Microbac



Laboratory Report Number: L12040844

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 10 2012

David E. Vandenberg

David Vandenberg – Managing Director

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

Microbac

Lab Report #: L12040844
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 #
0014448	H	3.0		1002239573610004575000872087761048
0017215	H	5.0		1015923873610004575000795762965660
0014659	H	4.0		1015923873610004575000795762965671

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	Yes
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	Yes
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct perservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	Yes

Microbac

Lab Report #: L12040844
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
MW-16I-042412	L12040844-01	04/24/2012 12:35	04/25/2012 10:45
MW-16I-042412	L12040844-02	04/24/2012 12:35	04/25/2012 10:45
MW-16S-042412	L12040844-03	04/24/2012 12:37	04/25/2012 10:45
MW-16S-042412	L12040844-04	04/24/2012 12:37	04/25/2012 10:45
MW-07-042412	L12040844-05	04/24/2012 13:15	04/25/2012 10:45
MW-07-042412	L12040844-06	04/24/2012 13:15	04/25/2012 10:45
TB-042412	L12040844-07	04/24/2012 08:05	04/25/2012 10:45

Microbac REPORT L12040844
PREPARED FOR CH2MHILL, Inc
WORK ID:

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1.0 Summary Data

1.1 Narratives

Login Number: L12040844
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: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

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

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

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: None.

Manual Integration Reason Codes

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

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

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

Reason #4: System Establishes Incorrect Baseline. There are numerous situations in chromatography where the

system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

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

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

Narrative ID: 46130
Approved By: Michael Albertson



Login Number: L12040844
Department: Volatiles - GC
Analyst: Michael Albertson

Analysis RSK-175

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes/Sample Duplicates: The MS/MSD results were not associated with this sample delivery group (SDG), due to insufficient volume of sample. Microbac Laboratories recommends site specific MS/MSD samples to avoid possible data qualifications.

SAMPLES

Samples: All acceptance criteria were met.

Manual Integration Reason Codes

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

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

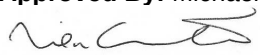
Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene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

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

Reason #5: Miscellaneous Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration

is not clearly covered by these four cases, then review and approval by the Laboratory Director or the QA/QC Supervisor will be required.

Narrative ID: 46104
Approved By: Michael Albertson



Login Number: L12040844
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3520C

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

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: The percent difference was out of range for the following analytes: 2,4-Dinitrophenol, 2-Chloronaphthalene, Pentachlorophenol. Please see the applicable QC report for a detailed presentation of the failures.

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

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: Recoveries out of range were observed for the following analytes: 3,3'-Dichlorobenzidine, 3-Nitroaniline. Please see the applicable QC report for a detailed presentation of the failures.

The LCS/LCSD pair exceeded % RPD criteria for 1,4-Dioxane and Benzoic Acid, however the recoveries for both the LCS and LCSD are within specified limits.

Matrix Spikes: There were no MS/MSD results associated with this sample delivery group, due to insufficient volume of sample. The laboratory included an LCS and LCS duplicate in the preparation batch in lieu of the NELAC prescribed MS/MSD. Microbac recommends site specific MS/MSD samples to avoid possible data qualification.

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: 45876
Approved By: Mike Cochran



Login Number: L12040844
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: There were no MS/MSD results associated with this sample delivery group, due to insufficient volume of sample. The laboratory included an LCS and LCS duplicate in the preparation batch in lieu of the NELAC prescribed MS/MSD. Microbac recommends site specific MS/MSD samples to avoid possible data qualification.

SAMPLES

Samples: All acceptance criteria were met.

Internal Standards: All acceptance criteria were met.

Surrogates: Recoveries out of range were observed for the following surrogate: 2-Fluorobiphenyl. Please see the applicable QC report for a detailed presentation of the failures.

No analytes were detected above the RL in the samples with failing recoveries.

Manual Integration Reason Codes

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

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

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

in standards or samples.

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

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

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Narrative ID: 45722
Approved By: Mike Cochran



Login Number: L12040844
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: WG396298 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG396298 - Client samples 05 and 06 required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 45617
Approved By: Sheri Pfalzgraf



Login Number: L12040844
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: WG396232 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 45591
Approved By: Sheri Pfalzgraf



Login Number: L12040844
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: WG396375 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 45685
Approved By: Sheri Pfalzgraf



Login Number: L12040844
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 310.2 (Alkalinity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

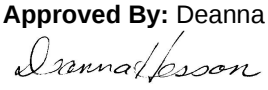
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46058
Approved By: Deanna Hesson



Login Number: L12040844
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.

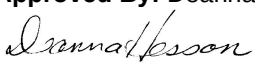
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46061
Approved By: Deanna Hesson



Login Number: L12040844
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 365.4 (Phosphorus)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

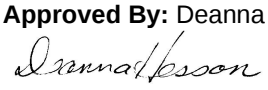
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46059
Approved By: Deanna Hesson



Login Number: L12040844
Department: Conventionals
Analyst: Deanna Hesson

METHOD

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

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

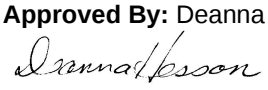
Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46060
Approved By: Deanna Hesson



Login Number: L12040844
Department: Conventionals
Analyst: Deanna Hesson

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.

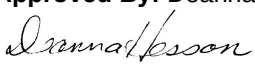
Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46062
Approved By: Deanna Hesson



1.2 Certificate of Analysis

Certificate of Analysis

Sample #: L12040844-01
Client ID: MW-16I-042412
Matrix: Water
Workgroup #: WG397029
Collect Date: 04/24/2012 12:35
Sample Tag: 01

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

Instrument: HPMS6
Prep Date: N/A
Cal Date: 04/25/2012 14:42
Run Date: 05/04/2012 22:02
File ID: 6M107878

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250

Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-16I-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 22:02
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	6M107878
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	110	80	120	
Dibromofluoromethane	108	86	118	
p-Bromofluorobenzene	108	86	115	
Toluene-d8	103	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-16I-042412	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/23/2012 16:44
Workgroup #:	WG396228	**Analyst:**	MDA	**Run Date:**	04/26/2012 13:35
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	16G32078
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	101		5.00	1.00
Carbon Dioxide	124-38-9	43300		10000	2500

Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16I-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 21:30
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	4M60615
Sample Tag:	01	**Units:**	ug/L		

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

Certificate of Analysis

Sample #: L12040844-01
Client ID: MW-16I-042412
Matrix: Water
Workgroup #: WG396824
Collect Date: 04/24/2012 12:35
Sample Tag: 01

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

Instrument: HPMS4
Prep Date: 04/25/2012 11:00
Cal Date: 04/19/2012 13:23
Run Date: 05/01/2012 21:30
File ID: 4M60615

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	72.1	10	123	
2-Fluorobiphenyl	60.1	43	116	
2-Fluorophenol	52.3	21	100	
Nitrobenzene-d5	58.8	35	114	
p-Terphenyl-d14	80.6	33	141	

Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-16I-042412 **Prep Method:** 3520C **Prep Date:** 04/25/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396824 **Analyst:** CAA **Run Date:** 05/01/2012 21:30
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** 4M60615
Sample Tag: 01 **Units:** ug/L

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	54.8	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-16I-042412 **Prep Method:** 3520C **Prep Date:** 04/25/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396824 **Analyst:** CAA **Run Date:** 05/01/2012 21:30
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** 4M60615
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		5.49		0.000	0.000
unknown		5.00		0.000	0.000
n-Hexadecanoic acid		8.44		0.000	0.000
Octadecanoic acid		9.55		0.000	0.000
unknown		12.2		0.000	0.000

Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-16I-042412	**Prep Method:**	3510C	**Prep Date:**	04/27/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG396497	**Analyst:**	CAA	**Run Date:**	04/30/2012 12:30
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	7M54816
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0532	0.0266
Acenaphthene	83-32-9		U	0.0532	0.0266
Acenaphthylene	208-96-8		U	0.0532	0.0266
Anthracene	120-12-7		U	0.0532	0.0266
Benzo(a)anthracene	56-55-3		U	0.0532	0.0266
Benzo(a)pyrene	50-32-8		U	0.0532	0.0266
Benzo(b)fluoranthene	205-99-2		U	0.0532	0.0266
Benzo(g,h,i)perylene	191-24-2		U	0.0532	0.0266
Benzo(k)fluoranthene	207-08-9		U	0.0532	0.0266
Chrysene	218-01-9		U	0.0532	0.0266
Dibenzo(a,h)anthracene	53-70-3		U	0.0532	0.0266
Fluoranthene	206-44-0		U	0.0532	0.0266
Fluorene	86-73-7		U	0.0532	0.0266
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0532	0.0266
Naphthalene	91-20-3		U	0.0532	0.0266
Phenanthrene	85-01-8		U	0.0532	0.0266
Pyrene	129-00-0		U	0.0532	0.0266

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	46.7	43	116	
Nitrobenzene-d5	48.3	35	114	
p-Terphenyl-d14	58.4	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-16I-042412	**Prep Method:**	3005A	**Prep Date:**	04/26/2012 07:21
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/09/2012 10:16
Workgroup #:	WG396298	**Analyst:**	KHR	**Run Date:**	05/09/2012 11:13
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	P2.050912.111332
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	0.136		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00249		0.000500	0.000250
Calcium, Total	7440-70-2	139		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	9.38		0.100	0.0250
Magnesium, Total	7439-95-4	28.3		0.500	0.250
Manganese, Total	7439-96-5	0.264		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	4.30		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	67.0		0.500	0.250
Vanadium, Total	7440-62-2	0.00564		0.0100	0.00500
Zinc, Total	7440-66-6	0.0768		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-16I-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 11:38
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** NI.042612.113800
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	0.00161		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00338		0.00100	0.000500
Thallium, Total	7440-28-0	0.000182		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-16I-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:11
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** HY.043012.111155
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.000104		0.000200	0.000100

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16I-042412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 04/26/2012 13:48
Workgroup #: WG396308 **Analyst:** DIH **Run Date:** 04/26/2012 14:10
Collect Date: 04/24/2012 12:35 **Dilution:** 2 **File ID:** SC120426005.045
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		412		40.0	20.0

Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16I-042412 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 04/26/2012 07:59
Workgroup #: WG396230 **Analyst:** DIH **Run Date:** 04/26/2012 10:18
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** SC12042713524901
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.103		0.0500	0.0250

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16I-042412 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/26/2012 08:43
Workgroup #: WG396212 **Analyst:** DIH **Run Date:** 04/26/2012 08:48
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** SC120426002.014
Sample Tag: 01 **Units:** mg/L

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

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16I-042412 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/03/2012 07:30
Workgroup #: WG396805 **Analyst:** DIH **Run Date:** 05/03/2012 07:34
Collect Date: 04/24/2012 12:35 **Dilution:** 4 **File ID:** SC120503001.016
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	78.5		20.0	10.0

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-16I-042412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396600 **Analyst:** DIH **Run Date:** 05/02/2012 01:09
Collect Date: 04/24/2012 12:35 **Dilution:** 3 **File ID:** TC05012012.053
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		4.93		3.00	1.50

Certificate of Analysis

Sample #:	L12040844-02	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-16I-042412	**Prep Method:**	3005A	**Prep Date:**	04/26/2012 07:21
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/09/2012 10:16
Workgroup #:	WG396298	**Analyst:**	KHR	**Run Date:**	05/09/2012 11:31
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	P2.050912.113130
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	0.135		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000530		0.000500	0.000250
Calcium, Dissolved	7440-70-2	139		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	9.00		0.100	0.0250
Magnesium, Dissolved	7439-95-4	27.9		0.500	0.250
Manganese, Dissolved	7439-96-5	0.259		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.25		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	67.2		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0703		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-02	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-16I-042412	**Prep Method:**	3015	**Prep Date:**	04/26/2012 06:28
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	04/26/2012 10:03
Workgroup #:	WG396232	**Analyst:**	JYH	**Run Date:**	04/26/2012 11:51
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	NI.042612.115156
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	0.00136		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00245		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000159		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12040844-02	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-16I-042412	**Prep Method:**	7470A	**Prep Date:**	04/26/2012 09:43
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	04/30/2012 09:57
Workgroup #:	WG396375	**Analyst:**	PDM	**Run Date:**	04/30/2012 11:15
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	HY.043012.111554
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-03
Client ID: MW-16S-042412
Matrix: Water
Workgroup #: WG397029
Collect Date: 04/24/2012 12:37
Sample Tag: 01

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

Instrument: HPMS6
Prep Date: N/A
Cal Date: 04/25/2012 14:42
Run Date: 05/04/2012 22:35
File ID: 6M107879

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-16S-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 22:35
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	6M107879
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	110	80	120	
Dibromofluoromethane	109	86	118	
p-Bromofluorobenzene	104	86	115	
Toluene-d8	104	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-16S-042412	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/23/2012 16:44
Workgroup #:	WG396228	**Analyst:**	MDA	**Run Date:**	04/26/2012 13:44
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	16G32079
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	142		5.00	1.00
Carbon Dioxide	124-38-9	38800		10000	2500

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16S-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:04
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	4M60616
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	21.3	2.66
1,3,5-Trinitrobenzene	99-35-4		U	5.32	2.66
1,3-Dinitrobenzene	99-65-0		U	5.32	2.66
1,4-Dioxane	123-91-1		U	10.6	5.32
2,4,5-Trichlorophenol	95-95-4		U	5.32	2.66
2,4,6-Trichlorophenol	88-06-2		U	5.32	2.66
2,4-Dichlorophenol	120-83-2		U	5.32	2.66
2,4-Dimethylphenol	105-67-9		U	5.32	2.66
2,4-Dinitrophenol	51-28-5		U	26.6	13.3
2,4-Dinitrotoluene	121-14-2		U	5.32	2.66
2,6-Dinitrotoluene	606-20-2		U	5.32	2.66
2-Chloronaphthalene	91-58-7		U	5.32	2.66
2-Chlorophenol	95-57-8		U	5.32	2.66
2-Methylnaphthalene	91-57-6		U	5.32	2.66
2-Methylphenol	95-48-7		U	5.32	2.66
2-Nitroaniline	88-74-4		U	26.6	13.3
2-Nitrophenol	88-75-5		U	5.32	2.66
3-Nitroaniline	99-09-2		U	26.6	13.3
3,3'-Dichlorobenzidine	91-94-1		U	5.32	2.66
3-,4-Methylphenol	106-44-5		U	5.32	2.66
4-Bromophenyl-phenylether	101-55-3		U	5.32	2.66
4-Chloroaniline	106-47-8		U	5.32	2.66
4-Nitrophenol	100-02-7		U	26.6	13.3
Acenaphthene	83-32-9		U	5.32	2.66
Acenaphthylene	208-96-8		U	5.32	2.66
Anthracene	120-12-7		U	5.32	2.66
Benzo(a)anthracene	56-55-3		U	5.32	2.66
Benzo(a)pyrene	50-32-8		U	5.32	2.66
Benzo(b)fluoranthene	205-99-2		U	5.32	2.66
Benzo(g,h,i)Perylene	191-24-2		U	5.32	2.66
Benzo(k)fluoranthene	207-08-9		U	5.32	2.66
Benzoic acid	65-85-0		U	21.3	10.6
Benzyl alcohol	100-51-6		U	5.32	2.66

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16S-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:04
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	4M60616
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.32	2.66
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.32	2.66
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.32	2.66
Butylbenzylphthalate	85-68-7		U	5.32	2.66
Carbazole	86-74-8		U	21.3	2.66
Chrysene	218-01-9		U	5.32	2.66
Di-N-Butylphthalate	84-74-2		U	5.32	2.66
Di-n-octylphthalate	117-84-0		U	5.32	2.66
Dibenzo(a,h)Anthracene	53-70-3		U	5.32	2.66
Dibenzofuran	132-64-9		U	5.32	2.66
Diethylphthalate	84-66-2		U	5.32	2.66
Dimethylphthalate	131-11-3		U	5.32	2.66
Fluoranthene	206-44-0		U	5.32	2.66
Fluorene	86-73-7		U	5.32	2.66
Hexachlorobenzene	118-74-1		U	5.32	2.66
Hexachlorobutadiene	87-68-3		U	5.32	2.66
Hexachlorocyclopentadiene	77-47-4		U	5.32	2.66
Hexachloroethane	67-72-1		U	5.32	2.66
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.32	2.66
Isophorone	78-59-1		U	5.32	2.66
N-Nitrosodiphenylamine	86-30-6		U	5.32	2.66
Naphthalene	91-20-3		U	5.32	2.66
Nitrobenzene	98-95-3		U	5.32	2.66
Pentachlorophenol	87-86-5		U	26.6	13.3
Phenanthrene	85-01-8		U	5.32	2.66
Phenol	108-95-2		U	5.32	2.66
Pyrene	129-00-0		U	5.32	2.66

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	90.2	10	123	
2-Fluorobiphenyl	63.0	43	116	
2-Fluorophenol	54.9	21	100	
Nitrobenzene-d5	61.0	35	114	
p-Terphenyl-d14	111	33	141	

Certificate of Analysis

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-16S-042412 **Prep Method:** 3520C **Prep Date:** 04/25/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396824 **Analyst:** CAA **Run Date:** 05/01/2012 22:04
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** 4M60616
Sample Tag: 01 **Units:** ug/L

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	60.2	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-16S-042412 **Prep Method:** 3520C **Prep Date:** 04/25/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396824 **Analyst:** CAA **Run Date:** 05/01/2012 22:04
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** 4M60616
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		4.36		0.000	0.000
unknown		5.38		0.000	0.000
n-Hexadecanoic acid		5.98		0.000	0.000
Octadecanoic acid		7.81		0.000	0.000
unknown		6.74		0.000	0.000
unknown		5.51		0.000	0.000
unknown		21.5		0.000	0.000
unknown		6.95		0.000	0.000
unknown		9.16		0.000	0.000
unknown		9.43		0.000	0.000
unknown		6.88		0.000	0.000

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-16S-042412	**Prep Method:**	3510C	**Prep Date:**	04/27/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG396497	**Analyst:**	CAA	**Run Date:**	04/30/2012 12:58
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	7M54817
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	0.0301		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	41.1	43	116	*
Nitrobenzene-d5	45.1	35	114	
p-Terphenyl-d14	49.8	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-16S-042412	**Prep Method:**	3005A	**Prep Date:**	04/26/2012 07:21
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/09/2012 10:16
Workgroup #:	WG396298	**Analyst:**	KHR	**Run Date:**	05/09/2012 11:37
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	P2.050912.113729
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	0.164		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9		U	0.000500	0.000250
Calcium, Total	7440-70-2	135		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	23.6		0.100	0.0250
Magnesium, Total	7439-95-4	25.0		0.500	0.250
Manganese, Total	7439-96-5	0.435		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	3.97		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	68.9		0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-16S-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 11:54
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** NI.042612.115442
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	0.00255		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00194		0.00100	0.000500
Thallium, Total	7440-28-0	0.000143		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-16S-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:17
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** HY.043012.111745
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 #: L12040844-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16S-042412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 04/26/2012 13:48
Workgroup #: WG396308 **Analyst:** DIH **Run Date:** 04/26/2012 14:11
Collect Date: 04/24/2012 12:37 **Dilution:** 2 **File ID:** SC120426005.046
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		408		40.0	20.0

Certificate of Analysis

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16S-042412 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 04/26/2012 07:59
Workgroup #: WG396230 **Analyst:** DIH **Run Date:** 04/26/2012 10:18
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** SC12042713525701
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.116		0.0500	0.0250

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16S-042412 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/26/2012 08:43
Workgroup #: WG396212 **Analyst:** DIH **Run Date:** 04/26/2012 08:48
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** SC120426002.015
Sample Tag: 01 **Units:** mg/L

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

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16S-042412 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/03/2012 07:30
Workgroup #: WG396805 **Analyst:** DIH **Run Date:** 05/03/2012 07:35
Collect Date: 04/24/2012 12:37 **Dilution:** 2 **File ID:** SC120503001.017
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	56.5		10.0	5.00

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-16S-042412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396600 **Analyst:** DIH **Run Date:** 05/02/2012 01:21
Collect Date: 04/24/2012 12:37 **Dilution:** 2 **File ID:** TC05012012.054
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		3.64		2.00	1.00

Certificate of Analysis

Sample #:	L12040844-04	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-16S-042412	**Prep Method:**	3005A	**Prep Date:**	04/26/2012 07:21
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/09/2012 10:16
Workgroup #:	WG396298	**Analyst:**	KHR	**Run Date:**	05/09/2012 12:08
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	P2.050912.120822
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	0.172		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	140		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	24.4		0.100	0.0250
Magnesium, Dissolved	7439-95-4	26.2		0.500	0.250
Manganese, Dissolved	7439-96-5	0.452		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.21		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	71.0		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 #:	L12040844-04	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-16S-042412	**Prep Method:**	3015	**Prep Date:**	04/26/2012 06:28
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	04/26/2012 10:03
Workgroup #:	WG396232	**Analyst:**	JYH	**Run Date:**	04/26/2012 11:57
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	NI.042612.115728
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	0.00236		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00148		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000146		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12040844-04	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-16S-042412	**Prep Method:**	7470A	**Prep Date:**	04/26/2012 09:43
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	04/30/2012 09:57
Workgroup #:	WG396375	**Analyst:**	PDM	**Run Date:**	04/30/2012 11:19
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	HY.043012.111929
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-05
Client ID: MW-07-042412
Matrix: Water
Workgroup #: WG397029
Collect Date: 04/24/2012 13:15
Sample Tag: 01

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

Instrument: HPMS6
Prep Date: N/A
Cal Date: 04/25/2012 14:42
Run Date: 05/04/2012 23:07
File ID: 6M107880

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-07-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 23:07
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	6M107880
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	111	80	120	
Dibromofluoromethane	108	86	118	
p-Bromofluorobenzene	107	86	115	
Toluene-d8	105	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-05 | **PrePrep Method:** N/A | **Instrument:** HP16
Client ID: MW-07-042412 | **Prep Method:** 5021 | **Prep Date:** N/A
Matrix: Water | **Analytical Method:** RSK175 | **Cal Date:** 04/23/2012 16:44
Workgroup #: WG396228 | **Analyst:** MDA | **Run Date:** 04/26/2012 13:53
Collect Date: 04/24/2012 13:15 | **Dilution:** 1 | **File ID:** 16G32080
Sample Tag: 01 | **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8		U	5.00	1.00
Carbon Dioxide	124-38-9	35500		10000	2500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-05 | **PrePrep Method:** N/A | **Instrument:** HPMS4
Client ID: MW-07-042412 | **Prep Method:** 3520C | **Prep Date:** 04/25/2012 11:00
Matrix: Water | **Analytical Method:** 8270C | **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396824 | **Analyst:** CAA | **Run Date:** 05/01/2012 22:38
Collect Date: 04/24/2012 13:15 | **Dilution:** 1 | **File ID:** 4M60617
Sample Tag: 01 | **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		5.00		0.000	0.000
2-Butanone, 4-hydroxy-		9.53		0.000	0.000
unknown		6.20		0.000	0.000
unknown		6.35		0.000	0.000
Dodecanoic acid		4.24		0.000	0.000
n-Hexadecanoic acid		7.77		0.000	0.000
Octadecanoic acid		16.5		0.000	0.000
unknown		4.29		0.000	0.000
unknown		7.41		0.000	0.000
unknown		10.8		0.000	0.000
unknown		5.90		0.000	0.000
unknown		7.27		0.000	0.000
unknown		9.04		0.000	0.000
unknown		6.29		0.000	0.000

Certificate of Analysis

Sample #: L12040844-05
Client ID: MW-07-042412
Matrix: Water
Workgroup #: WG396824
Collect Date: 04/24/2012 13:15
Sample Tag: 01

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

Instrument: HPMS4
Prep Date: 04/25/2012 11:00
Cal Date: 04/19/2012 13:23
Run Date: 05/01/2012 22:38
File ID: 4M60617

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	20.4	2.55
1,3,5-Trinitrobenzene	99-35-4		U	5.10	2.55
1,3-Dinitrobenzene	99-65-0		U	5.10	2.55
1,4-Dioxane	123-91-1		U	10.2	5.10
2,4,5-Trichlorophenol	95-95-4		U	5.10	2.55
2,4,6-Trichlorophenol	88-06-2		U	5.10	2.55
2,4-Dichlorophenol	120-83-2		U	5.10	2.55
2,4-Dimethylphenol	105-67-9		U	5.10	2.55
2,4-Dinitrophenol	51-28-5		U	25.5	12.8
2,4-Dinitrotoluene	121-14-2		U	5.10	2.55
2,6-Dinitrotoluene	606-20-2		U	5.10	2.55
2-Chloronaphthalene	91-58-7		U	5.10	2.55
2-Chlorophenol	95-57-8		U	5.10	2.55
2-Methylnaphthalene	91-57-6		U	5.10	2.55
2-Methylphenol	95-48-7		U	5.10	2.55
2-Nitroaniline	88-74-4		U	25.5	12.8
2-Nitrophenol	88-75-5		U	5.10	2.55
3-Nitroaniline	99-09-2		U	25.5	12.8
3,3'-Dichlorobenzidine	91-94-1		U	5.10	2.55
3-,4-Methylphenol	106-44-5		U	5.10	2.55
4-Bromophenyl-phenylether	101-55-3		U	5.10	2.55
4-Chloroaniline	106-47-8		U	5.10	2.55
4-Nitrophenol	100-02-7		U	25.5	12.8
Acenaphthene	83-32-9		U	5.10	2.55
Acenaphthylene	208-96-8		U	5.10	2.55
Anthracene	120-12-7		U	5.10	2.55
Benzo(a)anthracene	56-55-3		U	5.10	2.55
Benzo(a)pyrene	50-32-8		U	5.10	2.55
Benzo(b)fluoranthene	205-99-2		U	5.10	2.55
Benzo(g,h,i)Perylene	191-24-2		U	5.10	2.55
Benzo(k)fluoranthene	207-08-9		U	5.10	2.55
Benzoic acid	65-85-0		U	20.4	10.2
Benzyl alcohol	100-51-6		U	5.10	2.55

Certificate of Analysis

Sample #: L12040844-05
Client ID: MW-07-042412
Matrix: Water
Workgroup #: WG396824
Collect Date: 04/24/2012 13:15
Sample Tag: 01

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

Instrument: HPMS4
Prep Date: 04/25/2012 11:00
Cal Date: 04/19/2012 13:23
Run Date: 05/01/2012 22:38
File ID: 4M60617

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.10	2.55
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.10	2.55
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.10	2.55
Butylbenzylphthalate	85-68-7		U	5.10	2.55
Carbazole	86-74-8		U	20.4	2.55
Chrysene	218-01-9		U	5.10	2.55
Di-N-Butylphthalate	84-74-2		U	5.10	2.55
Di-n-octylphthalate	117-84-0		U	5.10	2.55
Dibenzo(a,h)Anthracene	53-70-3		U	5.10	2.55
Dibenzofuran	132-64-9		U	5.10	2.55
Diethylphthalate	84-66-2		U	5.10	2.55
Dimethylphthalate	131-11-3		U	5.10	2.55
Fluoranthene	206-44-0		U	5.10	2.55
Fluorene	86-73-7		U	5.10	2.55
Hexachlorobenzene	118-74-1		U	5.10	2.55
Hexachlorobutadiene	87-68-3		U	5.10	2.55
Hexachlorocyclopentadiene	77-47-4		U	5.10	2.55
Hexachloroethane	67-72-1		U	5.10	2.55
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.10	2.55
Isophorone	78-59-1		U	5.10	2.55
N-Nitrosodiphenylamine	86-30-6		U	5.10	2.55
Naphthalene	91-20-3		U	5.10	2.55
Nitrobenzene	98-95-3		U	5.10	2.55
Pentachlorophenol	87-86-5		U	25.5	12.8
Phenanthrene	85-01-8		U	5.10	2.55
Phenol	108-95-2		U	5.10	2.55
Pyrene	129-00-0		U	5.10	2.55

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	102	10	123	
2-Fluorobiphenyl	72.0	43	116	
2-Fluorophenol	56.9	21	100	
Nitrobenzene-d5	68.0	35	114	
p-Terphenyl-d14	78.7	33	141	

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-07-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:38
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	4M60617
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	63.4	10	94	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-07-042412	**Prep Method:**	3510C	**Prep Date:**	04/27/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG396497	**Analyst:**	CAA	**Run Date:**	04/30/2012 13:25
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	7M54818
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0510	0.0255
Acenaphthene	83-32-9		U	0.0510	0.0255
Acenaphthylene	208-96-8		U	0.0510	0.0255
Anthracene	120-12-7		U	0.0510	0.0255
Benzo(a)anthracene	56-55-3		U	0.0510	0.0255
Benzo(a)pyrene	50-32-8		U	0.0510	0.0255
Benzo(b)fluoranthene	205-99-2		U	0.0510	0.0255
Benzo(g,h,i)perylene	191-24-2		U	0.0510	0.0255
Benzo(k)fluoranthene	207-08-9		U	0.0510	0.0255
Chrysene	218-01-9		U	0.0510	0.0255
Dibenzo(a,h)anthracene	53-70-3		U	0.0510	0.0255
Fluoranthene	206-44-0		U	0.0510	0.0255
Fluorene	86-73-7		U	0.0510	0.0255
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0510	0.0255
Naphthalene	91-20-3		U	0.0510	0.0255
Phenanthrene	85-01-8		U	0.0510	0.0255
Pyrene	129-00-0		U	0.0510	0.0255

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	55.8	43	116	
Nitrobenzene-d5	57.2	35	114	
p-Terphenyl-d14	63.0	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-05 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-07-042412 | **Prep Method:** 3005A | **Prep Date:** 04/26/2012 07:21
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/09/2012 10:16
Workgroup #: WG396298 | **Analyst:** KHR | **Run Date:** 05/09/2012 12:21
Collect Date: 04/24/2012 13:15 | **Dilution:** 1 | **File ID:** P2.050912.122146
Sample Tag: 01 | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.304		0.100	0.0500
Barium, Total	7440-39-3	0.106		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00263		0.000500	0.000250
Calcium, Total	7440-70-2	107		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	0.216		0.100	0.0250
Magnesium, Total	7439-95-4	15.1		0.500	0.250
Manganese, Total	7439-96-5	0.00969		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	4.25		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.0444		0.0100	0.00500
Zinc, Total	7440-66-6	0.0378		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-05 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-07-042412 | **Prep Method:** 3005A | **Prep Date:** 04/26/2012 07:21
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/09/2012 10:16
Workgroup #: WG396298 | **Analyst:** KHR | **Run Date:** 05/09/2012 12:34
Collect Date: 04/24/2012 13:15 | **Dilution:** 100 | **File ID:** P2.050912.123446
Sample Tag: DL01 | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	558		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-07-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 12:00
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** NI.042612.120015
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000897		0.00100	0.000500
Arsenic, Total	7440-38-2	0.00463		0.00100	0.000500
Lead, Total	7439-92-1	0.000809		0.00100	0.000500
Selenium, Total	7782-49-2	0.0104		0.00100	0.000500
Thallium, Total	7440-28-0	0.000249		0.000200	0.000100

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-07-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:21
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** HY.043012.112125
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 #: L12040844-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-07-042412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 04/26/2012 13:48
Workgroup #: WG396308 **Analyst:** DIH **Run Date:** 04/26/2012 14:11
Collect Date: 04/24/2012 13:15 **Dilution:** 2 **File ID:** SC120426005.047
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		287		40.0	20.0

Certificate of Analysis

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-07-042412 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 04/26/2012 07:59
Workgroup #: WG396230 **Analyst:** DIH **Run Date:** 04/26/2012 10:18
Collect Date: 04/24/2012 13:15 **Dilution:** 4 **File ID:** SC12042713530801
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	2.48		0.200	0.100

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-07-042412 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/26/2012 08:43
Workgroup #: WG396212 **Analyst:** DIH **Run Date:** 04/26/2012 08:49
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** SC120426002.016
Sample Tag: 01 **Units:** mg/L

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

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-07-042412 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/03/2012 07:30
Workgroup #: WG396805 **Analyst:** DIH **Run Date:** 05/03/2012 07:36
Collect Date: 04/24/2012 13:15 **Dilution:** 2 **File ID:** SC120503001.019
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	53.9		10.0	5.00

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-07-042412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396600 **Analyst:** DIH **Run Date:** 05/01/2012 14:23
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** TC05012012.013
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		5.56		1.00	0.500

Certificate of Analysis

Sample #: L12040844-06 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-07-042412 **Prep Method:** 3005A **Prep Date:** 04/26/2012 07:21
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/09/2012 10:16
Workgroup #: WG396298 **Analyst:** KHR **Run Date:** 05/09/2012 12:27
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** P2.050912.122745
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	0.110		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.00186		0.000500	0.000250
Calcium, Dissolved	7440-70-2	102		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		U	0.100	0.0250
Magnesium, Dissolved	7439-95-4	15.1		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0127		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.32		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0427		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0351		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-06 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-07-042412 **Prep Method:** 3005A **Prep Date:** 04/26/2012 07:21
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/09/2012 10:16
Workgroup #: WG396298 **Analyst:** KHR **Run Date:** 05/09/2012 12:41
Collect Date: 04/24/2012 13:15 **Dilution:** 100 **File ID:** P2.050912.124143
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	584		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-06	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-07-042412	**Prep Method:**	3015	**Prep Date:**	04/26/2012 06:28
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	04/26/2012 10:03
Workgroup #:	WG396232	**Analyst:**	JYH	**Run Date:**	04/26/2012 12:03
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	NI.042612.120302
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.000918		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00464		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0114		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000263		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12040844-06	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-07-042412	**Prep Method:**	7470A	**Prep Date:**	04/26/2012 09:43
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	04/30/2012 09:57
Workgroup #:	WG396375	**Analyst:**	PDM	**Run Date:**	04/30/2012 11:23
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	HY.043012.112309
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.000138		0.000200	0.000100

Certificate of Analysis

Sample #: L12040844-07
Client ID: TB-042412
Matrix: Water
Workgroup #: WG397029
Collect Date: 04/24/2012 08:05
Sample Tag: 01

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

Instrument: HPMS6
Prep Date: N/A
Cal Date: 04/25/2012 14:42
Run Date: 05/04/2012 16:04
File ID: 6M107867

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250

Certificate of Analysis

Sample #:	L12040844-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	TB-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 16:04
Collect Date:	04/24/2012 08:05	**Dilution:**	1	**File ID:**	6M107867
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	111	80	120	
Dibromofluoromethane	106	86	118	
p-Bromofluorobenzene	108	86	115	
Toluene-d8	105	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: L12040844
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: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

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

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

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: None.

Manual Integration Reason Codes

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

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

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

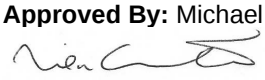
Reason #4: System Establishes Incorrect Baseline. There are numerous situations in chromatography where the

system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

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

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

Narrative ID: 46130
Approved By: Michael Albertson



Certificate of Analysis

Sample #: L12040844-01
Client ID: MW-16I-042412
Matrix: Water
Workgroup #: WG397029
Collect Date: 04/24/2012 12:35
Sample Tag: 01

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

Instrument: HPMS6
Prep Date: N/A
Cal Date: 04/25/2012 14:42
Run Date: 05/04/2012 22:02
File ID: 6M107878

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250

Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-16I-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 22:02
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	6M107878
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	110	80	120	
Dibromofluoromethane	108	86	118	
p-Bromofluorobenzene	108	86	115	
Toluene-d8	103	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-16S-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 22:35
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	6M107879
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250

Certificate of Analysis

Sample #: L12040844-03
Client ID: MW-16S-042412
Matrix: Water
Workgroup #: WG397029
Collect Date: 04/24/2012 12:37
Sample Tag: 01

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

Instrument: HPMS6
Prep Date: N/A
Cal Date: 04/25/2012 14:42
Run Date: 05/04/2012 22:35
File ID: 6M107879

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	110	80	120	
Dibromofluoromethane	109	86	118	
p-Bromofluorobenzene	104	86	115	
Toluene-d8	104	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-07-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 23:07
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	6M107880
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-07-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 23:07
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	6M107880
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	111	80	120	
Dibromofluoromethane	108	86	118	
p-Bromofluorobenzene	107	86	115	
Toluene-d8	105	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	TB-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 16:04
Collect Date:	04/24/2012 08:05	**Dilution:**	1	**File ID:**	6M107867
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250

Certificate of Analysis

Sample #:	L12040844-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	TB-042412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397029	**Analyst:**	ADC	**Run Date:**	05/04/2012 16:04
Collect Date:	04/24/2012 08:05	**Dilution:**	1	**File ID:**	6M107867
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	111	80	120	
Dibromofluoromethane	106	86	118	
p-Bromofluorobenzene	108	86	115	
Toluene-d8	105	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: HPMS6 Dataset: 012512
Analyst1: ADC Analyst2: NA
Method: 8260B/OVAP SOP: MSV01 Rev: 14/0
Method: 624 SOP: MSV10 Rev: 8
Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13
Maintenance Log ID: 40412

Internal Standard: STD49576 Surrogate Standard: STD49251
CCV: STD49665; STD49721 LCS: STD49523; STD49518 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG387849; WG387881

Comments:

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

Comments

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

Approved: January 26, 2012

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Microbac Laboratories Inc.

Instrument Run Log

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

Internal Standard: STD49576 Surrogate Standard: STD49251

CCV: STD49665; STD49721 LCS: STD49523; STD49518 MS/MSD: NA

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

Workgroups: WG387849; WG387881

Comments:

Comments

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

Approved: January 26, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS6 Dataset: 042512
Analyst1: ADC Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 5030C SOP: PAT01 Rev: 13

Maintenance Log ID: 41536

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

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

Comments:

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

Approved: May 01, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS6 Dataset: 050412
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: 41658

Internal Standard: STD51188 Surrogate Standard: STD51262
CCV: STD51371 LCS: STD51372 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397029

Comments: File IDs 6M107872 through 6M107877 are not reported due to failing ISTD.

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
6M107858	WG397028-01 50ng BFB STD 8260	NA	1	1	STD51241	05/04/12 11:14
6M107859	WG397028-02 50ug/L CCV STD 8260	NA	1	1	STD51371	05/04/12 11:43
6M107860	WG396XXX-01 100ug/L A9CCV STD 8260	NA	1	1	STDXXXXX	05/04/12 12:16
6M107861	WG397029-01 VBLK 0504 8260	NA	1	1		05/04/12 12:48
6M107862	WG397029-02 20ug/L LCS STD	NA	1	1	STD51372	05/04/12 13:21
6M107863	WG397029-03 20ug/L LCSDUP STD	NA	1	1	STD51372	05/04/12 13:54
6M107864	L12040942-01 B 500X 826-SPE	7	1	1		05/04/12 14:26
6M107865	L12050021-05 B 10,000X 826-SPE	7	1	1		05/04/12 14:59
6M107866	L12040859-37 A 826-SPE	<2	1	1		05/04/12 15:31
6M107867	L12040844-07 A 826-SPE	<2	1	1		05/04/12 16:04
6M107868	L12040950-03 A 826-SPE	<2	1	1		05/04/12 16:37
6M107869	L12040859-31 A 826-SPE	<2	1	1		05/04/12 17:09
6M107870	L12040859-32 A 826-SPE	<2	1	1		05/04/12 17:42
6M107871	L12040859-33 A 826-SPE	<2	1	1		05/04/12 18:15
6M107872	L12040859-34 A 826-SPE	<2	1	1		05/04/12 18:47
6M107873	L12040859-35 A 826-SPE	<2	1	1		05/04/12 19:19
6M107874	L12040859-36 A 826-SPE	<2	1	1		05/04/12 19:52
6M107875	L12040859-38 A 826-SPE	<2	1	1		05/04/12 20:25
6M107876	L12040950-01 A 826-SPE	<2	1	1		05/04/12 20:57
6M107877	L12040950-02 A 826-SPE	<2	1	1		05/04/12 21:30
6M107878	L12040844-01 A 826-SPE	<2	1	1		05/04/12 22:02
6M107879	L12040844-03 A 826-SPE	<2	1	1		05/04/12 22:35
6M107880	L12040844-05 A 826-SPE	<2	1	1		05/04/12 23:07
6M107881	RINSE	NA	1	1		05/04/12 23:40
6M107882	RINSE	NA	1	1		05/05/12 00:12
6M107883	RINSE	NA	1	1		05/05/12 00:45

Approved: May 10, 2012



Microbac

Page: 1

Microbac Laboratories Inc.

Data Checklist

Date: 25-JAN-2012
Analyst: ADC
Analyst: NA
Method: 8260B/624/OVAP
Instrument: HPMS6
Curve Workgroup: NA
Runlog ID: 44829
Analytical Workgroups: WG387849; WG387881

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

Primary Reviewer:
26-JAN-2012
Tiffany Bailey

Secondary Reviewer:
26-JAN-2012

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

Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
30-APR-2012



Secondary Reviewer:
01-MAY-2012



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

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
Analyst: ADC
Analyst: NA
Method: 8260
Instrument: HPMS6
Curve Workgroup: NA
Runlog ID: 46661
Analytical Workgroups: WG397029

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	ADC
Surrogates	X
Internal Standards Criteria	X
Library Searches	X
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	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:
10-MAY-2012

Secondary Reviewer:
10-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-10-2012 11:18:19

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B **AAB#:** WG397029

Login Number: L12040844

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-16I-042412	01	04/24/12							14		05/04/12	10.4	14	
MW-16S-042412	03	04/24/12							14		05/04/12	10.4	14	
MW-07-042412	05	04/24/12							14		05/04/12	10.4	14	
TB-042412	07	04/24/12							14		05/04/12	10.3	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2409626
Report generated 05/10/2012 13:00

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12040844 **Method:** 8260
Instrument Id: HPMS6 **CAL ID:** HPMS6-25-APR-12
Workgroup (AAB#): WG397029 **Matrix:** Water

Sample Number	Dilution	Tag	1	2	3	4
L12040844-01	1.00	01	110	108	108	103
L12040844-03	1.00	01	110	109	104	104
L12040844-05	1.00	01	111	108	107	105
L12040844-07	1.00	01	111	106	108	105
WG397029-01	1.00	01	107	106	106	101
WG397029-02	1.00	01	108	105	103	103
WG397029-03	1.00	01	109	106	104	104

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: 2409206
Report generated: 05/10/2012 13:01

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG397029
Blank File ID: 6M107861
Blank Sample ID: WG397029-01
Prep Date: 05/04/12 12:48
Instrument ID: HPMS6
Analyzed Date: 05/04/12 12:48
Method: 8260B
Analyst: ADC

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397029-02	6M107862	05/04/12 13:21	01
LCS2	WG397029-03	6M107863	05/04/12 13:54	01
TB-042412	L12040844-07	6M107867	05/04/12 16:04	01
MW-16I-042412	L12040844-01	6M107878	05/04/12 22:02	01
MW-16S-042412	L12040844-03	6M107879	05/04/12 22:35	01
MW-07-042412	L12040844-05	6M107880	05/04/12 23:07	01

Report Name: BLANK_SUMMARY
PDF File ID: 2409627
Report generated 05/10/2012 13:00

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040844 Prep Date:05/04/12 12:48 Sample ID:WG397029-01
Instrument ID:HPMS6 Run Date:05/04/12 12:48 Prep Method:5030B/5030C/503
File ID:6M107861 Analyst:ADC Method:8260B
Workgroup (AAB#):WG397029 Matrix:Water Units:ug/L
Contract #: Cal ID: HPMS6-25-APR-12

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

Report Name:BLANK
PDF ID: 2409628
10-MAY-2012 13:00

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 05/04/12 12:48 Sample ID: WG397029-01
Instrument ID: HPMS6 Run Date: 05/04/12 12:48 Prep Method: 5030B/5030C/503
File ID: 6M107861 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG397029 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS6-25-APR-12

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

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	107	80 - 120	PASS
Dibromofluoromethane	106	86 - 118	PASS
p-Bromofluorobenzene	106	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: 2409628
10-MAY-2012 13:00

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 Analyst: ADC Prep Method: 5030B/5030C/503
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG397029 Units: ug/L
QC Key: WATERLOO Lot #: STD51372

Sample ID: WG397029-02 LCS File ID: 6M107862 Run Date: 05/04/2012 13:21
Sample ID: WG397029-03 LCS2 File ID: 6M107863 Run Date: 05/04/2012 13:54

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	19.6	98.1	20.0	20.0	99.9	1.83	80 - 134	30	
1,1,2,2-Tetrachloroethane	20.0	20.1	100	20.0	20.4	102	1.72	79 - 125	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	17.5	87.4	20.0	18.1	90.6	3.52	80 - 130	30	
1,1,2-Trichloroethane	20.0	20.0	100	20.0	20.0	99.9	0.372	80 - 125	30	
1,1-Dichloroethane	20.0	19.1	95.6	20.0	20.1	100	4.86	80 - 125	30	
1,1-Dichloroethene	20.0	18.5	92.7	20.0	19.7	98.3	5.81	80 - 132	30	
1,2,3-Trichlorobenzene	20.0	19.5	97.7	20.0	20.0	99.8	2.07	55 - 140	30	
1,2,4-Trichlorobenzene	20.0	19.9	99.4	20.0	20.7	103	3.97	65 - 135	30	
1,2-Dibromo-3-chloropropane	20.0	17.6	87.8	20.0	18.1	90.7	3.19	50 - 130	30	
1,2-Dibromoethane	20.0	19.3	96.7	20.0	19.2	95.8	0.944	80 - 125	30	
1,2-Dichlorobenzene	20.0	18.9	94.5	20.0	19.4	96.9	2.54	80 - 125	30	
1,2-Dichloroethane	20.0	20.8	104	20.0	20.8	104	0.402	80 - 129	30	
cis-1,2-Dichloroethene	20.0	20.0	100	20.0	20.5	102	2.32	70 - 125	30	
trans-1,2-Dichloroethene	20.0	18.8	93.9	20.0	19.4	97.0	3.31	80 - 127	30	
1,2-Dichloropropane	20.0	20.9	104	20.0	21.3	107	2.00	80 - 120	30	
1,3-Dichlorobenzene	20.0	18.9	94.5	20.0	19.3	96.4	1.96	80 - 120	30	
1,4-Dichlorobenzene	20.0	18.5	92.6	20.0	18.9	94.5	2.04	80 - 120	30	
2-Butanone	20.0	21.2	106	20.0	22.2	111	4.68	30 - 150	30	
2-Hexanone	20.0	20.1	101	20.0	20.8	104	3.30	55 - 130	30	
4-Methyl-2-pentanone	20.0	19.6	98.1	20.0	21.6	108	9.37	64 - 140	30	
Acetone	20.0	18.8	94.0	20.0	19.7	98.6	4.73	40 - 142	30	
Benzene	20.0	19.7	98.3	20.0	20.0	100	1.78	80 - 121	30	
Bromochloromethane	20.0	20.7	103	20.0	22.0	110	6.18	65 - 130	30	
Bromodichloromethane	20.0	21.1	106	20.0	21.9	110	3.73	80 - 131	30	
Bromoform	20.0	20.3	101	20.0	20.1	100	0.986	70 - 130	30	
Bromomethane	20.0	18.1	90.5	20.0	18.9	94.7	4.50	30 - 145	30	
Carbon disulfide	20.0	19.6	98.0	20.0	20.4	102	4.23	58 - 138	30	
Carbon tetrachloride	20.0	20.3	102	20.0	20.9	104	2.77	65 - 140	30	
Chlorobenzene	20.0	19.0	94.9	20.0	19.1	95.3	0.433	80 - 120	30	
Chloroethane	20.0	19.0	94.8	20.0	19.8	99.2	4.48	60 - 135	30	
Chloroform	20.0	20.1	100	20.0	20.5	102	1.97	80 - 125	30	
Chloromethane	20.0	26.0	130	20.0	26.4	132	1.65	40 - 125	30	*
cis-1,3-Dichloropropene	20.0	18.9	94.6	20.0	19.4	97.1	2.66	70 - 130	30	
Cyclohexane	20.0	19.5	97.7	20.0	20.5	103	4.85	80 - 130	30	
Dibromochloromethane	20.0	19.4	97.2	20.0	18.9	94.3	3.01	60 - 135	30	
Dichlorodifluoromethane	20.0	24.3	122	20.0	25.2	126	3.63	50 - 133	30	
Ethyl benzene	20.0	19.4	97.2	20.0	19.8	99.0	1.79	80 - 122	30	
Isopropylbenzene	20.0	17.2	86.0	20.0	17.0	85.1	1.02	80 - 122	30	
Methyl acetate	20.0	17.4	87.2	20.0	18.0	89.9	3.02	80 - 130	30	
Methyl tert-butyl ether	20.0	18.6	93.2	20.0	19.1	95.5	2.49	65 - 125	30	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2409203
Report generated: 05/10/2012 13:00

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 Analyst: ADC Prep Method: 5030B/5030C/503
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG397029 Units: ug/L
QC Key: WATERLOO Lot #: STD51372

Sample ID: WG397029-02 LCS File ID: 6M107862 Run Date: 05/04/2012 13:21
Sample ID: WG397029-03 LCS2 File ID: 6M107863 Run Date: 05/04/2012 13:54

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methylcyclohexane	20.0	21.4	107	20.0	21.8	109	1.85	80 - 130	30	
Methylene chloride	20.0	19.8	98.8	20.0	20.0	100	1.35	80 - 123	30	
m,p-Xylene	40.0	38.2	95.6	40.0	39.0	97.4	1.91	80 - 122	30	
o-Xylene	20.0	19.1	95.6	20.0	19.0	94.9	0.780	80 - 122	30	
Styrene	20.0	18.0	90.2	20.0	18.1	90.6	0.394	80 - 123	30	
Tetrachloroethene	20.0	20.0	100	20.0	19.8	99.2	0.851	80 - 124	30	
Toluene	20.0	19.1	95.6	20.0	19.3	96.6	1.05	80 - 124	30	
trans-1,3-Dichloropropene	20.0	16.7	83.6	20.0	17.3	86.3	3.14	80 - 130	30	
Trichloroethene	20.0	19.6	98.1	20.0	20.4	102	4.18	80 - 122	30	
Trichlorofluoromethane	20.0	17.4	87.2	20.0	18.5	92.3	5.66	62 - 151	30	
Vinyl chloride	20.0	21.8	109	20.0	21.7	109	0.398	65 - 140	30	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	108	109	80 - 120	PASS
Dibromofluoromethane	105	106	86 - 118	PASS
p-Bromofluorobenzene	103	104	86 - 115	PASS
Toluene-d8	103	104	88 - 110	PASS

* EXCEEDS %REC LIMIT

EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2409203
Report generated: 05/10/2012 13:00

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12040844
Instrument: HPMS6
Analyst: ADC
Workgroup: WG387846

Tune ID: WG387846-01
Run Date: 01/25/2012
Run Time: 08:08
File ID: 6M105367
Cal ID: HPMS6-29-NOV-11

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

This check relates to the following samples:

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

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2409629
Report generated 05/10/2012 13:00

BFB

Login Number: L12040844
Instrument: HPMS6
Analyst: ADC
Workgroup: WG396001

Tune ID: WG396001-01
Run Date: 04/25/2012
Run Time: 08:52
File ID: 6M107637
Cal ID: HPMS6 - 25-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	21.9	4659	PASS
75.0	95.0	30.0	60.0	48.5	10324	PASS
95.0	95.0	100	100	100	21302	PASS
96.0	95.0	5.00	9.00	6.91	1471	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	76.2	16231	PASS
175	174	5.00	9.00	7.67	1245	PASS
176	174	95.0	101	100	16295	PASS
177	176	5.00	9.00	6.52	1063	PASS

This check relates to the following samples:

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

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2409629
Report generated 05/10/2012 13:00

BFB

Login Number: L12040844
Instrument: HPMS6
Analyst: ADC
Workgroup: WG397028

Tune ID: WG397028-01
Run Date: 05/04/2012
Run Time: 11:14
File ID: 6M107858
Cal ID: HPMS6 - 25-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	21.7	2517	PASS
75.0	95.0	30.0	60.0	48.5	5622	PASS
95.0	95.0	100	100	100	11597	PASS
96.0	95.0	5.00	9.00	6.41	743	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	71.6	8299	PASS
175	174	5.00	9.00	7.76	644	PASS
176	174	95.0	101	96.0	7971	PASS
177	176	5.00	9.00	6.86	547	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397028-02	CCV	01	05/04/2012 11:43	
WG397029-01	BLANK	01	05/04/2012 12:48	
WG397029-01	BLANK	01	05/04/2012 12:48	
WG397029-02	LCS	01	05/04/2012 13:21	
WG397029-03	LCS2	01	05/04/2012 13:54	
L12040844-07	TB-042412	01	05/04/2012 16:04	
L12040844-01	MW-16I-042412	01	05/04/2012 22:02	
L12040844-03	MW-16S-042412	01	05/04/2012 22:35	
L12040844-05	MW-07-042412	01	05/04/2012 23:07	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2409629
Report generated 05/10/2012 13:00

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

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

Thu Feb 02 09:47:01 2012

Calibration Table Report
Method: 8260WTR.M
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Calibration: Wed Apr 25 15:22:20 2012
Curve: WG396001
Calibration Files

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

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

Mon Apr 30 09:55:47 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number:L12040844 Run Date:04/25/2012 Sample ID:WG396001-12
Instrument ID:HPMS6 Run Time:15:46 Method:8260B
File ID:6M107650 Analyst:ADC QC Key:WATERLOO
ICal Workgroup:WG396001 Cal ID: HPMS6 - 25-APR-12

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

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2409204
Report generated 05/10/2012 13:00

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040844 Run Date: 04/25/2012 Sample ID: WG396001-12
Instrument ID: HPMS6 Run Time: 15:46 Method: 8260B
File ID: 6M107650 Analyst: ADC QC Key: WATERLOO
ICal Workgroup: WG396001 Cal ID: HPMS6 - 25-APR-12

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

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2409204
Report generated 05/10/2012 13:00

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 05/04/2012 Sample ID: WG397028-02
Instrument ID: HPMS6 Run Time: 11:43 Method: 8260B
File ID: 6M107859 Analyst: ADC QC Key: WATERLOO
Workgroup (AAB#): WG397029 Cal ID: HPMS6 - 25-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	48.7	ug/L	0.446	2.67	20	
1,2-Dichloropropane	CCC	50.0	50.3	ug/L	0.287	0.512	20	
Chloroform	CCC	50.0	48.9	ug/L	0.501	2.16	20	
Ethylbenzene	CCC	50.0	49.3	ug/L	0.531	1.30	20	
Toluene	CCC	50.0	47.9	ug/L	1.57	4.30	20	
Vinyl Chloride	CCC	50.0	48.9	ug/L	0.405	2.30	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	48.8	ug/L	0.516	2.45	20	
1,1-Dichloroethane	SPCC	50.0	48.8	ug/L	0.553	2.50	20	
Bromoform	SPCC	50.0	53.0	ug/L	0.188	6.01	20	
Chlorobenzene	SPCC	50.0	47.6	ug/L	0.994	4.82	20	
Chloromethane	SPCC	50.0	59.5	ug/L	0.533	19.1	20	
1,1,1-Trichloroethane		50.0	48.6	ug/L	0.435	2.88	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	45.7	ug/L	0.261	8.56	20	
1,1,2-Trichloroethane		50.0	47.6	ug/L	0.251	4.76	20	
1,2,3-Trichlorobenzene		50.0	47.4	ug/L	0.585	5.27	20	
1,2,4-Trichlorobenzene		50.0	50.8	ug/L	0.722	1.65	20	
1,2-Dibromo-3-Chloropropane		50.0	42.4	ug/L	0.0708	15.2	20	
1,2-Dibromoethane		50.0	47.7	ug/L	0.248	4.67	20	
1,2-Dichlorobenzene		50.0	47.8	ug/L	1.25	4.41	20	
1,2-Dichloroethane		50.0	49.9	ug/L	0.351	0.287	20	
cis-1,2-Dichloroethene		50.0	50.4	ug/L	0.292	0.772	20	
trans-1,2-Dichloroethene		50.0	49.3	ug/L	0.274	1.42	20	
1,3-Dichlorobenzene		50.0	49.2	ug/L	1.42	1.62	20	
1,4-Dichlorobenzene		50.0	47.9	ug/L	1.45	4.29	20	
2-Butanone		50.0	51.2	ug/L	0.0679	2.45	20	
2-Hexanone		50.0	49.8	ug/L	0.126	0.470	20	
4-Methyl-2-Pentanone		50.0	51.5	ug/L	0.0512	2.99	20	
Acetone		50.0	47.4	ug/L	0.0449	5.19	20	
Benzene		50.0	48.6	ug/L	1.07	2.85	20	
Bromochloromethane		50.0	51.5	ug/L	0.159	2.97	20	
Bromodichloromethane		50.0	50.3	ug/L	0.345	0.677	20	
Bromomethane		50.0	48.0	ug/L	0.226	4.05	20	
Carbon Disulfide		50.0	50.8	ug/L	0.844	1.52	20	
Carbon Tetrachloride		50.0	50.3	ug/L	0.398	0.582	20	
Chloroethane		50.0	48.4	ug/L	0.227	3.24	20	
cis-1,3-Dichloropropene		50.0	47.8	ug/L	0.393	4.34	20	
Cyclohexane		50.0	50.4	ug/L	0.452	0.799	20	
Dibromochloromethane		50.0	47.1	ug/L	0.334	5.75	20	
Dichlorodifluoromethane		50.0	48.7	ug/L	0.320	2.53	20	
Isopropylbenzene		50.0	49.5	ug/L	1.54	0.983	20	
Methyl acetate		50.0	47.1	ug/L	0.176	5.77	20	
Methyl Tert Butyl Ether		50.0	45.5	ug/L	0.545	8.95	20	

CCV - Modified 03/05/2008
PDF File ID: 2409205
Report generated 05/10/2012 13:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 05/04/2012 Sample ID: WG397028-02
Instrument ID: HPMS6 Run Time: 11:43 Method: 8260B
File ID: 6M107859 Analyst: ADC QC Key: WATERLOO
Workgroup (AAB#): WG397029 Cal ID: HPMS6 - 25-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Methylcyclohexane		50.0	51.9	ug/L	0.332	3.87	20	
Methylene Chloride		50.0	48.6	ug/L	0.276	2.71	20	
m-,p-Xylene		100	99.2	ug/L	0.653	0.809	20	
o-Xylene		50.0	48.8	ug/L	0.612	2.36	20	
Styrene		50.0	46.4	ug/L	1.05	7.18	20	
Tetrachloroethene		50.0	49.3	ug/L	0.378	1.47	20	
trans-1,3-Dichloropropene		50.0	46.6	ug/L	0.499	6.87	20	
Trichloroethene		50.0	49.5	ug/L	0.274	1.03	20	
Trichlorofluoromethane		50.0	45.6	ug/L	0.486	8.89	20	
1,2-Dichloroethene		100	99.7	ug/L	0.283	0.323	20	
Xylenes		150	148	ug/L	0.632	1.32	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2409205
Report generated 05/10/2012 13:01

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040844
Instrument ID: HPMS6
Workgroup (AAB#): WG397029

CCV Number: WG397028-02
CAL ID: HPMS6-25-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397028-02	NA	NA	140070	278648	415638
Upper Limit	NA	NA	280140	557296	831276
Lower Limit	NA	NA	70035	139324	207819
L12040844-01	1.00	01	93006	205286	296849
L12040844-03	1.00	01	96280	203822	299260
L12040844-05	1.00	01	92640	201951	296453
L12040844-07	1.00	01	104294	225098	325763
WG397029-01	1.00	01	115196	245946	351654
WG397029-02	1.00	01	127996	250468	366865
WG397029-03	1.00	01	128621	256908	373623

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: 2409630
Report generated 05/10/2012 13:01

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040844
Instrument ID: HPMS6
Workgroup (AAB#): WG397029

CCV Number: WG397028-02
CAL ID: HPMS6 - 25-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397028-02	NA	NA	18.6	15.04	10.54
Upper Limit	NA	NA	19.1	15.54	11.04
Lower Limit	NA	NA	18.1	14.54	10.04
L12040844-01	1.00	01	18.6	15.04	10.54
L12040844-03	1.00	01	18.6	15.03	10.54
L12040844-05	1.00	01	18.6	15.04	10.54
L12040844-07	1.00	01	18.6	15.03	10.54
WG397029-01	1.00	01	18.6	15.03	10.54
WG397029-02	1.00	01	18.6	15.04	10.54
WG397029-03	1.00	01	18.6	15.03	10.54

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

Underline = Response outside limits

INTERNAL_STD_RT - Modified 03/06/2008
PDF File ID: 2409631
Report generated 05/10/2012 13:01

2.1.1.3 Sample Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107878.D Vial: 21
Acq On : 4 May 2012 22:02 Operator: adc
Sample : L12040844-01 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 15:21:31 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	296849	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	205286	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	93006	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	86808	27.0076	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 108.04%			
43) 1,2-Dichloroethane-d4	10.07	65	86810	27.5198	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 110.08%			
58) Toluene-d8	12.83	98	287802	25.7955	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.20%			
80) p-Bromofluorobenzene	16.81	95	98219	26.9123	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 107.64%			

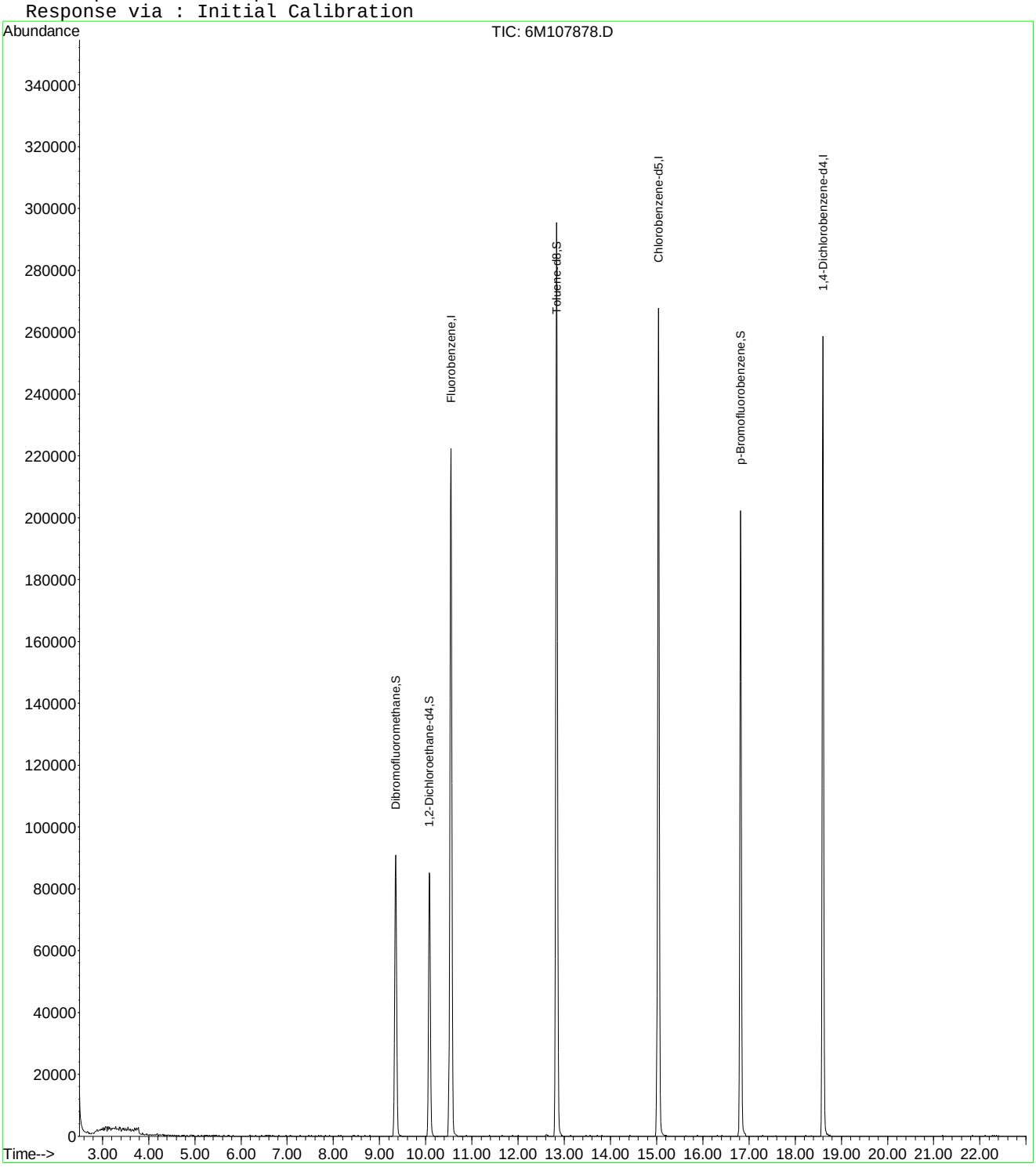
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
6M107878.D 8260WTR.M Wed May 09 15:21:31 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107878.D Vial: 21
Acq On : 4 May 2012 22:02 Operator: adc
Sample : L12040844-01 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 15:21 2012 Quant Results File: 8260WTR.RES

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



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\6M107878.D Vial: 21
Acq On : 4 May 2012 22:02 Operator: adc
Sample : L12040844-01 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

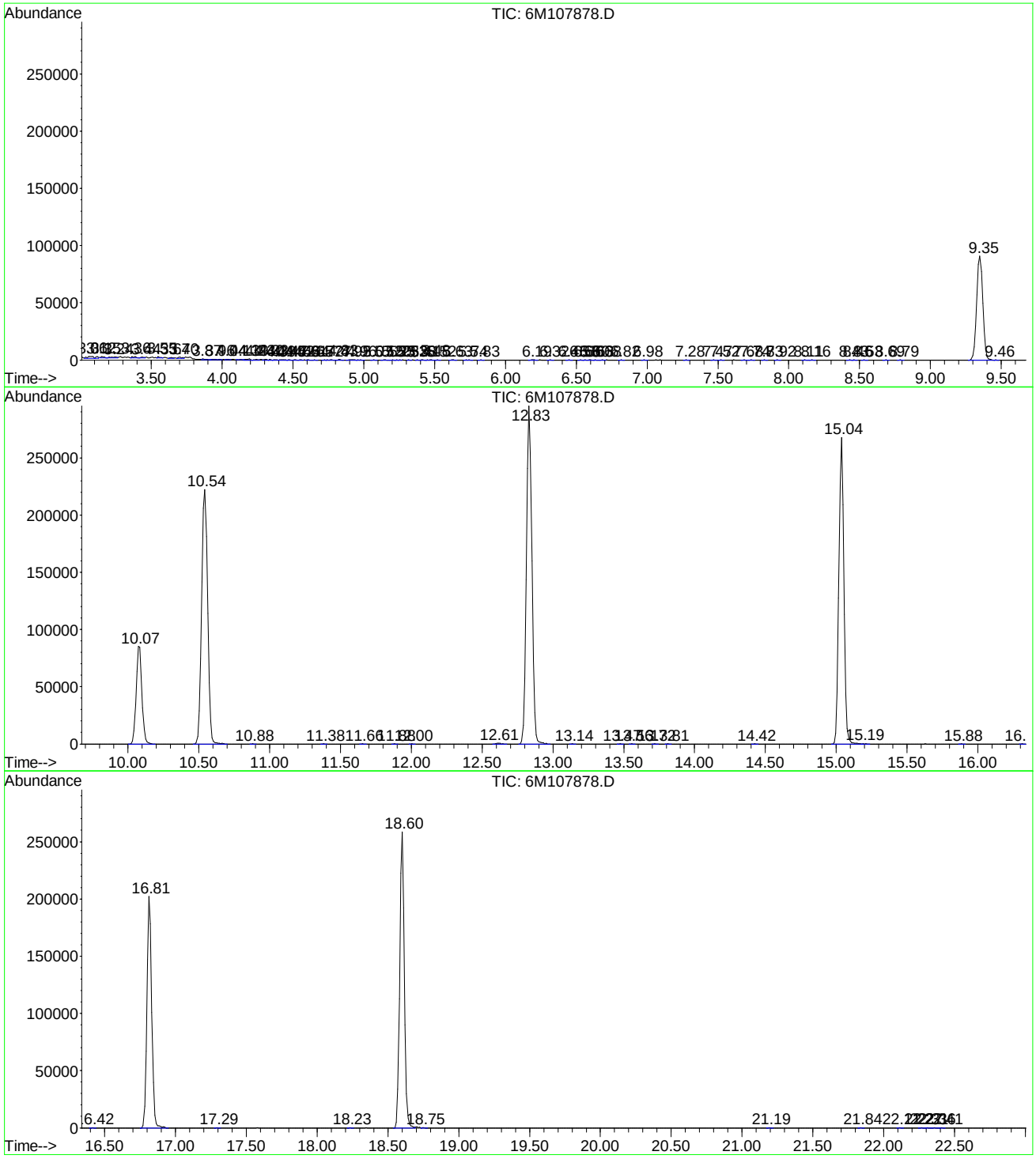
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.059	53	56	60	rVB	1524	4449	0.56%	0.120%
2	3.120	60	62	63	rBV	1564	1988	0.25%	0.053%
3	3.150	64	65	68	rVB	1114	1563	0.20%	0.042%
4	3.242	69	74	76	rBV2	721	2282	0.29%	0.061%
5	3.365	85	86	90	rVB	1336	2365	0.30%	0.064%
6	3.436	91	93	95	rBV	878	1293	0.16%	0.035%
7	3.549	103	104	107	rVB2	1213	1066	0.14%	0.029%
8	3.641	111	113	115	rBV	824	1089	0.14%	0.029%
9	3.702	117	119	122	rBV	1123	1968	0.25%	0.053%
10	3.865	134	135	140	rVB	774	784	0.10%	0.021%
11	3.957	140	144	148	rVV	448	746	0.09%	0.020%
12	4.039	150	152	154	rVB	203	305	0.04%	0.008%
13	4.131	158	161	163	rVV	270	380	0.05%	0.010%
14	4.192	163	167	169	rVB	891	1842	0.23%	0.049%
15	4.243	169	172	174	rBV	581	1215	0.15%	0.033%
16	4.304	176	178	180	rVB	651	924	0.12%	0.025%
17	4.335	180	181	183	rBB	453	495	0.06%	0.013%
18	4.386	183	186	187	rBB	374	649	0.08%	0.017%
19	4.437	187	191	193	rBB	396	1069	0.14%	0.029%
20	4.468	193	194	196	rBB	332	393	0.05%	0.011%
21	4.519	197	199	200	rBB	383	465	0.06%	0.012%
22	4.560	201	203	204	rBB	347	423	0.05%	0.011%
23	4.611	206	208	210	rBB	396	428	0.05%	0.012%
24	4.652	211	212	214	rBB	355	217	0.03%	0.006%
25	4.723	217	219	220	rBB	335	205	0.03%	0.006%
26	4.774	220	224	226	rBB	358	646	0.08%	0.017%
27	4.825	227	229	232	rBB	422	444	0.06%	0.012%
28	4.917	234	238	241	rBB	364	1031	0.13%	0.028%
29	4.958	241	242	246	rBB	354	419	0.05%	0.011%
30	5.070	251	253	255	rBB	340	208	0.03%	0.006%
31	5.152	258	261	263	rBB	366	411	0.05%	0.011%
32	5.203	264	266	268	rBB	327	200	0.03%	0.005%
33	5.234	268	269	270	rBB	305	187	0.02%	0.005%
34	5.254	270	271	272	rBB	319	195	0.02%	0.005%
35	5.315	276	277	279	rBB	373	229	0.03%	0.006%
36	5.377	282	283	284	rBB	316	194	0.02%	0.005%
37	5.407	285	286	289	rBB	346	399	0.05%	0.011%
38	5.479	289	293	295	rBB	403	636	0.08%	0.017%
39	5.519	296	297	299	rBB	314	192	0.02%	0.005%
40	5.632	305	308	310	rBB	315	383	0.05%	0.010%
41	5.744	315	319	321	rBB	394	480	0.06%	0.013%
42	5.826	325	327	329	rBB	351	215	0.03%	0.006%

43	6.193	360	363	366	rBB	359	610	0.08%	0.016%
44	6.316	373	375	377	rBB	337	206	0.03%	0.006%
45	6.449	386	388	390	rBB	312	191	0.02%	0.005%
46	6.530	394	396	398	rBB	398	244	0.03%	0.007%
47	6.561	398	399	400	rBB	311	190	0.02%	0.005%
48	6.602	401	403	405	rBB	349	422	0.05%	0.011%
49	6.633	405	406	408	rBB	331	203	0.03%	0.005%
50	6.684	409	411	413	rBB	310	190	0.02%	0.005%
51	6.816	422	424	426	rBB	361	221	0.03%	0.006%
52	6.980	438	440	442	rBB	346	212	0.03%	0.006%
53	7.276	467	469	471	rBB	313	192	0.02%	0.005%
54	7.470	486	488	490	rBB	323	198	0.03%	0.005%
55	7.521	491	493	495	rBB	387	237	0.03%	0.006%
56	7.684	507	509	511	rBB	311	190	0.02%	0.005%
57	7.735	512	514	516	rBB	338	207	0.03%	0.006%
58	7.827	521	523	525	rBB	328	201	0.03%	0.005%
59	7.919	530	532	534	rBB	343	210	0.03%	0.006%
60	8.113	549	551	553	rBB	380	233	0.03%	0.006%
61	8.164	554	556	558	rBB	305	187	0.02%	0.005%
62	8.430	580	582	584	rBB	380	233	0.03%	0.006%
63	8.460	584	585	587	rBB	339	208	0.03%	0.006%
64	8.532	590	592	594	rBB	310	190	0.02%	0.005%
65	8.685	605	607	609	rBB	345	211	0.03%	0.006%
66	8.787	615	617	619	rBB	339	208	0.03%	0.006%
67	9.349	664	672	682	rBB	90873	272204	34.55%	7.315%
68	9.461	682	683	685	rBB	344	211	0.03%	0.006%
69	10.074	736	743	754	rBB	85208	240438	30.52%	6.461%
70	10.544	781	789	804	rBB	222392	650911	82.61%	17.491%
71	10.881	820	822	824	rBB	307	188	0.02%	0.005%
72	11.381	869	871	873	rBB	340	208	0.03%	0.006%
73	11.657	896	898	900	rBB	331	203	0.03%	0.005%
74	11.881	918	920	922	rBB	364	223	0.03%	0.006%
75	12.004	930	932	934	rBB	348	213	0.03%	0.006%
76	12.606	988	991	997	rBB	476	1272	0.16%	0.034%
77	12.831	1006	1013	1027	rBB	295526	787890	100.00%	21.172%
78	13.137	1041	1043	1045	rBB	308	189	0.02%	0.005%
79	13.474	1074	1076	1078	rBB	351	215	0.03%	0.006%
80	13.556	1082	1084	1086	rBB	323	198	0.03%	0.005%
81	13.719	1098	1100	1102	rBB	320	196	0.02%	0.005%
82	13.811	1107	1109	1111	rBB	347	213	0.03%	0.006%
83	14.424	1167	1169	1171	rBB	322	197	0.03%	0.005%
84	15.037	1222	1229	1243	rBB	267789	656028	83.26%	17.629%
85	15.190	1243	1244	1248	rBB	401	447	0.06%	0.012%
86	15.884	1310	1312	1314	rBB	380	233	0.03%	0.006%
87	16.313	1352	1354	1356	rBB	335	205	0.03%	0.006%
88	16.415	1362	1364	1366	rBB	315	193	0.02%	0.005%
89	16.813	1397	1403	1416	rBB	202332	477323	60.58%	12.826%
90	17.293	1448	1450	1452	rBB	308	189	0.02%	0.005%
91	18.233	1540	1542	1544	rBB	372	228	0.03%	0.006%
92	18.600	1572	1578	1587	rBV	258772	588891	74.74%	15.824%
93	18.754	1591	1593	1595	rBB	382	426	0.05%	0.011%
94	21.194	1830	1832	1834	rBB	382	234	0.03%	0.006%
95	21.837	1893	1895	1897	rBB	305	187	0.02%	0.005%
96	22.113	1920	1922	1924	rBB	325	199	0.03%	0.005%
97	22.266	1935	1937	1939	rBB	333	204	0.03%	0.005%
98	22.307	1940	1941	1943	rBB	313	192	0.02%	0.005%
99	22.358	1944	1946	1948	rBB	307	188	0.02%	0.005%
100	22.409	1949	1951	1953	rBB	303	186	0.02%	0.005%

Sum of corrected areas: 3721388

File : C:\MSDCHEM\1\DATA\050412\6M107878.D
Operator : adc
Acquired : 4 May 2012 22:02 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: L12040844-01 A 826-SPE
Misc Info : 1,1
Vial Number: 21
Quant File :8260WTR.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107879.D Vial: 22
Acq On : 4 May 2012 22:35 Operator: adc
Sample : L12040844-03 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 15:21:32 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	299260	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	203822	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	96280	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	87994	27.1561	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 108.64%			
43) 1,2-Dichloroethane-d4	10.08	65	87727	27.5865	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 110.36%			
58) Toluene-d8	12.83	98	287661	25.9681	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.88%			
80) p-Bromofluorobenzene	16.81	95	98497	26.0707	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 104.28%			

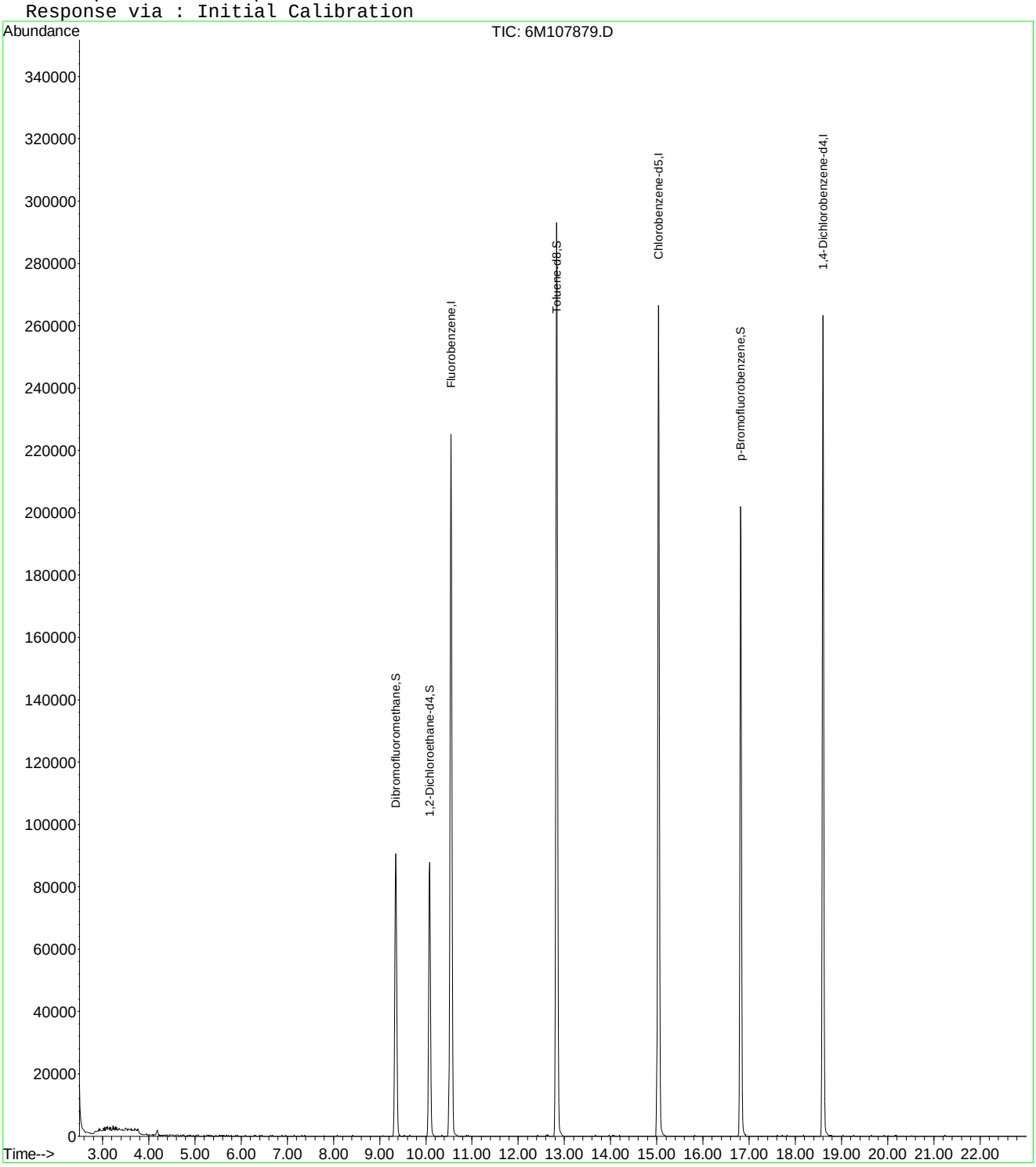
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
6M107879.D 8260WTR.M Wed May 09 15:21:33 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107879.D Vial: 22
Acq On : 4 May 2012 22:35 Operator: adc
Sample : L12040844-03 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 15:21 2012 Quant Results File: 8260WTR.RES

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



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\6M107879.D Vial: 22
Acq On : 4 May 2012 22:35 Operator: adc
Sample : L12040844-03 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

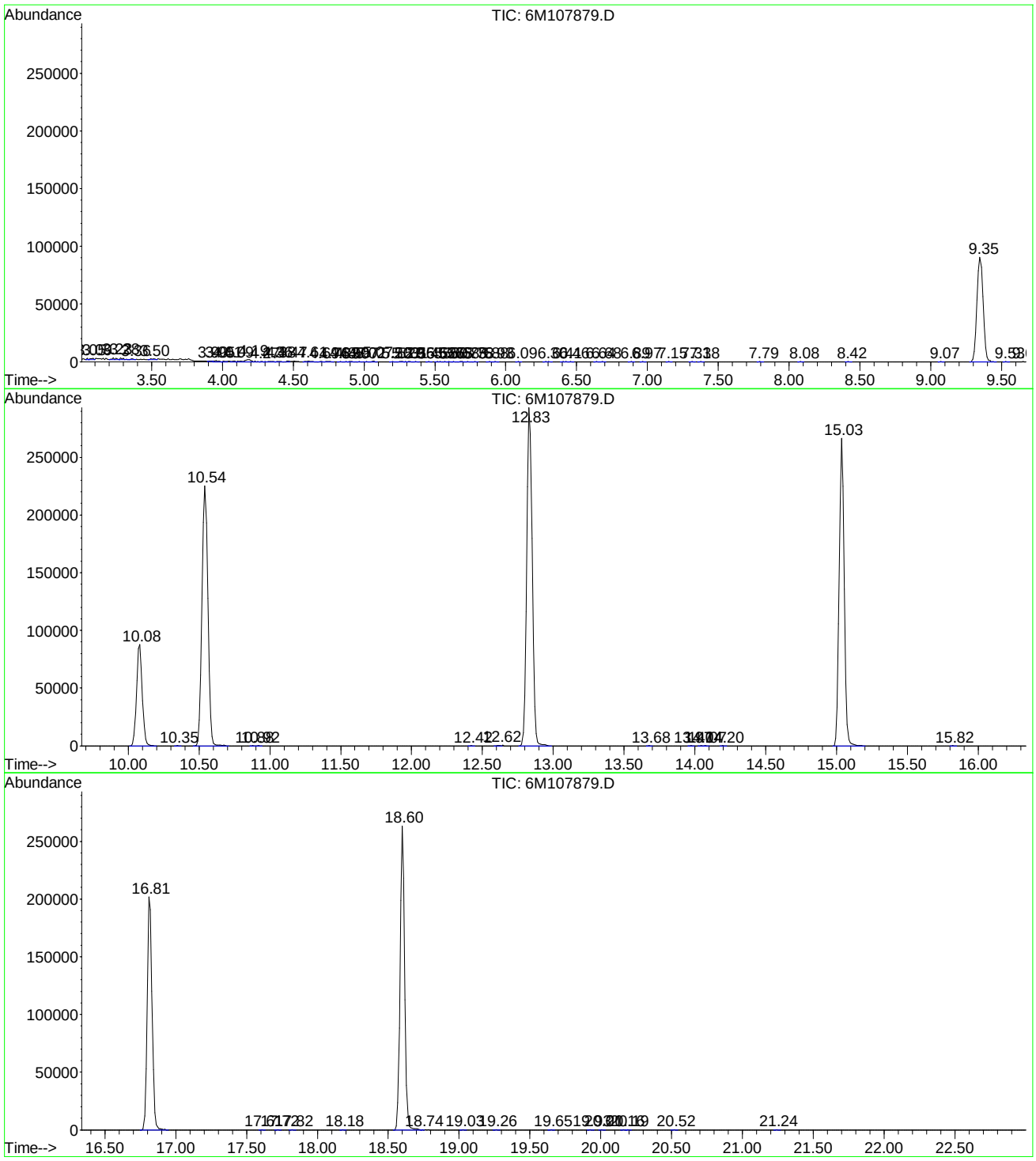
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.046	54	55	56	rBV	1435	927	0.12%	0.025%
2	3.087	56	59	60	rBV	1319	2198	0.28%	0.059%
3	3.230	70	73	77	rBV	1803	3124	0.40%	0.084%
4	3.281	77	78	83	rVV	1433	2217	0.28%	0.059%
5	3.363	84	86	88	rVB	719	928	0.12%	0.025%
6	3.495	97	99	103	rVB2	1022	2035	0.26%	0.055%
7	3.904	138	139	142	rBV	153	275	0.03%	0.007%
8	3.955	142	144	148	rVB	833	1558	0.20%	0.042%
9	4.006	148	149	152	rBV	537	1040	0.13%	0.028%
10	4.088	154	157	158	rVB	729	948	0.12%	0.025%
11	4.190	158	167	174	rBB3	1990	6493	0.83%	0.174%
12	4.272	174	175	177	rBB3	322	392	0.05%	0.011%
13	4.363	177	184	185	rBB3	413	1285	0.16%	0.034%
14	4.384	185	186	191	rBB3	410	887	0.11%	0.024%
15	4.466	192	194	195	rBV	451	746	0.09%	0.020%
16	4.609	204	208	213	rBB	435	1514	0.19%	0.041%
17	4.690	214	216	218	rBB	332	393	0.05%	0.011%
18	4.762	219	223	225	rBB	347	828	0.11%	0.022%
19	4.833	228	230	232	rBB	327	200	0.03%	0.005%
20	4.874	233	234	235	rBB	364	223	0.03%	0.006%
21	4.905	235	237	240	rBB	351	605	0.08%	0.016%
22	4.966	241	243	245	rBB	306	188	0.02%	0.005%
23	5.017	246	248	250	rBB	330	202	0.03%	0.005%
24	5.068	251	253	255	rBB	450	468	0.06%	0.013%
25	5.201	264	266	268	rBB	332	203	0.03%	0.005%
26	5.272	269	273	274	rBB	311	565	0.07%	0.015%
27	5.293	274	275	276	rBB	362	222	0.03%	0.006%
28	5.313	276	277	280	rBB	316	387	0.05%	0.010%
29	5.364	281	282	284	rBB	311	191	0.02%	0.005%
30	5.456	289	291	293	rBB	328	201	0.03%	0.005%
31	5.517	295	297	300	rBB	313	382	0.05%	0.010%
32	5.568	301	302	304	rBB	388	238	0.03%	0.006%
33	5.599	304	305	307	rBB	307	188	0.02%	0.005%
34	5.630	307	308	310	rBB	304	186	0.02%	0.005%
35	5.681	311	313	316	rBB	391	437	0.06%	0.012%
36	5.732	317	318	320	rBB	315	193	0.02%	0.005%
37	5.783	321	323	325	rBB	304	186	0.02%	0.005%
38	5.885	331	333	335	rBB	310	190	0.02%	0.005%
39	5.926	336	337	339	rBB	307	188	0.02%	0.005%
40	6.089	351	353	355	rBB	325	199	0.03%	0.005%
41	6.304	370	374	376	rBB	330	389	0.05%	0.010%
42	6.406	382	384	387	rBB	329	385	0.05%	0.010%

43	6.457	388	389	391	rBB	379	232	0.03%	0.006%
44	6.641	405	407	409	rBB	333	204	0.03%	0.005%
45	6.681	410	411	413	rBB	370	227	0.03%	0.006%
46	6.886	429	431	433	rBB	309	189	0.02%	0.005%
47	6.967	437	439	441	rBB	334	205	0.03%	0.005%
48	7.151	455	457	459	rBB	331	203	0.03%	0.005%
49	7.315	471	473	475	rBB	384	235	0.03%	0.006%
50	7.376	477	479	481	rBB	325	199	0.03%	0.005%
51	7.794	518	520	522	rBB	301	184	0.02%	0.005%
52	8.080	546	548	550	rBB	316	194	0.02%	0.005%
53	8.417	579	581	583	rBB	377	231	0.03%	0.006%
54	9.071	643	645	647	rBB	302	185	0.02%	0.005%
55	9.347	665	672	683	rBB	90712	273752	34.81%	7.339%
56	9.530	688	690	692	rBB	338	207	0.03%	0.006%
57	9.653	700	702	704	rBB	306	188	0.02%	0.005%
58	10.082	737	744	755	rBB	87885	245453	31.21%	6.580%
59	10.347	768	770	772	rBB	326	200	0.03%	0.005%
60	10.541	781	789	805	rBB	225242	650201	82.67%	17.430%
61	10.878	820	822	824	rBB	331	203	0.03%	0.005%
62	10.919	825	826	828	rBB	316	194	0.02%	0.005%
63	12.420	971	973	975	rBB	387	237	0.03%	0.006%
64	12.624	989	993	994	rBB	409	660	0.08%	0.018%
65	12.829	1006	1013	1028	rBB	293197	786525	100.00%	21.085%
66	13.676	1094	1096	1098	rBB	317	194	0.02%	0.005%
67	13.972	1123	1125	1127	rBB	338	207	0.03%	0.006%
68	14.044	1130	1132	1134	rBB	309	189	0.02%	0.005%
69	14.075	1134	1135	1137	rBB	307	188	0.02%	0.005%
70	14.197	1145	1147	1149	rBB	311	191	0.02%	0.005%
71	15.034	1223	1229	1245	rBB	266552	656511	83.47%	17.599%
72	15.821	1304	1306	1308	rBB	383	235	0.03%	0.006%
73	16.811	1397	1403	1416	rBB	202004	482134	61.30%	12.925%
74	17.608	1479	1481	1483	rBB	340	208	0.03%	0.006%
75	17.720	1490	1492	1494	rBB	311	191	0.02%	0.005%
76	17.822	1500	1502	1504	rBB	304	186	0.02%	0.005%
77	18.180	1535	1537	1539	rBB	308	189	0.02%	0.005%
78	18.598	1572	1578	1591	rBB	263387	592770	75.37%	15.891%
79	18.741	1591	1592	1593	rBB	333	204	0.03%	0.005%
80	19.027	1618	1620	1622	rBB	330	202	0.03%	0.005%
81	19.262	1641	1643	1645	rBB	394	241	0.03%	0.006%
82	19.650	1679	1681	1683	rBB	328	201	0.03%	0.005%
83	19.926	1706	1708	1710	rBB	308	189	0.02%	0.005%
84	20.007	1714	1716	1718	rBB	303	186	0.02%	0.005%
85	20.161	1729	1731	1733	rBB	307	188	0.02%	0.005%
86	20.191	1733	1734	1736	rBB	334	205	0.03%	0.005%
87	20.518	1764	1766	1768	rBB	303	186	0.02%	0.005%
88	21.243	1835	1837	1839	rBB	317	194	0.02%	0.005%

Sum of corrected areas: 3730301

File : C:\MSDCHEM\1\DATA\050412\6M107879.D
Operator : adc
Acquired : 4 May 2012 22:35 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: L12040844-03 A 826-SPE
Misc Info : 1,1
Vial Number: 22
Quant File :8260WTR.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107880.D Vial: 23
Acq On : 4 May 2012 23:07 Operator: adc
Sample : L12040844-05 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 15:21:33 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	296453	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	201951	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	92640	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	86277	26.8783	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 107.52%			
43) 1,2-Dichloroethane-d4	10.07	65	87382	27.7382	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 110.96%			
58) Toluene-d8	12.83	98	287890	26.2295	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 104.92%			
80) p-Bromofluorobenzene	16.81	95	97651	26.8624	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 107.44%			

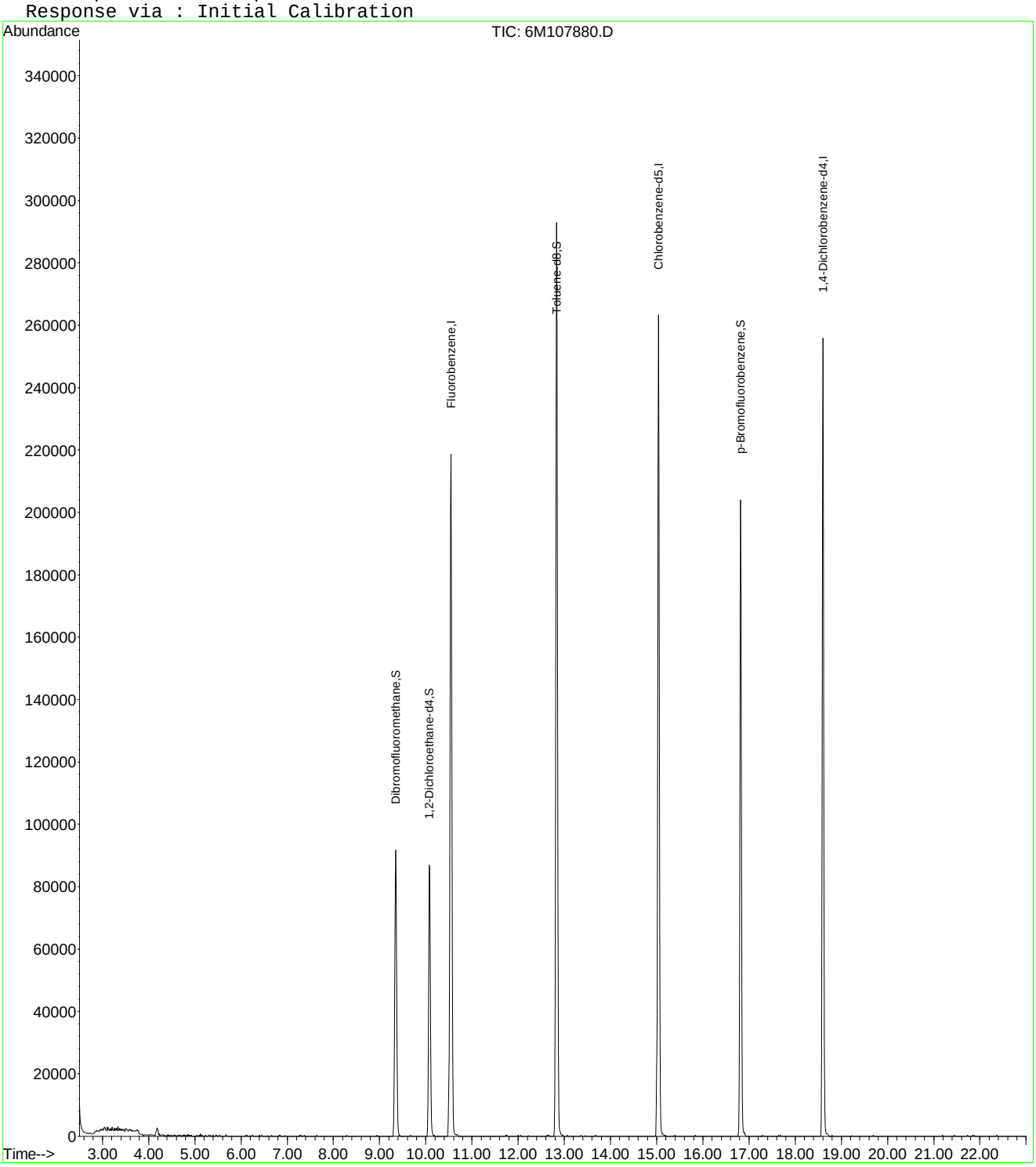
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
6M107880.D 8260WTR.M Wed May 09 15:21:34 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107880.D Vial: 23
Acq On : 4 May 2012 23:07 Operator: adc
Sample : L12040844-05 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 15:21 2012 Quant Results File: 8260WTR.RES

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



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\6M107880.D Vial: 23
Acq On : 4 May 2012 23:07 Operator: adc
Sample : L12040844-05 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

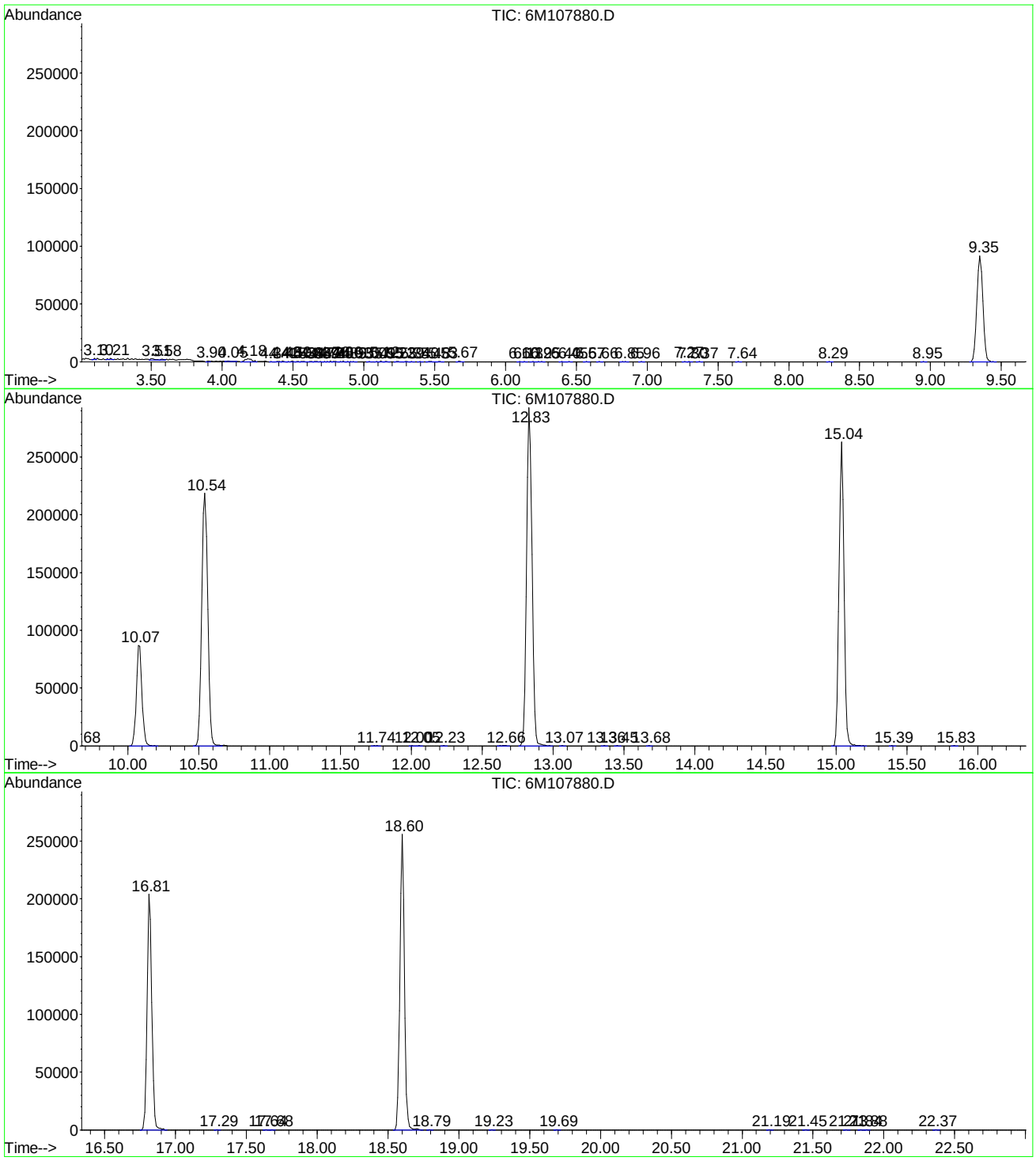
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.099	58	60	61	rBV	1324	1084	0.14%	0.030%
2	3.211	68	71	73	rVB	1178	1454	0.19%	0.040%
3	3.507	98	100	105	rBV	1052	2401	0.31%	0.065%
4	3.579	105	107	109	rBV	757	1203	0.15%	0.033%
5	3.895	137	138	140	rBV	441	770	0.10%	0.021%
6	4.049	150	153	158	rVV	198	626	0.08%	0.017%
7	4.181	161	166	172	rBB	2637	8470	1.09%	0.231%
8	4.345	181	182	184	rBB	350	215	0.03%	0.006%
9	4.406	185	188	189	rBB	372	642	0.08%	0.018%
10	4.426	189	190	193	rBB	464	513	0.07%	0.014%
11	4.498	193	197	198	rBB	419	641	0.08%	0.017%
12	4.529	199	200	202	rBB	392	465	0.06%	0.013%
13	4.580	202	205	207	rBB	382	610	0.08%	0.017%
14	4.631	208	210	211	rBB	314	378	0.05%	0.010%
15	4.692	211	216	218	rBB	361	839	0.11%	0.023%
16	4.723	218	219	220	rBB	301	184	0.02%	0.005%
17	4.743	220	221	222	rBB	362	222	0.03%	0.006%
18	4.763	222	223	224	rBB	461	282	0.04%	0.008%
19	4.794	224	226	229	rBB	394	643	0.08%	0.018%
20	4.855	229	232	234	rBB	631	596	0.08%	0.016%
21	4.886	234	235	236	rBB	308	189	0.02%	0.005%
22	4.927	236	239	241	rBB	343	412	0.05%	0.011%
23	5.039	248	250	252	rBB	351	215	0.03%	0.006%
24	5.090	253	255	256	rBB	379	232	0.03%	0.006%
25	5.121	257	258	260	rBB	758	464	0.06%	0.013%
26	5.151	260	261	264	rBB	335	396	0.05%	0.011%
27	5.233	267	269	272	rBB	386	422	0.05%	0.012%
28	5.294	273	275	278	rBB	332	404	0.05%	0.011%
29	5.335	278	279	281	rBB	333	204	0.03%	0.006%
30	5.396	283	285	287	rBB	315	193	0.02%	0.005%
31	5.478	289	293	295	rBB	354	589	0.08%	0.016%
32	5.529	296	298	301	rBB	313	383	0.05%	0.010%
33	5.672	310	312	315	rBB	537	542	0.07%	0.015%
34	6.101	352	354	356	rBB	314	192	0.02%	0.005%
35	6.132	356	357	359	rBB	320	196	0.03%	0.005%
36	6.193	361	363	365	rBB	300	184	0.02%	0.005%
37	6.254	366	369	371	rBB	311	374	0.05%	0.010%
38	6.397	381	383	385	rBB	312	191	0.02%	0.005%
39	6.448	386	388	390	rBB	352	216	0.03%	0.006%
40	6.571	398	400	402	rBB	301	184	0.02%	0.005%
41	6.663	407	409	411	rBB	336	206	0.03%	0.006%
42	6.847	423	427	429	rBB	327	387	0.05%	0.011%

43	6.959	436	438	440	rBB	301	184	0.02%	0.005%
44	7.265	466	468	470	rBB	415	254	0.03%	0.007%
45	7.296	470	471	473	rBB	305	187	0.02%	0.005%
46	7.367	476	478	480	rBB	312	191	0.02%	0.005%
47	7.643	503	505	507	rBB	312	191	0.02%	0.005%
48	8.286	566	568	570	rBB	375	230	0.03%	0.006%
49	8.950	631	633	635	rBB	389	238	0.03%	0.006%
50	9.348	665	672	683	rBB	91723	270283	34.72%	7.373%
51	9.675	702	704	706	rBB	328	201	0.03%	0.005%
52	10.073	737	743	756	rBB	86980	240431	30.88%	6.558%
53	10.543	781	789	801	rBV	218779	641507	82.40%	17.499%
54	11.738	904	906	910	rBB	322	385	0.05%	0.011%
55	12.003	930	932	934	rBB	314	192	0.02%	0.005%
56	12.054	935	937	939	rBB	331	203	0.03%	0.006%
57	12.228	952	954	956	rBB	301	184	0.02%	0.005%
58	12.657	991	996	999	rBB	376	856	0.11%	0.023%
59	12.830	1006	1013	1029	rBB	292994	778530	100.00%	21.237%
60	13.065	1034	1036	1038	rBB	321	197	0.03%	0.005%
61	13.361	1063	1065	1067	rBB	340	208	0.03%	0.006%
62	13.453	1072	1074	1076	rBB	303	186	0.02%	0.005%
63	13.678	1094	1096	1098	rBB	347	213	0.03%	0.006%
64	15.036	1222	1229	1246	rBB	263264	647216	83.13%	17.655%
65	15.394	1262	1264	1266	rBB	329	202	0.03%	0.006%
66	15.833	1305	1307	1309	rBB	352	216	0.03%	0.006%
67	16.813	1397	1403	1415	rBB	204117	475078	61.02%	12.959%
68	17.293	1448	1450	1452	rBB	328	201	0.03%	0.005%
69	17.640	1482	1484	1486	rBB	313	192	0.02%	0.005%
70	17.681	1487	1488	1490	rBB	330	202	0.03%	0.006%
71	18.600	1572	1578	1592	rBB	255934	576829	74.09%	15.735%
72	18.794	1595	1597	1599	rBB	320	196	0.03%	0.005%
73	19.233	1638	1640	1642	rBB	302	185	0.02%	0.005%
74	19.693	1683	1685	1687	rBB	310	190	0.02%	0.005%
75	21.194	1830	1832	1834	rBB	307	188	0.02%	0.005%
76	21.449	1855	1857	1859	rBB	317	194	0.02%	0.005%
77	21.735	1883	1885	1887	rBB	321	197	0.03%	0.005%
78	21.837	1893	1895	1897	rBB	332	203	0.03%	0.006%
79	21.878	1898	1899	1901	rBB	314	192	0.02%	0.005%
80	22.368	1945	1947	1949	rBB	356	218	0.03%	0.006%

Sum of corrected areas: 3665963

File : C:\MSDCHEM\1\DATA\050412\6M107880.D
Operator : adc
Acquired : 4 May 2012 23:07 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: L12040844-05 A 826-SPE
Misc Info : 1,1
Vial Number: 23
Quant File :8260WTR.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107867.D Vial: 10
Acq On : 4 May 2012 16:04 Operator: adc
Sample : L12040844-07 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 15:21:13 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	325763	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	225098	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	104294	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.34	111	93742	26.5763	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 106.32%			
43) 1,2-Dichloroethane-d4	10.08	65	96304	27.8198	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 111.28%			
58) Toluene-d8	12.83	98	321241	26.2584	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 105.04%			
80) p-Bromofluorobenzene	16.81	95	110535	27.0089	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 108.04%			

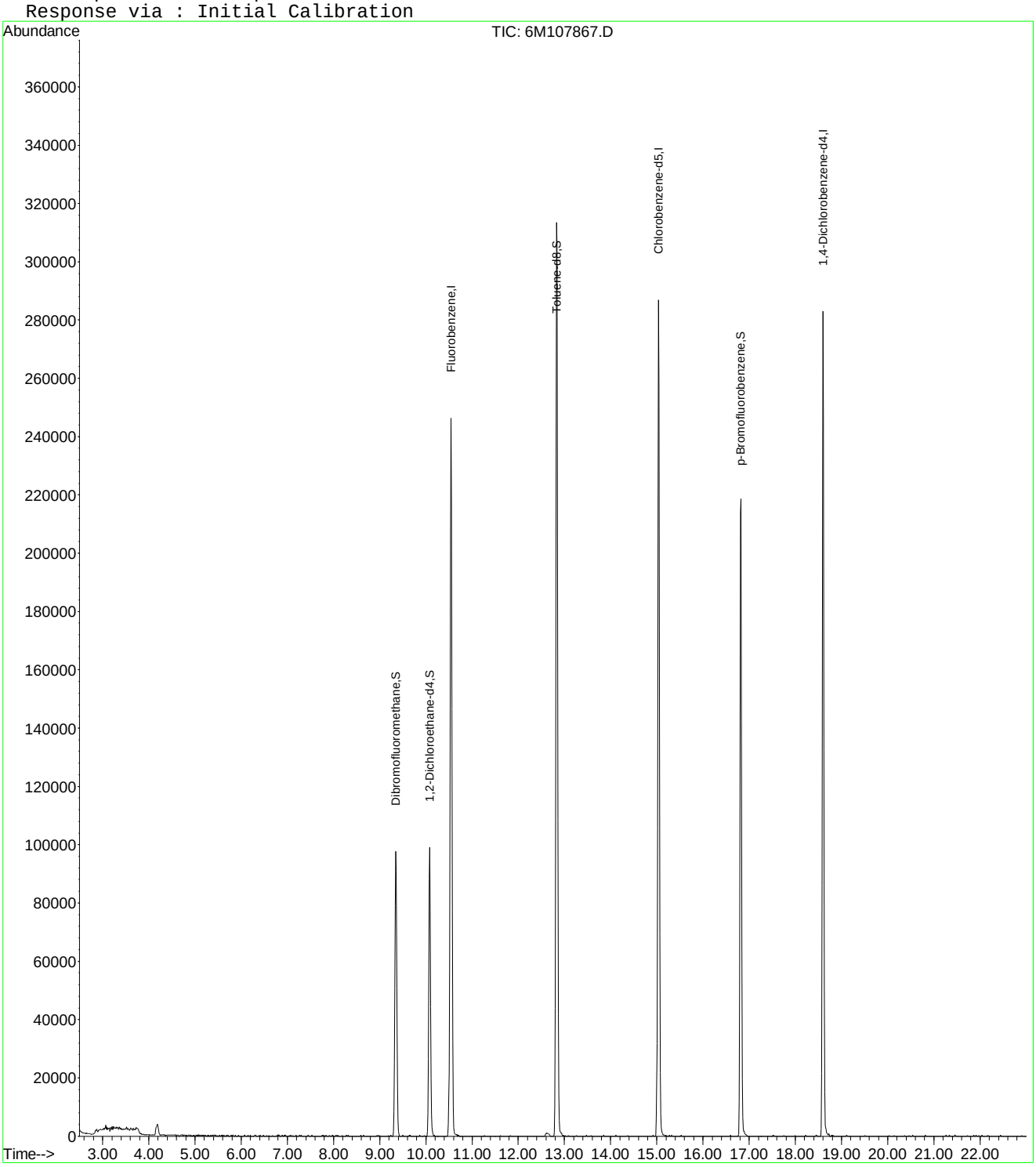
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
6M107867.D 8260WTR.M Wed May 09 15:21:13 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107867.D Vial: 10
Acq On : 4 May 2012 16:04 Operator: adc
Sample : L12040844-07 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 15:21 2012 Quant Results File: 8260WTR.RES

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



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\6M107867.D Vial: 10
Acq On : 4 May 2012 16:04 Operator: adc
Sample : L12040844-07 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

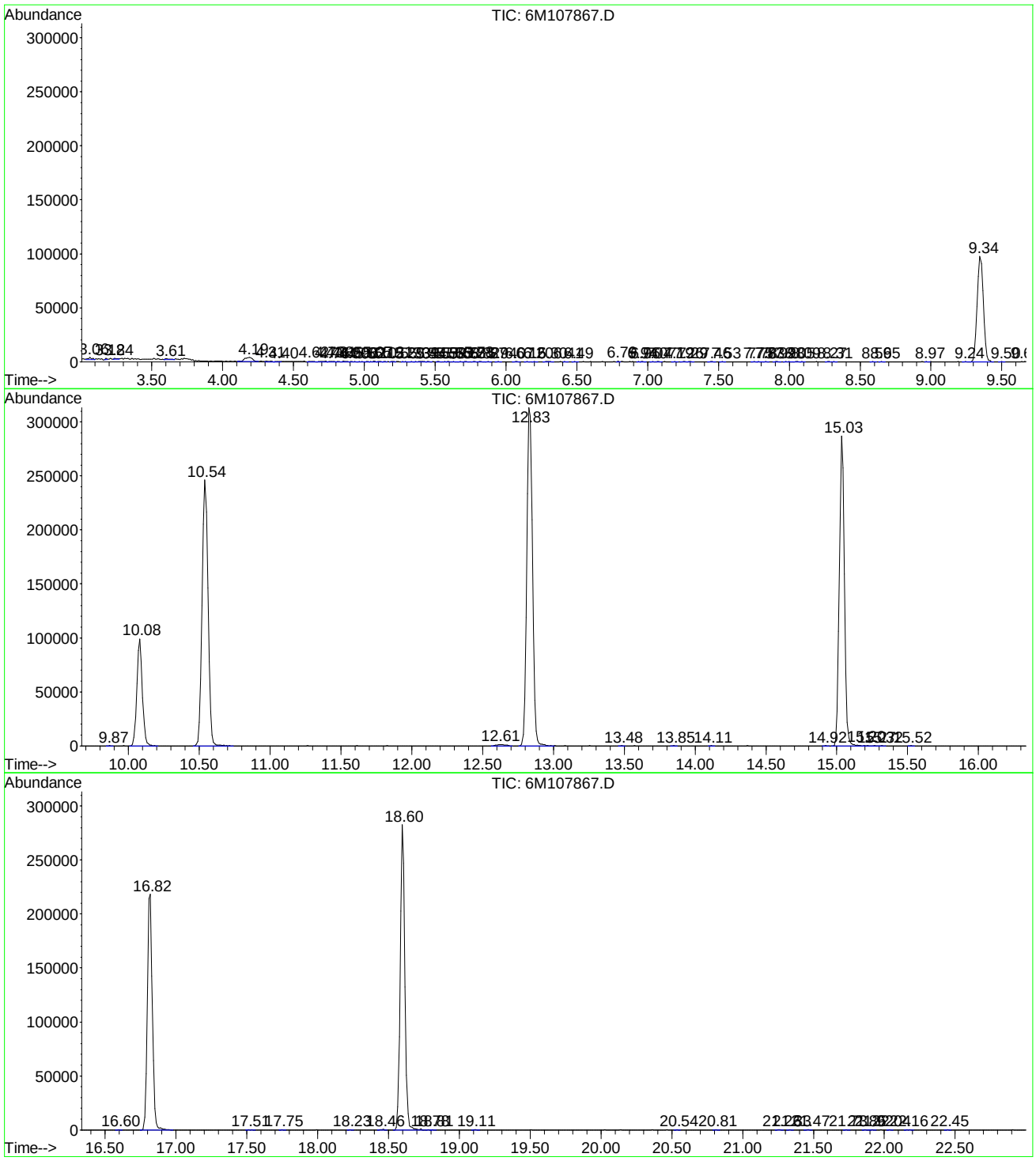
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.065	54	57	60	rVB2	1801	2871	0.33%	0.070%
2	3.177	67	68	69	rBV	940	721	0.08%	0.018%
3	3.239	73	74	77	rBV2	1155	1616	0.19%	0.039%
4	3.606	108	110	115	rBV2	953	2268	0.26%	0.055%
5	4.188	159	167	173	rVB2	3735	13873	1.60%	0.339%
6	4.311	178	179	184	rVB	522	1301	0.15%	0.032%
7	4.403	184	188	189	rBV	403	1100	0.13%	0.027%
8	4.617	207	209	213	rBB	435	1118	0.13%	0.027%
9	4.729	214	220	221	rBB	503	1424	0.16%	0.035%
10	4.760	221	223	227	rBB	414	1098	0.13%	0.027%
11	4.811	227	228	230	rBB	446	498	0.06%	0.012%
12	4.852	231	232	236	rBB	453	929	0.11%	0.023%
13	4.903	236	237	241	rBB	384	621	0.07%	0.015%
14	4.964	242	243	246	rBB	361	422	0.05%	0.010%
15	5.015	247	248	250	rBB	428	471	0.05%	0.011%
16	5.066	250	253	255	rBB	525	784	0.09%	0.019%
17	5.097	255	256	259	rBB	372	634	0.07%	0.015%
18	5.148	259	261	262	rBB	398	458	0.05%	0.011%
19	5.209	264	267	268	rBB	435	689	0.08%	0.017%
20	5.291	272	275	277	rBB	360	427	0.05%	0.010%
21	5.332	278	279	281	rBB	331	203	0.02%	0.005%
22	5.393	281	285	289	rBB	423	1307	0.15%	0.032%
23	5.444	289	290	293	rBB	371	434	0.05%	0.011%
24	5.526	296	298	300	rBB	360	405	0.05%	0.010%
25	5.567	301	302	303	rBB	377	231	0.03%	0.006%
26	5.587	303	304	306	rBB	354	415	0.05%	0.010%
27	5.628	307	308	310	rBB	368	225	0.03%	0.005%
28	5.679	311	313	314	rBB	411	252	0.03%	0.006%
29	5.720	315	317	319	rBB	377	445	0.05%	0.011%
30	5.781	320	323	324	rBB	432	449	0.05%	0.011%
31	5.822	325	327	329	rBB	377	458	0.05%	0.011%
32	5.873	330	332	334	rBB	364	223	0.03%	0.005%
33	5.945	337	339	341	rBB	330	202	0.02%	0.005%
34	6.067	349	351	354	rBB	375	455	0.05%	0.011%
35	6.149	357	359	361	rBB	323	198	0.02%	0.005%
36	6.200	362	364	366	rBB	327	200	0.02%	0.005%
37	6.302	370	374	377	rBB	378	808	0.09%	0.020%
38	6.414	384	385	387	rBB	356	218	0.03%	0.005%
39	6.486	390	392	394	rBB	324	199	0.02%	0.005%
40	6.792	421	422	423	rBB	622	381	0.04%	0.009%
41	6.935	435	436	437	rBB	366	224	0.03%	0.005%
42	6.955	437	438	441	rBB	339	410	0.05%	0.010%

43	7.037	444	446	447	rBB	317	194	0.02%	0.005%
44	7.068	448	449	452	rBB	326	390	0.04%	0.010%
45	7.190	459	461	463	rBB	357	219	0.03%	0.005%
46	7.262	465	468	469	rBB	322	392	0.05%	0.010%
47	7.292	470	471	474	rBB	365	410	0.05%	0.010%
48	7.456	484	487	489	rBB	367	418	0.05%	0.010%
49	7.527	492	494	496	rBB	360	221	0.03%	0.005%
50	7.752	514	516	518	rBB	389	238	0.03%	0.006%
51	7.783	518	519	521	rBB	328	201	0.02%	0.005%
52	7.834	522	524	526	rBB	346	212	0.02%	0.005%
53	7.915	529	532	534	rBB	308	376	0.04%	0.009%
54	7.977	536	538	542	rBB	321	385	0.04%	0.009%
55	8.048	543	545	548	rBB	341	398	0.05%	0.010%
56	8.089	548	549	551	rBB	330	202	0.02%	0.005%
57	8.273	565	567	569	rBB	321	382	0.04%	0.009%
58	8.314	570	571	573	rBB	349	214	0.02%	0.005%
59	8.589	596	598	600	rBB	346	212	0.02%	0.005%
60	8.651	602	604	606	rBB	323	198	0.02%	0.005%
61	8.967	634	635	637	rBB	334	205	0.02%	0.005%
62	9.243	660	662	664	rBB	325	199	0.02%	0.005%
63	9.345	665	672	681	rBB	97773	295067	34.03%	7.200%
64	9.498	685	687	689	rBB	380	233	0.03%	0.006%
65	9.641	699	701	705	rBB	394	469	0.05%	0.011%
66	9.866	721	723	725	rBB	327	200	0.02%	0.005%
67	10.080	737	744	756	rBB	99165	267602	30.86%	6.530%
68	10.540	781	789	808	rBB	246308	712004	82.12%	17.373%
69	12.613	987	992	1001	rBB	1106	5115	0.59%	0.125%
70	12.827	1006	1013	1030	rBB	313529	867056	100.00%	21.156%
71	13.481	1075	1077	1079	rBB	323	198	0.02%	0.005%
72	13.848	1111	1113	1115	rBB	348	213	0.02%	0.005%
73	14.114	1137	1139	1141	rBB	326	200	0.02%	0.005%
74	14.920	1216	1218	1220	rBB	369	226	0.03%	0.006%
75	15.033	1222	1229	1244	rBB	286868	716002	82.58%	17.471%
76	15.196	1244	1245	1249	rBB	437	452	0.05%	0.011%
77	15.268	1250	1252	1254	rBB	321	197	0.02%	0.005%
78	15.319	1255	1257	1259	rBB	359	220	0.03%	0.005%
79	15.523	1275	1277	1279	rBB	321	197	0.02%	0.005%
80	16.595	1380	1382	1384	rBB	324	198	0.02%	0.005%
81	16.820	1397	1404	1419	rBB	218597	534036	61.59%	13.031%
82	17.514	1470	1472	1476	rBB	321	390	0.04%	0.010%
83	17.749	1493	1495	1497	rBB	317	194	0.02%	0.005%
84	18.229	1540	1542	1544	rBB	327	200	0.02%	0.005%
85	18.464	1561	1565	1567	rBB	453	654	0.08%	0.016%
86	18.597	1572	1578	1593	rBB	282988	646046	74.51%	15.764%
87	18.780	1594	1596	1598	rBB	321	197	0.02%	0.005%
88	18.811	1598	1599	1601	rBB	359	220	0.03%	0.005%
89	19.107	1626	1628	1631	rBB	323	393	0.05%	0.010%
90	20.537	1766	1768	1770	rBB	350	214	0.02%	0.005%
91	20.812	1793	1795	1797	rBB	341	209	0.02%	0.005%
92	21.262	1836	1839	1841	rBB	320	387	0.04%	0.009%
93	21.333	1844	1846	1848	rBB	337	206	0.02%	0.005%
94	21.466	1856	1859	1861	rBB	370	439	0.05%	0.011%
95	21.731	1883	1885	1887	rBB	317	194	0.02%	0.005%
96	21.864	1896	1898	1900	rBB	344	211	0.02%	0.005%
97	21.915	1901	1903	1905	rBB	329	202	0.02%	0.005%
98	22.038	1913	1915	1917	rBB	320	196	0.02%	0.005%
99	22.160	1925	1927	1931	rBB	305	373	0.04%	0.009%
100	22.446	1953	1955	1957	rBB	323	198	0.02%	0.005%

Sum of corrected areas: 4098339

```
File       : C:\MSDCHEM\1\DATA\050412\6M107867.D
Operator   : adc
Acquired   :  4 May 2012  16:04     using AcqMethod 8260WTR
Instrument :   HPMS6
Sample Name: L12040844-07 A 826-SPE
Misc Info  : 1,1
Vial Number: 10
Quant File :8260WTR.RES (RTE Integrator)
```



2.1.1.4 Standards Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105371.D Vial: 5
Acq On : 25 Jan 2012 10:12 Operator: ADC
Sample : WG388587-01 5ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 11:00:06 2012 Quant Results File: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

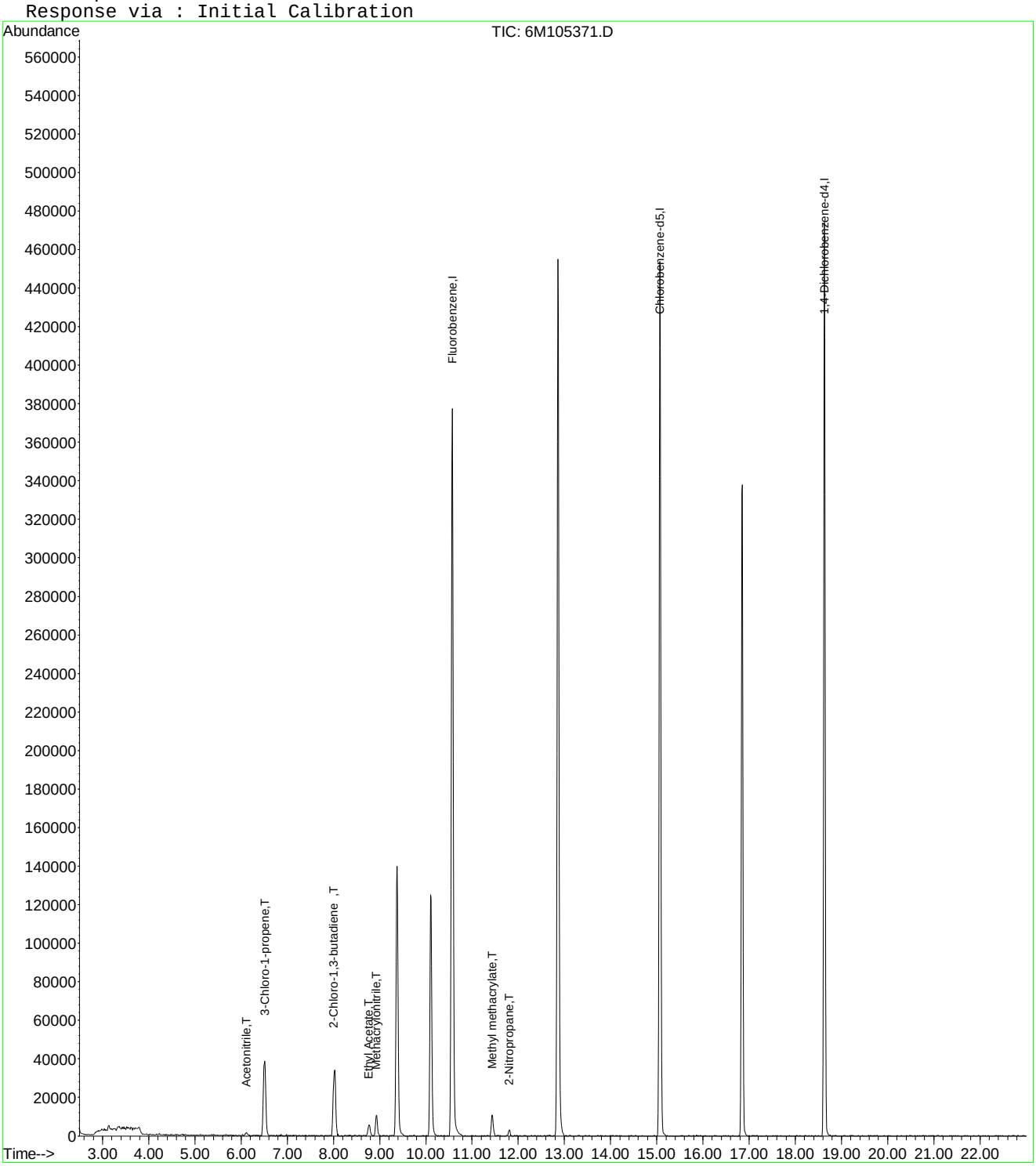
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	542118	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	382891	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	182930	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.11	41	1900	3.8474	ug/L	# 1
3) 3-Chloro-1-propene	6.51	41	51181	4.3471	ug/L	99
4) 2-Chloro-1,3-butadiene	8.01	53	44354	3.9841	ug/L	# 29
5) Ethyl Acetate	8.76	43	13368	4.1127	ug/L	# 100
6) Methacrylonitrile	8.93	67	5420	3.9672	ug/L	98
9) Methyl methacrylate	11.44	41	11648	9.5031	ug/L	99
10) 2-Nitropropane	11.80	43	3265	11.8335	ug/L	88

(#) = qualifier out of range (m) = manual integration
6M105371.D A9FOOWTR.M Thu Feb 02 15:11:53 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105371.D Vial: 5
Acq On : 25 Jan 2012 10:12 Operator: ADC
Sample : WG388587-01 5ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105372.D Vial: 6
Acq On : 25 Jan 2012 10:45 Operator: ADC
Sample : WG388587-02 20ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 11:00:07 2012 Quant Results File: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	527412	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	368818	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	180470	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.10	41	8738	18.1873	ug/L	92
3) 3-Chloro-1-propene	6.51	41	209591	18.2980	ug/L	99
4) 2-Chloro-1,3-butadiene	8.02	53	194300	17.9398	ug/L	98
5) Ethyl Acetate	8.76	43	57089	18.0532	ug/L #	100
6) Methacrylonitrile	8.93	67	22789	17.1456	ug/L	94
7) Isobutyl Alcohol	8.95	43	4943	35.3217	ug/L #	89
9) Methyl methacrylate	11.44	41	55796	20.8158	ug/L	98
10) 2-Nitropropane	11.81	43	15582	22.5273	ug/L	92
13) Cyclohexanone	16.56	55	2471	28.3472	ug/L	93

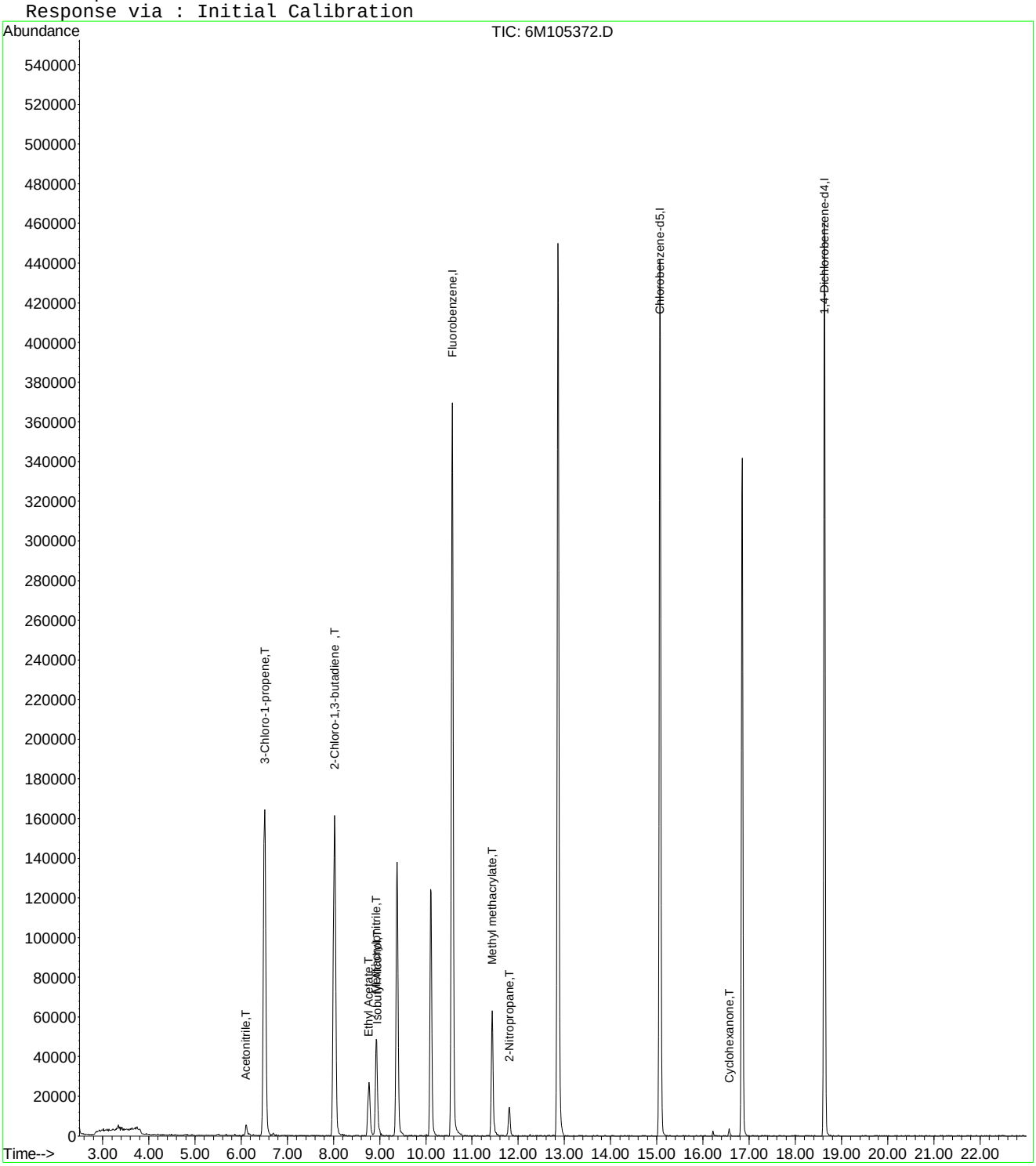
(#) = qualifier out of range (m) = manual integration
6M105372.D A9FOOWTR.M Thu Feb 02 15:11:55 2012 Page 1



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105372.D Vial: 6
Acq On : 25 Jan 2012 10:45 Operator: ADC
Sample : WG388587-02 20ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105373.D Vial: 7
Acq On : 25 Jan 2012 11:17 Operator: ADC
Sample : WG388587-03 50ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 11:00:09 2012 Quant Results File: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	525930	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	367927	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	178601	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.11	41	24875	51.9208	ug/L		96
3) 3-Chloro-1-propene	6.51	41	587071	51.3977	ug/L		100
4) 2-Chloro-1,3-butadiene	8.02	53	557757	51.6431	ug/L		100
5) Ethyl Acetate	8.76	43	155016	49.1587	ug/L	#	100
6) Methacrylonitrile	8.93	67	67503	50.9299	ug/L		98
7) Isobutyl Alcohol	8.95	43	13279	95.1565	ug/L	#	97
9) Methyl methacrylate	11.44	41	165950	48.9606	ug/L		100
10) 2-Nitropropane	11.81	43	45288	48.2442	ug/L		97
13) Cyclohexanone	16.57	55	8212	52.4388	ug/L		99

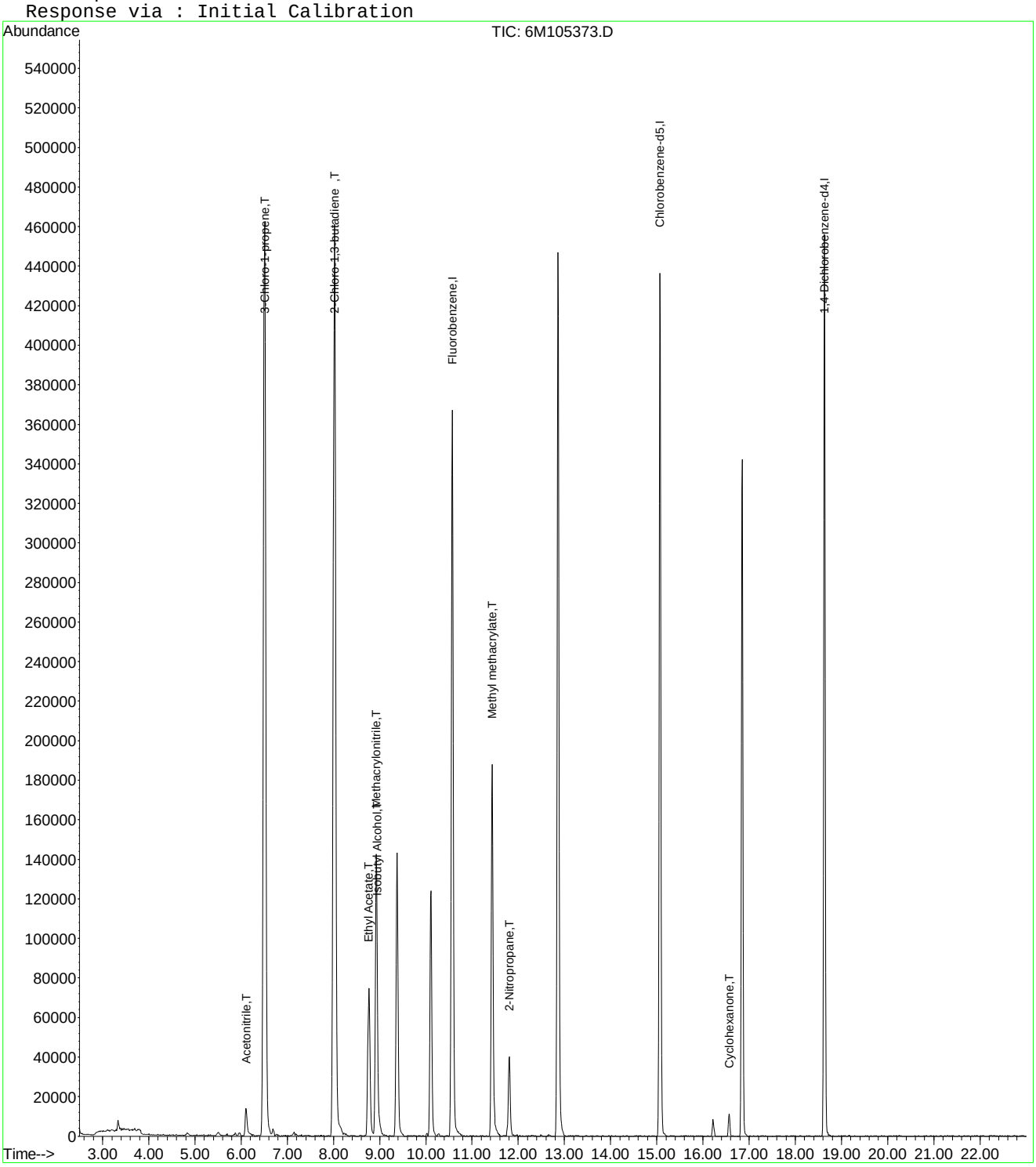
(#) = qualifier out of range (m) = manual integration
6M105373.D A9FOOWTR.M Thu Feb 02 15:11:56 2012 Page 1



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105373.D Vial: 7
Acq On : 25 Jan 2012 11:17 Operator: ADC
Sample : WG388587-03 50ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105374.D Vial: 8
Acq On : 25 Jan 2012 11:49 Operator: ADC
Sample : WG388587-04 100ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 11:00:11 2012 Quant Results File: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

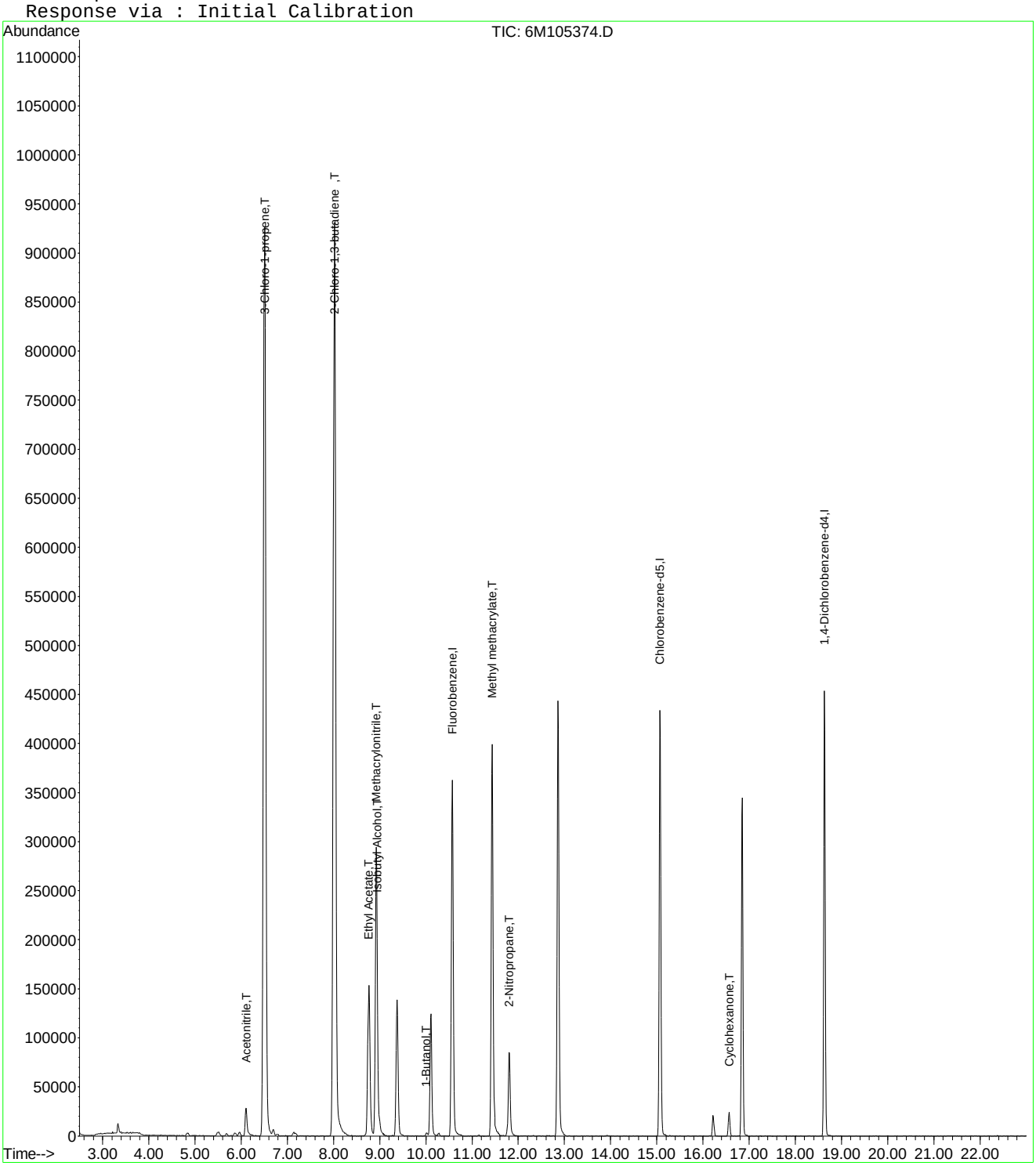
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	521985	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	364007	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	173837	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.11	41	49127	103.3162	ug/L		100
3) 3-Chloro-1-propene	6.51	41	1180872	104.1659	ug/L		100
4) 2-Chloro-1,3-butadiene	8.02	53	1129950	105.4136	ug/L		100
5) Ethyl Acetate	8.76	43	319926	102.2217	ug/L	#	100
6) Methacrylonitrile	8.93	67	135748	103.1936	ug/L		100
7) Isobutyl Alcohol	8.95	43	27528	198.7549	ug/L		96
8) 1-Butanol	10.01	41	1808	50.3611	ug/L		100
9) Methyl methacrylate	11.44	41	351082	96.8724	ug/L		100
10) 2-Nitropropane	11.80	43	98910	95.2434	ug/L		100
13) Cyclohexanone	16.56	55	17278	92.2929	ug/L		100

(#) = qualifier out of range (m) = manual integration
6M105374.D A9FOOWTR.M Thu Feb 02 15:11:57 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105374.D Vial: 8
Acq On : 25 Jan 2012 11:49 Operator: ADC
Sample : WG388587-04 100ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105375.D Vial: 9
Acq On : 25 Jan 2012 12:22 Operator: ADC
Sample : WG388587-05 200ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 11:00:12 2012 Quant Results File: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

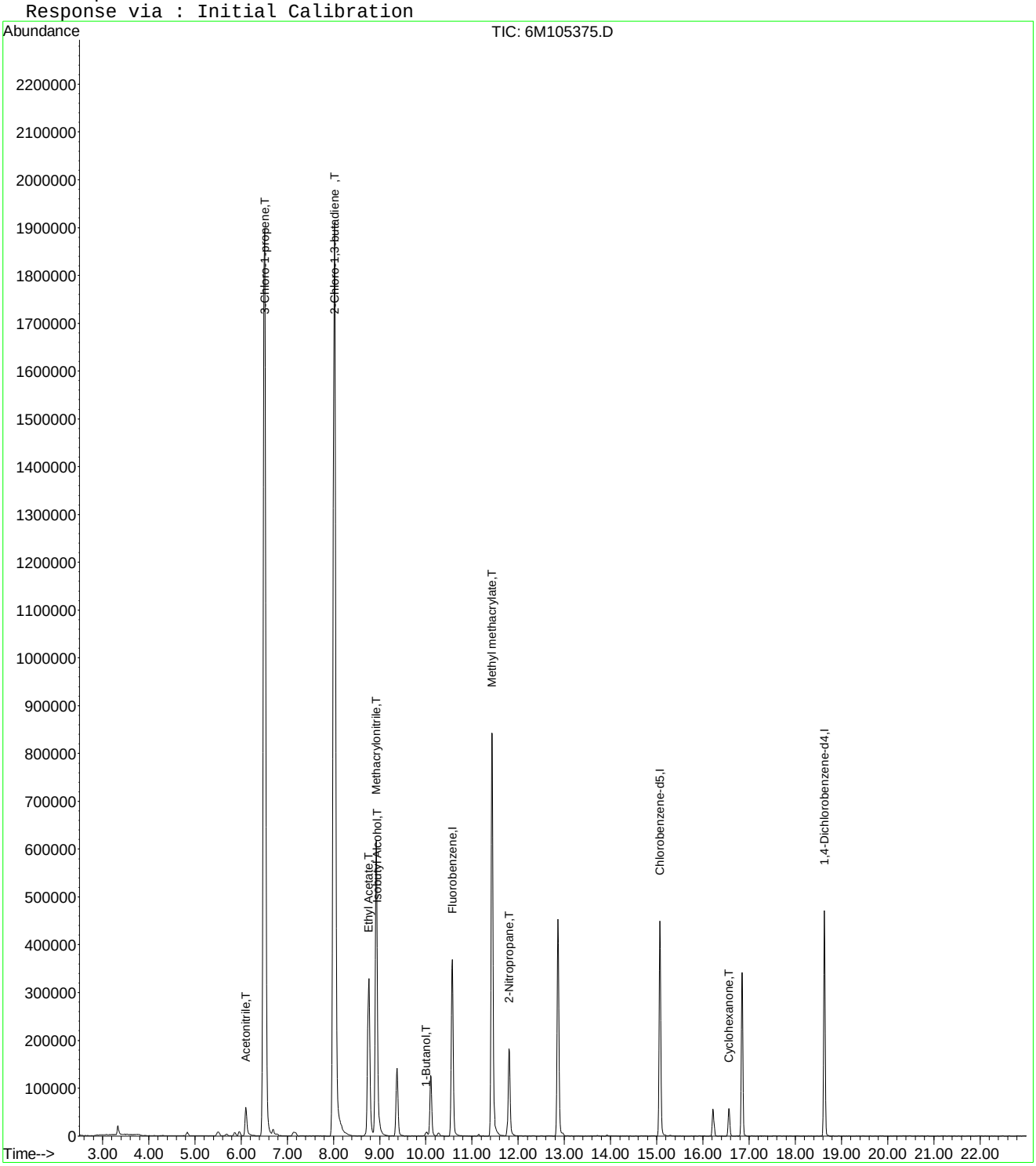
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	534922	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.07	117	371767	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	181349	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.10	41	104721	214.9064	ug/L		98
3) 3-Chloro-1-propene	6.51	41	2451072	210.9824	ug/L		99
4) 2-Chloro-1,3-butadiene	8.02	53	2371831	215.9180	ug/L		100
5) Ethyl Acetate	8.77	43	681737	212.5582	ug/L	#	100
6) Methacrylonitrile	8.93	67	292287	216.8185	ug/L		98
7) Isobutyl Alcohol	8.95	43	58077	409.1804	ug/L	#	92
8) 1-Butanol	10.01	41	6913	187.9020	ug/L		70
9) Methyl methacrylate	11.43	41	752659	195.4261	ug/L		99
10) 2-Nitropropane	11.80	43	216103	192.7634	ug/L		98
13) Cyclohexanone	16.56	55	41618	189.3675	ug/L		99

(#) = qualifier out of range (m) = manual integration
6M105375.D A9FOOWTR.M Thu Feb 02 15:11:58 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105375.D Vial: 9
Acq On : 25 Jan 2012 12:22 Operator: ADC
Sample : WG388587-05 200ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105376.D Vial: 10
Acq On : 25 Jan 2012 12:55 Operator: ADC
Sample : WG388587-06 300ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 11:00:14 2012 Quant Results File: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

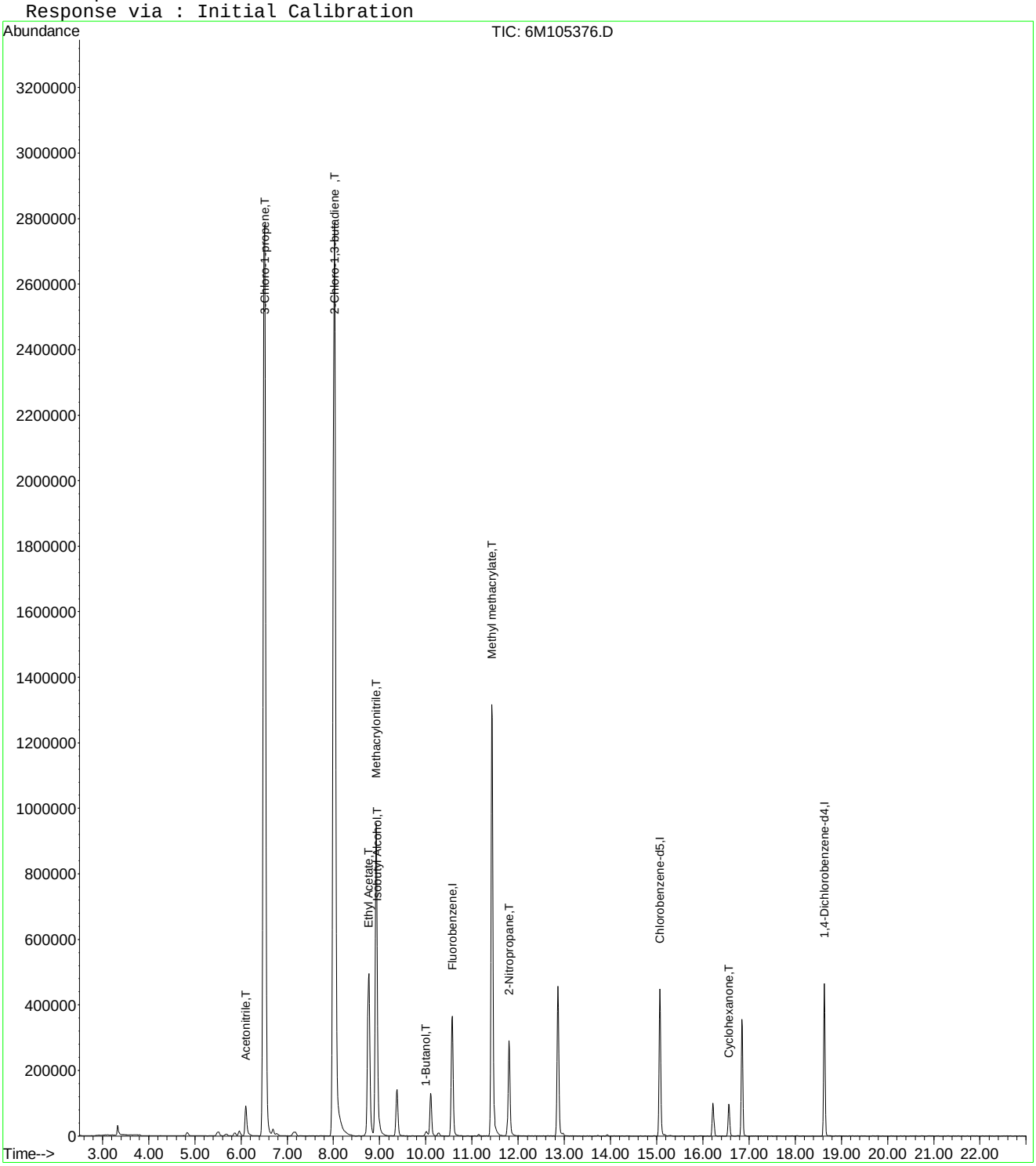
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	532868	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.07	117	367343	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	176868	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.10	41	156947	323.3252	ug/L	98
3) 3-Chloro-1-propene	6.51	41	3628216	313.5120	ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	3511500	320.8992	ug/L	100
5) Ethyl Acetate	8.77	43	1044658	326.9686	ug/L #	100
6) Methacrylonitrile	8.93	67	444609	331.0823	ug/L	99
7) Isobutyl Alcohol	8.95	43	94189	666.1648	ug/L	96
8) 1-Butanol	10.00	41	12003	327.5106	ug/L	67
9) Methyl methacrylate	11.43	41	1170130	301.2810	ug/L	100
10) 2-Nitropropane	11.80	43	338961	298.2921	ug/L	96
13) Cyclohexanone	16.56	55	67793	304.1310	ug/L	99

(#) = qualifier out of range (m) = manual integration
6M105376.D A9FOOWTR.M Thu Feb 02 15:12:00 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105376.D Vial: 10
Acq On : 25 Jan 2012 12:55 Operator: ADC
Sample : WG388587-06 300ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105377.D Vial: 11
Acq On : 25 Jan 2012 13:27 Operator: ADC
Sample : WG388587-07 400ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 11:00:16 2012 Quant Results File: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

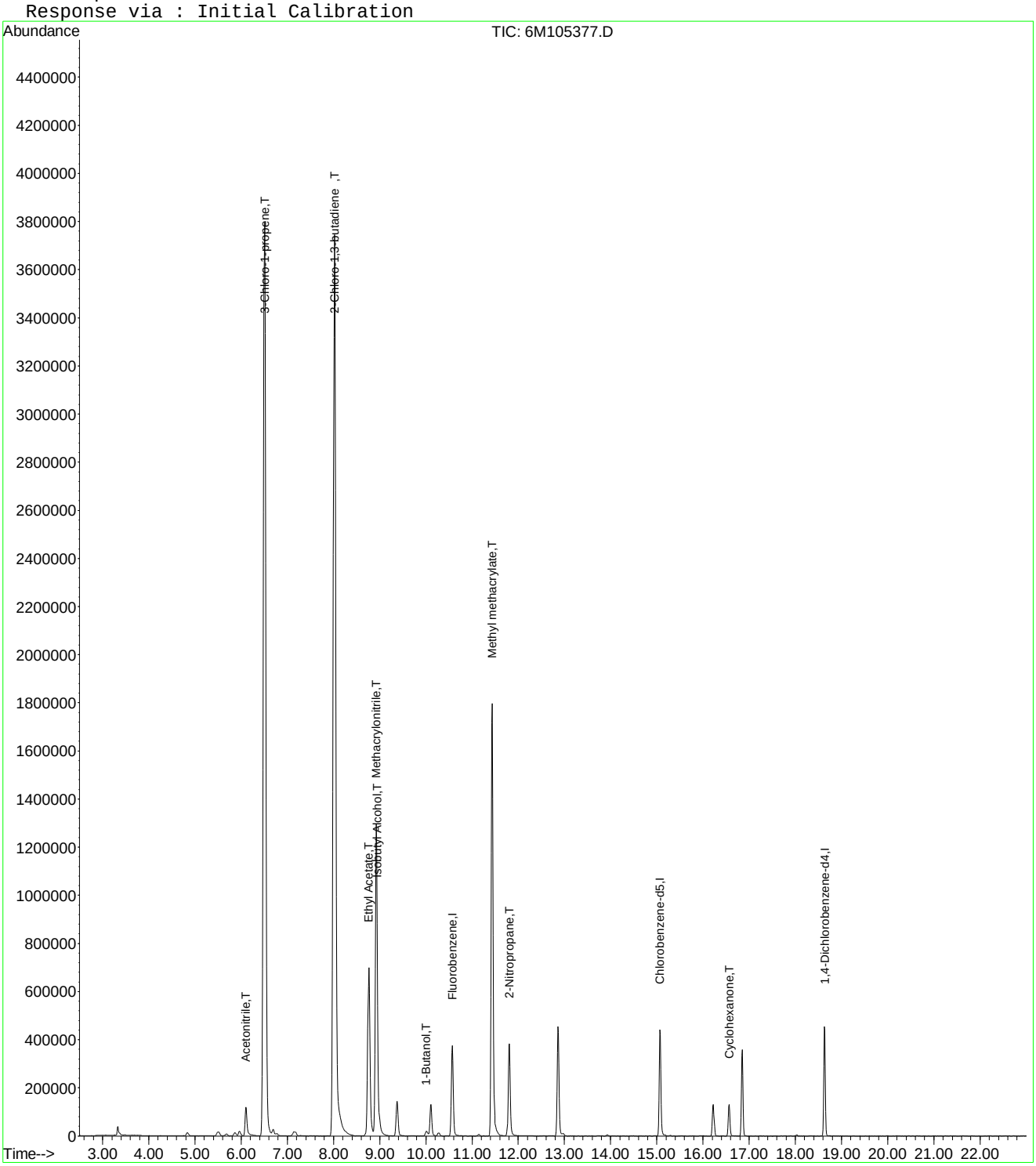
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	540011	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	371362	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.64	152	178768	25.00	ug/L		0.01
Target Compounds							Qvalue
2) Acetonitrile	6.10	41	215914	438.9189	ug/L		97
3) 3-Chloro-1-propene	6.51	41	4907559	418.4500	ug/L		99
4) 2-Chloro-1,3-butadiene	8.02	53	4745927	427.9707	ug/L		100
5) Ethyl Acetate	8.76	43	1446302	446.6917	ug/L	#	100
6) Methacrylonitrile	8.93	67	604809	444.4194	ug/L		100
7) Isobutyl Alcohol	8.95	43	119029	830.7136	ug/L		87
8) 1-Butanol	10.01	41	17098	460.3604	ug/L		72
9) Methyl methacrylate	11.44	41	1591710	402.1410	ug/L		100
10) 2-Nitropropane	11.81	43	471553	406.0960	ug/L		94
13) Cyclohexanone	16.56	55	92310	403.4226	ug/L		98

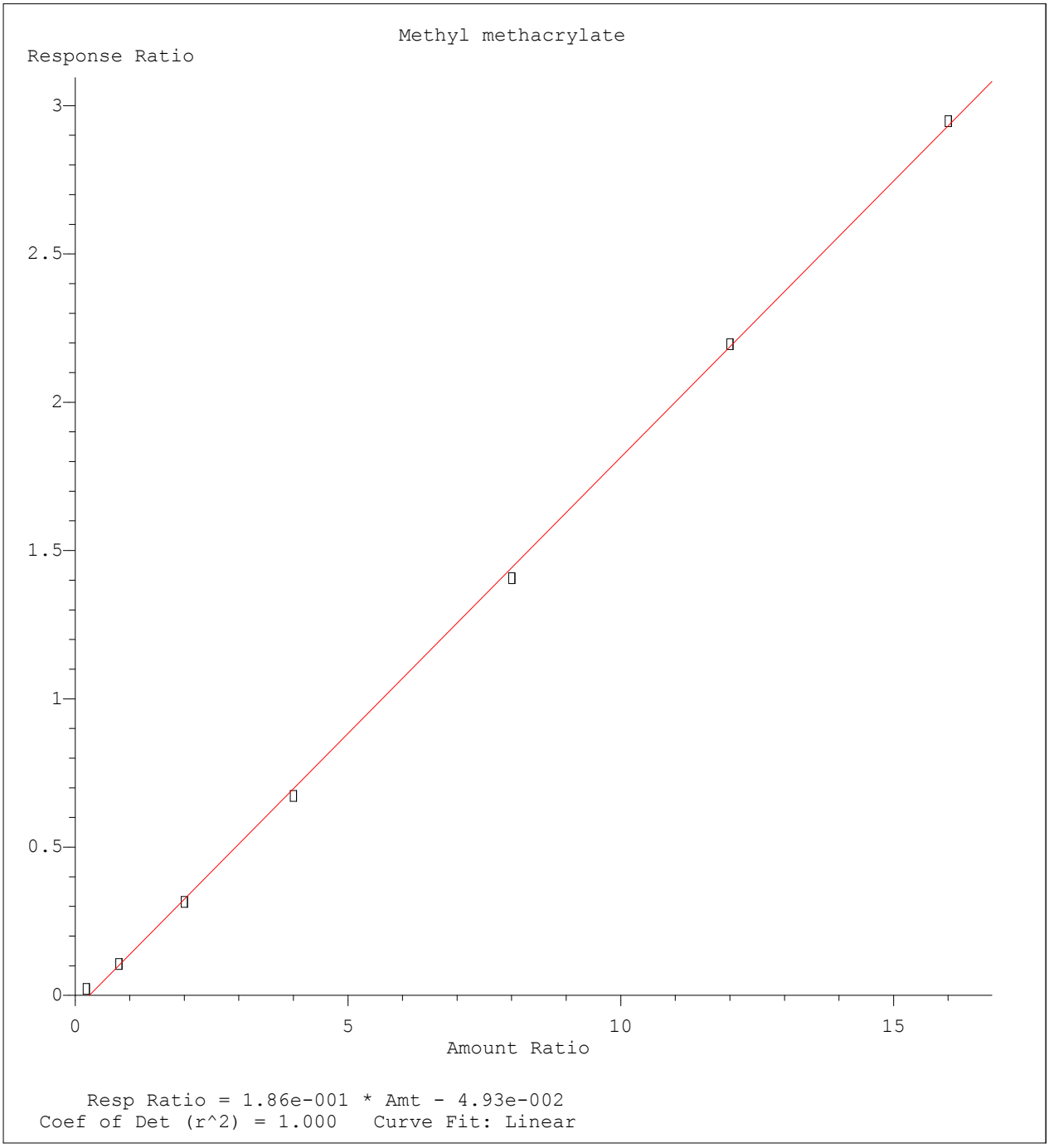
(#) = qualifier out of range (m) = manual integration
6M105377.D A9FOOWTR.M Thu Feb 02 15:12:01 2012 Page 1

Quantitation Report (Not Reviewed)

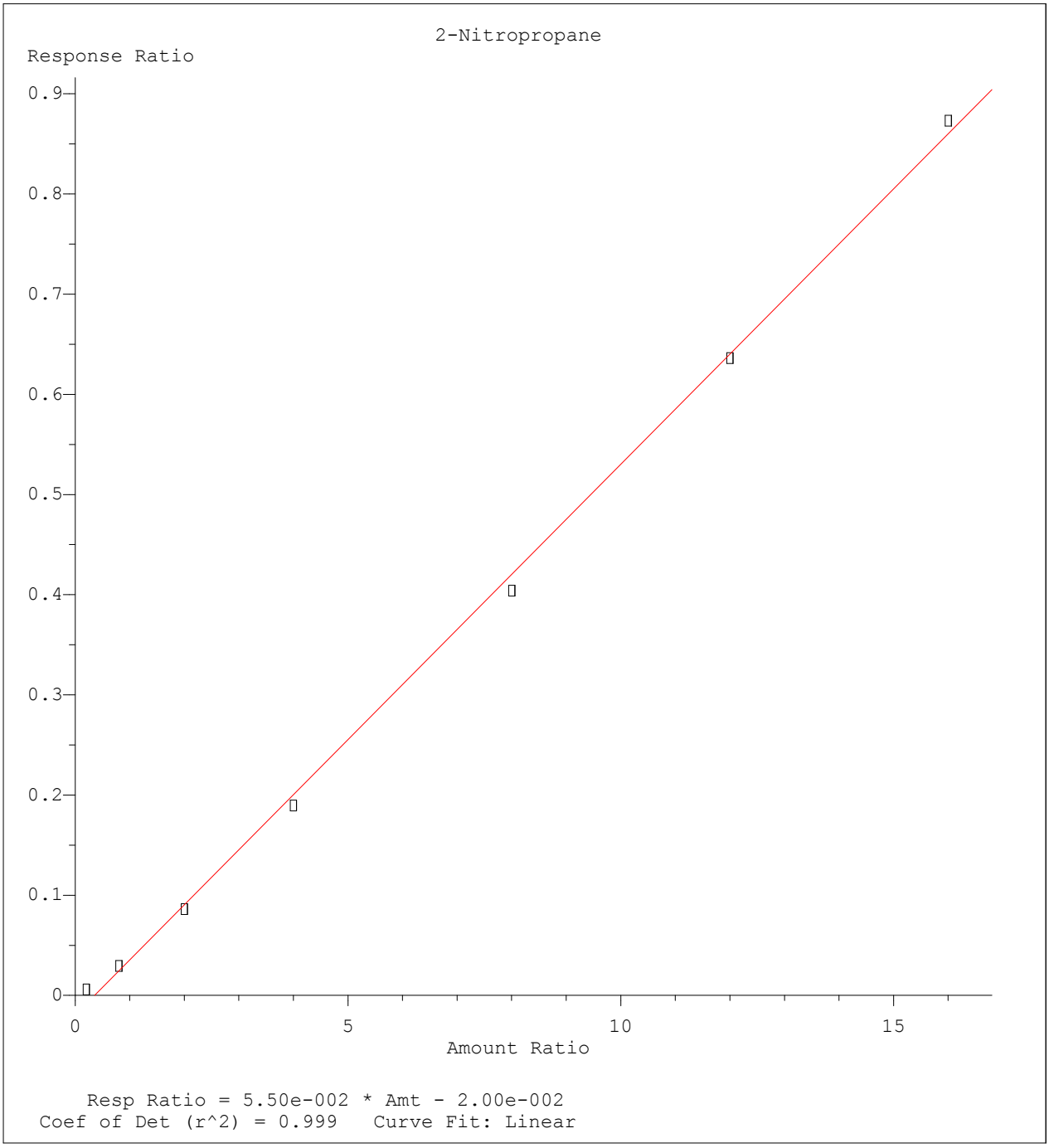
Data File : C:\MSDCHEM\2\DATA\012512\6M105377.D Vial: 11
Acq On : 25 Jan 2012 13:27 Operator: ADC
Sample : WG388587-07 400ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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

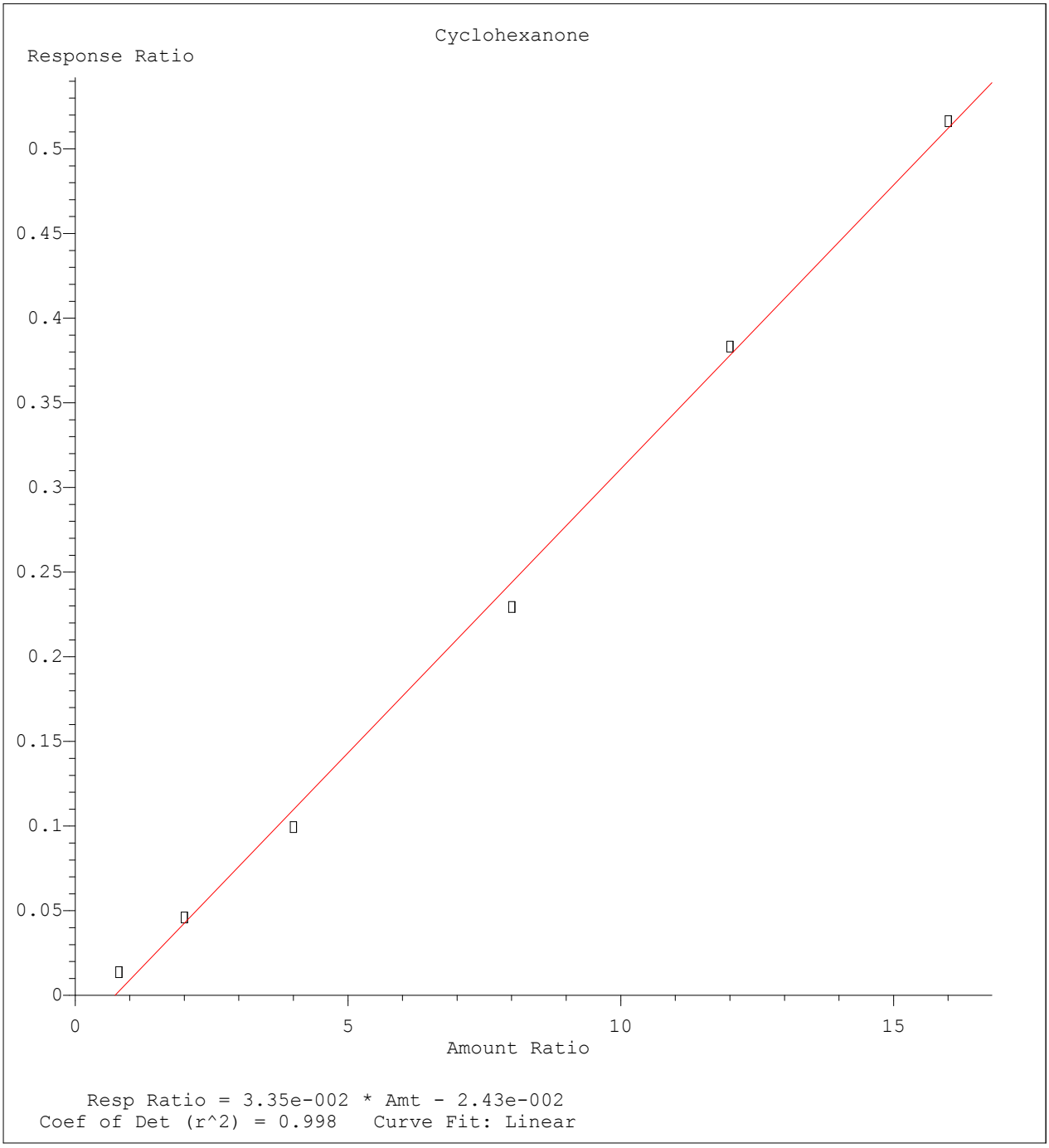




Method Name: C:\MSDCHEM\2\METHODS\A9FOOWTR.M
Calibration Table Last Updated: Thu Feb 02 09:44:46 2012



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



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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105378.D Vial: 12
Acq On : 25 Jan 2012 14:00 Operator: ADC
Sample : WG388587-08 100ug/L ALT 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 11:00:18 2012 Quant Results File: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

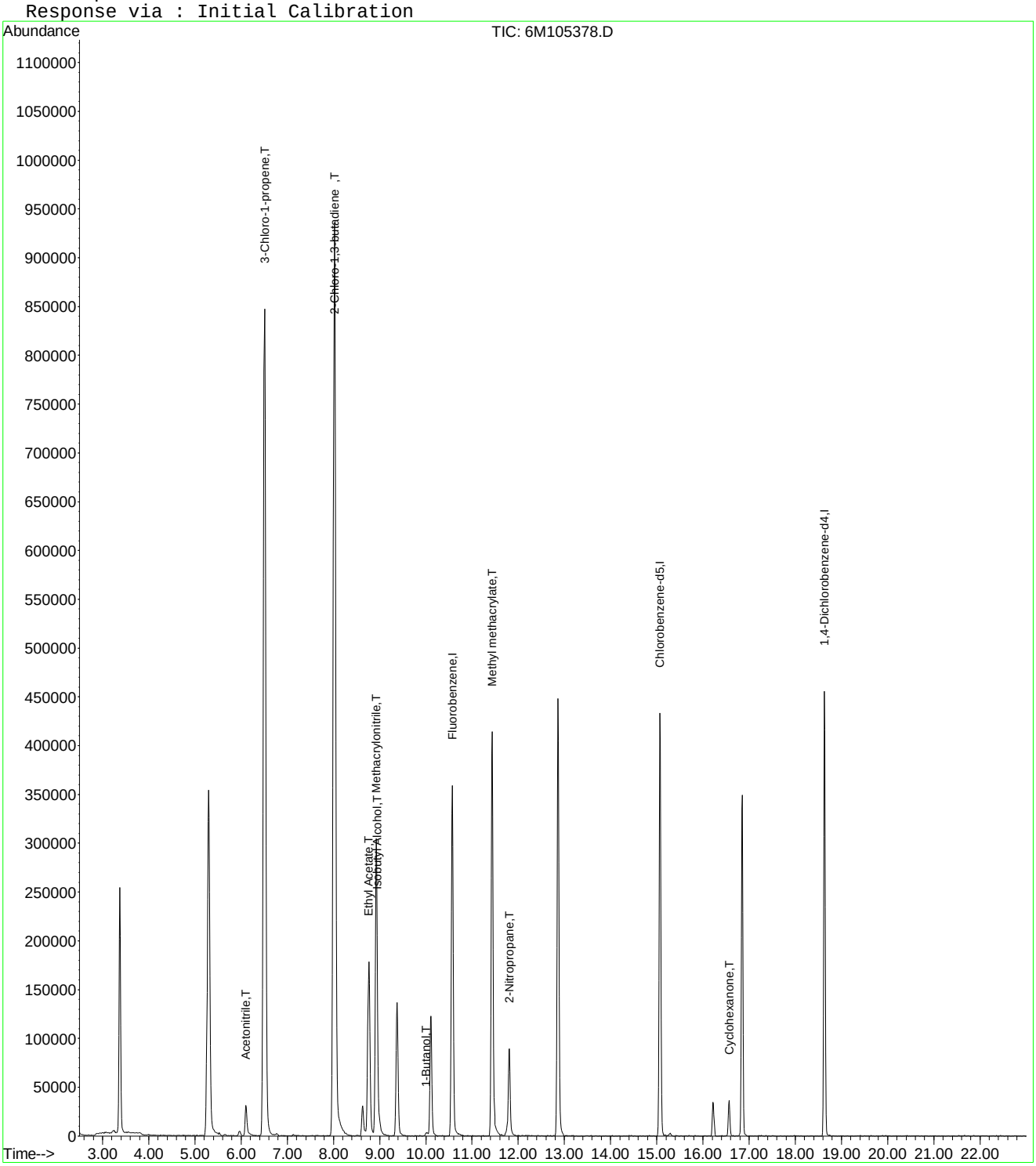
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	512896	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	362669	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	178315	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.10	41	54059	115.7031	ug/L		98
3) 3-Chloro-1-propene	6.51	41	1081081	97.0531	ug/L		100
4) 2-Chloro-1,3-butadiene	8.02	53	1145123	108.7223	ug/L		100
5) Ethyl Acetate	8.76	43	375275	122.0315	ug/L	#	100
6) Methacrylonitrile	8.93	67	141969	109.8352	ug/L		100
7) Isobutyl Alcohol	8.95	43	30619	224.9898	ug/L	#	99
8) 1-Butanol	10.01	41	3160	89.5804	ug/L		61
9) Methyl methacrylate	11.44	41	366057	102.3896	ug/L		100
10) 2-Nitropropane	11.81	43	105557	102.6620	ug/L		97
13) Cyclohexanone	16.57	55	24853	122.1280	ug/L		96

(#) = qualifier out of range (m) = manual integration
6M105378.D A9FOOWTR.M Thu Feb 02 15:12:02 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\012512\6M105378.D Vial: 12
Acq On : 25 Jan 2012 14:00 Operator: ADC
Sample : WG388587-08 100ug/L ALT 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\012512\6M105378.D Vial: 12
Acq On : 25 Jan 2012 14:00 Operator: ADC
Sample : WG388587-08 100ug/L ALT 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p

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

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

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

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6M105378.D A9FOOWTR.M Thu Feb 02 11:06:34 2012 Page 1



Quantitation Report (Not Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	625762	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	405212	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	186071	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	0.00	111	0	0.0000	ug/L	
Spiked Amount 25.000	Range 86 - 118		Recovery =	0.00%#		
43) 1,2-Dichloroethane-d4	0.00	65	0	0.0000	ug/L	
Spiked Amount 25.000	Range 80 - 120		Recovery =	0.00%#		
58) Toluene-d8	0.00	98	0	0.0000	ug/L	
Spiked Amount 25.000	Range 88 - 110		Recovery =	0.00%#		
80) p-Bromofluorobenzene	0.00	95	0	0.0000	ug/L	
Spiked Amount 25.000	Range 86 - 115		Recovery =	0.00%#		
Target Compounds						Qvalue
3) Chloromethane	3.10	50	512	Below Cal	#	1
14) 1,1-Dichloroethene	5.84	61	3084	0.2687	ug/L	96
18) Methyl acetate	6.43	43	771	0.1648	ug/L #	64
19) Methylene Chloride	6.66	84	2156	0.3032	ug/L	99
22) Methyl Tert Butyl Ether	6.94	73	4063	0.2712	ug/L #	51
23) trans-1,2-Dichloroethene	7.16	96	1668	0.2402	ug/L	92
27) 1,1-Dichloroethane	7.85	63	3358	0.2367	ug/L #	56
31) 2,2-Dichloropropane	8.71	77	3096	0.2887	ug/L	86
32) cis-1,2-Dichloroethene	8.79	96	2093	0.2885	ug/L	74
33) Chloroform	9.02	83	3699	0.2885	ug/L #	90
35) Bromochloromethane	9.28	130	1033	0.3188	ug/L #	38
38) 1,1,1-Trichloroethane	9.63	97	3315	0.2960	ug/L	81
40) 1,1-Dichloropropene	9.84	75	3075	0.3328	ug/L #	71
42) Carbon Tetrachloride	10.00	117	2402	0.2423	ug/L #	87
45) 1,2-Dichloroethane	10.21	62	1966	0.2232	ug/L #	73
46) Benzene	10.24	78	8322	0.3010	ug/L	90
47) Trichloroethene	11.13	130	1635	0.2358	ug/L	87
49) 1,2-Dichloropropane	11.38	63	1143	0.1601	ug/L #	35
51) Bromodichloromethane	11.71	83	2208	0.2575	ug/L	88
52) Dibromomethane	11.80	93	237	0.2826	ug/L	98
55) cis-1,3-Dichloropropene	12.48	75	1487	0.3509	ug/L #	62
59) Toluene	12.94	91	6712	0.2521	ug/L	96
62) trans-1,3-Dichloropropene	13.19	75	967	0.4630	ug/L #	53
63) 1,1,2-Trichloroethane	13.41	97	921	0.2153	ug/L #	72
65) 1,3-Dichloropropane	13.79	76	1501	0.2058	ug/L	93
66) Tetrachloroethene	13.89	166	1784	0.2869	ug/L	73
67) Dibromochloromethane	14.19	129	1095	0.3599	ug/L	81
68) 1,2-Dibromoethane	14.50	107	265	0.3139	ug/L #	2
70) Chlorobenzene	15.09	112	4491	0.2654	ug/L	94
71) 1,1,1,2-Tetrachloroethane	15.14	131	1441	0.2365	ug/L #	23
72) Ethylbenzene	15.15	106	2526	0.2894	ug/L	89
73) m-,p-Xylene	15.26	106	5784	0.5421	ug/L	100
74) o-Xylene	15.92	106	2570	0.2530	ug/L	100
75) Styrene	15.96	104	3513	0.4275	ug/L	84
77) Isopropylbenzene	16.43	105	7162	0.2833	ug/L	89
83) n-Propylbenzene	17.02	91	7123	0.2605	ug/L #	90
84) Bromobenzene	17.14	156	1260	0.3151	ug/L	92
85) 1,3,5-Trimethylbenzene	17.24	105	4964	0.2661	ug/L	91
86) 2-Chlorotoluene	17.31	91	5127	0.2824	ug/L	93
87) 4-Chlorotoluene	17.39	91	5576	0.3055	ug/L #	80

(#) = qualifier out of range (m) = manual integration
6M107639.D 8260WTR.M Wed Apr 25 15:08:24 2012 Page 1

Quantitation Report (Not Reviewed)

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

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

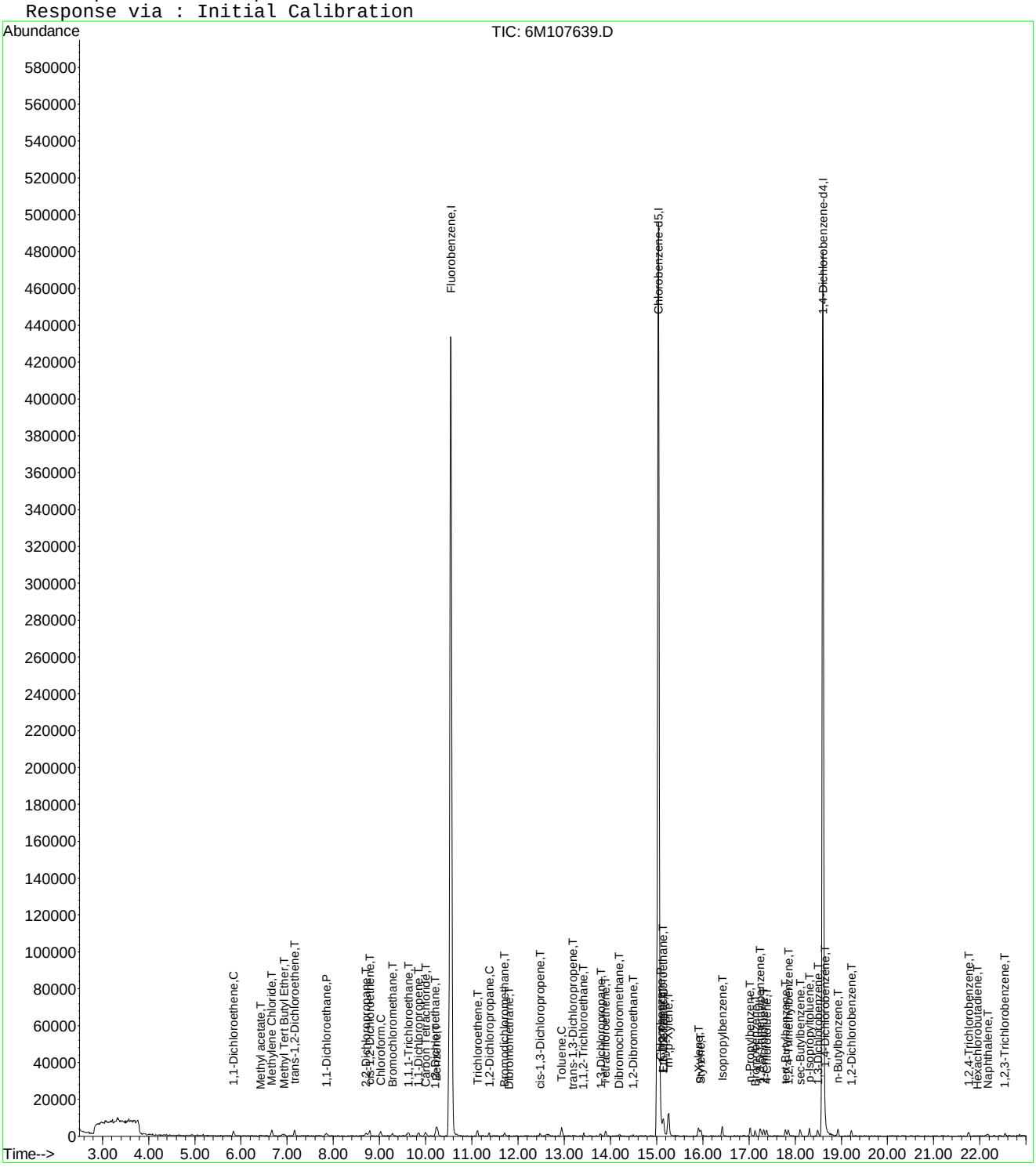
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
89)	tert-Butylbenzene	17.78	134	589	0.1564	ug/L	#	1
90)	1,2,4-Trimethylbenzene	17.86	105	4759	0.2413	ug/L		89
91)	sec-Butylbenzene	18.11	105	5777	0.2725	ug/L	#	83
92)	p-Isopropyltoluene	18.30	119	4803	0.2820	ug/L		82
93)	1,3-Dichlorobenzene	18.50	146	2837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

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

Quantitation Report (Not Reviewed)

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

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



Quantitation Report (Not Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	591975	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	392542	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	176332	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	0.00	111	0	0.0000	ug/L	
Spiked Amount 25.000	Range 86 - 118		Recovery =	0.00%#		
43) 1,2-Dichloroethane-d4	0.00	65	0	0.0000	ug/L	
Spiked Amount 25.000	Range 80 - 120		Recovery =	0.00%#		
58) Toluene-d8	0.00	98	0	0.0000	ug/L	
Spiked Amount 25.000	Range 88 - 110		Recovery =	0.00%#		
80) p-Bromofluorobenzene	0.00	95	0	0.0000	ug/L	
Spiked Amount 25.000	Range 86 - 115		Recovery =	0.00%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.72	85	3370	0.4340	ug/L #	67
3) Chloromethane	3.12	50	8770	0.2050	ug/L	98
4) Vinyl Chloride	3.31	62	4143	0.4219	ug/L	97
6) Bromomethane	4.11	94	2300	0.4133	ug/L	88
7) Chloroethane	4.27	64	2030	0.3654	ug/L #	63
8) Trichlorofluoromethane	4.72	101	4980	0.3944	ug/L #	91
10) Isoprene	5.29	67	3535	0.3292	ug/L	89
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	1497	0.2217	ug/L #	54
14) 1,1-Dichloroethene	5.82	61	3418	0.3148	ug/L	93
16) Dimethyl Sulfide	6.12	62	3396	0.3939	ug/L	91
17) Iodomethane	6.37	142	1553	0.2501	ug/L #	30
18) Methyl acetate	6.44	43	599	0.1353	ug/L #	64
19) Methylene Chloride	6.67	84	2468	0.3669	ug/L	90
20) Carbon Disulfide	6.69	76	7622	0.3874	ug/L	91
22) Methyl Tert Butyl Ether	6.94	73	4459	0.3147	ug/L #	62
23) trans-1,2-Dichloroethene	7.16	96	2011	0.3062	ug/L	60
24) n-Hexane	7.25	57	2779	0.3688	ug/L	96
27) 1,1-Dichloroethane	7.84	63	4770	0.3554	ug/L	88
31) 2,2-Dichloropropane	8.71	77	3393	0.3344	ug/L	85
32) cis-1,2-Dichloroethene	8.78	96	1875	0.2732	ug/L	84
33) Chloroform	9.02	83	4573	0.3770	ug/L #	90
35) Bromochloromethane	9.27	130	896	0.2966	ug/L	94
36) Tetrahydrofuran	9.64	42	235	0.2305	ug/L #	40
38) 1,1,1-Trichloroethane	9.62	97	3466	0.3271	ug/L	85
39) Cyclohexane	9.65	56	3456	0.3256	ug/L	90
40) 1,1-Dichloropropene	9.86	75	2506	0.2867	ug/L	93
42) Carbon Tetrachloride	10.01	117	2941	0.3136	ug/L #	94
45) 1,2-Dichloroethane	10.20	62	2897	0.3477	ug/L #	81
46) Benzene	10.24	78	9887	0.3781	ug/L	94
47) Trichloroethene	11.13	130	2204	0.3360	ug/L	80
48) Methylcyclohexane	11.20	83	2180	0.2882	ug/L #	76
49) 1,2-Dichloropropane	11.36	63	2309	0.3420	ug/L #	73
51) Bromodichloromethane	11.70	83	2679	0.3303	ug/L	93
52) Dibromomethane	11.80	93	450	0.3518	ug/L #	8
55) cis-1,3-Dichloropropene	12.48	75	1938	0.4053	ug/L #	68
56) Dimethyl Disulfide	12.75	79	1126	0.9500	ug/L #	50
59) Toluene	12.95	91	8735	0.3386	ug/L	99
62) trans-1,3-Dichloropropene	13.19	75	1160	0.4893	ug/L #	53
63) 1,1,2-Trichloroethane	13.42	97	1385	0.3343	ug/L #	65
65) 1,3-Dichloropropane	13.78	76	1905	0.2696	ug/L	95

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

Quantitation Report (Not Reviewed)

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

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

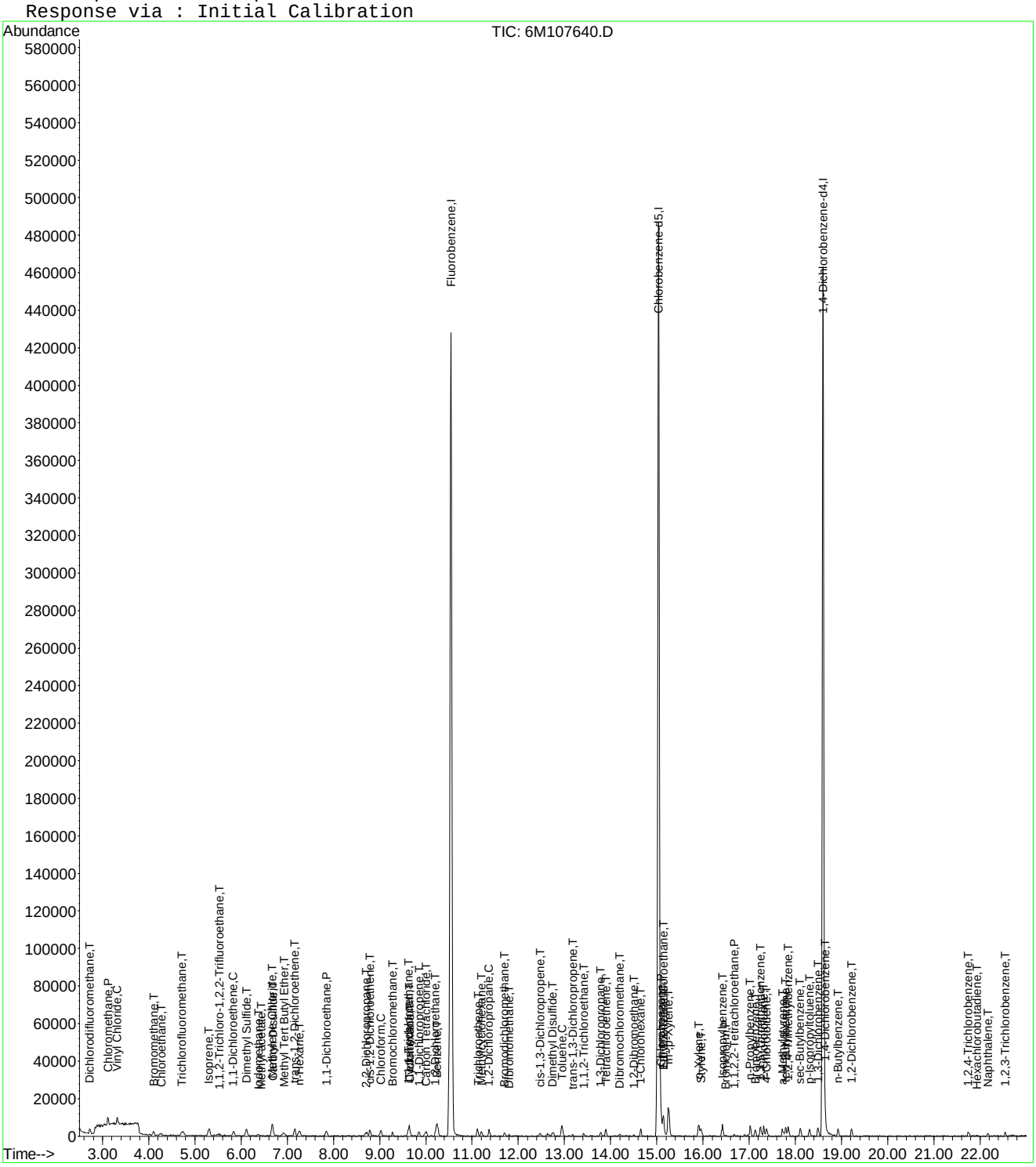
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
66)	Tetrachloroethene	13.90	166	1822	0.3024	ug/L		91
67)	Dibromochloromethane	14.20	129	1177	0.3807	ug/L		69
68)	1,2-Dibromoethane	14.50	107	467	0.3651	ug/L		82
69)	1-Chlorohexane	14.65	91	2262	0.3311	ug/L		94
70)	Chlorobenzene	15.10	112	5879	0.3587	ug/L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

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

Quantitation Report (Not Reviewed)

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

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



Quantitation Report (Not Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	581881	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	378697	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	176026	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.36	111	2819	0.4474	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	1.80%#		
43) 1,2-Dichloroethane-d4	10.08	65	3292	0.5324	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	2.12%#		
58) Toluene-d8	12.83	98	10550	0.5126	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	2.04%#		
80) p-Bromofluorobenzene	16.82	95	3639	0.5268	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	2.12%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.72	85	9155	1.1995	ug/L	94
3) Chloromethane	3.12	50	15738	0.8962	ug/L	92
4) Vinyl Chloride	3.31	62	12066	1.2499	ug/L	95
5) 1,3-Butadiene	3.36	54	9992	1.6783	ug/L #	72
6) Bromomethane	4.11	94	6430	1.1755	ug/L	95
7) Chloroethane	4.26	64	6255	1.1453	ug/L	93
8) Trichlorofluoromethane	4.73	101	14644	1.1798	ug/L	91
9) Diethyl ether	5.27	59	21000	4.9922	ug/L	99
10) Isoprene	5.29	67	10493	0.9942	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	8018	1.2078	ug/L	88
13) Acetone	5.61	43	499	0.4519	ug/L #	46
14) 1,1-Dichloroethene	5.84	61	11594	1.0862	ug/L	100
15) Tert-Butyl Alcohol	5.97	59	2587	9.1172	ug/L #	60
16) Dimethyl Sulfide	6.12	62	8242	0.9726	ug/L	97
17) Iodomethane	6.37	142	5055	0.8283	ug/L	94
18) Methyl acetate	6.42	43	4380	1.0066	ug/L #	71
19) Methylene Chloride	6.66	84	7513	1.1364	ug/L	99
20) Carbon Disulfide	6.68	76	20186	1.0438	ug/L	98
21) Acrylonitrile	6.89	53	242	0.1627	ug/L #	1
22) Methyl Tert Butyl Ether	6.93	73	15745	1.1304	ug/L	91
23) trans-1,2-Dichloroethene	7.16	96	6975	1.0803	ug/L	99
24) n-Hexane	7.26	57	8027	1.0837	ug/L	91
25) Diisopropyl ether	7.65	45	116212	4.9513	ug/L	98
26) Vinyl Acetate	7.86	43	3282	0.9617	ug/L #	77
27) 1,1-Dichloroethane	7.86	63	14623	1.1085	ug/L	93
28) Ethyl-Tert-Butyl ether	8.29	59	93335	4.9103	ug/L	99
29) 2-Butanone	8.50	43	1189	0.7825	ug/L #	56
30) Propionitrile	8.61	54	1634	3.7893	ug/L #	55
31) 2,2-Dichloropropane	8.71	77	11868	1.1901	ug/L	91
32) cis-1,2-Dichloroethene	8.78	96	7282	1.0794	ug/L	95
33) Chloroform	9.02	83	13286	1.1144	ug/L	99
34) 1-Bromopropane	9.17	122	683	0.6200	ug/L	69
35) Bromochloromethane	9.27	130	3890	1.1331	ug/L	93
36) Tetrahydrofuran	9.33	42	4906	4.8966	ug/L	95
38) 1,1,1-Trichloroethane	9.61	97	11387	1.0934	ug/L	98
39) Cyclohexane	9.65	56	10784	1.0336	ug/L	97
40) 1,1-Dichloropropene	9.85	75	8617	1.0029	ug/L	96
41) Tert-Amyl-Methyl ether	9.98	73	71707	5.0562	ug/L	99
42) Carbon Tetrachloride	10.00	117	10173	1.1036	ug/L	97
45) 1,2-Dichloroethane	10.21	62	9110	1.1124	ug/L #	91

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

Quantitation Report (Not Reviewed)

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

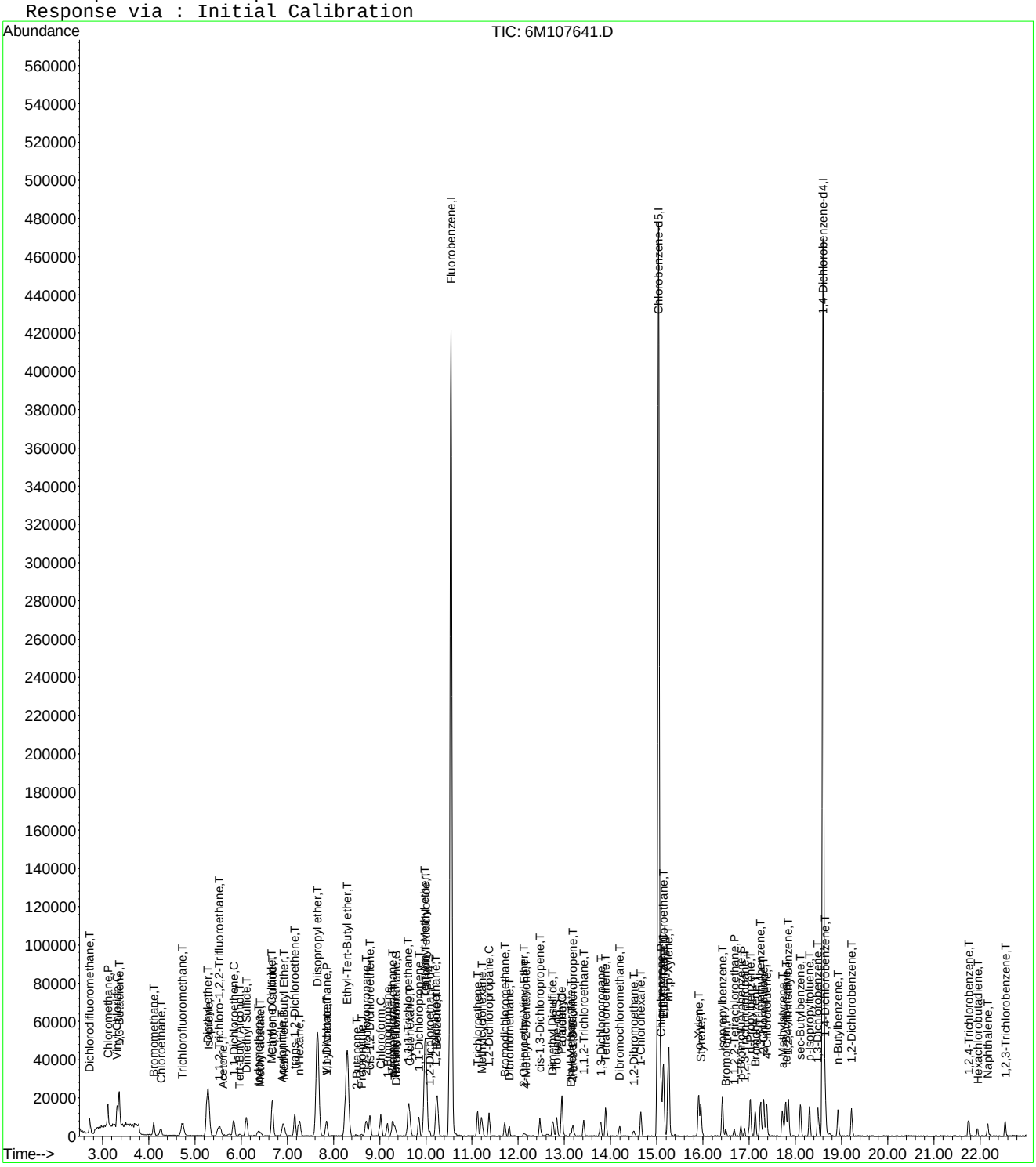
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

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

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

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

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



Quantitation Report (Not Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.54	96	582585	25.00	ug/L		0.00
57) Chlorobenzene-d5	15.03	117	377148	25.00	ug/L		0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	178106	25.00	ug/L		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	9.35	111	6278	0.9952	ug/L		0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	4.00%#			
43) 1,2-Dichloroethane-d4	10.07	65	6128	0.9899	ug/L		0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	3.96%#			
58) Toluene-d8	12.83	98	20901	1.0197	ug/L		0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	4.08%#			
80) p-Bromofluorobenzene	16.82	95	7075	1.0123	ug/L		0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	4.04%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.73	85	15707	2.0554	ug/L		96
3) Chloromethane	3.12	50	27211	2.0071	ug/L		99
4) Vinyl Chloride	3.31	62	20520	2.1231	ug/L		99
5) 1,3-Butadiene	3.36	54	18300	3.0701	ug/L	#	76
6) Bromomethane	4.10	94	12682	2.3156	ug/L		98
7) Chloroethane	4.26	64	10931	1.9990	ug/L		98
8) Trichlorofluoromethane	4.73	101	25474	2.0499	ug/L		94
9) Diethyl ether	5.27	59	105009	24.9331	ug/L		97
10) Isoprene	5.29	67	40120	3.7968	ug/L		100
11) Acrolein	5.52	56	390	8.8893	ug/L	#	15
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	12601	1.8958	ug/L		98
13) Acetone	5.64	43	1945	1.7593	ug/L	#	46
14) 1,1-Dichloroethene	5.83	61	22196	2.0770	ug/L		94
15) Tert-Butyl Alcohol	5.98	59	14716	51.8000	ug/L	#	87
16) Dimethyl Sulfide	6.11	62	34015	4.0093	ug/L		97
17) Iodomethane	6.37	142	19963	3.2671	ug/L		98
18) Methyl acetate	6.42	43	14583	3.3475	ug/L	#	92
19) Methylene Chloride	6.67	84	13885	2.0976	ug/L		96
20) Carbon Disulfide	6.69	76	76928	3.9731	ug/L		100
21) Acrylonitrile	6.89	53	2226	1.4948	ug/L		94
22) Methyl Tert Butyl Ether	6.93	73	29291	2.1004	ug/L		97
23) trans-1,2-Dichloroethene	7.16	96	13838	2.1407	ug/L		99
24) n-Hexane	7.26	57	28491	3.8420	ug/L		99
25) Diisopropyl ether	7.65	45	566354	24.1008	ug/L		100
26) Vinyl Acetate	7.84	43	8091	2.3679	ug/L	#	77
27) 1,1-Dichloroethane	7.84	63	28306	2.1432	ug/L		97
28) Ethyl-Tert-Butyl ether	8.28	59	461143	24.2310	ug/L		100
29) 2-Butanone	8.49	43	2585	1.6991	ug/L	#	56
30) Propionitrile	8.60	54	10470	24.2506	ug/L		92
31) 2,2-Dichloropropane	8.71	77	21551	2.1584	ug/L		100
32) cis-1,2-Dichloroethene	8.78	96	14676	2.1728	ug/L		91
33) Chloroform	9.02	83	25059	2.0993	ug/L		98
34) 1-Bromopropane	9.17	122	2071	1.8777	ug/L		95
35) Bromochloromethane	9.27	130	7448	2.1197	ug/L		97
36) Tetrahydrofuran	9.30	42	23813	23.7385	ug/L		99
38) 1,1,1-Trichloroethane	9.61	97	21821	2.0927	ug/L		97
39) Cyclohexane	9.64	56	40320	3.8599	ug/L		98
40) 1,1-Dichloropropene	9.85	75	18675	2.1710	ug/L		99
41) Tert-Amyl-Methyl ether	9.99	73	343289	24.1768	ug/L		99
42) Carbon Tetrachloride	10.00	117	18775	2.0342	ug/L		99

(#) = qualifier out of range (m) = manual integration
6M107642.D 8260WTR.M Wed Apr 25 15:17:16 2012 Page 1

Quantitation Report (Not Reviewed)

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

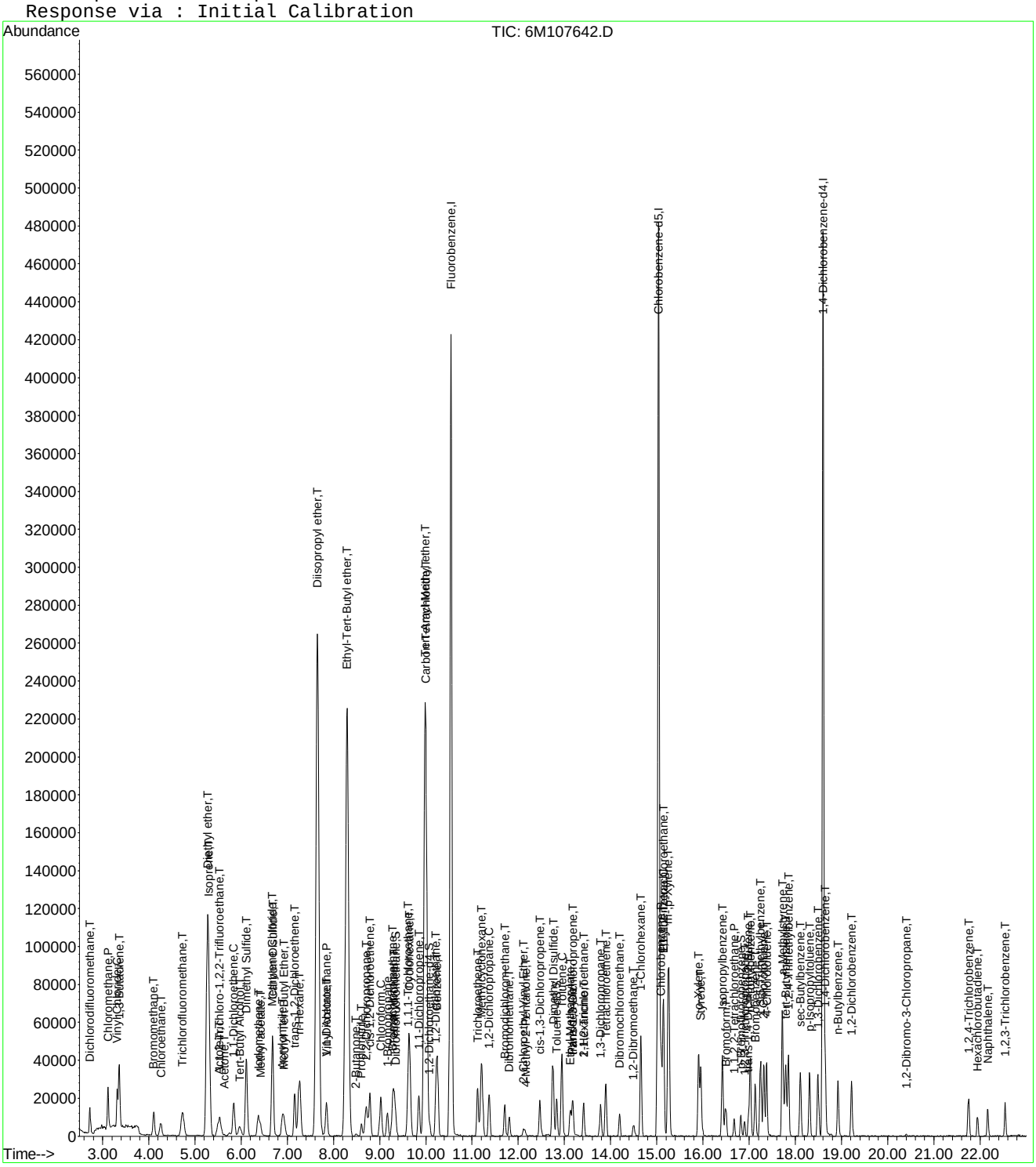
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

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

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

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

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



Quantitation Report (Not Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	575550	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	376063	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	177055	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	14601	2.3429	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	9.36%#		
43) 1,2-Dichloroethane-d4	10.08	65	14760	2.4133	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	9.64%#		
58) Toluene-d8	12.83	98	49480	2.4209	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	9.68%#		
80) p-Bromofluorobenzene	16.82	95	17382	2.5018	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	10.00%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.73	85	37947	5.0265	ug/L	95
3) Chloromethane	3.12	50	58571	5.1181	ug/L	97
4) Vinyl Chloride	3.31	62	46706	4.8915	ug/L	98
5) 1,3-Butadiene	3.35	54	44622	3.6880	ug/L	83
6) Bromomethane	4.11	94	24347	4.4999	ug/L	100
7) Chloroethane	4.25	64	25758	4.7681	ug/L	100
8) Trichlorofluoromethane	4.73	101	58962	4.8027	ug/L	99
9) Diethyl ether	5.26	59	210605	50.4880	ug/L	97
10) Isoprene	5.30	67	50690	4.8557	ug/L	99
11) Acrolein	5.51	56	1570	13.1948	ug/L	74
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	30663	4.6697	ug/L	99
13) Acetone	5.62	43	5754	5.2763	ug/L #	70
14) 1,1-Dichloroethene	5.83	61	52701	4.9917	ug/L	97
15) Tert-Butyl Alcohol	5.98	59	29303	102.9244	ug/L #	94
16) Dimethyl Sulfide	6.11	62	40108	4.7852	ug/L	94
17) Iodomethane	6.36	142	28857	4.7804	ug/L	100
18) Methyl acetate	6.41	43	21484	4.9918	ug/L	95
19) Methylene Chloride	6.67	84	31639	4.8382	ug/L	98
20) Carbon Disulfide	6.69	76	89235	4.6651	ug/L	98
21) Acrylonitrile	6.88	53	6205	4.2230	ug/L	94
22) Methyl Tert Butyl Ether	6.91	73	63560	4.6135	ug/L	99
23) trans-1,2-Dichloroethene	7.16	96	30919	4.8415	ug/L	100
24) n-Hexane	7.26	57	33579	4.5834	ug/L	100
25) Diisopropyl ether	7.65	45	1156939	49.7305	ug/L	99
26) Vinyl Acetate	7.84	43	17599	5.2255	ug/L	92
27) 1,1-Dichloroethane	7.84	63	62138	4.7623	ug/L	98
28) Ethyl-Tert-Butyl ether	8.29	59	943556	49.9070	ug/L	99
29) 2-Butanone	8.49	43	7075	4.6396	ug/L	91
30) Propionitrile	8.61	54	21710	49.7760	ug/L	95
31) 2,2-Dichloropropane	8.71	77	47225	4.7876	ug/L	97
32) cis-1,2-Dichloroethene	8.78	96	33123	4.9637	ug/L	97
33) Chloroform	9.02	83	57332	4.8617	ug/L	100
34) 1-Bromopropane	9.17	122	5621	5.0224	ug/L	96
35) Bromochloromethane	9.27	130	17793	5.0523	ug/L	96
36) Tetrahydrofuran	9.30	42	48924	48.7869	ug/L	96
38) 1,1,1-Trichloroethane	9.62	97	49012	4.7578	ug/L	97
39) Cyclohexane	9.64	56	48367	4.6868	ug/L	99
40) 1,1-Dichloropropene	9.85	75	41863	4.9261	ug/L	97
41) Tert-Amyl-Methyl ether	9.99	73	690718	49.0690	ug/L	99
42) Carbon Tetrachloride	10.00	117	43100	4.7269	ug/L	97

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

Quantitation Report (Not Reviewed)

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

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

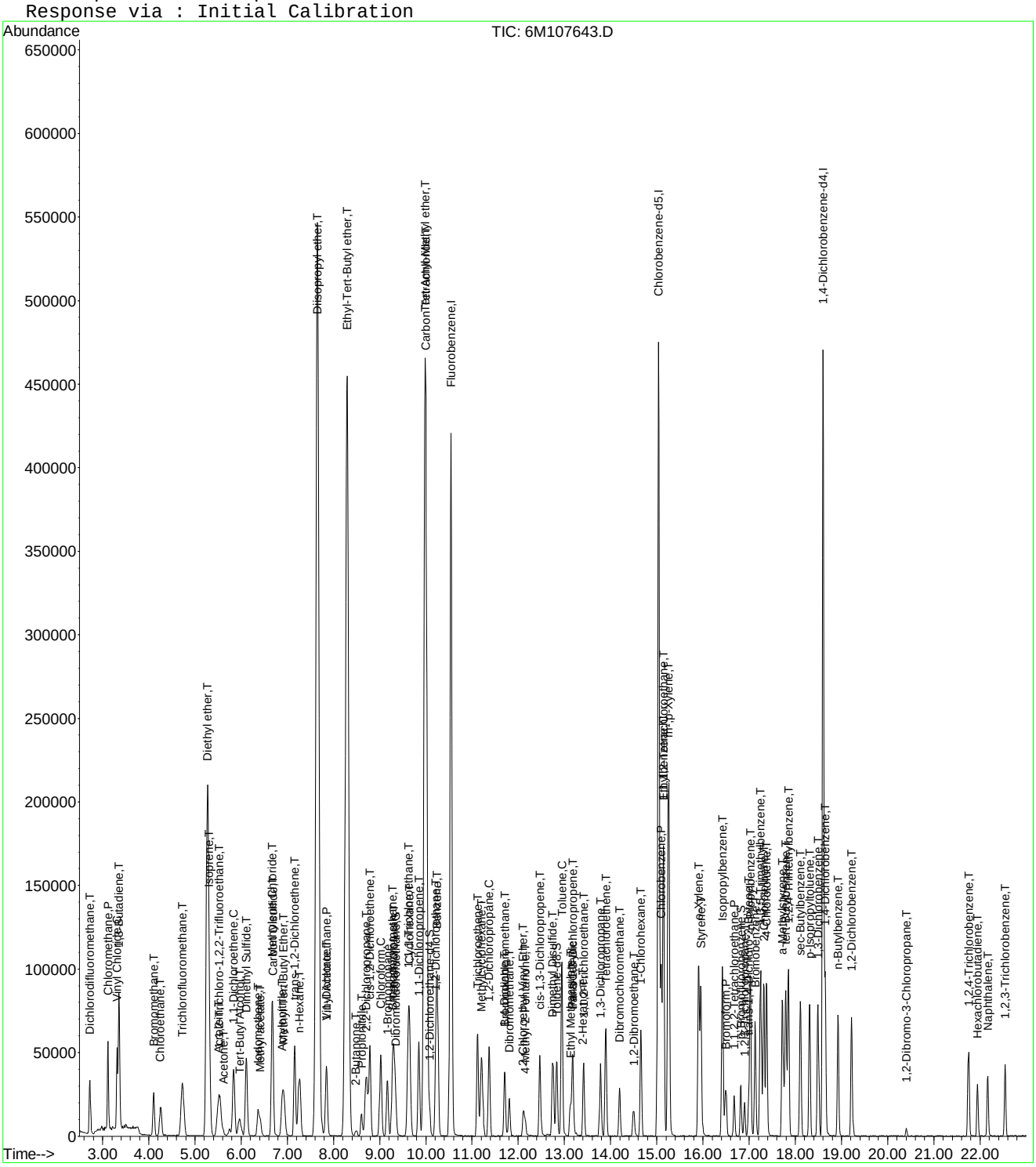
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45) 1,2-Dichloroethane	10.21	62	39847	4.9190 ug/L	98
46) Benzene	10.24	78	121550	4.7805 ug/L	97
47) Trichloroethene	11.12	130	29578	4.6379 ug/L	99
48) Methylcyclohexane	11.20	83	35302	4.7998 ug/L	98
49) 1,2-Dichloropropane	11.37	63	31224	4.7565 ug/L	95
50)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

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

Quantitation Report (Not Reviewed)

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

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



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

Quantitation Report (Not Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	594227	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	383762	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	183925	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	58307	9.0621	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 36.24%#			
43) 1,2-Dichloroethane-d4	10.07	65	57557	9.1150	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 36.48%#			
58) Toluene-d8	12.83	98	187435	8.9867	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 35.96%#			
80) p-Bromofluorobenzene	16.81	95	64661	8.9592	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 35.84%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.73	85	158858	20.3809	ug/L	100
3) Chloromethane	3.12	50	234659	21.6813	ug/L	100
4) Vinyl Chloride	3.31	62	191525	19.4279	ug/L	98
5) 1,3-Butadiene	3.34	54	131957	23.4663	ug/L	96
6) Bromomethane	4.11	94	104168	18.6477	ug/L	99
7) Chloroethane	4.26	64	113251	20.3052	ug/L	99
8) Trichlorofluoromethane	4.73	101	255332	20.1443	ug/L	100
9) Diethyl ether	5.26	59	339919	78.9271	ug/L	99
10) Isoprene	5.30	67	218497	20.2725	ug/L	98
11) Acrolein	5.50	56	7970	32.4391	ug/L	98
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	134612	19.8557	ug/L	98
13) Acetone	5.61	43	21788	19.3512	ug/L	95
14) 1,1-Dichloroethene	5.83	61	226043	20.7372	ug/L	100
15) Tert-Butyl Alcohol	5.97	59	43289	147.2701	ug/L	97
16) Dimethyl Sulfide	6.11	62	174474	20.1619	ug/L	99
17) Iodomethane	6.36	142	137221	22.0175	ug/L	98
18) Methyl acetate	6.42	43	88859	19.9975	ug/L	99
19) Methylene Chloride	6.67	84	134360	19.9002	ug/L	99
20) Carbon Disulfide	6.69	76	397265	20.1157	ug/L	100
21) Acrylonitrile	6.89	53	29729	19.5968	ug/L	99
22) Methyl Tert Butyl Ether	6.92	73	274821	19.3207	ug/L	100
23) trans-1,2-Dichloroethene	7.16	96	136845	20.7544	ug/L	100
24) n-Hexane	7.26	57	154306	20.4003	ug/L	98
25) Diisopropyl ether	7.65	45	1940470	80.7886	ug/L	99
26) Vinyl Acetate	7.83	43	66581	19.1479	ug/L	98
27) 1,1-Dichloroethane	7.84	63	269329	19.9929	ug/L	99
28) Ethyl-Tert-Butyl ether	8.28	59	1555823	79.7048	ug/L	100
29) 2-Butanone	8.48	43	29635	18.8229	ug/L	96
30) Propionitrile	8.60	54	36779	81.6752	ug/L	92
31) 2,2-Dichloropropane	8.71	77	202027	19.8373	ug/L	98
32) cis-1,2-Dichloroethene	8.78	96	145344	21.0963	ug/L	98
33) Chloroform	9.02	83	243884	20.0310	ug/L	99
34) 1-Bromopropane	9.17	122	25054	20.2993	ug/L	94
35) Bromochloromethane	9.27	130	76045	20.7517	ug/L	100
36) Tetrahydrofuran	9.31	42	80017	77.2848	ug/L	99
38) 1,1,1-Trichloroethane	9.61	97	217361	20.4370	ug/L	99
39) Cyclohexane	9.64	56	215903	20.2636	ug/L	99
40) 1,1-Dichloropropene	9.85	75	184496	21.0277	ug/L	99
41) Tert-Amyl-Methyl ether	9.99	73	1145087	78.7909	ug/L	100
42) Carbon Tetrachloride	10.00	117	196271	20.8489	ug/L	100

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

Quantitation Report (Not Reviewed)

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

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

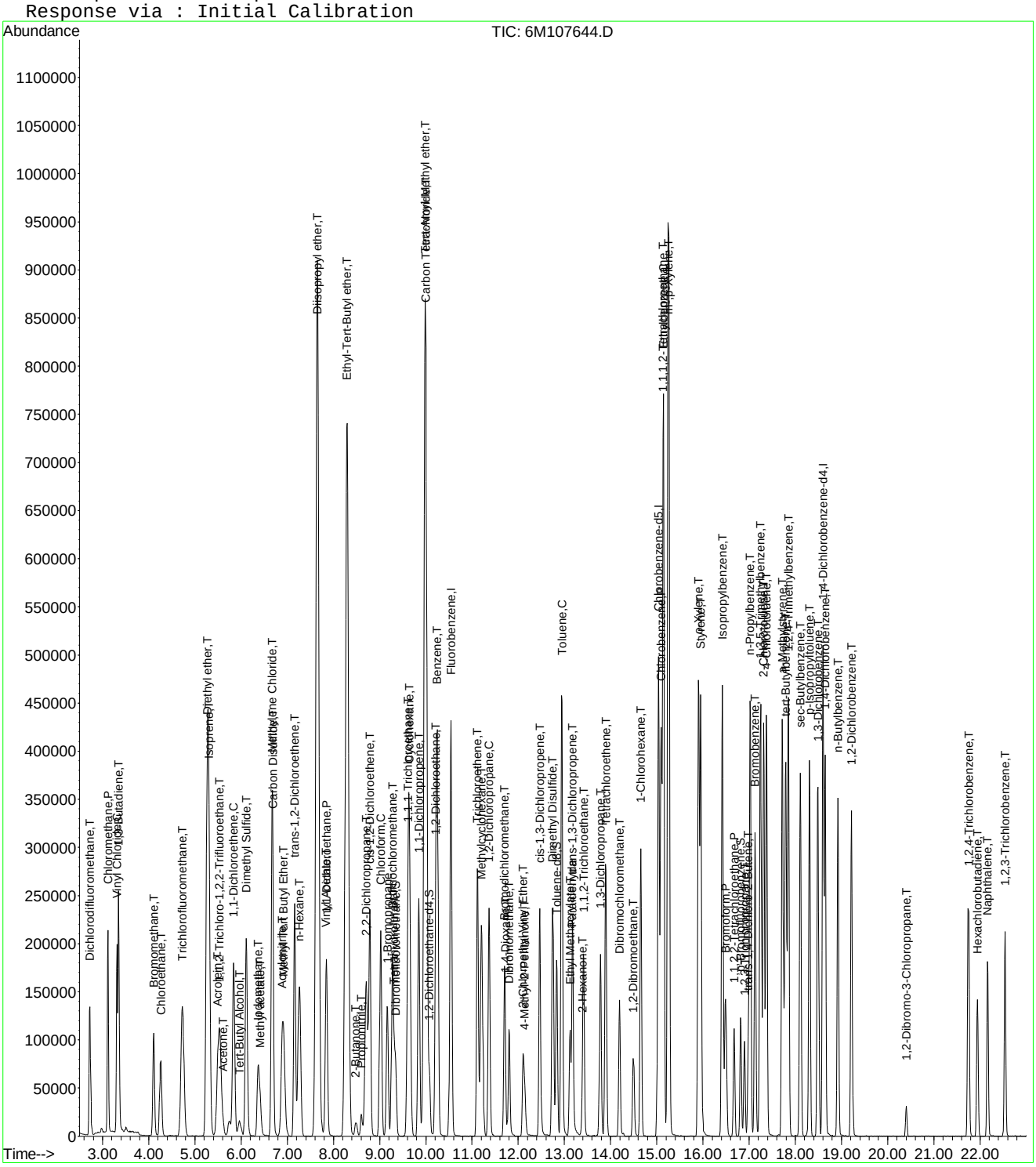
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	169343	20.2481 ug/L	99
46)	Benzene	10.24	78	529661	20.1764 ug/L	99
47)	Trichloroethene	11.11	130	136718	20.7638 ug/L	100
48)	Methylcyclohexane	11.20	83	155717	20.5066 ug/L	99
49)	1,2-Dichloropropane	11.37	63	137745	20.3236 ug/L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

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

Quantitation Report (Not Reviewed)

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

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



Quantitation Report (Not Reviewed)

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

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

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

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

Quantitation Report (Not Reviewed)

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

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

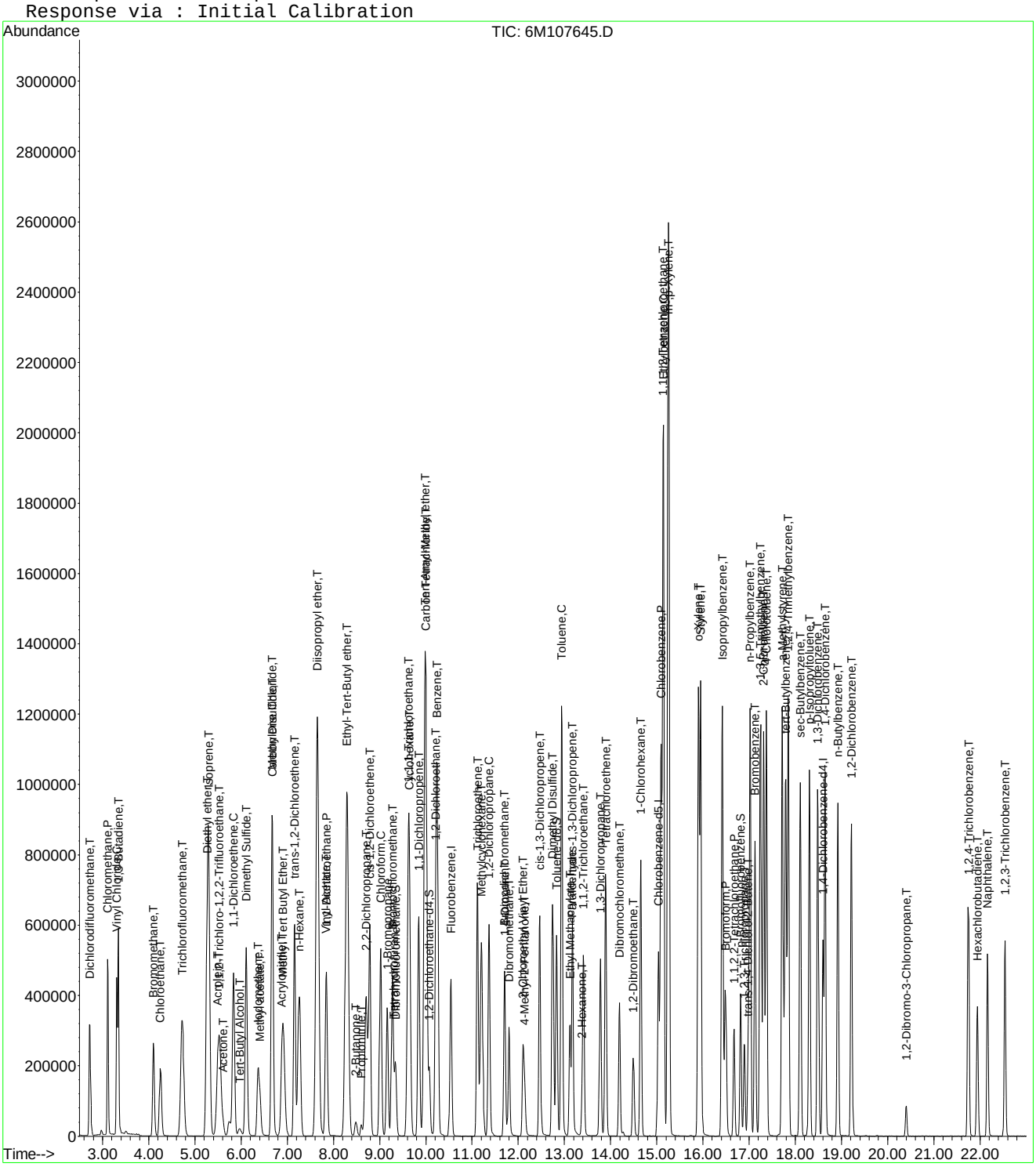
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	437086	50.1247	ug/L	100
46)	Benzene	10.25	78	1341106	48.9979	ug/L	100
47)	Trichloroethene	11.12	130	349281	50.8774	ug/L	100
48)	Methylcyclohexane	11.21	83	398780	50.3686	ug/L	100
49)	1,2-Dichloropropane	11.37	63	357464	50.5856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

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

Quantitation Report (Not Reviewed)

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

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



Quantitation Report (Not Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	618856	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	410376	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	203764	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	352242	52.5671	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 210.28%#			
43) 1,2-Dichloroethane-d4	10.07	65	347313	52.8133	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 211.24%#			
58) Toluene-d8	12.83	98	1158157	51.9272	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 207.72%#			
80) p-Bromofluorobenzene	16.81	95	411704	51.4901	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 205.96%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.72	85	748050	92.1528	ug/L	100
3) Chloromethane	3.11	50	1080230	97.9977	ug/L	100
4) Vinyl Chloride	3.30	62	835012	81.3310	ug/L	99
5) 1,3-Butadiene	3.33	54	502511	104.1932	ug/L	99
6) Bromomethane	4.10	94	545004	93.6813	ug/L	98
7) Chloroethane	4.25	64	553741	95.3309	ug/L	100
8) Trichlorofluoromethane	4.72	101	1255933	95.1430	ug/L	99
9) Diethyl ether	5.26	59	903969	201.5426	ug/L	99
10) Isoprene	5.29	67	1146761	102.1641	ug/L	99
11) Acrolein	5.51	56	62004	188.7394	ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	690733	97.8306	ug/L	99
13) Acetone	5.61	43	119353	101.7854	ug/L	98
14) 1,1-Dichloroethene	5.83	61	1151147	101.4035	ug/L	100
15) Tert-Butyl Alcohol	5.98	59	118369	386.6675	ug/L	99
16) Dimethyl Sulfide	6.11	62	922818	102.3954	ug/L	99
17) Iodomethane	6.37	142	706856	108.9033	ug/L	98
18) Methyl acetate	6.41	43	493386	106.6165	ug/L	99
19) Methylene Chloride	6.66	84	686038	97.5661	ug/L	100
20) Carbon Disulfide	6.68	76	2063105	100.3086	ug/L	100
21) Acrylonitrile	6.88	53	167946	106.3012	ug/L	98
22) Methyl Tert Butyl Ether	6.91	73	1453163	98.0959	ug/L	99
23) trans-1,2-Dichloroethene	7.15	96	694499	101.1384	ug/L	98
24) n-Hexane	7.26	57	793462	100.7261	ug/L	100
25) Diisopropyl ether	7.65	45	5110546	204.3022	ug/L	100
26) Vinyl Acetate	7.84	43	363097	100.2668	ug/L	100
27) 1,1-Dichloroethane	7.85	63	1396149	99.5149	ug/L	100
28) Ethyl-Tert-Butyl ether	8.29	59	4138115	203.5588	ug/L	100
29) 2-Butanone	8.48	43	172061	104.9368	ug/L	98
30) Propionitrile	8.60	54	102974	219.5740	ug/L	97
31) 2,2-Dichloropropane	8.72	77	1037187	97.7895	ug/L	99
32) cis-1,2-Dichloroethene	8.79	96	740781	103.2435	ug/L	100
33) Chloroform	9.02	83	1246716	98.3216	ug/L	99
34) 1-Bromopropane	9.16	122	128449	98.2947	ug/L	99
35) Bromochloromethane	9.28	130	387609	101.3625	ug/L	99
36) Tetrahydrofuran	9.31	42	226285	209.8603	ug/L	99
38) 1,1,1-Trichloroethane	9.61	97	1127271	101.7714	ug/L	100
39) Cyclohexane	9.64	56	1129505	101.7907	ug/L	99
40) 1,1-Dichloropropene	9.84	75	960862	105.1544	ug/L	98
41) Tert-Amyl-Methyl ether	9.99	73	3100244	204.8312	ug/L	99
42) Carbon Tetrachloride	10.00	117	1021779	104.2189	ug/L	99

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

Quantitation Report (Not Reviewed)

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

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

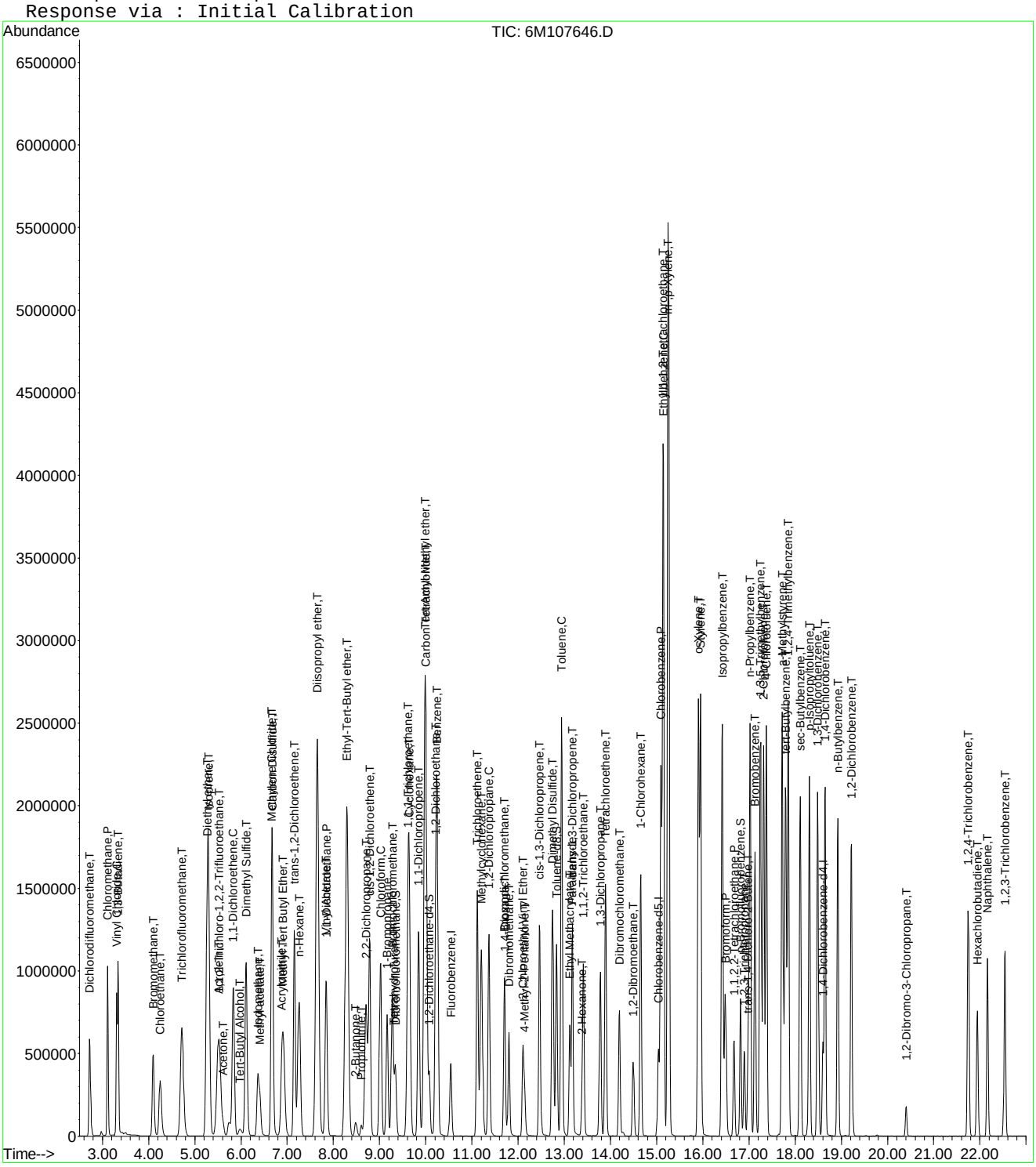
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.22	62	869687	99.8486	ug/L		99
46)	Benzene	10.25	78	2712885	99.2291	ug/L		100
47)	Trichloroethene	11.12	130	704332	102.7119	ug/L		100
48)	Methylcyclohexane	11.21	83	804930	101.7838	ug/L		100
49)	1,2-Dichloropropane	11.37	63	726078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

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

Quantitation Report (Not Reviewed)

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

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



Quantitation Report (Not Reviewed)

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

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

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

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

Quantitation Report (Not Reviewed)

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

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

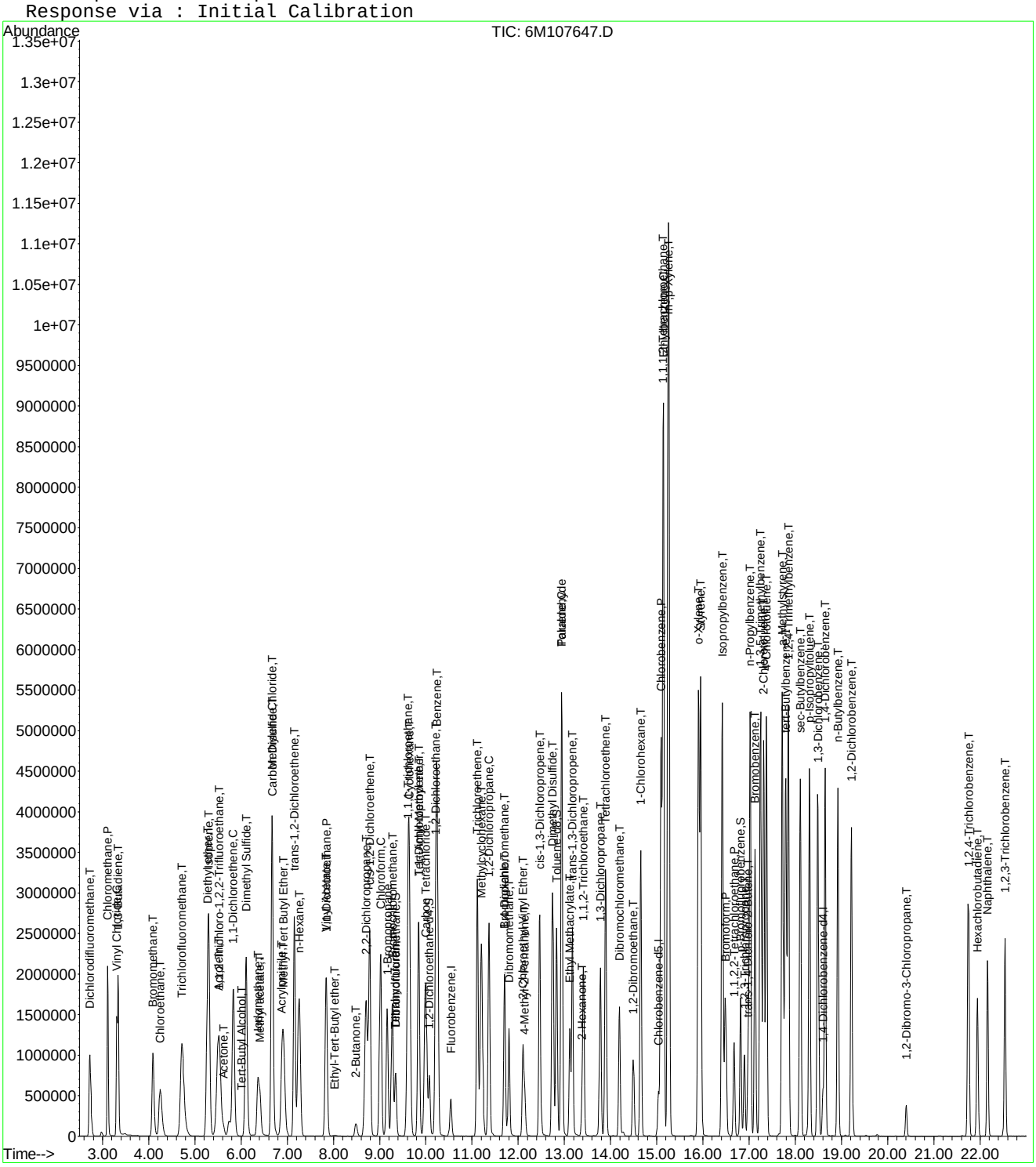
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47)	Trichloroethene	11.11	130	1494861	208.6910 ug/L		100
48)	Methylcyclohexane	11.21	83	1702262	206.0660 ug/L		99
49)	1,2-Dichloropropane	11.37	63	1554158	210.7866 ug/L		99
50)	1,4-Dioxane	11.71	88	1997	124.8880 ug/L	#	22
51)	Bromodichloromethane	11.71	83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

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

Quantitation Report (Not Reviewed)

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

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



Quantitation Report (Not Reviewed)

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	649576	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	418427	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	187665	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	0.00	111	0	0.0000	ug/L	
Spiked Amount 25.000	Range 86 - 118		Recovery =	0.00%#		
43) 1,2-Dichloroethane-d4	10.00	65	5879	0.8517	ug/L	-0.07
Spiked Amount 25.000	Range 80 - 120		Recovery =	3.40%#		
58) Toluene-d8	12.84	98	579	0.0255	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	0.12%#		
80) p-Bromofluorobenzene	16.83	95	1324	0.1798	ug/L	0.02
Spiked Amount 25.000	Range 86 - 115		Recovery =	0.72%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.73	85	1114	0.1307	ug/L #	67
3) Chloromethane	3.11	50	16042	0.7633	ug/L	95
5) 1,3-Butadiene	3.33	54	1417086	291.6036	ug/L	100
6) Bromomethane	4.09	94	42970	7.0368	ug/L	96
8) Trichlorofluoromethane	4.72	101	1720	0.1241	ug/L #	58
9) Diethyl ether	5.27	59	1433924	304.5784	ug/L	99
11) Acrolein	5.51	56	215549	605.9515	ug/L	95
12) 1,1,2-Trichloro-1,2,2-Trif	5.54	101	1936	0.2612	ug/L #	20
13) Acetone	5.62	43	366429	297.7157	ug/L	99
15) Tert-Butyl Alcohol	6.00	59	206479	642.5918	ug/L	98
17) Iodomethane	6.37	142	16577	2.4332	ug/L	99
18) Methyl acetate	6.42	43	611611	125.9136	ug/L	100
19) Methylene Chloride	6.67	84	4267	0.5781	ug/L	97
20) Carbon Disulfide	6.68	76	8026	0.3718	ug/L #	75
21) Acrylonitrile	6.87	53	494473	298.1748	ug/L	91
24) n-Hexane	7.25	57	5569	0.6735	ug/L	89
25) Diisopropyl ether	7.65	45	7975502	303.7550	ug/L	100
26) Vinyl Acetate	7.83	43	1127218	296.5528	ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	6614632	309.9935	ug/L	99
29) 2-Butanone	8.49	43	553348	321.5166	ug/L	99
30) Propionitrile	8.61	54	167232	339.7287	ug/L	98
34) 1-Bromopropane	9.17	122	415352	301.9461	ug/L	99
36) Tetrahydrofuran	9.30	42	363480	321.1550	ug/L	99
38) 1,1,1-Trichloroethane	9.62	97	1472	0.1266	ug/L #	31
39) Cyclohexane	9.65	56	3911	0.3358	ug/L #	73
40) 1,1-Dichloropropene	9.85	75	2008	0.2094	ug/L #	80
41) Tert-Amyl-Methyl ether	9.99	73	4865256	306.2426	ug/L	99
42) Carbon Tetrachloride	9.99	117	1448	0.1407	ug/L #	88
46) Benzene	10.24	78	5088	0.1773	ug/L	89
47) Trichloroethene	11.11	130	894	0.1242	ug/L #	61
48) Methylcyclohexane	11.21	83	2929	0.3529	ug/L	93
50) 1,4-Dioxane	11.73	88	18424	586.5169	ug/L	79
53) 2-Chloroethyl Vinyl Ether	12.10	63	1026968	307.0190	ug/L	99
54) 4-Methyl-2-Pentanone	12.13	58	441037	341.3917	ug/L	98
55) cis-1,3-Dichloropropene	12.47	75	591	0.2620	ug/L #	48
59) Toluene	12.95	91	6015	0.2188	ug/L	97
61) Paraldehyde	13.16	89	22698	307.4354	ug/L	90
64) 2-Hexanone	13.38	43	689282	309.5054	ug/L	99
66) Tetrachloroethene	13.90	166	1452	0.2261	ug/L #	75
69) 1-Chlorohexane	14.66	91	2013	0.2765	ug/L	92

(#) = qualifier out of range (m) = manual integration
6M107648.D 8260WTR.M Wed Apr 25 15:23:04 2012 Page 1

Quantitation Report (Not Reviewed)

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

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

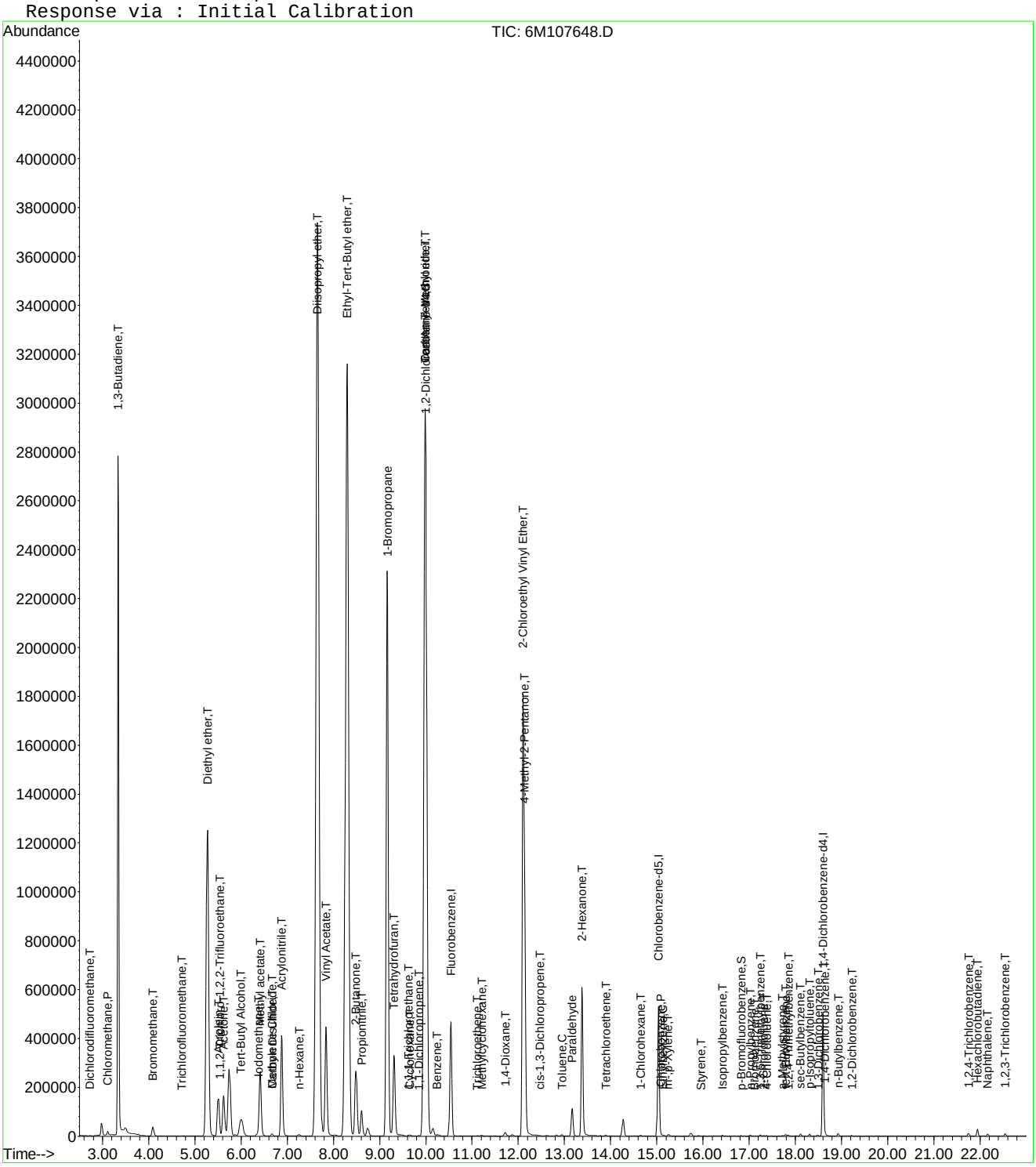
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
70)	Chlorobenzene	15.08	112	4245	0.2430 ug/L	#	12
72)	Ethylbenzene	15.14	106	1381	0.1532 ug/L		91
73)	m-,p-Xylene	15.25	106	3367	0.3056 ug/L		88
75)	Styrene	15.96	104	1741	0.3282 ug/L		78
77)	Isopropylbenzene	16.42	105	5543	0.2123 ug/L		98
83)	n-Propylbenzene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

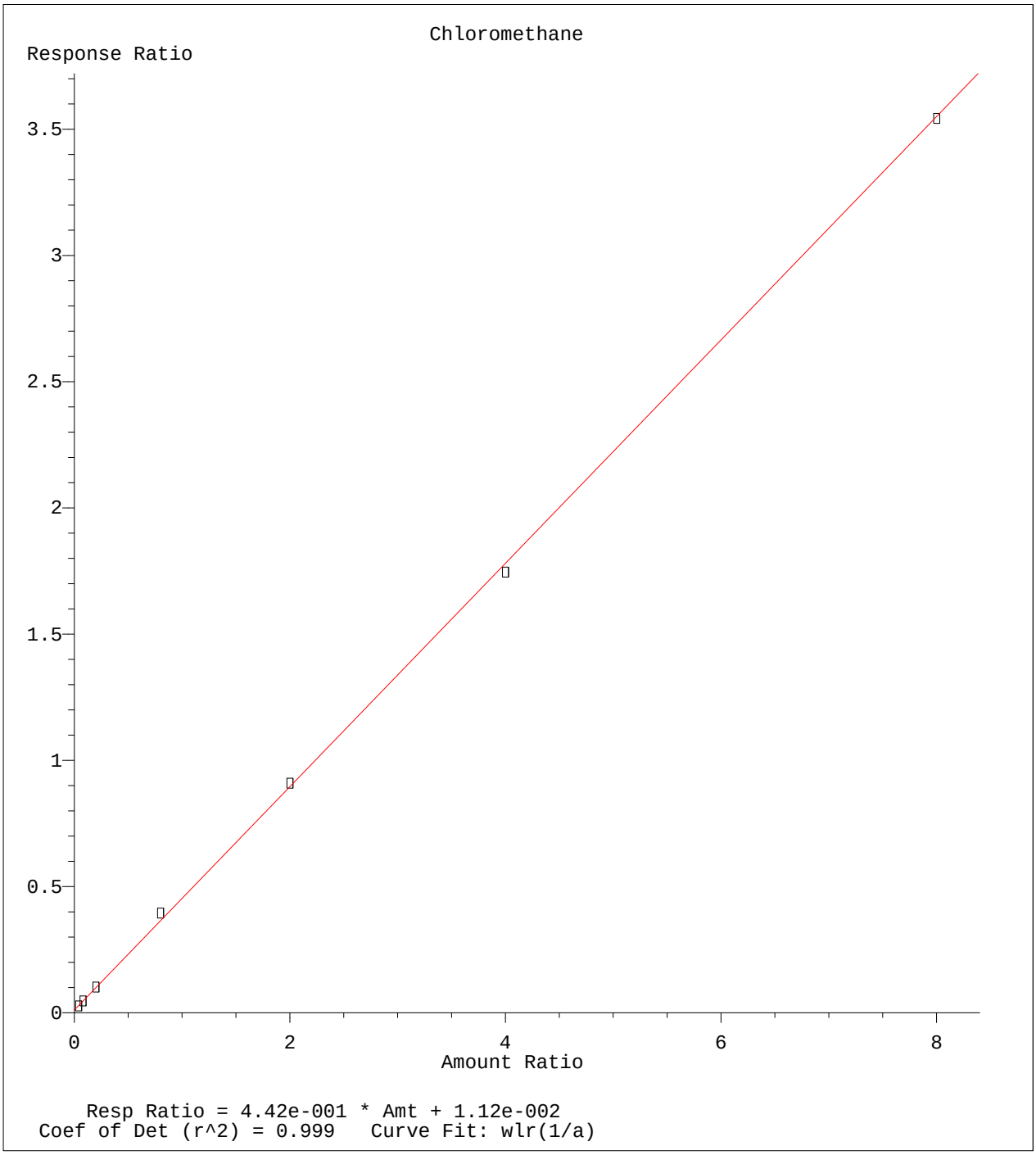
(#) = qualifier out of range (m) = manual integration
6M107648.D 8260WTR.M Wed Apr 25 15:23:04 2012 Page 2

Quantitation Report (Not Reviewed)

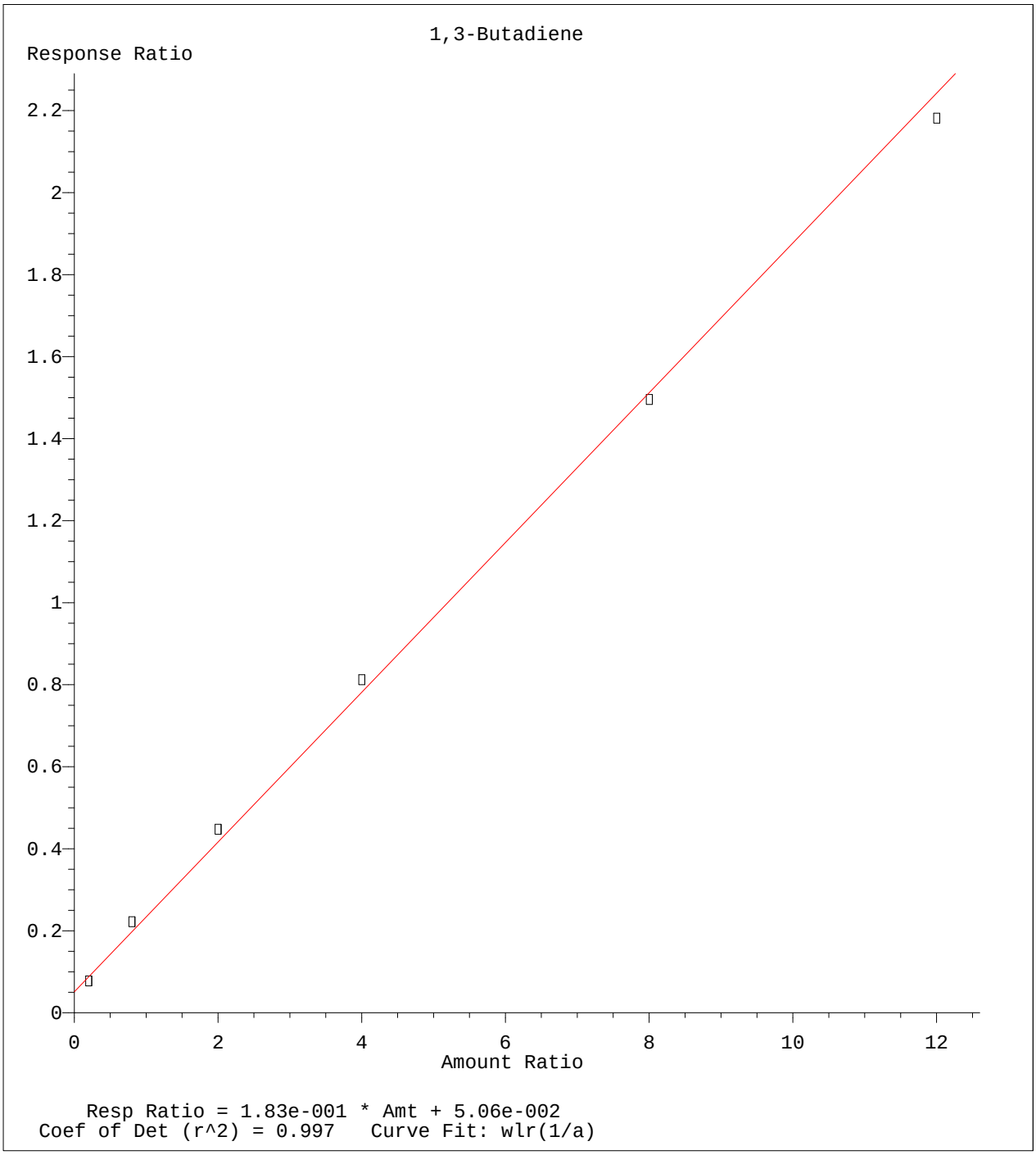
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Acq On : 25 Apr 2012 14:42 Operator: ADC
Sample : WG396001-11 300.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23 2012 Quant Results File: 8260WTR.RES

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

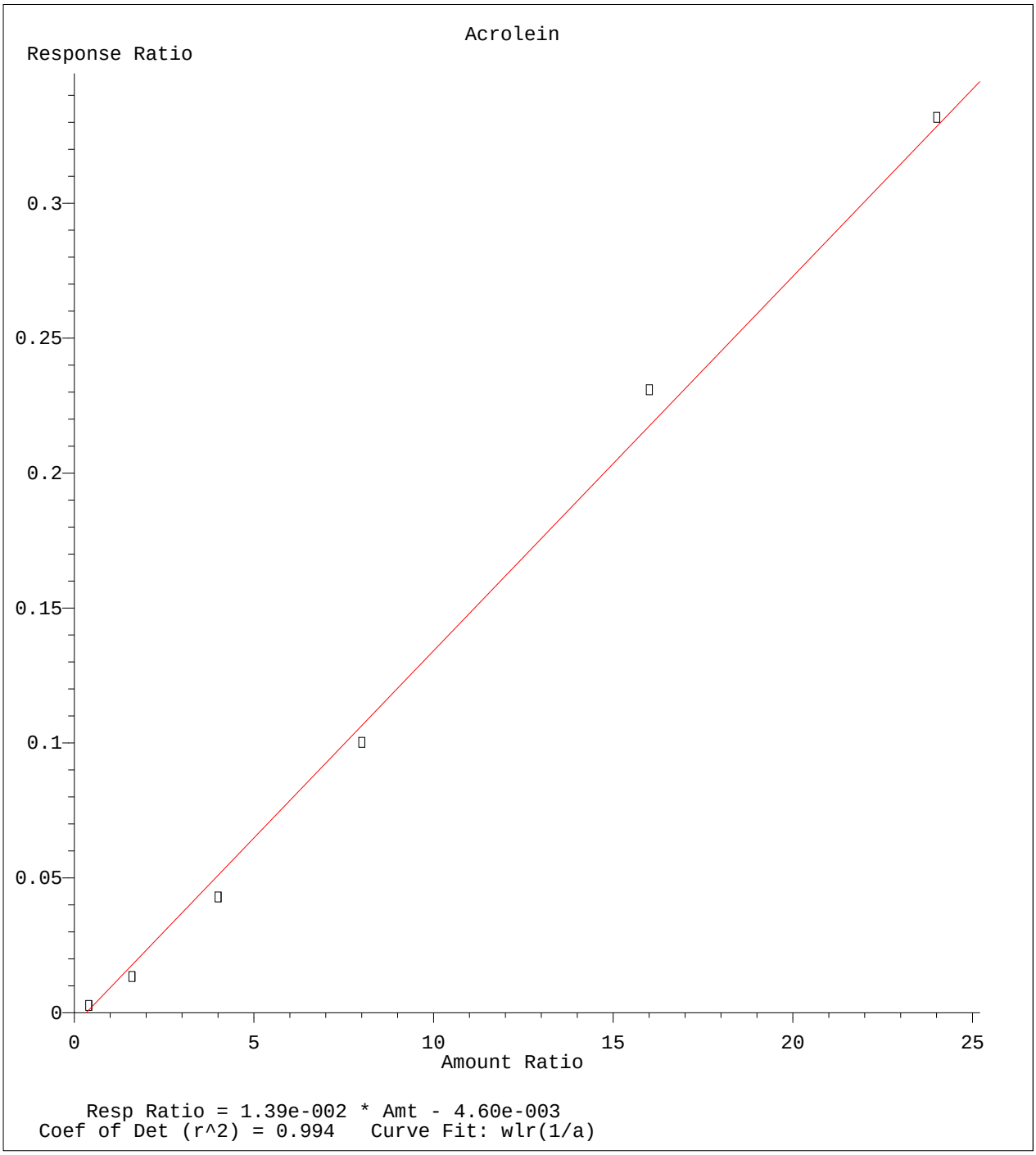




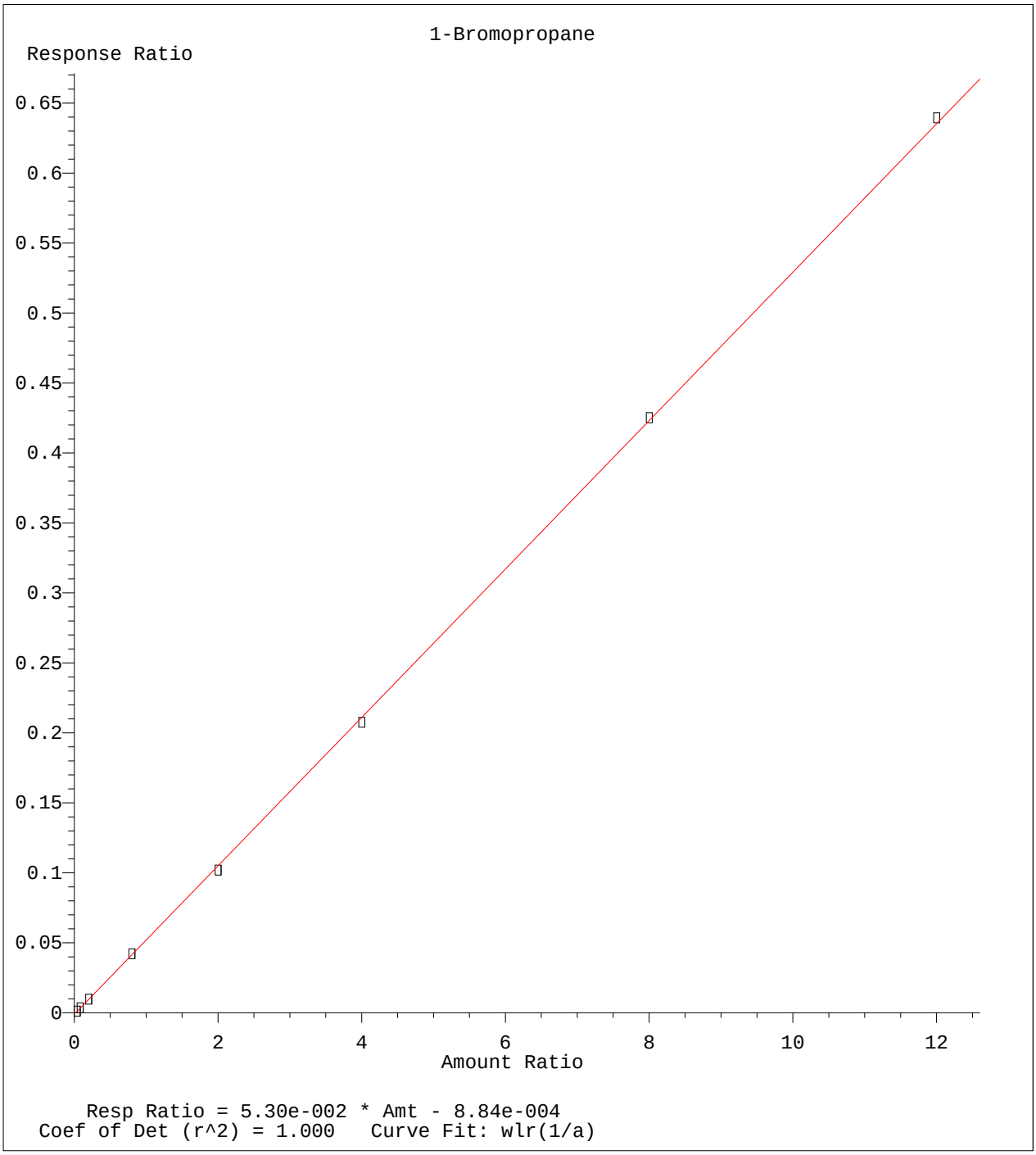
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Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



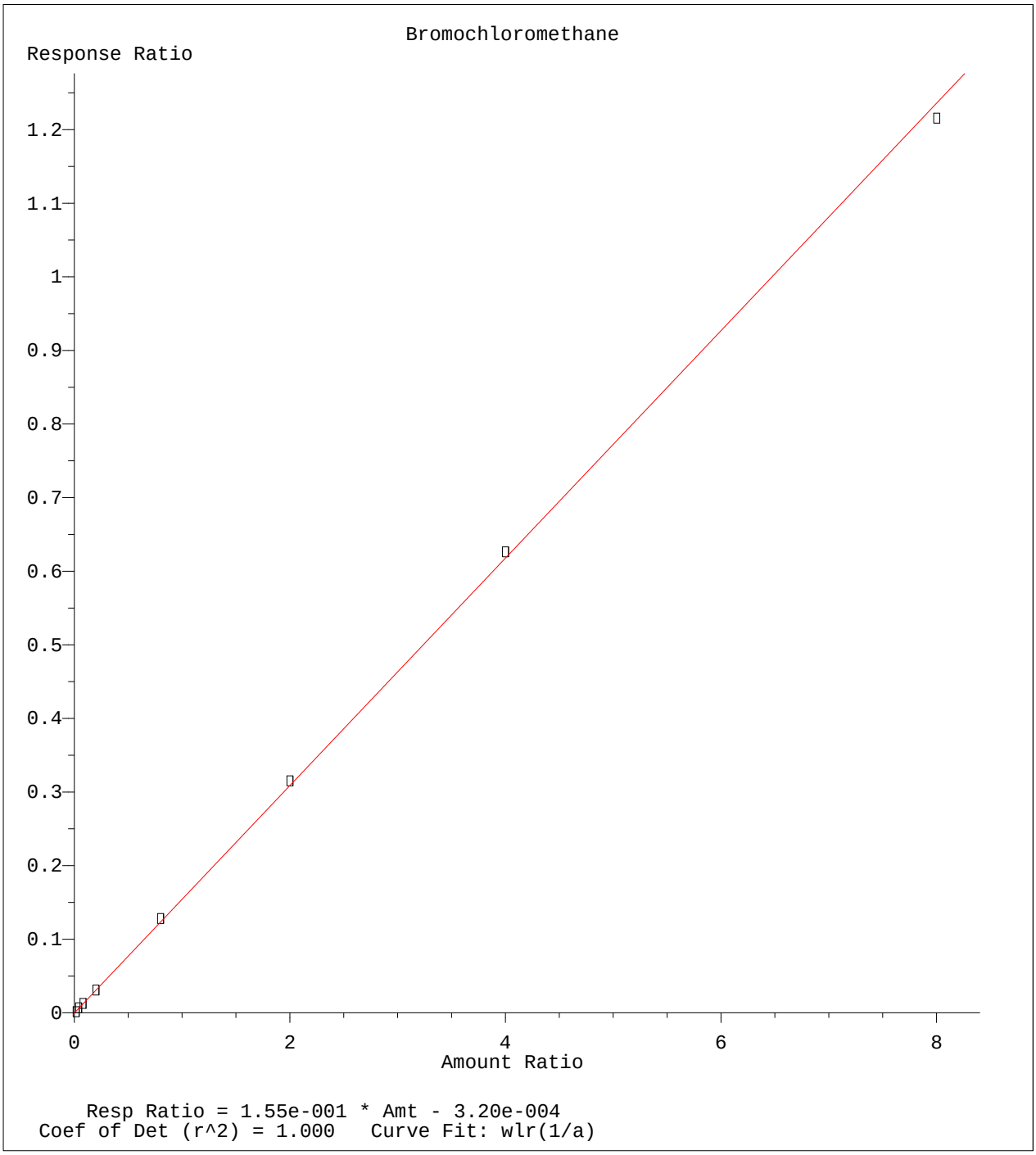
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Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



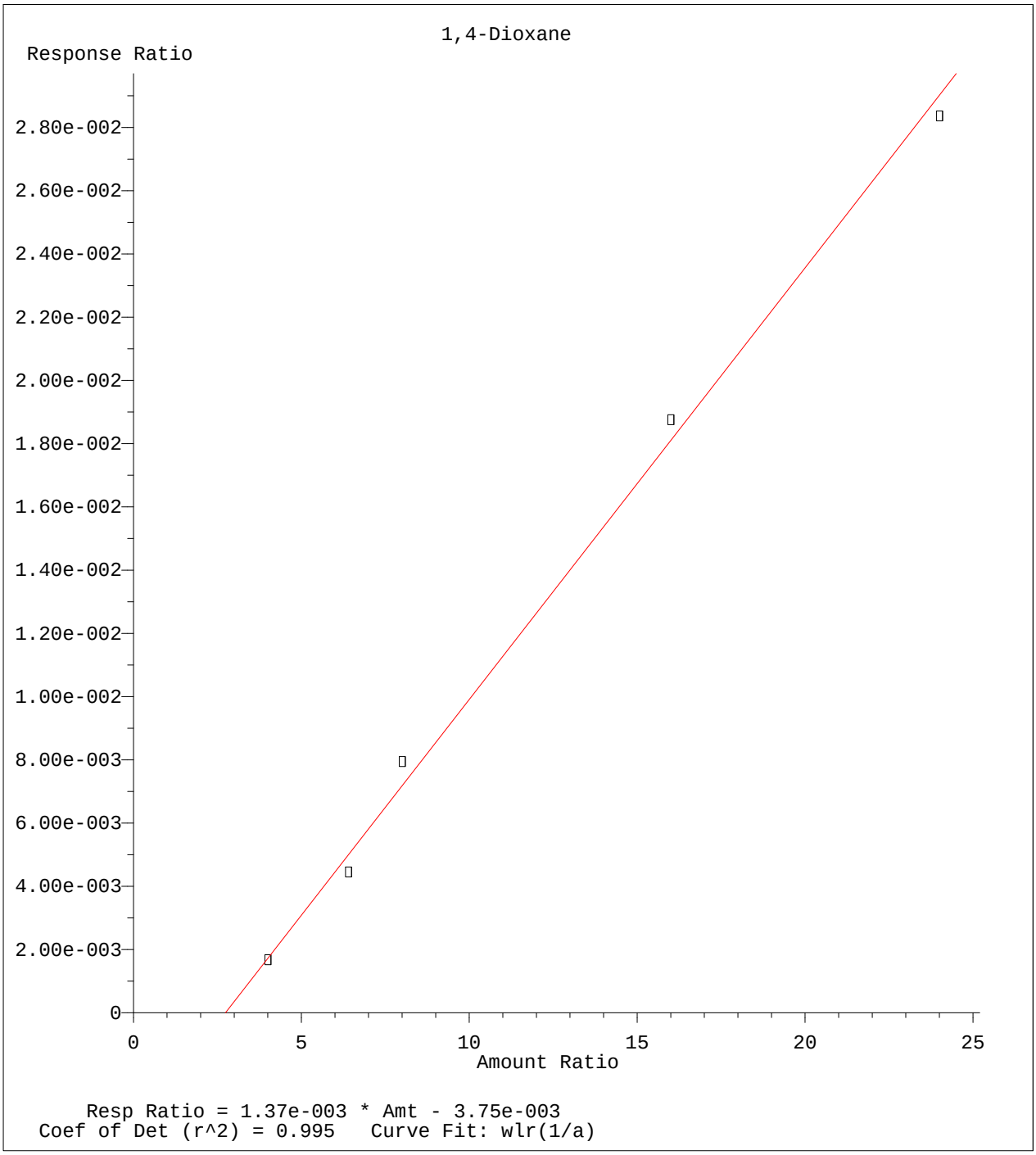
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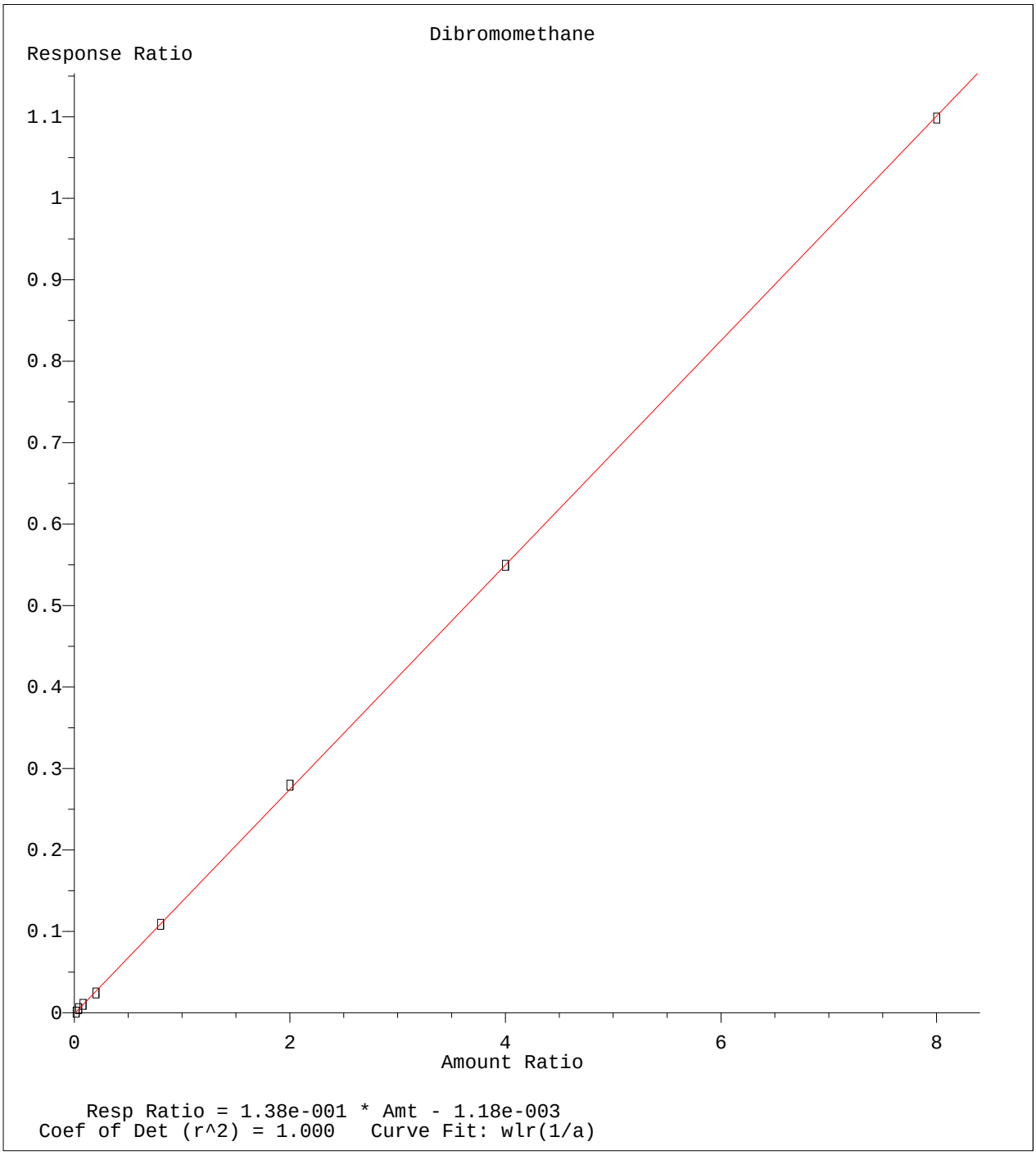
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Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



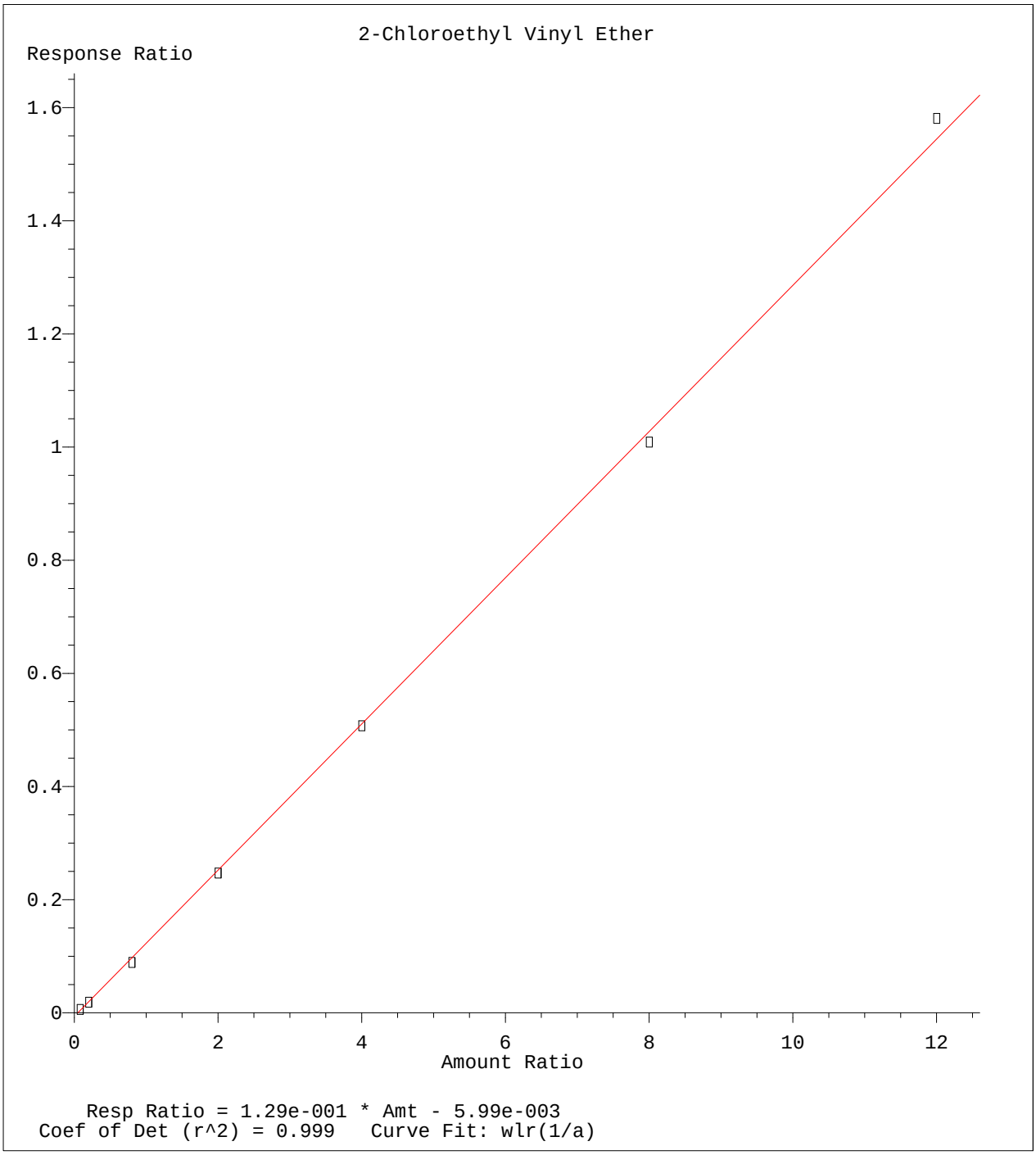
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



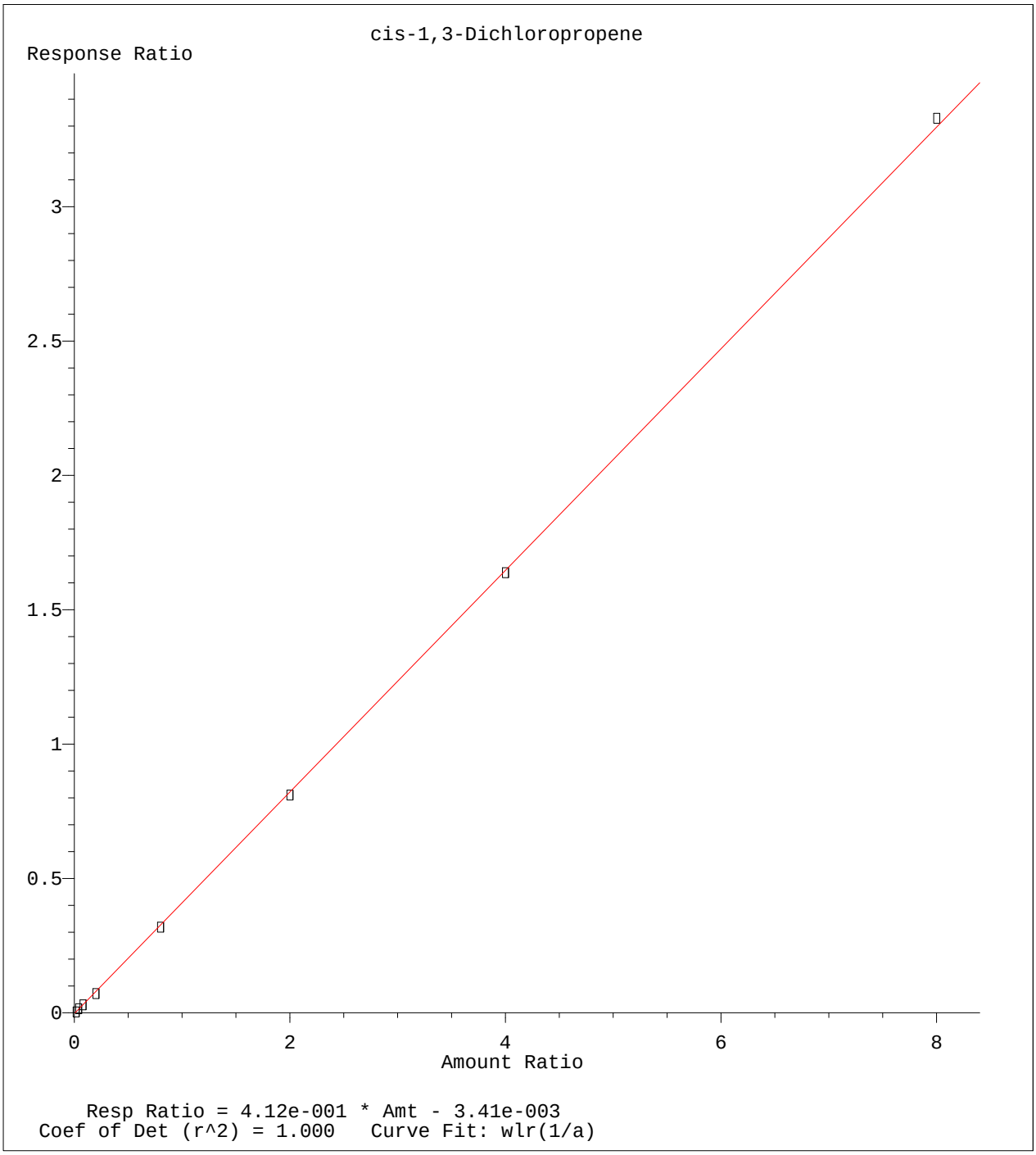
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Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



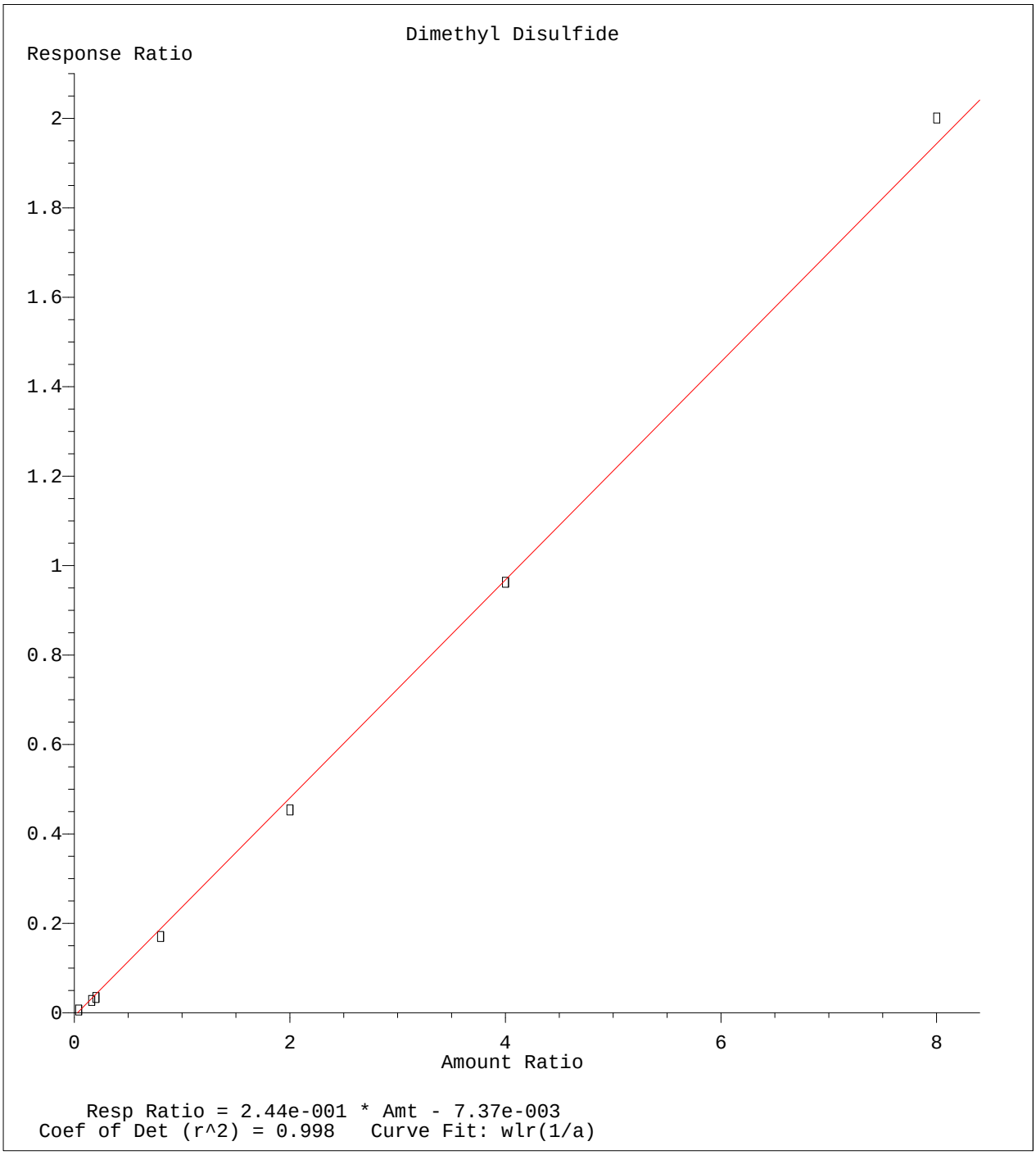
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Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



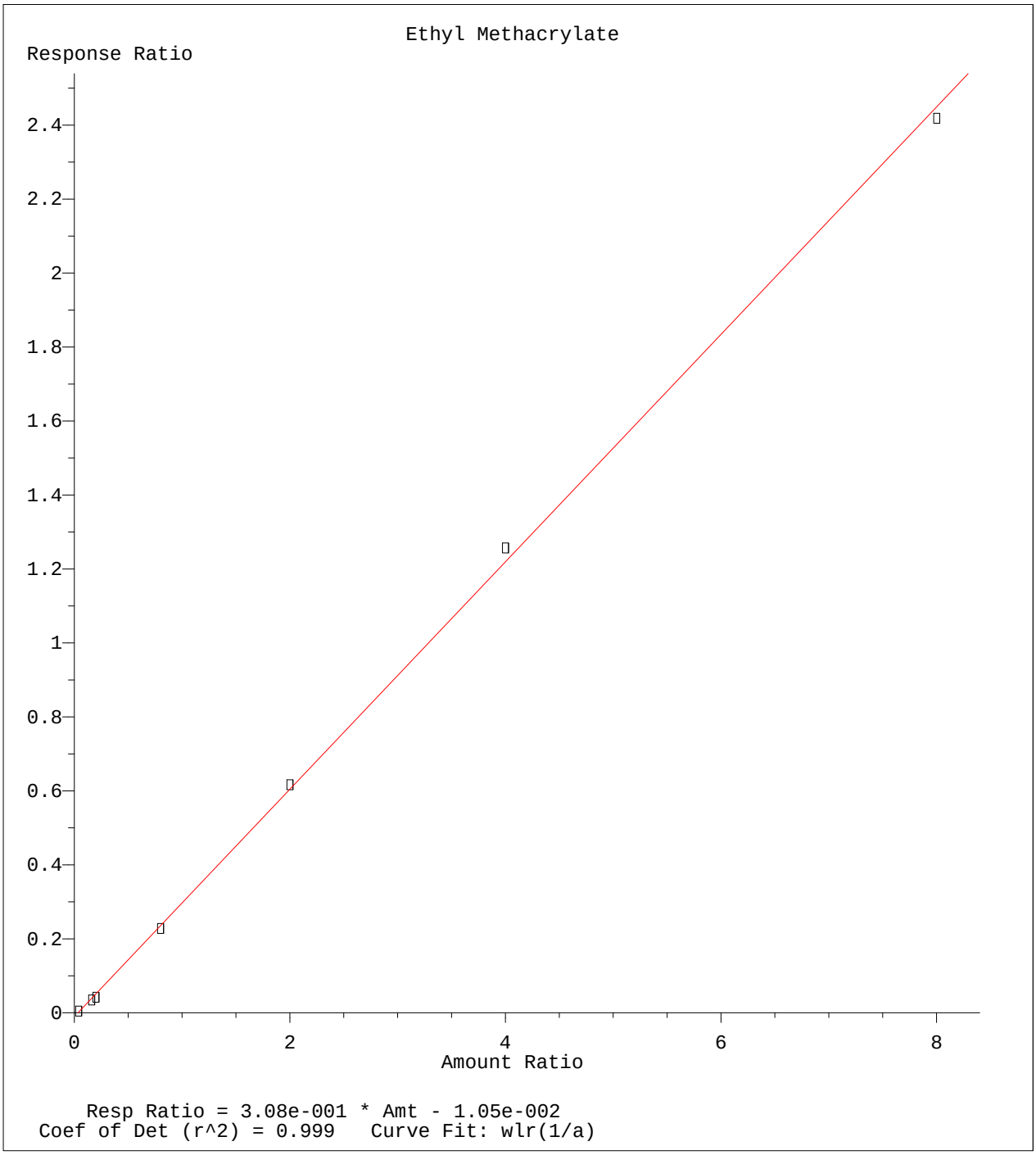
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Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



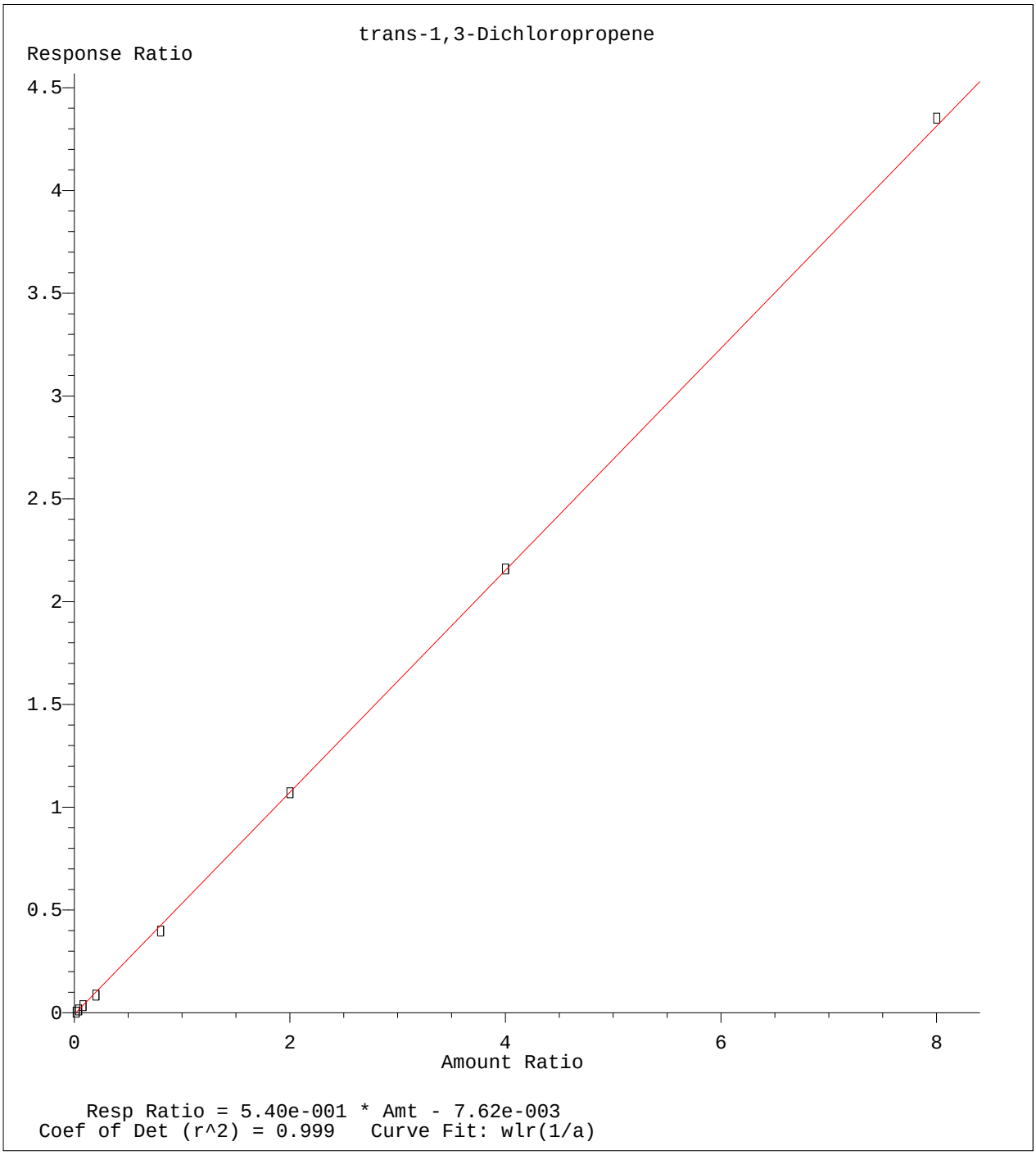
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Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



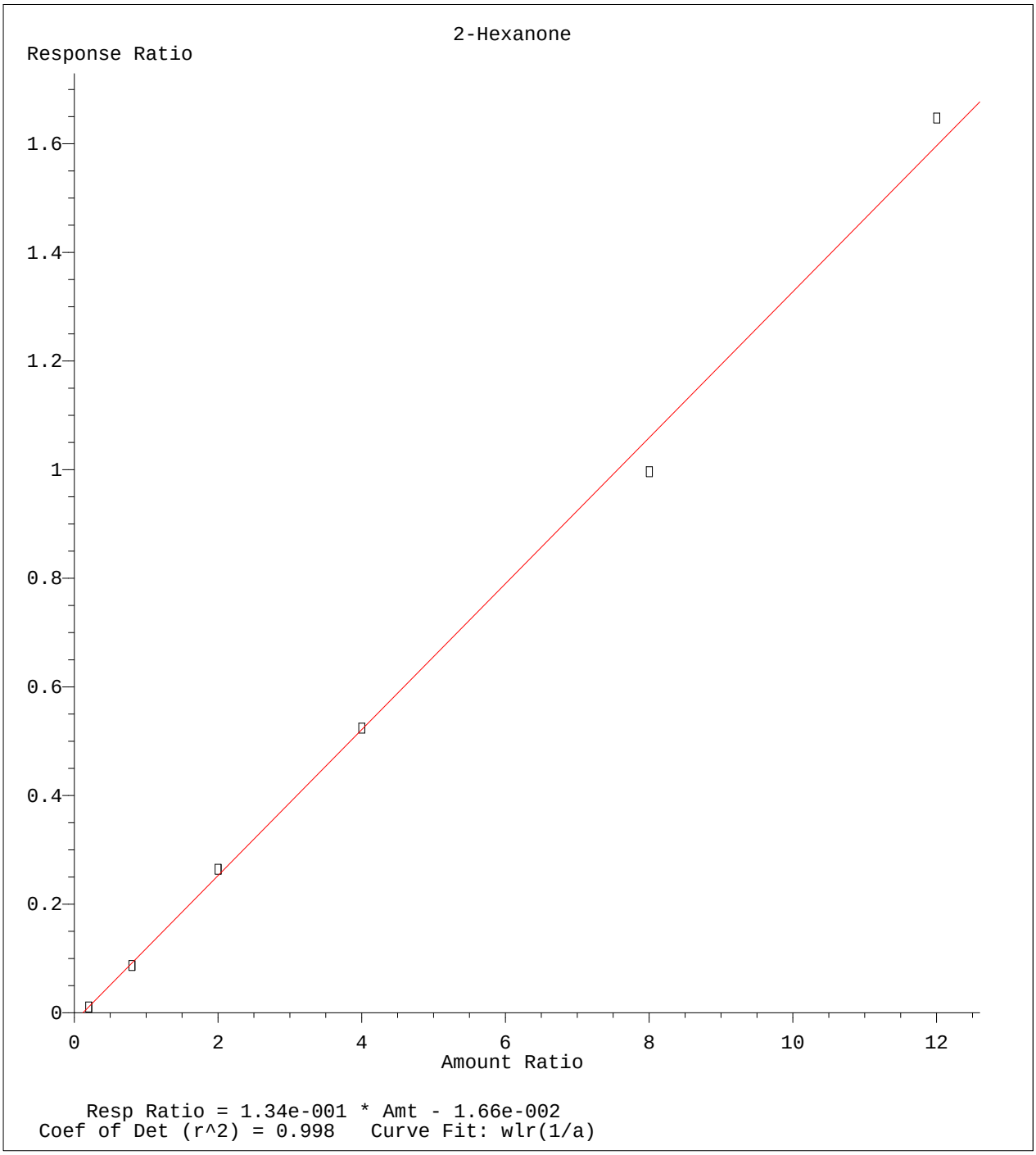
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Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



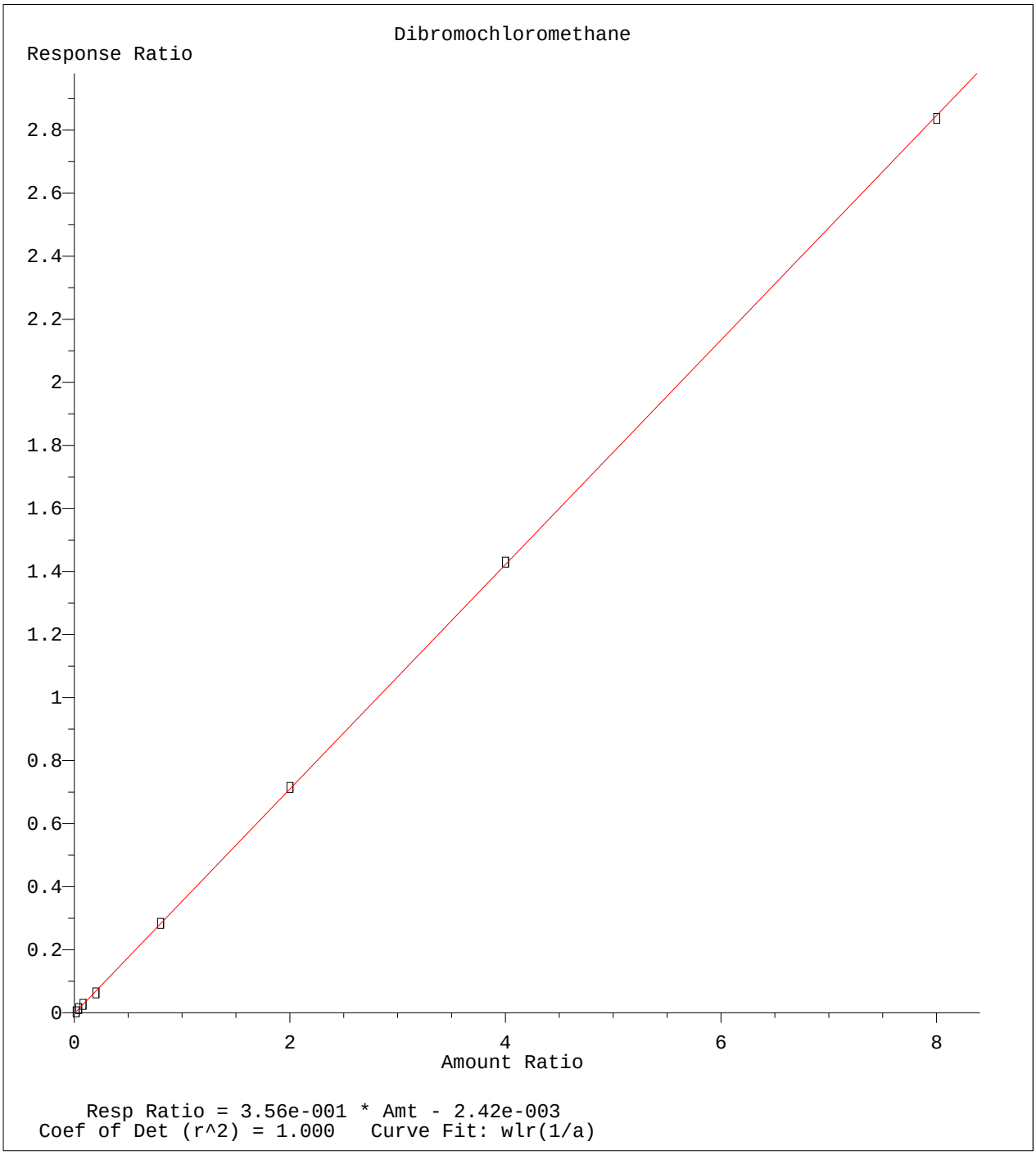
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



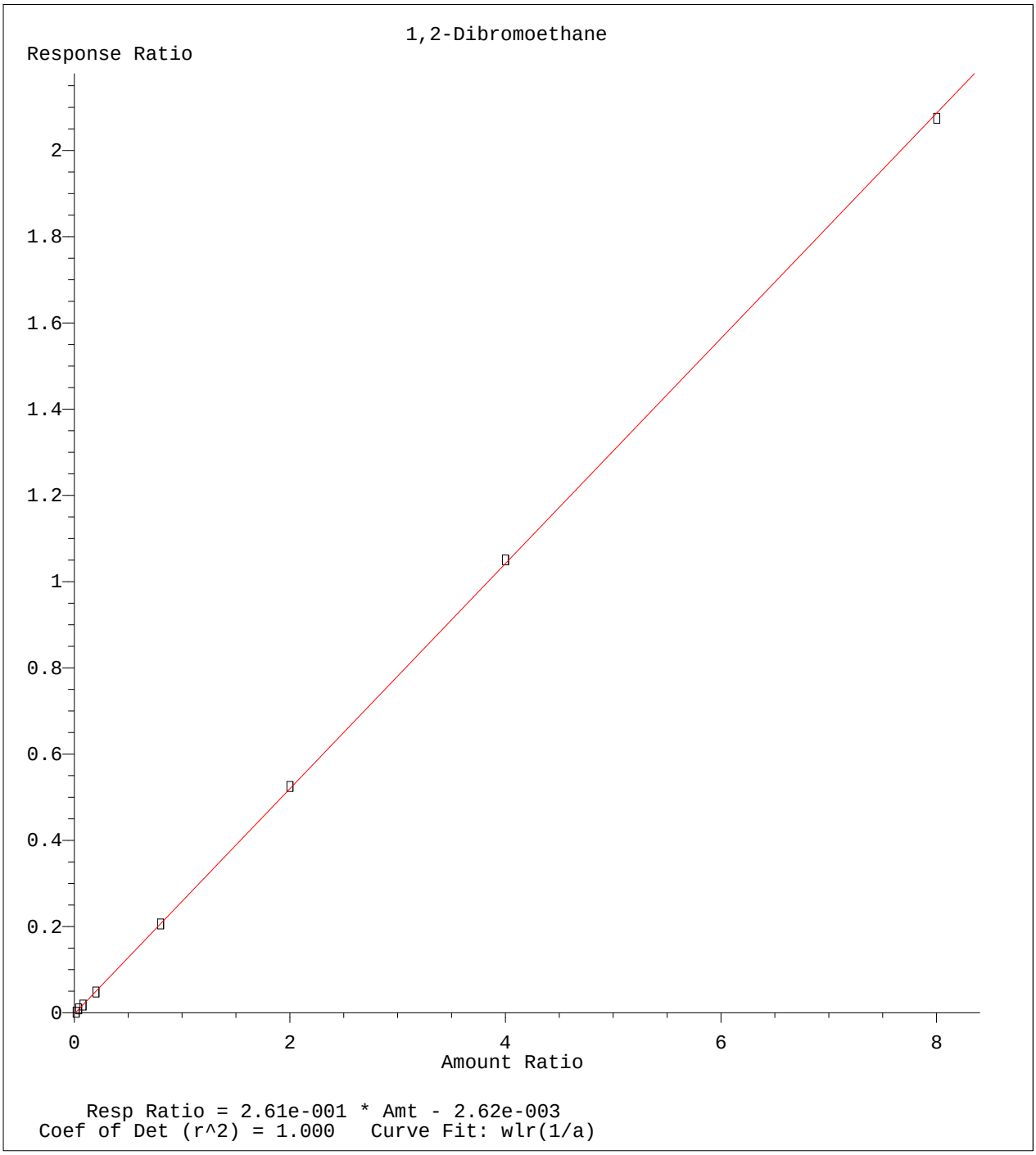
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



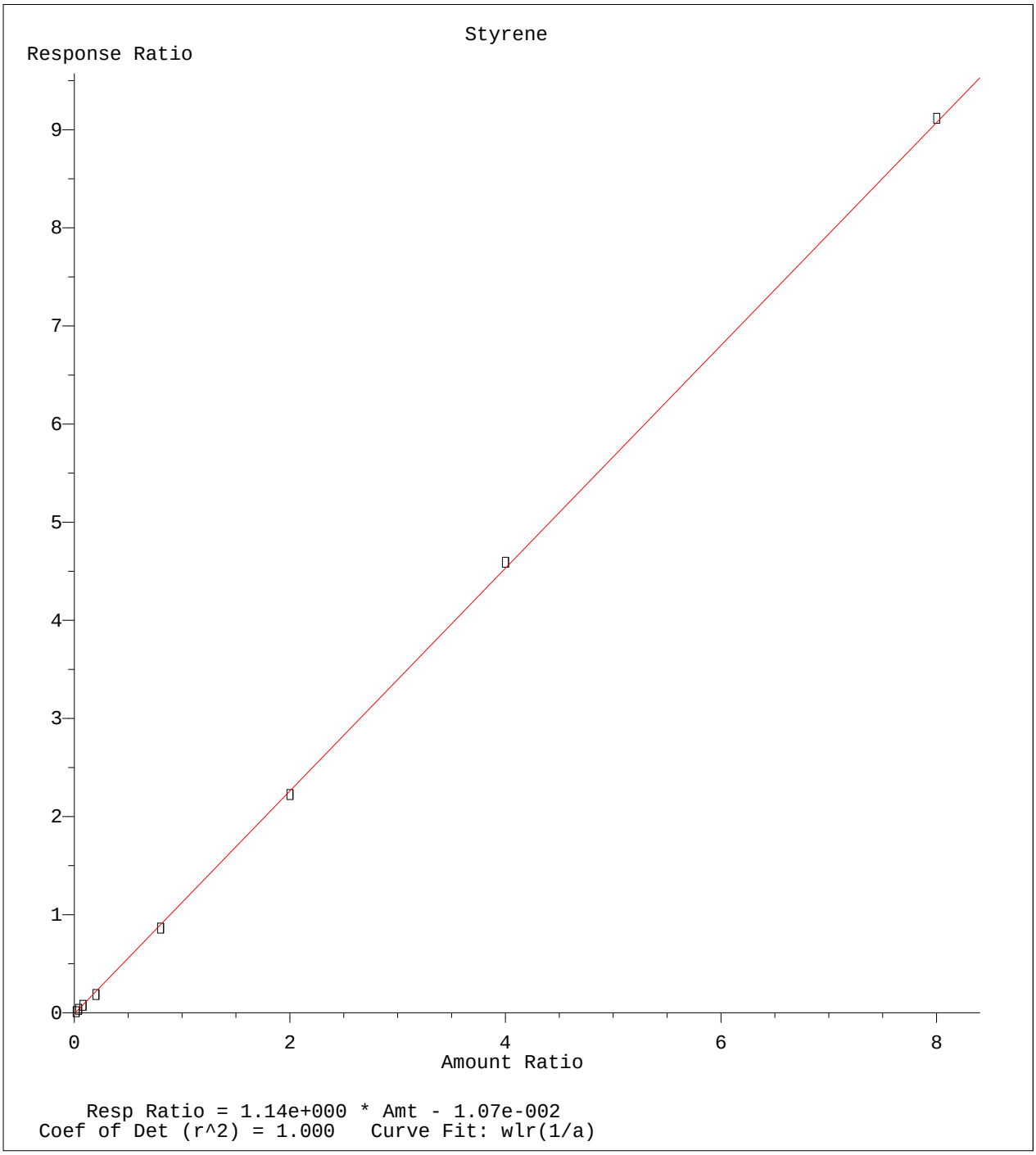
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



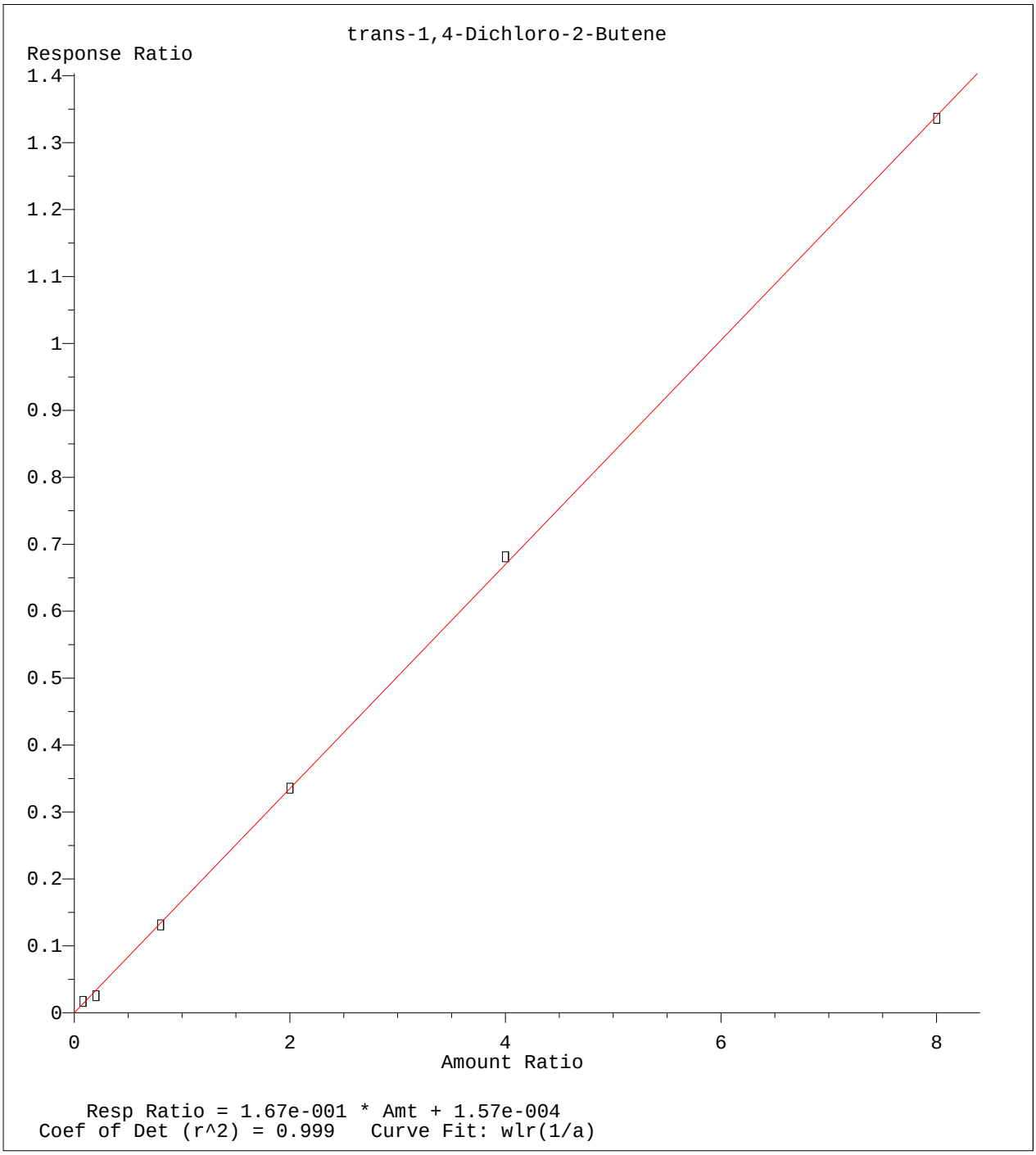
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



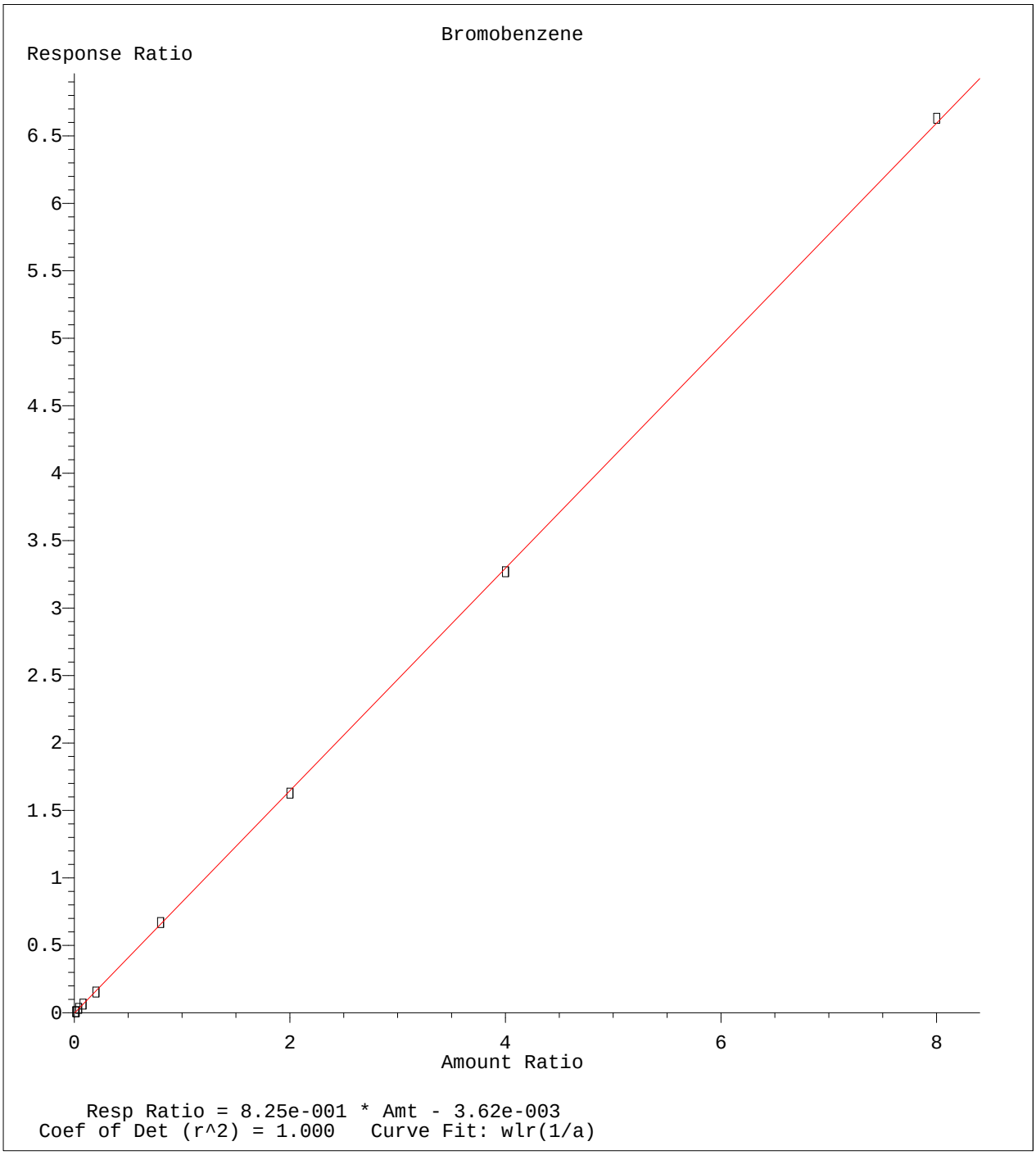
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



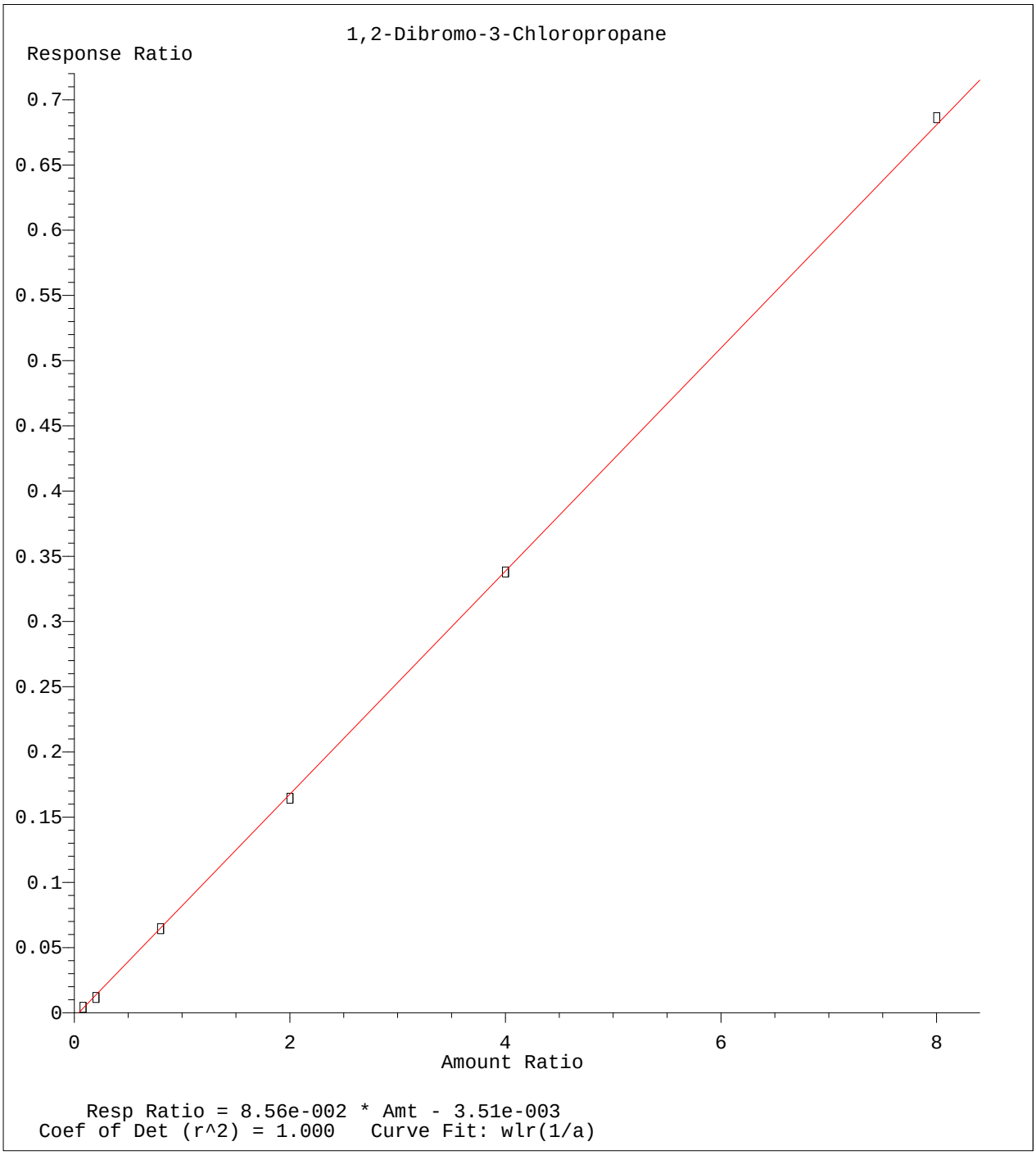
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



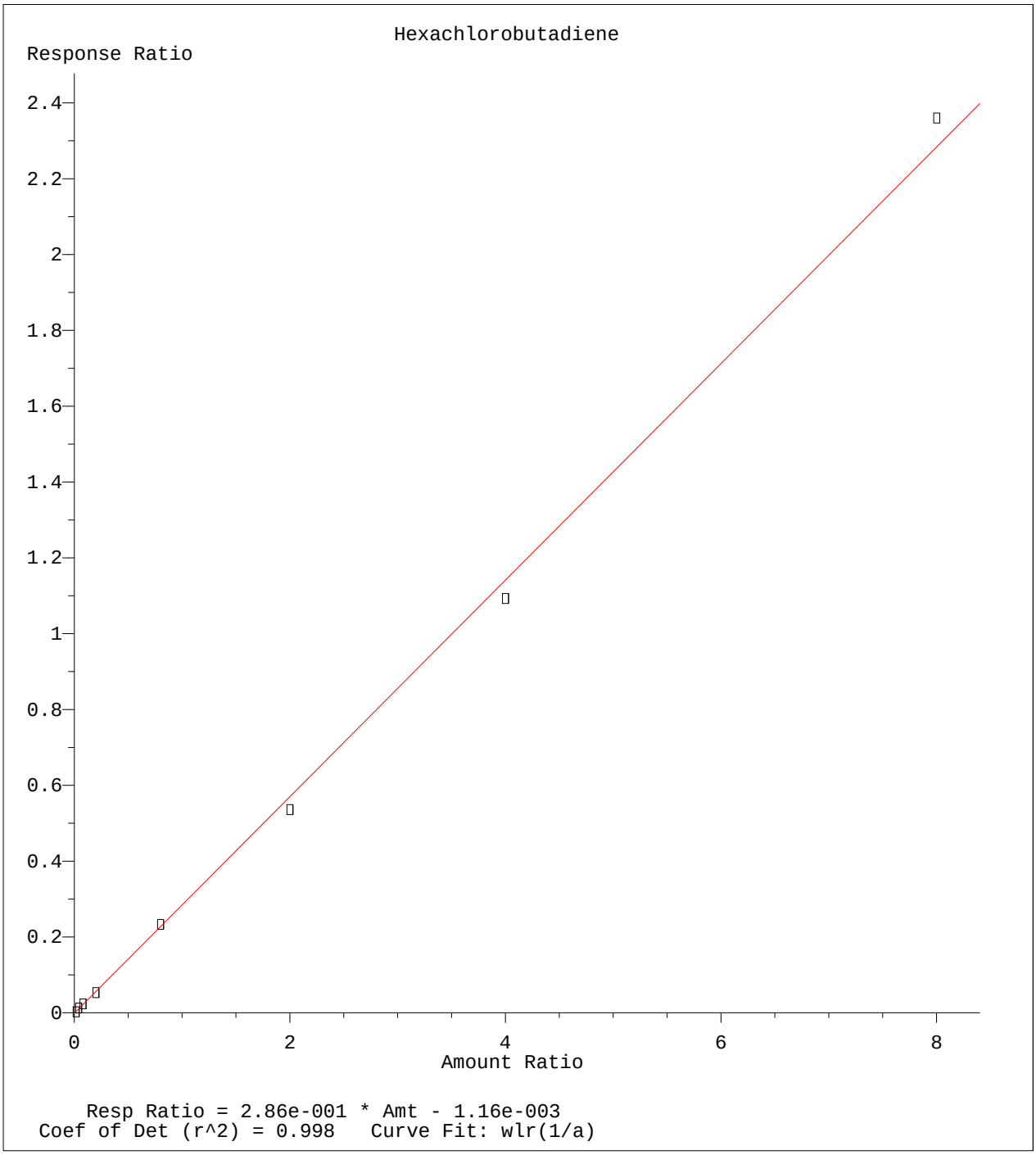
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



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



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



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

Quantitation Report (Not Reviewed)

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

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

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

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

Quantitation Report (Not Reviewed)

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

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

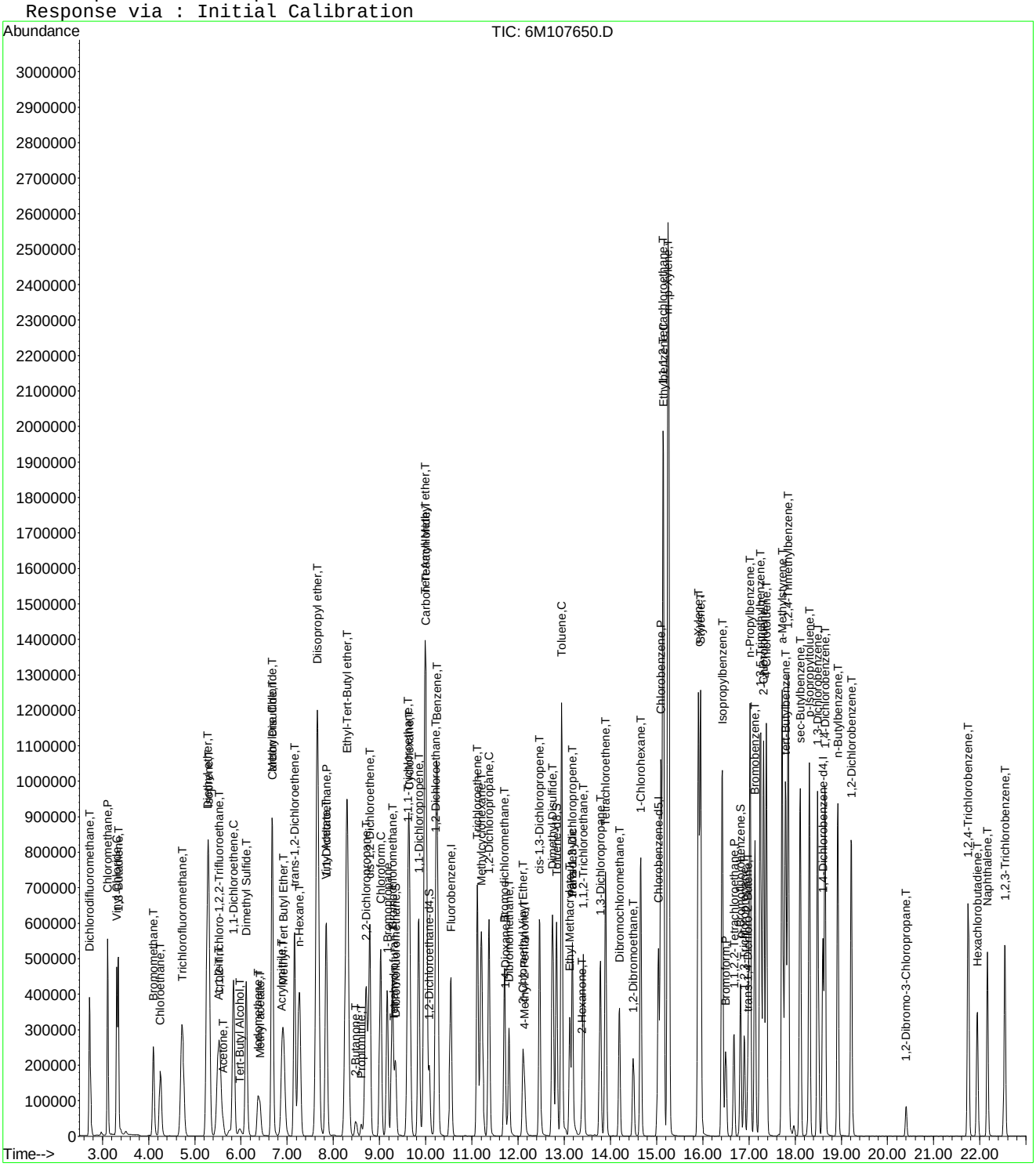
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.22	62	427893	48.4840	ug/L		99
46)	Benzene	10.25	78	1331878	48.0792	ug/L		100
47)	Trichloroethene	11.12	130	338809	48.7622	ug/L		100
48)	Methylcyclohexane	11.21	83	416357	51.9602	ug/L		99
49)	1,2-Dichloropropane	11.37	63	359097	50.2094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

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

Quantitation Report (Not Reviewed)

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

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



Evaluate Continuing Calibration Report

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

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

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

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

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

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

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

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

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

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107859.D Vial: 2
Acq On : 4 May 2012 11:43 Operator: adc
Sample : WG397028-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51371 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 04 12:06:44 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	415638	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	278648	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	140070	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	118406	26.3100	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 105.24%			
43) 1,2-Dichloroethane-d4	10.09	65	115784	26.2147	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 104.84%			
58) Toluene-d8	12.83	98	397766	26.2652	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 105.08%			
80) p-Bromofluorobenzene	16.81	95	144120	26.2208	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 104.88%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.72	85	265708	48.7368	ug/L	98
3) Chloromethane	3.11	50	442677	59.5481	ug/L	99
4) Vinyl Chloride	3.30	62	336854	48.8517	ug/L	99
5) 1,3-Butadiene	3.35	54	215715	64.0986	ug/L	97
6) Bromomethane	4.10	94	187456	47.9763	ug/L	97
7) Chloroethane	4.25	64	188748	48.3820	ug/L	98
8) Trichlorofluoromethane	4.72	101	403875	45.5546	ug/L	99
9) Diethyl ether	5.27	59	341293	113.2961	ug/L	98
10) Isoprene	5.30	67	373324	49.5206	ug/L	98
11) Acrolein	5.50	56	17298	83.2411	ug/L	95
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	216813	45.7219	ug/L	100
13) Acetone	5.61	43	37334	47.4058	ug/L	94
14) 1,1-Dichloroethene	5.84	61	371053	48.6668	ug/L	98
15) Tert-Butyl Alcohol	5.98	59	29661	144.2646	ug/L	96
16) Dimethyl Sulfide	6.11	62	308798	51.0168	ug/L	96
17) Iodomethane	6.37	142	244113	55.9984	ug/L	97
18) Methyl acetate	6.41	43	146430	47.1132	ug/L	98
19) Methylene Chloride	6.67	84	229734	48.6463	ug/L	96
20) Carbon Disulfide	6.68	76	701161	50.7585	ug/L	99
21) Acrylonitrile	6.88	53	56580	53.3219	ug/L	96
22) Methyl Tert Butyl Ether	6.91	73	452956	45.5268	ug/L	99
23) trans-1,2-Dichloroethene	7.16	96	227324	49.2906	ug/L	99
24) n-Hexane	7.26	57	282194	53.3381	ug/L	97
25) Diisopropyl ether	7.65	45	1807282	107.5737	ug/L	98
26) Vinyl Acetate	7.84	43	214615	88.2407	ug/L	98
27) 1,1-Dichloroethane	7.85	63	459368	48.7519	ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	1391813	101.9395	ug/L	99
29) 2-Butanone	8.48	43	56409	51.2234	ug/L	95
30) Propionitrile	8.60	54	31974	101.5137	ug/L	96
31) 2,2-Dichloropropane	8.72	77	358571	50.3367	ug/L	96
32) cis-1,2-Dichloroethene	8.79	96	242808	50.3860	ug/L	100
33) Chloroform	9.02	83	416615	48.9205	ug/L	99
34) 1-Bromopropane	9.18	122	40688	46.5800	ug/L	100
35) Bromochloromethane	9.28	130	132168	51.4872	ug/L	97
36) Tetrahydrofuran	9.31	42	75325	104.0131	ug/L	96
38) 1,1,1-Trichloroethane	9.62	97	361256	48.5609	ug/L	96
39) Cyclohexane	9.65	56	375605	50.3994	ug/L	97
40) 1,1-Dichloropropene	9.85	75	306063	49.8714	ug/L	97
41) Tert-Amyl-Methyl ether	9.99	73	1010651	99.4205	ug/L	99
42) Carbon Tetrachloride	10.00	117	331152	50.2911	ug/L	100

(#) = qualifier out of range (m) = manual integration
6M107859.D 8260WTR.M Fri May 04 12:06:44 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107859.D Vial: 2
Acq On : 4 May 2012 11:43 Operator: adc
Sample : WG397028-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51371 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 04 12:06:44 2012 Quant Results File: 8260WTR.RES

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

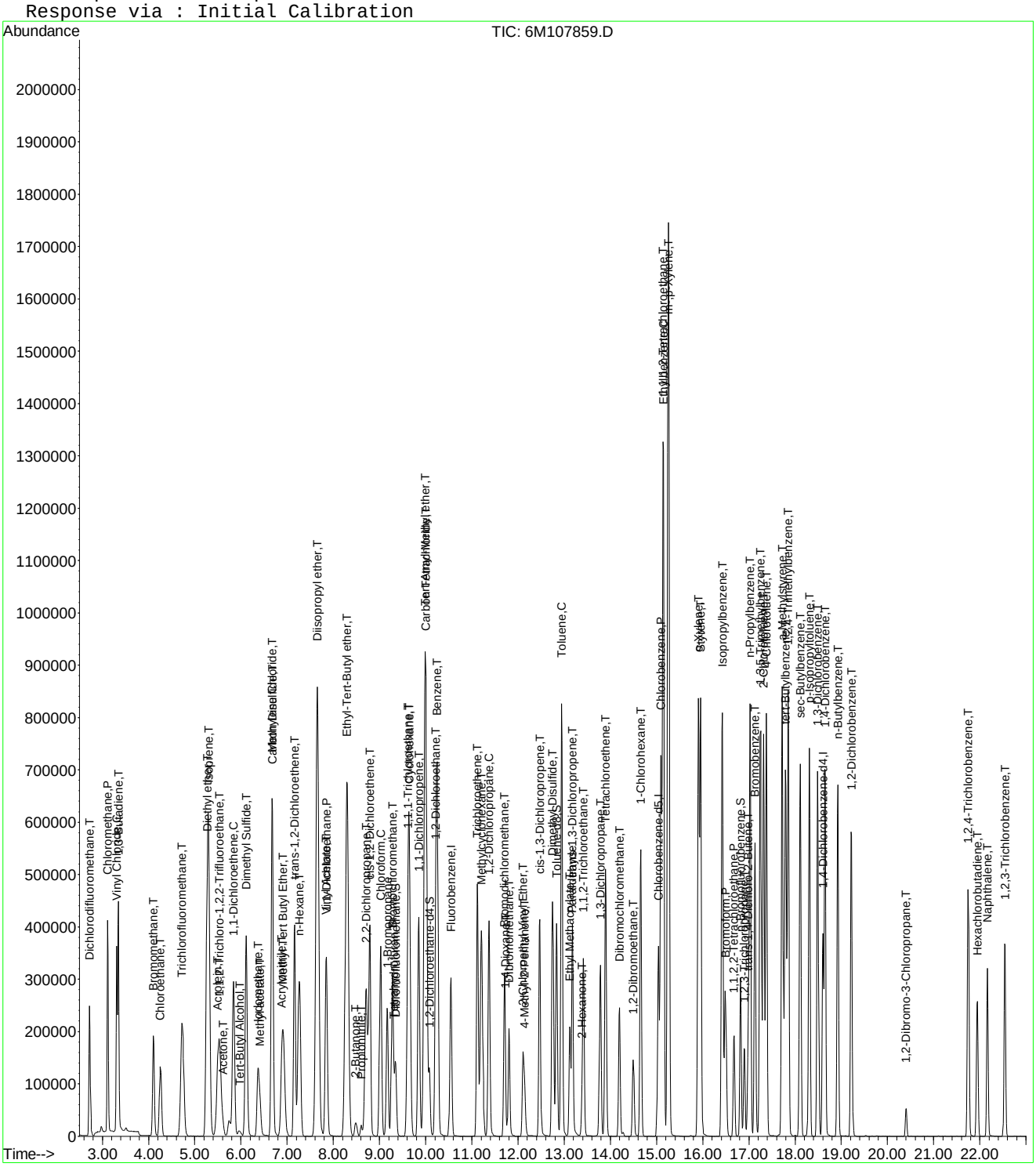
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.22	62	291653	49.8563	ug/L		97
46)	Benzene	10.25	78	891969	48.5771	ug/L		100
47)	Trichloroethene	11.12	130	227904	49.4846	ug/L		100
48)	Methylcyclohexane	11.21	83	275857	51.9372	ug/L		99
49)	1,2-Dichloropropane	11.37	63	238246	50.2561	ug/L		98
50)	1,4-Dioxane	11.73	88	1331	126.9537	ug/L	#	48
51)	Bromodichloromethane	11.71	83	286657	50.3386	ug/L		99
52)	Dibromomethane	11.80	93	111295	48.7924	ug/L		99
53)	2-Chloroethyl Vinyl Ether	12.11	63	90667	43.3606	ug/L		99
54)	4-Methyl-2-Pentanone	12.14	58	42565	51.4927	ug/L		97
55)	cis-1,3-Dichloropropene	12.47	75	326533	47.8310	ug/L		99
56)	Dimethyl Disulfide	12.75	79	185496	46.5057	ug/L		97
59)	Toluene	12.94	91	876210	47.8506	ug/L		100
60)	Ethyl Methacrylate	13.12	69	161975	48.1126	ug/L		96
61)	Paraldehyde	13.17	89	4341	88.2917	ug/L	#	16
62)	trans-1,3-Dichloropropene	13.18	75	278185	46.5647	ug/L		99
63)	1,1,2-Trichloroethane	13.41	97	140048	47.6177	ug/L		100
64)	2-Hexanone	13.38	43	69933	49.7650	ug/L		95
65)	1,3-Dichloropropane	13.78	76	250221	49.8879	ug/L		95
66)	Tetrachloroethene	13.89	166	210674	49.2628	ug/L		99
67)	Dibromochloromethane	14.20	129	186374	47.1257	ug/L		99
68)	1,2-Dibromoethane	14.50	107	138008	47.6627	ug/L		99
69)	1-Chlorohexane	14.66	91	252066	51.9835	ug/L		97
70)	Chlorobenzene	15.09	112	553734	47.5922	ug/L		100
71)	1,1,1,2-Tetrachloroethane	15.14	131	209085	49.9052	ug/L		100
72)	Ethylbenzene	15.15	106	296165	49.3490	ug/L		98
73)	m-,p-Xylene	15.25	106	727715	99.1909	ug/L		100
74)	o-Xylene	15.91	106	341065	48.8219	ug/L		99
75)	Styrene	15.96	104	584411	46.4093	ug/L		100
76)	Bromoform	16.50	173	105013	53.0032	ug/L		100
77)	Isopropylbenzene	16.43	105	860801	49.5085	ug/L		99
79)	1,1,2,2-Tetrachloroethane	16.67	83	144471	48.7749	ug/L		99
81)	1,2,3-Trichloropropane	16.90	110	36806	48.1942	ug/L		96
82)	trans-1,4-Dichloro-2-Buten	16.99	53	46717	49.7585	ug/L		94
83)	n-Propylbenzene	17.02	91	998568	48.5172	ug/L		100
84)	Bromobenzene	17.13	156	219254	47.5602	ug/L		100
85)	1,3,5-Trimethylbenzene	17.25	105	679629	48.4022	ug/L		99
86)	2-Chlorotoluene	17.31	91	648498	47.4542	ug/L		100
87)	4-Chlorotoluene	17.38	91	640487	46.6205	ug/L		99
88)	a-Methylstyrene	17.72	118	383274	53.2264	ug/L		95
89)	tert-Butylbenzene	17.78	134	135932	47.9342	ug/L		96
90)	1,2,4-Trimethylbenzene	17.85	105	721852	48.6253	ug/L		100
91)	sec-Butylbenzene	18.11	105	787351	49.3300	ug/L		99
92)	p-Isopropyltoluene	18.31	119	652725	50.9117	ug/L		100
93)	1,3-Dichlorobenzene	18.49	146	397922	49.1884	ug/L		100
94)	1,4-Dichlorobenzene	18.65	146	406004	47.8540	ug/L		98
95)	n-Butylbenzene	18.93	91	582377	52.1450	ug/L		99
96)	1,2-Dichlorobenzene	19.22	146	349460	47.7958	ug/L		99
97)	1,2-Dibromo-3-Chloropropan	20.40	75	19833	42.4023	ug/L		100
98)	1,2,4-Trichlorobenzene	21.75	180	202263	50.8241	ug/L		100
99)	Hexachlorobutadiene	21.95	225	78720	49.3004	ug/L		99
100)	Naphthalene	22.17	128	348381	45.9739	ug/L		100
101)	1,2,3-Trichlorobenzene	22.54	180	163836	47.3658	ug/L		99

(#) = qualifier out of range (m) = manual integration
6M107859.D 8260WTR.M Fri May 04 12:06:44 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107859.D Vial: 2
Acq On : 4 May 2012 11:43 Operator: adc
Sample : WG397028-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51371 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 12:06 2012 Quant Results File: 8260WTR.RES

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



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050412\6M107859.D Vial: 2
Acq On : 4 May 2012 11:43 Operator: adc
Sample : WG397028-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51371 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.0000	1.0000	0.0	67	0.00
2	T	Dichlorodifluoromethane	0.3279	0.3196	2.5	68	0.00
3	P	Chloromethane	0.5138	0.5325	-3.7	79	0.00
4	C	Vinyl Chloride	0.4148	0.4052	2.3	75	0.00
5	T	1,3-Butadiene	0.2435	0.2595	-6.6	78	0.00
6	T	Bromomethane	0.2350	0.2255	4.1	70	0.00
7	T	Chloroethane	0.2347	0.2271	3.2	67	0.00
8	T	Trichlorofluoromethane	0.5333	0.4859	8.9	63	0.00
9	T	Diethyl ether	0.1812	0.2053	-13.3	77	0.00
10	T	Isoprene	0.4535	0.4491	1.0	66	0.00
11	T	Acrolein	0.0111	0.0104	6.5	65	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.2852	0.2608	8.6	63	0.01
13	T	Acetone	0.0474	0.0449	5.2	64	0.00
14	C	1,1-Dichloroethene	0.4586	0.4464	2.7	64	0.00
15	T	Tert-Butyl Alcohol	0.0124	0.0089	27.9#	49#	0.00
16	T	Dimethyl Sulfide	0.3641	0.3715	-2.0	69	0.00
17	T	Iodomethane	0.2622	0.2937	-12.0	67	0.00
18	T	Methyl acetate	0.1869	0.1762	5.8	62	0.00
19	T	Methylene Chloride	0.2841	0.2764	2.7	68	0.00
20	T	Carbon Disulfide	0.8309	0.8435	-1.5	69	0.00
21	T	Acrylonitrile	0.0638	0.0681	-6.6	67	0.00
22	T	Methyl Tert Butyl Ether	0.5984	0.5449	8.9	62	0.00
23	T	trans-1,2-Dichloroethene	0.2774	0.2735	1.4	65	0.00
24	T	n-Hexane	0.3182	0.3395	-6.7	72	0.00
25	T	Diisopropyl ether	1.0105	1.0871	-7.6	71	0.00
26	T	Vinyl Acetate	0.1463	0.2582	-76.5#	117	0.00
27	P	1,1-Dichloroethane	0.5667	0.5526	2.5	67	0.00
28	T	Ethyl-Tert-Butyl ether	0.8212	0.8371	-1.9	67	0.00
29	T	2-Butanone	0.0662	0.0679	-2.4	66	0.00
30	T	Propionitrile	0.0190	0.0192	-1.5	64	0.00
31	T	2,2-Dichloropropane	0.4285	0.4314	-0.7	69	0.00
32	T	cis-1,2-Dichloroethene	0.2899	0.2921	-0.8	67	0.00
33	C	Chloroform	0.5122	0.5012	2.2	67	0.00
34		1-Bromopropane	0.0481	0.0490	-1.8	64	0.00
35	T	Bromochloromethane	0.1503	0.1590	-5.8	68	0.00
36	T	Tetrahydrofuran	0.0436	0.0453	-4.0	68	0.00
37	S	Dibromofluoromethane	0.2707	0.2849	-5.2	68	0.00
38	T	1,1,1-Trichloroethane	0.4475	0.4346	2.9	65	0.00
39	T	Cyclohexane	0.4483	0.4518	-0.8	67	0.00
40	T	1,1-Dichloropropene	0.3691	0.3682	0.3	65	0.00
41	T	Tert-Amyl-Methyl ether	0.6114	0.6079	0.6	66	0.00
42	T	Carbon Tetrachloride	0.3961	0.3984	-0.6	65	0.00
43	S	1,2-Dichloroethane-d4	0.2657	0.2786	-4.9	68	0.01
44		Heptane	0.0000	0.0000	0.0	64	0.01
45	T	1,2-Dichloroethane	0.3519	0.3509	0.3	67	0.00
46	T	Benzene	1.1044	1.0730	2.8	67	0.00
47	T	Trichloroethene	0.2770	0.2742	1.0	65	0.00
48	T	Methylcyclohexane	0.3195	0.3318	-3.9	69	0.00
49	C	1,2-Dichloropropane	0.2851	0.2866	-0.5	67	0.00
50	T	1,4-Dioxane	0.0009	0.0004	55.1#	27#	0.01
51	T	Bromodichloromethane	0.3425	0.3448	-0.7	66	0.00
52	T	Dibromomethane	0.1220	0.1339	-9.7	64	0.00
53	T	2-Chloroethyl Vinyl Ether	0.1124	0.1091	2.9	59	0.00
54	T	4-Methyl-2-Pentanone	0.0497	0.0512	-3.0	63	0.00

(#) = Out of Range
6M107859.D 8260WTR.M Fri May 04 12:10:46 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050412\6M107859.D Vial: 2
Acq On : 4 May 2012 11:43 Operator: adc
Sample : WG397028-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51371 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	0.3667	0.3928	-7.1	65	0.00
56	T	Dimethyl Disulfide	0.2035	0.2231	-9.7	66	0.00
57	I	Chlorobenzene-d5	1.0000	1.0000	0.0	68	0.00
58	S	Toluene-d8	1.3587	1.4275	-5.1	70	0.00
59	C	Toluene	1.6429	1.5722	4.3	65	0.00
60	T	Ethyl Methacrylate	0.2500	0.2906	-16.3	64	0.00
61		Paraldehyde	0.0044	0.0039	11.8	56	0.00
62	T	trans-1,3-Dichloropropene	0.4381	0.4992	-13.9	64	0.00
63	T	1,1,2-Trichloroethane	0.2639	0.2513	4.8	64	0.00
64	T	2-Hexanone	0.1145	0.1255	-9.6	65	0.00
65	T	1,3-Dichloropropane	0.4500	0.4490	0.2	63	0.00
66	T	Tetrachloroethene	0.3837	0.3780	1.5	66	0.00
67	T	Dibromochloromethane	0.3236	0.3344	-3.3	64	0.00
68	T	1,2-Dibromoethane	0.2260	0.2476	-9.6	64	0.00
69	T	1-Chlorohexane	0.4350	0.4523	-4.0	68	0.00
70	P	Chlorobenzene	1.0439	0.9936	4.8	65	0.00
71	T	1,1,1,2-Tetrachloroethane	0.3759	0.3752	0.2	65	0.00
72	C	Ethylbenzene	0.5384	0.5314	1.3	65	0.00
73	T	m-,p-Xylene	0.6582	0.6529	0.8	65	0.00
74	T	o-Xylene	0.6268	0.6120	2.4	64	0.00
75	T	Styrene	0.9916	1.0487	-5.7	64	0.00
76	P	Bromoform	0.1778	0.1884	-6.0	64	0.00
77	T	Isopropylbenzene	1.5599	1.5446	1.0	65	0.00
78	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	70	0.00
79	P	1,1,2,2-Tetrachloroethane	0.5287	0.5157	2.4	64	0.00
80	S	p-Bromofluorobenzene	0.9810	1.0289	-4.9	71	0.00
81	T	1,2,3-Trichloropropane	0.1363	0.1314	3.6	63	0.00
82	T	trans-1,4-Dichloro-2-Butene	0.1680	0.1668	0.7	69	0.01
83	T	n-Propylbenzene	3.6735	3.5645	3.0	67	0.00
84	T	Bromobenzene	0.7480	0.7827	-4.6	67	0.00
85	T	1,3,5-Trimethylbenzene	2.5061	2.4260	3.2	66	0.00
86	T	2-Chlorotoluene	2.4391	2.3149	5.1	67	0.00
87	T	4-Chlorotoluene	2.4520	2.2863	6.8	65	0.00
88	T	a-Methylstyrene	1.2852	1.3682	-6.5	69	0.00
89	T	tert-Butylbenzene	0.5061	0.4852	4.1	70	0.00
90	T	1,2,4-Trimethylbenzene	2.6496	2.5768	2.7	67	0.00
91	T	sec-Butylbenzene	2.8487	2.8106	1.3	69	0.00
92	T	p-Isopropyltoluene	2.2883	2.3300	-1.8	70	0.00
93	T	1,3-Dichlorobenzene	1.4439	1.4204	1.6	67	0.00
94	T	1,4-Dichlorobenzene	1.5143	1.4493	4.3	68	0.00
95	T	n-Butylbenzene	1.9934	2.0789	-4.3	71	0.00
96	T	1,2-Dichlorobenzene	1.3050	1.2474	4.4	66	0.00
97	T	1,2-Dibromo-3-Chloropropane	0.0741	0.0708	4.4	60	0.00
98	T	1,2,4-Trichlorobenzene	0.7103	0.7220	-1.6	70	0.00
99	T	Hexachlorobutadiene	0.2700	0.2810	-4.1	73	0.00
100	T	Naphthalene	1.3525	1.2436	8.1	60	0.00
101	T	1,2,3-Trichlorobenzene	0.6174	0.5848	5.3	69	0.00

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

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050412\6M107859.D Vial: 2
Acq On : 4 May 2012 11:43 Operator: adc
Sample : WG397028-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51371 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	67	0.00
2	T	Dichlorodifluoromethane	50.0000	48.7368	2.5	68	0.00
3	P	Chloromethane	50.0000	59.5481	-19.1	79	0.00
4	C	Vinyl Chloride	50.0000	48.8516	2.3	75	0.00
5	T	1,3-Butadiene	50.0000	64.0986	-28.2#	78	0.00
6	T	Bromomethane	50.0000	47.9763	4.0	70	0.00
7	T	Chloroethane	50.0000	48.3820	3.2	67	0.00
8	T	Trichlorofluoromethane	50.0000	45.5546	8.9	63	0.00
9	T	Diethyl ether	100.0000	113.2961	-13.3	77	0.00
10	T	Isoprene	50.0000	49.5206	1.0	66	0.00
11	T	Acrolein	100.0000	83.2411	16.8	65	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	45.7219	8.6	63	0.01
13	T	Acetone	50.0000	47.4058	5.2	64	0.00
14	C	1,1-Dichloroethene	50.0000	48.6668	2.7	64	0.00
15	T	Tert-Butyl Alcohol	200.0000	144.2646	27.9#	49	0.00
16	T	Dimethyl Sulfide	50.0000	51.0168	-2.0	69	0.00
17	T	Iodomethane	50.0000	55.9984	-12.0	67	0.00
18	T	Methyl acetate	50.0000	47.1131	5.8	62	0.00
19	T	Methylene Chloride	50.0000	48.6463	2.7	68	0.00
20	T	Carbon Disulfide	50.0000	50.7585	-1.5	69	0.00
21	T	Acrylonitrile	50.0000	53.3219	-6.6	67	0.00
22	T	Methyl Tert Butyl Ether	50.0000	45.5268	8.9	62	0.00
23	T	trans-1,2-Dichloroethene	50.0000	49.2906	1.4	65	0.00
24	T	n-Hexane	50.0000	53.3381	-6.7	72	0.00
25	T	Diisopropyl ether	100.0000	107.5737	-7.6	71	0.00
26	T	Vinyl Acetate	50.0000	88.2407	-76.5#	117	0.00
27	P	1,1-Dichloroethane	50.0000	48.7519	2.5	67	0.00
28	T	Ethyl-Tert-Butyl ether	100.0000	101.9395	-1.9	67	0.00
29	T	2-Butanone	50.0000	51.2234	-2.4	66	0.00
30	T	Propionitrile	100.0000	101.5137	-1.5	64	0.00
31	T	2,2-Dichloropropane	50.0000	50.3367	-0.7	69	0.00
32	T	cis-1,2-Dichloroethene	50.0000	50.3860	-0.8	67	0.00
33	C	Chloroform	50.0000	48.9205	2.2	67	0.00
34		1-Bromopropane	50.0000	46.5800	6.8	64	0.00
35	T	Bromochloromethane	50.0000	51.4872	-3.0	68	0.00
36	T	Tetrahydrofuran	100.0000	104.0131	-4.0	68	0.00
37	S	Dibromofluoromethane	25.0000	26.3100	-5.2	68	0.00
38	T	1,1,1-Trichloroethane	50.0000	48.5609	2.9	65	0.00
39	T	Cyclohexane	50.0000	50.3995	-0.8	67	0.00
40	T	1,1-Dichloropropene	50.0000	49.8714	0.3	65	0.00
41	T	Tert-Amyl-Methyl ether	100.0000	99.4205	0.6	66	0.00
42	T	Carbon Tetrachloride	50.0000	50.2911	-0.6	65	0.00
43	S	1,2-Dichloroethane-d4	25.0000	26.2147	-4.9	68	0.01
44		Heptane	-1.0000	0.0000	0.0	64	0.01
45	T	1,2-Dichloroethane	50.0000	49.8563	0.3	67	0.00
46	T	Benzene	50.0000	48.5771	2.8	67	0.00
47	T	Trichloroethene	50.0000	49.4846	1.0	65	0.00
48	T	Methylcyclohexane	50.0000	51.9372	-3.9	69	0.00
49	C	1,2-Dichloropropane	50.0000	50.2561	-0.5	67	0.00
50	T	1,4-Dioxane	200.0000	126.9537	36.5#	27	0.01
51	T	Bromodichloromethane	50.0000	50.3386	-0.7	66	0.00
52	T	Dibromomethane	50.0000	48.7924	2.4	64	0.00
53	T	2-Chloroethyl Vinyl Ether	50.0000	43.3606	13.3	59	0.00
54	T	4-Methyl-2-Pentanone	50.0000	51.4927	-3.0	63	0.00

(#) = Out of Range
6M107859.D 8260WTR.M Fri May 04 12:10:44 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050412\6M107859.D Vial: 2
Acq On : 4 May 2012 11:43 Operator: adc
Sample : WG397028-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51371 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

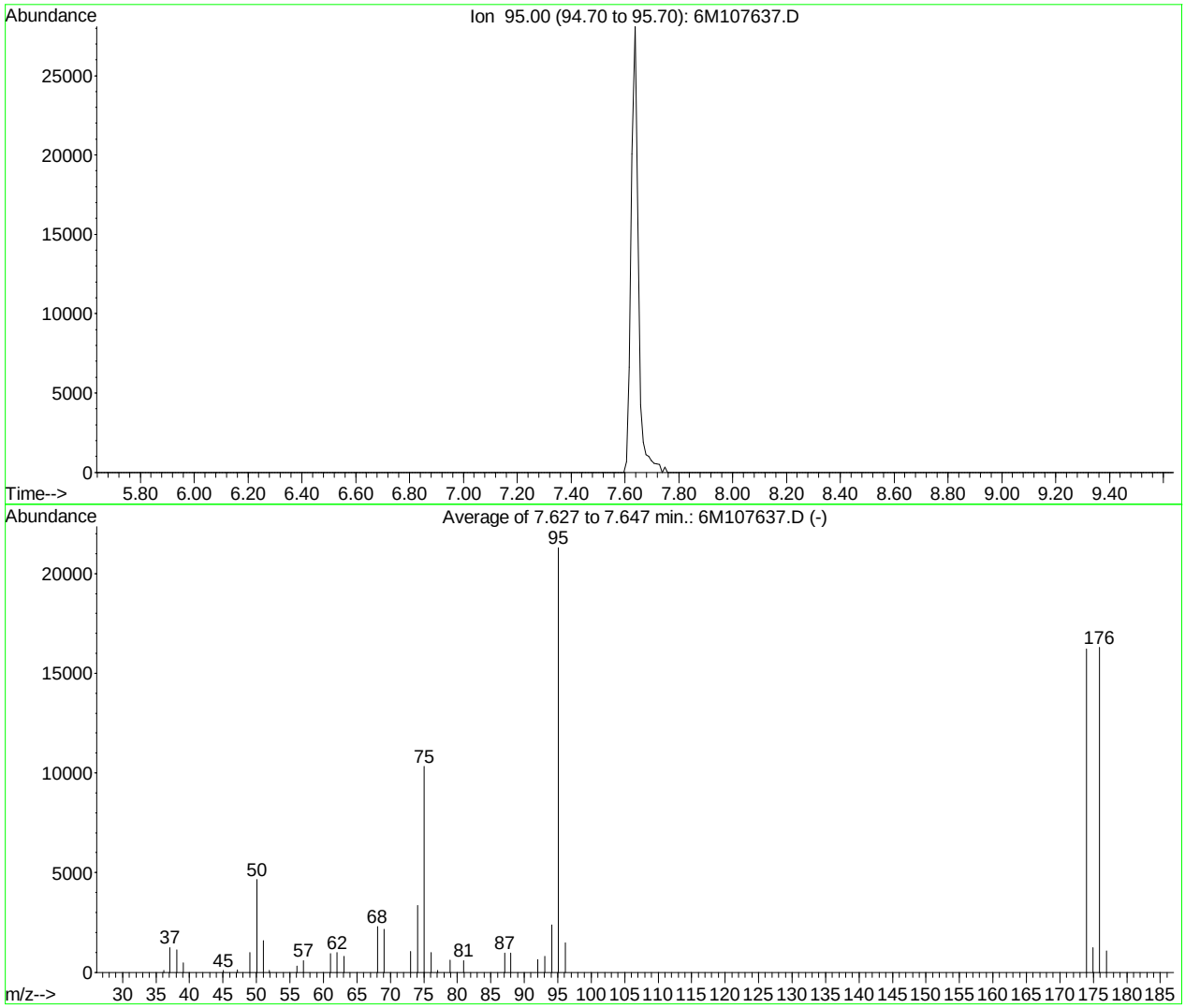
Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	50.0000	47.8310	4.3	65	0.00
56	T	Dimethyl Disulfide	50.0000	46.5057	7.0	66	0.00
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	68	0.00
58	S	Toluene-d8	25.0000	26.2652	-5.1	70	0.00
59	C	Toluene	50.0000	47.8505	4.3	65	0.00
60	T	Ethyl Methacrylate	50.0000	48.1126	3.8	64	0.00
61		Paraldehyde	100.0000	88.2917	11.7	56	0.00
62	T	trans-1,3-Dichloropropene	50.0000	46.5647	6.9	64	0.00
63	T	1,1,2-Trichloroethane	50.0000	47.6177	4.8	64	0.00
64	T	2-Hexanone	50.0000	49.7650	0.5	65	0.00
65	T	1,3-Dichloropropane	50.0000	49.8879	0.2	63	0.00
66	T	Tetrachloroethene	50.0000	49.2628	1.5	66	0.00
67	T	Dibromochloromethane	50.0000	47.1257	5.7	64	0.00
68	T	1,2-Dibromoethane	50.0000	47.6628	4.7	64	0.00
69	T	1-Chlorohexane	50.0000	51.9834	-4.0	68	0.00
70	P	Chlorobenzene	50.0000	47.5922	4.8	65	0.00
71	T	1,1,1,2-Tetrachloroethane	50.0000	49.9052	0.2	65	0.00
72	C	Ethylbenzene	50.0000	49.3490	1.3	65	0.00
73	T	m-,p-Xylene	100.0000	99.1910	0.8	65	0.00
74	T	o-Xylene	50.0000	48.8219	2.4	64	0.00
75	T	Styrene	50.0000	46.4093	7.2	64	0.00
76	P	Bromoform	50.0000	53.0033	-6.0	64	0.00
77	T	Isopropylbenzene	50.0000	49.5085	1.0	65	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	70	0.00
79	P	1,1,2,2-Tetrachloroethane	50.0000	48.7749	2.5	64	0.00
80	S	p-Bromofluorobenzene	25.0000	26.2208	-4.9	71	0.00
81	T	1,2,3-Trichloropropane	50.0000	48.1942	3.6	63	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	49.7585	0.5	69	0.01
83	T	n-Propylbenzene	50.0000	48.5172	3.0	67	0.00
84	T	Bromobenzene	50.0000	47.5602	4.9	67	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	48.4022	3.2	66	0.00
86	T	2-Chlorotoluene	50.0000	47.4542	5.1	67	0.00
87	T	4-Chlorotoluene	50.0000	46.6205	6.8	65	0.00
88	T	a-Methylstyrene	50.0000	53.2264	-6.5	69	0.00
89	T	tert-Butylbenzene	50.0000	47.9342	4.1	70	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	48.6253	2.7	67	0.00
91	T	sec-Butylbenzene	50.0000	49.3300	1.3	69	0.00
92	T	p-Isopropyltoluene	50.0000	50.9117	-1.8	70	0.00
93	T	1,3-Dichlorobenzene	50.0000	49.1884	1.6	67	0.00
94	T	1,4-Dichlorobenzene	50.0000	47.8540	4.3	68	0.00
95	T	n-Butylbenzene	50.0000	52.1450	-4.3	71	0.00
96	T	1,2-Dichlorobenzene	50.0000	47.7958	4.4	66	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	42.4023	15.2	60	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	50.8241	-1.6	70	0.00
99	T	Hexachlorobutadiene	50.0000	49.3004	1.4	73	0.00
100	T	Naphthalene	50.0000	45.9739	8.1	60	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	47.3658	5.3	69	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6M107859.D 8260WTR.M Fri May 04 12:10:45 2012 Page 2

2.1.1.5 Raw QC Data

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

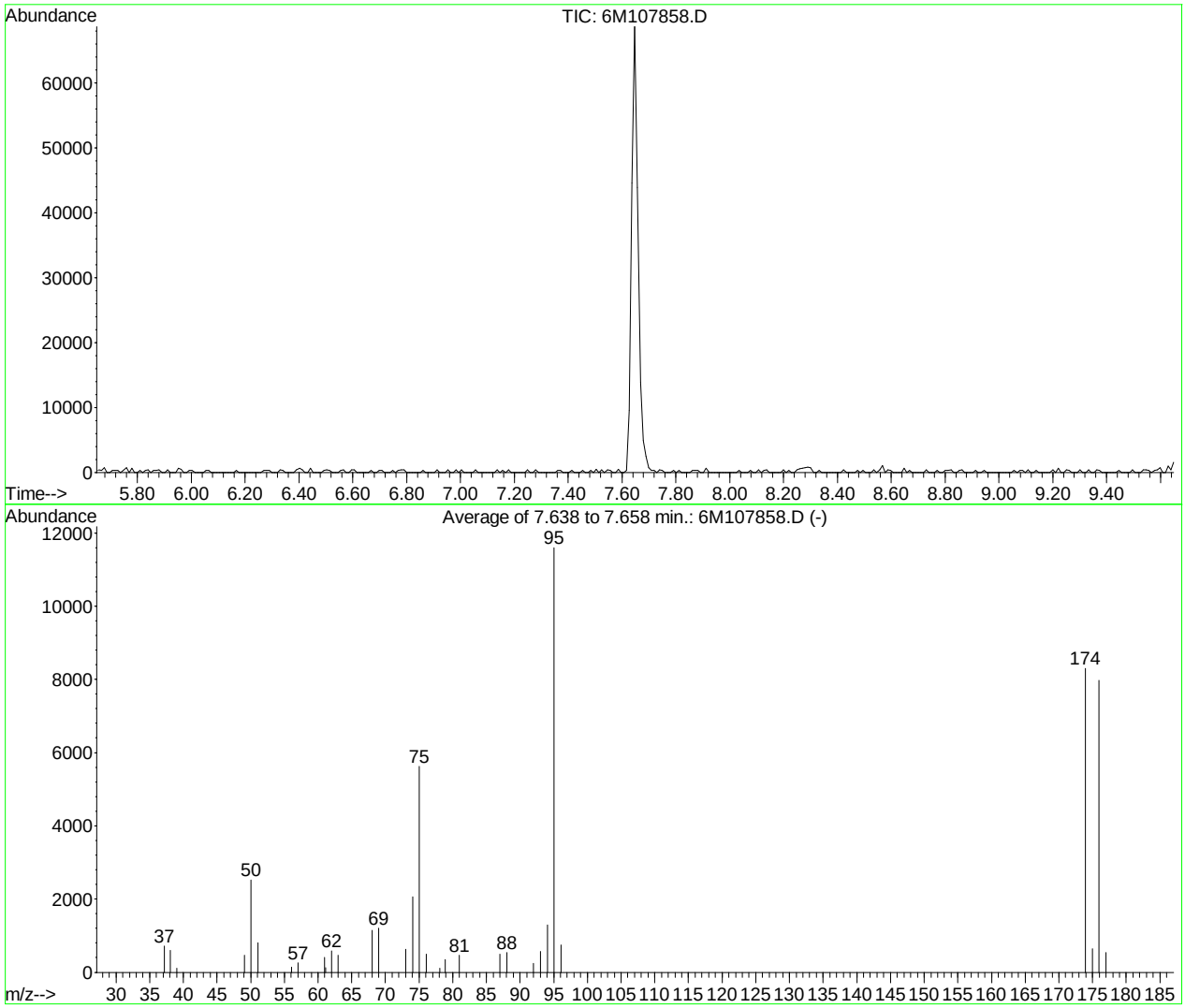


AutoFind: Scans 249, 250, 251; Background Corrected with Scan 244

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

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

Data File : C:\MSDCHEM\1\DATA\050412\6M107858.D Vial: 3
Acq On : 4 May 2012 11:14 Operator: adc
Sample : WG397028-01 50ng BFB STD 8260 Inst : HPMS6
Misc : 1,1 STD51241 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6



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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.7	2517	PASS
75	95	30	60	48.5	5622	PASS
95	95	100	100	100.0	11597	PASS
96	95	5	9	6.4	743	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.6	8299	PASS
175	174	5	9	7.8	644	PASS
176	174	95	101	96.0	7971	PASS
177	176	5	9	6.9	547	PASS

6M107858.D 8260WTR.M Fri May 04 12:11:19 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107861.D Vial: 4
Acq On : 4 May 2012 12:48 Operator: adc
Sample : WG397029-01 VBLK 0504 8260 Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 15:21:06 2012 Quant Results File: 8260WTR.RES

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

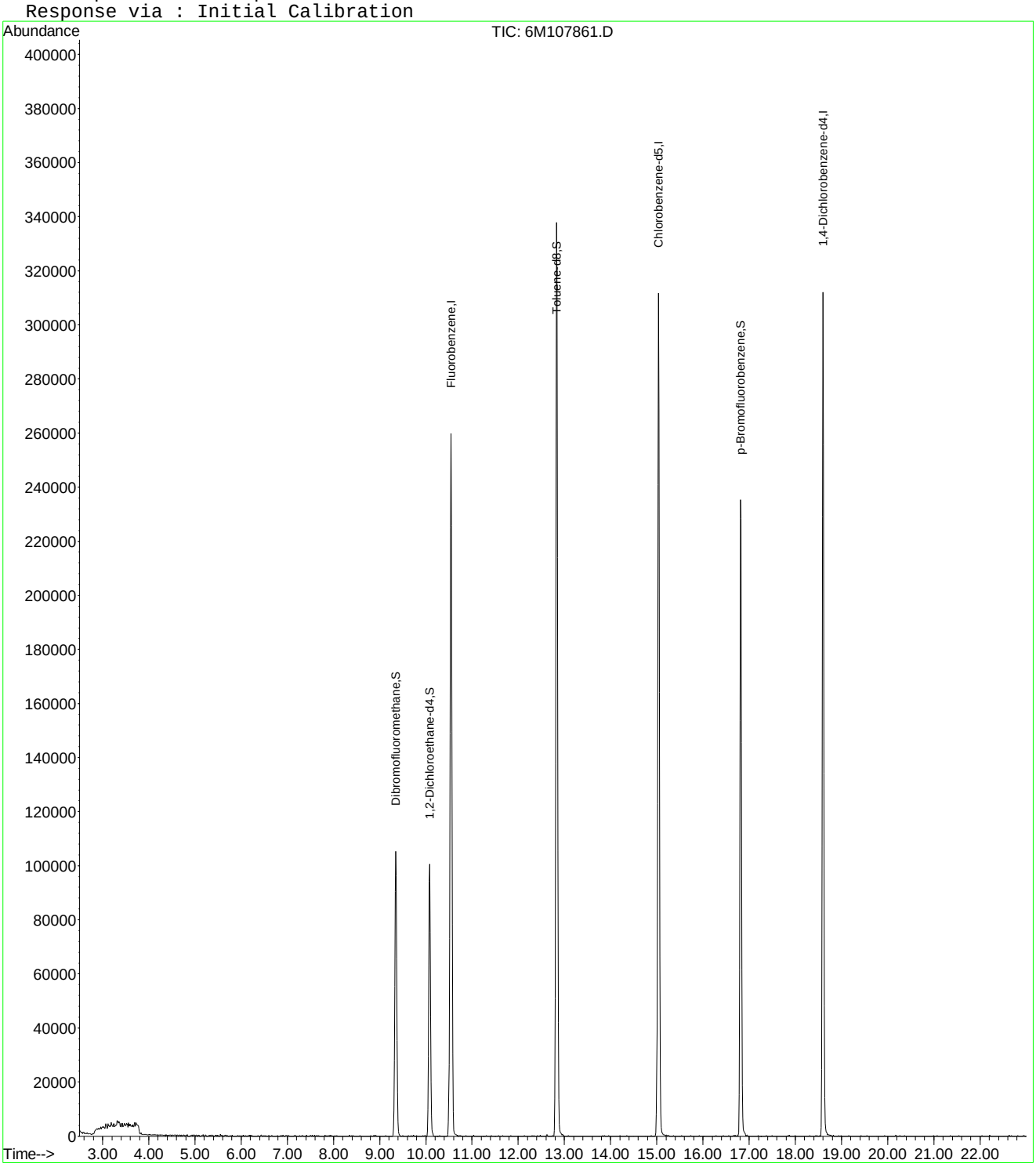
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	351654	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	245946	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	115196	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	101118	26.5568	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 106.24%			
43) 1,2-Dichloroethane-d4	10.08	65	100364	26.8580	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 107.44%			
58) Toluene-d8	12.83	98	337850	25.2751	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.12%			
80) p-Bromofluorobenzene	16.81	95	119833	26.5097	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 106.04%			
Target Compounds						Qvalue
3) Chloromethane	3.14	50	586	Below Cal		92

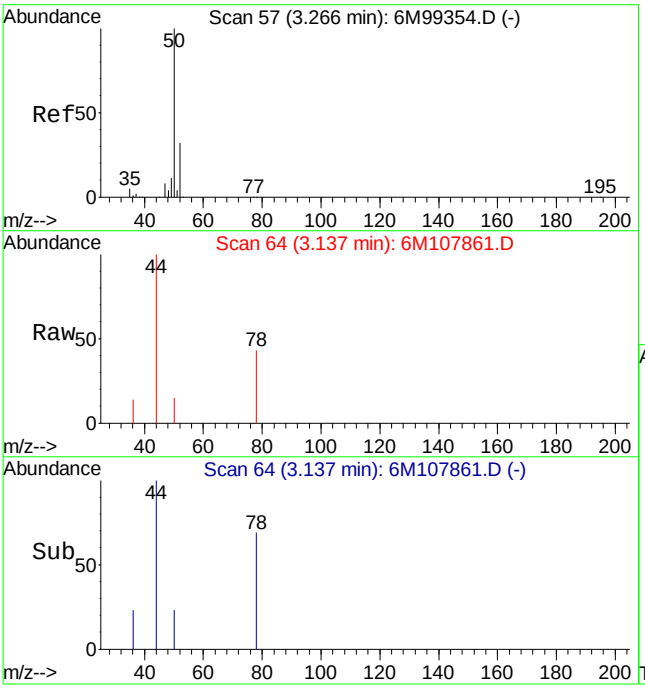
(#) = qualifier out of range (m) = manual integration
6M107861.D 8260WTR.M Wed May 09 15:21:06 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\6M107861.D Vial: 4
Acq On : 4 May 2012 12:48 Operator: adc
Sample : WG397029-01 VBLK 0504 8260 Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 15:21 2012 Quant Results File: 8260WTR.RES

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

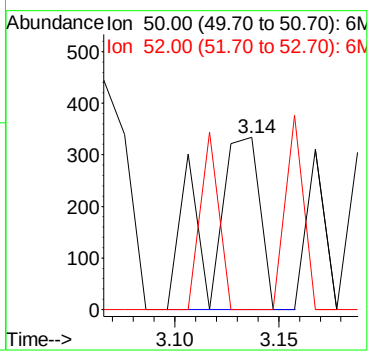




#3
Chloromethane
Concen: Below Cal
RT: 3.14 min Scan# 64
Delta R.T. 0.03 min
Lab File: 6M107861.D
Acq: 4 May 2012 12:48

Tgt Ion: 50 Resp: 586

Ion	Ratio	Lower	Upper
50	100		
52	36.0	18.8	44.0



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\6M107861.D Vial: 4
Acq On : 4 May 2012 12:48 Operator: adc
Sample : WG397029-01 VBLK 0504 8260 Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

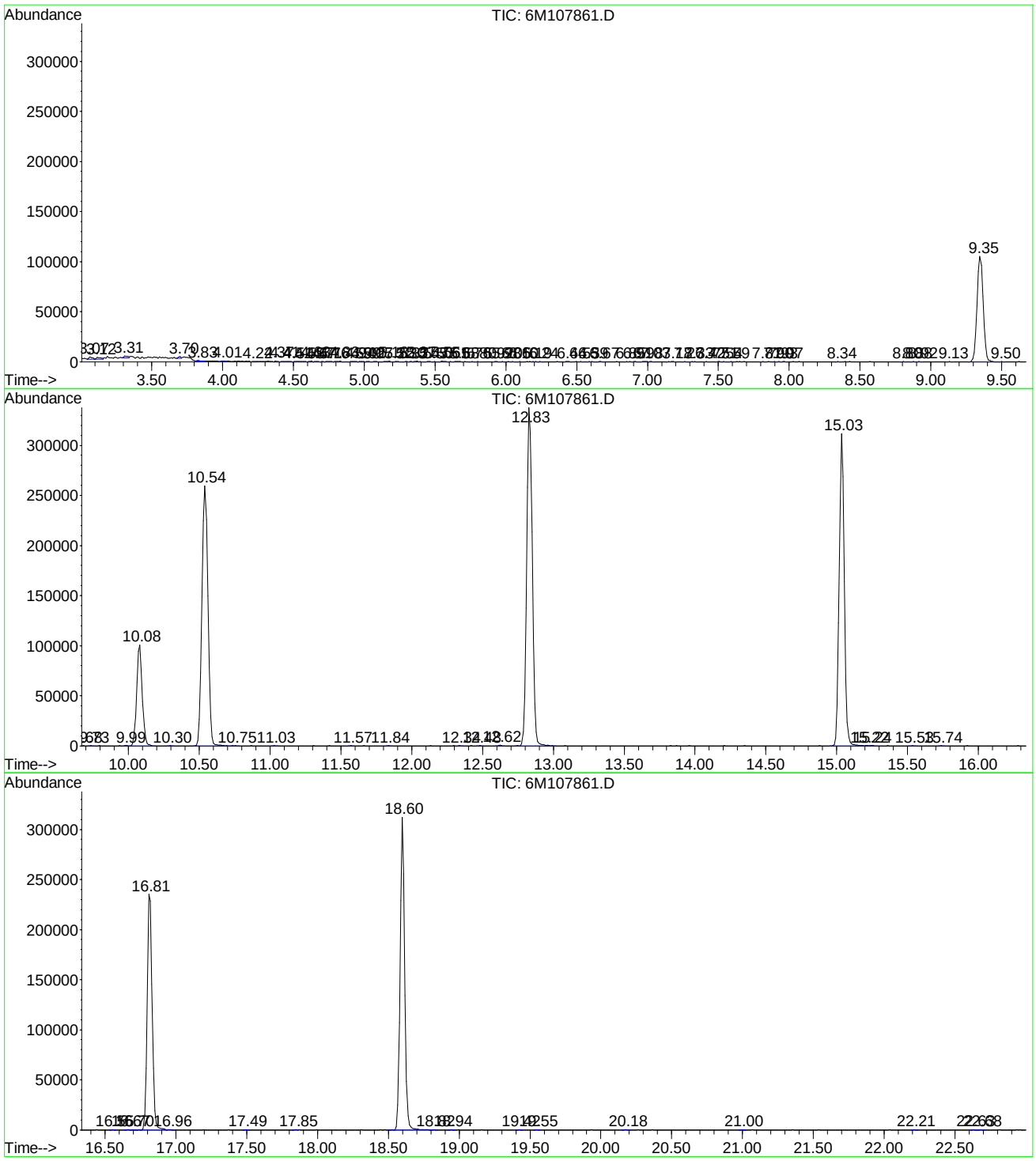
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.066	55	57	60	rVB2	1900	2932	0.32%	0.067%
2	3.117	60	62	66	rBV2	1854	3780	0.41%	0.086%
3	3.311	79	81	84	rBV3	1826	3468	0.38%	0.079%
4	3.699	117	119	120	rBV2	1720	1937	0.21%	0.044%
5	3.831	130	132	136	rVB	698	964	0.10%	0.022%
6	4.005	147	149	151	rVV	148	218	0.02%	0.005%
7	4.219	168	170	172	rBV	451	973	0.11%	0.022%
8	4.373	184	185	188	rBB	671	840	0.09%	0.019%
9	4.414	188	189	197	rBB	477	2062	0.22%	0.047%
10	4.505	197	198	200	rBV	454	706	0.08%	0.016%
11	4.587	201	206	207	rVB	412	1212	0.13%	0.028%
12	4.628	207	210	211	rBB	489	767	0.08%	0.018%
13	4.669	211	214	216	rBB	412	917	0.10%	0.021%
14	4.710	216	218	219	rBB	458	529	0.06%	0.012%
15	4.761	219	223	225	rBB	363	1062	0.12%	0.024%
16	4.832	225	230	232	rBB	628	1280	0.14%	0.029%
17	4.944	235	241	242	rBB	379	1069	0.12%	0.024%
18	4.985	242	245	247	rBB	413	961	0.10%	0.022%
19	5.016	247	248	251	rBB	376	637	0.07%	0.015%
20	5.067	252	253	257	rBB	456	710	0.08%	0.016%
21	5.179	258	264	266	rBB	635	1184	0.13%	0.027%
22	5.220	267	268	272	rBB	453	741	0.08%	0.017%
23	5.302	273	276	277	rBB	343	398	0.04%	0.009%
24	5.322	277	278	280	rBB	427	469	0.05%	0.011%
25	5.373	280	283	287	rBB	491	917	0.10%	0.021%
26	5.465	288	292	294	rBB	413	676	0.07%	0.015%
27	5.496	294	295	297	rBB	390	239	0.03%	0.005%
28	5.547	298	300	305	rBB	696	1053	0.11%	0.024%
29	5.608	305	306	307	rBB	346	212	0.02%	0.005%
30	5.680	308	313	315	rBB	368	1032	0.11%	0.024%
31	5.761	319	321	323	rBB	336	206	0.02%	0.005%
32	5.802	324	325	327	rBB	386	236	0.03%	0.005%
33	5.925	335	337	340	rBB	337	391	0.04%	0.009%
34	5.976	341	342	344	rBB	326	200	0.02%	0.005%
35	6.047	348	349	351	rBB	371	227	0.02%	0.005%
36	6.098	352	354	356	rBB	339	208	0.02%	0.005%
37	6.190	362	363	367	rBB	361	438	0.05%	0.010%
38	6.241	367	368	370	rBB	326	200	0.02%	0.005%
39	6.435	384	387	390	rBB	443	702	0.08%	0.016%
40	6.527	395	396	398	rBB	330	202	0.02%	0.005%
41	6.589	400	402	406	rBB	338	407	0.04%	0.009%
42	6.670	407	410	412	rBB	341	405	0.04%	0.009%

43	6.854	426	428	431	rBB	308	375	0.04%	0.009%
44	6.905	432	433	436	rBB	369	431	0.05%	0.010%
45	6.977	437	440	443	rBB	343	801	0.09%	0.018%
46	7.028	443	445	447	rBB	333	402	0.04%	0.009%
47	7.181	455	460	462	rBB	335	599	0.07%	0.014%
48	7.263	466	468	470	rBB	343	210	0.02%	0.005%
49	7.334	471	475	477	rBB	337	410	0.04%	0.009%
50	7.416	481	483	485	rBB	374	229	0.02%	0.005%
51	7.508	489	492	494	rBB	328	385	0.04%	0.009%
52	7.538	494	495	497	rBB	357	219	0.02%	0.005%
53	7.589	498	500	502	rBB	359	220	0.02%	0.005%
54	7.814	520	522	524	rBB	358	219	0.02%	0.005%
55	7.896	529	530	531	rBB	329	202	0.02%	0.005%
56	7.926	532	533	534	rBB	371	227	0.02%	0.005%
57	7.967	535	537	539	rBB	329	388	0.04%	0.009%
58	8.345	572	574	576	rBB	387	237	0.03%	0.005%
59	8.804	617	619	621	rBB	347	213	0.02%	0.005%
60	8.876	624	626	628	rBB	378	232	0.03%	0.005%
61	8.917	629	630	632	rBB	361	221	0.02%	0.005%
62	9.131	649	651	653	rBB	341	209	0.02%	0.005%
63	9.346	664	672	683	rBB	105300	314964	34.21%	7.194%
64	9.499	685	687	689	rBB	343	210	0.02%	0.005%
65	9.683	703	705	707	rBB	330	202	0.02%	0.005%
66	9.734	708	710	712	rBB	376	230	0.02%	0.005%
67	9.989	733	735	736	rBB	307	374	0.04%	0.009%
68	10.081	737	744	754	rBB	100558	276610	30.04%	6.318%
69	10.295	763	765	767	rBB	327	200	0.02%	0.005%
70	10.540	781	789	806	rBB	259782	759889	82.54%	17.357%
71	10.755	807	810	812	rBB	332	393	0.04%	0.009%
72	11.031	835	837	839	rBB	370	227	0.02%	0.005%
73	11.572	888	890	892	rBB	336	206	0.02%	0.005%
74	11.837	914	916	918	rBB	348	213	0.02%	0.005%
75	12.338	964	965	967	rBB	330	202	0.02%	0.005%
76	12.481	977	979	981	rBB	380	233	0.03%	0.005%
77	12.624	990	993	996	rBB	542	763	0.08%	0.017%
78	12.828	1003	1013	1031	rBB	337908	920670	100.00%	21.029%
79	15.033	1221	1229	1245	rBB	311721	776397	84.33%	17.734%
80	15.217	1245	1247	1248	rBB	415	482	0.05%	0.011%
81	15.238	1248	1249	1253	rBB	345	623	0.07%	0.014%
82	15.534	1276	1278	1280	rBB	342	210	0.02%	0.005%
83	15.738	1296	1298	1300	rBB	327	200	0.02%	0.005%
84	16.555	1376	1378	1380	rBB	351	215	0.02%	0.005%
85	16.667	1386	1389	1390	rBB	314	379	0.04%	0.009%
86	16.698	1391	1392	1394	rBB	363	222	0.02%	0.005%
87	16.810	1395	1403	1415	rBB	235280	574969	62.45%	13.133%
88	16.963	1415	1418	1420	rBB	382	661	0.07%	0.015%
89	17.494	1468	1470	1472	rBB	341	209	0.02%	0.005%
90	17.852	1502	1505	1506	rBB	307	375	0.04%	0.009%
91	18.597	1569	1578	1598	rBB	312105	701168	76.16%	16.016%
92	18.822	1599	1600	1602	rBB	356	218	0.02%	0.005%
93	18.944	1610	1612	1614	rBB	342	209	0.02%	0.005%
94	19.424	1657	1659	1661	rBB	329	202	0.02%	0.005%
95	19.547	1669	1671	1673	rBB	351	215	0.02%	0.005%
96	20.180	1730	1733	1735	rBB	378	417	0.05%	0.010%
97	20.997	1811	1813	1815	rBB	333	204	0.02%	0.005%
98	22.212	1930	1932	1934	rBB	372	228	0.02%	0.005%
99	22.631	1971	1973	1975	rBB	366	224	0.02%	0.005%
100	22.682	1976	1978	1980	rBB	327	200	0.02%	0.005%

Sum of corrected areas: 4378009

File : C:\MSDCHEM\1\DATA\050412\6M107861.D
Operator : adc
Acquired : 4 May 2012 12:48 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: WG397029-01 VBLK 0504 8260
Misc Info : 1,1
Vial Number: 4
Quant File :8260WTR.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107862.D Vial: 5
Acq On : 4 May 2012 13:21 Operator: adc
Sample : WG397029-02 20ug/L LCS STD Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 04 13:44:30 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	366865	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	250468	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	127996	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	104606	26.3337	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 105.32%			
43) 1,2-Dichloroethane-d4	10.07	65	105549	27.0744	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 108.28%			
58) Toluene-d8	12.83	98	352151	25.8694	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.48%			
80) p-Bromofluorobenzene	16.81	95	129726	25.8284	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 103.32%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.72	85	117080	24.3301	ug/L	98
3) Chloromethane	3.11	50	172989	26.0116	ug/L	99
4) Vinyl Chloride	3.30	62	132677	21.7993	ug/L	98
5) 1,3-Butadiene	3.34	54	90864	26.9710	ug/L	91
6) Bromomethane	4.10	94	62446	18.1068	ug/L	99
7) Chloroethane	4.25	64	65296	18.9626	ug/L	98
8) Trichlorofluoromethane	4.73	101	136511	17.4446	ug/L	100
9) Diethyl ether	5.26	59	267974	100.7835	ug/L	99
10) Isoprene	5.31	67	112852	16.9597	ug/L	98
11) Acrolein	5.50	56	27397	142.7878	ug/L	95
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	73177	17.4833	ug/L	99
13) Acetone	5.62	43	13069	18.8009	ug/L	92
14) 1,1-Dichloroethene	5.84	61	124826	18.5486	ug/L	99
15) Tert-Butyl Alcohol	5.96	59	25029	137.9198	ug/L	98
16) Dimethyl Sulfide	6.11	62	102587	19.2017	ug/L	95
17) Iodomethane	6.37	142	85089	22.1140	ug/L	99
18) Methyl acetate	6.41	43	47854	17.4437	ug/L	97
19) Methylene Chloride	6.67	84	82385	19.7643	ug/L	96
20) Carbon Disulfide	6.68	76	238972	19.5996	ug/L	99
21) Acrylonitrile	6.88	53	18726	19.9939	ug/L	93
22) Methyl Tert Butyl Ether	6.92	73	163634	18.6334	ug/L	99
23) trans-1,2-Dichloroethene	7.16	96	76414	18.7716	ug/L	100
24) n-Hexane	7.27	57	91855	19.6699	ug/L	96
25) Diisopropyl ether	7.65	45	1595740	107.6096	ug/L	98
26) Vinyl Acetate	7.84	43	108871	50.7142	ug/L	98
27) 1,1-Dichloroethane	7.85	63	159067	19.1258	ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	1198272	99.4320	ug/L	100
29) 2-Butanone	8.49	43	20571	21.1633	ug/L	95
30) Propionitrile	8.60	54	28633	102.9920	ug/L	98
31) 2,2-Dichloropropane	8.72	77	122777	19.5270	ug/L	95
32) cis-1,2-Dichloroethene	8.79	96	85151	20.0192	ug/L	98
33) Chloroform	9.02	83	150969	20.0841	ug/L	98
34) 1-Bromopropane	9.18	122	15759	20.6735	ug/L	99
35) Bromochloromethane	9.28	130	46827	20.6980	ug/L	98
36) Tetrahydrofuran	9.31	42	67003	104.8219	ug/L	96
38) 1,1,1-Trichloroethane	9.61	97	128776	19.6117	ug/L	99
39) Cyclohexane	9.64	56	128577	19.5464	ug/L	97
40) 1,1-Dichloropropene	9.85	75	109077	20.1365	ug/L	98
41) Tert-Amyl-Methyl ether	9.99	73	931672	103.8357	ug/L	99
42) Carbon Tetrachloride	10.00	117	118007	20.3040	ug/L	99

(#) = qualifier out of range (m) = manual integration
6M107862.D 8260WTR.M Fri May 04 13:44:31 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107862.D Vial: 5
Acq On : 4 May 2012 13:21 Operator: adc
Sample : WG397029-02 20ug/L LCS STD Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 04 13:44:30 2012 Quant Results File: 8260WTR.RES

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

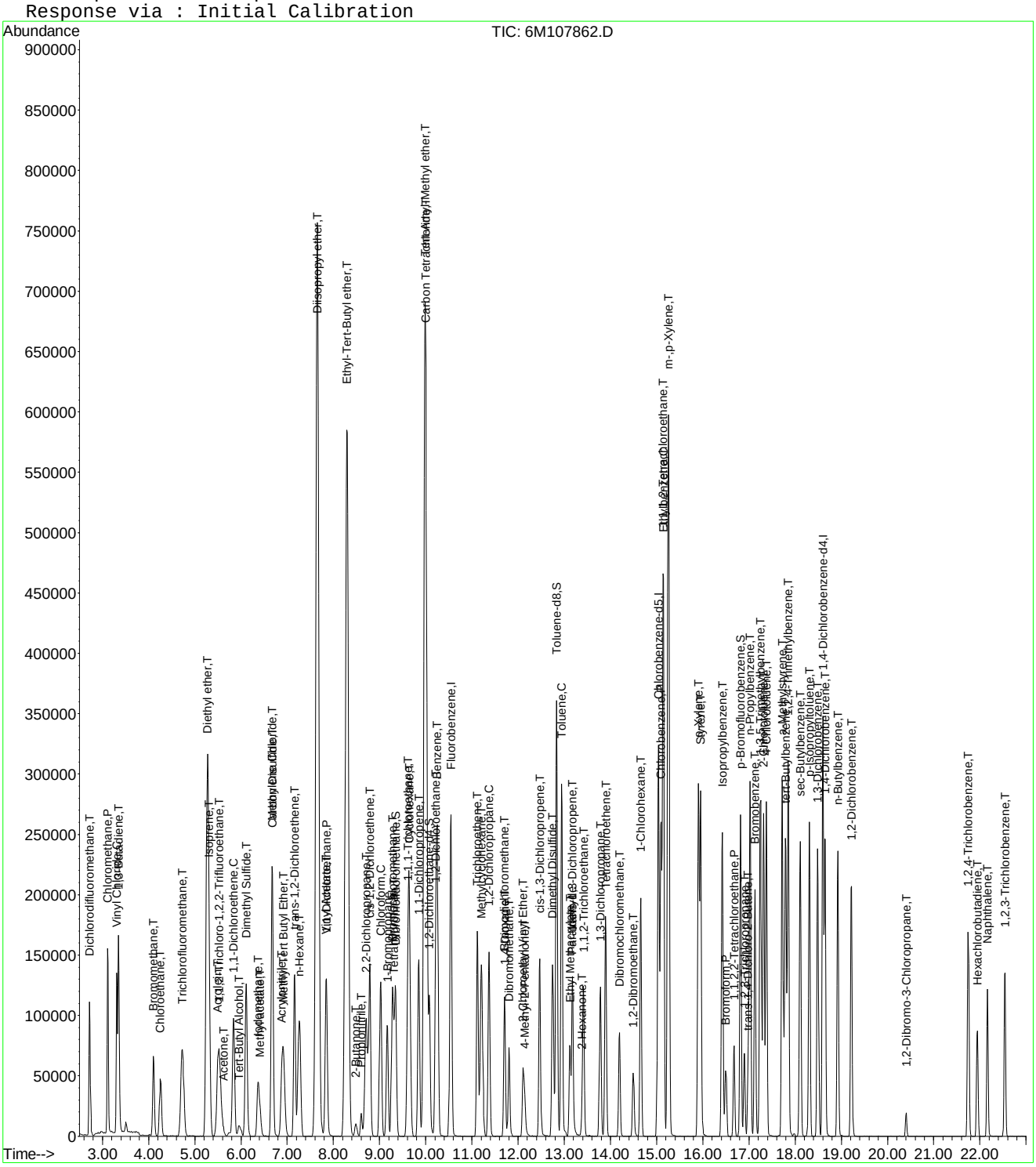
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.22	62	107619	20.8426	ug/L		99
46)	Benzene	10.25	78	318729	19.6658	ug/L		100
47)	Trichloroethene	11.12	130	79729	19.6130	ug/L		97
48)	Methylcyclohexane	11.21	83	100105	21.3530	ug/L		99
49)	1,2-Dichloropropane	11.37	63	87393	20.8857	ug/L		99
50)	1,4-Dioxane	11.72	88	380	87.3824	ug/L	#	22
51)	Bromodichloromethane	11.71	83	106269	21.1424	ug/L		100
52)	Dibromomethane	11.80	93	41288	20.6313	ug/L		99
53)	2-Chloroethyl Vinyl Ether	12.11	63	32730	18.4187	ug/L		98
54)	4-Methyl-2-Pentanone	12.15	58	14317	19.6225	ug/L		97
55)	cis-1,3-Dichloropropene	12.47	75	113216	18.9144	ug/L		99
56)	Dimethyl Disulfide	12.75	79	57835	16.9158	ug/L		97
59)	Toluene	12.94	91	314732	19.1216	ug/L		100
60)	Ethyl Methacrylate	13.13	69	59934	20.3077	ug/L		98
61)	Paraldehyde	13.17	89	2810	63.5829	ug/L	#	54
62)	trans-1,3-Dichloropropene	13.18	75	88568	16.7208	ug/L		100
63)	1,1,2-Trichloroethane	13.42	97	53002	20.0488	ug/L		99
64)	2-Hexanone	13.38	43	22919	20.1016	ug/L		95
65)	1,3-Dichloropropane	13.78	76	95551	21.1939	ug/L		96
66)	Tetrachloroethene	13.90	166	76903	20.0058	ug/L		99
67)	Dibromochloromethane	14.20	129	68754	19.4411	ug/L		98
68)	1,2-Dibromoethane	14.50	107	49962	19.3464	ug/L		99
69)	1-Chlorohexane	14.66	91	89147	20.4532	ug/L		92
70)	Chlorobenzene	15.09	112	198493	18.9794	ug/L		100
71)	1,1,1,2-Tetrachloroethane	15.14	131	74304	19.7305	ug/L		99
72)	Ethylbenzene	15.15	106	104892	19.4442	ug/L		98
73)	m-,p-Xylene	15.25	106	252081	38.2256	ug/L		99
74)	o-Xylene	15.90	106	120080	19.1228	ug/L		100
75)	Styrene	15.96	104	202616	18.0458	ug/L		99
76)	Bromoform	16.50	173	36110	20.2764	ug/L		100
77)	Isopropylbenzene	16.43	105	268785	17.1983	ug/L		100
79)	1,1,2,2-Tetrachloroethane	16.68	83	54286	20.0564	ug/L		100
81)	1,2,3-Trichloropropane	16.91	110	15403	22.0714	ug/L		97
82)	trans-1,4-Dichloro-2-Buten	16.98	53	16093	18.7430	ug/L		96
83)	n-Propylbenzene	17.02	91	355330	18.8929	ug/L		100
84)	Bromobenzene	17.13	156	79294	18.8892	ug/L		100
85)	1,3,5-Trimethylbenzene	17.25	105	241997	18.8604	ug/L		98
86)	2-Chlorotoluene	17.31	91	229079	18.3442	ug/L		99
87)	4-Chlorotoluene	17.38	91	221767	17.6649	ug/L		99
88)	a-Methylstyrene	17.72	118	131660	20.0088	ug/L		99
89)	tert-Butylbenzene	17.79	134	46398	17.9049	ug/L		100
90)	1,2,4-Trimethylbenzene	17.84	105	262384	19.3420	ug/L		100
91)	sec-Butylbenzene	18.11	105	273914	18.7804	ug/L		98
92)	p-Isopropyltoluene	18.30	119	229751	19.6107	ug/L		98
93)	1,3-Dichlorobenzene	18.49	146	139751	18.9047	ug/L		98
94)	1,4-Dichlorobenzene	18.65	146	143528	18.5129	ug/L		97
95)	n-Butylbenzene	18.93	91	205569	20.1426	ug/L		99
96)	1,2-Dichlorobenzene	19.22	146	126239	18.8945	ug/L		99
97)	1,2-Dibromo-3-Chloropropan	20.41	75	7244	17.5637	ug/L		100
98)	1,2,4-Trichlorobenzene	21.75	180	72260	19.8701	ug/L		99
99)	Hexachlorobutadiene	21.95	225	26505	18.2296	ug/L		98
100)	Naphthalene	22.16	128	130020	18.7766	ug/L		100
101)	1,2,3-Trichlorobenzene	22.54	180	61789	19.5486	ug/L		96

(#) = qualifier out of range (m) = manual integration
6M107862.D 8260WTR.M Fri May 04 13:44:31 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107862.D Vial: 5
Acq On : 4 May 2012 13:21 Operator: adc
Sample : WG397029-02 20ug/L LCS STD Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 13:44 2012 Quant Results File: 8260WTR.RES

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



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107863.D Vial: 6
Acq On : 4 May 2012 13:54 Operator: adc
Sample : WG397029-03 20ug/L LCSDUP STD Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 04 14:17:04 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	373623	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	256908	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	128621	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	106851	26.4124	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 105.64%			
43) 1,2-Dichloroethane-d4	10.08	65	107915	27.1806	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 108.72%			
58) Toluene-d8	12.83	98	362882	25.9895	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.96%			
80) p-Bromofluorobenzene	16.81	95	130869	25.9293	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 103.72%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.73	85	123644	25.2294	ug/L	99
3) Chloromethane	3.12	50	179044	26.4454	ug/L	99
4) Vinyl Chloride	3.31	62	134584	21.7126	ug/L	100
5) 1,3-Butadiene	3.34	54	77080	21.3096	ug/L	97
6) Bromomethane	4.11	94	66526	18.9409	ug/L	98
7) Chloroethane	4.25	64	69545	19.8312	ug/L	100
8) Trichlorofluoromethane	4.73	101	147119	18.4602	ug/L	100
9) Diethyl ether	5.27	59	284949	105.2292	ug/L	99
10) Isoprene	5.29	67	120413	17.7687	ug/L	98
11) Acrolein	5.51	56	29206	149.0756	ug/L	97
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	77199	18.1106	ug/L	99
13) Acetone	5.61	43	13955	19.7123	ug/L	95
14) 1,1-Dichloroethene	5.83	61	134727	19.6577	ug/L	98
15) Tert-Butyl Alcohol	5.97	59	29298	158.5235	ug/L	97
16) Dimethyl Sulfide	6.11	62	108916	20.0176	ug/L	98
17) Iodomethane	6.36	142	91092	23.2459	ug/L	95
18) Methyl acetate	6.42	43	50228	17.9779	ug/L	95
19) Methylene Chloride	6.67	84	85047	20.0339	ug/L	97
20) Carbon Disulfide	6.68	76	253895	20.4469	ug/L	100
21) Acrylonitrile	6.87	53	19375	20.3126	ug/L	96
22) Methyl Tert Butyl Ether	6.92	73	170846	19.1028	ug/L	100
23) trans-1,2-Dichloroethene	7.16	96	80440	19.4032	ug/L	98
24) n-Hexane	7.26	57	98595	20.7313	ug/L	97
25) Diisopropyl ether	7.65	45	1673754	110.8290	ug/L	99
26) Vinyl Acetate	7.83	43	113239	51.7948	ug/L	97
27) 1,1-Dichloroethane	7.85	63	170060	20.0777	ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	1242677	101.2515	ug/L	99
29) 2-Butanone	8.49	43	21953	22.1766	ug/L	93
30) Propionitrile	8.60	54	30134	106.4305	ug/L	98
31) 2,2-Dichloropropane	8.71	77	126910	19.8192	ug/L	94
32) cis-1,2-Dichloroethene	8.78	96	88758	20.4897	ug/L	97
33) Chloroform	9.02	83	156811	20.4840	ug/L	99
34) 1-Bromopropane	9.17	122	16387	21.0998	ug/L	100
35) Bromochloromethane	9.27	130	50738	22.0178	ug/L	97
36) Tetrahydrofuran	9.31	42	69570	106.8692	ug/L	96
38) 1,1,1-Trichloroethane	9.62	97	133574	19.9745	ug/L	98
39) Cyclohexane	9.64	56	137453	20.5178	ug/L	97
40) 1,1-Dichloropropene	9.85	75	115585	20.9519	ug/L	97
41) Tert-Amyl-Methyl ether	9.99	73	970734	106.2323	ug/L	99
42) Carbon Tetrachloride	10.00	117	123555	20.8740	ug/L	100

(#) = qualifier out of range (m) = manual integration
6M107863.D 8260WTR.M Fri May 04 14:17:04 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107863.D Vial: 6
Acq On : 4 May 2012 13:54 Operator: adc
Sample : WG397029-03 20ug/L LCSDUP STD Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 04 14:17:04 2012 Quant Results File: 8260WTR.RES

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

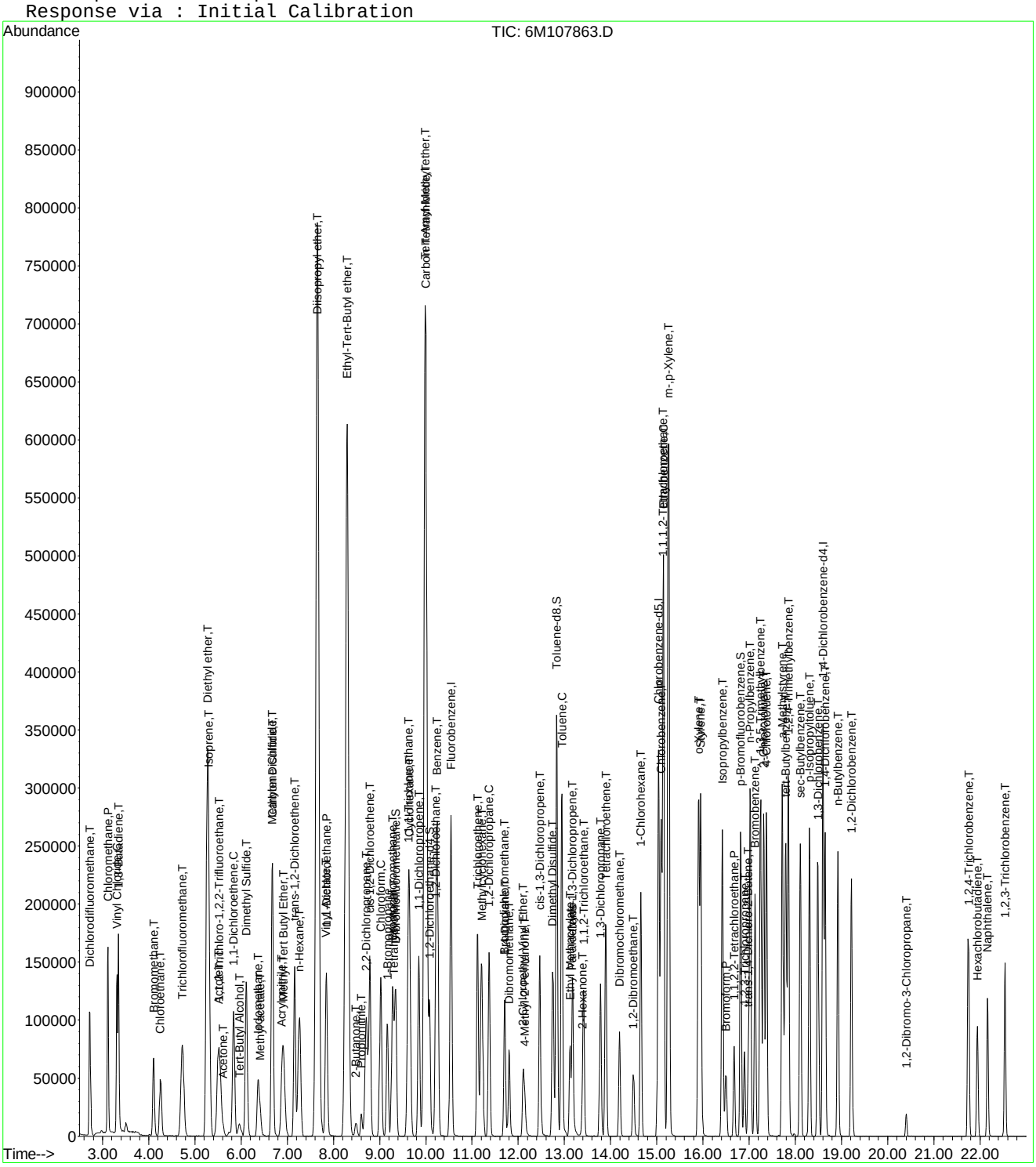
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.21	62	109162	20.7590	ug/L		96
46)	Benzene	10.24	78	330438	20.0195	ug/L		100
47)	Trichloroethene	11.12	130	84663	20.4500	ug/L		100
48)	Methylcyclohexane	11.21	83	103856	21.7524	ug/L		98
49)	1,2-Dichloropropane	11.37	63	90805	21.3086	ug/L		99
50)	1,4-Dioxane	11.72	88	2118	172.0046	ug/L		94
51)	Bromodichloromethane	11.70	83	112337	21.9454	ug/L		98
52)	Dibromomethane	11.80	93	42275	20.7413	ug/L		100
53)	2-Chloroethyl Vinyl Ether	12.10	63	33589	18.5513	ug/L		97
54)	4-Methyl-2-Pentanone	12.14	58	16014	21.5513	ug/L		93
55)	cis-1,3-Dichloropropene	12.47	75	118442	19.4239	ug/L		99
56)	Dimethyl Disulfide	12.75	79	58763	16.8781	ug/L		97
59)	Toluene	12.95	91	326240	19.3239	ug/L		100
60)	Ethyl Methacrylate	13.12	69	61530	20.3251	ug/L		98
61)	Paraldehyde	13.17	89	2671	58.9227	ug/L	#	55
62)	trans-1,3-Dichloropropene	13.18	75	93801	17.2533	ug/L		98
63)	1,1,2-Trichloroethane	13.42	97	54163	19.9744	ug/L		99
64)	2-Hexanone	13.39	43	24439	20.7755	ug/L		88
65)	1,3-Dichloropropane	13.78	76	99492	21.5148	ug/L		98
66)	Tetrachloroethene	13.90	166	78212	19.8363	ug/L		98
67)	Dibromochloromethane	14.20	129	68410	18.8641	ug/L		99
68)	1,2-Dibromoethane	14.49	107	50759	19.1647	ug/L		98
69)	1-Chlorohexane	14.66	91	94161	21.0620	ug/L		96
70)	Chlorobenzene	15.10	112	204480	19.0618	ug/L		98
71)	1,1,1,2-Tetrachloroethane	15.14	131	75262	19.4840	ug/L		98
72)	Ethylbenzene	15.15	106	109527	19.7945	ug/L		97
73)	m-,p-Xylene	15.26	106	263555	38.9637	ug/L		100
74)	o-Xylene	15.91	106	122210	18.9742	ug/L		98
75)	Styrene	15.95	104	208657	18.1171	ug/L		99
76)	Bromoform	16.50	173	36675	20.0774	ug/L		99
77)	Isopropylbenzene	16.42	105	272892	17.0234	ug/L		98
79)	1,1,2,2-Tetrachloroethane	16.68	83	55499	20.4049	ug/L		98
81)	1,2,3-Trichloropropane	16.90	110	16312	23.2604	ug/L		89
82)	trans-1,4-Dichloro-2-Buten	16.98	53	16323	18.9187	ug/L		96
83)	n-Propylbenzene	17.01	91	367121	19.4250	ug/L		99
84)	Bromobenzene	17.13	156	80862	19.1675	ug/L		99
85)	1,3,5-Trimethylbenzene	17.25	105	248370	19.2631	ug/L		99
86)	2-Chlorotoluene	17.31	91	229984	18.3272	ug/L		99
87)	4-Chlorotoluene	17.37	91	229528	18.1943	ug/L		99
88)	a-Methylstyrene	17.72	118	131883	19.9453	ug/L		94
89)	tert-Butylbenzene	17.79	134	48262	18.5337	ug/L		100
90)	1,2,4-Trimethylbenzene	17.85	105	273946	20.0961	ug/L		99
91)	sec-Butylbenzene	18.11	105	282745	19.2917	ug/L		99
92)	p-Isopropyltoluene	18.30	119	231488	19.6630	ug/L		98
93)	1,3-Dichlorobenzene	18.50	146	143215	19.2791	ug/L		99
94)	1,4-Dichlorobenzene	18.65	146	147208	18.8953	ug/L		98
95)	n-Butylbenzene	18.92	91	208464	20.3270	ug/L		100
96)	1,2-Dichlorobenzene	19.22	146	130116	19.3801	ug/L		98
97)	1,2-Dibromo-3-Chloropropan	20.41	75	7530	18.1331	ug/L		97
98)	1,2,4-Trichlorobenzene	21.75	180	75552	20.6744	ug/L		100
99)	Hexachlorobutadiene	21.95	225	28346	19.3945	ug/L		99
100)	Naphthalene	22.16	128	133829	19.2327	ug/L		99
101)	1,2,3-Trichlorobenzene	22.54	180	63388	19.9570	ug/L		99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050412\6M107863.D Vial: 6
Acq On : 4 May 2012 13:54 Operator: adc
Sample : WG397029-03 20ug/L LCSDUP STD Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 14:17 2012 Quant Results File: 8260WTR.RES

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



2.1.2 RSK 175

2.1.2.1 Summary Data

Login Number: L12040844
Department: Volatiles - GC
Analyst: Michael Albertson

Analysis RSK-175

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes/Sample Duplicates: The MS/MSD results were not associated with this sample delivery group (SDG), due to insufficient volume of sample. Microbac Laboratories recommends site specific MS/MSD samples to avoid possible data qualifications.

SAMPLES

Samples: All acceptance criteria were met.

Manual Integration Reason Codes

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

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

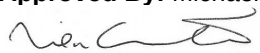
Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene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

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

Reason #5: Miscellaneous Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration

is not clearly covered by these four cases, then review and approval by the Laboratory Director or the QA/QC Supervisor will be required.

Narrative ID: 46104
Approved By: Michael Albertson



Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-16I-042412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/23/2012 16:44
Workgroup #: WG396228 **Analyst:** MDA **Run Date:** 04/26/2012 13:35
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** 16G32078
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	101		5.00	1.00
Carbon Dioxide	124-38-9	43300		10000	2500

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-16S-042412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/23/2012 16:44
Workgroup #: WG396228 **Analyst:** MDA **Run Date:** 04/26/2012 13:44
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** 16G32079
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	142		5.00	1.00
Carbon Dioxide	124-38-9	38800		10000	2500

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-07-042412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/23/2012 16:44
Workgroup #: WG396228 **Analyst:** MDA **Run Date:** 04/26/2012 13:53
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** 16G32080
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8		U	5.00	1.00
Carbon Dioxide	124-38-9	35500		10000	2500

U	Not detected at or above adjusted sample detection limit.

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

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Instrument Run Log

Instrument: HP16 Dataset: 042312
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41465

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG395914, WG395915

Comments: file 16G31971 not reported

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G31965	WG395914-01 133umol/mol CCV RSK175	NA	1	1	STD38726	04/23/12 13:40
16G31966	WG395915-01 RSK BLANK	NA	1	1		04/23/12 13:50
16G31967	WG395914-05 133umol/mol CCV RSK175	NA	1	1	STD38726	04/23/12 14:29
16G31968	WG395914-04 67umol/mol ICAL RSK175	NA	1	1	STD38726	04/23/12 15:44
16G31969	WG395914-03 33umol/mol ICAL RSK175	NA	1	1	STD38726	04/23/12 15:54
16G31970	WG395914-02 1.67umol/mol ICAL RSK175	NA	1	1	STD38726	04/23/12 16:04
16G31972	WG395914-06 333umol/mol ICAL RSK175	NA	1	1	STD38726	04/23/12 16:23
16G31973	WG395914-07 533umol/mol ICAL RSK175	NA	1	1	STD38726	04/23/12 16:34
16G31974	WG395914-01 0.67umol/mol ICAL RSK175	NA	1	1	STD38726	04/23/12 16:44
16G31975	WG395914-08 133umol/mol ICV RSK175	NA	1	1	STD45308	04/23/12 17:06
16G31976	WG395958-01 133umol/mol CCV RSK175	NA	1	1	STD38726	04/23/12 17:34
16G31977	WG395915-01 BLANK RSK175	NA	1	1		04/23/12 17:44
16G31978	WG395915-02 67umol/mol LCS RSK175	NA	1	1	STD45308	04/23/12 17:54
16G31979	WG395915-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	04/23/12 18:04
16G31980	L12040626-15 B RSK175EXT	7	1	1		04/23/12 18:53
16G31981	L12040590-01 A RSK175	<2	1	1		04/23/12 19:03
16G31982	L12040667-04 A RSK175EXT	7	1	1		04/23/12 19:14
16G31983	L12040667-05 A RSK175EXT	7	1	1		04/23/12 19:24
16G31984	L12040667-06 A RSK175EXT	7	1	1		04/23/12 19:34
16G31985	L12040667-07 A RSK175EXT	7	1	1		04/23/12 19:44
16G31986	L12040667-11 A RSK175EXT	7	1	1		04/23/12 19:53
16G31987	WG395958-02 133umol/mol CCV RSK175	NA	1	1	STD38726	04/23/12 20:03
16G31988	L12040667-12 A RSK175EXT	7	1	1		04/23/12 20:13
16G31989	L12040591-01 A RSK175	<2	1	1		04/23/12 20:23
16G31990	L12040698-04 A RSK175EXT	7	1	1		04/23/12 20:33
16G31991	L12040698-05 A RSK175EXT	7	1	1		04/23/12 20:42
16G31992	L12040698-07 A RSK175EXT	7	1	1		04/23/12 20:52
16G31993	L12040698-08 A RSK175EXT	7	1	1		04/23/12 21:02
16G31994	L12040698-09 A RSK175EXT	7	1	1		04/23/12 21:11
16G31995	L12040698-10 A RSK175EXT	7	1	1		04/23/12 21:22
16G31996	L12040592-01 A RSK175	<2	1	1		04/23/12 21:31
16G31997	L12040593-01 A RSK175	<2	1	1		04/23/12 21:41
16G31998	WG395958-03 133umol/mol CCV RSK175	NA	1	1	STD38726	04/23/12 21:51
16G31999	L12040578-01 A RSK175	<2	1	1		04/23/12 22:00

Approved: April 25, 2012

Page: 1

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Instrument Run Log

Instrument: HP16 Dataset: 042312
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41465

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG395914, WG395915

Comments: file 16G31971 not reported

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32000	L12040580-01 A RSK175	<2	1	1		04/23/12 22:10
16G32001A	L12040584-01 A RSK175	<2	1	1		04/23/12 22:20
16G32002A	WG395958-04 133umol/mol CCV RSK175	NA	1	1	STD38726	04/23/12 22:30
16G32003	WG395915-02 67umol/mol LCS RSK175	NA	1	1	STD45308	04/23/12 18:34
16G32204	WG395915-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	04/23/12 18:43

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1				
File ID: 16G31965				
			dnr rr high	
2				
File ID: 16G31966				
			dnr rr	
3				
File ID: 16G31967				
			needs ICAL	
17				
File ID: 16G31982				
			rr 20x methane	
18				
File ID: 16G31983				
			rr conf	
20				
File ID: 16G31985				
			rr 20x methane	
21				
File ID: 16G31986				
			rr co	
29				
File ID: 16G31994				
			rr 20x methane	
30				
File ID: 16G31995				
			rr 20x methane	
31				

Approved: April 25, 2012

Page: 2

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 042312
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41465

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG395914, WG395915

Comments: file 16G31971 not reported

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G31996				
	rr co			
32				
File ID: 16G31997				
	rr			
34				
File ID: 16G31999				
	rr 20x methane			
35				
File ID: 16G32000				
	rr co			
38				
File ID: 16G32003				
	dnr not needed			
39				
File ID: 16G32204				
	dnr not needed			

Approved: April 25, 2012

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 042612
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41509

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: wg396228

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32070	WG396227-01 133umol/mol RSK175 CCV	NA	1	1	STD38726	04/26/12 12:21
16G32071	WG396228-01 BLANK RSK175	NA	1	1		04/26/12 12:30
16G32072	WG396228-02 67umol/mol LCS RSK175	NA	1	1	STD45308	04/26/12 12:39
16G32073	WG396228-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	04/26/12 12:48
16G32074	L12040653-01 B RSK175EXT 20X	<2	1	20		04/26/12 12:57
16G32075	L12040718-01 RSK175	11	1	1		04/26/12 13:07
16G32076	L12040759-01 A RSK175	<2	1	1		04/26/12 13:17
16G32077	L12040756-01 A RSK175	<2	1	1		04/26/12 13:25
16G32078	L12040844-01 A RSK175EXT	7	1	1		04/26/12 13:35
16G32079	L12040844-03 A RSK175EXT	7	1	1		04/26/12 13:44
16G32080	L12040844-05 A RSK175EXT	7	1	1		04/26/12 13:53
16G32081	WG396227-02 133umol/mol CCV RSK175	NA	1	1	STD38726	04/26/12 14:02
16G32082	L12040757-01 A RSK175	<2	1	1		04/26/12 14:12
16G32083	L12040758-01 A RSK175	<2	1	1		04/26/12 14:21
16G32084	L12040847-01 A RSK175	<2	1	1		04/26/12 14:30
16G32085	L12040848-01 A RSK175	<2	1	1		04/26/12 14:39
16G32086	L12040849-01 A RSK175	<2	1	1		04/26/12 14:49
16G32087	WG396227-03 133umol/mol CCV RSK175	NA	1	1	STD38726	04/26/12 15:07
16G32088	WG396227-03 133umol/mol CCV RSK175	NA	1	1	STD38726	04/26/12 15:25

Comments

Seq.	Rerun	Dil.	Reason	Analytes
18				
File ID: 16G32087				
	DNR RR			

Approved: April 27, 2012

Page: 1

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B153730

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG395914-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG395914-04	15	mL	15	mL					5.47	mL	5.47	mL	40
WG395914-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG395914-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG395914-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG395914-07	15	mL	15	mL					5.47	mL	5.47	mL	40
WG395914-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG395914-08	15	mL	15	mL					5.47	mL	5.47	mL	40

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B153941

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG396227-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396227-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396227-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396227-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040653-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040844-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040756-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040844-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040759-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396228-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040758-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040847-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040849-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396228-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
WG396228-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12040757-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040718-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040844-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040848-01	15	mL	15	mL					5.47	mL	5.47	mL	40

Microbac Laboratories Inc.

Data Checklist

Date: 23-APR-2012
Analyst: MDA
Analyst: NA
Method: RSK175
Instrument: HP16
Curve Workgroup: WG395914
Runlog ID: 46346
Analytical Workgroups: WG395915

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



Secondary Reviewer:
25-APR-2012



CHECKLIST1 - Modified 03/05/2008
Generated: APR-25-2012 09:30:05

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: RSK175 **AAB#:** WG396228

Login Number: L12040844

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-16I-042412	01	04/24/12							7		04/26/12	2	7	
MW-16S-042412	03	04/24/12							7		04/26/12	2	7	
MW-07-042412	05	04/24/12							7		04/26/12	2	7	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2394167
Report generated 05/10/2012 08:03

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12040844	Work Group:	WG396228
Blank File ID:	16G32071	Blank Sample ID:	WG396228-01
Prep Date:	04/26/12 12:30	Instrument ID:	HP16
Analyzed Date:	04/26/12 12:30	Method:	RSK175
Analyst:	MDA		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396228-02	16G32072	04/26/12 12:39	01
LCS2	WG396228-03	16G32073	04/26/12 12:48	01
MW-16I-042412	L12040844-01	16G32078	04/26/12 13:35	01
MW-16S-042412	L12040844-03	16G32079	04/26/12 13:44	01
MW-07-042412	L12040844-05	16G32080	04/26/12 13:53	01

Report Name: BLANK_SUMMARY
PDF File ID: 2394168
Report generated 05/10/2012 08:03

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/26/12 12:30 Sample ID: WG396228-01
Instrument ID: HP16 Run Date: 04/26/12 12:30 Prep Method: 5021
File ID: 16G32071 Analyst: MDA Method: RSK175
Workgroup (AAB#): WG396228 Matrix: Water Units: ug/L
Contract #: Cal ID: HP16-23-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Methane	1.00	5.0	1.00	1	U
Carbon Dioxide	2500	10000	2500	1	U

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

Report Name:BLANK
PDF ID: 2394169
10-MAY-2012 08:03

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 **Analyst:** MDA **Prep Method:** 5021
Instrument ID: HP16 **Matrix:** Water **Method:** RSK175
Workgroup (AAB#): WG396228 **Units:** ug/L
QC Key: WATERLOO **Lot #:** STD45308

Sample ID: WG396228-02 LCS **File ID:** 16G32072 **Run Date:** 04/26/2012 12:39
Sample ID: WG396228-03 LCS2 **File ID:** 16G32073 **Run Date:** 04/26/2012 12:48

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methane	116	109	93.6	116	102	88.0	6.19	56 - 140	40	
Carbon Dioxide	31300	31300	99.9	31300	33000	105	5.46	10 - 200	40	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2394170
Report generated: 05/10/2012 08:03

Calibration Table Report
Method: RSK2EXT.M
Title: RSK175 HP16 (SOP: OVL RSK01) 042312
Last Calibration: Mon Apr 23 16:53:59 2012
Curve:WG395914
Calibration Files

Compound	0.66 16G31974.D	1.67 16G31970.D	33.3 16G31969.D	66.6 16G31968.D	133 16G31967.D	333 16G31972.D	533 16G31973.D	Avg	%RSD
methane		212223.967	168984.700	195163.562	202427.929	184867.054	197406.753	193512.000	7.747
ethene		285572.223	264758.482	326349.313	343592.614	306653.508	338257.265	310864.000	10.013
acetylene		278938.639	279686.040	308109.947	336876.538	311202.680	346348.350	310194.000	9.041
ethane	297263.838	301879.721	277088.499	337522.656	355086.326	315165.040	348542.070	318935.000	9.101
propane	422574.189	445795.239	384882.213	492892.528	520574.037	451710.773	511612.892	461435.000	10.732
Signal #2								0.000	0.000
carbon dioxide		5525.695	5417.101	6502.921	6209.406	6007.019	6155.175	5969.550	7.028

Mon Apr 23 16:55:36 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040844 Run Date: 04/23/2012 Sample ID: WG395914-08
Instrument ID: HP16 Run Time: 17:06 Method: RSK175
File ID: 16G31975 Analyst: MDA QC Key: WATERLOO
ICal Workgroup: WG395914 Cal ID: HP16 - 23-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
methane		228	223	ug/L	189000	2.10	20	
carbon dioxide		62700	60900	ug/L	5800	2.80	30	

* Exceeds %D Limit

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2394171
Report generated 05/10/2012 08:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396227-01

Instrument ID: HP16 Run Time: 12:21 Method: RSK175

File ID: 16G32070 Analyst: MDA QC Key: WATERLOO

Workgroup (AAB#): WG396228 Cal ID: HP16 - 23-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	194	ug/L	165000	15.0	20	
carbon dioxide		62700	55700	ug/L	5300	11.2	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2394172

Report generated 05/10/2012 08:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396227-02

Instrument ID: HP16 Run Time: 14:02 Method: RSK175

File ID: 16G32081 Analyst: MDA QC Key: WATERLOO

Workgroup (AAB#): WG396228 Cal ID: HP16 - 23-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	196	ug/L	166000	14.0	20	
carbon dioxide		62700	50500	ug/L	4810	19.4	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2394172

Report generated 05/10/2012 08:03

2.1.2.3 Sample Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\042612\16G32078.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDchem\1\DATA\042612\16G32078.D\TCD2B.CH
Acq On : 26 Apr 2012 13:35 Operator: MDA
Sample : L12040844-01 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 13:40:35 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :

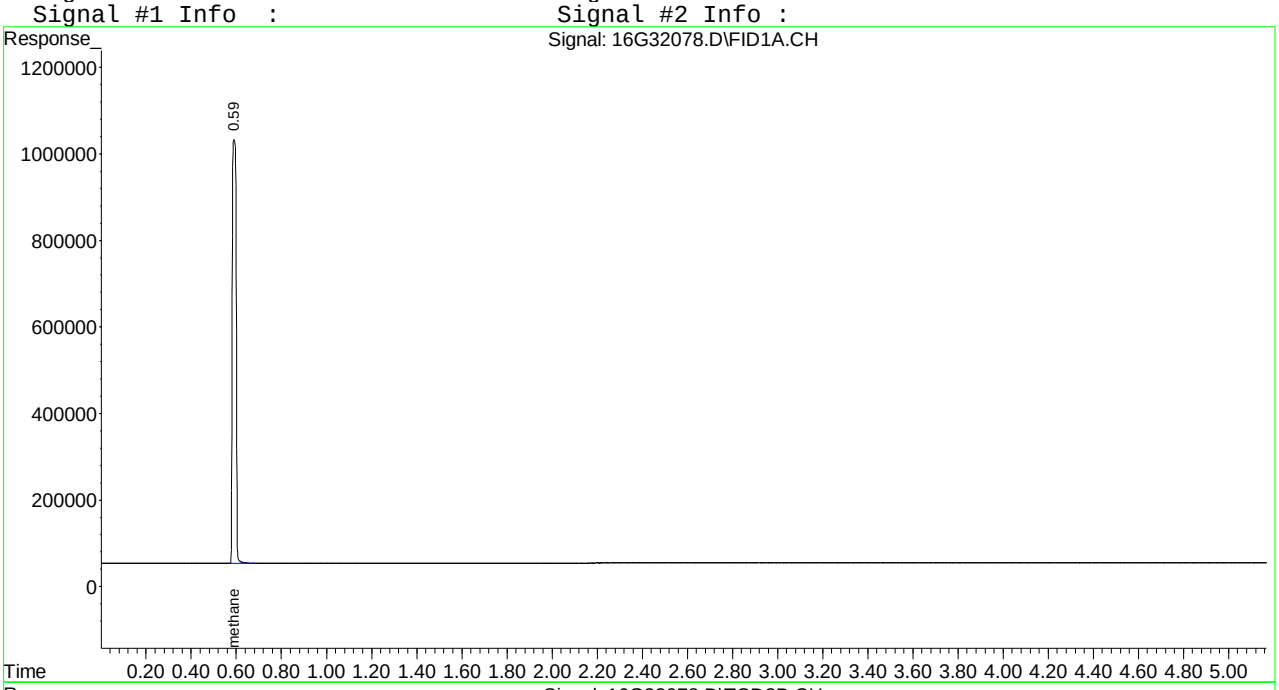
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	11392737	58.873	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	0.00	0	N.D.	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.20	55062554	9223.899	umol/

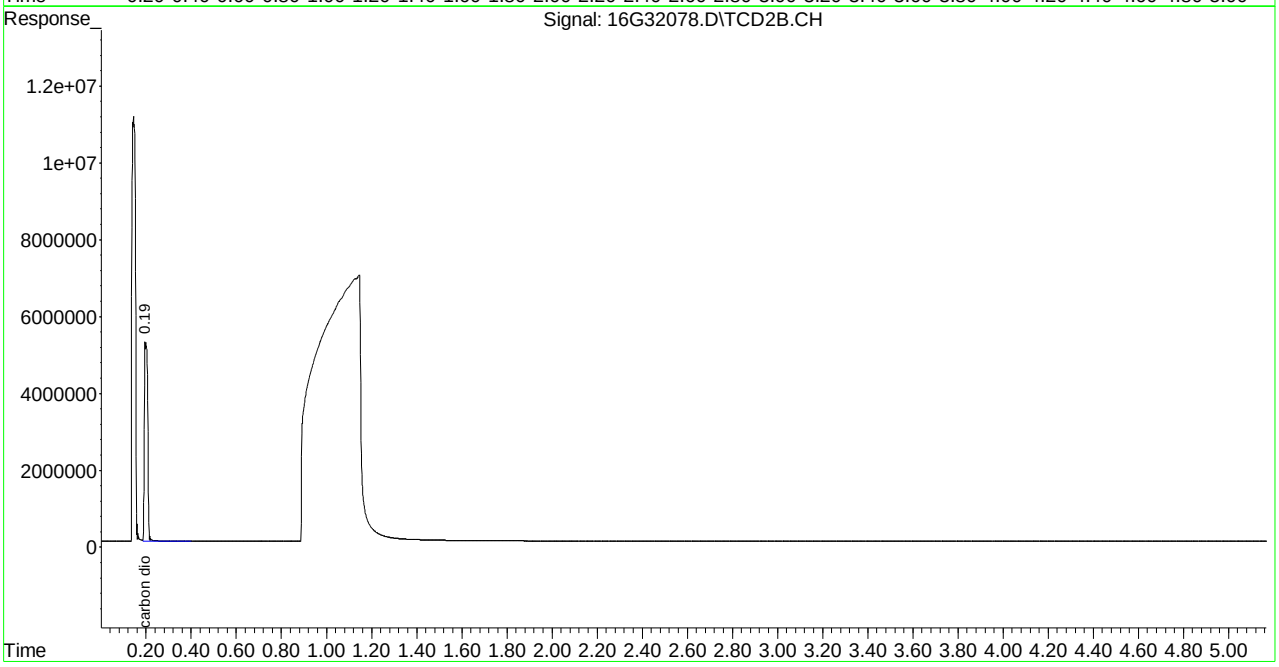
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32078.D RSK2EXT.M Thu Apr 26 13:40:35 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042612\16G32078.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDchem\1\DATA\042612\16G32078.D\TCD2B.CH
Acq On : 26 Apr 2012 13:35 Operator: MDA
Sample : L12040844-01 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 13:40 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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\042612\16G32079.D\FID1A.CH Vial: 10
Signal #2 : C:\MSDchem\1\DATA\042612\16G32079.D\TCD2B.CH
Acq On : 26 Apr 2012 13:44 Operator: MDA
Sample : L12040844-03 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 13:49:43 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :

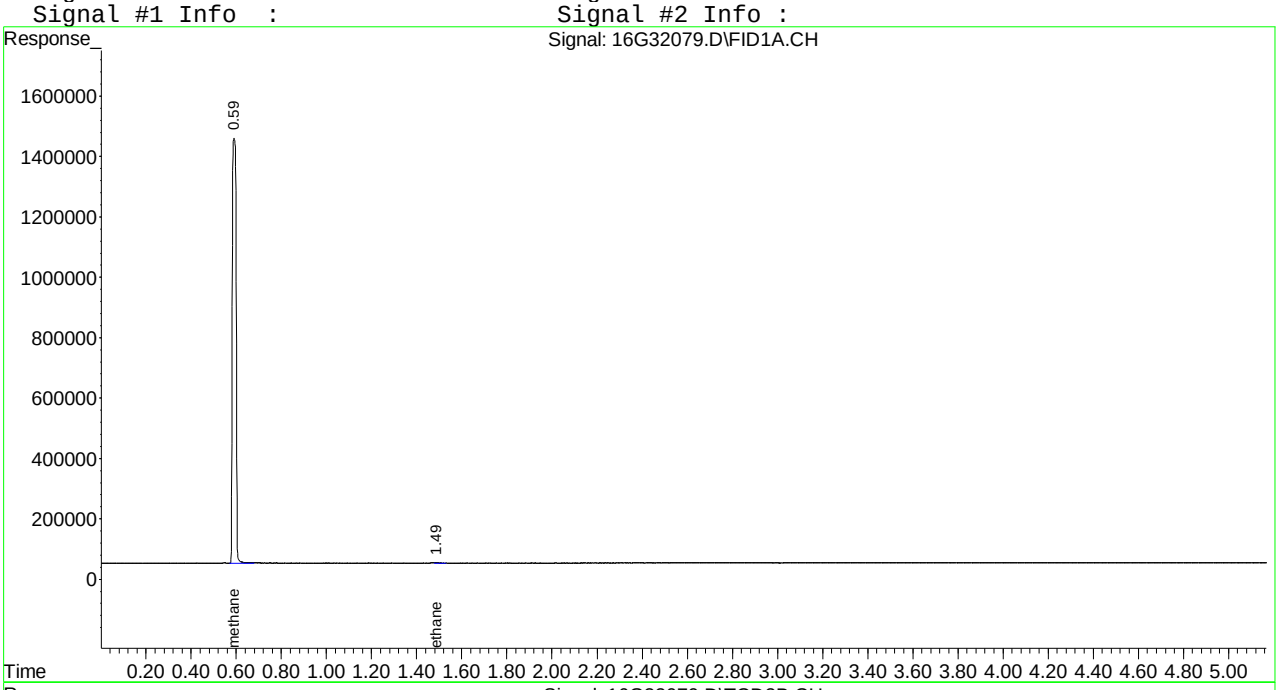
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	16086058	83.127	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	1.48	3182	0.010	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.20	49286581	8256.327	umol/

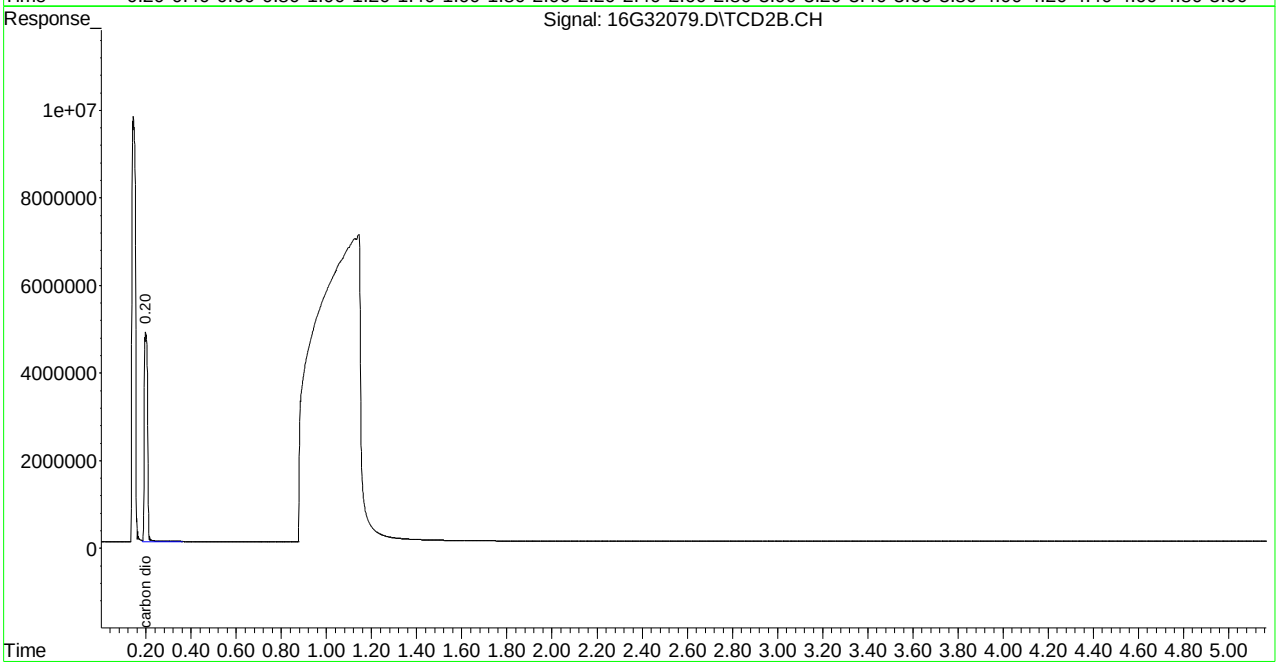
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32079.D RSK2EXT.M Thu Apr 26 13:49:43 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042612\16G32079.D\FID1A.CH Vial: 10
Signal #2 : C:\MSDchem\1\DATA\042612\16G32079.D\TCD2B.CH
Acq On : 26 Apr 2012 13:44 Operator: MDA
Sample : L12040844-03 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 13:49 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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\042612\16G32080.D\FID1A.CH Vial: 11
Signal #2 : C:\MSDchem\1\DATA\042612\16G32080.D\TCD2B.CH
Acq On : 26 Apr 2012 13:53 Operator: MDA
Sample : L12040844-05 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 13:58:43 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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	34159	0.177	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	1.25	548	0.002	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	45053991	7547.297	umol/

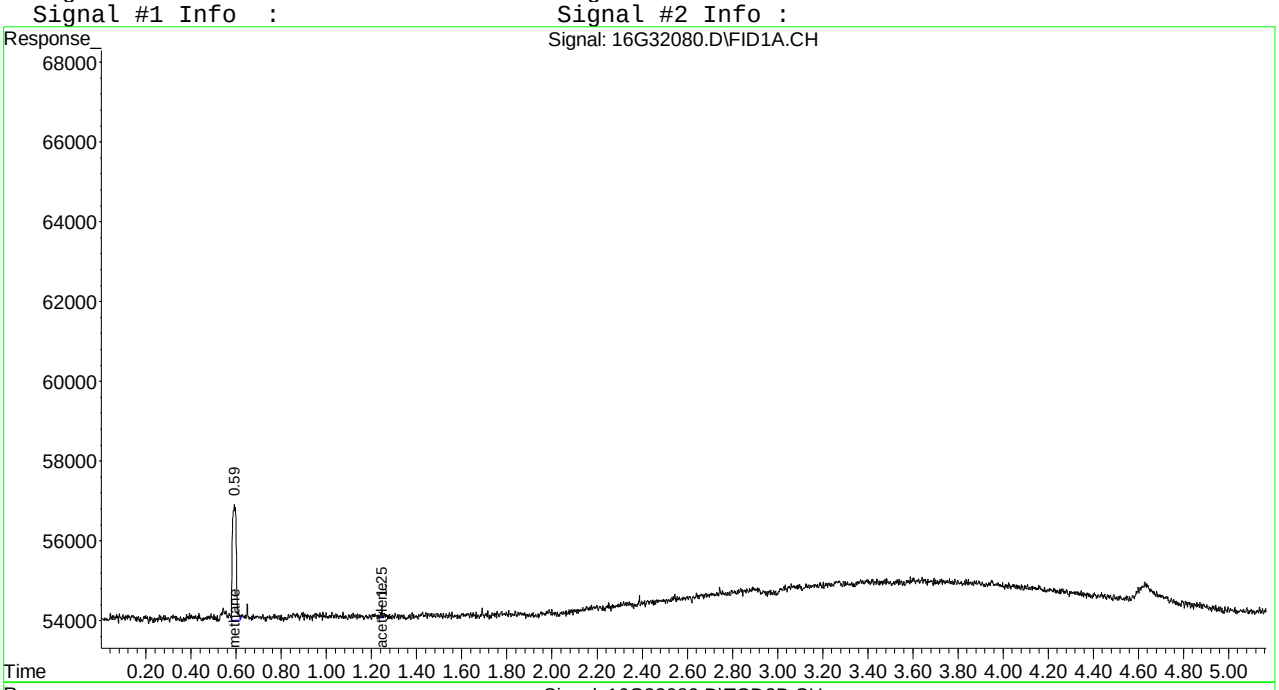
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32080.D RSK2EXT.M Thu Apr 26 13:58:43 2012 Page 1

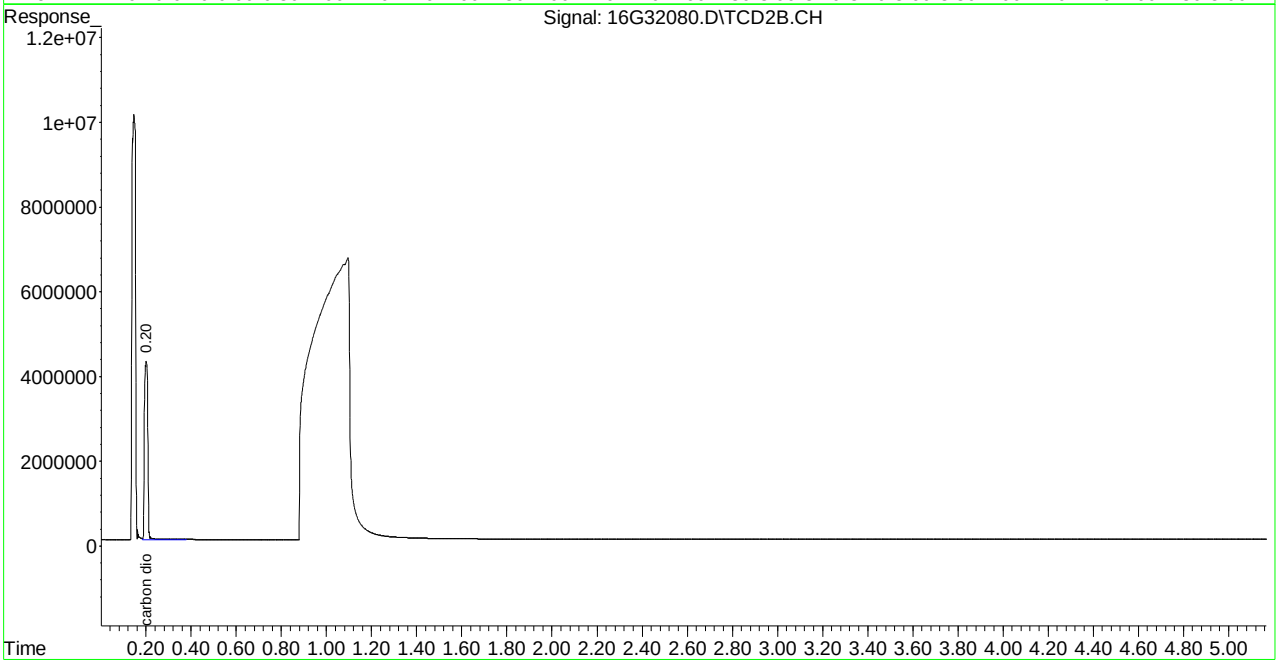
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\042612\16G32080.D\FID1A.CH Vial: 11
Signal #2 : C:\MSDchem\1\DATA\042612\16G32080.D\TCD2B.CH
Acq On : 26 Apr 2012 13:53 Operator: MDA
Sample : L12040844-05 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 13:58 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :





2.1.2.4 Standards Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\042312\16G31967.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\042312\16G31967.D\TCD2B.CH
Acq On : 23 Apr 2012 14:29 Operator: MDA
Sample : WG395914-05 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: Apr 23 15:50:22 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 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	26922914	162.842 umol/
2) T	ethene	1.12	45697818	179.040 umol/
3) T	acetylene	1.20	44804580	176.596 umol/
4) T	ethane	1.48	47226481	174.086 umol/
5) T	propane	3.90	69236347	179.657 umol/
7) T	carbon dioxide	0.20	82790005	15746.309 umol/

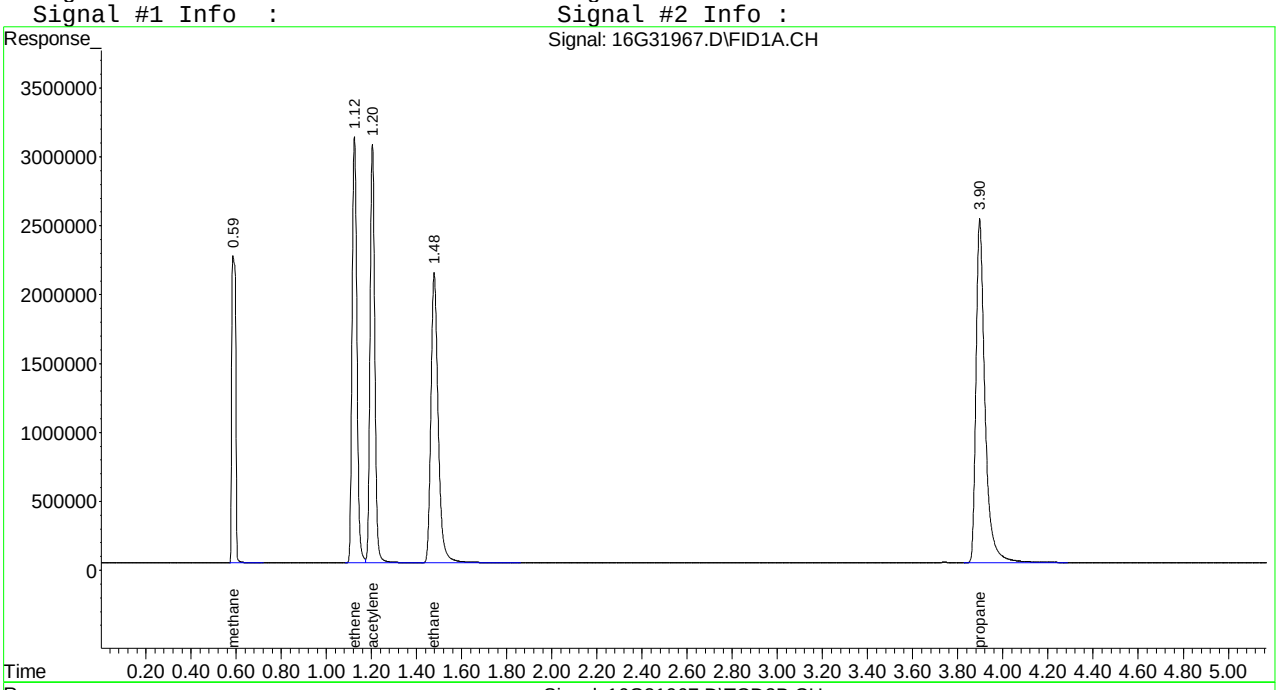
(f)=RT Delta > 1/2 Window (m)=manual int.
16G31967.D RSK2EXT.M Mon Apr 23 16:37:11 2012 Page 1

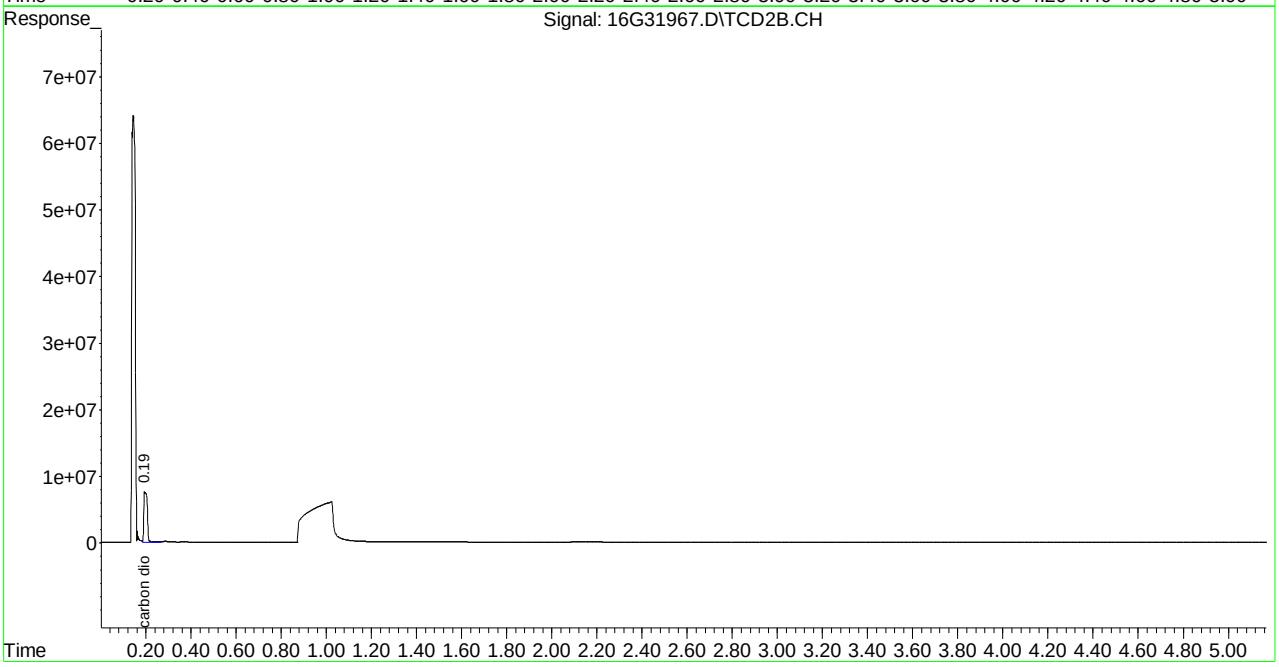
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\042312\16G31967.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\042312\16G31967.D\TCD2B.CH
Acq On : 23 Apr 2012 14:29 Operator: MDA
Sample : WG395914-05 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: Apr 23 15:50 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 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\042312\16G31968.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDchem\1\DATA\042312\16G31968.D\TCD2B.CH
Acq On : 23 Apr 2012 15:44 Operator: MDA
Sample : WG395914-04 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 23 15:50:05 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

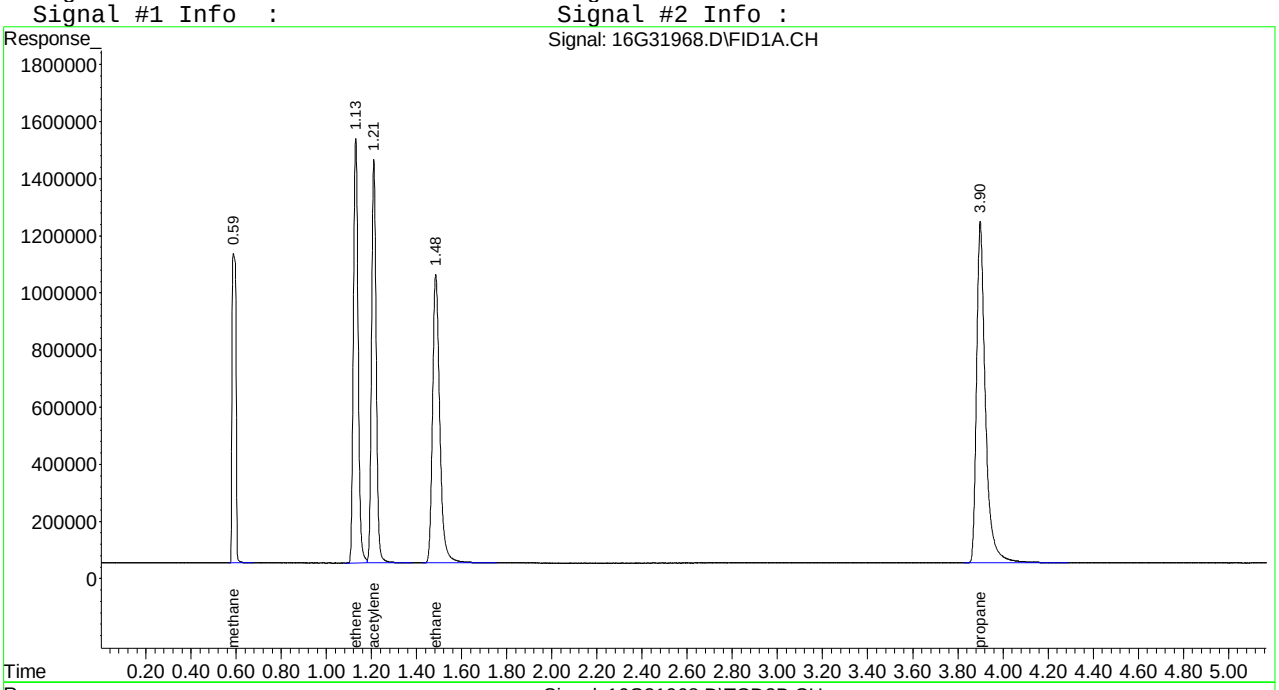
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	13011555	78.700	umol/
2) T	ethene	1.13	21757709	85.245	umol/
3) T	acetylene	1.21	20541690	80.964	umol/
4) T	ethane	1.49	22502635	82.949	umol/
5) T	propane	3.90	32861145	85.270	umol/
7) T	carbon dioxide	0.20	43354978	8245.933	umol/

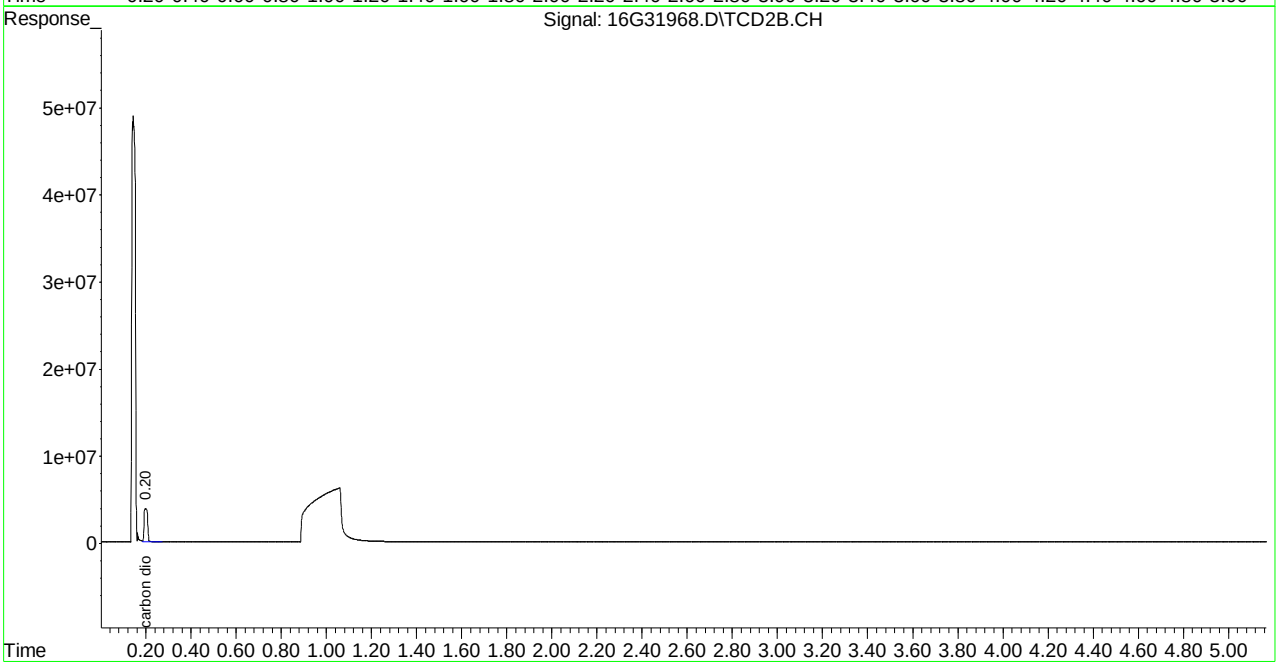
(f)=RT Delta > 1/2 Window (m)=manual int.
16G31968.D RSK2EXT.M Mon Apr 23 15:50:05 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042312\16G31968.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDchem\1\DATA\042312\16G31968.D\TCD2B.CH
Acq On : 23 Apr 2012 15:44 Operator: MDA
Sample : WG395914-04 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 23 15:50 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 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\042312\16G31969.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\042312\16G31969.D\TCD2B.CH
Acq On : 23 Apr 2012 15:54 Operator: MDA
Sample : WG395914-03 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 23 16:00:01 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

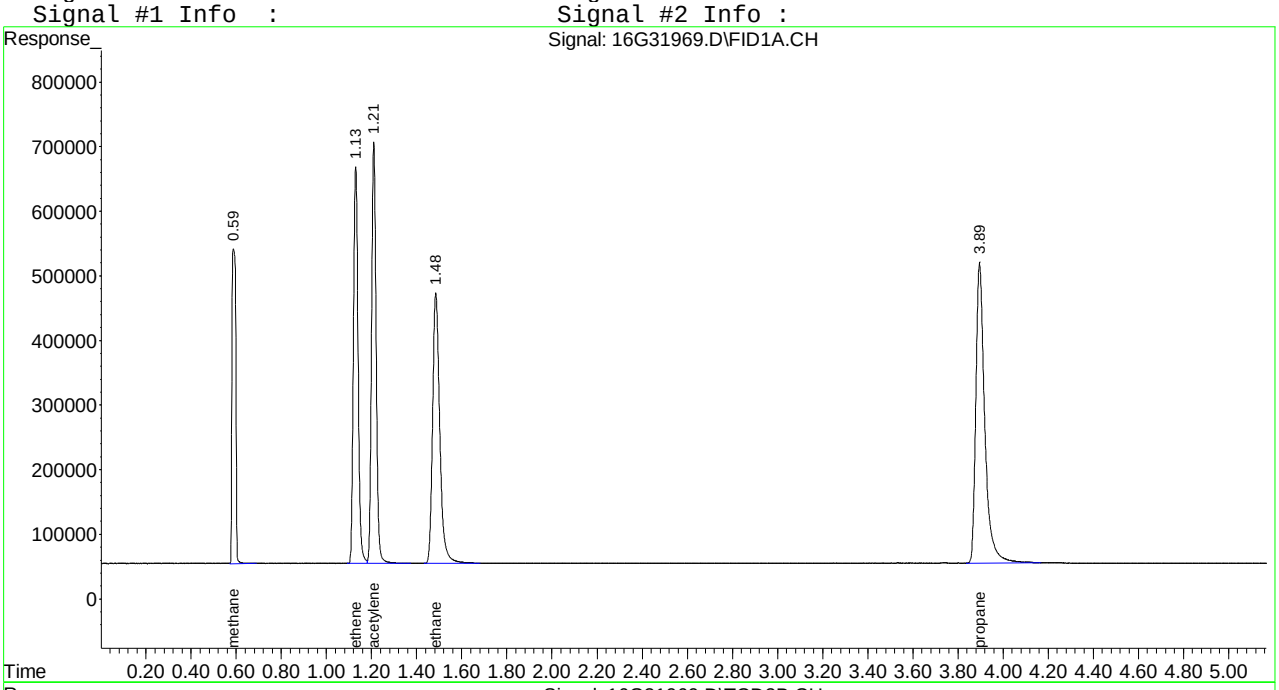
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	5633950	34.077	umol/
2) T	ethene	1.13	8827048	34.584	umol/
3) T	acetylene	1.21	9324733	36.753	umol/
4) T	ethane	1.49	9238131	34.054	umol/
5) T	propane	3.90	12831973	33.297	umol/
7) T	carbon dioxide	0.20	23483132	4466.392	umol/

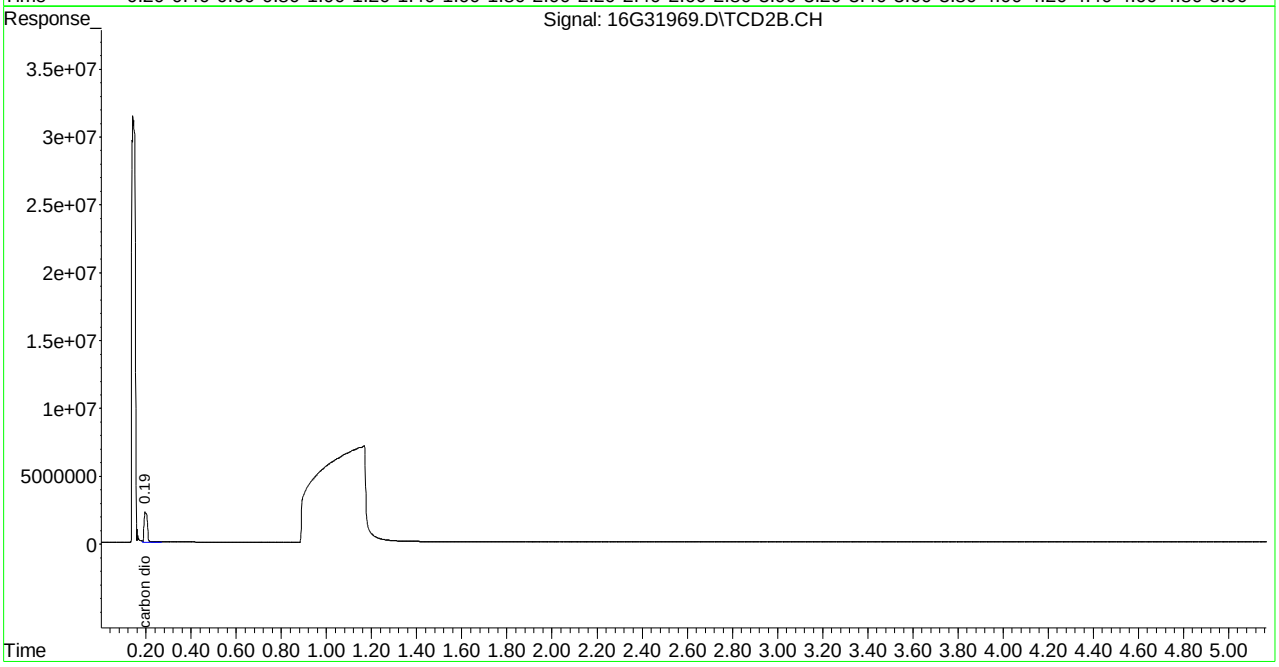
(f)=RT Delta > 1/2 Window (m)=manual int.
16G31969.D RSK2EXT.M Mon Apr 23 16:00:01 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042312\16G31969.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\042312\16G31969.D\TCD2B.CH
Acq On : 23 Apr 2012 15:54 Operator: MDA
Sample : WG395914-03 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 23 16:00 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 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\042312\16G31970.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\042312\16G31970.D\TCD2B.CH
Acq On : 23 Apr 2012 16:04 Operator: MDA
Sample : WG395914-02 1.67umol/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 23 16:09:43 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

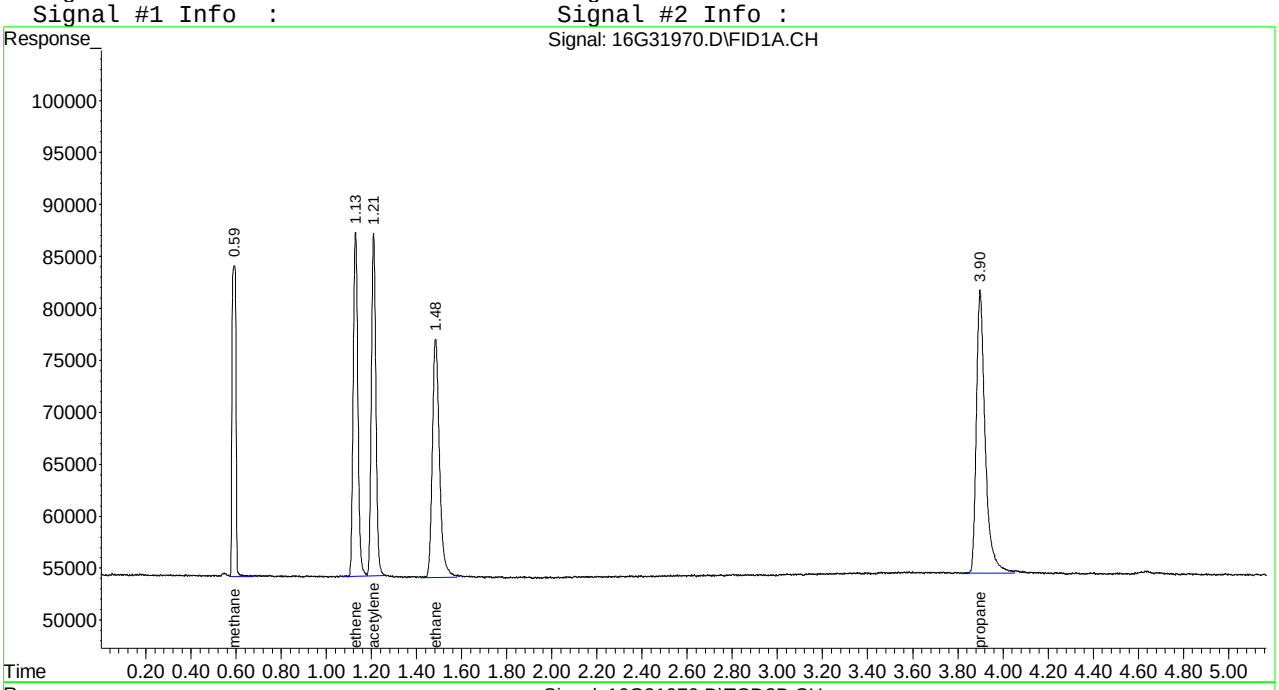
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	354414	2.144	umol/
2) T	ethene	1.13	476906	1.868	umol/
3) T	acetylene	1.21	465828	1.836	umol/
4) T	ethane	1.48	504139	1.858	umol/
5) T	propane	3.90	744478	1.932	umol/
7) T	carbon dioxide	0.20	11051390	2101.928	umol/

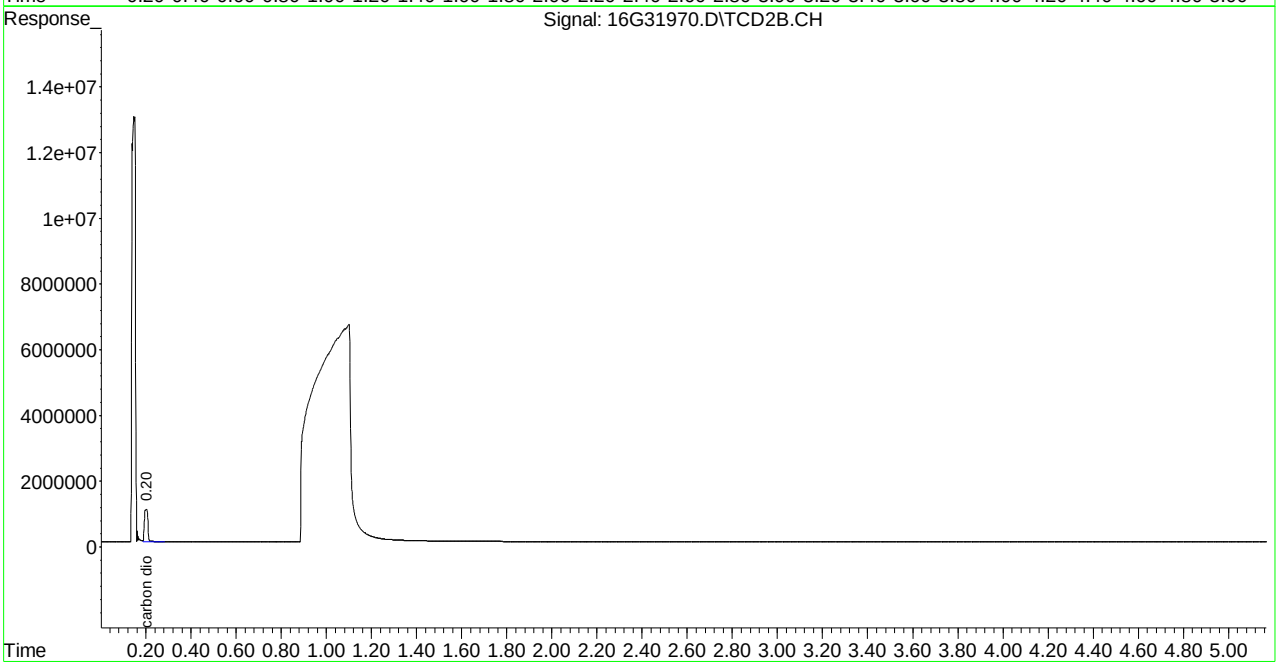
(f)=RT Delta > 1/2 Window (m)=manual int.
16G31970.D RSK2EXT.M Mon Apr 23 16:09:43 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042312\16G31970.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\042312\16G31970.D\TCD2B.CH
Acq On : 23 Apr 2012 16:04 Operator: MDA
Sample : WG395914-02 1.67umol/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 23 16:09 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 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\042312\16G31972.D\FID1A.CH Vial: 6
Signal #2 : C:\MSDchem\1\DATA\042312\16G31972.D\TCD2B.CH
Acq On : 23 Apr 2012 16:23 Operator: MDA
Sample : WG395914-06 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 23 16:29:09 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

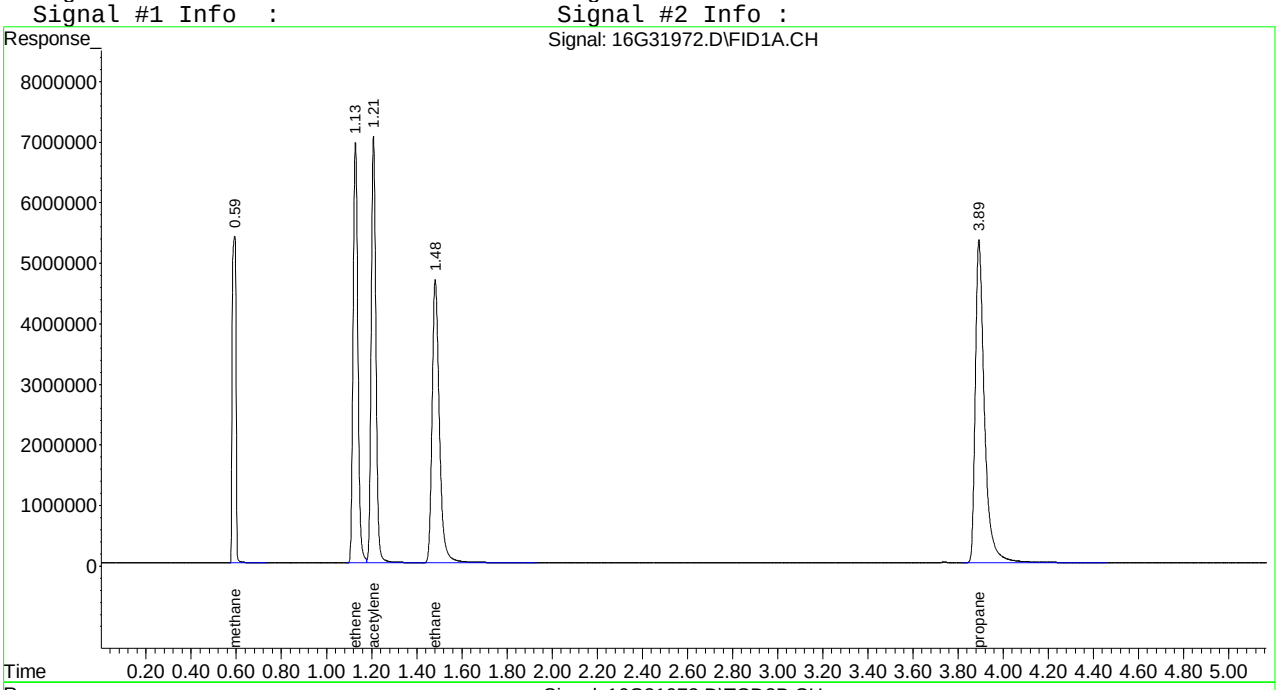
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	61560729	372.348	umol/
2) T	ethene	1.13	102115618	400.079	umol/
3) T	acetylene	1.21	103630493	408.456	umol/
4) T	ethane	1.48	104949958	386.867	umol/
5) T	propane	3.89	150419687	390.315	umol/
7) T	carbon dioxide	0.20	200231956	38083.272	umol/

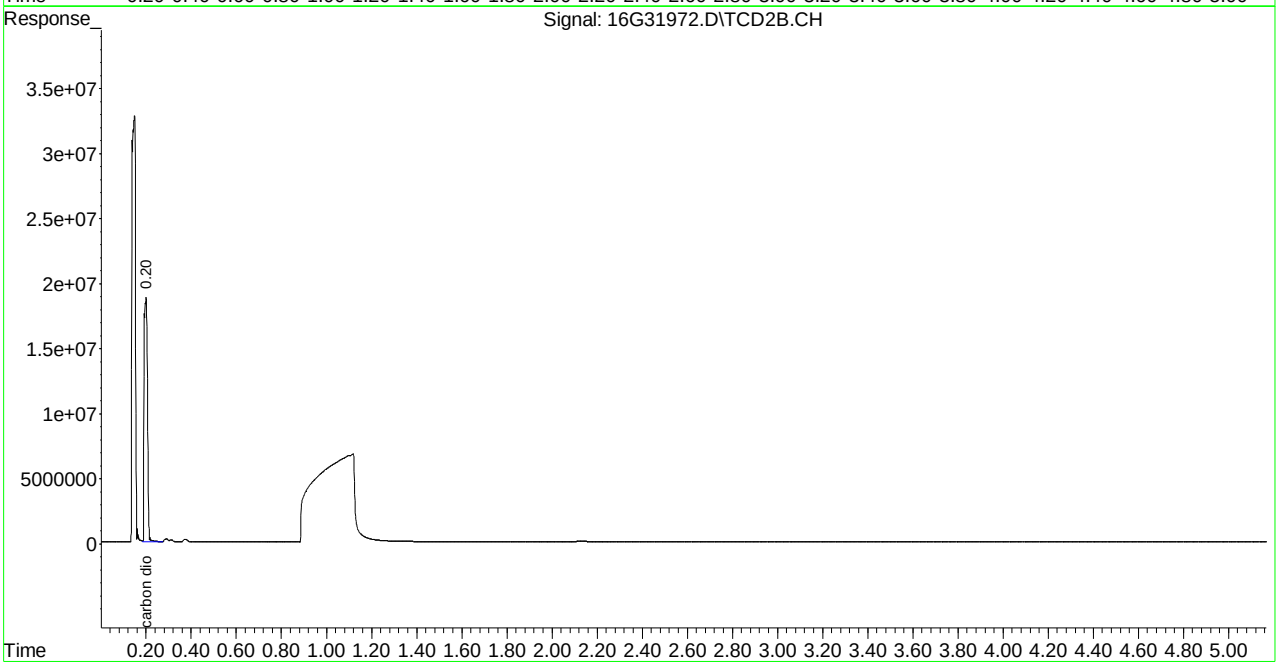
(f)=RT Delta > 1/2 Window (m)=manual int.
16G31972.D RSK2EXT.M Mon Apr 23 16:29:09 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042312\16G31972.D\FID1A.CH Vial: 6
Signal #2 : C:\MSDchem\1\DATA\042312\16G31972.D\TCD2B.CH
Acq On : 23 Apr 2012 16:23 Operator: MDA
Sample : WG395914-06 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 23 16:29 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 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\042312\16G31973.D\FID1A.CH Vial: 7
Signal #2 : C:\MSDchem\1\DATA\042312\16G31973.D\TCD2B.CH
Acq On : 23 Apr 2012 16:34 Operator: MDA
Sample : WG395914-07 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 23 16:39:43 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

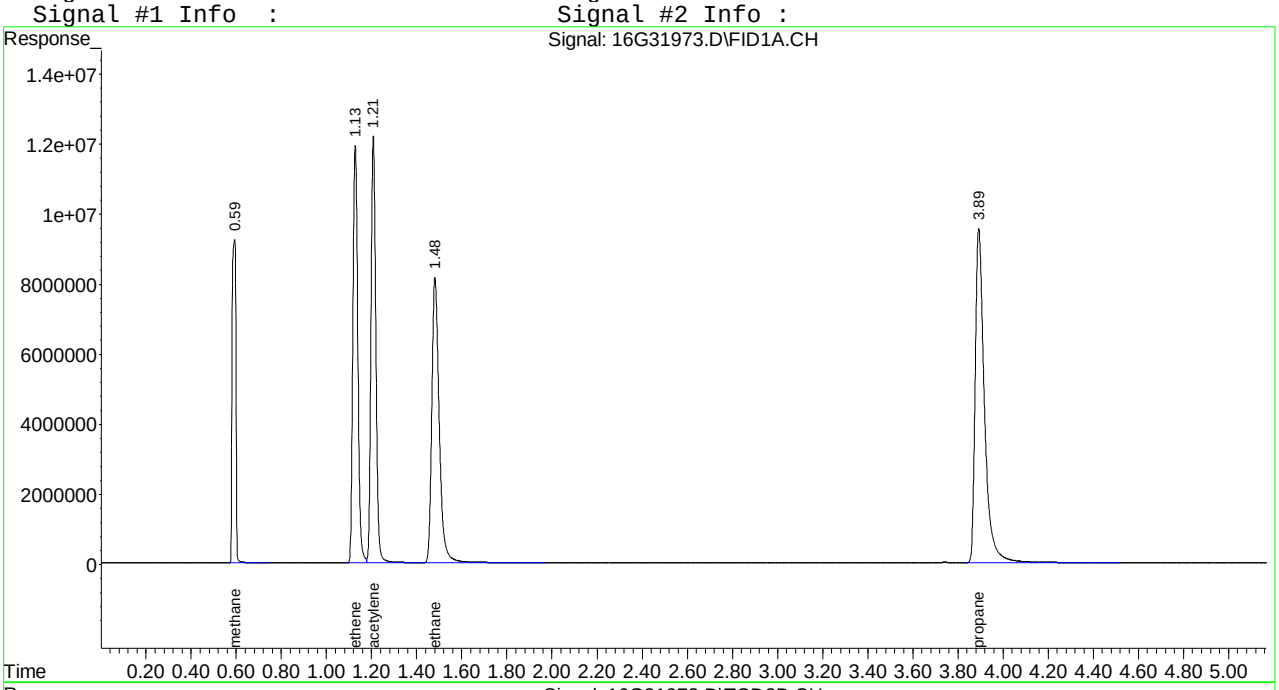
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	105217799	636.406 umol/
2) T	ethene	1.13	180291122	706.363 umol/
3) T	acetylene	1.21	184603670	727.610 umol/
4) T	ethane	1.48	185772923	684.796 umol/
5) T	propane	3.89	272689671	707.587 umol/
7) T	carbon dioxide	0.20	328273971	62436.322 umol/

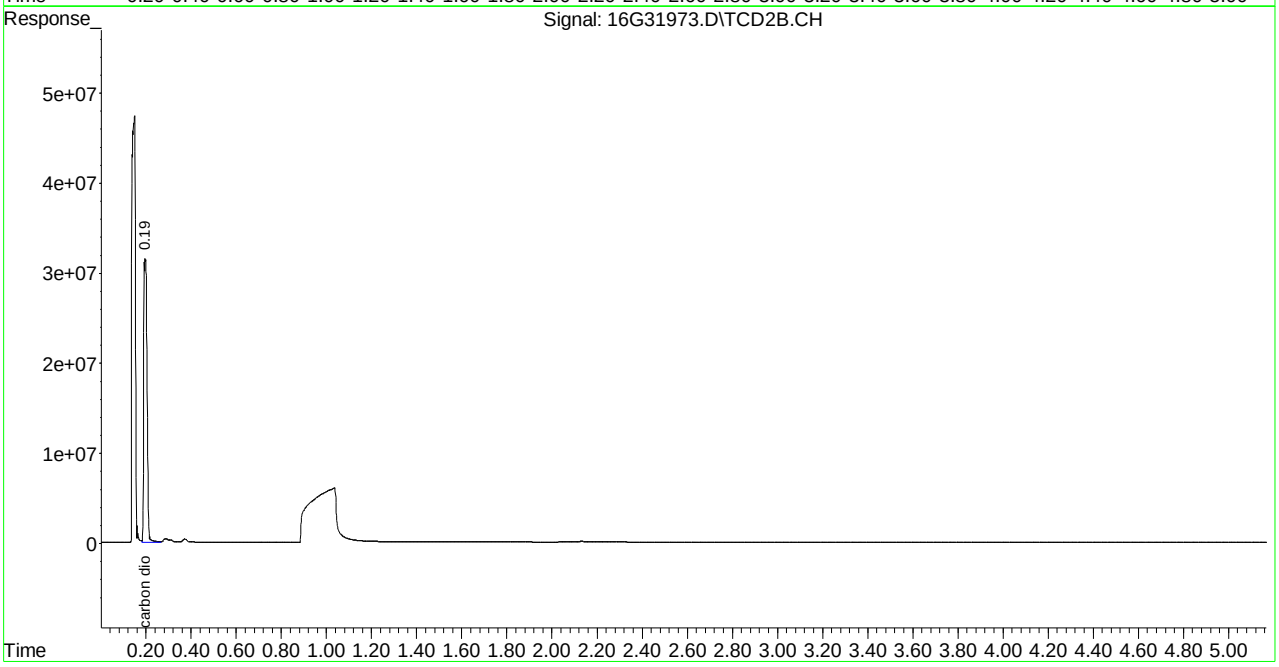
(f)=RT Delta > 1/2 Window (m)=manual int.
16G31973.D RSK2EXT.M Mon Apr 23 16:39:43 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042312\16G31973.D\FID1A.CH Vial: 7
Signal #2 : C:\MSDchem\1\DATA\042312\16G31973.D\TCD2B.CH
Acq On : 23 Apr 2012 16:34 Operator: MDA
Sample : WG395914-07 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 23 16:39 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 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\042312\16G31974.D\FID1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\042312\16G31974.D\TCD2B.CH
Acq On : 23 Apr 2012 16:44 Operator: MDA
Sample : WG395914-01 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 23 16:49:15 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

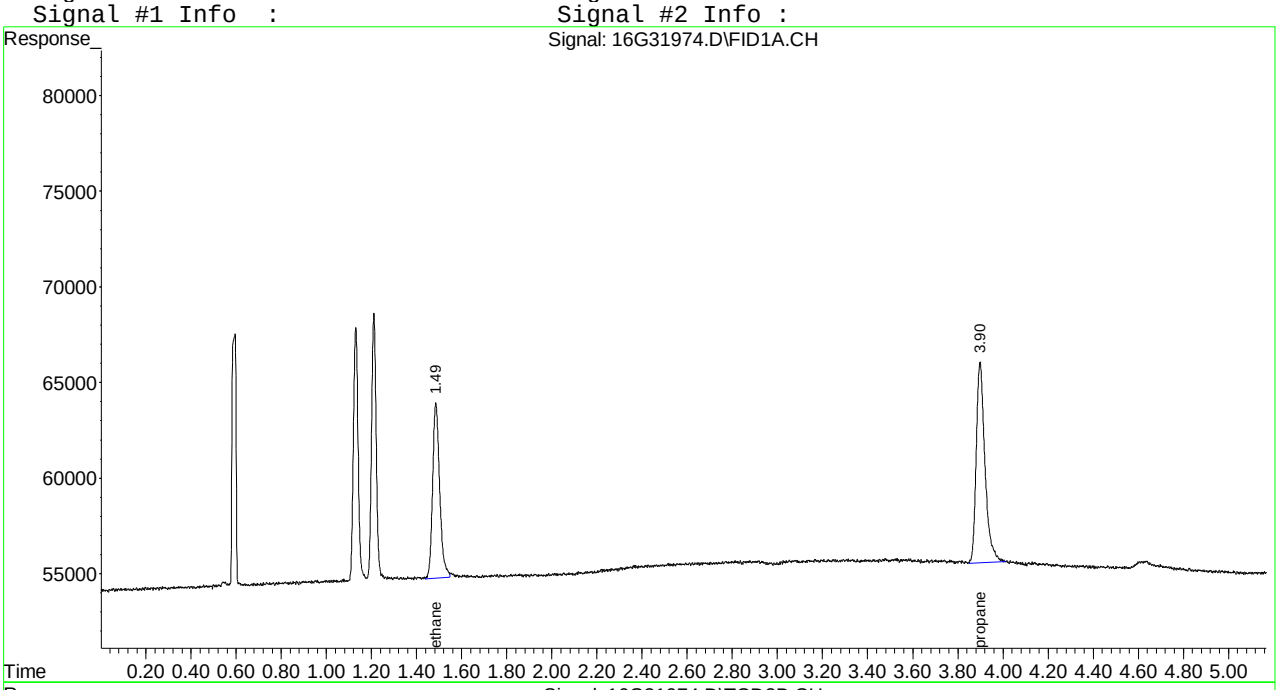
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.00	0	N.D.	umol/d
2) T	ethene	0.00	0	N.D.	umol/d
3) T	acetylene	0.00	0	N.D.	umol/d
4) T	ethane	1.49	198275	0.731	umol/
5) T	propane	3.90	281857	0.731	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/d

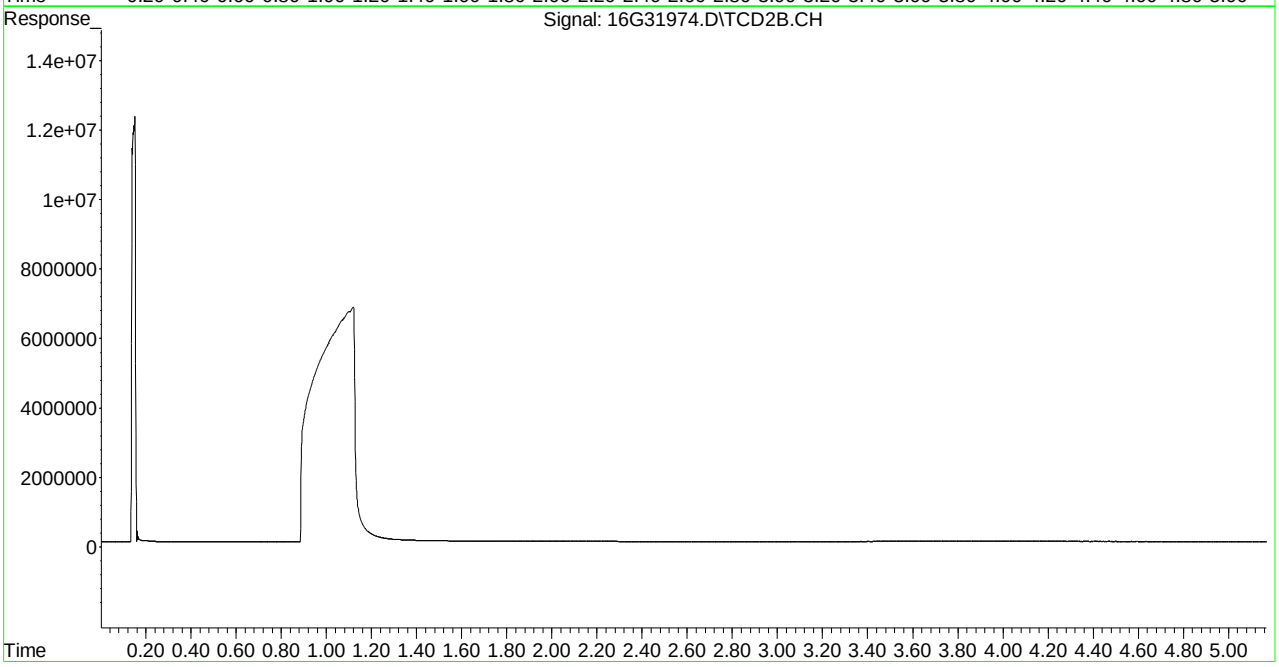
(f)=RT Delta > 1/2 Window (m)=manual int.
16G31974.D RSK2EXT.M Mon Apr 23 16:58:08 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\042312\16G31974.D\FID1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\042312\16G31974.D\TCD2B.CH
Acq On : 23 Apr 2012 16:44 Operator: MDA
Sample : WG395914-01 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 23 16:52 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Jan 09 08:57:07 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\042312\16G31975.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDchem\1\DATA\042312\16G31975.D\TCD2B.CH
Acq On : 23 Apr 2012 17:06 Operator: MDA
Sample : WG395914-08 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 23 17:11:50 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :

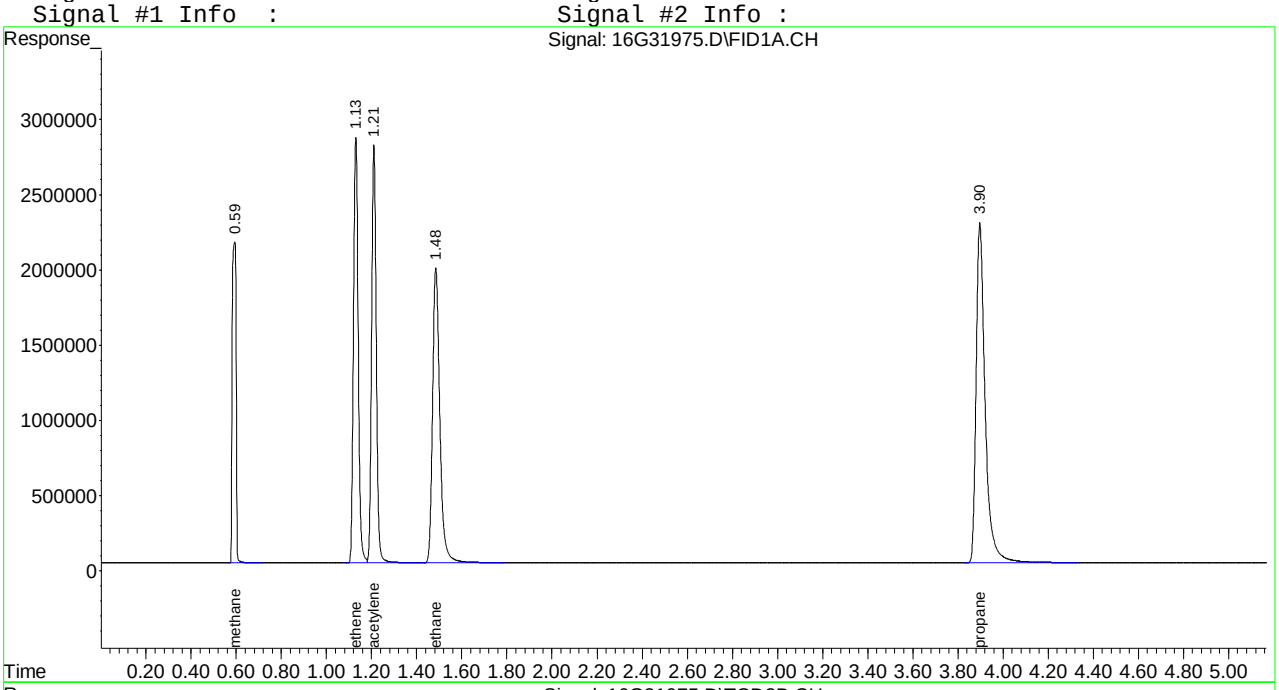
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	25188380	130.164 umol/
2) T	ethene	1.13	41273395	132.770 umol/
3) T	acetylene	1.21	40465294	130.452 umol/
4) T	ethane	1.49	43751203	137.179 umol/
5) T	propane	3.90	63026725	136.589 umol/
7) T	carbon dioxide	0.20	77365421	12960.003 umol/

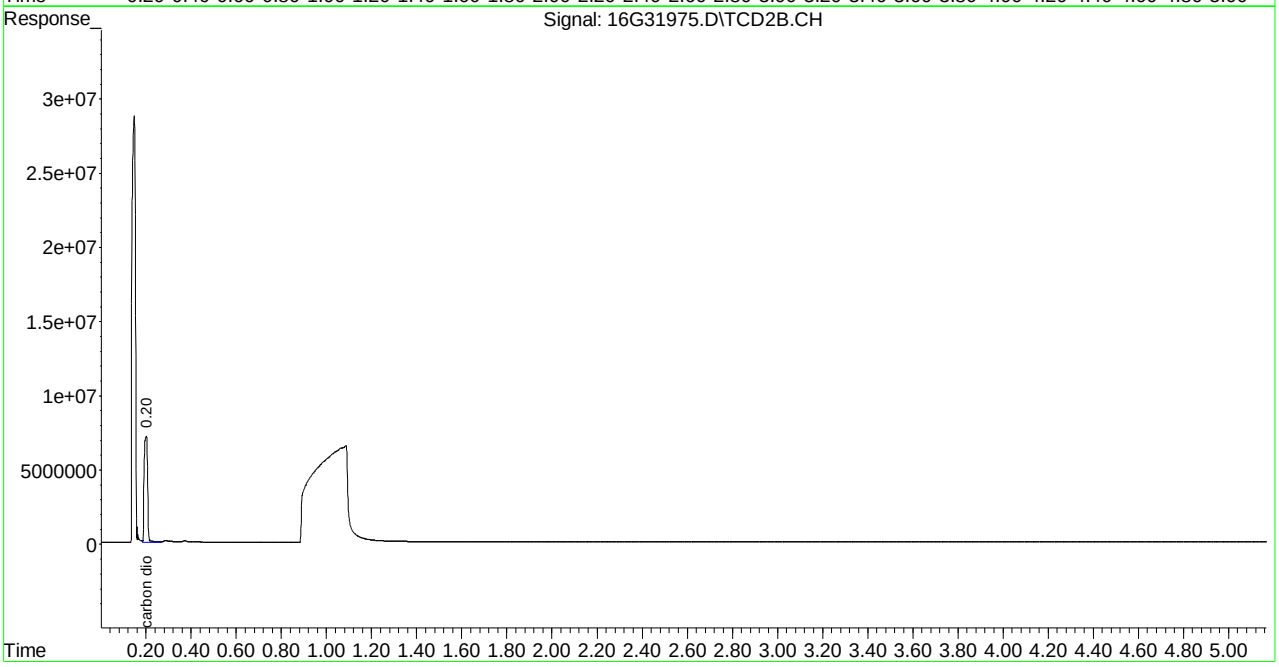
(f)=RT Delta > 1/2 Window (m)=manual int.
16G31975.D RSK2EXT.M Mon Apr 23 17:11:51 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042312\16G31975.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDchem\1\DATA\042312\16G31975.D\TCD2B.CH
Acq On : 23 Apr 2012 17:06 Operator: MDA
Sample : WG395914-08 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 23 17:11 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\042312\16G31975.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\042312\16G31975.D\TCD2B.CH
Acq On : 23 Apr 2012 17:06 Operator: MDA
Sample : WG395914-08 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) 042312
Last Update : Mon Apr 23 16:53:59 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	130.164	2.1	94	0.00
2	T	ethene	133.000	132.770	0.2	90	0.00
3	T	acetylene	133.000	130.452	1.9	90	0.00
4	T	ethane	133.000	137.179	-3.1	93	0.00
5	T	propane	133.000	136.589	-2.7	91	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	12960.003	2.8	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G31975.D RSK2EXT.M Mon Apr 23 17:13:59 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\042312\16G31975.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\042312\16G31975.D\TCD2B.CH
Acq On : 23 Apr 2012 17:06 Operator: MDA
Sample : WG395914-08 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) 042312
Last Update : Mon Apr 23 16:53:59 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\042612\16G32070.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDchem\1\DATA\042612\16G32070.D\TCD2B.CH
Acq On : 26 Apr 2012 12:21 Operator: MDA
Sample : WG396227-01 133umol/mol RSK175 CCV Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 12:26:20 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :

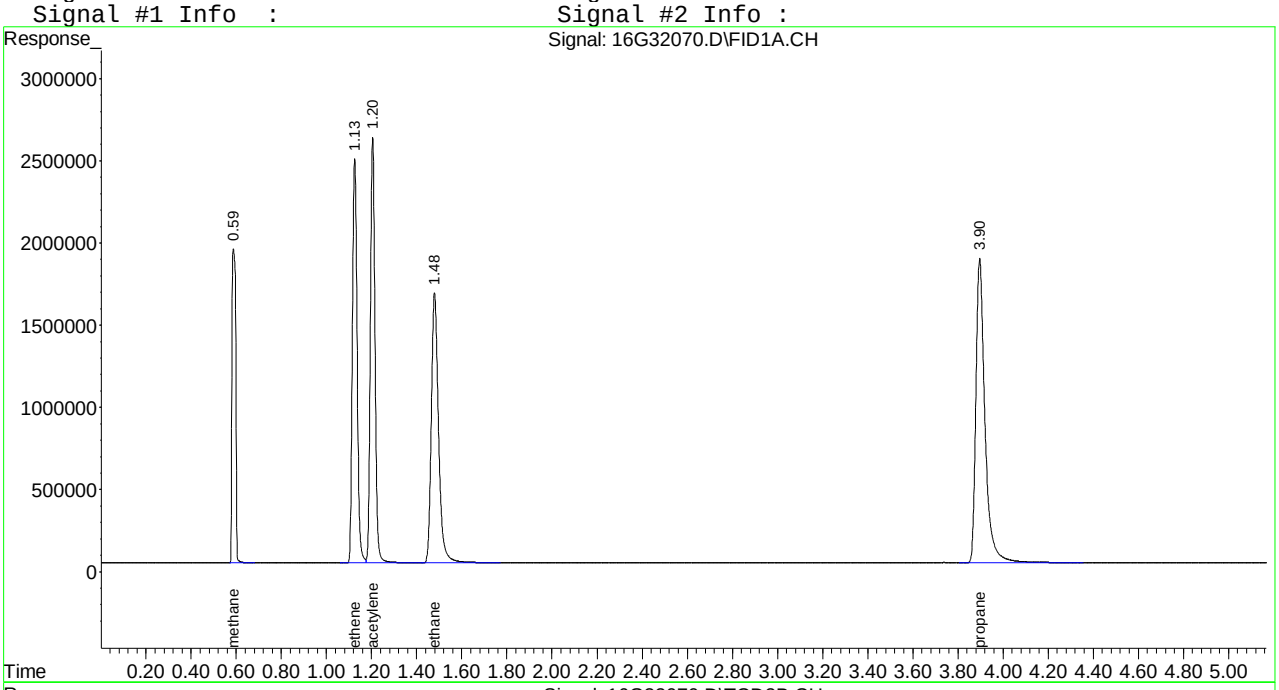
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	21888429	113.111 umol/
2) T	ethene	1.13	35683776	114.789 umol/
3) T	acetylene	1.21	37428460	120.662 umol/
4) T	ethane	1.48	36563897	114.644 umol/
5) T	propane	3.90	51910706	112.499 umol/
7) T	carbon dioxide	0.20	70713386	11845.676 umol/

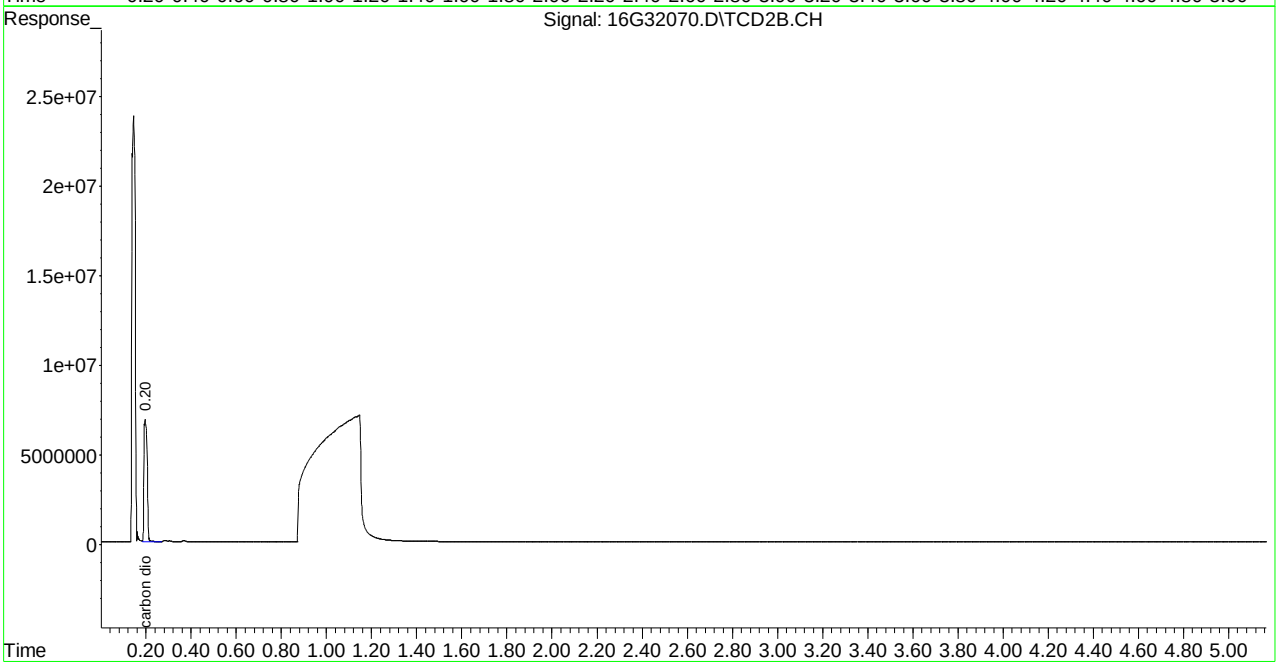
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32070.D RSK2EXT.M Thu Apr 26 12:26:20 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042612\16G32070.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDchem\1\DATA\042612\16G32070.D\TCD2B.CH
Acq On : 26 Apr 2012 12:21 Operator: MDA
Sample : WG396227-01 133umol/mol RSK175 CCV Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 12:26 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\042612\16G32070.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\042612\16G32070.D\TCD2B.CH
Acq On : 26 Apr 2012 12:21 Operator: MDA
Sample : WG396227-01 133umol/mol RSK175 CCV 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) 042312
Last Update : Mon Apr 23 16:53:59 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	113.111	15.0	81	0.00
2	T	ethene	133.000	114.789	13.7	78	0.00
3	T	acetylene	133.000	120.662	9.3	84	0.00
4	T	ethane	133.000	114.644	13.8	77	0.00
5	T	propane	133.000	112.499	15.4#	75	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	11845.676	11.2	85	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32070.D RSK2EXT.M Thu Apr 26 12:28:10 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\042612\16G32070.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\042612\16G32070.D\TCD2B.CH
Acq On : 26 Apr 2012 12:21 Operator: MDA
Sample : WG396227-01 133umol/mol RSK175 CCV 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) 042312
Last Update : Mon Apr 23 16:53:59 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\042612\16G32081.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDchem\1\DATA\042612\16G32081.D\TCD2B.CH
Acq On : 26 Apr 2012 14:02 Operator: MDA
Sample : WG396227-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 14:07:54 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :

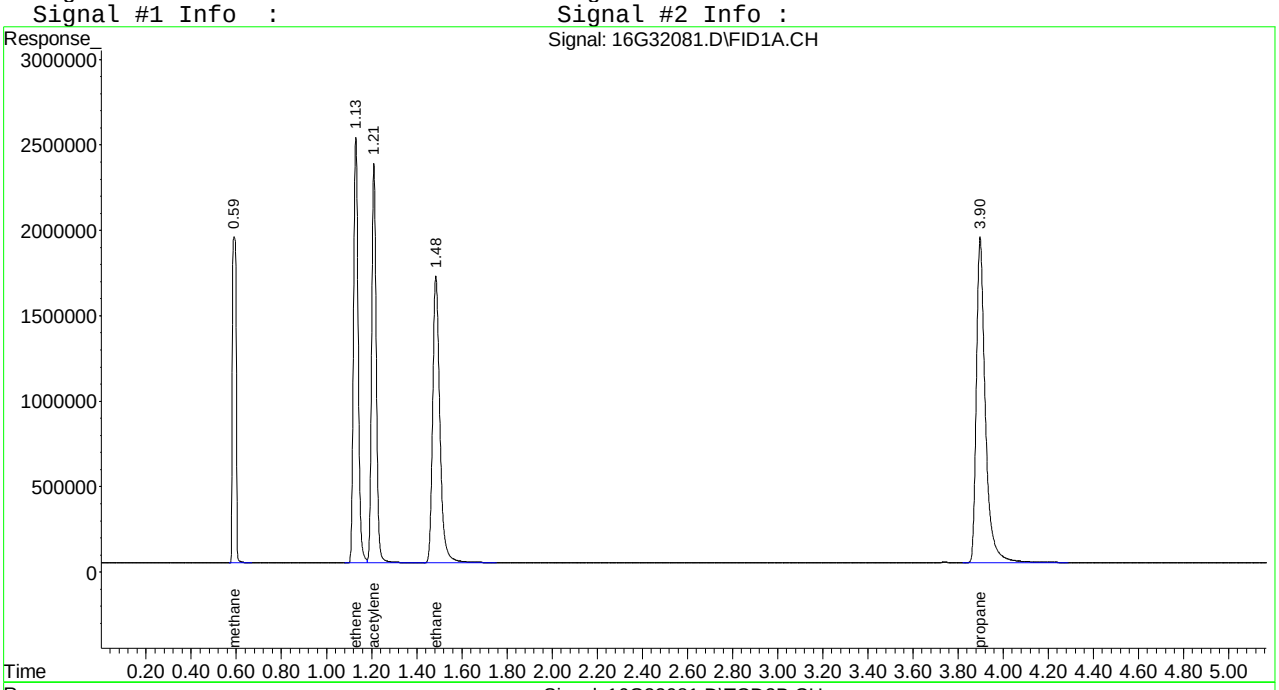
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22143539	114.430 umol/
2) T	ethene	1.13	35941950	115.620 umol/
3) T	acetylene	1.21	33572221	108.230 umol/
4) T	ethane	1.49	37214809	116.684 umol/
5) T	propane	3.90	52947382	114.745 umol/
7) T	carbon dioxide	0.20	64130364	10742.909 umol/

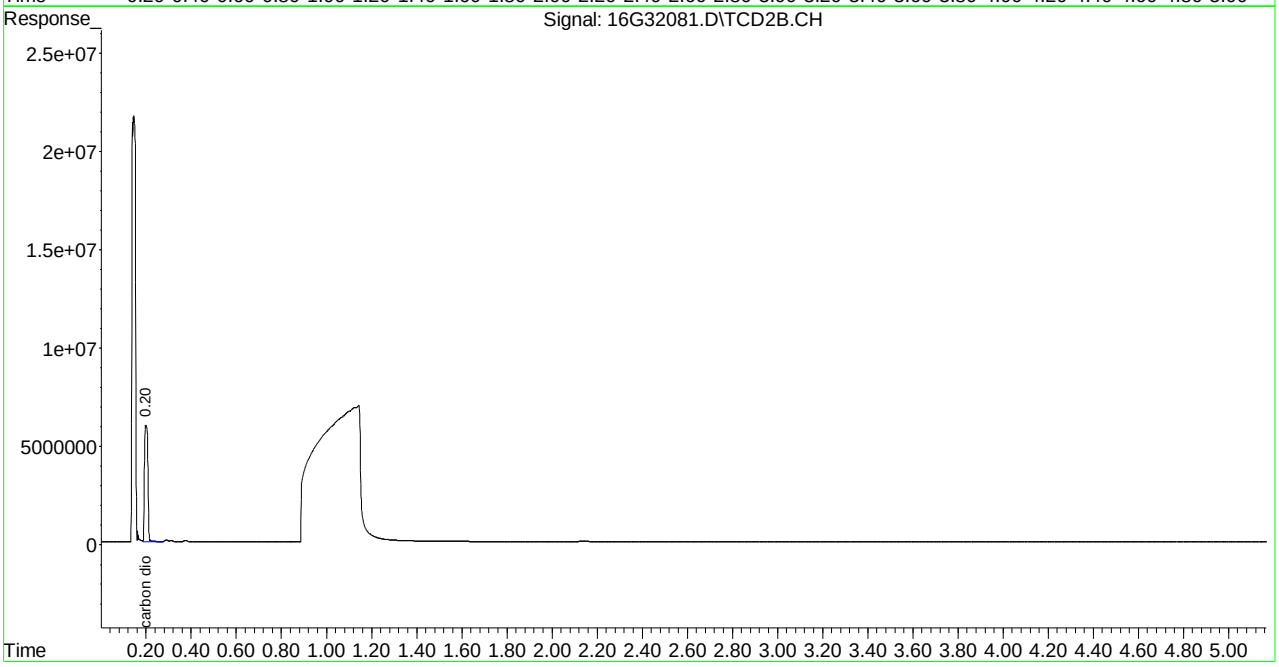
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32081.D RSK2EXT.M Thu Apr 26 14:07:54 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042612\16G32081.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDchem\1\DATA\042612\16G32081.D\TCD2B.CH
Acq On : 26 Apr 2012 14:02 Operator: MDA
Sample : WG396227-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 14:07 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\042612\16G32081.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\042612\16G32081.D\TCD2B.CH
Acq On : 26 Apr 2012 14:02 Operator: MDA
Sample : WG396227-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Apr 23 16:53:59 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	114.430	14.0	82	0.00
2	T	ethene	133.000	115.620	13.1	79	0.00
3	T	acetylene	133.000	108.230	18.6#	75	0.00
4	T	ethane	133.000	116.684	12.3	79	0.00
5	T	propane	133.000	114.745	13.7	76	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	10742.909	19.4#	77	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32081.D RSK2EXT.M Thu Apr 26 14:18:22 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\042612\16G32081.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\042612\16G32081.D\TCD2B.CH
Acq On : 26 Apr 2012 14:02 Operator: MDA
Sample : WG396227-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
Last Update : Mon Apr 23 16:53:59 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 #: L12040844 **Run Date:** 04/26/2012 **Sample ID:** WG396227-01
Instrument: HP16 **Run Time:** 12:21 **Method:** RSK175
Workgroup (AAB#): WG396228 **File ID:** 16G32070

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: 2394173
Report generated 05/10/2012 08:03

2.1.2.5 Raw QC Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\042612\16G32071.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\042612\16G32071.D\TCD2B.CH
Acq On : 26 Apr 2012 12:30 Operator: MDA
Sample : WG396228-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 12:44:41 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :

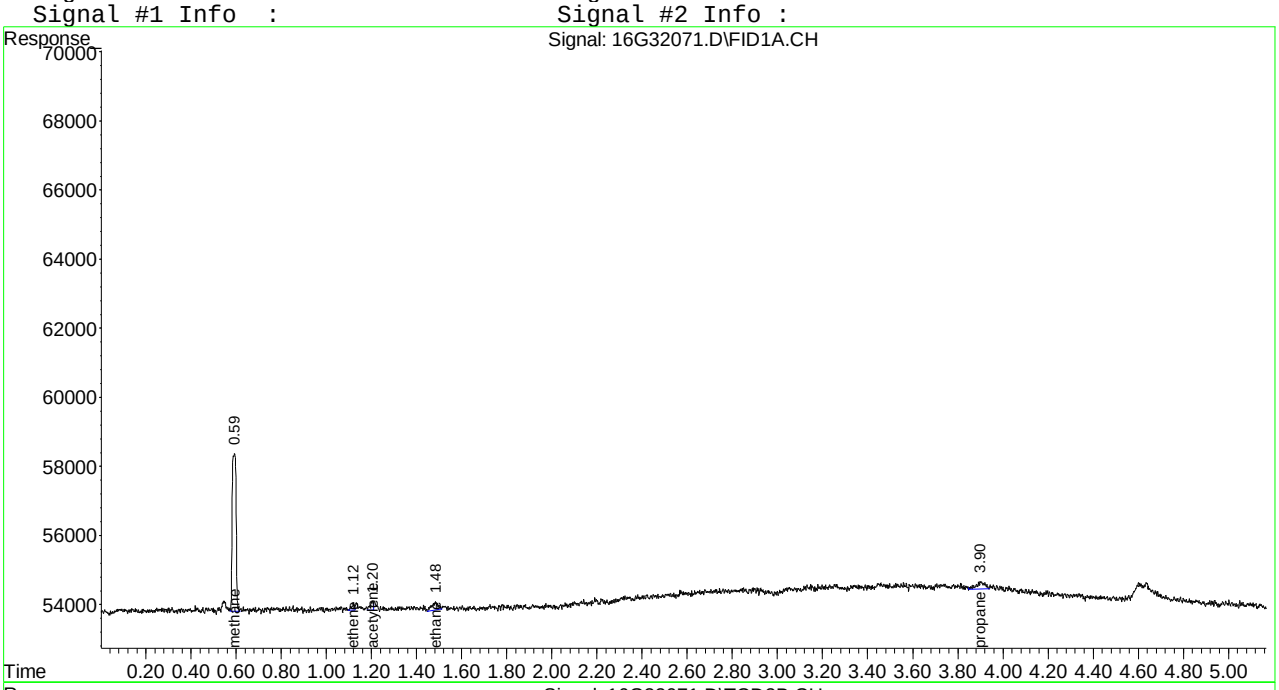
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	53511	0.277 umol/
2) T	ethene	1.12	1690	0.005 umol/
3) T	acetylene	1.20	2240	0.007 umol/
4) T	ethane	1.48	4278	0.013 umol/
5) T	propane	3.90	5671	0.012 umol/
7) T	carbon dioxide	0.00	0	N.D. umol/

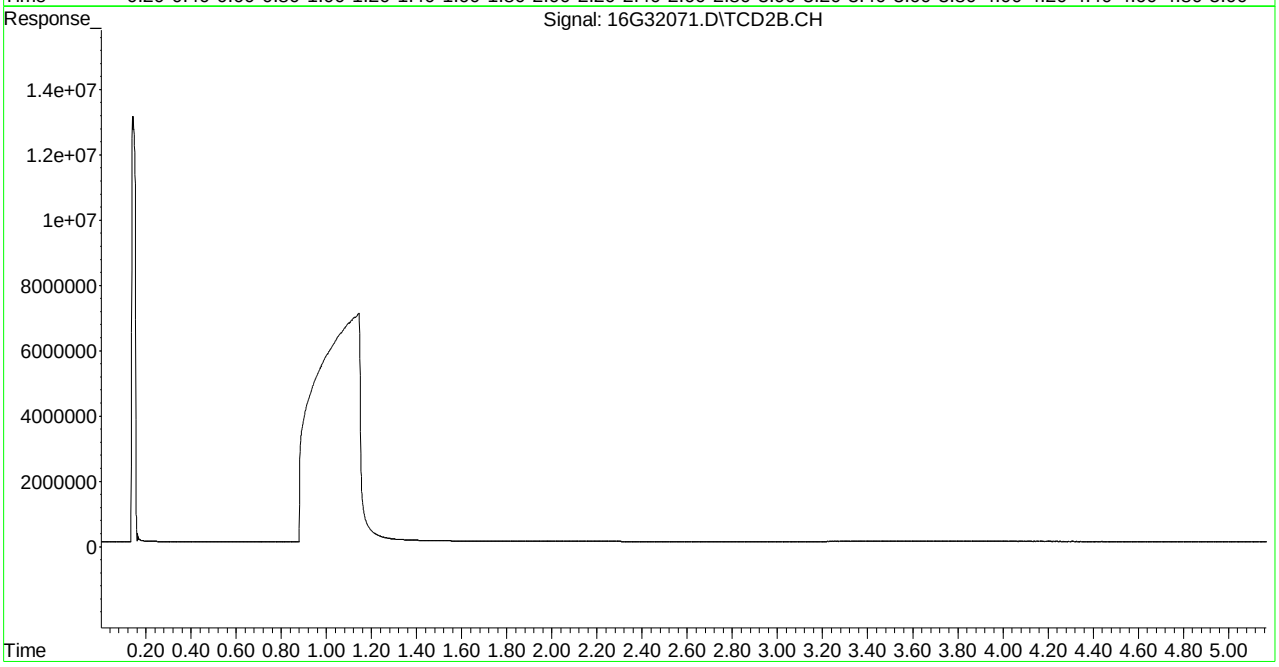
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32071.D RSK2EXT.M Thu Apr 26 12:44:45 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\042612\16G32071.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\042612\16G32071.D\TCD2B.CH
Acq On : 26 Apr 2012 12:30 Operator: MDA
Sample : WG396228-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 26 12:44 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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\042612\16G32072.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\042612\16G32072.D\TCD2B.CH
Acq On : 26 Apr 2012 12:39 Operator: MDA
Sample : WG396228-02 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: Apr 26 12:44:29 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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	12314314	63.636 umol/
2) T	ethene	1.13	20108947	64.687 umol/
3) T	acetylene	1.21	20848366	67.211 umol/
4) T	ethane	1.48	21254654	66.642 umol/
5) T	propane	3.90	30658200	66.441 umol/
7) T	carbon dioxide	0.20	39741555	6657.376 umol/

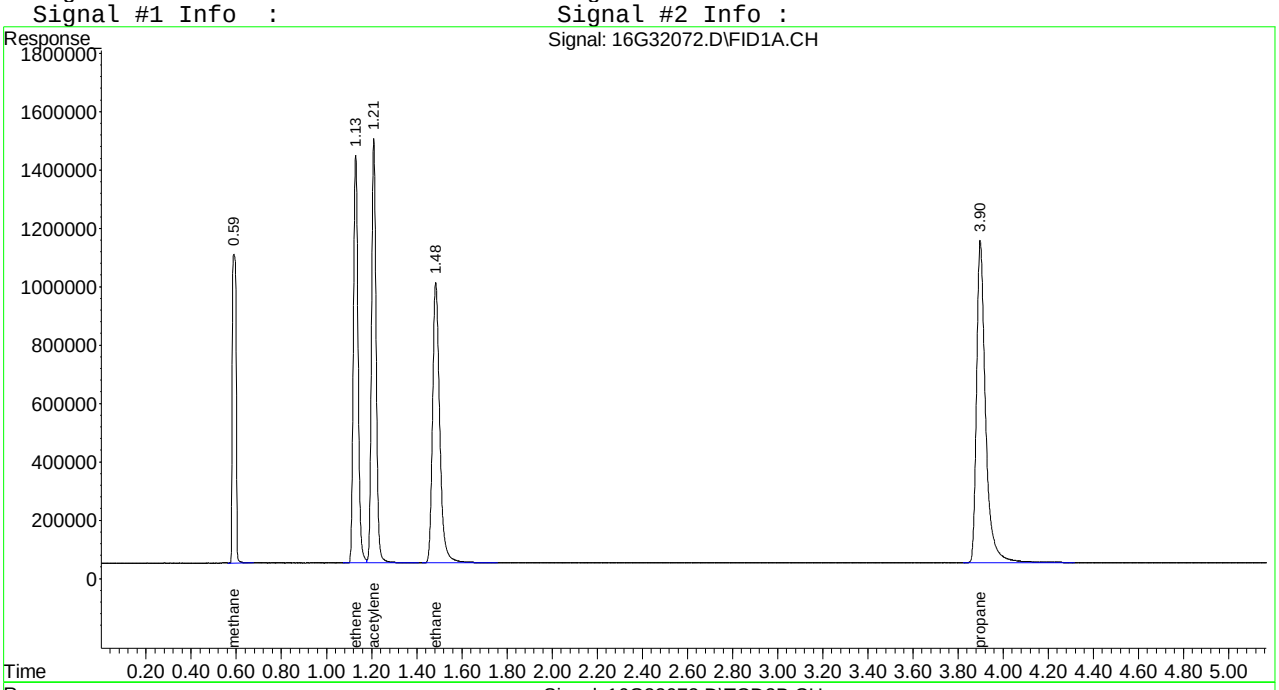
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32072.D RSK2EXT.M Thu Apr 26 12:44:29 2012 Page 1

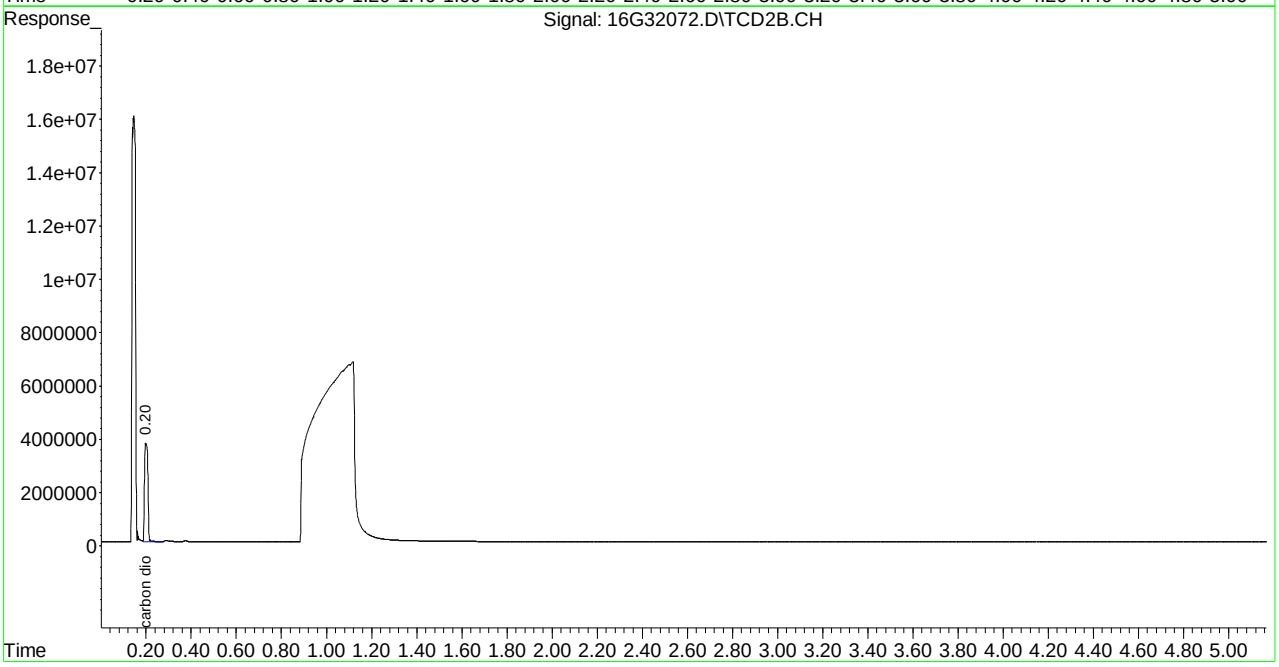
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\042612\16G32072.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\042612\16G32072.D\TCD2B.CH
Acq On : 26 Apr 2012 12:39 Operator: MDA
Sample : WG396228-02 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: Apr 26 12:44 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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\042612\16G32073.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\042612\16G32073.D\TCD2B.CH
Acq On : 26 Apr 2012 12:48 Operator: MDA
Sample : WG396228-03 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: Apr 26 12:54:50 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :

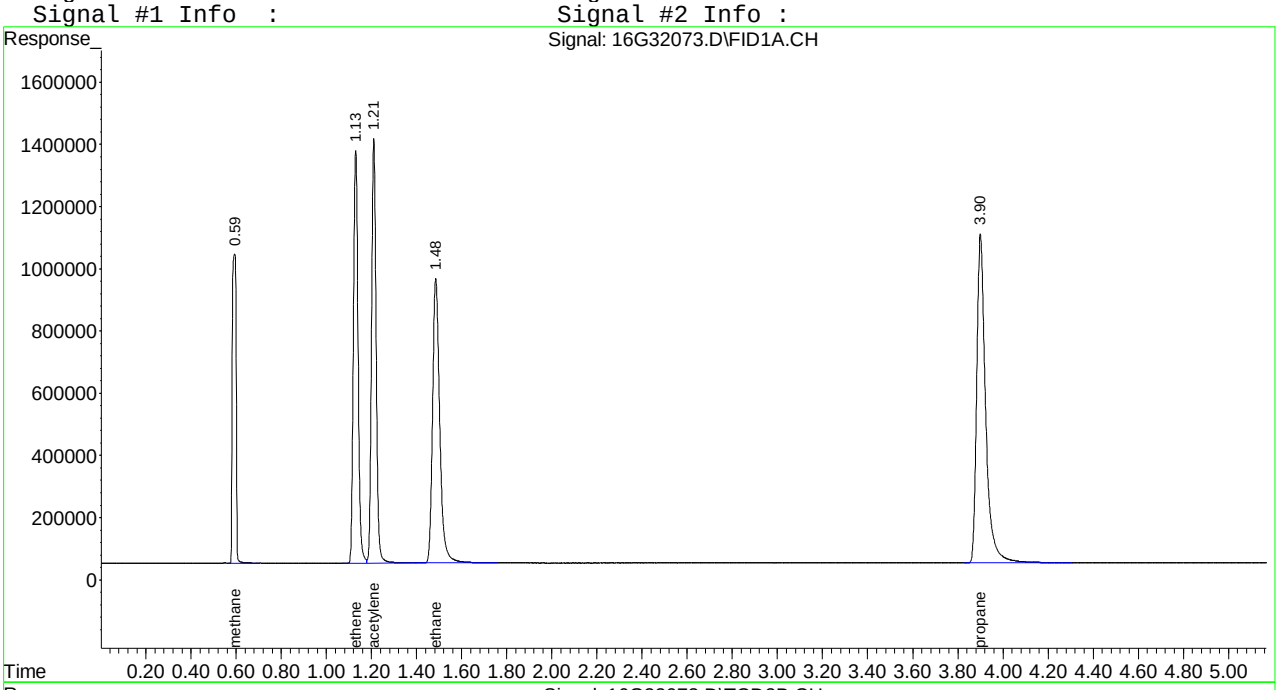
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	11575532	59.818 umol/
2) T	ethene	1.13	19071710	61.351 umol/
3) T	acetylene	1.21	19517491	62.920 umol/
4) T	ethane	1.49	20174593	63.256 umol/
5) T	propane	3.90	29248106	63.385 umol/
7) T	carbon dioxide	0.20	41971862	7030.989 umol/

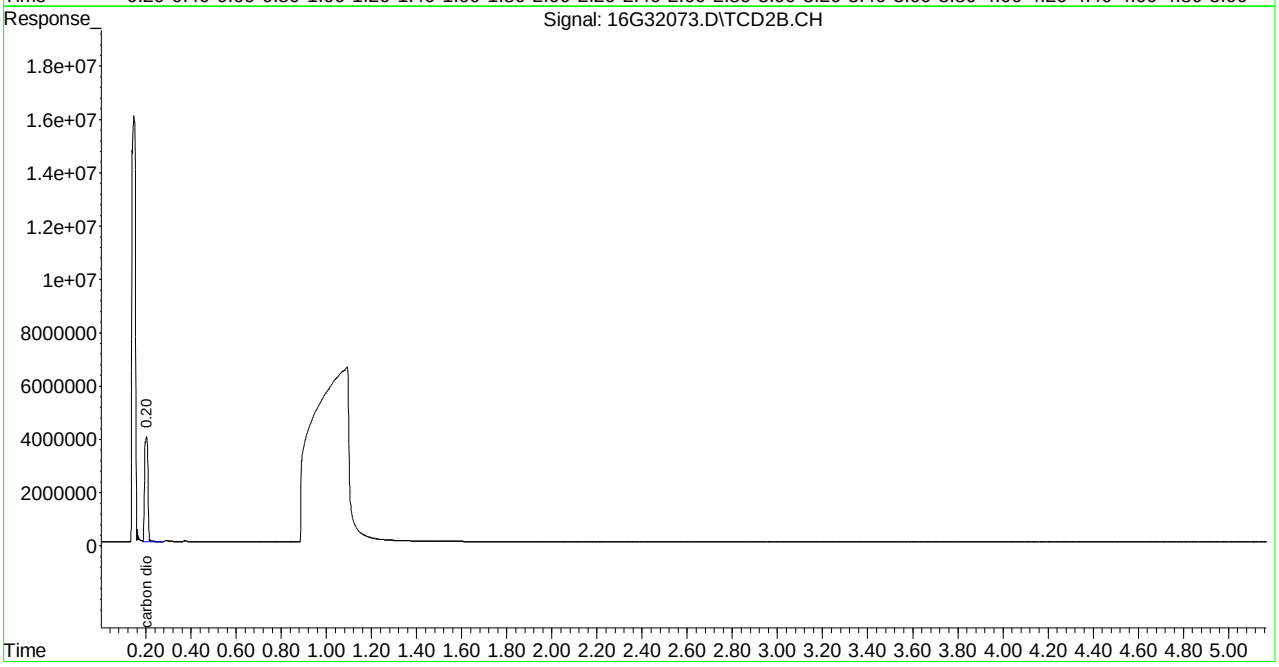
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32073.D RSK2EXT.M Thu Apr 26 12:54:50 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\042612\16G32073.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\042612\16G32073.D\TCD2B.CH
Acq On : 26 Apr 2012 12:48 Operator: MDA
Sample : WG396228-03 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: Apr 26 12:54 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 042312
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 :





2.2 Semivolatiles Data

2.2.1 Semivolatiles GC/MS Data (8270)

2.2.1.1 Summary Data

Login Number: L12040844
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3520C

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

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: The percent difference was out of range for the following analytes: 2,4-Dinitrophenol, 2-Chloronaphthalene, Pentachlorophenol. Please see the applicable QC report for a detailed presentation of the failures.

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

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: Recoveries out of range were observed for the following analytes: 3,3'-Dichlorobenzidine, 3-Nitroaniline. Please see the applicable QC report for a detailed presentation of the failures.

The LCS/LCSD pair exceeded % RPD criteria for 1,4-Dioxane and Benzoic Acid, however the recoveries for both the LCS and LCSD are within specified limits.

Matrix Spikes: There were no MS/MSD results associated with this sample delivery group, due to insufficient volume of sample. The laboratory included an LCS and LCS duplicate in the preparation batch in lieu of the NELAC prescribed MS/MSD. Microbac recommends site specific MS/MSD samples to avoid possible data qualification.

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: 45876
Approved By: Mike Cochran



Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16I-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 21:30
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	4M60615
Sample Tag:	01	**Units:**	ug/L		

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

Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16I-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 21:30
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	4M60615
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	72.1	10	123	
2-Fluorobiphenyl	60.1	43	116	
2-Fluorophenol	52.3	21	100	
Nitrobenzene-d5	58.8	35	114	
p-Terphenyl-d14	80.6	33	141	

Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16I-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 21:30
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	4M60615
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	54.8	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16I-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 21:30
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	4M60615
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		5.49		0.000	0.000
unknown		5.00		0.000	0.000
n-Hexadecanoic acid		8.44		0.000	0.000
Octadecanoic acid		9.55		0.000	0.000
unknown		12.2		0.000	0.000

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16S-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:04
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	4M60616
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	21.3	2.66
1,3,5-Trinitrobenzene	99-35-4		U	5.32	2.66
1,3-Dinitrobenzene	99-65-0		U	5.32	2.66
1,4-Dioxane	123-91-1		U	10.6	5.32
2,4,5-Trichlorophenol	95-95-4		U	5.32	2.66
2,4,6-Trichlorophenol	88-06-2		U	5.32	2.66
2,4-Dichlorophenol	120-83-2		U	5.32	2.66
2,4-Dimethylphenol	105-67-9		U	5.32	2.66
2,4-Dinitrophenol	51-28-5		U	26.6	13.3
2,4-Dinitrotoluene	121-14-2		U	5.32	2.66
2,6-Dinitrotoluene	606-20-2		U	5.32	2.66
2-Chloronaphthalene	91-58-7		U	5.32	2.66
2-Chlorophenol	95-57-8		U	5.32	2.66
2-Methylnaphthalene	91-57-6		U	5.32	2.66
2-Methylphenol	95-48-7		U	5.32	2.66
2-Nitroaniline	88-74-4		U	26.6	13.3
2-Nitrophenol	88-75-5		U	5.32	2.66
3-Nitroaniline	99-09-2		U	26.6	13.3
3,3'-Dichlorobenzidine	91-94-1		U	5.32	2.66
3-,4-Methylphenol	106-44-5		U	5.32	2.66
4-Bromophenyl-phenylether	101-55-3		U	5.32	2.66
4-Chloroaniline	106-47-8		U	5.32	2.66
4-Nitrophenol	100-02-7		U	26.6	13.3
Acenaphthene	83-32-9		U	5.32	2.66
Acenaphthylene	208-96-8		U	5.32	2.66
Anthracene	120-12-7		U	5.32	2.66
Benzo(a)anthracene	56-55-3		U	5.32	2.66
Benzo(a)pyrene	50-32-8		U	5.32	2.66
Benzo(b)fluoranthene	205-99-2		U	5.32	2.66
Benzo(g,h,i)Perylene	191-24-2		U	5.32	2.66
Benzo(k)fluoranthene	207-08-9		U	5.32	2.66
Benzoic acid	65-85-0		U	21.3	10.6
Benzyl alcohol	100-51-6		U	5.32	2.66

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-16S-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:04
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	4M60616
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.32	2.66
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.32	2.66
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.32	2.66
Butylbenzylphthalate	85-68-7		U	5.32	2.66
Carbazole	86-74-8		U	21.3	2.66
Chrysene	218-01-9		U	5.32	2.66
Di-N-Butylphthalate	84-74-2		U	5.32	2.66
Di-n-octylphthalate	117-84-0		U	5.32	2.66
Dibenzo(a,h)Anthracene	53-70-3		U	5.32	2.66
Dibenzofuran	132-64-9		U	5.32	2.66
Diethylphthalate	84-66-2		U	5.32	2.66
Dimethylphthalate	131-11-3		U	5.32	2.66
Fluoranthene	206-44-0		U	5.32	2.66
Fluorene	86-73-7		U	5.32	2.66
Hexachlorobenzene	118-74-1		U	5.32	2.66
Hexachlorobutadiene	87-68-3		U	5.32	2.66
Hexachlorocyclopentadiene	77-47-4		U	5.32	2.66
Hexachloroethane	67-72-1		U	5.32	2.66
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.32	2.66
Isophorone	78-59-1		U	5.32	2.66
N-Nitrosodiphenylamine	86-30-6		U	5.32	2.66
Naphthalene	91-20-3		U	5.32	2.66
Nitrobenzene	98-95-3		U	5.32	2.66
Pentachlorophenol	87-86-5		U	26.6	13.3
Phenanthrene	85-01-8		U	5.32	2.66
Phenol	108-95-2		U	5.32	2.66
Pyrene	129-00-0		U	5.32	2.66

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	90.2	10	123	
2-Fluorobiphenyl	63.0	43	116	
2-Fluorophenol	54.9	21	100	
Nitrobenzene-d5	61.0	35	114	
p-Terphenyl-d14	111	33	141	

Certificate of Analysis

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-16S-042412 **Prep Method:** 3520C **Prep Date:** 04/25/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396824 **Analyst:** CAA **Run Date:** 05/01/2012 22:04
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** 4M60616
Sample Tag: 01 **Units:** ug/L

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	60.2	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-16S-042412 **Prep Method:** 3520C **Prep Date:** 04/25/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396824 **Analyst:** CAA **Run Date:** 05/01/2012 22:04
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** 4M60616
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		4.36		0.000	0.000
unknown		5.38		0.000	0.000
n-Hexadecanoic acid		5.98		0.000	0.000
Octadecanoic acid		7.81		0.000	0.000
unknown		6.74		0.000	0.000
unknown		5.51		0.000	0.000
unknown		21.5		0.000	0.000
unknown		6.95		0.000	0.000
unknown		9.16		0.000	0.000
unknown		9.43		0.000	0.000
unknown		6.88		0.000	0.000

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-07-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:38
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	4M60617
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		5.00		0.000	0.000
2-Butanone, 4-hydroxy-		9.53		0.000	0.000
unknown		6.20		0.000	0.000
unknown		6.35		0.000	0.000
Dodecanoic acid		4.24		0.000	0.000
n-Hexadecanoic acid		7.77		0.000	0.000
Octadecanoic acid		16.5		0.000	0.000
unknown		4.29		0.000	0.000
unknown		7.41		0.000	0.000
unknown		10.8		0.000	0.000
unknown		5.90		0.000	0.000
unknown		7.27		0.000	0.000
unknown		9.04		0.000	0.000
unknown		6.29		0.000	0.000

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-07-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:38
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	4M60617
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	20.4	2.55
1,3,5-Trinitrobenzene	99-35-4		U	5.10	2.55
1,3-Dinitrobenzene	99-65-0		U	5.10	2.55
1,4-Dioxane	123-91-1		U	10.2	5.10
2,4,5-Trichlorophenol	95-95-4		U	5.10	2.55
2,4,6-Trichlorophenol	88-06-2		U	5.10	2.55
2,4-Dichlorophenol	120-83-2		U	5.10	2.55
2,4-Dimethylphenol	105-67-9		U	5.10	2.55
2,4-Dinitrophenol	51-28-5		U	25.5	12.8
2,4-Dinitrotoluene	121-14-2		U	5.10	2.55
2,6-Dinitrotoluene	606-20-2		U	5.10	2.55
2-Chloronaphthalene	91-58-7		U	5.10	2.55
2-Chlorophenol	95-57-8		U	5.10	2.55
2-Methylnaphthalene	91-57-6		U	5.10	2.55
2-Methylphenol	95-48-7		U	5.10	2.55
2-Nitroaniline	88-74-4		U	25.5	12.8
2-Nitrophenol	88-75-5		U	5.10	2.55
3-Nitroaniline	99-09-2		U	25.5	12.8
3,3'-Dichlorobenzidine	91-94-1		U	5.10	2.55
3-,4-Methylphenol	106-44-5		U	5.10	2.55
4-Bromophenyl-phenylether	101-55-3		U	5.10	2.55
4-Chloroaniline	106-47-8		U	5.10	2.55
4-Nitrophenol	100-02-7		U	25.5	12.8
Acenaphthene	83-32-9		U	5.10	2.55
Acenaphthylene	208-96-8		U	5.10	2.55
Anthracene	120-12-7		U	5.10	2.55
Benzo(a)anthracene	56-55-3		U	5.10	2.55
Benzo(a)pyrene	50-32-8		U	5.10	2.55
Benzo(b)fluoranthene	205-99-2		U	5.10	2.55
Benzo(g,h,i)Perylene	191-24-2		U	5.10	2.55
Benzo(k)fluoranthene	207-08-9		U	5.10	2.55
Benzoic acid	65-85-0		U	20.4	10.2
Benzyl alcohol	100-51-6		U	5.10	2.55

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-07-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:38
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	4M60617
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.10	2.55
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.10	2.55
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.10	2.55
Butylbenzylphthalate	85-68-7		U	5.10	2.55
Carbazole	86-74-8		U	20.4	2.55
Chrysene	218-01-9		U	5.10	2.55
Di-N-Butylphthalate	84-74-2		U	5.10	2.55
Di-n-octylphthalate	117-84-0		U	5.10	2.55
Dibenzo(a,h)Anthracene	53-70-3		U	5.10	2.55
Dibenzofuran	132-64-9		U	5.10	2.55
Diethylphthalate	84-66-2		U	5.10	2.55
Dimethylphthalate	131-11-3		U	5.10	2.55
Fluoranthene	206-44-0		U	5.10	2.55
Fluorene	86-73-7		U	5.10	2.55
Hexachlorobenzene	118-74-1		U	5.10	2.55
Hexachlorobutadiene	87-68-3		U	5.10	2.55
Hexachlorocyclopentadiene	77-47-4		U	5.10	2.55
Hexachloroethane	67-72-1		U	5.10	2.55
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.10	2.55
Isophorone	78-59-1		U	5.10	2.55
N-Nitrosodiphenylamine	86-30-6		U	5.10	2.55
Naphthalene	91-20-3		U	5.10	2.55
Nitrobenzene	98-95-3		U	5.10	2.55
Pentachlorophenol	87-86-5		U	25.5	12.8
Phenanthrene	85-01-8		U	5.10	2.55
Phenol	108-95-2		U	5.10	2.55
Pyrene	129-00-0		U	5.10	2.55

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	102	10	123	
2-Fluorobiphenyl	72.0	43	116	
2-Fluorophenol	56.9	21	100	
Nitrobenzene-d5	68.0	35	114	
p-Terphenyl-d14	78.7	33	141	

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-07-042412	**Prep Method:**	3520C	**Prep Date:**	04/25/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396824	**Analyst:**	CAA	**Run Date:**	05/01/2012 22:38
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	4M60617
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	63.4	10	94	

U	Not detected at or above adjusted sample detection limit.

2.2.1.2 QC Summary Data

Example 8270 Calculations

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

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

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

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

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

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

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

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

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

Dry weight correction:

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

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

4.0 Concentration from Linear Regression

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

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

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

m = slope from curve plot

b = intercept from curve plot

Step 2: Calculate y from Quantitation Report

y = 16790/784838 = 0.02139

Step 3: Solve for x

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

Step 4: Solve for analyte concentration Cx

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

Example Spreadsheet Calculation:

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

5.0 Concentration from Quadratic Regression

Step 1 - Retrieve Curve Data from Plot, y = Ax^2 + Bx + C
Where:
Ax^2 + Bx + (C - y) = 0
A, B, C = constants from the ICAL quadratic regression
y = Response ratio = Area of analyte/Area of internal standard (IS)
x = Amount ratio = Concentration of analyte/concentration of IS

Step 2: Calculate y from Quantitation Report

y = Ax/Ais

Step 3: Solve for x using the quadratic formula
Ax^2 + Bx + C - y = 0

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

Step 4: Solve for analyte concentration Cx

Cx = (Cis)(Amount ratio)

Example Spreadsheet Calculation:

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

Microbac Laboratories Inc.
Continuous Sample Extract Log

Workgroup: WG396102
Analyst: CSH
Spike Analyst: CSH
Method: 3520C
Run Date: 04/25/2012 11:00
SOP: EXB01 Revison 16
Spike Witness: RAH
Surr Solution: STD50249

TIME ON: 14:45 OFF: 09:00 ON: 16:00 OFF: 10:30
Methylene Chloride Lot #: COA16058
Sodium Sulfate,Anhydrous,Granular (Lot #COA15788
1:1 H2SO4 Lot #: RGT17192
10N NaOH Lot #: RGT17237

	SAMPLE #	Type	Reference	Prod	pH	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12040001-03	ML03		827-3520	<2>12	1000 mL	.5 mL	.05 mL	STD51285	1 mL	Colored
2	L12040001-04	ML04		827-3520	<2>12	1000 mL	.5 mL	.25 mL	STD51276	1 mL	Colored
3	L12040003-03	ML03		827-3520	<2>12	1000 mL	.5 mL	.1 mL	STD51285	1 mL	Colored
4	L12040003-04	ML04		827-3520	<2>12	1000 mL	.5 mL	.5 mL	STD51276	1 mL	Colored
5	L12040791-01	SAMP		827-SPE	<2>12	980 mL	.5 mL			1 mL	Transparent
6	L12040844-01	SAMP		827-SPE-DIO	<2>12	890 mL	.5 mL			1 mL	Transparent
7	L12040844-03	SAMP		827-SPE-DIO	<2>12	940 mL	.5 mL			1 mL	Transparent
8	L12040844-05	SAMP		827-SPE-DIO	<2>12	980 mL	.5 mL			1 mL	Colored
9	WG396102-01	BLANK		827-SPE	<2>12	1000 mL	.5 mL			1 mL	Transparent
10	WG396102-02	LCS		827-SPE	<2>12	1000 mL	.5 mL	1 mL	STD51286	1 mL	Colored
11	WG396102-03	LCS2		827-SPE	<2>12	1000 mL	.5 mL	1 mL	STD51286	1 mL	Colored

Due to insufficient sample volume, this preparation batch failed to include the method prescribed MS and MSD.

L12040001-03	LOD
L12040001-04	LOD
L12040003-03	LOQ
L12040003-04	LOQ

Analyst: Chris Hill

Reviewer:

EXTRACT - Modified 01/23/2009
PDF ID: 2395730
Report generated: 04/27/2012 16:01

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.

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.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C **AAB#:** WG396824

Login Number: L12040844

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-16I-042412	01	04/24/12					04/25/12	.9	7		05/01/12	6.4	40	
MW-16S-042412	03	04/24/12					04/25/12	.9	7		05/01/12	6.5	40	
MW-07-042412	05	04/24/12					04/25/12	.9	7		05/01/12	6.5	40	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2400181
Report generated 05/04/2012 13:29

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12040844
Instrument Id: HPMS4
Workgroup (AAB#): WG396824

Method: 8270
CAL ID: HPMS4-19-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4	5	6
L12040844-01	1.00	01	72.1	60.1	52.3	58.8	80.6	54.8
L12040844-03	1.00	01	90.2	63.0	54.9	61.0	111	60.2
L12040844-05	1.00	01	102	72.0	56.9	68.0	78.7	63.4
WG396102-01	1.00	03	83.7	64.1	56.1	63.2	113	61.0
WG396102-02	1.00	02	106	84.2	71.5	77.0	115	77.3
WG396102-03	1.00	02	101	89.6	83.8	87.4	114	86.3

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: 2400192
Report generated: 05/04/2012 13:30

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG396824
Blank File ID: 4M60609
Blank Sample ID: WG396102-01
Prep Date: 04/25/12 11:00
Instrument ID: HPMS4
Analyzed Date: 05/01/12 18:05
Method: 8270C
Analyst: CAA

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396102-02	4M60610	05/01/12 18:39	02
LCS2	WG396102-03	4M60611	05/01/12 19:13	02
MW-16I-042412	L12040844-01	4M60615	05/01/12 21:30	01
MW-16S-042412	L12040844-03	4M60616	05/01/12 22:04	01
MW-07-042412	L12040844-05	4M60617	05/01/12 22:38	01

Report Name: BLANK_SUMMARY
PDF File ID: 2400182
Report generated 05/04/2012 13:29

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040844 Prep Date:04/25/12 11:00 Sample ID:WG396102-01
Instrument ID:HPMS4 Run Date:05/01/12 18:05 Prep Method:3520
File ID:4M60609 Analyst:CAA Method:8270C
Workgroup (AAB#):WG396824 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: 2400183
04-MAY-2012 13:29

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/25/12 11:00 Sample ID: WG396102-01
Instrument ID: HPMS4 Run Date: 05/01/12 18:05 Prep Method: 3520
File ID: 4M60609 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG396824 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	83.7	10 - 123	PASS
2-Fluorobiphenyl	64.1	43 - 116	PASS
2-Fluorophenol	56.1	21 - 100	PASS
Nitrobenzene-d5	63.2	35 - 114	PASS
p-Terphenyl-d14	113	33 - 141	PASS
Phenol-d5	61.0	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: 2400183
04-MAY-2012 13:29

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number:L12040844 Analyst:CAA Prep Method:3520C
Instrument ID:HPMS4 Matrix:Water Method:8270C
Workgroup (AAB#):WG396824 Units:ug/L
QC Key:WATERLOO Lot #:STD51286

Sample ID:WG396102-02 LCS File ID:4M60610 Run Date:05/01/2012 18:39
Sample ID:WG396102-03 LCS2 File ID:4M60611 Run Date:05/01/2012 19:13

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1'-Biphenyl	50.0	37.8	75.7	50.0	40.5	81.0	6.83	40 - 140	30	
1,3,5-Trinitrobenzene	50.0	55.3	111	50.0	56.7	113	2.37	10 - 120	30	
1,3-Dinitrobenzene	50.0	48.6	97.1	50.0	50.2	100	3.37	30 - 130	30	
1,4-Dioxane	50.0	26.3	52.6	50.0	36.4	72.7	32.1	50 - 150	30	#
2,4,5-Trichlorophenol	50.0	50.9	102	50.0	53.0	106	4.03	35 - 120	30	
2,4,6-Trichlorophenol	50.0	46.7	93.3	50.0	49.3	98.6	5.43	30 - 120	30	
2,4-Dichlorophenol	50.0	41.5	83.0	50.0	45.1	90.1	8.17	20 - 110	30	
2,4-Dimethylphenol	50.0	39.4	78.7	50.0	42.7	85.4	8.06	20 - 120	30	
2,4-Dinitrophenol	50.0	59.4	119	50.0	58.3	117	1.95	20 - 140	30	
2,4-Dinitrotoluene	50.0	54.4	109	50.0	54.7	109	0.572	50 - 139	30	
2,6-Dinitrotoluene	50.0	51.2	102	50.0	52.2	104	1.93	50 - 120	30	
2-Chloronaphthalene	50.0	48.3	96.7	50.0	52.4	105	7.97	25 - 120	30	
2-Chlorophenol	50.0	36.4	72.7	50.0	41.4	82.7	12.9	25 - 110	30	
2-Methylnaphthalene	50.0	39.5	79.0	50.0	42.6	85.3	7.68	25 - 120	30	
2-Methylphenol	50.0	37.7	75.5	50.0	41.8	83.7	10.3	20 - 110	30	
2-Nitroaniline	50.0	47.2	94.3	50.0	49.6	99.1	4.97	45 - 115	30	
2-Nitrophenol	50.0	38.9	77.7	50.0	43.0	85.9	9.99	20 - 115	30	
3-Nitroaniline	50.0	68.8	138	50.0	68.9	138	0.238	40 - 120	30	*
3,3'-Dichlorobenzidine	50.0	77.1	154	50.0	76.1	152	1.37	30 - 140	30	*
3-,4-Methylphenol	50.0	43.5	87.0	50.0	48.1	96.2	9.96	20 - 110	30	
4-Bromophenyl-phenylether	50.0	51.2	102	50.0	51.7	103	0.980	40 - 115	30	
4-Chloroaniline	50.0	44.0	88.0	50.0	46.2	92.3	4.83	25 - 120	30	
4-Nitrophenol	50.0	46.8	93.5	50.0	45.8	91.5	2.16	10 - 132	30	
Acenaphthene	50.0	44.7	89.5	50.0	47.0	94.1	5.01	30 - 120	30	
Acenaphthylene	50.0	46.7	93.4	50.0	49.6	99.2	5.98	30 - 120	30	
Anthracene	50.0	47.2	94.5	50.0	47.4	94.9	0.408	55 - 130	30	
Benzo(a)anthracene	50.0	54.3	109	50.0	53.4	107	1.63	60 - 130	30	
Benzo(a)pyrene	50.0	57.0	114	50.0	56.4	113	1.18	55 - 135	30	
Benzo(b)fluoranthene	50.0	55.3	111	50.0	56.0	112	1.34	45 - 125	30	
Benzo(g,h,i)Perylene	50.0	55.4	111	50.0	54.0	108	2.50	45 - 140	30	
Benzo(k)fluoranthene	50.0	53.9	108	50.0	56.8	114	5.30	55 - 140	30	
Benzoic acid	50.0	13.7	27.5	50.0	5.98	12.0	78.7	10 - 100	30	#
Benzyl alcohol	50.0	39.2	78.4	50.0	43.5	86.9	10.3	20 - 110	30	
Bis(2-Chloroethyl)ether	50.0	36.2	72.4	50.0	42.1	84.3	15.2	25 - 110	30	
Bis(2-Chloroethoxy)Methane	50.0	44.5	89.1	50.0	49.6	99.1	10.7	20 - 105	30	
bis(2-Ethylhexyl)phthalate	50.0	58.3	117	50.0	59.4	119	1.80	50 - 150	30	
Butylbenzylphthalate	50.0	60.5	121	50.0	61.3	123	1.36	55 - 150	30	
Carbazole	50.0	54.1	108	50.0	53.2	106	1.63	50 - 130	30	
Chrysene	50.0	56.4	113	50.0	56.1	112	0.470	55 - 130	30	
Di-N-Butylphthalate	50.0	55.0	110	50.0	54.9	110	0.103	55 - 118	30	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2400184
Report generated: 05/04/2012 13:29

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number:L12040844 Analyst:CAA Prep Method:3520C
Instrument ID:HPMS4 Matrix:Water Method:8270C
Workgroup (AAB#):WG396824 Units:ug/L
QC Key:WATERLOO Lot #:STD51286

Sample ID:WG396102-02 LCS File ID:4M60610 Run Date:05/01/2012 18:39
Sample ID:WG396102-03 LCS2 File ID:4M60611 Run Date:05/01/2012 19:13

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Di-n-octylphthalate	50.0	62.2	124	50.0	63.0	126	1.23	40 - 146	30	
Dibenzo(a,h)Anthracene	50.0	57.1	114	50.0	55.6	111	2.74	45 - 125	30	
Dibenzofuran	50.0	47.0	93.9	50.0	49.4	98.7	4.97	35 - 115	30	
Diethylphthalate	50.0	53.7	107	50.0	54.5	109	1.53	45 - 120	30	
Dimethylphthalate	50.0	51.5	103	50.0	53.5	107	3.80	25 - 112	30	
Fluoranthene	50.0	52.5	105	50.0	51.2	102	2.46	50 - 137	30	
Fluorene	50.0	46.8	93.5	50.0	48.8	97.6	4.29	40 - 120	30	
Hexachlorobenzene	50.0	51.4	103	50.0	51.0	102	0.765	50 - 130	30	
Hexachlorobutadiene	50.0	29.9	59.7	50.0	34.1	68.3	13.4	24 - 105	30	
Hexachlorocyclopentadiene	50.0	27.8	55.6	50.0	30.3	60.6	8.67	20 - 143	30	
Hexachloroethane	50.0	19.7	39.4	50.0	25.0	50.0	23.6	25 - 95	30	
Indeno(1,2,3-cd)pyrene	50.0	56.2	112	50.0	55.3	111	1.71	50 - 135	30	
Isophorone	50.0	43.0	86.0	50.0	47.3	94.5	9.39	30 - 110	30	
N-Nitrosodiphenylamine	100	86.3	86.3	100	88.4	88.4	2.39	40 - 110	30	
Naphthalene	50.0	36.7	73.5	50.0	41.1	82.1	11.1	25 - 110	30	
Nitrobenzene	50.0	39.6	79.3	50.0	44.4	88.9	11.4	30 - 110	30	
Pentachlorophenol	50.0	60.6	121	50.0	57.2	114	5.72	40 - 140	30	
Phenanthrene	50.0	51.6	103	50.0	51.6	103	0.0361	55 - 120	30	
Phenol	50.0	37.6	75.1	50.0	42.3	84.6	11.9	10 - 120	30	
Pyrene	50.0	55.2	110	50.0	55.4	111	0.473	55 - 130	30	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
2,4,6-Tribromophenol	106	101	10 - 123	PASS
2-Fluorobiphenyl	84.2	89.6	43 - 116	PASS
2-Fluorophenol	71.5	83.8	21 - 100	PASS
Nitrobenzene-d5	77.0	87.4	35 - 114	PASS
p-Terphenyl-d14	115	114	33 - 141	PASS
Phenol-d5	77.3	86.3	10 - 94	PASS

* EXCEEDS %REC LIMIT
# EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2400184
Report generated: 05/04/2012 13:29

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040844
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: 2400189
Report generated 05/04/2012 13:29

DFTPP

Login Number: L12040844
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
WG396671-02	CCV	01	05/01/2012 13:31	
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	
WG396102-01	BLANK	03	05/01/2012 18:05	
WG396102-01	BLANK	03	05/01/2012 18:05	
WG396102-02	LCS	02	05/01/2012 18:39	
WG396102-03	LCS2	02	05/01/2012 19:13	
L12040844-01	MW-16I-042412	01	05/01/2012 21:30	
L12040844-03	MW-16S-042412	01	05/01/2012 22:04	
L12040844-05	MW-07-042412	01	05/01/2012 22:38	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2400189
Report generated 05/04/2012 13:29

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12040844 **Instrument ID:** HPMS4
Analytical Method: 8270C **Initial Calibration Date:** 19-APR-12 13:23
ICAL Workgroup: WG395394 **Column ID:** F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
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: L12040844 **Instrument ID:** HPMS4
Analytical Method: 8270C **Initial Calibration Date:** 19-APR-12 13:23
ICAL Workgroup: WG395394 **Column ID:** F

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

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

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

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Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844 **Instrument ID:** HPMS4

Analytical Method: 8270C **Initial Calibration Date:** 01-MAY-12 16:57

ICAL Workgroup: WG396709 **Column ID:** F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
1,1'-Biphenyl		1.642	6.66		

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

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

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INITIAL CALIBRATION DATA

Login Number: L12040844
Analytical Method: 8270C
Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-02			WG395394-03			WG395394-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	50.0	302655.000	0.3692	3.00	15865.0000	0.3732	10.0	48642.0000	0.3812
2,4-Dichlorophenol	50.0	406146.000	0.2843	3.00	23297.0000	0.3097	10.0	68171.0000	0.3052
2-Nitrophenol	50.0	296019.000	0.2072	3.00	14686.0000	0.1953	10.0	44266.0000	0.1982
Acenaphthene	50.0	959014.000	1.170	3.00	54687.0000	1.286	10.0	164631.000	1.290
Benzo[a]pyrene	50.0	1420992.00	1.050	3.00	76197.0000	1.089	10.0	230518.000	1.068
Di-n-Octyl Phthalate	50.0	1737436.00	1.283	3.00	92158.0000	1.317	10.0	278406.000	1.290
Fluoranthene	50.0	1596911.00	1.089	3.00	93933.0000	1.257	10.0	276101.000	1.217
Hexachlorobutadiene	50.0	236674.000	0.1657	3.00	13857.0000	0.1842	10.0	39698.0000	0.1777
Pentachlorophenol	50.0	206843.000	0.1411	NA	NA	NA	10.0	31968.0000	0.1409
Phenol	50.0	548117.000	1.480	3.00	33658.0000	1.678	10.0	94119.0000	1.582
2,4-Dinitrophenol	50.0	130897.000	0.1597	NA	NA	NA	NA	NA	NA
4-Nitrophenol	50.0	186191.000	0.2271	NA	NA	NA	10.0	32506.0000	0.2547
Hexachlorocyclopentadiene	50.0	244269.000	0.2980	3.00	10305.0000	0.2424	10.0	34278.0000	0.2686
n-Nitrosodipropylamine	50.0	311009.000	0.8398	3.00	19190.0000	0.9568	10.0	56111.0000	0.9434
1,3-Dinitrobenzene	50.0	201353.000	0.2456	3.00	9788.00000	0.2302	10.0	31289.0000	0.2452
1,4-Dioxane	50.0	185033.000	0.4996	3.00	9565.00000	0.4769	10.0	31667.0000	0.5324
2,4,5-Trichlorophenol	50.0	308844.000	0.3768	3.00	16640.0000	0.3914	10.0	49310.0000	0.3864
2,4-Dimethylphenol	50.0	463322.000	0.3243	3.00	33490.0000	0.4453	10.0	81553.0000	0.3651
2,4-Dinitrotoluene	50.0	332745.000	0.4059	3.00	17015.0000	0.4002	10.0	53272.0000	0.4175
2,6-Dinitrotoluene	50.0	256989.000	0.3135	3.00	13905.0000	0.3271	10.0	41342.0000	0.3240
2-Chloronaphthalene	50.0	906729.000	1.106	3.00	52303.0000	1.230	10.0	153572.000	1.204
2-Chlorophenol	50.0	497875.000	1.344	3.00	29118.0000	1.452	10.0	83952.0000	1.412
2-Methylnaphthalene	50.0	967916.000	0.6775	3.00	57527.0000	0.7649	10.0	167733.000	0.7510
2-Methylphenol	50.0	380206.000	1.027	3.00	22411.0000	1.117	10.0	64478.0000	1.084
2-Nitroaniline	50.0	261334.000	0.3188	3.00	13815.0000	0.3250	10.0	42993.0000	0.3369
3,3'-Dichlorobenzidine	50.0	322552.000	0.2327	3.00	25330.0000	0.3536	10.0	53915.0000	0.2449
3-Nitroaniline	50.0	174456.000	0.2128	NA	NA	NA	10.0	29679.0000	0.2326
4-Bromophenyl Phenyl Ether	50.0	293263.000	0.2000	3.00	16506.0000	0.2208	10.0	49608.0000	0.2187
4-Chloroaniline	50.0	522329.000	0.3656	3.00	34347.0000	0.4567	10.0	88805.0000	0.3976
Acenaphthylene	50.0	1459231.00	1.780	3.00	86364.0000	2.031	10.0	253419.000	1.986
Anthracene	50.0	1564112.00	1.067	3.00	91274.0000	1.221	10.0	268336.000	1.183
Benzo[a]anthracene	50.0	1436678.00	1.036	3.00	83823.0000	1.170	10.0	248867.000	1.130
Benzo[b]fluoranthene	50.0	1510511.00	1.116	3.00	87582.0000	1.251	10.0	261129.000	1.210
Benzo[ghi]perylene	50.0	1336874.00	0.9874	3.00	70328.0000	1.005	10.0	213268.000	0.9878
Benzo[k]fluoranthene	50.0	1477424.00	1.091	3.00	80556.0000	1.151	10.0	242271.000	1.122
Benzoic Acid	50.0	336174.000	0.2353	NA	NA	NA	NA	NA	NA
Benzyl Alcohol	50.0	323130.000	0.8725	3.00	18359.0000	0.9154	10.0	52708.0000	0.8862
Butyl Benzyl Phthalate	50.0	736908.000	0.5316	3.00	42313.0000	0.5907	10.0	126613.000	0.5751
Carbazole	50.0	1383835.00	0.9437	3.00	80012.0000	1.071	10.0	214134.000	0.9439
Chrysene	50.0	1327816.00	0.9578	3.00	81007.0000	1.131	10.0	234491.000	1.065
Di-n-Butyl Phthalate	50.0	1699050.00	1.159	3.00	98435.0000	1.317	10.0	291024.000	1.283
Dibenz[ah]anthracene	50.0	1352159.00	0.9987	3.00	67905.0000	0.9703	10.0	213369.000	0.9883

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INITIAL CALIBRATION DATA

Login Number: L12040844
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: L12040844
Analytical Method: 8270C
Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-05			WG395394-06			WG395394-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	15.0	77554.0000	0.3761	25.0	124477.000	0.3645	80.0	439102.000	0.3649
2,4-Dichlorophenol	15.0	106895.000	0.2950	25.0	170393.000	0.2845	80.0	591204.000	0.2792
2-Nitrophenol	15.0	73595.0000	0.2031	25.0	120323.000	0.2009	80.0	428368.000	0.2023
Acenaphthene	15.0	263554.000	1.278	25.0	408883.000	1.197	80.0	1355981.00	1.127
Benzo[a]pyrene	15.0	370228.000	1.061	25.0	586115.000	1.029	80.0	2027472.00	1.059
Di-n-Octyl Phthalate	15.0	449194.000	1.288	25.0	719604.000	1.263	80.0	2511032.00	1.312
Fluoranthene	15.0	437692.000	1.180	25.0	683155.000	1.108	80.0	2265098.00	1.057
Hexachlorobutadiene	15.0	63330.0000	0.1748	25.0	100093.000	0.1671	80.0	335869.000	0.1586
Pentachlorophenol	15.0	53277.0000	0.1436	25.0	85623.0000	0.1389	80.0	297153.000	0.1387
Phenol	15.0	149867.000	1.583	25.0	235368.000	1.495	80.0	801301.000	1.483
2,4-Dinitrophenol	15.0	22655.0000	0.1099	25.0	42104.0000	0.1233	80.0	201666.000	0.1676
4-Nitrophenol	15.0	53528.0000	0.2596	25.0	85342.0000	0.2499	80.0	267741.000	0.2225
Hexachlorocyclopentadiene	15.0	57593.0000	0.2793	25.0	93776.0000	0.2746	80.0	336327.000	0.2795
n-Nitrosodipropylamine	15.0	89924.0000	0.9501	25.0	138764.000	0.8815	80.0	435156.000	0.8054
1,3-Dinitrobenzene	15.0	49953.0000	0.2423	25.0	82367.0000	0.2412	80.0	300061.000	0.2493
1,4-Dioxane	15.0	48051.0000	0.5077	25.0	77889.0000	0.4948	80.0	257642.000	0.4768
2,4,5-Trichlorophenol	15.0	80341.0000	0.3896	25.0	126653.000	0.3709	80.0	450522.000	0.3744
2,4-Dimethylphenol	15.0	122457.000	0.3379	25.0	197889.000	0.3304	80.0	674316.000	0.3184
2,4-Dinitrotoluene	15.0	86594.0000	0.4200	25.0	136727.000	0.4004	80.0	484503.000	0.4026
2,6-Dinitrotoluene	15.0	66191.0000	0.3210	25.0	106277.000	0.3112	80.0	380371.000	0.3161
2-Chloronaphthalene	15.0	241377.000	1.171	25.0	384238.000	1.125	80.0	1316383.00	1.094
2-Chlorophenol	15.0	131982.000	1.394	25.0	209656.000	1.332	80.0	725693.000	1.343
2-Methylnaphthalene	15.0	262619.000	0.7247	25.0	413423.000	0.6902	80.0	1399298.00	0.6608
2-Methylphenol	15.0	103944.000	1.098	25.0	163750.000	1.040	80.0	561625.000	1.039
2-Nitroaniline	15.0	67899.0000	0.3293	25.0	110145.000	0.3226	80.0	389293.000	0.3235
3,3'-Dichlorobenzidine	15.0	83197.0000	0.2350	25.0	128645.000	0.2212	80.0	433623.000	0.2166
3-Nitroaniline	15.0	44675.0000	0.2167	25.0	69340.0000	0.2031	80.0	283165.000	0.2353
4-Bromophenyl Phenyl Ether	15.0	77958.0000	0.2101	25.0	122053.000	0.1980	80.0	414109.000	0.1933
4-Chloroaniline	15.0	129166.000	0.3565	25.0	194712.000	0.3251	80.0	840914.000	0.3971
Acenaphthylene	15.0	404588.000	1.962	25.0	629983.000	1.845	80.0	2059422.00	1.711
Anthracene	15.0	425502.000	1.147	25.0	667031.000	1.082	80.0	2228606.00	1.040
Benzo[a]anthracene	15.0	392679.000	1.109	25.0	614266.000	1.056	80.0	2052367.00	1.025
Benzo[b]fluoranthene	15.0	406702.000	1.166	25.0	655699.000	1.151	80.0	2178762.00	1.138
Benzo[ghi]perylene	15.0	337233.000	0.9668	25.0	544579.000	0.9557	80.0	1882226.00	0.9835
Benzo[k]fluoranthene	15.0	363539.000	1.042	25.0	603465.000	1.059	80.0	2073723.00	1.084
Benzoic Acid	15.0	73064.0000	0.2016	25.0	127036.000	0.2121	80.0	518434.000	0.2448
Benzyl Alcohol	15.0	85215.0000	0.9003	25.0	135966.000	0.8638	80.0	480683.000	0.8896
Butyl Benzyl Phthalate	15.0	199823.000	0.5644	25.0	316262.000	0.5438	80.0	1058648.00	0.5288
Carbazole	15.0	352808.000	0.9510	25.0	569024.000	0.9231	80.0	2025195.00	0.9454
Chrysene	15.0	373919.000	1.056	25.0	577331.000	0.9926	80.0	1906476.00	0.9524
Di-n-Butyl Phthalate	15.0	464423.000	1.252	25.0	730780.000	1.186	80.0	2430902.00	1.135
Dibenz[ah]anthracene	15.0	340635.000	0.9766	25.0	543273.000	0.9534	80.0	1911785.00	0.9989

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INITIAL CALIBRATION DATA

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Analytical Method: 8270C

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-05			WG395394-06			WG395394-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Dibenzofuran	15.0	345492.000	1.676	25.0	542792.000	1.590	80.0	1809858.00	1.504
Diethylphthalate	15.0	273892.000	1.328	25.0	427533.000	1.252	80.0	1465764.00	1.218
Dimethylphthalate	15.0	275007.000	1.334	25.0	432481.000	1.267	80.0	1452767.00	1.207
Fluorene	15.0	294134.000	1.427	25.0	461256.000	1.351	80.0	1524152.00	1.267
Hexachlorobenzene	15.0	85076.0000	0.2293	25.0	133370.000	0.2164	80.0	454706.000	0.2123
Hexachloroethane	15.0	55844.0000	0.5900	25.0	87874.0000	0.5582	80.0	310495.000	0.5746
Indeno[1,2,3-cd]pyrene	15.0	406105.000	1.164	25.0	649328.000	1.140	80.0	2284765.00	1.194
Isophorone	15.0	231590.000	0.6391	25.0	370301.000	0.6182	80.0	1254518.00	0.5924
Naphthalene	15.0	408896.000	1.128	25.0	637382.000	1.064	80.0	2143165.00	1.012
Nitrobenzene	15.0	126438.000	0.3489	25.0	200659.000	0.3350	80.0	698206.000	0.3297
Phenanthrene	15.0	414064.000	1.116	25.0	651360.000	1.057	80.0	2157063.00	1.007
Pyrene	15.0	443567.000	1.253	25.0	695786.000	1.196	80.0	2297635.00	1.148
Sym-Trinitrobenzene	15.0	57944.0000	0.1562	25.0	97026.0000	0.1574	80.0	374190.000	0.1747
bis(2-Chloroethoxy)methane	15.0	180101.000	0.4970	25.0	285147.000	0.4760	80.0	937865.000	0.4429
bis(2-Chloroethyl)ether	15.0	94566.0000	0.9991	25.0	149268.000	0.9483	80.0	497418.000	0.9206
bis(2-Ethylhexyl)phthalate	15.0	273457.000	0.7724	25.0	431927.000	0.7426	80.0	1454801.00	0.7267

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INITIAL CALIBRATION DATA

Login Number: L12040844
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Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-08			WG395394-09		
	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	100	535987.000	0.3570	120	669686.000	0.3523
2,4-Dichlorophenol	100	715757.000	0.2655	120	900159.000	0.2624
2-Nitrophenol	100	514984.000	0.1910	120	659346.000	0.1922
Acenaphthene	100	1612771.00	1.074	120	1951899.00	1.027
Benzo[a]pyrene	100	2422076.00	1.044	120	2982535.00	1.043
Di-n-Octyl Phthalate	100	3002395.00	1.294	120	3682000.00	1.288
Fluoranthene	100	2684844.00	1.005	120	3249661.00	0.9809
Hexachlorobutadiene	100	411451.000	0.1526	120	507887.000	0.1481
Pentachlorophenol	100	367513.000	0.1376	120	458736.000	0.1385
Phenol	100	991961.000	1.432	120	1231425.00	1.391
2,4-Dinitrophenol	100	256771.000	0.1710	120	327279.000	0.1722
4-Nitrophenol	100	320939.000	0.2137	120	386132.000	0.2032
Hexachlorocyclopentadiene	100	403426.000	0.2687	120	490221.000	0.2579
n-Nitrosodipropylamine	100	522498.000	0.7543	120	624493.000	0.7052
1,3-Dinitrobenzene	100	365872.000	0.2437	120	463456.000	0.2438
1,4-Dioxane	100	348759.000	0.5035	120	439725.000	0.4965
2,4,5-Trichlorophenol	100	556900.000	0.3709	120	692553.000	0.3644
2,4-Dimethylphenol	100	831386.000	0.3084	120	1031288.00	0.3007
2,4-Dinitrotoluene	100	583421.000	0.3886	120	727634.000	0.3828
2,6-Dinitrotoluene	100	466415.000	0.3106	120	580776.000	0.3056
2-Chloronaphthalene	100	1597789.00	1.064	120	1980928.00	1.042
2-Chlorophenol	100	903123.000	1.304	120	1130760.00	1.277
2-Methylnaphthalene	100	1696852.00	0.6294	120	2083523.00	0.6074
2-Methylphenol	100	686225.000	0.9906	120	853772.000	0.9640
2-Nitroaniline	100	478820.000	0.3189	120	598982.000	0.3151
3,3'-Dichlorobenzidine	100	535244.000	0.2164	120	679065.000	0.2212
3-Nitroaniline	100	384870.000	0.2563	120	523691.000	0.2755
4-Bromophenyl Phenyl Ether	100	505367.000	0.1892	120	625697.000	0.1889
4-Chloroaniline	100	1131551.00	0.4197	120	1382212.00	0.4030
Acenaphthylene	100	2438377.00	1.624	120	2981097.00	1.568
Anthracene	100	2652184.00	0.9930	120	3213859.00	0.9701
Benzo[a]anthracene	100	2445804.00	0.9887	120	2986908.00	0.9731
Benzo[b]fluoranthene	100	2654859.00	1.144	120	3081081.00	1.078
Benzo[ghi]perylene	100	2198670.00	0.9474	120	2700031.00	0.9446
Benzo[k]fluoranthene	100	2404348.00	1.036	120	2836726.00	0.9924
Benzoic Acid	100	675656.000	0.2506	120	915551.000	0.2669
Benzyl Alcohol	100	594299.000	0.8579	120	747792.000	0.8444
Butyl Benzyl Phthalate	100	1272202.00	0.5143	120	1549387.00	0.5048
Carbazole	100	2461069.00	0.9215	120	3053064.00	0.9215
Chrysene	100	2259995.00	0.9136	120	2763239.00	0.9003
Di-n-Butyl Phthalate	100	2883140.00	1.080	120	3504116.00	1.058
Dibenz[ah]anthracene	100	2261465.00	0.9745	120	2804015.00	0.9810

INT_CAL - Modified 03/06/2008
PDF File ID: 2400185
Report generated 05/04/2012 13:29

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040844
Analytical Method: 8270C
Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-08			WG395394-09		
	CONC	RESP	RF	CONC	RESP	RF
Dibenzofuran	100	2178444.00	1.451	120	2633898.00	1.386
Diethylphthalate	100	1756256.00	1.170	120	2162475.00	1.138
Dimethylphthalate	100	1760527.00	1.173	120	2165968.00	1.140
Fluorene	100	1832624.00	1.221	120	2243623.00	1.180
Hexachlorobenzene	100	543444.000	0.2035	120	663561.000	0.2003
Hexachloroethane	100	384708.000	0.5553	120	480318.000	0.5424
Indeno[1,2,3-cd]pyrene	100	2721409.00	1.173	120	3353339.00	1.173
Isophorone	100	1546209.00	0.5735	120	1916721.00	0.5588
Naphthalene	100	2577401.00	0.9560	120	3171066.00	0.9245
Nitrobenzene	100	854248.000	0.3168	120	1069745.00	0.3119
Phenanthrene	100	2552198.00	0.9556	120	3120483.00	0.9419
Pyrene	100	2734557.00	1.105	120	3331157.00	1.085
Sym-Trinitrobenzene	100	450708.000	0.1688	120	571928.000	0.1726
bis(2-Chloroethoxy)methane	100	1134885.00	0.4209	120	1390586.00	0.4054
bis(2-Chloroethyl)ether	100	615863.000	0.8890	120	761552.000	0.8599
bis(2-Ethylhexyl)phthalate	100	1738038.00	0.7026	120	2123921.00	0.6920

INT_CAL - Modified 03/06/2008
PDF File ID: 2400185
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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040844
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: 2400185
Report generated 05/04/2012 13:29

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040844
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: 2400185
Report generated 05/04/2012 13:29

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number:L12040844 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: 2400188
Report generated 05/04/2012 13:27

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040844 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: 2400188
Report generated 05/04/2012 13:27

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040844 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: 2400188
Report generated 05/04/2012 13:27

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040844 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: 2400188
Report generated 05/04/2012 13:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 05/01/2012 Sample ID: WG396671-02

Instrument ID: HPMS4 Run Time: 13:31 Method: 8270C

File ID: 4M60601 Analyst: CAA QC Key: WATERLOO

Workgroup (AAB#): WG396824 Cal ID: HPMS4 - 19-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
2,4,6-Trichlorophenol	CCC	50000	52400	ug/L	0.385	4.77	20	
2,4-Dichlorophenol	CCC	50000	50900	ug/L	0.291	1.84	20	
2-Nitrophenol	CCC	50000	54500	ug/L	0.217	9.09	20	
Acenaphthene	CCC	50000	49800	ug/L	1.18	0.394	20	
Benzo[a]pyrene	CCC	50000	52100	ug/L	1.10	4.11	20	
Di-n-Octyl Phthalate	CCC	50000	53700	ug/L	1.39	7.46	20	
Fluoranthene	CCC	50000	50700	ug/L	1.13	1.43	20	
Hexachlorobutadiene	CCC	50000	51000	ug/L	0.170	2.07	20	
n-Nitrosodiphenylamine	CCC	50000	50100	ug/L	0.648	0.105	20	
Pentachlorophenol	CCC	50000	53100	ug/L	0.149	6.19	20	
Phenol	CCC	50000	49200	ug/L	1.49	1.51	20	
1,4-Dichlorobenzene	CCC	50000	49300	ug/L	1.52	1.48	20	
4-Chloro-3-Methylphenol	CCC	50000	49000	ug/L	0.284	2.02	20	
2,4-Dinitrophenol	SPCC	50000	53200	ug/L	0.170	6.35	20	
4-Nitrophenol	SPCC	50000	44900	ug/L	0.209	10.3	20	
Hexachlorocyclopentadiene	SPCC	50000	57500	ug/L	0.312	15.1	20	
n-Nitrosodipropylamine	SPCC	50000	50600	ug/L	0.864	1.13	20	
Sym-Trinitrobenzene		50000	55600	ug/L	0.176	11.2	20	
1,3-Dinitrobenzene		50000	52600	ug/L	0.256	5.28	20	
1,4-Dioxane		50000	51500	ug/L	0.514	3.00	20	
2,4,5-Trichlorophenol		50000	53600	ug/L	0.406	7.27	20	
2,4-Dimethylphenol		50000	46000	ug/L	0.314	8.08	20	
2,4-Dinitrotoluene		50000	52600	ug/L	0.423	5.22	20	
2,6-Dinitrotoluene		50000	51800	ug/L	0.328	3.65	20	
2-Chloronaphthalene		50000	50800	ug/L	1.15	1.68	20	
2-Chlorophenol		50000	49600	ug/L	1.35	0.839	20	
2-Methylnaphthalene		50000	49400	ug/L	0.680	1.22	20	
2-Methylphenol		50000	47800	ug/L	0.999	4.37	20	
2-Nitroaniline		50000	48700	ug/L	0.316	2.51	20	
3-Nitroaniline		50000	47800	ug/L	0.223	4.43	20	
3,3'-Dichlorobenzidine		50000	51000	ug/L	0.227	1.95	20	
3-,4-Methylphenol		50000	47700	ug/L	1.30	4.56	20	
4-Bromophenyl Phenyl Ether		50000	51700	ug/L	0.209	3.42	20	
4-Chloroaniline		50000	51000	ug/L	0.398	2.03	20	
Acenaphthylene		50000	50200	ug/L	1.82	0.480	20	
Anthracene		50000	49400	ug/L	1.07	1.28	20	
Benzo[a]anthracene		50000	50200	ug/L	1.06	0.336	20	
Benzo[b]fluoranthene		50000	52800	ug/L	1.22	5.54	20	
Benzo[ghi]perylene		50000	50000	ug/L	0.972	0.0832	20	
Benzo[k]fluoranthene		50000	51400	ug/L	1.10	2.88	20	
Benzoic Acid		50000	29600	ug/L	0.139	40.8	20	*
Benzyl Alcohol		50000	48300	ug/L	0.848	3.49	20	

CCV - Modified 03/05/2008

PDF File ID: 2400190

Report generated 05/04/2012 13:30

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 05/01/2012 Sample ID: WG396671-02

Instrument ID: HPMS4 Run Time: 13:31 Method: 8270C

File ID: 4M60601 Analyst: CAA QC Key: WATERLOO

Workgroup (AAB#): WG396824 Cal ID: HPMS4 - 19-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
bis(2-Chloroethyl)ether		50000	47400	ug/L	0.900	5.19	20	
bis(2-Chloroethoxy)methane		50000	51200	ug/L	0.479	2.44	20	
bis(2-Ethylhexyl)phthalate		50000	51400	ug/L	0.763	2.80	20	
Butyl Benzyl Phthalate		50000	50900	ug/L	0.554	1.78	20	
Carbazole		50000	50800	ug/L	0.968	1.63	20	
Chrysene		50000	49400	ug/L	0.984	1.23	20	
Di-n-Butyl Phthalate		50000	51000	ug/L	1.21	2.04	20	
Dibenz[ah]anthracene		50000	52200	ug/L	1.02	4.37	20	
Dibenzofuran		50000	50400	ug/L	1.59	0.823	20	
Diethylphthalate		50000	50900	ug/L	1.28	1.80	20	
Dimethylphthalate		50000	50600	ug/L	1.28	1.11	20	
Fluorene		50000	50000	ug/L	1.34	0.0438	20	
Hexachlorobenzene		50000	52900	ug/L	0.234	5.86	20	
Hexachloroethane		50000	50100	ug/L	0.572	0.228	20	
Indeno[1,2,3-cd]pyrene		50000	51400	ug/L	1.21	2.73	20	
Isophorone		50000	50300	ug/L	0.619	0.565	20	
Naphthalene		50000	49100	ug/L	1.04	1.83	20	
Nitrobenzene		50000	50100	ug/L	0.338	0.168	20	
Phenanthrene		50000	49000	ug/L	1.04	2.07	20	
Pyrene		50000	51300	ug/L	1.23	2.61	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2400190
Report generated 05/04/2012 13:30

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040844
Instrument ID: HPMS4
Workgroup (AAB#): WG396824

CCV Number: WG396671-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG396671-02	NA	NA	239188	510787	853149	915817	798137	918023
Upper Limit	NA	NA	478376	1021574	1706298	1831634	1596274	1836046
Lower Limit	NA	NA	119594	255394	426575	457909	399069	459012
L12040844-01	1.00	01	212941	446059	738963	812852	701606	797091
L12040844-03	1.00	01	199530	427516	702653	766857	672690	761423
L12040844-05	1.00	01	195236	413041	689525	746007	652292	732291
WG396102-01	1.00	03	209333	441021	741853	789823	704908	779143
WG396102-02	1.00	02	220802	480664	805584	846095	749871	870815
WG396102-03	1.00	02	218519	465378	755455	836365	701904	836874

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: 2400191
Report generated 05/04/2012 13:30

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040844 CCV Number: WG396671-02

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

Workgroup (AAB#): WG396824 Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG396671-02	NA	NA	7.29	10.38	15.69	8.57	18.48	11.99
Upper Limit	NA	NA	7.79	10.88	16.19	9.07	18.98	12.49
Lower Limit	NA	NA	6.79	9.88	15.19	8.07	17.98	11.49
L12040844-01	1.00	01	7.29	10.38	15.69	8.57	18.48	11.99
L12040844-03	1.00	01	7.28	10.38	15.69	8.57	18.48	11.99
L12040844-05	1.00	01	7.29	10.38	15.69	8.57	18.48	11.99
WG396102-01	1.00	03	7.29	10.38	15.69	8.57	18.48	11.99
WG396102-02	1.00	02	7.29	10.38	15.69	8.57	18.48	11.99
WG396102-03	1.00	02	7.29	10.38	15.69	8.57	18.49	12

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: 2400193
Report generated 05/04/2012 13:30

2.2.1.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:25 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

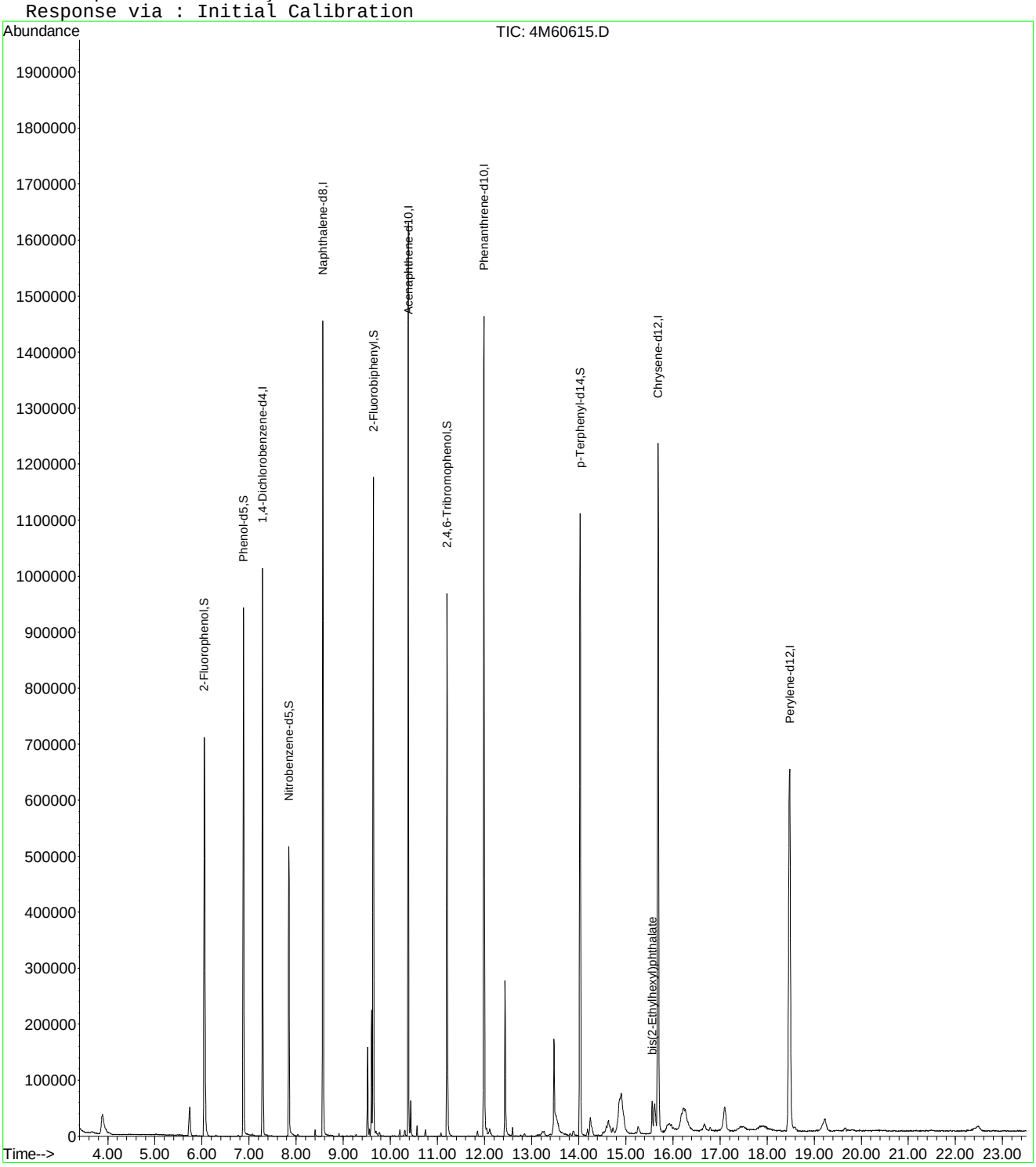
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	212941	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	811884	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	446059	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	797091	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	738963	40.00	ug/ml	-0.01
128) Perylene-d12	18.48	264	701606	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	337807	52.3224	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 52.32%			
12) Phenol-d5	6.88	99	414179	54.8134	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 54.81%			
31) Nitrobenzene-d5	7.84	82	201885	29.4002	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 58.80%			
59) 2-Fluorobiphenyl	9.64	172	447316	30.0314	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 60.06%			
86) 2,4,6-Tribromophenol	11.20	330	143452	72.1177	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 72.12%			
117) p-Terphenyl-d14	14.03	244	549192	40.3227	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 80.64%			
Target Compounds						Qvalue
124) bis(2-Ethylhexyl)phthalate	15.56	149	24493	1.7853	ug/ml#	98

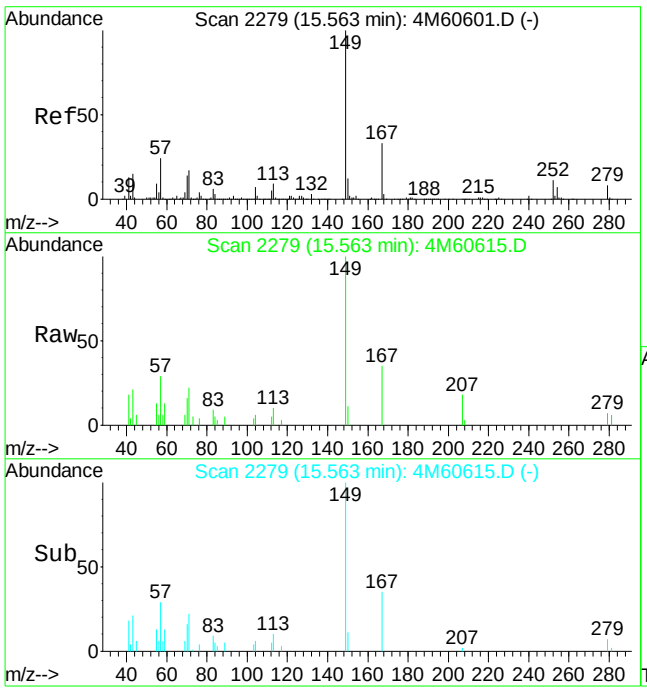
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:33 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration

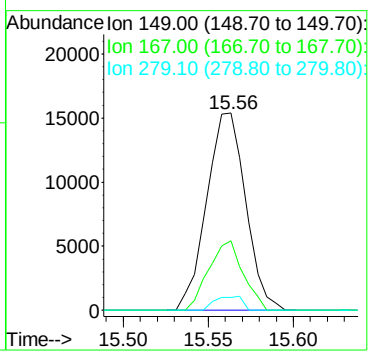




#124
bis(2-Ethylhexyl)phthalate
Concen: 1.79 ug/ml
RT: 15.56 min Scan# 2279
Delta R.T. -0.00 min
Lab File: 4M60615.D
Acq: 1 May 2012 21:30

Tgt Ion:149 Resp: 24493

Ion	Ratio	Lower	Upper
149	100		
167	31.1	25.4	38.0
279	5.0	6.2	9.2#



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:55:17 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 13:54:56 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	212941	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	812852	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	446059	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	797091	40.00	ug/mL	0.00

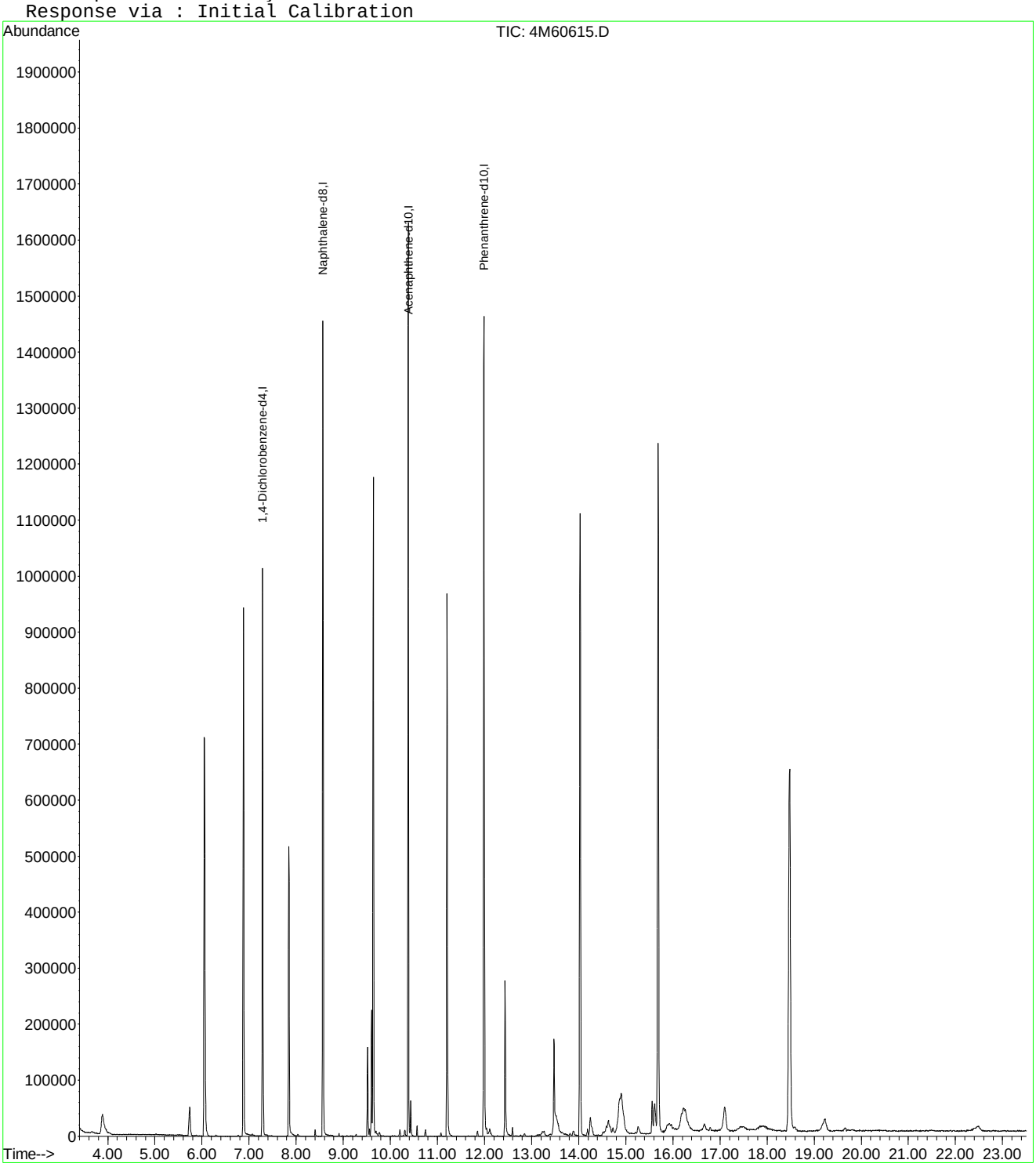
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60615.D TCL.M Wed May 02 13:55:18 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:55 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 13:54:56 2012
Response via : Initial Calibration



4M60615.D TCL.M Wed May 02 13:55:18 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

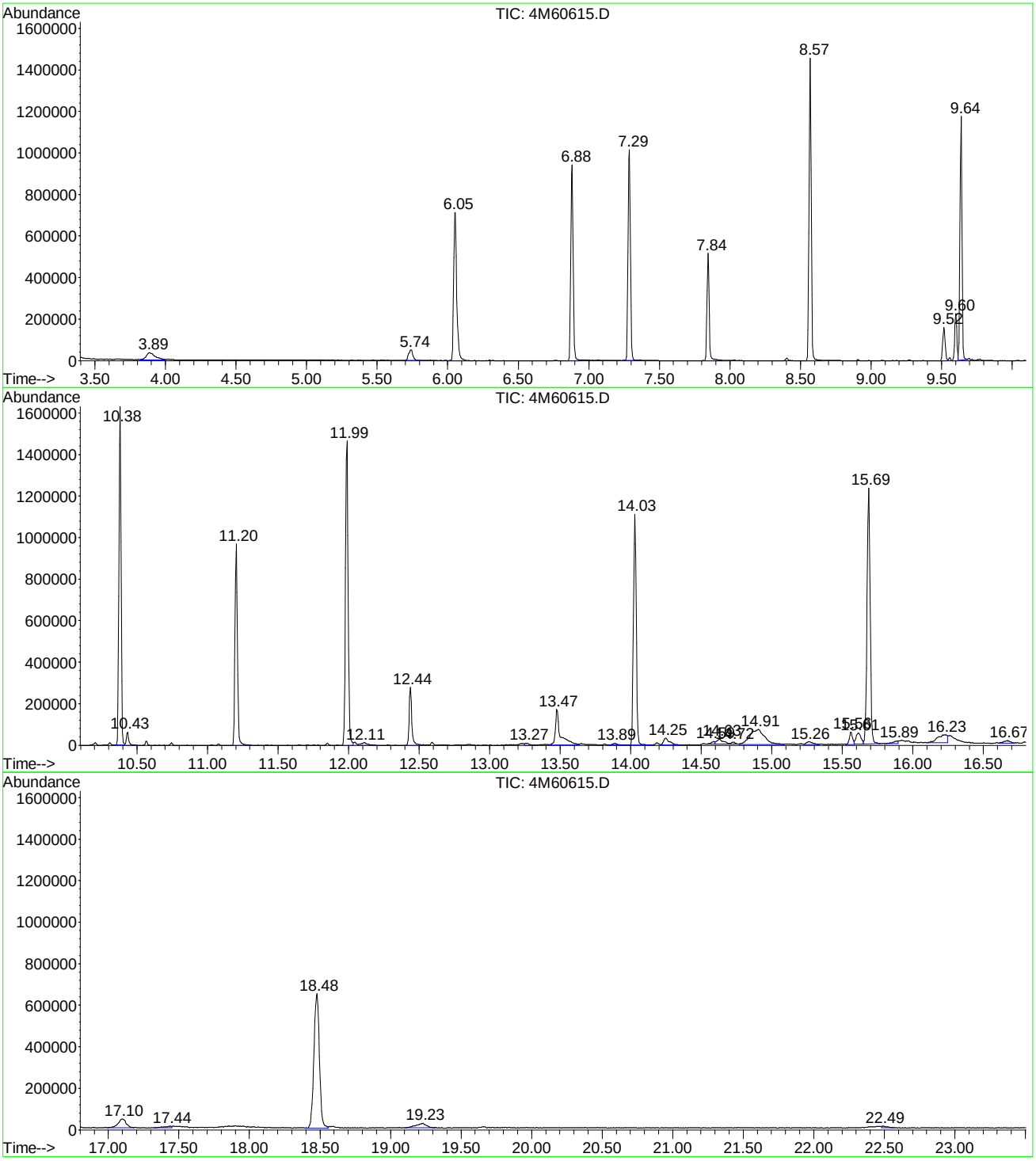
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.885	80	93	114	rBV2	34471	144978	7.67%	0.730%
2	5.739	432	440	453	rVB3	51893	108542	5.75%	0.547%
3	6.049	490	498	515	rBB	712436	1091867	57.79%	5.501%
4	6.882	647	654	664	rBV	943731	1098265	58.13%	5.534%
5	7.288	722	730	740	rBV	1013830	1186820	62.82%	5.980%
6	7.844	825	834	861	rBV	517089	587535	31.10%	2.960%
7	8.570	963	970	989	rBV	1456126	1569627	83.08%	7.909%
8	9.516	1141	1147	1152	rBV2	159212	191975	10.16%	0.967%
9	9.601	1158	1163	1166	rBV	225561	236333	12.51%	1.191%
10	9.639	1166	1170	1178	rVB	1172270	1189757	62.97%	5.995%
11	10.381	1303	1309	1315	rBV	1631083	1726203	91.37%	8.698%
12	10.435	1315	1319	1330	rVB	63187	70768	3.75%	0.357%
13	11.204	1457	1463	1484	rBB	968967	1154996	61.13%	5.820%
14	11.989	1602	1610	1618	rBV	1464094	1885140	99.78%	9.498%
15	12.107	1624	1632	1649	rVB4	13139	37380	1.98%	0.188%
16	12.438	1687	1694	1710	rBV2	278016	353892	18.73%	1.783%
17	13.266	1845	1849	1861	rVB2	8987	20121	1.07%	0.101%
18	13.474	1878	1888	1918	rBV4	171109	400487	21.20%	2.018%
19	13.886	1958	1965	1978	rVB4	8549	20366	1.08%	0.103%
20	14.030	1983	1992	2014	rVV	1110979	1540002	81.51%	7.759%
21	14.249	2026	2033	2050	rVB5	32688	95512	5.06%	0.481%
22	14.586	2087	2096	2098	rBV3	12712	23197	1.23%	0.117%
23	14.634	2098	2105	2117	rVV5	23694	79178	4.19%	0.399%
24	14.724	2117	2122	2130	rVV7	9848	21441	1.13%	0.108%
25	14.906	2130	2156	2189	rVB	72681	513592	27.18%	2.588%
26	15.259	2216	2222	2236	rVB3	12728	35998	1.91%	0.181%
27	15.558	2272	2278	2283	rBV	58546	95353	5.05%	0.480%
28	15.611	2283	2288	2295	rVV2	52847	130091	6.89%	0.655%
29	15.686	2295	2302	2317	rVB	1230334	1889277	100.00%	9.519%
30	15.889	2325	2340	2341	rBV6	13411	33938	1.80%	0.171%
31	16.226	2380	2403	2407	rBV2	37981	184039	9.74%	0.927%
32	16.669	2474	2486	2495	rBV7	12185	36487	1.93%	0.184%
33	17.096	2547	2566	2581	rBV7	42069	170112	9.00%	0.857%
34	17.438	2609	2630	2632	rBV5	8162	30456	1.61%	0.153%
35	18.480	2809	2825	2840	rBV	647136	1756925	92.99%	8.852%
36	19.233	2942	2966	2981	rVB8	22150	117071	6.20%	0.590%
37	22.492	3574	3576	3590	rVB8	8226	19159	1.01%	0.097%

Sum of corrected areas: 19846880

```
File       : I:\MSDCHEM\1\DATA\050112\4M60615.D
Operator   : CAA
Acquired   :  1 May 2012  21:30     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12040844-01
Misc Info  : 1,1
Vial Number: 16
Quant File :MEGAMIX.RES (RTE Integrator)
```



Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

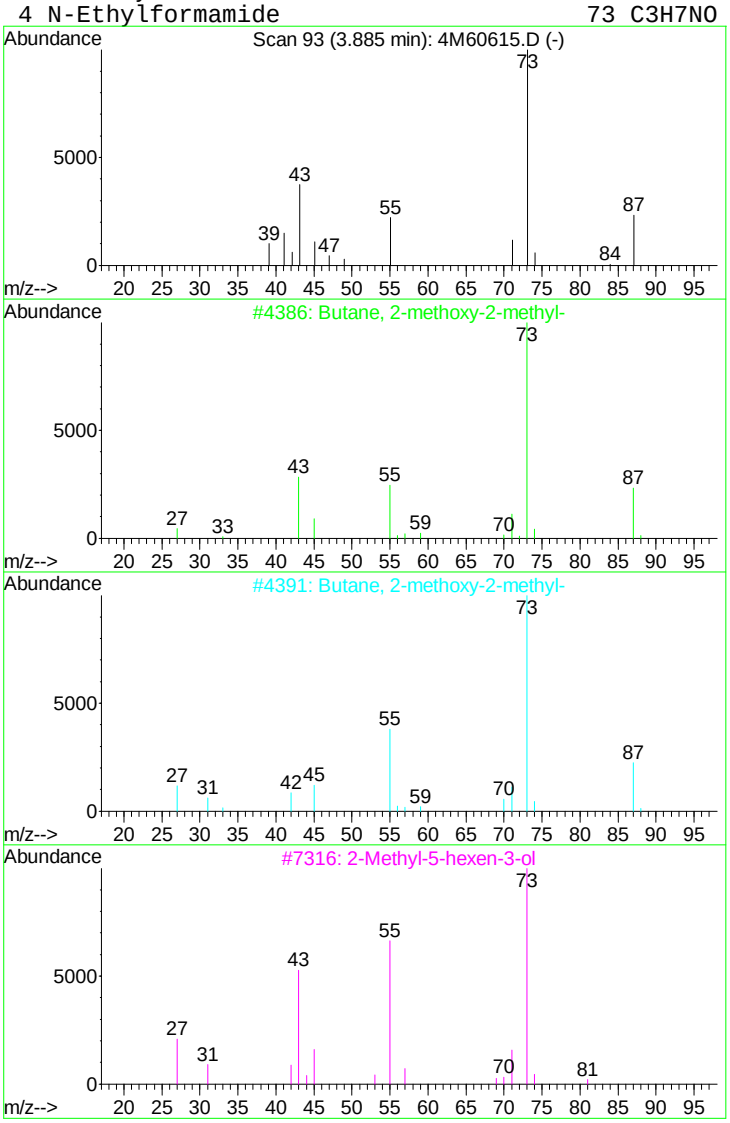
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

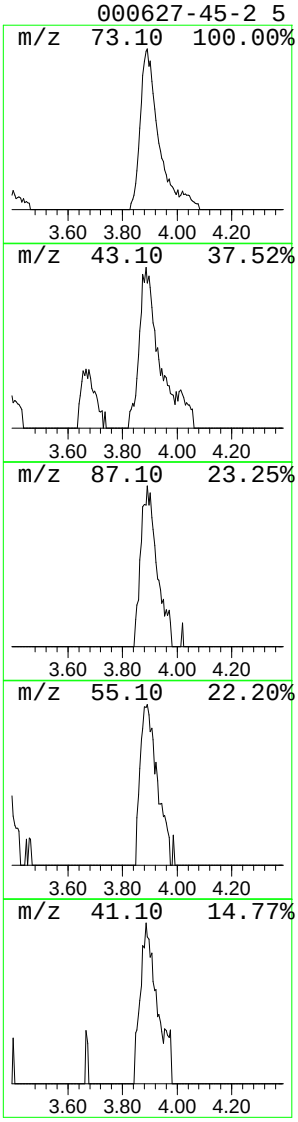
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.89	4.89 ug/ml	144978	1,4-Dichlorobenzene-d4	7.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	78
2	Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	39
3	2-Methyl-5-hexen-3-ol	114	C7H14O	032815-70-6	25
4	N-Ethylformamide	73	C3H7NO	000627-45-2	5





Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

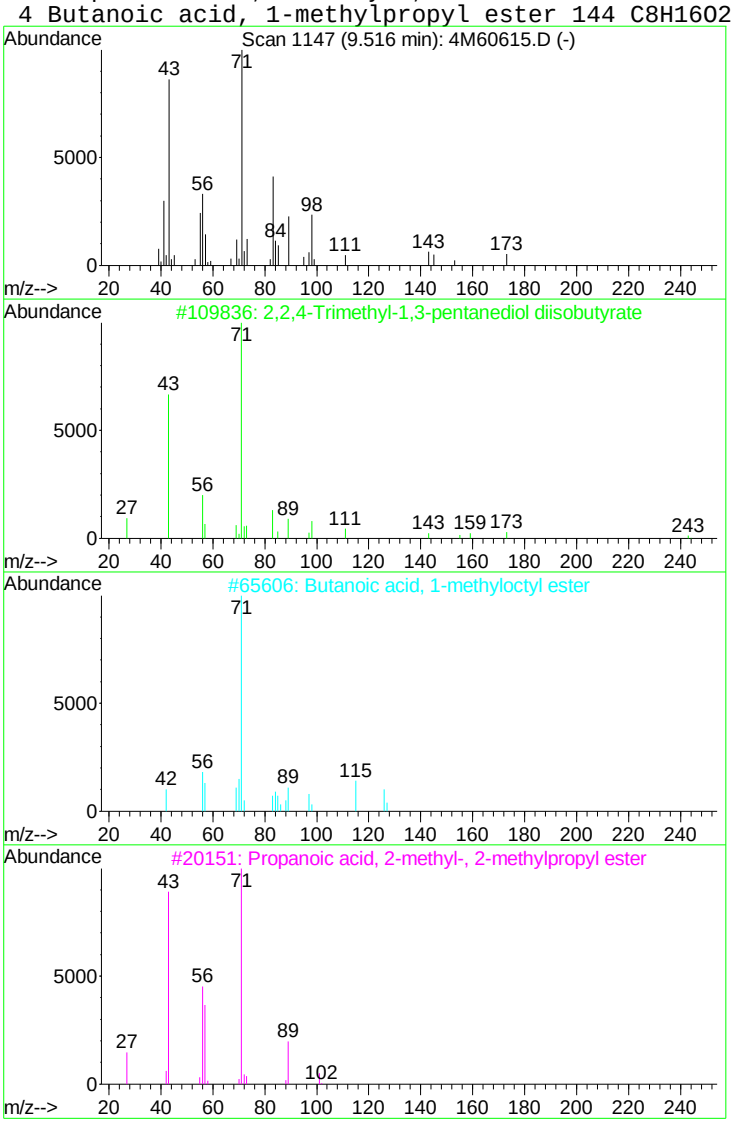
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

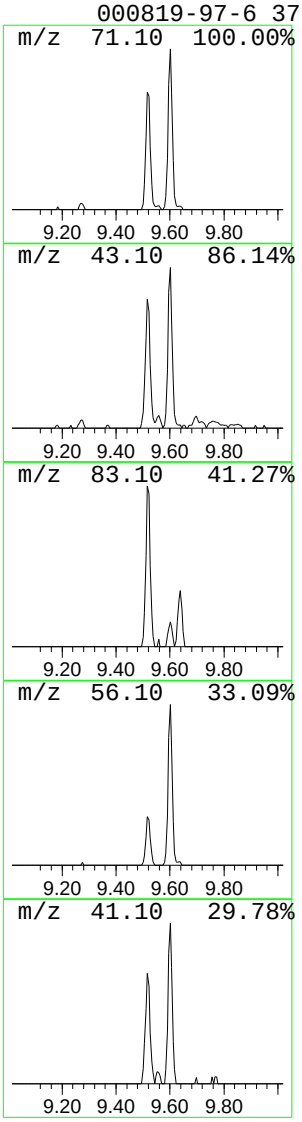
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Peak Number 2 2,2,4-Trimethyl-1,3-pentane... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.52	4.45 ug/ml	191975	Acenaphthene-d10	10.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2,4-Trimethyl-1,3-pentanediol ...	286	C16H30O4	006846-50-0	47
2	Butanoic acid, 1-methyloctyl ester	214	C13H26O2	069727-42-0	43
3	Propanoic acid, 2-methyl-, 2-met...	144	C8H16O2	000097-85-8	43
4	Butanoic acid, 1-methylpropyl ester	144	C8H16O2	000819-97-6	37





Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

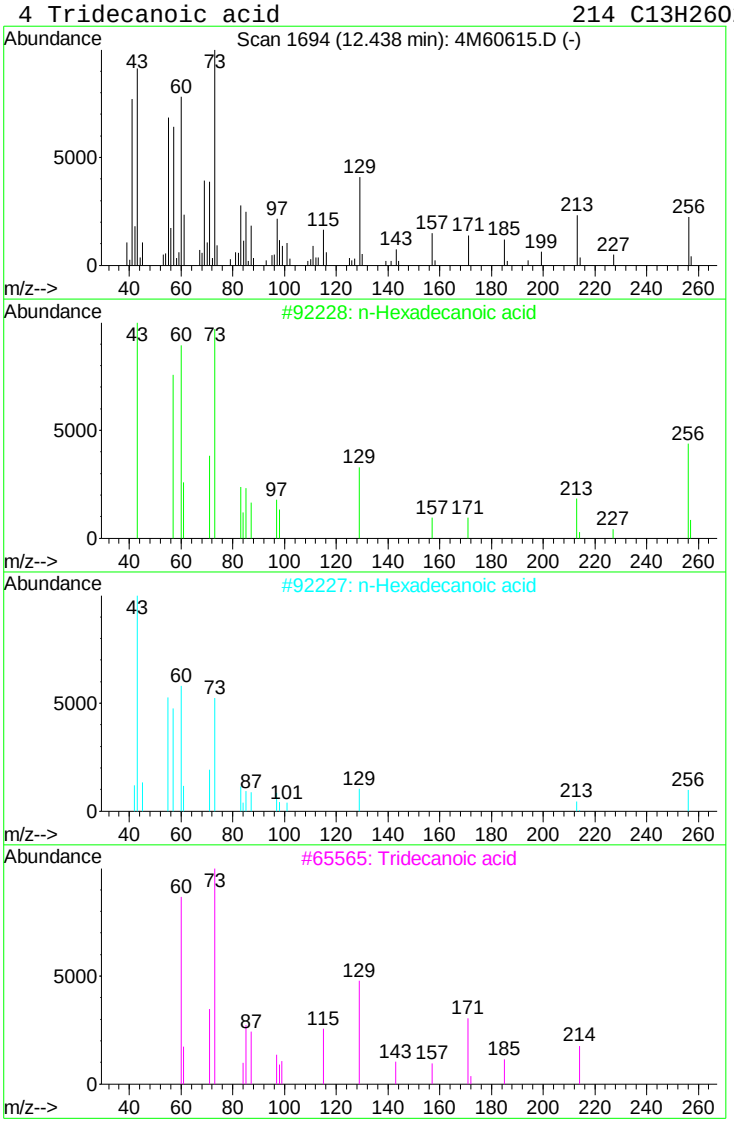
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

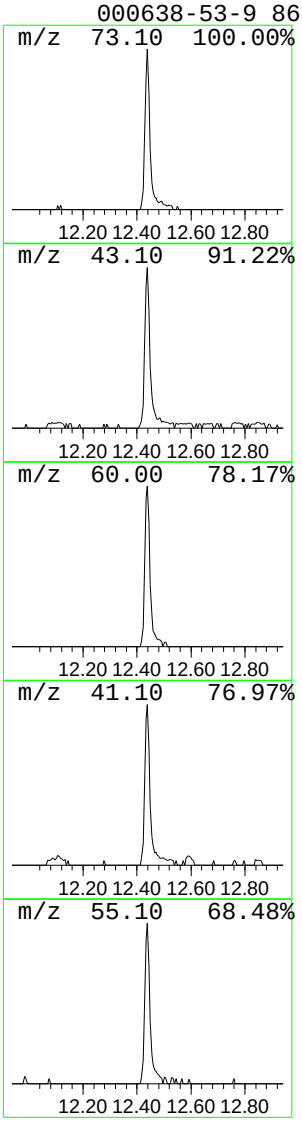
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Peak Number 3 n-Hexadecanoic acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.44	7.51 ug/ml	353892	Phenanthrene-d10	11.99

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
3	Tridecanoic acid	214	C13H26O2	000638-53-9	93
4	Tridecanoic acid	214	C13H26O2	000638-53-9	86





Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

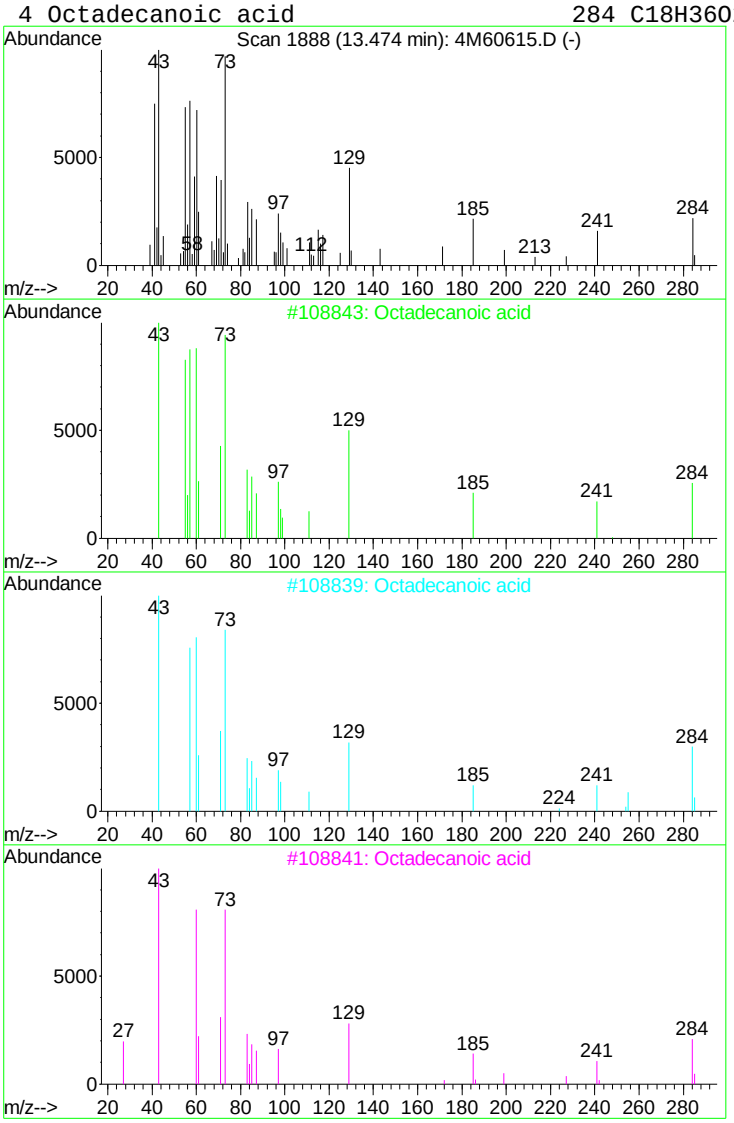
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

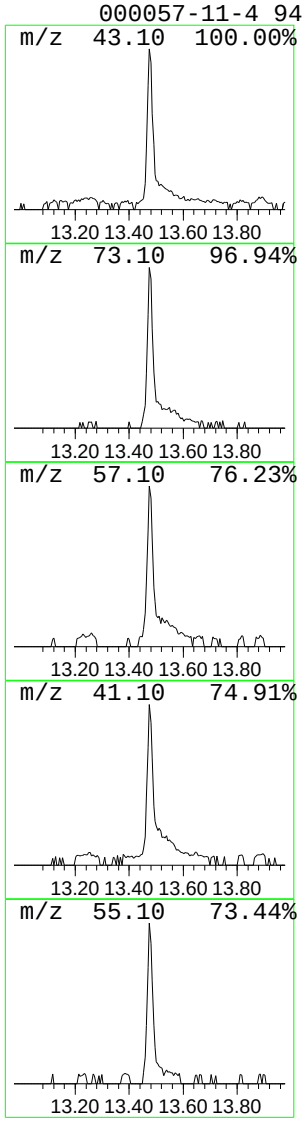
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Peak Number 4 Octadecanoic acid Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.47	8.50 ug/ml	400487	Phenanthrene-d10	11.99

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	99
3	Octadecanoic acid	284	C18H36O2	000057-11-4	98
4	Octadecanoic acid	284	C18H36O2	000057-11-4	94





Data File : I:\MSDCHEM\1\DATA\050112\4M60615.D Vial: 16
Acq On : 1 May 2012 21:30 Operator: CAA
Sample : L12040844-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

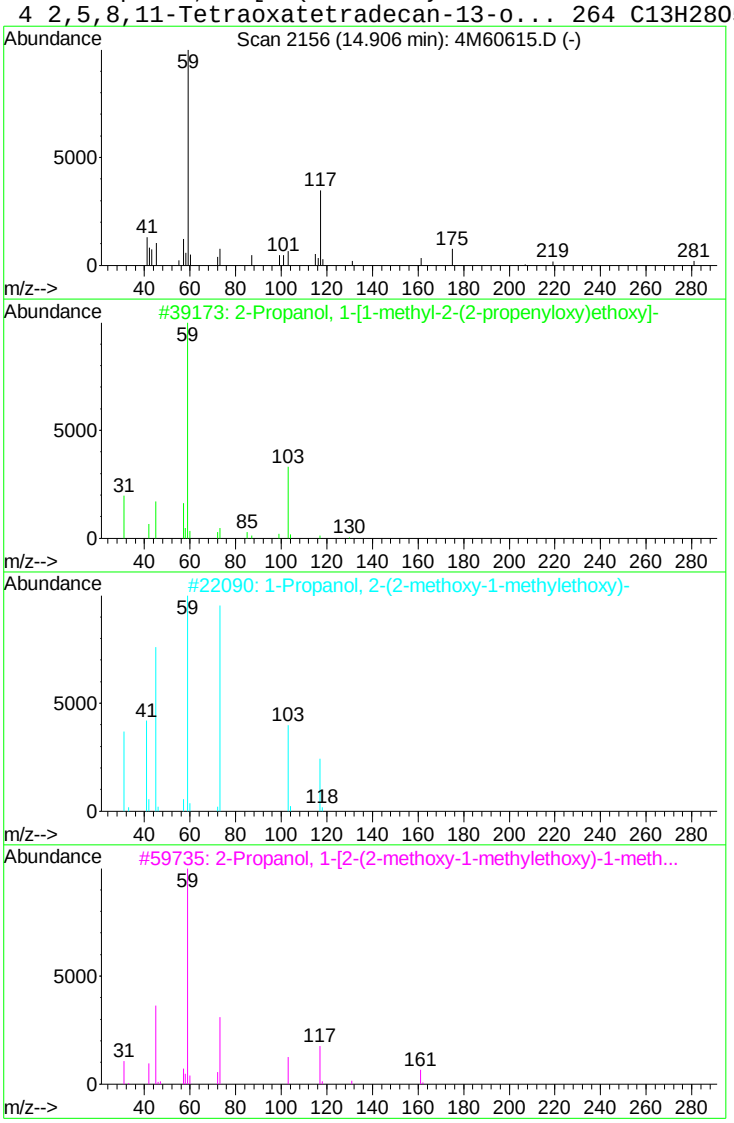
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

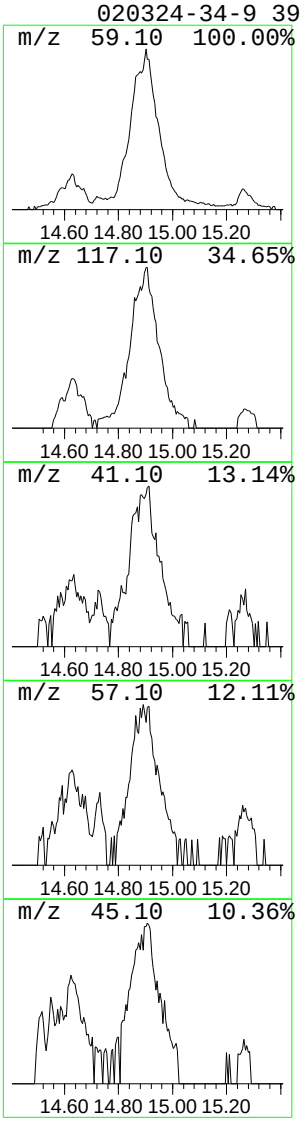
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Peak Number 5 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.91	10.87 ug/ml	513592	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	50
2	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	45
3	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42
4	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	39





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 1 May 2012 21:30
Data File: I:\MSDCHEM\1\DATA\050112\4M60615.D
Name: L12040844-01
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	3.89	4.9	ug/ml	144978	1	7.29	1186820	40.0
2,2,4-Trimethyl-1...	9.52	4.4	ug/ml	191975	3	10.38	1726200	40.0
n-Hexadecanoic acid	12.44	7.5	ug/ml	353892	4	11.99	1885140	40.0
Octadecanoic acid	13.47	8.5	ug/ml	400487	4	11.99	1885140	40.0
2-Propanol, 1-[1-...	14.91	10.9	ug/ml	513592	5	15.69	1889280	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:25 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.28	152	199530	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	766088	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	427516	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	761423	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	702653	40.00	ug/ml	0.00
128) Perylene-d12	18.48	264	672690	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	331833	54.8517	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 54.85%			
12) Phenol-d5	6.88	99	426487	60.2359	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 60.24%			
31) Nitrobenzene-d5	7.85	82	197554	30.4893	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 60.98%			
59) 2-Fluorobiphenyl	9.64	172	450005	31.5224	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 63.04%			
86) 2,4,6-Tribromophenol	11.21	330	171968	90.2034	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 90.20%			
117) p-Terphenyl-d14	14.03	244	721837	55.7373	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 111.48%			

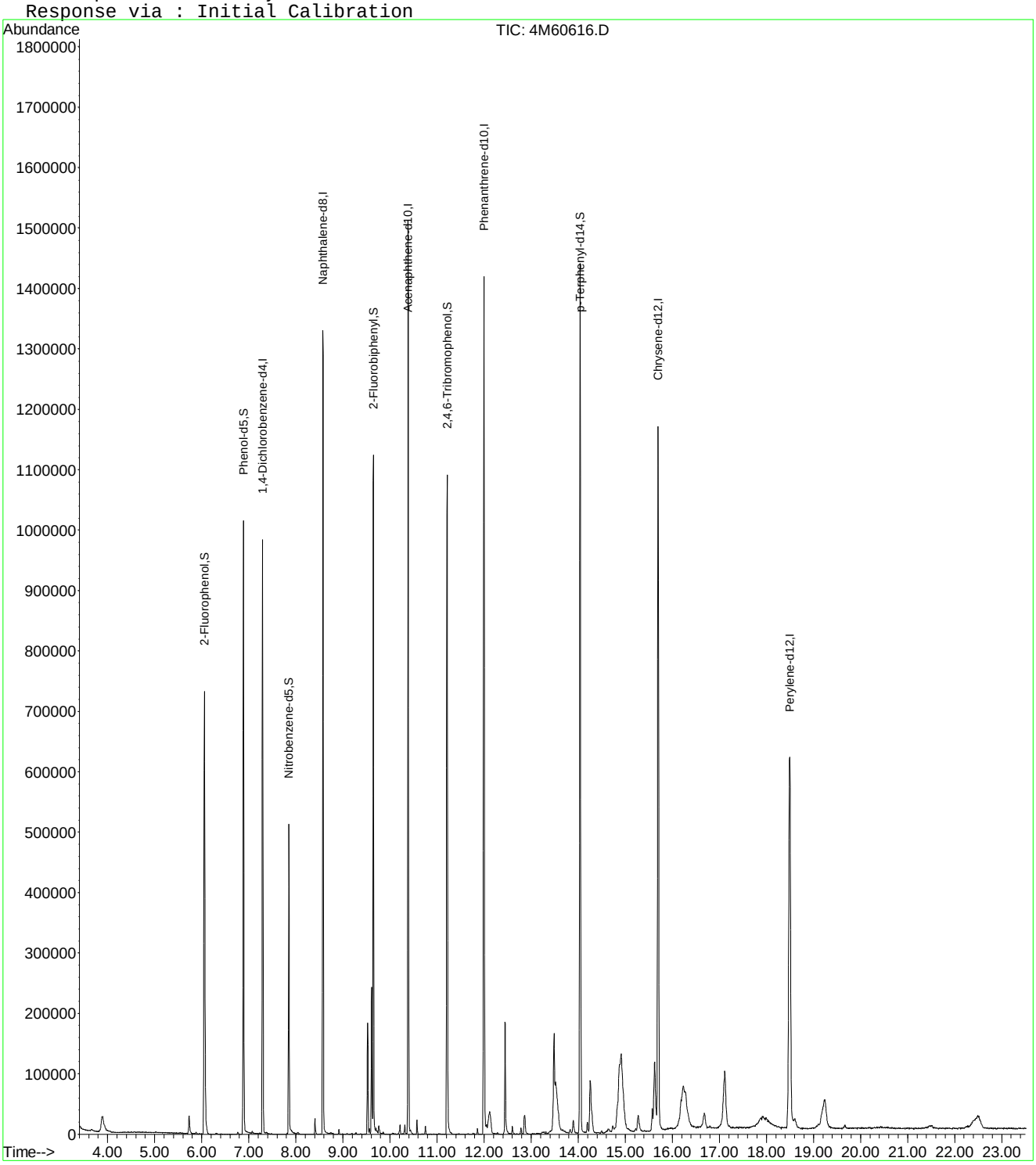
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration
4M60616.D MEGAMIX.M Wed May 02 13:47:21 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:33 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:55:21 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 13:54:56 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.28	152	199530	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	766857	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	427516	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	761423	40.00	ug/mL	0.00

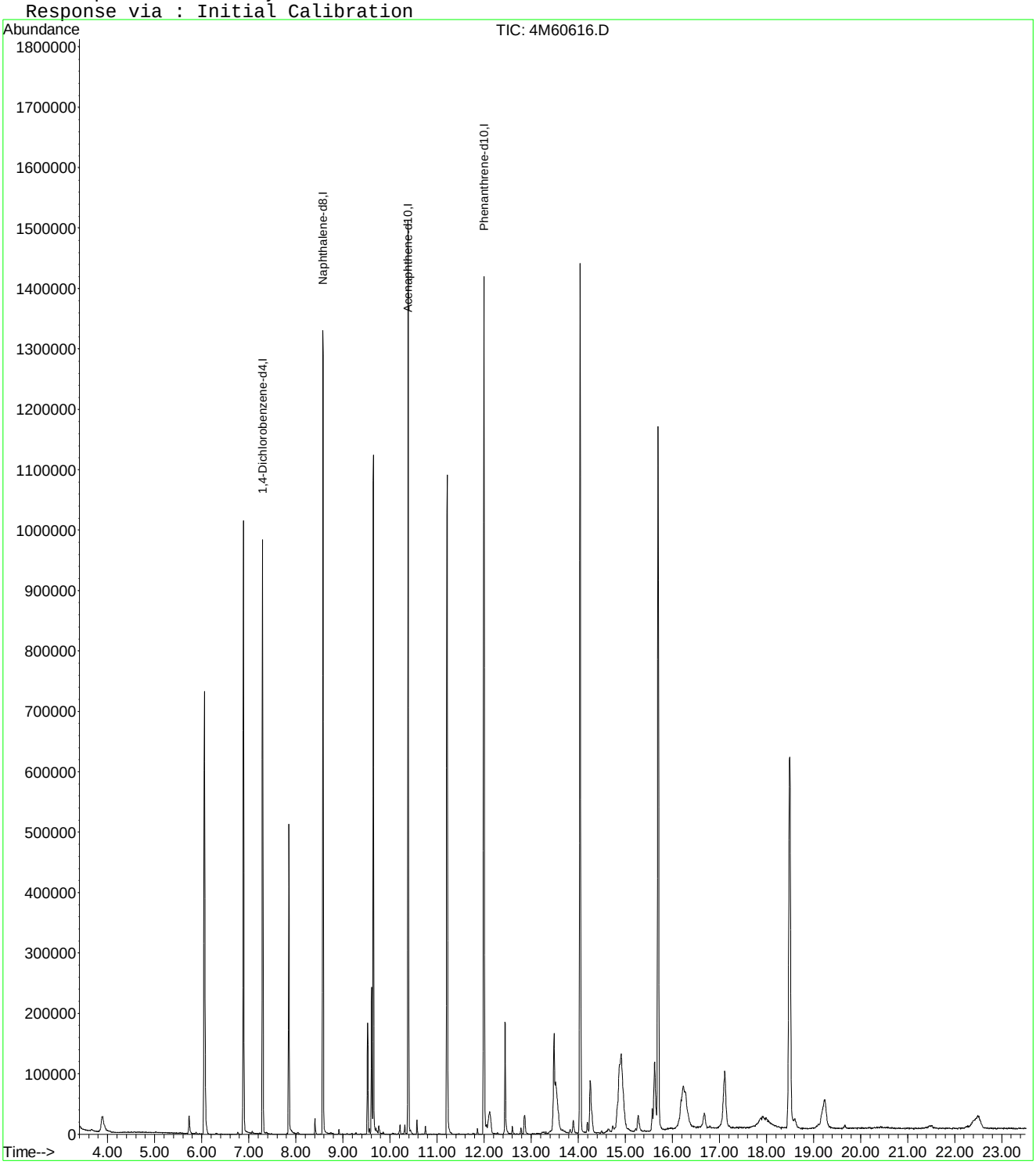
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60616.D TCL.M Wed May 02 13:55:21 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:55 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 13:54:56 2012
Response via : Initial Calibration



4M60616.D TCL.M Wed May 02 13:55:21 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

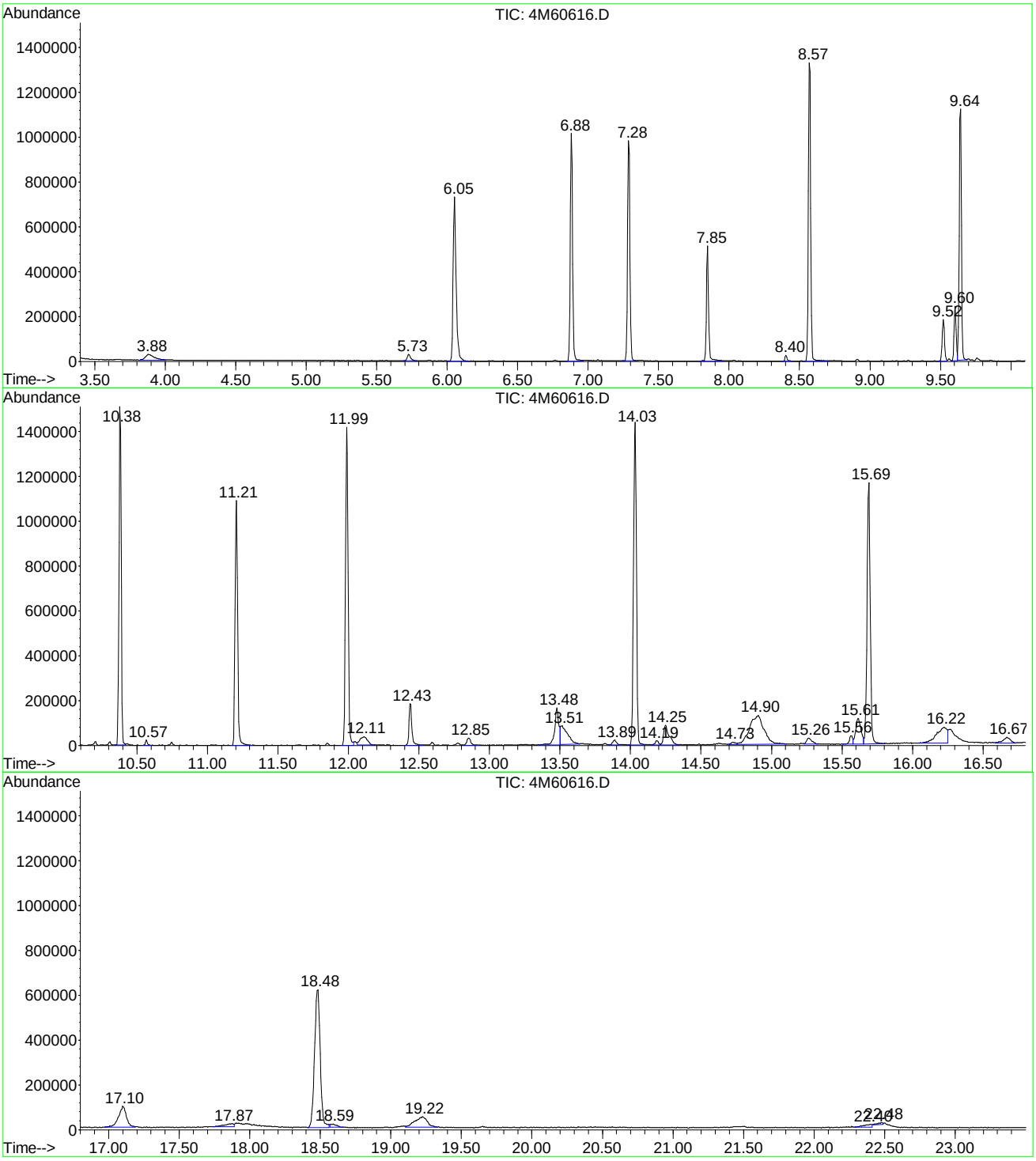
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.877	80	91	115	rBV4	25370	114817	5.58%	0.530%
2	5.725	430	437	447	rBV	29685	49685	2.41%	0.229%
3	6.051	489	498	517	rBB	732793	1066868	51.84%	4.927%
4	6.879	647	653	669	rBV	1015359	1140351	55.41%	5.266%
5	7.285	721	729	738	rBV	983116	1120424	54.44%	5.174%
6	7.846	824	834	855	rBV	513020	568780	27.64%	2.627%
7	8.401	934	938	946	rBB	26259	25158	1.22%	0.116%
8	8.567	963	969	995	rBV	1330421	1489219	72.36%	6.878%
9	9.518	1140	1147	1152	rBV	183978	207998	10.11%	0.961%
10	9.603	1158	1163	1166	rBV	243060	260509	12.66%	1.203%
11	9.641	1166	1170	1178	rVB	1119564	1198122	58.22%	5.533%
12	10.378	1302	1308	1316	rBV	1511046	1643503	79.86%	7.590%
13	10.565	1338	1343	1350	rBB	23671	21577	1.05%	0.100%
14	11.206	1456	1463	1483	rBB	1091198	1367825	66.47%	6.317%
15	11.986	1602	1609	1618	rBV	1419251	1804192	87.67%	8.332%
16	12.109	1623	1632	1646	rVB5	36473	135871	6.60%	0.627%
17	12.435	1686	1693	1711	rBV	185512	253348	12.31%	1.170%
18	12.851	1764	1771	1784	rVB2	31324	63674	3.09%	0.294%
19	13.477	1864	1888	1892	rBV2	165468	331020	16.08%	1.529%
20	13.514	1892	1895	1918	rVB	81802	285845	13.89%	1.320%
21	13.888	1957	1965	1973	rBV2	21132	39548	1.92%	0.183%
22	14.032	1982	1992	2005	rBV	1439816	2057947	100.00%	9.504%
23	14.187	2013	2021	2025	rBV3	17659	28240	1.37%	0.130%
24	14.246	2025	2032	2050	rVB	86947	232893	11.32%	1.076%
25	14.727	2116	2122	2127	rBV4	10679	21440	1.04%	0.099%
26	14.903	2127	2155	2192	rVB2	128698	908625	44.15%	4.196%
27	15.261	2216	2222	2234	rVB3	25452	64150	3.12%	0.296%
28	15.560	2267	2278	2281	rBV3	37787	60768	2.95%	0.281%
29	15.613	2281	2288	2295	rVV	113994	293590	14.27%	1.356%
30	15.688	2295	2302	2322	rVB	1164725	1798966	87.42%	8.308%
31	16.222	2369	2402	2407	rBV3	71150	387047	18.81%	1.787%
32	16.666	2470	2485	2496	rVB4	25447	89853	4.37%	0.415%
33	17.098	2542	2566	2583	rBV4	94103	374787	18.21%	1.731%
34	17.873	2686	2711	2714	rBV6	14758	70110	3.41%	0.324%
35	18.482	2812	2825	2840	rBV	614090	1692603	82.25%	7.817%
36	18.589	2841	2845	2858	rVB6	15362	42339	2.06%	0.196%
37	19.225	2941	2964	2983	rVB6	45818	273725	13.30%	1.264%
38	22.403	3537	3559	3560	rBV9	11850	46573	2.26%	0.215%
39	22.478	3562	3573	3575	rVV7	7827	21048	1.02%	0.097%

Sum of corrected areas: 21653038

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File       : I:\MSDCHEM\1\DATA\050112\4M60616.D
Operator   : CAA
Acquired   :  1 May 2012  22:04     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12040844-03
Misc Info  : 1,1
Vial Number: 17
Quant File :MEGAMIX.RES (RTE Integrator)
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Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

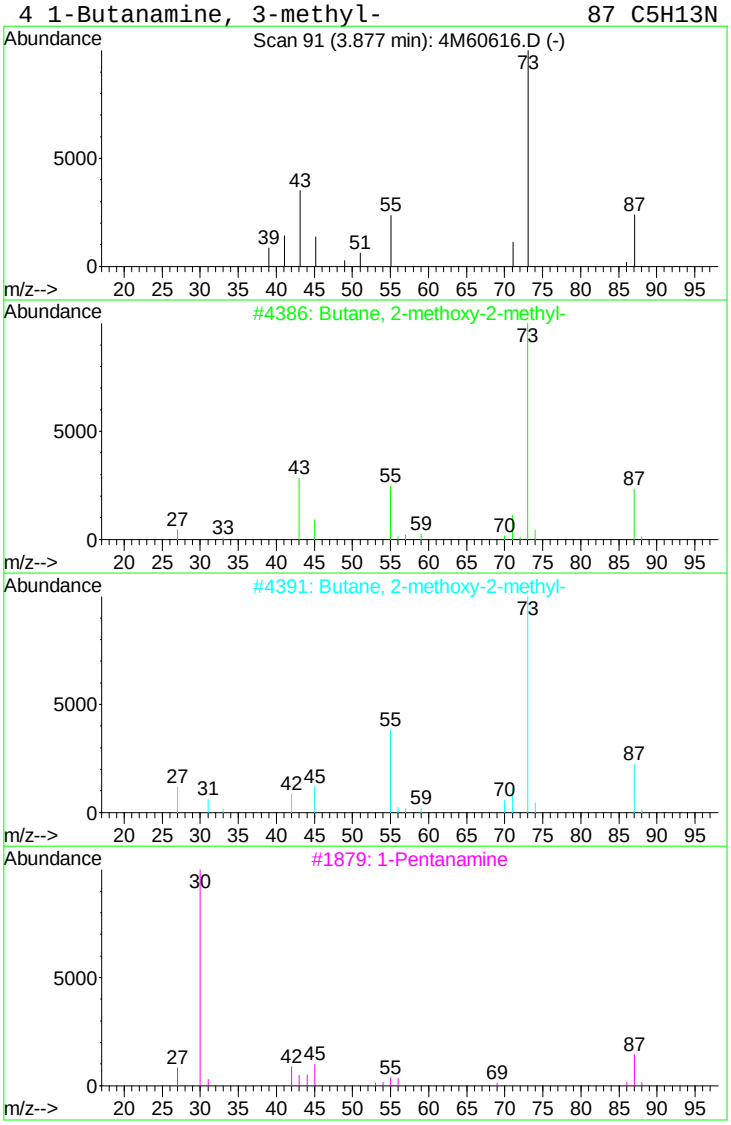
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

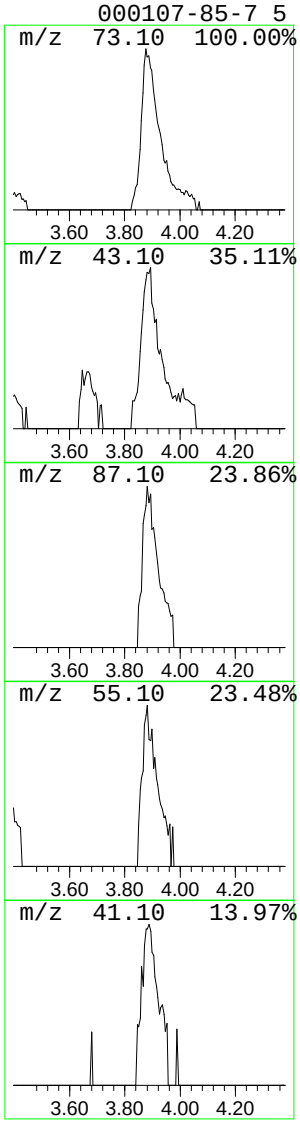
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Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.88	4.10 ug/ml	114817	1,4-Dichlorobenzene-d4	7.28

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	1-Pentanamine	87	C5H13N	000110-58-7	5
4	1-Butanamine, 3-methyl-	87	C5H13N	000107-85-7	5





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

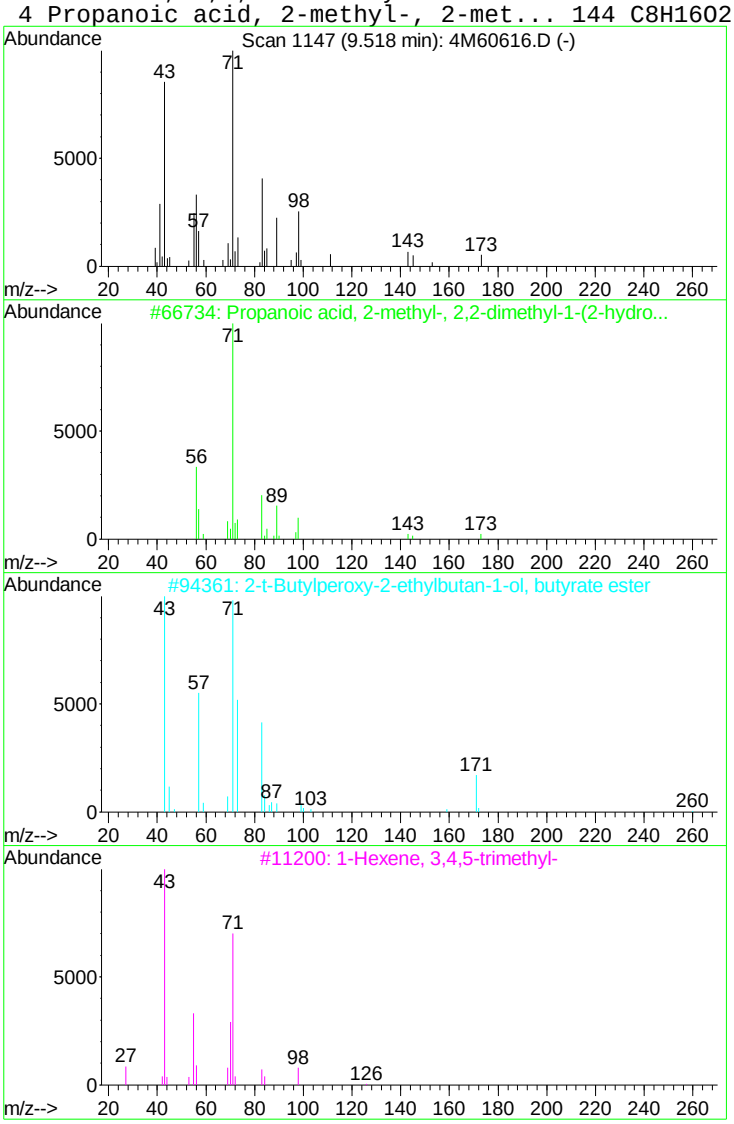
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

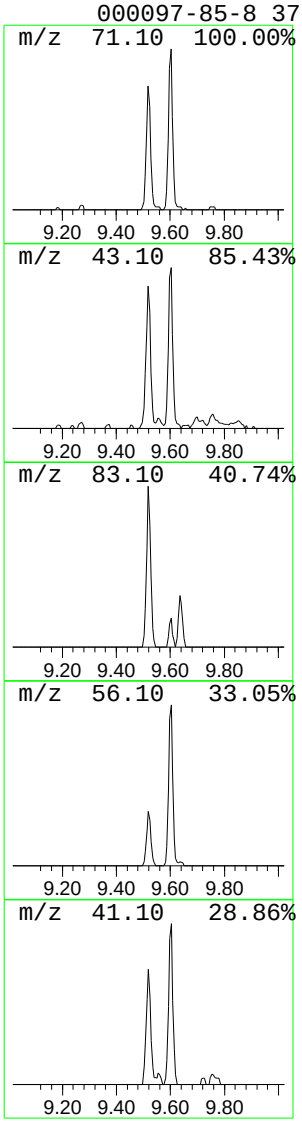
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Peak Number 2 Propanoic acid, 2-methyl-, ... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.52	5.06 ug/ml	207998	Acenaphthene-d10	10.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-d...	216	C12H24O3	074367-33-2	59
2	2-t-Butylperoxy-2-ethylbutan-1-o...	260	C14H28O4	139727-33-6	37
3	1-Hexene, 3,4,5-trimethyl-	126	C9H18	056728-10-0	37
4	Propanoic acid, 2-methyl-, 2-met...	144	C8H16O2	000097-85-8	37





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

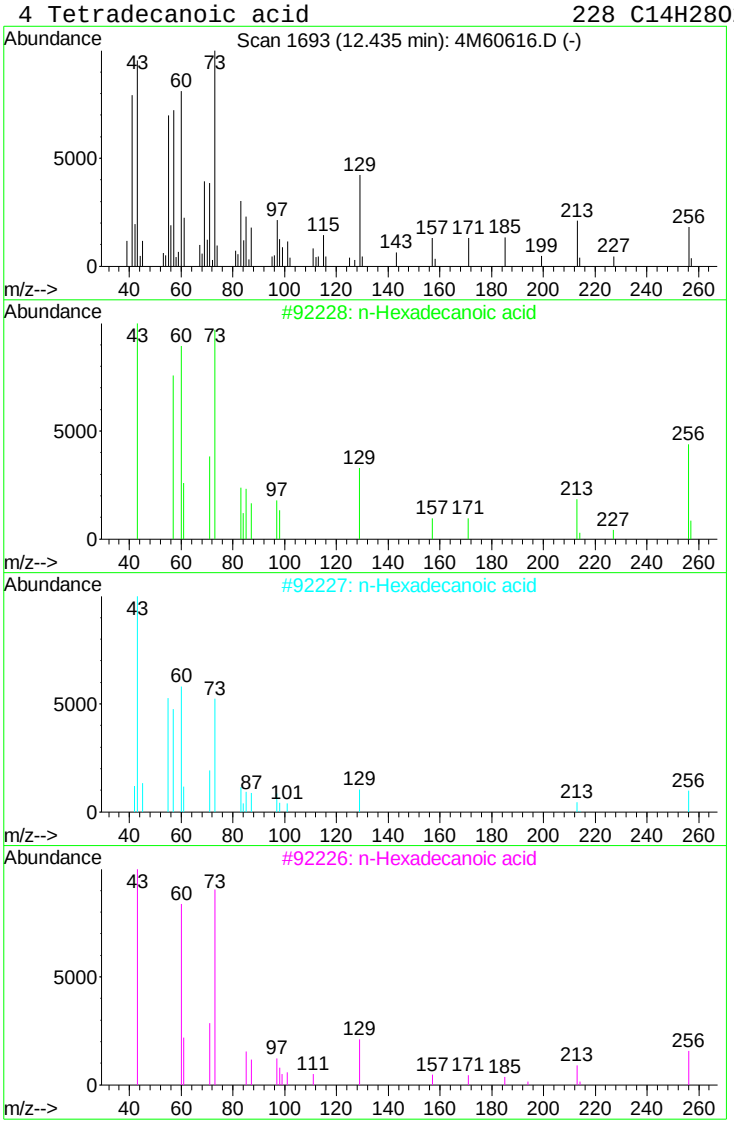
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

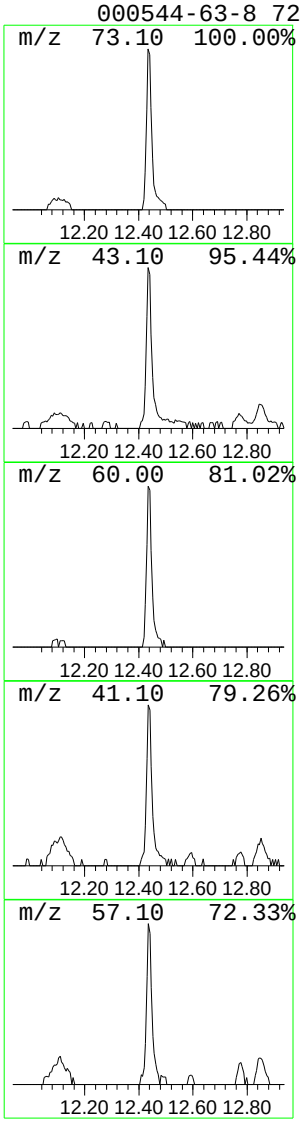
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Peak Number 3 n-Hexadecanoic acid Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.43	5.62 ug/ml	253348	Phenanthrene-d10	11.99

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	81
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	72





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

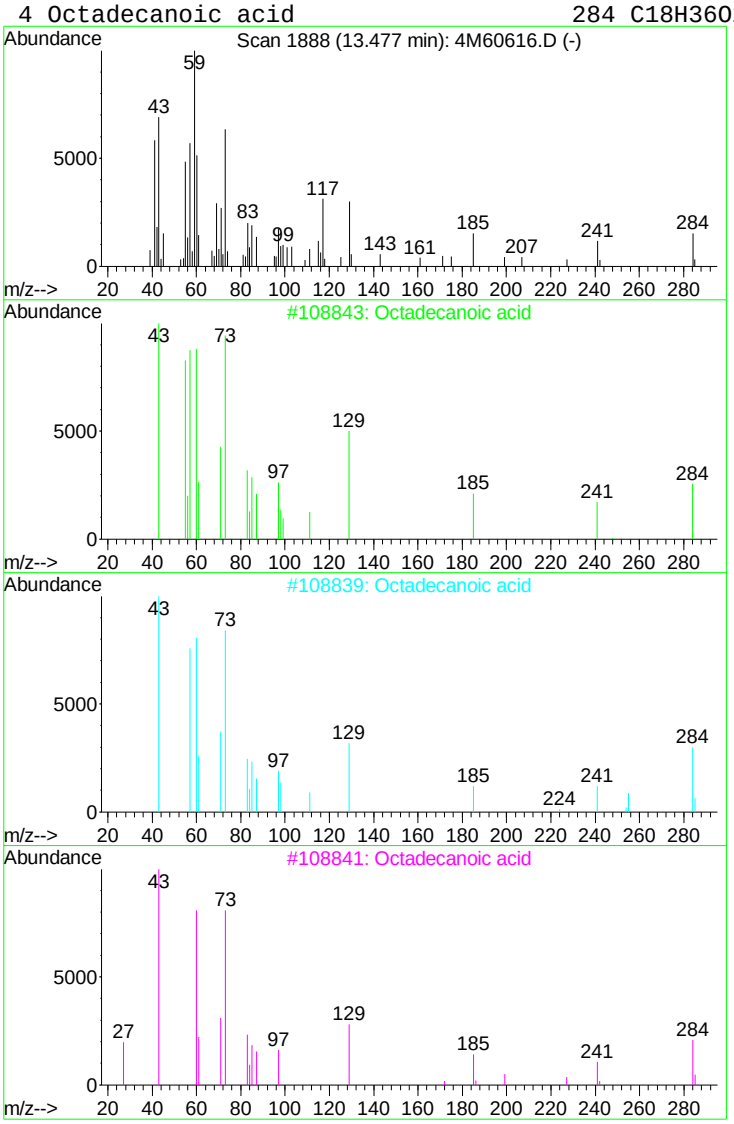
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

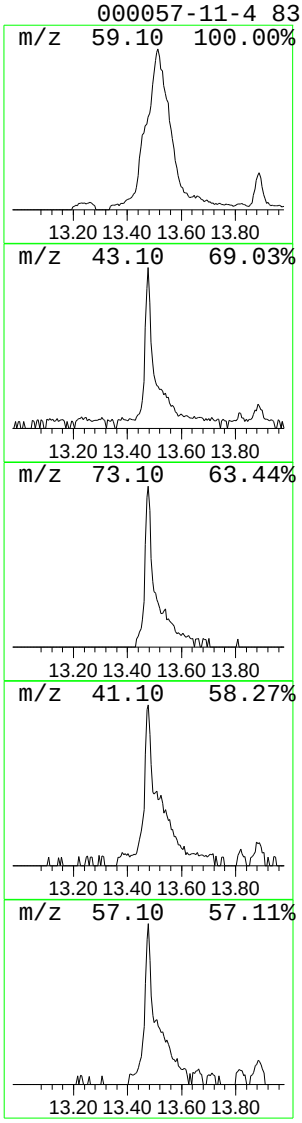
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Peak Number 4 Octadecanoic acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.48	7.34 ug/ml	331020	Phenanthrene-d10	11.99

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	98
2	Octadecanoic acid	284	C18H36O2	000057-11-4	95
3	Octadecanoic acid	284	C18H36O2	000057-11-4	93
4	Octadecanoic acid	284	C18H36O2	000057-11-4	83





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

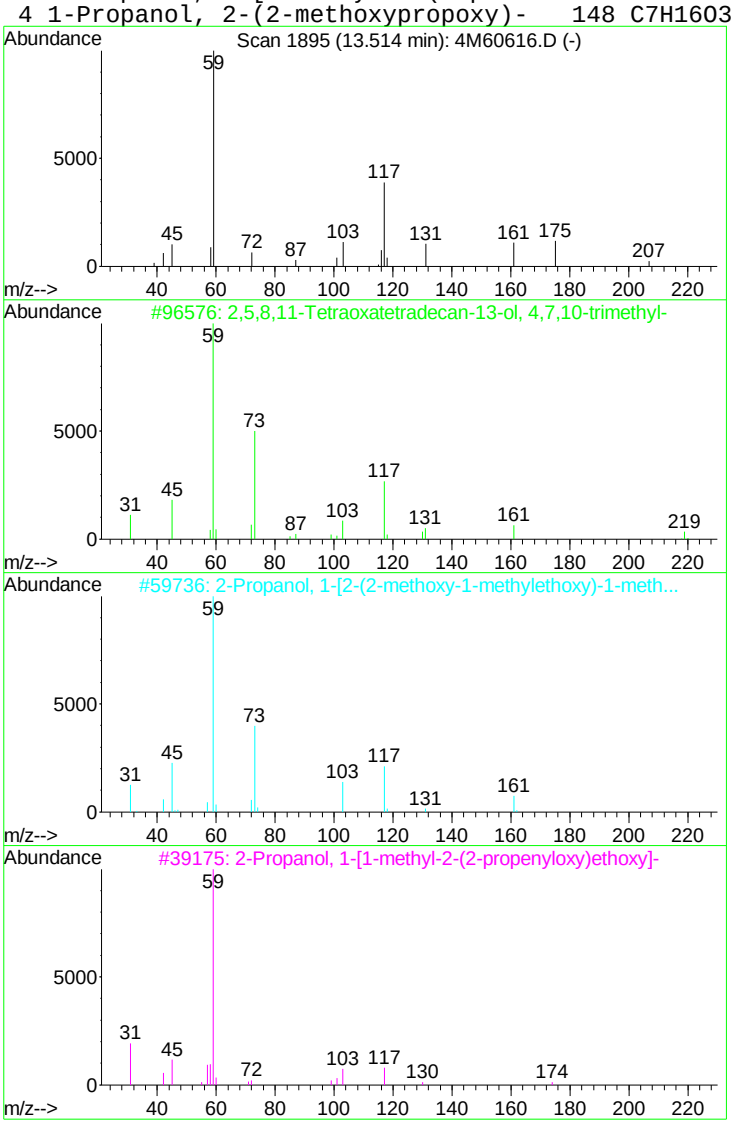
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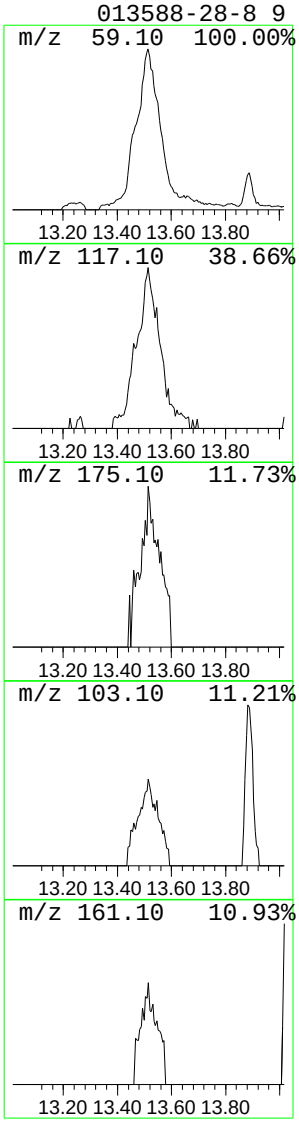
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Peak Number 5 2,5,8,11-Tetraoxatetradecan... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.51	6.34 ug/ml	285845	Phenanthrene-d10	11.99

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	64
2	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	33
3	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	25
4	1-Propanol, 2-(2-methoxypropoxy)-	148	C7H16O3	013588-28-8	9





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

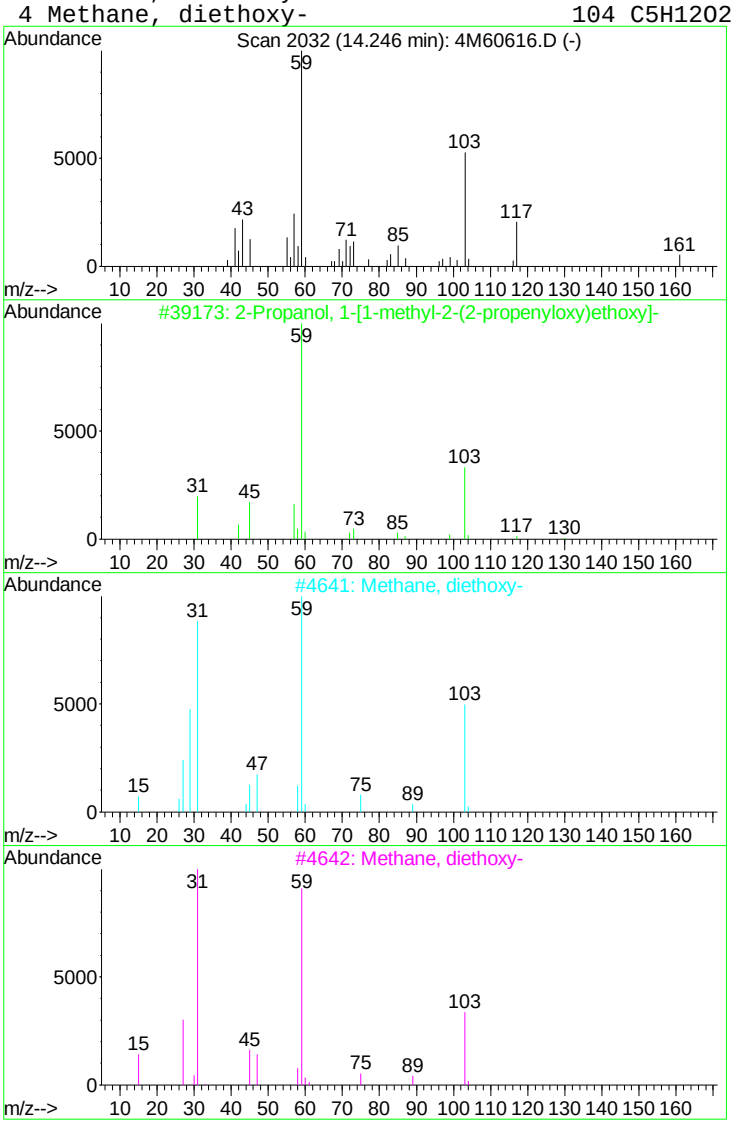
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Library : I:\DATABASE\NIST02.L

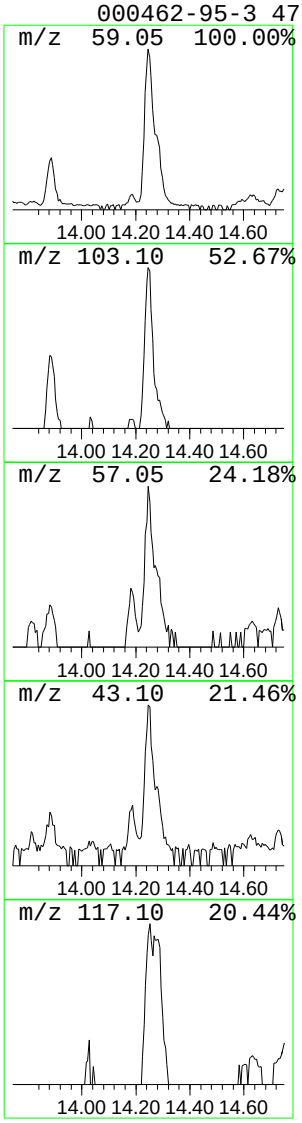
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Peak Number 6 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.25	5.18 ug/ml	232893	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	59
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	49
3	Methane, diethoxy-	104	C5H12O2	000462-95-3	47
4	Methane, diethoxy-	104	C5H12O2	000462-95-3	47





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

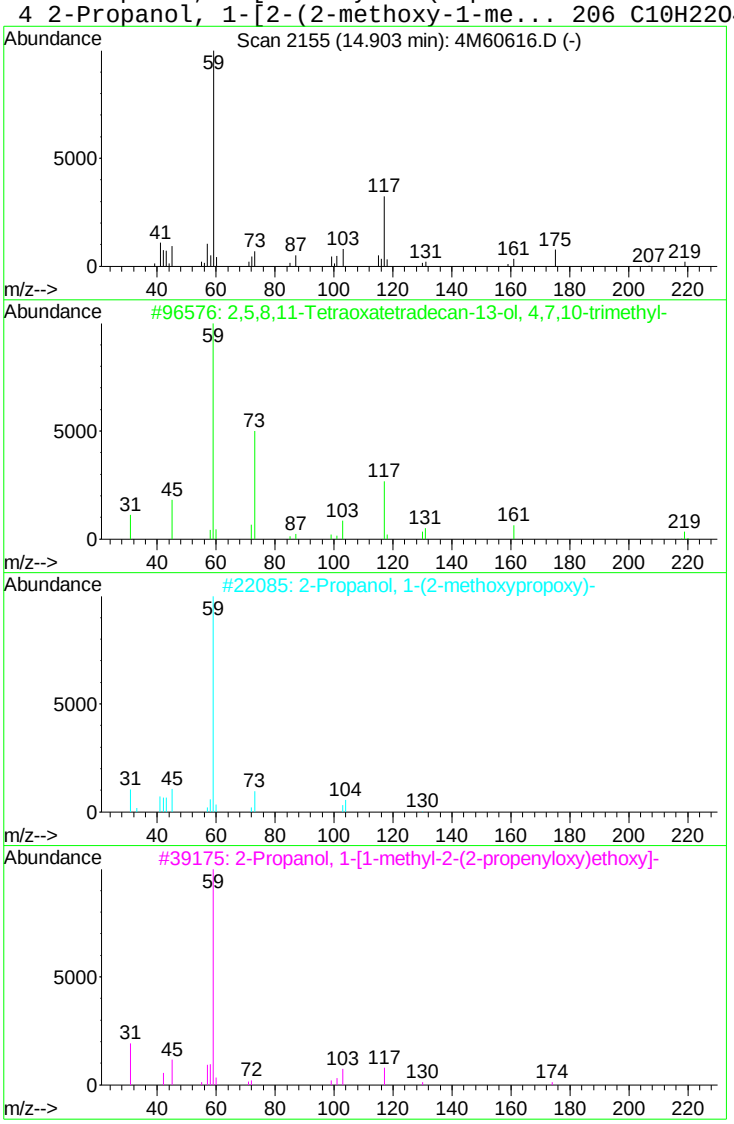
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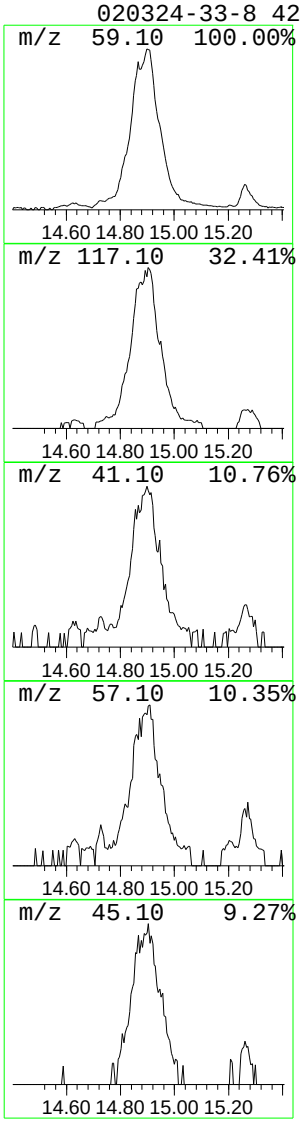
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Peak Number 7 2,5,8,11-Tetraoxatetradecan... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.90	20.20 ug/ml	908625	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	64
2	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	50
3	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	42
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

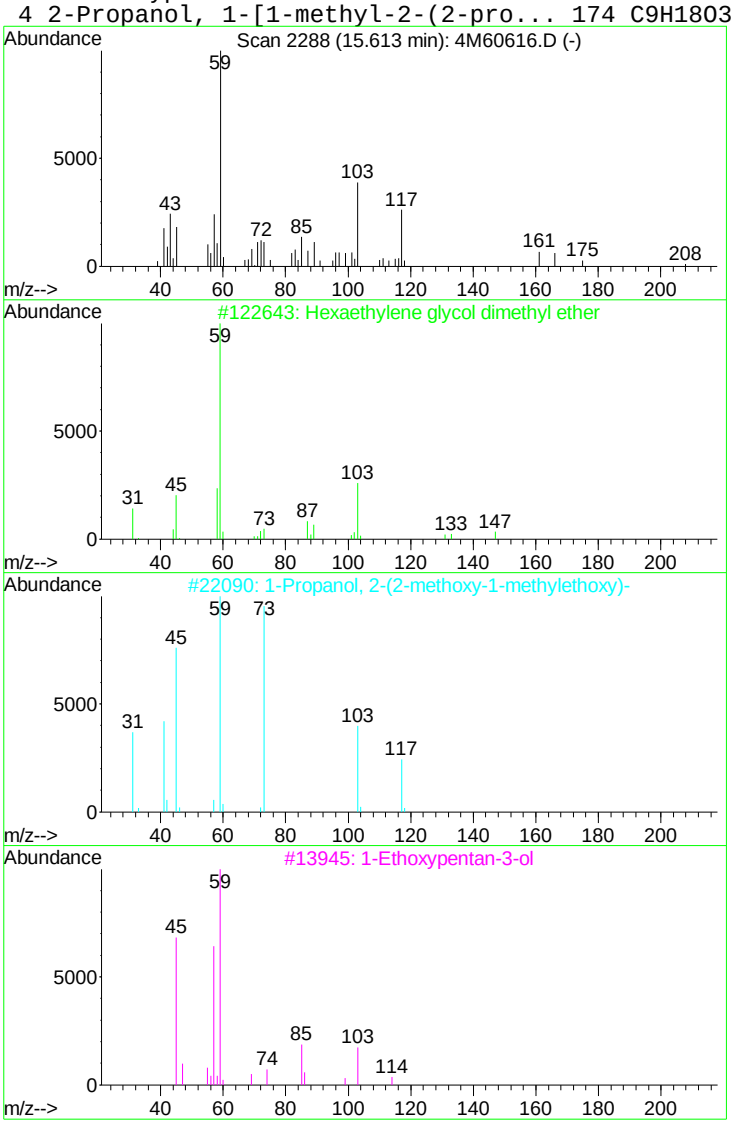
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

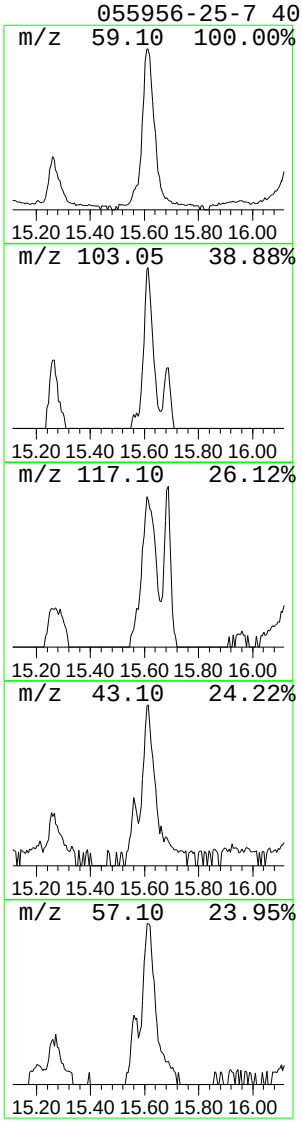
****

Peak Number 8 Hexaethylene glycol dimethy... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.61	6.53 ug/ml	293590	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	59
2	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	53
3	1-Ethoxypentan-3-ol	132	C7H16O2	100910-92-7	47
4	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	40





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

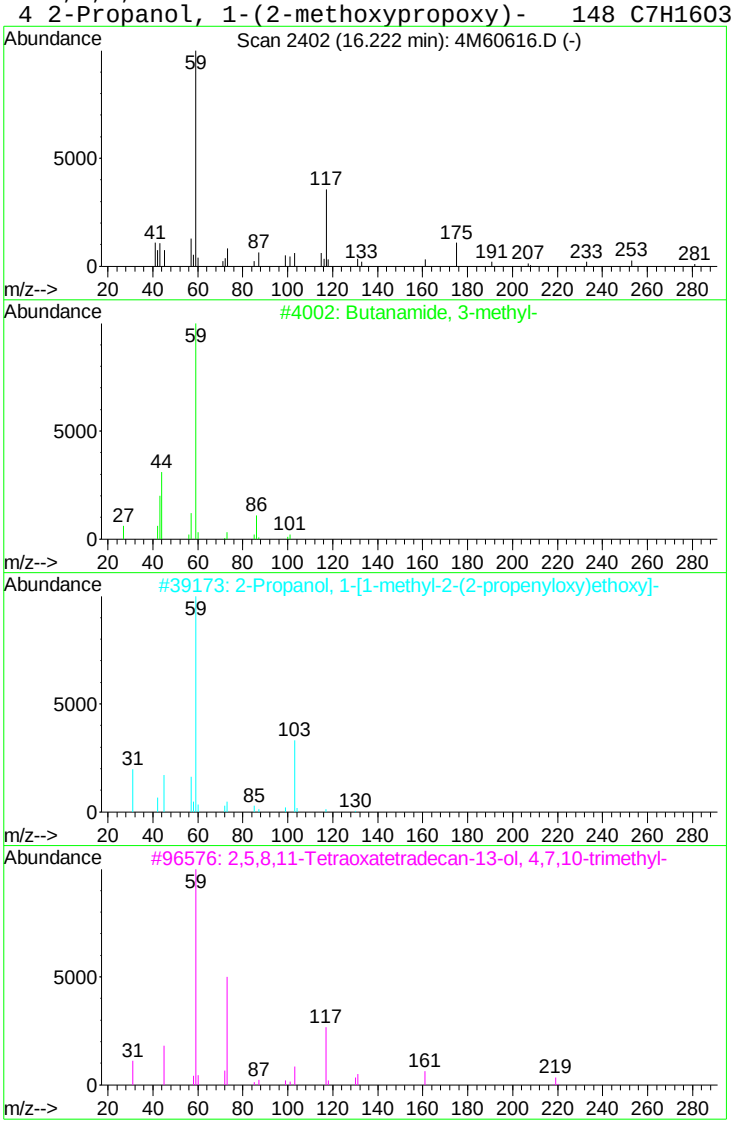
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

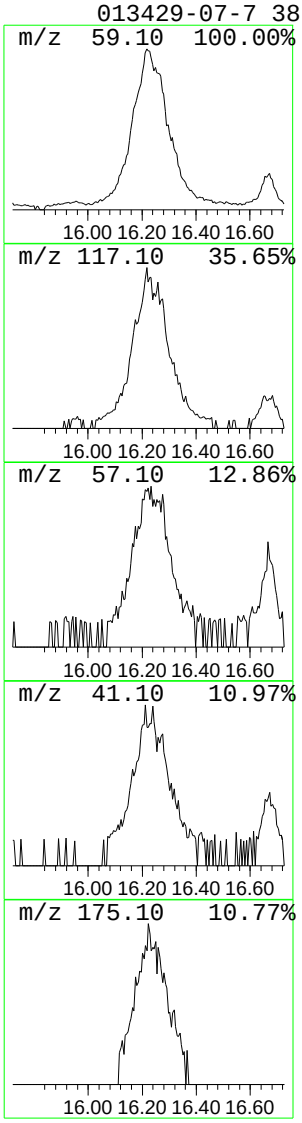
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Peak Number 9 Butanamide, 3-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.22	8.61 ug/ml	387047	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanamide, 3-methyl-	101	C5H11NO	000541-46-8	47
2	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	40
3	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	38
4	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	38





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

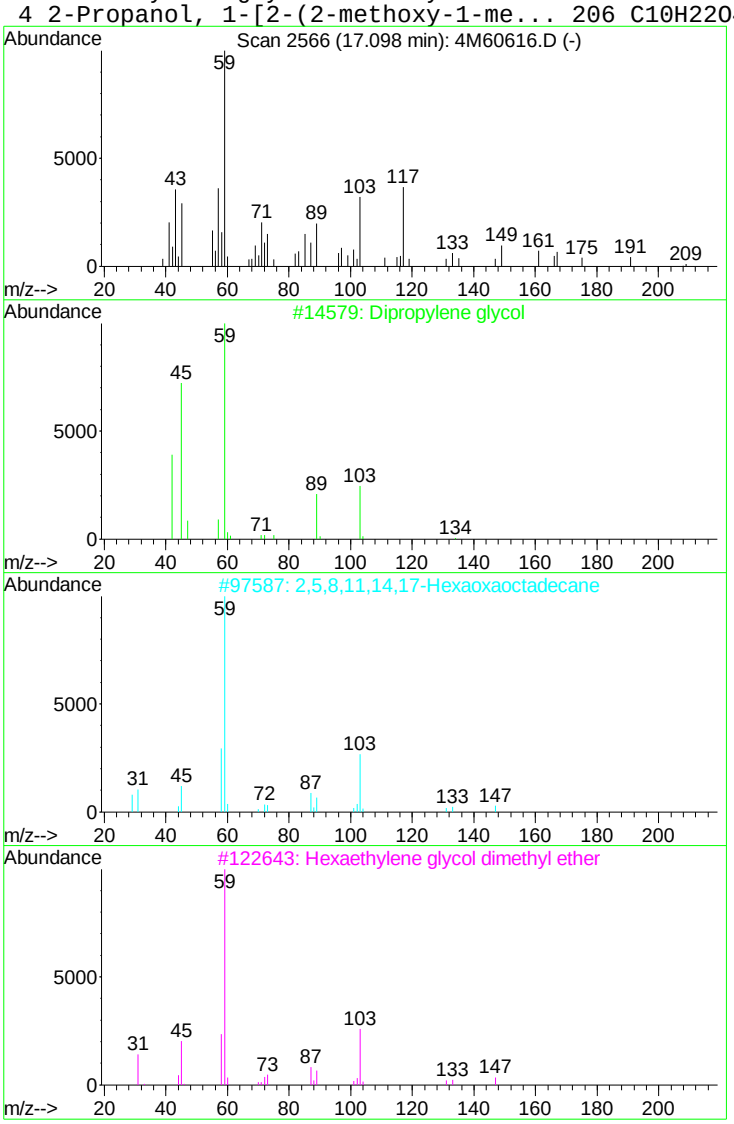
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

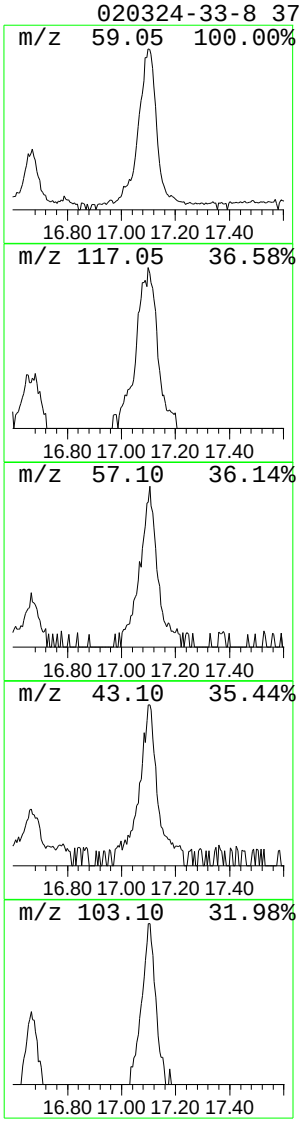
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Peak Number 10 Dipropylene glycol Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.10	8.86 ug/ml	374787	Perylene-d12	18.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dipropylene glycol	134	C6H14O3	025265-71-8	38
2	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	37
3	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	37
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	37





Data File : I:\MSDCHEM\1\DATA\050112\4M60616.D Vial: 17
Acq On : 1 May 2012 22:04 Operator: CAA
Sample : L12040844-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

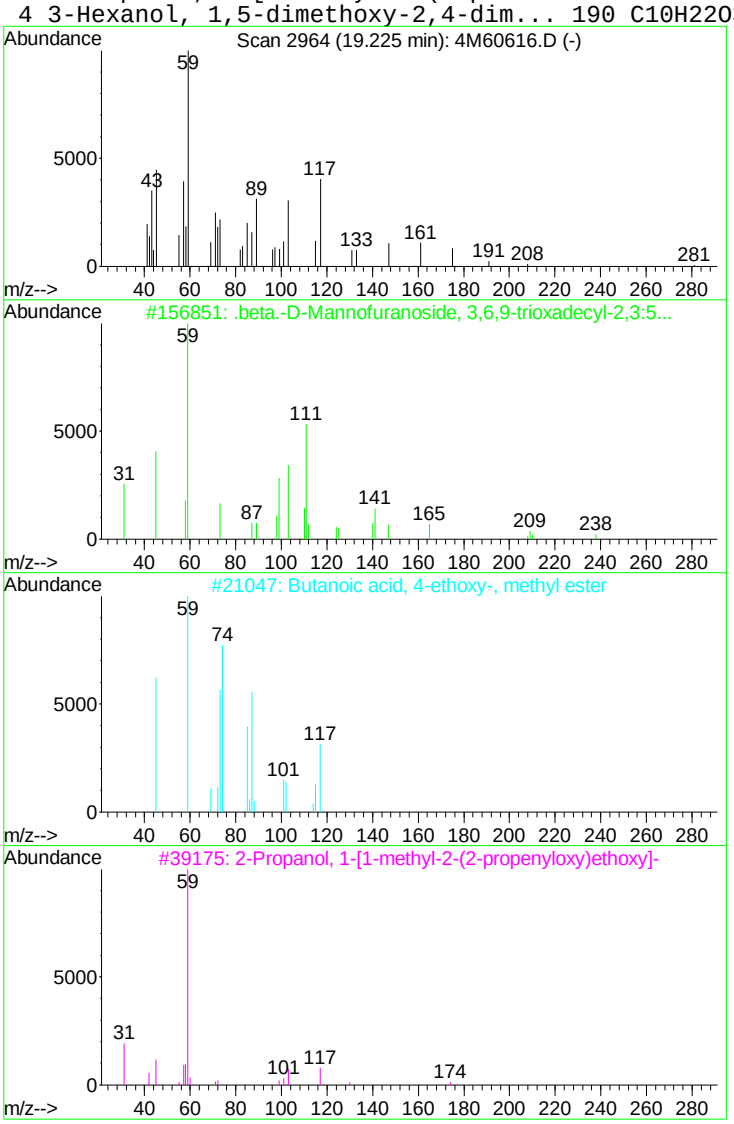
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

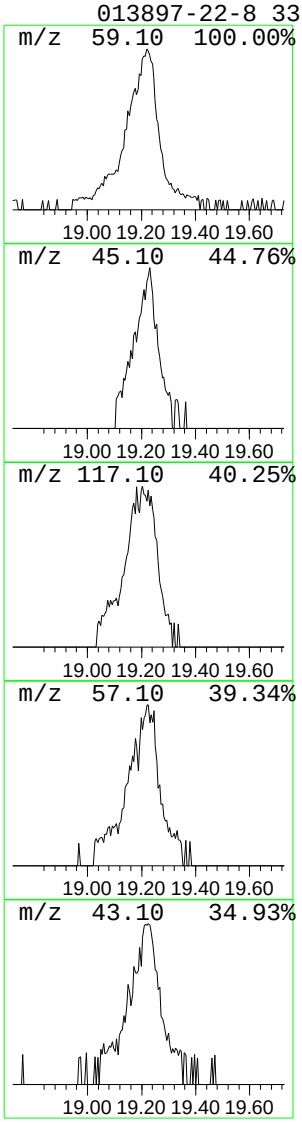
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Peak Number 11 .beta.-D-Mannofuranoside, 3... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.22	6.47 ug/ml	273725	Perylene-d12	18.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	40
2	Butanoic acid, 4-ethoxy-, methyl...	146	C7H14O3	029006-04-0	37
3	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	37
4	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	33





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 1 May 2012 22:04
Data File: I:\MSDCHEM\1\DATA\050112\4M60616.D
Name: L12040844-03
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	3.88	4.1	ug/ml	114817	1	7.28	1120420	40.0
Propanoic acid, 2...	9.52	5.1	ug/ml	207998	3	10.38	1643500	40.0
n-Hexadecanoic acid	12.43	5.6	ug/ml	253348	4	11.99	1804190	40.0
Octadecanoic acid	13.48	7.3	ug/ml	331020	4	11.99	1804190	40.0
2,5,8,11-Tetraoxa...	13.51	6.3	ug/ml	285845	4	11.99	1804190	40.0
2-Propanol, 1-[1-...	14.25	5.2	ug/ml	232893	5	15.69	1798970	40.0
2,5,8,11-Tetraoxa...	14.90	20.2	ug/ml	908625	5	15.69	1798970	40.0
Hexaethylene glyc...	15.61	6.5	ug/ml	293590	5	15.69	1798970	40.0
Butanamide, 3-met...	16.22	8.6	ug/ml	387047	5	15.69	1798970	40.0
Dipropylene glycol	17.10	8.9	ug/ml	374787	6	18.48	1692600	40.0
.beta.-D-Mannofur...	19.22	6.5	ug/ml	273725	6	18.48	1692600	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:25 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	195236	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	745170	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	413041	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	732291	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	689525	40.00	ug/ml	0.00
128) Perylene-d12	18.48	264	652292	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	336682	56.8772	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 56.88%			
12) Phenol-d5	6.88	99	438923	63.3558	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 63.36%			
31) Nitrobenzene-d5	7.84	82	214258	33.9955	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 68.00%			
59) 2-Fluorobiphenyl	9.64	172	496769	36.0176	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 72.04%			
86) 2,4,6-Tribromophenol	11.20	330	187553	101.8260	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 101.83%			
117) p-Terphenyl-d14	14.03	244	500369	39.3721	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 78.74%			

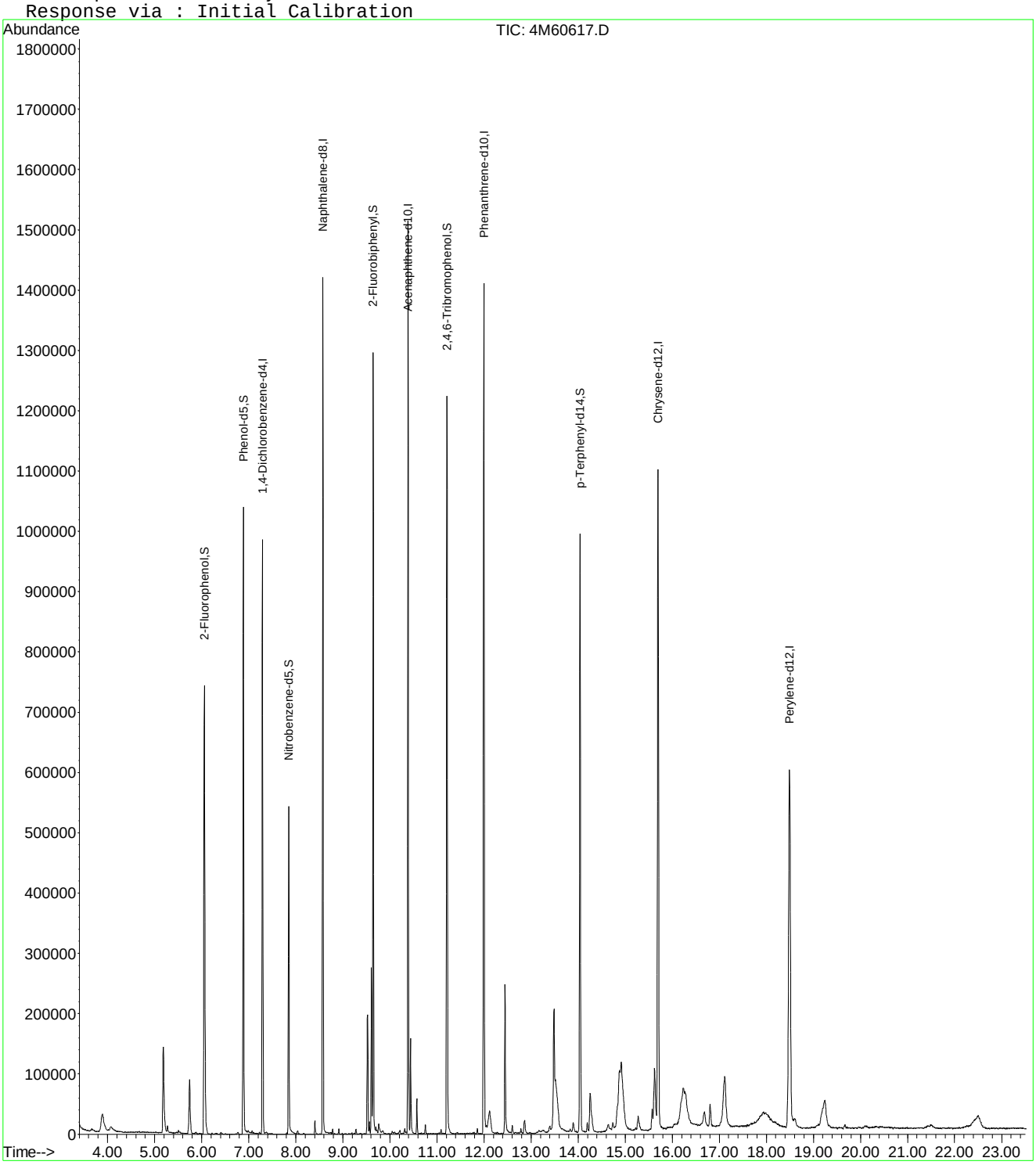
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60617.D MEGAMIX.M Wed May 02 13:47:22 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:33 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:55:24 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 13:54:56 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	195236	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	746007	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	413041	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	732291	40.00	ug/mL	0.00

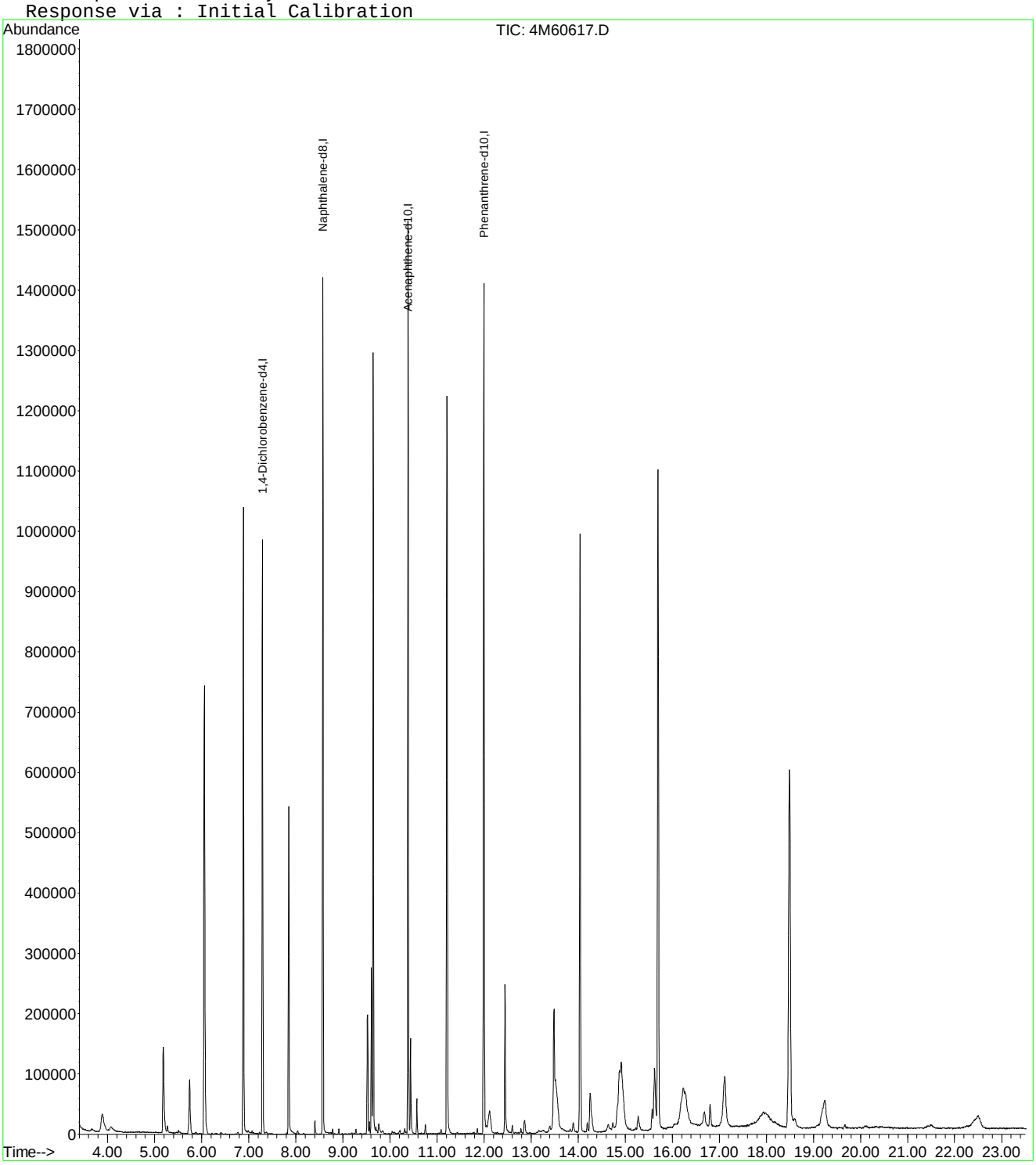
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60617.D TCL.M Wed May 02 13:55:24 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:55 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 13:54:56 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

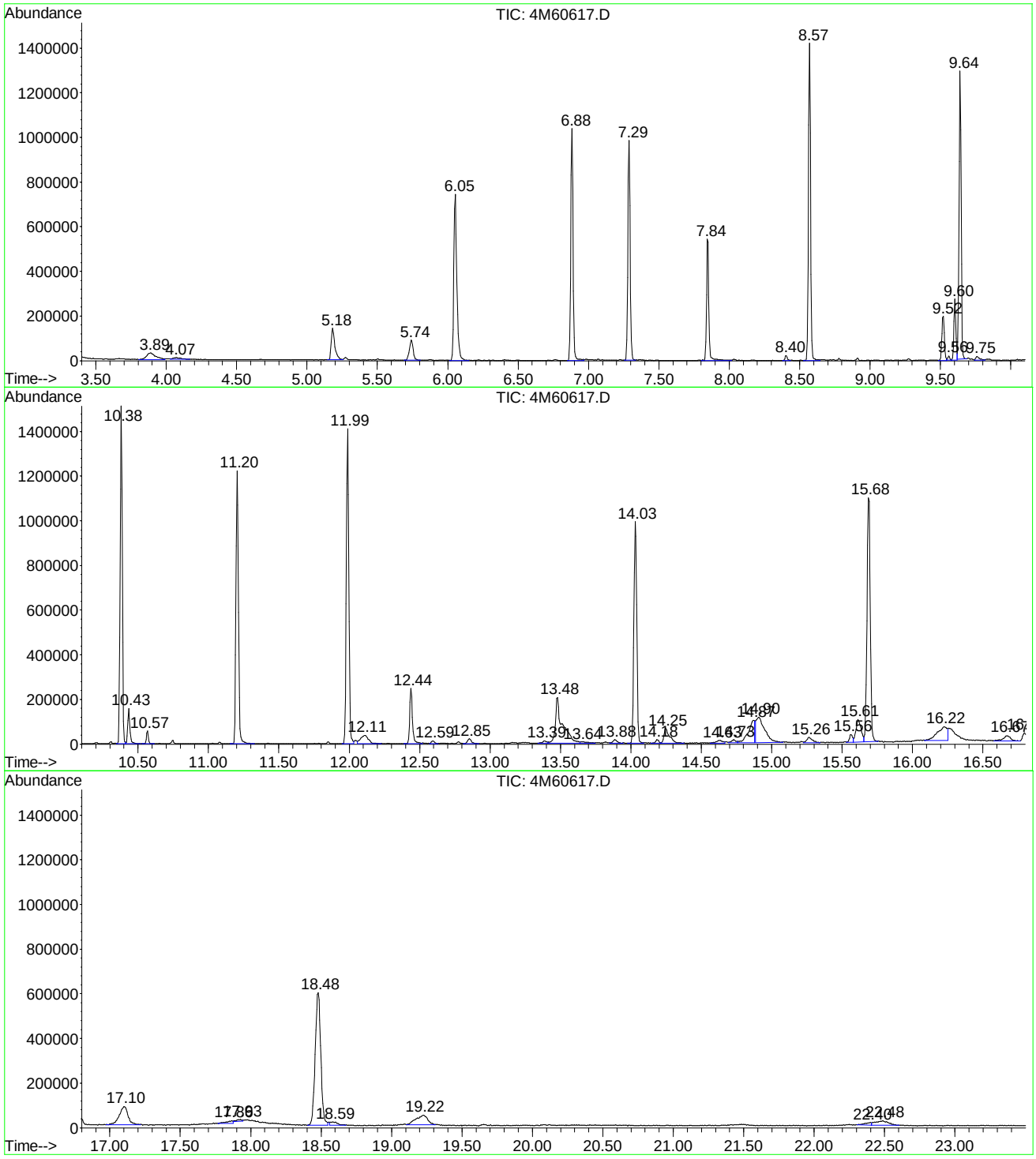
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.889	77	93	112	rBV5	29329	133039	7.62%	0.608%
2	4.071	119	127	144	rVB2	7041	26363	1.51%	0.121%
3	5.182	328	335	348	rBV	142210	253418	14.51%	1.159%
4	5.737	430	439	451	rVB2	89231	165016	9.45%	0.755%
5	6.053	490	498	515	rBB	744123	1088953	62.33%	4.980%
6	6.881	647	653	669	rBV	1039593	1158800	66.33%	5.300%
7	7.287	723	729	737	rBV	985407	1085830	62.15%	4.966%
8	7.842	825	833	865	rBV	543374	628766	35.99%	2.876%
9	8.403	933	938	943	rBB	21852	22400	1.28%	0.102%
10	8.569	961	969	983	rBV	1420806	1464034	83.80%	6.696%
11	9.520	1140	1147	1151	rBV2	197981	247357	14.16%	1.131%
12	9.557	1151	1154	1157	rVB	19392	17739	1.02%	0.081%
13	9.600	1157	1162	1165	rBV	274847	278498	15.94%	1.274%
14	9.637	1165	1169	1177	rVB	1290230	1325888	75.89%	6.064%
15	9.755	1188	1191	1202	rBV4	15280	27217	1.56%	0.124%
16	10.380	1302	1308	1314	rBV	1513205	1590619	91.05%	7.275%
17	10.433	1314	1318	1333	rVB	158284	165514	9.47%	0.757%
18	10.567	1336	1343	1351	rBV	58401	58162	3.33%	0.266%
19	11.202	1453	1462	1484	rBV	1223500	1492545	85.43%	6.826%
20	11.988	1602	1609	1617	rBV	1410641	1740921	99.65%	7.962%
21	12.111	1622	1632	1653	rVB5	37114	140608	8.05%	0.643%
22	12.436	1684	1693	1708	rBV	247982	331172	18.96%	1.515%
23	12.591	1718	1722	1728	rVB	13064	17808	1.02%	0.081%
24	12.853	1763	1771	1782	rVB3	21994	44575	2.55%	0.204%
25	13.387	1862	1871	1875	rBV5	10278	21581	1.24%	0.099%
26	13.478	1875	1888	1918	rVV2	204702	701926	40.18%	3.210%
27	13.644	1918	1919	1937	rVB4	5854	18513	1.06%	0.085%
28	13.884	1957	1964	1974	rVB4	16106	33320	1.91%	0.152%
29	14.028	1981	1991	2002	rBV2	993662	1409356	80.67%	6.446%
30	14.183	2012	2020	2025	rBV2	16321	26145	1.50%	0.120%
31	14.247	2025	2032	2055	rVB3	64789	183380	10.50%	0.839%
32	14.632	2091	2104	2110	rBV6	12981	40484	2.32%	0.185%
33	14.728	2115	2122	2127	rVV7	14638	30137	1.73%	0.138%
34	14.872	2127	2149	2150	rVV	99749	317028	18.15%	1.450%
35	14.904	2151	2155	2187	rVB2	112412	461440	26.41%	2.110%
36	15.262	2215	2222	2236	rVB3	24414	61541	3.52%	0.281%
37	15.562	2272	2278	2281	rBV	34368	54608	3.13%	0.250%
38	15.610	2281	2287	2295	rVV	100802	252257	14.44%	1.154%
39	15.684	2295	2301	2313	rVB	1091933	1747010	100.00%	7.990%
40	16.219	2376	2401	2407	rBV2	61157	311048	17.80%	1.423%
41	16.673	2468	2486	2502	rVV4	23761	88374	5.06%	0.404%
42	16.790	2502	2508	2517	rVB2	37415	69961	4.00%	0.320%

43	17.100	2542	2566	2587	rBV5	82809	361332	20.68%	1.653%
44	17.864	2691	2709	2711	rBV9	11714	41484	2.37%	0.190%
45	17.928	2711	2721	2724	rVV9	7511	22184	1.27%	0.101%
46	18.478	2810	2824	2837	rBV	593732	1630453	93.33%	7.457%
47	18.585	2839	2844	2860	rVB8	15300	55772	3.19%	0.255%
48	19.221	2941	2963	2979	rVB6	43182	251022	14.37%	1.148%
49	22.400	3540	3558	3559	rBV7	10566	34328	1.96%	0.157%
50	22.485	3559	3574	3595	rVB10	20481	134797	7.72%	0.617%

Sum of corrected areas: 21864723

```
File       : I:\MSDCHEM\1\DATA\050112\4M60617.D
Operator   : CAA
Acquired   :  1 May 2012  22:38     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12040844-05
Misc Info  : 1,1
Vial Number: 18
Quant File :MEGAMIX.RES (RTE Integrator)
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Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

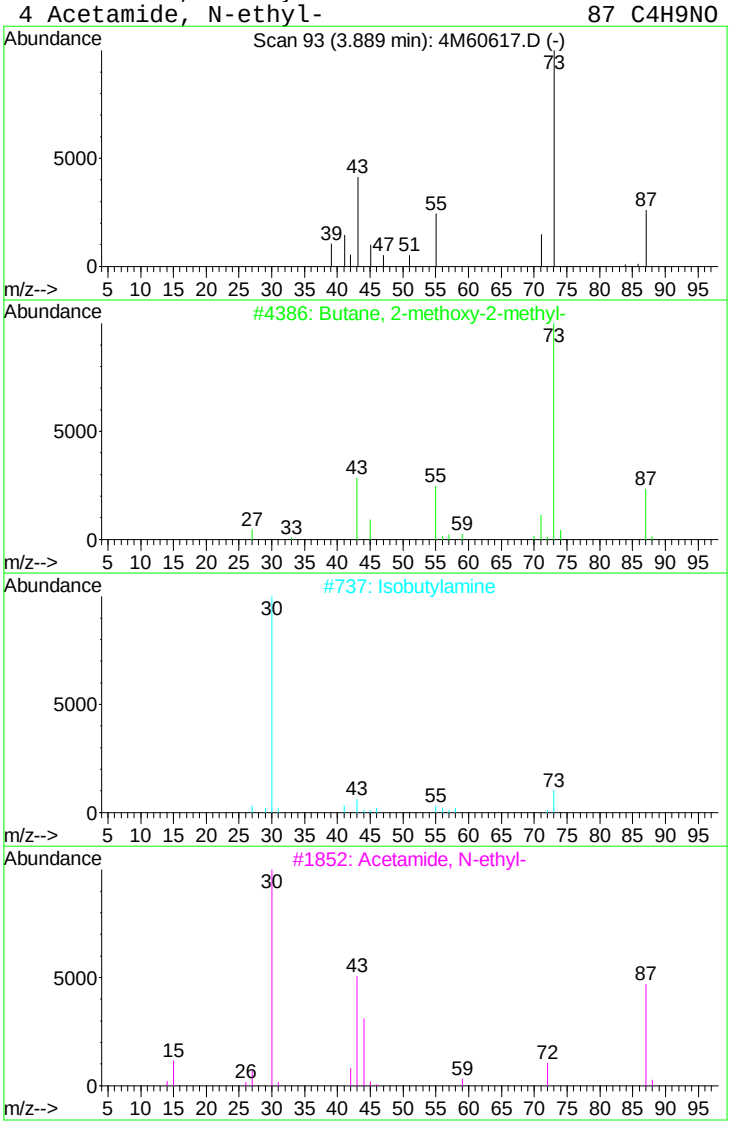
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

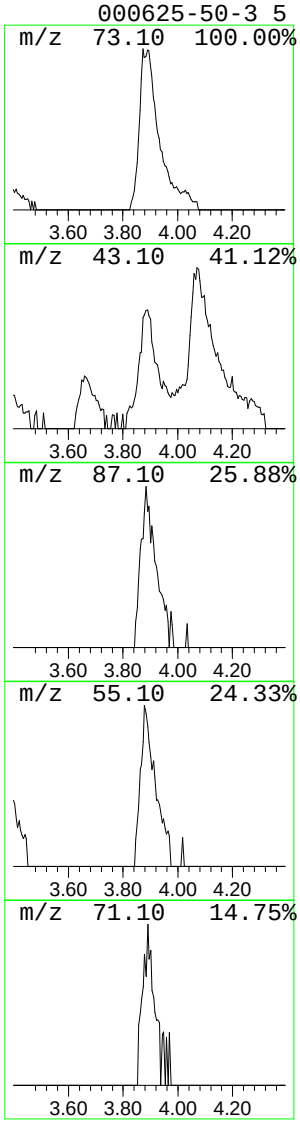
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.89	4.90 ug/ml	133039	1,4-Dichlorobenzene-d4	7.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	56
2	Isobutylamine	73	C4H11N	000078-81-9	5
3	Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5
4	Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

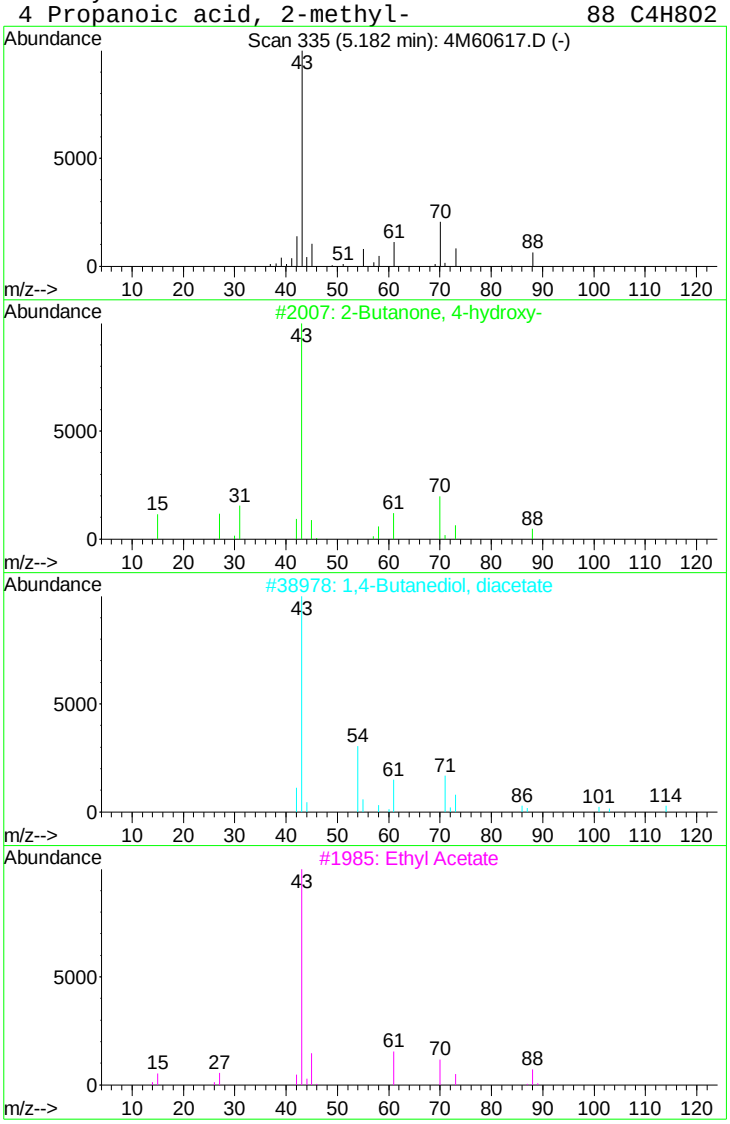
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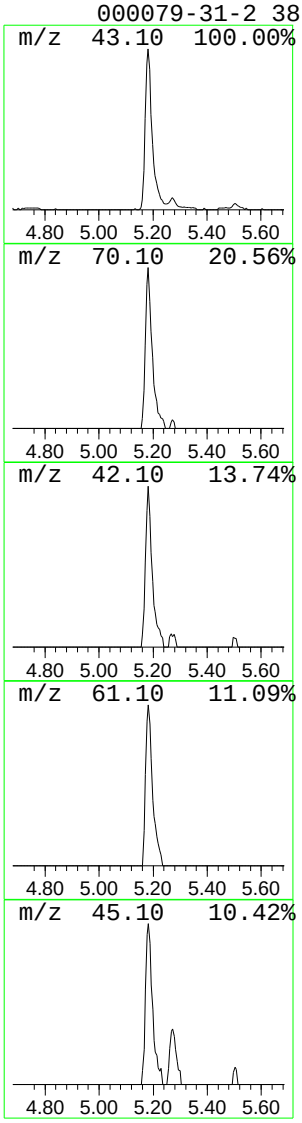
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Peak Number 2 2-Butanone, 4-hydroxy- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.18	9.34 ug/ml	253418	1,4-Dichlorobenzene-d4	7.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butanone, 4-hydroxy-	88	C4H8O2	000590-90-9	86
2	1,4-Butanediol, diacetate	174	C8H14O4	000628-67-1	38
3	Ethyl Acetate	88	C4H8O2	000141-78-6	38
4	Propanoic acid, 2-methyl-	88	C4H8O2	000079-31-2	38





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

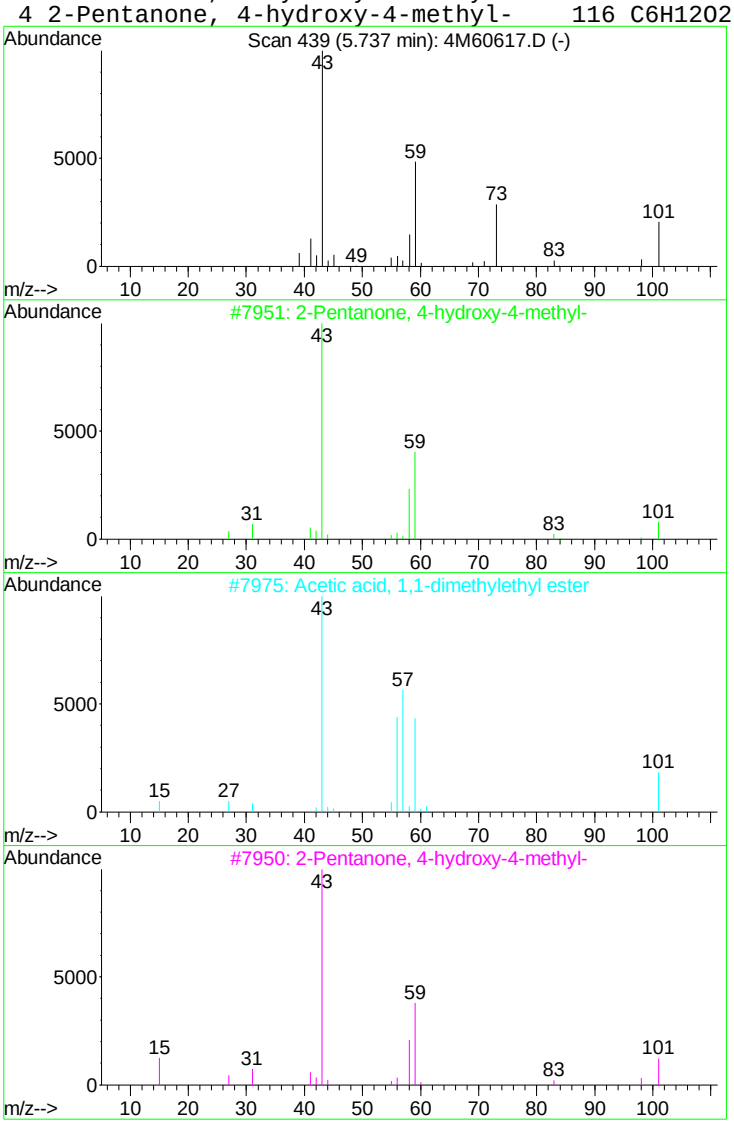
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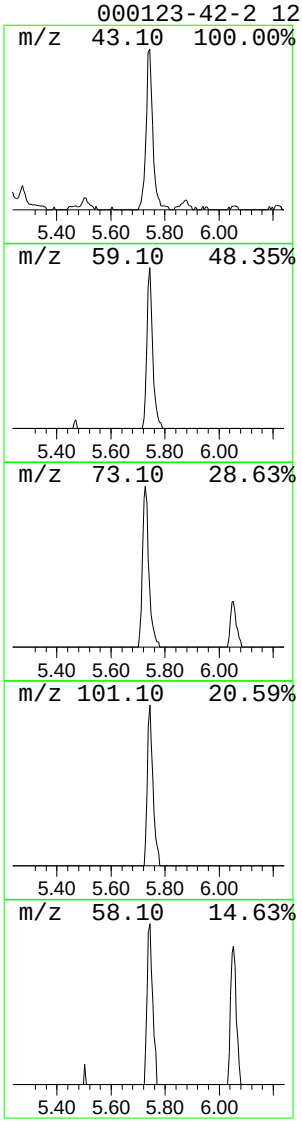
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Peak Number 3 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.74	6.08 ug/ml	165016	1,4-Dichlorobenzene-d4	7.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	36
2	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	36
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
4	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	12





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
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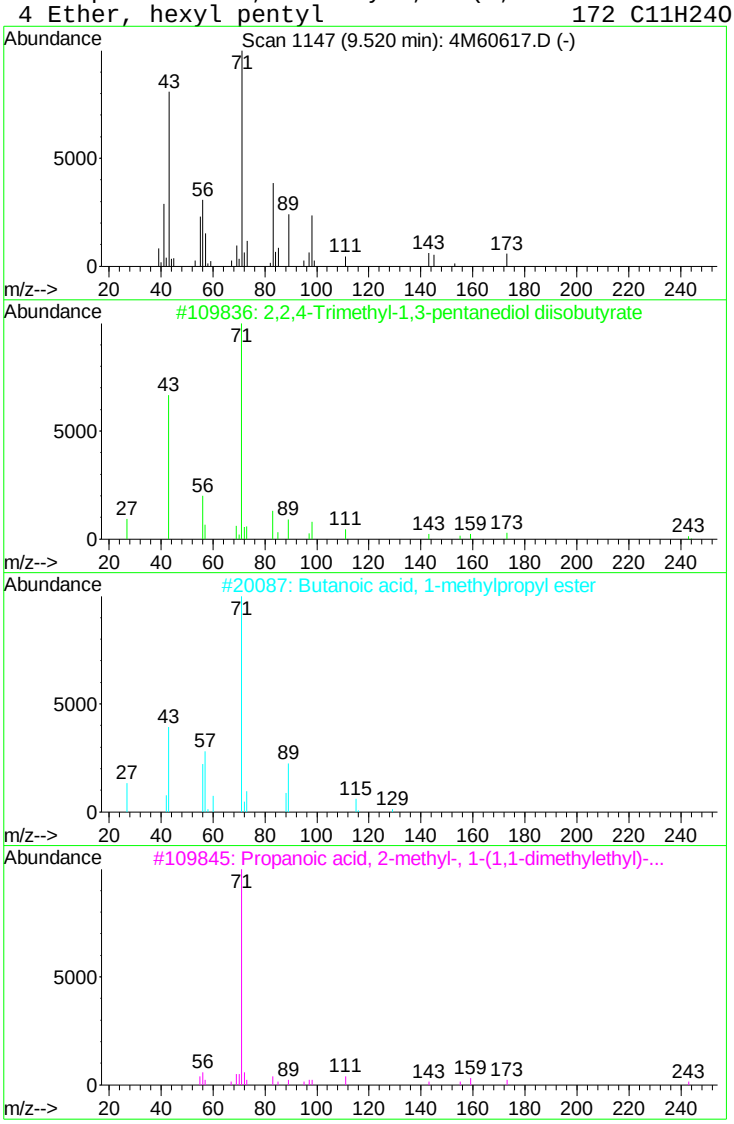
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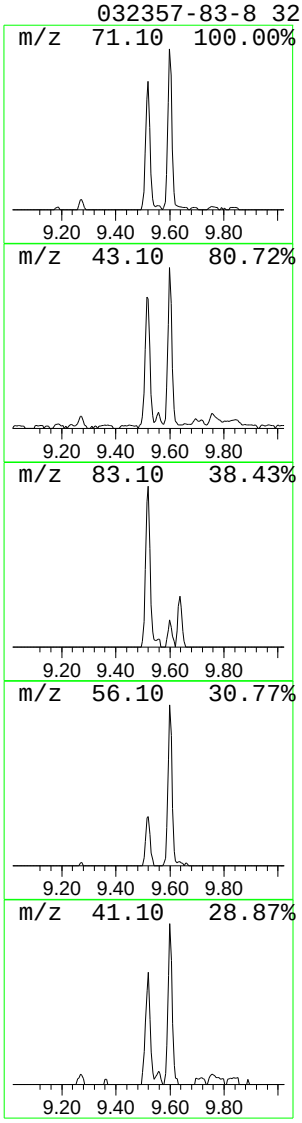
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Peak Number 4 2,2,4-Trimethyl-1,3-pentane... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.52	6.22 ug/ml	247357	Acenaphthene-d10	10.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2,4-Trimethyl-1,3-pentanediol ...	286	C16H30O4	006846-50-0	50
2	Butanoic acid, 1-methylpropyl ester	144	C8H16O2	000819-97-6	37
3	Propanoic acid, 2-methyl-, 1-(1,...	286	C16H30O4	074381-40-1	32
4	Ether, hexyl pentyl	172	C11H24O	032357-83-8	32





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
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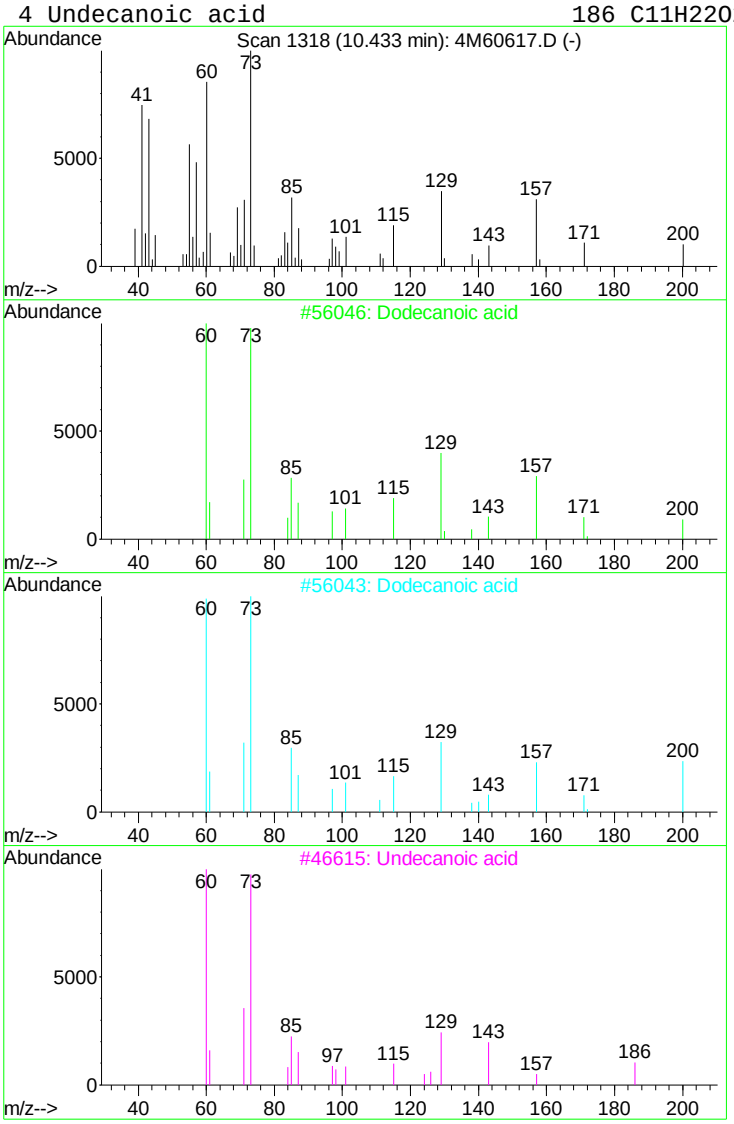
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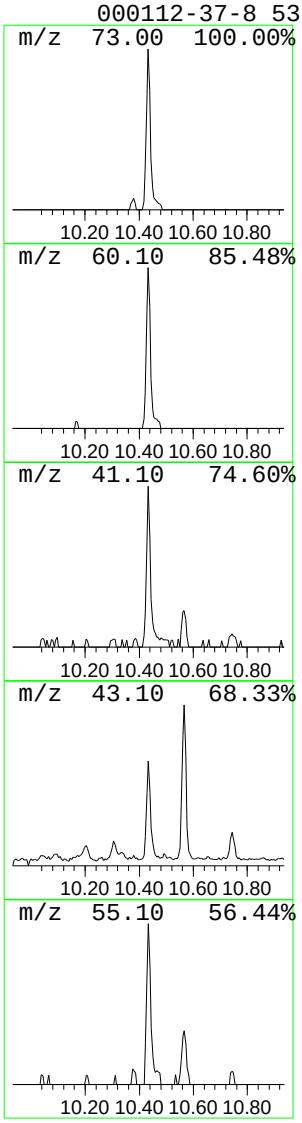
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Peak Number 5 Dodecanoic acid Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.43	4.16 ug/ml	165514	Acenaphthene-d10	10.38

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecanoic acid	200	C12H24O2	000143-07-7	99
2	Dodecanoic acid	200	C12H24O2	000143-07-7	87
3	Undecanoic acid	186	C11H22O2	000112-37-8	59
4	Undecanoic acid	186	C11H22O2	000112-37-8	53





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

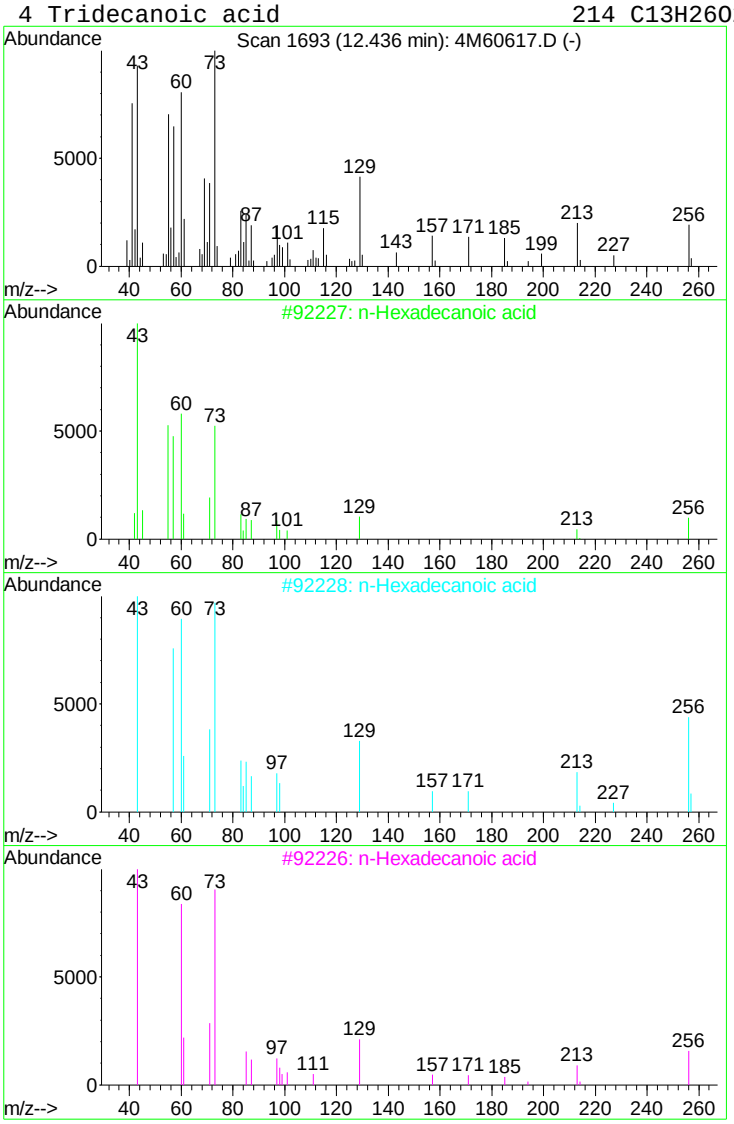
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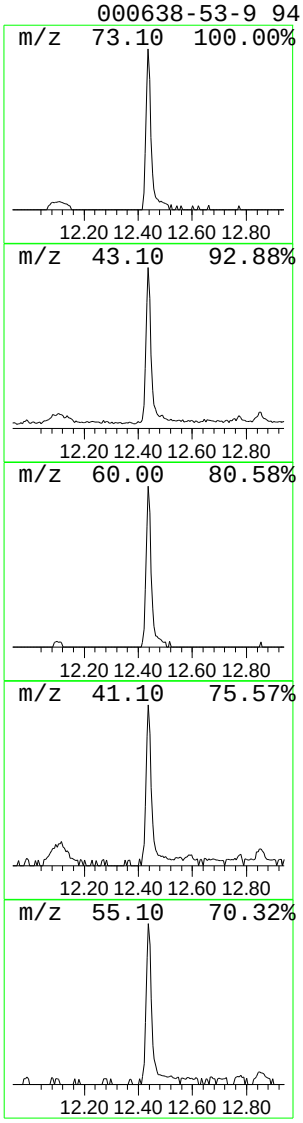
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Peak Number 6 n-Hexadecanoic acid Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.44	7.61 ug/ml	331172	Phenanthrene-d10	11.99

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	97
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	94
4	Tridecanoic acid	214	C13H26O2	000638-53-9	94





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
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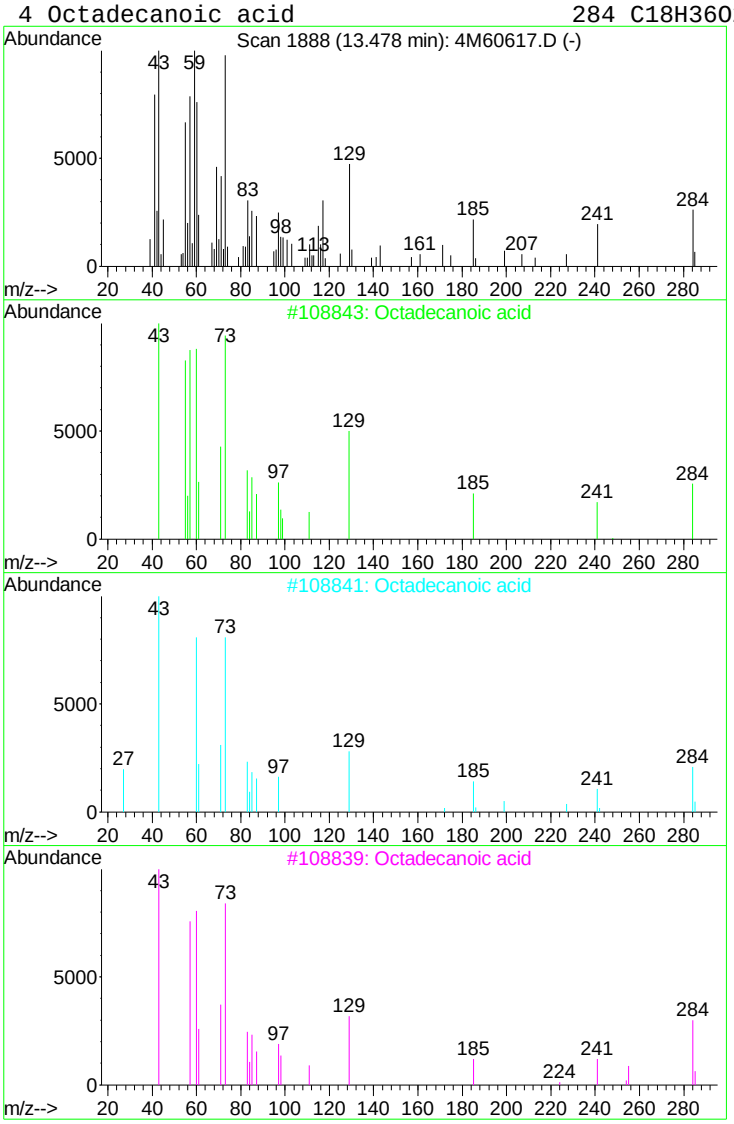
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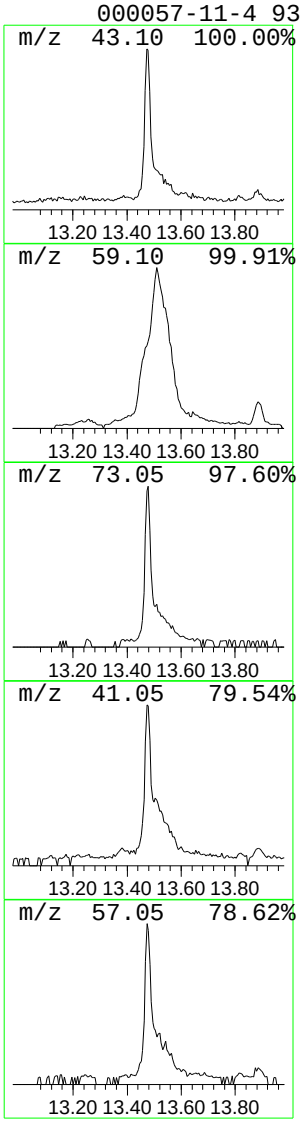
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Peak Number 7 Octadecanoic acid Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.48	16.13 ug/ml	701926	Phenanthrene-d10	11.99

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	98
3	Octadecanoic acid	284	C18H36O2	000057-11-4	95
4	Octadecanoic acid	284	C18H36O2	000057-11-4	93





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
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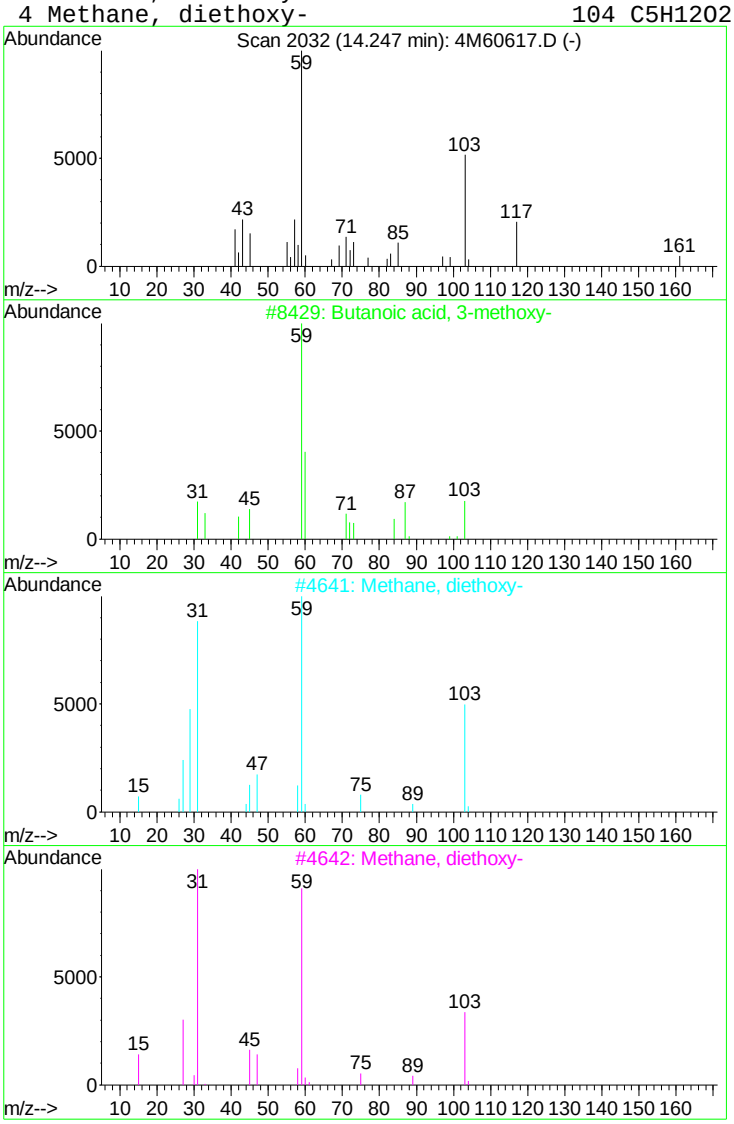
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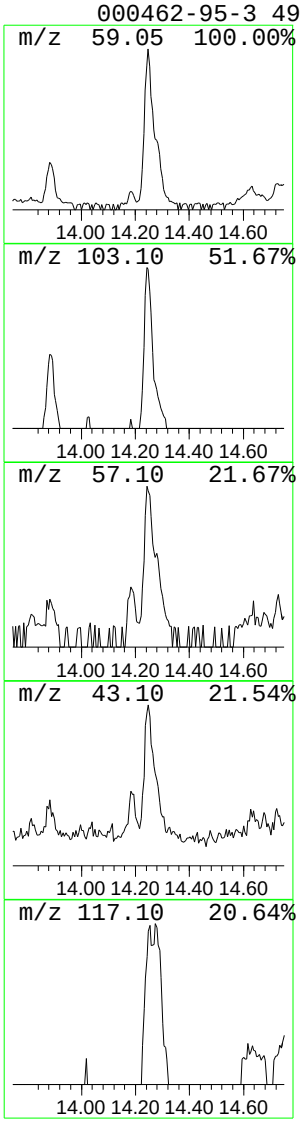
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Peak Number 8 Butanoic acid, 3-methoxy- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.25	4.20 ug/ml	183380	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanoic acid, 3-methoxy-	118	C5H10O3	010024-70-1	59
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	49
3	Methane, diethoxy-	104	C5H12O2	000462-95-3	49
4	Methane, diethoxy-	104	C5H12O2	000462-95-3	49





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

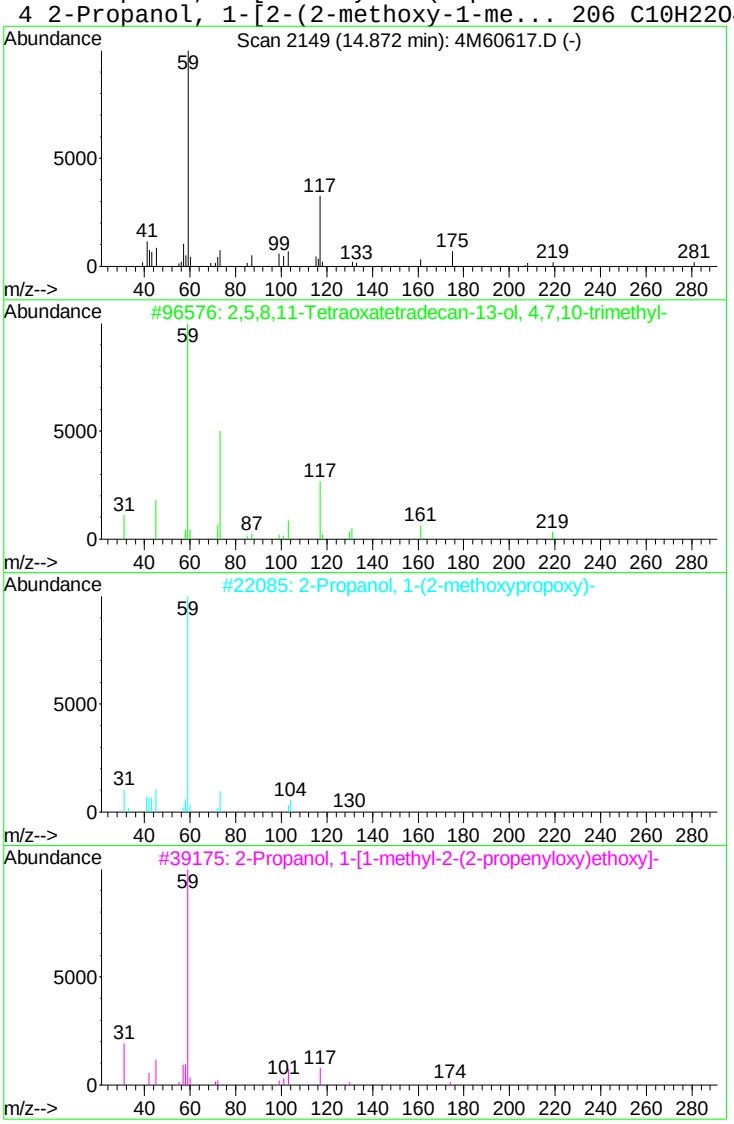
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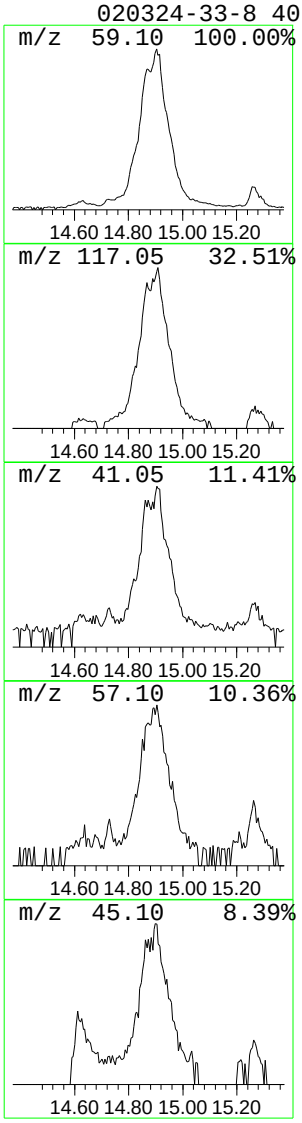
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Peak Number 9 2,5,8,11-Tetraoxatetradecan... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.87	7.26 ug/ml	317028	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	64
2	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	50
3	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	42
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	40





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
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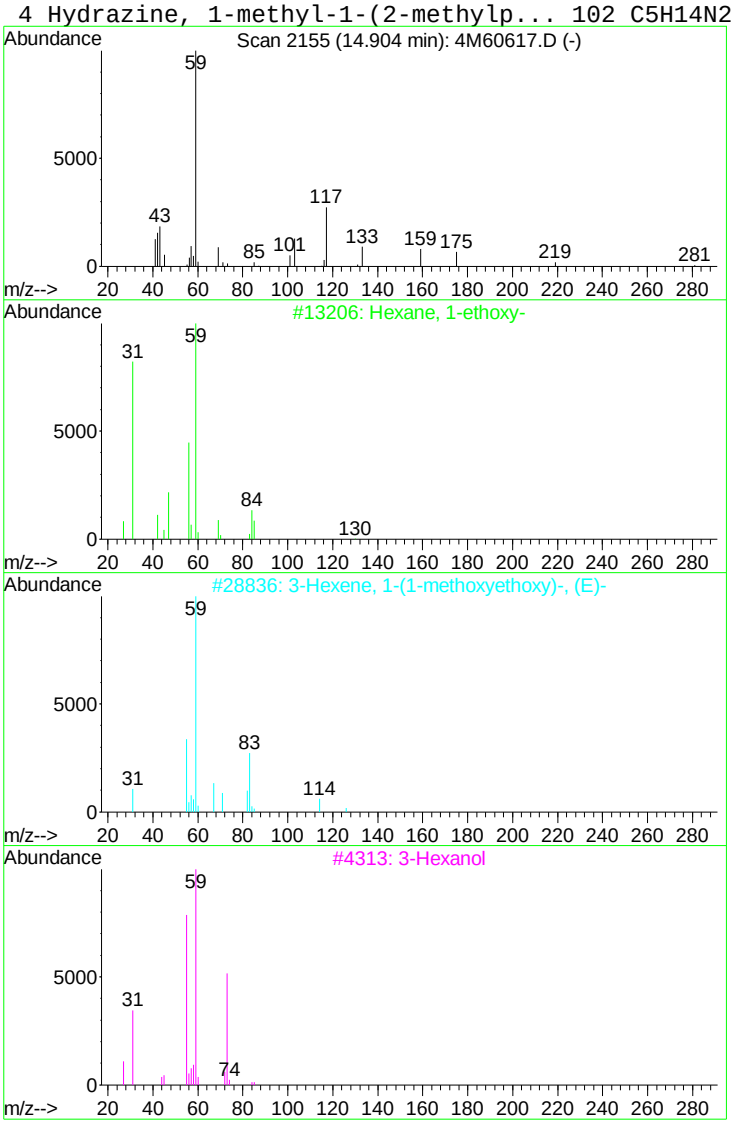
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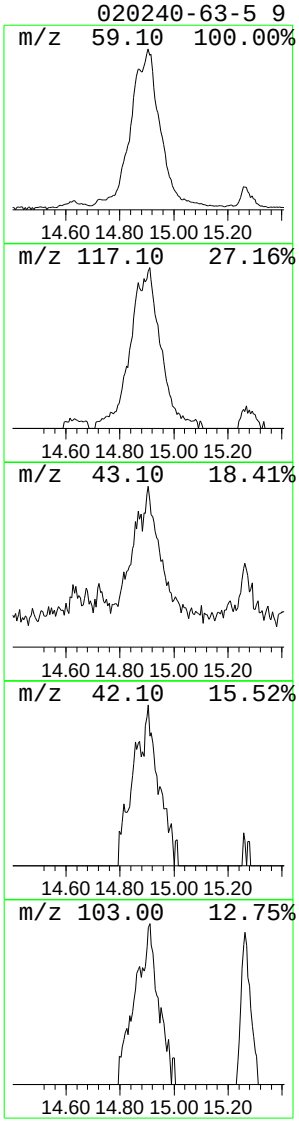
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Peak Number 10 Hexane, 1-ethoxy- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.90	10.57 ug/ml	461440	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 1-ethoxy-	130	C8H18O	005756-43-4	33
2	3-Hexene, 1-(1-methoxyethoxy)-, ...	158	C9H18O2	054340-97-5	28
3	3-Hexanol	102	C6H14O	000623-37-0	9
4	Hydrazine, 1-methyl-1-(2-methylp...	102	C5H14N2	020240-63-5	9





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
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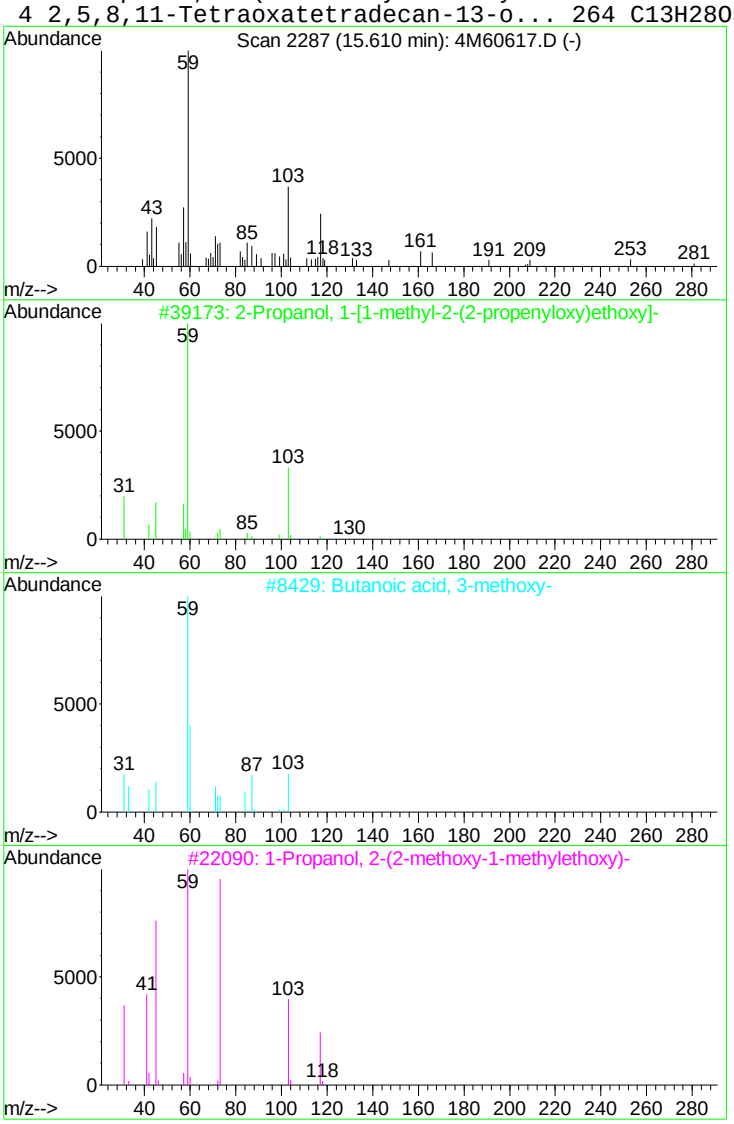
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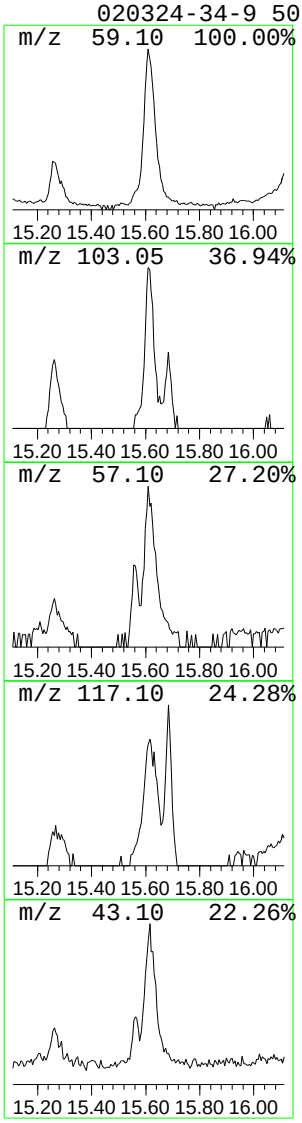
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Peak Number 11 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.61	5.78 ug/ml	252257	Chrysene-d12	15.69

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	Butanoic acid, 3-methoxy-	118	C5H10O3	010024-70-1	53
3	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	53
4	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

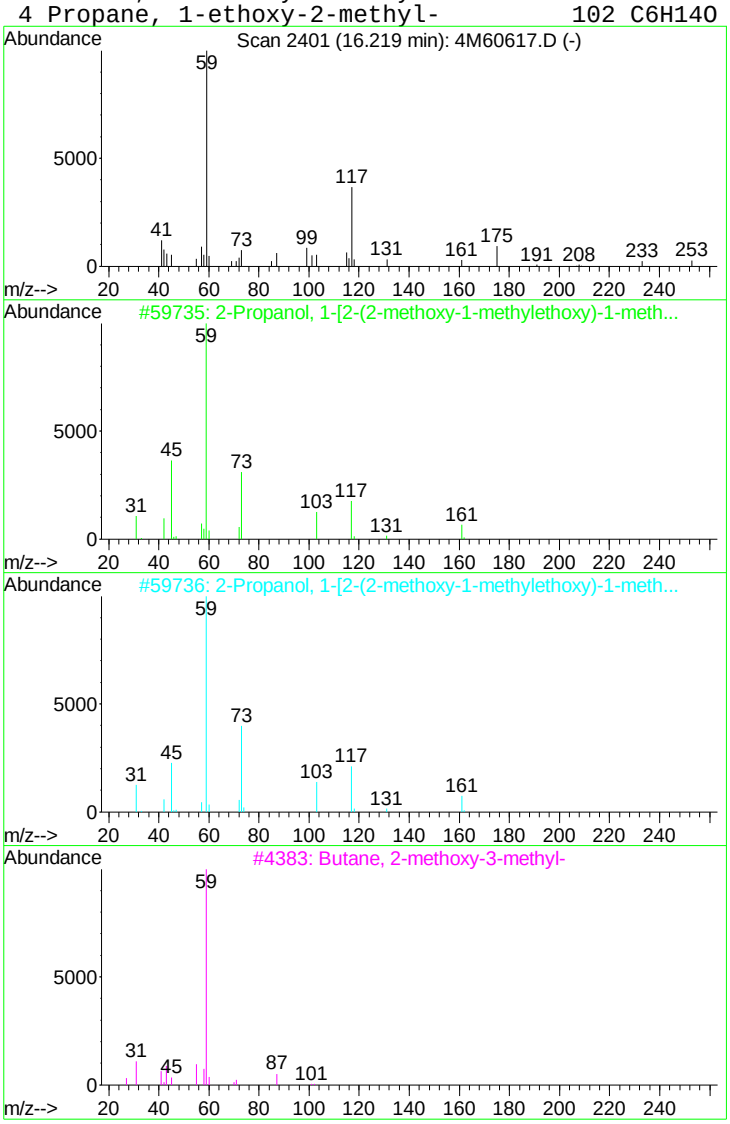
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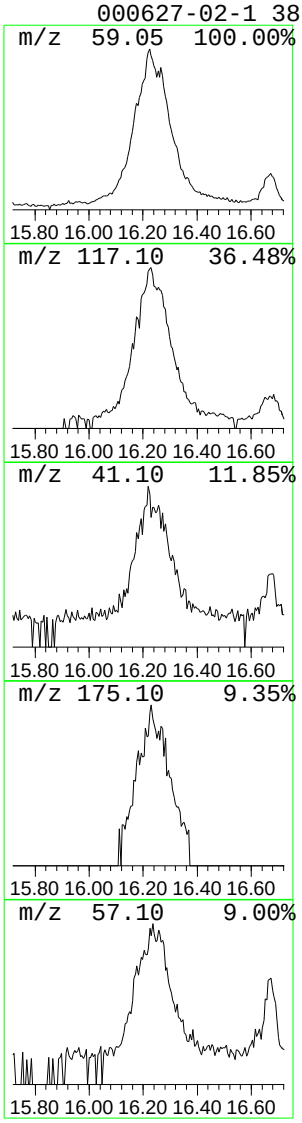
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Peak Number 12 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.22	7.12 ug/ml	311048	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42
2	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42
3	Butane, 2-methoxy-3-methyl-	102	C6H14O	062016-49-3	38
4	Propane, 1-ethoxy-2-methyl-	102	C6H14O	000627-02-1	38





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
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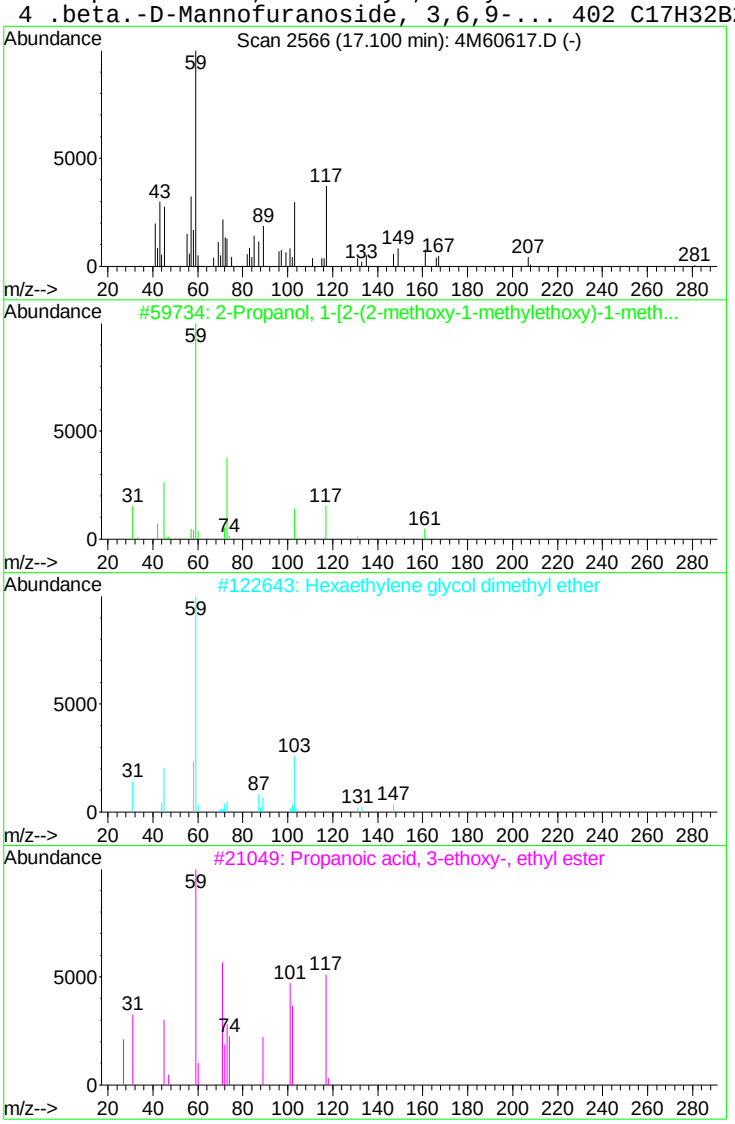
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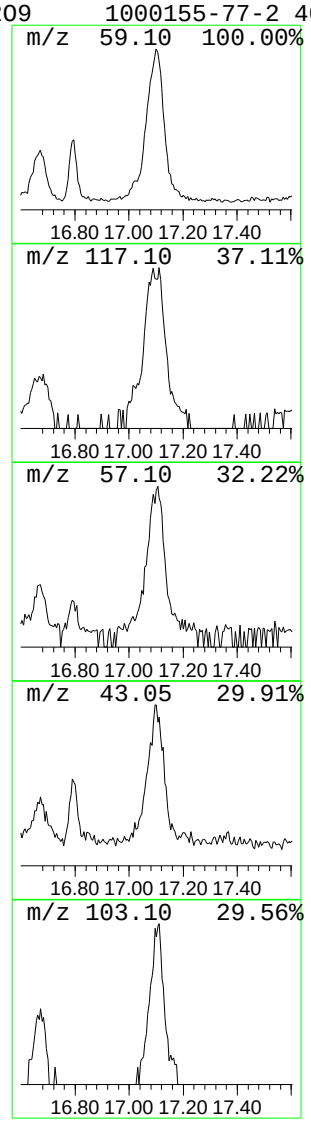
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Peak Number 13 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.10	8.86 ug/ml	361332	Perylene-d12	18.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	53
2	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	50
3	Propanoic acid, 3-ethoxy-, ethyl...	146	C7H14O3	000763-69-9	40
4	.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	40





Data File : I:\MSDCHEM\1\DATA\050112\4M60617.D Vial: 18
Acq On : 1 May 2012 22:38 Operator: CAA
Sample : L12040844-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

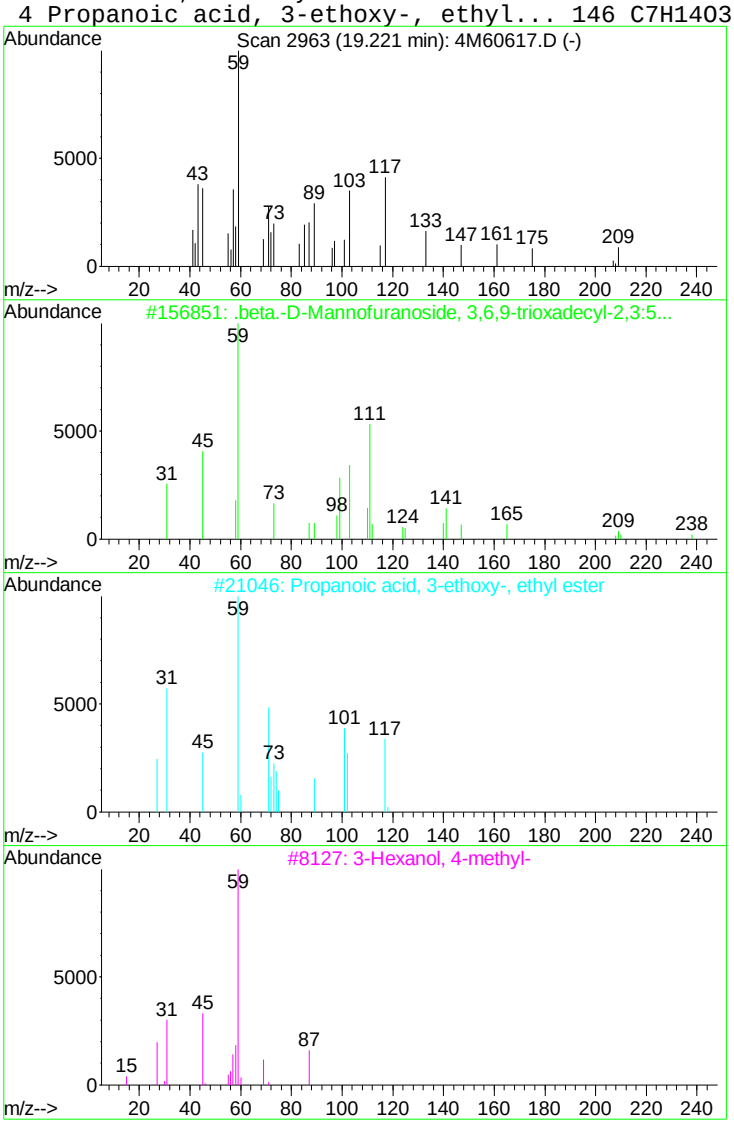
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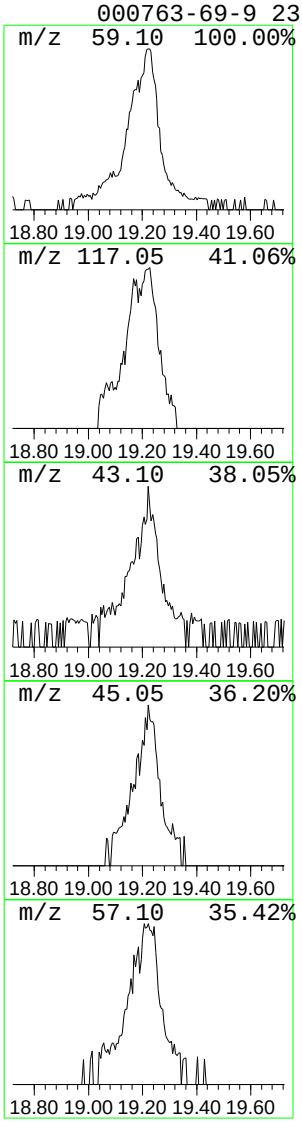
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Peak Number 14 .beta.-D-Mannofuranoside, 3... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.22	6.16 ug/ml	251022	Perylene-d12	18.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	43
2	Propanoic acid, 3-ethoxy-, ethyl...	146	C7H14O3	000763-69-9	28
3	3-Hexanol, 4-methyl-	116	C7H16O	000615-29-2	27
4	Propanoic acid, 3-ethoxy-, ethyl...	146	C7H14O3	000763-69-9	23





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 1 May 2012 22:38
Data File: I:\MSDCHEM\1\DATA\050112\4M60617.D
Name: L12040844-05
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	3.89	4.9	ug/ml	133039	1	7.29	1085830	40.0
2-Butanone, 4-hyd...	5.18	9.3	ug/ml	253418	1	7.29	1085830	40.0
2-Pentanone, 4-hy...	5.74	6.1	ug/ml	165016	1	7.29	1085830	40.0
2,2,4-Trimethyl-1...	9.52	6.2	ug/ml	247357	3	10.38	1590620	40.0
Dodecanoic acid	10.43	4.2	ug/ml	165514	3	10.38	1590620	40.0
n-Hexadecanoic acid	12.44	7.6	ug/ml	331172	4	11.99	1740920	40.0
Octadecanoic acid	13.48	16.1	ug/ml	701926	4	11.99	1740920	40.0
Butanoic acid, 3-...	14.25	4.2	ug/ml	183380	5	15.69	1747010	40.0
2,5,8,11-Tetraoxa...	14.87	7.3	ug/ml	317028	5	15.69	1747010	40.0
Hexane, 1-ethoxy-	14.90	10.6	ug/ml	461440	5	15.69	1747010	40.0
2-Propanol, 1-[1-...	15.61	5.8	ug/ml	252257	5	15.69	1747010	40.0
2-Propanol, 1-[2-...	16.22	7.1	ug/ml	311048	5	15.69	1747010	40.0
2-Propanol, 1-[2-...	17.10	8.9	ug/ml	361332	6	18.48	1630450	40.0
.beta.-D-Mannofur...	19.22	6.2	ug/ml	251022	6	18.48	1630450	40.0

2.2.1.4 Standards Data

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	296263	40.00	ug/ml	0.00
30) Naphthalene-d8	8.58	136	1142981	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.39	164	655776	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1173140	40.00	ug/ml	0.00
113) Chrysene-d12	15.70	240	1109018	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	1083134	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	443615	49.9857	ug/ml	0.02
Spiked Amount 100.000	Range 21 - 100		Recovery = 49.99%			
12) Phenol-d5	6.88	99	512467	51.0378	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 51.04%			
31) Nitrobenzene-d5	7.85	82	474197	50.7286	ug/ml	0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 101.46%			
59) 2-Fluorobiphenyl	9.64	172	1079454	55.4126	ug/ml	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery = 110.82%			
86) 2,4,6-Tribromophenol	11.21	330	148910	57.2081	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 57.21%			
117) p-Terphenyl-d14	14.03	244	994996	52.9278	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 105.86%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.27	88	185033	51.6833	ug/ml#	92
3) n-Nitrosodimethylamine	4.70	74	263504	47.4424	ug/ml	99
4) Pyridine	4.72	79	466167	47.5330	ug/ml	98
5) 2-Picoline	5.50	93	511992	48.6122	ug/ml	100
6) n-Nitrosomethylethylamine	5.62	88	220837	47.4416	ug/ml	99
7) Methyl Methanesulfonate	5.90	80	248543	48.2213	ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	240287	50.0469	ug/ml	98
10) Ethyl Methanesulfonate	6.54	79	323582	48.8787	ug/ml	99
11) Aniline	6.98	93	793273m	58.6766	ug/ml	
13) Phenol	6.89	94	548117	51.6690	ug/ml	100
14) bis(2-Chloroethyl)ether	7.00	63	334727	52.9904	ug/ml#	1
15) Pentachloroethane	7.02	167	187038	54.0943	ug/ml	99
16) 2-Chlorophenol	7.11	128	497875	51.1341	ug/ml	100
17) 1,3-Dichlorobenzene	7.26	146	546516	52.0870	ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	561209	52.9415	ug/ml	99
19) Benzyl Alcohol	7.39	108	323130	51.4484	ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	521321	54.2387	ug/ml	99
21) 2-Methylphenol	7.49	107	380206	51.9649	ug/ml	100
22) bis(2-Chloroisopropyl)ethe	7.54	45	683034	50.3930	ug/ml	99
23) 3-,4-Methylphenol	7.62	107	494212	51.1333	ug/ml	100
24) n-Nitrosopyrrolidine	7.67	100	225885	55.1278	ug/ml	100
25) n-Nitrosodipropylamine	7.67	70	311009	59.5407	ug/ml	99
26) Acetophenone	7.68	105	610408	57.6225	ug/ml	99
27) n-Nitrosomorpholine	7.68	56	283563	56.4602	ug/ml	99
28) o-Toluidine	7.73	106	774939	53.5779	ug/ml	100
29) Hexachloroethane	7.81	117	207953	50.4010	ug/ml	99
32) Nitrobenzene	7.87	77	471369	51.3132	ug/ml	99
33) n-Nitrosopiperidine	8.01	114	252949	50.5594	ug/ml	98
34) Isophorone	8.08	82	857268	52.5914	ug/ml	99
35) 2-Nitrophenol	8.19	139	296019m	46.4787	ug/ml	
36) 2,4-Dimethylphenol	8.15	122	463322	52.6785	ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.25	198	241610	57.3154	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	654041	56.2488	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.20	105	336174	73.2728	ug/ml	98
40)	2,4-Dichlorophenol	8.41	162	406146	52.5201	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.41	58	352764	51.6751	ug/ml	99
42)	1,2,4-Trichlorobenzene	8.52	180	454080	53.5984	ug/ml	100
43)	Naphthalene	8.60	128	1478551	57.1286	ug/ml	100
44)	4-Chloroaniline	8.62	127	522329	52.6511	ug/ml	99
45)	2,6-Dichlorophenol	8.64	162	419189	53.0993	ug/ml	99
46)	Hexachloropropene	8.71	213	274106	51.7151	ug/ml	100
47)	Hexachlorobutadiene	8.74	225	236674	55.3981	ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	394852	52.2669	ug/ml	98
49)	p-Phenylenediamine	9.06	108	32834	52.7401	ug/ml	98
50)	4-Chloro-3-Methylphenol	9.06	107	409911	53.7336	ug/ml	100
51)	Safrole	9.16	162	391403	54.0904	ug/ml	99
52)	2-Methylnaphthalene	9.29	142	967916	55.2571	ug/ml	100
53)	1-Methylnaphthalene	9.40	142	914409	54.9794	ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	420466	54.1164	ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	244269	59.3737	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	302655	52.9876	ug/ml	98
58)	2,4,5-Trichlorophenol	9.62	196	308844	53.9056	ug/ml	99
60)	Isosafrole	9.68	162	410694	52.1570	ug/ml	97
61)	2-Chloronaphthalene	9.79	162	906729	52.6084	ug/ml	99
62)	1-Chloronaphthalene	9.83	162	864129	53.6130	ug/ml	100
63)	2-Nitroaniline	9.89	65	261334	50.5913	ug/ml	98
64)	1,4-Naphthoquinone	9.95	158	378469	58.4376	ug/ml	99
65)	Dimethylphthalate	10.05	163	1022202	54.3128	ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	201353	50.3149	ug/ml	99
67)	2,6-Dinitrotoluene	10.15	165	256989	51.4076	ug/ml	100
68)	Acenaphthylene	10.24	152	1459231	55.8004	ug/ml	100
69)	3-Nitroaniline	10.31	138	174456	67.4649	ug/ml#	68
70)	2,4-Dinitrophenol	10.41	184	130897	51.1568	ug/ml	78
71)	Acenaphthene	10.42	154	959014	56.1434	ug/ml	99
72)	4-Nitrophenol	10.40	65	186191	50.9475	ug/ml	99
73)	2,4-Dinitrotoluene	10.56	165	332745	54.9652	ug/ml	98
74)	Pentachlorobenzene	10.60	250	385447	55.3704	ug/ml	99
75)	Dibenzofuran	10.57	168	1276287	57.1887	ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	227393	59.5614	ug/ml	99
77)	1-Naphthylamine	10.65	143	73636	134.9308	ug/ml#	18
78)	2-Naphthylamine	10.72	143	24431	63.2418	ug/ml#	91
79)	Diethylphthalate	10.76	149	1020028	54.9216	ug/ml	100
80)	Thionazin	10.86	107	172379	55.2578	ug/ml	99
81)	Fluorene	10.94	166	1088180	55.7218	ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	515271	56.5666	ug/ml	100
83)	4-Nitroaniline	10.95	138	223285	53.1737	ug/ml	96
84)	5-Nitro-o-Toluidine	10.94	152	233161	57.0574	ug/ml	94
85)	1,2-Diphenylhydrazine	11.05	77	983010	53.6394	ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	184821	44.9291	ug/ml	97
89)	n-Nitrosodiphenylamine	11.01	169	929531	53.8800	ug/ml	99
90)	Sulfotepp	11.20	322	169813	53.6919	ug/ml	97
91)	Sym-Trinitrobenzene	11.28	75	245626	47.8546	ug/ml	98
92)	Diallate	11.33	86	380783	55.9524	ug/ml	99
93)	Phenacetin	11.32	108	503393	55.1920	ug/ml	99
94)	Phorate	11.35	75	609588	53.7949	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.42	248	293263	53.0441	ug/ml	99
96)	Hexachlorobenzene	11.63	284	321319	54.1592	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

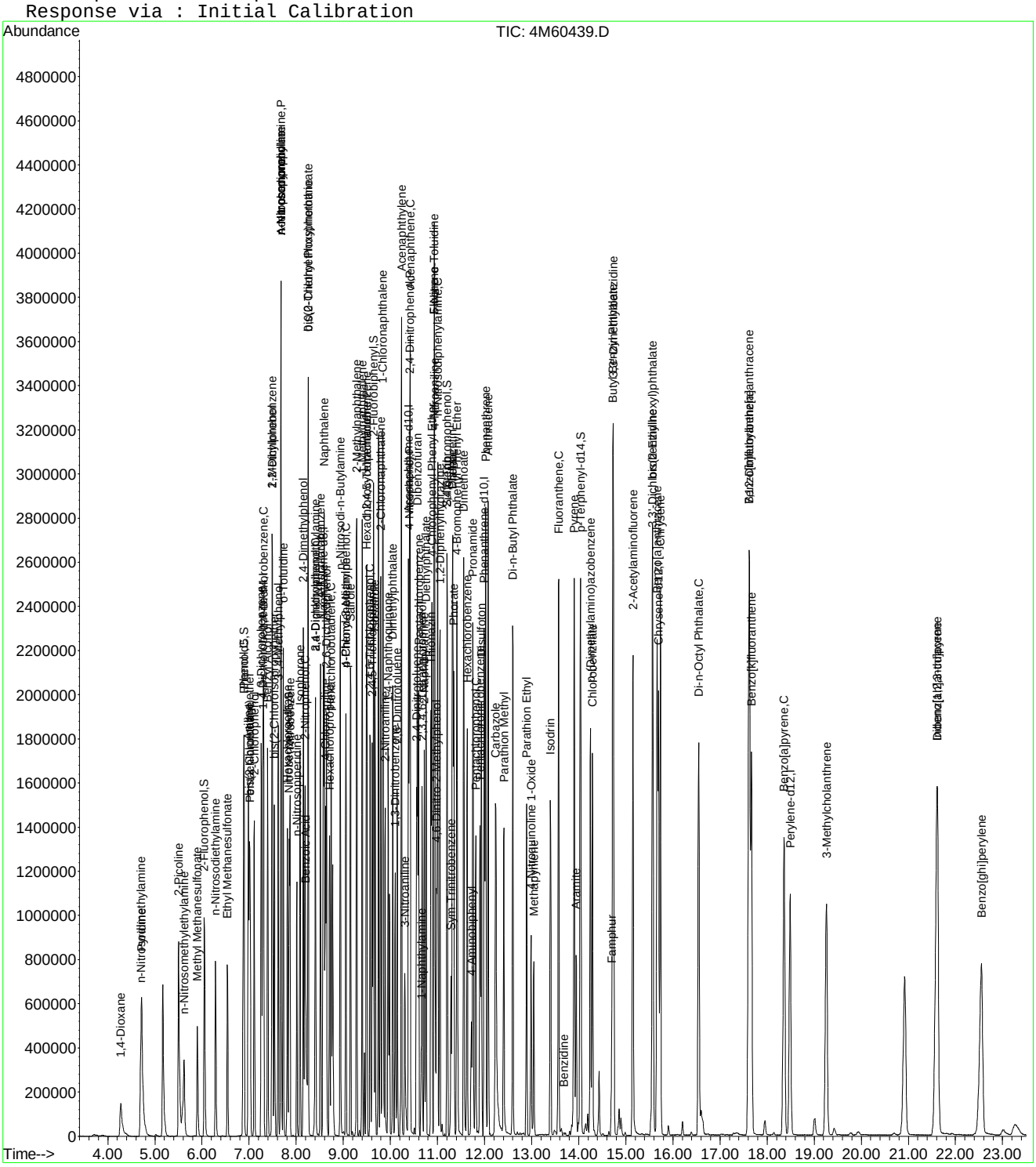
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	339058	61.7901	ug/ml	100
98)	4-Aminobiphenyl	11.72	169	362625	53.7158	ug/ml	100
99)	Pentachlorophenol	11.81	266	206843	60.4342	ug/ml	98
100)	Pronamide	11.75	173	474797	52.5004	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	112466	52.7533	ug/ml	98
102)	Disulfoton	11.94	88	525023	51.7079	ug/ml	99
103)	Phenanthrene	12.03	178	1519697	53.8500	ug/ml	100
104)	Anthracene	12.08	178	1564112	53.9305	ug/ml	100
105)	Carbazole	12.24	167	1383835	51.1066	ug/ml	100
106)	Parathion Methyl	12.41	109	332197	61.4956	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	1699050	53.3192	ug/ml	100
108)	Parathion Ethyl	12.89	97	202803	51.9363	ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.99	190	164563	87.9970	ug/ml	99
110)	Methapyrilene	13.05	58	313634	53.4102	ug/ml	99
111)	Isodrin	13.40	193	164002	52.0160	ug/ml	99
112)	Fluoranthene	13.58	202	1596911	54.0089	ug/ml	99
114)	Benzidine	13.69	184	13235	391.6902	ug/ml	100
115)	Pyrene	13.91	202	1618198	52.1353	ug/ml	100
116)	Aramite	13.94	185	96625	51.3784	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.25	225	344938	52.1731	ug/ml	96
119)	Chlorobenzilate	14.29	251	452662	52.1067	ug/ml	98
120)	Famphur	14.70	218	19662	24.2241	ug/ml#	52
121)	Butyl Benzyl Phthalate	14.72	149	736908	49.5460	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	265248	88.0533	ug/ml	97
123)	2-Acetylaminofluorene	15.15	181	672726	50.6242	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	1020072	51.9755	ug/ml	100
125)	3,3'-Dichlorobenzidine	15.58	252	322552	62.1461	ug/ml	99
126)	Benzo[a]anthracene	15.66	228	1436678	52.4916	ug/ml	100
127)	Chrysene	15.73	228	1327816	51.8780	ug/ml	99
129)	Di-n-Octyl Phthalate	16.55	149	1737436	49.8326	ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.62	256	693312	52.0347	ug/ml	99
131)	Benzo[b]fluoranthene	17.62	252	1510511	48.9916	ug/ml	99
132)	Benzo[k]fluoranthene	17.67	252	1477424	55.0736	ug/ml	96
133)	Benzo[a]pyrene	18.36	252	1420992	50.6605	ug/ml	100
134)	3-Methylcholanthrene	19.26	268	780637	51.2505	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.62	276	1616295	49.1334	ug/ml	99
136)	Dibenz[ah]anthracene	21.61	278	1352159	49.3321	ug/ml	100
137)	Benzo[ghi]perylene	22.55	276	1336874	49.0395	ug/ml	99

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

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

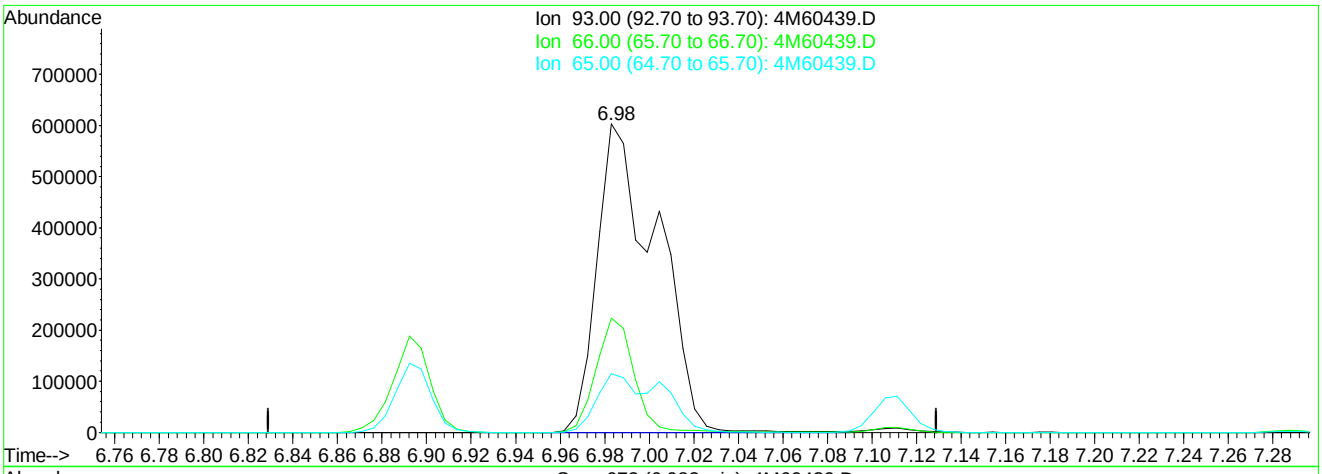
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

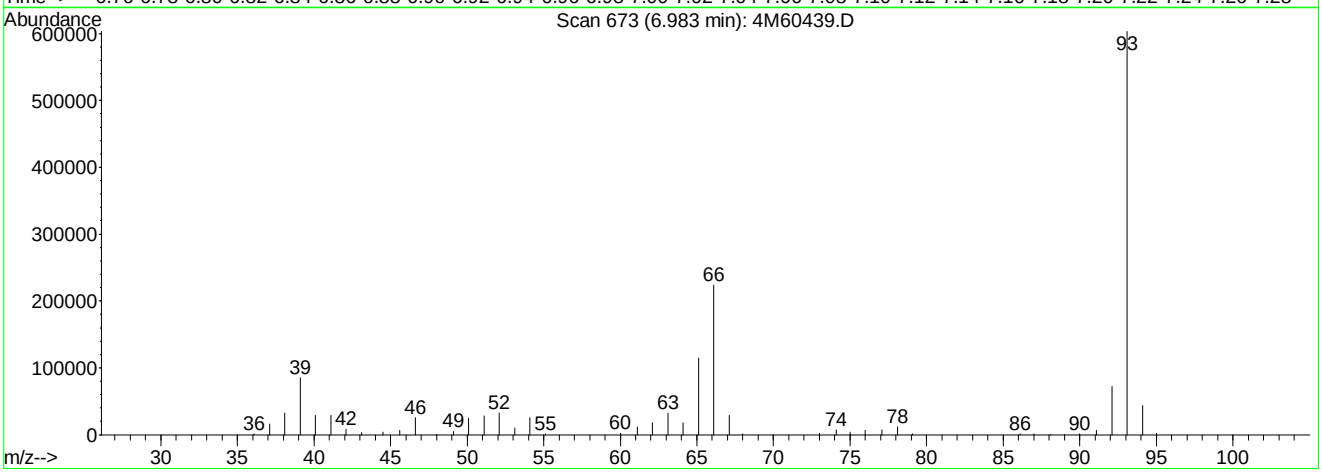


Quantitation Report (Qedit)

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

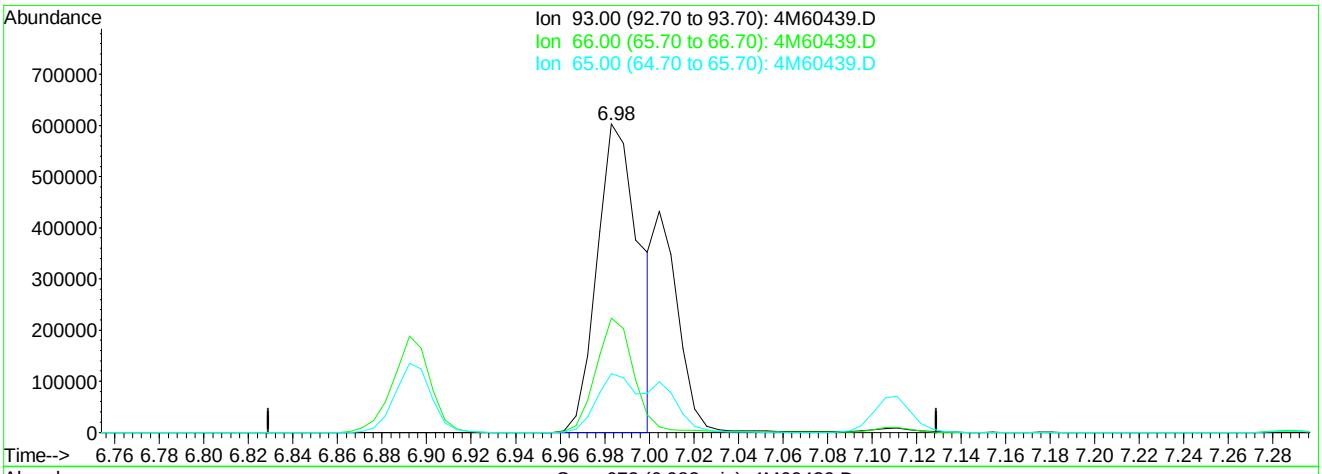
Ion	Exp%	Act%
93.00	100	100
66.00	42.70	23.58#
65.00	19.20	20.60
0.00	0.00	0.00

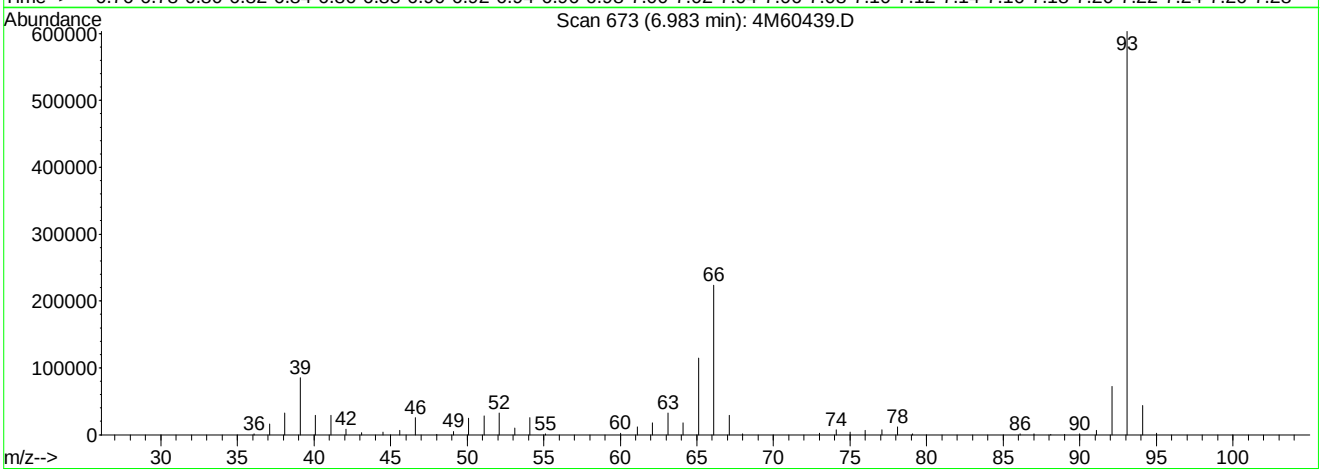
4M60439.D MEGAMIX.M Thu Apr 19 14:19:51 2012

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

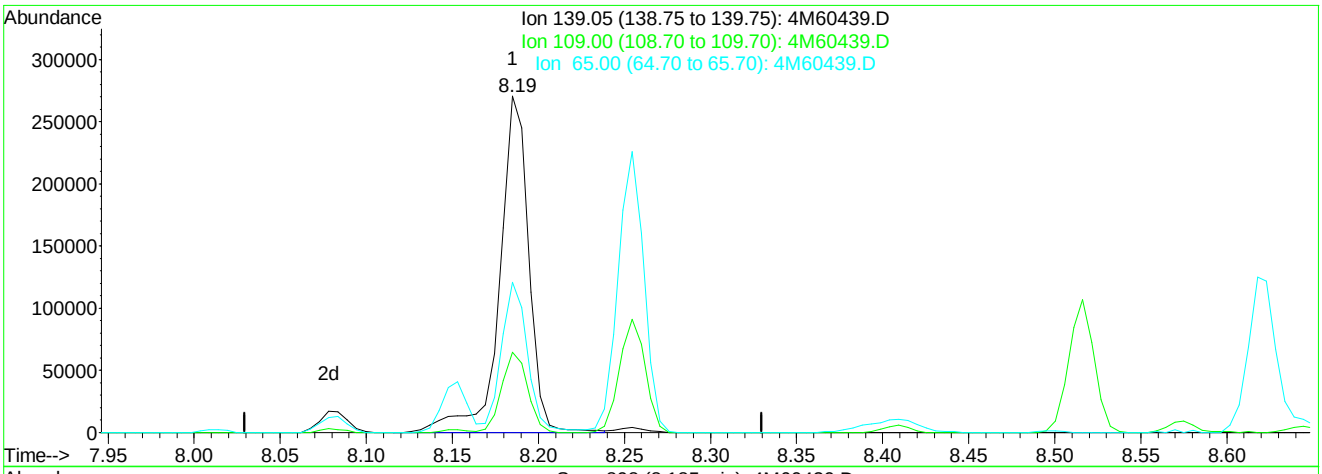
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

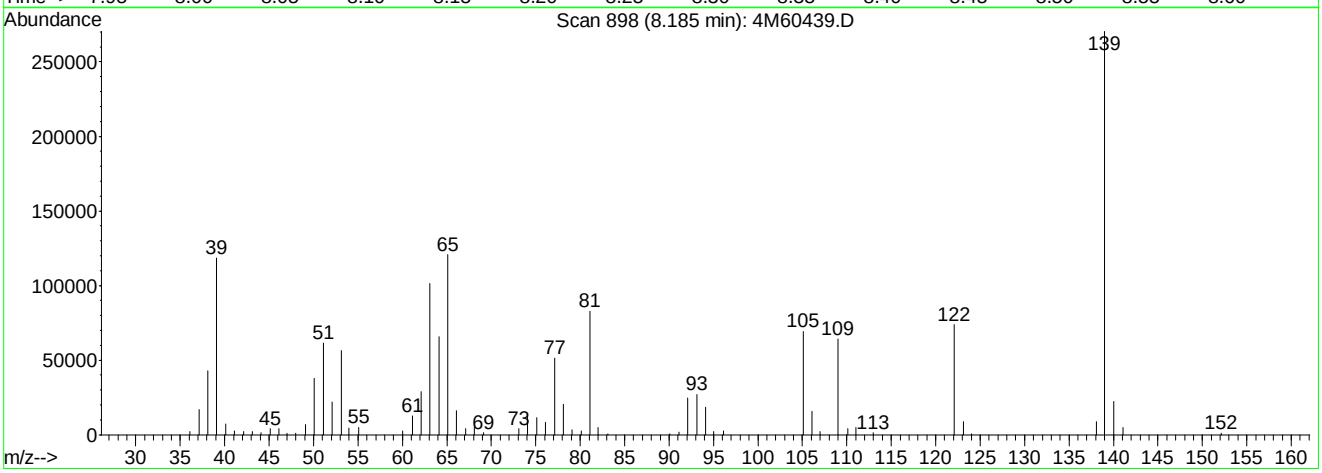
#3 - Improperly integrated isomers and/or coeluting compounds

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

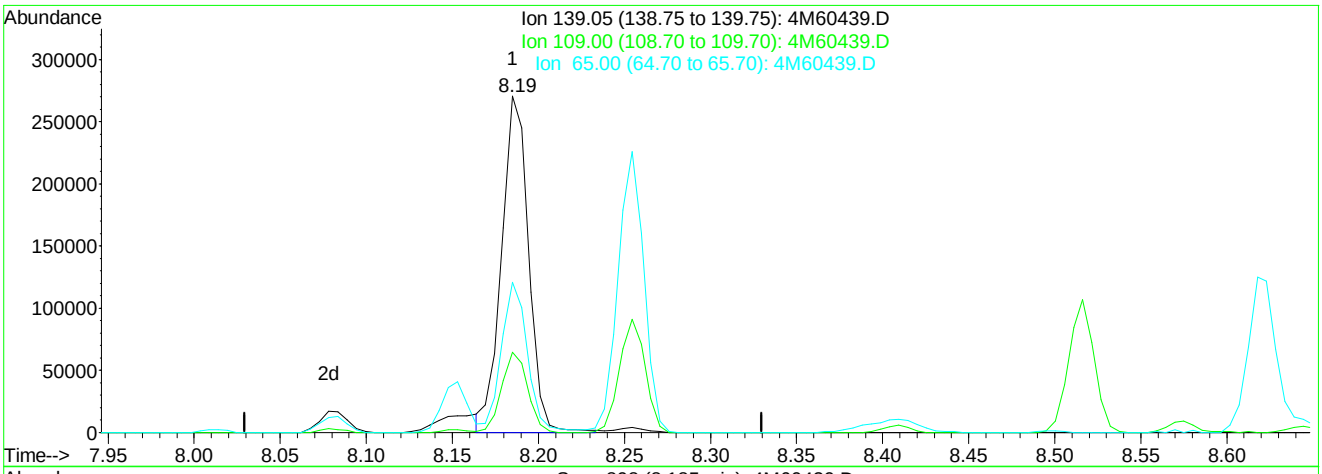
Ion	Exp%	Act%
139.05	100	100
109.00	16.10	21.09
65.00	37.90	40.29
0.00	0.00	0.00

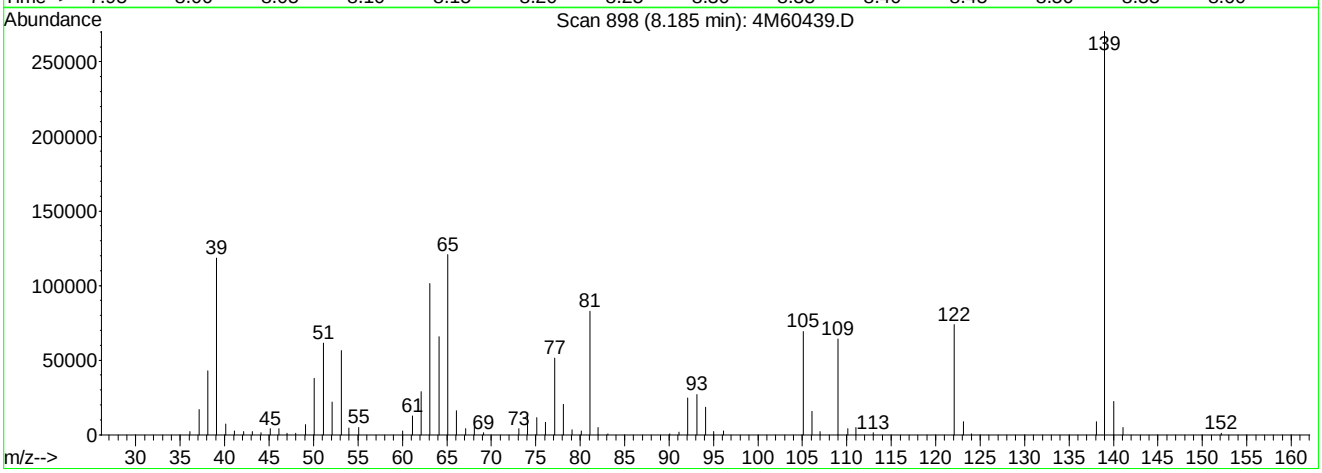
4M60439.D MEGAMIX.M Thu Apr 19 14:20:01 2012

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

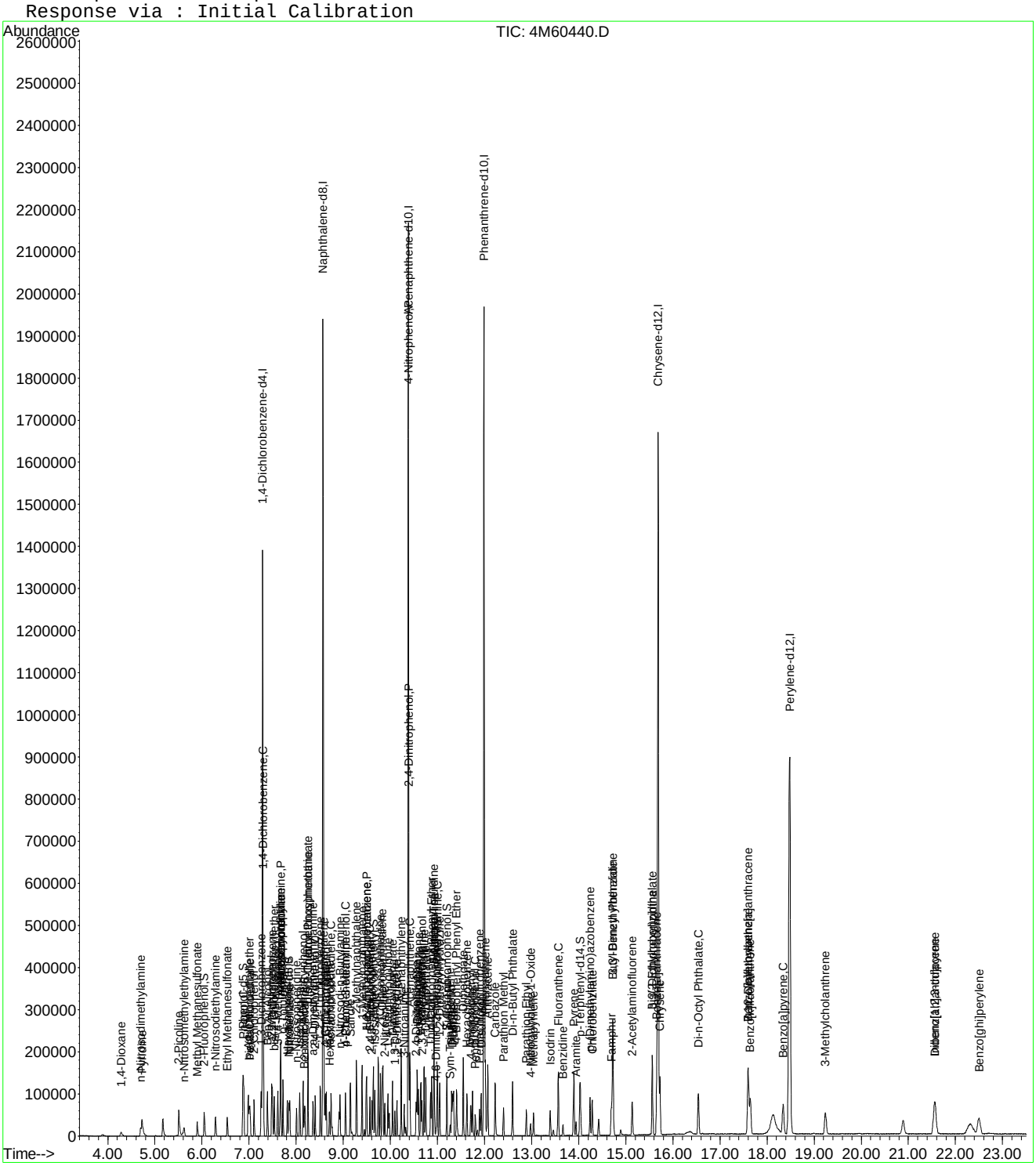
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	21420	4.5998	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	41614	7.2373	ug/ml	97
99)	Pentachlorophenol	11.80	266	8880	3.0117	ug/ml	98
100)	Pronamide	11.74	173	25508	3.3192	ug/ml	97
101)	Pentachloronitrobenzene	11.90	237	5928	3.2762	ug/ml	97
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

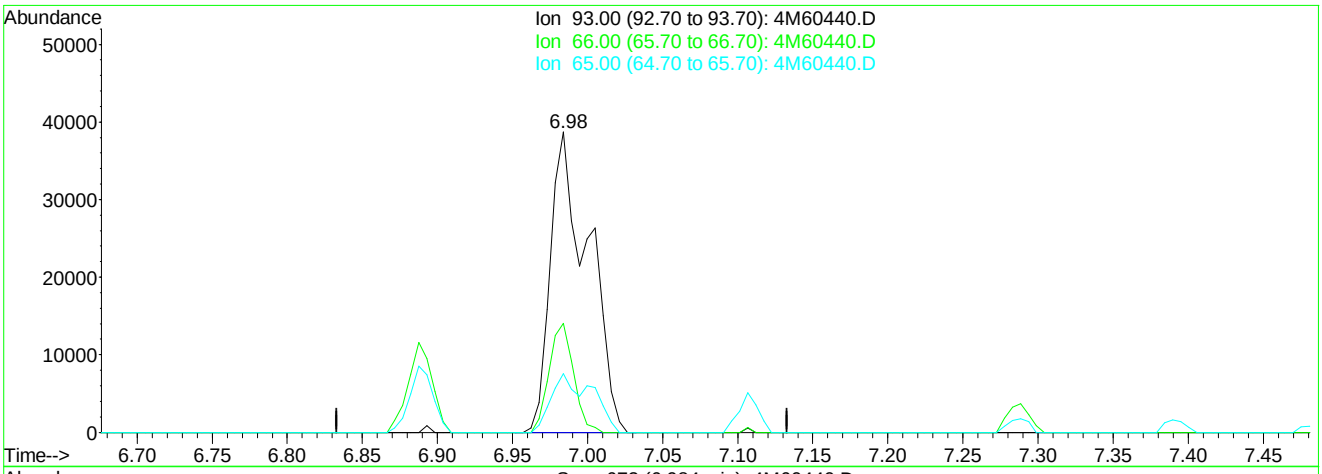
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



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

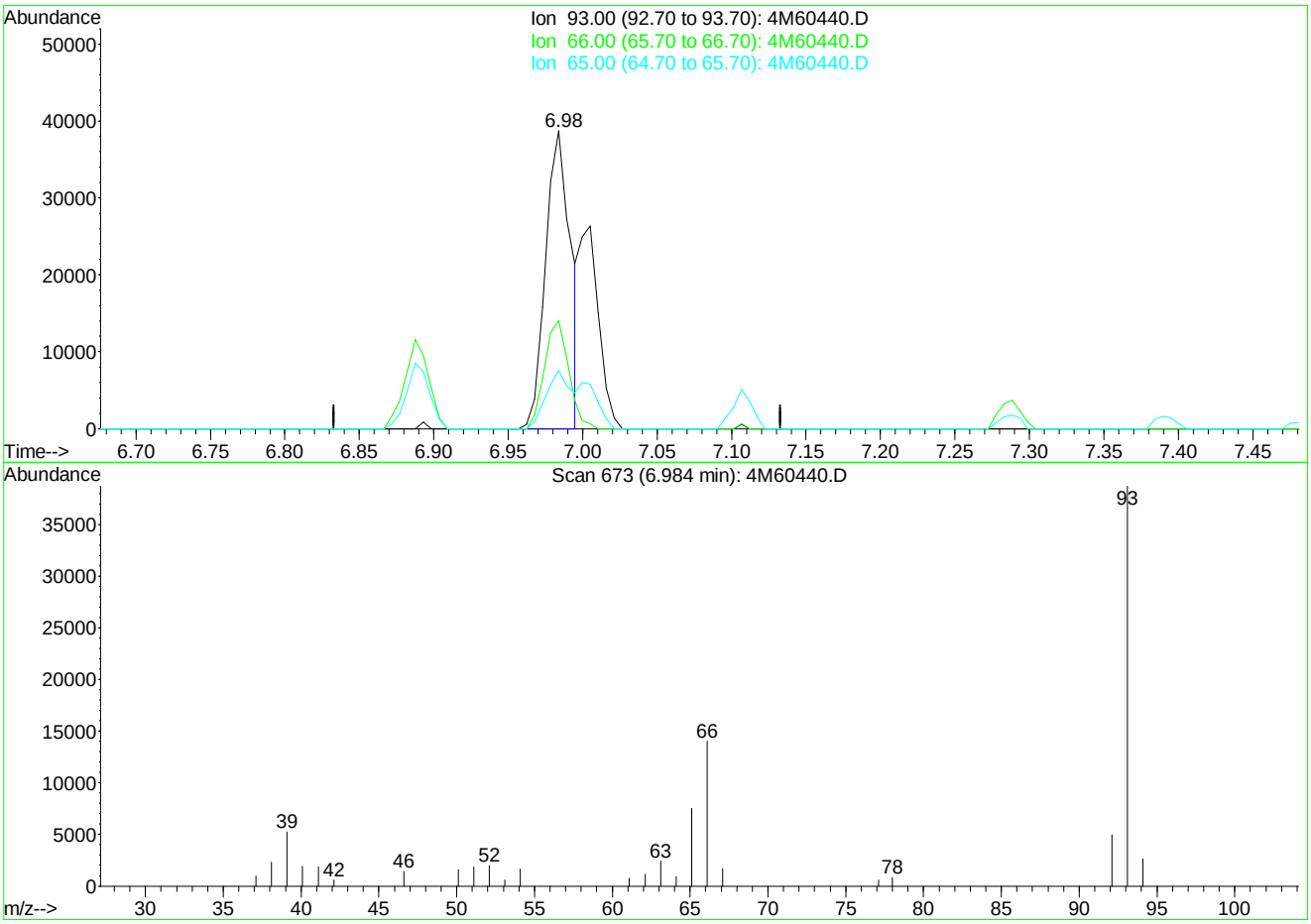
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.15
65.00	29.20	12.96#
0.00	0.00	0.00

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

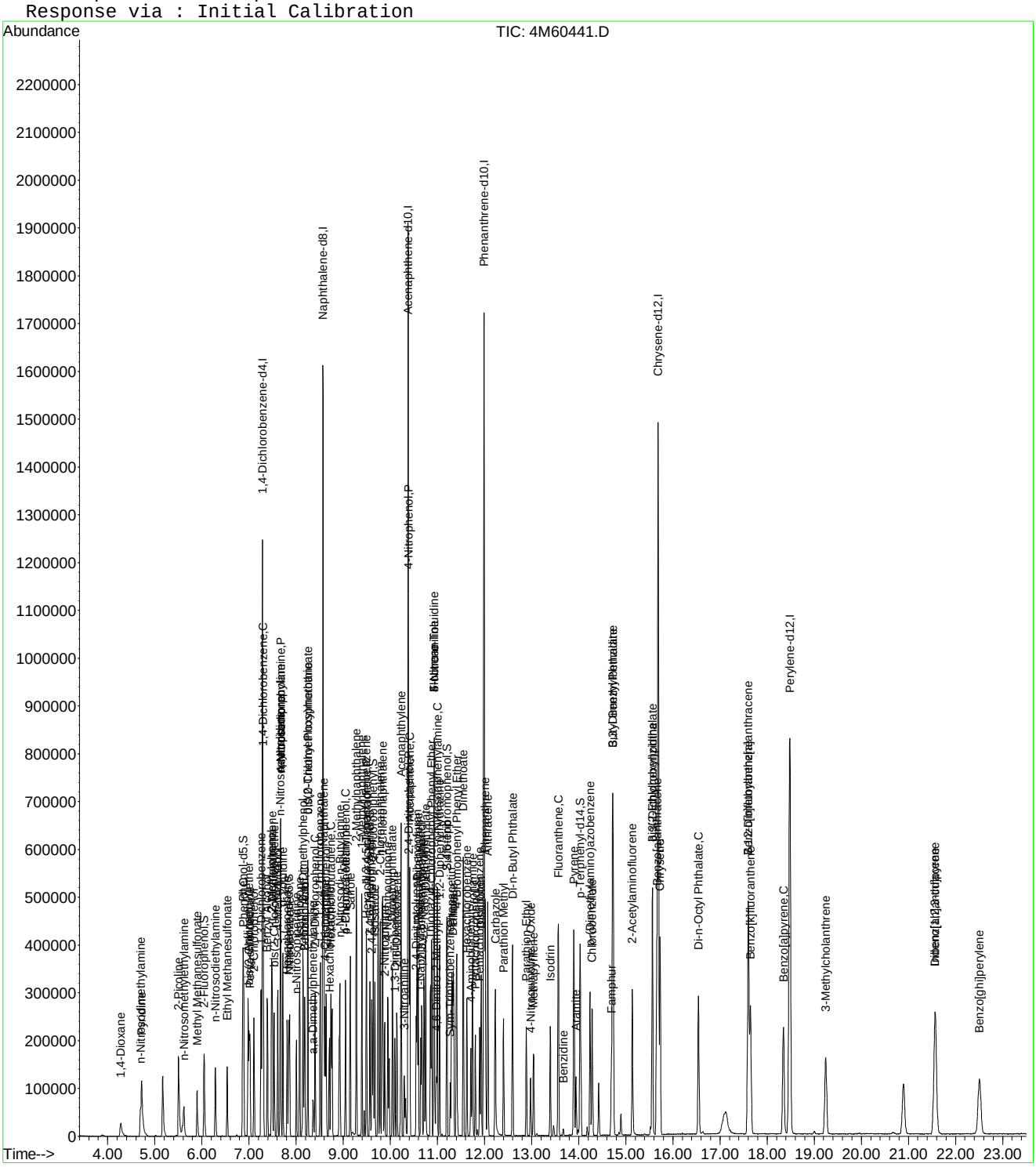
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	62939	14.8427	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	98626	18.8359	ug/ml	97
99)	Pentachlorophenol	11.81	266	31968	11.9067	ug/ml	98
100)	Pronamide	11.75	173	78302	11.1894	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	18446	11.1953	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

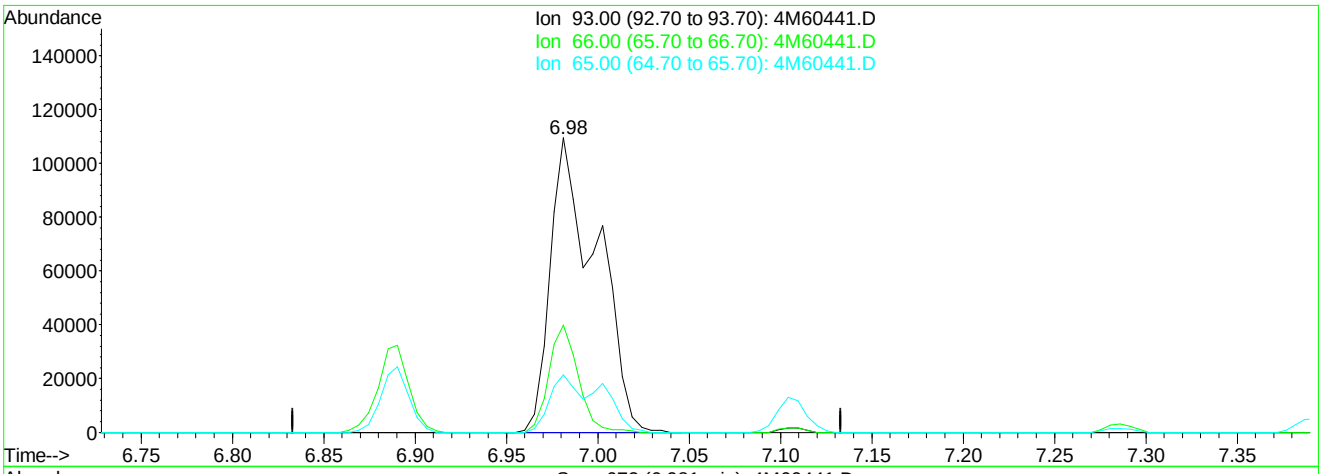


4M60441.D MEGAMIX.M Fri Apr 20 08:18:58 2012 Page 4

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

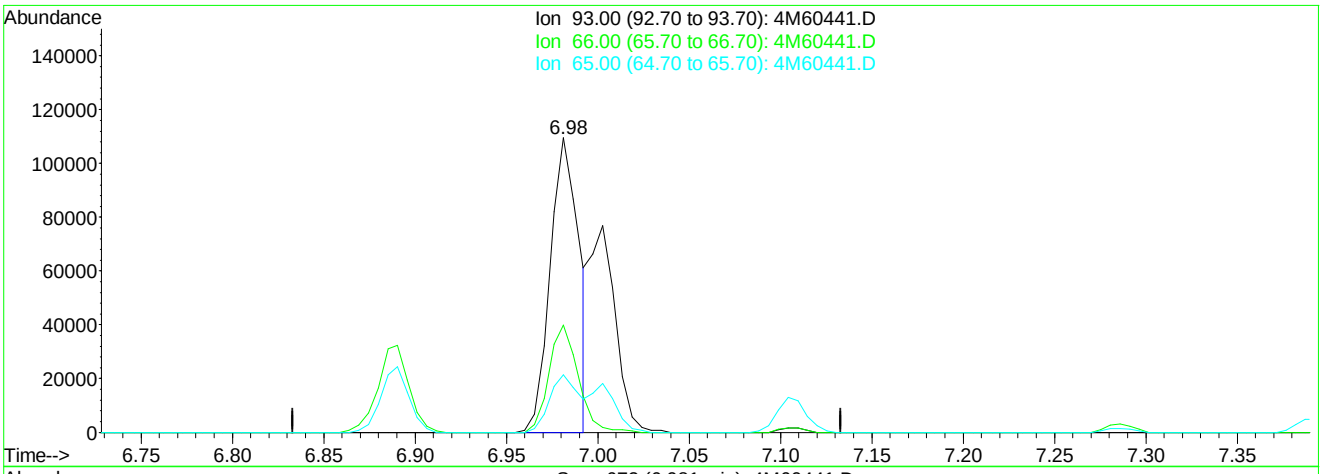
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.04
65.00	29.20	12.50#
0.00	0.00	0.00

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
4M60442.D MEGAMIX.M Fri Apr 20 08:18:58 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D Vial: 5
Acq On : 19 Apr 2012 11:05 Operator: CAA
Sample : WG395394-05 15PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21:57 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:52 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.18	105	73064	17.8534	ug/ml	90
40)	2,4-Dichlorophenol	8.40	162	106895	16.3636	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.37	58	73395	12.7979	ug/ml#	96
42)	1,2,4-Trichlorobenzene	8.52	180	122401	17.1017	ug/ml	100
43)	Naphthalene	8.59	128	408896	18.6367	ug/ml	97
44)	4-Chloroaniline	8.62	127	129166	14.9764	ug/ml	96
45)	2,6-Dichlorophenol	8.64	162	109450	16.3930	ug/ml	100
46)	Hexachloropropene	8.71	213	66756	14.9227	ug/ml	99
47)	Hexachlorobutadiene	8.74	225	63330	17.5040	ug/ml	100
48)	n-Nitrosodi-n-Butylamine	8.93	84	106657	16.6717	ug/ml	95
49)	p-Phenylenediamine	9.05	108	8853	16.7908	ug/ml	96
50)	4-Chloro-3-Methylphenol	9.05	107	108882	16.8671	ug/ml	99
51)	Safrole	9.15	162	103443	16.8843	ug/ml	99
52)	2-Methylnaphthalene	9.28	142	262619	17.7117	ug/ml	99
53)	1-Methylnaphthalene	9.40	142	247209	17.5689	ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	114900	17.6324	ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	57593	16.5303	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	77554	16.1689	ug/ml	99
58)	2,4,5-Trichlorophenol	9.61	196	80341	16.6924	ug/ml	99
60)	Isosafrole	9.67	162	107208	16.2343	ug/ml	99
61)	2-Chloronaphthalene	9.79	162	241377	16.7103	ug/ml	99
62)	1-Chloronaphthalene	9.83	162	230497	17.0641	ug/ml	100
63)	2-Nitroaniline	9.88	65	67899	15.6511	ug/ml	98
64)	1,4-Naphthoquinone	9.95	158	102741	18.9200	ug/ml	97
65)	Dimethylphthalate	10.04	163	275007	17.4083	ug/ml	99
66)	1,3-Dinitrobenzene	10.10	168	49953	14.8927	ug/ml	97
67)	2,6-Dinitrotoluene	10.14	165	66191	15.7994	ug/ml	99
68)	Acenaphthylene	10.23	152	404588	18.4211	ug/ml	98
69)	3-Nitroaniline	10.30	138	44675	18.4840	ug/ml	99
70)	2,4-Dinitrophenol	10.40	184	22655	10.4391	ug/ml#	1
71)	Acenaphthene	10.41	154	263554	18.3383	ug/ml	99
72)	4-Nitrophenol	10.39	65	53528	17.4427	ug/ml	87
73)	2,4-Dinitrotoluene	10.55	165	86594	17.0065	ug/ml	99
74)	Pentachlorobenzene	10.59	250	101642	17.3695	ug/ml	99
75)	Dibenzofuran	10.57	168	345492	18.4118	ug/ml	100
76)	2,3,4,6-Tetrachlorophenol	10.67	232	65906	20.5458	ug/ml	99
77)	1-Naphthylamine	10.65	143	62212	115.5239	ug/ml#	77
78)	2-Naphthylamine	10.72	143	27301	85.8289	ug/ml#	77
79)	Diethylphthalate	10.76	149	273892	17.5667	ug/ml	100
80)	Thionazin	10.85	107	44504	16.9829	ug/ml	99
81)	Fluorene	10.93	166	294134	17.9213	ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	136246	17.7779	ug/ml	100
83)	4-Nitroaniline	10.94	138	61583	17.4160	ug/ml	98
84)	5-Nitro-o-Toluidine	10.93	152	65039	18.6866	ug/ml	99
85)	1,2-Diphenylhydrazine	11.05	77	264481	17.2284	ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	10.98	198	38138	11.0187	ug/ml	81
89)	n-Nitrosodiphenylamine	11.00	169	247141	16.9381	ug/ml	99
90)	Sulfotepp	11.20	322	44742	16.7478	ug/ml	96
91)	Sym-Trinitrobenzene	11.27	75	57944	13.3865	ug/ml	98
92)	Diallate	11.33	86	101940	17.7602	ug/ml	94
93)	Phenacetin	11.31	108	129651	16.8282	ug/ml	100
94)	Phorate	11.34	75	162275	16.9952	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	77958	16.6955	ug/ml	99
96)	Hexachlorobenzene	11.63	284	85076	16.9764	ug/ml	100

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

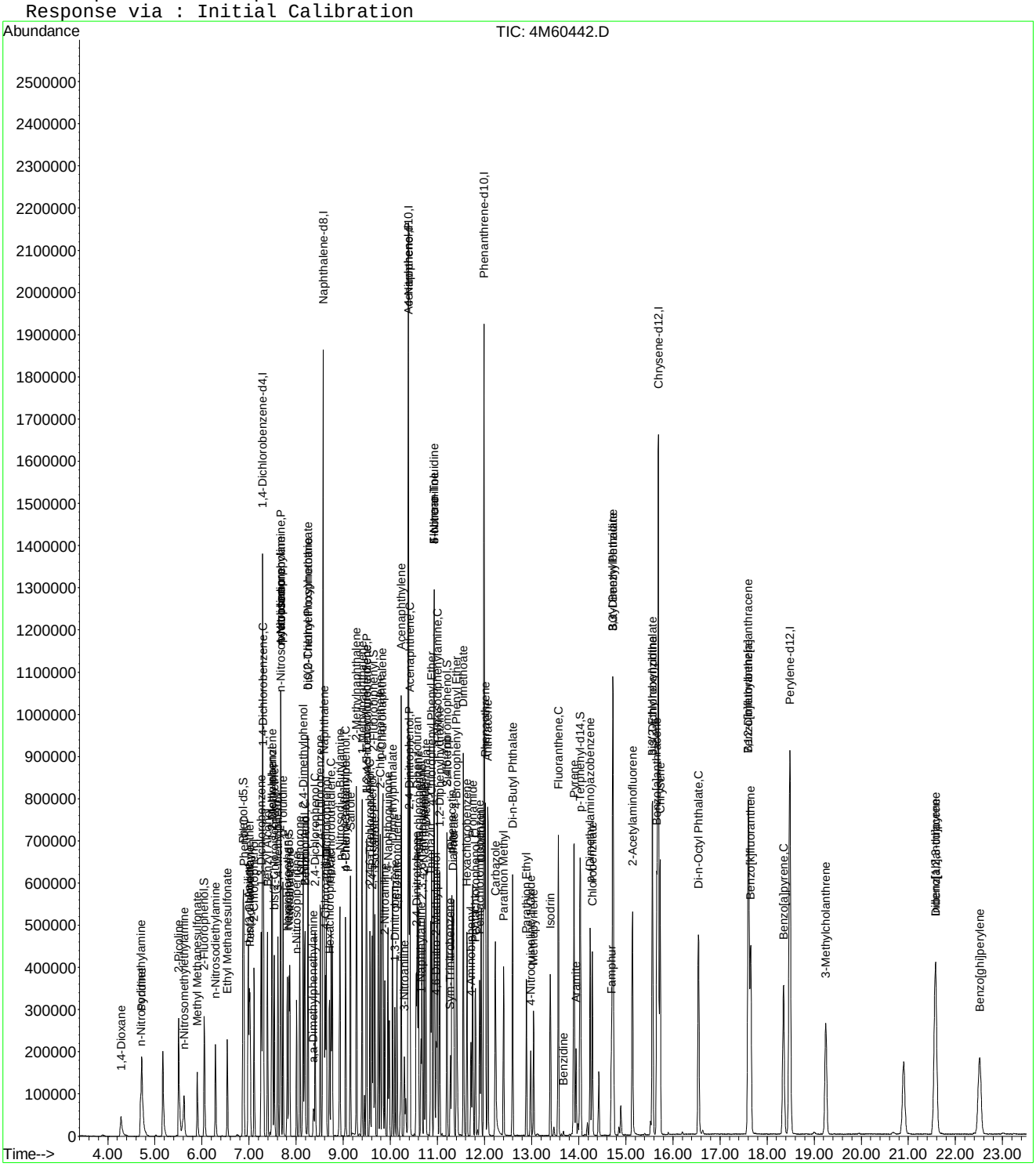
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	100546	21.7536	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	125719	22.0160	ug/ml	99
99)	Pentachlorophenol	11.81	266	53277	18.1856	ug/ml	99
100)	Pronamide	11.75	173	123932	16.2463	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	29537	16.4436	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

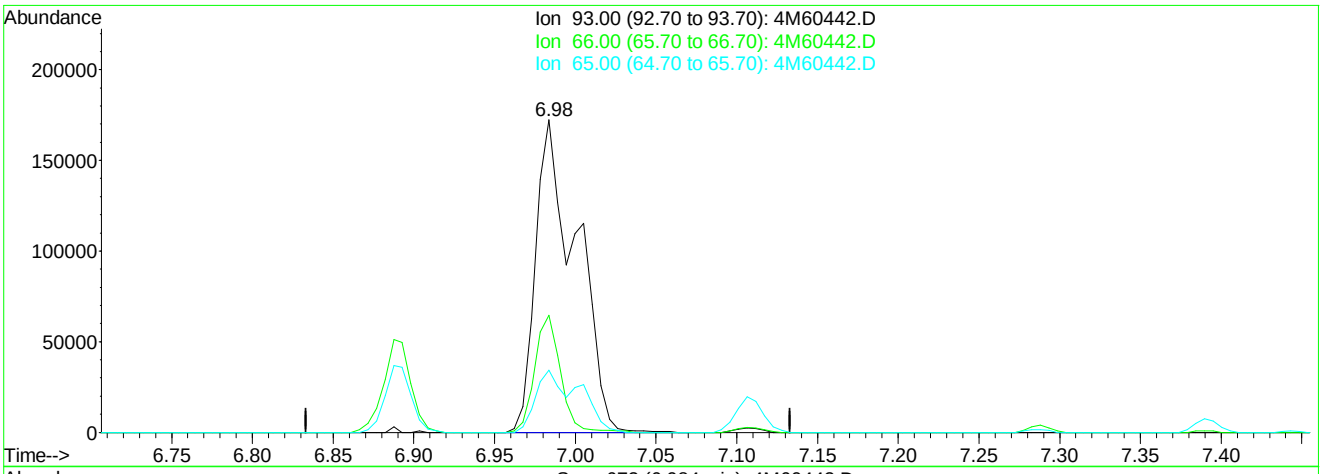
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

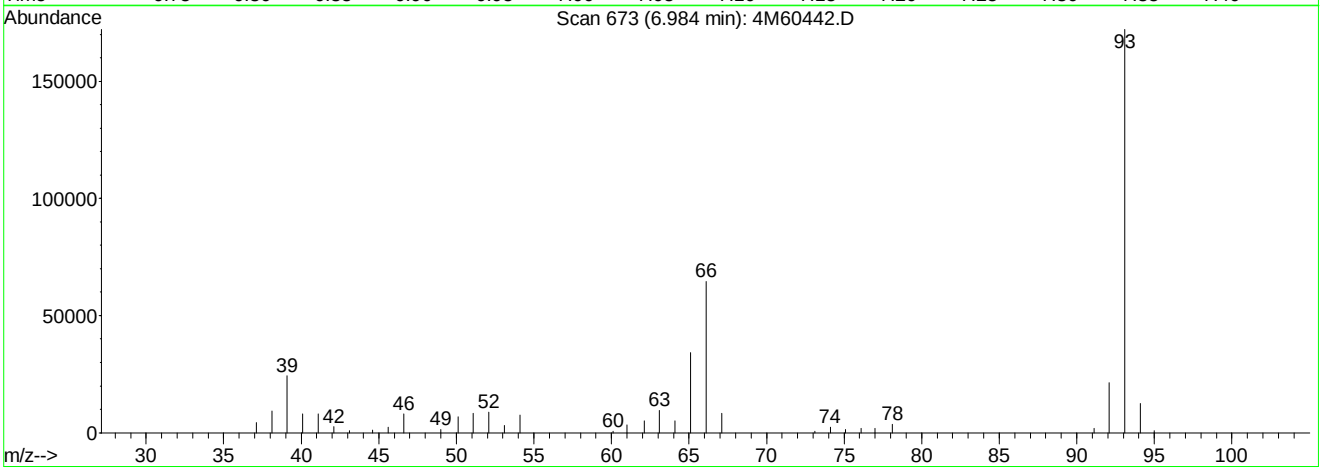


Quantitation Report (Qedit)

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

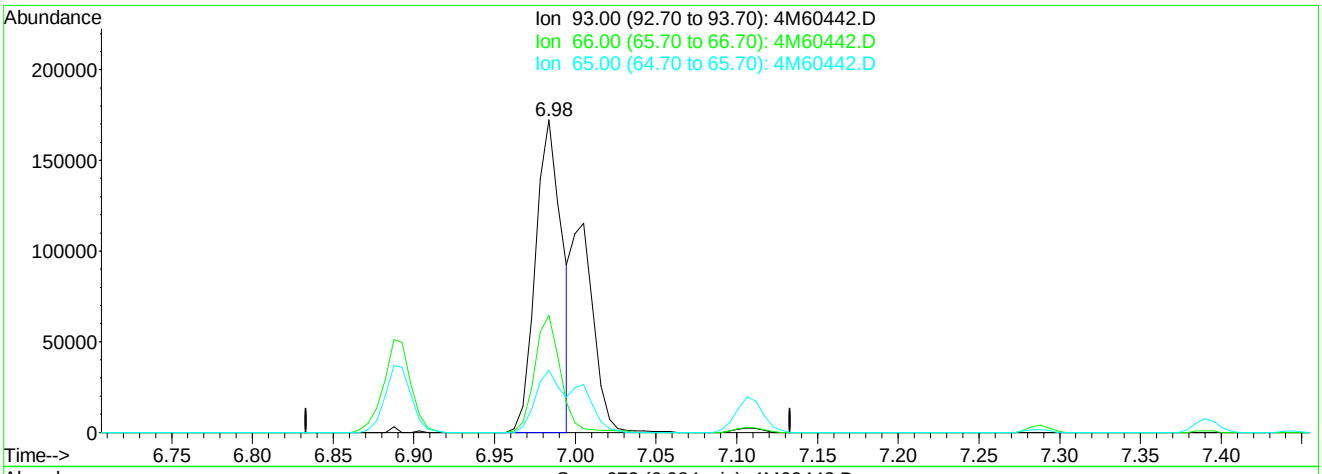
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.55
65.00	29.20	12.97#
0.00	0.00	0.00

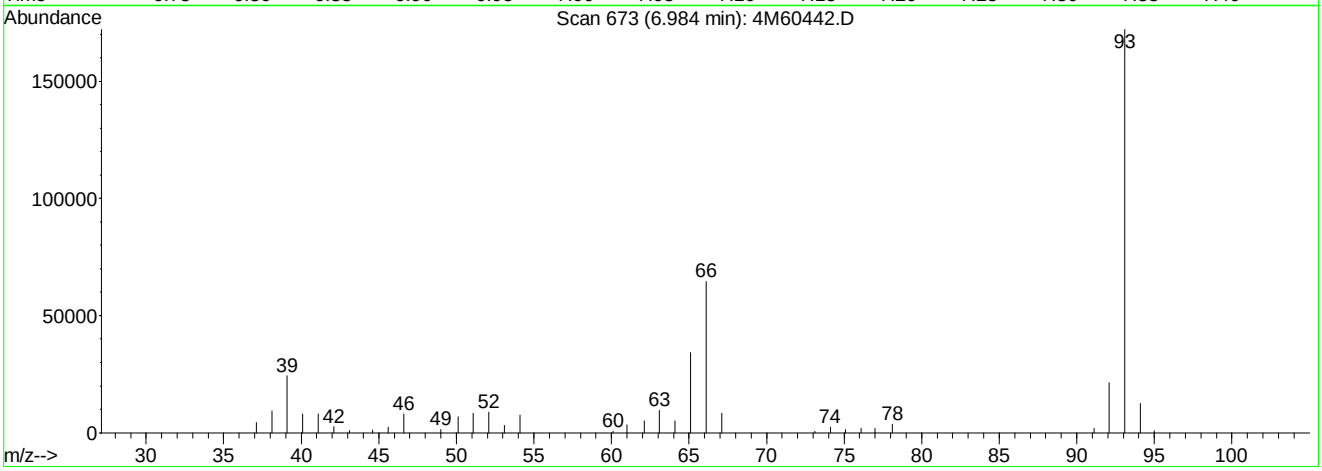
4M60442.D MEGAMIX.M Thu Apr 19 14:22:04 2012

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

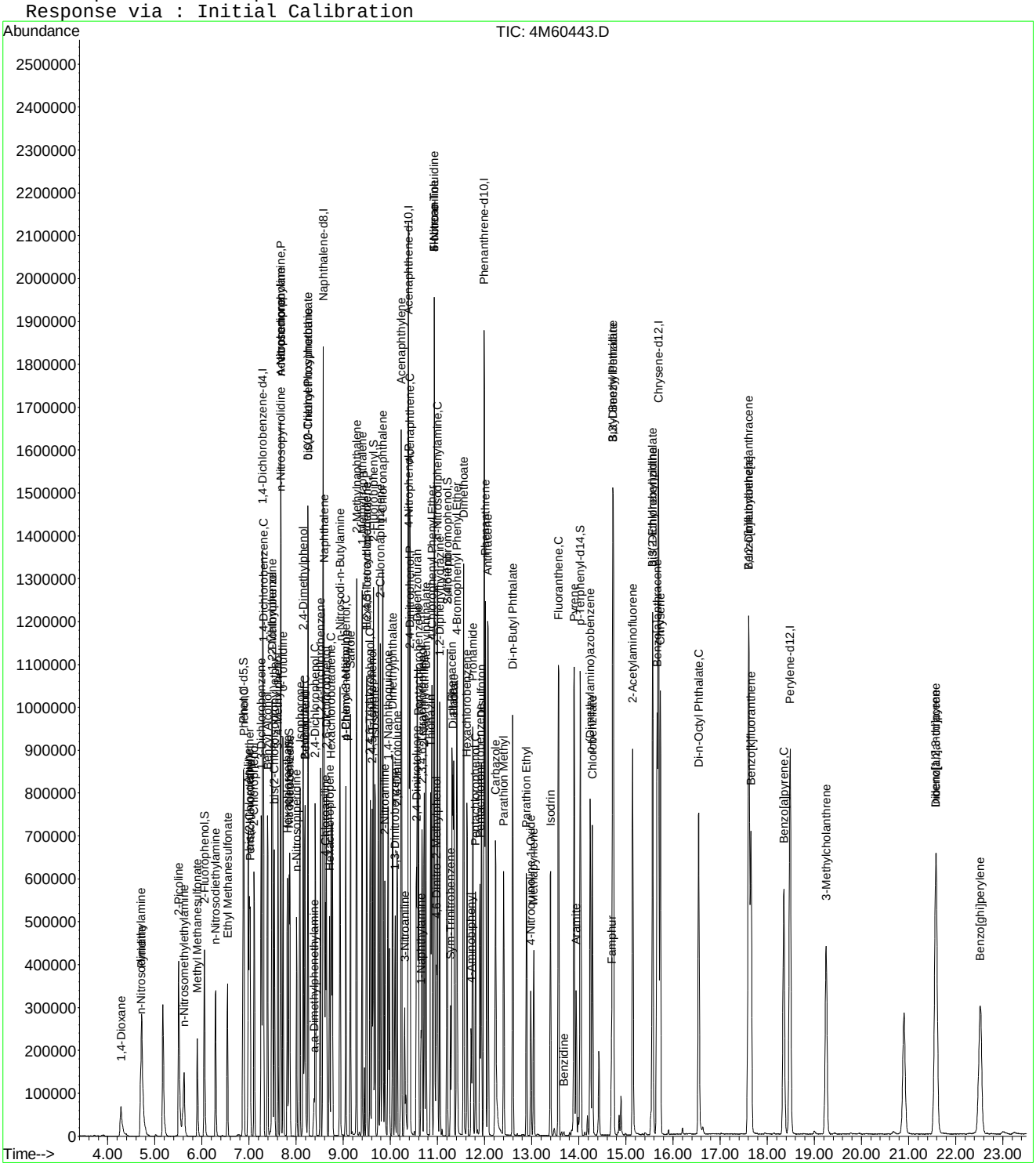
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	154209	33.4716	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	167715	29.4842	ug/ml	99
99)	Pentachlorophenol	11.81	266	85623	29.2700	ug/ml	99
100)	Pronamide	11.75	173	198719	26.1362	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	47519	26.5373	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

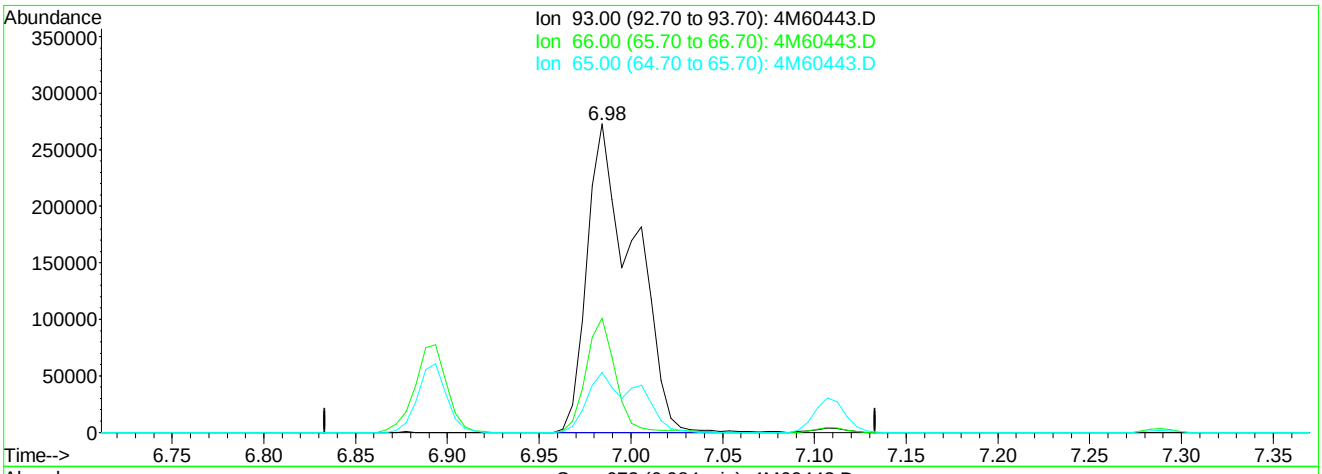
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



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

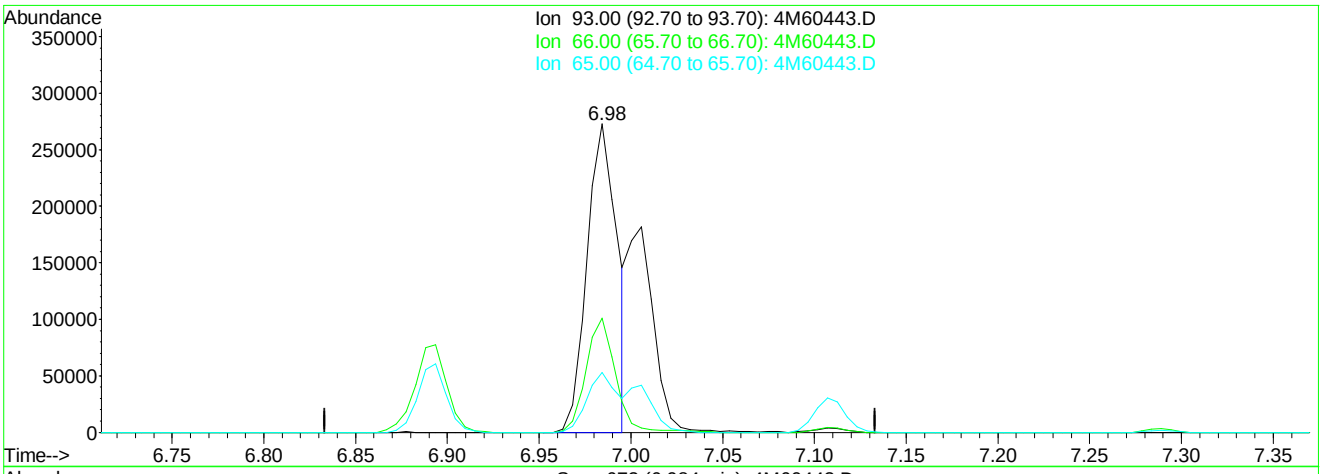
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.25
65.00	29.20	12.52#
0.00	0.00	0.00

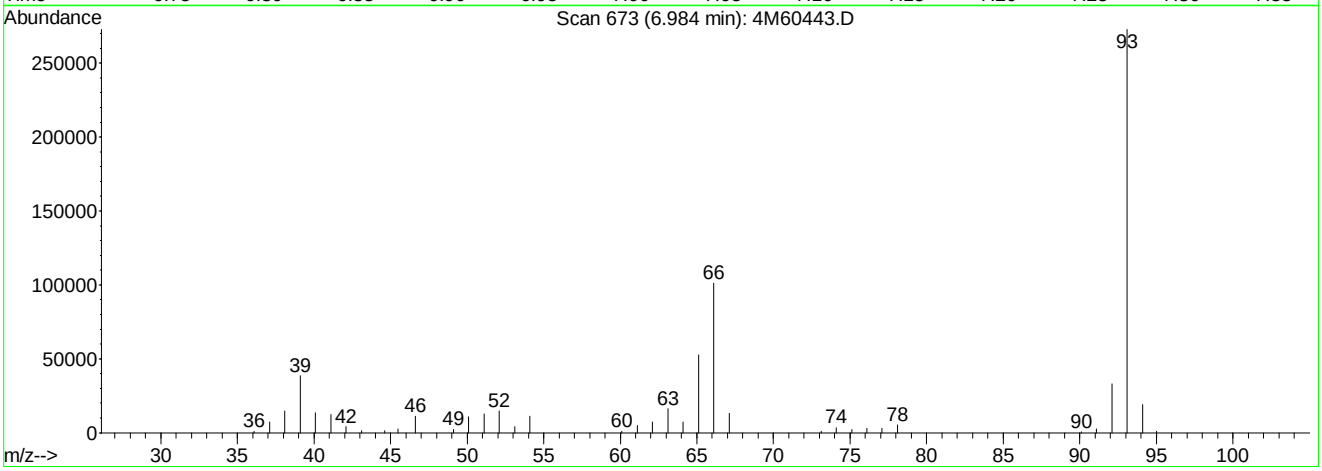
4M60443.D MEGAMIX.M Thu Apr 19 14:22:42 2012

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
4M60444.D MEGAMIX.M Fri Apr 20 08:19:00 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:13 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.21	105	518434	113.7758 ug/ml#	75
40)	2,4-Dichlorophenol	8.41	162	591204	82.5988 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.43	58	961556	154.8459 ug/ml	98
42)	1,2,4-Trichlorobenzene	8.52	180	659109	84.0934 ug/ml	100
43)	Naphthalene	8.60	128	2143165	89.1050 ug/ml	98
44)	4-Chloroaniline	8.62	127	840914	88.5412 ug/ml	100
45)	2,6-Dichlorophenol	8.64	162	616497	84.2773 ug/ml	100
46)	Hexachloropropene	8.71	213	395486	80.8426 ug/ml	100
47)	Hexachlorobutadiene	8.74	225	335869	84.6848 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	585181	83.4905 ug/ml	98
49)	p-Phenylenediamine	9.06	108	49839	86.2185 ug/ml	93
50)	4-Chloro-3-Methylphenol	9.06	107	603833	85.3273 ug/ml	100
51)	Safrole	9.15	162	568977	84.7565 ug/ml	100
52)	2-Methylnaphthalene	9.28	142	1399298	86.1316 ug/ml	100
53)	1-Methylnaphthalene	9.40	142	1329751	86.2523 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	595962	83.6137 ug/ml	99
56)	Hexachlorocyclopentadiene	9.51	237	336327	87.8983 ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	439102	83.6396 ug/ml	99
58)	2,4,5-Trichlorophenol	9.62	196	450522	85.5336 ug/ml	99
60)	Isosafrole	9.68	162	602738	83.4485 ug/ml	99
61)	2-Chloronaphthalene	9.79	162	1316383	83.3430 ug/ml	100
62)	1-Chloronaphthalene	9.83	162	1231825	83.3956 ug/ml	99
63)	2-Nitroaniline	9.89	65	389293	81.9939 ug/ml	100
64)	1,4-Naphthoquinone	9.95	158	517634	87.1575 ug/ml	99
65)	Dimethylphthalate	10.06	163	1452767	84.0445 ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	300061	81.7587 ug/ml	100
67)	2,6-Dinitrotoluene	10.15	165	380371	82.9628 ug/ml	99
68)	Acenaphthylene	10.24	152	2059422	85.6892 ug/ml	99
69)	3-Nitroaniline	10.31	138	283165	101.9547 ug/ml	100
70)	2,4-Dinitrophenol	10.41	184	201666	84.5715 ug/ml	85
71)	Acenaphthene	10.42	154	1355981	86.2034 ug/ml	100
72)	4-Nitrophenol	10.41	65	267741	79.4179 ug/ml	99
73)	2,4-Dinitrotoluene	10.56	165	484503	86.9438 ug/ml	100
74)	Pentachlorobenzene	10.60	250	543917	84.9318 ug/ml	99
75)	Dibenzofuran	10.57	168	1809858	88.1523 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	315686	89.7842 ug/ml	99
77)	1-Naphthylamine	10.65	143	106768	170.5477 ug/ml#	89
78)	2-Naphthylamine	10.72	143	31352	93.0336 ug/ml	95
79)	Diethylphthalate	10.76	149	1465764	85.9268 ug/ml	99
80)	Thionazin	10.86	107	247858	86.4534 ug/ml	99
81)	Fluorene	10.93	166	1524152	84.8688 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	732168	87.2764 ug/ml	99
83)	4-Nitroaniline	10.95	138	344564	89.1086 ug/ml	98
84)	5-Nitro-o-Toluidine	10.94	152	359517	94.2582 ug/ml	99
85)	1,2-Diphenylhydrazine	11.05	77	1430564	85.2157 ug/ml	100
88)	4,6-Dinitro-2-Methylphenol	10.98	198	289337	77.2686 ug/ml	97
89)	n-Nitrosodiphenylamine	11.01	169	1335543	84.6041 ug/ml	99
90)	Sulfotepp	11.20	322	235004	81.2649 ug/ml	98
91)	Sym-Trinitrobenzene	11.29	75	374190	79.8745 ug/ml	99
92)	Diallate	11.33	86	544965	87.7632 ug/ml	99
93)	Phenacetin	11.32	108	721724	86.6007 ug/ml	100
94)	Phorate	11.35	75	880600	85.2698 ug/ml#	100
95)	4-Bromophenyl Phenyl Ether	11.41	248	414109	81.9579 ug/ml	99
96)	Hexachlorobenzene	11.63	284	454706	83.8308 ug/ml	99

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

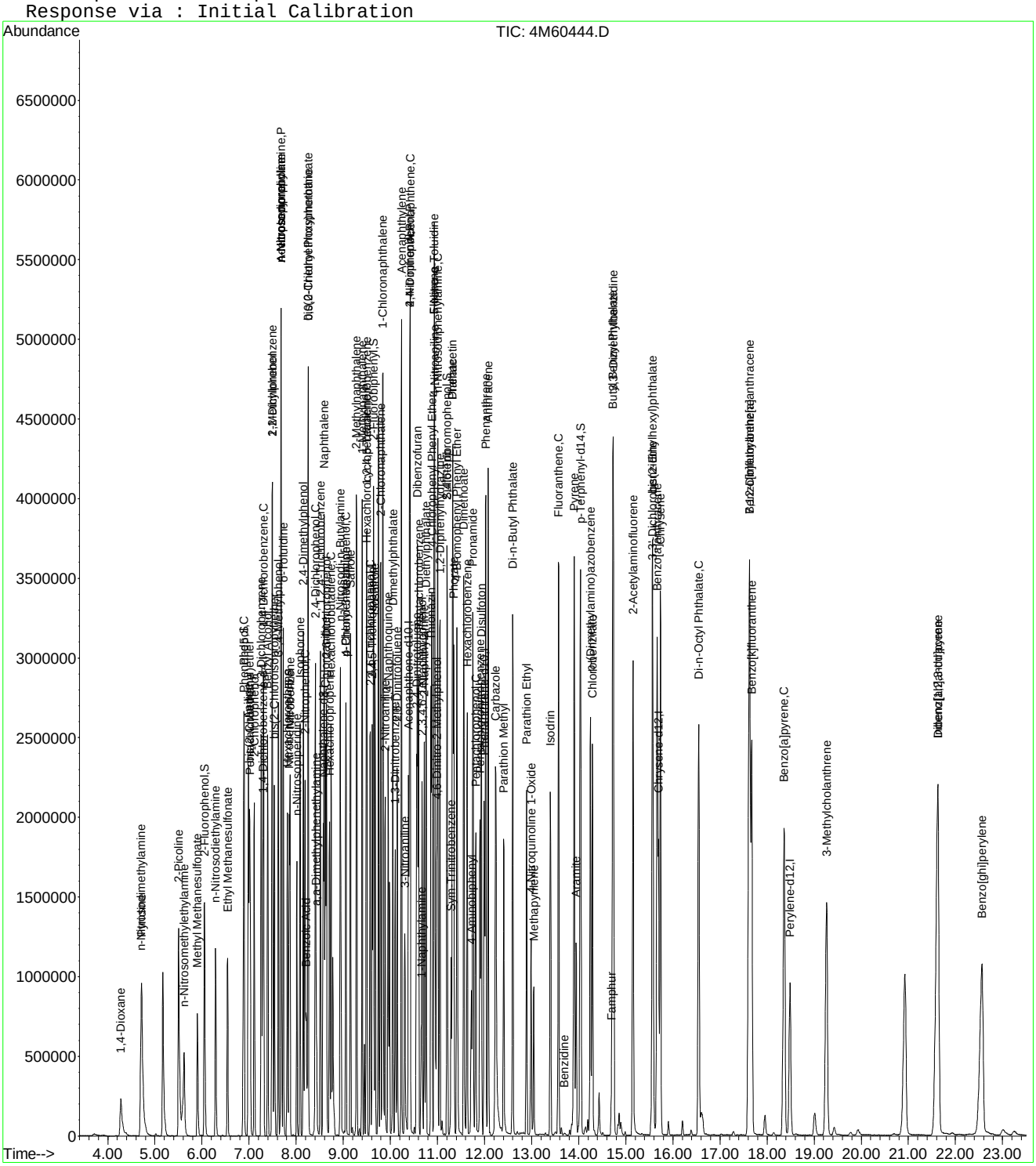
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	438351	87.6686	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	583198	94.6458	ug/ml	100
99)	Pentachlorophenol	11.81	266	297153	93.2093	ug/ml	100
100)	Pronamide	11.75	173	682115	82.6482	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	162254	83.4353	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

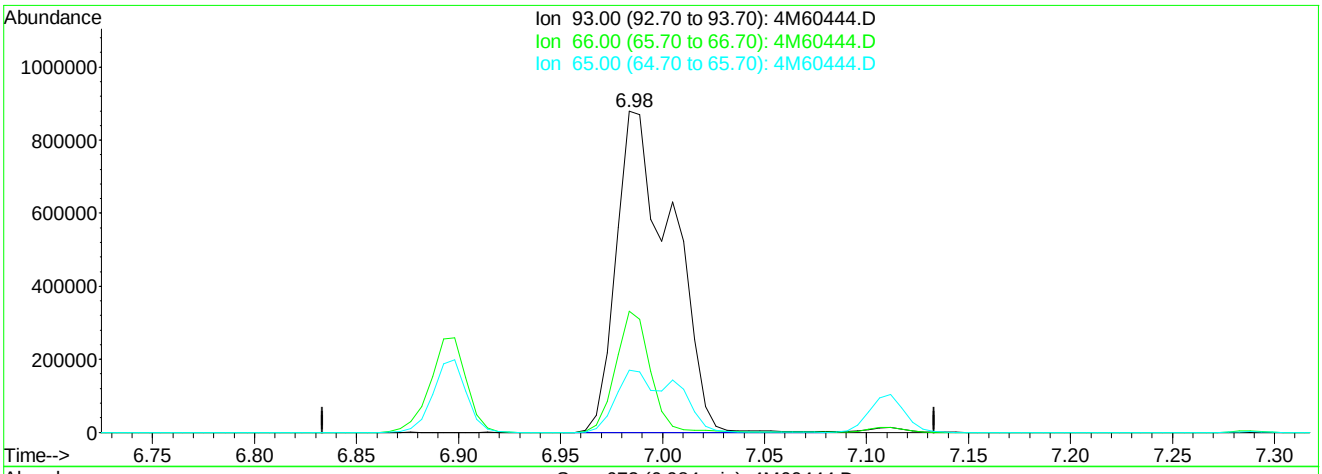
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

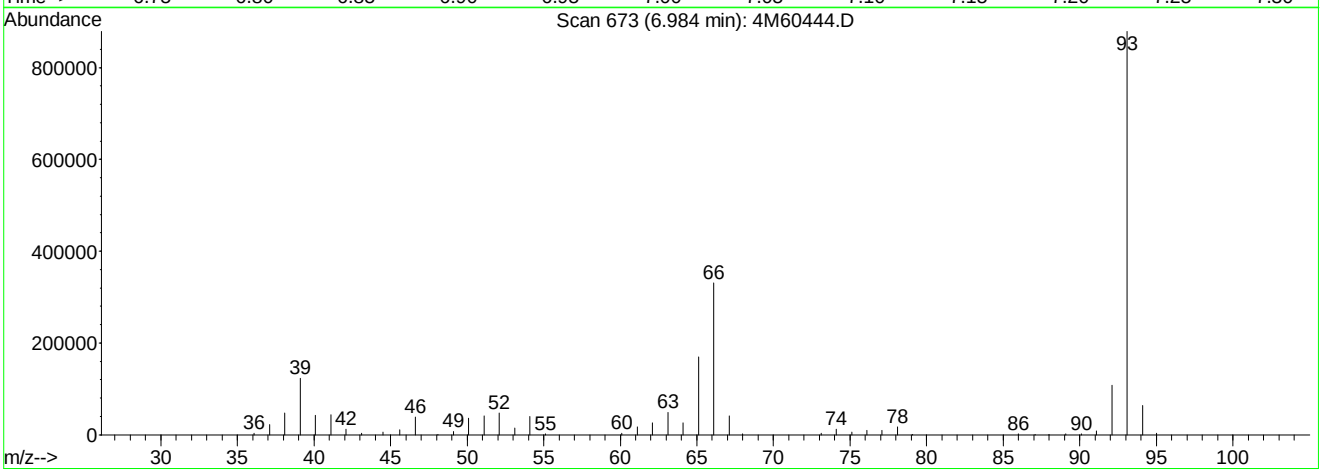


Quantitation Report (Qedit)

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

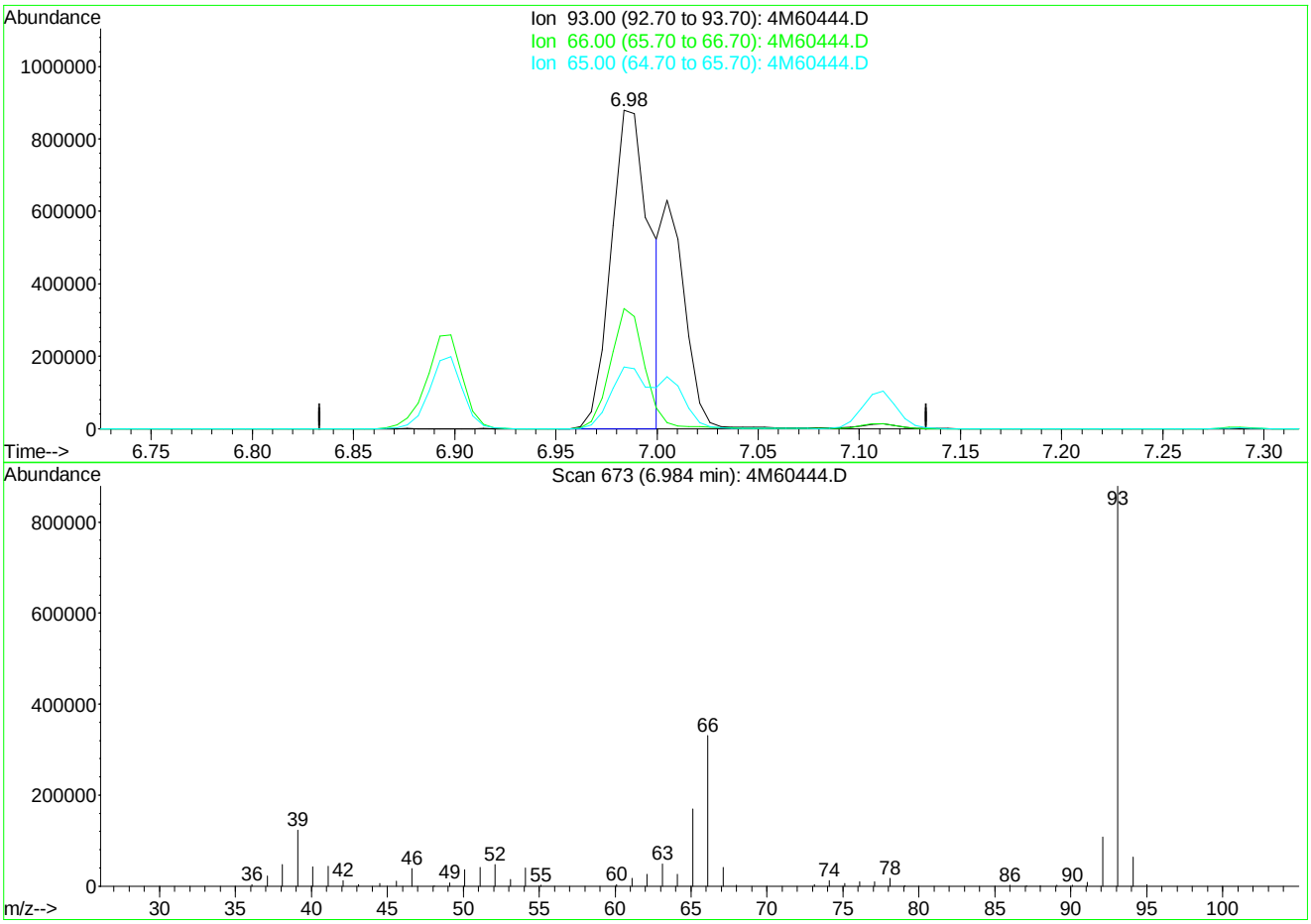
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.77
65.00	29.20	20.73
0.00	0.00	0.00

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
4M60445.D MEGAMIX.M Fri Apr 20 08:19:01 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:50 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

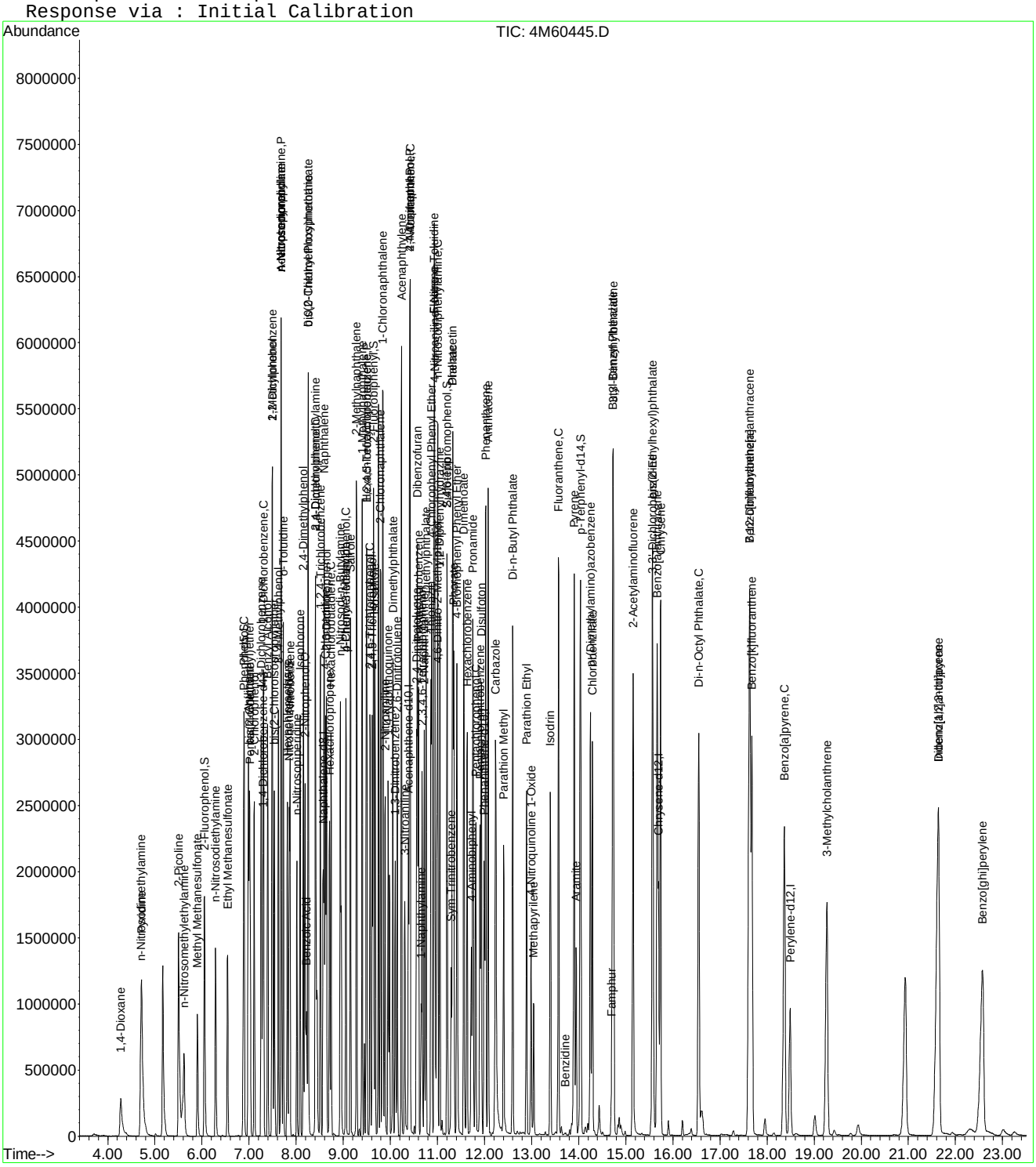
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	501935	100.9365	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	862423	134.3000	ug/ml	100
99)	Pentachlorophenol	11.81	266	367513	111.8825	ug/ml	99
100)	Pronamide	11.75	173	823842	100.0678	ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	193570	99.6174	ug/ml	99
102)	Disulfoton	11.93	88	922033	100.0754	ug/ml	100
103)	Phenanthrene	12.03	178	2552198	99.2497	ug/ml	99
104)	Anthracene	12.08	178	2652184	100.4170	ug/ml	99
105)	Carbazole	12.24	167	2461069	99.8497	ug/ml	99
106)	Parathion Methyl	12.41	109	520215	104.5338	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	2883140	99.5732	ug/ml	99
108)	Parathion Ethyl	12.89	97	355174	100.0641	ug/ml	99
109)	4-Nitroquinoline 1-Oxide	12.99	190	263646	131.3569	ug/ml	99
110)	Methapyrilene	13.04	58	422454	85.8738	ug/ml	97
111)	Isodrin	13.40	193	283018	98.8367	ug/ml	98
112)	Fluoranthene	13.57	202	2684844	99.6277	ug/ml	98
114)	Benzidine	13.71	184	19802	246.1112	ug/ml	100
115)	Pyrene	13.91	202	2734557	99.2391	ug/ml	99
116)	Aramite	13.94	185	163546	97.8929	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.25	225	595098	100.7242	ug/ml	97
119)	Chlorobenzilate	14.29	251	776046	99.9442	ug/ml	99
120)	Famphur	14.69	218	1795	5.1158	ug/ml#	1
121)	Butyl Benzyl Phthalate	14.72	149	1272202	97.2772	ug/ml	100
122)	3,3'-Dimethylbenzidine	14.73	212	375596	134.3617	ug/ml	98
123)	2-Acetylaminofluorene	15.16	181	1158799	97.9644	ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.57	149	1738038	99.6497	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.58	252	535244	112.0420	ug/ml	100
126)	Benzo[a]anthracene	15.67	228	2445804	100.0289	ug/ml	99
127)	Chrysene	15.74	228	2259995	99.1082	ug/ml	99
129)	Di-n-Octyl Phthalate	16.55	149	3002395	100.8005	ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.63	256	1177849	102.3467	ug/ml	100
131)	Benzo[b]fluoranthene	17.63	252	2654859	100.7327	ug/ml	99
132)	Benzo[k]fluoranthene	17.68	252	2404348	102.9880	ug/ml	99
133)	Benzo[a]pyrene	18.37	252	2422076	100.8122	ug/ml	99
134)	3-Methylcholanthrene	19.27	268	1309867	100.1318	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.64	276	2721409	97.4416	ug/ml	98
136)	Dibenz[ah]anthracene	21.64	278	2261465	97.0489	ug/ml	98
137)	Benzo[ghi]perylene	22.58	276	2198670	95.3121	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: MEGAMIX.RES

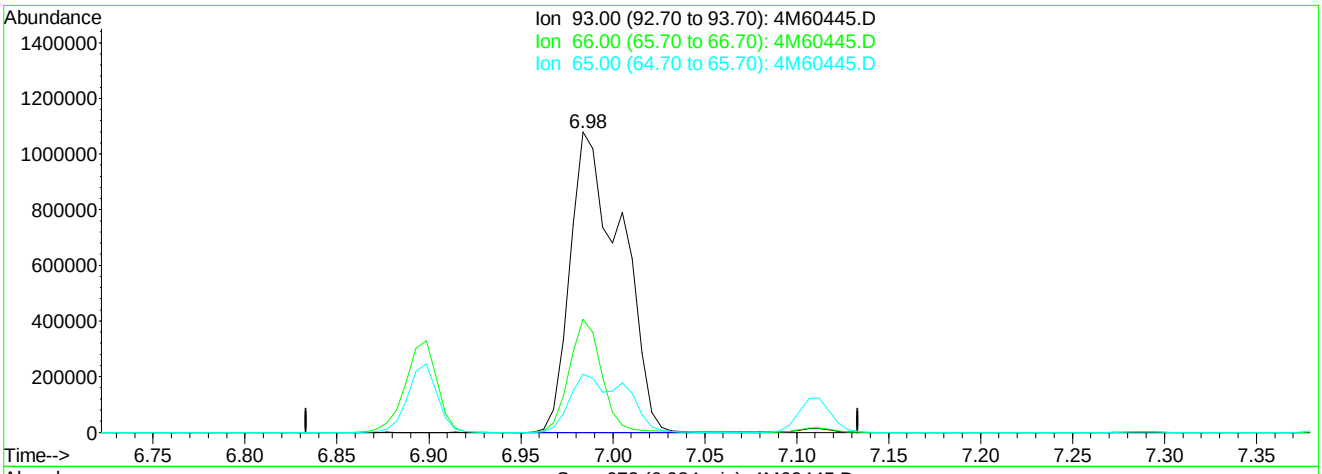
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

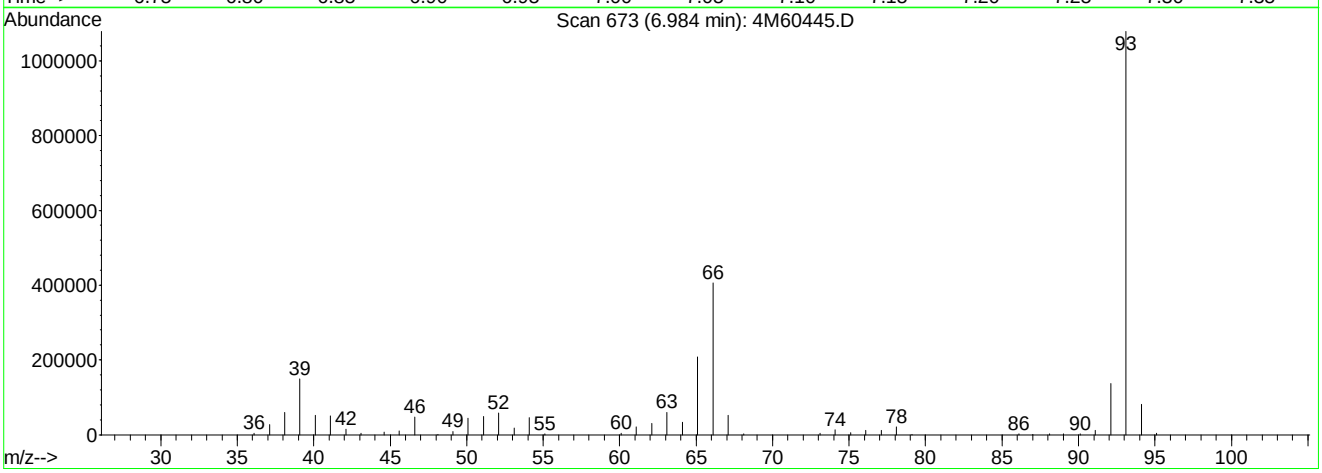


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Multiple Level Calibration





TIC: 4M60445.D

(11) Aniline

6.98min 154.36ug/ml

response 2082404

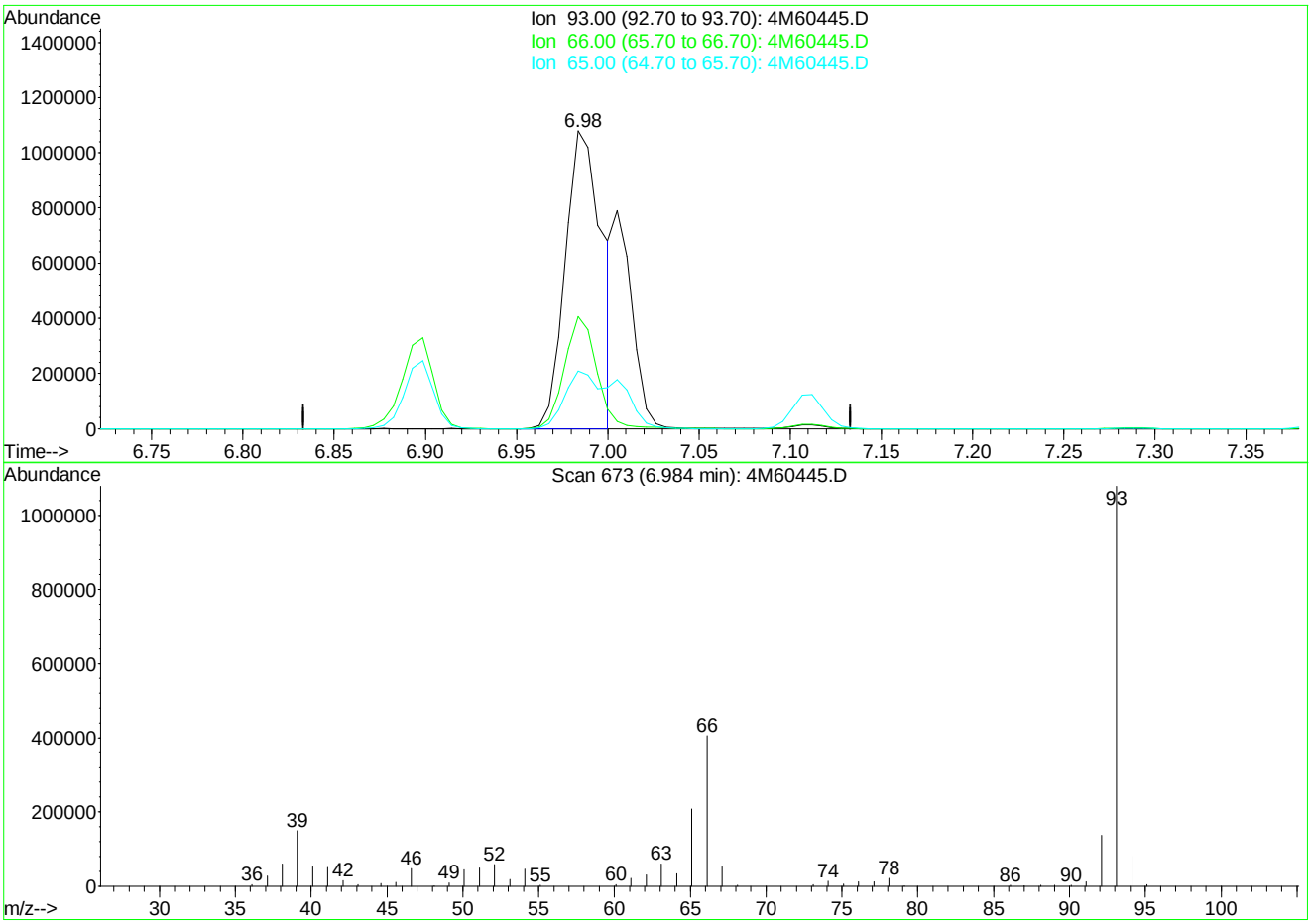
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.95
65.00	29.20	20.71
0.00	0.00	0.00

4M60445.D MEGAMIX.M Thu Apr 19 14:23:57 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Multiple Level Calibration



TIC: 4M60445.D

(11) Aniline

6.98min 111.40ug/ml mint

response 1502899

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	33.18
65.00	29.20	28.70
0.00	0.00	0.00

4M60445.D MEGAMIX.M Thu Apr 19 2012

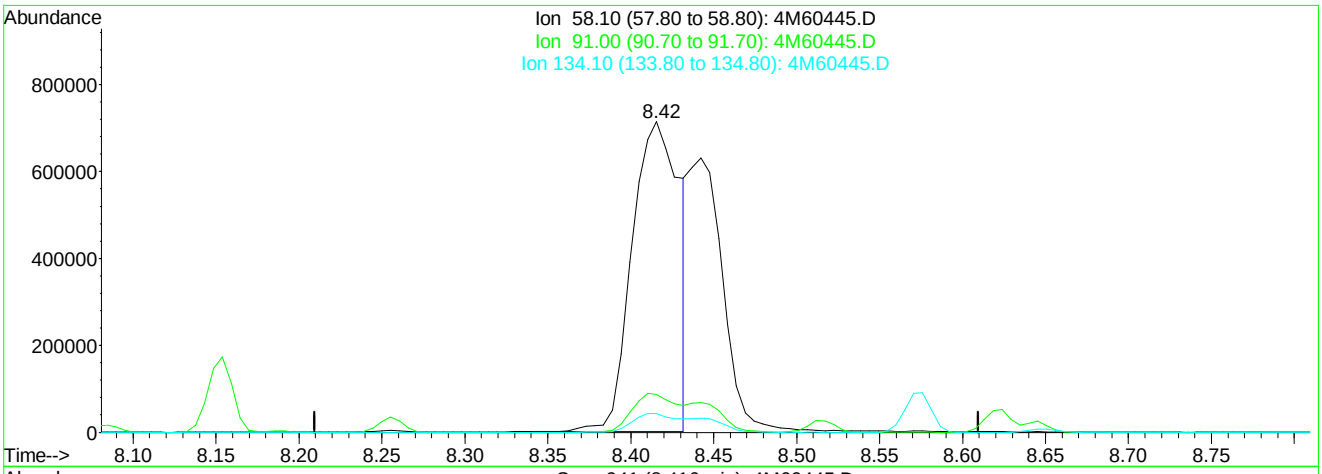
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

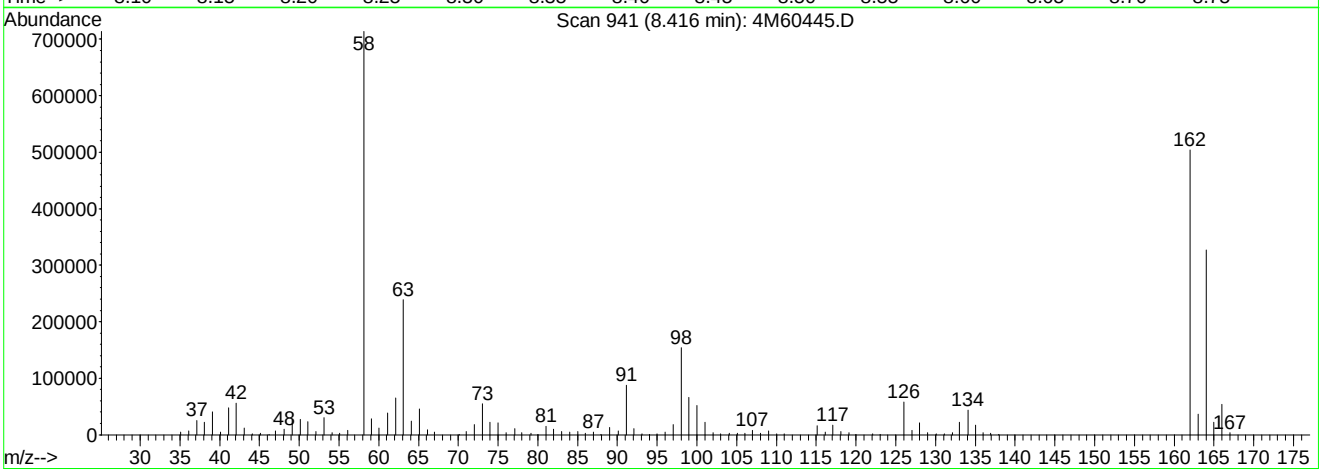
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Multiple Level Calibration





TIC: 4M60445.D

(41) a,a-Dimethylphenethylamine

8.42min 169.94ug/ml

response 1426957

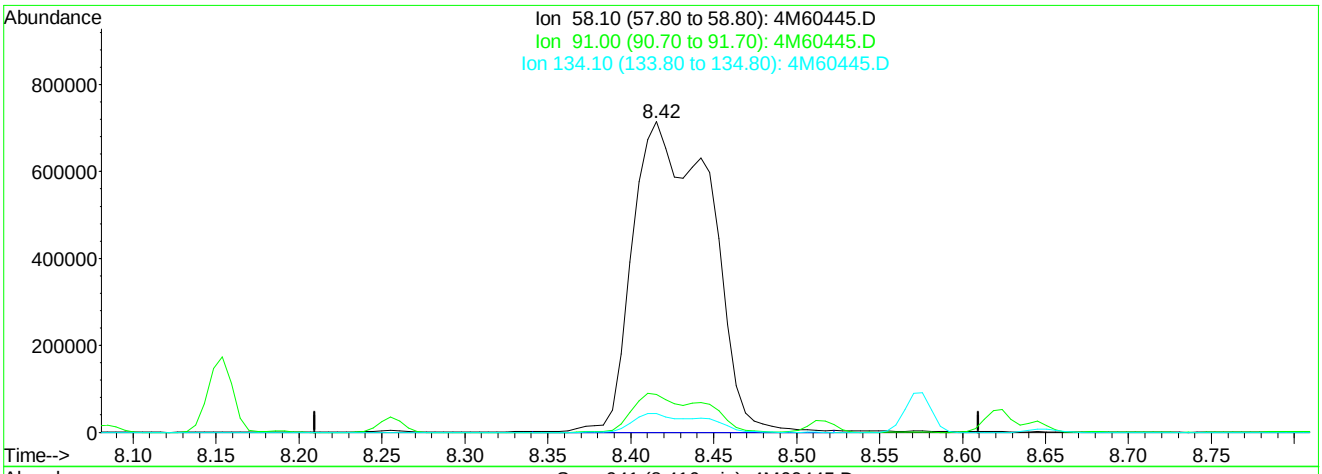
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.82
134.10	6.20	5.67
0.00	0.00	0.00

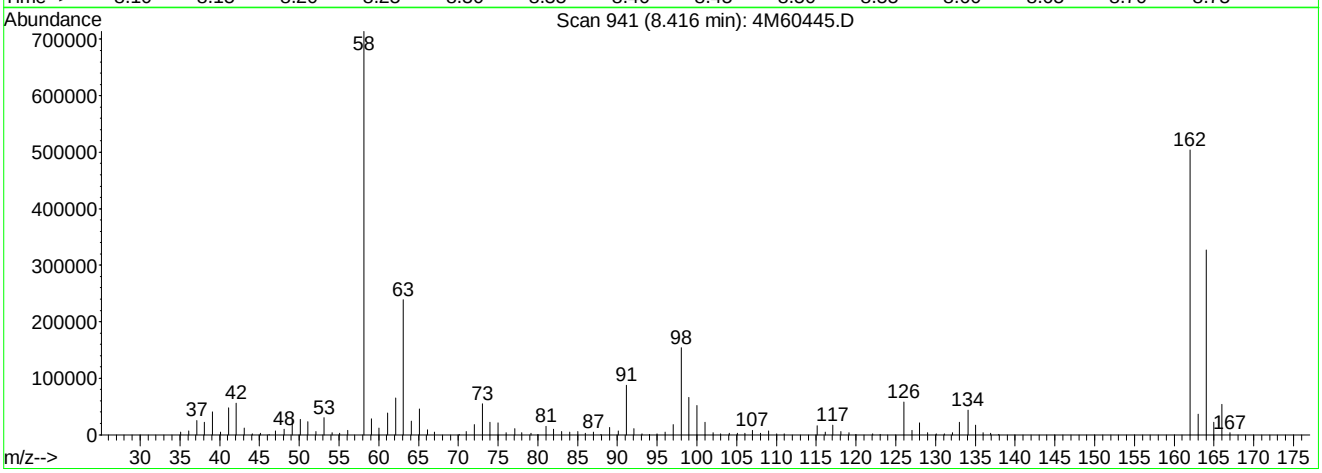
4M60445.D MEGAMIX.M Thu Apr 19 14:24:09 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Multiple Level Calibration





TIC: 4M60445.D

(41) a,a-Dimethylphenethylamine

8.42min 277.40ug/ml mint

response 2329298

Ion	Exp%	Act%
58.10	100	100
91.00	12.60	7.24#
134.10	6.20	3.48#
0.00	0.00	0.00

4M60445.D MEGAMIX.M Thu Apr 19 [illegible] 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24:33 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	295204	40.00	ug/ml	0.00
30) Naphthalene-d8	8.58	136	1143324	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.39	164	633567	40.00	ug/ml	0.00
87) Phenanthrene-d10	12.00	188	1104340	40.00	ug/ml	0.00
113) Chrysene-d12	15.70	240	1023127	40.00	ug/ml	0.00
128) Perylene-d12	18.50	264	952814	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	1017185	116.1120	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 116.11%#			
12) Phenol-d5	6.89	99	1168891	116.9594	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 116.96%#			
31) Nitrobenzene-d5	7.85	82	1081184	116.7280	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 233.46%#			
59) 2-Fluorobiphenyl	9.64	172	2267884	117.9312	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 235.86%#			
86) 2,4,6-Tribromophenol	11.21	330	314255	120.1918	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 120.19%			
117) p-Terphenyl-d14	14.03	244	2038815	117.3604	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 234.72%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.27	88	439725	122.1350	ug/ml#	88
3) n-Nitrosodimethylamine	4.70	74	632381	116.4857	ug/ml	98
4) Pyridine	4.72	79	1110745	115.9641	ug/ml	98
5) 2-Picoline	5.50	93	1204707	116.4905	ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	533756	117.0434	ug/ml	99
7) Methyl Methanesulfonate	5.91	80	549270	110.8694	ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	557116	116.8629	ug/ml	98
10) Ethyl Methanesulfonate	6.55	79	761495	116.8640	ug/ml	100
11) Aniline	6.99	93	1742391m	113.7271	ug/ml	
13) Phenol	6.90	94	1231425	116.1180	ug/ml	100
14) bis(2-Chloroethyl)ether	7.01	63	761552	118.2493	ug/ml	98
15) Pentachloroethane	7.02	167	419665	118.9879	ug/ml	99
16) 2-Chlorophenol	7.11	128	1130760	116.7897	ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	1221367	116.6035	ug/ml	99
18) 1,4-Dichlorobenzene	7.30	146	1248304	117.1596	ug/ml	100
19) Benzyl Alcohol	7.40	108	747792	118.0213	ug/ml	98
20) 1,2-Dichlorobenzene	7.50	146	1123630	114.9645	ug/ml	100
21) 2-Methylphenol	7.49	107	853772	115.8294	ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.54	45	1585443	117.1658	ug/ml	100
23) 3-,4-Methylphenol	7.62	107	1136454	117.1605	ug/ml	99
24) n-Nitrosopyrrolidine	7.69	100	494488	117.8479	ug/ml	88
25) n-Nitrosodipropylamine	7.68	70	624493	115.0549	ug/ml	98
26) Acetophenone	7.68	105	1272038	116.3509	ug/ml	99
27) n-Nitrosomorpholine	7.69	56	585852	109.4485	ug/ml	97
28) o-Toluidine	7.73	106	1776423	118.8174	ug/ml	100
29) Hexachloroethane	7.81	117	480318	116.8146	ug/ml	97
32) Nitrobenzene	7.88	77	1069745	117.5181	ug/ml	99
33) n-Nitrosopiperidine	8.02	114	584415	117.4946	ug/ml	100
34) Isophorone	8.08	82	1916721	117.3865	ug/ml	99
35) 2-Nitrophenol	8.19	139	659346	116.7203	ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	1031288	116.6170	ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.26	198	516466	119.4681	ug/ml	100
38) bis(2-Chloroethoxy)methane	8.25	93	1390586	117.4347	ug/ml	96

(#) = qualifier out of range (m) = manual integration
4M60446.D MEGAMIX.M Fri Apr 20 08:19:01 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24:33 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.23	105	915551m	149.2026	ug/ml	
40)	2,4-Dichlorophenol	8.41	162	900159	117.1034	ug/ml	100
41)	a,a-Dimethylphenethylamine	8.43	58	3126203m	175.9425	ug/ml	
42)	1,2,4-Trichlorobenzene	8.52	180	1011531	118.7749	ug/ml	99
43)	Naphthalene	8.60	128	3171066	118.6040	ug/ml	100
44)	4-Chloroaniline	8.62	127	1382212	123.0297	ug/ml	98
45)	2,6-Dichlorophenol	8.64	162	951046	119.1835	ug/ml	100
46)	Hexachloropropene	8.71	213	598624	115.0699	ug/ml	99
47)	Hexachlorobutadiene	8.74	225	507887	117.2560	ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	920957	120.0550	ug/ml#	88
49)	p-Phenylenediamine	9.06	108	85039	128.7343	ug/ml#	70
50)	4-Chloro-3-Methylphenol	9.06	107	927332	119.3638	ug/ml	98
51)	Safrole	9.16	162	867771	118.4686	ug/ml	100
52)	2-Methylnaphthalene	9.29	142	2083523	116.9852	ug/ml	100
53)	1-Methylnaphthalene	9.40	142	1993434	118.1192	ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	888172	117.3675	ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	490221	118.0325	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	669686	119.8369	ug/ml	98
58)	2,4,5-Trichlorophenol	9.62	196	692553	121.1238	ug/ml	100
60)	Isosafrole	9.68	162	919807	119.5987	ug/ml	98
61)	2-Chloronaphthalene	9.79	162	1980928	118.3415	ug/ml	99
62)	1-Chloronaphthalene	9.84	162	1800099	115.1895	ug/ml	99
63)	2-Nitroaniline	9.89	65	598982	119.1975	ug/ml	99
64)	1,4-Naphthoquinone	9.96	158	608672	98.4253	ug/ml	99
65)	Dimethylphthalate	10.06	163	2165968	117.4868	ug/ml	99
66)	1,3-Dinitrobenzene	10.11	168	463456	119.9429	ug/ml	100
67)	2,6-Dinitrotoluene	10.15	165	580776	118.9713	ug/ml	99
68)	Acenaphthylene	10.24	152	2981097	116.5105	ug/ml	98
69)	3-Nitroaniline	10.31	138	523691	145.2699	ug/ml	100
70)	2,4-Dinitrophenol	10.41	184	327279	125.2754	ug/ml	66
71)	Acenaphthene	10.42	154	1951899	115.3402	ug/ml	99
72)	4-Nitrophenol	10.41	65	386132	110.2412	ug/ml	96
73)	2,4-Dinitrotoluene	10.56	165	727634	120.8692	ug/ml	98
74)	Pentachlorobenzene	10.60	250	812777	118.5532	ug/ml	100
75)	Dibenzofuran	10.58	168	2633898	118.1646	ug/ml	98
76)	2,3,4,6-Tetrachlorophenol	10.68	232	524408	134.7472	ug/ml	99
77)	1-Naphthylamine	10.65	143	622864	453.0629	ug/ml#	74
78)	2-Naphthylamine	10.72	143	230585	512.0727	ug/ml#	64
79)	Diethylphthalate	10.76	149	2162475	118.3166	ug/ml	99
80)	Thionazin	10.87	107	368362	119.2258	ug/ml	99
81)	Fluorene	10.94	166	2243623	117.1179	ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	1082920	119.0368	ug/ml	99
83)	4-Nitroaniline	10.95	138	549333	127.0437	ug/ml	97
84)	5-Nitro-o-Toluidine	10.94	152	619633	138.6193	ug/ml	97
85)	1,2-Diphenylhydrazine	11.05	77	2100584	117.4922	ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	11.00	198	463462	122.4587	ug/ml	91
89)	n-Nitrosodiphenylamine	11.01	169	1990000	120.3593	ug/ml	98
90)	Sulfotepp	11.21	322	351340	118.2475	ug/ml	98
91)	Sym-Trinitrobenzene	11.30	75	571928	119.9420	ug/ml	99
92)	Diallate	11.33	86	776821	118.2900	ug/ml	96
93)	Phenacetin	11.33	108	1047444	118.9704	ug/ml	99
94)	Phorate	11.35	75	1287348	119.7104	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.42	248	625697	119.7732	ug/ml	99
96)	Hexachlorobenzene	11.64	284	663561	117.7232	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24:33 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

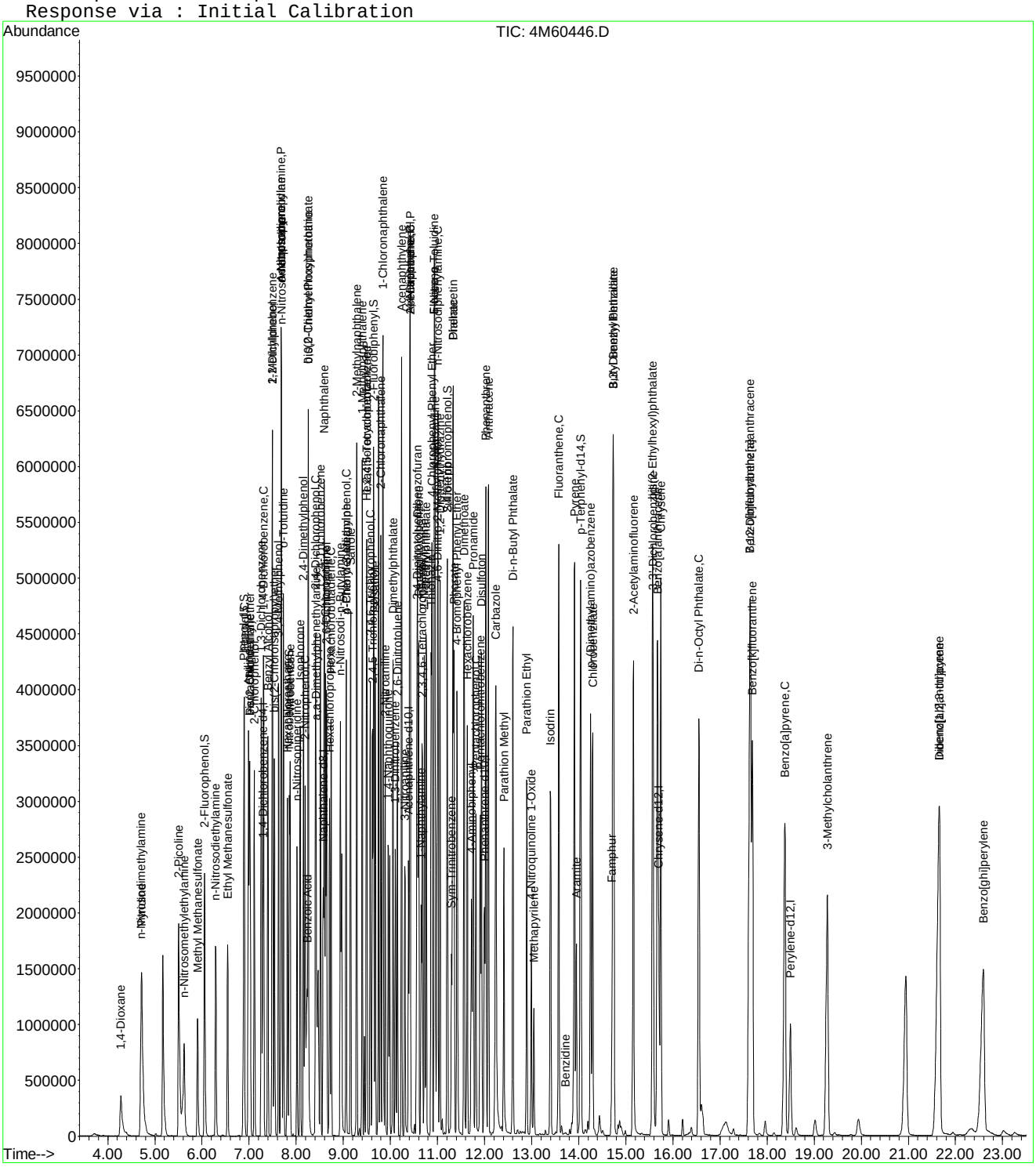
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.57	87	584529	113.1904	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	1329903	179.9601	ug/ml	99
99)	Pentachlorophenol	11.82	266	458736	128.2299	ug/ml	99
100)	Pronamide	11.76	173	1019977	119.6949	ug/ml	99
101)	Pentachloronitrobenzene	11.91	237	235684	116.9232	ug/ml	100
102)	Disulfoton	11.94	88	1131291	118.6386	ug/ml	99
103)	Phenanthrene	12.03	178	3120483	117.2080	ug/ml	98
104)	Anthracene	12.08	178	3213859	117.2735	ug/ml	98
105)	Carbazole	12.24	167	3053064	119.6914	ug/ml	98
106)	Parathion Methyl	12.41	109	617507	117.7994	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	3504116	116.9376	ug/ml	99
108)	Parathion Ethyl	12.90	97	436504	118.9029	ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.99	190	313238	133.4652	ug/ml	99
110)	Methapyrilene	13.05	58	474669	98.5639	ug/ml	97
111)	Isodrin	13.40	193	345670	116.8596	ug/ml	95
112)	Fluoranthene	13.58	202	3249661	116.4558	ug/ml	98
114)	Benzidine	13.72	184	31724	228.4870	ug/ml	100
115)	Pyrene	13.91	202	3331157	116.9710	ug/ml	98
116)	Aramite	13.95	185	199458	116.3650	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.25	225	726842	118.4507	ug/ml	96
119)	Chlorobenzilate	14.30	251	954917	118.6141	ug/ml	99
120)	Famphur	14.70	218	2140	5.8988	ug/ml#	3
121)	Butyl Benzyl Phthalate	14.72	149	1549387	115.8308	ug/ml	100
122)	3,3'-Dimethylbenzidine	14.73	212	503849	152.9940	ug/ml	99
123)	2-Acetylaminofluorene	15.16	181	1459431	120.0732	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	2123921	117.7673	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.58	252	679065	131.2368	ug/ml	99
126)	Benzo[a]anthracene	15.67	228	2986908	117.8500	ug/ml	98
127)	Chrysene	15.74	228	2763239	117.2485	ug/ml	99
129)	Di-n-Octyl Phthalate	16.55	149	3682000	120.1551	ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.64	256	1443439	121.0144	ug/ml	99
131)	Benzo[b]fluoranthene	17.65	252	3081081	112.7355	ug/ml	96
132)	Benzo[k]fluoranthene	17.69	252	2836726	117.6277	ug/ml	98
133)	Benzo[a]pyrene	18.38	252	2982535	120.4719	ug/ml	98
134)	3-Methylcholanthrene	19.28	268	1615024	120.0160	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.66	276	3353339	117.9707	ug/ml	97
136)	Dibenz[ah]anthracene	21.65	278	2804015	118.2735	ug/ml	98
137)	Benzo[ghi]perylene	22.59	276	2700031	116.0476	ug/ml	97

(#) = qualifier out of range (m) = manual integration
4M60446.D MEGAMIX.M Fri Apr 20 08:19:01 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:25 2012 Quant Results File: MEGAMIX.RES

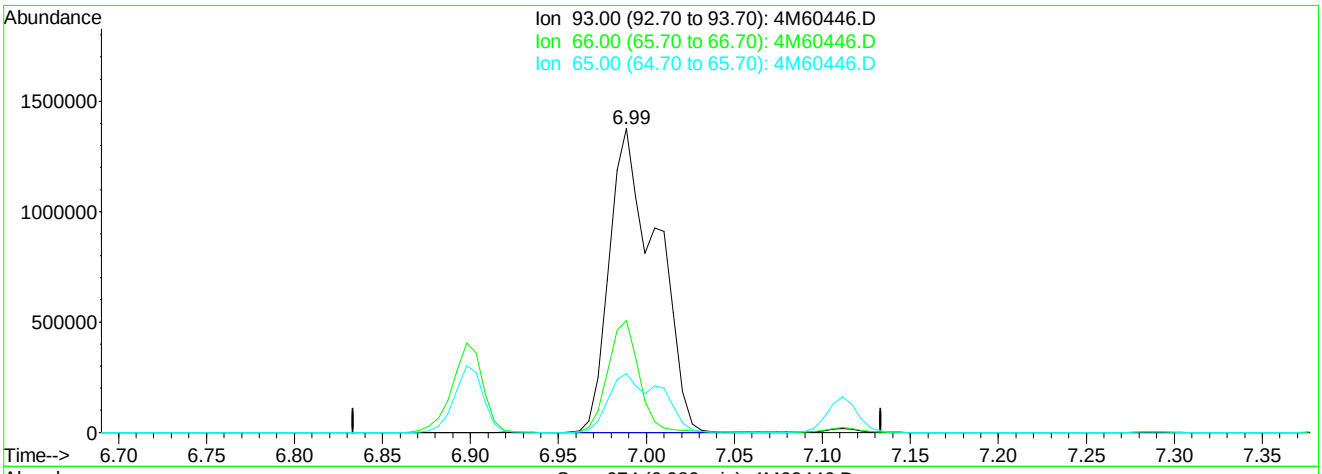
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

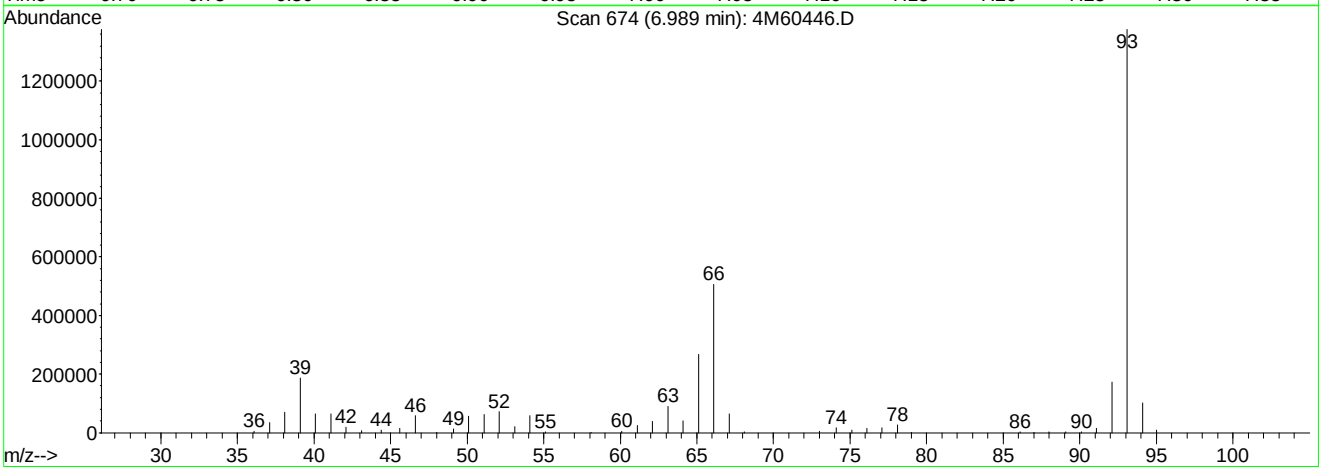


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Multiple Level Calibration





TIC: 4M60446.D

(11) Aniline

6.99min 168.68ug/ml

response 2584301

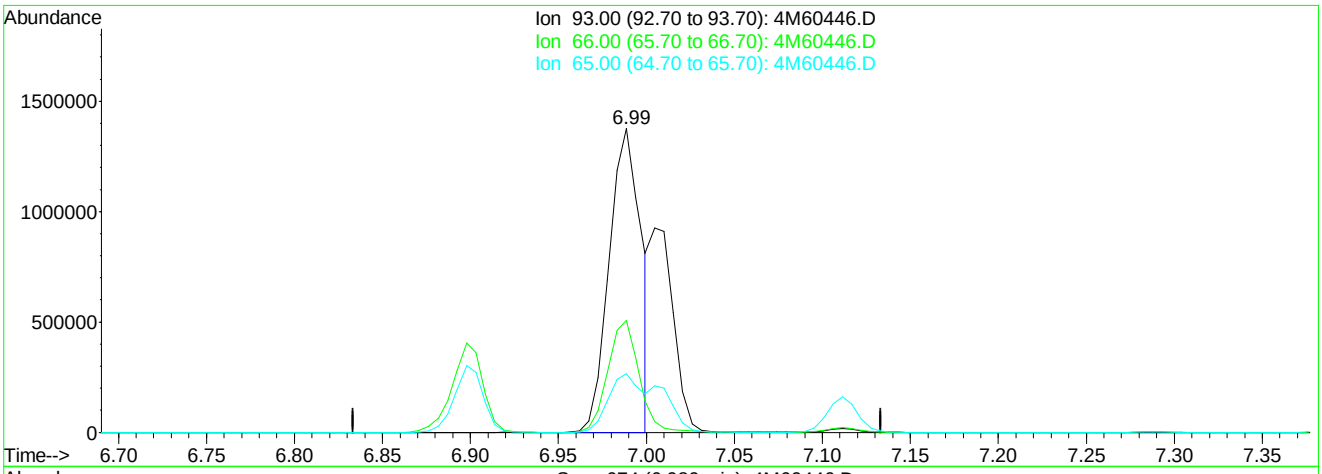
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	24.12
65.00	29.20	20.98
0.00	0.00	0.00

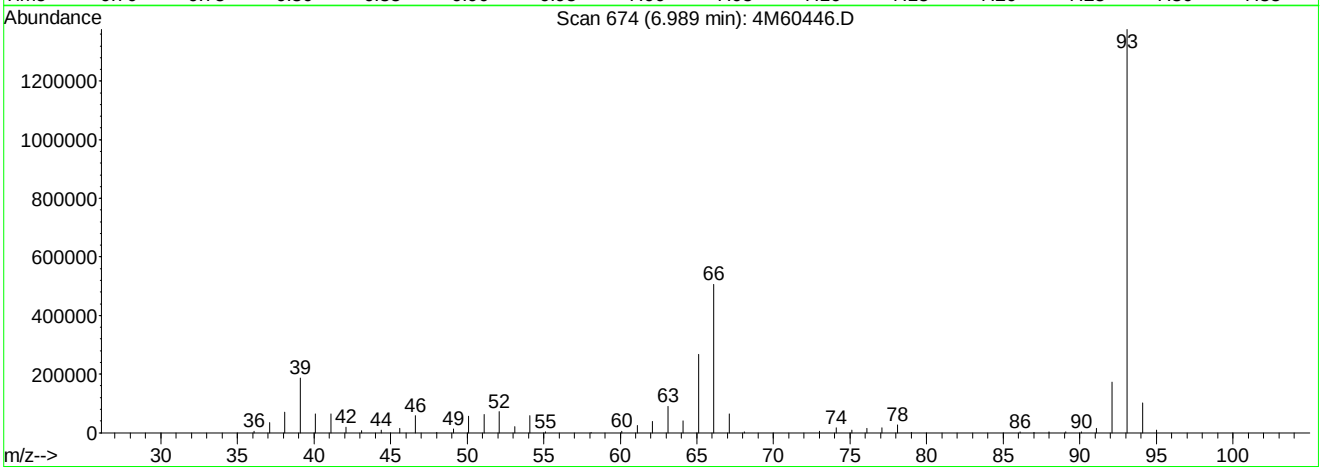
4M60446.D MEGAMIX.M Thu Apr 19 14:24:40 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Multiple Level Calibration





TIC: 4M60446.D

(11) Aniline

6.99min 113.73ug/ml mint

response 1742391

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	35.78
65.00	29.20	31.12
0.00	0.00	0.00

4M60446.D MEGAMIX.M Thu Apr 19 [illegible] 2012

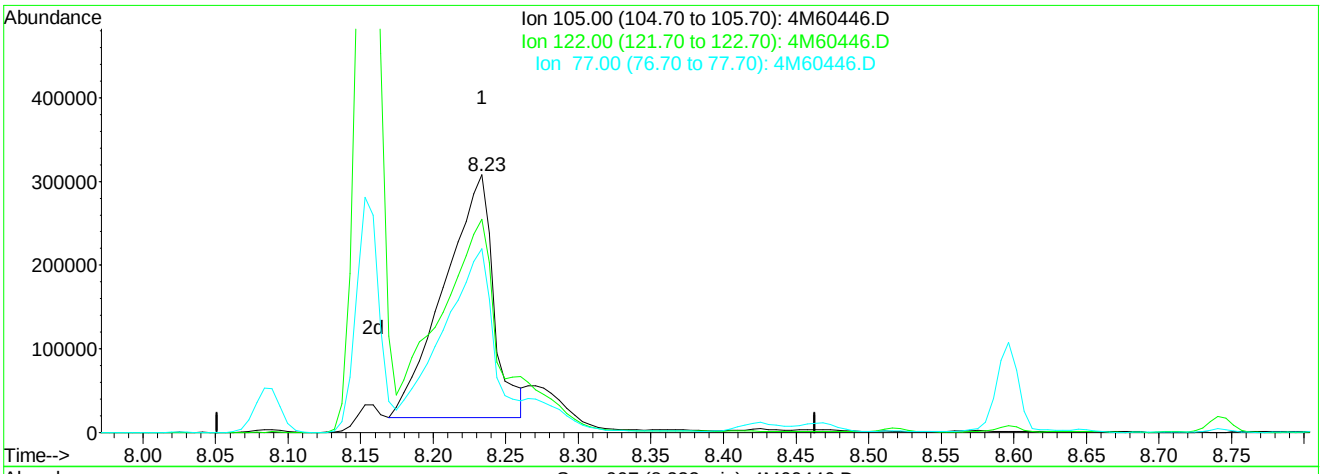
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

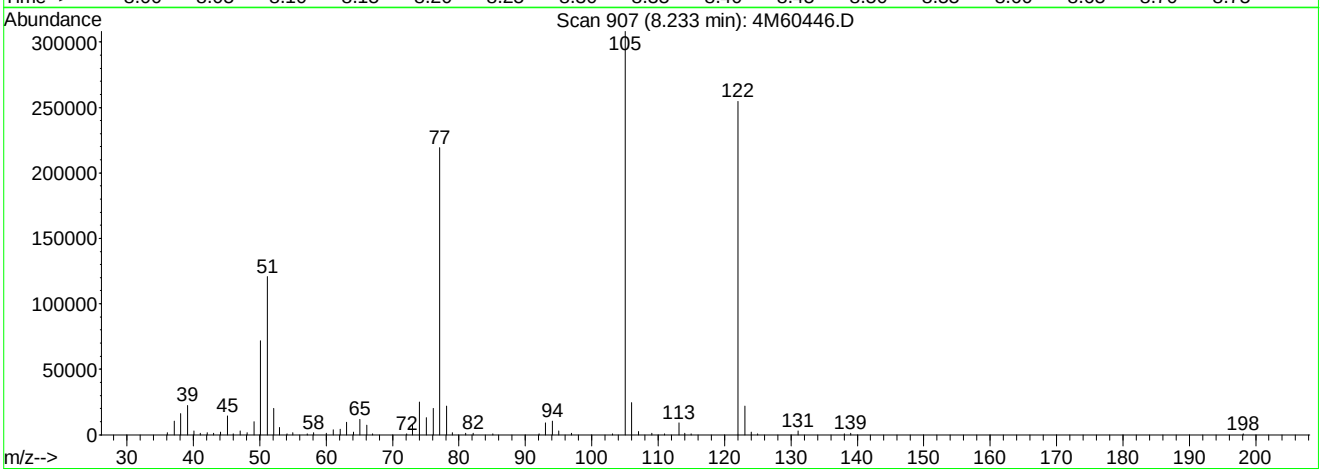
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Single Level Calibration





TIC: 4M60446.D

(39) Benzoic Acid

8.23min 111.58ug/ml

response 684707

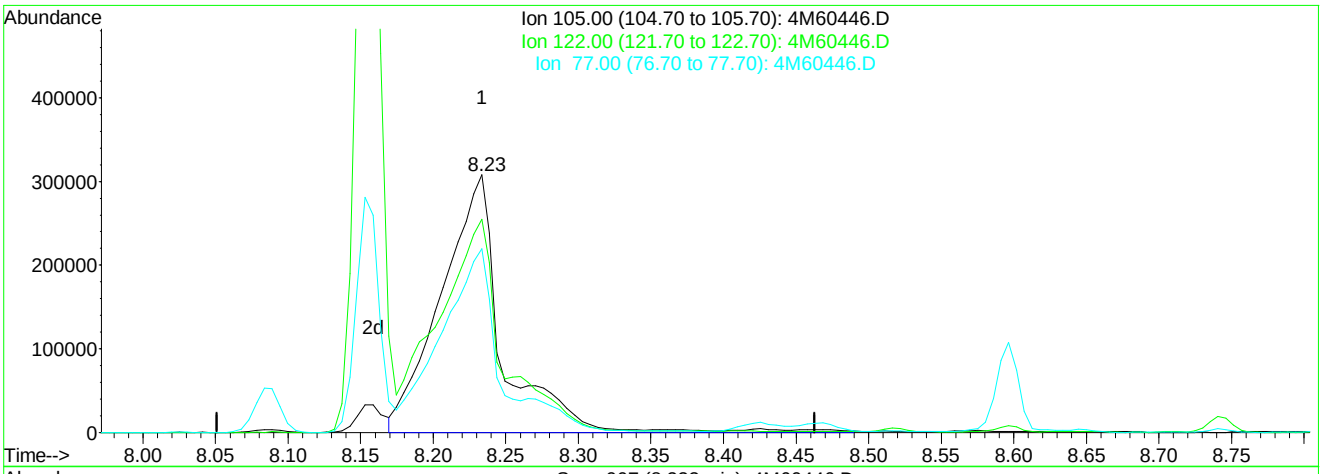
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	111.94
77.00	70.40	62.20
0.00	0.00	0.00

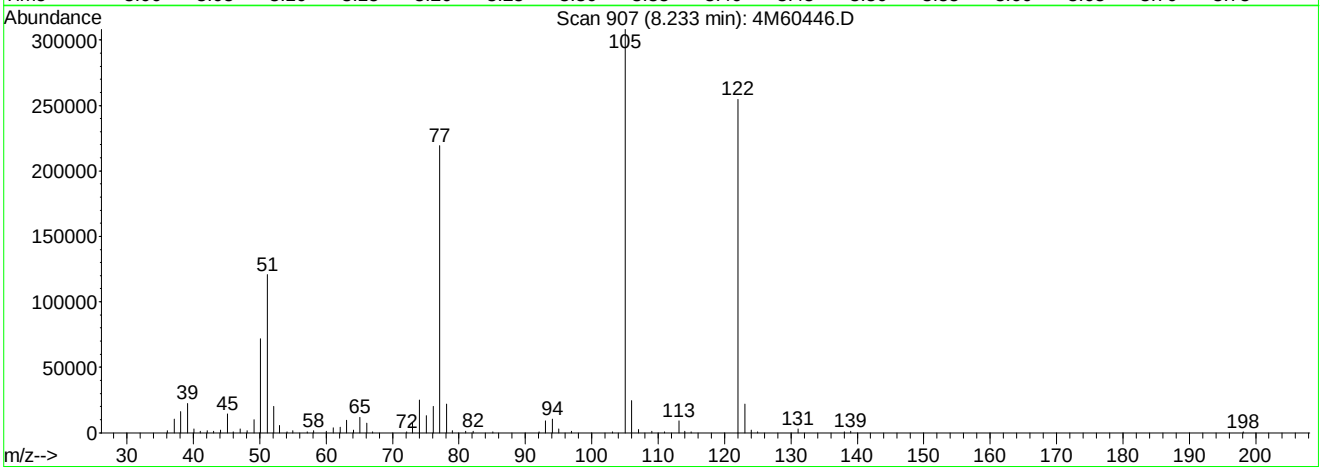
4M60446.D MEGAMIX.M Thu Apr 19 14:24:49 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Single Level Calibration





TIC: 4M60446.D

(39) Benzoic Acid

8.23min 149.20ug/ml mint

response 915551

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	83.72
77.00	70.40	46.52
0.00	0.00	0.00

4M60446.D MEGAMIX.M Thu Apr 19 14:24:28 2012

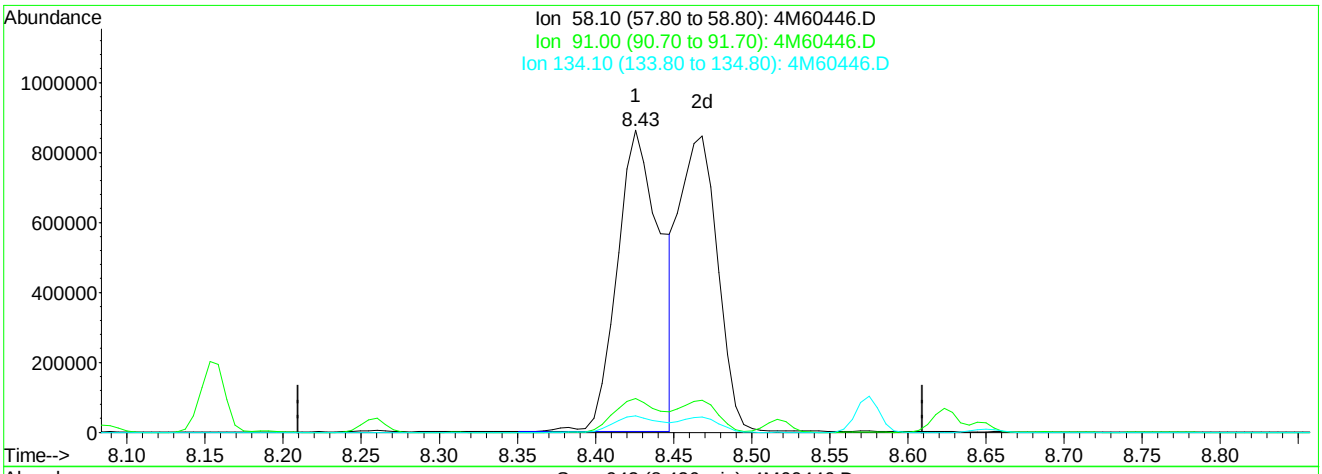
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

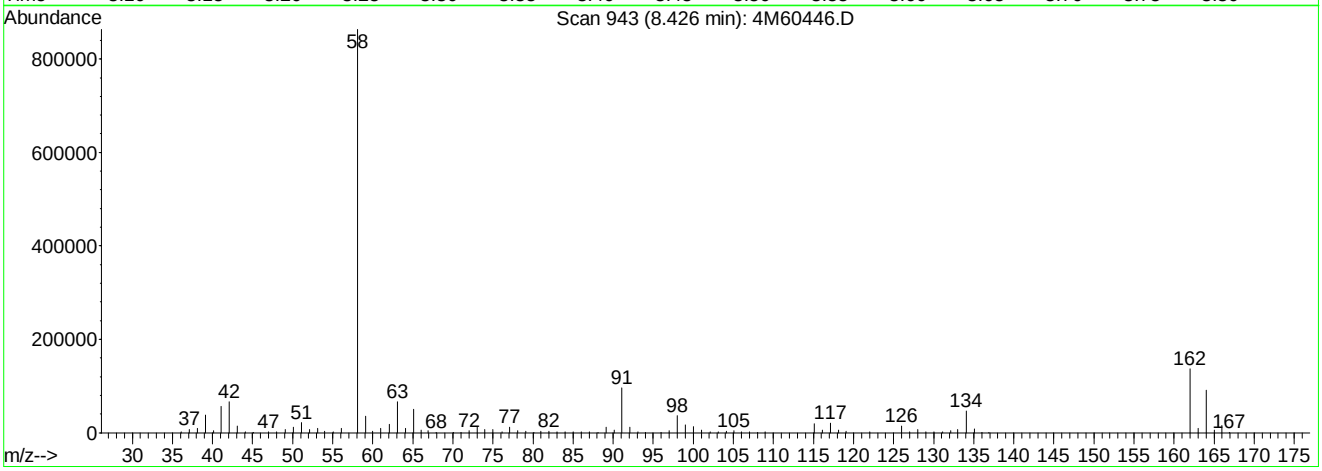
#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Multiple Level Calibration





TIC: 4M60446.D

(41) a,a-Dimethylphenethylamine

8.43min 93.27ug/ml

response 1657316

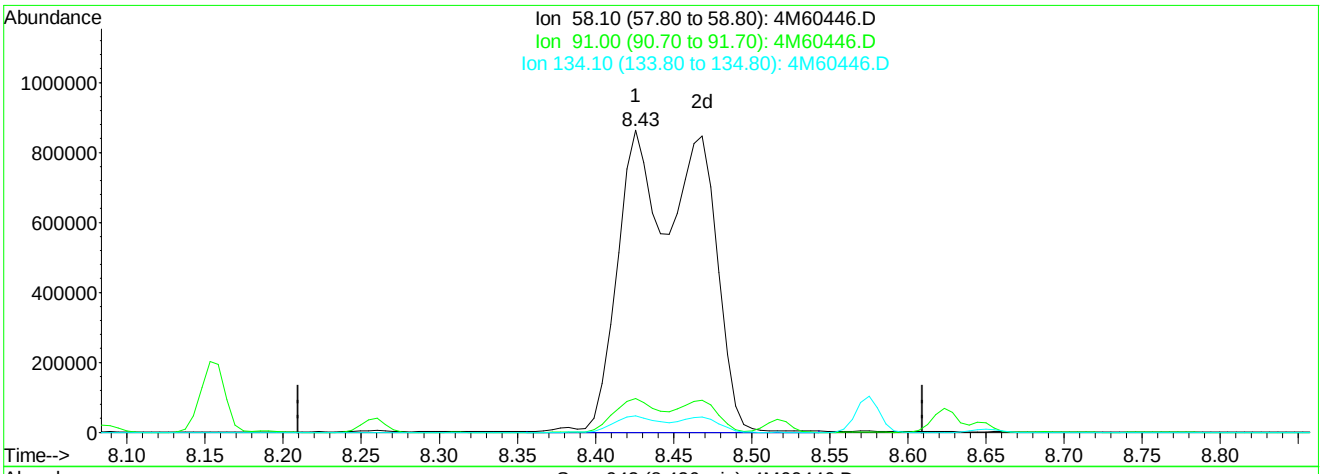
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.80
134.10	6.20	5.71
0.00	0.00	0.00

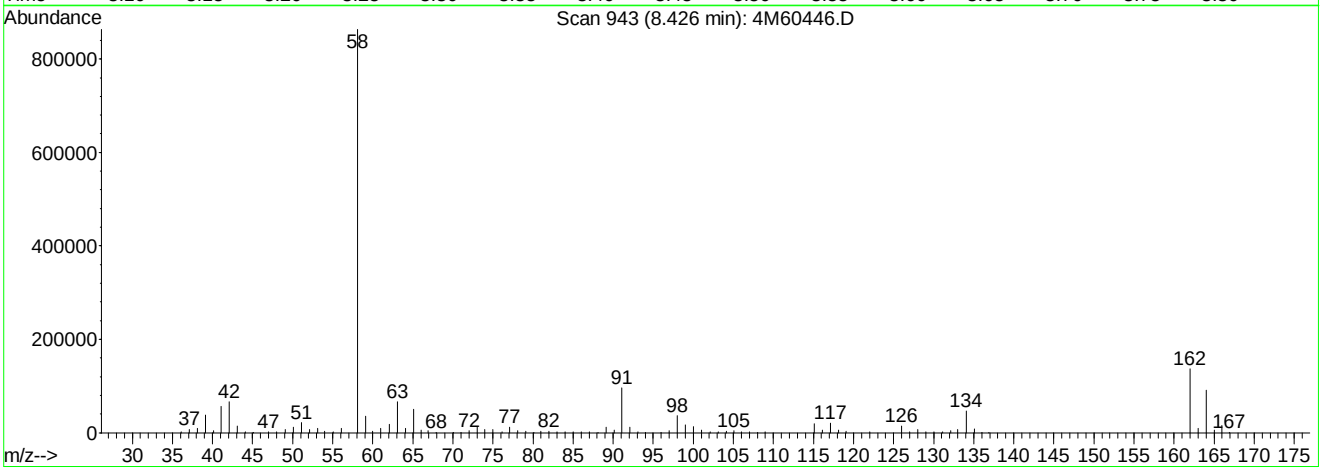
4M60446.D MEGAMIX.M Thu Apr 19 14:24:58 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:25 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Multiple Level Calibration





TIC: 4M60446.D

(41) a,a-Dimethylphenethylamine

8.43min 175.94ug/ml mint

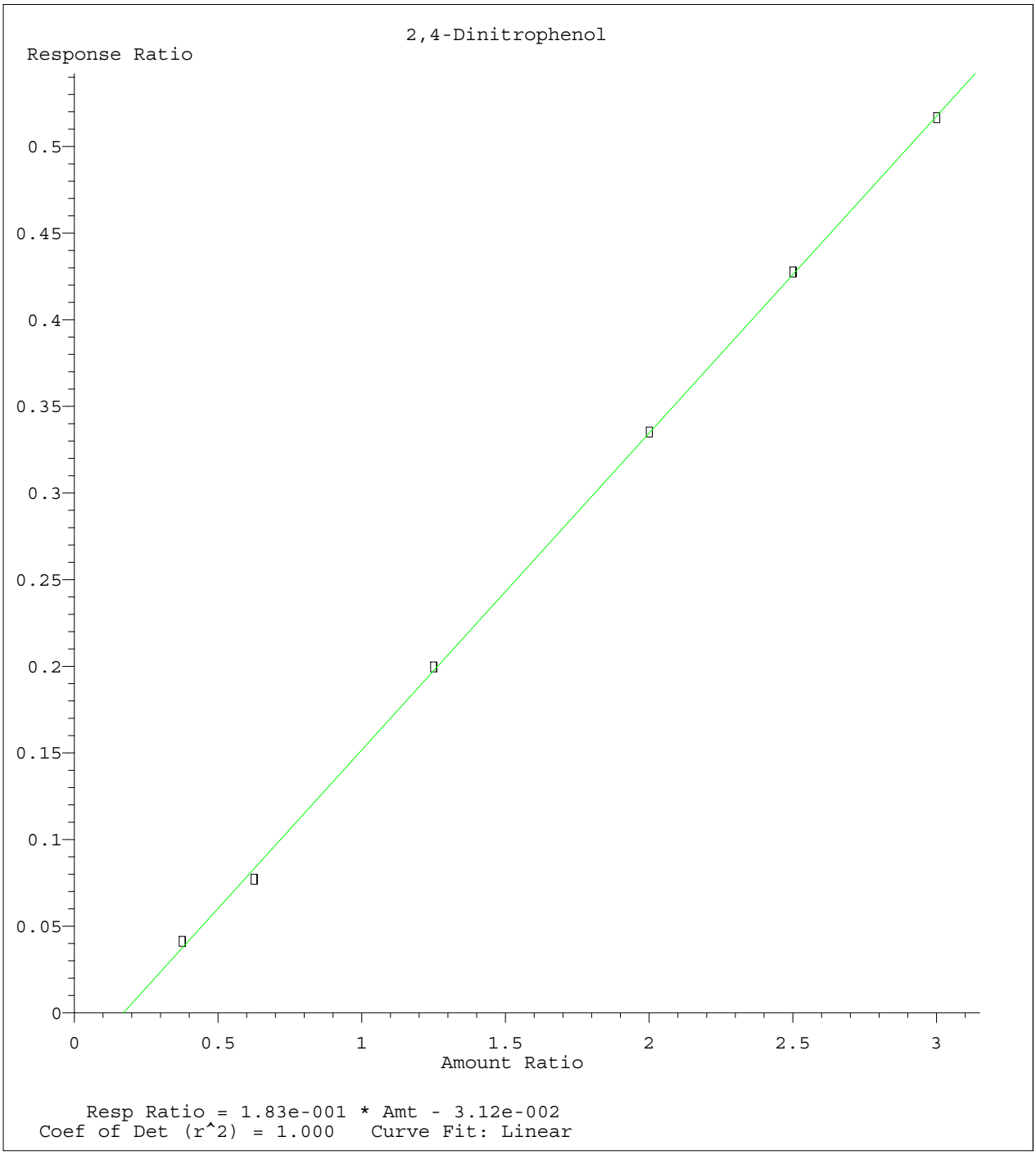
response 3126203

Ion	Exp%	Act%
58.10	100	100
91.00	12.60	6.25#
134.10	6.20	3.03#
0.00	0.00	0.00

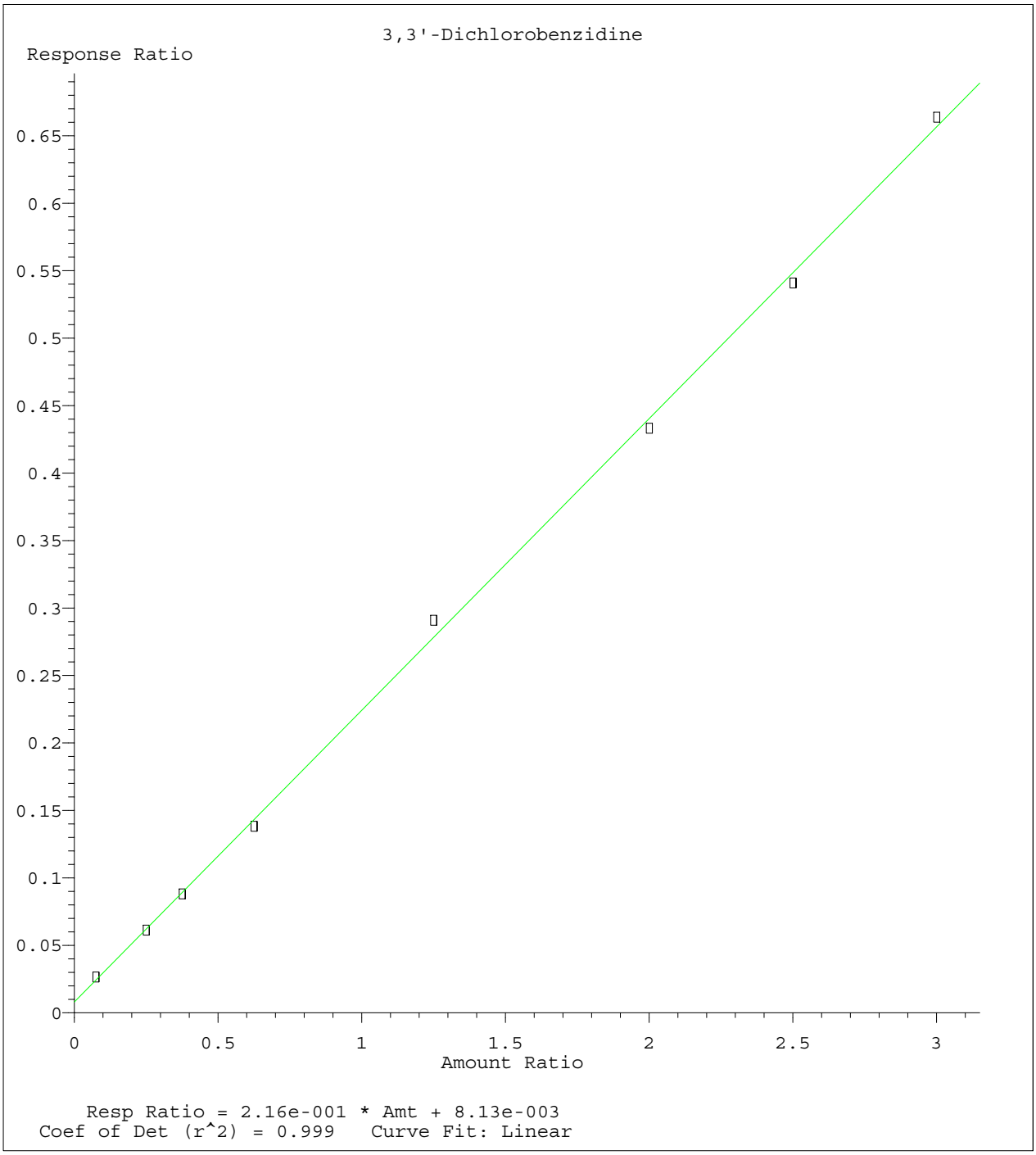
4M60446.D MEGAMIX.M Thu Apr 19 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak



Method Name: I:\MSDCHEM\1\METHODS\MEGAMIX.M
Calibration Table Last Updated: Fri Apr 20 08:27:42 2012



Method Name: I:\MSDCHEM\1\METHODS\MEGAMIX.M
Calibration Table Last Updated: Fri Apr 20 08:27:42 2012

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	256286	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	986779	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	526241	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	955907	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	888081	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	842099	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	0.00	112	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 21 - 100		Recovery =	0.00%#		
12) Phenol-d5	0.00	99	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 10 - 94		Recovery =	0.00%#		
31) Nitrobenzene-d5	7.81	82	39246	4.7024	ug/ml	-0.04
Spiked Amount 50.000	Range 35 - 114		Recovery =	9.40%#		
59) 2-Fluorobiphenyl	9.62	172	163	0.0093	ug/ml	-0.03
Spiked Amount 50.000	Range 43 - 116		Recovery =	0.02%#		
86) 2,4,6-Tribromophenol	0.00	330	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 10 - 123		Recovery =	0.00%#		
117) p-Terphenyl-d14	0.00	244	0	0.0000	ug/ml	
Spiked Amount 50.000	Range 33 - 141		Recovery =	0.00%#		
Target Compounds						Qvalue
3) n-Nitrosodimethylamine	4.70	74	276126	58.3812	ug/ml	99
4) Pyridine	4.72	79	488797	58.2919	ug/ml	96
5) 2-Picoline	5.50	93	472924	51.8312	ug/ml	100
6) n-Nitrosomethylethylamine	5.62	88	213170	54.1601	ug/ml	96
7) Methyl Methanesulfonate	5.90	80	251495	56.2801	ug/ml	97
9) n-Nitrosodiethylamine	6.29	102	220952	52.3624	ug/ml	96
10) Ethyl Methanesulfonate	6.54	79	323437	55.2616	ug/ml	99
11) Aniline	6.99	93	722468m	53.7589	ug/ml	
13) Phenol	6.89	94	534518	55.0450	ug/ml	96
14) bis(2-Chloroethyl)ether	7.00	63	328519	54.0297	ug/ml	95
15) Pentachloroethane	7.02	167	179705	54.8681	ug/ml	99
16) 2-Chlorophenol	7.11	128	484796	55.7509	ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	516293	53.3428	ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	536363	54.3336	ug/ml	99
19) Benzyl Alcohol	7.39	108	330847	58.7617	ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	497579	54.2754	ug/ml	99
21) 2-Methylphenol	7.48	107	365939	54.6506	ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.54	45	675914	54.1456	ug/ml	97
23) 3-,4-Methylphenol	7.62	107	470754	54.0846	ug/ml	99
24) n-Nitrosopyrrolidine	7.67	100	208831	53.1426	ug/ml	91
25) n-Nitrosodipropylamine	7.67	70	307584	56.1778	ug/ml	99
26) Acetophenone	7.68	105	592221	55.0002	ug/ml	100
27) n-Nitrosomorpholine	7.68	56	276958	52.9339	ug/ml	98
28) o-Toluidine	7.72	106	697310	51.2251	ug/ml	100
29) Hexachloroethane	7.82	117	199783	54.6536	ug/ml	96
32) Nitrobenzene	7.87	77	450915	54.2075	ug/ml	99
33) n-Nitrosopiperidine	8.01	114	225543	50.6524	ug/ml	96
34) Isophorone	8.08	82	800833	52.7444	ug/ml	99
35) 2-Nitrophenol	8.18	139	287863m	58.7056	ug/ml	
36) 2,4-Dimethylphenol	8.15	122	437384	51.9463	ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.25	198	205339	48.8480	ug/ml#	40
38) bis(2-Chloroethoxy)methane	8.25	93	654932	56.7589	ug/ml#	94
39) Benzoic Acid	8.21	105	346193	59.6587	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
40)	2,4-Dichlorophenol	8.41	162	379014	53.7708 ug/ml	100
41)	a,a-Dimethylphenethylamine	8.40	58	245419	20.5941 ug/ml	99
42)	1,2,4-Trichlorobenzene	8.52	180	417438	52.1552 ug/ml	100
43)	Naphthalene	8.60	128	1415927	54.1805 ug/ml	99
44)	4-Chloroaniline	8.62	127	470468	48.8813 ug/ml	99
45)	2,6-Dichlorophenol	8.64	162	401989	55.2675 ug/ml	99
46)	Hexachloropropene	8.71	213	247910	55.2660 ug/ml	99
47)	Hexachlorobutadiene	8.74	225	227254	55.4605 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	294849	42.0146 ug/ml#	86
49)	p-Phenylenediamine	9.05	108	30477	50.1895 ug/ml	97
50)	4-Chloro-3-Methylphenol	9.05	107	384557	53.7631 ug/ml	100
51)	Safrole	9.16	162	374856	55.1030 ug/ml	99
52)	2-Methylnaphthalene	9.28	142	922336	54.3242 ug/ml	99
53)	1-Methylnaphthalene	9.40	142	844148	52.5880 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	391219	56.7302 ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	197932	55.4902 ug/ml	100
57)	2,4,6-Trichlorophenol	9.57	196	279030	57.7433 ug/ml	99
58)	2,4,5-Trichlorophenol	9.62	196	290230	58.3464 ug/ml	100
60)	Isosafrole	9.67	162	386331	58.0944 ug/ml	99
61)	2-Chloronaphthalene	9.79	162	960412	64.6318 ug/ml	100
62)	1-Chloronaphthalene	9.83	162	808109	57.4329 ug/ml	100
63)	2-Nitroaniline	9.89	65	246949	57.9777 ug/ml	99
64)	1,4-Naphthoquinone	9.95	158	378234	64.4567 ug/ml	99
65)	Dimethylphthalate	10.05	163	920406	55.2812 ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	168742	52.8536 ug/ml	98
67)	2,6-Dinitrotoluene	10.14	165	239977	57.6995 ug/ml	99
68)	Acenaphthylene	10.24	152	1360420	57.0190 ug/ml	100
69)	3-Nitroaniline	10.30	138	121424	39.5804 ug/ml	100
70)	2,4-Dinitrophenol	10.41	184	169659	77.2850 ug/ml	47
71)	Acenaphthene	10.42	154	876985	56.4328 ug/ml	98
72)	4-Nitrophenol	10.40	65	179487	58.5610 ug/ml	96
73)	2,4-Dinitrotoluene	10.56	165	301594	56.9906 ug/ml	97
74)	Pentachlorobenzene	10.60	250	337611	54.3733 ug/ml	99
75)	Dibenzofuran	10.57	168	1179664	56.6917 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	214281	55.8583 ug/ml	99
77)	1-Naphthylamine	10.72	143	22712	5.0751 ug/ml	87
78)	2-Naphthylamine	10.72	143	24316	8.9264 ug/ml	87
79)	Diethylphthalate	10.76	149	931578	56.1811 ug/ml	100
80)	Thionazin	10.86	107	138070	50.0423 ug/ml	97
81)	Fluorene	10.94	166	984153	55.6484 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	450483	54.2093 ug/ml	99
83)	4-Nitroaniline	10.95	138	203824	53.6740 ug/ml	98
84)	5-Nitro-o-Toluidine	10.94	152	205250	49.1581 ug/ml	99
85)	1,2-Diphenylhydrazine	11.05	77	945859	58.6519 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	198538	66.7184 ug/ml#	54
89)	n-Nitrosodiphenylamine	11.00	169	854618	55.2550 ug/ml	99
90)	Sulfotepp	11.20	322	144797	52.3998 ug/ml	92
91)	Sym-Trinitrobenzene	11.28	75	251346	66.4719 ug/ml	98
92)	Diallate	11.33	86	357858	56.7344 ug/ml	93
93)	Phenacetin	11.31	108	474657	58.5779 ug/ml	99
94)	Phorate	11.35	75	562933	55.9411 ug/ml#	98
95)	4-Bromophenyl Phenyl Ether	11.42	248	257123	53.1649 ug/ml	99
96)	Hexachlorobenzene	11.63	284	274708	51.9612 ug/ml	97
97)	Dimethoate	11.56	87	306288	57.6192 ug/ml	96

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

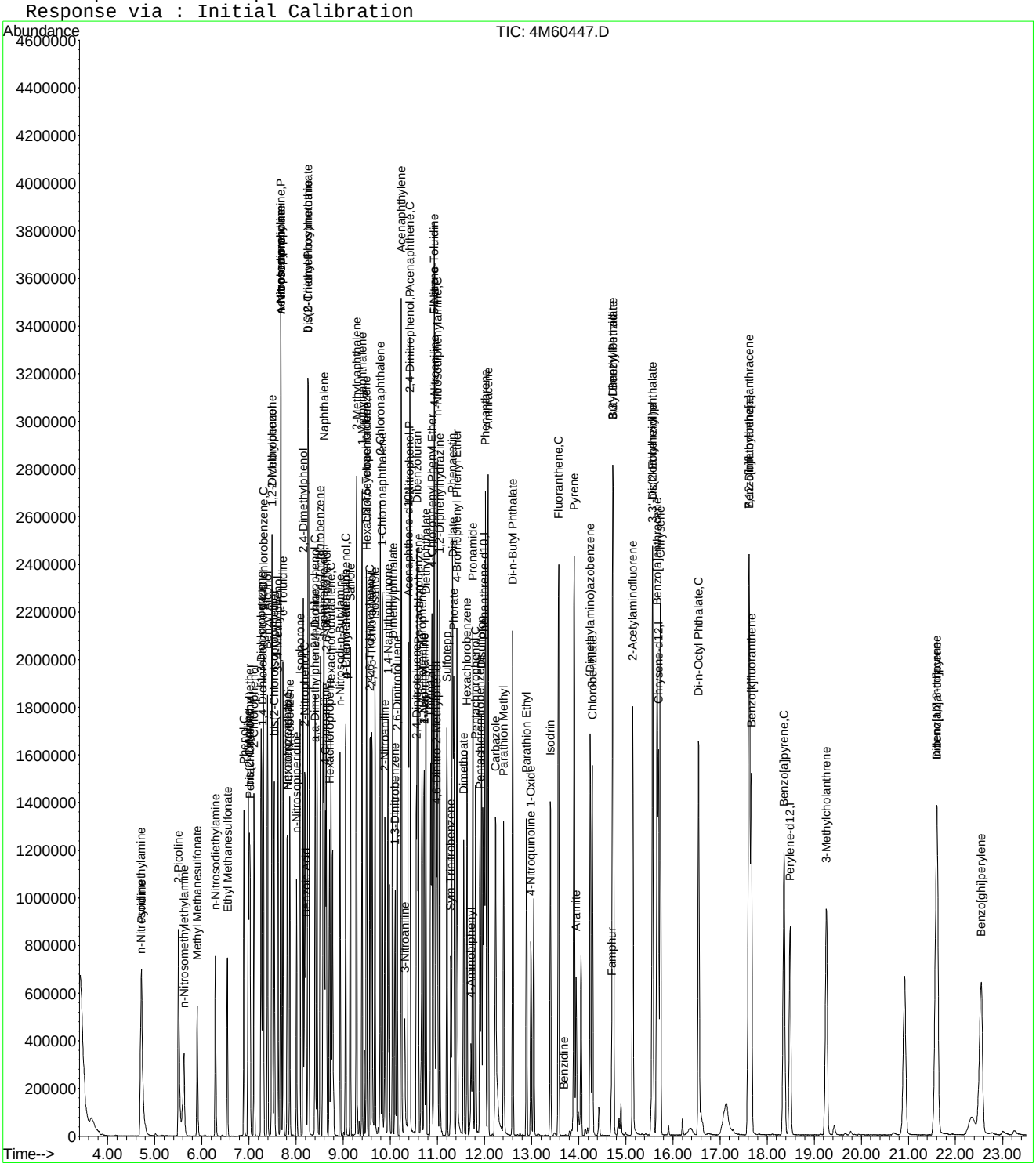
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
98)	4-Aminobiphenyl	11.72	169	299707	53.6701 ug/ml	100
99)	Pentachlorophenol	11.81	266	219981	65.8011 ug/ml	100
100)	Pronamide	11.75	173	435376	56.0268 ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	100661	54.9377 ug/ml	99
102)	Disulfoton	11.93	88	465671	53.8412 ug/ml	99
103)	Phenanthrene	12.02	178	1403448	55.3523 ug/ml	100
104)	Anthracene	12.08	178	1431854	55.0760 ug/ml	100
105)	Carbazole	12.23	167	1222576	53.7063 ug/ml	99
106)	Parathion Methyl	12.41	109	309666	58.5249 ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	1540149	54.4568 ug/ml	100
108)	Parathion Ethyl	12.89	97	176185	54.6918 ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.99	190	144361	61.3308 ug/ml	98
110)	Methapyrilene	13.05	58	407182	Below Cal	97
111)	Isodrin	13.40	193	153389	56.3232 ug/ml	98
112)	Fluoranthene	13.57	202	1432961	53.9334 ug/ml	99
114)	Benzidine	13.68	184	3158	2.5513 ug/ml	100
115)	Pyrene	13.91	202	1489985	56.0937 ug/ml	100
116)	Aramite	13.95	185	79710	52.9951 ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.25	225	308031	56.1665 ug/ml	95
119)	Chlorobenzilate	14.29	251	405945	56.1581 ug/ml	97
120)	Famphur	14.70	218	32734	103.9507 ug/ml#	65
121)	Butyl Benzyl Phthalate	14.72	149	707095	58.5249 ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	122499	14.5948 ug/ml#	90
123)	2-Acetylaminofluorene	15.15	181	590016	57.0856 ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	934893	56.7035 ug/ml	100
125)	3,3'-Dichlorobenzidine	15.58	252	256765	51.9984 ug/ml	99
126)	Benzo[a]anthracene	15.67	228	1277312	54.2153 ug/ml	100
127)	Chrysene	15.73	228	1248555	56.4561 ug/ml	99
129)	Di-n-Octyl Phthalate	16.54	149	1590286	58.4774 ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.62	256	644600	59.1079 ug/ml	99
131)	Benzo[b]fluoranthene	17.62	252	1328651	54.5618 ug/ml	98
132)	Benzo[k]fluoranthene	17.67	252	1162236	51.4888 ug/ml	95
133)	Benzo[a]pyrene	18.36	252	1248294	56.1868 ug/ml	99
134)	3-Methylcholanthrene	19.26	268	701245	58.1339 ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.60	276	1375274	55.5825 ug/ml	97
136)	Dibenz[ah]anthracene	21.60	278	1145050	55.4891 ug/ml	98
137)	Benzo[ghi]perylene	22.55	276	1116722	54.5580 ug/ml	98

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

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

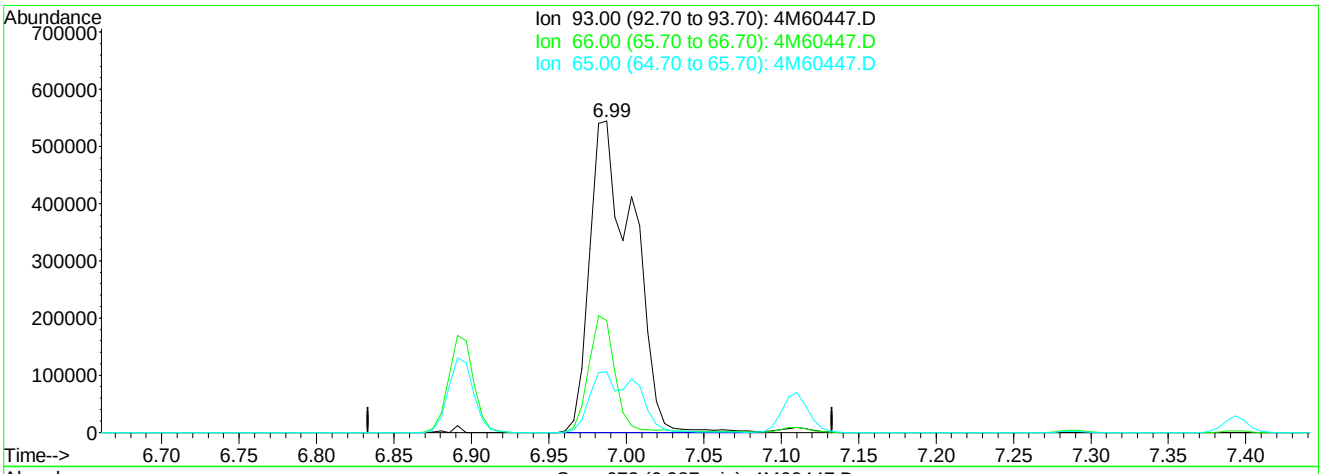
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri Apr 20 08:27:42 2012
Response via : Initial Calibration

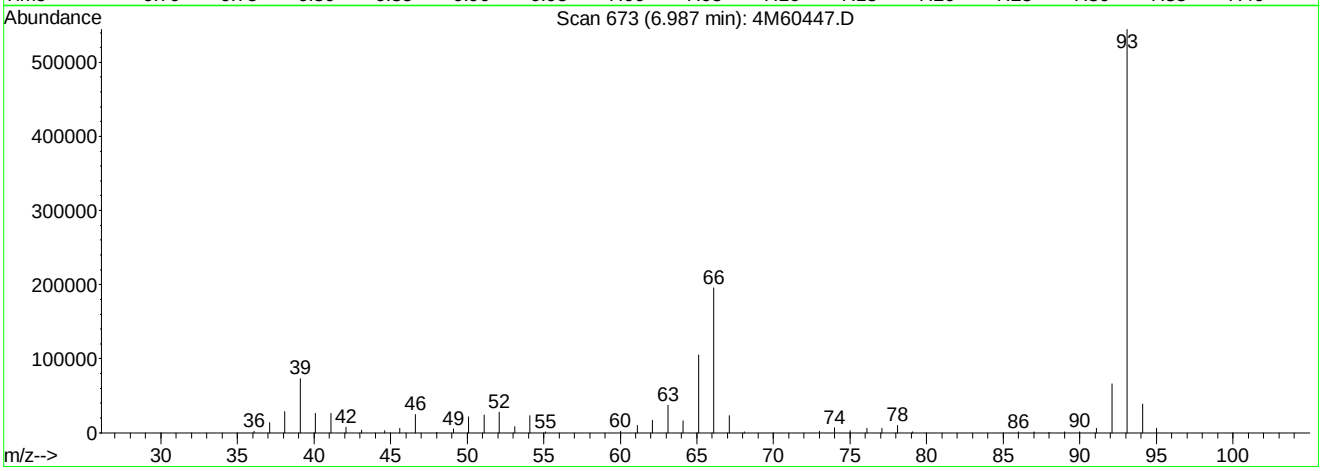


Quantitation Report (Qedit)

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

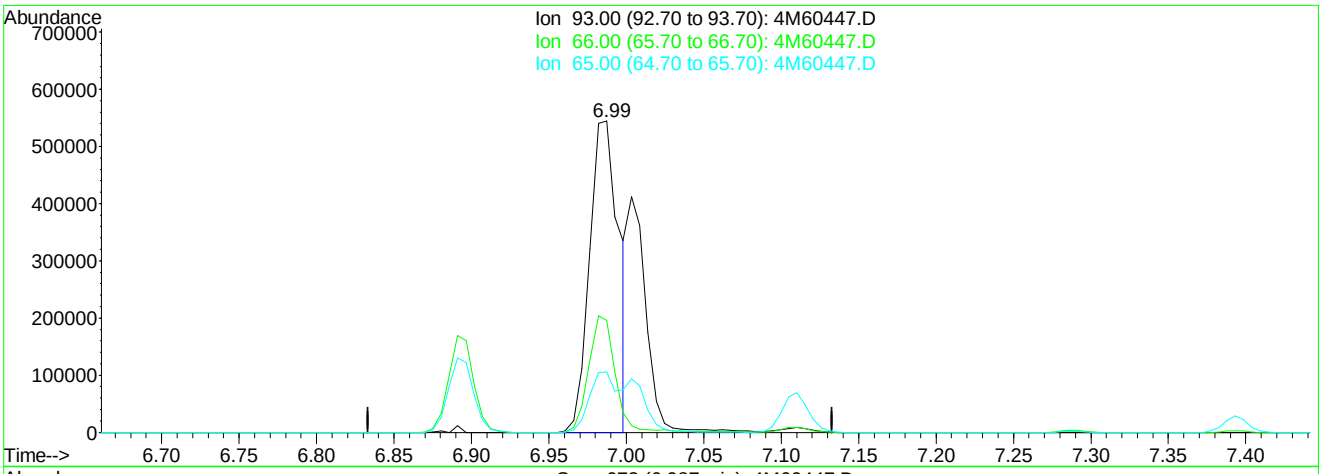
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.26
65.00	29.20	13.53#
0.00	0.00	0.00

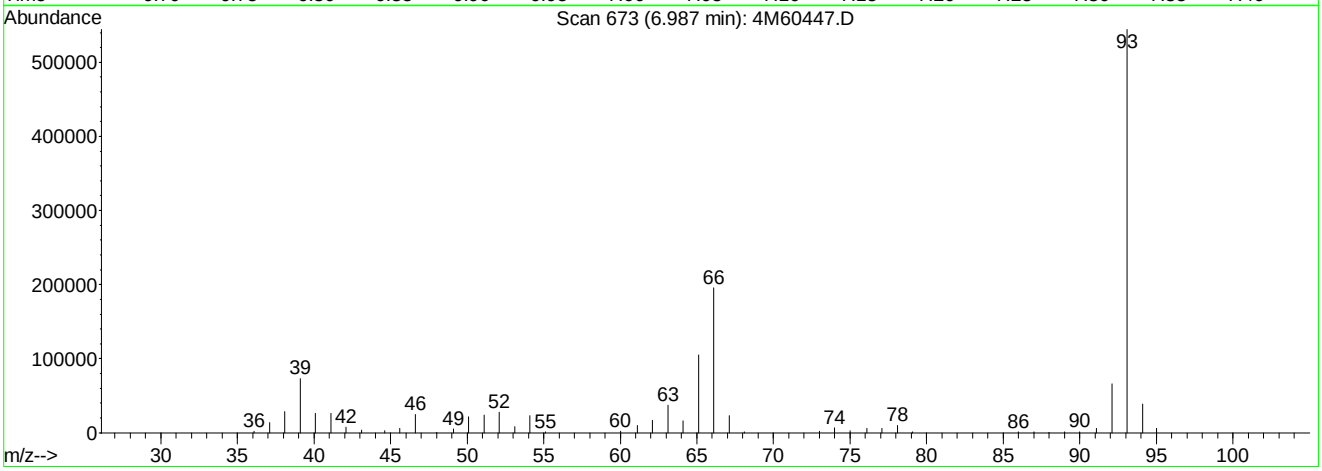
4M60447.D MEGAMIX.M Thu Apr 19 14:28:17 2012

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

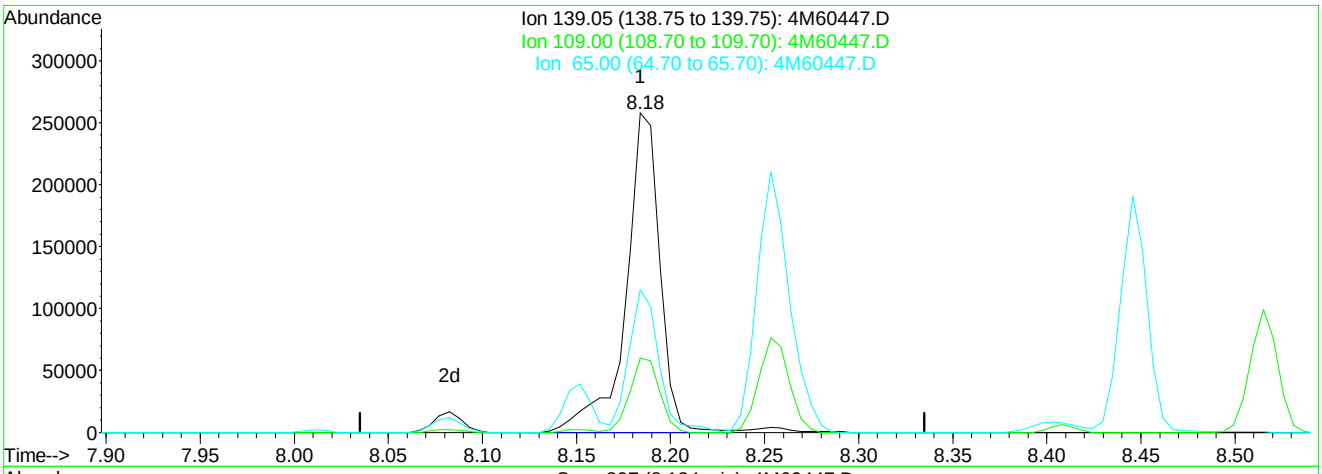
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

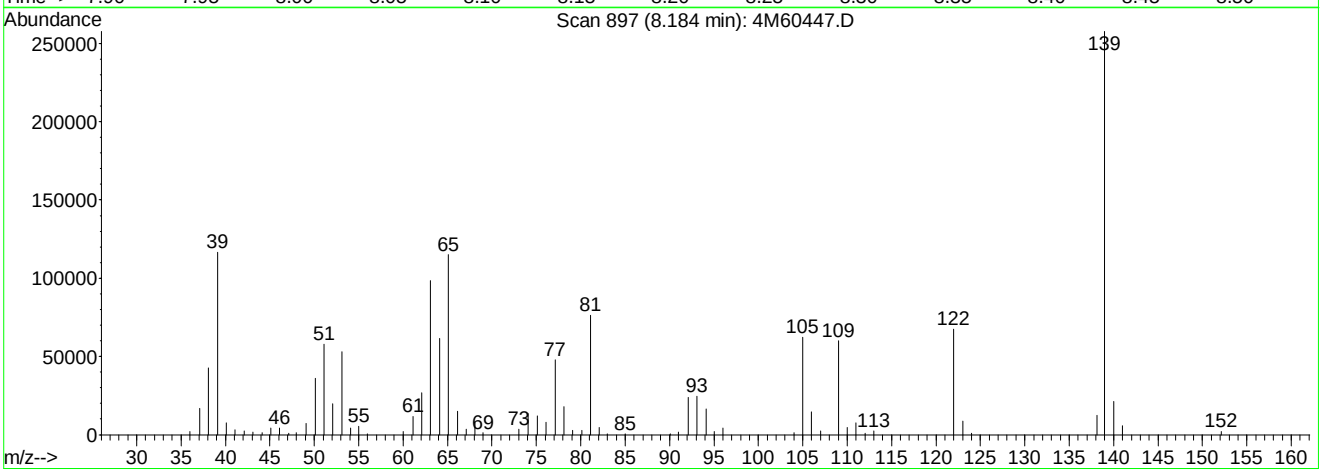
#3 - Improperly integrated isomers and/or coeluting compounds

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

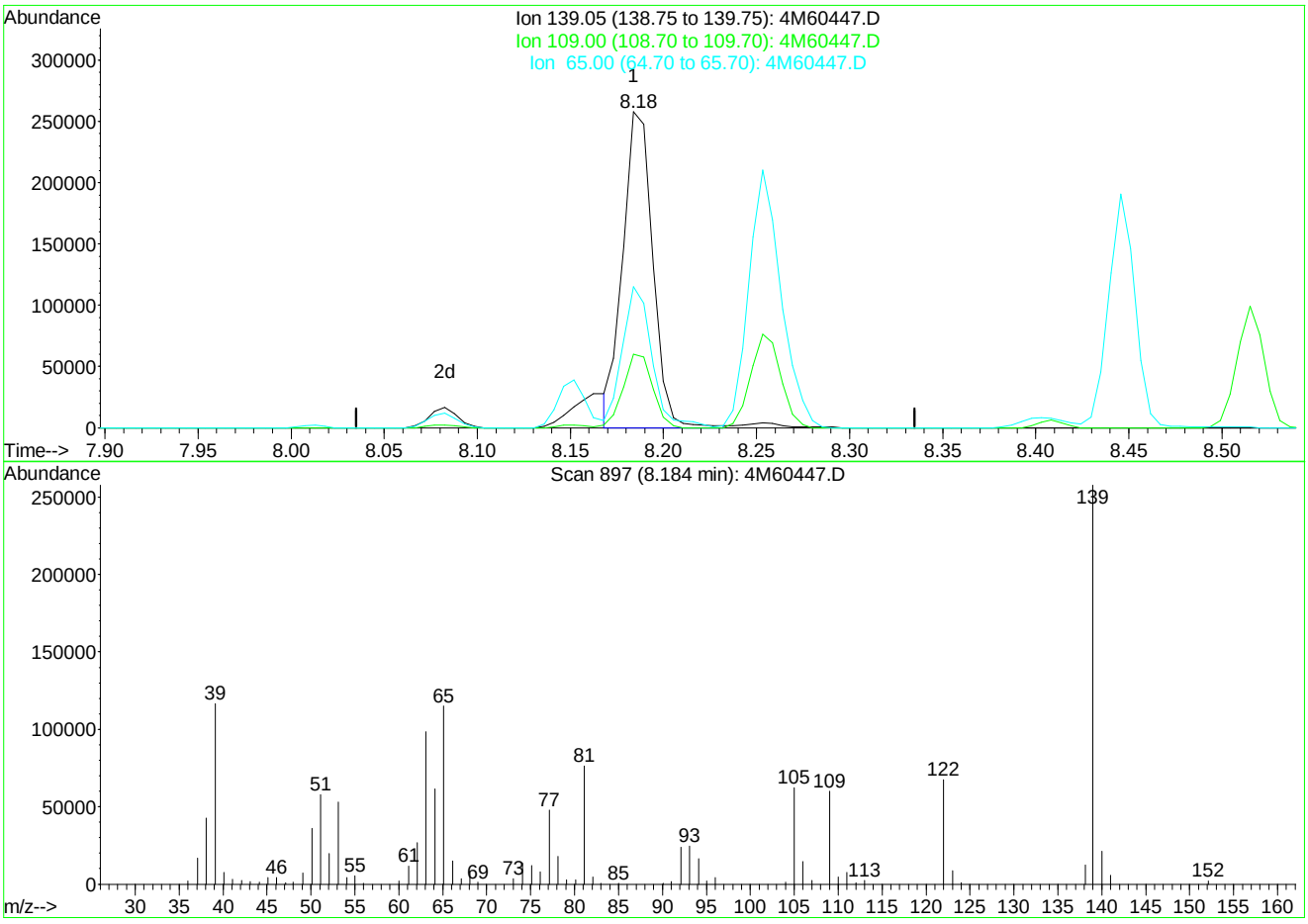
Ion	Exp%	Act%
139.05	100	100
109.00	22.80	20.32
65.00	43.50	39.41
0.00	0.00	0.00

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

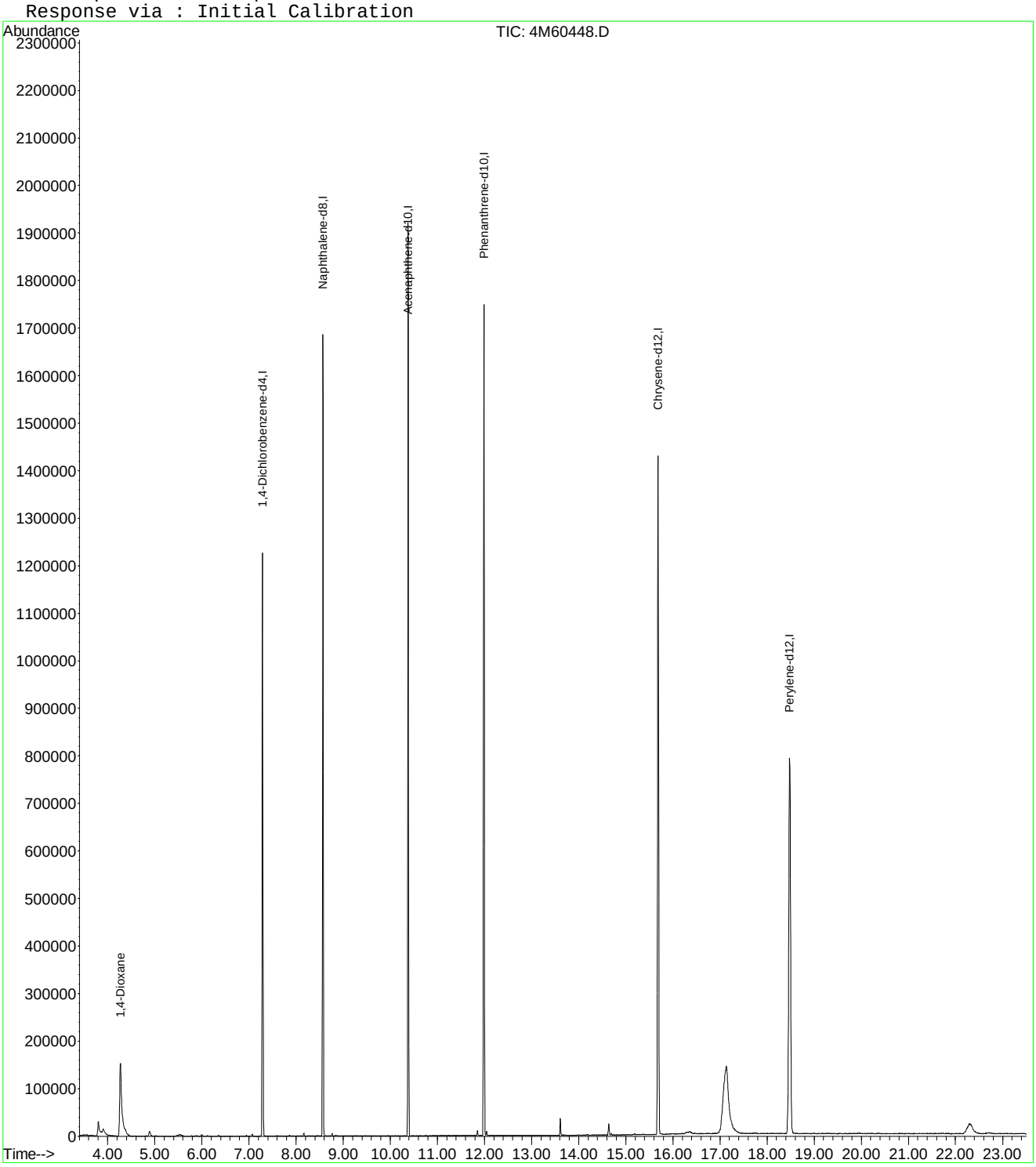
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	241408	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	908072	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	500473	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	872547	40.00	ug/ml	0.00
113) Chrysene-d12	15.68	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

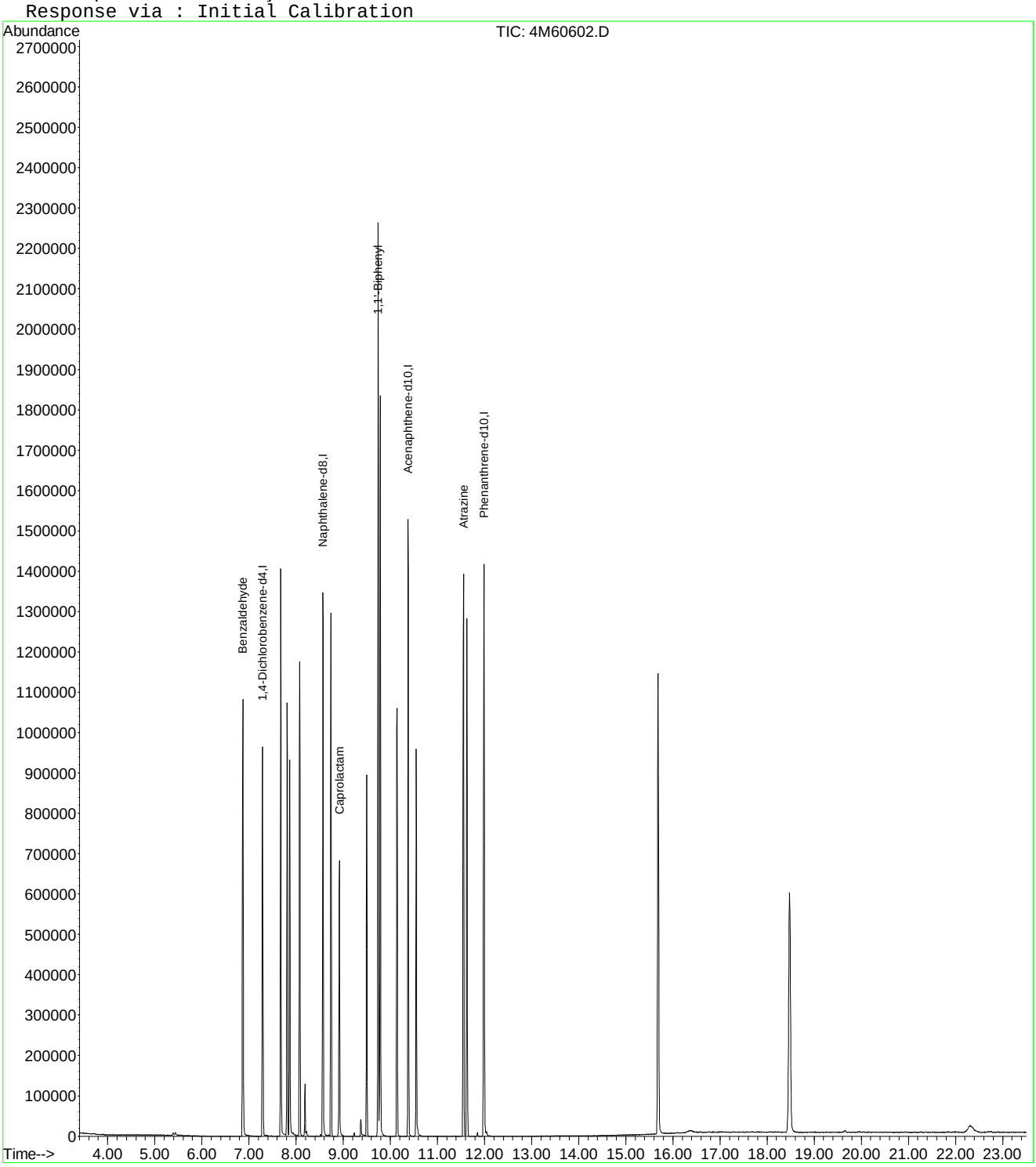
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	198785	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	762076	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425534	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	753240	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

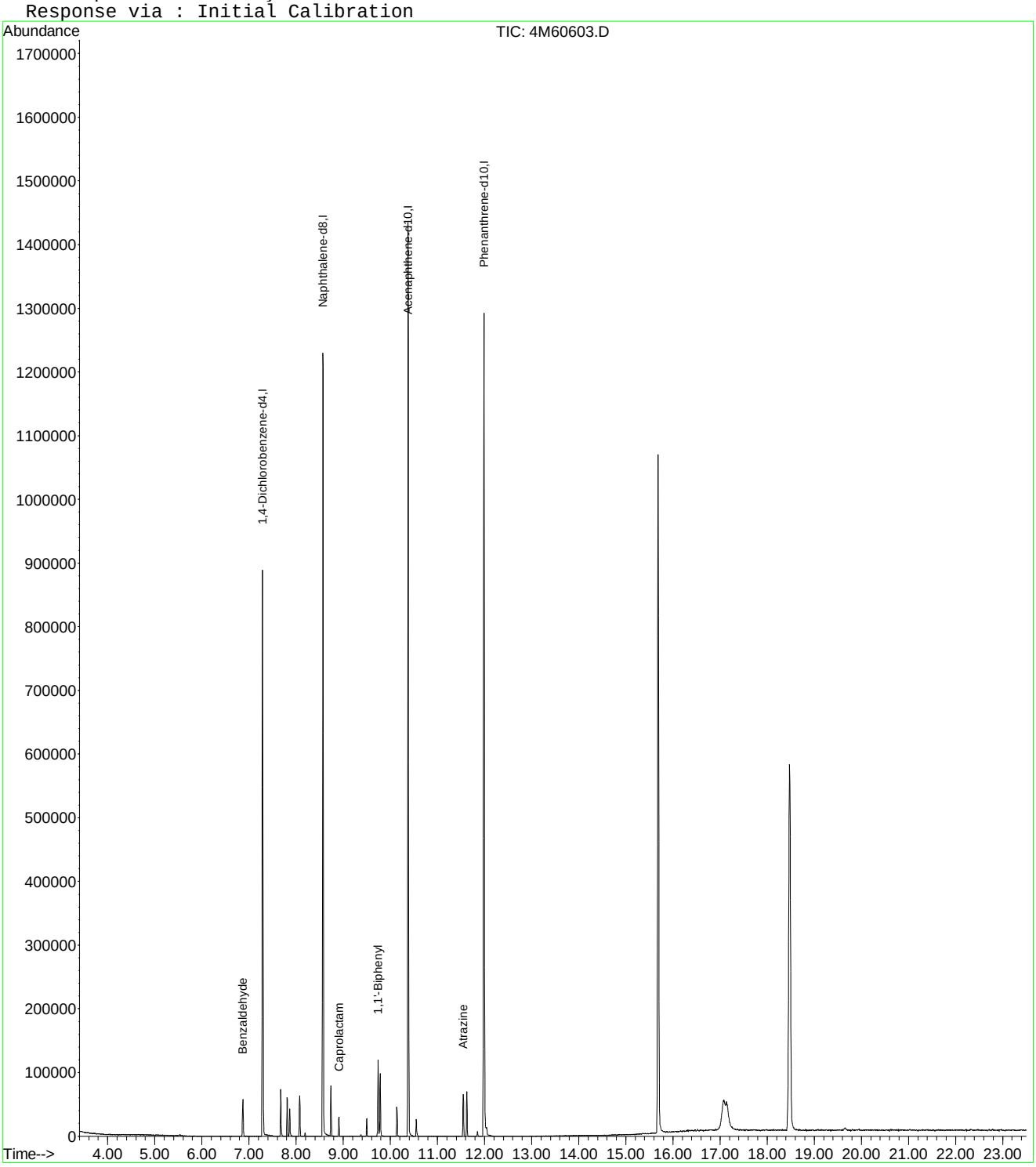
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	184318	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	711419	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	396131	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	705172	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

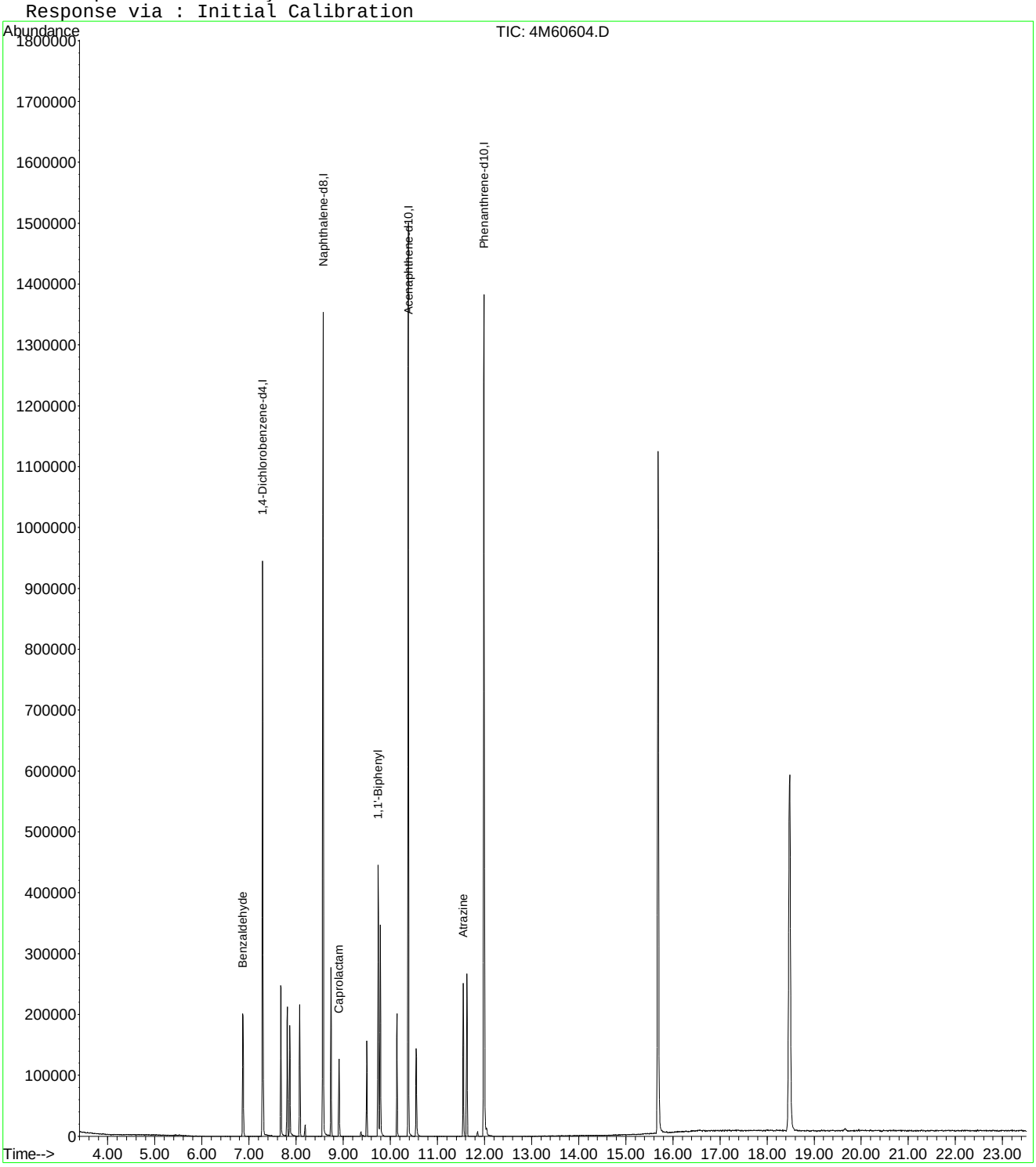
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191577	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	738266	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	412816	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	727410	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



4M60604.D TCL.M Wed May 02 13:54:28 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60605.D Vial: 6
Acq On : 1 May 2012 15:47 Operator: CAA
Sample : WG396709-04 25PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:30:57 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:30:53 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

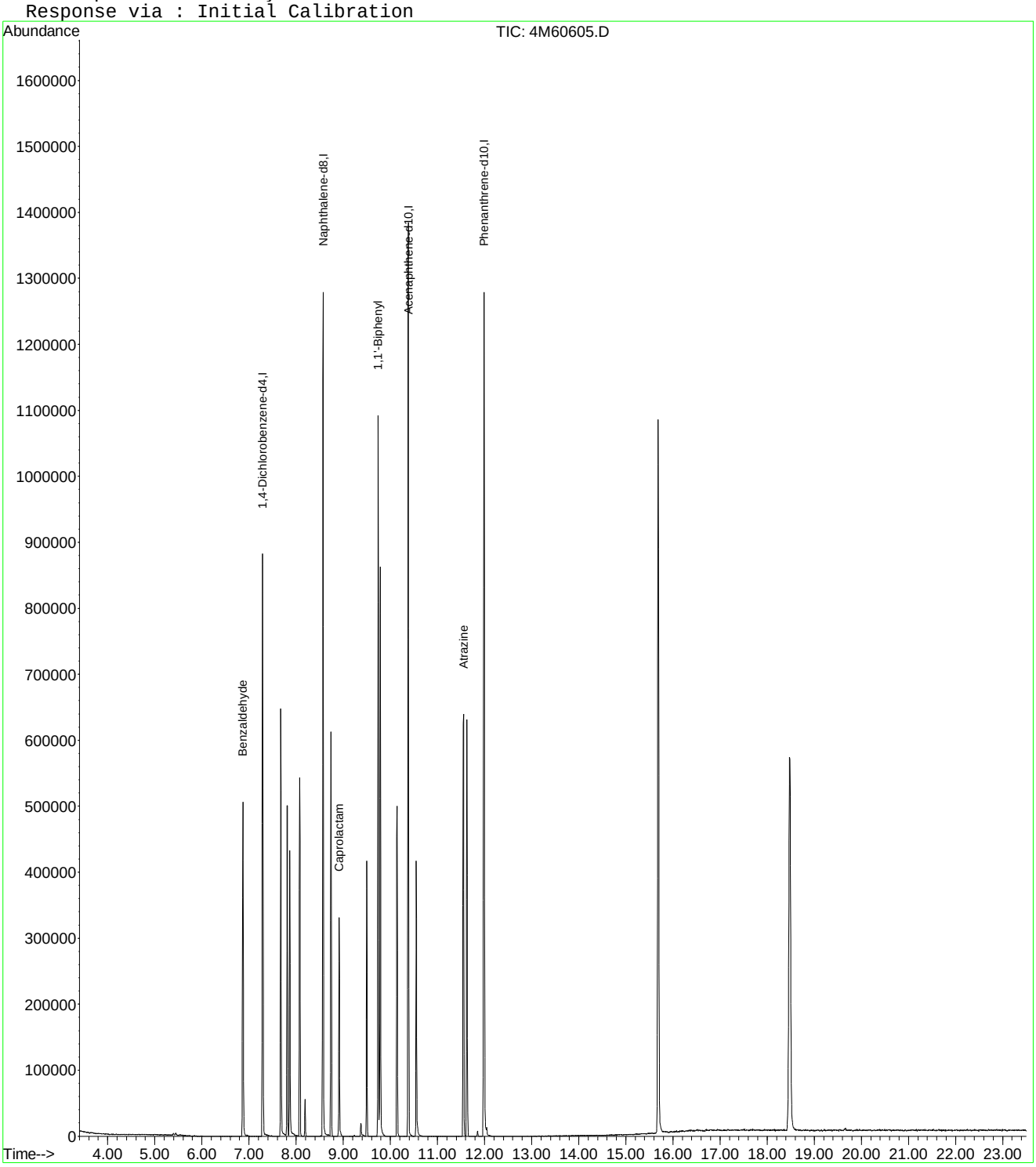
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	188543	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	712737	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	395022	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	719816	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.87	105	124002	22.8836	ug/L	99
4) Caprolactam	8.91	55	58452	20.9951	ug/L	99
6) 1,1'-Biphenyl	9.74	154	424267	25.6276	ug/L	99
8) Atrazine	11.55	200	100051	24.1908	ug/L	100

(#) = qualifier out of range (m) = manual integration
4M60605.D TCL.M Wed May 02 13:54:28 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60605.D Vial: 6
Acq On : 1 May 2012 15:47 Operator: CAA
Sample : WG396709-04 25PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:30 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



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

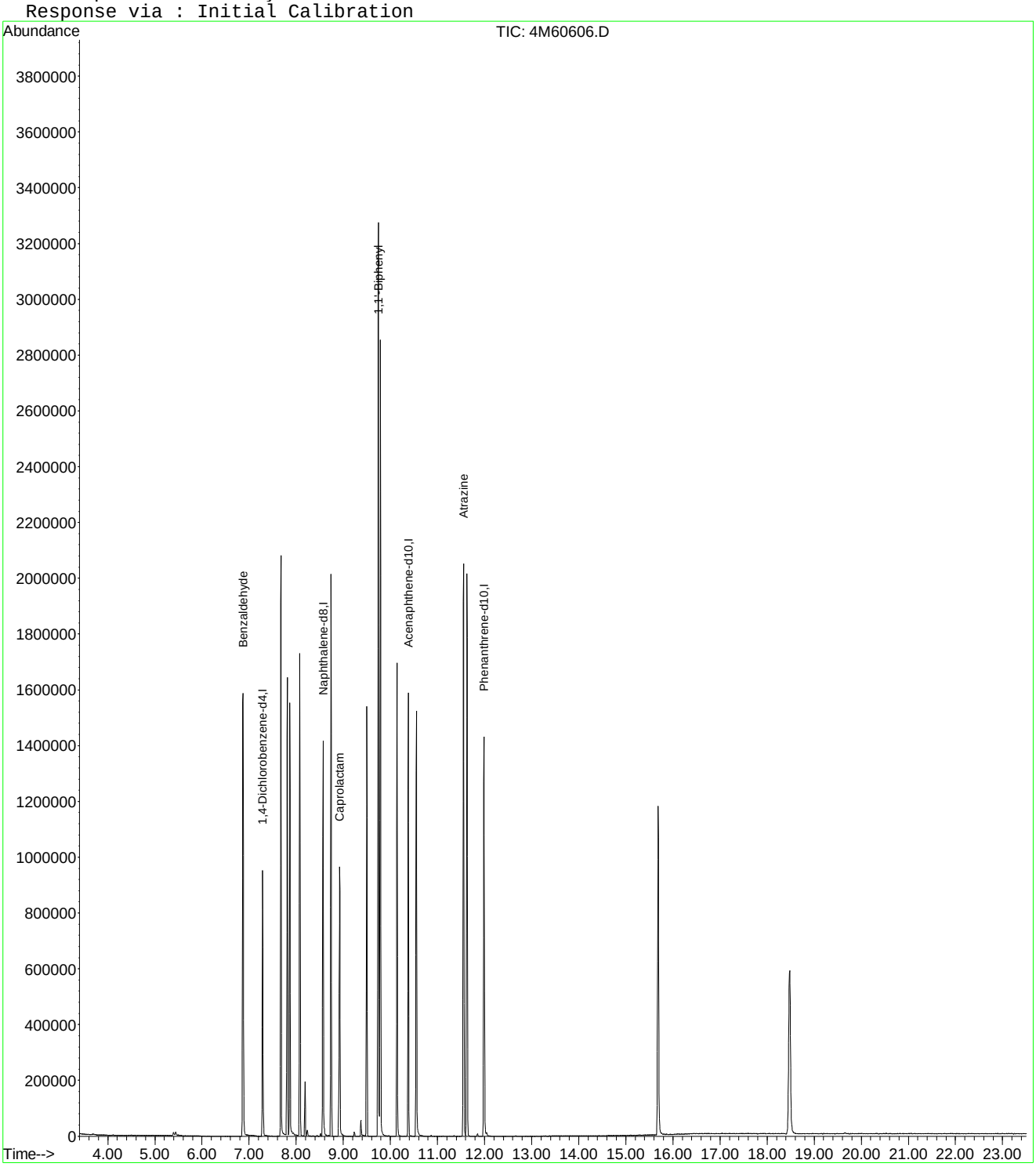
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	195973	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	750611	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425817	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	761381	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

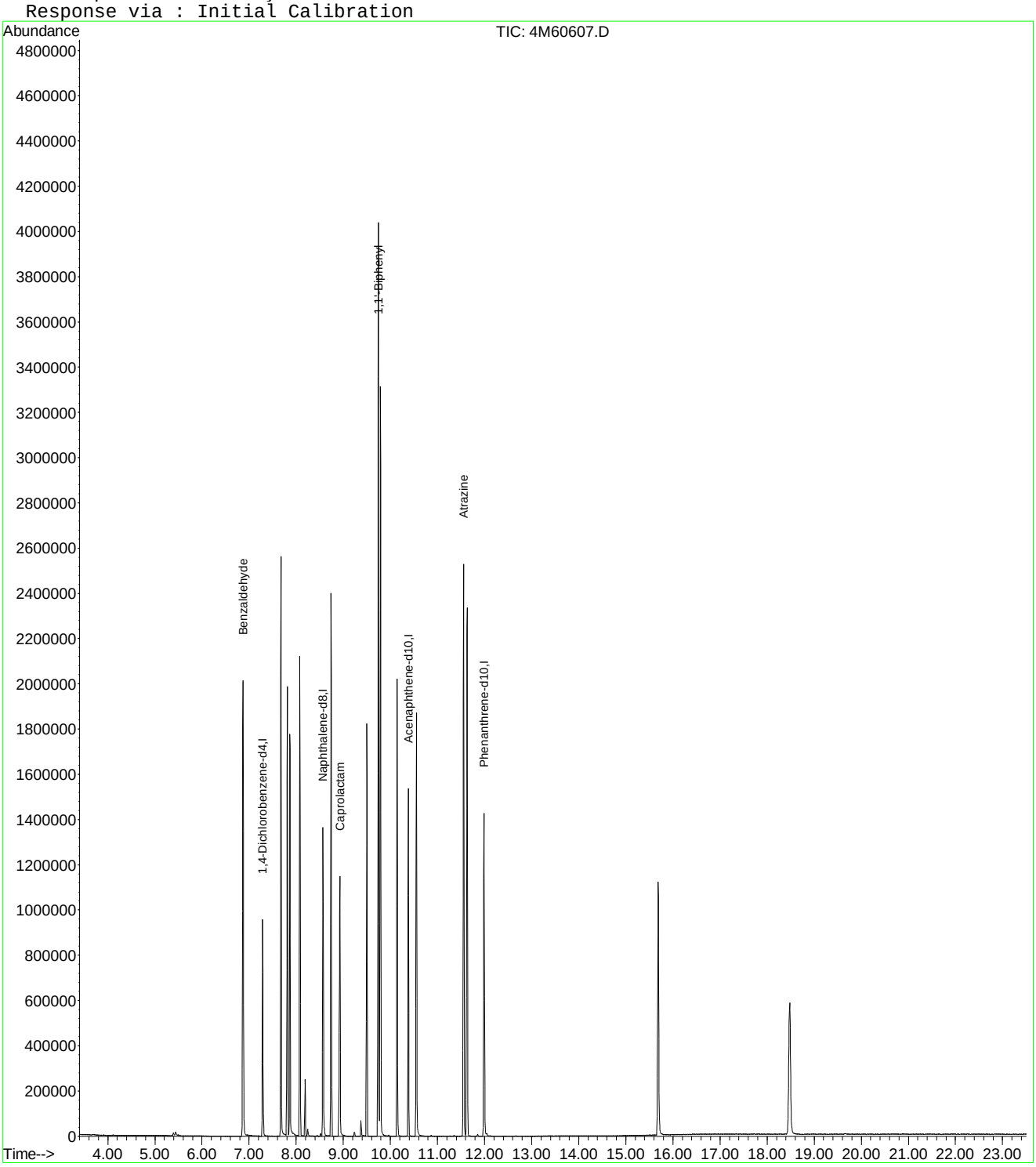
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191003	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	734165	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	416593	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	754784	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

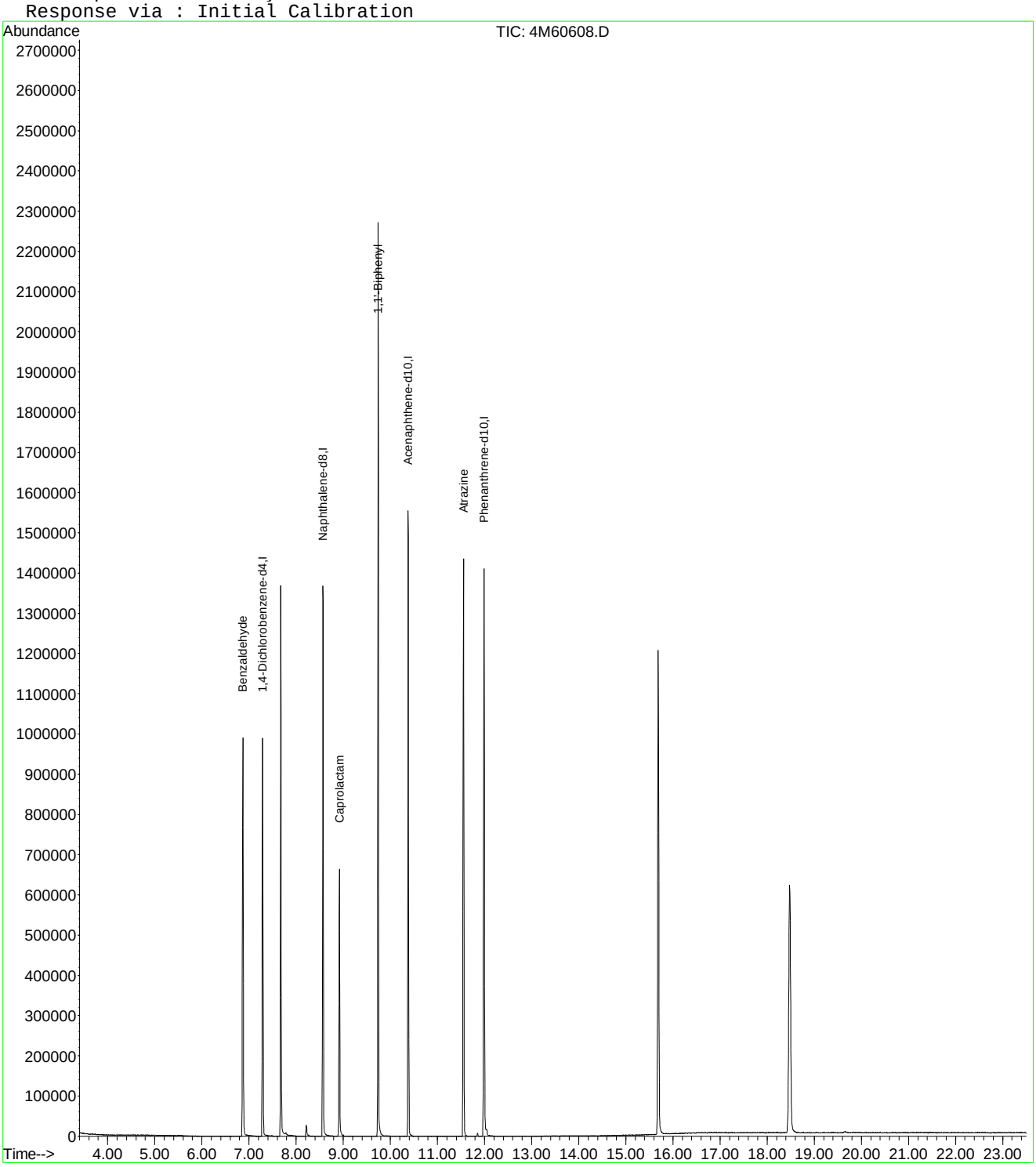
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	209920	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	790964	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	444492	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	786510	40.00	ug/mL	0.00
Target Compounds						Qvalue
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\050112\4M60601.D Vial: 2
Acq On : 1 May 2012 13:31 Operator: CAA
Sample : WG396671-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 13:55:11 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 01 13:32:02 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	239188	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	915817	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	510787	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	918023	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	853149	40.00	ug/ml	0.00
128) Perylene-d12	18.48	264	798137	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	352320	48.5821	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 48.58%			
12) Phenol-d5	6.88	99	425974	50.1882	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 50.19%			
31) Nitrobenzene-d5	7.85	82	387433	50.0182	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 100.04%			
59) 2-Fluorobiphenyl	9.64	172	865147	50.7229	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 101.44%			
86) 2,4,6-Tribromophenol	11.21	330	126177	55.3947	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 55.39%			
117) p-Terphenyl-d14	14.03	244	803497	51.0984	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 102.20%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.28	88	153517	51.4976	ug/ml#	94
3) n-Nitrosodimethylamine	4.70	74	216606	49.0706	ug/ml	92
4) Pyridine	4.72	79	382020	48.8147	ug/ml	88
5) 2-Picoline	5.50	93	422868	49.6581	ug/ml	98
6) n-Nitrosomethylethylamine	5.62	88	181467	49.4011	ug/ml	89
7) Methyl Methanesulfonate	5.90	80	212846	51.0360	ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	191375	48.5951	ug/ml	92
10) Ethyl Methanesulfonate	6.54	79	271804	49.7594	ug/ml	98
11) Aniline	6.98	93	582897m	46.4739	ug/ml	
13) Phenol	6.89	94	446313	49.2471	ug/ml	98
14) bis(2-Chloroethyl)ether	7.00	63	269011	47.4054	ug/ml	94
15) Pentachloroethane	7.02	167	156289	51.1297	ug/ml	98
16) 2-Chlorophenol	7.11	128	402377	49.5806	ug/ml	98
17) 1,3-Dichlorobenzene	7.26	146	446946	49.4789	ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	453831	49.2594	ug/ml	100
19) Benzyl Alcohol	7.39	108	253560	48.2540	ug/ml	97
20) 1,2-Dichlorobenzene	7.50	146	421729	49.2901	ug/ml	99
21) 2-Methylphenol	7.49	107	298811	47.8154	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.53	45	486490	41.7572	ug/ml	93
23) 3-,4-Methylphenol	7.62	107	387632	47.7182	ug/ml	99
24) n-Nitrosopyrrolidine	7.67	100	186935	50.9711	ug/ml	90
25) n-Nitrosodipropylamine	7.67	70	258383	50.5650	ug/ml	94
26) Acetophenone	7.68	105	483426	48.1056	ug/ml	98
27) n-Nitrosomorpholine	7.68	56	208318	43.6985	ug/ml	94
28) o-Toluidine	7.73	106	611355	48.1211	ug/ml	98
29) Hexachloroethane	7.81	117	170967	50.1138	ug/ml	100
32) Nitrobenzene	7.86	77	386654	50.0839	ug/ml	98
33) n-Nitrosopiperidine	8.01	114	204002	49.3647	ug/ml	92
34) Isophorone	8.08	82	708553	50.2827	ug/ml	99
35) 2-Nitrophenol	8.19	139	248231	54.5457	ug/ml	97
36) 2,4-Dimethylphenol	8.15	122	359161	45.9613	ug/ml	98
37) 0,0,0-Triethyl Phosphoroth	8.25	198	191876	49.1822	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	548536	51.2217	ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M60601.D MEGAMIX.M Wed May 02 13:33:08 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60601.D Vial: 2
Acq On : 1 May 2012 13:31 Operator: CAA
Sample : WG396671-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 13:55:11 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 01 13:32:02 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.19	105	159437m	29.6044 ug/ml	
40)	2,4-Dichlorophenol	8.41	162	333094	50.9177 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.41	58	446444	40.3658 ug/ml	99
42)	1,2,4-Trichlorobenzene	8.52	180	378916	51.0105 ug/ml	99
43)	Naphthalene	8.59	128	1190490	49.0839 ug/ml	98
44)	4-Chloroaniline	8.62	127	455693	51.0148 ug/ml	96
45)	2,6-Dichlorophenol	8.64	162	340923	50.5037 ug/ml	100
46)	Hexachloropropene	8.71	213	229445	55.1129 ug/ml	100
47)	Hexachlorobutadiene	8.74	225	194083	51.0354 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.93	84	323341	49.6447 ug/ml	93
49)	p-Phenylenediamine	9.06	108	27274	48.3951 ug/ml	89
50)	4-Chloro-3-Methylphenol	9.06	107	325228	48.9917 ug/ml	98
51)	Safrole	9.15	162	319718	50.6395 ug/ml	99
52)	2-Methylnaphthalene	9.28	142	778256	49.3899 ug/ml	100
53)	1-Methylnaphthalene	9.40	142	731921	49.1296 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	346165	51.7157 ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	199220	57.5411 ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	245696	52.3834 ug/ml	100
58)	2,4,5-Trichlorophenol	9.62	196	258966	53.6364 ug/ml	98
60)	Isosafrole	9.68	162	326610	50.5998 ug/ml	98
61)	2-Chloronaphthalene	9.79	162	733262	50.8385 ug/ml	99
62)	1-Chloronaphthalene	9.83	162	699403	51.2109 ug/ml	99
63)	2-Nitroaniline	9.88	65	201522	48.7440 ug/ml	95
64)	1,4-Naphthoquinone	9.95	158	288226	50.6041 ug/ml	99
65)	Dimethylphthalate	10.05	163	816975	50.5535 ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	163131	52.6420 ug/ml	99
67)	2,6-Dinitrotoluene	10.15	165	209218	51.8258 ug/ml	99
68)	Acenaphthylene	10.23	152	1163483	50.2402 ug/ml	100
69)	3-Nitroaniline	10.31	138	142290	47.7854 ug/ml	99
70)	2,4-Dinitrophenol	10.40	184	108326	53.1742 ug/ml	89
71)	Acenaphthene	10.41	154	751227	49.8030 ug/ml	100
72)	4-Nitrophenol	10.41	65	133488	44.8707 ug/ml	96
73)	2,4-Dinitrotoluene	10.55	165	270239	52.6106 ug/ml	97
74)	Pentachlorobenzene	10.59	250	314265	52.1447 ug/ml	99
75)	Dibenzofuran	10.57	168	1018176	50.4114 ug/ml	100
76)	2,3,4,6-Tetrachlorophenol	10.67	232	191591	51.4546 ug/ml	100
77)	1-Naphthylamine	10.64	143	90052	20.7313 ug/ml	93
78)	2-Naphthylamine	10.71	143	36017	13.6219 ug/ml#	82
79)	Diethylphthalate	10.75	149	819222	50.8999 ug/ml	100
80)	Thionazin	10.86	107	135611	50.6382 ug/ml	95
81)	Fluorene	10.93	166	857916	49.9781 ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	413459	51.2593 ug/ml	99
83)	4-Nitroaniline	10.95	138	188947	51.2618 ug/ml	99
84)	5-Nitro-o-Toluidine	10.93	152	199908	49.3273 ug/ml	99
85)	1,2-Diphenylhydrazine	11.05	77	809545	51.7180 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	161079	56.3642 ug/ml	85
89)	n-Nitrosodiphenylamine	11.00	169	743474	50.0527 ug/ml	99
90)	Sulfotepp	11.20	322	140913	53.0986 ug/ml	99
91)	Sym-Trinitrobenzene	11.28	75	201963	55.6160 ug/ml	99
92)	Diallate	11.33	86	310709	51.2923 ug/ml	91
93)	Phenacetin	11.31	108	395264	50.7929 ug/ml	100
94)	Phorate	11.34	75	501440	51.8866 ug/ml#	98
95)	4-Bromophenyl Phenyl Ether	11.41	248	240181	51.7113 ug/ml	98
96)	Hexachlorobenzene	11.63	284	268750	52.9320 ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60601.D Vial: 2
Acq On : 1 May 2012 13:31 Operator: CAA
Sample : WG396671-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 13:55:11 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 01 13:32:02 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

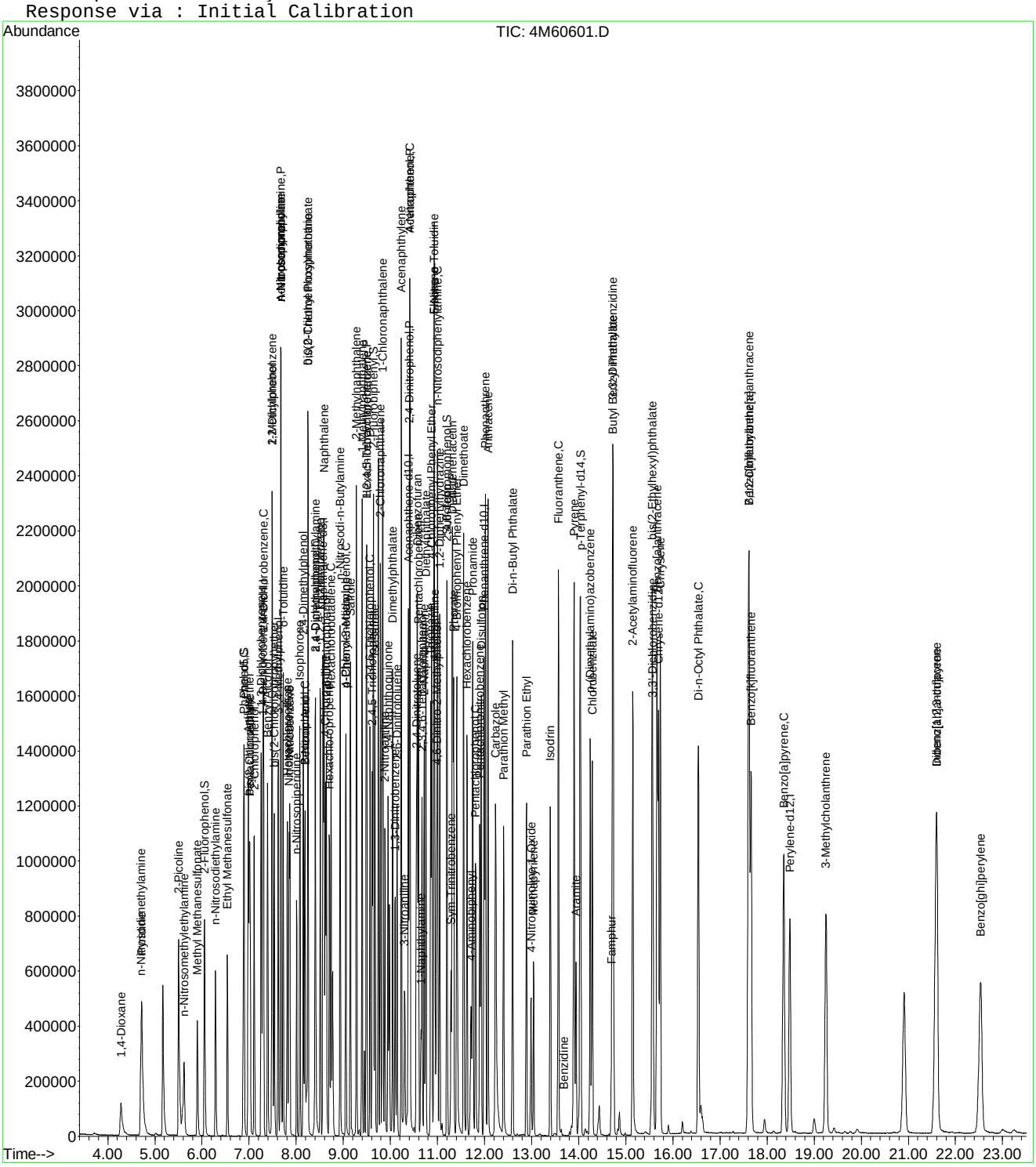
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	279821	54.1394	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	395551	66.6477	ug/ml	99
99)	Pentachlorophenol	11.81	266	170463	53.0934	ug/ml	99
100)	Pronamide	11.75	173	378278	50.6879	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	93361	53.0563	ug/ml	98
102)	Disulfoton	11.93	88	425450	51.2208	ug/ml	99
103)	Phenanthrene	12.02	178	1192358	48.9675	ug/ml	100
104)	Anthracene	12.07	178	1232355	49.3585	ug/ml	100
105)	Carbazole	12.23	167	1110864	50.8128	ug/ml	99
106)	Parathion Methyl	12.41	109	262126	51.5845	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	1385753	51.0196	ug/ml	100
108)	Parathion Ethyl	12.89	97	166671	53.8735	ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.99	190	93092	41.3157	ug/ml	98
110)	Methapyrilene	13.04	58	232657	44.9897	ug/ml	89
111)	Isodrin	13.40	193	134697	51.5007	ug/ml	100
112)	Fluoranthene	13.57	202	1294074	50.7159	ug/ml	99
114)	Benzidine	13.68	184	3670	3.0863	ug/ml	100
115)	Pyrene	13.90	202	1309232	51.3070	ug/ml	99
116)	Aramite	13.94	185	78231	54.1414	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.24	225	278631	52.8860	ug/ml	98
119)	Chlorobenzilate	14.29	251	368285	53.0343	ug/ml	100
120)	Famphur	14.69	218	34480	113.9786	ug/ml#	57
121)	Butyl Benzyl Phthalate	14.71	149	590678	50.8910	ug/ml	98
122)	3,3'-Dimethylbenzidine	14.72	212	220844	27.3891	ug/ml	95
123)	2-Acetylaminofluorene	15.15	181	521105	52.4826	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.56	149	814079	51.3975	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.58	252	241946	50.9747	ug/ml	99
126)	Benzo[a]anthracene	15.66	228	1135463	50.1679	ug/ml	100
127)	Chrysene	15.73	228	1049168	49.3829	ug/ml	100
129)	Di-n-Octyl Phthalate	16.54	149	1384934	53.7313	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.61	256	550326	53.2428	ug/ml	99
131)	Benzo[b]fluoranthene	17.61	252	1217923	52.7696	ug/ml	99
132)	Benzo[k]fluoranthene	17.66	252	1100471	51.4378	ug/ml	97
133)	Benzo[a]pyrene	18.36	252	1096126	52.0552	ug/ml	99
134)	3-Methylcholanthrene	19.25	268	599199	52.4103	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.59	276	1204536	51.3635	ug/ml	98
136)	Dibenz[ah]anthracene	21.60	278	1020654	52.1852	ug/ml	98
137)	Benzo[ghi]perylene	22.54	276	969191	49.9584	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60601.D Vial: 2
Acq On : 1 May 2012 13:31 Operator: CAA
Sample : WG396671-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:32 2012 Quant Results File: MEGAMIX.RES

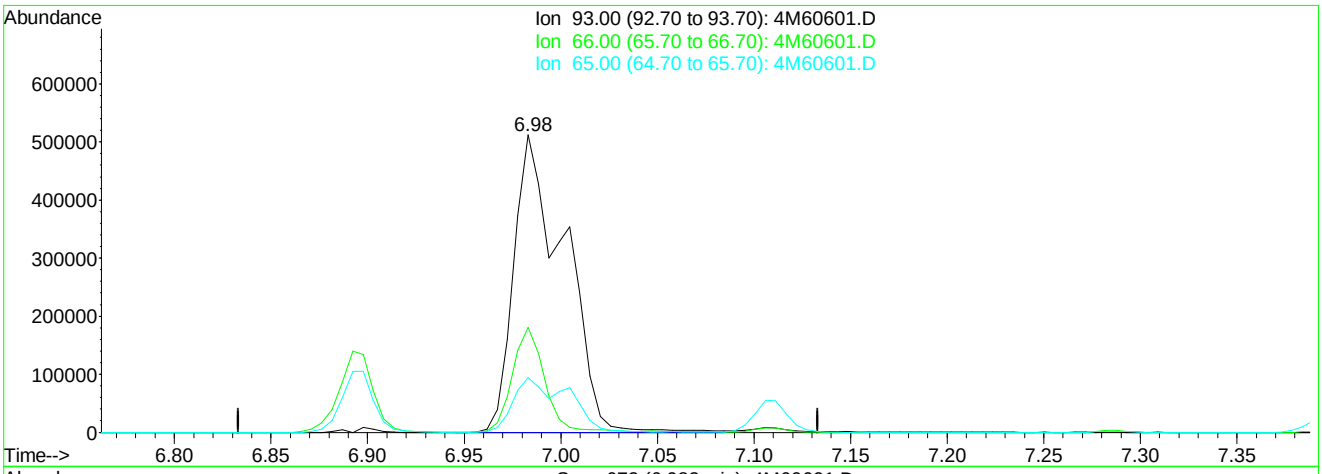
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Tue May 01 13:32:02 2012
Response via : Initial Calibration

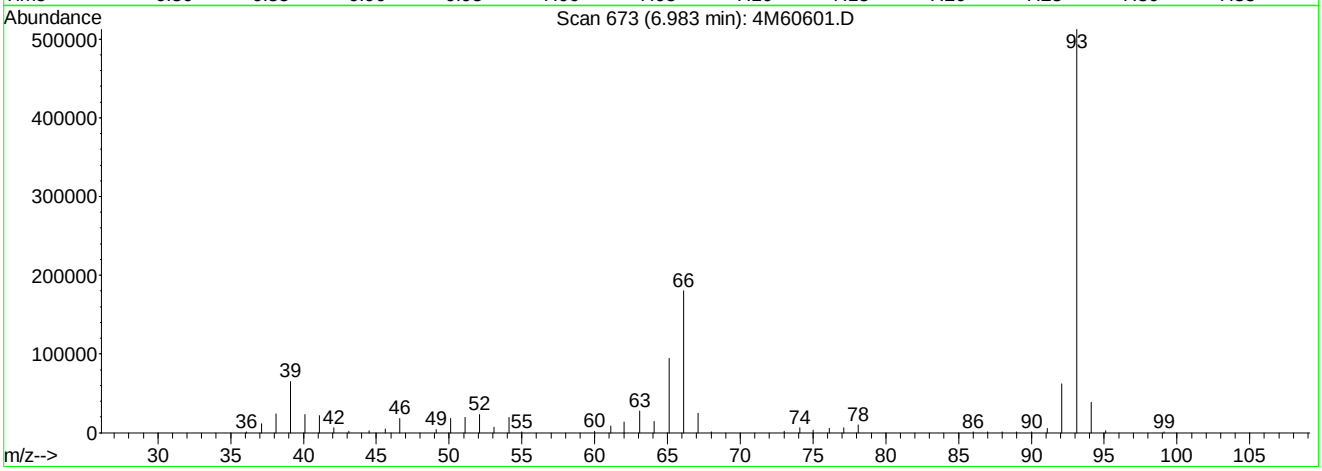


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60601.D Vial: 2
Acq On : 1 May 2012 13:31 Operator: CAA
Sample : WG396671-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:55 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 01 13:32:02 2012
Response via : Multiple Level Calibration





TIC: 4M60601.D

(11) Aniline

6.98min 74.74ug/ml

response 937457

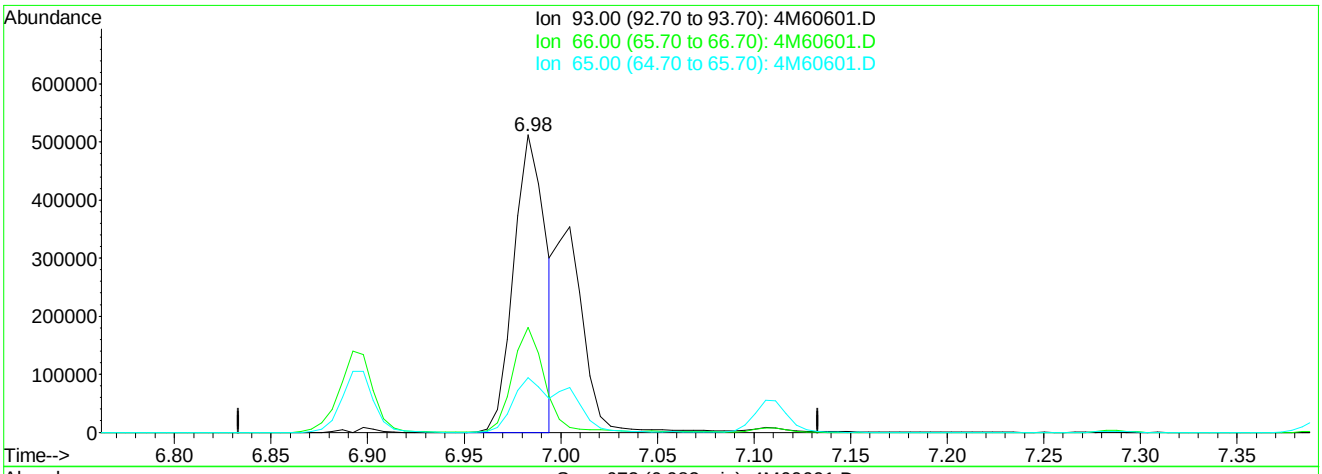
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	22.39
65.00	29.20	11.81#
0.00	0.00	0.00

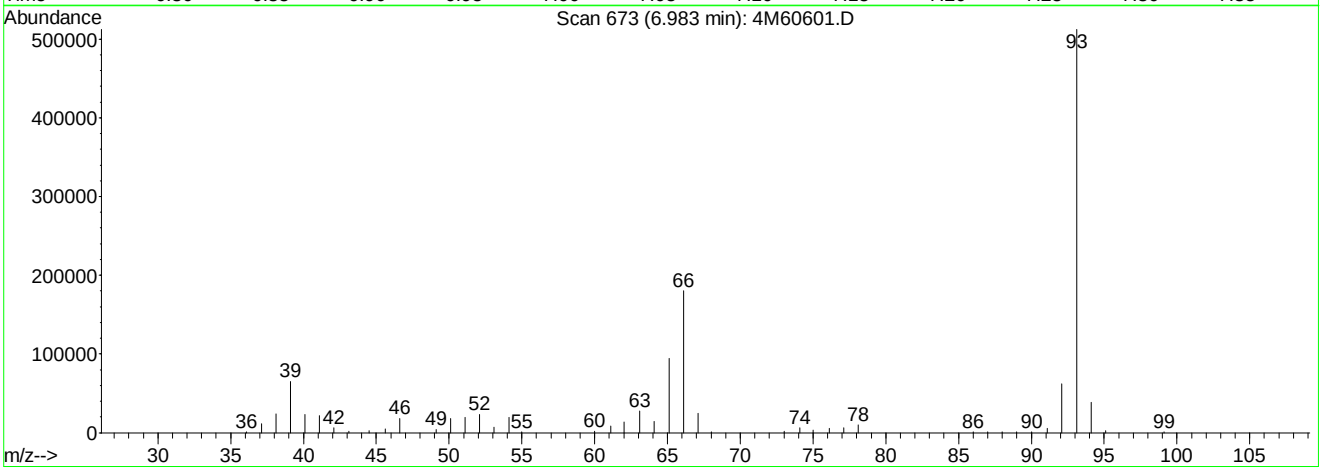
4M60601.D MEGAMIX.M Wed May 02 13:32:30 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60601.D Vial: 2
Acq On : 1 May 2012 13:31 Operator: CAA
Sample : WG396671-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:32 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 01 13:32:02 2012
Response via : Multiple Level Calibration





TIC: 4M60601.D

(11) Aniline

6.98min 46.47ug/ml mint

response 582897

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	36.02
65.00	29.20	18.99
0.00	0.00	0.00

4M60601.D MEGAMIX.M Wed May 02 3 2012

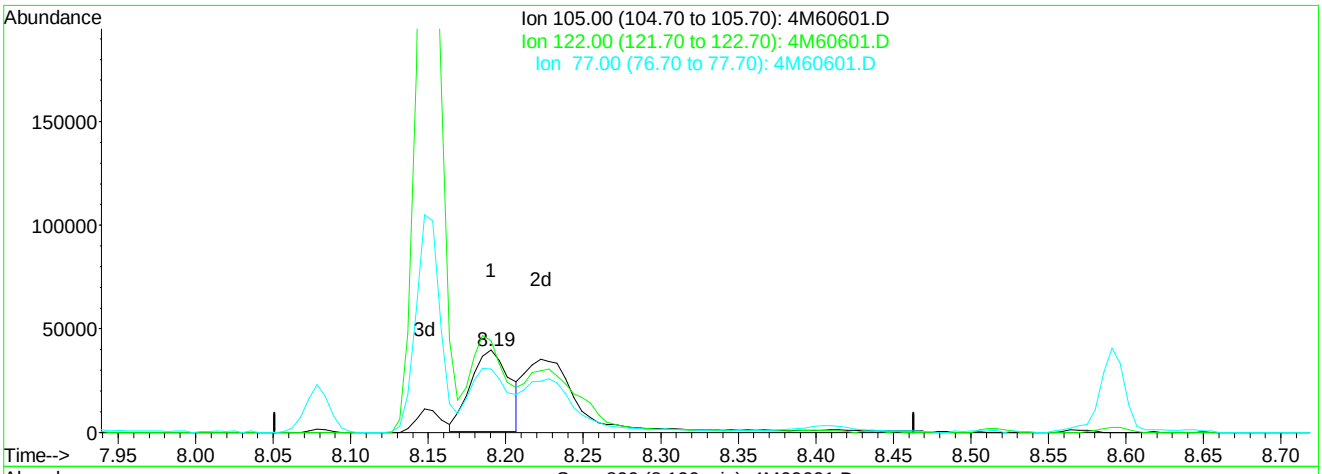
Analyst: 05/02/2012 15:06 Supervisor: 05/03/2012 14:39

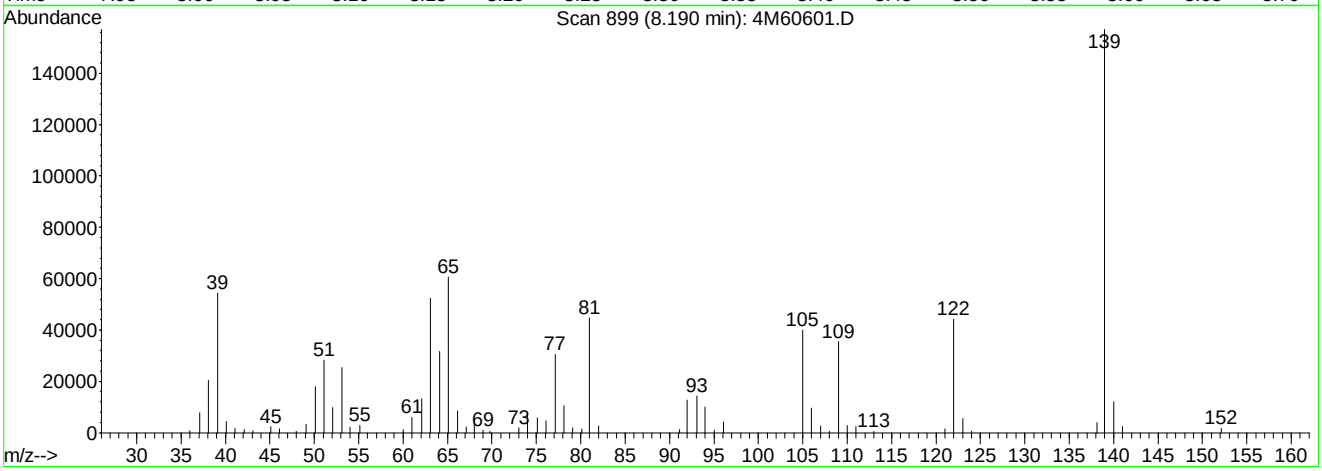
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60601.D Vial: 2
Acq On : 1 May 2012 13:31 Operator: CAA
Sample : WG396671-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:32 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 01 13:32:02 2012
Response via : Single Level Calibration





TIC: 4M60601.D

(39) Benzoic Acid

8.19min 12.80ug/ml

response 68936

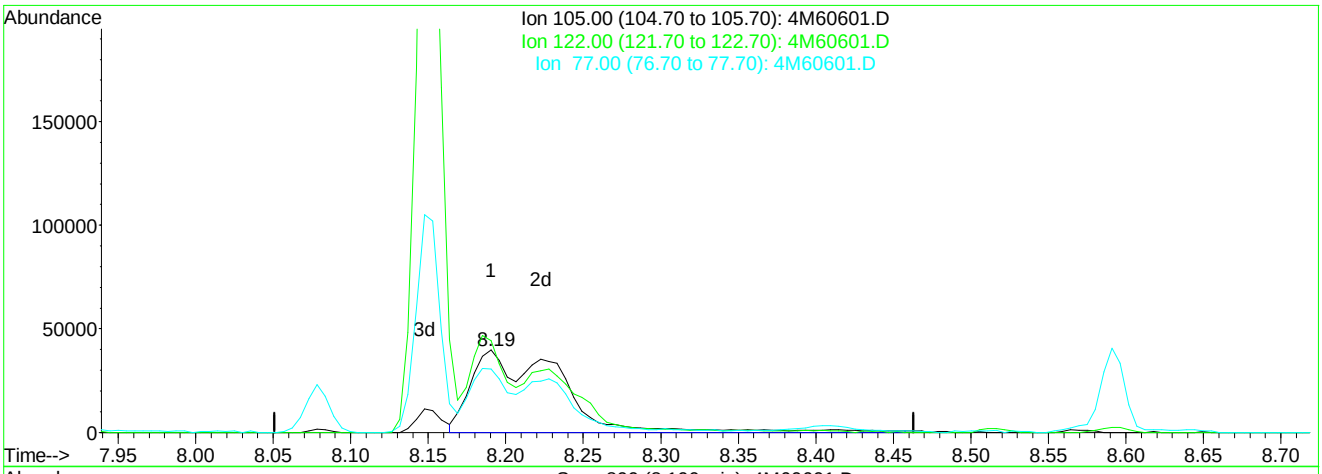
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	105.02
77.00	70.40	74.82
0.00	0.00	0.00

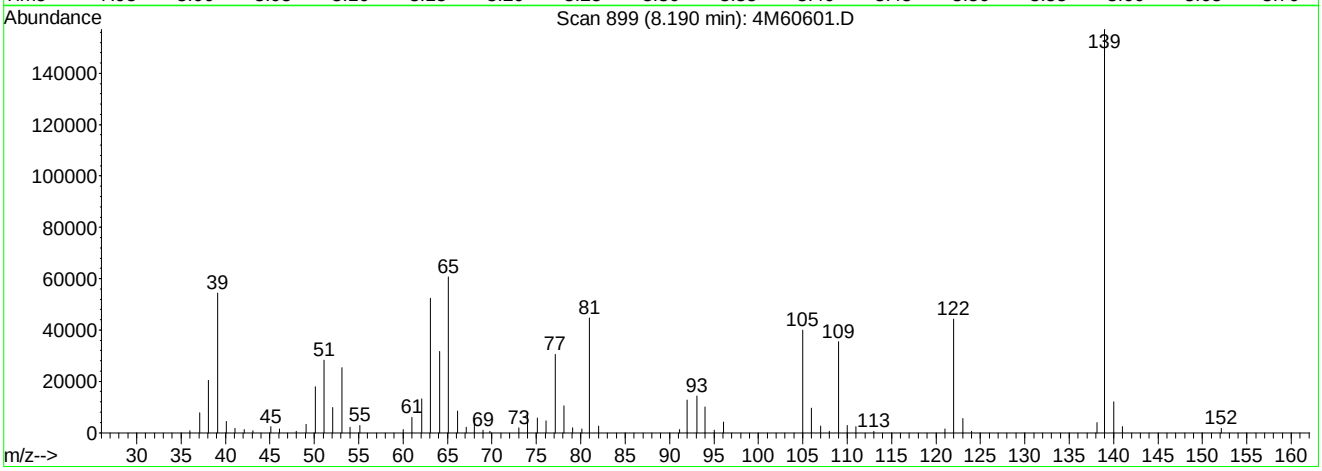
4M60601.D MEGAMIX.M Wed May 02 13:32:41 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60601.D Vial: 2
Acq On : 1 May 2012 13:31 Operator: CAA
Sample : WG396671-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:32 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 01 13:32:02 2012
Response via : Single Level Calibration





TIC: 4M60601.D

(39) Benzoic Acid

8.19min 29.60ug/ml mint

response 159437

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	45.41#
77.00	70.40	32.35#
0.00	0.00	0.00

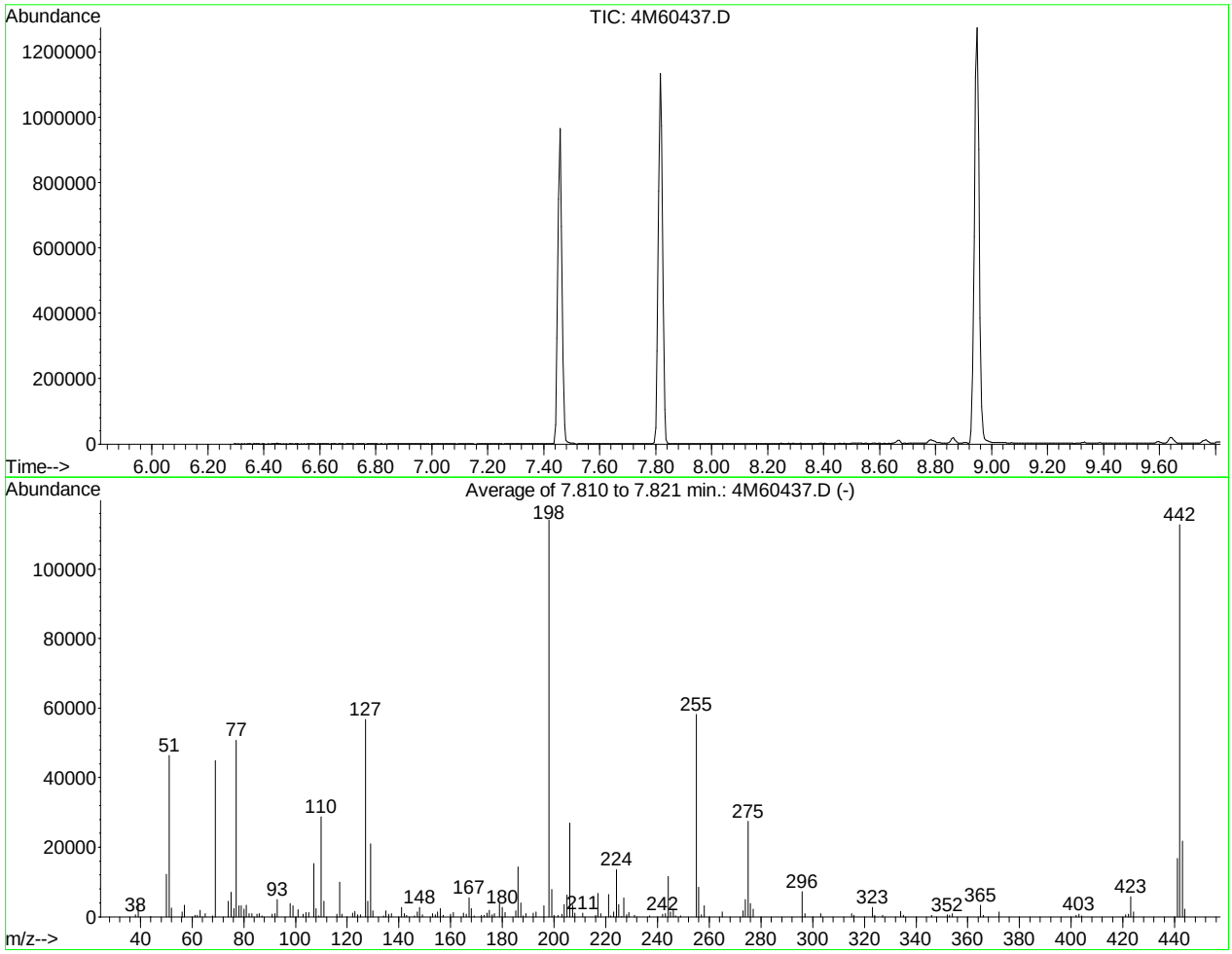
4M60601.D MEGAMIX.M Wed May 02 ; 2012

Analyst: 05/02/2012 15:06 Supervisor: 05/03/2012 14:39

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

2.2.1.5 Raw QC Data

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



AutoFind: Scans 285, 286, 287; Background Corrected with Scan 279

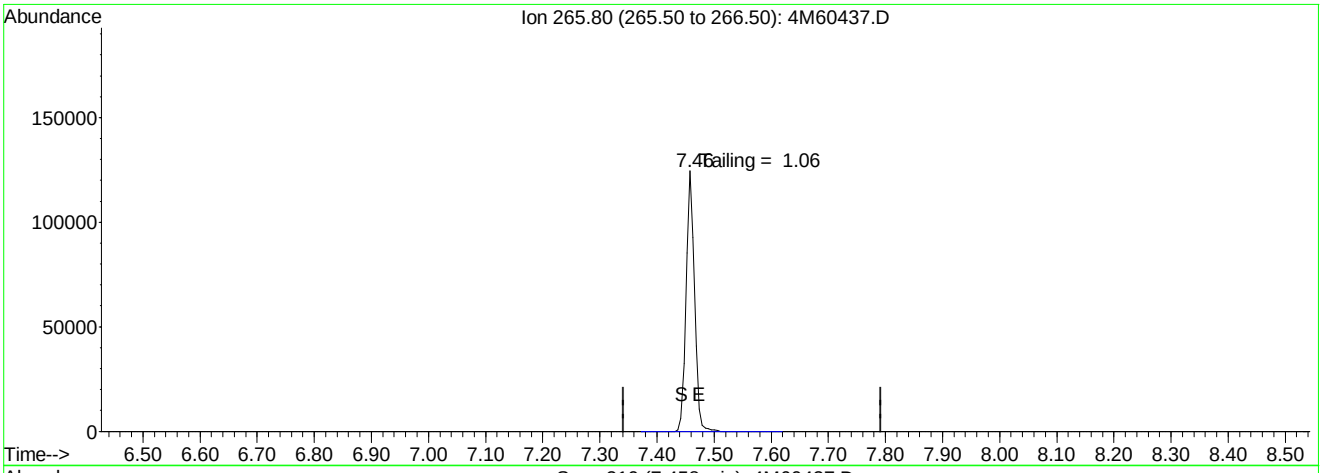
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.7	46389	PASS
68	69	0.00	2	0.7	296	PASS
69	198	0.00	100	39.4	44901	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.8	56768	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	114077	PASS
199	198	5	9	6.8	7794	PASS
275	198	10	30	24.0	27400	PASS
365	198	1	100	2.9	3319	PASS
441	443	0.01	100	76.9	16803	PASS
442	198	40	100	98.8	112693	PASS
443	442	17	23	19.4	21851	PASS

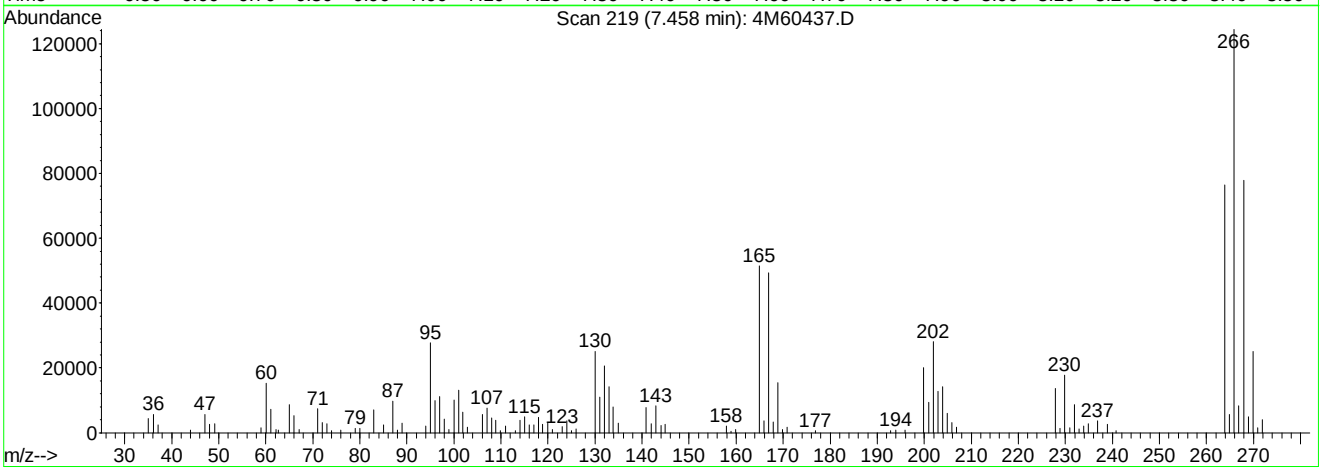
4M60437.D DFTPP.M Fri Apr 20 08:17:55 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60437.D

(1) Pentachlorophenol

7.46min 0.00ug/ml

response 128509

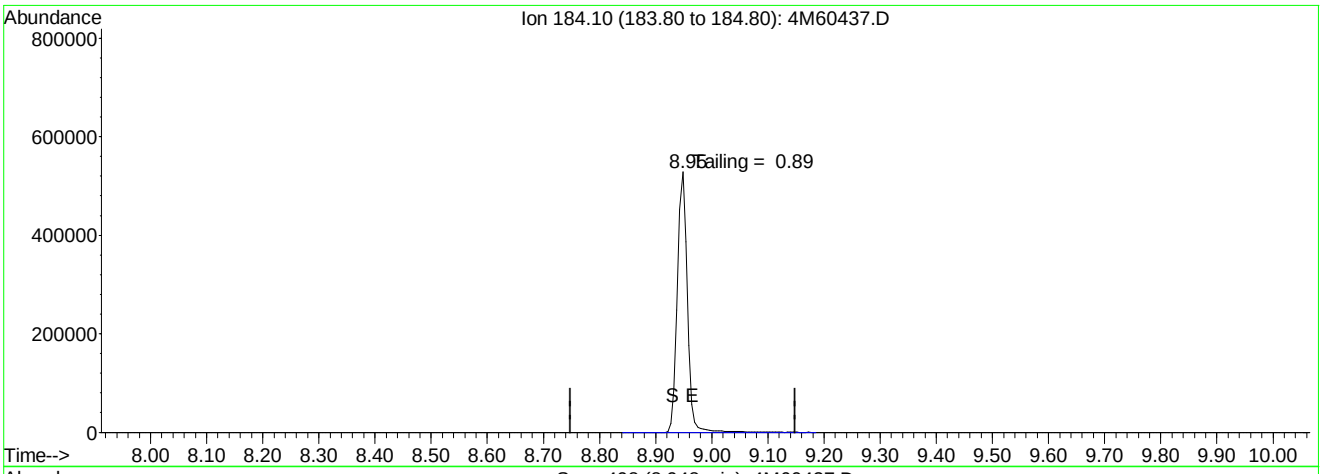
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

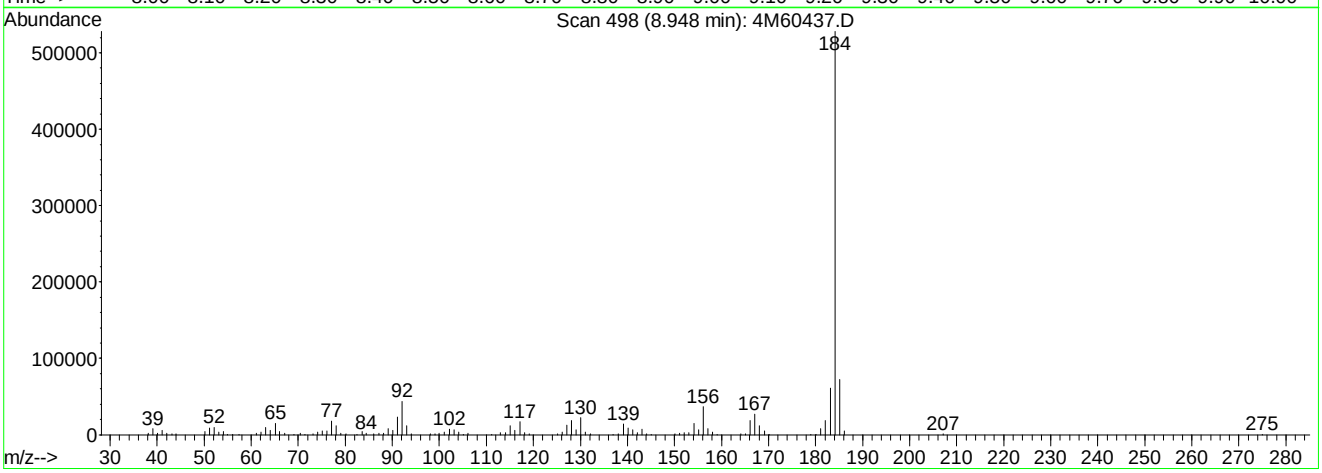
4M60437.D DFTPP.M Fri Apr 20 08:18:15 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60437.D

(2) Benzidine

8.95min 0.00ug/ml

response 651083

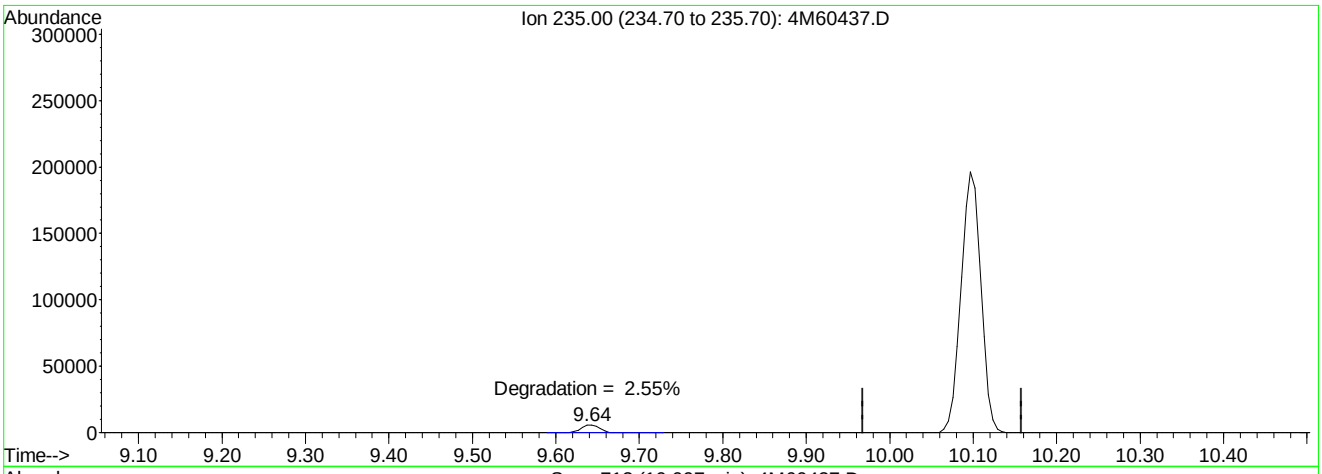
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60437.D DFTPP.M Fri Apr 20 08:18:21 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration



TIC: 4M60437.D

(3) DDT

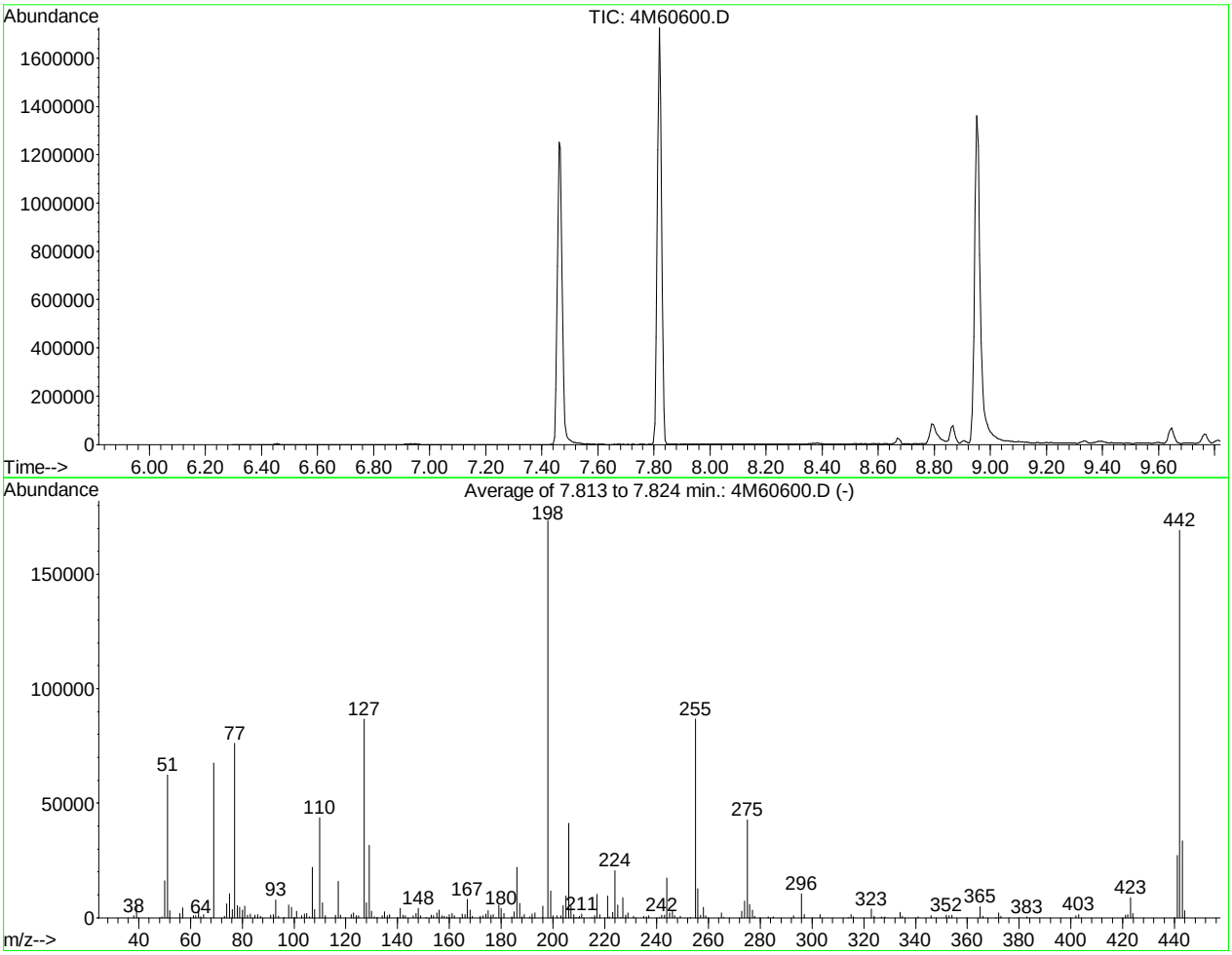
10.10min 0.00ug/ml

response 324289

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60437.D DFTPP.M Fri Apr 20 08:18:28 2012

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



AutoFind: Scans 285, 286, 287; Background Corrected with Scan 279

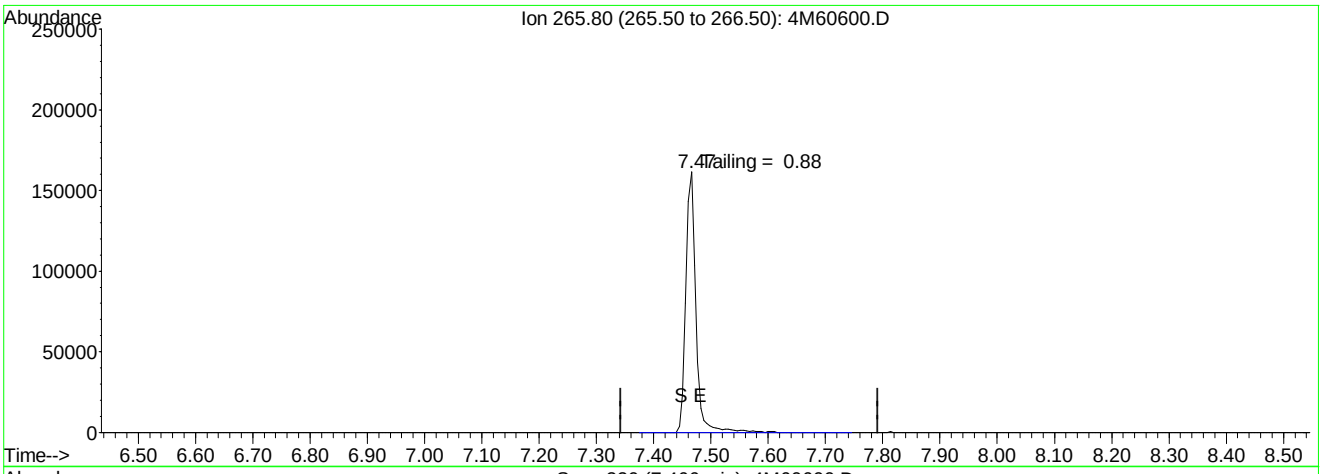
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.0	62456	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.0	67664	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.1	86805	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	173418	PASS
199	198	5	9	6.7	11620	PASS
275	198	10	30	24.6	42746	PASS
365	198	1	100	2.8	4791	PASS
441	443	0.01	100	80.8	27090	PASS
442	198	40	100	97.5	169160	PASS
443	442	17	23	19.8	33546	PASS

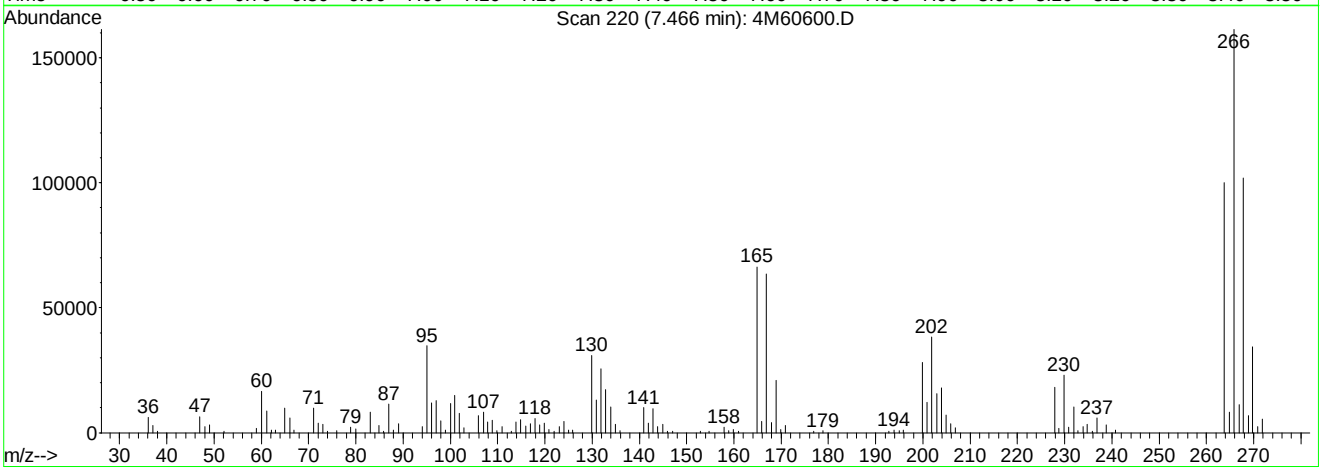
4M60600.D DFTPP.M Wed May 02 13:32:01 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60600.D

(1) Pentachlorophenol

7.47min 0.00ug/ml

response 195050

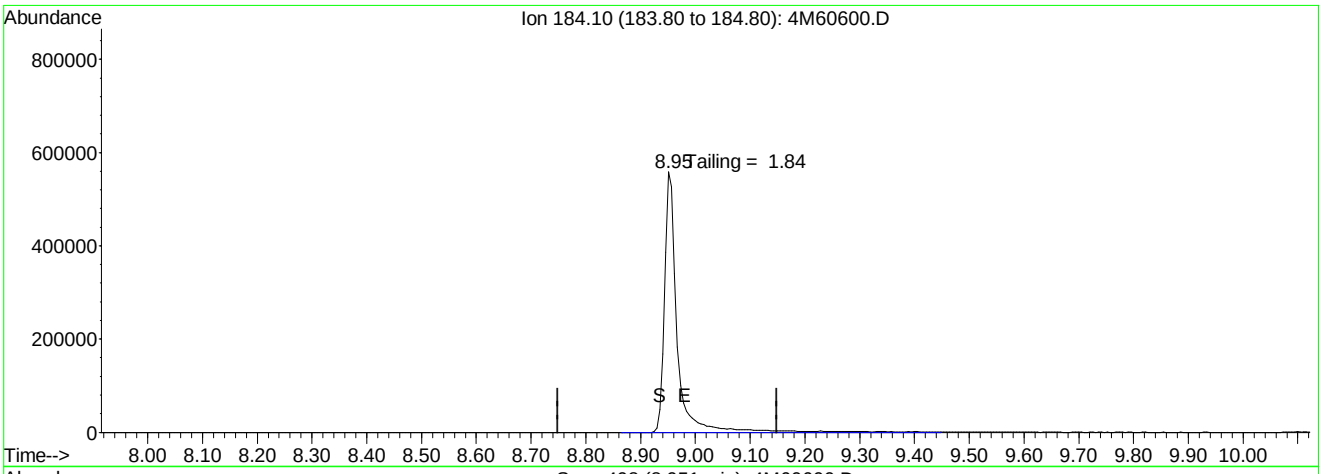
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

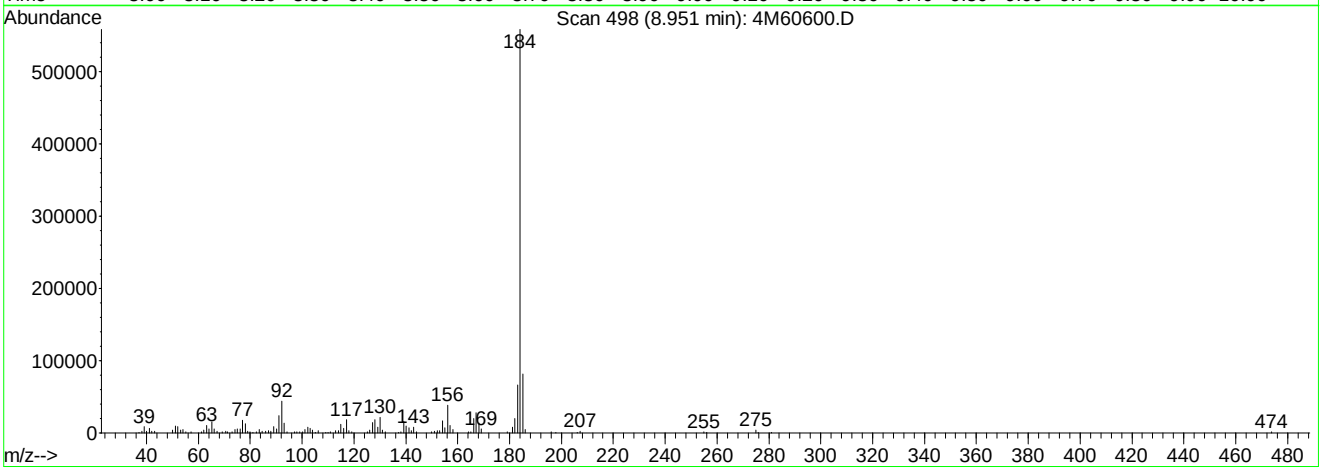
4M60600.D DFTPP.M Wed May 02 13:32:06 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60600.D

(2) Benzidine

8.95min 0.00ug/ml

response 874364

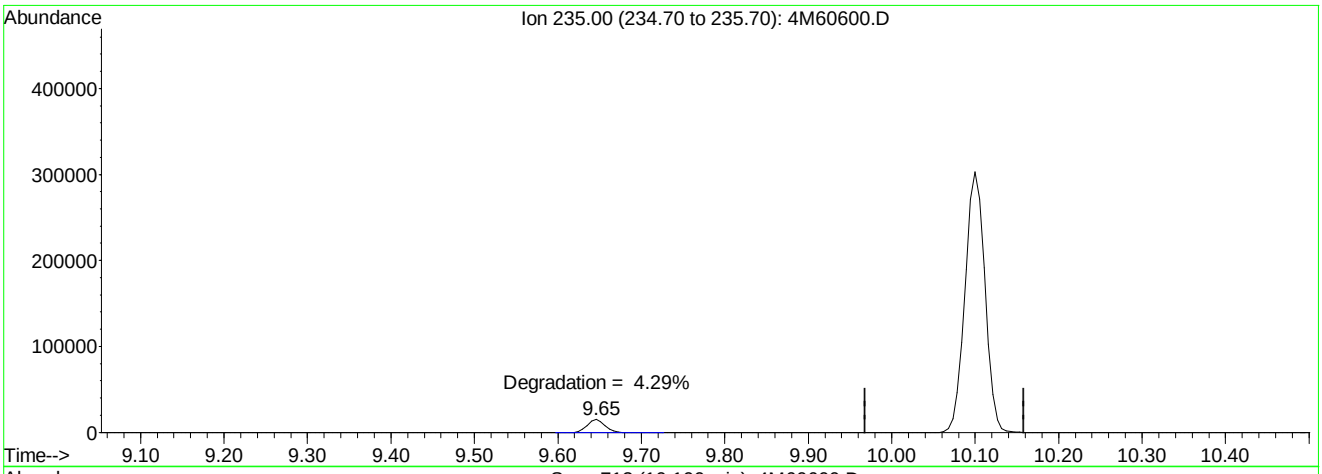
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

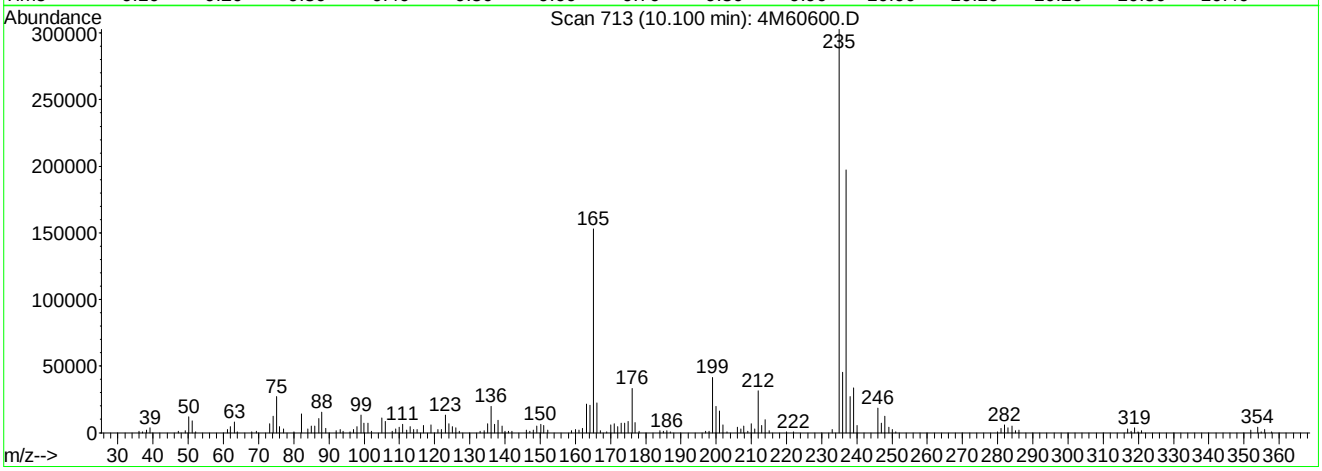
4M60600.D DFTPP.M Wed May 02 13:32:11 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60600.D

(3) DDT

10.10min 0.00ug/ml

response 501767

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60600.D DFTPP.M Wed May 02 13:32:18 2012

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60609.D Vial: 10
Acq On : 1 May 2012 18:05 Operator: CAA
Sample : WG396102-01 BLK 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:23 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	209333	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	788667	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	441021	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	779143	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	741853	40.00	ug/ml	0.00
128) Perylene-d12	18.48	264	704908	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	356329	56.1425	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 56.14%			
12) Phenol-d5	6.88	99	453437	61.0432	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 61.04%			
31) Nitrobenzene-d5	7.85	82	210748	31.5944	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 63.18%			
59) 2-Fluorobiphenyl	9.64	172	471906	32.0442	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 64.08%			
86) 2,4,6-Tribromophenol	11.21	330	164532	83.6602	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 83.66%			
117) p-Terphenyl-d14	14.03	244	775240	56.6978	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 113.40%			

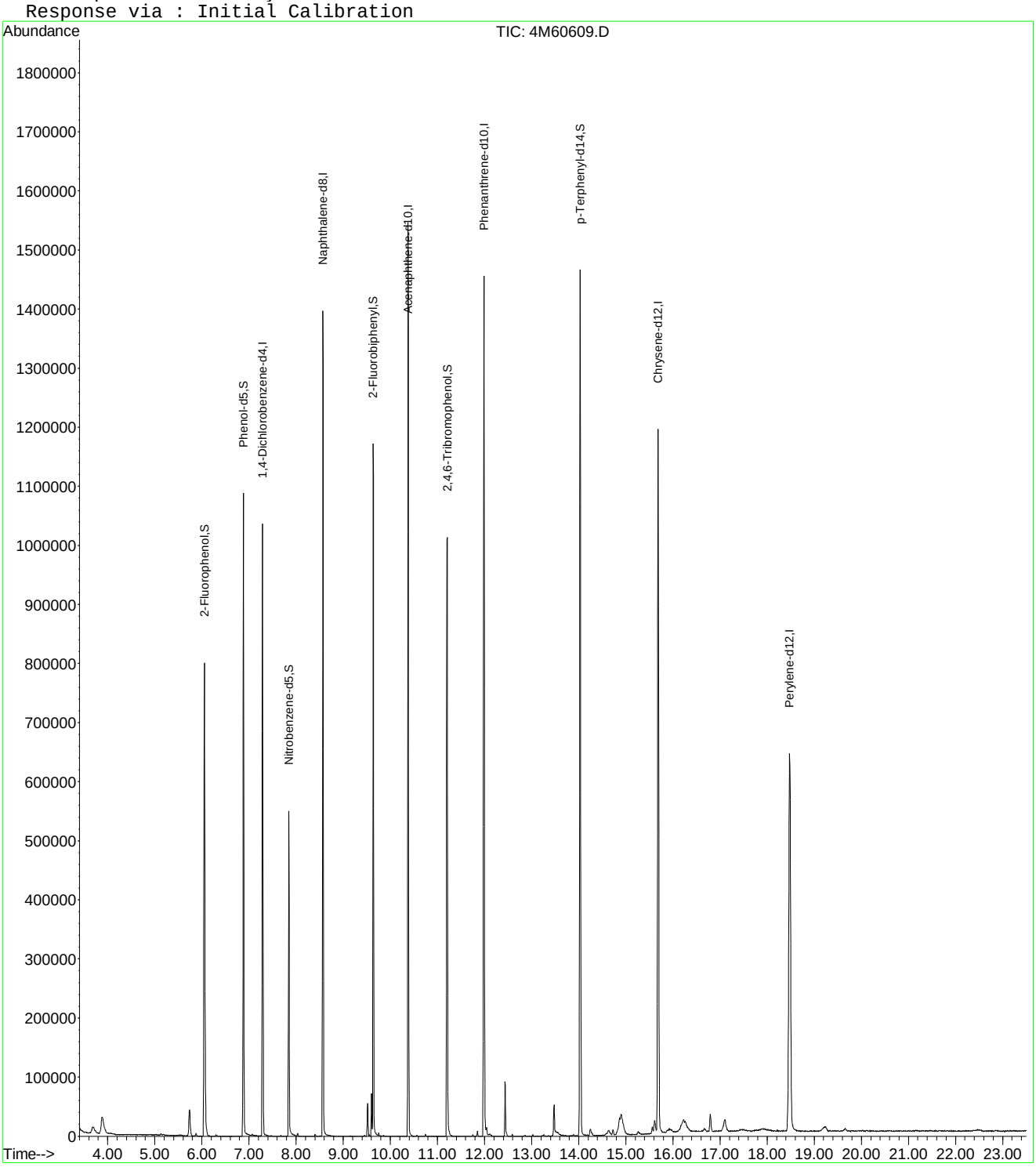
Target Compounds Qvalue

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

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60609.D Vial: 10
Acq On : 1 May 2012 18:05 Operator: CAA
Sample : WG396102-01 BLK 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:33 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration



4M60609.D MEGAMIX.M Wed May 02 13:47:19 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60609.D Vial: 10
Acq On : 1 May 2012 18:05 Operator: CAA
Sample : WG396102-01 BLK 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:55:05 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 13:54:56 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	209333	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	789823	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	441021	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	779143	40.00	ug/mL	0.00

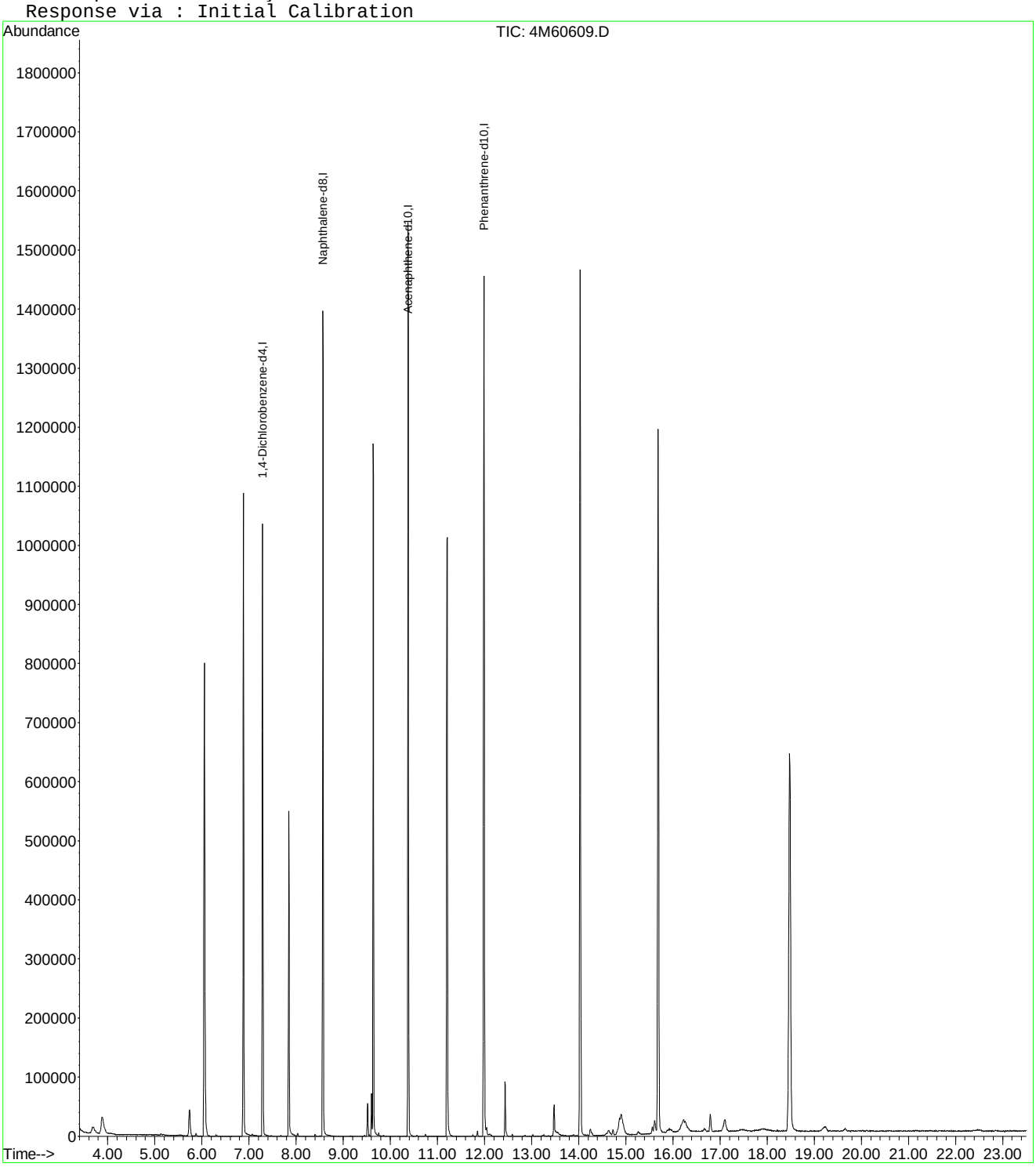
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60609.D TCL.M Wed May 02 13:55:05 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60609.D Vial: 10
Acq On : 1 May 2012 18:05 Operator: CAA
Sample : WG396102-01 BLK 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:55 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 13:54:56 2012
Response via : Initial Calibration



4M60609.D TCL.M Wed May 02 13:55:05 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\050112\4M60609.D Vial: 10
Acq On : 1 May 2012 18:05 Operator: CAA
Sample : WG396102-01 BLK 04/25 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

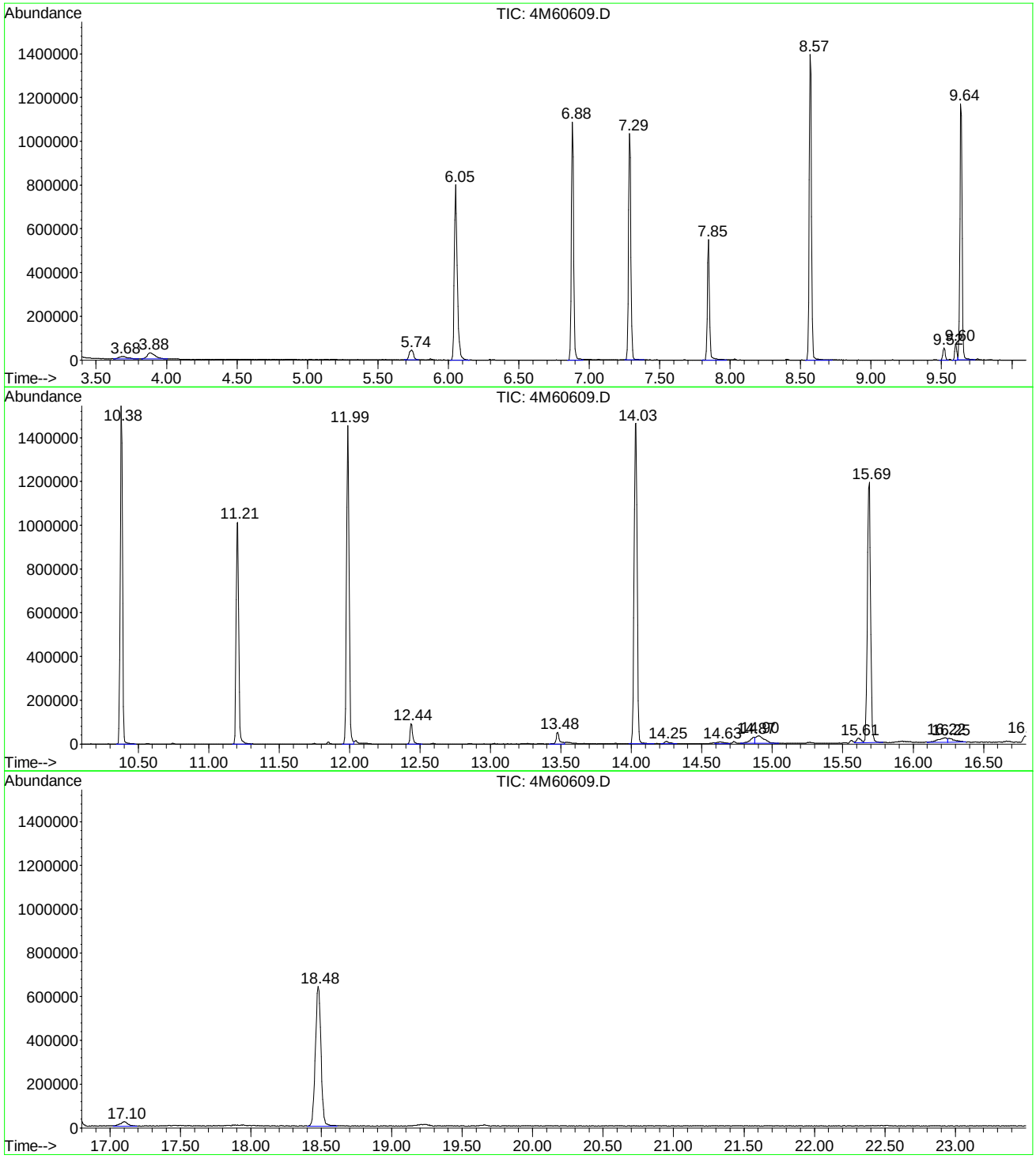
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.679	44	54	76	rBV5	10644	45866	2.11%	0.245%
2	3.882	81	92	114	rBV4	27711	113577	5.22%	0.606%
3	5.742	430	440	448	rBV2	44575	95937	4.41%	0.512%
4	6.051	491	498	516	rBB	801403	1155670	53.08%	6.164%
5	6.879	647	653	667	rBV	1088797	1210402	55.59%	6.456%
6	7.285	723	729	747	rBV	1035789	1171067	53.79%	6.246%
7	7.846	825	834	858	rBV	550284	608560	27.95%	3.246%
8	8.568	963	969	998	rBV	1396972	1537379	70.61%	8.200%
9	9.518	1141	1147	1152	rBB2	55731	64919	2.98%	0.346%
10	9.604	1158	1163	1165	rBV	72544	77607	3.56%	0.414%
11	9.636	1165	1169	1187	rVB	1171924	1260390	57.89%	6.723%
12	10.378	1302	1308	1327	rBB	1546752	1697135	77.95%	9.052%
13	11.207	1456	1463	1481	rBB	1013812	1283819	58.96%	6.848%
14	11.986	1602	1609	1617	rBV	1456371	1843112	84.65%	9.831%
15	12.435	1688	1693	1707	rBB2	92725	116554	5.35%	0.622%
16	13.477	1877	1888	1897	rBV4	53345	86657	3.98%	0.462%
17	14.033	1983	1992	2015	rBV	1465847	2177267	100.00%	11.613%
18	14.246	2025	2032	2045	rBV4	11112	27106	1.24%	0.145%
19	14.631	2097	2104	2116	rVB2	8079	25855	1.19%	0.138%
20	14.871	2131	2149	2150	rBV2	28968	71778	3.30%	0.383%
21	14.898	2150	2154	2181	rVB4	34430	141295	6.49%	0.754%
22	15.608	2282	2287	2294	rVV4	21649	49479	2.27%	0.264%
23	15.689	2294	2302	2319	rVB	1191030	1860248	85.44%	9.922%
24	16.223	2379	2402	2406	rBV5	20891	92016	4.23%	0.491%
25	16.255	2406	2408	2429	rVB8	17239	59036	2.71%	0.315%
26	16.794	2502	2509	2519	rBV2	29597	52301	2.40%	0.279%
27	17.104	2552	2567	2582	rVB8	20467	83993	3.86%	0.448%
28	18.477	2810	2824	2849	rBV	639510	1738786	79.86%	9.275%

Sum of corrected areas: 18747811

File : I:\MSDCHEM\1\DATA\050112\4M60609.D
Operator : CAA
Acquired : 1 May 2012 18:05 using AcqMethod BNATEST
Instrument : HPMS4
Sample Name: WG396102-01 BLK 04/25
Misc Info : 1,1
Vial Number: 10
Quant File :MEGAMIX.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 1 May 2012 18:05
Data File: I:\MSDCHEM\1\DATA\050112\4M60609.D
Name: WG396102-01 BLK 04/25
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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:23 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	220802	40.00 ug/ml	0.00
30) Naphthalene-d8	8.57	136	846095	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.38	164	480664	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	870815	40.00 ug/ml	0.00
113) Chrysene-d12	15.69	240	805584	40.00 ug/ml	0.00
128) Perylene-d12	18.48	264	749871	40.00 ug/ml	0.00
System Monitoring Compounds					
8) 2-Fluorophenol	6.06	112	478987	71.5483 ug/ml	0.01
Spiked Amount 100.000	Range 21 - 100		Recovery = 71.55%		
12) Phenol-d5	6.89	99	605805	77.3193 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 77.32%		
31) Nitrobenzene-d5	7.85	82	275473	38.4946 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 76.98%		
59) 2-Fluorobiphenyl	9.64	172	676062	42.1210 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 84.24%		
86) 2,4,6-Tribromophenol	11.21	330	227174	105.9851 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 105.99%		
117) p-Terphenyl-d14	14.03	244	855714	57.6323 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 115.26%		
Target Compounds					Qvalue
2) 1,4-Dioxane	4.28	88	72377	26.3007 ug/ml#	96
3) n-Nitrosodimethylamine	4.70	74	146250	35.8908 ug/ml	98
4) Pyridine	4.72	79	200328	27.7296 ug/ml	89
5) 2-Picoline	5.50	93	253923	32.3016 ug/ml	98
6) n-Nitrosomethylethylamine	5.62	88	114935	33.8944 ug/ml	89
7) Methyl Methanesulfonate	5.90	80	136627	35.4882 ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	125615	34.5529 ug/ml	96
10) Ethyl Methanesulfonate	6.54	79	173363	34.3805 ug/ml	98
11) Aniline	6.98	93	337471m	29.1468 ug/ml	
13) Phenol	6.90	94	314196	37.5559 ug/ml	95
14) bis(2-Chloroethyl)ether	7.00	63	189553	36.1847 ug/ml	93
15) Pentachloroethane	7.02	167	67037	23.7572 ug/ml	99
16) 2-Chlorophenol	7.11	128	272388	36.3582 ug/ml	97
17) 1,3-Dichlorobenzene	7.26	146	193021	23.1476 ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	209875	24.6770 ug/ml	100
19) Benzyl Alcohol	7.39	108	190128	39.1954 ug/ml	96
20) 1,2-Dichlorobenzene	7.50	146	212424	26.8947 ug/ml	99
21) 2-Methylphenol	7.49	107	217712	37.7390 ug/ml	97
22) bis(2-Chloroisopropyl)ethe	7.54	45	343969	31.9825 ug/ml	93
23) 3-,4-Methylphenol	7.61	107	326340	43.5183 ug/ml	92
24) n-Nitrosopyrrolidine	7.67	100	140796	41.5873 ug/ml	96
25) n-Nitrosodipropylamine	7.67	70	204614	43.3768 ug/ml	94
26) Acetophenone	7.68	105	675721	72.8400 ug/ml	99
27) n-Nitrosomorpholine	7.68	56	156918	35.6573 ug/ml	94
28) o-Toluidine	7.73	106	363210	30.9696 ug/ml	99
29) Hexachloroethane	7.81	117	62077	19.7112 ug/ml	98
32) Nitrobenzene	7.87	77	282634	39.6269 ug/ml	97
33) n-Nitrosopiperidine	8.01	114	145134	38.0137 ug/ml	96
34) Isophorone	8.08	82	560124	43.0249 ug/ml	99
35) 2-Nitrophenol	8.18	139	163430	38.8710 ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	284235	39.3704 ug/ml	97
37) 0,0,0-Triethyl Phosphoroth	8.25	198	145526	40.3754 ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	440702	44.5434 ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M60610.D MEGAMIX.M Wed May 02 13:45:12 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:23 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.22	105	68322m	13.7315 ug/ml	
40)	2,4-Dichlorophenol	8.41	162	250944	41.5211 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.42	58	782444	76.5755 ug/ml	100
42)	1,2,4-Trichlorobenzene	8.52	180	214588	31.2688 ug/ml	99
43)	Naphthalene	8.60	128	823088	36.7324 ug/ml	97
44)	4-Chloroaniline	8.62	127	362939	43.9792 ug/ml	96
45)	2,6-Dichlorophenol	8.64	162	258632	41.4705 ug/ml	99
46)	Hexachloropropene	8.71	213	78599	20.4353 ug/ml	99
47)	Hexachlorobutadiene	8.74	225	104931	29.8660 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.93	84	259573	43.1381 ug/ml	94
49)	p-Phenylenediamine	9.06	108	26534	50.9618 ug/ml	65
50)	4-Chloro-3-Methylphenol	9.06	107	282415	46.0481 ug/ml	98
51)	Safrole	9.15	162	220912	37.8731 ug/ml	100
52)	2-Methylnaphthalene	9.28	142	574961	39.4951 ug/ml	99
53)	1-Methylnaphthalene	9.40	142	511669	37.1756 ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	247358	39.2702 ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	90541	27.7900 ug/ml	100
57)	2,4,6-Trichlorophenol	9.57	196	205994	46.6711 ug/ml	100
58)	2,4,5-Trichlorophenol	9.62	196	231246	50.8966 ug/ml	99
60)	Isosafrole	9.68	162	428496	70.5447 ug/ml	98
61)	2-Chloronaphthalene	9.79	162	656233	48.3493 ug/ml	99
62)	1-Chloronaphthalene	9.83	162	525297	40.8732 ug/ml	99
63)	2-Nitroaniline	9.88	65	183483	47.1620 ug/ml	99
64)	1,4-Naphthoquinone	9.95	158	219239	40.9042 ug/ml	99
65)	Dimethylphthalate	10.05	163	783071	51.4923 ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	141588	48.5535 ug/ml	97
67)	2,6-Dinitrotoluene	10.15	165	194574	51.2189 ug/ml	99
68)	Acenaphthylene	10.23	152	1018242	46.7241 ug/ml	100
69)	3-Nitroaniline	10.30	138	192744	68.7860 ug/ml	98
70)	2,4-Dinitrophenol	10.41	184	115700	59.4317 ug/ml	54
71)	Acenaphthene	10.42	154	634951	44.7325 ug/ml	99
72)	4-Nitrophenol	10.41	65	130936	46.7711 ug/ml	98
73)	2,4-Dinitrotoluene	10.56	165	262949	54.3995 ug/ml	97
74)	Pentachlorobenzene	10.59	250	256305	45.1928 ug/ml	100
75)	Dibenzofuran	10.57	168	892617	46.9645 ug/ml	100
76)	2,3,4,6-Tetrachlorophenol	10.72	232	171828	49.0390 ug/ml	97
77)	1-Naphthylamine	10.65	143	497290	121.6583 ug/ml#	65
78)	2-Naphthylamine	10.72	143	453172	182.1341 ug/ml#	57
79)	Diethylphthalate	10.75	149	813568	53.7165 ug/ml	100
80)	Thionazin	10.86	107	132457	52.5601 ug/ml	94
81)	Fluorene	10.93	166	755486	46.7692 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	368173	48.5054 ug/ml	99
83)	4-Nitroaniline	10.94	138	202460	58.3702 ug/ml	97
84)	5-Nitro-o-Toluidine	10.94	152	213506	55.9842 ug/ml	94
85)	1,2-Diphenylhydrazine	11.05	77	720245	48.8966 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	164708	60.7584 ug/ml	90
89)	n-Nitrosodiphenylamine	11.01	169	1216521	86.3393 ug/ml	100
90)	Sulfotepp	11.20	322	127268	50.5567 ug/ml	98
91)	Sym-Trinitrobenzene	11.29	75	190605	55.3337 ug/ml	99
92)	Diallate	11.33	86	533931	92.9203 ug/ml#	81
93)	Phenacetin	11.32	108	379124	51.3600 ug/ml	93
94)	Phorate	11.35	75	473717	51.6753 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	225769	51.2435 ug/ml	99
96)	Hexachlorobenzene	11.63	284	247728	51.4366 ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M60610.D MEGAMIX.M Wed May 02 13:45:12 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:23 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

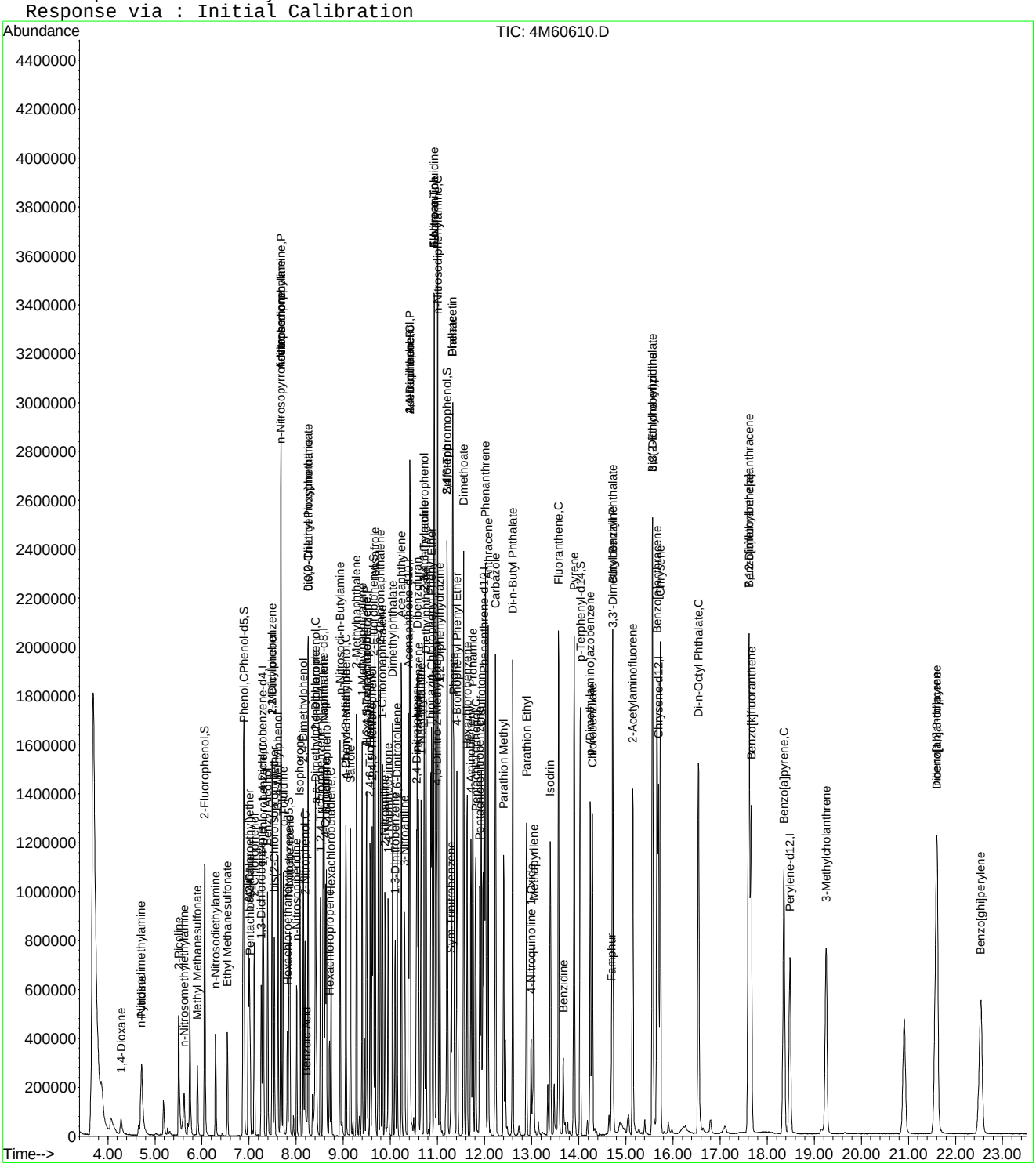
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	304842	64.5193	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	584917	87.5879	ug/ml	100
99)	Pentachlorophenol	11.81	266	184505	60.5823	ug/ml	99
100)	Pronamide	11.75	173	361144	51.0154	ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	88298	52.8993	ug/ml	98
102)	Disulfoton	11.93	88	397821	50.4909	ug/ml	99
103)	Phenanthrene	12.02	178	1192211	51.6157	ug/ml	100
104)	Anthracene	12.07	178	1118845	47.2415	ug/ml	99
105)	Carbazole	12.23	167	1121019	54.0571	ug/ml	100
106)	Parathion Methyl	12.41	109	282050	58.5144	ug/ml	99
107)	Di-n-Butyl Phthalate	12.60	149	1417096	55.0020	ug/ml	100
108)	Parathion Ethyl	12.89	97	170904	58.2365	ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.99	190	67655	31.7496	ug/ml	95
110)	Methapyrilene	13.04	58	288799	67.5049	ug/ml	89
111)	Isodrin	13.40	193	128830	51.9278	ug/ml	99
112)	Fluoranthene	13.57	202	1270010	52.4711	ug/ml	99
114)	Benzidine	13.67	184	217379	193.6020	ug/ml	100
115)	Pyrene	13.90	202	1328881	55.1519	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.25	225	268288	53.9295	ug/ml	98
119)	Chlorobenzilate	14.29	251	358908	54.7356	ug/ml	98
120)	Famphur	14.69	218	95859	335.5853	ug/ml#	33
121)	Butyl Benzyl Phthalate	14.72	149	662875	60.4834	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	311839	40.9578	ug/ml#	94
123)	2-Acetylaminofluorene	15.15	181	501221	53.4606	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.56	149	872468	58.3363	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.57	252	342253	77.1154	ug/ml	100
126)	Benzo[a]anthracene	15.66	228	1159499	54.2546	ug/ml	100
127)	Chrysene	15.73	228	1130537	56.3547	ug/ml	99
129)	Di-n-Octyl Phthalate	16.54	149	1506781	62.2213	ug/ml	98
130)	7,12-Dimethylbenz[a]anthra	17.62	256	497929	51.2742	ug/ml	100
131)	Benzo[b]fluoranthene	17.61	252	1198264	55.2595	ug/ml	99
132)	Benzo[k]fluoranthene	17.66	252	1082537	53.8564	ug/ml	97
133)	Benzo[a]pyrene	18.36	252	1128098	57.0218	ug/ml	99
134)	3-Methylcholanthrene	19.25	268	558399	51.9853	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.60	276	1239321	56.2483	ug/ml	99
136)	Dibenz[ah]anthracene	21.60	278	1049950	57.1385	ug/ml	98
137)	Benzo[ghi]perylene	22.54	276	1009032	55.3598	ug/ml	98

(#) = qualifier out of range (m) = manual integration
4M60610.D MEGAMIX.M Wed May 02 13:45:12 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:34 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:55:09 2012 Quant Results File: TCL.RES

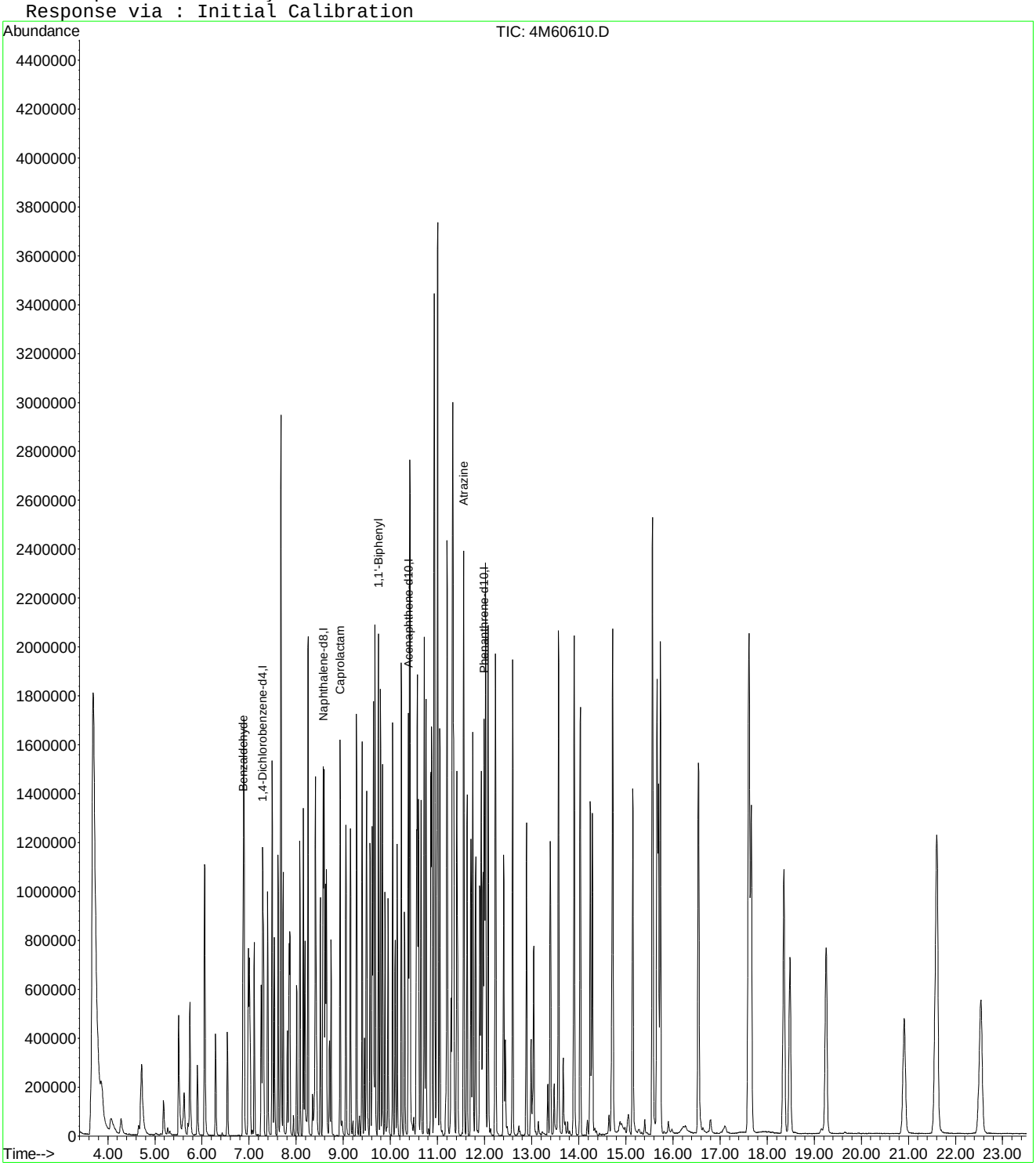
Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:54:56 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	220802	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	846095	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	480664	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	870815	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.87	105	159923	27.1918	ug/L	98
4) Caprolactam	8.93	55	153821	55.6698	ug/L	90
6) 1,1'-Biphenyl	9.74	154	746393	37.8347	ug/L	99
8) Atrazine	11.56	200	210368	43.6438	ug/L	98

(#) = qualifier out of range (m) = manual integration
4M60610.D TCL.M Wed May 02 13:55:09 2012 Page 1

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:55 2012 Quant Results File: TCL.RES

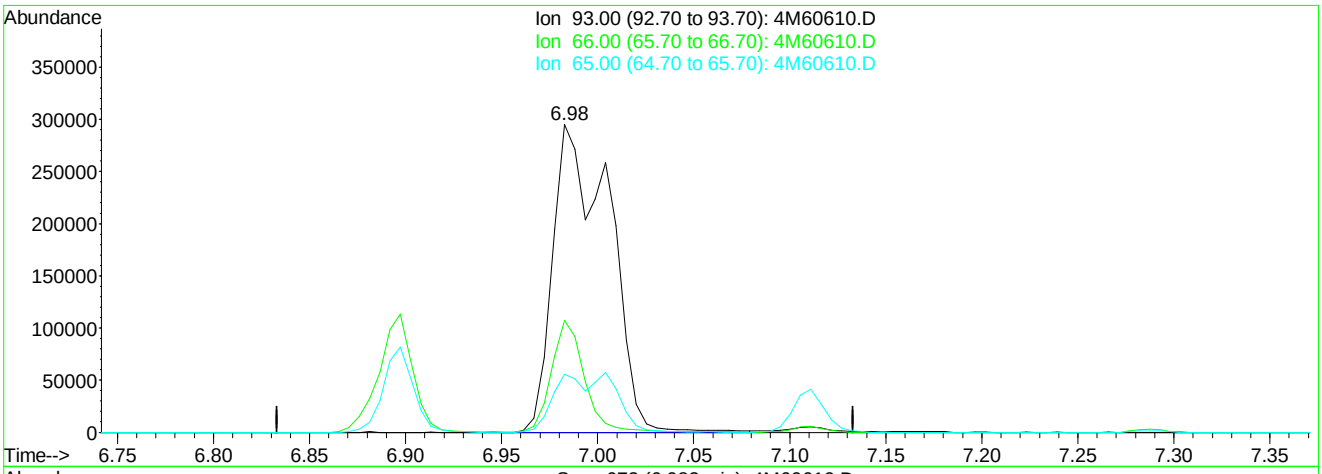
Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:54:56 2012
Response via : Initial Calibration

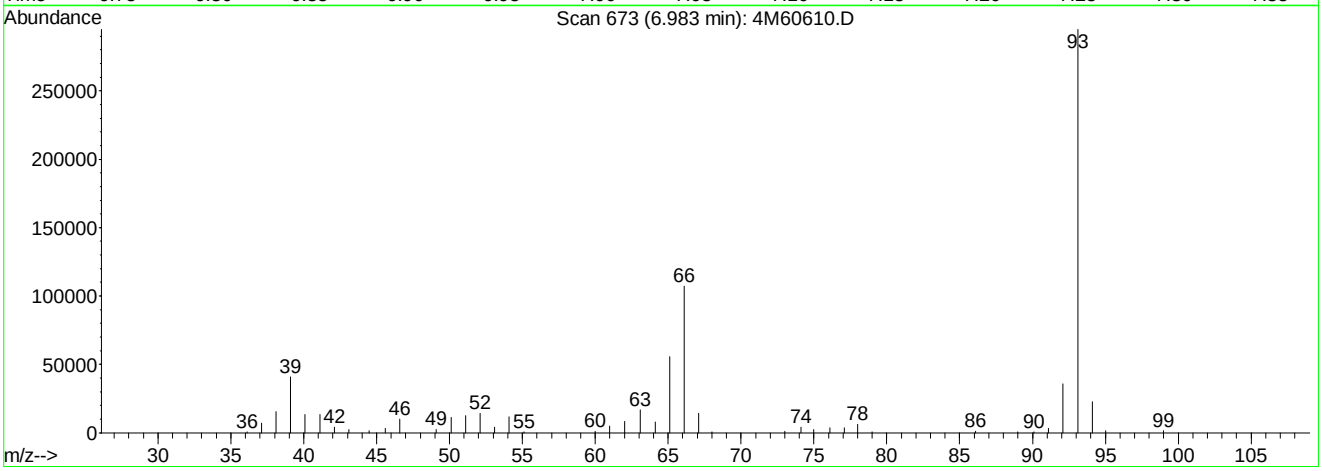


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:33 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 : Wed May 02 13:33:10 2012
Response via : Multiple Level Calibration





TIC: 4M60610.D

(11) Aniline

6.98min 52.02ug/ml

response 602271

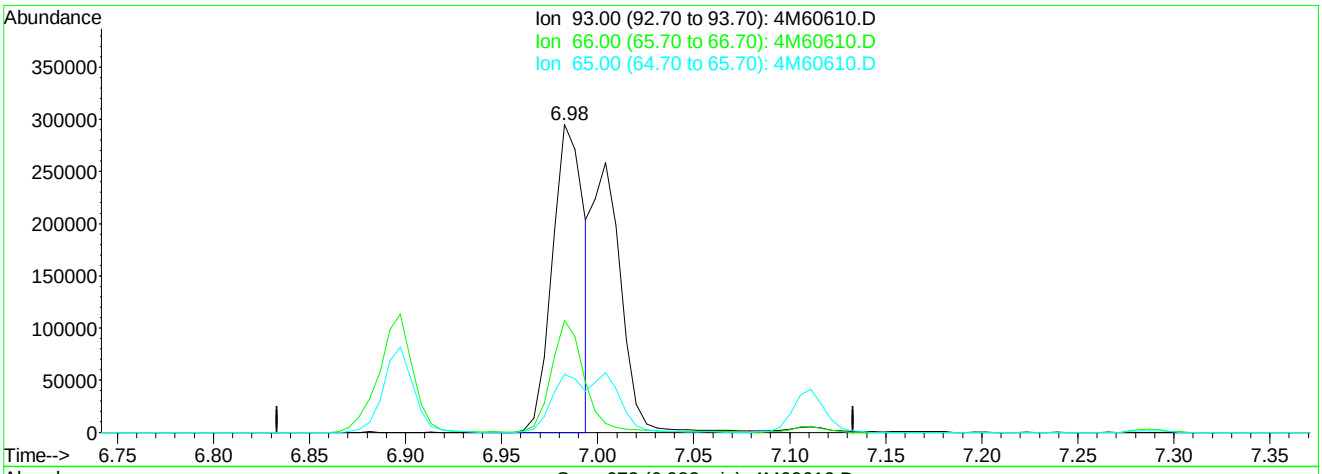
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	20.97
65.00	29.20	10.94#
0.00	0.00	0.00

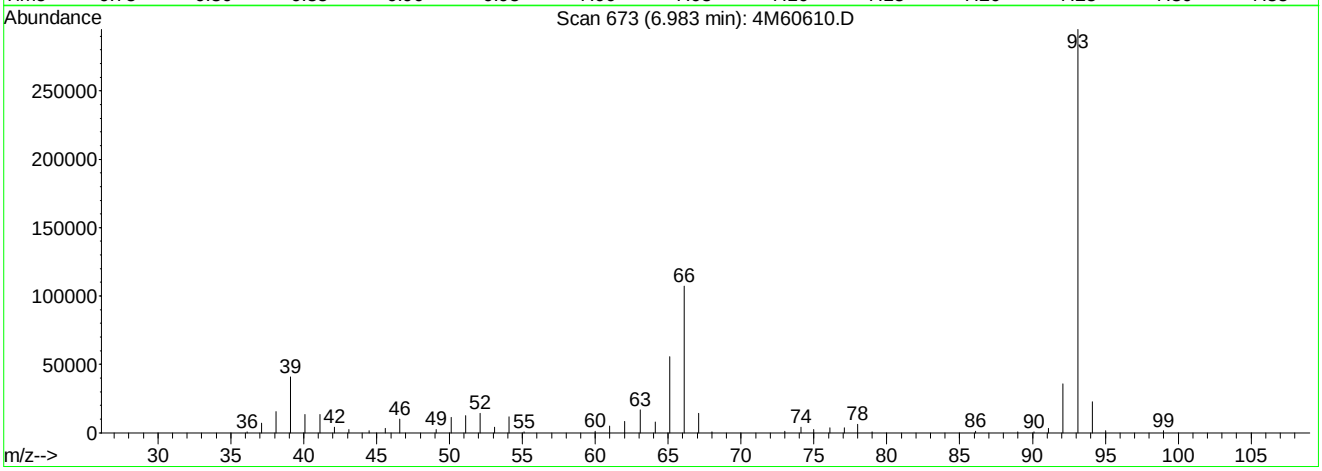
4M60610.D MEGAMIX.M Wed May 02 13:34:35 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:34 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 : Wed May 02 13:33:10 2012
Response via : Multiple Level Calibration





TIC: 4M60610.D

(11) Aniline

6.98min 29.15ug/ml mint

response 337471

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	37.43
65.00	29.20	19.52
0.00	0.00	0.00

4M60610.D MEGAMIX.M Wed May 02 3 2012

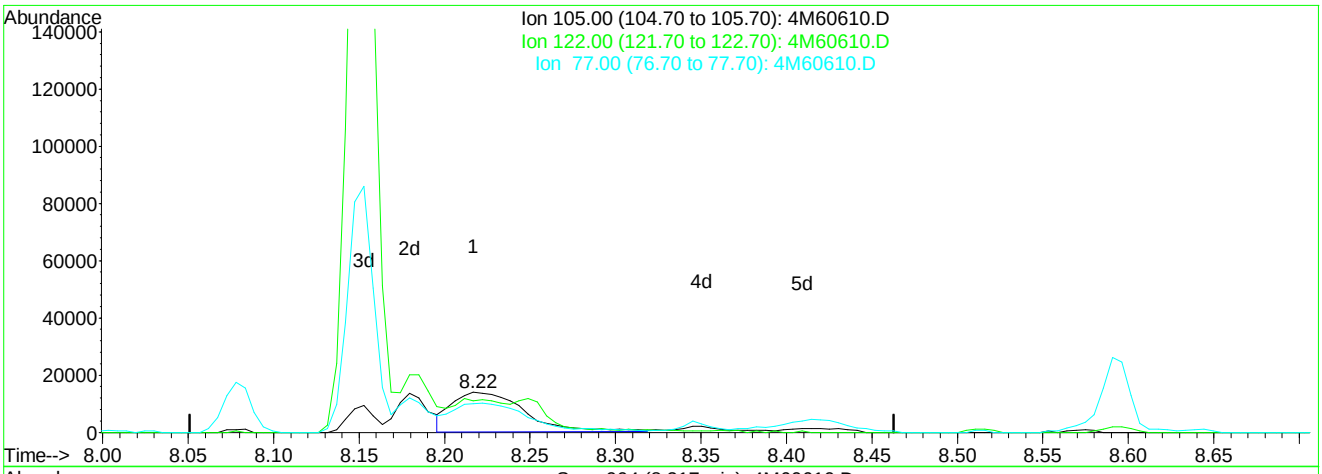
Analyst: 05/02/2012 15:06 Supervisor: 05/03/2012 14:39

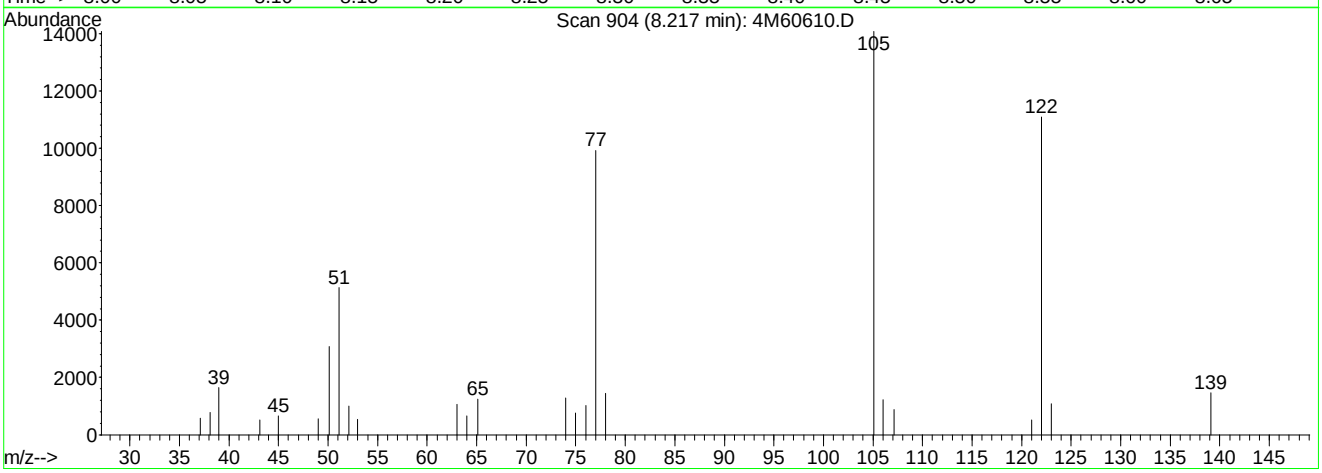
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:34 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 : Wed May 02 13:33:10 2012
Response via : Single Level Calibration





TIC: 4M60610.D

(39) Benzoic Acid

8.22min 8.22ug/ml

response 40909

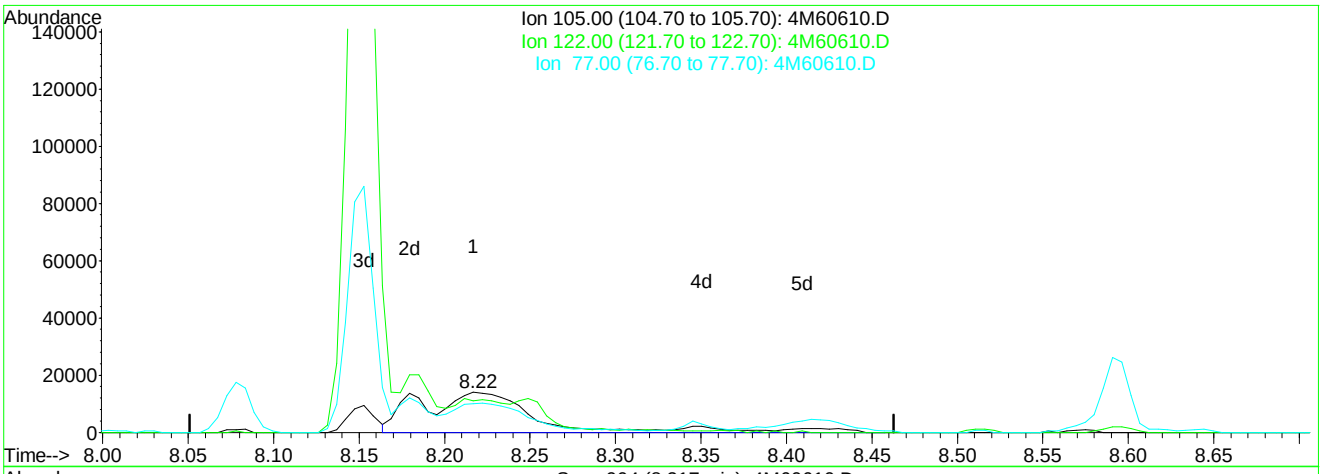
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	0.00#
77.00	70.40	71.52
0.00	0.00	0.00

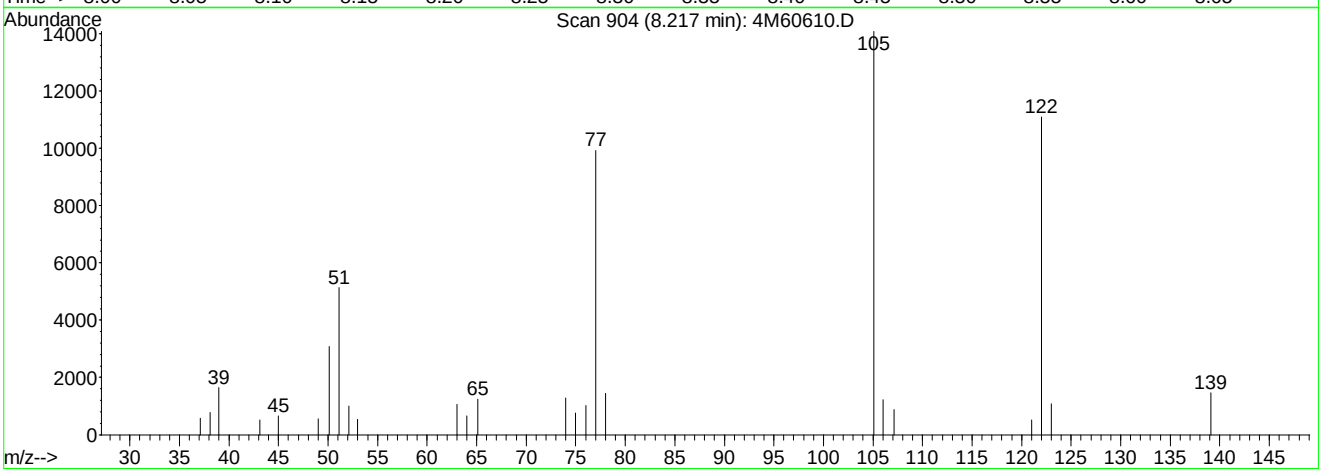
4M60610.D MEGAMIX.M Wed May 02 13:34:44 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60610.D Vial: 11
Acq On : 1 May 2012 18:39 Operator: CAA
Sample : WG396102-02 LCS 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:34 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 : Wed May 02 13:33:10 2012
Response via : Single Level Calibration





TIC: 4M60610.D

(39) Benzoic Acid

8.22min 13.73ug/ml mint

response 68322

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	0.00#
77.00	70.40	42.83
0.00	0.00	0.00

4M60610.D MEGAMIX.M Wed May 02 13:33:13 2012

Analyst: 05/02/2012 15:06 Supervisor: 05/03/2012 14:39

#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\050112\4M60611.D Vial: 12
Acq On : 1 May 2012 19:13 Operator: CAA
Sample : WG396102-03 LCS DUP 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:24 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	218519	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	836365	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	465378	40.00	ug/ml	0.00
87) Phenanthrene-d10	12.00	188	836874	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	755455	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	701904	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	555416	83.8316	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 83.83%			
12) Phenol-d5	6.88	99	669491	86.3403	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 86.34%			
31) Nitrobenzene-d5	7.85	82	308975	43.6785	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 87.36%			
59) 2-Fluorobiphenyl	9.64	172	696375	44.8117	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 89.62%			
86) 2,4,6-Tribromophenol	11.21	330	210432	101.3990	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 101.40%			
117) p-Terphenyl-d14	14.03	244	790747	56.7906	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 113.58%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.28	88	99019	36.3579	ug/ml#	90
3) n-Nitrosodimethylamine	4.70	74	172536	42.7839	ug/ml	97
4) Pyridine	4.72	79	237413	33.2062	ug/ml	89
5) 2-Picoline	5.50	93	293982	37.7882	ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	134826	40.1756	ug/ml	89
7) Methyl Methanesulfonate	5.91	80	155561	40.8284	ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	144096	40.0506	ug/ml	95
10) Ethyl Methanesulfonate	6.54	79	198058	39.6882	ug/ml	97
11) Aniline	6.98	93	398875	34.8100	ug/ml	90
13) Phenol	6.90	94	350206	42.2975	ug/ml	97
14) bis(2-Chloroethyl)ether	7.01	63	218409	42.1287	ug/ml#	37
15) Pentachloroethane	7.02	167	83823	30.0164	ug/ml	97
16) 2-Chlorophenol	7.11	128	306678	41.3629	ug/ml	98
17) 1,3-Dichlorobenzene	7.26	146	236311	28.6351	ug/ml	100
18) 1,4-Dichlorobenzene	7.31	146	249591	29.6534	ug/ml	99
19) Benzyl Alcohol	7.40	108	208630	43.4590	ug/ml	94
20) 1,2-Dichlorobenzene	7.50	146	250764	32.0806	ug/ml	99
21) 2-Methylphenol	7.49	107	238854	41.8364	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.53	45	397782	37.3725	ug/ml	94
23) 3-,4-Methylphenol	7.61	107	356834	48.0819	ug/ml	90
24) n-Nitrosopyrrolidine	7.67	100	152473	45.5069	ug/ml	96
25) n-Nitrosodipropylamine	7.67	70	222406	47.6412	ug/ml	94
26) Acetophenone	7.68	105	750735	81.7716	ug/ml	99
27) n-Nitrosomorpholine	7.68	56	167115	38.3712	ug/ml	94
28) o-Toluidine	7.73	106	393914	33.9386	ug/ml	99
29) Hexachloroethane	7.81	117	77911	24.9974	ug/ml	100
32) Nitrobenzene	7.87	77	313278	44.4343	ug/ml	98
33) n-Nitrosopiperidine	8.01	114	157668	41.7771	ug/ml	95
34) Isophorone	8.08	82	608243	47.2646	ug/ml	99
35) 2-Nitrophenol	8.19	139	178543	42.9596	ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	304573	42.6783	ug/ml	98
37) 0,0,0-Triethyl Phosphoroth	8.26	198	157447	44.1910	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	484737	49.5642	ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60611.D MEGAMIX.M Wed May 02 13:45:13 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60611.D Vial: 12
Acq On : 1 May 2012 19:13 Operator: CAA
Sample : WG396102-03 LCS DUP 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:24 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Benzoic Acid	8.22	105	29399	5.9774 ug/ml#	47
40) 2,4-Dichlorophenol	8.41	162	269189	45.0580 ug/ml	99
41) a,a-Dimethylphenethylamine	8.42	58	788192	78.0354 ug/ml	100
42) 1,2,4-Trichlorobenzene	8.52	180	240561	35.4613 ug/ml	99
43) Naphthalene	8.59	128	909279	41.0510 ug/ml	97
44) 4-Chloroaniline	8.62	127	376510	46.1544 ug/ml	96
45) 2,6-Dichlorophenol	8.65	162	271477	44.0365 ug/ml	99
46) Hexachloropropene	8.71	213	83985	22.0897 ug/ml	99
47) Hexachlorobutadiene	8.74	225	118572	34.1412 ug/ml	99
48) n-Nitrosodi-n-Butylamine	8.93	84	274429	46.1376 ug/ml	93
49) p-Phenylenediamine	9.06	108	23802	46.2465 ug/ml	94
50) 4-Chloro-3-Methylphenol	9.06	107	290236	47.8739 ug/ml	98
51) Safrole	9.15	162	238140	41.3017 ug/ml	100
52) 2-Methylnaphthalene	9.28	142	613729	42.6486 ug/ml	99
53) 1-Methylnaphthalene	9.40	142	548372	40.3058 ug/ml	99
55) 1,2,4,5-Tetrachlorobenzene	9.49	216	260371	42.6939 ug/ml	99
56) Hexachlorocyclopentadiene	9.50	237	95604	30.3079 ug/ml	99
57) 2,4,6-Trichlorophenol	9.57	196	210572	49.2754 ug/ml	100
58) 2,4,5-Trichlorophenol	9.62	196	233094	52.9885 ug/ml	99
60) Isosafrole	9.68	162	442631	75.2654 ug/ml	99
61) 2-Chloronaphthalene	9.79	162	688126	52.3643 ug/ml	99
62) 1-Chloronaphthalene	9.83	162	547807	44.0248 ug/ml	98
63) 2-Nitroaniline	9.89	65	186697	49.5644 ug/ml	100
64) 1,4-Naphthoquinone	9.95	158	226130	43.5757 ug/ml	99
65) Dimethylphthalate	10.05	163	787537	53.4869 ug/ml	100
66) 1,3-Dinitrobenzene	10.10	168	141779	50.2160 ug/ml	97
67) 2,6-Dinitrotoluene	10.15	165	192067	52.2196 ug/ml	99
68) Acenaphthylene	10.23	152	1046603	49.6029 ug/ml	100
69) 3-Nitroaniline	10.30	138	187059	68.9498 ug/ml	98
70) 2,4-Dinitrophenol	10.41	184	109572	58.2819 ug/ml	64
71) Acenaphthene	10.42	154	646363	47.0321 ug/ml	99
72) 4-Nitrophenol	10.41	65	124060	45.7705 ug/ml	96
73) 2,4-Dinitrotoluene	10.55	165	256047	54.7115 ug/ml	98
74) Pentachlorobenzene	10.60	250	254994	46.4385 ug/ml	99
75) Dibenzofuran	10.57	168	908283	49.3584 ug/ml	100
76) 2,3,4,6-Tetrachlorophenol	10.72	232	165391	48.7523 ug/ml	96
77) 1-Naphthylamine	10.65	143	477364	120.6195 ug/ml#	65
78) 2-Naphthylamine	10.72	143	458250	190.2244 ug/ml#	57
79) Diethylphthalate	10.76	149	799800	54.5420 ug/ml	99
80) Thionazin	10.86	107	129746	53.1754 ug/ml	93
81) Fluorene	10.93	166	763549	48.8209 ug/ml	99
82) 4-Chlorophenyl Phenyl Ethe	10.88	204	370152	50.3679 ug/ml	99
83) 4-Nitroaniline	10.94	138	192969	57.4613 ug/ml	98
84) 5-Nitro-o-Toluidine	10.94	152	204173	55.2955 ug/ml	94
85) 1,2-Diphenylhydrazine	11.05	77	727734	51.0278 ug/ml	97
88) 4,6-Dinitro-2-Methylphenol	10.99	198	158118	60.6931 ug/ml	87
89) n-Nitrosodiphenylamine	11.00	169	1197375	88.4270 ug/ml	99
90) Sulfotepp	11.20	322	117920	48.7431 ug/ml	93
91) Sym-Trinitrobenzene	11.28	75	187568	56.6605 ug/ml	98
92) Diallate	11.33	86	527210	95.4718 ug/ml#	80
93) Phenacetin	11.32	108	365587	51.5347 ug/ml	93
94) Phorate	11.34	75	468480	53.1766 ug/ml#	98
95) 4-Bromophenyl Phenyl Ether	11.41	248	219106	51.7481 ug/ml	99
96) Hexachlorobenzene	11.63	284	236258	51.0446 ug/ml	99

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

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60611.D Vial: 12
Acq On : 1 May 2012 19:13 Operator: CAA
Sample : WG396102-03 LCS DUP 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:33:24 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

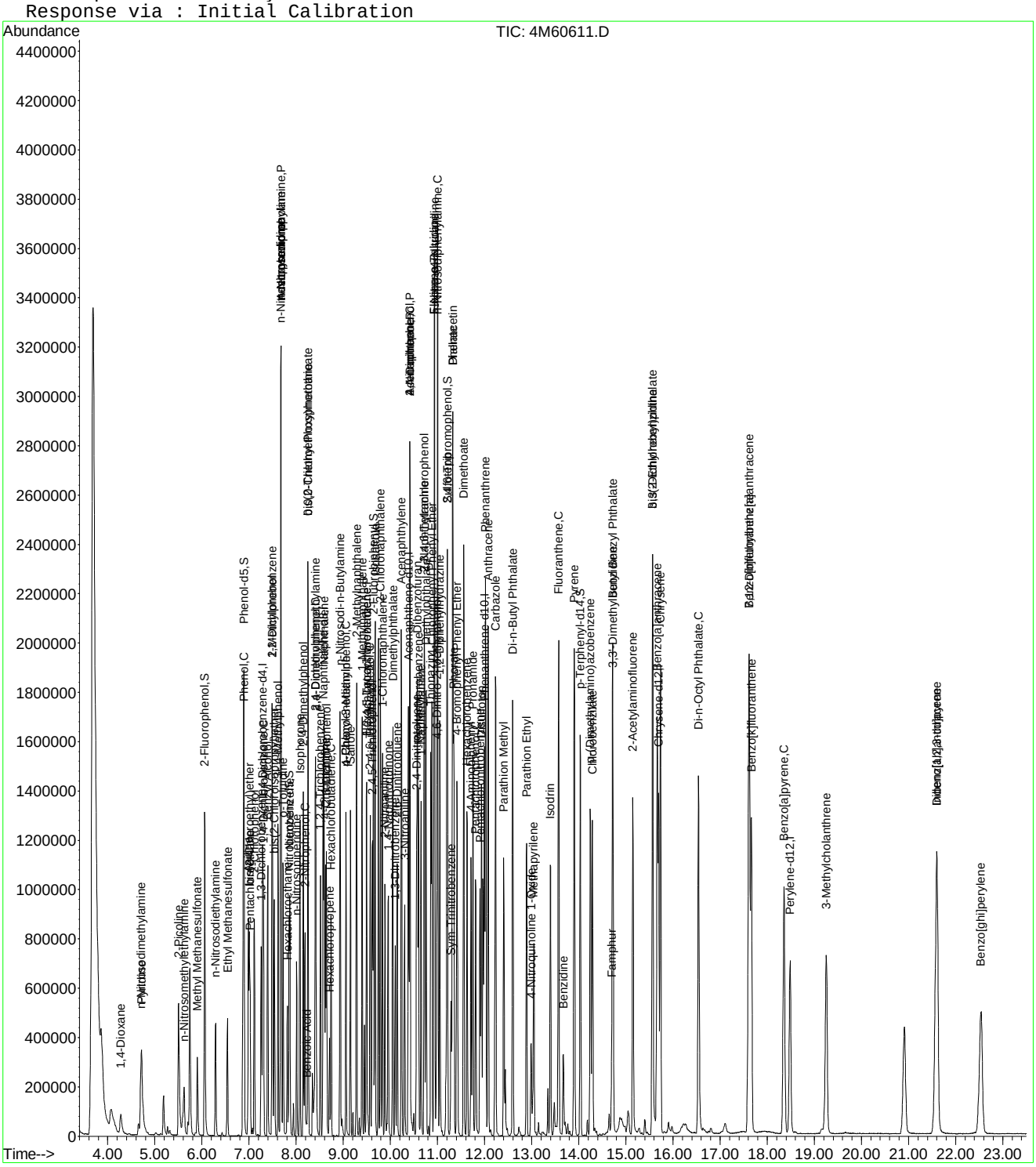
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	294853	65.0627	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	554294	86.8668	ug/ml	100
99)	Pentachlorophenol	11.81	266	167446	57.2108	ug/ml	99
100)	Pronamide	11.75	173	344108	50.5803	ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	84020	52.3778	ug/ml	98
102)	Disulfoton	11.93	88	395333	52.2101	ug/ml	99
103)	Phenanthrene	12.02	178	1145330	51.5971	ug/ml	100
104)	Anthracene	12.08	178	1079634	47.4347	ug/ml	99
105)	Carbazole	12.24	167	1059863	53.1808	ug/ml	100
106)	Parathion Methyl	12.41	109	268798	58.0268	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	1360457	54.9452	ug/ml	100
108)	Parathion Ethyl	12.89	97	162348	57.5646	ug/ml	96
109)	4-Nitroquinoline 1-Oxide	12.99	190	68381	33.3706	ug/ml	95
110)	Methapyrilene	13.04	58	287877	71.8511	ug/ml	90
111)	Isodrin	13.40	193	122898	51.5458	ug/ml	100
112)	Fluoranthene	13.57	202	1190827	51.1950	ug/ml	100
114)	Benzidine	13.67	184	228475	216.9867	ug/ml	100
115)	Pyrene	13.90	202	1252092	55.4131	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.25	225	250798	53.7590	ug/ml	98
119)	Chlorobenzilate	14.29	251	331030	53.8340	ug/ml	96
120)	Famphur	14.69	218	94941	354.4264	ug/ml#	33
121)	Butyl Benzyl Phthalate	14.72	149	630157	61.3134	ug/ml	98
122)	3,3'-Dimethylbenzidine	14.73	212	300915	42.1457	ug/ml#	93
123)	2-Acetylaminofluorene	15.15	181	468836	53.3246	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.56	149	833017	59.3944	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.57	252	316667	76.0648	ug/ml	100
126)	Benzo[a]anthracene	15.67	228	1069746	53.3764	ug/ml	100
127)	Chrysene	15.73	228	1055220	56.0906	ug/ml	99
129)	Di-n-Octyl Phthalate	16.54	149	1427868	62.9921	ug/ml	98
130)	7,12-Dimethylbenz[a]anthra	17.62	256	460219	50.6297	ug/ml	99
131)	Benzo[b]fluoranthene	17.62	252	1136756	56.0055	ug/ml	99
132)	Benzo[k]fluoranthene	17.66	252	1068406	56.7858	ug/ml	97
133)	Benzo[a]pyrene	18.36	252	1043543	56.3525	ug/ml	99
134)	3-Methylcholanthrene	19.26	268	516724	51.3930	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.60	276	1140379	55.2947	ug/ml	99
136)	Dibenz[ah]anthracene	21.60	278	956223	55.5940	ug/ml	99
137)	Benzo[ghi]perylene	22.54	276	921194	53.9945	ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60611.D MEGAMIX.M Wed May 02 13:45:13 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60611.D Vial: 12
Acq On : 1 May 2012 19:13 Operator: CAA
Sample : WG396102-03 LCS DUP 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:33 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 : Wed May 02 13:33:10 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60611.D Vial: 12
Acq On : 1 May 2012 19:13 Operator: CAA
Sample : WG396102-03 LCS DUP 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:55:12 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 13:54:56 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

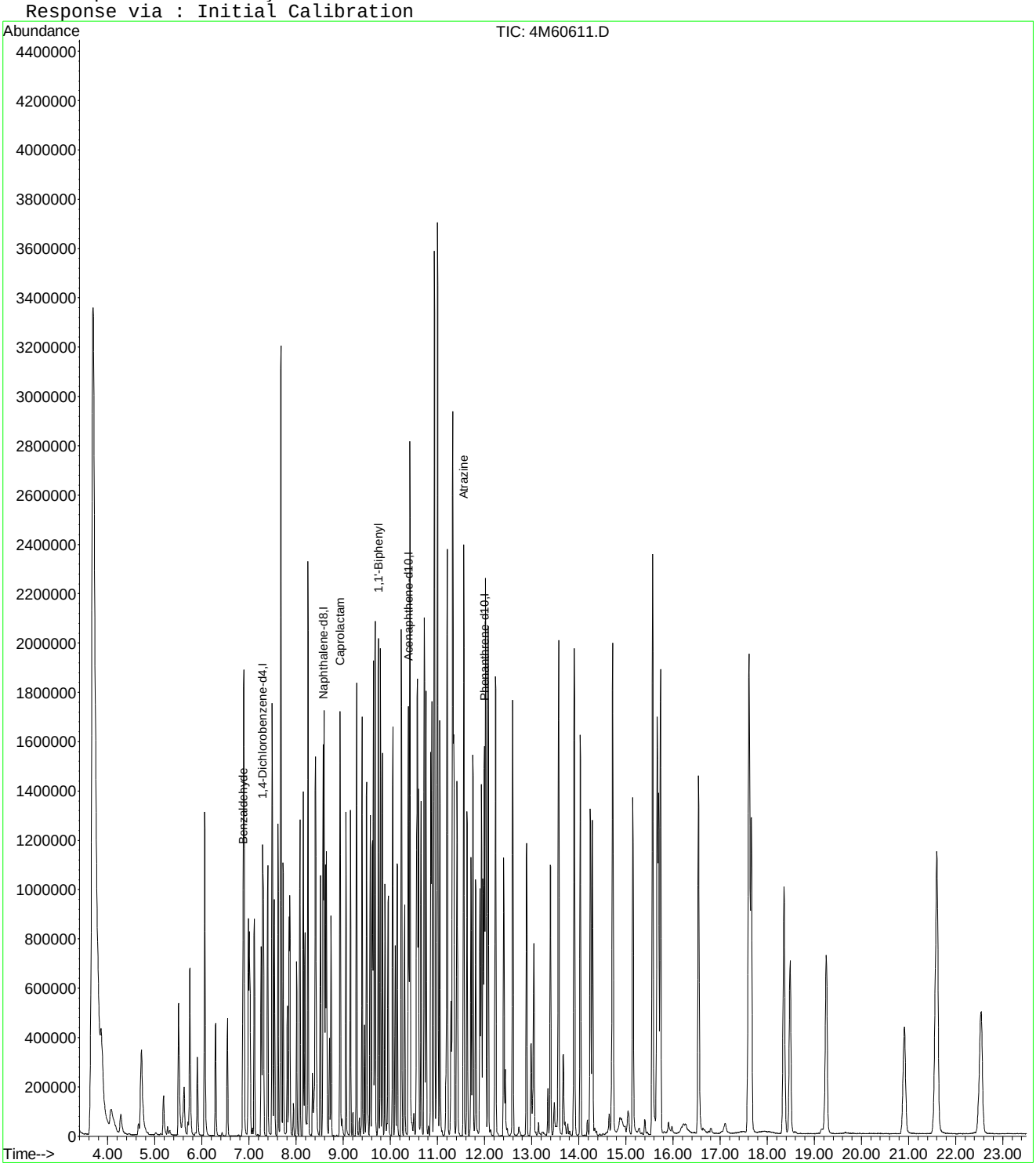
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	218519	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	836365	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	465378	40.00	ug/mL	0.00
7) Phenanthrene-d10	12.00	188	836874	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.87	105	186274	32.0031	ug/L	98
4) Caprolactam	8.93	55	158483	58.0243	ug/L	91
6) 1,1'-Biphenyl	9.75	154	773728	40.5086	ug/L	100
8) Atrazine	11.56	200	202838	43.7883	ug/L	98

(#) = qualifier out of range (m) = manual integration
4M60611.D TCL.M Wed May 02 13:55:12 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60611.D Vial: 12
Acq On : 1 May 2012 19:13 Operator: CAA
Sample : WG396102-03 LCS DUP 04/25 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:55 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 13:54:56 2012
Response via : Initial Calibration



2.2.2 Semivolatiles GC/MS Data (827-PAHL)

2.2.2.1 Summary Data

Login Number: L12040844
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: There were no MS/MSD results associated with this sample delivery group, due to insufficient volume of sample. The laboratory included an LCS and LCS duplicate in the preparation batch in lieu of the NELAC prescribed MS/MSD. Microbac recommends site specific MS/MSD samples to avoid possible data qualification.

SAMPLES

Samples: All acceptance criteria were met.

Internal Standards: All acceptance criteria were met.

Surrogates: Recoveries out of range were observed for the following surrogate: 2-Fluorobiphenyl. Please see the applicable QC report for a detailed presentation of the failures.

No analytes were detected above the RL in the samples with failing recoveries.

Manual Integration Reason Codes

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

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

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

in standards or samples.

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

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

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

Narrative ID: 45722
Approved By: Mike Cochran



Certificate of Analysis

Sample #:	L12040844-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-16I-042412	**Prep Method:**	3510C	**Prep Date:**	04/27/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG396497	**Analyst:**	CAA	**Run Date:**	04/30/2012 12:30
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	7M54816
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0532	0.0266
Acenaphthene	83-32-9		U	0.0532	0.0266
Acenaphthylene	208-96-8		U	0.0532	0.0266
Anthracene	120-12-7		U	0.0532	0.0266
Benzo(a)anthracene	56-55-3		U	0.0532	0.0266
Benzo(a)pyrene	50-32-8		U	0.0532	0.0266
Benzo(b)fluoranthene	205-99-2		U	0.0532	0.0266
Benzo(g,h,i)perylene	191-24-2		U	0.0532	0.0266
Benzo(k)fluoranthene	207-08-9		U	0.0532	0.0266
Chrysene	218-01-9		U	0.0532	0.0266
Dibenzo(a,h)anthracene	53-70-3		U	0.0532	0.0266
Fluoranthene	206-44-0		U	0.0532	0.0266
Fluorene	86-73-7		U	0.0532	0.0266
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0532	0.0266
Naphthalene	91-20-3		U	0.0532	0.0266
Phenanthrene	85-01-8		U	0.0532	0.0266
Pyrene	129-00-0		U	0.0532	0.0266

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	46.7	43	116	
Nitrobenzene-d5	48.3	35	114	
p-Terphenyl-d14	58.4	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-16S-042412	**Prep Method:**	3510C	**Prep Date:**	04/27/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG396497	**Analyst:**	CAA	**Run Date:**	04/30/2012 12:58
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	7M54817
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	0.0301		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	41.1	43	116	*
Nitrobenzene-d5	45.1	35	114	
p-Terphenyl-d14	49.8	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-07-042412	**Prep Method:**	3510C	**Prep Date:**	04/27/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG396497	**Analyst:**	CAA	**Run Date:**	04/30/2012 13:25
Collect Date:	04/24/2012 13:15	**Dilution:**	1	**File ID:**	7M54818
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0510	0.0255
Acenaphthene	83-32-9		U	0.0510	0.0255
Acenaphthylene	208-96-8		U	0.0510	0.0255
Anthracene	120-12-7		U	0.0510	0.0255
Benzo(a)anthracene	56-55-3		U	0.0510	0.0255
Benzo(a)pyrene	50-32-8		U	0.0510	0.0255
Benzo(b)fluoranthene	205-99-2		U	0.0510	0.0255
Benzo(g,h,i)perylene	191-24-2		U	0.0510	0.0255
Benzo(k)fluoranthene	207-08-9		U	0.0510	0.0255
Chrysene	218-01-9		U	0.0510	0.0255
Dibenzo(a,h)anthracene	53-70-3		U	0.0510	0.0255
Fluoranthene	206-44-0		U	0.0510	0.0255
Fluorene	86-73-7		U	0.0510	0.0255
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0510	0.0255
Naphthalene	91-20-3		U	0.0510	0.0255
Phenanthrene	85-01-8		U	0.0510	0.0255
Pyrene	129-00-0		U	0.0510	0.0255

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	55.8	43	116	
Nitrobenzene-d5	57.2	35	114	
p-Terphenyl-d14	63.0	33	141	

U	Not detected at or above adjusted sample detection limit.

2.2.2.2 QC Summary Data

Example 8270 Calculations

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

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

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

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

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

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

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

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

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

Dry weight correction:

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

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

4.0 Concentration from Linear Regression

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

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

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

m = slope from curve plot

b = intercept from curve plot

Step 2: Calculate y from Quantitation Report

y = 16790/784838 = 0.02139

Step 3: Solve for x

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

Step 4: Solve for analyte concentration Cx

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

Example Spreadsheet Calculation:

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

5.0 Concentration from Quadratic Regression

Step 1 - Retrieve Curve Data from Plot, y = Ax^2 + Bx + C
Where:
Ax^2 + Bx + (C - y) = 0
A, B, C = constants from the ICAL quadratic regression
y = Response ratio = Area of analyte/Area of internal standard (IS)
x = Amount ratio = Concentration of analyte/concentration of IS

Step 2: Calculate y from Quantitation Report

y = Ax/Ais

Step 3: Solve for x using the quadratic formula
Ax^2 + Bx + C - y = 0

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

Step 4: Solve for analyte concentration Cx

Cx = (Cis)(Amount ratio)

Example Spreadsheet Calculation:

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

Microbac Laboratories Inc.
Sample Extract Log

Workgroup: WG396339
Analyst: CPD
Spike Analyst: CPD
Method: 3510C
Run Date: 04/27/2012 09:30
SOP: EXA01 Revison 15
Spike Witness: CSH
Surr Solution: STD50786

Methylene Chloride Lot #: COA16058
Sodium Sulfate,Anhydrous,Granular (Lot # COA15788

	SAMPLE #	Type	Reference	pH	Prod	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12040844-01	SAMP		N	827-PAHL	940 mL	.25 mL			1 mL	Transparent
2	L12040844-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
3	L12040844-05	SAMP		N	827-PAHL	980 mL	.25 mL			1 mL	Colored
4	L12040891-08	SAMP		N	827-PAHL-SPE	1000 mL	.25 mL			1 mL	Transparent
5	L12040891-09	SAMP		N	827-PAHL-SPE	980 mL	.25 mL			1 mL	Transparent
6	L12040898-01	SAMP		N	827-PAHL	930 mL	.25 mL			1 mL	Colored
7	L12040898-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Colored
8	L12040898-05	SAMP		N	827-PAHL	980 mL	.25 mL			1 mL	Transparent
9	L12040898-08	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
10	L12040898-10	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Colored
11	L12040898-12	SAMP		N	827-PAHL	970 mL	.25 mL			1 mL	Transparent
12	L12040898-14	SAMP		N	827-PAHL	980 mL	.25 mL			1 mL	Transparent
13	WG396339-01	BLANK		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
14	WG396339-02	LCS		N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
15	WG396339-03	LCS2		N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent

Due to insufficient sample volume, this preparation batch failed to include the method prescribed MS and MSD.

L12040898-01	EMULSIONS(N), INIT. PH~11, ADDED 1:1 H2SO4 (RGT17192) TO ADJ. TO ~7, STRONG ODOR
L12040898-05	EMULSIONS(N)
L12040898-10	EMULSIONS(N), INIT. PH~10, ADDED 1:1 H2SO4 (RGT17192) TO ADJ. TO ~7, STRONG ODOR
L12040898-12	EMULSIONS(N)

Analyst: 

Reviewer: 

EXTRACT - Modified 10/22/2008
PDF ID: 2395719
Report generated: 04/27/2012 15:59

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: 043012
Analyst1: CAA Analyst2: NA
Method: 8270L SOP: MSS03 Rev: 10

Maintenance Log ID: 41545 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG396498, WG396497
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	7M54807	WG396502-01 5PPM DFTPP STD	1	1	STD50659	04/30/12 08:30
2	7M54808	WG396502-02 1PPM PAHL STD	1	1	STD49560	04/30/12 08:47
3	7M54809	WG396339-01 BLK 04/27	1	1		04/30/12 09:14
4	7M54810	WG396339-02 LCS 04/27	1	1		04/30/12 09:42
5	7M54811	WG396339-03 LCS DUP 04/27	1	1		04/30/12 10:09
6	7M54812	WG396337-02 BLK 04/27	7	1	SOIL	04/30/12 10:37
7	7M54813	WG396337-03 LCS 04/27	7	1	SOIL	04/30/12 11:04
8	7M54814	L12040891-08	1	1		04/30/12 11:34
9	7M54815	L12040891-09	1	1		04/30/12 12:02
10	7M54816	L12040844-01	1	1		04/30/12 12:30
11	7M54817	L12040844-03	1	1		04/30/12 12:58
12	7M54818	L12040844-05	1	1		04/30/12 13:25
13	7M54819	L12040898-01	1	1		04/30/12 13:53
14	7M54820	L12040898-03	1	1		04/30/12 14:21
15	7M54821	L12040898-05	1	1		04/30/12 14:48
16	7M54822	L12040898-08	1	1		04/30/12 15:16
17	7M54823	L12040898-10	1	1		04/30/12 15:44
18	7M54824	L12040891-01	7	1	SOIL	04/30/12 16:12
19	7M54825	L12040891-02 REF	7	1	SOIL	04/30/12 16:39
20	7M54826	L12040891-03 MS	7	1	SOIL	04/30/12 17:07
21	7M54827	L12040891-04 MSD	7	1	SOIL	04/30/12 17:35
22	7M54828	L12040891-05	7	1	SOIL	04/30/12 18:02
23	7M54829	L12040891-06	7	1	SOIL	04/30/12 18:30
24	7M54830	L12040891-07	7	1	SOIL	04/30/12 18:58
25	7M54831	L12040864-04 20X	7	20	SOIL	04/30/12 19:25
26	7M54832	L12040898-12	1	1		04/30/12 19:53
27	7M54833	L12040898-14	1	1		04/30/12 20:20

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8				
	L12040891-08 - SS FBP low, needs re-extracted.			
11				
	L12040844-03 - SS FBP low.			

Page: 1 Approved: 01-MAY-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS7 Dataset: 043012
Analyst1: CAA Analyst2: NA
Method: 8270L SOP: MSS03 Rev: 10

Maintenance Log ID: 41545 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG396498, WG396497
Internal STD: STD51409 Surrogate STD: NA
CCV STD: LCS STD:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
13				
	L12040898-01 - SS FBP low.			
19				
	L12040891-02 REF - SS FBP low, needs re-extracted.			
20				
	L12040891-03 MS - Needs re-extracted due to REF.			
21				
	L12040891-04 MSD - Needs re-extracted due to REF.			
22	X	10	Over Calibration Range	#12, 13, 14, 16, 18, 19, 21, 22, 23, 24, 26
	L12040891-05 - SS FBP low, needs re-extracted.			
24				
	L12040891-07 - SS FBP low, needs re-extracted.			
25				
	L12040864-04 20X - Sample was analyzed at a dilution due to extract appearance and viscosity.			

Page: 2 Approved: 01-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: 30-APR-2012
Analyst: CAA
Analyst: NA
Method: 8270L
Instrument: HPMS7
Curve Workgroup: NA
Runlog ID: 46402
Analytical Workgroups: L12040891, L12040844, L12040898, L12040864

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	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:
01-MAY-2012

Secondary Reviewer:
01-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-01-2012 09:33:06

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C **AAB#:** WG396497

Login Number: L12040844

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-16I-042412	01	04/24/12					04/27/12	2.9	7		04/30/12	3.1	40	
MW-16S-042412	03	04/24/12					04/27/12	2.9	7		04/30/12	3.1	40	
MW-07-042412	05	04/24/12					04/27/12	2.8	7		04/30/12	3.2	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2397576
Report generated 05/01/2012 10:29

Login Number: L12040844
Instrument Id: HPMS7
Workgroup (AAB#): WG396497

Method: 8270L
CAL ID: HPMS7-04-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3
L12040844-01	1.00	01	46.7	48.3	58.4
L12040844-03	1.00	01	41.1	45.1	49.8
L12040844-05	1.00	01	55.8	57.2	63.0
WG396339-01	1.00	01	68.1	71.1	73.4
WG396339-02	1.00	01	73.7	76.4	93.4
WG396339-03	1.00	01	71.7	74.8	91.3

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: 2397585
Report generated: 05/01/2012 10:30

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Blank File ID: 7M54809
Prep Date: 04/27/12 09:30
Analyzed Date: 04/30/12 09:14
Analyst: CAA

Work Group: WG396497
Blank Sample ID: WG396339-01
Instrument ID: HPMS7
Method: 8270C

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396339-02	7M54810	04/30/12 09:42	01
LCS2	WG396339-03	7M54811	04/30/12 10:09	01
MW-16I-042412	L12040844-01	7M54816	04/30/12 12:30	01
MW-16S-042412	L12040844-03	7M54817	04/30/12 12:58	01
MW-07-042412	L12040844-05	7M54818	04/30/12 13:25	01

Report Name: BLANK_SUMMARY
PDF File ID: 2397577
Report generated 05/01/2012 10:29

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/27/12 09:30 Sample ID: WG396339-01
Instrument ID: HPMS7 Run Date: 04/30/12 09:14 Prep Method: 3510C
File ID: 7M54809 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG396497 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	68.1	43	-	116	PASS
Nitrobenzene-d5	71.1	35	-	114	PASS
p-Terphenyl-d14	73.4	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: 2397578
01-MAY-2012 10:29

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 Analyst: CAA Prep Method: 3510C
Instrument ID: HPMS7 Matrix: Water Method: 8270C
Workgroup (AAB#): WG396497 Units: ug/L
QC Key: WATERLOO Lot #: STD50386

Sample ID: WG396339-02 LCS File ID: 7M54810 Run Date: 04/30/2012 09:42
Sample ID: WG396339-03 LCS2 File ID: 7M54811 Run Date: 04/30/2012 10:09

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Methylnaphthalene	1.00	0.905	90.5	1.00	0.875	87.5	3.31	30 - 105	30	
Acenaphthene	1.00	0.801	80.1	1.00	0.779	77.9	2.79	30 - 110	30	
Acenaphthylene	1.00	0.841	84.1	1.00	0.807	80.7	4.16	30 - 115	30	
Anthracene	1.00	0.895	89.5	1.00	0.847	84.7	5.50	30 - 130	30	
Benzo(a)anthracene	1.00	0.841	84.1	1.00	0.817	81.7	2.88	50 - 150	30	
Benzo(a)pyrene	1.00	0.952	95.2	1.00	0.946	94.6	0.629	50 - 140	30	
Benzo(b)fluoranthene	1.00	0.918	91.8	1.00	0.902	90.2	1.76	40 - 150	30	
Benzo(g,h,i)perylene	1.00	0.895	89.5	1.00	0.933	93.3	4.12	30 - 150	30	
Benzo(k)fluoranthene	1.00	0.947	94.7	1.00	0.946	94.6	0.112	40 - 150	30	
Chrysene	1.00	0.935	93.5	1.00	0.913	91.3	2.38	45 - 145	30	
Dibenzo(a,h)anthracene	1.00	0.886	88.6	1.00	0.937	93.7	5.61	25 - 155	30	
Fluoranthene	1.00	0.977	97.7	1.00	0.930	93.0	4.92	40 - 150	30	
Fluorene	1.00	0.801	80.1	1.00	0.779	77.9	2.81	30 - 120	30	
Indeno(1,2,3-cd)pyrene	1.00	0.890	89.0	1.00	0.933	93.3	4.78	35 - 150	30	
Naphthalene	1.00	0.811	81.1	1.00	0.791	79.1	2.42	30 - 100	30	
Phenanthrene	1.00	0.849	84.9	1.00	0.816	81.6	3.97	30 - 130	30	
Pyrene	1.00	0.951	95.1	1.00	0.902	90.2	5.38	50 - 150	30	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Nitrobenzene-d5	76.4	74.8	35 - 114	PASS
2-Fluorobiphenyl	73.7	71.7	43 - 116	PASS
p-Terphenyl-d14	93.4	91.3	33 - 141	PASS

* EXCEEDS %REC LIMIT
# EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2397579
Report generated: 05/01/2012 10:29

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040844
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: 2397582
Report generated 05/01/2012 10:29

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040844
Instrument: HPMS7
Analyst: CAA
Workgroup: WG396502

Tune ID: WG396502-01
Run Date: 04/30/2012
Run Time: 08:30
File ID: 7M54807
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	44.9	215336	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	46.2	221397	PASS
70.0	69.0	0	2.00	0.628	1391	PASS
127	198	40.0	60.0	58.4	279920	PASS
197	198	0	1.00	0.183	876	PASS
198	198	100	100	100	479125	PASS
199	198	5.00	9.00	6.74	32280	PASS
275	198	10.0	30.0	22.4	107437	PASS
365	198	1.00	100	2.33	11179	PASS
441	443	0.0100	100	76.1	47970	PASS
442	198	40.0	100	66.8	319850	PASS
443	442	17.0	23.0	19.7	63069	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG396502-02	CCV	01	04/30/2012 08:47	
WG396339-01	BLANK	01	04/30/2012 09:14	
WG396339-02	LCS	01	04/30/2012 09:42	
WG396339-03	LCS2	01	04/30/2012 10:09	
L12040844-01	MW-16I-042412	01	04/30/2012 12:30	
L12040844-03	MW-16S-042412	01	04/30/2012 12:58	
L12040844-05	MW-07-042412	01	04/30/2012 13:25	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2397582
Report generated 05/01/2012 10:29

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12040844 **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: 2397580
Report generated 05/01/2012 10:29

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040844
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: 2397580
Report generated 05/01/2012 10:29

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040844
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: 2397580
Report generated 05/01/2012 10:29

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040844
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: 2397580
Report generated 05/01/2012 10:29

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040844 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: 2397581
Report generated 05/01/2012 10:29

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396502-02
Instrument ID: HPMS7 Run Time: 08:47 Method: 8270C
File ID: 7M54808 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG396497 Cal ID: HPMS7 - 04-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Acenaphthene	CCC	1000	1010	ug/L	1.28	1.24	20	
Benzo[a]pyrene	CCC	1000	991	ug/L	1.27	0.910	20	
Fluoranthene	CCC	1000	1050	ug/L	1.37	5.38	20	
2-Methylnaphthalene		1000	1040	ug/L	0.754	4.47	20	
Acenaphthylene		1000	1030	ug/L	2.27	2.68	20	
Anthracene		1000	1010	ug/L	1.26	0.790	20	
Benzo[a]anthracene		1000	980	ug/L	1.27	2.05	20	
Benzo[b]fluoranthene		1000	962	ug/L	1.33	3.80	20	
Benzo[ghi]perylene		1000	996	ug/L	1.23	0.380	20	
Benzo[k]fluoranthene		1000	1030	ug/L	1.35	3.30	20	
Chrysene		1000	996	ug/L	1.29	0.430	20	
Dibenz[ah]anthracene		1000	1000	ug/L	1.19	0.0500	20	
Fluorene		1000	988	ug/L	1.49	1.18	20	
Indeno[1,2,3-cd]pyrene		1000	1010	ug/L	1.42	1.22	20	
Naphthalene		1000	988	ug/L	1.17	1.21	20	
Phenanthrene		1000	966	ug/L	1.20	3.42	20	
Pyrene		1000	979	ug/L	1.57	2.08	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2397583
Report generated 05/01/2012 10:30

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040844 **CCV Number:** WG396502-02
Instrument ID: HPMS7 **CAL ID:** HPMS7-04-APR-12
Workgroup (AAB#): WG396497 **Matrix:** WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG396502-02	NA	NA	83627	137315	147829	137605	139583
Upper Limit	NA	NA	167254	274630	295658	275210	279166
Lower Limit	NA	NA	41814	68658	73915	68803	69792
L12040844-01	1.00	01	71294	115974	120005	113184	118515
L12040844-03	1.00	01	76114	123115	128063	120592	126431
L12040844-05	1.00	01	79757	131599	134227	127812	133211
WG396339-01	1.00	01	71135	108438	114017	104398	112374
WG396339-02	1.00	01	66853	103301	107824	99273	105117
WG396339-03	1.00	01	71161	111173	117126	107174	113502

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: 2397584
Report generated 05/01/2012 10:30

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040844 CCV Number: WG396502-02

Instrument ID: HPMS7 CAL ID: HPMS7-04-APR-12

Workgroup (AAB#): WG396497 Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG396502-02	NA	NA	8.23	13.47	6.03	15.7	10.09
Upper Limit	NA	NA	8.73	13.97	6.53	16.2	10.59
Lower Limit	NA	NA	7.73	12.97	5.53	15.2	9.59
L12040844-01	1.00	01	8.23	13.47	6.03	15.7	10.09
L12040844-03	1.00	01	8.23	13.47	6.02	15.7	10.09
L12040844-05	1.00	01	8.23	13.47	6.03	15.7	10.09
WG396339-01	1.00	01	8.22	13.47	6.03	15.7	10.09
WG396339-02	1.00	01	8.23	13.47	6.03	15.7	10.09
WG396339-03	1.00	01	8.23	13.47	6.03	15.7	10.09

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: 2397586
Report generated 05/01/2012 10:30

2.2.2.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54816.D Vial: 10
Acq On : 30 Apr 2012 12:30 pm Operator: CAA
Sample : L12040844-01 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 07:16:49 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

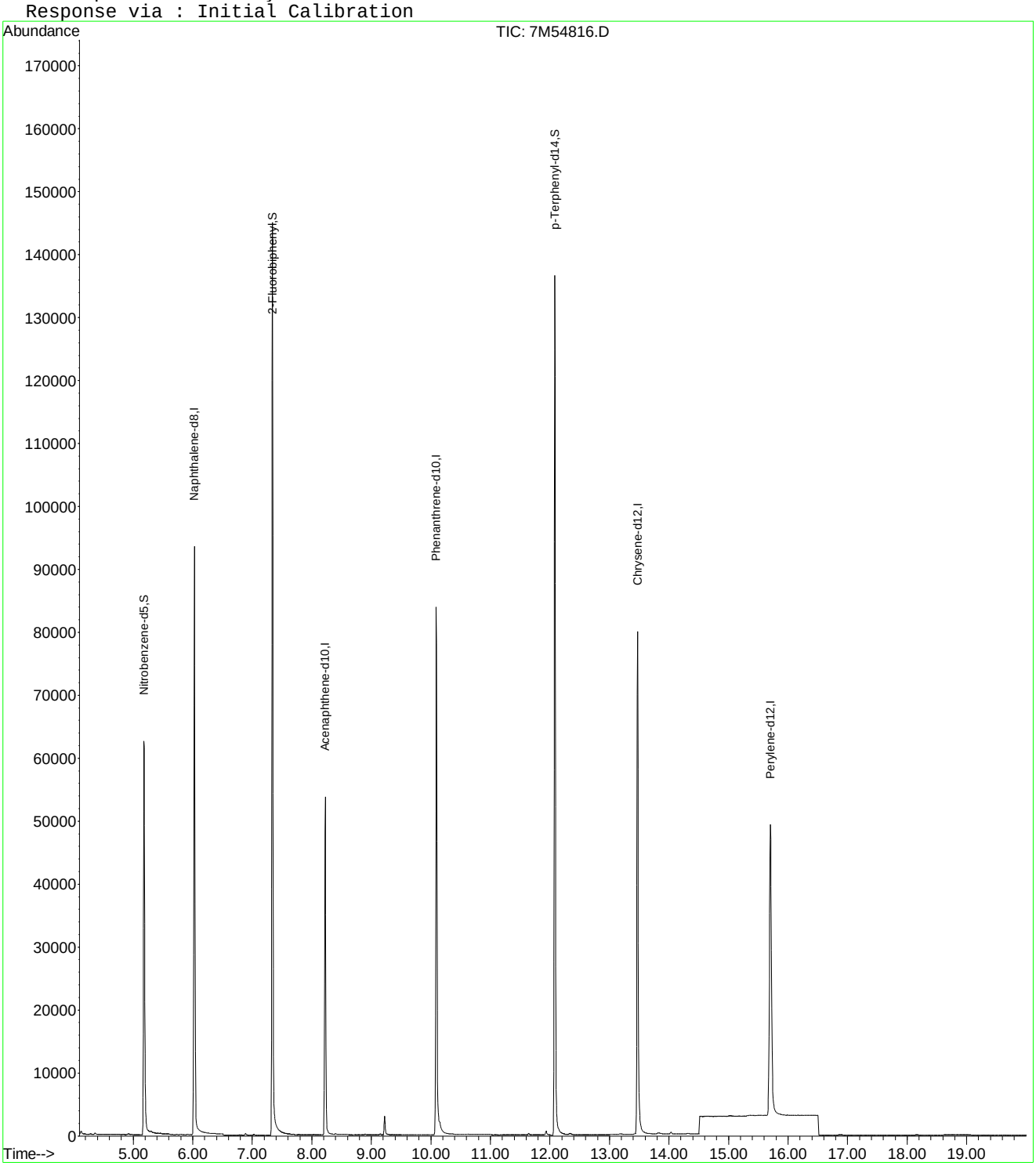
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	120005	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	71294	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	118515	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	115974	1.00	ug/ml	0.00
20) Perylene-d12	15.70	264	113184	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	60514	1.2074	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 48.40%			
7) 2-Fluorobiphenyl	7.34	172	137630	1.1672	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 46.80%			
17) p-Terphenyl-d14	12.08	244	157115	1.4602	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 58.40%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
7M54816.D SIMPAHL.M Tue May 01 07:25:25 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54816.D Vial: 10
Acq On : 30 Apr 2012 12:30 pm Operator: CAA
Sample : L12040844-01 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 7:16 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54817.D Vial: 11
Acq On : 30 Apr 2012 12:58 pm Operator: CAA
Sample : L12040844-03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 07:16:49 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

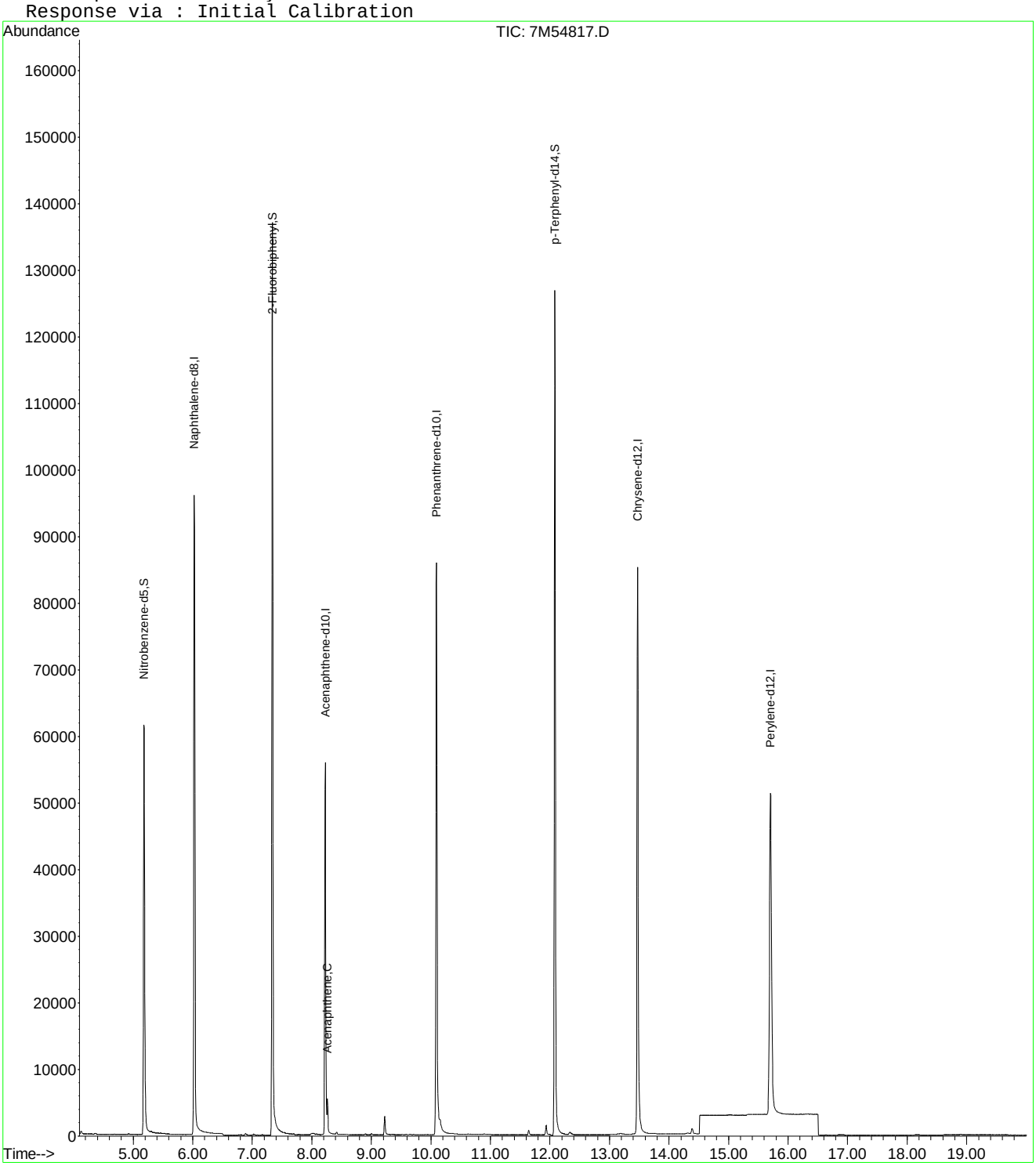
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	128063	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	76114	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	126431	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	123115	1.00	ug/ml	0.00
20) Perylene-d12	15.70	264	120592	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	60276	1.1270	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 45.20%			
7) 2-Fluorobiphenyl	7.34	172	129460	1.0284	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 41.20%#			
17) p-Terphenyl-d14	12.08	244	142238	1.2453	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 50.00%			
Target Compounds						Qvalue
9) Acenaphthene	8.26	154	2896	0.0301	ug/ml	95

(#) = qualifier out of range (m) = manual integration
7M54817.D SIMPAHL.M Tue May 01 07:25:26 2012 Page 1

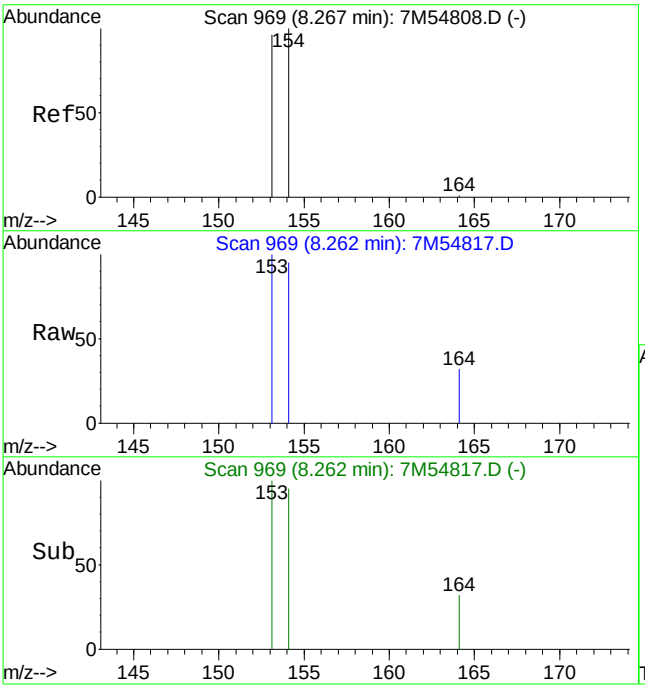
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54817.D Vial: 11
Acq On : 30 Apr 2012 12:58 pm Operator: CAA
Sample : L12040844-03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 7:16 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration



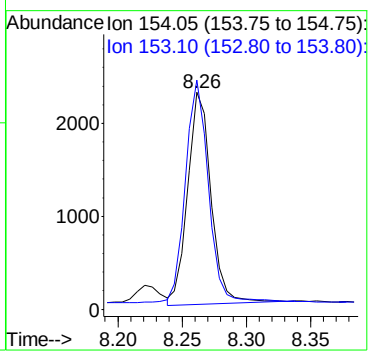
7M54817.D SIMPAHL.M Tue May 01 07:25:26 2012 Page 2



#9
Acenaphthene
Concen: 0.03 ug/ml
RT: 8.26 min Scan# 969
Delta R.T. -0.01 min
Lab File: 7M54817.D
Acq: 30 Apr 2012 12:58 pm

Tgt Ion:154 Resp: 2896

Ion	Ratio	Lower	Upper
154	100		
153	110.5	63.1	147.1



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54818.D Vial: 12
Acq On : 30 Apr 2012 1:25 pm Operator: CAA
Sample : L12040844-05 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 07:16:49 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	134227	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	79757	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	133211	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	131599	1.00	ug/ml	0.00
20) Perylene-d12	15.70	264	127812	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	80213	1.4309	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 57.20%			
7) 2-Fluorobiphenyl	7.34	172	184093	1.3955	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 56.00%			
17) p-Terphenyl-d14	12.08	244	192426	1.5761	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 63.20%			

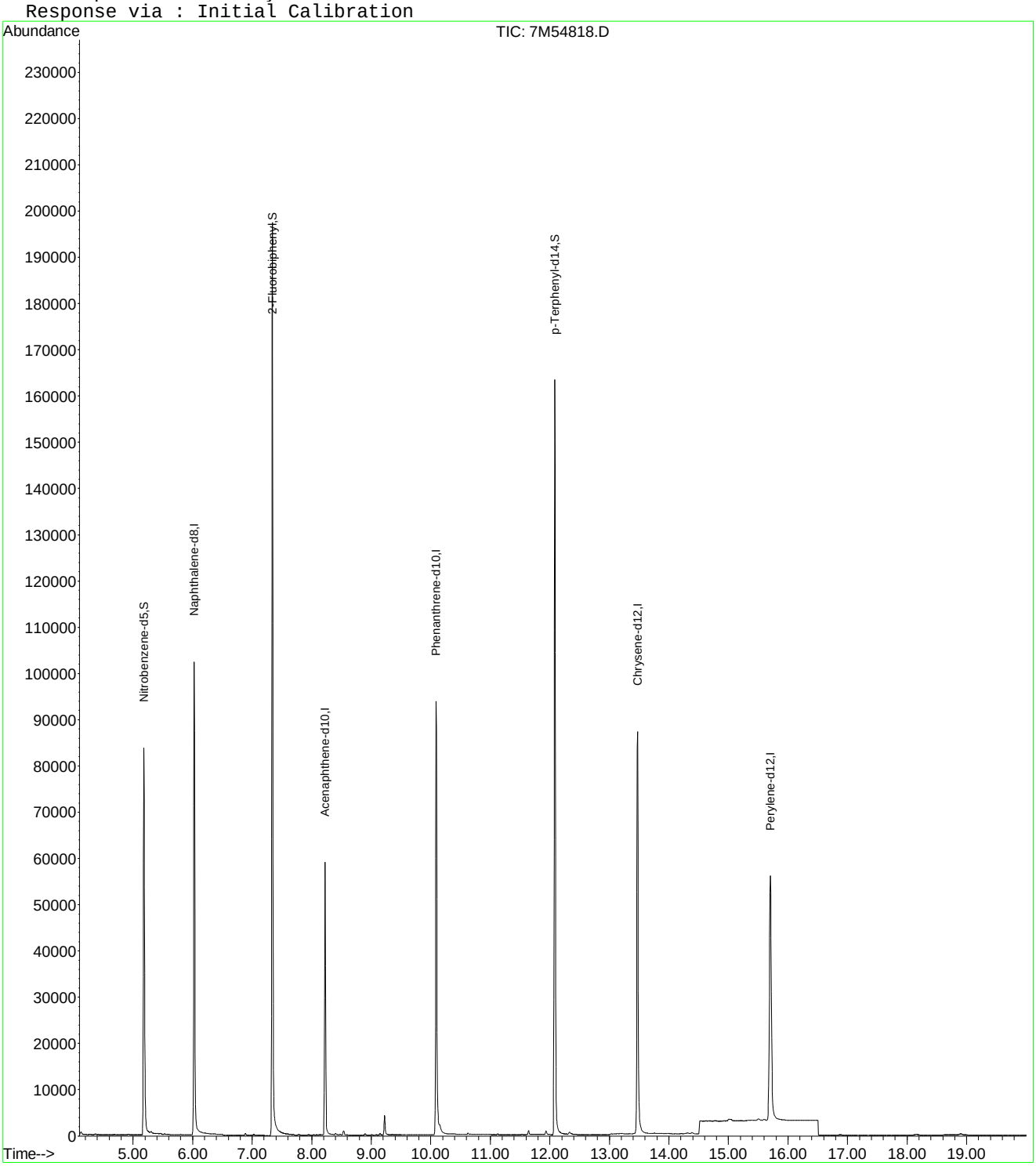
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54818.D SIMPAHL.M Tue May 01 07:25:27 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54818.D Vial: 12
Acq On : 30 Apr 2012 1:25 pm Operator: CAA
Sample : L12040844-05 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 7:16 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 : Tue May 01 07:16:32 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

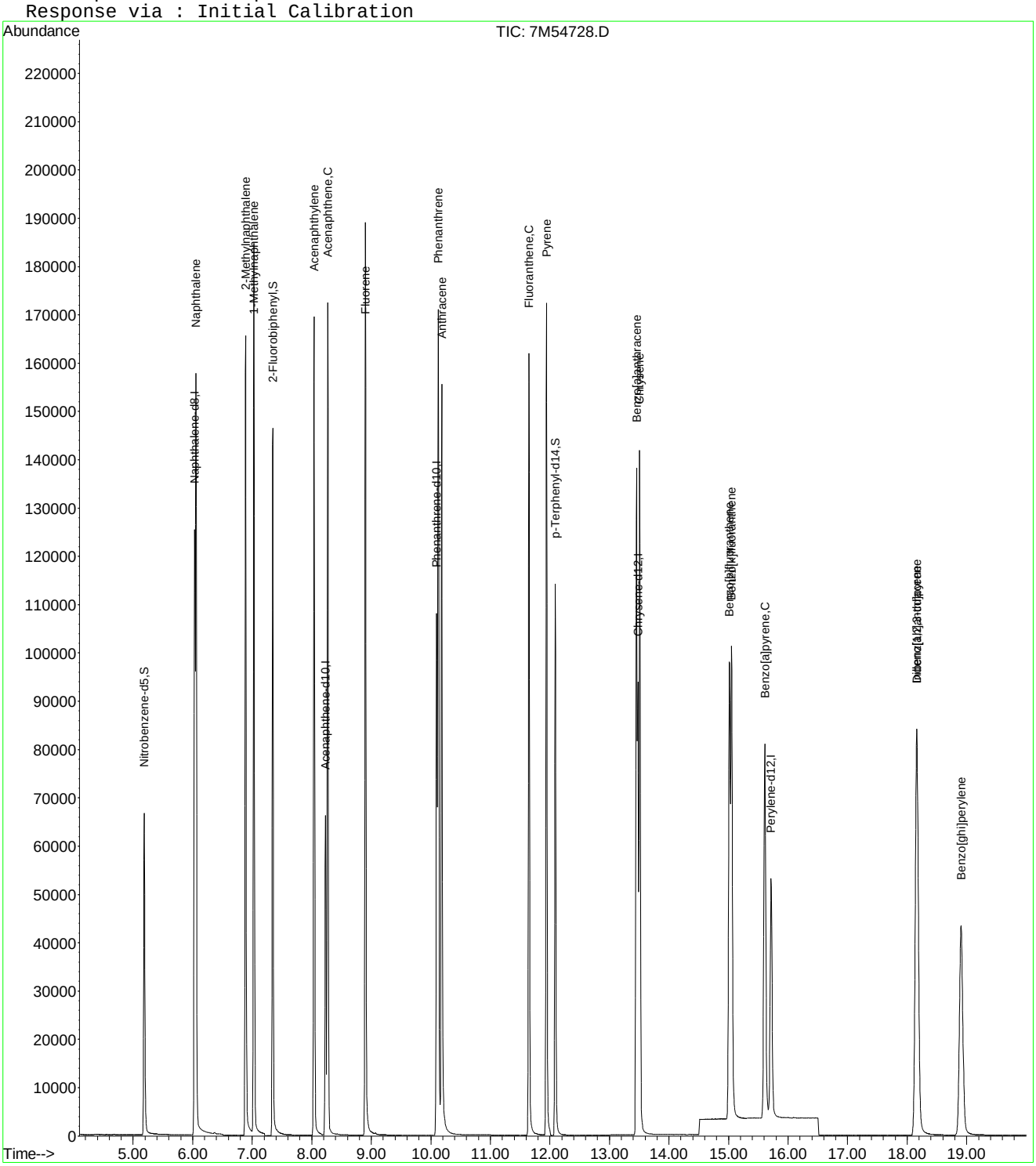
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	153463	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	85143	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	143225	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	118114	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	116508	1.00	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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54728.D Vial: 2
Acq On : 4 Apr 2012 9:39 am Operator: CAA
Sample : WG394111-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:56 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54729.D Vial: 3
Acq On : 4 Apr 2012 10:35 am Operator: CAA
Sample : WG394111-03 10PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:56:53 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:56:49 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

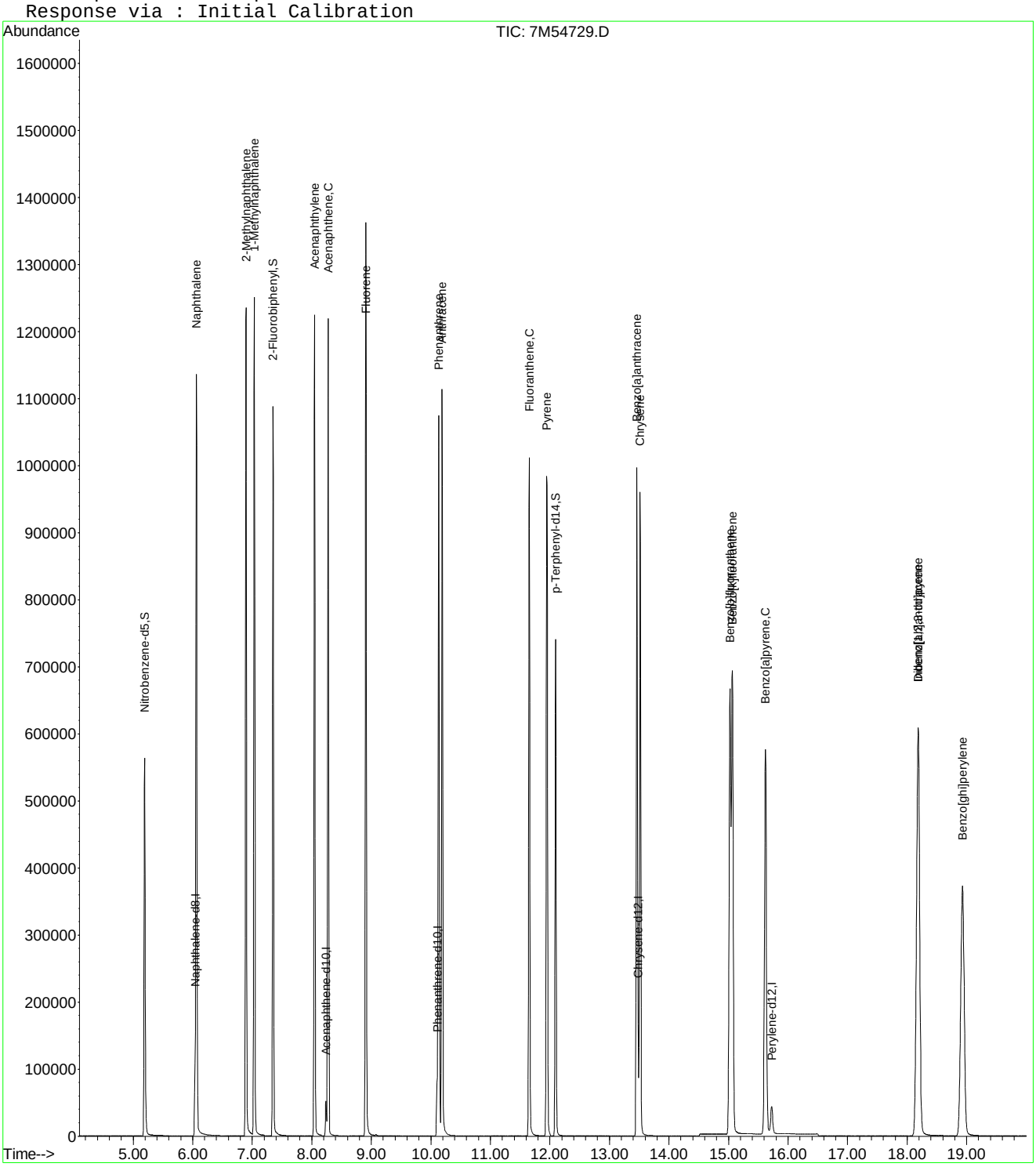
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.04	136	128908	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.24	164	64023	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	105133	1.00	ug/ml	0.00
15) Chrysene-d12	13.49	240	92409	1.00	ug/ml	0.00
20) Perylene-d12	15.73	264	91750	1.00	ug/ml	0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.19	82	514649	10.5523	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 422.00%#			
7) 2-Fluorobiphenyl	7.35	172	982495	10.8849	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 435.20%#			
17) p-Terphenyl-d14	12.09	244	752352	9.8300	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 393.20%#			
Target Compounds						Qvalue
3) Naphthalene	6.06	128	1299479	9.4803	ug/ml	98
4) 2-Methylnaphthalene	6.90	142	851242	10.1225	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	819176	9.7675	ug/ml	100
8) Acenaphthylene	8.04	152	1359329	12.0426	ug/ml	98
9) Acenaphthene	8.27	154	743637	10.6172	ug/ml	99
10) Fluorene	8.91	166	903709	11.2386	ug/ml	99
12) Phenanthrene	10.13	178	1204227	10.3551	ug/ml	98
13) Anthracene	10.19	178	1226008	10.6044	ug/ml	98
14) Fluoranthene	11.65	202	1136279	8.8360	ug/ml	98
16) Pyrene	11.95	202	1269832	9.4356	ug/ml	99
18) Benzo[a]anthracene	13.46	228	1071059	10.0680	ug/ml	98
19) Chrysene	13.51	228	1017304	9.5093	ug/ml	98
21) Benzo[b]fluoranthene	15.03	252	1150949	10.3919	ug/ml	98
22) Benzo[k]fluoranthene	15.06	252	1050437	10.2151	ug/ml	98
23) Benzo[a]pyrene	15.62	252	1081378	10.2910	ug/ml	98
24) Indeno[1,2,3-cd]pyrene	18.19	276	1239153	10.1969	ug/ml	100
25) Dibenz[ah]anthracene	18.19	278	1055300	10.3692	ug/ml	100
26) Benzo[ghi]perylene	18.93	276	1226855	11.5835	ug/ml	99

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

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

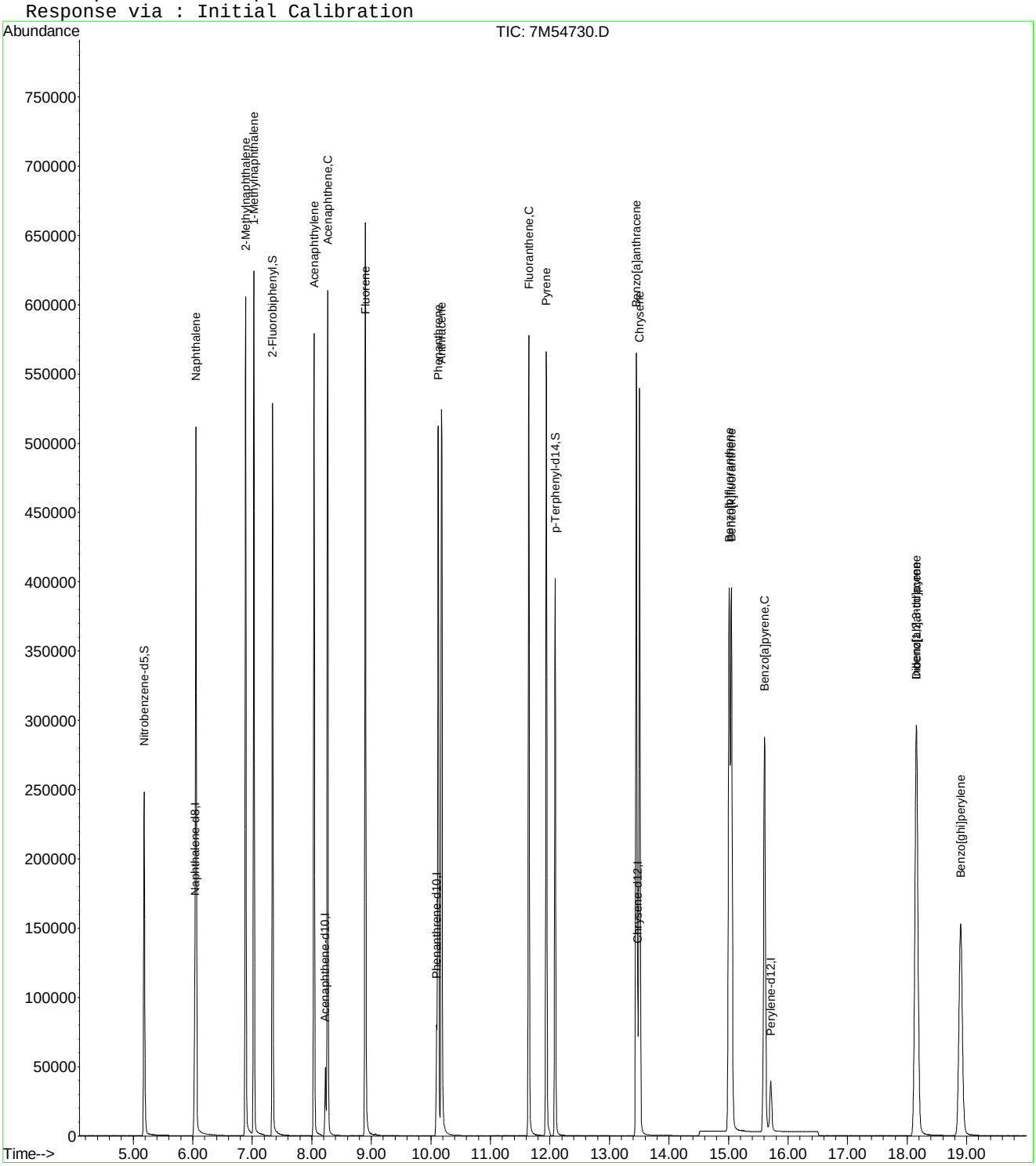
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	108655	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58819	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	97058	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	93620	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	84709	1.00	ug/ml	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

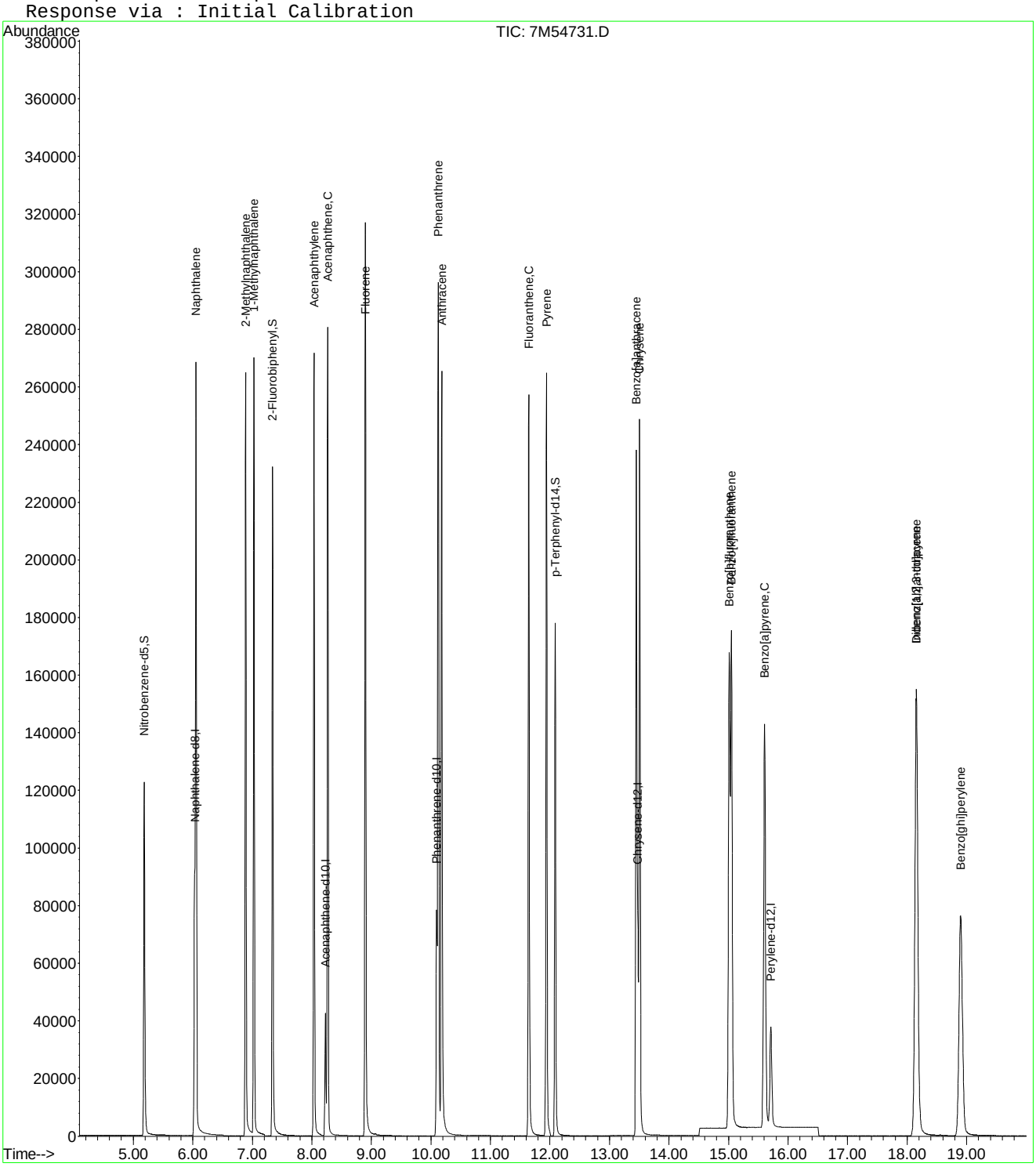
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	107923	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	51916	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	98158	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	84003	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	82066	1.00	ug/ml	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

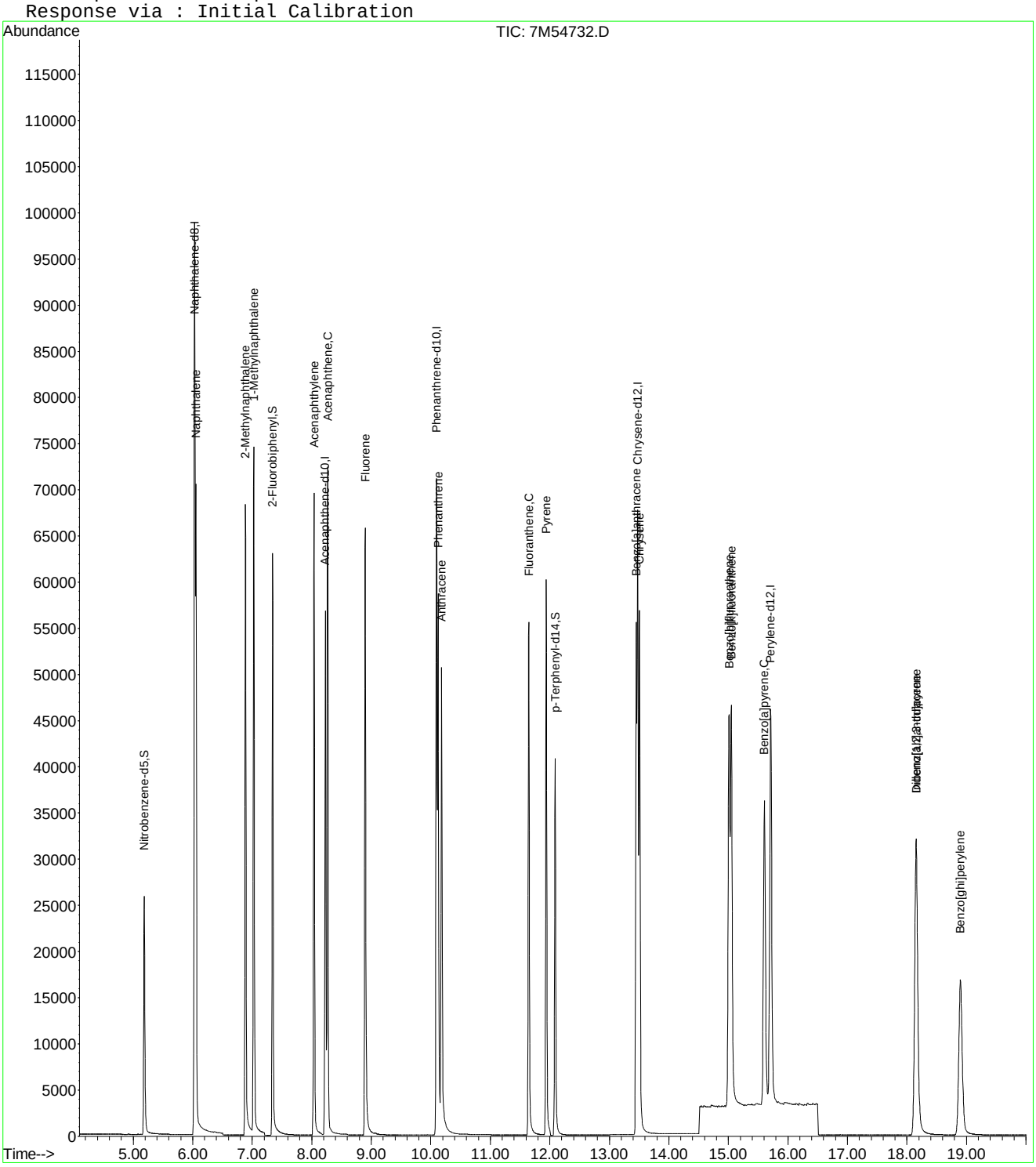
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	124416	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	72846	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	97007	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	93356	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	102269	1.00	ug/ml	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

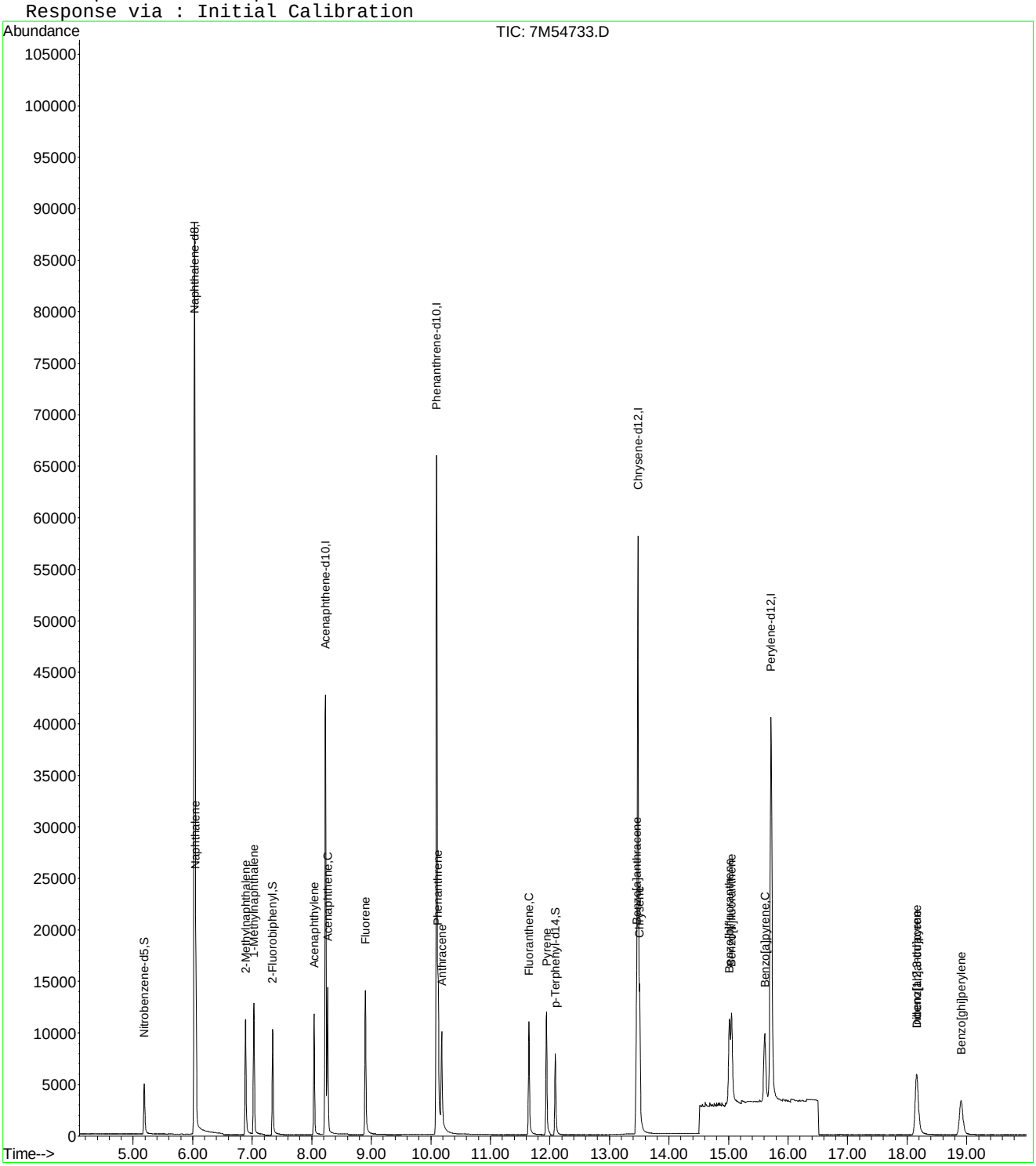
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	111904	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58154	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	92508	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	83643	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	89887	1.00	ug/ml	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

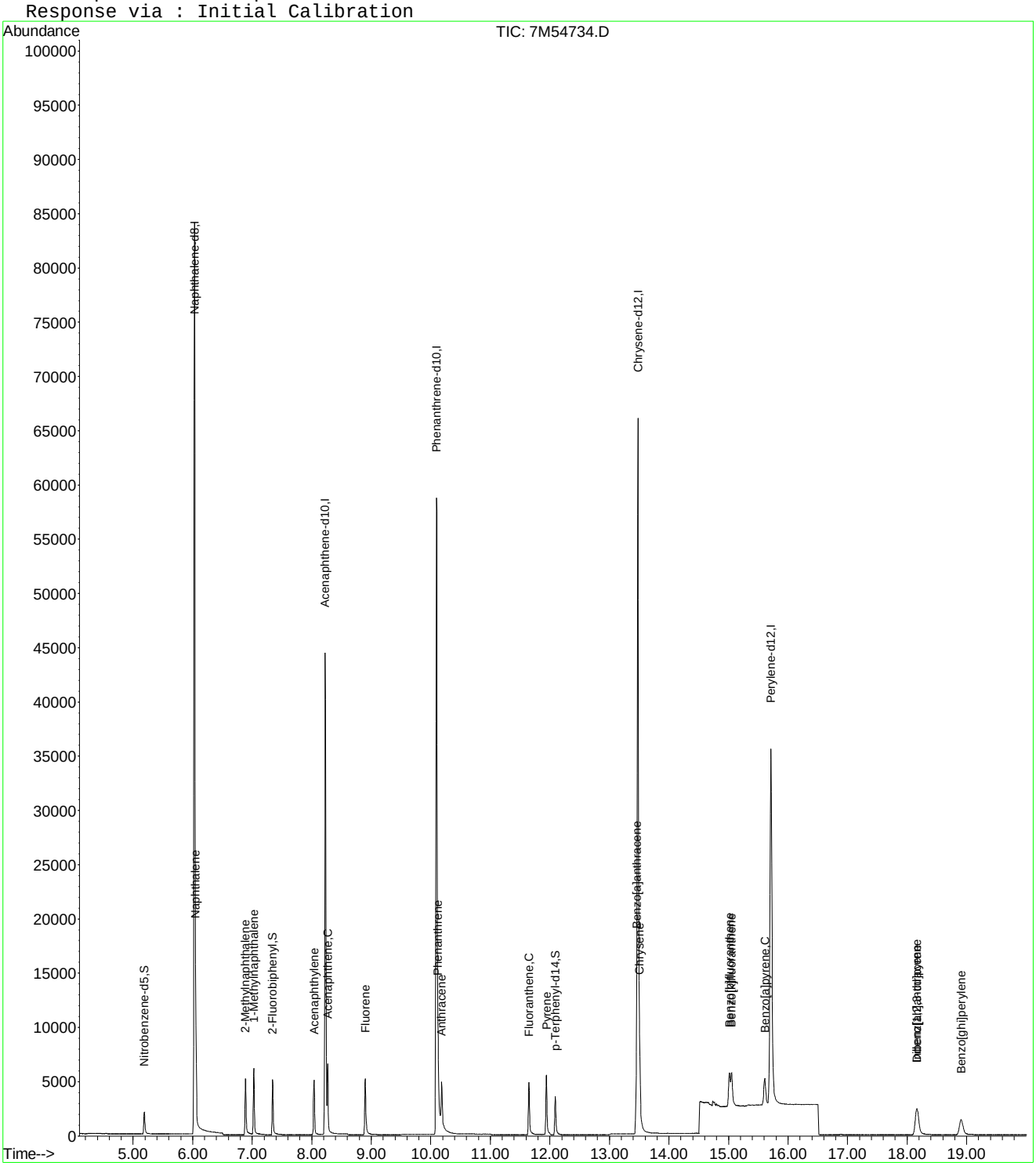
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	109028	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	59339	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	88697	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	96074	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	80216	1.00	ug/ml	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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54734.D Vial: 8
Acq On : 4 Apr 2012 12:53 pm Operator: CAA
Sample : WG394111-08 0.05PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:58 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



7M54734.D SIMPAHL.M Thu Apr 05 13:50:28 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54735.D Vial: 9
Acq On : 4 Apr 2012 1:21 pm Operator: CAA
Sample : WG394111-09 1PPM PAHL Alt Src STD Inst : HPMS7
Misc : 1,1 STD49584 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 14:06:24 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 13:51:14 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

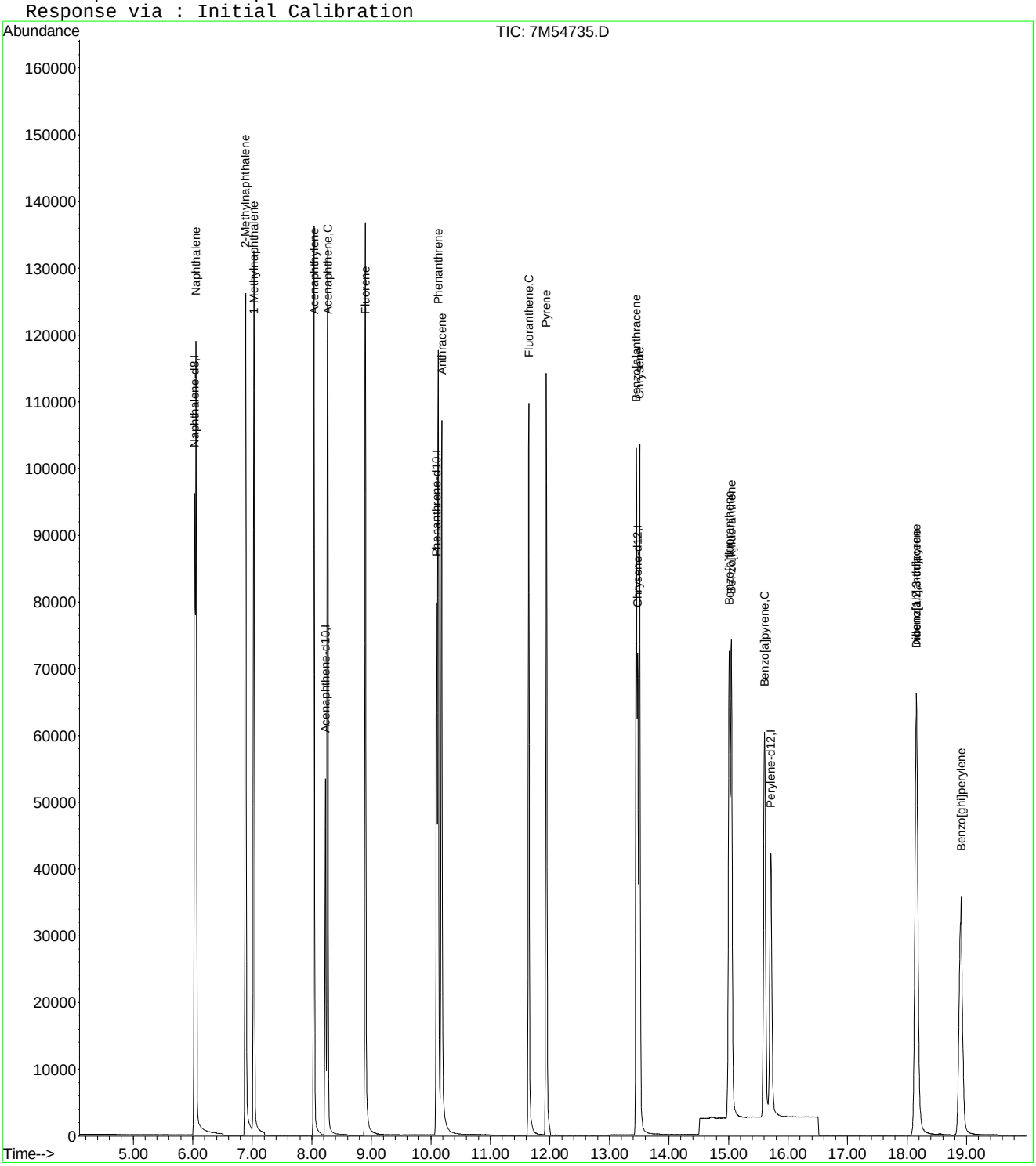
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	120214	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	64322	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	106999	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	92251	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	93409	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.20	82	39	0.0008	ug/ml	0.01
Spiked Amount 2.500	Range 35 - 114		Recovery =	0.00%#		
7) 2-Fluorobiphenyl	7.34	172	27	0.0003	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery =	0.00%#		
17) p-Terphenyl-d14	12.09	244	82	0.0010	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery =	0.00%#		
Target Compounds						Qvalue
3) Naphthalene	6.06	128	134414	0.9444	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	88598	1.0216	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	87630	0.9897	ug/ml	100
8) Acenaphthylene	8.04	152	150796	1.0604	ug/ml	99
9) Acenaphthene	8.27	154	80009	0.9833	ug/ml	100
10) Fluorene	8.90	166	94027	0.9726	ug/ml	100
12) Phenanthrene	10.12	178	124612	0.9362	ug/ml	100
13) Anthracene	10.18	178	131148	0.9810	ug/ml	100
14) Fluoranthene	11.65	202	123616	0.8865	ug/ml	100
16) Pyrene	11.94	202	139306	0.9395	ug/ml	99
18) Benzo[a]anthracene	13.45	228	110200	0.9207	ug/ml	99
19) Chrysene	13.51	228	111347	0.9352	ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	111147	0.8625	ug/ml	100
22) Benzo[k]fluoranthene	15.05	252	108157	0.8870	ug/ml	99
23) Benzo[a]pyrene	15.60	252	113304	0.9444	ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	130669	0.9952	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	108696	0.9781	ug/ml	100
26) Benzo[ghi]perylene	18.91	276	114195	0.9863	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54735.D SIMPAHL.M Thu Apr 05 14:06:31 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54735.D Vial: 9
Acq On : 4 Apr 2012 1:21 pm Operator: CAA
Sample : WG394111-09 1PPM PAHL Alt Src STD Inst : HPMS7
Misc : 1,1 STD49584 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 14:06 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 13:51:14 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54808.D Vial: 2
Acq On : 30 Apr 2012 8:47 am Operator: CAA
Sample : WG396502-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 09:08:21 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 : Wed Apr 25 08:18:27 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

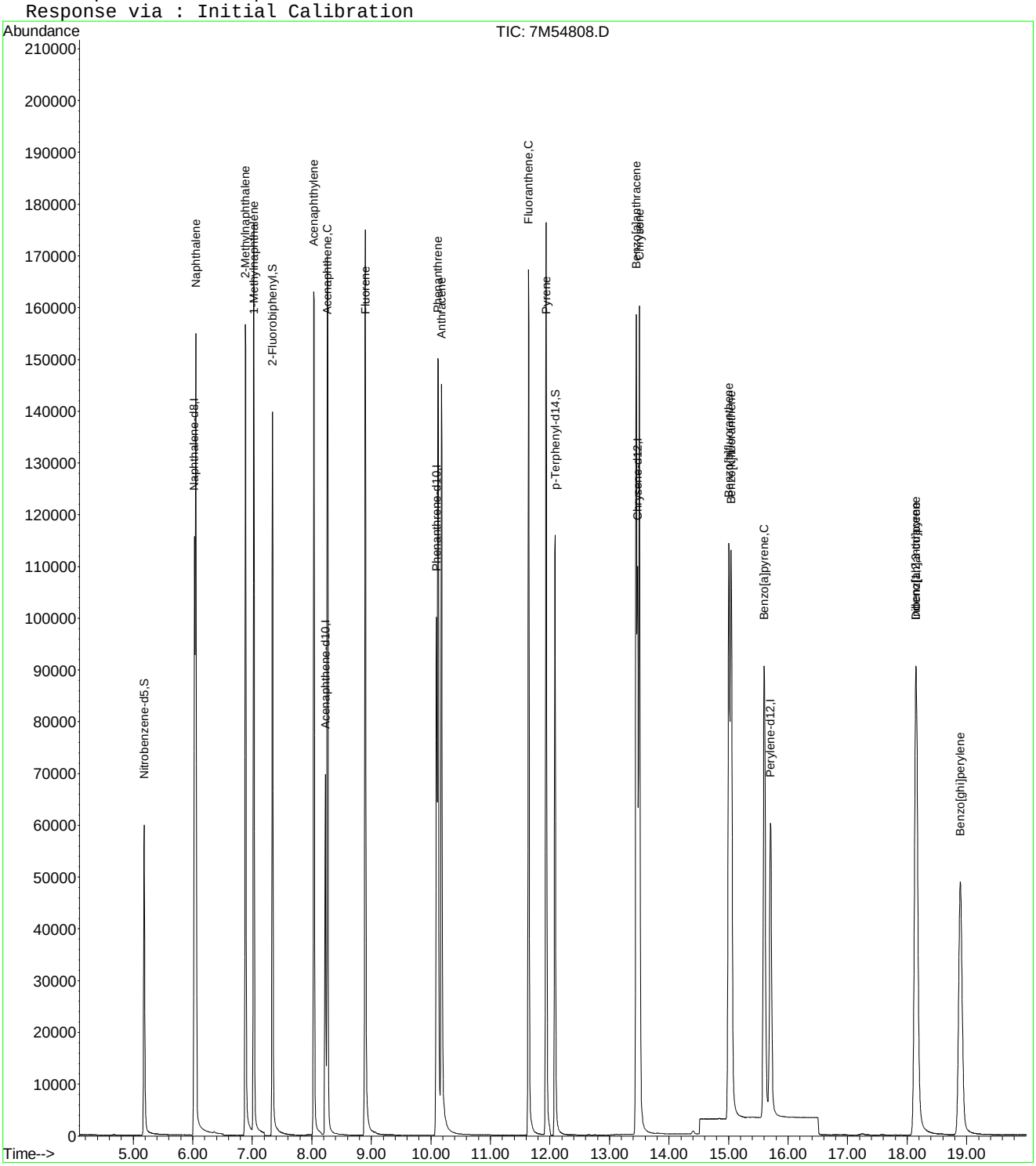
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	147829	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	83627	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	139583	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	137315	1.00	ug/ml	0.00
20) Perylene-d12	15.70	264	137605	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	57071	0.9244	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 36.80%			
7) 2-Fluorobiphenyl	7.34	172	136846	0.9894	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 39.60%#			
17) p-Terphenyl-d14	12.09	244	123641	0.9705	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 38.80%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	172890	0.9879	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	111413	1.0447	ug/ml	99
5) 1-Methylnaphthalene	7.02	142	114502	1.0516	ug/ml	100
8) Acenaphthylene	8.04	152	189851	1.0268	ug/ml	100
9) Acenaphthene	8.27	154	107095	1.0124	ug/ml	100
10) Fluorene	8.90	166	124208	0.9882	ug/ml	100
12) Phenanthrene	10.12	178	167687	0.9658	ug/ml	100
13) Anthracene	10.18	178	175790	1.0079	ug/ml	100
14) Fluoranthene	11.64	202	191689	1.0538	ug/ml	100
16) Pyrene	11.94	202	216104	0.9792	ug/ml	100
18) Benzo[a]anthracene	13.45	228	174505	0.9795	ug/ml	99
19) Chrysene	13.50	228	176454	0.9957	ug/ml	100
21) Benzo[b]fluoranthene	15.00	252	182623	0.9620	ug/ml	96
22) Benzo[k]fluoranthene	15.04	252	185552	1.0330	ug/ml	95
23) Benzo[a]pyrene	15.60	252	175136	0.9909	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.15	276	195776	1.0122	ug/ml	100
25) Dibenz[ah]anthracene	18.15	278	163797	1.0005	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	169923	0.9962	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54808.D SIMPAHL.M Tue May 01 07:16:30 2012 Page 1

Quantitation Report (QT Reviewed)

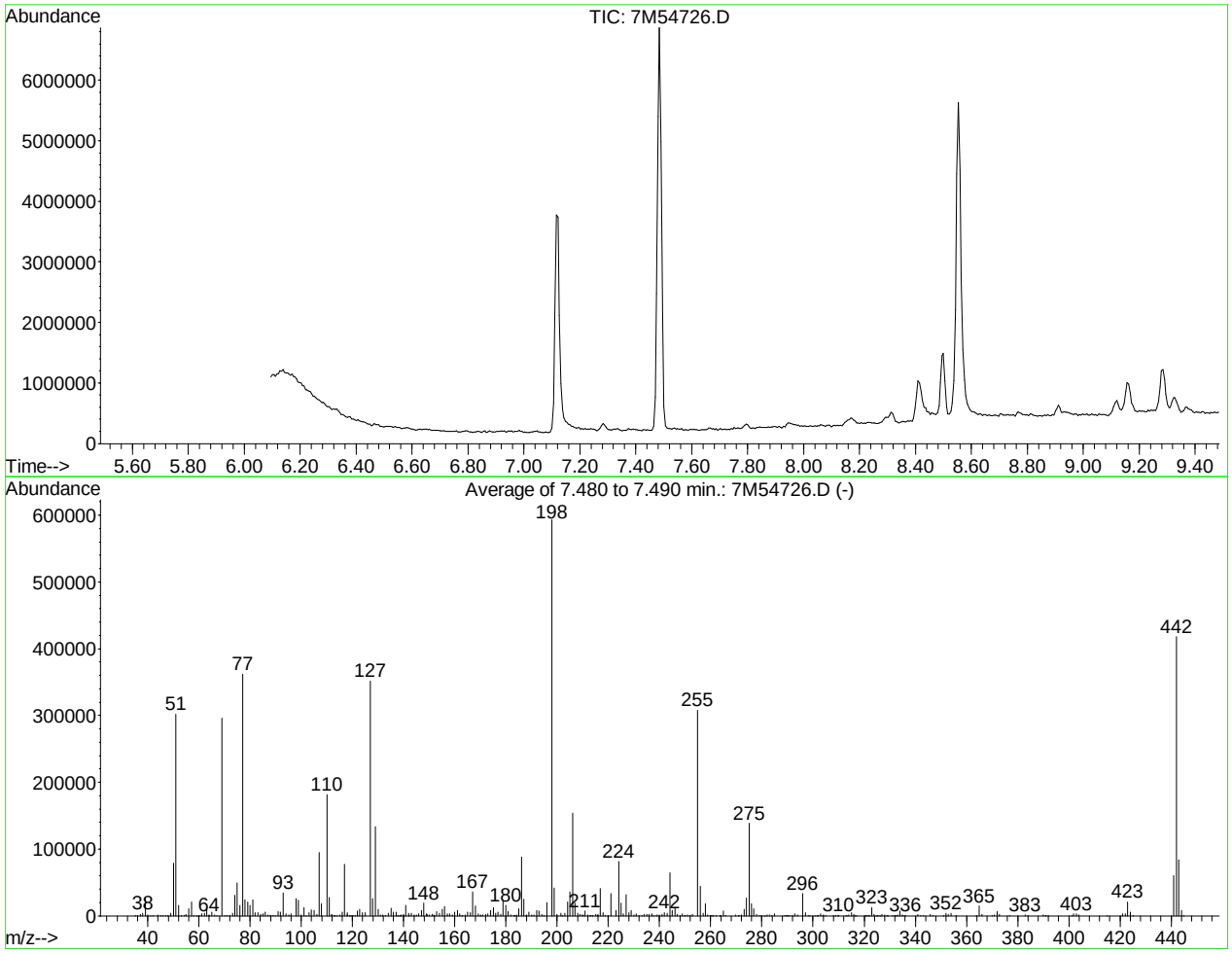
Data File : C:\MSDCHEM\1\DATA\043012\7M54808.D Vial: 2
Acq On : 30 Apr 2012 8:47 am Operator: CAA
Sample : WG396502-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 30 9:08 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Wed Apr 25 08:18:27 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

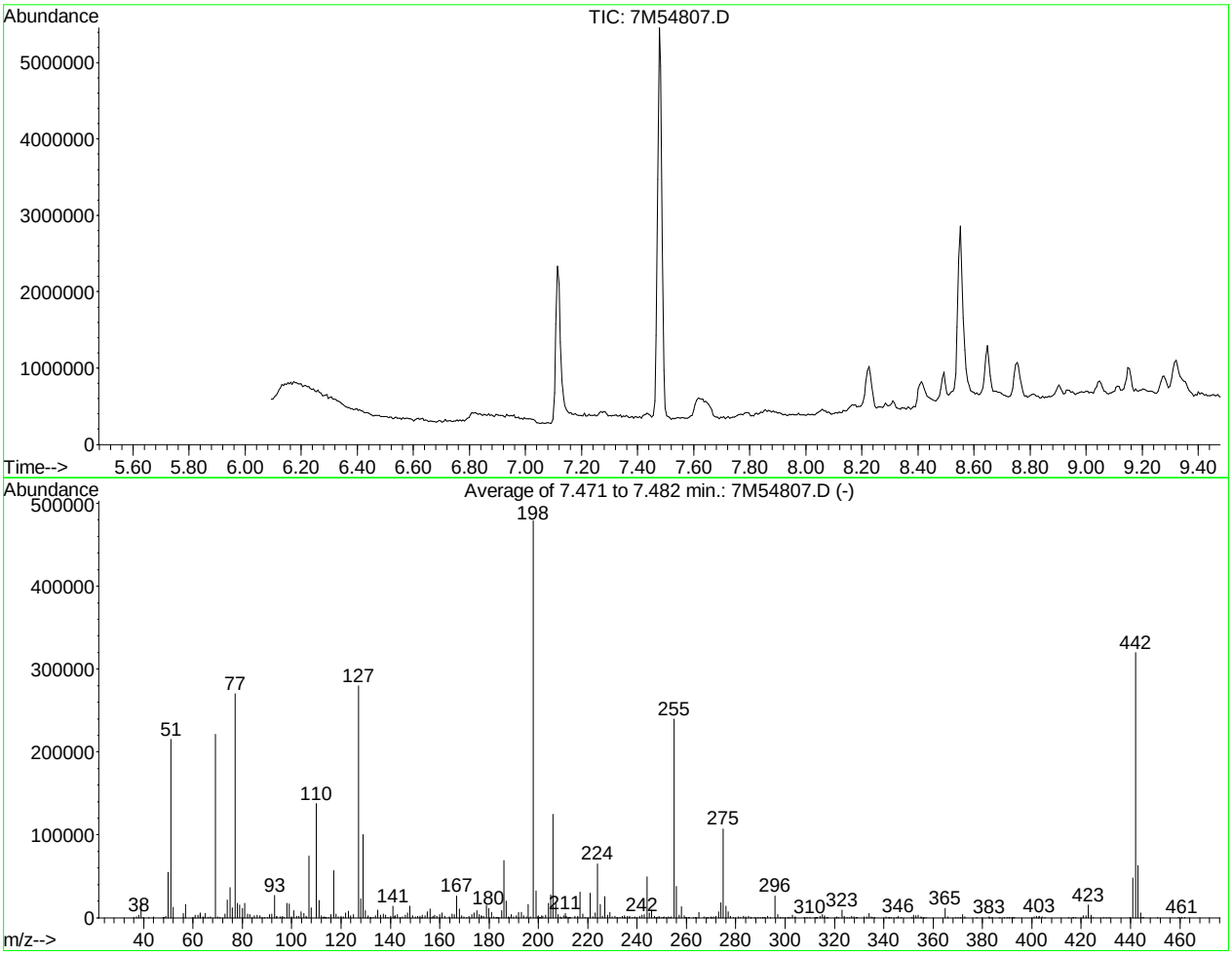


AutoFind: Scans 260, 261, 262; Background Corrected with Scan 254

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\043012\7M54807.D Vial: 1
Acq On : 30 Apr 2012 8:30 am Operator: CAA
Sample : WG396502-01 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 259, 260, 261; Background Corrected with Scan 252

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.9	215336	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.2	221397	PASS
70	69	0.00	2	0.6	1391	PASS
127	198	40	60	58.4	279920	PASS
197	198	0.00	1	0.2	876	PASS
198	198	100	100	100.0	479125	PASS
199	198	5	9	6.7	32280	PASS
275	198	10	30	22.4	107437	PASS
365	198	1	100	2.3	11179	PASS
441	443	0.01	100	76.1	47970	PASS
442	198	40	100	66.8	319850	PASS
443	442	17	23	19.7	63069	PASS

7M54807.D DFTPP.M Tue May 01 07:16:04 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54809.D Vial: 3
Acq On : 30 Apr 2012 9:14 am Operator: CAA
Sample : WG396339-01 BLK 04/27 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 07:16:47 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	114017	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.22	164	71135	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	112374	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	108438	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	104398	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	84658	1.7779	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 71.20%			
7) 2-Fluorobiphenyl	7.34	172	200445	1.7037	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 68.00%			
17) p-Terphenyl-d14	12.08	244	184534	1.8343	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 73.20%			

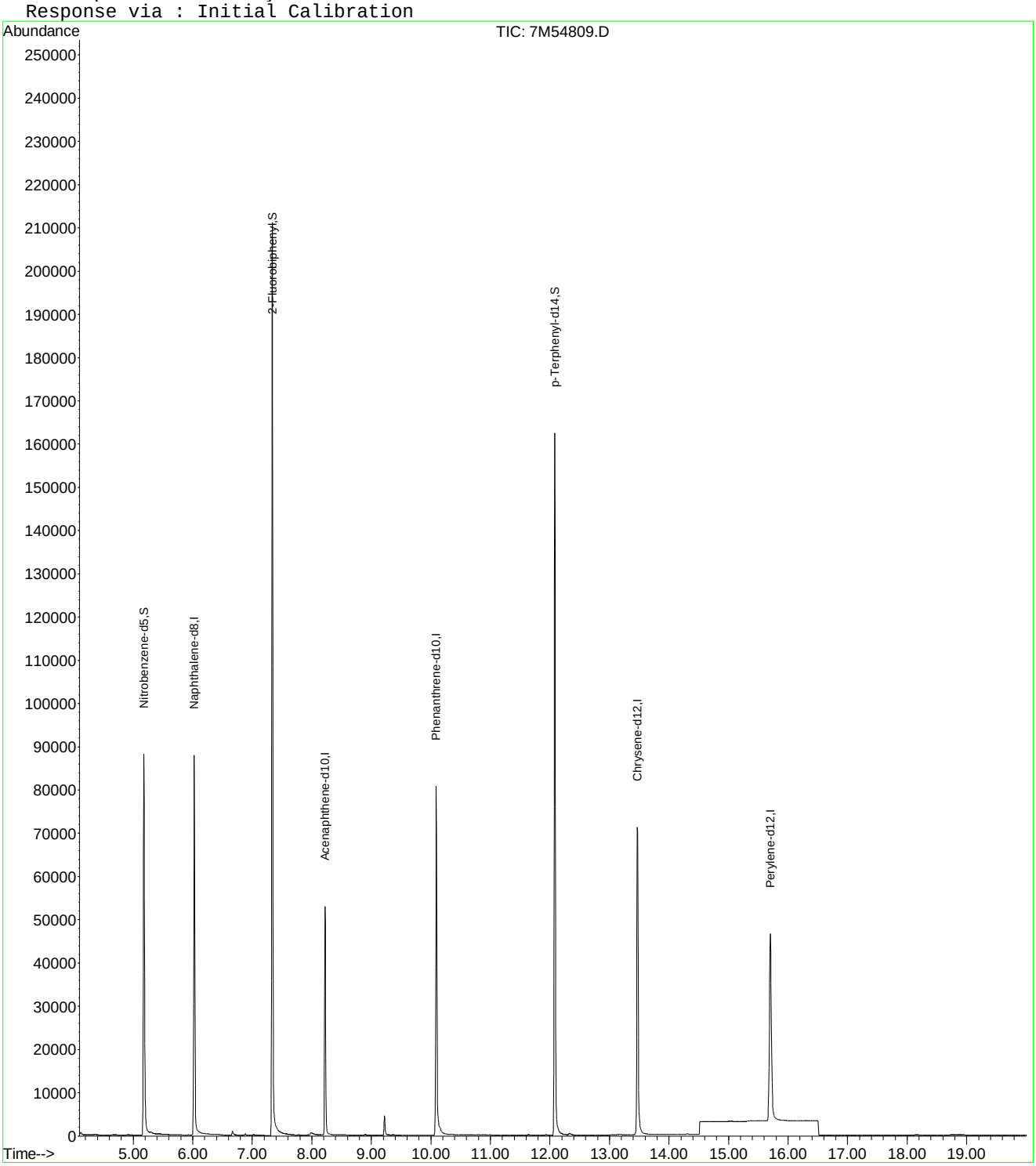
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54809.D SIMPAHL.M Tue May 01 07:25:22 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54809.D Vial: 3
Acq On : 30 Apr 2012 9:14 am Operator: CAA
Sample : WG396339-01 BLK 04/27 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 7:16 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54810.D Vial: 4
Acq On : 30 Apr 2012 9:42 am Operator: CAA
Sample : WG396339-02 LCS 04/27 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 07:16:47 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

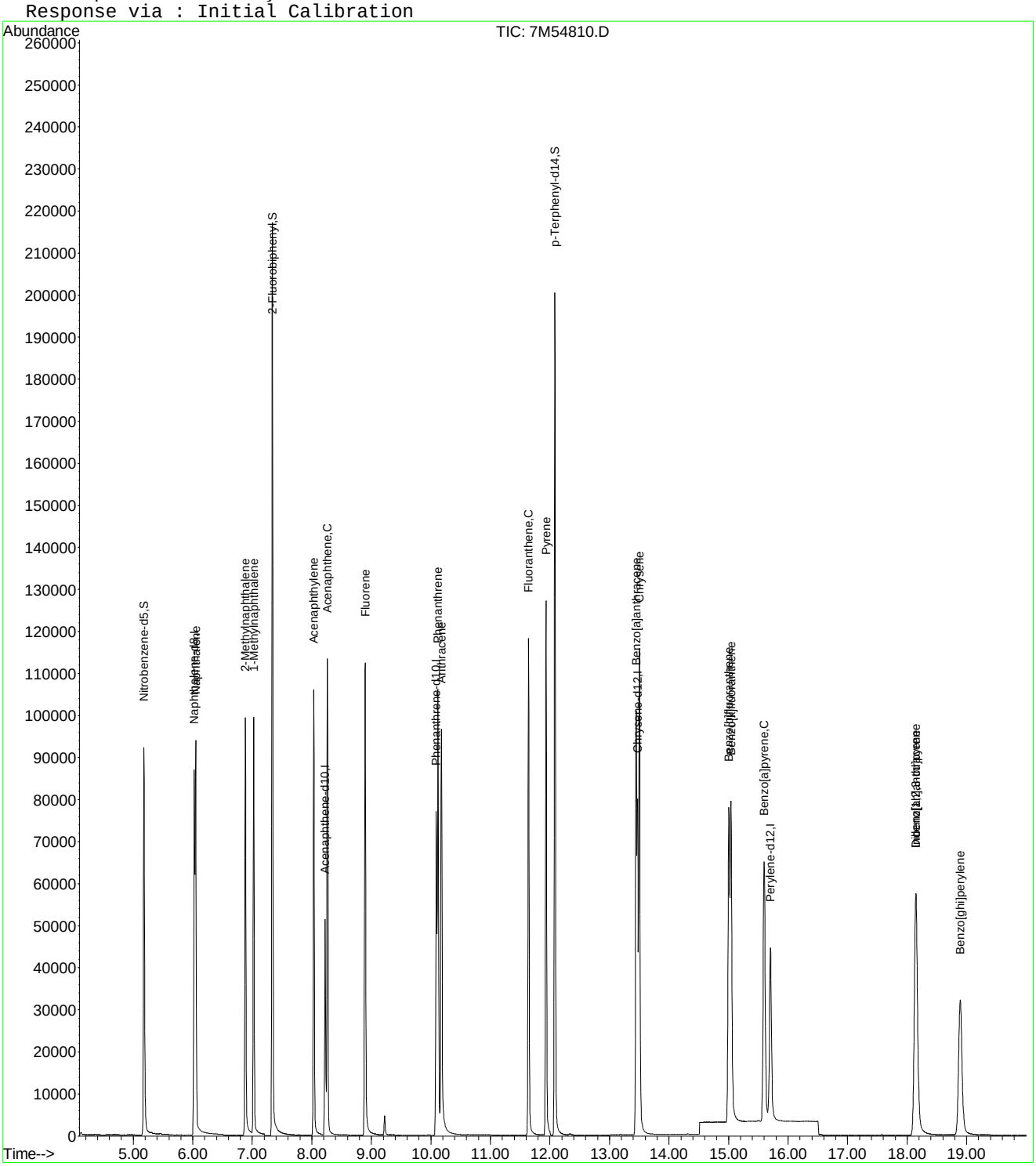
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	107824	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	66853	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	105117	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	103301	1.00	ug/ml	0.00
20) Perylene-d12	15.70	264	99273	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	85971	1.9091	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 76.40%			
7) 2-Fluorobiphenyl	7.34	172	203673	1.8420	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 73.60%			
17) p-Terphenyl-d14	12.08	244	223834	2.3356	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 93.60%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	103496	0.8108	ug/ml	100
4) 2-Methylnaphthalene	6.88	142	70387	0.9049	ug/ml	100
5) 1-Methylnaphthalene	7.02	142	67053	0.8443	ug/ml	100
8) Acenaphthylene	8.03	152	124334	0.8412	ug/ml	99
9) Acenaphthene	8.26	154	67759	0.8012	ug/ml	100
10) Fluorene	8.90	166	80514	0.8013	ug/ml	100
12) Phenanthrene	10.12	178	110982	0.8488	ug/ml	99
13) Anthracene	10.18	178	117497	0.8946	ug/ml	99
14) Fluoranthene	11.64	202	133826	0.9769	ug/ml	100
16) Pyrene	11.93	202	157969	0.9514	ug/ml	100
18) Benzo[a]anthracene	13.45	228	112669	0.8406	ug/ml	100
19) Chrysene	13.50	228	124670	0.9351	ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	125729	0.9181	ug/ml	96
22) Benzo[k]fluoranthene	15.04	252	122719	0.9470	ug/ml	95
23) Benzo[a]pyrene	15.60	252	121444	0.9525	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.15	276	124175	0.8899	ug/ml	100
25) Dibenz[ah]anthracene	18.15	278	104652	0.8861	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	110119	0.8949	ug/ml	99

(#) = qualifier out of range (m) = manual integration
7M54810.D SIMPAHL.M Tue May 01 07:20:38 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54810.D Vial: 4
Acq On : 30 Apr 2012 9:42 am Operator: CAA
Sample : WG396339-02 LCS 04/27 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 7:16 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54811.D Vial: 5
Acq On : 30 Apr 2012 10:09 am Operator: CAA
Sample : WG396339-03 LCS DUP 04/27 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 01 07:16:48 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 : Tue May 01 07:16:32 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

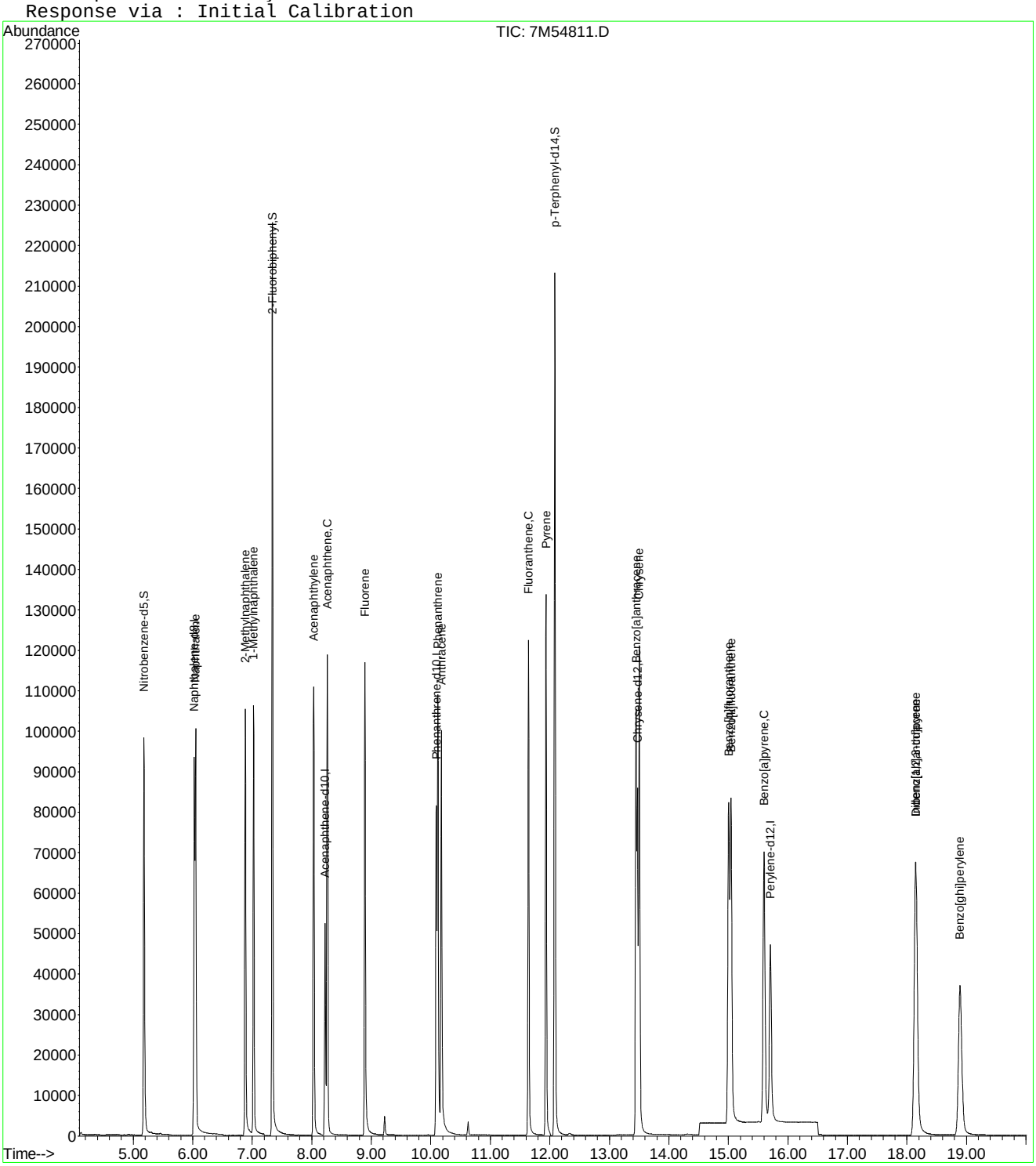
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	117126	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	71161	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	113502	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	111173	1.00	ug/ml	0.00
20) Perylene-d12	15.70	264	107174	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	91529	1.8711	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 74.80%			
7) 2-Fluorobiphenyl	7.34	172	210846	1.7914	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 71.60%			
17) p-Terphenyl-d14	12.08	244	235501	2.2833	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 91.20%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	109734	0.7914	ug/ml	100
4) 2-Methylnaphthalene	6.88	142	73967	0.8754	ug/ml	99
5) 1-Methylnaphthalene	7.02	142	70057	0.8121	ug/ml	100
8) Acenaphthylene	8.03	152	126952	0.8069	ug/ml	99
9) Acenaphthene	8.26	154	70143	0.7792	ug/ml	100
10) Fluorene	8.90	166	83331	0.7791	ug/ml	100
12) Phenanthrene	10.12	178	115170	0.8157	ug/ml	99
13) Anthracene	10.18	178	120079	0.8467	ug/ml	100
14) Fluoranthene	11.64	202	137564	0.9300	ug/ml	100
16) Pyrene	11.94	202	161108	0.9016	ug/ml	100
18) Benzo[a]anthracene	13.45	228	117816	0.8168	ug/ml	99
19) Chrysene	13.50	228	131018	0.9132	ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	133368	0.9021	ug/ml	96
22) Benzo[k]fluoranthene	15.04	252	132338	0.9460	ug/ml	94
23) Benzo[a]pyrene	15.60	252	130288	0.9465	ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.15	276	140620	0.9334	ug/ml	100
25) Dibenz[ah]anthracene	18.15	278	119508	0.9373	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	123884	0.9325	ug/ml	99

(#) = qualifier out of range (m) = manual integration
7M54811.D SIMPAHL.M Tue May 01 07:20:39 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\043012\7M54811.D Vial: 5
Acq On : 30 Apr 2012 10:09 am Operator: CAA
Sample : WG396339-03 LCS DUP 04/27 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 7:16 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 : Tue May 01 07:16:32 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: L12040844
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: WG396298 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG396298 - Client samples 05 and 06 required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 45617
Approved By: Sheri Pfalzgraf



Certificate of Analysis

Sample #: L12040844-01
Client ID: MW-16I-042412
Matrix: Water
Workgroup #: WG396298
Collect Date: 04/24/2012 12:35
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: 04/26/2012 07:21
Cal Date: 05/09/2012 10:16
Run Date: 05/09/2012 11:13
File ID: P2.050912.111332

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.136		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00249		0.000500	0.000250
Calcium, Total	7440-70-2	139		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	9.38		0.100	0.0250
Magnesium, Total	7439-95-4	28.3		0.500	0.250
Manganese, Total	7439-96-5	0.264		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	4.30		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	67.0		0.500	0.250
Vanadium, Total	7440-62-2	0.00564		0.0100	0.00500
Zinc, Total	7440-66-6	0.0768		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-02	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-16I-042412	**Prep Method:**	3005A	**Prep Date:**	04/26/2012 07:21
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/09/2012 10:16
Workgroup #:	WG396298	**Analyst:**	KHR	**Run Date:**	05/09/2012 11:31
Collect Date:	04/24/2012 12:35	**Dilution:**	1	**File ID:**	P2.050912.113130
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	0.135		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000530		0.000500	0.000250
Calcium, Dissolved	7440-70-2	139		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	9.00		0.100	0.0250
Magnesium, Dissolved	7439-95-4	27.9		0.500	0.250
Manganese, Dissolved	7439-96-5	0.259		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.25		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	67.2		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0703		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-03
Client ID: MW-16S-042412
Matrix: Water
Workgroup #: WG396298
Collect Date: 04/24/2012 12:37
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: 04/26/2012 07:21
Cal Date: 05/09/2012 10:16
Run Date: 05/09/2012 11:37
File ID: P2.050912.113729

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.164		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9		U	0.000500	0.000250
Calcium, Total	7440-70-2	135		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	23.6		0.100	0.0250
Magnesium, Total	7439-95-4	25.0		0.500	0.250
Manganese, Total	7439-96-5	0.435		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	3.97		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	68.9		0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040844-04	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-16S-042412	**Prep Method:**	3005A	**Prep Date:**	04/26/2012 07:21
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/09/2012 10:16
Workgroup #:	WG396298	**Analyst:**	KHR	**Run Date:**	05/09/2012 12:08
Collect Date:	04/24/2012 12:37	**Dilution:**	1	**File ID:**	P2.050912.120822
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	0.172		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	140		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	24.4		0.100	0.0250
Magnesium, Dissolved	7439-95-4	26.2		0.500	0.250
Manganese, Dissolved	7439-96-5	0.452		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.21		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	71.0		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 #: L12040844-05 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-07-042412 **Prep Method:** 3005A **Prep Date:** 04/26/2012 07:21
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/09/2012 10:16
Workgroup #: WG396298 **Analyst:** KHR **Run Date:** 05/09/2012 12:21
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** P2.050912.122146
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.304		0.100	0.0500
Barium, Total	7440-39-3	0.106		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00263		0.000500	0.000250
Calcium, Total	7440-70-2	107		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	0.216		0.100	0.0250
Magnesium, Total	7439-95-4	15.1		0.500	0.250
Manganese, Total	7439-96-5	0.00969		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	4.25		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.0444		0.0100	0.00500
Zinc, Total	7440-66-6	0.0378		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-07-042412 **Prep Method:** 3005A **Prep Date:** 04/26/2012 07:21
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/09/2012 10:16
Workgroup #: WG396298 **Analyst:** KHR **Run Date:** 05/09/2012 12:34
Collect Date: 04/24/2012 13:15 **Dilution:** 100 **File ID:** P2.050912.123446
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	558		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-06 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-07-042412 **Prep Method:** 3005A **Prep Date:** 04/26/2012 07:21
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/09/2012 10:16
Workgroup #: WG396298 **Analyst:** KHR **Run Date:** 05/09/2012 12:27
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** P2.050912.122745
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	0.110		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.00186		0.000500	0.000250
Calcium, Dissolved	7440-70-2	102		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		U	0.100	0.0250
Magnesium, Dissolved	7439-95-4	15.1		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0127		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.32		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0427		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0351		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-06 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-07-042412 **Prep Method:** 3005A **Prep Date:** 04/26/2012 07:21
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/09/2012 10:16
Workgroup #: WG396298 **Analyst:** KHR **Run Date:** 05/09/2012 12:41
Collect Date: 04/24/2012 13:15 **Dilution:** 100 **File ID:** P2.050912.124143
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	584		50.0	25.0

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: WG396210
Analyst: REK
Spike Analyst: REK
Method: 3005A
Run Date: 04/26/2012 07:21
Hotblock Start Temp: 94.6 @ 06:00
Hotblock End Temp: 95.1 @ 10:00

SOP: ME401 Revison 14
Spike Solution: STD50758
Spike Witness: VC
HNO3 Lot #: COA16033
ICP;WG392584 Filter Lot COA16040
Digestion Tubes Lot #: COA16053
HCL Lot #: COA16113

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG396210-02	BLANK	1	50 mL	50 mL		
2	WG396210-03	LCS	1	50 mL	50 mL	5 mL	
3	L12040810-01	SAMP	1	50 mL	50 mL		05/04/12
4	L12040810-02	SAMP	1	50 mL	50 mL		05/04/12
5	L12040810-03	SAMP	1	50 mL	50 mL		05/04/12
6	L12040810-04	SAMP	1	50 mL	50 mL		05/04/12
7	L12040816-01	SAMP	1	50 mL	50 mL		05/04/12
8	L12040816-02	SAMP	1	50 mL	50 mL		05/04/12
9	L12040816-03	SAMP	1	50 mL	50 mL		05/04/12
10	L12040816-04	SAMP	1	50 mL	50 mL		05/04/12
11	L12040816-05	SAMP	1	50 mL	50 mL		05/04/12
12	WG396210-01	REF	1	50 mL	50 mL		
13	L12040844-01	SAMP	1	50 mL	50 mL		05/09/12
14	L12040844-02	SAMP	1	50 mL	50 mL		05/09/12
15	L12040844-03	SAMP	1	50 mL	50 mL		05/09/12
16	L12040844-04	SAMP	1	50 mL	50 mL		05/09/12
17	L12040844-05	SAMP	1	50 mL	50 mL		05/09/12
18	L12040844-06	SAMP	1	50 mL	50 mL		05/09/12
19	L12040857-02	SAMP	1	50 mL	50 mL		05/02/12
20	L12040863-01	SAMP	1	50 mL	50 mL		04/30/12
21	WG396210-04	MS	1	50 mL	50 mL	5 mL	
22	WG396210-05	MSD	1	50 mL	50 mL	5 mL	

Analyst: 

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 2392335
Report generated: 05/09/2012 10:17

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 042712H3.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 11
Maintenance Log ID: 41516

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254
ICSA: STD51272 ICSAB: STD51142 Int. Std: RGT17106
CCV: STD51198 LLCCV:

Workgroups: 396298, 396428

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.042712.090619	WG396441-01	Calibration Point		1		04/27/12 09:06
2	P2.042712.091313	WG396441-02	Calibration Point		1		04/27/12 09:13
3	P2.042712.092007	WG396441-03	Calibration Point		1		04/27/12 09:20
4	P2.042712.092702	WG396441-04	Calibration Point		1		04/27/12 09:27
5	P2.042712.093301	WG396441-05	Calibration Point		1		04/27/12 09:33
6	P2.042712.093905	WG396441-06	Initial Calibration Verification		1		04/27/12 09:39
7	P2.042712.094503	WG396441-07	Initial Calib Blank		1		04/27/12 09:45
8	P2.042712.095235	WG396441-08	Interference Check		1		04/27/12 09:52
9	P2.042712.095831	WG396441-09	Interference Check		1		04/27/12 09:58
10	P2.042712.100427	WG396441-10	CCV		1		04/27/12 10:04
11	P2.042712.101028	WG396441-11	CCB		1		04/27/12 10:10
12	P2.042712.101722	WG396210-02	Method/Prep Blank		1		04/27/12 10:17
13	P2.042712.102416	WG396210-03	Laboratory Control S		1		04/27/12 10:24
14	P2.042712.103015	WG396210-01	Reference Sample		1	L12040844-01	04/27/12 10:30
15	P2.042712.103614	WG396210-04	Matrix Spike		1	L12040844-01	04/27/12 10:36
16	P2.042712.104214	WG396210-05	Matrix Spike Duplica		1	L12040844-01	04/27/12 10:42
17	P2.042712.104859	L12040844-02	MW-16I-042412		1		04/27/12 10:48
18	P2.042712.105459	L12040844-03	MW-16S-042412		1		04/27/12 10:54
19	P2.042712.110059	L12040844-04	MW-16S-042412		1		04/27/12 11:00
20	P2.042712.110659	WG396298-01	Post Digestion Spike		1	L12040816-04	04/27/12 11:06
21	P2.042712.111300	WG396298-02	Serial Dilution		5	L12040816-04	04/27/12 11:13
22	P2.042712.111857	WG396441-12	CCV		1		04/27/12 11:18
23	P2.042712.112459	WG396441-13	CCB		1		04/27/12 11:24
24	P2.042712.113152	L12040844-05	MW-07-042412		1		04/27/12 11:31
25	P2.042712.113755	L12040844-06	MW-07-042412		1		04/27/12 11:37
26	P2.042712.114454	L12040810-01	70322-W0001		1		04/27/12 11:44
27	P2.042712.115149	L12040810-02	70333-W0001		1		04/27/12 11:51
28	P2.042712.115843	L12040810-03	70333-W0002		1		04/27/12 11:58
29	P2.042712.120537	L12040810-04	75038-W0001		1		04/27/12 12:05
30	P2.042712.121232	WG396441-14	CCV		1		04/27/12 12:12
31	P2.042712.121833	WG396441-15	CCB		1		04/27/12 12:18
32	P2.042712.122526	WG396441-16	Interference Check		1		04/27/12 12:25
33	P2.042712.123123	WG396441-17	Interference Check		1		04/27/12 12:31
34	P2.042712.123720	WG396441-18	CCV		1		04/27/12 12:37

Page: 1 Approved: April 30, 2012

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 042712H3.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 11
Maintenance Log ID: 41516

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254
ICSA: STD51272 ICSAB: STD51142 Int. Std: RGT17106
CCV: STD51198 LLCCV:

Workgroups: 396298, 396428

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.042712.124321	WG396441-19	CCB		1		04/27/12 12:43
36	P2.042712.125014	L12040816-01	8145-W0001		1		04/27/12 12:50
37	P2.042712.125709	L12040816-02	8966-W0001		1		04/27/12 12:57
38	P2.042712.130404	L12040816-03	8966-W0002		1		04/27/12 13:04
39	P2.042712.131100	L12040816-04	8966-W0003		1		04/27/12 13:11
40	P2.042712.131757	L12040816-05	9182-W0001		1		04/27/12 13:17
41	P2.042712.132453	L12040857-02	AV-RW-26-042112		1		04/27/12 13:24
42	P2.042712.133049	L12040863-01	9095 SUMP		1		04/27/12 13:30
43	P2.042712.133645	WG396441-20	CCV		1		04/27/12 13:36
44	P2.042712.134247	WG396441-21	CCB		1		04/27/12 13:42
45	P2.042712.134904	WG396402-02	Method/Prep Blank	5/50	1		04/27/12 13:49
46	P2.042712.135557	WG396402-03	Laboratory Control S	5/50	1		04/27/12 13:55
47	P2.042712.140208	WG396357-01	Fluid Blank		1		04/27/12 14:02
48	P2.042712.140639	L12040823-01	2770-SSP0026		1		04/27/12 14:06
49	P2.042712.141340	L12040852-01	1109-112-D-SP2	5/50	1		04/27/12 14:13
50	P2.042712.141938	L12040853-01	1109-143-111-D-001	5/50	1		04/27/12 14:19
51	P2.042712.142634	L12040855-01	1	5/50	1		04/27/12 14:26
52	P2.042712.143233	L12040855-02	2	5/50	1		04/27/12 14:32
53	P2.042712.143832	WG396428-01	Post Digestion Spike		1	L12040855-02	04/27/12 14:38
54	P2.042712.144433	WG396428-02	Serial Dilution		5	L12040855-02	04/27/12 14:44
55	P2.042712.145031	WG396441-22	CCV		1		04/27/12 14:50
56	P2.042712.145632	WG396441-23	CCB		1		04/27/12 14:56
57	P2.042712.150325	WG396402-02	Method/Prep Blank		1		04/27/12 15:03
58	P2.042712.151020	WG396210-03	Laboratory Control S	50/50	1		04/27/12 15:10
59	P2.042712.151708	WG396210-02	Method/Prep Blank	50/50	1		04/27/12 15:17
60	P2.042712.152402	L12040855-03	3	5/50	1		04/27/12 15:24
61	P2.042712.152959	L12040855-04	4	5/50	1		04/27/12 15:29
62	P2.042712.153557	L12040855-05	5	5/50	1		04/27/12 15:35
63	P2.042712.154154	L12040855-06	6	5/50	1		04/27/12 15:41
64	P2.042712.154922	L12040855-07	7	5/50	1		04/27/12 15:49
65	P2.042712.155521	L12040855-08	8	5/50	1		04/27/12 15:55
66	P2.042712.160122	L12040855-09	9	5/50	1		04/27/12 16:01
67	P2.042712.160720	WG396441-24	CCV		1		04/27/12 16:07
68	P2.042712.161321	WG396441-25	CCB		1		04/27/12 16:13

 Approved: April 30, 2012

Maren Berry

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 042712H3.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 11
Maintenance Log ID: 41516

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254
ICSA: STD51272 ICSAB: STD51142 Int. Std: RGT17106
CCV: STD51198 LLCCV:

Workgroups: 396298, 396428

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.042712.162014	L12040855-10	10	5/50	1		04/27/12 16:20
70	P2.042712.162614	L12040855-11	11	5/50	1		04/27/12 16:26
71	P2.042712.163213	WG396402-01	Reference Sample		1	L12040855-12	04/27/12 16:32
72	P2.042712.163814	WG396402-04	Matrix Spike	5/50	1	L12040855-12	04/27/12 16:38
73	P2.042712.164414	WG396402-05	Matrix Spike Duplica	5/50	1	L12040855-12	04/27/12 16:44
74	P2.042712.165015	L12040810-01	70322-W0001	50/50	1		04/27/12 16:50
75	P2.042712.165709	WG396441-26	CCV		1		04/27/12 16:57
76	P2.042712.170310	WG396441-27	CCB		1		04/27/12 17:03
77	P2.042712.171003	L12040810-02	70333-W0001	50/50	1		04/27/12 17:10
78	P2.042712.171658	L12040810-03	70333-W0002	50/50	1		04/27/12 17:16
79	P2.042712.172352	L12040810-04	75038-W0001	50/50	1		04/27/12 17:23
80	P2.042712.173047	L12040816-01	8145-W0001	50/50	1		04/27/12 17:30
81	P2.042712.173741	L12040816-02	8966-W0001	50/50	1		04/27/12 17:37
82	P2.042712.174436	L12040816-03	8966-W0002	50/50	1		04/27/12 17:44
83	P2.042712.175131	L12040816-04	8966-W0003	50/50	1		04/27/12 17:51
84	P2.042712.175826	WG396298-01	Post Digestion Spike		1	L12040816-04	04/27/12 17:58
85	P2.042712.180426	WG396298-02	Serial Dilution		5	L12040816-04	04/27/12 18:04
86	P2.042712.181123	WG396441-28	CCV		1		04/27/12 18:11
87	P2.042712.181724	WG396441-29	CCB		1		04/27/12 18:17
88	P2.042712.182417	L12040816-05	9182-W0001	50/50	1		04/27/12 18:24
89	P2.042712.183114	L12040844-01	MW-16I-042412		1	WG396210-01	04/27/12 18:31
90	P2.042712.183714	WG396210-04	Matrix Spike	50/50	1	L12040844-01	04/27/12 18:37
91	P2.042712.184313	WG396210-05	Matrix Spike Duplica	50/50	1	L12040844-01	04/27/12 18:43
92	P2.042712.184912	L12040844-02	MW-16I-042412		1		04/27/12 18:49
93	P2.042712.185511	L12040844-03	MW-16S-042412		1		04/27/12 18:55
94	P2.042712.190110	L12040844-04	MW-16S-042412		1		04/27/12 19:01
95	P2.042712.190709	L12040844-05	MW-07-042412		1		04/27/12 19:07
96	P2.042712.191312	L12040844-06	MW-07-042412		1		04/27/12 19:13
97	P2.042712.192012	L12040857-02	AV-RW-26-042112	50/50	1		04/27/12 19:20
98	P2.042712.192611	WG396441-30	CCV		1		04/27/12 19:26
99	P2.042712.193212	WG396441-31	CCB		1		04/27/12 19:32

Comments

Seq.	Rerun	Dil.	Reason	Analytes

Page: 3 Approved: April 30, 2012

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 042712H3.CSV

Analyst1: KHR Analyst2: N/A

Method: 6010 SOP: ME600E Rev: 11

Maintenance Log ID: 41516

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254

ICSA: STD51272 ICSAB: STD51142 Int. Std: RGT17106

CCV: STD51198 LLCCV:

Workgroups: 396298, 396428

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time

Seq.	Rerun	Dil.	Reason	Analytes
12			Data not used from 10:17 through 13:30	

 Approved: April 30, 2012

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 27-APR-2012
Analyst: KHR
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 396441
Runlog ID: 46436
Analytical Workgroups: 396298, 396428

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	855
Level 4	852, 853, 810, 816, 857
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:
30-APR-2012

Secondary Reviewer:
30-APR-2012

CHECKLIST1 - Modified 03/05/2008
Generated: APR-30-2012 14:57:41

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6010B **AAB#:** WG396298

Login Number: L12040844

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-16I-042412	01	04/24/12					04/26/12	1.8	180		05/09/12	14.9	180	
MW-16I-042412	02	04/24/12					04/26/12	1.8	180		05/09/12	15	180	
MW-16S-042412	03	04/24/12					04/26/12	1.8	180		05/09/12	15	180	
MW-16S-042412	04	04/24/12					04/26/12	1.8	180		05/09/12	15	180	
MW-07-042412	05	04/24/12					04/26/12	1.8	180		05/09/12	15	180	
MW-07-042412	05	04/24/12					04/26/12	1.8	180		05/09/12	15	180	
MW-07-042412	06	04/24/12					04/26/12	1.8	180		05/09/12	15	180	
MW-07-042412	06	04/24/12					04/26/12	1.8	180		05/09/12	15	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2395383
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG396298
Blank File ID: P2.050912.110038
Blank Sample ID: WG396210-02
Prep Date: 04/26/12 07:21
Instrument ID: PE-ICP2
Analyzed Date: 05/09/12 11:00
Method: 6010B
Analyst: KHR

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396210-03	P2.042712.151020	04/27/12 15:10	01
LCS	WG396210-03	P2.050912.110735	05/09/12 11:07	02
MW-16I-042412	L12040844-01	P2.050912.111332	05/09/12 11:13	01
MW-16I-042412	L12040844-02	P2.050912.113130	05/09/12 11:31	01
MW-16S-042412	L12040844-03	P2.050912.113729	05/09/12 11:37	01
MW-16S-042412	L12040844-04	P2.050912.120822	05/09/12 12:08	01
MW-07-042412	L12040844-05	P2.050912.122146	05/09/12 12:21	01
MW-07-042412	L12040844-06	P2.050912.122745	05/09/12 12:27	01
MW-07-042412	L12040844-05	P2.050912.123446	05/09/12 12:34	DL01
MW-07-042412	L12040844-06	P2.050912.124143	05/09/12 12:41	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2395384
Report generated 05/09/2012 14:22

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040844 Prep Date:04/26/12 07:21 Sample ID:WG396210-02
Instrument ID:PE-ICP2 Run Date:05/09/12 11:00 Prep Method:3005A
File ID:P2.050912.110038 Analyst:KHR Method:6010B
Workgroup (AAB#):WG396298 Matrix:Water Units:mg/L
Contract #: Cal ID:PE-ICP-09-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Barium, Total	0.00250	0.0100	-0.00362	1	U
Beryllium, Total	0.000500	0.00200	0.000500	1	U
Cadmium, Total	0.000250	0.000500	0.000250	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Chromium, Total	0.00250	0.00500	0.00250	1	U
Cobalt, Total	0.00250	0.0200	0.00250	1	U
Copper, Total	0.00500	0.0200	0.00500	1	U
Iron, Total	0.0250	0.100	0.0250	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Nickel, Total	0.00500	0.0400	0.00500	1	U
Potassium, Total	0.250	1.00	0.250	1	U
Silver, Total	0.00500	0.0100	0.00500	1	U
Sodium, Total	0.250	0.500	0.250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U
Zinc, Total	0.00500	0.0200	0.00500	1	U

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

Report Name:BLANK
PDF ID: 2395385
09-MAY-2012 14:22

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG396210-03
Instrument ID: PE-ICP2 Run Time: 11:07 Prep Method: 3005A
File ID: P2.050912.110735 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG396298 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD50758 Cal ID: PE-ICP-09-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	5.04	101	85 - 115	
Barium, Total	0.500	0.508	102	85 - 115	
Beryllium, Total	0.0250	0.0252	101	85 - 115	
Cadmium, Total	0.0250	0.0247	98.6	85 - 115	
Calcium, Total	5.00	5.10	102	85 - 115	
Chromium, Total	0.250	0.254	102	85 - 115	
Cobalt, Total	0.100	0.101	101	85 - 115	
Copper, Total	0.250	0.258	103	85 - 115	
Iron, Total	2.00	2.01	101	85 - 115	
Magnesium, Total	5.00	5.10	102	85 - 115	
Manganese, Total	0.250	0.253	101	85 - 115	
Nickel, Total	0.250	0.259	104	85 - 115	
Potassium, Total	25.0	24.5	98.1	85 - 115	
Silver, Total	0.200	0.206	103	85 - 115	
Sodium, Total	25.0	25.2	101	85 - 115	
Vanadium, Total	0.500	0.511	102	85 - 115	
Zinc, Total	0.500	0.518	104	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2395387
Report generated: 05/09/2012 14:22

Microbac Laboratories Inc.
MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12040844 Cal ID: PE-ICP2- Worknum: WG396298
Instrument ID: PE-ICP2 Contract #: Method: 6010B
Parent ID: WG396210-01 File ID: P2.050912.111332 Dil: 1 Matrix: WATER
Sample ID: WG396210-04 MS File ID: P2.050912.111930 Dil: 1 Units: mg/L
Sample ID: WG396210-05 MSD File ID: P2.050912.112530 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	ND	5.00	5.01	100	5.00	5.16	103	2.95	85 - 115	20	
Barium, Total	0.136	0.500	0.635	99.7	0.500	0.653	103	2.85	85 - 115	20	
Beryllium, Total	ND	0.0250	0.0235	94.0	0.0250	0.0250	100	6.20	85 - 115	20	
Cadmium, Total	0.00249	0.0250	0.0250	90.0	0.0250	0.0267	96.7	6.42	85 - 115	20	
Calcium, Total	139	5.00	147	157	5.00	154	291	4.47	85 - 115	20	*
Chromium, Total	ND	0.250	0.248	99.1	0.250	0.256	103	3.41	85 - 115	20	
Cobalt, Total	ND	0.100	0.0959	95.9	0.100	0.0994	99.4	3.51	85 - 115	20	
Copper, Total	ND	0.250	0.241	96.5	0.250	0.255	102	5.40	85 - 115	20	
Iron, Total	9.38	2.00	11.2	89.1	2.00	11.4	103	2.48	85 - 115	20	
Magnesium, Total	28.3	5.00	33.1	97.2	5.00	33.9	112	2.26	85 - 115	20	
Manganese, Total	0.264	0.250	0.520	102	0.250	0.535	108	2.73	85 - 115	20	
Nickel, Total	ND	0.250	0.245	97.9	0.250	0.254	102	3.80	85 - 115	20	
Potassium, Total	4.30	25.0	29.1	99.2	25.0	29.7	102	2.14	85 - 115	20	
Silver, Total	ND	0.200	0.195	97.7	0.200	0.207	104	5.81	85 - 115	20	
Sodium, Total	67.0	25.0	95.3	113	25.0	96.9	119	1.66	85 - 115	20	*
Vanadium, Total	0.00564	0.500	0.509	101	0.500	0.526	104	3.20	85 - 115	20	
Zinc, Total	0.0768	0.500	0.566	97.8	0.500	0.585	102	3.26	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 05/26/2011
PDF File ID: 2395389
Report generated 05/09/2012 14:22

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12040844 **Worknum:** WG396298
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG396298-04 **File ID:** P2.050912.114929 **Dil:** 5 **Units:** mg/L
Sample: L12040844-03 **File ID:** P2.050912.113729 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	ND	U	ND	U		
Barium	0.164		0.154		5.69	
Beryllium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Calcium	135		135		0.18	
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	ND	U	ND	U		
Iron	23.6		24.0		1.76	
Magnesium	25.0		25.1		0.65	
Manganese	0.435		0.423		2.67	
Nickel	ND	U	ND	U		
Potassium	3.97	X	4.05	F	2.12	
Silver	ND	U	ND	U		
Sodium	68.9		68.5		0.63	
Vanadium	ND	U	ND	U		
Zinc	ND	U	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 2395381
05/09/2012 14:21

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12040844 **Worknum:** WG396298
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG396298-03 **File ID:** P2.050912.114329 **Dil:** 1 **Units:** mg/L
Sample ID: L12040844-03 **File ID:** P2.050912.113729 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	5.07		0	U	5	101.5	75 - 125	
BARIUM	0.656		0.164		.5	101.8	75 - 125	
BERYLLIUM	0.0248		0	U	.025	99.1	75 - 125	
CADMIUM	0.0241		0	U	.025	96.2	75 - 125	
CALCIUM	131		135		5	198.9	75 - 125	N
CHROMIUM	0.253		0	U	.25	101.1	75 - 125	
COBALT	0.0976		0	U	.1	97.6	75 - 125	
COPPER	0.247		0	U	.25	99.0	75 - 125	
IRON	23.5		23.6		2	114.5	75 - 125	
MAGNESIUM	27.7		25.0		5	104.9	75 - 125	
MANGANESE	0.655		0.435		.25	105.7	75 - 125	
NICKEL	0.252		0	U	.25	100.7	75 - 125	
POTASSIUM	28.6		3.97		25	100.0	75 - 125	
SILVER	0.204		0	U	.2	101.8	75 - 125	
SODIUM	89.5		68.9		25	110.1	75 - 125	
VANADIUM	0.514		0	U	.5	102.8	75 - 125	
ZINC	0.512		0	U	.5	102.5	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2395382
Report generated: 05/09/2012 14:21

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12040844**	Workgroup (AAB#):	**WG396298**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG397533**	Initial Calibration Date:	**09-MAY-2012 10:16**

	WG397533-01		WG397533-02		WG397533-03		WG397533-04		WG397533-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-5.02	.1	815	.2	1640	10	80200	20	159000	.99999	
BARIUM	0	-154	.01	1530	.02	3070	1	154000	2	299000	.999904	
BERYLLIUM	0	-1630	.0005	570	.001	1220	.05	64100	.1	124000	.999892	
CADMIUM	0	82.2	.0005	33.7	.001	52.7	.05	2830	.1	5500	.999902	
CALCIUM	0	-77.6	NA	NA	.2	91.0	10	4910	20	9790	.999999	
CHROMIUM	0	169	.005	542	.01	1090	.5	54600	1	106000	.999893	
COBALT	0	3.68	.002	77.3	.004	150	.1	7660	.4	14900	.999929	
COPPER	0	-714	.005	1350	.01	2730	.5	144000	1	281000	.999941	
IRON	0	29.8	.04	625	.08	1290	4	64200	8	130000	.999991	
MAGNESIUM	0	22.9	.1	364	.2	722	10	35900	20	72300	.999994	
MANGANESE	0	362	.005	4350	.01	8290	.5	425000	1	815000	.99979	
NICKEL	0	-184	.005	350	.01	694	.5	33900	1	65700	.999877	
POTASSIUM	0	28.0	.5	1900	1	3670	50	174000	100	340000	1	
SILVER	0	-92.8	.004	1300	.008	2500	.4	131000	.8	252000	.999836	
SODIUM	0	1140	.5	10500	1	21100	50	1050000	100	2050000	1	
VANADIUM	0	15700	.01	1880	.02	3890	1	196000	2	382000	.999913	
ZINC	0	4.94	.01	410	.02	813	1	40600	2	77800	.999779	

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: 2395394
Report generated: 09-MAY-2012 14:39

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-07
Instrument ID: PE-ICP2 Run Time: 10:28 Method: 6010B
File ID: P2.050912.102841 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG396298 Cal ID: PE-ICP2 - 09-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: 2395396
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-11

Instrument ID: PE-ICP2 Run Time: 10:53 Method: 6010B

File ID: P2.050912.105345 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00369	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	-0.000315	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	-0.00552	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: 2395399
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-13

Instrument ID: PE-ICP2 Run Time: 12:01 Method: 6010B

File ID: P2.050912.120128 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00365	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	-0.00571	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: 2395399
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-15

Instrument ID: PE-ICP2 Run Time: 13:29 Method: 6010B

File ID: P2.050912.132908 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00375	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	-0.000297	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	-0.00568	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: 2395399
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-19

Instrument ID: PE-ICP2 Run Time: 13:53 Method: 6010B

File ID: P2.050912.135355 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00369	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	-0.00558	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: 2395399
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-06
Instrument ID: PE-ICP2 Run Time: 10:22 Method: 6010B
File ID: P2.050912.102243 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	9.81	98.1	90 - 110	
Barium		1	1.00	100	90 - 110	
Beryllium		.05	0.0490	98.0	90 - 110	
Cadmium		.05	0.0484	96.8	90 - 110	
Calcium		10	10.2	102	90 - 110	
Chromium		.5	0.498	99.6	90 - 110	
Cobalt		.2	0.197	98.3	90 - 110	
Copper		.5	0.503	101	90 - 110	
Iron		4	3.92	98.1	90 - 110	
Magnesium		10	9.71	97.1	90 - 110	
Manganese		.5	0.505	101	90 - 110	
Nickel		.5	0.503	101	90 - 110	
Potassium		50	48.4	96.8	90 - 110	
Silver		.4	0.396	98.9	90 - 110	
Sodium		50	48.5	97.0	90 - 110	
Vanadium		1	0.981	98.1	90 - 110	
Zinc		1	1.01	101	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2395395
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-10
Instrument ID: PE-ICP2 Run Time: 10:47 Method: 6010B
File ID: P2.050912.104744 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.68	mg/L	96.8	90 - 110		
Barium		1.00	1.00	mg/L	100	90 - 110		
Beryllium		0.0500	0.0486	mg/L	97.2	90 - 110		
Cadmium		0.0500	0.0479	mg/L	95.8	90 - 110		
Calcium		10.0	10.1	mg/L	101	90 - 110		
Chromium		0.500	0.497	mg/L	99.4	90 - 110		
Cobalt		0.200	0.196	mg/L	98.1	90 - 110		
Copper		0.500	0.489	mg/L	97.7	90 - 110		
Iron		4.00	3.89	mg/L	97.3	90 - 110		
Magnesium		10.0	9.68	mg/L	96.8	90 - 110		
Manganese		0.500	0.504	mg/L	101	90 - 110		
Nickel		0.500	0.498	mg/L	99.7	90 - 110		
Potassium		50.0	47.7	mg/L	95.4	90 - 110		
Silver		0.400	0.397	mg/L	99.3	90 - 110		
Sodium		50.0	48.3	mg/L	96.5	90 - 110		
Vanadium		1.00	0.988	mg/L	98.8	90 - 110		
Zinc		1.00	1.01	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2395398
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-12

Instrument ID: PE-ICP2 Run Time: 11:55 Method: 6010B

File ID: P2.050912.115527 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.77	mg/L	97.7	90 - 110		
Barium		1.00	1.00	mg/L	100	90 - 110		
Beryllium		0.0500	0.0503	mg/L	101	90 - 110		
Cadmium		0.0500	0.0496	mg/L	99.3	90 - 110		
Calcium		10.0	10.3	mg/L	103	90 - 110		
Chromium		0.500	0.500	mg/L	100	90 - 110		
Cobalt		0.200	0.197	mg/L	98.4	90 - 110		
Copper		0.500	0.499	mg/L	99.9	90 - 110		
Iron		4.00	3.98	mg/L	99.5	90 - 110		
Magnesium		10.0	9.91	mg/L	99.1	90 - 110		
Manganese		0.500	0.503	mg/L	101	90 - 110		
Nickel		0.500	0.499	mg/L	99.8	90 - 110		
Potassium		50.0	47.9	mg/L	95.8	90 - 110		
Silver		0.400	0.410	mg/L	103	90 - 110		
Sodium		50.0	48.2	mg/L	96.3	90 - 110		
Vanadium		1.00	0.986	mg/L	98.6	90 - 110		
Zinc		1.00	1.02	mg/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395398

Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-14

Instrument ID: PE-ICP2 Run Time: 13:23 Method: 6010B

File ID: P2.050912.132307 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.70	mg/L	97.0	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0495	mg/L	98.9	90 - 110		
Cadmium		0.0500	0.0490	mg/L	97.9	90 - 110		
Calcium		10.0	10.1	mg/L	101	90 - 110		
Chromium		0.500	0.498	mg/L	99.6	90 - 110		
Cobalt		0.200	0.199	mg/L	99.5	90 - 110		
Copper		0.500	0.490	mg/L	98.0	90 - 110		
Iron		4.00	3.96	mg/L	99.0	90 - 110		
Magnesium		10.0	9.87	mg/L	98.7	90 - 110		
Manganese		0.500	0.507	mg/L	101	90 - 110		
Nickel		0.500	0.502	mg/L	100	90 - 110		
Potassium		50.0	48.5	mg/L	97.0	90 - 110		
Silver		0.400	0.401	mg/L	100	90 - 110		
Sodium		50.0	47.4	mg/L	94.9	90 - 110		
Vanadium		1.00	0.995	mg/L	99.5	90 - 110		
Zinc		1.00	1.02	mg/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395398

Report generated 05/09/2012 14:21

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 05/09/2012 Sample ID: WG397533-18

Instrument ID: PE-ICP2 Run Time: 13:47 Method: 6010B

File ID: P2.050912.134754 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG396298 Cal ID: PE-ICP - 09-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.1	mg/L	101	90 - 110		
Barium		1.00	1.05	mg/L	105	90 - 110		
Beryllium		0.0500	0.0521	mg/L	104	90 - 110		
Cadmium		0.0500	0.0509	mg/L	102	90 - 110		
Calcium		10.0	10.5	mg/L	105	90 - 110		
Chromium		0.500	0.524	mg/L	105	90 - 110		
Cobalt		0.200	0.205	mg/L	102	90 - 110		
Copper		0.500	0.514	mg/L	103	90 - 110		
Iron		4.00	4.18	mg/L	105	90 - 110		
Magnesium		10.0	10.4	mg/L	104	90 - 110		
Manganese		0.500	0.529	mg/L	106	90 - 110		
Nickel		0.500	0.525	mg/L	105	90 - 110		
Potassium		50.0	49.7	mg/L	99.5	90 - 110		
Silver		0.400	0.424	mg/L	106	90 - 110		
Sodium		50.0	50.0	mg/L	100	90 - 110		
Vanadium		1.00	1.03	mg/L	103	90 - 110		
Zinc		1.00	1.08	mg/L	108	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395398

Report generated 05/09/2012 14:21

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040844 **Workgroup (AAB#):** WG396298
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG397533-08 **File ID:** P2.050912.103534 **Units:** mg/L
Sol. AB : WG397533-09 **File ID:** P2.050912.104147 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	252	101	250	254	102	
Barium	NS	-0.00120	NS	0.250	0.247	98.8	
Beryllium	NS	-0.000990	NS	0.250	0.247	98.8	
Cadmium	NS	-0.000250	NS	0.500	0.414	82.8	
Calcium	250	262	105	250	263	105	
Chromium	NS	-0.00295	NS	0.250	0.248	99.2	
Cobalt	NS	-0.00265	NS	0.250	0.231	92.4	
Copper	NS	0.00141	NS	0.250	0.247	98.8	
Iron	100	94.3	94.3	100	94.7	94.7	
Magnesium	250	255	102	250	256	102	
Manganese	NS	-0.00269	NS	0.250	0.240	96.0	
Nickel	NS	-0.00139	NS	0.500	0.476	95.2	
Potassium	NS	-0.0504	NS	5.00	4.71	94.2	
Silver	NS	-0.00288	NS	0.500	0.506	101	
Sodium	NS	0.00897	NS	5.00	4.99	99.8	
Vanadium	NS	0.00196	NS	0.250	0.245	98.0	
Zinc	NS	-0.00270	NS	0.500	0.473	94.6	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 2395397
Report generated 05/09/2012 14:21

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040844 **Workgroup (AAB#):** WG396298
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG397533-16 **File ID:** P2.050912.133601 **Units:** mg/L
Sol. AB : WG397533-17 **File ID:** P2.050912.134157 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	241	96.4	250	252	101	
Barium	NS	-0.00136	NS	0.250	0.251	100	
Beryllium	NS	-0.000730	NS	0.250	0.249	99.6	
Cadmium	NS	-0.000260	NS	0.500	0.420	84.0	
Calcium	250	255	102	250	261	104	
Chromium	NS	-0.00261	NS	0.250	0.252	101	
Cobalt	NS	-0.00246	NS	0.250	0.236	94.4	
Copper	NS	0.00142	NS	0.250	0.246	98.4	
Iron	100	93.1	93.1	100	95.5	95.5	
Magnesium	250	250	100	250	258	103	
Manganese	NS	-0.00269	NS	0.250	0.243	97.2	
Nickel	NS	-0.00142	NS	0.500	0.483	96.6	
Potassium	NS	-0.0601	NS	5.00	4.71	94.2	
Silver	NS	-0.00300	NS	0.500	0.508	102	
Sodium	NS	-0.000440	NS	5.00	4.96	99.2	
Vanadium	NS	-0.00284	NS	0.250	0.245	98.0	
Zinc	NS	-0.00261	NS	0.500	0.489	97.8	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040844 **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: 2395393
Report generated: 05/09/2012 14:21

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040844 **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
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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040844 **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

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040844 **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
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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040844 **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
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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040844 **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: 2395393
Report generated: 05/09/2012 14:21

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12040844 **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: 2395391
Report generated: 05/09/2012 14:21

2.3.1.3 Raw Data

==========

Analysis Begun

Start Time: 4/27/2012 9:06:17 AM **Plasma On Time: 4/27/2012 6:06:24 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: 042712H3
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 4/27/2012 9:06:19 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	1857844.1	28511.27	1.53%		
YRADIAL	219528.3	4639.66	2.11%		
Ga 417.206	1022505.7	7484.19	0.73%		
GaRADIAL	64549.0	1953.65	3.03%		
Ag 328.068†	58.1	45.63	78.58%	[0.00]	mg/L
Al 396.153†	38.3	11.59	30.27%	[0.00]	mg/L
As 188.979†	-19.7	4.17	21.16%	[0.00]	mg/L
Ba 233.527†	-169.9	20.15	11.86%	[0.00]	mg/L
Be 234.861†	-1768.7	18.98	1.07%	[0.00]	mg/L
B 249.677†	25.5	20.01	78.53%	[0.00]	mg/L
Ca 227.546†	-65.5	10.68	16.31%	[0.00]	mg/L
Cd 228.802†	86.5	7.89	9.11%	[0.00]	mg/L
Co 228.616†	-4.2	0.42	9.97%	[0.00]	mg/L
Cr 267.716†	193.5	6.80	3.52%	[0.00]	mg/L
Cu 327.393†	-493.1	89.84	18.22%	[0.00]	mg/L
Fe 239.562†	7.1	4.51	63.37%	[0.00]	mg/L
Mg 279.077†	31.7	7.73	24.42%	[0.00]	mg/L
Mn 257.610†	334.8	13.19	3.94%	[0.00]	mg/L
Mo 202.031†	90.6	8.20	9.05%	[0.00]	mg/L
Ni 231.604†	-191.9	16.54	8.62%	[0.00]	mg/L
Pb 220.353†	-84.7	3.40	4.01%	[0.00]	mg/L
Sb 206.836†	11.1	5.06	45.59%	[0.00]	mg/L
Se 196.026†	20.7	3.19	15.44%	[0.00]	mg/L
Si 251.611†	628.4	6.81	1.08%	[0.00]	mg/L
Sn 189.927†	26.1	4.14	15.87%	[0.00]	mg/L
Ti 334.940†	823.3	48.77	5.92%	[0.00]	mg/L
Tl 190.801†	-82.1	6.58	8.01%	[0.00]	mg/L
V 290.880†	12170.7	152.62	1.25%	[0.00]	mg/L
Zn 206.200†	-5.6	9.21	164.84%	[0.00]	mg/L
K 766.490†	-117.2	81.27	69.37%	[0.00]	mg/L
Na 589.592†	742.8	54.86	7.39%	[0.00]	mg/L
Sr 407.771†	-508.8	23.24	4.57%	[0.00]	mg/L
Li 670.784†	-55.2	84.15	152.41%	[0.00]	mg/L

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 4/27/2012 9:13:13 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S1

Approved: April 30, 2012

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	1915186.6	21261.88	1.11%		
YRADIAL	223704.6	3598.86	1.61%		
Ga 417.206	1063190.9	11286.46	1.06%		
GaRADIAL	65233.7	1310.84	2.01%		
Ag 328.068†	855.4	70.82	8.28%	[0.0040]	mg/L
Al 396.153†	557.9	11.45	2.05%	[0.10]	mg/L
Ba 233.527†	1343.7	15.32	1.14%	[0.010]	mg/L
Be 234.861†	586.5	36.08	6.15%	[0.0005]	mg/L
Cd 228.802†	20.7	6.93	33.53%	[0.00050]	mg/L
Co 228.616†	61.4	5.97	9.71%	[0.0020]	mg/L
Cr 267.716†	442.4	11.09	2.51%	[0.0050]	mg/L
Cu 327.393†	1045.5	200.25	19.15%	[0.0050]	mg/L
Fe 239.562†	520.5	8.67	1.67%	[0.040]	mg/L
Mg 279.077†	295.6	8.95	3.03%	[0.10]	mg/L
Mn 257.610†	3511.1	65.21	1.86%	[0.0050]	mg/L
Mo 202.031†	292.3	4.61	1.58%	[0.010]	mg/L
Ni 231.604†	305.7	14.59	4.77%	[0.0050]	mg/L
Pb 220.353†	31.7	9.60	30.25%	[0.0050]	mg/L
Sb 206.836†	39.4	2.05	5.21%	[0.012]	mg/L
Si 251.611†	1651.0	18.54	1.12%	[0.050]	mg/L
Sn 189.927†	83.9	4.32	5.14%	[0.010]	mg/L
Ti 334.940†	7666.3	164.30	2.14%	[0.010]	mg/L
V 290.880†	1217.4	154.36	12.68%	[0.010]	mg/L
Zn 206.200†	396.4	11.40	2.88%	[0.010]	mg/L
K 766.490†	1526.0	17.25	1.13%	[0.50]	mg/L
Na 589.592†	6911.3	81.02	1.17%	[0.50]	mg/L
Sr 407.771†	18559.5	643.73	3.47%	[0.010]	mg/L
Li 670.784†	1152.1	50.20	4.36%	[0.010]	mg/L

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Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 4/27/2012 9:20:07 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	1864301.3	32321.64	1.73%		
YRADIAL	223179.5	5198.70	2.33%		
Ga 417.206	1030446.9	7097.29	0.69%		
GaRADIAL	65371.1	872.49	1.33%		
Ag 328.068†	2012.4	63.77	3.17%	[0.0080]	mg/L
Al 396.153†	1099.1	9.09	0.83%	[0.20]	mg/L
As 188.979†	18.9	5.07	26.89%	[0.0080]	mg/L
Ba 233.527†	2784.8	39.35	1.41%	[0.020]	mg/L
Be 234.861†	1132.8	33.86	2.99%	[0.0010]	mg/L
B 249.677†	696.8	24.40	3.50%	[0.010]	mg/L
Ca 227.546†	60.8	8.01	13.16%	[0.20]	mg/L
Cd 228.802†	40.0	10.62	26.59%	[0.0010]	mg/L
Co 228.616†	137.4	3.26	2.37%	[0.0040]	mg/L
Cr 267.716†	941.8	23.98	2.55%	[0.010]	mg/L
Cu 327.393†	1958.2	22.89	1.17%	[0.010]	mg/L
Fe 239.562†	1026.5	11.32	1.10%	[0.080]	mg/L
Mg 279.077†	578.2	15.08	2.61%	[0.20]	mg/L
Mn 257.610†	7007.0	43.81	0.63%	[0.010]	mg/L
Mo 202.031†	621.7	1.72	0.28%	[0.020]	mg/L
Ni 231.604†	621.7	12.47	2.01%	[0.010]	mg/L

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Pb 220.353†	90.5	15.01	16.58%	[0.010]	mg/L
Sb 206.836†	82.5	3.80	4.61%	[0.024]	mg/L
Se 196.026†	1.0	3.34	329.99%	[0.0080]	mg/L
Si 251.611†	3518.1	63.64	1.81%	[0.10]	mg/L
Sn 189.927†	175.8	4.30	2.45%	[0.020]	mg/L
Ti 334.940†	15656.7	115.25	0.74%	[0.020]	mg/L
Tl 190.801†	38.2	11.68	30.60%	[0.010]	mg/L
V 290.880†	2922.5	247.29	8.46%	[0.020]	mg/L
Zn 206.200†	830.2	16.54	1.99%	[0.020]	mg/L
K 766.490†	2661.9	34.42	1.29%	[1.00]	mg/L
Na 589.592†	13859.8	422.76	3.05%	[1.00]	mg/L
Sr 407.771†	36966.3	960.10	2.60%	[0.020]	mg/L
Li 670.784†	2197.7	22.01	1.00%	[0.020]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 4/27/2012 9:27:02 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	1839017.8	32223.70	1.75%		
YRADIAL	227115.2	4059.58	1.79%		
Ga 417.206	1007378.7	14447.50	1.43%		
GaRADIAL	66568.3	1019.24	1.53%		
Ag 328.068†	105826.8	3230.02	3.05%	[0.40]	mg/L
Al 396.153†	51884.9	151.78	0.29%	[10.00]	mg/L
As 188.979†	924.7	18.09	1.96%	[0.40]	mg/L
Ba 233.527†	134172.2	1578.68	1.18%	[1.00]	mg/L
Be 234.861†	54681.4	1354.11	2.48%	[0.05]	mg/L
B 249.677†	34953.1	1042.29	2.98%	[0.50]	mg/L
Ca 227.546†	3484.1	105.02	3.01%	[10.00]	mg/L
Cd 228.802†	2470.3	84.61	3.42%	[0.05]	mg/L
Co 228.616†	6478.6	112.58	1.74%	[0.20]	mg/L
Cr 267.716†	45353.9	238.51	0.53%	[0.50]	mg/L
Cu 327.393†	99285.2	2419.61	2.44%	[0.50]	mg/L
Fe 239.562†	52227.4	104.83	0.20%	[4.00]	mg/L
Mg 279.077†	27922.7	19.36	0.07%	[10.00]	mg/L
Mn 257.610†	348888.2	4749.10	1.36%	[0.50]	mg/L
Mo 202.031†	30741.4	329.87	1.07%	[1.00]	mg/L
Ni 231.604†	28825.7	495.07	1.72%	[0.50]	mg/L
Pb 220.353†	4786.5	84.11	1.76%	[0.50]	mg/L
Sb 206.836†	4142.7	76.98	1.86%	[1.20]	mg/L
Se 196.026†	587.2	13.92	2.37%	[0.40]	mg/L
Si 251.611†	171402.0	3682.84	2.15%	[5.00]	mg/L
Sn 189.927†	8762.8	116.44	1.33%	[1.00]	mg/L
Ti 334.940†	782241.5	2221.47	0.28%	[1.00]	mg/L
Tl 190.801†	1622.5	11.82	0.73%	[0.50]	mg/L
V 290.880†	161981.1	858.27	0.53%	[1.00]	mg/L
Zn 206.200†	40215.9	467.09	1.16%	[1.00]	mg/L
K 766.490†	109260.1	292.16	0.27%	[50.00]	mg/L
Na 589.592†	679144.4	9989.44	1.47%	[50.00]	mg/L
Sr 407.771†	1806228.7	39099.32	2.16%	[1.00]	mg/L
Li 670.784†	102253.6	714.80	0.70%	[1.00]	mg/L

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 4/27/2012 9:33:01 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 30, 2012

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	1786747.0	30262.80	1.69%		
YRADIAL	211808.8	4009.28	1.89%		
Ga 417.206	983104.3	19111.45	1.94%		
GaRADIAL	64175.8	1373.75	2.14%		
Ag 328.068†	207219.0	4476.91	2.16%	[0.80]	mg/L
Al 396.153†	102500.3	287.89	0.28%	[20.00]	mg/L
As 188.979†	1869.3	28.21	1.51%	[0.80]	mg/L
Ba 233.527†	264910.8	271.58	0.10%	[2.00]	mg/L
Be 234.861†	108400.1	2026.58	1.87%	[0.10]	mg/L
B 249.677†	69400.7	1706.06	2.46%	[1.00]	mg/L
Ca 227.546†	7095.5	189.18	2.67%	[20.00]	mg/L
Cd 228.802†	4934.7	152.40	3.09%	[0.10]	mg/L
Co 228.616†	12844.3	238.72	1.86%	[0.40]	mg/L
Cr 267.716†	89344.3	461.17	0.52%	[1.00]	mg/L
Cu 327.393†	195998.2	3075.57	1.57%	[1.00]	mg/L
Fe 239.562†	104660.5	744.97	0.71%	[8.00]	mg/L
Mg 279.077†	56438.0	469.86	0.83%	[20.00]	mg/L
Mn 257.610†	676608.4	3698.70	0.55%	[1.00]	mg/L
Mo 202.031†	60865.8	204.52	0.34%	[2.00]	mg/L
Ni 231.604†	56397.9	330.51	0.59%	[1.00]	mg/L
Pb 220.353†	9495.0	162.92	1.72%	[1.00]	mg/L
Sb 206.836†	8253.8	202.44	2.45%	[2.40]	mg/L
Se 196.026†	1170.9	29.87	2.55%	[0.80]	mg/L
Si 251.611†	332181.1	3938.81	1.19%	[10.00]	mg/L
Sn 189.927†	17299.8	346.00	2.00%	[2.00]	mg/L
Ti 334.940†	1555623.1	3155.76	0.20%	[2.00]	mg/L
Tl 190.801†	3218.4	52.96	1.65%	[1.00]	mg/L
V 290.880†	316610.9	1818.06	0.57%	[2.00]	mg/L
Zn 206.200†	78492.5	117.88	0.15%	[2.00]	mg/L
K 766.490†	216930.9	618.50	0.29%	[100.00]	mg/L
Na 589.592†	1375484.8	33981.04	2.47%	[100.00]	mg/L
Sr 407.771†	3676912.4	113119.44	3.08%	[2.00]	mg/L
Li 670.784†	199163.4	426.31	0.21%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin, Calc Int	200.7	259800	0.00000	0.999944	
Al 396.153	4	Lin, Calc Int	116.5	5131	0.00000	0.999983	
As 188.979	3	Wt. Lin	0.3	2324	0.00000	0.999985	
Ba 233.527	4	Lin, Calc Int	262.2	132600	0.00000	0.999981	
Be 234.861	4	Lin, Calc Int	89.2	1085000	0.00000	0.999991	
B 249.677	3	Lin, Calc Int	47.3	69440	0.00000	0.999993	
Ca 227.546	3	Lin, Calc Int	-16.2	354.5	0.00000	0.999960	
Cd 228.802	4	Lin, Calc Int	-3.8	49400	0.00000	0.999998	
Co 228.616	4	Lin, Calc Int	9.0	32140	0.00000	0.999991	
Cr 267.716	4	Lin, Calc Int	98.7	89500	0.00000	0.999973	
Cu 327.393	4	Lin, Calc Int	180.2	196300	0.00000	0.999980	
Fe 239.562	4	Lin, Calc Int	-20.0	13080	0.00000	1.000000	
Mg 279.077	4	Lin, Calc Int	-28.4	2818	0.00000	0.999986	
Mn 257.610	4	Lin, Calc Int	1433.6	679100	0.00000	0.999886	
Mo 202.031	4	Lin, Calc Int	38.7	30470	0.00000	0.999988	
Ni 231.604	4	Lin, Calc Int	103.5	56520	0.00000	0.999944	
Pb 220.353	4	Lin, Calc Int	-1.5	9512	0.00000	0.999990	
Sb 206.836	4	Lin, Calc Int	1.3	3441	0.00000	0.999998	
Se 196.026	3	Wt. Lin	-10.9	1486	0.00000	0.999981	
Si 251.611	4	Lin, Calc Int	719.7	33340	0.00000	0.999881	
Sn 189.927	4	Lin, Calc Int	14.1	8664	0.00000	0.999980	
Ti 334.940	4	Lin, Calc Int	548.0	778400	0.00000	0.999996	
Tl 190.801	3	Lin, Calc Int	5.1	3218	0.00000	0.999992	
V 290.880	4	Lin, Calc Int	266.8	158900	0.00000	0.999932	
Zn 206.200	4	Lin, Calc Int	136.1	39360	0.00000	0.999929	
K 766.490	4	Non Lin, Calc Int	297.4	2193	-0.26263	0.999999	

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Na 589.592	4	Non Lin, Calc Int	217.6	13400	3.47862	1.000000
Sr 407.771	4	Lin, Calc Int	-3897.2	1834000	0.00000	0.999963
Li 670.784	4	Lin, Calc Int	446.2	99850	0.00000	0.999919

Sequence No.: 6 **Autosampler Location: 11**
Sample ID: ICV 2nd Vendor **Date Collected: 4/27/2012 9:39:05 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	151.0 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	1812586.7						35256.78	1.95%
YRADIAL	222418.9						3815.34	1.72%
Ga 417.206	984980.2						28183.57	2.86%
GaRADIAL	65293.6						1262.52	1.93%
Ag 328.068†	105568.9	0.409	mg/L	0.0117	0.409	mg/L	0.0117	2.86%
QC value within limits for Ag 328.068 Recovery = 102.28%								
Al 396.153†	52636.0	10.2	mg/L	0.04	10.2	mg/L	0.04	0.43%
QC value within limits for Al 396.153 Recovery = 101.68%								
As 188.979†	953.6	0.405	mg/L	0.0105	0.405	mg/L	0.0105	2.58%
QC value within limits for As 188.979 Recovery = 101.34%								
Ba 233.527†	137244.1	1.03	mg/L	0.033	1.03	mg/L	0.033	3.15%
QC value within limits for Ba 233.527 Recovery = 103.30%								
Be 234.861†	55428.5	0.0505	mg/L	0.00126	0.0505	mg/L	0.00126	2.49%
QC value within limits for Be 234.861 Recovery = 101.08%								
B 249.677†	35551.6	0.507	mg/L	0.0170	0.507	mg/L	0.0170	3.36%
QC value within limits for B 249.677 Recovery = 101.45%								
Ca 227.546†	3540.0	10.5	mg/L	0.31	10.5	mg/L	0.31	2.94%
QC value greater than the upper limit for Ca 227.546 Recovery = 105.11%								
Cd 228.802†	2550.5	0.0503	mg/L	0.00227	0.0503	mg/L	0.00227	4.52%
QC value within limits for Cd 228.802 Recovery = 100.57%								
Co 228.616†	6584.8	0.204	mg/L	0.0035	0.204	mg/L	0.0035	1.72%
QC value within limits for Co 228.616 Recovery = 101.87%								
Cr 267.716†	46027.5	0.514	mg/L	0.0114	0.514	mg/L	0.0114	2.23%
QC value within limits for Cr 267.716 Recovery = 102.72%								
Cu 327.393†	101976.3	0.520	mg/L	0.0108	0.520	mg/L	0.0108	2.07%
QC value within limits for Cu 327.393 Recovery = 104.06%								
Fe 239.562†	53617.1	4.10	mg/L	0.009	4.10	mg/L	0.009	0.23%
QC value within limits for Fe 239.562 Recovery = 102.49%								
Mg 279.077†	28309.3	10.1	mg/L	0.01	10.1	mg/L	0.01	0.08%
QC value within limits for Mg 279.077 Recovery = 100.73%								
Mn 257.610†	355491.4	0.522	mg/L	0.0184	0.522	mg/L	0.0184	3.53%
QC value within limits for Mn 257.610 Recovery = 104.40%								
Mo 202.031†	30401.6	0.997	mg/L	0.0279	0.997	mg/L	0.0279	2.80%
QC value within limits for Mo 202.031 Recovery = 99.72%								
Ni 231.604†	29611.8	0.522	mg/L	0.0160	0.522	mg/L	0.0160	3.07%
QC value within limits for Ni 231.604 Recovery = 104.34%								
Pb 220.353†	4854.8	0.512	mg/L	0.0078	0.512	mg/L	0.0078	1.51%
QC value within limits for Pb 220.353 Recovery = 102.41%								
Sb 206.836†	4281.1	1.24	mg/L	0.039	1.24	mg/L	0.039	3.14%
QC value within limits for Sb 206.836 Recovery = 103.54%								
Se 196.026†	602.8	0.414	mg/L	0.0147	0.414	mg/L	0.0147	3.54%
QC value within limits for Se 196.026 Recovery = 103.60%								
Si 251.611†	174864.1	5.21	mg/L	0.098	5.21	mg/L	0.098	1.88%
QC value within limits for Si 251.611 Recovery = 104.23%								
Sn 189.927†	9135.1	1.05	mg/L	0.018	1.05	mg/L	0.018	1.68%
QC value greater than the upper limit for Sn 189.927 Recovery = 105.27%								
Ti 334.940†	783817.1	1.01	mg/L	0.002	1.01	mg/L	0.002	0.18%
QC value within limits for Ti 334.940 Recovery = 100.77%								
Tl 190.801†	1657.4	0.528	mg/L	0.0076	0.528	mg/L	0.0076	1.44%
QC value greater than the upper limit for Tl 190.801 Recovery = 105.62%								
V 290.880†	162664.3	1.02	mg/L	0.037	1.02	mg/L	0.037	3.66%
QC value within limits for V 290.880 Recovery = 102.13%								

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Zn 206.200†            41072.7        1.04 mg/L         0.029        1.04 mg/L         0.029   2.73%
   QC value within limits for Zn 206.200  Recovery = 104.50%
K 766.490†            110223.5        50.4 mg/L          0.22        50.4 mg/L          0.22   0.44%
   QC value within limits for K 766.490  Recovery = 100.78%
Na 589.592†           684110.0        50.4 mg/L          1.26        50.4 mg/L          1.26   2.50%
   QC value within limits for Na 589.592  Recovery = 100.72%
Sr 407.771†          1826601.5       0.998 mg/L        0.0254       0.998 mg/L        0.0254   2.55%
   QC value within limits for Sr 407.771  Recovery = 99.77%
Li 670.784†           102924.3        1.03 mg/L         0.012        1.03 mg/L         0.012   1.20%
   QC value within limits for Li 670.784  Recovery = 102.64%
QC Failed.  Continue with analysis.
```

Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 4/27/2012 9:45:03 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	151.0 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	1887246.9						13234.61	0.70%
YRADIAL	221345.2						4596.25	2.08%
Ga 417.206	1040500.6						11841.35	1.14%
GaRADIAL	64802.5						980.27	1.51%
Ag 328.068†	-63.2	-0.00102	mg/L	0.000390	-0.00102	mg/L	0.000390	38.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	9.0	-0.0209	mg/L	0.00170	-0.0209	mg/L	0.00170	8.15%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.2	-0.00105	mg/L	0.001604	-0.00105	mg/L	0.001604	152.71%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.9	-0.00192	mg/L	0.000192	-0.00192	mg/L	0.000192	10.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	44.0	-0.00004	mg/L	0.000013	-0.00004	mg/L	0.000013	29.38%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	130.6	0.00120	mg/L	0.000374	0.00120	mg/L	0.000374	31.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.8	0.0610	mg/L	0.02831	0.0610	mg/L	0.02831	46.41%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.5	0.00011	mg/L	0.000119	0.00011	mg/L	0.000119	104.52%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	7.0	-0.00006	mg/L	0.000268	-0.00006	mg/L	0.000268	436.91%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	5.6	-0.00104	mg/L	0.000181	-0.00104	mg/L	0.000181	17.38%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	89.1	-0.00047	mg/L	0.000606	-0.00047	mg/L	0.000606	130.03%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-1.7	0.00140	mg/L	0.000709	0.00140	mg/L	0.000709	50.69%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	4.8	0.0118	mg/L	0.00084	0.0118	mg/L	0.00084	7.11%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	2.8	-0.00211	mg/L	0.000010	-0.00211	mg/L	0.000010	0.47%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	2.1	-0.00120	mg/L	0.000202	-0.00120	mg/L	0.000202	16.80%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	22.2	-0.00144	mg/L	0.000270	-0.00144	mg/L	0.000270	18.79%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-3.4	-0.00021	mg/L	0.001565	-0.00021	mg/L	0.001565	749.39%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.3	-0.00029	mg/L	0.001379	-0.00029	mg/L	0.001379	479.75%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.7	0.00682	mg/L	0.003355	0.00682	mg/L	0.003355	49.18%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	104.4	-0.0184	mg/L	0.00049	-0.0184	mg/L	0.00049	2.65%
QC value within limits for Si 251.611 Recovery = Not calculated								

Approved: April 30, 2012

```
Sn 189.927†              13.0    -0.00013 mg/L      0.000137    -0.00013 mg/L      0.000137 104.35%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†            -125.4    -0.00086 mg/L      0.000076    -0.00086 mg/L      0.000076   8.93%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.9    -0.00189 mg/L      0.002009    -0.00189 mg/L      0.002009 106.43%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†             -316.1    -0.00367 mg/L      0.001922    -0.00367 mg/L      0.001922  52.39%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†               1.4    -0.00343 mg/L      0.000127    -0.00343 mg/L      0.000127   3.70%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               43.7      -0.116 mg/L        0.0021      -0.116 mg/L        0.0021   1.80%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†              41.1     -0.0132 mg/L       0.00501     -0.0132 mg/L       0.00501  38.08%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              13.9     0.00213 mg/L      0.000027     0.00213 mg/L      0.000027   1.26%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†            -12.9    -0.00460 mg/L      0.000606    -0.00460 mg/L      0.000606  13.19%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

================================================================================================
Sequence No.: 8                                    Autosampler Location: 12
Sample ID: ICSA                                    Date Collected: 4/27/2012 9:51:56 AM
Analyst:                                           Data Type: Original
Initial Sample Wt:                                 Initial Sample Vol:
Dilution:                                          Sample Prep Vol:
User canceled analysis.

================================================================================================
Analysis Begun

Start Time: 4/27/2012 9:52:35 AM                   Plasma On Time: 4/27/2012 6:06:24 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: 042712H3
Results Library: C:\pe\peicp2\Results\Results.mdb

================================================================================================
Sequence No.: 8                                    Autosampler Location: 12
Sample ID: ICSA                                    Date Collected: 4/27/2012 9:52:35 AM
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
                  Mean Corrected          Calib.                          Sample
Analyte              Intensity     Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          1718612.5                                                     22518.49   1.31%
YRADIAL             216776.9                                                      5659.07   2.61%
Ga 417.206          975002.2                                                     15872.87   1.63%
GaRADIAL             65082.8                                                      2243.61   3.45%
Ag 328.068†         -10640.9     0.00158 mg/L      0.001518     0.00158 mg/L      0.001518  95.90%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†         1323838.0         258 mg/L           6.0         258 mg/L           6.0   2.31%
   QC value within limits for Al 396.153  Recovery = 103.20%
As 188.979†             -14.3     0.00024 mg/L      0.003468     0.00024 mg/L      0.003468 >999.9%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             627.5     0.00030 mg/L      0.000145     0.00030 mg/L      0.000145  47.91%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†           21854.2    -0.00172 mg/L      0.000732    -0.00172 mg/L      0.000732  42.57%
   QC value less than the lower limit for Be 234.861  Recovery = Not calculated
B 249.677†             3248.7     0.00409 mg/L      0.005862     0.00409 mg/L      0.005862 143.35%
   QC value within limits for B 249.677  Recovery = Not calculated
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Ca 227.546†            93976.0         268 mg/L          8.9         268 mg/L           8.9   3.33%
   QC value within limits for Ca 227.546  Recovery = 107.01%
Cd 228.802†               6.1     0.00005 mg/L      0.000223     0.00005 mg/L      0.000223 459.11%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              28.6    -0.00187 mg/L      0.000289    -0.00187 mg/L      0.000289  15.39%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              96.1    -0.00147 mg/L      0.000150    -0.00147 mg/L      0.000150  10.23%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†           -1191.9     0.00121 mg/L      0.000294     0.00121 mg/L      0.000294  24.38%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†         1277556.1        97.7 mg/L          2.31        97.7 mg/L           2.31   2.37%
   QC value within limits for Fe 239.562  Recovery = 97.67%
Mg 279.077†          729741.8         259 mg/L          5.7         259 mg/L           5.7   2.19%
   QC value within limits for Mg 279.077  Recovery = 103.58%
Mn 257.610†           -1713.9    -0.00190 mg/L      0.000484    -0.00190 mg/L      0.000484  25.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -73.6     0.00111 mg/L      0.000724     0.00111 mg/L      0.000724  65.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†              76.3    -0.00048 mg/L      0.001077    -0.00048 mg/L      0.001077 226.33%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†            -375.7     0.00282 mg/L      0.003014     0.00282 mg/L      0.003014 106.70%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†             -27.8    -0.00488 mg/L      0.000372    -0.00488 mg/L      0.000372   7.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -47.6     0.00128 mg/L      0.004513     0.00128 mg/L      0.004513 352.03%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†            1214.4      0.0149 mg/L       0.00091      0.0149 mg/L       0.00091   6.12%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -313.4     -0.0378 mg/L       0.00029     -0.0378 mg/L       0.00029   0.76%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†          -28036.7     0.00305 mg/L      0.003689     0.00305 mg/L      0.003689 120.96%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -43.9    -0.00866 mg/L      0.005873    -0.00866 mg/L      0.005873  67.85%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†             3420.6     0.00501 mg/L      0.005179     0.00501 mg/L      0.005179 103.35%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             255.2     0.00116 mg/L      0.000429     0.00116 mg/L      0.000429  36.83%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               17.1      -0.128 mg/L        0.0130      -0.128 mg/L        0.0130  10.14%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             191.6    -0.00194 mg/L      0.010559    -0.00194 mg/L      0.010559 544.12%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†            1826.3    -0.00271 mg/L      0.000230    -0.00271 mg/L      0.000230   8.48%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             169.1    -0.00278 mg/L      0.000776    -0.00278 mg/L      0.000776  27.97%
   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: 4/27/2012 9:58:31 AM
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
                  Mean Corrected          Calib.                          Sample
Analyte              Intensity     Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          1734506.1                                                     12621.98   0.73%
YRADIAL             213944.4                                                      1779.72   0.83%
Ga 417.206          978617.7                                                     25472.16   2.60%
GaRADIAL             64493.1                                                       580.21   0.90%
Ag 328.068†         118895.9       0.499 mg/L        0.0175       0.499 mg/L        0.0175   3.50%
   QC value within limits for Ag 328.068  Recovery = 99.86%
Al 396.153†        1295871.9         253 mg/L          1.8         253 mg/L           1.8   0.70%
   QC value within limits for Al 396.153  Recovery = 101.02%
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Approved: April 30, 2012

As 188.979† 513.1 0.227 mg/L 0.0038 0.227 mg/L 0.0038 1.69%
QC value within limits for As 188.979 Recovery = 90.82%
Ba 233.527† 33500.2 0.248 mg/L 0.0018 0.248 mg/L 0.0018 0.72%
QC value within limits for Ba 233.527 Recovery = 99.27%
Be 234.861† 283942.6 0.241 mg/L 0.0067 0.241 mg/L 0.0067 2.77%
QC value within limits for Be 234.861 Recovery = 96.22%
B 249.677† 3116.1 -0.00814 mg/L 0.011352 -0.00814 mg/L 0.011352 139.53%
QC value within limits for B 249.677 Recovery = Not calculated
Ca 227.546† 91561.3 261 mg/L 8.4 261 mg/L 8.4 3.21%
QC value within limits for Ca 227.546 Recovery = 104.39%
Cd 228.802† 20129.3 0.407 mg/L 0.0113 0.407 mg/L 0.0113 2.78%
QC value within limits for Cd 228.802 Recovery = 81.41%
Co 228.616† 7431.9 0.228 mg/L 0.0016 0.228 mg/L 0.0016 0.70%
QC value within limits for Co 228.616 Recovery = 91.38%
Cr 267.716† 22353.2 0.247 mg/L 0.0002 0.247 mg/L 0.0002 0.09%
QC value within limits for Cr 267.716 Recovery = 98.95%
Cu 327.393† 48333.0 0.253 mg/L 0.0069 0.253 mg/L 0.0069 2.74%
QC value within limits for Cu 327.393 Recovery = 101.30%
Fe 239.562† 1240115.7 94.8 mg/L 1.21 94.8 mg/L 1.21 1.28%
QC value within limits for Fe 239.562 Recovery = 94.80%
Mg 279.077† 706768.8 251 mg/L 3.0 251 mg/L 3.0 1.22%
QC value within limits for Mg 279.077 Recovery = 100.32%
Mn 257.610† 162846.9 0.240 mg/L 0.0021 0.240 mg/L 0.0021 0.87%
QC value within limits for Mn 257.610 Recovery = 96.18%
Mo 202.031† -50.6 0.00189 mg/L 0.000552 0.00189 mg/L 0.000552 29.23%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 26421.5 0.465 mg/L 0.0037 0.465 mg/L 0.0037 0.80%
QC value within limits for Ni 231.604 Recovery = 93.04%
Pb 220.353† 4116.7 0.474 mg/L 0.0058 0.474 mg/L 0.0058 1.23%
QC value within limits for Pb 220.353 Recovery = 94.78%
Sb 206.836† 1605.1 0.468 mg/L 0.0159 0.468 mg/L 0.0159 3.40%
QC value within limits for Sb 206.836 Recovery = 93.60%
Se 196.026† 298.1 0.233 mg/L 0.0121 0.233 mg/L 0.0121 5.18%
QC value within limits for Se 196.026 Recovery = 93.31%
Si 251.611† -242.8 -0.0288 mg/L 0.00143 -0.0288 mg/L 0.00143 4.97%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -321.3 -0.0387 mg/L 0.00085 -0.0387 mg/L 0.00085 2.19%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -27225.1 0.00300 mg/L 0.003618 0.00300 mg/L 0.003618 120.73%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 1457.3 0.458 mg/L 0.0037 0.458 mg/L 0.0037 0.81%
QC value within limits for Tl 190.801 Recovery = 91.60%
V 290.880† 41866.9 0.247 mg/L 0.0032 0.247 mg/L 0.0032 1.28%
QC value within limits for V 290.880 Recovery = 98.96%
Zn 206.200† 18209.7 0.460 mg/L 0.0016 0.460 mg/L 0.0016 0.36%
QC value within limits for Zn 206.200 Recovery = 91.96%
K 766.490† 10675.8 4.73 mg/L 0.059 4.73 mg/L 0.059 1.26%
QC value within limits for K 766.490 Recovery = 94.62%
Na 589.592† 67378.2 5.00 mg/L 0.016 5.00 mg/L 0.016 0.33%
QC value within limits for Na 589.592 Recovery = 100.07%
Sr 407.771† 1844.5 -0.00255 mg/L 0.000194 -0.00255 mg/L 0.000194 7.60%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 170.7 -0.00276 mg/L 0.000416 -0.00276 mg/L 0.000416 15.07%
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: 4/27/2012 10:04:27 AM**
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.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD

Approved: April 30, 2012

Y 371.029	1835361.2					37922.48	2.07%
YRADIAL	216565.5					8410.77	3.88%
Ga 417.206	1005767.6					13154.14	1.31%
GaRADIAL	64202.6					1708.65	2.66%
Ag 328.068†	107315.1	0.416 mg/L	0.0124	0.416 mg/L	0.0124		2.97%
QC value within limits for Ag 328.068 Recovery = 103.97%							
Al 396.153†	52161.5	10.1 mg/L	0.02	10.1 mg/L	0.02		0.21%
QC value within limits for Al 396.153 Recovery = 100.74%							
As 188.979†	946.7	0.402 mg/L	0.0061	0.402 mg/L	0.0061		1.51%
QC value within limits for As 188.979 Recovery = 100.56%							
Ba 233.527†	136422.6	1.03 mg/L	0.008	1.03 mg/L	0.008		0.76%
QC value within limits for Ba 233.527 Recovery = 102.69%							
Be 234.861†	56235.5	0.0513 mg/L	0.00152	0.0513 mg/L	0.00152		2.96%
QC value within limits for Be 234.861 Recovery = 102.60%							
B 249.677†	35218.3	0.503 mg/L	0.0174	0.503 mg/L	0.0174		3.46%
QC value within limits for B 249.677 Recovery = 100.50%							
Ca 227.546†	3493.5	10.4 mg/L	0.17	10.4 mg/L	0.17		1.61%
QC value within limits for Ca 227.546 Recovery = 103.74%							
Cd 228.802†	2543.7	0.0502 mg/L	0.00122	0.0502 mg/L	0.00122		2.43%
QC value within limits for Cd 228.802 Recovery = 100.33%							
Co 228.616†	6610.4	0.205 mg/L	0.0047	0.205 mg/L	0.0047		2.28%
QC value within limits for Co 228.616 Recovery = 102.29%							
Cr 267.716†	45944.9	0.513 mg/L	0.0025	0.513 mg/L	0.0025		0.49%
QC value within limits for Cr 267.716 Recovery = 102.53%							
Cu 327.393†	101287.2	0.517 mg/L	0.0123	0.517 mg/L	0.0123		2.38%
QC value within limits for Cu 327.393 Recovery = 103.36%							
Fe 239.562†	53270.7	4.07 mg/L	0.017	4.07 mg/L	0.017		0.43%
QC value within limits for Fe 239.562 Recovery = 101.83%							
Mg 279.077†	28543.4	10.2 mg/L	0.16	10.2 mg/L	0.16		1.57%
QC value within limits for Mg 279.077 Recovery = 101.56%							
Mn 257.610†	353590.2	0.519 mg/L	0.0058	0.519 mg/L	0.0058		1.11%
QC value within limits for Mn 257.610 Recovery = 103.84%							
Mo 202.031†	31293.1	1.03 mg/L	0.008	1.03 mg/L	0.008		0.82%
QC value within limits for Mo 202.031 Recovery = 102.65%							
Ni 231.604†	29302.7	0.516 mg/L	0.0061	0.516 mg/L	0.0061		1.18%
QC value within limits for Ni 231.604 Recovery = 103.24%							
Pb 220.353†	4836.0	0.510 mg/L	0.0114	0.510 mg/L	0.0114		2.24%
QC value within limits for Pb 220.353 Recovery = 102.02%							
Sb 206.836†	4169.9	1.21 mg/L	0.017	1.21 mg/L	0.017		1.42%
QC value within limits for Sb 206.836 Recovery = 100.85%							
Se 196.026†	604.7	0.416 mg/L	0.0032	0.416 mg/L	0.0032		0.78%
QC value within limits for Se 196.026 Recovery = 103.92%							
Si 251.611†	173529.1	5.17 mg/L	0.116	5.17 mg/L	0.116		2.24%
QC value within limits for Si 251.611 Recovery = 103.43%							
Sn 189.927†	8849.0	1.02 mg/L	0.022	1.02 mg/L	0.022		2.20%
QC value within limits for Sn 189.927 Recovery = 101.97%							
Ti 334.940†	790912.8	1.02 mg/L	0.003	1.02 mg/L	0.003		0.25%
QC value within limits for Ti 334.940 Recovery = 101.67%							
Tl 190.801†	1644.4	0.524 mg/L	0.0059	0.524 mg/L	0.0059		1.12%
QC value within limits for Tl 190.801 Recovery = 104.84%							
V 290.880†	164133.9	1.03 mg/L	0.004	1.03 mg/L	0.004		0.34%
QC value within limits for V 290.880 Recovery = 103.05%							
Zn 206.200†	41072.1	1.04 mg/L	0.005	1.04 mg/L	0.005		0.50%
QC value within limits for Zn 206.200 Recovery = 104.49%							
K 766.490†	110878.1	50.7 mg/L	0.25	50.7 mg/L	0.25		0.49%
QC value within limits for K 766.490 Recovery = 101.38%							
Na 589.592†	710813.9	52.3 mg/L	1.34	52.3 mg/L	1.34		2.56%
QC value within limits for Na 589.592 Recovery = 104.60%							
Sr 407.771†	1872200.2	1.02 mg/L	0.039	1.02 mg/L	0.039		3.86%
QC value within limits for Sr 407.771 Recovery = 102.25%							
Li 670.784†	102363.8	1.02 mg/L	0.003	1.02 mg/L	0.003		0.32%
QC value within limits for Li 670.784 Recovery = 102.07%							

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 10:10:28 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 30, 2012

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1916043.1						29480.59	1.54%
YRADIAL	224022.0						3629.23	1.62%
Ga 417.206	1047359.0						17653.04	1.69%
GaRADIAL	65690.9						1538.27	2.34%
Ag 328.068†	-52.9	-0.00098	mg/L	0.000298	-0.00098	mg/L	0.000298	30.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	9.0	-0.0209	mg/L	0.00192	-0.0209	mg/L	0.00192	9.21%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.9	-0.00092	mg/L	0.001623	-0.00092	mg/L	0.001623	176.10%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	19.3	-0.00183	mg/L	0.000117	-0.00183	mg/L	0.000117	6.41%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	68.6	-0.00002	mg/L	0.000044	-0.00002	mg/L	0.000044	207.76%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	83.0	0.00051	mg/L	0.000345	0.00051	mg/L	0.000345	67.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-8.5	0.0205	mg/L	0.00464	0.0205	mg/L	0.00464	22.68%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-5.5	-0.00003	mg/L	0.000042	-0.00003	mg/L	0.000042	139.89%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	10.8	0.00006	mg/L	0.000353	0.00006	mg/L	0.000353	631.16%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.7	-0.00110	mg/L	0.000035	-0.00110	mg/L	0.000035	3.23%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	117.8	-0.00032	mg/L	0.000434	-0.00032	mg/L	0.000434	135.88%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	76.7	0.00739	mg/L	0.000610	0.00739	mg/L	0.000610	8.26%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	19.8	0.0171	mg/L	0.00326	0.0171	mg/L	0.00326	19.12%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.2	-0.00211	mg/L	0.000025	-0.00211	mg/L	0.000025	1.20%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.7	-0.00125	mg/L	0.000718	-0.00125	mg/L	0.000718	57.47%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	15.9	-0.00155	mg/L	0.000154	-0.00155	mg/L	0.000154	9.97%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-4.6	-0.00033	mg/L	0.000388	-0.00033	mg/L	0.000388	116.28%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-2.3	-0.00105	mg/L	0.001059	-0.00105	mg/L	0.001059	100.81%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.5	0.00630	mg/L	0.001545	0.00630	mg/L	0.001545	24.53%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	13.8	-0.0212	mg/L	0.00041	-0.0212	mg/L	0.00041	1.92%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	4.9	-0.00106	mg/L	0.000299	-0.00106	mg/L	0.000299	28.20%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	21.3	-0.00067	mg/L	0.000104	-0.00067	mg/L	0.000104	15.39%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	5.4	0.00005	mg/L	0.003049	0.00005	mg/L	0.003049	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-279.6	-0.00344	mg/L	0.001494	-0.00344	mg/L	0.001494	43.42%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	7.5	-0.00328	mg/L	0.000132	-0.00328	mg/L	0.000132	4.03%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	89.2	-0.0950	mg/L	0.02979	-0.0950	mg/L	0.02979	31.37%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	6.7	-0.0157	mg/L	0.00621	-0.0157	mg/L	0.00621	39.45%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	13.9	0.00213	mg/L	0.000039	0.00213	mg/L	0.000039	1.85%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-18.4	-0.00465	mg/L	0.001187	-0.00465	mg/L	0.001187	25.51%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: April 30, 2012

Sequence No.: 12 **Autosampler Location: 14**
Sample ID: PBW 02 WG396210-02 **Date Collected: 4/27/2012 10:17:22 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 02 WG396210-02

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: PBW 02 WG396210-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1692937.7						19123.25	1.13%
YRADIAL	222903.0						4211.87	1.89%
Ga 417.206	946450.5						28393.66	3.00%
GaRADIAL	64309.5						1470.04	2.29%
Ag 328.068†	-247.9	-0.00167	mg/L	0.000695	-0.00167	mg/L	0.000695	41.70%
Al 396.153†	10.1	-0.0208	mg/L	0.00164	-0.0208	mg/L	0.00164	7.85%
As 188.979†	-13.4	-0.00588	mg/L	0.000828	-0.00588	mg/L	0.000828	14.08%
Ba 233.527†	75.3	-0.00142	mg/L	0.000311	-0.00142	mg/L	0.000311	21.98%
Be 234.861†	-252.9	-0.00032	mg/L	0.000053	-0.00032	mg/L	0.000053	16.39%
B 249.677†	5684.0	0.0812	mg/L	0.02055	0.0812	mg/L	0.02055	25.33%
Ca 227.546†	-31.4	-0.0439	mg/L	0.02711	-0.0439	mg/L	0.02711	61.70%
Cd 228.802†	9.3	0.00029	mg/L	0.000294	0.00029	mg/L	0.000294	100.45%
Co 228.616†	12.4	0.00011	mg/L	0.000189	0.00011	mg/L	0.000189	169.94%
Cr 267.716†	36.4	-0.00068	mg/L	0.000291	-0.00068	mg/L	0.000291	42.77%
Cu 327.393†	-227.9	-0.00207	mg/L	0.000491	-0.00207	mg/L	0.000491	23.74%
Fe 239.562†	318.7	0.0259	mg/L	0.00367	0.0259	mg/L	0.00367	14.18%
Mg 279.077†	19.2	0.0169	mg/L	0.00777	0.0169	mg/L	0.00777	46.00%
Mn 257.610†	140.4	-0.00190	mg/L	0.000028	-0.00190	mg/L	0.000028	1.48%
Mo 202.031†	90.3	0.00171	mg/L	0.000917	0.00171	mg/L	0.000917	53.76%
Ni 231.604†	1.2	-0.00181	mg/L	0.000187	-0.00181	mg/L	0.000187	10.32%
Pb 220.353†	-56.1	-0.00573	mg/L	0.002052	-0.00573	mg/L	0.002052	35.78%
Sb 206.836†	-1.7	-0.00085	mg/L	0.001154	-0.00085	mg/L	0.001154	135.23%
Se 196.026†	4.8	0.0105	mg/L	0.00117	0.0105	mg/L	0.00117	11.10%
Si 251.611†	669.7	-0.00152	mg/L	0.003713	-0.00152	mg/L	0.003713	244.37%
Sn 189.927†	315.7	0.0348	mg/L	0.02312	0.0348	mg/L	0.02312	66.42%
Ti 334.940†	177.7	-0.00048	mg/L	0.000102	-0.00048	mg/L	0.000102	21.20%
Tl 190.801†	-8.5	-0.00418	mg/L	0.003454	-0.00418	mg/L	0.003454	82.72%
V 290.880†	4023.1	0.0236	mg/L	0.00391	0.0236	mg/L	0.00391	16.54%
Zn 206.200†	73.0	-0.00161	mg/L	0.000315	-0.00161	mg/L	0.000315	19.56%
K 766.490†	350.0	0.0240	mg/L	0.00617	0.0240	mg/L	0.00617	25.72%
Na 589.592†	-264.1	-0.0359	mg/L	0.00079	-0.0359	mg/L	0.00079	2.20%
Sr 407.771†	745.4	0.00253	mg/L	0.000052	0.00253	mg/L	0.000052	2.04%
Li 670.784†	144.5	-0.00302	mg/L	0.000130	-0.00302	mg/L	0.000130	4.30%

Sequence No.: 13 **Autosampler Location: 15**
Sample ID: LCSW 02 WG396210-03 **Date Collected: 4/27/2012 10:24:16 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 02 WG396210-03

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: LCSW 02 WG396210-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1862245.0						22825.14	1.23%
YRADIAL	225878.1						3875.08	1.72%
Ga 417.206	1063011.2						18537.86	1.74%
GaRADIAL	64638.6						493.39	0.76%
Ag 328.068†	49666.7	0.192	mg/L	0.0042	0.192	mg/L	0.0042	2.16%
Al 396.153†	25878.5	4.99	mg/L	0.029	4.99	mg/L	0.029	0.59%

Approved: April 30, 2012

As 188.979†	447.5	0.190	mg/L	0.0025	0.190	mg/L	0.0025 1.31%
Ba 233.527†	67011.8	0.503	mg/L	0.0066	0.503	mg/L	0.0066 1.30%
Be 234.861†	25985.7	0.0237	mg/L	0.00037	0.0237	mg/L	0.00037 1.55%
B 249.677†	68592.0	0.985	mg/L	0.0258	0.985	mg/L	0.0258 2.62%
Ca 227.546†	1610.2	4.83	mg/L	0.049	4.83	mg/L	0.049 1.01%
Cd 228.802†	1176.4	0.0232	mg/L	0.00080	0.0232	mg/L	0.00080 3.46%
Co 228.616†	3224.6	0.0997	mg/L	0.00181	0.0997	mg/L	0.00181 1.82%
Cr 267.716†	22734.8	0.253	mg/L	0.0030	0.253	mg/L	0.0030 1.18%
Cu 327.393†	48766.0	0.248	mg/L	0.0058	0.248	mg/L	0.0058 2.32%
Fe 239.562†	25686.9	1.96	mg/L	0.037	1.96	mg/L	0.037 1.86%
Mg 279.077†	13970.0	4.98	mg/L	0.085	4.98	mg/L	0.085 1.71%
Mn 257.610†	171414.8	0.251	mg/L	0.0040	0.251	mg/L	0.0040 1.61%
Mo 202.031†	15432.6	0.506	mg/L	0.0059	0.506	mg/L	0.0059 1.16%
Ni 231.604†	15060.1	0.264	mg/L	0.0041	0.264	mg/L	0.0041 1.54%
Pb 220.353†	2369.1	0.250	mg/L	0.0038	0.250	mg/L	0.0038 1.54%
Sb 206.836†	1949.3	0.565	mg/L	0.0071	0.565	mg/L	0.0071 1.26%
Se 196.026†	282.2	0.198	mg/L	0.0072	0.198	mg/L	0.0072 3.62%
Si 251.611†	83885.1	2.49	mg/L	0.038	2.49	mg/L	0.038 1.51%
Sn 189.927†	4939.6	0.569	mg/L	0.0083	0.569	mg/L	0.0083 1.47%
Ti 334.940†	380570.3	0.489	mg/L	0.0016	0.489	mg/L	0.0016 0.32%
Tl 190.801†	827.6	0.263	mg/L	0.0029	0.263	mg/L	0.0029 1.11%
V 290.880†	80727.8	0.506	mg/L	0.0054	0.506	mg/L	0.0054 1.06%
Zn 206.200†	20325.7	0.515	mg/L	0.0035	0.515	mg/L	0.0035 0.68%
K 766.490†	54787.1	24.9	mg/L	0.04	24.9	mg/L	0.04 0.18%
Na 589.592†	356089.6	26.4	mg/L	0.43	26.4	mg/L	0.43 1.64%
Sr 407.771†	900977.0	0.493	mg/L	0.0022	0.493	mg/L	0.0022 0.44%
Li 670.784†	52223.6	0.519	mg/L	0.0016	0.519	mg/L	0.0016 0.31%

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Sequence No.: 14 **Autosampler Location: 16**
Sample ID: L1204084401 WG396210-01 **Date Collected: 4/27/2012 10:30:15 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084401 WG396210-01

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1204084401 WG396210-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1816431.5						51463.89	2.83%
YRADIAL	219769.7						3219.56	1.46%
Ga 417.206	1062564.7						29171.83	2.75%
GaRADIAL	65914.4						1293.91	1.96%
Ag 328.068†	-220.7	0.00225	mg/L	0.000129	0.00225	mg/L	0.000129	5.71%
Al 396.153†	-22.1	-0.0259	mg/L	0.00236	-0.0259	mg/L	0.00236	9.11%
As 188.979†	-19.0	-0.00731	mg/L	0.001140	-0.00731	mg/L	0.001140	15.61%
Ba 233.527†	18282.8	0.136	mg/L	0.0034	0.136	mg/L	0.0034	2.53%
Be 234.861†	2193.2	-0.00006	mg/L	0.000128	-0.00006	mg/L	0.000128	206.09%
B 249.677†	7555.4	0.104	mg/L	0.0045	0.104	mg/L	0.0045	4.28%
Ca 227.546†	48932.1	138	mg/L	4.7	138	mg/L	4.7	3.40%
Cd 228.802†	118.3	0.00250	mg/L	0.000412	0.00250	mg/L	0.000412	16.49%
Co 228.616†	12.8	-0.00012	mg/L	0.000489	-0.00012	mg/L	0.000489	408.11%
Cr 267.716†	91.3	0.00023	mg/L	0.000236	0.00023	mg/L	0.000236	100.84%
Cu 327.393†	171.1	0.00070	mg/L	0.000635	0.00070	mg/L	0.000635	90.64%
Fe 239.562†	118914.4	9.09	mg/L	0.197	9.09	mg/L	0.197	2.17%
Mg 279.077†	76789.8	27.3	mg/L	0.68	27.3	mg/L	0.68	2.50%
Mn 257.610†	177513.1	0.260	mg/L	0.0062	0.260	mg/L	0.0062	2.40%
Mo 202.031†	47.4	0.00079	mg/L	0.000227	0.00079	mg/L	0.000227	28.81%
Ni 231.604†	196.1	0.00164	mg/L	0.001047	0.00164	mg/L	0.001047	63.84%
Pb 220.353†	-12.9	-0.00104	mg/L	0.002081	-0.00104	mg/L	0.002081	200.04%
Sb 206.836†	-4.0	-0.00121	mg/L	0.001228	-0.00121	mg/L	0.001228	101.28%
Se 196.026†	-0.5	0.00965	mg/L	0.003677	0.00965	mg/L	0.003677	38.10%
Si 251.611†	207218.6	6.19	mg/L	0.175	6.19	mg/L	0.175	2.82%
Sn 189.927†	-240.7	-0.0294	mg/L	0.00086	-0.0294	mg/L	0.00086	2.93%
Ti 334.940†	-15450.5	0.00016	mg/L	0.001659	0.00016	mg/L	0.001659	>999.9%
Tl 190.801†	-20.1	-0.00833	mg/L	0.001687	-0.00833	mg/L	0.001687	20.26%
V 290.880†	1252.1	0.00473	mg/L	0.002840	0.00473	mg/L	0.002840	59.98%

Approved: April 30, 2012

Zn 206.200†	3199.5	0.0777 mg/L	0.00207	0.0777 mg/L	0.00207	2.66%
K 766.490†	10021.4	4.37 mg/L	0.027	4.37 mg/L	0.027	0.61%
Na 589.592†	888836.3	65.2 mg/L	1.75	65.2 mg/L	1.75	2.68%
Sr 407.771†	1189059.5	0.647 mg/L	0.0046	0.647 mg/L	0.0046	0.70%
Li 670.784†	3177.9	0.0274 mg/L	0.00121	0.0274 mg/L	0.00121	4.42%

Sequence No.: 15 **Autosampler Location: 17**
Sample ID: L1204084401S WG396210-04 **Date Collected: 4/27/2012 10:36:14 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084401S WG396210-04

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084401S WG396210-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1802425.7						25899.09	1.44%
YRADIAL	221887.9						5723.76	2.58%
Ga 417.206	1049130.4						24406.44	2.33%
GaRADIAL	65845.3						1273.95	1.93%
Ag 328.068†	49178.0	0.194	mg/L	0.0073	0.194	mg/L	0.0073	3.76%
Al 396.153†	25420.9	4.90	mg/L	0.013	4.90	mg/L	0.013	0.27%
As 188.979†	426.8	0.182	mg/L	0.0021	0.182	mg/L	0.0021	1.14%
Ba 233.527†	83731.1	0.629	mg/L	0.0045	0.629	mg/L	0.0045	0.72%
Be 234.861†	28069.6	0.0237	mg/L	0.00087	0.0237	mg/L	0.00087	3.67%
B 249.677†	75314.0	1.08	mg/L	0.041	1.08	mg/L	0.041	3.83%
Ca 227.546†	51991.1	147	mg/L	6.4	147	mg/L	6.4	4.33%
Cd 228.802†	1267.7	0.0251	mg/L	0.00112	0.0251	mg/L	0.00112	4.46%
Co 228.616†	3093.7	0.0954	mg/L	0.00237	0.0954	mg/L	0.00237	2.49%
Cr 267.716†	22350.8	0.249	mg/L	0.0035	0.249	mg/L	0.0035	1.39%
Cu 327.393†	47838.1	0.244	mg/L	0.0082	0.244	mg/L	0.0082	3.34%
Fe 239.562†	139657.0	10.7	mg/L	0.07	10.7	mg/L	0.07	0.69%
Mg 279.077†	88623.1	31.5	mg/L	0.23	31.5	mg/L	0.23	0.73%
Mn 257.610†	349069.3	0.512	mg/L	0.0019	0.512	mg/L	0.0019	0.37%
Mo 202.031†	15263.5	0.501	mg/L	0.0051	0.501	mg/L	0.0051	1.01%
Ni 231.604†	14340.5	0.252	mg/L	0.0056	0.252	mg/L	0.0056	2.22%
Pb 220.353†	2323.4	0.245	mg/L	0.0063	0.245	mg/L	0.0063	2.57%
Sb 206.836†	1918.8	0.557	mg/L	0.0140	0.557	mg/L	0.0140	2.52%
Se 196.026†	280.3	0.199	mg/L	0.0085	0.199	mg/L	0.0085	4.27%
Si 251.611†	294712.1	8.81	mg/L	0.260	8.81	mg/L	0.260	2.95%
Sn 189.927†	4445.0	0.511	mg/L	0.0116	0.511	mg/L	0.0116	2.26%
Ti 334.940†	359440.8	0.483	mg/L	0.0019	0.483	mg/L	0.0019	0.39%
Tl 190.801†	757.2	0.240	mg/L	0.0018	0.240	mg/L	0.0018	0.74%
V 290.880†	80440.0	0.503	mg/L	0.0081	0.503	mg/L	0.0081	1.62%
Zn 206.200†	22088.9	0.560	mg/L	0.0083	0.560	mg/L	0.0083	1.49%
K 766.490†	63617.4	28.9	mg/L	0.05	28.9	mg/L	0.05	0.18%
Na 589.592†	1223811.0	89.2	mg/L	2.44	89.2	mg/L	2.44	2.74%
Sr 407.771†	2025594.8	1.10	mg/L	0.036	1.10	mg/L	0.036	3.22%
Li 670.784†	53421.6	0.531	mg/L	0.0018	0.531	mg/L	0.0018	0.34%

Sequence No.: 16 **Autosampler Location: 18**
Sample ID: L1204084401SD WG396210-05 **Date Collected: 4/27/2012 10:42:14 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084401SD WG396210-05

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1204084401SD WG396210-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: April 30, 2012

Y 371.029	1830519.3					39419.60	2.15%
YRADIAL	224668.3					7763.32	3.46%
Ga 417.206	1056540.1					14517.95	1.37%
GaRADIAL	65914.9					1808.05	2.74%
Ag 328.068†	49264.6	0.194	mg/L	0.0061	0.194 mg/L	0.0061	3.16%
Al 396.153†	26213.0	5.05	mg/L	0.021	5.05 mg/L	0.021	0.42%
As 188.979†	433.9	0.185	mg/L	0.0047	0.185 mg/L	0.0047	2.54%
Ba 233.527†	84043.1	0.632	mg/L	0.0179	0.632 mg/L	0.0179	2.83%
Be 234.861†	28320.6	0.0238	mg/L	0.00055	0.0238 mg/L	0.00055	2.32%
B 249.677†	75745.0	1.08	mg/L	0.037	1.08 mg/L	0.037	3.38%
Ca 227.546†	52114.5	148	mg/L	4.4	148 mg/L	4.4	2.95%
Cd 228.802†	1290.5	0.0255	mg/L	0.00069	0.0255 mg/L	0.00069	2.69%
Co 228.616†	3128.3	0.0964	mg/L	0.00207	0.0964 mg/L	0.00207	2.15%
Cr 267.716†	22352.0	0.249	mg/L	0.0080	0.249 mg/L	0.0080	3.21%
Cu 327.393†	48148.7	0.246	mg/L	0.0096	0.246 mg/L	0.0096	3.90%
Fe 239.562†	143594.0	11.0	mg/L	0.11	11.0 mg/L	0.11	0.97%
Mg 279.077†	90811.7	32.2	mg/L	0.39	32.2 mg/L	0.39	1.22%
Mn 257.610†	349404.0	0.513	mg/L	0.0160	0.513 mg/L	0.0160	3.11%
Mo 202.031†	15244.7	0.500	mg/L	0.0149	0.500 mg/L	0.0149	2.99%
Ni 231.604†	13900.4	0.244	mg/L	0.0068	0.244 mg/L	0.0068	2.81%
Pb 220.353†	2357.5	0.249	mg/L	0.0053	0.249 mg/L	0.0053	2.12%
Sb 206.836†	1950.8	0.566	mg/L	0.0072	0.566 mg/L	0.0072	1.28%
Se 196.026†	286.2	0.203	mg/L	0.0081	0.203 mg/L	0.0081	3.99%
Si 251.611†	295250.3	8.83	mg/L	0.237	8.83 mg/L	0.237	2.68%
Sn 189.927†	4507.8	0.519	mg/L	0.0106	0.519 mg/L	0.0106	2.05%
Ti 334.940†	371528.7	0.499	mg/L	0.0038	0.499 mg/L	0.0038	0.77%
Tl 190.801†	767.0	0.244	mg/L	0.0042	0.244 mg/L	0.0042	1.70%
V 290.880†	81104.9	0.507	mg/L	0.0153	0.507 mg/L	0.0153	3.01%
Zn 206.200†	22274.7	0.565	mg/L	0.0130	0.565 mg/L	0.0130	2.30%
K 766.490†	65166.6	29.6	mg/L	0.17	29.6 mg/L	0.17	0.59%
Na 589.592†	1261391.1	91.9	mg/L	3.46	91.9 mg/L	3.46	3.77%
Sr 407.771†	2076833.3	1.13	mg/L	0.055	1.13 mg/L	0.055	4.84%
Li 670.784†	54649.6	0.543	mg/L	0.0007	0.543 mg/L	0.0007	0.14%

Sequence No.: 17 **Autosampler Location: 19**
Sample ID: L1204084402 **Date Collected: 4/27/2012 10:48:59 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084402

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084402

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1829486.7						38639.92	2.11%
YRADIAL	217799.5						1942.45	0.89%
Ga 417.206	1068717.6						10446.02	0.98%
GaRADIAL	64671.2						681.21	1.05%
Ag 328.068†	-334.3	0.00184	mg/L	0.000474	0.00184	mg/L	0.000474	25.81%
Al 396.153†	-46.6	-0.0307	mg/L	0.00162	-0.0307	mg/L	0.00162	5.28%
As 188.979†	-9.2	-0.00307	mg/L	0.003139	-0.00307	mg/L	0.003139	102.11%
Ba 233.527†	19130.9	0.142	mg/L	0.0030	0.142	mg/L	0.0030	2.12%
Be 234.861†	2280.4	0.00001	mg/L	0.000185	0.00001	mg/L	0.000185	>999.9%
B 249.677†	7457.0	0.103	mg/L	0.0019	0.103	mg/L	0.0019	1.88%
Ca 227.546†	51151.5	145	mg/L	4.6	145	mg/L	4.6	3.19%
Cd 228.802†	37.7	0.00084	mg/L	0.000135	0.00084	mg/L	0.000135	15.99%
Co 228.616†	27.8	0.00034	mg/L	0.000177	0.00034	mg/L	0.000177	51.35%
Cr 267.716†	93.3	0.00026	mg/L	0.000189	0.00026	mg/L	0.000189	73.06%
Cu 327.393†	43.1	0.00005	mg/L	0.000092	0.00005	mg/L	0.000092	176.62%
Fe 239.562†	119744.1	9.16	mg/L	0.086	9.16	mg/L	0.086	0.94%
Mg 279.077†	79830.1	28.3	mg/L	0.26	28.3	mg/L	0.26	0.92%
Mn 257.610†	184020.2	0.269	mg/L	0.0068	0.269	mg/L	0.0068	2.52%
Mo 202.031†	45.4	0.00073	mg/L	0.000301	0.00073	mg/L	0.000301	41.33%
Ni 231.604†	211.2	0.00191	mg/L	0.000601	0.00191	mg/L	0.000601	31.50%
Pb 220.353†	-0.3	0.00032	mg/L	0.001394	0.00032	mg/L	0.001394	436.75%
Sb 206.836†	-5.0	-0.00150	mg/L	0.001231	-0.00150	mg/L	0.001231	82.08%

Approved: April 30, 2012

Se 196.026†	-4.7	0.00680	mg/L	0.004644	0.00680	mg/L	0.004644 68.34%
Si 251.611†	215850.7	6.45	mg/L	0.129	6.45	mg/L	0.129 2.00%
Sn 189.927†	-265.3	-0.0323	mg/L	0.00070	-0.0323	mg/L	0.00070 2.16%
Ti 334.940†	-16024.9	0.00036	mg/L	0.001905	0.00036	mg/L	0.001905 528.52%
Tl 190.801†	-28.5	-0.0110	mg/L	0.00619	-0.0110	mg/L	0.00619 56.55%
V 290.880†	1287.9	0.00492	mg/L	0.003106	0.00492	mg/L	0.003106 63.06%
Zn 206.200†	3061.1	0.0741	mg/L	0.00090	0.0741	mg/L	0.00090 1.22%
K 766.490†	10650.5	4.65	mg/L	0.033	4.65	mg/L	0.033 0.70%
Na 589.592†	950035.2	69.6	mg/L	0.83	69.6	mg/L	0.83 1.20%
Sr 407.771†	1252949.6	0.682	mg/L	0.0021	0.682	mg/L	0.0021 0.30%
Li 670.784†	3362.0	0.0292	mg/L	0.00121	0.0292	mg/L	0.00121 4.14%

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Sequence No.: 18 **Autosampler Location: 20**
Sample ID: L1204084403 **Date Collected: 4/27/2012 10:54:59 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084403

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084403

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1838998.3						40290.46	2.19%
YRADIAL	221992.7						6979.30	3.14%
Ga 417.206	1068093.0						31589.88	2.96%
GaRADIAL	66972.6						802.15	1.20%
Ag 328.068†	-1813.4	0.00212	mg/L	0.000302	0.00212	mg/L	0.000302	14.23%
Al 396.153†	2.9	-0.0194	mg/L	0.00842	-0.0194	mg/L	0.00842	43.36%
As 188.979†	-8.5	-0.00130	mg/L	0.000552	-0.00130	mg/L	0.000552	42.52%
Ba 233.527†	21745.3	0.161	mg/L	0.0007	0.161	mg/L	0.0007	0.43%
Be 234.861†	5413.3	-0.00010	mg/L	0.000111	-0.00010	mg/L	0.000111	110.61%
B 249.677†	6100.4	0.0774	mg/L	0.00360	0.0774	mg/L	0.00360	4.65%
Ca 227.546†	47567.6	135	mg/L	5.4	135	mg/L	5.4	4.04%
Cd 228.802†	10.4	0.00027	mg/L	0.000138	0.00027	mg/L	0.000138	52.14%
Co 228.616†	13.7	-0.00046	mg/L	0.000252	-0.00046	mg/L	0.000252	54.94%
Cr 267.716†	13.7	-0.00018	mg/L	0.000060	-0.00018	mg/L	0.000060	34.22%
Cu 327.393†	-326.3	-0.00070	mg/L	0.000545	-0.00070	mg/L	0.000545	78.31%
Fe 239.562†	296196.5	22.6	mg/L	0.23	22.6	mg/L	0.23	1.04%
Mg 279.077†	68283.1	24.2	mg/L	0.84	24.2	mg/L	0.84	3.45%
Mn 257.610†	289110.9	0.424	mg/L	0.0031	0.424	mg/L	0.0031	0.74%
Mo 202.031†	27.4	0.00083	mg/L	0.000346	0.00083	mg/L	0.000346	41.75%
Ni 231.604†	115.4	0.00021	mg/L	0.000457	0.00021	mg/L	0.000457	213.72%
Pb 220.353†	10.5	0.00011	mg/L	0.001486	0.00011	mg/L	0.001486	>999.9%
Sb 206.836†	-6.0	-0.00128	mg/L	0.001060	-0.00128	mg/L	0.001060	82.74%
Se 196.026†	-9.5	0.00761	mg/L	0.000237	0.00761	mg/L	0.000237	3.11%
Si 251.611†	267627.6	8.00	mg/L	0.189	8.00	mg/L	0.189	2.36%
Sn 189.927†	-266.7	-0.0324	mg/L	0.00080	-0.0324	mg/L	0.00080	2.48%
Ti 334.940†	-14795.0	0.00042	mg/L	0.001760	0.00042	mg/L	0.001760	414.93%
Tl 190.801†	-22.1	-0.00912	mg/L	0.003018	-0.00912	mg/L	0.003018	33.08%
V 290.880†	923.5	0.00162	mg/L	0.001180	0.00162	mg/L	0.001180	72.95%
Zn 206.200†	313.8	0.00408	mg/L	0.000201	0.00408	mg/L	0.000201	4.92%
K 766.490†	9420.7	4.10	mg/L	0.066	4.10	mg/L	0.066	1.61%
Na 589.592†	904933.3	66.3	mg/L	1.76	66.3	mg/L	1.76	2.65%
Sr 407.771†	1026072.3	0.559	mg/L	0.0114	0.559	mg/L	0.0114	2.04%
Li 670.784†	2994.3	0.0255	mg/L	0.00037	0.0255	mg/L	0.00037	1.45%

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Sequence No.: 19 **Autosampler Location: 21**
Sample ID: L1204084404 **Date Collected: 4/27/2012 11:00:59 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084404

Analyte	Back Pressure	Flow

Approved: April 30, 2012

All 148.0 kPa 0.50 L/min

Mean Data: L1204084404

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1808125.5						7488.79	0.41%
YRADIAL	214073.2						3309.58	1.55%
Ga 417.206	1046515.4						24312.83	2.32%
GaRADIAL	63134.2						748.13	1.18%
Ag 328.068†	-1936.3	0.00208	mg/L	0.000305	0.00208	mg/L	0.000305	14.64%
Al 396.153†	-53.9	-0.0303	mg/L	0.00657	-0.0303	mg/L	0.00657	21.64%
As 188.979†	-14.7	-0.00386	mg/L	0.002509	-0.00386	mg/L	0.002509	65.01%
Ba 233.527†	23231.7	0.173	mg/L	0.0013	0.173	mg/L	0.0013	0.77%
Be 234.861†	5714.4	-0.00004	mg/L	0.000103	-0.00004	mg/L	0.000103	251.60%
B 249.677†	6489.9	0.0826	mg/L	0.00310	0.0826	mg/L	0.00310	3.75%
Ca 227.546†	50605.5	143	mg/L	5.1	143	mg/L	5.1	3.55%
Cd 228.802†	14.6	0.00036	mg/L	0.000464	0.00036	mg/L	0.000464	128.75%
Co 228.616†	15.3	-0.00044	mg/L	0.000542	-0.00044	mg/L	0.000542	123.77%
Cr 267.716†	3.6	-0.00025	mg/L	0.000044	-0.00025	mg/L	0.000044	17.33%
Cu 327.393†	-170.0	0.00018	mg/L	0.000347	0.00018	mg/L	0.000347	189.18%
Fe 239.562†	309145.1	23.6	mg/L	0.29	23.6	mg/L	0.29	1.23%
Mg 279.077†	71550.4	25.4	mg/L	0.07	25.4	mg/L	0.07	0.29%
Mn 257.610†	305923.9	0.449	mg/L	0.0022	0.449	mg/L	0.0022	0.49%
Mo 202.031†	19.6	0.00063	mg/L	0.000248	0.00063	mg/L	0.000248	39.62%
Ni 231.604†	112.6	0.00016	mg/L	0.000788	0.00016	mg/L	0.000788	482.86%
Pb 220.353†	11.8	0.00022	mg/L	0.001874	0.00022	mg/L	0.001874	851.64%
Sb 206.836†	-7.3	-0.00162	mg/L	0.001978	-0.00162	mg/L	0.001978	121.82%
Se 196.026†	-16.9	0.00290	mg/L	0.001320	0.00290	mg/L	0.001320	45.58%
Si 251.611†	283069.5	8.47	mg/L	0.216	8.47	mg/L	0.216	2.55%
Sn 189.927†	-291.9	-0.0353	mg/L	0.00069	-0.0353	mg/L	0.00069	1.95%
Ti 334.940†	-15349.9	0.00100	mg/L	0.001712	0.00100	mg/L	0.001712	171.77%
Tl 190.801†	-20.8	-0.00873	mg/L	0.002569	-0.00873	mg/L	0.002569	29.44%
V 290.880†	1423.1	0.00465	mg/L	0.002685	0.00465	mg/L	0.002685	57.74%
Zn 206.200†	144.2	-0.00025	mg/L	0.000332	-0.00025	mg/L	0.000332	131.00%
K 766.490†	9976.8	4.35	mg/L	0.126	4.35	mg/L	0.126	2.91%
Na 589.592†	979552.0	71.7	mg/L	2.49	71.7	mg/L	2.49	3.48%
Sr 407.771†	1085598.2	0.591	mg/L	0.0065	0.591	mg/L	0.0065	1.11%
Li 670.784†	3262.9	0.0282	mg/L	0.00011	0.0282	mg/L	0.00011	0.39%

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Sequence No.: 20 **Autosampler Location: 22**
Sample ID: L1204084404PS WG396298-01 **Date Collected: 4/27/2012 11:06:59 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084404PS WG396298-01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084404PS WG396298-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1819314.9						23531.62	1.29%
YRADIAL	215431.3						4600.90	2.14%
Ga 417.206	1036519.5						35143.66	3.39%
GaRADIAL	63108.2						1206.89	1.91%
Ag 328.068†	50147.6	0.203	mg/L	0.0067	0.203	mg/L	0.0067	3.27%
Al 396.153†	26713.1	5.15	mg/L	0.011	5.15	mg/L	0.011	0.21%
As 188.979†	454.0	0.195	mg/L	0.0109	0.195	mg/L	0.0109	5.61%
Ba 233.527†	88622.9	0.666	mg/L	0.0129	0.666	mg/L	0.0129	1.93%
Be 234.861†	32806.3	0.0252	mg/L	0.00084	0.0252	mg/L	0.00084	3.33%
B 249.677†	77881.6	1.11	mg/L	0.044	1.11	mg/L	0.044	3.97%
Ca 227.546†	48061.3	136	mg/L	5.8	136	mg/L	5.8	4.29%
Cd 228.802†	1229.0	0.0242	mg/L	0.00134	0.0242	mg/L	0.00134	5.53%
Co 228.616†	3217.7	0.0989	mg/L	0.00138	0.0989	mg/L	0.00138	1.40%
Cr 267.716†	23094.0	0.258	mg/L	0.0036	0.258	mg/L	0.0036	1.40%
Cu 327.393†	50010.7	0.256	mg/L	0.0104	0.256	mg/L	0.0104	4.04%
Fe 239.562†	308717.9	23.6	mg/L	0.19	23.6	mg/L	0.19	0.82%

Approved: April 30, 2012

Mg 279.077†	78867.0	28.0	mg/L	0.21	28.0	mg/L	0.21	0.76%
Mn 257.610†	452342.3	0.665	mg/L	0.0138	0.665	mg/L	0.0138	2.08%
Mo 202.031†	15785.6	0.518	mg/L	0.0105	0.518	mg/L	0.0105	2.03%
Ni 231.604†	14456.8	0.254	mg/L	0.0043	0.254	mg/L	0.0043	1.68%
Pb 220.353†	2435.2	0.256	mg/L	0.0032	0.256	mg/L	0.0032	1.25%
Sb 206.836†	2048.1	0.595	mg/L	0.0191	0.595	mg/L	0.0191	3.20%
Se 196.026†	296.5	0.214	mg/L	0.0101	0.214	mg/L	0.0101	4.74%
Si 251.611†	346434.2	10.4	mg/L	0.37	10.4	mg/L	0.37	3.56%
Sn 189.927†	-278.8	-0.0338	mg/L	0.00020	-0.0338	mg/L	0.00020	0.60%
Ti 334.940†	378446.9	0.506	mg/L	0.0045	0.506	mg/L	0.0045	0.89%
Tl 190.801†	753.6	0.239	mg/L	0.0044	0.239	mg/L	0.0044	1.82%
V 290.880†	83488.6	0.521	mg/L	0.0122	0.521	mg/L	0.0122	2.34%
Zn 206.200†	20006.0	0.507	mg/L	0.0081	0.507	mg/L	0.0081	1.59%
K 766.490†	65267.2	29.6	mg/L	0.19	29.6	mg/L	0.19	0.65%
Na 589.592†	1265522.6	92.2	mg/L	2.37	92.2	mg/L	2.37	2.57%
Sr 407.771†	1929449.2	1.05	mg/L	0.029	1.05	mg/L	0.029	2.80%
Li 670.784†	55461.5	0.551	mg/L	0.0020	0.551	mg/L	0.0020	0.36%

Sequence No.: 21 **Autosampler Location: 23**
Sample ID: L1204084404DL WG396298-02 **Date Collected: 4/27/2012 11:13:00 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084404DL WG396298-02

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204084404DL WG396298-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1858773.9						13398.61	0.72%
YRADIAL	215855.1						4269.03	1.98%
Ga 417.206	1027052.9						31491.38	3.07%
GaRADIAL	63127.0						1582.02	2.51%
Ag 328.068†	-356.1	-0.00001	mg/L	0.000517	-0.00001	mg/L	0.000517	>999.9%
Al 396.153†	-21.9	-0.0264	mg/L	0.01235	-0.0264	mg/L	0.01235	46.82%
As 188.979†	-5.4	-0.00188	mg/L	0.002337	-0.00188	mg/L	0.002337	124.28%
Ba 233.527†	4930.9	0.0351	mg/L	0.00032	0.0351	mg/L	0.00032	0.91%
Be 234.861†	1402.9	0.00013	mg/L	0.000186	0.00013	mg/L	0.000186	145.55%
B 249.677†	1662.7	0.0211	mg/L	0.00224	0.0211	mg/L	0.00224	10.58%
Ca 227.546†	10012.1	28.4	mg/L	1.10	28.4	mg/L	1.10	3.88%
Cd 228.802†	17.0	0.00043	mg/L	0.000084	0.00043	mg/L	0.000084	19.78%
Co 228.616†	24.1	0.00034	mg/L	0.000385	0.00034	mg/L	0.000385	112.53%
Cr 267.716†	-13.1	-0.00108	mg/L	0.000256	-0.00108	mg/L	0.000256	23.66%
Cu 327.393†	115.0	0.00007	mg/L	0.000375	0.00007	mg/L	0.000375	501.23%
Fe 239.562†	64043.7	4.90	mg/L	0.034	4.90	mg/L	0.034	0.69%
Mg 279.077†	14569.8	5.18	mg/L	0.049	5.18	mg/L	0.049	0.94%
Mn 257.610†	62397.0	0.0899	mg/L	0.00017	0.0899	mg/L	0.00017	0.19%
Mo 202.031†	35.6	0.00016	mg/L	0.000349	0.00016	mg/L	0.000349	221.19%
Ni 231.604†	83.3	-0.00036	mg/L	0.000597	-0.00036	mg/L	0.000597	166.60%
Pb 220.353†	-22.1	-0.00242	mg/L	0.001019	-0.00242	mg/L	0.001019	42.03%
Sb 206.836†	-3.6	-0.00125	mg/L	0.001697	-0.00125	mg/L	0.001697	135.92%
Se 196.026†	-6.1	0.00464	mg/L	0.001486	0.00464	mg/L	0.001486	32.01%
Si 251.611†	58557.6	1.73	mg/L	0.052	1.73	mg/L	0.052	2.97%
Sn 189.927†	-159.5	-0.0200	mg/L	0.00120	-0.0200	mg/L	0.00120	6.00%
Ti 334.940†	-3241.5	-0.00062	mg/L	0.000509	-0.00062	mg/L	0.000509	81.58%
Tl 190.801†	-1.5	-0.00221	mg/L	0.001911	-0.00221	mg/L	0.001911	86.52%
V 290.880†	447.7	0.00060	mg/L	0.000767	0.00060	mg/L	0.000767	128.67%
Zn 206.200†	127.4	-0.00032	mg/L	0.000147	-0.00032	mg/L	0.000147	45.25%
K 766.490†	2197.0	0.852	mg/L	0.0300	0.852	mg/L	0.0300	3.52%
Na 589.592†	197982.7	14.7	mg/L	0.14	14.7	mg/L	0.14	0.96%
Sr 407.771†	220683.9	0.122	mg/L	0.0002	0.122	mg/L	0.0002	0.15%
Li 670.784†	651.7	0.00206	mg/L	0.000914	0.00206	mg/L	0.000914	44.41%

Sequence No.: 22 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 11:18:57 AM**
Analyst: **Data Type: Original**

Approved: April 30, 2012

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1825827.3						17110.59	0.94%
YRADIAL	220941.9						1784.00	0.81%
Ga 417.206	995655.1						27599.62	2.77%
GaRADIAL	64572.2						1269.67	1.97%
Ag 328.068†	108695.0	0.421	mg/L	0.0134	0.421	mg/L	0.0134	3.17%
QC value within limits for Ag 328.068 Recovery = 105.29%								
Al 396.153†	52182.8	10.1	mg/L	0.00	10.1	mg/L	0.00	0.02%
QC value within limits for Al 396.153 Recovery = 100.78%								
As 188.979†	950.3	0.404	mg/L	0.0063	0.404	mg/L	0.0063	1.57%
QC value within limits for As 188.979 Recovery = 100.94%								
Ba 233.527†	136568.9	1.03	mg/L	0.009	1.03	mg/L	0.009	0.88%
QC value within limits for Ba 233.527 Recovery = 102.80%								
Be 234.861†	56335.1	0.0514	mg/L	0.00156	0.0514	mg/L	0.00156	3.03%
QC value within limits for Be 234.861 Recovery = 102.79%								
B 249.677†	35438.2	0.506	mg/L	0.0180	0.506	mg/L	0.0180	3.55%
QC value within limits for B 249.677 Recovery = 101.13%								
Ca 227.546†	3550.6	10.5	mg/L	0.32	10.5	mg/L	0.32	3.03%
QC value within limits for Ca 227.546 Recovery = 105.31%								
Cd 228.802†	2587.8	0.0510	mg/L	0.00189	0.0510	mg/L	0.00189	3.70%
QC value within limits for Cd 228.802 Recovery = 102.10%								
Co 228.616†	6619.7	0.205	mg/L	0.0044	0.205	mg/L	0.0044	2.15%
QC value within limits for Co 228.616 Recovery = 102.44%								
Cr 267.716†	46135.1	0.515	mg/L	0.0025	0.515	mg/L	0.0025	0.49%
QC value within limits for Cr 267.716 Recovery = 102.96%								
Cu 327.393†	102310.0	0.522	mg/L	0.0159	0.522	mg/L	0.0159	3.06%
QC value within limits for Cu 327.393 Recovery = 104.40%								
Fe 239.562†	53039.7	4.06	mg/L	0.014	4.06	mg/L	0.014	0.35%
QC value within limits for Fe 239.562 Recovery = 101.39%								
Mg 279.077†	28363.1	10.1	mg/L	0.06	10.1	mg/L	0.06	0.61%
QC value within limits for Mg 279.077 Recovery = 100.92%								
Mn 257.610†	351107.1	0.516	mg/L	0.0061	0.516	mg/L	0.0061	1.19%
QC value within limits for Mn 257.610 Recovery = 103.11%								
Mo 202.031†	31333.5	1.03	mg/L	0.008	1.03	mg/L	0.008	0.78%
QC value within limits for Mo 202.031 Recovery = 102.78%								
Ni 231.604†	29058.2	0.512	mg/L	0.0064	0.512	mg/L	0.0064	1.25%
QC value within limits for Ni 231.604 Recovery = 102.38%								
Pb 220.353†	4842.2	0.511	mg/L	0.0085	0.511	mg/L	0.0085	1.67%
QC value within limits for Pb 220.353 Recovery = 102.15%								
Sb 206.836†	4211.4	1.22	mg/L	0.028	1.22	mg/L	0.028	2.30%
QC value within limits for Sb 206.836 Recovery = 101.86%								
Se 196.026†	610.6	0.420	mg/L	0.0053	0.420	mg/L	0.0053	1.26%
QC value within limits for Se 196.026 Recovery = 104.92%								
Si 251.611†	172994.3	5.16	mg/L	0.133	5.16	mg/L	0.133	2.59%
QC value within limits for Si 251.611 Recovery = 103.11%								
Sn 189.927†	8925.5	1.03	mg/L	0.017	1.03	mg/L	0.017	1.62%
QC value within limits for Sn 189.927 Recovery = 102.86%								
Ti 334.940†	788126.5	1.01	mg/L	0.003	1.01	mg/L	0.003	0.33%
QC value within limits for Ti 334.940 Recovery = 101.32%								
Tl 190.801†	1658.2	0.528	mg/L	0.0012	0.528	mg/L	0.0012	0.23%
QC value within limits for Tl 190.801 Recovery = 105.69%								
V 290.880†	163790.0	1.03	mg/L	0.004	1.03	mg/L	0.004	0.42%
QC value within limits for V 290.880 Recovery = 102.83%								
Zn 206.200†	40994.9	1.04	mg/L	0.007	1.04	mg/L	0.007	0.64%
QC value within limits for Zn 206.200 Recovery = 104.30%								
K 766.490†	111306.4	50.9	mg/L	0.49	50.9	mg/L	0.49	0.96%
QC value within limits for K 766.490 Recovery = 101.78%								
Na 589.592†	693509.5	51.0	mg/L	1.01	51.0	mg/L	1.01	1.97%
QC value within limits for Na 589.592 Recovery = 102.09%								
Sr 407.771†	1783047.1	0.974	mg/L	0.0082	0.974	mg/L	0.0082	0.84%
QC value within limits for Sr 407.771 Recovery = 97.39%								

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Li 670.784† 102158.1 1.02 mg/L 0.006 1.02 mg/L 0.006 0.62%
QC value within limits for Li 670.784 Recovery = 101.87%
All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 11:24:59 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1900359.6						10003.08	0.53%
YRADIAL	222128.7						7382.92	3.32%
Ga 417.206	1065734.5						24552.17	2.30%
GaRADIAL	64988.9						1325.22	2.04%
Ag 328.068†	-39.5	-0.00093	mg/L	0.000764	-0.00093	mg/L	0.000764	82.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	6.2	-0.0214	mg/L	0.00089	-0.0214	mg/L	0.00089	4.16%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-5.3	-0.00238	mg/L	0.001706	-0.00238	mg/L	0.001706	71.69%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	20.1	-0.00182	mg/L	0.000102	-0.00182	mg/L	0.000102	5.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	95.3	0.00000	mg/L	0.000037	0.00000	mg/L	0.000037	845.17%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	143.5	0.00138	mg/L	0.000344	0.00138	mg/L	0.000344	24.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-4.9	0.0306	mg/L	0.04228	0.0306	mg/L	0.04228	138.03%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-1.1	0.00007	mg/L	0.000065	0.00007	mg/L	0.000065	97.14%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	7.1	-0.00006	mg/L	0.000122	-0.00006	mg/L	0.000122	208.20%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.9	-0.00111	mg/L	0.000119	-0.00111	mg/L	0.000119	10.69%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	112.3	-0.00035	mg/L	0.000651	-0.00035	mg/L	0.000651	187.19%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	9.2	0.00223	mg/L	0.000182	0.00223	mg/L	0.000182	8.15%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	15.0	0.0154	mg/L	0.00192	0.0154	mg/L	0.00192	12.51%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	21.3	-0.00208	mg/L	0.000007	-0.00208	mg/L	0.000007	0.32%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.2	-0.00127	mg/L	0.000096	-0.00127	mg/L	0.000096	7.56%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	25.9	-0.00137	mg/L	0.000276	-0.00137	mg/L	0.000276	20.06%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-14.8	-0.00141	mg/L	0.000411	-0.00141	mg/L	0.000411	29.22%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.0	-0.00068	mg/L	0.001762	-0.00068	mg/L	0.001762	258.58%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-6.1	0.00321	mg/L	0.004021	0.00321	mg/L	0.004021	125.15%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	26.9	-0.0208	mg/L	0.00079	-0.0208	mg/L	0.00079	3.82%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	4.3	-0.00113	mg/L	0.001172	-0.00113	mg/L	0.001172	103.83%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	70.9	-0.00061	mg/L	0.000074	-0.00061	mg/L	0.000074	12.15%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.1	-0.00094	mg/L	0.002169	-0.00094	mg/L	0.002169	229.73%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-268.5	-0.00337	mg/L	0.002201	-0.00337	mg/L	0.002201	65.33%
QC value within limits for V 290.880 Recovery = Not calculated								

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Zn 206.200†              -5.3    -0.00360 mg/L      0.000053    -0.00360 mg/L      0.000053   1.48%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              131.9     -0.0755 mg/L       0.05539     -0.0755 mg/L       0.05539  73.41%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             -73.5     -0.0217 mg/L       0.00208     -0.0217 mg/L       0.00208   9.56%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              38.5     0.00214 mg/L      0.000043     0.00214 mg/L      0.000043   2.00%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†               0.3    -0.00447 mg/L      0.000347    -0.00447 mg/L      0.000347   7.78%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 24 **Autosampler Location: 24**
Sample ID: L1204084405 **Date Collected: 4/27/2012 11:31:52 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084405

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084405

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1733105.0						24768.49	1.43%
YRADIAL	208714.1						884.76	0.42%
Ga 417.206	1016615.3						35232.69	3.47%
GaRADIAL	63738.2						936.16	1.47%
Ag 328.068†	530.9	0.00128	mg/L	0.000726	0.00128	mg/L	0.000726	56.81%
Al 396.153†	1750.4	0.318	mg/L	0.0044	0.318	mg/L	0.0044	1.37%
As 188.979†	-1.9	-0.00093	mg/L	0.003077	-0.00093	mg/L	0.003077	329.57%
Ba 233.527†	15047.1	0.111	mg/L	0.0040	0.111	mg/L	0.0040	3.56%
Be 234.861†	265.4	0.00012	mg/L	0.000049	0.00012	mg/L	0.000049	41.65%
B 249.677†	5007.8	0.0713	mg/L	0.00284	0.0713	mg/L	0.00284	3.99%
Ca 227.546†	37659.6	106	mg/L	3.8	106	mg/L	3.8	3.55%
Cd 228.802†	127.5	0.00266	mg/L	0.000368	0.00266	mg/L	0.000368	13.83%
Co 228.616†	10.1	0.00003	mg/L	0.000307	0.00003	mg/L	0.000307	987.42%
Cr 267.716†	300.9	0.00229	mg/L	0.000030	0.00229	mg/L	0.000030	1.30%
Cu 327.393†	637.4	0.00235	mg/L	0.001211	0.00235	mg/L	0.001211	51.50%
Fe 239.562†	2853.0	0.219	mg/L	0.0059	0.219	mg/L	0.0059	2.70%
Mg 279.077†	43070.5	15.3	mg/L	0.24	15.3	mg/L	0.24	1.55%
Mn 257.610†	8842.2	0.0109	mg/L	0.00012	0.0109	mg/L	0.00012	1.06%
Mo 202.031†	255.8	0.00716	mg/L	0.000384	0.00716	mg/L	0.000384	5.37%
Ni 231.604†	269.6	0.00294	mg/L	0.000853	0.00294	mg/L	0.000853	29.00%
Pb 220.353†	-15.3	-0.00056	mg/L	0.000448	-0.00056	mg/L	0.000448	79.88%
Sb 206.836†	-2.3	-0.00101	mg/L	0.001212	-0.00101	mg/L	0.001212	119.82%
Se 196.026†	10.7	0.0146	mg/L	0.00544	0.0146	mg/L	0.00544	37.23%
Si 251.611†	250867.7	7.50	mg/L	0.244	7.50	mg/L	0.244	3.25%
Sn 189.927†	-271.4	-0.0329	mg/L	0.00135	-0.0329	mg/L	0.00135	4.11%
Ti 334.940†	-9193.0	0.00343	mg/L	0.001515	0.00343	mg/L	0.001515	44.21%
Tl 190.801†	-24.4	-0.00922	mg/L	0.002084	-0.00922	mg/L	0.002084	22.61%
V 290.880†	6739.0	0.0403	mg/L	0.00297	0.0403	mg/L	0.00297	7.36%
Zn 206.200†	1829.4	0.0430	mg/L	0.00056	0.0430	mg/L	0.00056	1.31%
K 766.490†	10121.6	3.98	mg/L	0.035	3.98	mg/L	0.035	0.87%
Na 589.592†	7669898.5	506	mg/L	6.3	506	mg/L	6.3	1.25%
Sr 407.771†	1578570.1	0.860	mg/L	0.0123	0.860	mg/L	0.0123	1.43%
Li 670.784†	2665.3	0.0222	mg/L	0.00085	0.0222	mg/L	0.00085	3.81%

Sequence No.: 25 **Autosampler Location: 25**
Sample ID: L1204084406 **Date Collected: 4/27/2012 11:37:55 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084406

Analyte	Back Pressure	Flow

Approved: April 30, 2012

All	148.0 kPa	0.50 L/min

Mean Data: L1204084406

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1781430.7						20124.88	1.13%
YRADIAL	213137.4						3458.02	1.62%
Ga 417.206	1084637.0						23041.33	2.12%
GaRADIAL	65108.1						1228.94	1.89%
Ag 328.068†	227.2	0.00000	mg/L	0.000375	0.00000	mg/L	0.000375	>999.9%
Al 396.153†	0.5	-0.0231	mg/L	0.00133	-0.0231	mg/L	0.00133	5.78%
As 188.979†	-2.0	-0.00102	mg/L	0.003798	-0.00102	mg/L	0.003798	370.94%
Ba 233.527†	14591.4	0.108	mg/L	0.0014	0.108	mg/L	0.0014	1.33%
Be 234.861†	171.1	0.00008	mg/L	0.000026	0.00008	mg/L	0.000026	34.22%
B 249.677†	4512.8	0.0643	mg/L	0.00139	0.0643	mg/L	0.00139	2.17%
Ca 227.546†	35082.2	99.0	mg/L	0.26	99.0	mg/L	0.26	0.27%
Cd 228.802†	92.8	0.00196	mg/L	0.000115	0.00196	mg/L	0.000115	5.87%
Co 228.616†	-1.5	-0.00031	mg/L	0.000395	-0.00031	mg/L	0.000395	126.08%
Cr 267.716†	248.9	0.00170	mg/L	0.000072	0.00170	mg/L	0.000072	4.24%
Cu 327.393†	616.3	0.00222	mg/L	0.000520	0.00222	mg/L	0.000520	23.44%
Fe 239.562†	107.8	0.00947	mg/L	0.000359	0.00947	mg/L	0.000359	3.79%
Mg 279.077†	41692.8	14.8	mg/L	0.17	14.8	mg/L	0.17	1.16%
Mn 257.610†	10046.6	0.0127	mg/L	0.00030	0.0127	mg/L	0.00030	2.40%
Mo 202.031†	240.7	0.00665	mg/L	0.000262	0.00665	mg/L	0.000262	3.94%
Ni 231.604†	194.7	0.00162	mg/L	0.000332	0.00162	mg/L	0.000332	20.52%
Pb 220.353†	9.4	0.00194	mg/L	0.001348	0.00194	mg/L	0.001348	69.57%
Sb 206.836†	4.6	0.00097	mg/L	0.001204	0.00097	mg/L	0.001204	124.02%
Se 196.026†	8.0	0.0127	mg/L	0.00389	0.0127	mg/L	0.00389	30.54%
Si 251.611†	218283.3	6.52	mg/L	0.044	6.52	mg/L	0.044	0.68%
Sn 189.927†	-263.7	-0.0321	mg/L	0.00118	-0.0321	mg/L	0.00118	3.69%
Ti 334.940†	-12715.0	-0.00219	mg/L	0.000673	-0.00219	mg/L	0.000673	30.78%
Tl 190.801†	-28.7	-0.0106	mg/L	0.00225	-0.0106	mg/L	0.00225	21.14%
V 290.880†	5845.9	0.0347	mg/L	0.00075	0.0347	mg/L	0.00075	2.15%
Zn 206.200†	1588.2	0.0369	mg/L	0.00089	0.0369	mg/L	0.00089	2.41%
K 766.490†	9747.4	3.80	mg/L	0.074	3.80	mg/L	0.074	1.95%
Na 589.592†	7704688.8	508	mg/L	15.0	508	mg/L	15.0	2.95%
Sr 407.771†	1609256.9	0.877	mg/L	0.0144	0.877	mg/L	0.0144	1.64%
Li 670.784†	2561.2	0.0212	mg/L	0.00052	0.0212	mg/L	0.00052	2.45%

Sequence No.: 26 **Autosampler Location: 26**
Sample ID: L1204081001 **Date Collected: 4/27/2012 11:44:54 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081001

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081001

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1882939.9						14832.40	0.79%
YRADIAL	213288.7						6695.69	3.14%
Ga 417.206	1091827.0						26033.28	2.38%
GaRADIAL	63956.3						513.24	0.80%
Ag 328.068†	-91.0	-0.00113	mg/L	0.000464	-0.00113	mg/L	0.000464	41.25%
Al 396.153†	17.5	-0.0192	mg/L	0.00192	-0.0192	mg/L	0.00192	9.97%
As 188.979†	1.9	0.00073	mg/L	0.000687	0.00073	mg/L	0.000687	94.63%
Ba 233.527†	38.8	-0.00168	mg/L	0.000057	-0.00168	mg/L	0.000057	3.38%
Be 234.861†	92.3	0.00000	mg/L	0.000027	0.00000	mg/L	0.000027	>999.9%
B 249.677†	59.4	0.00017	mg/L	0.000231	0.00017	mg/L	0.000231	135.58%
Ca 227.546†	-5.1	0.0303	mg/L	0.01719	0.0303	mg/L	0.01719	56.66%
Cd 228.802†	-2.6	0.00002	mg/L	0.000176	0.00002	mg/L	0.000176	819.97%
Co 228.616†	13.6	0.00014	mg/L	0.000183	0.00014	mg/L	0.000183	127.22%
Cr 267.716†	11.4	-0.00098	mg/L	0.000046	-0.00098	mg/L	0.000046	4.71%
Cu 327.393†	105.5	-0.00038	mg/L	0.000405	-0.00038	mg/L	0.000405	106.29%
Fe 239.562†	60.4	0.00614	mg/L	0.001149	0.00614	mg/L	0.001149	18.70%

Approved: April 30, 2012

Mg 279.077†	12.0	0.0143	mg/L	0.00196	0.0143	mg/L	0.00196 13.66%
Mn 257.610†	185.0	-0.00184	mg/L	0.000013	-0.00184	mg/L	0.000013 0.71%
Mo 202.031†	3.7	-0.00115	mg/L	0.000297	-0.00115	mg/L	0.000297 25.87%
Ni 231.604†	36.0	-0.00119	mg/L	0.000212	-0.00119	mg/L	0.000212 17.74%
Pb 220.353†	-14.9	-0.00141	mg/L	0.002119	-0.00141	mg/L	0.002119 149.83%
Sb 206.836†	-1.3	-0.00076	mg/L	0.002248	-0.00076	mg/L	0.002248 297.52%
Se 196.026†	-1.1	0.00655	mg/L	0.002375	0.00655	mg/L	0.002375 36.24%
Si 251.611†	272.1	-0.0134	mg/L	0.00122	-0.0134	mg/L	0.00122 9.06%
Sn 189.927†	-2.3	-0.00190	mg/L	0.000751	-0.00190	mg/L	0.000751 39.60%
Ti 334.940†	-1.1	-0.00070	mg/L	0.000046	-0.00070	mg/L	0.000046 6.53%
Tl 190.801†	9.8	0.00144	mg/L	0.002657	0.00144	mg/L	0.002657 184.33%
V 290.880†	-127.8	-0.00248	mg/L	0.001822	-0.00248	mg/L	0.001822 73.36%
Zn 206.200†	181.4	0.00114	mg/L	0.000129	0.00114	mg/L	0.000129 11.35%
K 766.490†	113.6	-0.0839	mg/L	0.03263	-0.0839	mg/L	0.03263 38.91%
Na 589.592†	386.9	0.0126	mg/L	0.01264	0.0126	mg/L	0.01264 100.06%
Sr 407.771†	55.2	0.00215	mg/L	0.000024	0.00215	mg/L	0.000024 1.12%
Li 670.784†	-54.9	-0.00502	mg/L	0.000678	-0.00502	mg/L	0.000678 13.51%

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Sequence No.: 27 **Autosampler Location: 27**
Sample ID: L1204081002 **Date Collected: 4/27/2012 11:51:49 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081002

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081002

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1943564.7						21894.45	1.13%
YRADIAL	218092.9						5260.02	2.41%
Ga 417.206	1126096.9						15058.02	1.34%
GaRADIAL	65374.9						937.52	1.43%
Ag 328.068†	40.2	-0.00062	mg/L	0.000217	-0.00062	mg/L	0.000217	34.78%
Al 396.153†	9.3	-0.0208	mg/L	0.00240	-0.0208	mg/L	0.00240	11.52%
As 188.979†	-1.6	-0.00078	mg/L	0.001723	-0.00078	mg/L	0.001723	221.49%
Ba 233.527†	50.2	-0.00160	mg/L	0.000092	-0.00160	mg/L	0.000092	5.74%
Be 234.861†	137.7	0.00004	mg/L	0.000028	0.00004	mg/L	0.000028	64.66%
B 249.677†	39.8	-0.00011	mg/L	0.000122	-0.00011	mg/L	0.000122	108.92%
Ca 227.546†	-0.7	0.0428	mg/L	0.01727	0.0428	mg/L	0.01727	40.35%
Cd 228.802†	-0.6	0.00007	mg/L	0.000158	0.00007	mg/L	0.000158	227.45%
Co 228.616†	12.9	0.00012	mg/L	0.000442	0.00012	mg/L	0.000442	359.77%
Cr 267.716†	12.8	-0.00096	mg/L	0.000234	-0.00096	mg/L	0.000234	24.36%
Cu 327.393†	75.4	-0.00054	mg/L	0.000714	-0.00054	mg/L	0.000714	133.40%
Fe 239.562†	67.1	0.00665	mg/L	0.000358	0.00665	mg/L	0.000358	5.38%
Mg 279.077†	8.5	0.0131	mg/L	0.00298	0.0131	mg/L	0.00298	22.81%
Mn 257.610†	111.3	-0.00195	mg/L	0.000008	-0.00195	mg/L	0.000008	0.42%
Mo 202.031†	-1.2	-0.00131	mg/L	0.000341	-0.00131	mg/L	0.000341	25.96%
Ni 231.604†	25.8	-0.00137	mg/L	0.000253	-0.00137	mg/L	0.000253	18.42%
Pb 220.353†	-22.2	-0.00218	mg/L	0.001422	-0.00218	mg/L	0.001422	65.08%
Sb 206.836†	-0.3	-0.00048	mg/L	0.000425	-0.00048	mg/L	0.000425	88.62%
Se 196.026†	-4.0	0.00465	mg/L	0.001609	0.00465	mg/L	0.001609	34.62%
Si 251.611†	163.8	-0.0167	mg/L	0.00027	-0.0167	mg/L	0.00027	1.62%
Sn 189.927†	-1.3	-0.00178	mg/L	0.000820	-0.00178	mg/L	0.000820	46.02%
Ti 334.940†	23.0	-0.00067	mg/L	0.000269	-0.00067	mg/L	0.000269	40.22%
Tl 190.801†	3.5	-0.00052	mg/L	0.002411	-0.00052	mg/L	0.002411	464.79%
V 290.880†	-385.9	-0.00411	mg/L	0.001438	-0.00411	mg/L	0.001438	35.01%
Zn 206.200†	155.5	0.00048	mg/L	0.000330	0.00048	mg/L	0.000330	68.27%
K 766.490†	78.5	-0.0998	mg/L	0.01624	-0.0998	mg/L	0.01624	16.26%
Na 589.592†	123.2	-0.00704	mg/L	0.010743	-0.00704	mg/L	0.010743	152.59%
Sr 407.771†	12.8	0.00213	mg/L	0.000058	0.00213	mg/L	0.000058	2.71%
Li 670.784†	-3.7	-0.00451	mg/L	0.000844	-0.00451	mg/L	0.000844	18.72%

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Sequence No.: 28 **Autosampler Location: 28**
Sample ID: L1204081003 **Date Collected: 4/27/2012 11:58:43 AM**
Analyst: KHR **Data Type: Original**

Approved: April 30, 2012

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081003

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081003

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1908749.3						34248.64	1.79%
YRADIAL	222782.0						5063.32	2.27%
Ga 417.206	1099508.9						36042.30	3.28%
GaRADIAL	66872.8						956.79	1.43%
Ag 328.068†	-74.0	-0.00108	mg/L	0.000441	-0.00108	mg/L	0.000441	40.94%
Al 396.153†	15.1	-0.0197	mg/L	0.00111	-0.0197	mg/L	0.00111	5.62%
As 188.979†	-0.5	-0.00034	mg/L	0.000667	-0.00034	mg/L	0.000667	196.81%
Ba 233.527†	29.2	-0.00176	mg/L	0.000160	-0.00176	mg/L	0.000160	9.12%
Be 234.861†	79.2	0.00000	mg/L	0.000028	0.00000	mg/L	0.000028	>999.9%
B 249.677†	45.1	-0.00003	mg/L	0.000200	-0.00003	mg/L	0.000200	632.12%
Ca 227.546†	3.2	0.0538	mg/L	0.03467	0.0538	mg/L	0.03467	64.43%
Cd 228.802†	-7.1	-0.00006	mg/L	0.000196	-0.00006	mg/L	0.000196	306.89%
Co 228.616†	6.7	-0.00007	mg/L	0.000370	-0.00007	mg/L	0.000370	513.70%
Cr 267.716†	22.5	-0.00085	mg/L	0.000168	-0.00085	mg/L	0.000168	19.69%
Cu 327.393†	123.8	-0.00029	mg/L	0.000339	-0.00029	mg/L	0.000339	117.75%
Fe 239.562†	70.1	0.00688	mg/L	0.000429	0.00688	mg/L	0.000429	6.23%
Mg 279.077†	4.9	0.0118	mg/L	0.00539	0.0118	mg/L	0.00539	45.75%
Mn 257.610†	73907.9	0.107	mg/L	0.0008	0.107	mg/L	0.0008	0.73%
Mo 202.031†	7.4	-0.00101	mg/L	0.000233	-0.00101	mg/L	0.000233	23.17%
Ni 231.604†	37.7	-0.00117	mg/L	0.000150	-0.00117	mg/L	0.000150	12.91%
Pb 220.353†	-14.1	-0.00139	mg/L	0.001774	-0.00139	mg/L	0.001774	127.52%
Sb 206.836†	1.5	0.00006	mg/L	0.000169	0.00006	mg/L	0.000169	298.38%
Se 196.026†	-3.7	0.00480	mg/L	0.000418	0.00480	mg/L	0.000418	8.73%
Si 251.611†	178.7	-0.0162	mg/L	0.00122	-0.0162	mg/L	0.00122	7.52%
Sn 189.927†	4.0	-0.00117	mg/L	0.000633	-0.00117	mg/L	0.000633	54.10%
Ti 334.940†	92.6	-0.00058	mg/L	0.000083	-0.00058	mg/L	0.000083	14.43%
Tl 190.801†	2.7	-0.00089	mg/L	0.001150	-0.00089	mg/L	0.001150	128.97%
V 290.880†	-332.6	-0.00377	mg/L	0.002475	-0.00377	mg/L	0.002475	65.60%
Zn 206.200†	169.0	0.00083	mg/L	0.000207	0.00083	mg/L	0.000207	25.03%
K 766.490†	315.1	0.00806	mg/L	0.050045	0.00806	mg/L	0.050045	621.26%
Na 589.592†	21.9	-0.0146	mg/L	0.00587	-0.0146	mg/L	0.00587	40.21%
Sr 407.771†	6.9	0.00213	mg/L	0.000015	0.00213	mg/L	0.000015	0.73%
Li 670.784†	-43.1	-0.00490	mg/L	0.001168	-0.00490	mg/L	0.001168	23.84%

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Sequence No.: 29 **Autosampler Location: 29**
Sample ID: L1204081004 **Date Collected: 4/27/2012 12:05:37 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081004

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1913054.6						37473.45	1.96%
YRADIAL	223026.3						4975.53	2.23%
Ga 417.206	1103174.7						18677.43	1.69%
GaRADIAL	66710.0						777.61	1.17%
Ag 328.068†	-79.2	-0.00108	mg/L	0.000380	-0.00108	mg/L	0.000380	35.31%
Al 396.153†	26.5	-0.0174	mg/L	0.00111	-0.0174	mg/L	0.00111	6.34%
As 188.979†	-5.2	-0.00235	mg/L	0.000608	-0.00235	mg/L	0.000608	25.93%
Ba 233.527†	31.5	-0.00174	mg/L	0.000082	-0.00174	mg/L	0.000082	4.71%
Be 234.861†	99.5	0.00000	mg/L	0.000040	0.00000	mg/L	0.000040	>999.9%
B 249.677†	33.0	-0.00022	mg/L	0.000425	-0.00022	mg/L	0.000425	195.70%

Approved: April 30, 2012

Ca 227.546†	-4.2	0.0332	mg/L	0.02092	0.0332	mg/L	0.02092 62.99%
Cd 228.802†	0.0	0.00009	mg/L	0.000227	0.00009	mg/L	0.000227 254.16%
Co 228.616†	6.7	-0.00007	mg/L	0.000051	-0.00007	mg/L	0.000051 73.52%
Cr 267.716†	33.2	-0.00073	mg/L	0.000131	-0.00073	mg/L	0.000131 17.84%
Cu 327.393†	107.5	-0.00037	mg/L	0.000298	-0.00037	mg/L	0.000298 80.61%
Fe 239.562†	293.7	0.0240	mg/L	0.00069	0.0240	mg/L	0.00069 2.87%
Mg 279.077†	16.4	0.0158	mg/L	0.00163	0.0158	mg/L	0.00163 10.28%
Mn 257.610†	280.4	-0.00170	mg/L	0.000040	-0.00170	mg/L	0.000040 2.38%
Mo 202.031†	3.2	-0.00117	mg/L	0.000126	-0.00117	mg/L	0.000126 10.79%
Ni 231.604†	14.5	-0.00157	mg/L	0.000511	-0.00157	mg/L	0.000511 32.47%
Pb 220.353†	-20.9	-0.00205	mg/L	0.001627	-0.00205	mg/L	0.001627 79.47%
Sb 206.836†	0.9	-0.00013	mg/L	0.001079	-0.00013	mg/L	0.001079 838.85%
Se 196.026†	-4.0	0.00463	mg/L	0.001923	0.00463	mg/L	0.001923 41.51%
Si 251.611†	239.2	-0.0144	mg/L	0.00048	-0.0144	mg/L	0.00048 3.31%
Sn 189.927†	-5.2	-0.00223	mg/L	0.000298	-0.00223	mg/L	0.000298 13.35%
Ti 334.940†	82.7	-0.00059	mg/L	0.000107	-0.00059	mg/L	0.000107 18.10%
Tl 190.801†	-5.2	-0.00324	mg/L	0.002447	-0.00324	mg/L	0.002447 75.50%
V 290.880†	-398.1	-0.00419	mg/L	0.002398	-0.00419	mg/L	0.002398 57.27%
Zn 206.200†	204.9	0.00174	mg/L	0.000113	0.00174	mg/L	0.000113 6.47%
K 766.490†	348.0	0.0231	mg/L	0.00886	0.0231	mg/L	0.00886 38.37%
Na 589.592†	-291.2	-0.0380	mg/L	0.00112	-0.0380	mg/L	0.00112 2.95%
Sr 407.771†	49.8	0.00215	mg/L	0.000004	0.00215	mg/L	0.000004 0.21%
Li 670.784†	85.2	-0.00361	mg/L	0.000107	-0.00361	mg/L	0.000107 2.95%

Sequence No.: 30 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 12:12:32 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	147.0 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	1817226.2						64949.44	3.57%
YRADIAL	218443.4						4236.18	1.94%
Ga 417.206	993884.2						21233.48	2.14%
GaRADIAL	65373.8						1120.87	1.71%
Ag 328.068†	109320.1	0.424	mg/L	0.0085	0.424	mg/L	0.0085	2.01%
QC value within limits for Ag 328.068 Recovery = 105.90%								
Al 396.153†	52020.0	10.0	mg/L	0.07	10.0	mg/L	0.07	0.70%
QC value within limits for Al 396.153 Recovery = 100.45%								
As 188.979†	971.1	0.413	mg/L	0.0109	0.413	mg/L	0.0109	2.63%
QC value within limits for As 188.979 Recovery = 103.17%								
Ba 233.527†	140046.3	1.05	mg/L	0.043	1.05	mg/L	0.043	4.09%
QC value within limits for Ba 233.527 Recovery = 105.42%								
Be 234.861†	56976.0	0.0520	mg/L	0.00142	0.0520	mg/L	0.00142	2.74%
QC value within limits for Be 234.861 Recovery = 103.98%								
B 249.677†	35370.2	0.505	mg/L	0.0097	0.505	mg/L	0.0097	1.92%
QC value within limits for B 249.677 Recovery = 100.92%								
Ca 227.546†	3586.2	10.6	mg/L	0.17	10.6	mg/L	0.17	1.62%
QC value within limits for Ca 227.546 Recovery = 106.41%								
Cd 228.802†	2630.9	0.0519	mg/L	0.00072	0.0519	mg/L	0.00072	1.39%
QC value within limits for Cd 228.802 Recovery = 103.80%								
Co 228.616†	6831.3	0.211	mg/L	0.0091	0.211	mg/L	0.0091	4.30%
QC value within limits for Co 228.616 Recovery = 105.73%								
Cr 267.716†	46769.7	0.522	mg/L	0.0169	0.522	mg/L	0.0169	3.24%
QC value within limits for Cr 267.716 Recovery = 104.38%								
Cu 327.393†	102200.7	0.521	mg/L	0.0120	0.521	mg/L	0.0120	2.31%
QC value within limits for Cu 327.393 Recovery = 104.29%								
Fe 239.562†	53236.4	4.07	mg/L	0.034	4.07	mg/L	0.034	0.84%
QC value within limits for Fe 239.562 Recovery = 101.77%								
Mg 279.077†	28636.9	10.2	mg/L	0.11	10.2	mg/L	0.11	1.09%
QC value within limits for Mg 279.077 Recovery = 101.90%								
Mn 257.610†	360756.4	0.530	mg/L	0.0238	0.530	mg/L	0.0238	4.50%
QC value within limits for Mn 257.610 Recovery = 105.95%								

Approved: April 30, 2012

Mo 202.031† 31796.6 1.04 mg/L 0.047 1.04 mg/L 0.047 4.54%
QC value within limits for Mo 202.031 Recovery = 104.30%
Ni 231.604† 29771.4 0.525 mg/L 0.0262 0.525 mg/L 0.0262 4.99%
QC value within limits for Ni 231.604 Recovery = 104.90%
Pb 220.353† 4977.2 0.525 mg/L 0.0228 0.525 mg/L 0.0228 4.34%
QC value within limits for Pb 220.353 Recovery = 104.99%
Sb 206.836† 4287.0 1.24 mg/L 0.028 1.24 mg/L 0.028 2.29%
QC value within limits for Sb 206.836 Recovery = 103.68%
Se 196.026† 616.4 0.424 mg/L 0.0075 0.424 mg/L 0.0075 1.78%
QC value within limits for Se 196.026 Recovery = 105.90%
Si 251.611† 176540.1 5.26 mg/L 0.161 5.26 mg/L 0.161 3.07%
QC value within limits for Si 251.611 Recovery = 105.23%
Sn 189.927† 9226.3 1.06 mg/L 0.047 1.06 mg/L 0.047 4.40%
QC value within limits for Sn 189.927 Recovery = 106.33%
Ti 334.940† 797026.4 1.02 mg/L 0.011 1.02 mg/L 0.011 1.10%
QC value within limits for Ti 334.940 Recovery = 102.46%
Tl 190.801† 1689.7 0.538 mg/L 0.0132 0.538 mg/L 0.0132 2.45%
QC value within limits for Tl 190.801 Recovery = 107.67%
V 290.880† 166581.3 1.05 mg/L 0.036 1.05 mg/L 0.036 3.47%
QC value within limits for V 290.880 Recovery = 104.59%
Zn 206.200† 42199.0 1.07 mg/L 0.045 1.07 mg/L 0.045 4.16%
QC value within limits for Zn 206.200 Recovery = 107.36%
K 766.490† 112669.2 51.5 mg/L 0.35 51.5 mg/L 0.35 0.68%
QC value within limits for K 766.490 Recovery = 103.04%
Na 589.592† 680248.8 50.1 mg/L 0.55 50.1 mg/L 0.55 1.10%
QC value within limits for Na 589.592 Recovery = 100.16%
Sr 407.771† 1802444.1 0.984 mg/L 0.0173 0.984 mg/L 0.0173 1.76%
QC value within limits for Sr 407.771 Recovery = 98.45%
Li 670.784† 100132.9 0.998 mg/L 0.0080 0.998 mg/L 0.0080 0.81%
QC value within limits for Li 670.784 Recovery = 99.84%
All analyte(s) passed QC.

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Sequence No.: 31 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 12:18:33 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	147.0 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	1869764.7						38863.80	2.08%
YRADIAL	216824.6						2828.99	1.30%
Ga 417.206	1041481.9						30691.89	2.95%
GaRADIAL	64671.7						2067.25	3.20%
Ag 328.068†	-52.0	-0.00098	mg/L	0.000341	-0.00098	mg/L	0.000341	34.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	0.7	-0.0225	mg/L	0.00549	-0.0225	mg/L	0.00549	24.41%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.2	-0.00061	mg/L	0.000832	-0.00061	mg/L	0.000832	135.45%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-4.7	-0.00201	mg/L	0.000109	-0.00201	mg/L	0.000109	5.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	29.3	-0.00006	mg/L	0.000058	-0.00006	mg/L	0.000058	103.30%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	102.8	0.00080	mg/L	0.000411	0.00080	mg/L	0.000411	51.16%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-11.2	0.0126	mg/L	0.03587	0.0126	mg/L	0.03587	284.15%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-11.4	-0.00015	mg/L	0.000146	-0.00015	mg/L	0.000146	97.40%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	8.4	-0.00002	mg/L	0.000420	-0.00002	mg/L	0.000420	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.2	-0.00116	mg/L	0.000161	-0.00116	mg/L	0.000161	13.84%
QC value within limits for Cr 267.716 Recovery = Not calculated								

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```
Cu 327.393†              190.8     0.00005 mg/L      0.000184     0.00005 mg/L      0.000184 353.32%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†               -1.9     0.00138 mg/L      0.000528     0.00138 mg/L      0.000528  38.12%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†                7.5      0.0127 mg/L       0.00142      0.0127 mg/L       0.00142  11.19%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†                2.0    -0.00211 mg/L      0.000015    -0.00211 mg/L      0.000015   0.71%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -1.8    -0.00133 mg/L      0.000292    -0.00133 mg/L      0.000292  21.92%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†                6.4    -0.00172 mg/L      0.000248    -0.00172 mg/L      0.000248  14.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†               -2.9    -0.00015 mg/L      0.001647    -0.00015 mg/L      0.001647 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†                2.6     0.00036 mg/L      0.001261     0.00036 mg/L      0.001261 353.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                3.1     0.00937 mg/L      0.002415     0.00937 mg/L      0.002415  25.77%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               70.3     -0.0195 mg/L       0.00081     -0.0195 mg/L       0.00081   4.17%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               12.0    -0.00025 mg/L      0.000851    -0.00025 mg/L      0.000851 343.76%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†               98.8    -0.00057 mg/L      0.000129    -0.00057 mg/L      0.000129  22.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.7    -0.00182 mg/L      0.000730    -0.00182 mg/L      0.000730  40.10%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              -197.9    -0.00293 mg/L      0.001253    -0.00293 mg/L      0.001253  42.84%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†               -1.5    -0.00351 mg/L      0.000086    -0.00351 mg/L      0.000086   2.44%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               103.7     -0.0883 mg/L       0.01143     -0.0883 mg/L       0.01143  12.94%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†                6.3     -0.0158 mg/L       0.00695     -0.0158 mg/L       0.00695  44.11%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              -30.1     0.00211 mg/L      0.000004     0.00211 mg/L      0.000004   0.21%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              -25.7    -0.00473 mg/L      0.000867    -0.00473 mg/L      0.000867  18.35%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

================================================================================================================
Sequence No.: 32                                    Autosampler Location: 12
Sample ID: ICSA                                     Date Collected: 4/27/2012 12:25:26 PM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

----------------------------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSA
Analyte                 Back Pressure    Flow
All                    147.0 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          1741751.2                                                     7993.85   0.46%
YRADIAL             214012.2                                                     1552.02   0.73%
Ga 417.206          985350.7                                                    21606.89   2.19%
GaRADIAL             65177.6                                                      393.70   0.60%
Ag 328.068†         -10278.6     0.00053 mg/L      0.001629     0.00053 mg/L      0.001629 305.57%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†         1233873.5         240 mg/L           5.4         240 mg/L           5.4   2.26%
   QC value within limits for Al 396.153  Recovery = 96.19%
As 188.979†             -14.6    -0.00020 mg/L      0.001681    -0.00020 mg/L      0.001681 843.73%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†              622.6     0.00040 mg/L      0.000233     0.00040 mg/L      0.000233  57.64%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†            21447.1    -0.00087 mg/L      0.000873    -0.00087 mg/L      0.000873 100.64%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†              3186.9     0.00557 mg/L      0.001799     0.00557 mg/L      0.001799  32.33%
   QC value within limits for B 249.677  Recovery = Not calculated
```

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Ca 227.546†	90438.6	257 mg/L	6.0	257 mg/L	6.0	2.32%			
QC value within limits for Ca 227.546 Recovery = 102.96%									
Cd 228.802†	14.9	0.00024 mg/L	0.000338	0.00024 mg/L	0.000338	142.67%			
QC value within limits for Cd 228.802 Recovery = Not calculated									
Co 228.616†	24.0	-0.00187 mg/L	0.000184	-0.00187 mg/L	0.000184	9.82%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	89.7	-0.00140 mg/L	0.000253	-0.00140 mg/L	0.000253	18.00%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 327.393†	-1134.5	0.00104 mg/L	0.000374	0.00104 mg/L	0.000374	36.15%			
QC value within limits for Cu 327.393 Recovery = Not calculated									
Fe 239.562†	1205550.5	92.2 mg/L	2.79	92.2 mg/L	2.79	3.03%			
QC value within limits for Fe 239.562 Recovery = 92.16%									
Mg 279.077†	693384.9	246 mg/L	6.9	246 mg/L	6.9	2.81%			
QC value within limits for Mg 279.077 Recovery = 98.42%									
Mn 257.610†	-1624.6	-0.00192 mg/L	0.000559	-0.00192 mg/L	0.000559	29.14%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	-49.8	0.00162 mg/L	0.000731	0.00162 mg/L	0.000731	45.21%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Ni 231.604†	87.4	-0.00028 mg/L	0.000957	-0.00028 mg/L	0.000957	343.01%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
Pb 220.353†	-367.5	0.00079 mg/L	0.003095	0.00079 mg/L	0.003095	390.20%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
Sb 206.836†	-18.2	-0.00229 mg/L	0.001480	-0.00229 mg/L	0.001480	64.68%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-38.3	0.00611 mg/L	0.002316	0.00611 mg/L	0.002316	37.91%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	1188.6	0.0141 mg/L	0.00164	0.0141 mg/L	0.00164	11.65%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	-327.8	-0.0395 mg/L	0.00071	-0.0395 mg/L	0.00071	1.80%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Ti 334.940†	-26705.3	0.00326 mg/L	0.002969	0.00326 mg/L	0.002969	90.98%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	-46.1	-0.00978 mg/L	0.001730	-0.00978 mg/L	0.001730	17.68%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
V 290.880†	2993.7	0.00312 mg/L	0.003859	0.00312 mg/L	0.003859	123.82%			
QC value within limits for V 290.880 Recovery = Not calculated									
Zn 206.200†	256.6	0.00130 mg/L	0.000412	0.00130 mg/L	0.000412	31.65%			
QC value within limits for Zn 206.200 Recovery = Not calculated									
K 766.490†	0.5	-0.135 mg/L	0.0343	-0.135 mg/L	0.0343	25.36%			
QC value within limits for K 766.490 Recovery = Not calculated									
Na 589.592†	57.1	-0.0120 mg/L	0.01152	-0.0120 mg/L	0.01152	96.27%			
QC value within limits for Na 589.592 Recovery = Not calculated									
Sr 407.771†	1708.0	-0.00256 mg/L	0.000148	-0.00256 mg/L	0.000148	5.79%			
QC value within limits for Sr 407.771 Recovery = Not calculated									
Li 670.784†	190.6	-0.00256 mg/L	0.000165	-0.00256 mg/L	0.000165	6.44%			
QC value within limits for Li 670.784 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 33 **Autosampler Location: 13**
Sample ID: ICSAB **Date Collected: 4/27/2012 12:31:23 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	147.0 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	1765070.9						17003.63	0.96%
YRADIAL	209807.7						6120.27	2.92%
Ga 417.206	995865.5						34226.06	3.44%
GaRADIAL	64015.8						1918.84	3.00%
Ag 328.068†	118949.7	0.500	mg/L	0.0141	0.500	mg/L	0.0141	2.81%
QC value within limits for Ag 328.068 Recovery = 100.08%								
Al 396.153†	1287061.2	251	mg/L	9.0	251	mg/L	9.0	3.60%
QC value within limits for Al 396.153 Recovery = 100.34%								

Approved: April 30, 2012

As 188.979† 515.4 0.228 mg/L 0.0104 0.228 mg/L 0.0104 4.58%
QC value within limits for As 188.979 Recovery = 91.33%
Ba 233.527† 34185.8 0.253 mg/L 0.0028 0.253 mg/L 0.0028 1.11%
QC value within limits for Ba 233.527 Recovery = 101.31%
Be 234.861† 285782.5 0.242 mg/L 0.0070 0.242 mg/L 0.0070 2.88%
QC value within limits for Be 234.861 Recovery = 96.72%
B 249.677† 3092.4 -0.00948 mg/L 0.001027 -0.00948 mg/L 0.001027 10.84%
QC value within limits for B 249.677 Recovery = Not calculated
Ca 227.546† 91024.0 260 mg/L 6.8 260 mg/L 6.8 2.63%
QC value within limits for Ca 227.546 Recovery = 103.81%
Cd 228.802† 20383.5 0.412 mg/L 0.0149 0.412 mg/L 0.0149 3.62%
QC value within limits for Cd 228.802 Recovery = 82.45%
Co 228.616† 7566.4 0.233 mg/L 0.0026 0.233 mg/L 0.0026 1.13%
QC value within limits for Co 228.616 Recovery = 93.03%
Cr 267.716† 22752.7 0.252 mg/L 0.0044 0.252 mg/L 0.0044 1.74%
QC value within limits for Cr 267.716 Recovery = 100.78%
Cu 327.393† 48042.9 0.252 mg/L 0.0058 0.252 mg/L 0.0058 2.28%
QC value within limits for Cu 327.393 Recovery = 100.78%
Fe 239.562† 1265914.4 96.8 mg/L 3.40 96.8 mg/L 3.40 3.52%
QC value within limits for Fe 239.562 Recovery = 96.78%
Mg 279.077† 724208.5 257 mg/L 9.4 257 mg/L 9.4 3.67%
QC value within limits for Mg 279.077 Recovery = 102.79%
Mn 257.610† 164089.6 0.242 mg/L 0.0019 0.242 mg/L 0.0019 0.79%
QC value within limits for Mn 257.610 Recovery = 96.93%
Mo 202.031† -42.7 0.00225 mg/L 0.000539 0.00225 mg/L 0.000539 23.97%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 26771.5 0.471 mg/L 0.0053 0.471 mg/L 0.0053 1.12%
QC value within limits for Ni 231.604 Recovery = 94.28%
Pb 220.353† 4144.9 0.476 mg/L 0.0049 0.476 mg/L 0.0049 1.04%
QC value within limits for Pb 220.353 Recovery = 95.27%
Sb 206.836† 1615.3 0.471 mg/L 0.0176 0.471 mg/L 0.0176 3.73%
QC value within limits for Sb 206.836 Recovery = 94.20%
Se 196.026† 300.5 0.235 mg/L 0.0128 0.235 mg/L 0.0128 5.44%
QC value within limits for Se 196.026 Recovery = 94.19%
Si 251.611† -258.5 -0.0293 mg/L 0.00023 -0.0293 mg/L 0.00023 0.78%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -311.4 -0.0376 mg/L 0.00163 -0.0376 mg/L 0.00163 4.35%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -26975.5 0.00309 mg/L 0.003141 0.00309 mg/L 0.003141 101.67%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 1491.3 0.469 mg/L 0.0128 0.469 mg/L 0.0128 2.73%
QC value within limits for Tl 190.801 Recovery = 93.70%
V 290.880† 42500.0 0.251 mg/L 0.0031 0.251 mg/L 0.0031 1.24%
QC value within limits for V 290.880 Recovery = 100.42%
Zn 206.200† 18802.2 0.475 mg/L 0.0065 0.475 mg/L 0.0065 1.36%
QC value within limits for Zn 206.200 Recovery = 94.97%
K 766.490† 10780.3 4.78 mg/L 0.014 4.78 mg/L 0.014 0.28%
QC value within limits for K 766.490 Recovery = 95.58%
Na 589.592† 68049.4 5.05 mg/L 0.022 5.05 mg/L 0.022 0.43%
QC value within limits for Na 589.592 Recovery = 101.07%
Sr 407.771† 1791.3 -0.00255 mg/L 0.000151 -0.00255 mg/L 0.000151 5.92%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 202.0 -0.00245 mg/L 0.000406 -0.00245 mg/L 0.000406 16.60%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 34 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 12:37:20 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD

Approved: April 30, 2012

Y 371.029	1802289.7				18790.73	1.04%
YRADIAL	220083.0				1970.36	0.90%
Ga 417.206	973912.9				14732.20	1.51%
GaRADIAL	64479.1				618.82	0.96%
Ag 328.068†	111370.9	0.432 mg/L	0.0039	0.432 mg/L	0.0039	0.89%
QC value within limits for Ag 328.068 Recovery = 107.90%						
Al 396.153†	53449.7	10.3 mg/L	0.05	10.3 mg/L	0.05	0.47%
QC value within limits for Al 396.153 Recovery = 103.23%						
As 188.979†	999.9	0.425 mg/L	0.0044	0.425 mg/L	0.0044	1.03%
QC value within limits for As 188.979 Recovery = 106.25%						
Ba 233.527†	141391.7	1.06 mg/L	0.026	1.06 mg/L	0.026	2.42%
QC value within limits for Ba 233.527 Recovery = 106.43%						
Be 234.861†	58228.4	0.0531 mg/L	0.00060	0.0531 mg/L	0.00060	1.13%
QC value within limits for Be 234.861 Recovery = 106.22%						
B 249.677†	36159.0	0.516 mg/L	0.0050	0.516 mg/L	0.0050	0.96%
QC value within limits for B 249.677 Recovery = 103.17%						
Ca 227.546†	3680.1	10.9 mg/L	0.20	10.9 mg/L	0.20	1.84%
QC value within limits for Ca 227.546 Recovery = 109.13%						
Cd 228.802†	2708.5	0.0534 mg/L	0.00146	0.0534 mg/L	0.00146	2.74%
QC value within limits for Cd 228.802 Recovery = 106.84%						
Co 228.616†	6930.9	0.215 mg/L	0.0035	0.215 mg/L	0.0035	1.65%
QC value within limits for Co 228.616 Recovery = 107.27%						
Cr 267.716†	47439.4	0.529 mg/L	0.0137	0.529 mg/L	0.0137	2.60%
QC value within limits for Cr 267.716 Recovery = 105.88%						
Cu 327.393†	104342.2	0.532 mg/L	0.0090	0.532 mg/L	0.0090	1.69%
QC value within limits for Cu 327.393 Recovery = 106.48%						
Fe 239.562†	55425.2	4.24 mg/L	0.034	4.24 mg/L	0.034	0.80%
QC value within limits for Fe 239.562 Recovery = 105.95%						
Mg 279.077†	29403.5	10.5 mg/L	0.03	10.5 mg/L	0.03	0.31%
QC value within limits for Mg 279.077 Recovery = 104.62%						
Mn 257.610†	363897.4	0.534 mg/L	0.0157	0.534 mg/L	0.0157	2.94%
QC value within limits for Mn 257.610 Recovery = 106.88%						
Mo 202.031†	32103.4	1.05 mg/L	0.026	1.05 mg/L	0.026	2.47%
QC value within limits for Mo 202.031 Recovery = 105.31%						
Ni 231.604†	30083.5	0.530 mg/L	0.0178	0.530 mg/L	0.0178	3.37%
QC value within limits for Ni 231.604 Recovery = 106.00%						
Pb 220.353†	5062.3	0.534 mg/L	0.0075	0.534 mg/L	0.0075	1.41%
QC value within limits for Pb 220.353 Recovery = 106.78%						
Sb 206.836†	4392.2	1.27 mg/L	0.019	1.27 mg/L	0.019	1.49%
QC value within limits for Sb 206.836 Recovery = 106.23%						
Se 196.026†	639.1	0.439 mg/L	0.0045	0.439 mg/L	0.0045	1.02%
QC value within limits for Se 196.026 Recovery = 109.73%						
Si 251.611†	179788.0	5.36 mg/L	0.085	5.36 mg/L	0.085	1.58%
QC value within limits for Si 251.611 Recovery = 107.17%						
Sn 189.927†	9316.4	1.07 mg/L	0.020	1.07 mg/L	0.020	1.89%
QC value within limits for Sn 189.927 Recovery = 107.37%						
Ti 334.940†	810089.7	1.04 mg/L	0.002	1.04 mg/L	0.002	0.15%
QC value within limits for Ti 334.940 Recovery = 104.15%						
Tl 190.801†	1715.4	0.547 mg/L	0.0041	0.547 mg/L	0.0041	0.75%
QC value within limits for Tl 190.801 Recovery = 109.32%						
V 290.880†	168017.9	1.05 mg/L	0.023	1.05 mg/L	0.023	2.15%
QC value within limits for V 290.880 Recovery = 105.49%						
Zn 206.200†	42762.2	1.09 mg/L	0.025	1.09 mg/L	0.025	2.31%
QC value within limits for Zn 206.200 Recovery = 108.80%						
K 766.490†	115550.1	52.8 mg/L	0.28	52.8 mg/L	0.28	0.52%
QC value within limits for K 766.490 Recovery = 105.70%						
Na 589.592†	698250.0	51.4 mg/L	0.17	51.4 mg/L	0.17	0.33%
QC value within limits for Na 589.592 Recovery = 102.78%						
Sr 407.771†	1807966.4	0.987 mg/L	0.0148	0.987 mg/L	0.0148	1.50%
QC value within limits for Sr 407.771 Recovery = 98.75%						
Li 670.784†	103877.2	1.04 mg/L	0.004	1.04 mg/L	0.004	0.36%
QC value within limits for Li 670.784 Recovery = 103.59%						

All analyte(s) passed QC.

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Sequence No.: 35 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 12:43:21 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 30, 2012

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	147.0 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	1892971.3						34918.22	1.84%
YRADIAL	212196.9						5074.13	2.39%
Ga 417.206	1040454.3						27643.48	2.66%
GaRADIAL	63218.2						872.69	1.38%
Ag 328.068†	-93.6	-0.00114	mg/L	0.000211	-0.00114	mg/L	0.000211	18.50%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1.4	-0.0223	mg/L	0.00166	-0.0223	mg/L	0.00166	7.44%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-4.6	-0.00207	mg/L	0.001163	-0.00207	mg/L	0.001163	56.12%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.7	-0.00194	mg/L	0.000070	-0.00194	mg/L	0.000070	3.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-3.1	-0.00009	mg/L	0.000071	-0.00009	mg/L	0.000071	80.52%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	106.6	0.00085	mg/L	0.000360	0.00085	mg/L	0.000360	42.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-3.2	0.0356	mg/L	0.01292	0.0356	mg/L	0.01292	36.31%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-7.8	-0.00007	mg/L	0.000100	-0.00007	mg/L	0.000100	142.92%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.3	-0.00024	mg/L	0.000373	-0.00024	mg/L	0.000373	156.19%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-6.6	-0.00118	mg/L	0.000082	-0.00118	mg/L	0.000082	6.98%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	74.4	-0.00054	mg/L	0.000525	-0.00054	mg/L	0.000525	97.14%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	102.9	0.00940	mg/L	0.000129	0.00940	mg/L	0.000129	1.37%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	20.7	0.0174	mg/L	0.00276	0.0174	mg/L	0.00276	15.86%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	4.5	-0.00211	mg/L	0.000020	-0.00211	mg/L	0.000020	0.95%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-6.7	-0.00149	mg/L	0.000220	-0.00149	mg/L	0.000220	14.76%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	20.2	-0.00147	mg/L	0.000301	-0.00147	mg/L	0.000301	20.43%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-7.9	-0.00068	mg/L	0.000736	-0.00068	mg/L	0.000736	108.28%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.1	-0.00069	mg/L	0.002231	-0.00069	mg/L	0.002231	321.55%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-10.0	0.00057	mg/L	0.002416	0.00057	mg/L	0.002416	427.17%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	9.6	-0.0213	mg/L	0.00071	-0.0213	mg/L	0.00071	3.36%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	3.1	-0.00127	mg/L	0.001387	-0.00127	mg/L	0.001387	109.43%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-6.9	-0.00071	mg/L	0.000180	-0.00071	mg/L	0.000180	25.51%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.6	-0.00142	mg/L	0.002044	-0.00142	mg/L	0.002044	144.14%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-515.3	-0.00492	mg/L	0.001656	-0.00492	mg/L	0.001656	33.65%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	11.1	-0.00319	mg/L	0.000296	-0.00319	mg/L	0.000296	9.27%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	13.1	-0.130	mg/L	0.0088	-0.130	mg/L	0.0088	6.82%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	-16.3	-0.0174	mg/L	0.00499	-0.0174	mg/L	0.00499	28.62%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-24.2	0.00211	mg/L	0.000037	0.00211	mg/L	0.000037	1.78%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	33.6	-0.00413	mg/L	0.000067	-0.00413	mg/L	0.000067	1.63%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

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Sequence No.: 36 **Autosampler Location: 30**
Sample ID: L1204081601 **Date Collected: 4/27/2012 12:50:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081601

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081601

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1858826.7						8631.84	0.46%
YRADIAL	218925.0						5692.39	2.60%
Ga 417.206	1056553.3						18217.19	1.72%
GaRADIAL	65938.6						2091.58	3.17%
Ag 328.068†	-22.4	-0.00085	mg/L	0.000221	-0.00085	mg/L	0.000221	25.90%
Al 396.153†	23.1	-0.0181	mg/L	0.00069	-0.0181	mg/L	0.00069	3.78%
As 188.979†	3.6	0.00143	mg/L	0.001149	0.00143	mg/L	0.001149	80.27%
Ba 233.527†	22.4	-0.00181	mg/L	0.000152	-0.00181	mg/L	0.000152	8.41%
Be 234.861†	8.0	-0.00008	mg/L	0.000028	-0.00008	mg/L	0.000028	34.59%
B 249.677†	37.9	-0.00014	mg/L	0.000155	-0.00014	mg/L	0.000155	109.46%
Ca 227.546†	5.6	0.0606	mg/L	0.01260	0.0606	mg/L	0.01260	20.78%
Cd 228.802†	-4.5	-0.00002	mg/L	0.000145	-0.00002	mg/L	0.000145	672.03%
Co 228.616†	6.3	-0.00008	mg/L	0.000349	-0.00008	mg/L	0.000349	422.44%
Cr 267.716†	-4.9	-0.00116	mg/L	0.000131	-0.00116	mg/L	0.000131	11.36%
Cu 327.393†	176.4	-0.00002	mg/L	0.000992	-0.00002	mg/L	0.000992	>999.9%
Fe 239.562†	225.8	0.0188	mg/L	0.00028	0.0188	mg/L	0.00028	1.47%
Mg 279.077†	24.7	0.0188	mg/L	0.00099	0.0188	mg/L	0.00099	5.25%
Mn 257.610†	207.4	-0.00181	mg/L	0.000016	-0.00181	mg/L	0.000016	0.89%
Mo 202.031†	7.1	-0.00104	mg/L	0.000186	-0.00104	mg/L	0.000186	17.88%
Ni 231.604†	23.2	-0.00142	mg/L	0.000075	-0.00142	mg/L	0.000075	5.28%
Pb 220.353†	-18.6	-0.00180	mg/L	0.000890	-0.00180	mg/L	0.000890	49.39%
Sb 206.836†	0.4	-0.00028	mg/L	0.000397	-0.00028	mg/L	0.000397	142.92%
Se 196.026†	-0.3	0.00714	mg/L	0.007079	0.00714	mg/L	0.007079	99.20%
Si 251.611†	207.9	-0.0153	mg/L	0.00101	-0.0153	mg/L	0.00101	6.59%
Sn 189.927†	-1.1	-0.00176	mg/L	0.000401	-0.00176	mg/L	0.000401	22.82%
Ti 334.940†	162.4	-0.00049	mg/L	0.000057	-0.00049	mg/L	0.000057	11.79%
Tl 190.801†	-2.4	-0.00235	mg/L	0.003384	-0.00235	mg/L	0.003384	144.12%
V 290.880†	-27.7	-0.00186	mg/L	0.001325	-0.00186	mg/L	0.001325	71.38%
Zn 206.200†	297.0	0.00408	mg/L	0.003778	0.00408	mg/L	0.003778	92.67%
K 766.490†	105.6	-0.0875	mg/L	0.01804	-0.0875	mg/L	0.01804	20.62%
Na 589.592†	178.4	-0.00292	mg/L	0.001679	-0.00292	mg/L	0.001679	57.52%
Sr 407.771†	81.9	0.00217	mg/L	0.000033	0.00217	mg/L	0.000033	1.54%
Li 670.784†	-10.6	-0.00458	mg/L	0.000521	-0.00458	mg/L	0.000521	11.39%

Sequence No.: 37 **Autosampler Location: 31**
Sample ID: L1204081602 **Date Collected: 4/27/2012 12:57:09 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081602

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204081602

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1869020.2						11497.15	0.62%
YRADIAL	217452.0						6902.17	3.17%
Ga 417.206	1068984.1						16440.77	1.54%
GaRADIAL	65668.1						640.16	0.97%
Ag 328.068†	-71.2	-0.00104	mg/L	0.000329	-0.00104	mg/L	0.000329	31.72%
Al 396.153†	7.4	-0.0212	mg/L	0.00186	-0.0212	mg/L	0.00186	8.78%

Approved: April 30, 2012

As 188.979†	-2.9	-0.00136	mg/L	0.001367	-0.00136	mg/L	0.001367 100.17%
Ba 233.527†	32.1	-0.00174	mg/L	0.000185	-0.00174	mg/L	0.000185 10.66%
Be 234.861†	48.4	-0.00005	mg/L	0.000034	-0.00005	mg/L	0.000034 74.62%
B 249.677†	52.2	0.00006	mg/L	0.000043	0.00006	mg/L	0.000043 75.52%
Ca 227.546†	-1.0	0.0426	mg/L	0.00529	0.0426	mg/L	0.00529 12.40%
Cd 228.802†	-3.6	0.00001	mg/L	0.000100	0.00001	mg/L	0.000100 953.84%
Co 228.616†	0.6	-0.00026	mg/L	0.000087	-0.00026	mg/L	0.000087 33.57%
Cr 267.716†	9.7	-0.00099	mg/L	0.000127	-0.00099	mg/L	0.000127 12.78%
Cu 327.393†	177.5	-0.00001	mg/L	0.000546	-0.00001	mg/L	0.000546 >999.9%
Fe 239.562†	425.3	0.0340	mg/L	0.00031	0.0340	mg/L	0.00031 0.91%
Mg 279.077†	20.8	0.0174	mg/L	0.00155	0.0174	mg/L	0.00155 8.92%
Mn 257.610†	309.3	-0.00166	mg/L	0.000020	-0.00166	mg/L	0.000020 1.24%
Mo 202.031†	7.6	-0.00102	mg/L	0.000116	-0.00102	mg/L	0.000116 11.35%
Ni 231.604†	30.2	-0.00130	mg/L	0.000124	-0.00130	mg/L	0.000124 9.61%
Pb 220.353†	-17.6	-0.00170	mg/L	0.000512	-0.00170	mg/L	0.000512 30.01%
Sb 206.836†	-0.9	-0.00065	mg/L	0.001768	-0.00065	mg/L	0.001768 270.10%
Se 196.026†	0.8	0.00788	mg/L	0.001805	0.00788	mg/L	0.001805 22.90%
Si 251.611†	109.4	-0.0183	mg/L	0.00076	-0.0183	mg/L	0.00076 4.15%
Sn 189.927†	-2.1	-0.00188	mg/L	0.000238	-0.00188	mg/L	0.000238 12.69%
Ti 334.940†	42.6	-0.00064	mg/L	0.000111	-0.00064	mg/L	0.000111 17.32%
Tl 190.801†	-8.8	-0.00433	mg/L	0.000313	-0.00433	mg/L	0.000313 7.23%
V 290.880†	-233.4	-0.00315	mg/L	0.000974	-0.00315	mg/L	0.000974 30.89%
Zn 206.200†	168.4	0.00081	mg/L	0.000245	0.00081	mg/L	0.000245 30.28%
K 766.490†	352.1	0.0249	mg/L	0.00501	0.0249	mg/L	0.00501 20.06%
Na 589.592†	30.0	-0.0140	mg/L	0.00231	-0.0140	mg/L	0.00231 16.52%
Sr 407.771†	40.5	0.00215	mg/L	0.000009	0.00215	mg/L	0.000009 0.42%
Li 670.784†	80.7	-0.00366	mg/L	0.000099	-0.00366	mg/L	0.000099 2.69%

Sequence No.: 38 **Autosampler Location: 32**
Sample ID: L1204081603 **Date Collected: 4/27/2012 1:04:04 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081603

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081603

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1926872.8						38944.78	2.02%
YRADIAL	215682.1						3756.28	1.74%
Ga 417.206	1102340.5						27440.90	2.49%
GaRADIAL	65043.0						1322.19	2.03%
Ag 328.068†	-71.4	-0.00105	mg/L	0.000655	-0.00105	mg/L	0.000655	62.14%
Al 396.153†	29.2	-0.0169	mg/L	0.00282	-0.0169	mg/L	0.00282	16.67%
As 188.979†	-3.4	-0.00156	mg/L	0.001074	-0.00156	mg/L	0.001074	69.05%
Ba 233.527†	28.9	-0.00176	mg/L	0.000104	-0.00176	mg/L	0.000104	5.90%
Be 234.861†	78.3	-0.00001	mg/L	0.000032	-0.00001	mg/L	0.000032	251.60%
B 249.677†	37.4	-0.00014	mg/L	0.000357	-0.00014	mg/L	0.000357	258.48%
Ca 227.546†	-4.9	0.0311	mg/L	0.03166	0.0311	mg/L	0.03166	101.96%
Cd 228.802†	-17.2	-0.00026	mg/L	0.000303	-0.00026	mg/L	0.000303	115.38%
Co 228.616†	5.6	-0.00011	mg/L	0.000246	-0.00011	mg/L	0.000246	232.31%
Cr 267.716†	17.3	-0.00091	mg/L	0.000122	-0.00091	mg/L	0.000122	13.41%
Cu 327.393†	78.5	-0.00052	mg/L	0.000331	-0.00052	mg/L	0.000331	63.69%
Fe 239.562†	94.0	0.00872	mg/L	0.000444	0.00872	mg/L	0.000444	5.09%
Mg 279.077†	18.4	0.0166	mg/L	0.00432	0.0166	mg/L	0.00432	26.05%
Mn 257.610†	138.9	-0.00191	mg/L	0.000013	-0.00191	mg/L	0.000013	0.68%
Mo 202.031†	8.9	-0.00098	mg/L	0.000157	-0.00098	mg/L	0.000157	16.02%
Ni 231.604†	39.3	-0.00114	mg/L	0.000498	-0.00114	mg/L	0.000498	43.90%
Pb 220.353†	-8.0	-0.00069	mg/L	0.000724	-0.00069	mg/L	0.000724	104.95%
Sb 206.836†	4.1	0.00081	mg/L	0.001351	0.00081	mg/L	0.001351	165.79%
Se 196.026†	-4.2	0.00450	mg/L	0.003813	0.00450	mg/L	0.003813	84.68%
Si 251.611†	120.8	-0.0180	mg/L	0.00075	-0.0180	mg/L	0.00075	4.18%
Sn 189.927†	-7.5	-0.00249	mg/L	0.000686	-0.00249	mg/L	0.000686	27.51%
Ti 334.940†	110.1	-0.00056	mg/L	0.000152	-0.00056	mg/L	0.000152	27.22%
Tl 190.801†	-1.2	-0.00198	mg/L	0.002040	-0.00198	mg/L	0.002040	103.25%
V 290.880†	-515.6	-0.00493	mg/L	0.003338	-0.00493	mg/L	0.003338	67.77%

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Zn 206.200†	235.4	0.00251	mg/L	0.000264	0.00251	mg/L	0.000264 10.51%
K 766.490†	107.4	-0.0866	mg/L	0.03408	-0.0866	mg/L	0.03408 39.33%
Na 589.592†	28.4	-0.0141	mg/L	0.00526	-0.0141	mg/L	0.00526 37.27%
Sr 407.771†	8.0	0.00213	mg/L	0.000004	0.00213	mg/L	0.000004 0.17%
Li 670.784†	4.0	-0.00443	mg/L	0.001038	-0.00443	mg/L	0.001038 23.44%

Sequence No.: 39 **Autosampler Location: 33**
Sample ID: L1204081604 **Date Collected: 4/27/2012 1:11:00 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081604

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081604

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1880859.0						19308.86	1.03%
YRADIAL	217262.3						4885.95	2.25%
Ga 417.206	1073552.2						23545.06	2.19%
GaRADIAL	65823.7						777.68	1.18%
Ag 328.068†	-56.0	-0.00099	mg/L	0.000515	-0.00099	mg/L	0.000515	51.88%
Al 396.153†	15.6	-0.0196	mg/L	0.00073	-0.0196	mg/L	0.00073	3.74%
As 188.979†	-1.8	-0.00088	mg/L	0.001944	-0.00088	mg/L	0.001944	222.02%
Ba 233.527†	26.0	-0.00178	mg/L	0.000123	-0.00178	mg/L	0.000123	6.93%
Be 234.861†	26.4	-0.00006	mg/L	0.000038	-0.00006	mg/L	0.000038	63.35%
B 249.677†	1.6	-0.00066	mg/L	0.000191	-0.00066	mg/L	0.000191	29.02%
Ca 227.546†	-2.7	0.0368	mg/L	0.04409	0.0368	mg/L	0.04409	119.75%
Cd 228.802†	-8.4	-0.00009	mg/L	0.000196	-0.00009	mg/L	0.000196	223.09%
Co 228.616†	7.6	-0.00004	mg/L	0.000224	-0.00004	mg/L	0.000224	520.76%
Cr 267.716†	-0.0	-0.00110	mg/L	0.000058	-0.00110	mg/L	0.000058	5.22%
Cu 327.393†	143.5	-0.00019	mg/L	0.000554	-0.00019	mg/L	0.000554	294.44%
Fe 239.562†	82.5	0.00784	mg/L	0.000947	0.00784	mg/L	0.000947	12.09%
Mg 279.077†	14.9	0.0154	mg/L	0.00134	0.0154	mg/L	0.00134	8.70%
Mn 257.610†	173.9	-0.00186	mg/L	0.000018	-0.00186	mg/L	0.000018	0.96%
Mo 202.031†	5.5	-0.00109	mg/L	0.000464	-0.00109	mg/L	0.000464	42.48%
Ni 231.604†	10.4	-0.00165	mg/L	0.000257	-0.00165	mg/L	0.000257	15.58%
Pb 220.353†	2.7	0.00043	mg/L	0.001740	0.00043	mg/L	0.001740	400.77%
Sb 206.836†	4.1	0.00080	mg/L	0.002648	0.00080	mg/L	0.002648	329.62%
Se 196.026†	-3.5	0.00497	mg/L	0.001990	0.00497	mg/L	0.001990	40.02%
Si 251.611†	93.0	-0.0188	mg/L	0.00063	-0.0188	mg/L	0.00063	3.33%
Sn 189.927†	-1.8	-0.00183	mg/L	0.000676	-0.00183	mg/L	0.000676	36.89%
Ti 334.940†	1.0	-0.00070	mg/L	0.000130	-0.00070	mg/L	0.000130	18.64%
Tl 190.801†	-1.1	-0.00195	mg/L	0.001543	-0.00195	mg/L	0.001543	79.12%
V 290.880†	-295.6	-0.00354	mg/L	0.002205	-0.00354	mg/L	0.002205	62.28%
Zn 206.200†	138.9	0.00006	mg/L	0.000057	0.00006	mg/L	0.000057	92.97%
K 766.490†	152.4	-0.0662	mg/L	0.02366	-0.0662	mg/L	0.02366	35.76%
Na 589.592†	271.2	0.00400	mg/L	0.002041	0.00400	mg/L	0.002041	51.04%
Sr 407.771†	-15.0	0.00212	mg/L	0.000044	0.00212	mg/L	0.000044	2.07%
Li 670.784†	-0.3	-0.00447	mg/L	0.000568	-0.00447	mg/L	0.000568	12.70%

Sequence No.: 40 **Autosampler Location: 34**
Sample ID: L1204081605 **Date Collected: 4/27/2012 1:17:57 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081605

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204081605

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: April 30, 2012

Y 371.029	1898320.6					41629.34	2.19%
YRADIAL	221515.5					4980.71	2.25%
Ga 417.206	1072411.2					41048.88	3.83%
GaRADIAL	66569.0					462.56	0.69%
Ag 328.068†	-41.9	-0.00094	mg/L	0.000516	-0.00094 mg/L	0.000516	55.06%
Al 396.153†	61.5	-0.0106	mg/L	0.00152	-0.0106 mg/L	0.00152	14.30%
As 188.979†	1.5	0.00053	mg/L	0.002811	0.00053 mg/L	0.002811	533.80%
Ba 233.527†	44.1	-0.00164	mg/L	0.000227	-0.00164 mg/L	0.000227	13.82%
Be 234.861†	36.1	-0.00005	mg/L	0.000048	-0.00005 mg/L	0.000048	89.23%
B 249.677†	10.9	-0.00053	mg/L	0.000197	-0.00053 mg/L	0.000197	37.38%
Ca 227.546†	89.2	0.297	mg/L	0.0135	0.297 mg/L	0.0135	4.55%
Cd 228.802†	-7.1	-0.00007	mg/L	0.000106	-0.00007 mg/L	0.000106	152.43%
Co 228.616†	-2.2	-0.00035	mg/L	0.000380	-0.00035 mg/L	0.000380	109.11%
Cr 267.716†	7.4	-0.00102	mg/L	0.000258	-0.00102 mg/L	0.000258	25.30%
Cu 327.393†	84.3	-0.00049	mg/L	0.000643	-0.00049 mg/L	0.000643	131.44%
Fe 239.562†	221.8	0.0185	mg/L	0.00013	0.0185 mg/L	0.00013	0.71%
Mg 279.077†	42.6	0.0252	mg/L	0.00174	0.0252 mg/L	0.00174	6.93%
Mn 257.610†	1055.0	-0.00056	mg/L	0.000049	-0.00056 mg/L	0.000049	8.72%
Mo 202.031†	7.3	-0.00103	mg/L	0.000363	-0.00103 mg/L	0.000363	35.12%
Ni 231.604†	27.2	-0.00135	mg/L	0.000168	-0.00135 mg/L	0.000168	12.45%
Pb 220.353†	-9.8	-0.00088	mg/L	0.001447	-0.00088 mg/L	0.001447	164.67%
Sb 206.836†	1.0	-0.00011	mg/L	0.001033	-0.00011 mg/L	0.001033	970.82%
Se 196.026†	0.2	0.00744	mg/L	0.002812	0.00744 mg/L	0.002812	37.81%
Si 251.611†	704.2	-0.00045	mg/L	0.001838	-0.00045 mg/L	0.001838	406.44%
Sn 189.927†	-8.2	-0.00257	mg/L	0.000600	-0.00257 mg/L	0.000600	23.33%
Ti 334.940†	96.4	-0.00054	mg/L	0.000179	-0.00054 mg/L	0.000179	33.50%
Tl 190.801†	-2.4	-0.00236	mg/L	0.000725	-0.00236 mg/L	0.000725	30.71%
V 290.880†	-562.7	-0.00522	mg/L	0.004181	-0.00522 mg/L	0.004181	80.04%
Zn 206.200†	221.1	0.00215	mg/L	0.000148	0.00215 mg/L	0.000148	6.90%
K 766.490†	98.0	-0.0910	mg/L	0.01006	-0.0910 mg/L	0.01006	11.06%
Na 589.592†	576.5	0.0268	mg/L	0.00250	0.0268 mg/L	0.00250	9.35%
Sr 407.771†	2245.0	0.00334	mg/L	0.000031	0.00334 mg/L	0.000031	0.93%
Li 670.784†	-23.6	-0.00471	mg/L	0.000207	-0.00471 mg/L	0.000207	4.40%

Sequence No.: 41 **Autosampler Location: 35**
Sample ID: L1204085702 **Date Collected: 4/27/2012 1:24:53 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085702

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204085702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1855580.4						16139.98	0.87%
YRADIAL	211627.2						3646.09	1.72%
Ga 417.206	1070358.5						29000.01	2.71%
GaRADIAL	63711.5						1773.83	2.78%
Ag 328.068†	331.2	0.00113	mg/L	0.000350	0.00113	mg/L	0.000350	31.10%
Al 396.153†	139.9	0.00473	mg/L	0.007724	0.00473	mg/L	0.007724	163.37%
As 188.979†	-8.8	-0.00375	mg/L	0.001799	-0.00375	mg/L	0.001799	47.91%
Ba 233.527†	6222.7	0.0449	mg/L	0.00062	0.0449	mg/L	0.00062	1.37%
Be 234.861†	694.2	0.00025	mg/L	0.000145	0.00025	mg/L	0.000145	58.93%
B 249.677†	6019.6	0.0854	mg/L	0.00184	0.0854	mg/L	0.00184	2.15%
Ca 227.546†	28173.5	79.6	mg/L	1.86	79.6	mg/L	1.86	2.34%
Cd 228.802†	14.1	0.00038	mg/L	0.000255	0.00038	mg/L	0.000255	66.82%
Co 228.616†	19.3	0.00029	mg/L	0.000064	0.00029	mg/L	0.000064	21.74%
Cr 267.716†	140.7	0.00052	mg/L	0.000121	0.00052	mg/L	0.000121	23.30%
Cu 327.393†	115.0	-0.00024	mg/L	0.000338	-0.00024	mg/L	0.000338	141.80%
Fe 239.562†	18557.8	1.42	mg/L	0.036	1.42	mg/L	0.036	2.53%
Mg 279.077†	75395.0	26.8	mg/L	0.66	26.8	mg/L	0.66	2.47%
Mn 257.610†	31853.8	0.0448	mg/L	0.00035	0.0448	mg/L	0.00035	0.79%
Mo 202.031†	43.3	0.00023	mg/L	0.000326	0.00023	mg/L	0.000326	142.50%
Ni 231.604†	129.2	0.00046	mg/L	0.000700	0.00046	mg/L	0.000700	152.59%
Pb 220.353†	16.8	0.00241	mg/L	0.001745	0.00241	mg/L	0.001745	72.51%
Sb 206.836†	-6.1	-0.00212	mg/L	0.002032	-0.00212	mg/L	0.002032	96.04%

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Se 196.026†	-0.3	0.00751	mg/L	0.002747	0.00751	mg/L	0.002747 36.58%
Si 251.611†	256976.3	7.69	mg/L	0.138	7.69	mg/L	0.138 1.80%
Sn 189.927†	-261.3	-0.0318	mg/L	0.00020	-0.0318	mg/L	0.00020 0.63%
Ti 334.940†	-8806.1	-0.00009	mg/L	0.000807	-0.00009	mg/L	0.000807 907.38%
Tl 190.801†	-30.0	-0.0111	mg/L	0.00082	-0.0111	mg/L	0.00082 7.36%
V 290.880†	284.2	-0.00071	mg/L	0.001405	-0.00071	mg/L	0.001405 199.15%
Zn 206.200†	270.8	0.00340	mg/L	0.000350	0.00340	mg/L	0.000350 10.29%
K 766.490†	1479.6	0.471	mg/L	0.0559	0.471	mg/L	0.0559 11.89%
Na 589.592†	934536.0	68.5	mg/L	2.49	68.5	mg/L	2.49 3.64%
Sr 407.771†	Saturated2						
Li 670.784†	8552.7	0.0812	mg/L	0.00158	0.0812	mg/L	0.00158 1.94%

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Sequence No.: 42 **Autosampler Location: 36**
Sample ID: L1204086301 **Date Collected: 4/27/2012 1:30:49 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204086301

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204086301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1873285.9						21080.37	1.13%
YRADIAL	213246.3						5322.32	2.50%
Ga 417.206	1072019.8						40549.70	3.78%
GaRADIAL	63697.9						1120.42	1.76%
Ag 328.068†	51.7	-0.00017	mg/L	0.000304	-0.00017	mg/L	0.000304	183.97%
Al 396.153†	2336.7	0.422	mg/L	0.0018	0.422	mg/L	0.0018	0.43%
As 188.979†	4.1	0.00087	mg/L	0.002122	0.00087	mg/L	0.002122	244.80%
Ba 233.527†	4988.8	0.0357	mg/L	0.00046	0.0357	mg/L	0.00046	1.30%
Be 234.861†	518.8	0.00023	mg/L	0.000080	0.00023	mg/L	0.000080	34.43%
B 249.677†	5866.4	0.0835	mg/L	0.00338	0.0835	mg/L	0.00338	4.05%
Ca 227.546†	12572.6	35.5	mg/L	1.45	35.5	mg/L	1.45	4.07%
Cd 228.802†	19.1	0.00045	mg/L	0.000382	0.00045	mg/L	0.000382	85.53%
Co 228.616†	13.6	0.00041	mg/L	0.000217	0.00041	mg/L	0.000217	52.86%
Cr 267.716†	190.4	0.00103	mg/L	0.000189	0.00103	mg/L	0.000189	18.40%
Cu 327.393†	368.8	0.00106	mg/L	0.000230	0.00106	mg/L	0.000230	21.72%
Fe 239.562†	13364.2	1.02	mg/L	0.038	1.02	mg/L	0.038	3.71%
Mg 279.077†	33807.6	12.0	mg/L	0.54	12.0	mg/L	0.54	4.49%
Mn 257.610†	26398.2	0.0368	mg/L	0.00060	0.0368	mg/L	0.00060	1.62%
Mo 202.031†	5015.2	0.163	mg/L	0.0020	0.163	mg/L	0.0020	1.23%
Ni 231.604†	267.7	0.00291	mg/L	0.000642	0.00291	mg/L	0.000642	22.07%
Pb 220.353†	-15.7	-0.00116	mg/L	0.002325	-0.00116	mg/L	0.002325	199.72%
Sb 206.836†	-7.6	-0.00233	mg/L	0.000349	-0.00233	mg/L	0.000349	14.95%
Se 196.026†	-0.2	0.00749	mg/L	0.000501	0.00749	mg/L	0.000501	6.68%
Si 251.611†	42748.0	1.26	mg/L	0.036	1.26	mg/L	0.036	2.89%
Sn 189.927†	-175.4	-0.0219	mg/L	0.00079	-0.0219	mg/L	0.00079	3.61%
Ti 334.940†	-3295.1	0.00039	mg/L	0.000593	0.00039	mg/L	0.000593	152.39%
Tl 190.801†	-12.1	-0.00541	mg/L	0.001880	-0.00541	mg/L	0.001880	34.76%
V 290.880†	268.3	-0.00042	mg/L	0.001139	-0.00042	mg/L	0.001139	272.02%
Zn 206.200†	4601.9	0.113	mg/L	0.0014	0.113	mg/L	0.0014	1.27%
K 766.490†	4542.1	1.90	mg/L	0.008	1.90	mg/L	0.008	0.44%
Na 589.592†	427332.8	31.6	mg/L	1.08	31.6	mg/L	1.08	3.41%
Sr 407.771†	364708.7	0.200	mg/L	0.0019	0.200	mg/L	0.0019	0.93%
Li 670.784†	711.0	0.00265	mg/L	0.000898	0.00265	mg/L	0.000898	33.86%

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Sequence No.: 43 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 1:36:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow

Approved: April 30, 2012

All 147.0 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	1862818.6						5883.77	0.32%
YRADIAL	208758.6						1858.61	0.89%
Ga 417.206	1018597.8						34869.49	3.42%
GaRADIAL	62628.5						914.79	1.46%
Ag 328.068†	107330.4	0.416	mg/L	0.0214	0.416	mg/L	0.0214	5.15%
QC value within limits for Ag 328.068 Recovery = 104.00%								
Al 396.153†	53112.4	10.3	mg/L	0.04	10.3	mg/L	0.04	0.40%
QC value within limits for Al 396.153 Recovery = 102.59%								
As 188.979†	949.5	0.403	mg/L	0.0092	0.403	mg/L	0.0092	2.27%
QC value within limits for As 188.979 Recovery = 100.86%								
Ba 233.527†	139122.0	1.05	mg/L	0.020	1.05	mg/L	0.020	1.88%
QC value within limits for Ba 233.527 Recovery = 104.72%								
Be 234.861†	56272.4	0.0513	mg/L	0.00257	0.0513	mg/L	0.00257	5.01%
QC value within limits for Be 234.861 Recovery = 102.60%								
B 249.677†	34652.6	0.494	mg/L	0.0256	0.494	mg/L	0.0256	5.17%
QC value within limits for B 249.677 Recovery = 98.85%								
Ca 227.546†	3476.8	10.3	mg/L	0.38	10.3	mg/L	0.38	3.71%
QC value within limits for Ca 227.546 Recovery = 103.31%								
Cd 228.802†	2584.6	0.0510	mg/L	0.00236	0.0510	mg/L	0.00236	4.63%
QC value within limits for Cd 228.802 Recovery = 101.99%								
Co 228.616†	6706.3	0.208	mg/L	0.0014	0.208	mg/L	0.0014	0.66%
QC value within limits for Co 228.616 Recovery = 103.76%								
Cr 267.716†	46480.4	0.519	mg/L	0.0106	0.519	mg/L	0.0106	2.05%
QC value within limits for Cr 267.716 Recovery = 103.73%								
Cu 327.393†	99887.2	0.510	mg/L	0.0273	0.510	mg/L	0.0273	5.36%
QC value within limits for Cu 327.393 Recovery = 101.94%								
Fe 239.562†	55358.8	4.23	mg/L	0.035	4.23	mg/L	0.035	0.83%
QC value within limits for Fe 239.562 Recovery = 105.82%								
Mg 279.077†	29944.1	10.7	mg/L	0.08	10.7	mg/L	0.08	0.71%
QC value within limits for Mg 279.077 Recovery = 106.53%								
Mn 257.610†	356833.1	0.524	mg/L	0.0088	0.524	mg/L	0.0088	1.68%
QC value within limits for Mn 257.610 Recovery = 104.80%								
Mo 202.031†	31362.6	1.03	mg/L	0.017	1.03	mg/L	0.017	1.63%
QC value within limits for Mo 202.031 Recovery = 102.88%								
Ni 231.604†	29349.0	0.517	mg/L	0.0063	0.517	mg/L	0.0063	1.23%
QC value within limits for Ni 231.604 Recovery = 103.41%								
Pb 220.353†	4881.5	0.515	mg/L	0.0038	0.515	mg/L	0.0038	0.74%
QC value within limits for Pb 220.353 Recovery = 102.98%								
Sb 206.836†	4190.8	1.22	mg/L	0.042	1.22	mg/L	0.042	3.44%
QC value within limits for Sb 206.836 Recovery = 101.35%								
Se 196.026†	603.5	0.415	mg/L	0.0156	0.415	mg/L	0.0156	3.75%
QC value within limits for Se 196.026 Recovery = 103.73%								
Si 251.611†	173864.0	5.18	mg/L	0.247	5.18	mg/L	0.247	4.77%
QC value within limits for Si 251.611 Recovery = 103.63%								
Sn 189.927†	9003.6	1.04	mg/L	0.008	1.04	mg/L	0.008	0.77%
QC value within limits for Sn 189.927 Recovery = 103.76%								
Ti 334.940†	803606.1	1.03	mg/L	0.004	1.03	mg/L	0.004	0.34%
QC value within limits for Ti 334.940 Recovery = 103.30%								
Tl 190.801†	1650.7	0.526	mg/L	0.0058	0.526	mg/L	0.0058	1.10%
QC value within limits for Tl 190.801 Recovery = 105.27%								
V 290.880†	163976.3	1.03	mg/L	0.025	1.03	mg/L	0.025	2.47%
QC value within limits for V 290.880 Recovery = 102.95%								
Zn 206.200†	42238.1	1.07	mg/L	0.013	1.07	mg/L	0.013	1.25%
QC value within limits for Zn 206.200 Recovery = 107.46%								
K 766.490†	116059.0	53.1	mg/L	0.12	53.1	mg/L	0.12	0.22%
QC value within limits for K 766.490 Recovery = 106.17%								
Na 589.592†	700101.4	51.5	mg/L	1.42	51.5	mg/L	1.42	2.75%
QC value within limits for Na 589.592 Recovery = 103.04%								
Sr 407.771†	1846920.3	1.01	mg/L	0.024	1.01	mg/L	0.024	2.36%
QC value within limits for Sr 407.771 Recovery = 100.87%								
Li 670.784†	101237.4	1.01	mg/L	0.005	1.01	mg/L	0.005	0.48%
QC value within limits for Li 670.784 Recovery = 100.95%								

All analyte(s) passed QC.

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Sequence No.: 44 **Autosampler Location: 1**

Approved: April 30, 2012

Sample ID: CCB **Date Collected:** 4/27/2012 1:42:47 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	146.0 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	1829486.1						47360.29	2.59%
YRADIAL	209150.5						4428.05	2.12%
Ga 417.206	994474.3						27831.07	2.80%
GaRADIAL	62580.3						1077.08	1.72%
Ag 328.068†	-68.3	-0.00104	mg/L	0.000211	-0.00104	mg/L	0.000211	20.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-0.3	-0.0227	mg/L	0.00063	-0.0227	mg/L	0.00063	2.80%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-6.4	-0.00287	mg/L	0.000919	-0.00287	mg/L	0.000919	32.00%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-19.7	-0.00212	mg/L	0.000104	-0.00212	mg/L	0.000104	4.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-17.7	-0.00010	mg/L	0.000061	-0.00010	mg/L	0.000061	60.53%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	111.2	0.00092	mg/L	0.000194	0.00092	mg/L	0.000194	21.16%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-7.8	0.0225	mg/L	0.04241	0.0225	mg/L	0.04241	188.74%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.7	0.00008	mg/L	0.000292	0.00008	mg/L	0.000292	373.55%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.8	-0.00016	mg/L	0.000162	-0.00016	mg/L	0.000162	101.59%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.3	-0.00110	mg/L	0.000076	-0.00110	mg/L	0.000076	6.92%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	11.3	-0.00086	mg/L	0.000737	-0.00086	mg/L	0.000737	85.49%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	27.3	0.00361	mg/L	0.000385	0.00361	mg/L	0.000385	10.66%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	12.1	0.0143	mg/L	0.00336	0.0143	mg/L	0.00336	23.45%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	9.2	-0.00210	mg/L	0.000021	-0.00210	mg/L	0.000021	0.98%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.7	-0.00125	mg/L	0.000457	-0.00125	mg/L	0.000457	36.58%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	6.2	-0.00172	mg/L	0.000219	-0.00172	mg/L	0.000219	12.71%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-7.7	-0.00066	mg/L	0.001037	-0.00066	mg/L	0.001037	157.98%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.1	-0.00007	mg/L	0.001719	-0.00007	mg/L	0.001719	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.2	0.00653	mg/L	0.001569	0.00653	mg/L	0.001569	24.02%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	44.6	-0.0202	mg/L	0.00126	-0.0202	mg/L	0.00126	6.21%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	1.9	-0.00141	mg/L	0.000327	-0.00141	mg/L	0.000327	23.22%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	76.1	-0.00060	mg/L	0.000030	-0.00060	mg/L	0.000030	5.04%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.8	-0.00074	mg/L	0.001326	-0.00074	mg/L	0.001326	180.06%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-364.7	-0.00397	mg/L	0.001702	-0.00397	mg/L	0.001702	42.81%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-2.4	-0.00353	mg/L	0.000139	-0.00353	mg/L	0.000139	3.93%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	180.5	-0.0533	mg/L	0.00675	-0.0533	mg/L	0.00675	12.67%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	47.1	-0.0127	mg/L	0.00460	-0.0127	mg/L	0.00460	36.18%
QC value within limits for Na 589.592 Recovery = Not calculated								

Approved: April 30, 2012

```
Sr 407.771†              -60.4     0.00209 mg/L      0.000026     0.00209 mg/L      0.000026   1.23%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†               70.5    -0.00376 mg/L      0.000558    -0.00376 mg/L      0.000558  14.83%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
```

Approved: April 30, 2012

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Analysis Begun

Start Time: 4/27/2012 1:49:02 PM **Plasma On Time: 4/27/2012 6:06:24 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: 042712H3
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 37**
Sample ID: PBW 74 WG396402-02 **Date Collected: 4/27/2012 1:49:04 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 74 WG396402-02

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: PBW 74 WG396402-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1935614.4						23250.51	1.20%
YRADIAL	213148.9						4530.15	2.13%
Ga 417.206	1027745.9						20979.60	2.04%
GaRADIAL	65247.6						936.74	1.44%
Ag 328.068†	-202.9	-0.00157	mg/L	0.000257	-0.00157	mg/L	0.000257	16.43%
Al 396.153†	-3.4	-0.0233	mg/L	0.00157	-0.0233	mg/L	0.00157	6.76%
As 188.979†	-14.6	-0.00639	mg/L	0.001030	-0.00639	mg/L	0.001030	16.13%
Ba 233.527†	-56.7	-0.00240	mg/L	0.000096	-0.00240	mg/L	0.000096	3.98%
Be 234.861†	-440.8	-0.00049	mg/L	0.000018	-0.00049	mg/L	0.000018	3.61%
B 249.677†	-5.8	-0.00078	mg/L	0.000326	-0.00078	mg/L	0.000326	41.97%
Ca 227.546†	-8.4	0.0201	mg/L	0.01705	0.0201	mg/L	0.01705	84.88%
Cd 228.802†	20.8	0.00053	mg/L	0.000305	0.00053	mg/L	0.000305	57.68%
Co 228.616†	1.9	-0.00022	mg/L	0.000337	-0.00022	mg/L	0.000337	153.05%
Cr 267.716†	17.2	-0.00091	mg/L	0.000127	-0.00091	mg/L	0.000127	13.87%
Cu 327.393†	-29.2	-0.00107	mg/L	0.000309	-0.00107	mg/L	0.000309	28.92%
Fe 239.562†	44.7	0.00494	mg/L	0.000202	0.00494	mg/L	0.000202	4.09%
Mg 279.077†	160.9	0.0672	mg/L	0.00504	0.0672	mg/L	0.00504	7.51%
Mn 257.610†	194.8	-0.00183	mg/L	0.000022	-0.00183	mg/L	0.000022	1.21%
Mo 202.031†	15.8	-0.00076	mg/L	0.000530	-0.00076	mg/L	0.000530	70.08%
Ni 231.604†	-45.0	-0.00262	mg/L	0.000222	-0.00262	mg/L	0.000222	8.48%
Pb 220.353†	-16.7	-0.00160	mg/L	0.001023	-0.00160	mg/L	0.001023	63.97%
Sb 206.836†	4.0	0.00077	mg/L	0.000998	0.00077	mg/L	0.000998	129.85%
Se 196.026†	2.4	0.00895	mg/L	0.007070	0.00895	mg/L	0.007070	79.02%
Si 251.611†	-61.4	-0.0234	mg/L	0.00054	-0.0234	mg/L	0.00054	2.32%
Sn 189.927†	1.3	-0.00147	mg/L	0.000374	-0.00147	mg/L	0.000374	25.36%
Ti 334.940†	211.1	-0.00043	mg/L	0.000177	-0.00043	mg/L	0.000177	41.35%
Tl 190.801†	-13.0	-0.00567	mg/L	0.003307	-0.00567	mg/L	0.003307	58.30%
V 290.880†	-940.3	-0.00760	mg/L	0.001998	-0.00760	mg/L	0.001998	26.30%
Zn 206.200†	65.0	-0.00182	mg/L	0.000080	-0.00182	mg/L	0.000080	4.39%
K 766.490†	98.0	-0.0910	mg/L	0.03041	-0.0910	mg/L	0.03041	33.43%
Na 589.592†	522.8	0.0228	mg/L	0.00678	0.0228	mg/L	0.00678	29.77%
Sr 407.771†	670.7	0.00249	mg/L	0.000047	0.00249	mg/L	0.000047	1.88%
Li 670.784†	-53.9	-0.00501	mg/L	0.000735	-0.00501	mg/L	0.000735	14.67%

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Sequence No.: 2 **Autosampler Location: 38**
Sample ID: LCSW 74 WG396402-03 **Date Collected: 4/27/2012 1:55:57 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 74 WG396402-03

Approved: April 30, 2012

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: LCSW 74 WG396402-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1899324.6						26014.90	1.37%
YRADIAL	215144.9						4475.94	2.08%
Ga 417.206	1001126.5						10973.43	1.10%
GaRADIAL	64805.5						964.03	1.49%
Ag 328.068†	50367.4	0.195	mg/L	0.0043	0.195	mg/L	0.0043	2.22%
Al 396.153†	24935.7	4.80	mg/L	0.017	4.80	mg/L	0.017	0.36%
As 188.979†	425.4	0.181	mg/L	0.0030	0.181	mg/L	0.0030	1.68%
Ba 233.527†	65264.5	0.490	mg/L	0.0058	0.490	mg/L	0.0058	1.18%
Be 234.861†	25279.4	0.0230	mg/L	0.00059	0.0230	mg/L	0.00059	2.56%
B 249.677†	64672.9	0.929	mg/L	0.0204	0.929	mg/L	0.0204	2.20%
Ca 227.546†	1602.3	4.80	mg/L	0.055	4.80	mg/L	0.055	1.15%
Cd 228.802†	1225.6	0.0243	mg/L	0.00091	0.0243	mg/L	0.00091	3.73%
Co 228.616†	3124.1	0.0966	mg/L	0.00201	0.0966	mg/L	0.00201	2.09%
Cr 267.716†	22102.1	0.246	mg/L	0.0009	0.246	mg/L	0.0009	0.35%
Cu 327.393†	48614.4	0.248	mg/L	0.0056	0.248	mg/L	0.0056	2.25%
Fe 239.562†	25820.0	1.98	mg/L	0.048	1.98	mg/L	0.048	2.42%
Mg 279.077†	14502.7	5.16	mg/L	0.096	5.16	mg/L	0.096	1.86%
Mn 257.610†	165960.3	0.243	mg/L	0.0032	0.243	mg/L	0.0032	1.32%
Mo 202.031†	15138.4	0.496	mg/L	0.0072	0.496	mg/L	0.0072	1.45%
Ni 231.604†	14281.9	0.251	mg/L	0.0041	0.251	mg/L	0.0041	1.65%
Pb 220.353†	2217.9	0.234	mg/L	0.0060	0.234	mg/L	0.0060	2.58%
Sb 206.836†	1966.4	0.570	mg/L	0.0069	0.570	mg/L	0.0069	1.21%
Se 196.026†	262.3	0.185	mg/L	0.0004	0.185	mg/L	0.0004	0.20%
Si 251.611†	83105.0	2.47	mg/L	0.032	2.47	mg/L	0.032	1.30%
Sn 189.927†	-37.0	-0.00590	mg/L	0.000387	-0.00590	mg/L	0.000387	6.56%
Ti 334.940†	370871.9	0.476	mg/L	0.0014	0.476	mg/L	0.0014	0.29%
Tl 190.801†	762.4	0.242	mg/L	0.0007	0.242	mg/L	0.0007	0.28%
V 290.880†	76563.9	0.480	mg/L	0.0026	0.480	mg/L	0.0026	0.54%
Zn 206.200†	19024.2	0.482	mg/L	0.0058	0.482	mg/L	0.0058	1.20%
K 766.490†	54147.5	24.6	mg/L	0.05	24.6	mg/L	0.05	0.21%
Na 589.592†	336196.4	24.9	mg/L	0.50	24.9	mg/L	0.50	2.02%
Sr 407.771†	882612.9	0.483	mg/L	0.0014	0.483	mg/L	0.0014	0.30%
Li 670.784†	48553.5	0.482	mg/L	0.0048	0.482	mg/L	0.0048	0.99%

Sequence No.: 3 **Autosampler Location: 39**
Sample ID: FBLK WG396357-01 **Date Collected: 4/27/2012 2:02:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG396357-01

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: FBLK WG396357-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1873261.1						10940.11	0.58%
YRADIAL	211656.8						5576.79	2.63%
Ga 417.206	1041677.7						21374.97	2.05%
GaRADIAL	64566.3						2666.27	4.13%
Ag 328.068†	-155.1	-0.00137	mg/L	0.000541	-0.00137	mg/L	0.000541	39.35%
Al 396.153†	139.6	0.00453	mg/L	0.002321	0.00453	mg/L	0.002321	51.20%
As 188.979†	-10.3	-0.00454	mg/L	0.000802	-0.00454	mg/L	0.000802	17.68%
Ba 233.527†	-12.6	-0.00207	mg/L	0.000158	-0.00207	mg/L	0.000158	7.63%
Be 234.861†	-402.3	-0.00046	mg/L	0.000030	-0.00046	mg/L	0.000030	6.67%
B 249.677†	214.6	0.00239	mg/L	0.000523	0.00239	mg/L	0.000523	21.85%
Ca 227.546†	20.9	0.103	mg/L	0.0224	0.103	mg/L	0.0224	21.78%
Cd 228.802†	20.6	0.00052	mg/L	0.000181	0.00052	mg/L	0.000181	34.99%
Co 228.616†	0.5	-0.00026	mg/L	0.000172	-0.00026	mg/L	0.000172	65.16%
Cr 267.716†	40.3	-0.00065	mg/L	0.000114	-0.00065	mg/L	0.000114	17.41%
Cu 327.393†	37.8	-0.00073	mg/L	0.001299	-0.00073	mg/L	0.001299	179.17%

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Fe 239.562†	174.5	0.0149	mg/L	0.00086	0.0149	mg/L	0.00086 5.76%
Mg 279.077†	284.1	0.111	mg/L	0.0029	0.111	mg/L	0.0029 2.66%
Mn 257.610†	333.1	-0.00162	mg/L	0.000007	-0.00162	mg/L	0.000007 0.46%
Mo 202.031†	32.5	-0.00021	mg/L	0.000276	-0.00021	mg/L	0.000276 134.30%
Ni 231.604†	-47.5	-0.00267	mg/L	0.000224	-0.00267	mg/L	0.000224 8.38%
Pb 220.353†	-8.3	-0.00072	mg/L	0.001531	-0.00072	mg/L	0.001531 213.63%
Sb 206.836†	10.5	0.00266	mg/L	0.000830	0.00266	mg/L	0.000830 31.21%
Se 196.026†	5.5	0.0110	mg/L	0.00176	0.0110	mg/L	0.00176 15.98%
Si 251.611†	2988.7	0.0681	mg/L	0.00237	0.0681	mg/L	0.00237 3.49%
Sn 189.927†	-3.0	-0.00198	mg/L	0.000850	-0.00198	mg/L	0.000850 42.99%
Ti 334.940†	1133.7	0.00077	mg/L	0.000095	0.00077	mg/L	0.000095 12.33%
Tl 190.801†	-23.1	-0.00878	mg/L	0.001789	-0.00878	mg/L	0.001789 20.39%
V 290.880†	-577.6	-0.00532	mg/L	0.001930	-0.00532	mg/L	0.001930 36.28%
Zn 206.200†	243.1	0.00271	mg/L	0.000123	0.00271	mg/L	0.000123 4.54%
K 766.490†	279.2	-0.151	mg/L	0.0247	-0.151	mg/L	0.0247 16.39%
Na 589.592†	1977999.9	142	mg/L	2.4	142	mg/L	2.4 1.68%
Sr 407.771†	1383.9	0.00288	mg/L	0.000036	0.00288	mg/L	0.000036 1.26%
Li 670.784†	-40.6	-0.00488	mg/L	0.000406	-0.00488	mg/L	0.000406 8.33%

User canceled analysis.

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Analysis Begun

Start Time: 4/27/2012 2:06:37 PM **Plasma On Time: 4/27/2012 6:06:24 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: 042712H3
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 4 **Autosampler Location: 40**
Sample ID: L1204082301 **Date Collected: 4/27/2012 2:06:39 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204082301

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204082301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1852473.1						9755.48	0.53%
YRADIAL	217251.0						2735.54	1.26%
Ga 417.206	1093942.1						20228.53	1.85%
GaRADIAL	66991.1						1356.65	2.03%
Ag 328.068†	180.8	-0.00012	mg/L	0.000212	-0.00012	mg/L	0.000212	174.66%
Al 396.153†	76.8	-0.00787	mg/L	0.000972	-0.00787	mg/L	0.000972	12.35%
As 188.979†	-8.5	-0.00380	mg/L	0.001926	-0.00380	mg/L	0.001926	50.74%
Ba 233.527†	7870.3	0.0574	mg/L	0.00182	0.0574	mg/L	0.00182	3.17%
Be 234.861†	-285.3	-0.00034	mg/L	0.000007	-0.00034	mg/L	0.000007	2.11%
B 249.677†	3454.9	0.0490	mg/L	0.00279	0.0490	mg/L	0.00279	5.68%
Ca 227.546†	23125.2	65.3	mg/L	3.31	65.3	mg/L	3.31	5.06%
Cd 228.802†	51.1	0.00113	mg/L	0.000271	0.00113	mg/L	0.000271	23.98%
Co 228.616†	7.2	-0.00005	mg/L	0.000275	-0.00005	mg/L	0.000275	589.53%
Cr 267.716†	250.9	0.00170	mg/L	0.000056	0.00170	mg/L	0.000056	3.27%
Cu 327.393†	15672.9	0.0789	mg/L	0.00438	0.0789	mg/L	0.00438	5.55%
Fe 239.562†	151.9	0.0131	mg/L	0.00045	0.0131	mg/L	0.00045	3.42%
Mg 279.077†	4371.6	1.56	mg/L	0.023	1.56	mg/L	0.023	1.47%
Mn 257.610†	39485.9	0.0560	mg/L	0.00179	0.0560	mg/L	0.00179	3.20%
Mo 202.031†	99.0	0.00199	mg/L	0.000076	0.00199	mg/L	0.000076	3.83%
Ni 231.604†	-22.6	-0.00222	mg/L	0.000347	-0.00222	mg/L	0.000347	15.58%
Pb 220.353†	29.8	0.00370	mg/L	0.002445	0.00370	mg/L	0.002445	66.14%
Sb 206.836†	5.9	0.00131	mg/L	0.000308	0.00131	mg/L	0.000308	23.55%
Se 196.026†	13.7	0.0165	mg/L	0.00504	0.0165	mg/L	0.00504	30.50%
Si 251.611†	15984.2	0.458	mg/L	0.0196	0.458	mg/L	0.0196	4.28%

Approved: April 30, 2012

Sn 189.927†	-247.2	-0.0302	mg/L	0.00079	-0.0302	mg/L	0.00079 2.60%
Ti 334.940†	-7894.0	-0.00105	mg/L	0.000561	-0.00105	mg/L	0.000561 53.25%
Tl 190.801†	-51.9	-0.0179	mg/L	0.00155	-0.0179	mg/L	0.00155 8.63%
V 290.880†	-289.4	-0.00354	mg/L	0.002883	-0.00354	mg/L	0.002883 81.33%
Zn 206.200†	708.0	0.0146	mg/L	0.00021	0.0146	mg/L	0.00021 1.41%
K 766.490†	1419.8	0.375	mg/L	0.0316	0.375	mg/L	0.0316 8.42%
Na 589.592†	1907382.0	137	mg/L	3.3	137	mg/L	3.3 2.42%
Sr 407.771†	273841.1	0.150	mg/L	0.0026	0.150	mg/L	0.0026 1.71%
Li 670.784†	86.9	-0.00360	mg/L	0.000134	-0.00360	mg/L	0.000134 3.73%

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Sequence No.: 5 **Autosampler Location: 41**
Sample ID: L1204085201 **Date Collected: 4/27/2012 2:13:40 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085201

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1851525.9						27126.81	1.47%
YRADIAL	216576.3						7769.75	3.59%
Ga 417.206	1006198.5						29435.87	2.93%
GaRADIAL	64220.3						2004.55	3.12%
Ag 328.068†	304.3	0.00054	mg/L	0.000261	0.00054	mg/L	0.000261	47.90%
Al 396.153†	992.9	0.171	mg/L	0.0055	0.171	mg/L	0.0055	3.22%
As 188.979†	-17.0	-0.00741	mg/L	0.002325	-0.00741	mg/L	0.002325	31.39%
Ba 233.527†	2908.7	0.0199	mg/L	0.00021	0.0199	mg/L	0.00021	1.06%
Be 234.861†	-104.2	-0.00025	mg/L	0.000219	-0.00025	mg/L	0.000219	86.50%
B 249.677†	659.2	0.00861	mg/L	0.000614	0.00861	mg/L	0.000614	7.14%
Ca 227.546†	19151.7	54.1	mg/L	2.75	54.1	mg/L	2.75	5.08%
Cd 228.802†	58.3	0.00130	mg/L	0.000408	0.00130	mg/L	0.000408	31.47%
Co 228.616†	38.1	0.00090	mg/L	0.000126	0.00090	mg/L	0.000126	14.05%
Cr 267.716†	169.2	0.00080	mg/L	0.000094	0.00080	mg/L	0.000094	11.80%
Cu 327.393†	141.5	-0.00017	mg/L	0.000800	-0.00017	mg/L	0.000800	481.26%
Fe 239.562†	5084.7	0.390	mg/L	0.0074	0.390	mg/L	0.0074	1.90%
Mg 279.077†	3834.1	1.37	mg/L	0.043	1.37	mg/L	0.043	3.14%
Mn 257.610†	76676.9	0.111	mg/L	0.0040	0.111	mg/L	0.0040	3.65%
Mo 202.031†	83.8	0.00152	mg/L	0.000190	0.00152	mg/L	0.000190	12.53%
Ni 231.604†	42.0	-0.00109	mg/L	0.000806	-0.00109	mg/L	0.000806	74.21%
Pb 220.353†	1050.0	0.111	mg/L	0.0037	0.111	mg/L	0.0037	3.33%
Sb 206.836†	-0.2	-0.00046	mg/L	0.000592	-0.00046	mg/L	0.000592	129.17%
Se 196.026†	11.1	0.0149	mg/L	0.00408	0.0149	mg/L	0.00408	27.43%
Si 251.611†	9580.0	0.266	mg/L	0.0165	0.266	mg/L	0.0165	6.23%
Sn 189.927†	-223.1	-0.0274	mg/L	0.00040	-0.0274	mg/L	0.00040	1.46%
Ti 334.940†	-826.7	0.00634	mg/L	0.000630	0.00634	mg/L	0.000630	9.92%
Tl 190.801†	-24.6	-0.00937	mg/L	0.004241	-0.00937	mg/L	0.004241	45.27%
V 290.880†	26.1	-0.00158	mg/L	0.002361	-0.00158	mg/L	0.002361	149.15%
Zn 206.200†	753.5	0.0157	mg/L	0.00014	0.0157	mg/L	0.00014	0.87%
K 766.490†	876.8	0.123	mg/L	0.0063	0.123	mg/L	0.0063	5.10%
Na 589.592†	1969224.8	142	mg/L	0.8	142	mg/L	0.8	0.55%
Sr 407.771†	88598.5	0.0492	mg/L	0.00040	0.0492	mg/L	0.00040	0.82%
Li 670.784†	-15.0	-0.00462	mg/L	0.000669	-0.00462	mg/L	0.000669	14.48%

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Sequence No.: 6 **Autosampler Location: 42**
Sample ID: L1204085301 **Date Collected: 4/27/2012 2:19:38 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085301

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Approved: April 30, 2012

Mean Data: L1204085301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1847882.6						7582.98	0.41%
YRADIAL	213079.2						2339.53	1.10%
Ga 417.206	1035914.8						19607.12	1.89%
GaRADIAL	65144.4						2090.01	3.21%
Ag 328.068†	-38.6	-0.00092	mg/L	0.000525	-0.00092	mg/L	0.000525	57.02%
Al 396.153†	305.3	0.0368	mg/L	0.00176	0.0368	mg/L	0.00176	4.79%
As 188.979†	-22.2	-0.00965	mg/L	0.000279	-0.00965	mg/L	0.000279	2.89%
Ba 233.527†	2965.9	0.0204	mg/L	0.00024	0.0204	mg/L	0.00024	1.17%
Be 234.861†	-398.3	-0.00046	mg/L	0.000015	-0.00046	mg/L	0.000015	3.32%
B 249.677†	916.0	0.0125	mg/L	0.00082	0.0125	mg/L	0.00082	6.59%
Ca 227.546†	6543.2	18.5	mg/L	0.36	18.5	mg/L	0.36	1.94%
Cd 228.802†	30.9	0.00075	mg/L	0.000213	0.00075	mg/L	0.000213	28.38%
Co 228.616†	5.3	-0.00012	mg/L	0.000199	-0.00012	mg/L	0.000199	165.46%
Cr 267.716†	104.2	0.00006	mg/L	0.000101	0.00006	mg/L	0.000101	169.71%
Cu 327.393†	45.2	-0.00069	mg/L	0.000626	-0.00069	mg/L	0.000626	91.12%
Fe 239.562†	529.9	0.0420	mg/L	0.00151	0.0420	mg/L	0.00151	3.61%
Mg 279.077†	5225.5	1.86	mg/L	0.022	1.86	mg/L	0.022	1.17%
Mn 257.610†	25076.3	0.0348	mg/L	0.00012	0.0348	mg/L	0.00012	0.34%
Mo 202.031†	53.3	0.00049	mg/L	0.000212	0.00049	mg/L	0.000212	43.61%
Ni 231.604†	-26.4	-0.00229	mg/L	0.000202	-0.00229	mg/L	0.000202	8.80%
Pb 220.353†	-8.0	-0.00056	mg/L	0.000854	-0.00056	mg/L	0.000854	152.76%
Sb 206.836†	9.8	0.00244	mg/L	0.000471	0.00244	mg/L	0.000471	19.30%
Se 196.026†	10.5	0.0144	mg/L	0.00108	0.0144	mg/L	0.00108	7.47%
Si 251.611†	7753.7	0.211	mg/L	0.0102	0.211	mg/L	0.0102	4.86%
Sn 189.927†	-122.8	-0.0158	mg/L	0.00069	-0.0158	mg/L	0.00069	4.36%
Ti 334.940†	-49.0	0.00201	mg/L	0.000292	0.00201	mg/L	0.000292	14.53%
Tl 190.801†	-34.0	-0.0122	mg/L	0.00299	-0.0122	mg/L	0.00299	24.45%
V 290.880†	-544.7	-0.00516	mg/L	0.001155	-0.00516	mg/L	0.001155	22.38%
Zn 206.200†	380.5	0.00621	mg/L	0.000143	0.00621	mg/L	0.000143	2.30%
K 766.490†	778.8	0.0806	mg/L	0.00523	0.0806	mg/L	0.00523	6.50%
Na 589.592†	1929928.5	139	mg/L	2.4	139	mg/L	2.4	1.74%
Sr 407.771†	28597.8	0.0173	mg/L	0.00034	0.0173	mg/L	0.00034	1.94%
Li 670.784†	60.7	-0.00386	mg/L	0.000145	-0.00386	mg/L	0.000145	3.77%

Sequence No.: 7 **Autosampler Location: 43**
Sample ID: L1204085501 **Date Collected: 4/27/2012 2:26:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085501

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085501

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1846233.0						28411.54	1.54%
YRADIAL	210082.4						1903.67	0.91%
Ga 417.206	1000697.9						21576.52	2.16%
GaRADIAL	64061.5						596.50	0.93%
Ag 328.068†	158.1	0.00008	mg/L	0.000860	0.00008	mg/L	0.000860	>999.9%
Al 396.153†	507.0	0.0761	mg/L	0.01117	0.0761	mg/L	0.01117	14.68%
As 188.979†	-18.0	-0.00776	mg/L	0.001806	-0.00776	mg/L	0.001806	23.29%
Ba 233.527†	23047.1	0.172	mg/L	0.0041	0.172	mg/L	0.0041	2.39%
Be 234.861†	10.4	-0.00024	mg/L	0.000130	-0.00024	mg/L	0.000130	55.06%
B 249.677†	6411.5	0.0913	mg/L	0.00379	0.0913	mg/L	0.00379	4.16%
Ca 227.546†	13697.3	38.7	mg/L	1.27	38.7	mg/L	1.27	3.29%
Cd 228.802†	43.1	0.00099	mg/L	0.000344	0.00099	mg/L	0.000344	34.77%
Co 228.616†	39.7	0.00089	mg/L	0.000391	0.00089	mg/L	0.000391	44.05%
Cr 267.716†	185.4	0.00100	mg/L	0.000249	0.00100	mg/L	0.000249	24.96%
Cu 327.393†	203.6	0.00019	mg/L	0.000539	0.00019	mg/L	0.000539	290.78%
Fe 239.562†	10980.9	0.841	mg/L	0.0195	0.841	mg/L	0.0195	2.32%
Mg 279.077†	11629.1	4.14	mg/L	0.059	4.14	mg/L	0.059	1.43%
Mn 257.610†	155528.4	0.227	mg/L	0.0046	0.227	mg/L	0.0046	2.03%

Approved: April 30, 2012

Mo 202.031†	79.0	0.00141	mg/L	0.000353	0.00141	mg/L	0.000353 25.00%
Ni 231.604†	78.2	-0.00045	mg/L	0.000661	-0.00045	mg/L	0.000661 148.15%
Pb 220.353†	-17.9	-0.00162	mg/L	0.002993	-0.00162	mg/L	0.002993 185.32%
Sb 206.836†	2.0	0.00021	mg/L	0.000811	0.00021	mg/L	0.000811 387.20%
Se 196.026†	5.0	0.0109	mg/L	0.00396	0.0109	mg/L	0.00396 36.44%
Si 251.611†	10418.2	0.291	mg/L	0.0173	0.291	mg/L	0.0173 5.95%
Sn 189.927†	-189.6	-0.0235	mg/L	0.00096	-0.0235	mg/L	0.00096 4.06%
Ti 334.940†	-2496.7	0.00189	mg/L	0.001190	0.00189	mg/L	0.001190 62.94%
Tl 190.801†	-20.5	-0.00824	mg/L	0.003267	-0.00824	mg/L	0.003267 39.63%
V 290.880†	-3.1	-0.00188	mg/L	0.001733	-0.00188	mg/L	0.001733 92.12%
Zn 206.200†	436.0	0.00761	mg/L	0.000083	0.00761	mg/L	0.000083 1.09%
K 766.490†	15384.4	6.74	mg/L	0.057	6.74	mg/L	0.057 0.85%
Na 589.592†	2053518.4	148	mg/L	2.8	148	mg/L	2.8 1.90%
Sr 407.771†	863258.6	0.472	mg/L	0.0039	0.472	mg/L	0.0039 0.82%
Li 670.784†	68.8	-0.00378	mg/L	0.001377	-0.00378	mg/L	0.001377 36.42%

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Sequence No.: 8 **Autosampler Location: 44**
Sample ID: L1204085502 **Date Collected: 4/27/2012 2:32:33 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085502

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085502

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1861864.7						8133.24	0.44%
YRADIAL	217864.7						4562.07	2.09%
Ga 417.206	1006469.2						29842.08	2.97%
GaRADIAL	63536.3						1553.56	2.45%
Ag 328.068†	52.6	-0.00046	mg/L	0.000169	-0.00046	mg/L	0.000169	36.70%
Al 396.153†	315.5	0.0388	mg/L	0.01264	0.0388	mg/L	0.01264	32.62%
As 188.979†	-17.8	-0.00772	mg/L	0.001599	-0.00772	mg/L	0.001599	20.71%
Ba 233.527†	19865.3	0.148	mg/L	0.0020	0.148	mg/L	0.0020	1.36%
Be 234.861†	-17.1	-0.00020	mg/L	0.000036	-0.00020	mg/L	0.000036	18.41%
B 249.677†	6591.1	0.0940	mg/L	0.00385	0.0940	mg/L	0.00385	4.10%
Ca 227.546†	15924.7	45.0	mg/L	1.58	45.0	mg/L	1.58	3.50%
Cd 228.802†	45.3	0.00104	mg/L	0.000229	0.00104	mg/L	0.000229	22.13%
Co 228.616†	41.9	0.00097	mg/L	0.000236	0.00097	mg/L	0.000236	24.28%
Cr 267.716†	101.9	0.00005	mg/L	0.000074	0.00005	mg/L	0.000074	140.71%
Cu 327.393†	225.3	0.00027	mg/L	0.000356	0.00027	mg/L	0.000356	132.43%
Fe 239.562†	7133.3	0.547	mg/L	0.0160	0.547	mg/L	0.0160	2.93%
Mg 279.077†	11566.5	4.11	mg/L	0.087	4.11	mg/L	0.087	2.11%
Mn 257.610†	145800.9	0.213	mg/L	0.0025	0.213	mg/L	0.0025	1.16%
Mo 202.031†	84.5	0.00157	mg/L	0.000090	0.00157	mg/L	0.000090	5.71%
Ni 231.604†	65.8	-0.00067	mg/L	0.000472	-0.00067	mg/L	0.000472	71.03%
Pb 220.353†	-20.4	-0.00180	mg/L	0.001276	-0.00180	mg/L	0.001276	70.80%
Sb 206.836†	0.5	-0.00024	mg/L	0.001456	-0.00024	mg/L	0.001456	613.06%
Se 196.026†	14.6	0.0173	mg/L	0.00199	0.0173	mg/L	0.00199	11.52%
Si 251.611†	11560.1	0.325	mg/L	0.0090	0.325	mg/L	0.0090	2.75%
Sn 189.927†	-205.8	-0.0254	mg/L	0.00039	-0.0254	mg/L	0.00039	1.52%
Ti 334.940†	-3014.2	0.00217	mg/L	0.000876	0.00217	mg/L	0.000876	40.36%
Tl 190.801†	-25.9	-0.00993	mg/L	0.001757	-0.00993	mg/L	0.001757	17.70%
V 290.880†	-246.0	-0.00339	mg/L	0.001807	-0.00339	mg/L	0.001807	53.39%
Zn 206.200†	364.2	0.00578	mg/L	0.000224	0.00578	mg/L	0.000224	3.87%
K 766.490†	16784.3	7.37	mg/L	0.077	7.37	mg/L	0.077	1.05%
Na 589.592†	2151631.0	154	mg/L	2.0	154	mg/L	2.0	1.31%
Sr 407.771†	908074.1	0.496	mg/L	0.0040	0.496	mg/L	0.0040	0.80%
Li 670.784†	123.4	-0.00323	mg/L	0.000645	-0.00323	mg/L	0.000645	19.94%

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Sequence No.: 9 **Autosampler Location: 45**
Sample ID: L1204085502PS WG396428-01 **Date Collected: 4/27/2012 2:38:32 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 30, 2012

Nebulizer Parameters: L1204085502PS WG396428-01

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085502PS WG396428-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1852721.4						20614.77	1.11%
YRADIAL	215497.9						364.38	0.17%
Ga 417.206	1001076.5						12629.08	1.26%
GaRADIAL	63794.8						379.25	0.59%
Ag 328.068†	50081.2	0.194	mg/L	0.0029	0.194	mg/L	0.0029	1.48%
Al 396.153†	25217.0	4.86	mg/L	0.009	4.86	mg/L	0.009	0.19%
As 188.979†	430.0	0.183	mg/L	0.0020	0.183	mg/L	0.0020	1.08%
Ba 233.527†	83028.6	0.624	mg/L	0.0085	0.624	mg/L	0.0085	1.37%
Be 234.861†	25840.9	0.0234	mg/L	0.00034	0.0234	mg/L	0.00034	1.46%
B 249.677†	70891.0	1.02	mg/L	0.012	1.02	mg/L	0.012	1.17%
Ca 227.546†	15821.9	44.9	mg/L	0.62	44.9	mg/L	0.62	1.38%
Cd 228.802†	1221.1	0.0242	mg/L	0.00101	0.0242	mg/L	0.00101	4.19%
Co 228.616†	3168.0	0.0979	mg/L	0.00086	0.0979	mg/L	0.00086	0.88%
Cr 267.716†	22110.5	0.246	mg/L	0.0026	0.246	mg/L	0.0026	1.04%
Cu 327.393†	48310.1	0.246	mg/L	0.0029	0.246	mg/L	0.0029	1.16%
Fe 239.562†	31604.6	2.42	mg/L	0.008	2.42	mg/L	0.008	0.34%
Mg 279.077†	24280.5	8.63	mg/L	0.024	8.63	mg/L	0.024	0.27%
Mn 257.610†	293847.2	0.431	mg/L	0.0071	0.431	mg/L	0.0071	1.66%
Mo 202.031†	15221.9	0.499	mg/L	0.0058	0.499	mg/L	0.0058	1.16%
Ni 231.604†	14384.3	0.252	mg/L	0.0020	0.252	mg/L	0.0020	0.78%
Pb 220.353†	2263.2	0.239	mg/L	0.0021	0.239	mg/L	0.0021	0.90%
Sb 206.836†	1971.2	0.572	mg/L	0.0102	0.572	mg/L	0.0102	1.79%
Se 196.026†	280.0	0.197	mg/L	0.0064	0.197	mg/L	0.0064	3.26%
Si 251.611†	93822.2	2.79	mg/L	0.009	2.79	mg/L	0.009	0.33%
Sn 189.927†	-192.3	-0.0238	mg/L	0.00068	-0.0238	mg/L	0.00068	2.84%
Ti 334.940†	371173.6	0.483	mg/L	0.0012	0.483	mg/L	0.0012	0.24%
Tl 190.801†	728.0	0.231	mg/L	0.0032	0.231	mg/L	0.0032	1.39%
V 290.880†	77758.2	0.487	mg/L	0.0055	0.487	mg/L	0.0055	1.13%
Zn 206.200†	19794.2	0.502	mg/L	0.0050	0.502	mg/L	0.0050	1.00%
K 766.490†	68244.3	30.9	mg/L	0.20	30.9	mg/L	0.20	0.66%
Na 589.592†	2255683.8	161	mg/L	1.0	161	mg/L	1.0	0.61%
Sr 407.771†	1697630.1	0.927	mg/L	0.0023	0.927	mg/L	0.0023	0.24%
Li 670.784†	47381.6	0.470	mg/L	0.0004	0.470	mg/L	0.0004	0.08%

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Sequence No.: 10 **Autosampler Location: 46**
Sample ID: L1204085502DL WG396428-02 **Date Collected: 4/27/2012 2:44:33 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085502DL WG396428-02

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085502DL WG396428-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1844348.7						29778.02	1.61%
YRADIAL	200913.4						2572.79	1.28%
Ga 417.206	1038071.3						26523.75	2.56%
GaRADIAL	61754.8						1356.97	2.20%
Ag 328.068†	-29.3	-0.00086	mg/L	0.000191	-0.00086	mg/L	0.000191	22.11%
Al 396.153†	85.7	-0.00593	mg/L	0.002734	-0.00593	mg/L	0.002734	46.07%
As 188.979†	-8.8	-0.00389	mg/L	0.001336	-0.00389	mg/L	0.001336	34.34%
Ba 233.527†	4340.0	0.0307	mg/L	0.00055	0.0307	mg/L	0.00055	1.80%
Be 234.861†	-76.1	-0.00018	mg/L	0.000035	-0.00018	mg/L	0.000035	19.84%
B 249.677†	1643.9	0.0229	mg/L	0.00208	0.0229	mg/L	0.00208	9.06%
Ca 227.546†	3148.9	8.93	mg/L	0.224	8.93	mg/L	0.224	2.51%
Cd 228.802†	3.3	0.00016	mg/L	0.000093	0.00016	mg/L	0.000093	56.62%

Approved: April 30, 2012

Co 228.616†	7.2	-0.00007 mg/L	0.000105	-0.00007 mg/L	0.000105	162.16%
Cr 267.716†	20.9	-0.00087 mg/L	0.000194	-0.00087 mg/L	0.000194	22.42%
Cu 327.393†	77.3	-0.00052 mg/L	0.000416	-0.00052 mg/L	0.000416	80.56%
Fe 239.562†	1645.1	0.127 mg/L	0.0007	0.127 mg/L	0.0007	0.52%
Mg 279.077†	2662.9	0.955 mg/L	0.0028	0.955 mg/L	0.0028	0.29%
Mn 257.610†	30827.3	0.0433 mg/L	0.00077	0.0433 mg/L	0.00077	1.78%
Mo 202.031†	21.0	-0.00057 mg/L	0.000401	-0.00057 mg/L	0.000401	70.64%
Ni 231.604†	5.0	-0.00174 mg/L	0.000394	-0.00174 mg/L	0.000394	22.64%
Pb 220.353†	-2.0	-0.00002 mg/L	0.003290	-0.00002 mg/L	0.003290	>999.9%
Sb 206.836†	5.0	0.00108 mg/L	0.001523	0.00108 mg/L	0.001523	141.20%
Se 196.026†	2.8	0.00920 mg/L	0.001057	0.00920 mg/L	0.001057	11.49%
Si 251.611†	2446.6	0.0518 mg/L	0.00282	0.0518 mg/L	0.00282	5.44%
Sn 189.927†	-71.5	-0.00989 mg/L	0.001444	-0.00989 mg/L	0.001444	14.61%
Ti 334.940†	-778.5	-0.00036 mg/L	0.000222	-0.00036 mg/L	0.000222	60.92%
Tl 190.801†	-4.4	-0.00303 mg/L	0.000861	-0.00303 mg/L	0.000861	28.43%
V 290.880†	-338.3	-0.00384 mg/L	0.002167	-0.00384 mg/L	0.002167	56.36%
Zn 206.200†	395.0	0.00657 mg/L	0.001851	0.00657 mg/L	0.001851	28.19%
K 766.490†	4080.8	1.69 mg/L	0.026	1.69 mg/L	0.026	1.53%
Na 589.592†	454609.7	33.6 mg/L	0.71	33.6 mg/L	0.71	2.13%
Sr 407.771†	201512.3	0.112 mg/L	0.0030	0.112 mg/L	0.0030	2.71%
Li 670.784†	91.5	-0.00355 mg/L	0.000180	-0.00355 mg/L	0.000180	5.07%

User canceled analysis.

Approved: April 30, 2012

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Analysis Begun

Start Time: 4/27/2012 2:50:30 PM **Plasma On Time: 4/27/2012 6:06:24 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: 042712H3
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 2:50:31 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	146.0 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	1837126.2						9613.02	0.52%
YRADIAL	210142.5						1087.47	0.52%
Ga 417.206	994913.3						20301.12	2.04%
GaRADIAL	63675.7						447.80	0.70%
Ag 328.068†	108688.5	0.421	mg/L	0.0144	0.421	mg/L	0.0144	3.43%
QC value within limits for Ag 328.068 Recovery = 105.30%								
Al 396.153†	51740.1	9.99	mg/L	0.042	9.99	mg/L	0.042	0.42%
QC value within limits for Al 396.153 Recovery = 99.91%								
As 188.979†	972.6	0.413	mg/L	0.0064	0.413	mg/L	0.0064	1.54%
QC value within limits for As 188.979 Recovery = 103.34%								
Ba 233.527†	139407.2	1.05	mg/L	0.009	1.05	mg/L	0.009	0.85%
QC value within limits for Ba 233.527 Recovery = 104.94%								
Be 234.861†	56761.4	0.0518	mg/L	0.00168	0.0518	mg/L	0.00168	3.24%
QC value within limits for Be 234.861 Recovery = 103.54%								
B 249.677†	35162.8	0.502	mg/L	0.0193	0.502	mg/L	0.0193	3.85%
QC value within limits for B 249.677 Recovery = 100.32%								
Ca 227.546†	3501.7	10.4	mg/L	0.28	10.4	mg/L	0.28	2.73%
QC value within limits for Ca 227.546 Recovery = 104.02%								
Cd 228.802†	2606.5	0.0514	mg/L	0.00184	0.0514	mg/L	0.00184	3.59%
QC value within limits for Cd 228.802 Recovery = 102.79%								
Co 228.616†	6768.2	0.209	mg/L	0.0017	0.209	mg/L	0.0017	0.83%
QC value within limits for Co 228.616 Recovery = 104.75%								
Cr 267.716†	46757.8	0.522	mg/L	0.0074	0.522	mg/L	0.0074	1.43%
QC value within limits for Cr 267.716 Recovery = 104.35%								
Cu 327.393†	100817.7	0.514	mg/L	0.0169	0.514	mg/L	0.0169	3.29%
QC value within limits for Cu 327.393 Recovery = 102.88%								
Fe 239.562†	54286.8	4.15	mg/L	0.010	4.15	mg/L	0.010	0.23%
QC value within limits for Fe 239.562 Recovery = 103.77%								
Mg 279.077†	29529.7	10.5	mg/L	0.09	10.5	mg/L	0.09	0.83%
QC value within limits for Mg 279.077 Recovery = 105.07%								
Mn 257.610†	358517.4	0.526	mg/L	0.0058	0.526	mg/L	0.0058	1.10%
QC value within limits for Mn 257.610 Recovery = 105.29%								
Mo 202.031†	31572.9	1.04	mg/L	0.015	1.04	mg/L	0.015	1.48%
QC value within limits for Mo 202.031 Recovery = 103.57%								
Ni 231.604†	29605.6	0.522	mg/L	0.0069	0.522	mg/L	0.0069	1.32%
QC value within limits for Ni 231.604 Recovery = 104.32%								
Pb 220.353†	4933.9	0.520	mg/L	0.0018	0.520	mg/L	0.0018	0.36%
QC value within limits for Pb 220.353 Recovery = 104.07%								
Sb 206.836†	4245.7	1.23	mg/L	0.031	1.23	mg/L	0.031	2.50%
QC value within limits for Sb 206.836 Recovery = 102.68%								
Se 196.026†	615.0	0.423	mg/L	0.0165	0.423	mg/L	0.0165	3.91%
QC value within limits for Se 196.026 Recovery = 105.67%								
Si 251.611†	175773.5	5.24	mg/L	0.153	5.24	mg/L	0.153	2.91%

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QC value within limits for Si 251.611 Recovery = 104.77%
Sn 189.927† 9083.2 1.05 mg/L 0.005 1.05 mg/L 0.005 0.52%
QC value within limits for Sn 189.927 Recovery = 104.68%
Ti 334.940† 792439.7 1.02 mg/L 0.004 1.02 mg/L 0.004 0.40%
QC value within limits for Ti 334.940 Recovery = 101.87%
Tl 190.801† 1667.4 0.531 mg/L 0.0016 0.531 mg/L 0.0016 0.31%
QC value within limits for Tl 190.801 Recovery = 106.27%
V 290.880† 163630.7 1.03 mg/L 0.015 1.03 mg/L 0.015 1.45%
QC value within limits for V 290.880 Recovery = 102.73%
Zn 206.200† 42485.8 1.08 mg/L 0.013 1.08 mg/L 0.013 1.19%
QC value within limits for Zn 206.200 Recovery = 108.09%
K 766.490† 114210.7 52.2 mg/L 0.42 52.2 mg/L 0.42 0.80%
QC value within limits for K 766.490 Recovery = 104.46%
Na 589.592† 670149.4 49.3 mg/L 1.88 49.3 mg/L 1.88 3.80%
QC value within limits for Na 589.592 Recovery = 98.69%
Sr 407.771† 1782230.4 0.973 mg/L 0.0300 0.973 mg/L 0.0300 3.08%
QC value within limits for Sr 407.771 Recovery = 97.35%
Li 670.784† 98126.6 0.978 mg/L 0.0017 0.978 mg/L 0.0017 0.17%
QC value within limits for Li 670.784 Recovery = 97.83%
All analyte(s) passed QC.

Sequence No.: 2 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 2:56:32 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	146.0 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	1879990.5						18727.46	1.00%
YRADIAL	209153.4						2413.39	1.15%
Ga 417.206	1013239.9						30048.68	2.97%
GaRADIAL	63460.9						1376.52	2.17%
Ag 328.068†	35.8	-0.00065	mg/L	0.000563	-0.00065	mg/L	0.000563	87.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.9	-0.0220	mg/L	0.00093	-0.0220	mg/L	0.00093	4.22%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-3.9	-0.00180	mg/L	0.000738	-0.00180	mg/L	0.000738	41.03%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-20.0	-0.00213	mg/L	0.000129	-0.00213	mg/L	0.000129	6.06%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-39.6	-0.00012	mg/L	0.000023	-0.00012	mg/L	0.000023	19.59%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	181.0	0.00193	mg/L	0.000556	0.00193	mg/L	0.000556	28.81%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-11.8	0.0108	mg/L	0.04393	0.0108	mg/L	0.04393	406.83%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-8.0	-0.00008	mg/L	0.000251	-0.00008	mg/L	0.000251	330.49%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.9	-0.00016	mg/L	0.000055	-0.00016	mg/L	0.000055	34.74%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-8.5	-0.00120	mg/L	0.000083	-0.00120	mg/L	0.000083	6.91%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	159.3	-0.00011	mg/L	0.000455	-0.00011	mg/L	0.000455	416.17%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	9.7	0.00227	mg/L	0.000515	0.00227	mg/L	0.000515	22.73%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	8.8	0.0132	mg/L	0.00261	0.0132	mg/L	0.00261	19.85%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	3.6	-0.00211	mg/L	0.000020	-0.00211	mg/L	0.000020	0.95%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.1	-0.00107	mg/L	0.000383	-0.00107	mg/L	0.000383	35.71%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-4.9	-0.00192	mg/L	0.000214	-0.00192	mg/L	0.000214	11.17%

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QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† -13.3 -0.00125 mg/L 0.001284 -0.00125 mg/L 0.001284 102.59%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 5.0 0.00107 mg/L 0.000472 0.00107 mg/L 0.000472 44.06%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 0.0 0.00734 mg/L 0.003691 0.00734 mg/L 0.003691 50.25%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 7.2 -0.0214 mg/L 0.00074 -0.0214 mg/L 0.00074 3.47%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† 1.6 -0.00145 mg/L 0.000721 -0.00145 mg/L 0.000721 49.84%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† 45.7 -0.00064 mg/L 0.000144 -0.00064 mg/L 0.000144 22.39%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 5.1 -0.00003 mg/L 0.002249 -0.00003 mg/L 0.002249 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -713.0 -0.00617 mg/L 0.002629 -0.00617 mg/L 0.002629 42.63%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 0.8 -0.00345 mg/L 0.000114 -0.00345 mg/L 0.000114 3.31%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 87.1 -0.0959 mg/L 0.02148 -0.0959 mg/L 0.02148 22.39%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 7.9 -0.0156 mg/L 0.01121 -0.0156 mg/L 0.01121 71.70%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -80.7 0.00208 mg/L 0.000048 0.00208 mg/L 0.000048 2.31%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 24.0 -0.00423 mg/L 0.000340 -0.00423 mg/L 0.000340 8.04%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 3 **Autosampler Location: 60**
Sample ID: PBW 74 WG396402-02 **Date Collected: 4/27/2012 3:03:25 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 74 WG396402-02

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: PBW 74 WG396402-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1907980.6						19739.77	1.03%
YRADIAL	217952.0						4631.84	2.13%
Ga 417.206	998752.4						17720.16	1.77%
GaRADIAL	66318.5						2168.36	3.27%
Ag 328.068†	-122.4	-0.00126	mg/L	0.000208	-0.00126	mg/L	0.000208	16.57%
Al 396.153†	-5.0	-0.0236	mg/L	0.00162	-0.0236	mg/L	0.00162	6.86%
As 188.979†	-17.2	-0.00751	mg/L	0.000453	-0.00751	mg/L	0.000453	6.04%
Ba 233.527†	-67.2	-0.00248	mg/L	0.000105	-0.00248	mg/L	0.000105	4.22%
Be 234.861†	-508.4	-0.00055	mg/L	0.000027	-0.00055	mg/L	0.000027	4.90%
B 249.677†	20.4	-0.00040	mg/L	0.000116	-0.00040	mg/L	0.000116	29.36%
Ca 227.546†	-0.7	0.0415	mg/L	0.02327	0.0415	mg/L	0.02327	56.02%
Cd 228.802†	19.4	0.00051	mg/L	0.000083	0.00051	mg/L	0.000083	16.42%
Co 228.616†	-5.8	-0.00046	mg/L	0.000185	-0.00046	mg/L	0.000185	40.40%
Cr 267.716†	34.3	-0.00072	mg/L	0.000058	-0.00072	mg/L	0.000058	8.04%
Cu 327.393†	50.1	-0.00067	mg/L	0.000350	-0.00067	mg/L	0.000350	52.52%
Fe 239.562†	22.8	0.00327	mg/L	0.000418	0.00327	mg/L	0.000418	12.76%
Mg 279.077†	154.7	0.0649	mg/L	0.00063	0.0649	mg/L	0.00063	0.96%
Mn 257.610†	187.6	-0.00184	mg/L	0.000023	-0.00184	mg/L	0.000023	1.26%
Mo 202.031†	22.0	-0.00055	mg/L	0.000222	-0.00055	mg/L	0.000222	40.10%
Ni 231.604†	-49.1	-0.00270	mg/L	0.000315	-0.00270	mg/L	0.000315	11.66%
Pb 220.353†	-13.9	-0.00131	mg/L	0.001006	-0.00131	mg/L	0.001006	77.08%
Sb 206.836†	3.3	0.00055	mg/L	0.001815	0.00055	mg/L	0.001815	331.29%
Se 196.026†	8.2	0.0128	mg/L	0.00132	0.0128	mg/L	0.00132	10.30%
Si 251.611†	-62.1	-0.0234	mg/L	0.00055	-0.0234	mg/L	0.00055	2.36%
Sn 189.927†	-7.4	-0.00248	mg/L	0.000494	-0.00248	mg/L	0.000494	19.93%
Ti 334.940†	273.6	-0.00035	mg/L	0.000116	-0.00035	mg/L	0.000116	33.65%
Tl 190.801†	-11.0	-0.00503	mg/L	0.001070	-0.00503	mg/L	0.001070	21.26%

Approved: April 30, 2012

V 290.880†	-887.3	-0.00726	mg/L	0.001130	-0.00726	mg/L	0.001130	15.56%
Zn 206.200†	57.6	-0.00200	mg/L	0.000050	-0.00200	mg/L	0.000050	2.49%
K 766.490†	126.4	-0.0780	mg/L	0.03743	-0.0780	mg/L	0.03743	47.98%
Na 589.592†	594.1	0.0281	mg/L	0.00421	0.0281	mg/L	0.00421	14.98%
Sr 407.771†	676.8	0.00249	mg/L	0.000021	0.00249	mg/L	0.000021	0.86%
Li 670.784†	-81.1	-0.00528	mg/L	0.000905	-0.00528	mg/L	0.000905	17.13%

Sequence No.: 4 **Autosampler Location: 59**
Sample ID: PBW 02 WG396210-02 **Date Collected: 4/27/2012 3:10:20 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 02 WG396210-02

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: PBW 02 WG396210-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1876545.4						43308.61	2.31%
YRADIAL	211060.3						10273.50	4.87%
Ga 417.206	1039377.0						46208.86	4.45%
GaRADIAL	65642.7						1011.71	1.54%
Ag 328.068†	51976.3	0.201	mg/L	0.0105	0.201	mg/L	0.0105	5.21%
Al 396.153†	25132.0	4.84	mg/L	0.165	4.84	mg/L	0.165	3.41%
As 188.979†	460.8	0.196	mg/L	0.0095	0.196	mg/L	0.0095	4.84%
Ba 233.527†	69356.1	0.521	mg/L	0.0133	0.521	mg/L	0.0133	2.55%
Be 234.861†	27357.4	0.0249	mg/L	0.00123	0.0249	mg/L	0.00123	4.96%
B 249.677†	69883.1	1.00	mg/L	0.055	1.00	mg/L	0.055	5.45%
Ca 227.546†	1636.0	4.91	mg/L	0.208	4.91	mg/L	0.208	4.24%
Cd 228.802†	1222.2	0.0241	mg/L	0.00156	0.0241	mg/L	0.00156	6.45%
Co 228.616†	3273.5	0.101	mg/L	0.0031	0.101	mg/L	0.0031	3.06%
Cr 267.716†	23185.0	0.258	mg/L	0.0086	0.258	mg/L	0.0086	3.32%
Cu 327.393†	49572.7	0.252	mg/L	0.0141	0.252	mg/L	0.0141	5.60%
Fe 239.562†	26917.3	2.06	mg/L	0.160	2.06	mg/L	0.160	7.76%
Mg 279.077†	14881.4	5.30	mg/L	0.406	5.30	mg/L	0.406	7.65%
Mn 257.610†	176292.4	0.258	mg/L	0.0066	0.258	mg/L	0.0066	2.57%
Mo 202.031†	15790.4	0.517	mg/L	0.0128	0.517	mg/L	0.0128	2.47%
Ni 231.604†	15194.1	0.267	mg/L	0.0071	0.267	mg/L	0.0071	2.67%
Pb 220.353†	2392.8	0.252	mg/L	0.0074	0.252	mg/L	0.0074	2.91%
Sb 206.836†	2000.2	0.580	mg/L	0.0295	0.580	mg/L	0.0295	5.08%
Se 196.026†	285.1	0.200	mg/L	0.0118	0.200	mg/L	0.0118	5.88%
Si 251.611†	87777.4	2.61	mg/L	0.120	2.61	mg/L	0.120	4.62%
Sn 189.927†	4920.6	0.566	mg/L	0.0165	0.566	mg/L	0.0165	2.92%
Ti 334.940†	382402.6	0.491	mg/L	0.0047	0.491	mg/L	0.0047	0.96%
Tl 190.801†	821.9	0.261	mg/L	0.0081	0.261	mg/L	0.0081	3.11%
V 290.880†	81003.6	0.508	mg/L	0.0162	0.508	mg/L	0.0162	3.19%
Zn 206.200†	21193.7	0.537	mg/L	0.0085	0.537	mg/L	0.0085	1.57%
K 766.490†	55453.6	25.2	mg/L	0.90	25.2	mg/L	0.90	3.58%
Na 589.592†	330748.5	24.5	mg/L	0.35	24.5	mg/L	0.35	1.43%
Sr 407.771†	890779.1	0.488	mg/L	0.0244	0.488	mg/L	0.0244	4.99%
Li 670.784†	48642.1	0.483	mg/L	0.0165	0.483	mg/L	0.0165	3.43%

User canceled analysis.

Approved: April 30, 2012

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Analysis Begun

Start Time: 4/27/2012 3:17:06 PM **Plasma On Time: 4/27/2012 6:06:24 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: 042712H3
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 61**
Sample ID: PBW 02 WG396210-02 **Date Collected: 4/27/2012 3:17:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 02 WG396210-02

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: PBW 02 WG396210-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1874232.5						20317.63	1.08%
YRADIAL	210499.0						9262.58	4.40%
Ga 417.206	1062352.7						29571.06	2.78%
GaRADIAL	64208.6						2586.87	4.03%
Ag 328.068†	-112.6	-0.00121	mg/L	0.000294	-0.00121	mg/L	0.000294	24.21%
Al 396.153†	2.9	-0.0220	mg/L	0.00123	-0.0220	mg/L	0.00123	5.60%
As 188.979†	-1.3	-0.00065	mg/L	0.001340	-0.00065	mg/L	0.001340	204.90%
Ba 233.527†	-16.5	-0.00210	mg/L	0.000107	-0.00210	mg/L	0.000107	5.07%
Be 234.861†	28.0	-0.00006	mg/L	0.000037	-0.00006	mg/L	0.000037	63.28%
B 249.677†	222.8	0.00253	mg/L	0.000308	0.00253	mg/L	0.000308	12.15%
Ca 227.546†	1.3	0.0478	mg/L	0.03807	0.0478	mg/L	0.03807	79.60%
Cd 228.802†	-12.7	-0.00018	mg/L	0.000146	-0.00018	mg/L	0.000146	82.57%
Co 228.616†	-0.7	-0.00030	mg/L	0.000235	-0.00030	mg/L	0.000235	78.05%
Cr 267.716†	-1.6	-0.00112	mg/L	0.000183	-0.00112	mg/L	0.000183	16.29%
Cu 327.393†	130.1	-0.00026	mg/L	0.000394	-0.00026	mg/L	0.000394	153.04%
Fe 239.562†	35.6	0.00425	mg/L	0.000438	0.00425	mg/L	0.000438	10.31%
Mg 279.077†	13.2	0.0147	mg/L	0.00224	0.0147	mg/L	0.00224	15.20%
Mn 257.610†	41.5	-0.00205	mg/L	0.000032	-0.00205	mg/L	0.000032	1.57%
Mo 202.031†	-1.2	-0.00131	mg/L	0.000413	-0.00131	mg/L	0.000413	31.45%
Ni 231.604†	-4.8	-0.00192	mg/L	0.000074	-0.00192	mg/L	0.000074	3.84%
Pb 220.353†	-9.2	-0.00081	mg/L	0.000315	-0.00081	mg/L	0.000315	38.74%
Sb 206.836†	2.4	0.00031	mg/L	0.001833	0.00031	mg/L	0.001833	599.56%
Se 196.026†	-9.5	0.00093	mg/L	0.003188	0.00093	mg/L	0.003188	344.25%
Si 251.611†	-6.5	-0.0218	mg/L	0.00112	-0.0218	mg/L	0.00112	5.13%
Sn 189.927†	-0.1	-0.00165	mg/L	0.000496	-0.00165	mg/L	0.000496	30.14%
Ti 334.940†	38.6	-0.00065	mg/L	0.000107	-0.00065	mg/L	0.000107	16.58%
Tl 190.801†	0.9	-0.00133	mg/L	0.001188	-0.00133	mg/L	0.001188	89.66%
V 290.880†	-506.3	-0.00487	mg/L	0.001836	-0.00487	mg/L	0.001836	37.73%
Zn 206.200†	54.0	-0.00210	mg/L	0.000382	-0.00210	mg/L	0.000382	18.23%
K 766.490†	60.8	-0.108	mg/L	0.0232	-0.108	mg/L	0.0232	21.53%
Na 589.592†	-38.8	-0.0191	mg/L	0.00121	-0.0191	mg/L	0.00121	6.31%
Sr 407.771†	-130.8	0.00205	mg/L	0.000026	0.00205	mg/L	0.000026	1.25%
Li 670.784†	-7.7	-0.00455	mg/L	0.000488	-0.00455	mg/L	0.000488	10.73%

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Sequence No.: 2 **Autosampler Location: 47**
Sample ID: L1204085503 **Date Collected: 4/27/2012 3:24:02 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085503

Approved: April 30, 2012

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085503

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1863131.4						26040.42	1.40%
YRADIAL	210365.3						3406.84	1.62%
Ga 417.206	995500.9						6969.09	0.70%
GaRADIAL	63290.0						1451.04	2.29%
Ag 328.068†	86.5	-0.00044	mg/L	0.000242	-0.00044	mg/L	0.000242	54.32%
Al 396.153†	36.9	-0.0155	mg/L	0.00865	-0.0155	mg/L	0.00865	55.65%
As 188.979†	-15.5	-0.00678	mg/L	0.005288	-0.00678	mg/L	0.005288	78.01%
Ba 233.527†	12113.8	0.0893	mg/L	0.00150	0.0893	mg/L	0.00150	1.67%
Be 234.861†	-206.5	-0.00029	mg/L	0.000097	-0.00029	mg/L	0.000097	33.95%
B 249.677†	6664.6	0.0951	mg/L	0.00071	0.0951	mg/L	0.00071	0.74%
Ca 227.546†	15286.2	43.2	mg/L	0.33	43.2	mg/L	0.33	0.75%
Cd 228.802†	38.6	0.00090	mg/L	0.000175	0.00090	mg/L	0.000175	19.52%
Co 228.616†	32.7	0.00072	mg/L	0.000319	0.00072	mg/L	0.000319	44.51%
Cr 267.716†	83.1	-0.00017	mg/L	0.000183	-0.00017	mg/L	0.000183	110.61%
Cu 327.393†	35.2	-0.00072	mg/L	0.000604	-0.00072	mg/L	0.000604	83.68%
Fe 239.562†	3874.1	0.298	mg/L	0.0047	0.298	mg/L	0.0047	1.56%
Mg 279.077†	8136.0	2.90	mg/L	0.066	2.90	mg/L	0.066	2.27%
Mn 257.610†	361375.7	0.530	mg/L	0.0098	0.530	mg/L	0.0098	1.85%
Mo 202.031†	71.1	0.00119	mg/L	0.000115	0.00119	mg/L	0.000115	9.70%
Ni 231.604†	71.7	-0.00056	mg/L	0.000740	-0.00056	mg/L	0.000740	132.24%
Pb 220.353†	-14.5	-0.00137	mg/L	0.001115	-0.00137	mg/L	0.001115	81.64%
Sb 206.836†	0.1	-0.00036	mg/L	0.001793	-0.00036	mg/L	0.001793	499.38%
Se 196.026†	5.6	0.0110	mg/L	0.00294	0.0110	mg/L	0.00294	26.74%
Si 251.611†	8293.4	0.227	mg/L	0.0075	0.227	mg/L	0.0075	3.30%
Sn 189.927†	-186.9	-0.0232	mg/L	0.00145	-0.0232	mg/L	0.00145	6.26%
Ti 334.940†	-4514.9	-0.00003	mg/L	0.000372	-0.00003	mg/L	0.000372	>999.9%
Tl 190.801†	-31.3	-0.0119	mg/L	0.00226	-0.0119	mg/L	0.00226	18.97%
V 290.880†	-239.7	-0.00329	mg/L	0.000452	-0.00329	mg/L	0.000452	13.74%
Zn 206.200†	296.5	0.00407	mg/L	0.000294	0.00407	mg/L	0.000294	7.23%
K 766.490†	14455.9	6.31	mg/L	0.163	6.31	mg/L	0.163	2.58%
Na 589.592†	2092381.7	150	mg/L	0.7	150	mg/L	0.7	0.47%
Sr 407.771†	562484.8	0.308	mg/L	0.0029	0.308	mg/L	0.0029	0.94%
Li 670.784†	128.1	-0.00319	mg/L	0.000249	-0.00319	mg/L	0.000249	7.81%

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Sequence No.: 3 **Autosampler Location: 48**
Sample ID: L1204085504 **Date Collected: 4/27/2012 3:29:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085504

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085504

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1887756.3						10717.25	0.57%
YRADIAL	214458.4						857.05	0.40%
Ga 417.206	1017168.5						14186.71	1.39%
GaRADIAL	64564.5						885.75	1.37%
Ag 328.068†	122.8	-0.00030	mg/L	0.000729	-0.00030	mg/L	0.000729	240.38%
Al 396.153†	111.4	-0.00102	mg/L	0.000605	-0.00102	mg/L	0.000605	59.39%
As 188.979†	-23.3	-0.0101	mg/L	0.00404	-0.0101	mg/L	0.00404	39.91%
Ba 233.527†	20986.4	0.156	mg/L	0.0014	0.156	mg/L	0.0014	0.89%
Be 234.861†	-144.3	-0.00026	mg/L	0.000078	-0.00026	mg/L	0.000078	30.06%
B 249.677†	7185.3	0.103	mg/L	0.0005	0.103	mg/L	0.0005	0.52%
Ca 227.546†	15391.4	43.5	mg/L	0.94	43.5	mg/L	0.94	2.17%
Cd 228.802†	38.5	0.00091	mg/L	0.000407	0.00091	mg/L	0.000407	44.84%
Co 228.616†	32.6	0.00069	mg/L	0.000478	0.00069	mg/L	0.000478	69.60%
Cr 267.716†	85.6	-0.00014	mg/L	0.000164	-0.00014	mg/L	0.000164	118.83%
Cu 327.393†	77.7	-0.00050	mg/L	0.000700	-0.00050	mg/L	0.000700	139.05%

Approved: April 30, 2012

Fe 239.562†	4012.6	0.308	mg/L	0.0078	0.308	mg/L	0.0078 2.53%
Mg 279.077†	10338.9	3.68	mg/L	0.082	3.68	mg/L	0.082 2.24%
Mn 257.610†	173692.3	0.254	mg/L	0.0021	0.254	mg/L	0.0021 0.82%
Mo 202.031†	71.0	0.00113	mg/L	0.000236	0.00113	mg/L	0.000236 20.99%
Ni 231.604†	92.7	-0.00019	mg/L	0.000843	-0.00019	mg/L	0.000843 447.15%
Pb 220.353†	-16.6	-0.00142	mg/L	0.001778	-0.00142	mg/L	0.001778 124.78%
Sb 206.836†	3.3	0.00058	mg/L	0.001154	0.00058	mg/L	0.001154 199.38%
Se 196.026†	7.6	0.0125	mg/L	0.00463	0.0125	mg/L	0.00463 37.13%
Si 251.611†	11011.3	0.309	mg/L	0.0036	0.309	mg/L	0.0036 1.16%
Sn 189.927†	-200.1	-0.0247	mg/L	0.00124	-0.0247	mg/L	0.00124 5.03%
Ti 334.940†	-2902.1	0.00209	mg/L	0.000525	0.00209	mg/L	0.000525 25.13%
Tl 190.801†	-30.5	-0.0114	mg/L	0.00130	-0.0114	mg/L	0.00130 11.44%
V 290.880†	-420.5	-0.00445	mg/L	0.000786	-0.00445	mg/L	0.000786 17.66%
Zn 206.200†	354.2	0.00553	mg/L	0.000060	0.00553	mg/L	0.000060 1.08%
K 766.490†	14838.9	6.49	mg/L	0.159	6.49	mg/L	0.159 2.45%
Na 589.592†	2072609.4	149	mg/L	1.1	149	mg/L	1.1 0.74%
Sr 407.771†	896279.3	0.490	mg/L	0.0040	0.490	mg/L	0.0040 0.81%
Li 670.784†	184.6	-0.00262	mg/L	0.000712	-0.00262	mg/L	0.000712 27.19%

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Sequence No.: 4 **Autosampler Location: 49**
Sample ID: L1204085505 **Date Collected: 4/27/2012 3:35:57 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085505

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085505

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1866487.5						25810.73	1.38%
YRADIAL	215736.9						2487.51	1.15%
Ga 417.206	994697.1						28560.47	2.87%
GaRADIAL	63573.0						916.02	1.44%
Ag 328.068†	130.7	-0.00010	mg/L	0.000030	-0.00010	mg/L	0.000030	30.23%
Al 396.153†	1104.4	0.193	mg/L	0.0085	0.193	mg/L	0.0085	4.43%
As 188.979†	-14.0	-0.00606	mg/L	0.003070	-0.00606	mg/L	0.003070	50.64%
Ba 233.527†	23529.1	0.175	mg/L	0.0016	0.175	mg/L	0.0016	0.91%
Be 234.861†	-25.6	-0.00023	mg/L	0.000114	-0.00023	mg/L	0.000114	49.09%
B 249.677†	6733.1	0.0959	mg/L	0.00439	0.0959	mg/L	0.00439	4.58%
Ca 227.546†	13446.9	38.0	mg/L	1.64	38.0	mg/L	1.64	4.32%
Cd 228.802†	48.8	0.00110	mg/L	0.000299	0.00110	mg/L	0.000299	27.27%
Co 228.616†	40.4	0.00091	mg/L	0.000274	0.00091	mg/L	0.000274	30.15%
Cr 267.716†	116.1	0.00021	mg/L	0.000071	0.00021	mg/L	0.000071	33.36%
Cu 327.393†	152.5	-0.00009	mg/L	0.000926	-0.00009	mg/L	0.000926	>999.9%
Fe 239.562†	9182.4	0.703	mg/L	0.0058	0.703	mg/L	0.0058	0.82%
Mg 279.077†	12459.9	4.43	mg/L	0.033	4.43	mg/L	0.033	0.75%
Mn 257.610†	200273.5	0.293	mg/L	0.0033	0.293	mg/L	0.0033	1.12%
Mo 202.031†	70.6	0.00114	mg/L	0.000272	0.00114	mg/L	0.000272	23.81%
Ni 231.604†	88.5	-0.00026	mg/L	0.001117	-0.00026	mg/L	0.001117	424.08%
Pb 220.353†	-17.8	-0.00162	mg/L	0.001423	-0.00162	mg/L	0.001423	87.98%
Sb 206.836†	2.2	0.00026	mg/L	0.001083	0.00026	mg/L	0.001083	424.38%
Se 196.026†	11.8	0.0154	mg/L	0.00623	0.0154	mg/L	0.00623	40.56%
Si 251.611†	13722.1	0.390	mg/L	0.0114	0.390	mg/L	0.0114	2.93%
Sn 189.927†	-184.8	-0.0230	mg/L	0.00051	-0.0230	mg/L	0.00051	2.21%
Ti 334.940†	-1042.3	0.00365	mg/L	0.000571	0.00365	mg/L	0.000571	15.63%
Tl 190.801†	-24.0	-0.00937	mg/L	0.004244	-0.00937	mg/L	0.004244	45.31%
V 290.880†	-381.2	-0.00426	mg/L	0.000946	-0.00426	mg/L	0.000946	22.21%
Zn 206.200†	359.1	0.00565	mg/L	0.000107	0.00565	mg/L	0.000107	1.90%
K 766.490†	14923.5	6.52	mg/L	0.027	6.52	mg/L	0.027	0.42%
Na 589.592†	2106852.3	151	mg/L	1.0	151	mg/L	1.0	0.68%
Sr 407.771†	859627.6	0.470	mg/L	0.0017	0.470	mg/L	0.0017	0.37%
Li 670.784†	184.4	-0.00262	mg/L	0.000370	-0.00262	mg/L	0.000370	14.13%

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Sequence No.: 5 **Autosampler Location: 50**
Sample ID: L1204085506 **Date Collected: 4/27/2012 3:41:54 PM**

Approved: April 30, 2012

Analyst: KHR
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1204085506

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085506

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1905287.7						16848.27	0.88%
YRADIAL	213195.1						7624.41	3.58%
Ga 417.206	1030721.4						38875.68	3.77%
GaRADIAL	64240.5						1668.10	2.60%
Ag 328.068†	222.0	0.00009	mg/L	0.000008	0.00009	mg/L	0.000008	8.69%
Al 396.153†	313.4	0.0384	mg/L	0.00154	0.0384	mg/L	0.00154	4.02%
As 188.979†	-21.3	-0.00926	mg/L	0.001251	-0.00926	mg/L	0.001251	13.51%
Ba 233.527†	29414.1	0.220	mg/L	0.0047	0.220	mg/L	0.0047	2.15%
Be 234.861†	-106.3	-0.00024	mg/L	0.000044	-0.00024	mg/L	0.000044	18.12%
B 249.677†	5673.4	0.0808	mg/L	0.00758	0.0808	mg/L	0.00758	9.38%
Ca 227.546†	16281.0	46.0	mg/L	2.94	46.0	mg/L	2.94	6.39%
Cd 228.802†	39.0	0.00091	mg/L	0.000528	0.00091	mg/L	0.000528	57.74%
Co 228.616†	31.9	0.00064	mg/L	0.000090	0.00064	mg/L	0.000090	14.11%
Cr 267.716†	67.4	-0.00034	mg/L	0.000143	-0.00034	mg/L	0.000143	42.15%
Cu 327.393†	154.7	-0.00010	mg/L	0.000035	-0.00010	mg/L	0.000035	33.78%
Fe 239.562†	4937.1	0.379	mg/L	0.0152	0.379	mg/L	0.0152	4.02%
Mg 279.077†	12654.9	4.50	mg/L	0.192	4.50	mg/L	0.192	4.27%
Mn 257.610†	157047.6	0.229	mg/L	0.0040	0.229	mg/L	0.0040	1.76%
Mo 202.031†	77.6	0.00134	mg/L	0.000183	0.00134	mg/L	0.000183	13.69%
Ni 231.604†	65.5	-0.00067	mg/L	0.000918	-0.00067	mg/L	0.000918	137.37%
Pb 220.353†	-4.2	-0.00008	mg/L	0.001616	-0.00008	mg/L	0.001616	>999.9%
Sb 206.836†	4.0	0.00078	mg/L	0.000868	0.00078	mg/L	0.000868	111.08%
Se 196.026†	12.6	0.0158	mg/L	0.00111	0.0158	mg/L	0.00111	7.01%
Si 251.611†	12905.2	0.365	mg/L	0.0106	0.365	mg/L	0.0106	2.90%
Sn 189.927†	-198.4	-0.0245	mg/L	0.00045	-0.0245	mg/L	0.00045	1.84%
Ti 334.940†	-1801.1	0.00388	mg/L	0.000709	0.00388	mg/L	0.000709	18.28%
Tl 190.801†	-32.4	-0.0119	mg/L	0.00354	-0.0119	mg/L	0.00354	29.62%
V 290.880†	-435.1	-0.00457	mg/L	0.002845	-0.00457	mg/L	0.002845	62.19%
Zn 206.200†	341.5	0.00521	mg/L	0.000136	0.00521	mg/L	0.000136	2.62%
K 766.490†	13370.2	5.82	mg/L	0.197	5.82	mg/L	0.197	3.38%
Na 589.592†	2072052.7	149	mg/L	0.6	149	mg/L	0.6	0.43%
Sr 407.771†	1097675.8	0.600	mg/L	0.0018	0.600	mg/L	0.0018	0.31%
Li 670.784†	186.7	-0.00260	mg/L	0.000484	-0.00260	mg/L	0.000484	18.64%

User canceled analysis.

Approved: April 30, 2012

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Analysis Begun

Start Time: 4/27/2012 3:49:19 PM **Plasma On Time: 4/27/2012 6:06:24 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011400 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\FRIDAY1.sif
Batch ID:
Results Data Set: 042712H3
Results Library: C:\pe\peicp2\Results\Results.mdb

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Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 4/24/2012 8:08:44 AM**
IEC File: CA227_LiBeMOD.iec **SMF File:**
Method Description: STANDARD

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Sequence No.: 1 **Autosampler Location: 51**
Sample ID: L1204085507 **Date Collected: 4/27/2012 3:49:22 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085507

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085507

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1819257.3						21487.71	1.18%
YRADIAL	220563.6						2402.83	1.09%
Ga 417.206	969269.9						30862.44	3.18%
GaRADIAL	62575.7						816.52	1.30%
Ag 328.068†	119.1	-0.00034	mg/L	0.000377	-0.00034	mg/L	0.000377	111.71%
Al 396.153†	-43.3	-0.0313	mg/L	0.00300	-0.0313	mg/L	0.00300	9.59%
As 188.979†	-24.9	-0.0108	mg/L	0.00151	-0.0108	mg/L	0.00151	13.94%
Ba 233.527†	25418.9	0.190	mg/L	0.0019	0.190	mg/L	0.0019	1.01%
Be 234.861†	-343.7	-0.00042	mg/L	0.000075	-0.00042	mg/L	0.000075	18.09%
B 249.677†	9134.0	0.131	mg/L	0.0080	0.131	mg/L	0.0080	6.11%
Ca 227.546†	18977.6	53.6	mg/L	1.46	53.6	mg/L	1.46	2.72%
Cd 228.802†	52.8	0.00120	mg/L	0.000412	0.00120	mg/L	0.000412	34.28%
Co 228.616†	30.5	0.00062	mg/L	0.000571	0.00062	mg/L	0.000571	91.78%
Cr 267.716†	126.9	0.00033	mg/L	0.000155	0.00033	mg/L	0.000155	47.02%
Cu 327.393†	-82.3	-0.00132	mg/L	0.000369	-0.00132	mg/L	0.000369	27.90%
Fe 239.562†	2647.1	0.204	mg/L	0.0031	0.204	mg/L	0.0031	1.53%
Mg 279.077†	10680.6	3.80	mg/L	0.034	3.80	mg/L	0.034	0.90%
Mn 257.610†	182484.1	0.267	mg/L	0.0041	0.267	mg/L	0.0041	1.53%
Mo 202.031†	109.7	0.00240	mg/L	0.000468	0.00240	mg/L	0.000468	19.49%
Ni 231.604†	47.4	-0.00099	mg/L	0.001089	-0.00099	mg/L	0.001089	110.22%
Pb 220.353†	-47.1	-0.00455	mg/L	0.002813	-0.00455	mg/L	0.002813	61.85%
Sb 206.836†	-4.2	-0.00159	mg/L	0.001692	-0.00159	mg/L	0.001692	106.43%
Se 196.026†	7.6	0.0124	mg/L	0.00285	0.0124	mg/L	0.00285	22.95%
Si 251.611†	7903.5	0.215	mg/L	0.0095	0.215	mg/L	0.0095	4.42%
Sn 189.927†	514.6	0.0578	mg/L	0.01829	0.0578	mg/L	0.01829	31.65%
Ti 334.940†	-5744.8	-0.00005	mg/L	0.000537	-0.00005	mg/L	0.000537	>999.9%
Tl 190.801†	-32.7	-0.0121	mg/L	0.00382	-0.0121	mg/L	0.00382	31.56%
V 290.880†	2219.9	0.0122	mg/L	0.00303	0.0122	mg/L	0.00303	24.90%
Zn 206.200†	212.4	0.00194	mg/L	0.000169	0.00194	mg/L	0.000169	8.73%
K 766.490†	12603.8	5.47	mg/L	0.051	5.47	mg/L	0.051	0.93%
Na 589.592†	2035146.2	146	mg/L	0.3	146	mg/L	0.3	0.19%
Sr 407.771†	954236.8	0.521	mg/L	0.0014	0.521	mg/L	0.0014	0.26%
Li 670.784†	170.8	-0.00276	mg/L	0.000291	-0.00276	mg/L	0.000291	10.57%

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Sequence No.: 2 **Autosampler Location: 52**
Sample ID: L1204085508 **Date Collected: 4/27/2012 3:55:21 PM**

Approved: April 30, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085508

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085508

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1873261.0						27426.78	1.46%
YRADIAL	219244.2						2592.24	1.18%
Ga 417.206	1035496.7						41557.97	4.01%
GaRADIAL	63335.4						647.63	1.02%
Ag 328.068†	68.8	-0.00036	mg/L	0.000573	-0.00036	mg/L	0.000573	157.52%
Al 396.153†	176.2	0.0116	mg/L	0.01198	0.0116	mg/L	0.01198	103.11%
As 188.979†	-16.9	-0.00731	mg/L	0.000575	-0.00731	mg/L	0.000575	7.86%
Ba 233.527†	16149.8	0.120	mg/L	0.0032	0.120	mg/L	0.0032	2.67%
Be 234.861†	-52.0	-0.00023	mg/L	0.000058	-0.00023	mg/L	0.000058	24.94%
B 249.677†	7748.7	0.111	mg/L	0.0049	0.111	mg/L	0.0049	4.46%
Ca 227.546†	13313.9	37.6	mg/L	1.74	37.6	mg/L	1.74	4.62%
Cd 228.802†	41.8	0.00096	mg/L	0.000314	0.00096	mg/L	0.000314	32.66%
Co 228.616†	33.3	0.00071	mg/L	0.000332	0.00071	mg/L	0.000332	46.54%
Cr 267.716†	82.4	-0.00016	mg/L	0.000206	-0.00016	mg/L	0.000206	126.46%
Cu 327.393†	141.6	-0.00015	mg/L	0.000174	-0.00015	mg/L	0.000174	114.22%
Fe 239.562†	7528.4	0.577	mg/L	0.0027	0.577	mg/L	0.0027	0.46%
Mg 279.077†	10458.0	3.72	mg/L	0.056	3.72	mg/L	0.056	1.51%
Mn 257.610†	181367.2	0.265	mg/L	0.0078	0.265	mg/L	0.0078	2.96%
Mo 202.031†	81.8	0.00150	mg/L	0.000223	0.00150	mg/L	0.000223	14.88%
Ni 231.604†	67.7	-0.00063	mg/L	0.000612	-0.00063	mg/L	0.000612	97.05%
Pb 220.353†	2.3	0.00049	mg/L	0.000620	0.00049	mg/L	0.000620	126.02%
Sb 206.836†	-0.6	-0.00056	mg/L	0.001354	-0.00056	mg/L	0.001354	242.89%
Se 196.026†	15.6	0.0179	mg/L	0.00131	0.0179	mg/L	0.00131	7.32%
Si 251.611†	9565.0	0.265	mg/L	0.0119	0.265	mg/L	0.0119	4.47%
Sn 189.927†	-2.3	-0.00190	mg/L	0.002622	-0.00190	mg/L	0.002622	138.03%
Ti 334.940†	-2105.7	0.00223	mg/L	0.000816	0.00223	mg/L	0.000816	36.57%
Tl 190.801†	-26.8	-0.0102	mg/L	0.00443	-0.0102	mg/L	0.00443	43.29%
V 290.880†	160.4	-0.00082	mg/L	0.000167	-0.00082	mg/L	0.000167	20.39%
Zn 206.200†	411.3	0.00698	mg/L	0.000067	0.00698	mg/L	0.000067	0.96%
K 766.490†	15275.4	6.69	mg/L	0.034	6.69	mg/L	0.034	0.51%
Na 589.592†	2087875.0	150	mg/L	0.9	150	mg/L	0.9	0.63%
Sr 407.771†	690097.8	0.378	mg/L	0.0017	0.378	mg/L	0.0017	0.44%
Li 670.784†	92.5	-0.00354	mg/L	0.000717	-0.00354	mg/L	0.000717	20.23%

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Sequence No.: 3 **Autosampler Location: 53**
Sample ID: L1204085509 **Date Collected: 4/27/2012 4:01:22 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085509

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085509

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1837111.4						29043.17	1.58%
YRADIAL	216309.0						2089.40	0.97%
Ga 417.206	1002383.7						24270.58	2.42%
GaRADIAL	63394.2						834.76	1.32%
Ag 328.068†	-81.0	-0.00096	mg/L	0.000563	-0.00096	mg/L	0.000563	58.55%
Al 396.153†	44.4	-0.0140	mg/L	0.01331	-0.0140	mg/L	0.01331	94.76%
As 188.979†	-24.5	-0.0106	mg/L	0.00462	-0.0106	mg/L	0.00462	43.56%
Ba 233.527†	16665.0	0.124	mg/L	0.0013	0.124	mg/L	0.0013	1.04%
Be 234.861†	15.8	-0.00016	mg/L	0.000089	-0.00016	mg/L	0.000089	56.05%

Approved: April 30, 2012

B 249.677†	8144.2	0.116	mg/L	0.0060	0.116	mg/L	0.0060 5.17%
Ca 227.546†	11551.9	32.6	mg/L	1.24	32.6	mg/L	1.24 3.81%
Cd 228.802†	40.3	0.00095	mg/L	0.000269	0.00095	mg/L	0.000269 28.39%
Co 228.616†	36.1	0.00080	mg/L	0.000167	0.00080	mg/L	0.000167 20.90%
Cr 267.716†	104.3	0.00008	mg/L	0.000118	0.00008	mg/L	0.000118 147.13%
Cu 327.393†	59.3	-0.00058	mg/L	0.000703	-0.00058	mg/L	0.000703 122.12%
Fe 239.562†	6808.1	0.522	mg/L	0.0043	0.522	mg/L	0.0043 0.83%
Mg 279.077†	11529.4	4.10	mg/L	0.068	4.10	mg/L	0.068 1.65%
Mn 257.610†	167989.6	0.245	mg/L	0.0034	0.245	mg/L	0.0034 1.39%
Mo 202.031†	69.9	0.00110	mg/L	0.000466	0.00110	mg/L	0.000466 42.37%
Ni 231.604†	56.5	-0.00083	mg/L	0.000728	-0.00083	mg/L	0.000728 87.79%
Pb 220.353†	-22.7	-0.00217	mg/L	0.003543	-0.00217	mg/L	0.003543 163.46%
Sb 206.836†	3.3	0.00059	mg/L	0.002265	0.00059	mg/L	0.002265 383.75%
Se 196.026†	3.0	0.00940	mg/L	0.001533	0.00940	mg/L	0.001533 16.31%
Si 251.611†	10252.9	0.286	mg/L	0.0123	0.286	mg/L	0.0123 4.31%
Sn 189.927†	-99.7	-0.0131	mg/L	0.00115	-0.0131	mg/L	0.00115 8.76%
Ti 334.940†	-2401.7	0.00111	mg/L	0.000476	0.00111	mg/L	0.000476 43.02%
Tl 190.801†	-29.8	-0.0111	mg/L	0.00307	-0.0111	mg/L	0.00307 27.60%
V 290.880†	203.6	-0.00055	mg/L	0.001175	-0.00055	mg/L	0.001175 213.15%
Zn 206.200†	464.6	0.00834	mg/L	0.000175	0.00834	mg/L	0.000175 2.10%
K 766.490†	14993.7	6.56	mg/L	0.082	6.56	mg/L	0.082 1.25%
Na 589.592†	2133076.4	153	mg/L	1.7	153	mg/L	1.7 1.14%
Sr 407.771†	694561.8	0.380	mg/L	0.0056	0.380	mg/L	0.0056 1.47%
Li 670.784†	84.6	-0.00362	mg/L	0.000619	-0.00362	mg/L	0.000619 17.08%

Sequence No.: 4 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 4:07:20 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	146.0 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	1912970.1						20965.34	1.10%
YRADIAL	215240.6						7791.79	3.62%
Ga 417.206	1057903.9						45691.11	4.32%
GaRADIAL	64760.7						1660.81	2.56%
Ag 328.068†	101767.3	0.394	mg/L	0.0242	0.394	mg/L	0.0242	6.14%
QC value within limits for Ag 328.068 Recovery = 98.59%								
Al 396.153†	49475.0	9.55	mg/L	0.033	9.55	mg/L	0.033	0.35%
QC value within limits for Al 396.153 Recovery = 95.53%								
As 188.979†	902.1	0.383	mg/L	0.0166	0.383	mg/L	0.0166	4.34%
QC value within limits for As 188.979 Recovery = 95.81%								
Ba 233.527†	132250.0	0.995	mg/L	0.0212	0.995	mg/L	0.0212	2.13%
QC value within limits for Ba 233.527 Recovery = 99.54%								
Be 234.861†	53253.8	0.0486	mg/L	0.00268	0.0486	mg/L	0.00268	5.52%
QC value within limits for Be 234.861 Recovery = 97.12%								
B 249.677†	33054.2	0.471	mg/L	0.0294	0.471	mg/L	0.0294	6.24%
QC value within limits for B 249.677 Recovery = 94.30%								
Ca 227.546†	3288.6	9.78	mg/L	0.502	9.78	mg/L	0.502	5.13%
QC value within limits for Ca 227.546 Recovery = 97.77%								
Cd 228.802†	2433.2	0.0480	mg/L	0.00317	0.0480	mg/L	0.00317	6.61%
QC value within limits for Cd 228.802 Recovery = 96.00%								
Co 228.616†	6374.2	0.197	mg/L	0.0024	0.197	mg/L	0.0024	1.20%
QC value within limits for Co 228.616 Recovery = 98.64%								
Cr 267.716†	44136.9	0.492	mg/L	0.0135	0.492	mg/L	0.0135	2.75%
QC value within limits for Cr 267.716 Recovery = 98.49%								
Cu 327.393†	95505.7	0.487	mg/L	0.0287	0.487	mg/L	0.0287	5.89%
QC value within limits for Cu 327.393 Recovery = 97.45%								
Fe 239.562†	51562.8	3.94	mg/L	0.013	3.94	mg/L	0.013	0.34%
QC value within limits for Fe 239.562 Recovery = 98.57%								
Mg 279.077†	27924.1	9.94	mg/L	0.073	9.94	mg/L	0.073	0.74%
QC value within limits for Mg 279.077 Recovery = 99.36%								
Mn 257.610†	340074.6	0.499	mg/L	0.0103	0.499	mg/L	0.0103	2.07%

Approved: April 30, 2012

QC value within limits for Mn 257.610 Recovery = 99.85%
Mo 202.031† 30020.6 0.985 mg/L 0.0221 0.985 mg/L 0.0221 2.25%
QC value within limits for Mo 202.031 Recovery = 98.47%
Ni 231.604† 28121.2 0.495 mg/L 0.0092 0.495 mg/L 0.0092 1.85%
QC value within limits for Ni 231.604 Recovery = 99.07%
Pb 220.353† 4660.3 0.492 mg/L 0.0059 0.492 mg/L 0.0059 1.20%
QC value within limits for Pb 220.353 Recovery = 98.31%
Sb 206.836† 3943.4 1.14 mg/L 0.055 1.14 mg/L 0.055 4.80%
QC value within limits for Sb 206.836 Recovery = 95.37%
Se 196.026† 574.2 0.395 mg/L 0.0196 0.395 mg/L 0.0196 4.97%
QC value within limits for Se 196.026 Recovery = 98.78%
Si 251.611† 165179.6 4.92 mg/L 0.259 4.92 mg/L 0.259 5.27%
QC value within limits for Si 251.611 Recovery = 98.43%
Sn 189.927† 8562.9 0.987 mg/L 0.0132 0.987 mg/L 0.0132 1.34%
QC value within limits for Sn 189.927 Recovery = 98.67%
Ti 334.940† 754563.3 0.970 mg/L 0.0024 0.970 mg/L 0.0024 0.24%
QC value within limits for Ti 334.940 Recovery = 97.00%
Tl 190.801† 1575.3 0.502 mg/L 0.0132 0.502 mg/L 0.0132 2.63%
QC value within limits for Tl 190.801 Recovery = 100.40%
V 290.880† 155515.2 0.976 mg/L 0.0295 0.976 mg/L 0.0295 3.02%
QC value within limits for V 290.880 Recovery = 97.63%
Zn 206.200† 40018.4 1.02 mg/L 0.021 1.02 mg/L 0.021 2.05%
QC value within limits for Zn 206.200 Recovery = 101.80%
K 766.490† 109510.9 50.1 mg/L 0.25 50.1 mg/L 0.25 0.50%
QC value within limits for K 766.490 Recovery = 100.12%
Na 589.592† 667662.0 49.2 mg/L 0.83 49.2 mg/L 0.83 1.69%
QC value within limits for Na 589.592 Recovery = 98.33%
Sr 407.771† 1757017.9 0.960 mg/L 0.0268 0.960 mg/L 0.0268 2.79%
QC value within limits for Sr 407.771 Recovery = 95.97%
Li 670.784† 95000.6 0.947 mg/L 0.0041 0.947 mg/L 0.0041 0.44%
QC value within limits for Li 670.784 Recovery = 94.70%
All analyte(s) passed QC.

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Sequence No.: 5 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 4:13:21 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	146.0 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	1869237.7						24155.47	1.29%
YRADIAL	207431.3						6918.32	3.34%
Ga 417.206	1043912.6						14432.00	1.38%
GaRADIAL	62740.7						1455.21	2.32%
Ag 328.068†	-60.4	-0.00101	mg/L	0.000478	-0.00101	mg/L	0.000478	47.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-3.2	-0.0232	mg/L	0.00152	-0.0232	mg/L	0.00152	6.54%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.0	0.00031	mg/L	0.000887	0.00031	mg/L	0.000887	288.11%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-23.5	-0.00215	mg/L	0.000190	-0.00215	mg/L	0.000190	8.84%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-13.8	-0.00010	mg/L	0.000026	-0.00010	mg/L	0.000026	27.42%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	237.8	0.00275	mg/L	0.000481	0.00275	mg/L	0.000481	17.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-8.0	0.0213	mg/L	0.01452	0.0213	mg/L	0.01452	68.03%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-16.2	-0.00025	mg/L	0.000258	-0.00025	mg/L	0.000258	101.96%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	6.4	-0.00008	mg/L	0.000369	-0.00008	mg/L	0.000369	461.69%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-10.6	-0.00122	mg/L	0.000121	-0.00122	mg/L	0.000121	9.86%

Approved: April 30, 2012

QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 327.393† 12.2 -0.00086 mg/L 0.000555 -0.00086 mg/L 0.000555 64.61%
QC value within limits for Cu 327.393 Recovery = Not calculated
Fe 239.562† 5.2 0.00193 mg/L 0.000384 0.00193 mg/L 0.000384 19.93%
QC value within limits for Fe 239.562 Recovery = Not calculated
Mg 279.077† 12.1 0.0143 mg/L 0.00332 0.0143 mg/L 0.00332 23.17%
QC value within limits for Mg 279.077 Recovery = Not calculated
Mn 257.610† 1.7 -0.00211 mg/L 0.000023 -0.00211 mg/L 0.000023 1.11%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -8.7 -0.00156 mg/L 0.000304 -0.00156 mg/L 0.000304 19.52%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† -11.9 -0.00204 mg/L 0.000326 -0.00204 mg/L 0.000326 15.96%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 4.3 0.00060 mg/L 0.000876 0.00060 mg/L 0.000876 145.67%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 1.5 0.00006 mg/L 0.000975 0.00006 mg/L 0.000975 >999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -0.3 0.00709 mg/L 0.004691 0.00709 mg/L 0.004691 66.21%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† -42.5 -0.0228 mg/L 0.00042 -0.0228 mg/L 0.00042 1.82%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† 18.8 0.00054 mg/L 0.000574 0.00054 mg/L 0.000574 106.77%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† 21.6 -0.00067 mg/L 0.000207 -0.00067 mg/L 0.000207 30.85%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 1.8 -0.00105 mg/L 0.000575 -0.00105 mg/L 0.000575 54.88%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -416.5 -0.00430 mg/L 0.001642 -0.00430 mg/L 0.001642 38.17%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 1.7 -0.00343 mg/L 0.000220 -0.00343 mg/L 0.000220 6.41%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 48.1 -0.114 mg/L 0.0104 -0.114 mg/L 0.0104 9.13%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 88.3 -0.00965 mg/L 0.002919 -0.00965 mg/L 0.002919 30.26%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -89.0 0.00208 mg/L 0.000032 0.00208 mg/L 0.000032 1.54%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 29.0 -0.00418 mg/L 0.000579 -0.00418 mg/L 0.000579 13.86%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 6 **Autosampler Location: 54**
Sample ID: L1204085510 **Date Collected: 4/27/2012 4:20:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085510

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085510

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1849745.2						15232.71	0.82%
YRADIAL	211041.5						1989.20	0.94%
Ga 417.206	1033863.0						19530.09	1.89%
GaRADIAL	64348.5						1475.78	2.29%
Ag 328.068†	-54.4	-0.00081	mg/L	0.000512	-0.00081	mg/L	0.000512	62.97%
Al 396.153†	74.8	-0.00811	mg/L	0.013964	-0.00811	mg/L	0.013964	172.08%
As 188.979†	-21.0	-0.00909	mg/L	0.001031	-0.00909	mg/L	0.001031	11.34%
Ba 233.527†	28749.2	0.215	mg/L	0.0030	0.215	mg/L	0.0030	1.38%
Be 234.861†	113.9	-0.00012	mg/L	0.000079	-0.00012	mg/L	0.000079	68.52%
B 249.677†	6099.9	0.0868	mg/L	0.00078	0.0868	mg/L	0.00078	0.89%
Ca 227.546†	12266.7	34.7	mg/L	0.62	34.7	mg/L	0.62	1.79%
Cd 228.802†	40.5	0.00094	mg/L	0.000331	0.00094	mg/L	0.000331	35.07%
Co 228.616†	36.1	0.00076	mg/L	0.000104	0.00076	mg/L	0.000104	13.58%
Cr 267.716†	82.8	-0.00015	mg/L	0.000044	-0.00015	mg/L	0.000044	28.36%
Cu 327.393†	434.7	0.00135	mg/L	0.000422	0.00135	mg/L	0.000422	31.28%

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Fe 239.562†	9143.8	0.700	mg/L	0.0132	0.700	mg/L	0.0132	1.89%
Mg 279.077†	14824.1	5.27	mg/L	0.105	5.27	mg/L	0.105	2.00%
Mn 257.610†	118727.8	0.173	mg/L	0.0028	0.173	mg/L	0.0028	1.64%
Mo 202.031†	72.5	0.00118	mg/L	0.000340	0.00118	mg/L	0.000340	28.87%
Ni 231.604†	56.5	-0.00083	mg/L	0.000715	-0.00083	mg/L	0.000715	86.21%
Pb 220.353†	-18.4	-0.00167	mg/L	0.000770	-0.00167	mg/L	0.000770	46.04%
Sb 206.836†	0.2	-0.00030	mg/L	0.001146	-0.00030	mg/L	0.001146	384.02%
Se 196.026†	11.4	0.0152	mg/L	0.00419	0.0152	mg/L	0.00419	27.66%
Si 251.611†	9425.4	0.261	mg/L	0.0120	0.261	mg/L	0.0120	4.61%
Sn 189.927†	-164.2	-0.0206	mg/L	0.00078	-0.0206	mg/L	0.00078	3.81%
Ti 334.940†	-2563.1	0.00120	mg/L	0.000049	0.00120	mg/L	0.000049	4.05%
Tl 190.801†	-25.9	-0.00987	mg/L	0.002107	-0.00987	mg/L	0.002107	21.35%
V 290.880†	-25.5	-0.00204	mg/L	0.000389	-0.00204	mg/L	0.000389	19.06%
Zn 206.200†	401.7	0.00673	mg/L	0.000158	0.00673	mg/L	0.000158	2.34%
K 766.490†	13770.2	6.00	mg/L	0.036	6.00	mg/L	0.036	0.60%
Na 589.592†	2011893.3	145	mg/L	4.2	145	mg/L	4.2	2.91%
Sr 407.771†	1057122.7	0.578	mg/L	0.0033	0.578	mg/L	0.0033	0.56%
Li 670.784†	102.4	-0.00344	mg/L	0.000786	-0.00344	mg/L	0.000786	22.84%

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Sequence No.: 7 **Autosampler Location: 55**
Sample ID: L1204085511 **Date Collected: 4/27/2012 4:26:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085511

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085511

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1865584.5						15900.09	0.85%
YRADIAL	215146.3						3069.01	1.43%
Ga 417.206	1029151.6						7032.14	0.68%
GaRADIAL	64025.7						238.52	0.37%
Ag 328.068†	-29.2	-0.00054	mg/L	0.000504	-0.00054	mg/L	0.000504	93.78%
Al 396.153†	686.3	0.111	mg/L	0.0070	0.111	mg/L	0.0070	6.34%
As 188.979†	-18.7	-0.00806	mg/L	0.002301	-0.00806	mg/L	0.002301	28.54%
Ba 233.527†	18649.9	0.139	mg/L	0.0013	0.139	mg/L	0.0013	0.92%
Be 234.861†	130.0	-0.00017	mg/L	0.000132	-0.00017	mg/L	0.000132	76.55%
B 249.677†	6392.0	0.0909	mg/L	0.00090	0.0909	mg/L	0.00090	1.00%
Ca 227.546†	12499.2	35.3	mg/L	0.56	35.3	mg/L	0.56	1.59%
Cd 228.802†	39.9	0.00093	mg/L	0.000298	0.00093	mg/L	0.000298	32.15%
Co 228.616†	31.5	0.00063	mg/L	0.000203	0.00063	mg/L	0.000203	32.07%
Cr 267.716†	123.2	0.00031	mg/L	0.000166	0.00031	mg/L	0.000166	54.46%
Cu 327.393†	487.1	0.00165	mg/L	0.000415	0.00165	mg/L	0.000415	25.21%
Fe 239.562†	13362.7	1.02	mg/L	0.021	1.02	mg/L	0.021	2.05%
Mg 279.077†	11363.2	4.04	mg/L	0.105	4.04	mg/L	0.105	2.60%
Mn 257.610†	125104.0	0.182	mg/L	0.0021	0.182	mg/L	0.0021	1.16%
Mo 202.031†	71.9	0.00118	mg/L	0.000163	0.00118	mg/L	0.000163	13.83%
Ni 231.604†	147.0	0.00077	mg/L	0.000728	0.00077	mg/L	0.000728	94.43%
Pb 220.353†	-13.7	-0.00118	mg/L	0.002753	-0.00118	mg/L	0.002753	234.15%
Sb 206.836†	-1.0	-0.00065	mg/L	0.001251	-0.00065	mg/L	0.001251	193.42%
Se 196.026†	9.6	0.0140	mg/L	0.00297	0.0140	mg/L	0.00297	21.20%
Si 251.611†	13063.3	0.370	mg/L	0.0013	0.370	mg/L	0.0013	0.36%
Sn 189.927†	-163.6	-0.0205	mg/L	0.00020	-0.0205	mg/L	0.00020	0.97%
Ti 334.940†	62.5	0.00467	mg/L	0.000190	0.00467	mg/L	0.000190	4.07%
Tl 190.801†	-23.7	-0.00916	mg/L	0.004630	-0.00916	mg/L	0.004630	50.55%
V 290.880†	-62.2	-0.00227	mg/L	0.001820	-0.00227	mg/L	0.001820	80.32%
Zn 206.200†	419.5	0.00718	mg/L	0.000438	0.00718	mg/L	0.000438	6.10%
K 766.490†	13830.3	6.03	mg/L	0.118	6.03	mg/L	0.118	1.95%
Na 589.592†	2055928.2	148	mg/L	1.9	148	mg/L	1.9	1.31%
Sr 407.771†	711459.8	0.389	mg/L	0.0036	0.389	mg/L	0.0036	0.92%
Li 670.784†	47.5	-0.00399	mg/L	0.000377	-0.00399	mg/L	0.000377	9.44%

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Sequence No.: 8 **Autosampler Location: 56**
Sample ID: L1204085512 WG396402-01 **Date Collected: 4/27/2012 4:32:13 PM**

Approved: April 30, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085512 WG396402-01

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085512 WG396402-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1813992.0						15973.86	0.88%
YRADIAL	213915.5						3357.00	1.57%
Ga 417.206	996635.5						25110.19	2.52%
GaRADIAL	63335.0						467.37	0.74%
Ag 328.068†	39.2	-0.00044	mg/L	0.000400	-0.00044	mg/L	0.000400	90.40%
Al 396.153†	376.5	0.0507	mg/L	0.00550	0.0507	mg/L	0.00550	10.85%
As 188.979†	-18.6	-0.00804	mg/L	0.000119	-0.00804	mg/L	0.000119	1.48%
Ba 233.527†	18565.6	0.138	mg/L	0.0020	0.138	mg/L	0.0020	1.48%
Be 234.861†	41.4	-0.00017	mg/L	0.000060	-0.00017	mg/L	0.000060	35.11%
B 249.677†	5979.6	0.0851	mg/L	0.00126	0.0851	mg/L	0.00126	1.48%
Ca 227.546†	15526.2	43.9	mg/L	0.60	43.9	mg/L	0.60	1.36%
Cd 228.802†	41.9	0.00097	mg/L	0.000376	0.00097	mg/L	0.000376	38.88%
Co 228.616†	31.1	0.00064	mg/L	0.000356	0.00064	mg/L	0.000356	55.69%
Cr 267.716†	79.9	-0.00019	mg/L	0.000118	-0.00019	mg/L	0.000118	62.89%
Cu 327.393†	78.1	-0.00047	mg/L	0.000157	-0.00047	mg/L	0.000157	33.30%
Fe 239.562†	8577.7	0.657	mg/L	0.0153	0.657	mg/L	0.0153	2.33%
Mg 279.077†	11471.2	4.08	mg/L	0.080	4.08	mg/L	0.080	1.95%
Mn 257.610†	133258.3	0.194	mg/L	0.0035	0.194	mg/L	0.0035	1.78%
Mo 202.031†	77.6	0.00135	mg/L	0.000525	0.00135	mg/L	0.000525	38.89%
Ni 231.604†	68.2	-0.00062	mg/L	0.000717	-0.00062	mg/L	0.000717	115.71%
Pb 220.353†	-21.1	-0.00187	mg/L	0.000996	-0.00187	mg/L	0.000996	53.20%
Sb 206.836†	1.5	0.00008	mg/L	0.001603	0.00008	mg/L	0.001603	>999.9%
Se 196.026†	13.2	0.0164	mg/L	0.00579	0.0164	mg/L	0.00579	35.42%
Si 251.611†	9676.1	0.269	mg/L	0.0150	0.269	mg/L	0.0150	5.57%
Sn 189.927†	-187.1	-0.0232	mg/L	0.00118	-0.0232	mg/L	0.00118	5.07%
Ti 334.940†	-4030.6	0.00069	mg/L	0.000513	0.00069	mg/L	0.000513	73.89%
Tl 190.801†	-36.9	-0.0133	mg/L	0.00442	-0.0133	mg/L	0.00442	33.15%
V 290.880†	265.2	-0.00018	mg/L	0.000956	-0.00018	mg/L	0.000956	544.98%
Zn 206.200†	316.6	0.00457	mg/L	0.000168	0.00457	mg/L	0.000168	3.67%
K 766.490†	15885.1	6.96	mg/L	0.077	6.96	mg/L	0.077	1.10%
Na 589.592†	2150357.6	154	mg/L	2.9	154	mg/L	2.9	1.90%
Sr 407.771†	790412.5	0.432	mg/L	0.0037	0.432	mg/L	0.0037	0.86%
Li 670.784†	111.8	-0.00335	mg/L	0.000364	-0.00335	mg/L	0.000364	10.87%

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Sequence No.: 9 **Autosampler Location: 57**
Sample ID: L1204085512 WG396402-01 **Date Collected: 4/27/2012 4:38:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085512 WG396402-01

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204085512 WG396402-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1860036.4						36433.58	1.96%
YRADIAL	216882.0						745.86	0.34%
Ga 417.206	1037491.0						43479.66	4.19%
GaRADIAL	64483.1						373.02	0.58%
Ag 328.068†	47976.6	0.186	mg/L	0.0055	0.186	mg/L	0.0055	2.94%
Al 396.153†	25276.6	4.87	mg/L	0.013	4.87	mg/L	0.013	0.27%
As 188.979†	409.2	0.174	mg/L	0.0054	0.174	mg/L	0.0054	3.10%
Ba 233.527†	82042.8	0.617	mg/L	0.0115	0.617	mg/L	0.0115	1.87%
Be 234.861†	24644.3	0.0223	mg/L	0.00054	0.0223	mg/L	0.00054	2.44%

Approved: April 30, 2012

B 249.677†	67372.6	0.967	mg/L	0.0196	0.967	mg/L	0.0196	2.03%
Ca 227.546†	16270.3	46.2	mg/L	0.94	46.2	mg/L	0.94	2.04%
Cd 228.802†	1160.9	0.0230	mg/L	0.00142	0.0230	mg/L	0.00142	6.19%
Co 228.616†	3064.5	0.0947	mg/L	0.00171	0.0947	mg/L	0.00171	1.80%
Cr 267.716†	21662.7	0.241	mg/L	0.0026	0.241	mg/L	0.0026	1.07%
Cu 327.393†	46686.7	0.238	mg/L	0.0058	0.238	mg/L	0.0058	2.43%
Fe 239.562†	31800.3	2.43	mg/L	0.020	2.43	mg/L	0.020	0.83%
Mg 279.077†	24899.8	8.85	mg/L	0.072	8.85	mg/L	0.072	0.81%
Mn 257.610†	288310.5	0.423	mg/L	0.0095	0.423	mg/L	0.0095	2.25%
Mo 202.031†	14990.7	0.491	mg/L	0.0081	0.491	mg/L	0.0081	1.65%
Ni 231.604†	13899.2	0.244	mg/L	0.0045	0.244	mg/L	0.0045	1.83%
Pb 220.353†	2202.1	0.233	mg/L	0.0035	0.233	mg/L	0.0035	1.49%
Sb 206.836†	1878.4	0.545	mg/L	0.0196	0.545	mg/L	0.0196	3.59%
Se 196.026†	261.7	0.184	mg/L	0.0101	0.184	mg/L	0.0101	5.47%
Si 251.611†	98861.8	2.94	mg/L	0.053	2.94	mg/L	0.053	1.79%
Sn 189.927†	-172.0	-0.0215	mg/L	0.00082	-0.0215	mg/L	0.00082	3.82%
Ti 334.940†	369270.3	0.481	mg/L	0.0014	0.481	mg/L	0.0014	0.28%
Tl 190.801†	702.2	0.223	mg/L	0.0062	0.223	mg/L	0.0062	2.79%
V 290.880†	77489.7	0.485	mg/L	0.0041	0.485	mg/L	0.0041	0.84%
Zn 206.200†	18905.0	0.479	mg/L	0.0075	0.479	mg/L	0.0075	1.56%
K 766.490†	69004.5	31.3	mg/L	0.12	31.3	mg/L	0.12	0.37%
Na 589.592†	2387402.5	171	mg/L	1.0	171	mg/L	1.0	0.60%
Sr 407.771†	1619567.6	0.884	mg/L	0.0028	0.884	mg/L	0.0028	0.32%
Li 670.784†	47421.8	0.470	mg/L	0.0003	0.470	mg/L	0.0003	0.07%

Sequence No.: 10 **Autosampler Location: 58**
Sample ID: L1204085512 WG396402-01 **Date Collected: 4/27/2012 4:44:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085512 WG396402-01

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204085512 WG396402-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1874039.0						11937.44	0.64%
YRADIAL	222624.8						3295.00	1.48%
Ga 417.206	1044408.7						44009.40	4.21%
GaRADIAL	66252.4						1008.75	1.52%
Ag 328.068†	48079.1	0.187	mg/L	0.0062	0.187	mg/L	0.0062	3.32%
Al 396.153†	28822.5	5.56	mg/L	0.031	5.56	mg/L	0.031	0.55%
As 188.979†	409.4	0.174	mg/L	0.0110	0.174	mg/L	0.0110	6.31%
Ba 233.527†	83170.2	0.625	mg/L	0.0091	0.625	mg/L	0.0091	1.45%
Be 234.861†	25197.9	0.0224	mg/L	0.00070	0.0224	mg/L	0.00070	3.13%
B 249.677†	68135.3	0.978	mg/L	0.0312	0.978	mg/L	0.0312	3.19%
Ca 227.546†	16186.5	46.0	mg/L	1.81	46.0	mg/L	1.81	3.93%
Cd 228.802†	1160.4	0.0230	mg/L	0.00163	0.0230	mg/L	0.00163	7.11%
Co 228.616†	3145.8	0.0971	mg/L	0.00075	0.0971	mg/L	0.00075	0.77%
Cr 267.716†	22054.5	0.246	mg/L	0.0028	0.246	mg/L	0.0028	1.13%
Cu 327.393†	47463.1	0.242	mg/L	0.0077	0.242	mg/L	0.0077	3.17%
Fe 239.562†	55274.8	4.23	mg/L	0.027	4.23	mg/L	0.027	0.64%
Mg 279.077†	25520.4	9.07	mg/L	0.079	9.07	mg/L	0.079	0.87%
Mn 257.610†	320358.7	0.470	mg/L	0.0082	0.470	mg/L	0.0082	1.75%
Mo 202.031†	15155.4	0.497	mg/L	0.0065	0.497	mg/L	0.0065	1.31%
Ni 231.604†	14195.5	0.249	mg/L	0.0033	0.249	mg/L	0.0033	1.34%
Pb 220.353†	2269.4	0.240	mg/L	0.0020	0.240	mg/L	0.0020	0.85%
Sb 206.836†	1907.4	0.553	mg/L	0.0292	0.553	mg/L	0.0292	5.27%
Se 196.026†	267.5	0.189	mg/L	0.0120	0.189	mg/L	0.0120	6.35%
Si 251.611†	97044.2	2.88	mg/L	0.073	2.88	mg/L	0.073	2.54%
Sn 189.927†	-181.4	-0.0226	mg/L	0.00066	-0.0226	mg/L	0.00066	2.94%
Ti 334.940†	374143.1	0.487	mg/L	0.0014	0.487	mg/L	0.0014	0.28%
Tl 190.801†	714.9	0.227	mg/L	0.0054	0.227	mg/L	0.0054	2.39%
V 290.880†	77491.1	0.485	mg/L	0.0066	0.485	mg/L	0.0066	1.37%
Zn 206.200†	19358.0	0.491	mg/L	0.0088	0.491	mg/L	0.0088	1.79%
K 766.490†	69997.1	31.7	mg/L	0.14	31.7	mg/L	0.14	0.43%
Na 589.592†	2325483.1	166	mg/L	2.1	166	mg/L	2.1	1.25%

Approved: April 30, 2012

Sr 407.771†	1594889.8	0.871	mg/L	0.0095	0.871	mg/L	0.0095	1.10%
Li 670.784†	47816.2	0.474	mg/L	0.0015	0.474	mg/L	0.0015	0.32%

Sequence No.: 11 **Autosampler Location: 71**
Sample ID: L1204081001 **Date Collected: 4/27/2012 4:50:15 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081001

Analyte	Back Pressure	Flow
All	146.0 kPa	0.50 L/min

Mean Data: L1204081001

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1945048.5						41978.14	2.16%
YRADIAL	223655.3						3623.98	1.62%
Ga 417.206	1142487.0						47583.84	4.16%
GaRADIAL	68111.6						1328.95	1.95%
Ag 328.068†	-82.4	-0.00110	mg/L	0.000484	-0.00110	mg/L	0.000484	43.87%
Al 396.153†	13.2	-0.0200	mg/L	0.00318	-0.0200	mg/L	0.00318	15.87%
As 188.979†	-2.8	-0.00131	mg/L	0.000566	-0.00131	mg/L	0.000566	43.20%
Ba 233.527†	16.3	-0.00185	mg/L	0.000109	-0.00185	mg/L	0.000109	5.88%
Be 234.861†	102.0	0.00001	mg/L	0.000041	0.00001	mg/L	0.000041	418.51%
B 249.677†	341.5	0.00425	mg/L	0.000750	0.00425	mg/L	0.000750	17.67%
Ca 227.546†	1.0	0.0472	mg/L	0.02468	0.0472	mg/L	0.02468	52.29%
Cd 228.802†	-22.3	-0.00037	mg/L	0.000098	-0.00037	mg/L	0.000098	26.59%
Co 228.616†	-2.1	-0.00034	mg/L	0.000260	-0.00034	mg/L	0.000260	75.73%
Cr 267.716†	4.7	-0.00105	mg/L	0.000166	-0.00105	mg/L	0.000166	15.74%
Cu 327.393†	164.6	-0.00008	mg/L	0.000756	-0.00008	mg/L	0.000756	911.74%
Fe 239.562†	52.1	0.00551	mg/L	0.000739	0.00551	mg/L	0.000739	13.41%
Mg 279.077†	9.3	0.0133	mg/L	0.00378	0.0133	mg/L	0.00378	28.38%
Mn 257.610†	194.3	-0.00183	mg/L	0.000035	-0.00183	mg/L	0.000035	1.90%
Mo 202.031†	0.4	-0.00126	mg/L	0.000419	-0.00126	mg/L	0.000419	33.27%
Ni 231.604†	4.5	-0.00175	mg/L	0.000161	-0.00175	mg/L	0.000161	9.18%
Pb 220.353†	3.6	0.00053	mg/L	0.001646	0.00053	mg/L	0.001646	310.65%
Sb 206.836†	5.8	0.00130	mg/L	0.001810	0.00130	mg/L	0.001810	138.75%
Se 196.026†	-0.7	0.00686	mg/L	0.004552	0.00686	mg/L	0.004552	66.34%
Si 251.611†	29.8	-0.0207	mg/L	0.00103	-0.0207	mg/L	0.00103	4.98%
Sn 189.927†	1.0	-0.00151	mg/L	0.000425	-0.00151	mg/L	0.000425	28.07%
Ti 334.940†	24.7	-0.00066	mg/L	0.000156	-0.00066	mg/L	0.000156	23.45%
Tl 190.801†	2.9	-0.00072	mg/L	0.002730	-0.00072	mg/L	0.002730	379.19%
V 290.880†	-988.0	-0.00790	mg/L	0.002591	-0.00790	mg/L	0.002591	32.80%
Zn 206.200†	155.1	0.00047	mg/L	0.000202	0.00047	mg/L	0.000202	42.64%
K 766.490†	120.5	-0.0807	mg/L	0.01915	-0.0807	mg/L	0.01915	23.72%
Na 589.592†	232.2	0.00109	mg/L	0.012287	0.00109	mg/L	0.012287	>999.9%
Sr 407.771†	-72.2	0.00208	mg/L	0.000058	0.00208	mg/L	0.000058	2.78%
Li 670.784†	10.9	-0.00436	mg/L	0.000460	-0.00436	mg/L	0.000460	10.55%

Sequence No.: 12 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 4:57:09 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	146.0 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	1880072.0						40169.33	2.14%
YRADIAL	214469.3						5685.85	2.65%
Ga 417.206	1038533.1						40584.24	3.91%

Approved: April 30, 2012

GaRADIAL	64966.7				964.92	1.49%
Ag 328.068†	103871.7	0.403 mg/L	0.0154	0.403 mg/L	0.0154	3.82%
QC value within limits for Ag 328.068 Recovery = 100.63%						
Al 396.153†	50278.9	9.71 mg/L	0.039	9.71 mg/L	0.039	0.40%
QC value within limits for Al 396.153 Recovery = 97.08%						
As 188.979†	925.1	0.393 mg/L	0.0096	0.393 mg/L	0.0096	2.44%
QC value within limits for As 188.979 Recovery = 98.26%						
Ba 233.527†	134903.6	1.02 mg/L	0.041	1.02 mg/L	0.041	4.03%
QC value within limits for Ba 233.527 Recovery = 101.54%						
Be 234.861†	54154.5	0.0494 mg/L	0.00182	0.0494 mg/L	0.00182	3.68%
QC value within limits for Be 234.861 Recovery = 98.79%						
B 249.677†	33344.1	0.476 mg/L	0.0153	0.476 mg/L	0.0153	3.21%
QC value within limits for B 249.677 Recovery = 95.12%						
Ca 227.546†	3382.0	10.0 mg/L	0.44	10.0 mg/L	0.44	4.38%
QC value within limits for Ca 227.546 Recovery = 100.49%						
Cd 228.802†	2471.4	0.0487 mg/L	0.00257	0.0487 mg/L	0.00257	5.28%
QC value within limits for Cd 228.802 Recovery = 97.48%						
Co 228.616†	6535.0	0.202 mg/L	0.0044	0.202 mg/L	0.0044	2.20%
QC value within limits for Co 228.616 Recovery = 101.13%						
Cr 267.716†	44730.8	0.499 mg/L	0.0184	0.499 mg/L	0.0184	3.68%
QC value within limits for Cr 267.716 Recovery = 99.82%						
Cu 327.393†	97430.4	0.497 mg/L	0.0186	0.497 mg/L	0.0186	3.75%
QC value within limits for Cu 327.393 Recovery = 99.42%						
Fe 239.562†	51981.8	3.97 mg/L	0.016	3.97 mg/L	0.016	0.41%
QC value within limits for Fe 239.562 Recovery = 99.37%						
Mg 279.077†	28240.3	10.0 mg/L	0.08	10.0 mg/L	0.08	0.75%
QC value within limits for Mg 279.077 Recovery = 100.48%						
Mn 257.610†	346970.8	0.509 mg/L	0.0219	0.509 mg/L	0.0219	4.30%
QC value within limits for Mn 257.610 Recovery = 101.89%						
Mo 202.031†	30495.0	1.00 mg/L	0.041	1.00 mg/L	0.041	4.11%
QC value within limits for Mo 202.031 Recovery = 100.03%						
Ni 231.604†	28721.5	0.506 mg/L	0.0217	0.506 mg/L	0.0217	4.29%
QC value within limits for Ni 231.604 Recovery = 101.19%						
Pb 220.353†	4771.7	0.503 mg/L	0.0105	0.503 mg/L	0.0105	2.08%
QC value within limits for Pb 220.353 Recovery = 100.65%						
Sb 206.836†	4045.6	1.17 mg/L	0.053	1.17 mg/L	0.053	4.49%
QC value within limits for Sb 206.836 Recovery = 97.84%						
Se 196.026†	580.6	0.399 mg/L	0.0170	0.399 mg/L	0.0170	4.26%
QC value within limits for Se 196.026 Recovery = 99.86%						
Si 251.611†	168449.5	5.02 mg/L	0.171	5.02 mg/L	0.171	3.40%
QC value within limits for Si 251.611 Recovery = 100.39%						
Sn 189.927†	8742.2	1.01 mg/L	0.022	1.01 mg/L	0.022	2.15%
QC value within limits for Sn 189.927 Recovery = 100.74%						
Ti 334.940†	768568.8	0.988 mg/L	0.0040	0.988 mg/L	0.0040	0.41%
QC value within limits for Ti 334.940 Recovery = 98.80%						
Tl 190.801†	1615.2	0.515 mg/L	0.0131	0.515 mg/L	0.0131	2.55%
QC value within limits for Tl 190.801 Recovery = 102.94%						
V 290.880†	158366.6	0.994 mg/L	0.0382	0.994 mg/L	0.0382	3.84%
QC value within limits for V 290.880 Recovery = 99.42%						
Zn 206.200†	40648.3	1.03 mg/L	0.041	1.03 mg/L	0.041	3.96%
QC value within limits for Zn 206.200 Recovery = 103.40%						
K 766.490†	110863.9	50.7 mg/L	0.04	50.7 mg/L	0.04	0.09%
QC value within limits for K 766.490 Recovery = 101.37%						
Na 589.592†	677816.3	49.9 mg/L	0.71	49.9 mg/L	0.71	1.42%
QC value within limits for Na 589.592 Recovery = 99.81%						
Sr 407.771†	1809425.0	0.988 mg/L	0.0252	0.988 mg/L	0.0252	2.55%
QC value within limits for Sr 407.771 Recovery = 98.83%						
Li 670.784†	96646.4	0.963 mg/L	0.0063	0.963 mg/L	0.0063	0.66%
QC value within limits for Li 670.784 Recovery = 96.35%						

All analyte(s) passed QC.

Sequence No.: 13 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 5:03:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Approved: April 30, 2012

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	1925587.0						32124.23	1.67%
YRADIAL	221874.2						2245.72	1.01%
Ga 417.206	1088108.6						19921.22	1.83%
GaRADIAL	66825.6						1521.84	2.28%
Ag 328.068†	-99.2	-0.00117	mg/L	0.000185	-0.00117	mg/L	0.000185	15.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.1	-0.0222	mg/L	0.00216	-0.0222	mg/L	0.00216	9.72%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.8	-0.00129	mg/L	0.001572	-0.00129	mg/L	0.001572	121.54%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-21.7	-0.00214	mg/L	0.000150	-0.00214	mg/L	0.000150	7.01%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	55.9	-0.00003	mg/L	0.000054	-0.00003	mg/L	0.000054	170.91%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	119.7	0.00105	mg/L	0.000300	0.00105	mg/L	0.000300	28.53%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-0.3	0.0432	mg/L	0.02433	0.0432	mg/L	0.02433	56.32%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-18.1	-0.00028	mg/L	0.000260	-0.00028	mg/L	0.000260	92.28%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	2.3	-0.00021	mg/L	0.000042	-0.00021	mg/L	0.000042	20.16%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	2.4	-0.00108	mg/L	0.000042	-0.00108	mg/L	0.000042	3.88%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	69.9	-0.00057	mg/L	0.000536	-0.00057	mg/L	0.000536	94.82%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	2.6	0.00172	mg/L	0.000325	0.00172	mg/L	0.000325	18.87%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	16.2	0.0158	mg/L	0.00009	0.0158	mg/L	0.00009	0.55%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	3.0	-0.00211	mg/L	0.000005	-0.00211	mg/L	0.000005	0.22%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.5	-0.00123	mg/L	0.000102	-0.00123	mg/L	0.000102	8.30%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-7.7	-0.00197	mg/L	0.000368	-0.00197	mg/L	0.000368	18.71%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	2.5	0.00041	mg/L	0.001116	0.00041	mg/L	0.001116	270.92%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.5	0.00034	mg/L	0.001199	0.00034	mg/L	0.001199	357.47%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.4	0.00501	mg/L	0.004872	0.00501	mg/L	0.004872	97.20%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-76.2	-0.0239	mg/L	0.00034	-0.0239	mg/L	0.00034	1.44%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	4.1	-0.00115	mg/L	0.000652	-0.00115	mg/L	0.000652	56.60%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-96.3	-0.00082	mg/L	0.000119	-0.00082	mg/L	0.000119	14.48%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	7.7	0.00077	mg/L	0.003594	0.00077	mg/L	0.003594	468.17%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-749.8	-0.00640	mg/L	0.001891	-0.00640	mg/L	0.001891	29.55%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	4.8	-0.00335	mg/L	0.000107	-0.00335	mg/L	0.000107	3.21%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	53.3	-0.111	mg/L	0.0515	-0.111	mg/L	0.0515	46.24%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	22.9	-0.0145	mg/L	0.00754	-0.0145	mg/L	0.00754	51.92%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-74.4	0.00208	mg/L	0.000011	0.00208	mg/L	0.000011	0.51%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	11.0	-0.00436	mg/L	0.001126	-0.00436	mg/L	0.001126	25.84%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 14 **Autosampler Location: 72**

Sample ID: L1204081002 **Date Collected: 4/27/2012 5:10:03 PM**

Approved: April 30, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081002

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081002

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1925909.5						8604.02	0.45%
YRADIAL	217538.2						3221.27	1.48%
Ga 417.206	1119185.7						26205.89	2.34%
GaRADIAL	66316.0						1542.46	2.33%
Ag 328.068†	-145.9	-0.00135	mg/L	0.000260	-0.00135	mg/L	0.000260	19.30%
Al 396.153†	14.5	-0.0198	mg/L	0.00139	-0.0198	mg/L	0.00139	7.02%
As 188.979†	-2.4	-0.00115	mg/L	0.001063	-0.00115	mg/L	0.001063	92.80%
Ba 233.527†	9.1	-0.00191	mg/L	0.000193	-0.00191	mg/L	0.000193	10.13%
Be 234.861†	91.1	0.00000	mg/L	0.000007	0.00000	mg/L	0.000007	>999.9%
B 249.677†	51.5	0.00007	mg/L	0.000116	0.00007	mg/L	0.000116	174.90%
Ca 227.546†	3.0	0.0530	mg/L	0.03680	0.0530	mg/L	0.03680	69.42%
Cd 228.802†	-17.9	-0.00028	mg/L	0.000090	-0.00028	mg/L	0.000090	31.87%
Co 228.616†	-3.3	-0.00038	mg/L	0.000245	-0.00038	mg/L	0.000245	64.10%
Cr 267.716†	21.0	-0.00087	mg/L	0.000052	-0.00087	mg/L	0.000052	5.93%
Cu 327.393†	113.0	-0.00034	mg/L	0.000962	-0.00034	mg/L	0.000962	278.83%
Fe 239.562†	58.0	0.00596	mg/L	0.000663	0.00596	mg/L	0.000663	11.13%
Mg 279.077†	15.0	0.0154	mg/L	0.00128	0.0154	mg/L	0.00128	8.31%
Mn 257.610†	136.0	-0.00191	mg/L	0.000025	-0.00191	mg/L	0.000025	1.32%
Mo 202.031†	-4.9	-0.00144	mg/L	0.000356	-0.00144	mg/L	0.000356	24.79%
Ni 231.604†	7.9	-0.00169	mg/L	0.000294	-0.00169	mg/L	0.000294	17.41%
Pb 220.353†	1.5	0.00031	mg/L	0.000935	0.00031	mg/L	0.000935	302.86%
Sb 206.836†	7.4	0.00176	mg/L	0.000477	0.00176	mg/L	0.000477	27.13%
Se 196.026†	0.4	0.00759	mg/L	0.003212	0.00759	mg/L	0.003212	42.31%
Si 251.611†	14.7	-0.0211	mg/L	0.00065	-0.0211	mg/L	0.00065	3.07%
Sn 189.927†	10.4	-0.00043	mg/L	0.000380	-0.00043	mg/L	0.000380	87.95%
Ti 334.940†	15.7	-0.00068	mg/L	0.000156	-0.00068	mg/L	0.000156	23.10%
Tl 190.801†	-0.9	-0.00191	mg/L	0.002967	-0.00191	mg/L	0.002967	155.43%
V 290.880†	-845.1	-0.00700	mg/L	0.001342	-0.00700	mg/L	0.001342	19.18%
Zn 206.200†	199.6	0.00161	mg/L	0.000119	0.00161	mg/L	0.000119	7.43%
K 766.490†	44.7	-0.115	mg/L	0.0125	-0.115	mg/L	0.0125	10.89%
Na 589.592†	68.8	-0.0111	mg/L	0.00458	-0.0111	mg/L	0.00458	41.24%
Sr 407.771†	-41.4	0.00210	mg/L	0.000021	0.00210	mg/L	0.000021	0.98%
Li 670.784†	1.4	-0.00445	mg/L	0.001107	-0.00445	mg/L	0.001107	24.85%

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Sequence No.: 15 **Autosampler Location: 73**
Sample ID: L1204081003 **Date Collected: 4/27/2012 5:16:58 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081003

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081003

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1919335.3						20732.65	1.08%
YRADIAL	218462.1						3126.74	1.43%
Ga 417.206	1124829.3						41616.51	3.70%
GaRADIAL	66567.7						1118.01	1.68%
Ag 328.068†	-132.2	-0.00130	mg/L	0.000182	-0.00130	mg/L	0.000182	13.93%
Al 396.153†	14.2	-0.0198	mg/L	0.00071	-0.0198	mg/L	0.00071	3.60%
As 188.979†	-2.2	-0.00107	mg/L	0.001109	-0.00107	mg/L	0.001109	103.85%
Ba 233.527†	-3.5	-0.00200	mg/L	0.000107	-0.00200	mg/L	0.000107	5.34%
Be 234.861†	68.6	-0.00001	mg/L	0.000042	-0.00001	mg/L	0.000042	412.16%

Approved: April 30, 2012

B 249.677†	31.6	-0.00022	mg/L	0.000177	-0.00022	mg/L	0.000177 79.79%
Ca 227.546†	8.2	0.0675	mg/L	0.04029	0.0675	mg/L	0.04029 59.67%
Cd 228.802†	-13.0	-0.00018	mg/L	0.000289	-0.00018	mg/L	0.000289 160.14%
Co 228.616†	-4.6	-0.00042	mg/L	0.000389	-0.00042	mg/L	0.000389 91.88%
Cr 267.716†	17.8	-0.00091	mg/L	0.000187	-0.00091	mg/L	0.000187 20.68%
Cu 327.393†	149.2	-0.00016	mg/L	0.000467	-0.00016	mg/L	0.000467 291.99%
Fe 239.562†	61.3	0.00621	mg/L	0.000344	0.00621	mg/L	0.000344 5.54%
Mg 279.077†	6.9	0.0125	mg/L	0.00203	0.0125	mg/L	0.00203 16.23%
Mn 257.610†	73944.5	0.107	mg/L	0.0016	0.107	mg/L	0.0016 1.51%
Mo 202.031†	-6.0	-0.00145	mg/L	0.000476	-0.00145	mg/L	0.000476 32.91%
Ni 231.604†	2.0	-0.00179	mg/L	0.000076	-0.00179	mg/L	0.000076 4.25%
Pb 220.353†	-3.7	-0.00030	mg/L	0.001489	-0.00030	mg/L	0.001489 498.83%
Sb 206.836†	8.1	0.00195	mg/L	0.000657	0.00195	mg/L	0.000657 33.64%
Se 196.026†	-1.8	0.00605	mg/L	0.000640	0.00605	mg/L	0.000640 10.58%
Si 251.611†	26.9	-0.0208	mg/L	0.00089	-0.0208	mg/L	0.00089 4.31%
Sn 189.927†	11.5	-0.00030	mg/L	0.000062	-0.00030	mg/L	0.000062 20.72%
Ti 334.940†	-26.1	-0.00073	mg/L	0.000019	-0.00073	mg/L	0.000019 2.61%
Tl 190.801†	-1.1	-0.00208	mg/L	0.003625	-0.00208	mg/L	0.003625 174.28%
V 290.880†	-651.8	-0.00578	mg/L	0.002028	-0.00578	mg/L	0.002028 35.08%
Zn 206.200†	185.0	0.00123	mg/L	0.000484	0.00123	mg/L	0.000484 39.26%
K 766.490†	268.0	-0.0134	mg/L	0.02528	-0.0134	mg/L	0.02528 188.27%
Na 589.592†	51.1	-0.0124	mg/L	0.00221	-0.0124	mg/L	0.00221 17.82%
Sr 407.771†	-39.6	0.00210	mg/L	0.000037	0.00210	mg/L	0.000037 1.75%
Li 670.784†	18.7	-0.00428	mg/L	0.000728	-0.00428	mg/L	0.000728 16.99%

Sequence No.: 16 **Autosampler Location: 74**
Sample ID: L1204081004 **Date Collected: 4/27/2012 5:23:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081004

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081004

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1904792.5						44976.23	2.36%
YRADIAL	218580.2						6176.43	2.83%
Ga 417.206	1124401.8						35303.86	3.14%
GaRADIAL	66552.3						2989.65	4.49%
Ag 328.068†	-135.1	-0.00129	mg/L	0.000285	-0.00129	mg/L	0.000285	22.04%
Al 396.153†	25.8	-0.0176	mg/L	0.00197	-0.0176	mg/L	0.00197	11.19%
As 188.979†	-3.7	-0.00168	mg/L	0.002012	-0.00168	mg/L	0.002012	120.03%
Ba 233.527†	-16.9	-0.00210	mg/L	0.000182	-0.00210	mg/L	0.000182	8.65%
Be 234.861†	64.2	-0.00003	mg/L	0.000055	-0.00003	mg/L	0.000055	188.15%
B 249.677†	10.5	-0.00053	mg/L	0.000514	-0.00053	mg/L	0.000514	97.71%
Ca 227.546†	9.2	0.0707	mg/L	0.02803	0.0707	mg/L	0.02803	39.64%
Cd 228.802†	-24.2	-0.00041	mg/L	0.000225	-0.00041	mg/L	0.000225	55.44%
Co 228.616†	-8.4	-0.00054	mg/L	0.000190	-0.00054	mg/L	0.000190	35.00%
Cr 267.716†	29.1	-0.00078	mg/L	0.000173	-0.00078	mg/L	0.000173	22.18%
Cu 327.393†	121.7	-0.00030	mg/L	0.000214	-0.00030	mg/L	0.000214	71.70%
Fe 239.562†	287.1	0.0235	mg/L	0.00110	0.0235	mg/L	0.00110	4.69%
Mg 279.077†	9.2	0.0133	mg/L	0.00095	0.0133	mg/L	0.00095	7.16%
Mn 257.610†	299.9	-0.00167	mg/L	0.000035	-0.00167	mg/L	0.000035	2.11%
Mo 202.031†	-6.5	-0.00148	mg/L	0.000198	-0.00148	mg/L	0.000198	13.32%
Ni 231.604†	-10.7	-0.00202	mg/L	0.000153	-0.00202	mg/L	0.000153	7.56%
Pb 220.353†	0.9	0.00024	mg/L	0.000223	0.00024	mg/L	0.000223	92.82%
Sb 206.836†	0.8	-0.00017	mg/L	0.000361	-0.00017	mg/L	0.000361	209.08%
Se 196.026†	-6.3	0.00306	mg/L	0.003539	0.00306	mg/L	0.003539	115.51%
Si 251.611†	117.1	-0.0181	mg/L	0.00108	-0.0181	mg/L	0.00108	5.97%
Sn 189.927†	2.9	-0.00129	mg/L	0.000105	-0.00129	mg/L	0.000105	8.10%
Ti 334.940†	27.0	-0.00066	mg/L	0.000143	-0.00066	mg/L	0.000143	21.65%
Tl 190.801†	-10.1	-0.00475	mg/L	0.001696	-0.00475	mg/L	0.001696	35.67%
V 290.880†	-629.7	-0.00564	mg/L	0.002441	-0.00564	mg/L	0.002441	43.26%
Zn 206.200†	211.8	0.00191	mg/L	0.000297	0.00191	mg/L	0.000297	15.53%
K 766.490†	341.8	0.0203	mg/L	0.00393	0.0203	mg/L	0.00393	19.38%
Na 589.592†	-336.4	-0.0413	mg/L	0.00244	-0.0413	mg/L	0.00244	5.89%

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Sr 407.771†	-18.1	0.00211	mg/L	0.000012	0.00211	mg/L	0.000012	0.56%
Li 670.784†	81.4	-0.00365	mg/L	0.000113	-0.00365	mg/L	0.000113	3.09%

Sequence No.: 17 **Autosampler Location: 75**
Sample ID: L1204081601 **Date Collected: 4/27/2012 5:30:47 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081601

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081601

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1896839.1						27173.73	1.43%
YRADIAL	215827.1						4126.56	1.91%
Ga 417.206	1099460.6						12044.58	1.10%
GaRADIAL	66023.9						1160.44	1.76%
Ag 328.068†	-123.0	-0.00125	mg/L	0.000503	-0.00125	mg/L	0.000503	40.23%
Al 396.153†	33.0	-0.0162	mg/L	0.00221	-0.0162	mg/L	0.00221	13.69%
As 188.979†	0.6	0.00017	mg/L	0.002805	0.00017	mg/L	0.002805	>999.9%
Ba 233.527†	-0.4	-0.00198	mg/L	0.000137	-0.00198	mg/L	0.000137	6.94%
Be 234.861†	60.7	-0.00003	mg/L	0.000028	-0.00003	mg/L	0.000028	90.94%
B 249.677†	19.3	-0.00040	mg/L	0.000314	-0.00040	mg/L	0.000314	78.96%
Ca 227.546†	13.2	0.0819	mg/L	0.02792	0.0819	mg/L	0.02792	34.11%
Cd 228.802†	-23.3	-0.00040	mg/L	0.000125	-0.00040	mg/L	0.000125	31.65%
Co 228.616†	0.8	-0.00025	mg/L	0.000151	-0.00025	mg/L	0.000151	59.32%
Cr 267.716†	-7.8	-0.00119	mg/L	0.000154	-0.00119	mg/L	0.000154	12.91%
Cu 327.393†	53.5	-0.00065	mg/L	0.000268	-0.00065	mg/L	0.000268	41.34%
Fe 239.562†	174.0	0.0148	mg/L	0.00015	0.0148	mg/L	0.00015	1.03%
Mg 279.077†	1.0	0.0104	mg/L	0.00448	0.0104	mg/L	0.00448	43.15%
Mn 257.610†	211.9	-0.00180	mg/L	0.000016	-0.00180	mg/L	0.000016	0.87%
Mo 202.031†	-3.5	-0.00139	mg/L	0.000461	-0.00139	mg/L	0.000461	33.19%
Ni 231.604†	6.4	-0.00172	mg/L	0.000320	-0.00172	mg/L	0.000320	18.61%
Pb 220.353†	-0.6	0.00009	mg/L	0.002285	0.00009	mg/L	0.002285	>999.9%
Sb 206.836†	1.7	0.00010	mg/L	0.000693	0.00010	mg/L	0.000693	719.99%
Se 196.026†	0.5	0.00765	mg/L	0.002866	0.00765	mg/L	0.002866	37.48%
Si 251.611†	152.0	-0.0170	mg/L	0.00045	-0.0170	mg/L	0.00045	2.66%
Sn 189.927†	2.9	-0.00130	mg/L	0.000394	-0.00130	mg/L	0.000394	30.31%
Ti 334.940†	7.7	-0.00068	mg/L	0.000053	-0.00068	mg/L	0.000053	7.75%
Tl 190.801†	2.8	-0.00076	mg/L	0.001300	-0.00076	mg/L	0.001300	172.20%
V 290.880†	-574.0	-0.00529	mg/L	0.000643	-0.00529	mg/L	0.000643	12.15%
Zn 206.200†	118.2	-0.00047	mg/L	0.000357	-0.00047	mg/L	0.000357	76.35%
K 766.490†	140.4	-0.0716	mg/L	0.08788	-0.0716	mg/L	0.08788	122.70%
Na 589.592†	106.7	-0.00827	mg/L	0.012062	-0.00827	mg/L	0.012062	145.80%
Sr 407.771†	-16.6	0.00211	mg/L	0.000034	0.00211	mg/L	0.000034	1.59%
Li 670.784†	8.3	-0.00439	mg/L	0.000750	-0.00439	mg/L	0.000750	17.11%

Sequence No.: 18 **Autosampler Location: 76**
Sample ID: L1204081602 **Date Collected: 4/27/2012 5:37:41 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081602

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081602

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1903819.5						28493.09	1.50%
YRADIAL	222842.1						5182.95	2.33%
Ga 417.206	1106254.6						21471.48	1.94%

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GaRADIAL	67480.0					1658.34	2.46%
Ag 328.068†	-56.8	-0.00099	mg/L	0.000205	-0.00099 mg/L	0.000205	20.62%
Al 396.153†	13.3	-0.0200	mg/L	0.00129	-0.0200 mg/L	0.00129	6.45%
As 188.979†	-3.2	-0.00147	mg/L	0.001068	-0.00147 mg/L	0.001068	72.83%
Ba 233.527†	-7.1	-0.00203	mg/L	0.000151	-0.00203 mg/L	0.000151	7.44%
Be 234.861†	44.8	-0.00005	mg/L	0.000026	-0.00005 mg/L	0.000026	53.55%
B 249.677†	9.8	-0.00054	mg/L	0.000145	-0.00054 mg/L	0.000145	26.75%
Ca 227.546†	6.0	0.0619	mg/L	0.04265	0.0619 mg/L	0.04265	68.95%
Cd 228.802†	-18.3	-0.00029	mg/L	0.000163	-0.00029 mg/L	0.000163	56.69%
Co 228.616†	-6.8	-0.00049	mg/L	0.000271	-0.00049 mg/L	0.000271	55.24%
Cr 267.716†	16.5	-0.00092	mg/L	0.000089	-0.00092 mg/L	0.000089	9.65%
Cu 327.393†	136.0	-0.00023	mg/L	0.000423	-0.00023 mg/L	0.000423	187.67%
Fe 239.562†	376.8	0.0303	mg/L	0.00086	0.0303 mg/L	0.00086	2.85%
Mg 279.077†	9.2	0.0133	mg/L	0.00248	0.0133 mg/L	0.00248	18.64%
Mn 257.610†	311.8	-0.00165	mg/L	0.000003	-0.00165 mg/L	0.000003	0.17%
Mo 202.031†	-3.1	-0.00138	mg/L	0.000304	-0.00138 mg/L	0.000304	22.08%
Ni 231.604†	0.4	-0.00182	mg/L	0.000294	-0.00182 mg/L	0.000294	16.11%
Pb 220.353†	-0.5	0.00009	mg/L	0.001563	0.00009 mg/L	0.001563	>999.9%
Sb 206.836†	0.7	-0.00020	mg/L	0.000104	-0.00020 mg/L	0.000104	52.36%
Se 196.026†	-6.6	0.00289	mg/L	0.005330	0.00289 mg/L	0.005330	184.33%
Si 251.611†	52.5	-0.0200	mg/L	0.00091	-0.0200 mg/L	0.00091	4.53%
Sn 189.927†	2.4	-0.00135	mg/L	0.000404	-0.00135 mg/L	0.000404	29.83%
Ti 334.940†	87.2	-0.00058	mg/L	0.000104	-0.00058 mg/L	0.000104	17.83%
Tl 190.801†	-1.0	-0.00192	mg/L	0.003620	-0.00192 mg/L	0.003620	188.18%
V 290.880†	-817.1	-0.00682	mg/L	0.002007	-0.00682 mg/L	0.002007	29.41%
Zn 206.200†	139.3	0.00007	mg/L	0.000083	0.00007 mg/L	0.000083	116.82%
K 766.490†	338.5	0.0188	mg/L	0.00674	0.0188 mg/L	0.00674	35.92%
Na 589.592†	34.2	-0.0137	mg/L	0.00244	-0.0137 mg/L	0.00244	17.86%
Sr 407.771†	-17.8	0.00211	mg/L	0.000012	0.00211 mg/L	0.000012	0.55%
Li 670.784†	91.0	-0.00356	mg/L	0.000154	-0.00356 mg/L	0.000154	4.34%

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Sequence No.: 19 **Autosampler Location: 77**
Sample ID: L1204081603 **Date Collected: 4/27/2012 5:44:36 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081603

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081603

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1922835.8						18129.73	0.94%
YRADIAL	221629.3						1702.84	0.77%
Ga 417.206	1118652.5						21867.40	1.95%
GaRADIAL	67542.3						1454.48	2.15%
Ag 328.068†	-178.1	-0.00147	mg/L	0.000492	-0.00147	mg/L	0.000492	33.44%
Al 396.153†	15.3	-0.0196	mg/L	0.00150	-0.0196	mg/L	0.00150	7.66%
As 188.979†	-0.4	-0.00028	mg/L	0.003757	-0.00028	mg/L	0.003757	>999.9%
Ba 233.527†	-11.4	-0.00206	mg/L	0.000092	-0.00206	mg/L	0.000092	4.44%
Be 234.861†	53.7	-0.00003	mg/L	0.000028	-0.00003	mg/L	0.000028	79.58%
B 249.677†	11.3	-0.00051	mg/L	0.000117	-0.00051	mg/L	0.000117	22.81%
Ca 227.546†	9.0	0.0697	mg/L	0.02248	0.0697	mg/L	0.02248	32.23%
Cd 228.802†	-16.5	-0.00026	mg/L	0.000089	-0.00026	mg/L	0.000089	35.00%
Co 228.616†	-2.8	-0.00037	mg/L	0.000475	-0.00037	mg/L	0.000475	129.68%
Cr 267.716†	26.4	-0.00081	mg/L	0.000183	-0.00081	mg/L	0.000183	22.62%
Cu 327.393†	80.4	-0.00051	mg/L	0.000149	-0.00051	mg/L	0.000149	29.12%
Fe 239.562†	68.2	0.00674	mg/L	0.000202	0.00674	mg/L	0.000202	3.00%
Mg 279.077†	-1.5	0.00952	mg/L	0.004537	0.00952	mg/L	0.004537	47.64%
Mn 257.610†	152.7	-0.00189	mg/L	0.000009	-0.00189	mg/L	0.000009	0.49%
Mo 202.031†	-1.8	-0.00133	mg/L	0.000318	-0.00133	mg/L	0.000318	23.85%
Ni 231.604†	-0.8	-0.00185	mg/L	0.000181	-0.00185	mg/L	0.000181	9.79%
Pb 220.353†	0.5	0.00020	mg/L	0.000253	0.00020	mg/L	0.000253	127.08%
Sb 206.836†	4.5	0.00092	mg/L	0.000799	0.00092	mg/L	0.000799	87.33%
Se 196.026†	-4.1	0.00457	mg/L	0.000308	0.00457	mg/L	0.000308	6.74%
Si 251.611†	104.2	-0.0184	mg/L	0.00107	-0.0184	mg/L	0.00107	5.79%
Sn 189.927†	5.9	-0.00095	mg/L	0.000826	-0.00095	mg/L	0.000826	86.72%

Approved: April 30, 2012

Ti 334.940†	-33.1	-0.00074	mg/L	0.000169	-0.00074	mg/L	0.000169 23.04%
Tl 190.801†	5.1	-0.00003	mg/L	0.001355	-0.00003	mg/L	0.001355 >999.9%
V 290.880†	-897.3	-0.00733	mg/L	0.002955	-0.00733	mg/L	0.002955 40.32%
Zn 206.200†	142.5	0.00015	mg/L	0.000218	0.00015	mg/L	0.000218 142.55%
K 766.490†	19.0	-0.127	mg/L	0.0134	-0.127	mg/L	0.0134 10.55%
Na 589.592†	4.6	-0.0159	mg/L	0.00492	-0.0159	mg/L	0.00492 30.96%
Sr 407.771†	-53.8	0.00209	mg/L	0.000038	0.00209	mg/L	0.000038 1.81%
Li 670.784†	-107.4	-0.00554	mg/L	0.000300	-0.00554	mg/L	0.000300 5.41%

Sequence No.: 20 **Autosampler Location: 78**
Sample ID: L1204081604 **Date Collected: 4/27/2012 5:51:31 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081604

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204081604

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1968232.5						31569.90	1.60%
YRADIAL	225105.4						11023.78	4.90%
Ga 417.206	1148560.5						8680.34	0.76%
GaRADIAL	68049.8						1170.21	1.72%
Ag 328.068†	-92.8	-0.00114	mg/L	0.000018	-0.00114	mg/L	0.000018	1.57%
Al 396.153†	1.4	-0.0223	mg/L	0.00072	-0.0223	mg/L	0.00072	3.21%
As 188.979†	1.2	0.00040	mg/L	0.001241	0.00040	mg/L	0.001241	308.49%
Ba 233.527†	-6.2	-0.00202	mg/L	0.000131	-0.00202	mg/L	0.000131	6.48%
Be 234.861†	102.0	0.00001	mg/L	0.000047	0.00001	mg/L	0.000047	483.48%
B 249.677†	1.5	-0.00065	mg/L	0.000144	-0.00065	mg/L	0.000144	22.10%
Ca 227.546†	13.8	0.0832	mg/L	0.01896	0.0832	mg/L	0.01896	22.77%
Cd 228.802†	-22.3	-0.00038	mg/L	0.000079	-0.00038	mg/L	0.000079	21.06%
Co 228.616†	-0.7	-0.00030	mg/L	0.000250	-0.00030	mg/L	0.000250	82.54%
Cr 267.716†	-11.0	-0.00123	mg/L	0.000163	-0.00123	mg/L	0.000163	13.30%
Cu 327.393†	144.1	-0.00019	mg/L	0.000488	-0.00019	mg/L	0.000488	260.64%
Fe 239.562†	57.6	0.00593	mg/L	0.000573	0.00593	mg/L	0.000573	9.67%
Mg 279.077†	7.6	0.0127	mg/L	0.00582	0.0127	mg/L	0.00582	45.72%
Mn 257.610†	160.3	-0.00188	mg/L	0.000021	-0.00188	mg/L	0.000021	1.13%
Mo 202.031†	-5.0	-0.00144	mg/L	0.000250	-0.00144	mg/L	0.000250	17.37%
Ni 231.604†	0.3	-0.00182	mg/L	0.000167	-0.00182	mg/L	0.000167	9.17%
Pb 220.353†	-3.6	-0.00023	mg/L	0.001427	-0.00023	mg/L	0.001427	618.58%
Sb 206.836†	-2.8	-0.00120	mg/L	0.000625	-0.00120	mg/L	0.000625	51.91%
Se 196.026†	-5.2	0.00383	mg/L	0.002958	0.00383	mg/L	0.002958	77.22%
Si 251.611†	31.7	-0.0206	mg/L	0.00077	-0.0206	mg/L	0.00077	3.72%
Sn 189.927†	1.8	-0.00142	mg/L	0.000250	-0.00142	mg/L	0.000250	17.67%
Ti 334.940†	-34.0	-0.00073	mg/L	0.000037	-0.00073	mg/L	0.000037	5.06%
Tl 190.801†	2.2	-0.00094	mg/L	0.003383	-0.00094	mg/L	0.003383	360.00%
V 290.880†	-1045.6	-0.00826	mg/L	0.001387	-0.00826	mg/L	0.001387	16.79%
Zn 206.200†	154.3	0.00045	mg/L	0.000237	0.00045	mg/L	0.000237	52.57%
K 766.490†	116.4	-0.0826	mg/L	0.02156	-0.0826	mg/L	0.02156	26.12%
Na 589.592†	210.9	-0.00050	mg/L	0.004024	-0.00050	mg/L	0.004024	811.80%
Sr 407.771†	-82.4	0.00208	mg/L	0.000021	0.00208	mg/L	0.000021	1.00%
Li 670.784†	15.3	-0.00432	mg/L	0.000496	-0.00432	mg/L	0.000496	11.49%

Sequence No.: 21 **Autosampler Location: 79**
Sample ID: L1204081604PS WG396298-01 **Date Collected: 4/27/2012 5:58:26 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081604PS WG396298-01

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Approved: April 30, 2012

Mean Data: L1204081604PS WG396298-01

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1912444.0						29217.50	1.53%
YRADIAL	220463.4						2006.43	0.91%
Ga 417.206	1089236.3						40067.94	3.68%
GaRADIAL	66641.8						486.34	0.73%
Ag 328.068†	49799.1	0.193	mg/L	0.0099	0.193	mg/L	0.0099	5.16%
Al 396.153†	25276.5	4.87	mg/L	0.032	4.87	mg/L	0.032	0.67%
As 188.979†	441.0	0.187	mg/L	0.0079	0.187	mg/L	0.0079	4.20%
Ba 233.527†	68158.2	0.512	mg/L	0.0119	0.512	mg/L	0.0119	2.32%
Be 234.861†	26115.5	0.0238	mg/L	0.00109	0.0238	mg/L	0.00109	4.60%
B 249.677†	66510.2	0.955	mg/L	0.0481	0.955	mg/L	0.0481	5.04%
Ca 227.546†	1583.4	4.75	mg/L	0.195	4.75	mg/L	0.195	4.11%
Cd 228.802†	1156.7	0.0229	mg/L	0.00155	0.0229	mg/L	0.00155	6.77%
Co 228.616†	3218.4	0.0995	mg/L	0.00174	0.0995	mg/L	0.00174	1.75%
Cr 267.716†	22696.1	0.253	mg/L	0.0083	0.253	mg/L	0.0083	3.27%
Cu 327.393†	47959.8	0.244	mg/L	0.0127	0.244	mg/L	0.0127	5.18%
Fe 239.562†	25563.0	1.96	mg/L	0.010	1.96	mg/L	0.010	0.49%
Mg 279.077†	14269.6	5.08	mg/L	0.023	5.08	mg/L	0.023	0.46%
Mn 257.610†	173449.6	0.254	mg/L	0.0053	0.254	mg/L	0.0053	2.10%
Mo 202.031†	15478.1	0.507	mg/L	0.0119	0.507	mg/L	0.0119	2.35%
Ni 231.604†	14918.1	0.262	mg/L	0.0050	0.262	mg/L	0.0050	1.91%
Pb 220.353†	2364.5	0.249	mg/L	0.0036	0.249	mg/L	0.0036	1.43%
Sb 206.836†	1935.4	0.561	mg/L	0.0263	0.561	mg/L	0.0263	4.68%
Se 196.026†	276.2	0.194	mg/L	0.0105	0.194	mg/L	0.0105	5.43%
Si 251.611†	84034.9	2.49	mg/L	0.109	2.49	mg/L	0.109	4.37%
Sn 189.927†	-38.4	-0.00606	mg/L	0.000806	-0.00606	mg/L	0.000806	13.30%
Ti 334.940†	377726.8	0.485	mg/L	0.0004	0.485	mg/L	0.0004	0.07%
Tl 190.801†	822.4	0.261	mg/L	0.0061	0.261	mg/L	0.0061	2.33%
V 290.880†	79534.4	0.498	mg/L	0.0187	0.498	mg/L	0.0187	3.76%
Zn 206.200†	20608.4	0.523	mg/L	0.0133	0.523	mg/L	0.0133	2.55%
K 766.490†	55249.9	25.1	mg/L	0.14	25.1	mg/L	0.14	0.54%
Na 589.592†	338935.0	25.1	mg/L	0.07	25.1	mg/L	0.07	0.26%
Sr 407.771†	893100.2	0.489	mg/L	0.0017	0.489	mg/L	0.0017	0.35%
Li 670.784†	49168.4	0.488	mg/L	0.0008	0.488	mg/L	0.0008	0.17%

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Sequence No.: 22 **Autosampler Location: 80**
Sample ID: L1204081604DL WG396298-02 **Date Collected: 4/27/2012 6:04:26 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081604DL WG396298-02

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204081604DL WG396298-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1910876.4						22670.96	1.19%
YRADIAL	223961.9						6740.67	3.01%
Ga 417.206	1087855.6						16387.34	1.51%
GaRADIAL	67191.8						1123.69	1.67%
Ag 328.068†	-161.3	-0.00141	mg/L	0.000151	-0.00141	mg/L	0.000151	10.76%
Al 396.153†	-7.6	-0.0241	mg/L	0.00194	-0.0241	mg/L	0.00194	8.04%
As 188.979†	-2.2	-0.00106	mg/L	0.002497	-0.00106	mg/L	0.002497	236.40%
Ba 233.527†	-28.9	-0.00219	mg/L	0.000179	-0.00219	mg/L	0.000179	8.18%
Be 234.861†	35.6	-0.00005	mg/L	0.000048	-0.00005	mg/L	0.000048	94.38%
B 249.677†	153.7	0.00154	mg/L	0.000300	0.00154	mg/L	0.000300	19.52%
Ca 227.546†	6.0	0.0612	mg/L	0.01393	0.0612	mg/L	0.01393	22.76%
Cd 228.802†	-11.1	-0.00014	mg/L	0.000280	-0.00014	mg/L	0.000280	194.78%
Co 228.616†	-6.0	-0.00047	mg/L	0.000157	-0.00047	mg/L	0.000157	33.56%
Cr 267.716†	2.8	-0.00107	mg/L	0.000233	-0.00107	mg/L	0.000233	21.70%
Cu 327.393†	76.0	-0.00053	mg/L	0.000617	-0.00053	mg/L	0.000617	115.61%
Fe 239.562†	11.2	0.00238	mg/L	0.000086	0.00238	mg/L	0.000086	3.62%
Mg 279.077†	10.1	0.0136	mg/L	0.00517	0.0136	mg/L	0.00517	37.89%
Mn 257.610†	546.4	-0.00131	mg/L	0.000019	-0.00131	mg/L	0.000019	1.48%
Mo 202.031†	-6.3	-0.00148	mg/L	0.000329	-0.00148	mg/L	0.000329	22.17%

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Ni 231.604†	-6.2	-0.00194 mg/L	0.000253	-0.00194 mg/L	0.000253	13.05%
Pb 220.353†	7.1	0.00090 mg/L	0.000200	0.00090 mg/L	0.000200	22.25%
Sb 206.836†	3.5	0.00062 mg/L	0.000728	0.00062 mg/L	0.000728	118.16%
Se 196.026†	0.2	0.00744 mg/L	0.002805	0.00744 mg/L	0.002805	37.72%
Si 251.611†	-42.2	-0.0228 mg/L	0.00077	-0.0228 mg/L	0.00077	3.39%
Sn 189.927†	-1.3	-0.00178 mg/L	0.000616	-0.00178 mg/L	0.000616	34.62%
Ti 334.940†	-50.8	-0.00076 mg/L	0.000154	-0.00076 mg/L	0.000154	20.23%
Tl 190.801†	-2.3	-0.00232 mg/L	0.002801	-0.00232 mg/L	0.002801	120.57%
V 290.880†	-820.0	-0.00684 mg/L	0.001414	-0.00684 mg/L	0.001414	20.67%
Zn 206.200†	142.2	0.00015 mg/L	0.000507	0.00015 mg/L	0.000507	349.53%
K 766.490†	73.5	-0.102 mg/L	0.0276	-0.102 mg/L	0.0276	27.05%
Na 589.592†	1.7	-0.0161 mg/L	0.00249	-0.0161 mg/L	0.00249	15.47%
Sr 407.771†	-116.8	0.00206 mg/L	0.000033	0.00206 mg/L	0.000033	1.62%
Li 670.784†	66.8	-0.00380 mg/L	0.000580	-0.00380 mg/L	0.000580	15.27%

Sequence No.: 23 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 6:11:23 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	147.0 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	1880092.8						26422.25	1.41%
YRADIAL	216395.2						7001.41	3.24%
Ga 417.206	1047496.8						18525.56	1.77%
GaRADIAL	65514.0						2005.04	3.06%
Ag 328.068†	101696.2	0.394	mg/L	0.0095	0.394	mg/L	0.0095	2.40%
QC value within limits for Ag 328.068 Recovery = 98.53%								
Al 396.153†	50530.1	9.76	mg/L	0.005	9.76	mg/L	0.005	0.06%
QC value within limits for Al 396.153 Recovery = 97.58%								
As 188.979†	916.3	0.389	mg/L	0.0050	0.389	mg/L	0.0050	1.28%
QC value within limits for As 188.979 Recovery = 97.33%								
Ba 233.527†	133483.0	1.00	mg/L	0.014	1.00	mg/L	0.014	1.44%
QC value within limits for Ba 233.527 Recovery = 100.47%								
Be 234.861†	52985.3	0.0483	mg/L	0.00100	0.0483	mg/L	0.00100	2.07%
QC value within limits for Be 234.861 Recovery = 96.60%								
B 249.677†	32658.0	0.466	mg/L	0.0081	0.466	mg/L	0.0081	1.75%
QC value within limits for B 249.677 Recovery = 93.14%								
Ca 227.546†	3331.4	9.90	mg/L	0.232	9.90	mg/L	0.232	2.34%
QC value within limits for Ca 227.546 Recovery = 99.00%								
Cd 228.802†	2430.7	0.0479	mg/L	0.00133	0.0479	mg/L	0.00133	2.78%
QC value within limits for Cd 228.802 Recovery = 95.87%								
Co 228.616†	6536.6	0.202	mg/L	0.0029	0.202	mg/L	0.0029	1.42%
QC value within limits for Co 228.616 Recovery = 101.14%								
Cr 267.716†	44606.3	0.498	mg/L	0.0058	0.498	mg/L	0.0058	1.17%
QC value within limits for Cr 267.716 Recovery = 99.54%								
Cu 327.393†	94717.6	0.483	mg/L	0.0103	0.483	mg/L	0.0103	2.14%
QC value within limits for Cu 327.393 Recovery = 96.66%								
Fe 239.562†	52452.5	4.01	mg/L	0.016	4.01	mg/L	0.016	0.40%
QC value within limits for Fe 239.562 Recovery = 100.27%								
Mg 279.077†	28473.7	10.1	mg/L	0.08	10.1	mg/L	0.08	0.78%
QC value within limits for Mg 279.077 Recovery = 101.31%								
Mn 257.610†	344786.2	0.506	mg/L	0.0047	0.506	mg/L	0.0047	0.92%
QC value within limits for Mn 257.610 Recovery = 101.24%								
Mo 202.031†	30171.1	0.990	mg/L	0.0079	0.990	mg/L	0.0079	0.80%
QC value within limits for Mo 202.031 Recovery = 98.97%								
Ni 231.604†	28239.6	0.497	mg/L	0.0020	0.497	mg/L	0.0020	0.40%
QC value within limits for Ni 231.604 Recovery = 99.48%								
Pb 220.353†	4758.6	0.502	mg/L	0.0084	0.502	mg/L	0.0084	1.67%
QC value within limits for Pb 220.353 Recovery = 100.38%								
Sb 206.836†	4019.2	1.17	mg/L	0.022	1.17	mg/L	0.022	1.92%
QC value within limits for Sb 206.836 Recovery = 97.20%								
Se 196.026†	580.0	0.399	mg/L	0.0094	0.399	mg/L	0.0094	2.35%

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QC value within limits for Se 196.026 Recovery = 99.77%
Si 251.611† 164987.1 4.92 mg/L 0.094 4.92 mg/L 0.094 1.91%
QC value within limits for Si 251.611 Recovery = 98.31%
Sn 189.927† 8761.3 1.01 mg/L 0.015 1.01 mg/L 0.015 1.52%
QC value within limits for Sn 189.927 Recovery = 100.96%
Ti 334.940† 774239.0 0.995 mg/L 0.0002 0.995 mg/L 0.0002 0.02%
QC value within limits for Ti 334.940 Recovery = 99.53%
Tl 190.801† 1615.1 0.515 mg/L 0.0117 0.515 mg/L 0.0117 2.27%
QC value within limits for Tl 190.801 Recovery = 102.94%
V 290.880† 157595.2 0.989 mg/L 0.0191 0.989 mg/L 0.0191 1.94%
QC value within limits for V 290.880 Recovery = 98.94%
Zn 206.200† 40366.3 1.03 mg/L 0.009 1.03 mg/L 0.009 0.83%
QC value within limits for Zn 206.200 Recovery = 102.68%
K 766.490† 111367.4 50.9 mg/L 0.27 50.9 mg/L 0.27 0.53%
QC value within limits for K 766.490 Recovery = 101.84%
Na 589.592† 679973.0 50.1 mg/L 1.88 50.1 mg/L 1.88 3.75%
QC value within limits for Na 589.592 Recovery = 100.12%
Sr 407.771† 1829624.2 0.999 mg/L 0.0374 0.999 mg/L 0.0374 3.74%
QC value within limits for Sr 407.771 Recovery = 99.93%
Li 670.784† 96626.9 0.963 mg/L 0.0018 0.963 mg/L 0.0018 0.18%
QC value within limits for Li 670.784 Recovery = 96.33%
All analyte(s) passed QC.

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Sequence No.: 24 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 6:17:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	147.0 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	1910603.7						37900.58	1.98%
YRADIAL	219567.7						4660.23	2.12%
Ga 417.206	1069710.0						15236.32	1.42%
GaRADIAL	66134.5						2001.01	3.03%
Ag 328.068†	-31.0	-0.00090	mg/L	0.000739	-0.00090	mg/L	0.000739	81.71%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-4.7	-0.0235	mg/L	0.00234	-0.0235	mg/L	0.00234	9.94%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-4.8	-0.00216	mg/L	0.000839	-0.00216	mg/L	0.000839	38.81%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-32.2	-0.00222	mg/L	0.000151	-0.00222	mg/L	0.000151	6.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	30.5	-0.00006	mg/L	0.000028	-0.00006	mg/L	0.000028	50.07%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	90.9	0.00063	mg/L	0.000250	0.00063	mg/L	0.000250	39.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	0.3	0.0451	mg/L	0.00957	0.0451	mg/L	0.00957	21.24%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-9.0	-0.00009	mg/L	0.000213	-0.00009	mg/L	0.000213	225.64%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-4.8	-0.00043	mg/L	0.000214	-0.00043	mg/L	0.000214	50.03%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.2	-0.00113	mg/L	0.000065	-0.00113	mg/L	0.000065	5.76%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-74.9	-0.00130	mg/L	0.000256	-0.00130	mg/L	0.000256	19.65%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	3.4	0.00179	mg/L	0.000051	0.00179	mg/L	0.000051	2.88%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	12.5	0.0145	mg/L	0.00430	0.0145	mg/L	0.00430	29.74%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	15.5	-0.00209	mg/L	0.000013	-0.00209	mg/L	0.000013	0.61%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-3.6	-0.00139	mg/L	0.000345	-0.00139	mg/L	0.000345	24.79%

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QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† -2.8 -0.00188 mg/L 0.000128 -0.00188 mg/L 0.000128 6.81%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 0.6 0.00021 mg/L 0.000757 0.00021 mg/L 0.000757 358.61%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† -2.1 -0.00100 mg/L 0.000334 -0.00100 mg/L 0.000334 33.28%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 0.6 0.00770 mg/L 0.004017 0.00770 mg/L 0.004017 52.16%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† -57.7 -0.0233 mg/L 0.00087 -0.0233 mg/L 0.00087 3.74%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† 4.3 -0.00113 mg/L 0.000118 -0.00113 mg/L 0.000118 10.44%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -22.5 -0.00073 mg/L 0.000087 -0.00073 mg/L 0.000087 11.93%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -0.2 -0.00167 mg/L 0.002141 -0.00167 mg/L 0.002141 128.01%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -747.4 -0.00638 mg/L 0.001654 -0.00638 mg/L 0.001654 25.91%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 6.9 -0.00329 mg/L 0.000181 -0.00329 mg/L 0.000181 5.49%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 65.9 -0.106 mg/L 0.0183 -0.106 mg/L 0.0183 17.36%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 21.6 -0.0146 mg/L 0.00327 -0.0146 mg/L 0.00327 22.40%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -70.8 0.00208 mg/L 0.000025 0.00208 mg/L 0.000025 1.22%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 1.0 -0.00446 mg/L 0.000617 -0.00446 mg/L 0.000617 13.85%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 25 **Autosampler Location: 81**
Sample ID: L1204081605 **Date Collected: 4/27/2012 6:24:17 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204081605

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204081605

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1899223.5						52585.10	2.77%
YRADIAL	223669.8						3381.36	1.51%
Ga 417.206	1108536.6						26362.70	2.38%
GaRADIAL	67541.4						668.01	0.99%
Ag 328.068†	-83.8	-0.00110	mg/L	0.000318	-0.00110	mg/L	0.000318	28.91%
Al 396.153†	64.7	-0.01000	mg/L	0.002472	-0.01000	mg/L	0.002472	24.73%
As 188.979†	-1.7	-0.00083	mg/L	0.001404	-0.00083	mg/L	0.001404	169.97%
Ba 233.527†	15.6	-0.00186	mg/L	0.000132	-0.00186	mg/L	0.000132	7.08%
Be 234.861†	60.8	-0.00003	mg/L	0.000067	-0.00003	mg/L	0.000067	217.86%
B 249.677†	48.0	0.00001	mg/L	0.000042	0.00001	mg/L	0.000042	465.40%
Ca 227.546†	96.4	0.317	mg/L	0.0155	0.317	mg/L	0.0155	4.90%
Cd 228.802†	-11.0	-0.00014	mg/L	0.000236	-0.00014	mg/L	0.000236	167.12%
Co 228.616†	-1.8	-0.00034	mg/L	0.000075	-0.00034	mg/L	0.000075	22.41%
Cr 267.716†	14.0	-0.00095	mg/L	0.000189	-0.00095	mg/L	0.000189	19.89%
Cu 327.393†	81.9	-0.00050	mg/L	0.000562	-0.00050	mg/L	0.000562	111.85%
Fe 239.562†	205.4	0.0172	mg/L	0.00044	0.0172	mg/L	0.00044	2.53%
Mg 279.077†	33.9	0.0220	mg/L	0.00320	0.0220	mg/L	0.00320	14.51%
Mn 257.610†	1063.6	-0.00055	mg/L	0.000091	-0.00055	mg/L	0.000091	16.60%
Mo 202.031†	-4.7	-0.00143	mg/L	0.000083	-0.00143	mg/L	0.000083	5.83%
Ni 231.604†	-7.0	-0.00195	mg/L	0.000189	-0.00195	mg/L	0.000189	9.68%
Pb 220.353†	1.5	0.00031	mg/L	0.000790	0.00031	mg/L	0.000790	253.85%
Sb 206.836†	1.4	0.00003	mg/L	0.000928	0.00003	mg/L	0.000928	>999.9%
Se 196.026†	-4.7	0.00414	mg/L	0.001288	0.00414	mg/L	0.001288	31.10%
Si 251.611†	655.7	-0.00191	mg/L	0.000729	-0.00191	mg/L	0.000729	38.29%
Sn 189.927†	-0.7	-0.00171	mg/L	0.000402	-0.00171	mg/L	0.000402	23.54%

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Ti 334.940†	67.1	-0.00057	mg/L	0.000130	-0.00057	mg/L	0.000130	22.79%
Tl 190.801†	-11.7	-0.00524	mg/L	0.002949	-0.00524	mg/L	0.002949	56.26%
V 290.880†	-670.9	-0.00590	mg/L	0.001811	-0.00590	mg/L	0.001811	30.68%
Zn 206.200†	216.2	0.00202	mg/L	0.000393	0.00202	mg/L	0.000393	19.39%
K 766.490†	123.0	-0.0796	mg/L	0.02670	-0.0796	mg/L	0.02670	33.57%
Na 589.592†	476.0	0.0193	mg/L	0.00524	0.0193	mg/L	0.00524	27.18%
Sr 407.771†	2165.1	0.00330	mg/L	0.000039	0.00330	mg/L	0.000039	1.18%
Li 670.784†	4.6	-0.00442	mg/L	0.000287	-0.00442	mg/L	0.000287	6.48%

Sequence No.: 26 **Autosampler Location: 82**
Sample ID: L1204084401 WG396210-01 **Date Collected: 4/27/2012 6:31:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084401 WG396210-01

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1204084401 WG396210-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1841936.3						16781.63	0.91%
YRADIAL	212137.2						1405.44	0.66%
Ga 417.206	1075315.5						16109.01	1.50%
GaRADIAL	65449.9						384.45	0.59%
Ag 328.068†	-349.2	0.00173	mg/L	0.000317	0.00173	mg/L	0.000317	18.32%
Al 396.153†	-64.4	-0.0342	mg/L	0.00188	-0.0342	mg/L	0.00188	5.51%
As 188.979†	-11.6	-0.00411	mg/L	0.003965	-0.00411	mg/L	0.003965	96.59%
Ba 233.527†	18405.0	0.137	mg/L	0.0007	0.137	mg/L	0.0007	0.50%
Be 234.861†	2201.6	-0.00005	mg/L	0.000083	-0.00005	mg/L	0.000083	174.88%
B 249.677†	6604.7	0.0905	mg/L	0.00125	0.0905	mg/L	0.00125	1.39%
Ca 227.546†	47638.8	135	mg/L	2.5	135	mg/L	2.5	1.83%
Cd 228.802†	114.6	0.00241	mg/L	0.000341	0.00241	mg/L	0.000341	14.15%
Co 228.616†	11.1	-0.00017	mg/L	0.000184	-0.00017	mg/L	0.000184	108.29%
Cr 267.716†	75.9	0.00006	mg/L	0.000264	0.00006	mg/L	0.000264	463.71%
Cu 327.393†	234.3	0.00102	mg/L	0.000399	0.00102	mg/L	0.000399	39.23%
Fe 239.562†	118502.5	9.06	mg/L	0.049	9.06	mg/L	0.049	0.54%
Mg 279.077†	77834.7	27.6	mg/L	0.14	27.6	mg/L	0.14	0.52%
Mn 257.610†	177572.8	0.260	mg/L	0.0031	0.260	mg/L	0.0031	1.18%
Mo 202.031†	42.9	0.00064	mg/L	0.000059	0.00064	mg/L	0.000059	9.27%
Ni 231.604†	154.8	0.00091	mg/L	0.000487	0.00091	mg/L	0.000487	53.43%
Pb 220.353†	-4.0	-0.00014	mg/L	0.003470	-0.00014	mg/L	0.003470	>999.9%
Sb 206.836†	-2.9	-0.00091	mg/L	0.001968	-0.00091	mg/L	0.001968	215.25%
Se 196.026†	-1.6	0.00887	mg/L	0.006604	0.00887	mg/L	0.006604	74.44%
Si 251.611†	204924.6	6.12	mg/L	0.051	6.12	mg/L	0.051	0.83%
Sn 189.927†	-285.3	-0.0346	mg/L	0.00142	-0.0346	mg/L	0.00142	4.12%
Ti 334.940†	-15929.4	-0.00100	mg/L	0.001482	-0.00100	mg/L	0.001482	147.72%
Tl 190.801†	-33.6	-0.0125	mg/L	0.00172	-0.0125	mg/L	0.00172	13.71%
V 290.880†	258.0	-0.00153	mg/L	0.000975	-0.00153	mg/L	0.000975	63.72%
Zn 206.200†	3211.4	0.0780	mg/L	0.00049	0.0780	mg/L	0.00049	0.62%
K 766.490†	10136.6	4.43	mg/L	0.025	4.43	mg/L	0.025	0.57%
Na 589.592†	876906.9	64.3	mg/L	0.48	64.3	mg/L	0.48	0.75%
Sr 407.771†	1200525.7	0.654	mg/L	0.0031	0.654	mg/L	0.0031	0.47%
Li 670.784†	3018.0	0.0258	mg/L	0.00023	0.0258	mg/L	0.00023	0.91%

Sequence No.: 27 **Autosampler Location: 83**
Sample ID: L1204084401S WG396210-04 **Date Collected: 4/27/2012 6:37:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084401S WG396210-04

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Approved: April 30, 2012

Mean Data: L1204084401S WG396210-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1820450.1						12902.43	0.71%
YRADIAL	217516.5						3666.46	1.69%
Ga 417.206	1055289.4						20621.70	1.95%
GaRADIAL	66061.6						590.78	0.89%
Ag 328.068†	49325.4	0.195	mg/L	0.0047	0.195	mg/L	0.0047	2.40%
Al 396.153†	25491.2	4.91	mg/L	0.010	4.91	mg/L	0.010	0.20%
As 188.979†	442.6	0.189	mg/L	0.0034	0.189	mg/L	0.0034	1.79%
Ba 233.527†	86955.9	0.654	mg/L	0.0027	0.654	mg/L	0.0027	0.42%
Be 234.861†	28578.5	0.0241	mg/L	0.00045	0.0241	mg/L	0.00045	1.88%
B 249.677†	74747.4	1.07	mg/L	0.019	1.07	mg/L	0.019	1.81%
Ca 227.546†	52444.4	148	mg/L	3.5	148	mg/L	3.5	2.34%
Cd 228.802†	1271.0	0.0251	mg/L	0.00123	0.0251	mg/L	0.00123	4.89%
Co 228.616†	3183.3	0.0982	mg/L	0.00072	0.0982	mg/L	0.00072	0.73%
Cr 267.716†	22632.0	0.252	mg/L	0.0013	0.252	mg/L	0.0013	0.52%
Cu 327.393†	47764.5	0.244	mg/L	0.0041	0.244	mg/L	0.0041	1.70%
Fe 239.562†	143720.2	11.0	mg/L	0.05	11.0	mg/L	0.05	0.44%
Mg 279.077†	92222.5	32.7	mg/L	0.18	32.7	mg/L	0.18	0.54%
Mn 257.610†	360337.7	0.529	mg/L	0.0055	0.529	mg/L	0.0055	1.04%
Mo 202.031†	15545.4	0.510	mg/L	0.0027	0.510	mg/L	0.0027	0.53%
Ni 231.604†	14668.5	0.258	mg/L	0.0024	0.258	mg/L	0.0024	0.93%
Pb 220.353†	2383.2	0.252	mg/L	0.0040	0.252	mg/L	0.0040	1.58%
Sb 206.836†	1955.1	0.568	mg/L	0.0174	0.568	mg/L	0.0174	3.07%
Se 196.026†	281.1	0.200	mg/L	0.0039	0.200	mg/L	0.0039	1.94%
Si 251.611†	302468.5	9.04	mg/L	0.090	9.04	mg/L	0.090	0.99%
Sn 189.927†	4550.0	0.524	mg/L	0.0065	0.524	mg/L	0.0065	1.23%
Ti 334.940†	366290.7	0.492	mg/L	0.0007	0.492	mg/L	0.0007	0.15%
Tl 190.801†	766.9	0.243	mg/L	0.0052	0.243	mg/L	0.0052	2.12%
V 290.880†	81258.8	0.508	mg/L	0.0045	0.508	mg/L	0.0045	0.88%
Zn 206.200†	22987.7	0.583	mg/L	0.0021	0.583	mg/L	0.0021	0.35%
K 766.490†	65612.2	29.8	mg/L	0.10	29.8	mg/L	0.10	0.35%
Na 589.592†	1241681.5	90.5	mg/L	1.68	90.5	mg/L	1.68	1.85%
Sr 407.771†	2112534.1	1.15	mg/L	0.035	1.15	mg/L	0.035	3.03%
Li 670.784†	52027.8	0.517	mg/L	0.0024	0.517	mg/L	0.0024	0.46%

Sequence No.: 28 **Autosampler Location: 84**
Sample ID: L1204084401SD WG396210-05 **Date Collected: 4/27/2012 6:43:13 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084401SD WG396210-05

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204084401SD WG396210-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1837602.4						8066.91	0.44%
YRADIAL	219664.2						2685.54	1.22%
Ga 417.206	1066630.3						34911.04	3.27%
GaRADIAL	66720.4						1025.49	1.54%
Ag 328.068†	48275.7	0.190	mg/L	0.0084	0.190	mg/L	0.0084	4.43%
Al 396.153†	25013.4	4.82	mg/L	0.014	4.82	mg/L	0.014	0.28%
As 188.979†	427.5	0.182	mg/L	0.0055	0.182	mg/L	0.0055	3.04%
Ba 233.527†	84055.2	0.632	mg/L	0.0066	0.632	mg/L	0.0066	1.04%
Be 234.861†	27671.7	0.0233	mg/L	0.00101	0.0233	mg/L	0.00101	4.34%
B 249.677†	72697.7	1.04	mg/L	0.049	1.04	mg/L	0.049	4.69%
Ca 227.546†	50391.8	143	mg/L	7.0	143	mg/L	7.0	4.93%
Cd 228.802†	1247.8	0.0247	mg/L	0.00136	0.0247	mg/L	0.00136	5.49%
Co 228.616†	3106.8	0.0958	mg/L	0.00076	0.0958	mg/L	0.00076	0.80%
Cr 267.716†	22040.5	0.246	mg/L	0.0022	0.246	mg/L	0.0022	0.91%
Cu 327.393†	46325.5	0.237	mg/L	0.0098	0.237	mg/L	0.0098	4.15%
Fe 239.562†	139154.2	10.6	mg/L	0.04	10.6	mg/L	0.04	0.34%
Mg 279.077†	89327.8	31.7	mg/L	0.11	31.7	mg/L	0.11	0.34%
Mn 257.610†	348478.4	0.512	mg/L	0.0025	0.512	mg/L	0.0025	0.50%
Mo 202.031†	15283.1	0.501	mg/L	0.0039	0.501	mg/L	0.0039	0.77%

Approved: April 30, 2012

Ni 231.604†	14325.0	0.251	mg/L	0.0014	0.251	mg/L	0.0014	0.56%
Pb 220.353†	2341.4	0.247	mg/L	0.0011	0.247	mg/L	0.0011	0.43%
Sb 206.836†	1912.0	0.555	mg/L	0.0186	0.555	mg/L	0.0186	3.34%
Se 196.026†	275.0	0.196	mg/L	0.0083	0.196	mg/L	0.0083	4.25%
Si 251.611†	291244.6	8.71	mg/L	0.306	8.71	mg/L	0.306	3.51%
Sn 189.927†	4425.1	0.509	mg/L	0.0047	0.509	mg/L	0.0047	0.92%
Ti 334.940†	358523.7	0.481	mg/L	0.0017	0.481	mg/L	0.0017	0.35%
Tl 190.801†	742.7	0.236	mg/L	0.0022	0.236	mg/L	0.0022	0.93%
V 290.880†	78792.1	0.492	mg/L	0.0091	0.492	mg/L	0.0091	1.85%
Zn 206.200†	22190.5	0.562	mg/L	0.0023	0.562	mg/L	0.0023	0.40%
K 766.490†	64367.3	29.2	mg/L	0.02	29.2	mg/L	0.02	0.09%
Na 589.592†	1199226.4	87.5	mg/L	2.62	87.5	mg/L	2.62	3.00%
Sr 407.771†	2030557.8	1.11	mg/L	0.039	1.11	mg/L	0.039	3.53%
Li 670.784†	51141.2	0.508	mg/L	0.0018	0.508	mg/L	0.0018	0.35%

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Sequence No.: 29 **Autosampler Location: 85**
Sample ID: L1204084402 **Date Collected: 4/27/2012 6:49:12 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084402

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204084402

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1877963.8						46366.86	2.47%
YRADIAL	223480.0						3009.48	1.35%
Ga 417.206	1087919.3						11687.61	1.07%
GaRADIAL	67926.4						714.57	1.05%
Ag 328.068†	-156.8	0.00237	mg/L	0.000209	0.00237	mg/L	0.000209	8.81%
Al 396.153†	-74.2	-0.0361	mg/L	0.00654	-0.0361	mg/L	0.00654	18.13%
As 188.979†	-9.7	-0.00330	mg/L	0.000759	-0.00330	mg/L	0.000759	23.05%
Ba 233.527†	18648.7	0.138	mg/L	0.0038	0.138	mg/L	0.0038	2.78%
Be 234.861†	2198.3	0.00000	mg/L	0.000121	0.00000	mg/L	0.000121	>999.9%
B 249.677†	6932.0	0.0953	mg/L	0.00242	0.0953	mg/L	0.00242	2.54%
Ca 227.546†	48368.0	137	mg/L	1.9	137	mg/L	1.9	1.42%
Cd 228.802†	32.1	0.00073	mg/L	0.000355	0.00073	mg/L	0.000355	48.47%
Co 228.616†	25.7	0.00029	mg/L	0.000455	0.00029	mg/L	0.000455	158.14%
Cr 267.716†	86.0	0.00016	mg/L	0.000179	0.00016	mg/L	0.000179	109.53%
Cu 327.393†	-69.2	-0.00055	mg/L	0.000188	-0.00055	mg/L	0.000188	34.28%
Fe 239.562†	115695.4	8.85	mg/L	0.200	8.85	mg/L	0.200	2.26%
Mg 279.077†	77994.6	27.7	mg/L	0.63	27.7	mg/L	0.63	2.28%
Mn 257.610†	179116.6	0.262	mg/L	0.0079	0.262	mg/L	0.0079	3.03%
Mo 202.031†	34.6	0.00035	mg/L	0.000340	0.00035	mg/L	0.000340	95.97%
Ni 231.604†	175.7	0.00128	mg/L	0.000735	0.00128	mg/L	0.000735	57.45%
Pb 220.353†	17.3	0.00214	mg/L	0.001451	0.00214	mg/L	0.001451	67.84%
Sb 206.836†	-8.1	-0.00242	mg/L	0.002715	-0.00242	mg/L	0.002715	112.33%
Se 196.026†	-3.3	0.00769	mg/L	0.000565	0.00769	mg/L	0.000565	7.35%
Si 251.611†	209367.2	6.26	mg/L	0.113	6.26	mg/L	0.113	1.80%
Sn 189.927†	-271.1	-0.0329	mg/L	0.00049	-0.0329	mg/L	0.00049	1.49%
Ti 334.940†	-15967.1	-0.00074	mg/L	0.001326	-0.00074	mg/L	0.001326	178.43%
Tl 190.801†	-28.1	-0.0108	mg/L	0.00737	-0.0108	mg/L	0.00737	67.90%
V 290.880†	131.3	-0.00231	mg/L	0.001851	-0.00231	mg/L	0.001851	80.09%
Zn 206.200†	3087.5	0.0748	mg/L	0.00169	0.0748	mg/L	0.00169	2.26%
K 766.490†	10297.2	4.50	mg/L	0.130	4.50	mg/L	0.130	2.90%
Na 589.592†	895216.2	65.6	mg/L	0.37	65.6	mg/L	0.37	0.56%
Sr 407.771†	1210371.7	0.659	mg/L	0.0029	0.659	mg/L	0.0029	0.44%
Li 670.784†	3135.9	0.0269	mg/L	0.00094	0.0269	mg/L	0.00094	3.48%

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Sequence No.: 30 **Autosampler Location: 86**
Sample ID: L1204084403 **Date Collected: 4/27/2012 6:55:11 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 30, 2012

Nebulizer Parameters: L1204084403

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204084403

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1844723.4						17575.21	0.95%
YRADIAL	215225.4						6707.70	3.12%
Ga 417.206	1064824.0						35093.75	3.30%
GaRADIAL	65649.1						1756.83	2.68%
Ag 328.068†	-2035.9	0.00158	mg/L	0.000349	0.00158	mg/L	0.000349	22.17%
Al 396.153†	-16.4	-0.0231	mg/L	0.01275	-0.0231	mg/L	0.01275	55.32%
As 188.979†	-11.9	-0.00267	mg/L	0.000303	-0.00267	mg/L	0.000303	11.36%
Ba 233.527†	22243.0	0.165	mg/L	0.0007	0.165	mg/L	0.0007	0.42%
Be 234.861†	5797.8	0.00010	mg/L	0.000137	0.00010	mg/L	0.000137	143.66%
B 249.677†	6140.4	0.0777	mg/L	0.00216	0.0777	mg/L	0.00216	2.78%
Ca 227.546†	47853.4	136	mg/L	6.1	136	mg/L	6.1	4.47%
Cd 228.802†	10.6	0.00027	mg/L	0.000253	0.00027	mg/L	0.000253	92.41%
Co 228.616†	15.1	-0.00043	mg/L	0.000376	-0.00043	mg/L	0.000376	86.63%
Cr 267.716†	37.6	0.00011	mg/L	0.000189	0.00011	mg/L	0.000189	165.93%
Cu 327.393†	-309.2	-0.00055	mg/L	0.000804	-0.00055	mg/L	0.000804	146.10%
Fe 239.562†	305583.0	23.4	mg/L	0.12	23.4	mg/L	0.12	0.50%
Mg 279.077†	70666.4	25.1	mg/L	0.49	25.1	mg/L	0.49	1.97%
Mn 257.610†	295631.0	0.434	mg/L	0.0009	0.434	mg/L	0.0009	0.21%
Mo 202.031†	11.9	0.00036	mg/L	0.000382	0.00036	mg/L	0.000382	106.97%
Ni 231.604†	81.7	-0.00038	mg/L	0.000473	-0.00038	mg/L	0.000473	123.40%
Pb 220.353†	22.0	0.00126	mg/L	0.000491	0.00126	mg/L	0.000491	39.09%
Sb 206.836†	-5.5	-0.00114	mg/L	0.000753	-0.00114	mg/L	0.000753	66.03%
Se 196.026†	-15.1	0.00402	mg/L	0.001557	0.00402	mg/L	0.001557	38.77%
Si 251.611†	273760.4	8.19	mg/L	0.244	8.19	mg/L	0.244	2.97%
Sn 189.927†	-279.2	-0.0339	mg/L	0.00187	-0.0339	mg/L	0.00187	5.51%
Ti 334.940†	-15622.9	-0.00052	mg/L	0.001915	-0.00052	mg/L	0.001915	369.21%
Tl 190.801†	-16.0	-0.00725	mg/L	0.001625	-0.00725	mg/L	0.001625	22.41%
V 290.880†	678.3	-0.00001	mg/L	0.002962	-0.00001	mg/L	0.002962	>999.9%
Zn 206.200†	269.8	0.00295	mg/L	0.000295	0.00295	mg/L	0.000295	10.00%
K 766.490†	9738.3	4.24	mg/L	0.020	4.24	mg/L	0.020	0.47%
Na 589.592†	918532.3	67.3	mg/L	1.42	67.3	mg/L	1.42	2.10%
Sr 407.771†	1057649.6	0.576	mg/L	0.0020	0.576	mg/L	0.0020	0.34%
Li 670.784†	2935.3	0.0249	mg/L	0.00066	0.0249	mg/L	0.00066	2.66%

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Sequence No.: 31 **Autosampler Location: 87**
Sample ID: L1204084404 **Date Collected: 4/27/2012 7:01:10 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084404

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204084404

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1863325.5						41636.24	2.23%
YRADIAL	220540.0						1364.27	0.62%
Ga 417.206	1075254.5						15571.77	1.45%
GaRADIAL	67049.3						276.20	0.41%
Ag 328.068†	-2099.8	0.00130	mg/L	0.000536	0.00130	mg/L	0.000536	41.37%
Al 396.153†	-77.1	-0.0349	mg/L	0.01341	-0.0349	mg/L	0.01341	38.47%
As 188.979†	-13.9	-0.00354	mg/L	0.003674	-0.00354	mg/L	0.003674	103.88%
Ba 233.527†	22688.5	0.168	mg/L	0.0031	0.168	mg/L	0.0031	1.85%
Be 234.861†	5999.1	0.00029	mg/L	0.000127	0.00029	mg/L	0.000127	43.18%
B 249.677†	6070.4	0.0767	mg/L	0.00208	0.0767	mg/L	0.00208	2.72%
Ca 227.546†	47984.7	136	mg/L	4.5	136	mg/L	4.5	3.28%
Cd 228.802†	3.2	0.00013	mg/L	0.000130	0.00013	mg/L	0.000130	100.43%
Co 228.616†	11.7	-0.00054	mg/L	0.000682	-0.00054	mg/L	0.000682	126.95%

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Cr 267.716†	19.3	-0.00009	mg/L	0.000038	-0.00009	mg/L	0.000038 41.36%
Cu 327.393†	-383.3	-0.00093	mg/L	0.000397	-0.00093	mg/L	0.000397 42.44%
Fe 239.562†	304819.4	23.3	mg/L	0.09	23.3	mg/L	0.09 0.39%
Mg 279.077†	69735.2	24.7	mg/L	0.25	24.7	mg/L	0.25 1.03%
Mn 257.610†	300250.5	0.441	mg/L	0.0089	0.441	mg/L	0.0089 2.02%
Mo 202.031†	5.0	0.00013	mg/L	0.000370	0.00013	mg/L	0.000370 292.71%
Ni 231.604†	72.1	-0.00055	mg/L	0.000624	-0.00055	mg/L	0.000624 113.04%
Pb 220.353†	16.7	0.00071	mg/L	0.002620	0.00071	mg/L	0.002620 369.79%
Sb 206.836†	-1.7	-0.00002	mg/L	0.001367	-0.00002	mg/L	0.001367 >999.9%
Se 196.026†	-7.4	0.00918	mg/L	0.003340	0.00918	mg/L	0.003340 36.37%
Si 251.611†	275794.2	8.25	mg/L	0.188	8.25	mg/L	0.188 2.27%
Sn 189.927†	-290.1	-0.0351	mg/L	0.00093	-0.0351	mg/L	0.00093 2.64%
Ti 334.940†	-15759.0	-0.00064	mg/L	0.001892	-0.00064	mg/L	0.001892 296.57%
Tl 190.801†	-25.3	-0.0102	mg/L	0.00262	-0.0102	mg/L	0.00262 25.79%
V 290.880†	389.2	-0.00181	mg/L	0.002258	-0.00181	mg/L	0.002258 124.53%
Zn 206.200†	178.2	0.00062	mg/L	0.000260	0.00062	mg/L	0.000260 42.16%
K 766.490†	9614.2	4.18	mg/L	0.063	4.18	mg/L	0.063 1.51%
Na 589.592†	937589.3	68.7	mg/L	0.35	68.7	mg/L	0.35 0.51%
Sr 407.771†	1083305.9	0.590	mg/L	0.0029	0.590	mg/L	0.0029 0.49%
Li 670.784†	3007.6	0.0257	mg/L	0.00043	0.0257	mg/L	0.00043 1.66%

Sequence No.: 32 **Autosampler Location: 88**
Sample ID: L1204084405 **Date Collected: 4/27/2012 7:07:09 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084405

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084405

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1774020.5						26260.54	1.48%
YRADIAL	215151.1						917.54	0.43%
Ga 417.206	1029926.4						21816.60	2.12%
GaRADIAL	65561.2						491.54	0.75%
Ag 328.068†	466.0	0.00102	mg/L	0.000067	0.00102	mg/L	0.000067	6.61%
Al 396.153†	1850.4	0.338	mg/L	0.0123	0.338	mg/L	0.0123	3.65%
As 188.979†	-5.1	-0.00234	mg/L	0.001759	-0.00234	mg/L	0.001759	75.07%
Ba 233.527†	14457.0	0.107	mg/L	0.0005	0.107	mg/L	0.0005	0.49%
Be 234.861†	203.6	0.00006	mg/L	0.000042	0.00006	mg/L	0.000042	69.89%
B 249.677†	4739.4	0.0674	mg/L	0.00201	0.0674	mg/L	0.00201	2.99%
Ca 227.546†	35833.5	101	mg/L	4.1	101	mg/L	4.1	4.01%
Cd 228.802†	112.4	0.00236	mg/L	0.000354	0.00236	mg/L	0.000354	14.99%
Co 228.616†	14.4	0.00017	mg/L	0.000182	0.00017	mg/L	0.000182	109.02%
Cr 267.716†	295.5	0.00222	mg/L	0.000173	0.00222	mg/L	0.000173	7.77%
Cu 327.393†	544.8	0.00188	mg/L	0.000472	0.00188	mg/L	0.000472	25.14%
Fe 239.562†	2877.4	0.221	mg/L	0.0084	0.221	mg/L	0.0084	3.78%
Mg 279.077†	42503.6	15.1	mg/L	0.31	15.1	mg/L	0.31	2.06%
Mn 257.610†	8594.2	0.0106	mg/L	0.00026	0.0106	mg/L	0.00026	2.46%
Mo 202.031†	234.8	0.00646	mg/L	0.000318	0.00646	mg/L	0.000318	4.93%
Ni 231.604†	239.7	0.00241	mg/L	0.000650	0.00241	mg/L	0.000650	26.92%
Pb 220.353†	-1.7	0.00084	mg/L	0.000415	0.00084	mg/L	0.000415	49.65%
Sb 206.836†	-0.4	-0.00047	mg/L	0.000527	-0.00047	mg/L	0.000527	112.96%
Se 196.026†	10.9	0.0147	mg/L	0.00517	0.0147	mg/L	0.00517	35.07%
Si 251.611†	245750.1	7.35	mg/L	0.217	7.35	mg/L	0.217	2.95%
Sn 189.927†	-268.6	-0.0326	mg/L	0.00141	-0.0326	mg/L	0.00141	4.33%
Ti 334.940†	-8806.7	0.00315	mg/L	0.001510	0.00315	mg/L	0.001510	47.90%
Tl 190.801†	-27.2	-0.0101	mg/L	0.00466	-0.0101	mg/L	0.00466	46.09%
V 290.880†	5503.6	0.0325	mg/L	0.00080	0.0325	mg/L	0.00080	2.44%
Zn 206.200†	1728.4	0.0405	mg/L	0.00066	0.0405	mg/L	0.00066	1.64%
K 766.490†	9889.0	3.88	mg/L	0.145	3.88	mg/L	0.145	3.73%
Na 589.592†	7474541.7	494	mg/L	10.4	494	mg/L	10.4	2.11%
Sr 407.771†	1541623.8	0.840	mg/L	0.0055	0.840	mg/L	0.0055	0.65%
Li 670.784†	2595.7	0.0215	mg/L	0.00061	0.0215	mg/L	0.00061	2.85%

Approved: April 30, 2012

Sequence No.: 33 **Autosampler Location: 89**
Sample ID: L1204084406 **Date Collected: 4/27/2012 7:13:12 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084406

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084406

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1794472.4						15420.69	0.86%
YRADIAL	219761.9						3241.24	1.47%
Ga 417.206	1093002.3						13599.79	1.24%
GaRADIAL	68058.1						1453.69	2.14%
Ag 328.068†	227.6	0.00000	mg/L	0.000250	0.00000	mg/L	0.000250	>999.9%
Al 396.153†	-14.9	-0.0260	mg/L	0.00373	-0.0260	mg/L	0.00373	14.33%
As 188.979†	0.6	0.00012	mg/L	0.001947	0.00012	mg/L	0.001947	>999.9%
Ba 233.527†	14331.0	0.106	mg/L	0.0015	0.106	mg/L	0.0015	1.45%
Be 234.861†	127.3	0.00004	mg/L	0.000020	0.00004	mg/L	0.000020	53.61%
B 249.677†	4353.3	0.0620	mg/L	0.00255	0.0620	mg/L	0.00255	4.12%
Ca 227.546†	34347.0	96.9	mg/L	1.68	96.9	mg/L	1.68	1.73%
Cd 228.802†	83.2	0.00176	mg/L	0.000287	0.00176	mg/L	0.000287	16.37%
Co 228.616†	-5.5	-0.00044	mg/L	0.000087	-0.00044	mg/L	0.000087	20.02%
Cr 267.716†	244.4	0.00165	mg/L	0.000392	0.00165	mg/L	0.000392	23.84%
Cu 327.393†	439.8	0.00132	mg/L	0.000646	0.00132	mg/L	0.000646	49.12%
Fe 239.562†	89.7	0.00809	mg/L	0.000836	0.00809	mg/L	0.000836	10.34%
Mg 279.077†	41164.3	14.6	mg/L	0.21	14.6	mg/L	0.21	1.40%
Mn 257.610†	10107.0	0.0128	mg/L	0.00023	0.0128	mg/L	0.00023	1.78%
Mo 202.031†	219.5	0.00595	mg/L	0.000166	0.00595	mg/L	0.000166	2.79%
Ni 231.604†	162.8	0.00105	mg/L	0.000469	0.00105	mg/L	0.000469	44.57%
Pb 220.353†	33.7	0.00447	mg/L	0.001774	0.00447	mg/L	0.001774	39.65%
Sb 206.836†	-0.2	-0.00044	mg/L	0.001152	-0.00044	mg/L	0.001152	264.33%
Se 196.026†	8.4	0.0129	mg/L	0.00342	0.0129	mg/L	0.00342	26.47%
Si 251.611†	216477.6	6.47	mg/L	0.105	6.47	mg/L	0.105	1.62%
Sn 189.927†	-269.5	-0.0327	mg/L	0.00014	-0.0327	mg/L	0.00014	0.42%
Ti 334.940†	-13343.9	-0.00331	mg/L	0.000413	-0.00331	mg/L	0.000413	12.49%
Tl 190.801†	-27.7	-0.0104	mg/L	0.00545	-0.0104	mg/L	0.00545	52.61%
V 290.880†	4885.5	0.0287	mg/L	0.00178	0.0287	mg/L	0.00178	6.22%
Zn 206.200†	1608.7	0.0374	mg/L	0.00065	0.0374	mg/L	0.00065	1.74%
K 766.490†	9673.6	3.79	mg/L	0.043	3.79	mg/L	0.043	1.14%
Na 589.592†	7334155.4	486	mg/L	13.2	486	mg/L	13.2	2.73%
Sr 407.771†	1553293.4	0.847	mg/L	0.0308	0.847	mg/L	0.0308	3.63%
Li 670.784†	2550.7	0.0211	mg/L	0.00049	0.0211	mg/L	0.00049	2.31%

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Sequence No.: 34 **Autosampler Location: 90**
Sample ID: L1204085702 **Date Collected: 4/27/2012 7:20:12 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204085702

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204085702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1843424.2						14487.21	0.79%
YRADIAL	221737.2						695.34	0.31%
Ga 417.206	1060389.6						14609.74	1.38%
GaRADIAL	65679.6						959.38	1.46%
Ag 328.068†	136.2	0.00035	mg/L	0.000165	0.00035	mg/L	0.000165	47.40%
Al 396.153†	244.0	0.0250	mg/L	0.01135	0.0250	mg/L	0.01135	45.39%
As 188.979†	-4.4	-0.00184	mg/L	0.002505	-0.00184	mg/L	0.002505	135.76%

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Ba 233.527†	6209.0	0.0448	mg/L	0.00011	0.0448	mg/L	0.00011 0.25%
Be 234.861†	645.3	0.00021	mg/L	0.000099	0.00021	mg/L	0.000099 46.21%
B 249.677†	6098.5	0.0865	mg/L	0.00104	0.0865	mg/L	0.00104 1.21%
Ca 227.546†	28548.0	80.6	mg/L	3.80	80.6	mg/L	3.80 4.72%
Cd 228.802†	8.6	0.00026	mg/L	0.000295	0.00026	mg/L	0.000295 113.36%
Co 228.616†	14.8	0.00016	mg/L	0.000242	0.00016	mg/L	0.000242 151.41%
Cr 267.716†	147.5	0.00059	mg/L	0.000054	0.00059	mg/L	0.000054 9.14%
Cu 327.393†	95.6	-0.00034	mg/L	0.000599	-0.00034	mg/L	0.000599 174.51%
Fe 239.562†	17732.7	1.36	mg/L	0.017	1.36	mg/L	0.017 1.29%
Mg 279.077†	72439.1	25.7	mg/L	0.39	25.7	mg/L	0.39 1.52%
Mn 257.610†	32045.2	0.0451	mg/L	0.00054	0.0451	mg/L	0.00054 1.20%
Mo 202.031†	43.6	0.00024	mg/L	0.000124	0.00024	mg/L	0.000124 52.83%
Ni 231.604†	97.9	-0.00010	mg/L	0.000687	-0.00010	mg/L	0.000687 702.31%
Pb 220.353†	4.9	0.00118	mg/L	0.001865	0.00118	mg/L	0.001865 158.34%
Sb 206.836†	-4.9	-0.00178	mg/L	0.000543	-0.00178	mg/L	0.000543 30.54%
Se 196.026†	2.4	0.00929	mg/L	0.001988	0.00929	mg/L	0.001988 21.39%
Si 251.611†	260647.3	7.80	mg/L	0.261	7.80	mg/L	0.261 3.34%
Sn 189.927†	-246.0	-0.0300	mg/L	0.00068	-0.0300	mg/L	0.00068 2.26%
Ti 334.940†	-9535.7	-0.00087	mg/L	0.000829	-0.00087	mg/L	0.000829 95.53%
Tl 190.801†	-17.2	-0.00715	mg/L	0.002460	-0.00715	mg/L	0.002460 34.40%
V 290.880†	266.6	-0.00078	mg/L	0.002727	-0.00078	mg/L	0.002727 347.78%
Zn 206.200†	246.0	0.00277	mg/L	0.000390	0.00277	mg/L	0.000390 14.06%
K 766.490†	1471.5	0.468	mg/L	0.0260	0.468	mg/L	0.0260 5.56%
Na 589.592†	923887.6	67.7	mg/L	1.20	67.7	mg/L	1.20 1.78%
Sr 407.771†	Saturated2						
Li 670.784†	8508.4	0.0807	mg/L	0.00071	0.0807	mg/L	0.00071 0.88%

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Sequence No.: 35 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 7:26:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1833592.5						32283.46	1.76%
YRADIAL	216891.0						1075.18	0.50%
Ga 417.206	1003241.4						31521.62	3.14%
GaRADIAL	65227.0						589.67	0.90%
Ag 328.068†	107847.9	0.418	mg/L	0.0160	0.418	mg/L	0.0160	3.82%
QC value within limits for Ag 328.068 Recovery = 104.48%								
Al 396.153†	51673.3	9.98	mg/L	0.050	9.98	mg/L	0.050	0.50%
QC value within limits for Al 396.153 Recovery = 99.78%								
As 188.979†	963.4	0.409	mg/L	0.0074	0.409	mg/L	0.0074	1.82%
QC value within limits for As 188.979 Recovery = 102.35%								
Ba 233.527†	138660.1	1.04	mg/L	0.034	1.04	mg/L	0.034	3.25%
QC value within limits for Ba 233.527 Recovery = 104.38%								
Be 234.861†	56325.5	0.0514	mg/L	0.00155	0.0514	mg/L	0.00155	3.02%
QC value within limits for Be 234.861 Recovery = 102.77%								
B 249.677†	34573.8	0.493	mg/L	0.0168	0.493	mg/L	0.0168	3.41%
QC value within limits for B 249.677 Recovery = 98.64%								
Ca 227.546†	3544.5	10.5	mg/L	0.30	10.5	mg/L	0.30	2.86%
QC value within limits for Ca 227.546 Recovery = 105.20%								
Cd 228.802†	2584.3	0.0510	mg/L	0.00213	0.0510	mg/L	0.00213	4.17%
QC value within limits for Cd 228.802 Recovery = 101.93%								
Co 228.616†	6769.5	0.210	mg/L	0.0047	0.210	mg/L	0.0047	2.26%
QC value within limits for Co 228.616 Recovery = 104.77%								
Cr 267.716†	46438.4	0.518	mg/L	0.0163	0.518	mg/L	0.0163	3.15%
QC value within limits for Cr 267.716 Recovery = 103.64%								
Cu 327.393†	101263.7	0.517	mg/L	0.0185	0.517	mg/L	0.0185	3.58%
QC value within limits for Cu 327.393 Recovery = 103.33%								
Fe 239.562†	53366.6	4.08	mg/L	0.016	4.08	mg/L	0.016	0.38%
QC value within limits for Fe 239.562 Recovery = 102.02%								
Mg 279.077†	28806.6	10.2	mg/L	0.05	10.2	mg/L	0.05	0.49%

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QC value within limits for Mg 279.077 Recovery = 102.50%
Mn 257.610† 358419.3 0.526 mg/L 0.0195 0.526 mg/L 0.0195 3.70%
QC value within limits for Mn 257.610 Recovery = 105.26%
Mo 202.031† 31570.8 1.04 mg/L 0.035 1.04 mg/L 0.035 3.41%
QC value within limits for Mo 202.031 Recovery = 103.56%
Ni 231.604† 29525.7 0.520 mg/L 0.0215 0.520 mg/L 0.0215 4.14%
QC value within limits for Ni 231.604 Recovery = 104.03%
Pb 220.353† 4941.6 0.521 mg/L 0.0115 0.521 mg/L 0.0115 2.20%
QC value within limits for Pb 220.353 Recovery = 104.23%
Sb 206.836† 4244.3 1.23 mg/L 0.034 1.23 mg/L 0.034 2.76%
QC value within limits for Sb 206.836 Recovery = 102.65%
Se 196.026† 609.4 0.419 mg/L 0.0147 0.419 mg/L 0.0147 3.52%
QC value within limits for Se 196.026 Recovery = 104.71%
Si 251.611† 175198.1 5.22 mg/L 0.186 5.22 mg/L 0.186 3.56%
QC value within limits for Si 251.611 Recovery = 104.43%
Sn 189.927† 9157.7 1.06 mg/L 0.024 1.06 mg/L 0.024 2.23%
QC value within limits for Sn 189.927 Recovery = 105.54%
Ti 334.940† 791055.8 1.02 mg/L 0.002 1.02 mg/L 0.002 0.21%
QC value within limits for Ti 334.940 Recovery = 101.70%
Tl 190.801† 1657.2 0.528 mg/L 0.0052 0.528 mg/L 0.0052 0.99%
QC value within limits for Tl 190.801 Recovery = 105.63%
V 290.880† 163807.9 1.03 mg/L 0.034 1.03 mg/L 0.034 3.31%
QC value within limits for V 290.880 Recovery = 102.84%
Zn 206.200† 41788.8 1.06 mg/L 0.036 1.06 mg/L 0.036 3.39%
QC value within limits for Zn 206.200 Recovery = 106.32%
K 766.490† 112781.9 51.6 mg/L 0.42 51.6 mg/L 0.42 0.82%
QC value within limits for K 766.490 Recovery = 103.14%
Na 589.592† 691590.2 50.9 mg/L 0.68 50.9 mg/L 0.68 1.33%
QC value within limits for Na 589.592 Recovery = 101.81%
Sr 407.771† 1842386.0 1.01 mg/L 0.009 1.01 mg/L 0.009 0.85%
QC value within limits for Sr 407.771 Recovery = 100.63%
Li 670.784† 100029.5 0.997 mg/L 0.0056 0.997 mg/L 0.0056 0.56%
QC value within limits for Li 670.784 Recovery = 99.74%
All analyte(s) passed QC.

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Sequence No.: 36 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/27/2012 7:32:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1908388.2						50285.63	2.63%
YRADIAL	221876.9						6655.31	3.00%
Ga 417.206	1058697.9						35870.76	3.39%
GaRADIAL	66221.7						1840.59	2.78%
Ag 328.068†	-133.7	-0.00130	mg/L	0.000734	-0.00130	mg/L	0.000734	56.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-4.0	-0.0234	mg/L	0.00151	-0.0234	mg/L	0.00151	6.45%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-3.8	-0.00173	mg/L	0.000925	-0.00173	mg/L	0.000925	53.32%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-30.5	-0.00221	mg/L	0.000179	-0.00221	mg/L	0.000179	8.12%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-2.6	-0.00009	mg/L	0.000057	-0.00009	mg/L	0.000057	66.86%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	82.6	0.00052	mg/L	0.000153	0.00052	mg/L	0.000153	29.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-3.7	0.0335	mg/L	0.00693	0.0335	mg/L	0.00693	20.72%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-15.8	-0.00023	mg/L	0.000212	-0.00023	mg/L	0.000212	90.21%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	5.2	-0.00012	mg/L	0.000390	-0.00012	mg/L	0.000390	330.20%

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QC value within limits for Co 228.616 Recovery = Not calculated
Cr 267.716† -12.2 -0.00124 mg/L 0.000132 -0.00124 mg/L 0.000132 10.64%
QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 327.393† 100.3 -0.00041 mg/L 0.000136 -0.00041 mg/L 0.000136 33.04%
QC value within limits for Cu 327.393 Recovery = Not calculated
Fe 239.562† 1.7 0.00165 mg/L 0.000055 0.00165 mg/L 0.000055 3.34%
QC value within limits for Fe 239.562 Recovery = Not calculated
Mg 279.077† 8.2 0.0129 mg/L 0.00273 0.0129 mg/L 0.00273 21.07%
QC value within limits for Mg 279.077 Recovery = Not calculated
Mn 257.610† 11.1 -0.00210 mg/L 0.000017 -0.00210 mg/L 0.000017 0.83%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -6.5 -0.00149 mg/L 0.000257 -0.00149 mg/L 0.000257 17.29%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† -20.6 -0.00220 mg/L 0.000370 -0.00220 mg/L 0.000370 16.84%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 2.3 0.00040 mg/L 0.000771 0.00040 mg/L 0.000771 194.60%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 0.7 -0.00019 mg/L 0.001695 -0.00019 mg/L 0.001695 882.99%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -2.9 0.00534 mg/L 0.000981 0.00534 mg/L 0.000981 18.36%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 66.6 -0.0196 mg/L 0.00093 -0.0196 mg/L 0.00093 4.77%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† 4.4 -0.00113 mg/L 0.001226 -0.00113 mg/L 0.001226 108.92%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† 8.3 -0.00069 mg/L 0.000053 -0.00069 mg/L 0.000053 7.66%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 3.7 -0.00048 mg/L 0.003806 -0.00048 mg/L 0.003806 798.47%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -804.0 -0.00674 mg/L 0.002353 -0.00674 mg/L 0.002353 34.91%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 9.0 -0.00324 mg/L 0.000094 -0.00324 mg/L 0.000094 2.88%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 119.4 -0.0812 mg/L 0.00968 -0.0812 mg/L 0.00968 11.93%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 170.4 -0.00352 mg/L 0.007971 -0.00352 mg/L 0.007971 226.38%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -82.7 0.00208 mg/L 0.000027 0.00208 mg/L 0.000027 1.30%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 67.9 -0.00379 mg/L 0.000257 -0.00379 mg/L 0.000257 6.78%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 37 **Autosampler Location: 91**
Sample ID: L1204086301 **Date Collected: 4/27/2012 7:39:05 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204086301

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204086301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1879273.6						12873.31	0.69%
YRADIAL	219236.7						7034.08	3.21%
Ga 417.206	1070355.3						24366.61	2.28%
GaRADIAL	65364.5						1898.06	2.90%
Ag 328.068†	38.0	-0.00023	mg/L	0.000245	-0.00023	mg/L	0.000245	107.51%
Al 396.153†	2324.9	0.420	mg/L	0.0055	0.420	mg/L	0.0055	1.30%
As 188.979†	-10.3	-0.00530	mg/L	0.003210	-0.00530	mg/L	0.003210	60.56%
Ba 233.527†	4863.3	0.0348	mg/L	0.00028	0.0348	mg/L	0.00028	0.80%
Be 234.861†	394.9	0.00012	mg/L	0.000044	0.00012	mg/L	0.000044	36.27%
B 249.677†	5833.3	0.0830	mg/L	0.00230	0.0830	mg/L	0.00230	2.77%
Ca 227.546†	12586.6	35.6	mg/L	1.17	35.6	mg/L	1.17	3.29%
Cd 228.802†	6.2	0.00022	mg/L	0.000359	0.00022	mg/L	0.000359	165.53%
Co 228.616†	9.7	0.00028	mg/L	0.000398	0.00028	mg/L	0.000398	140.74%

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Cr 267.716†	198.3	0.00112 mg/L	0.000138	0.00112 mg/L	0.000138	12.36%
Cu 327.393†	354.6	0.00099 mg/L	0.000610	0.00099 mg/L	0.000610	61.91%
Fe 239.562†	13133.1	1.01 mg/L	0.044	1.01 mg/L	0.044	4.33%
Mg 279.077†	33200.2	11.8 mg/L	0.48	11.8 mg/L	0.48	4.05%
Mn 257.610†	25840.7	0.0360 mg/L	0.00047	0.0360 mg/L	0.00047	1.31%
Mo 202.031†	4901.1	0.160 mg/L	0.0017	0.160 mg/L	0.0017	1.05%
Ni 231.604†	239.9	0.00241 mg/L	0.000446	0.00241 mg/L	0.000446	18.49%
Pb 220.353†	-13.9	-0.00097 mg/L	0.001242	-0.00097 mg/L	0.001242	128.04%
Sb 206.836†	-5.2	-0.00164 mg/L	0.002220	-0.00164 mg/L	0.002220	135.52%
Se 196.026†	1.6	0.00867 mg/L	0.002270	0.00867 mg/L	0.002270	26.19%
Si 251.611†	42876.6	1.26 mg/L	0.018	1.26 mg/L	0.018	1.40%
Sn 189.927†	-170.7	-0.0213 mg/L	0.00050	-0.0213 mg/L	0.00050	2.34%
Ti 334.940†	-3326.8	0.00035 mg/L	0.000489	0.00035 mg/L	0.000489	137.98%
Tl 190.801†	-6.8	-0.00378 mg/L	0.002102	-0.00378 mg/L	0.002102	55.68%
V 290.880†	58.1	-0.00173 mg/L	0.002602	-0.00173 mg/L	0.002602	150.21%
Zn 206.200†	4470.2	0.110 mg/L	0.0010	0.110 mg/L	0.0010	0.94%
K 766.490†	4331.4	1.81 mg/L	0.032	1.81 mg/L	0.032	1.78%
Na 589.592†	417470.4	30.9 mg/L	1.29	30.9 mg/L	1.29	4.18%
Sr 407.771†	358065.5	0.197 mg/L	0.0011	0.197 mg/L	0.0011	0.55%
Li 670.784†	725.5	0.00280 mg/L	0.000595	0.00280 mg/L	0.000595	21.26%

Sequence No.: 38 **Autosampler Location: 92**
Sample ID: L1204084405 0.01 **Date Collected: 4/27/2012 7:45:04 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204084405 0.01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084405 0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1899837.1						41618.78	2.19%
YRADIAL	225747.2						7370.33	3.26%
Ga 417.206	1062892.9						26476.56	2.49%
GaRADIAL	67054.1						688.44	1.03%
Ag 328.068†	-209.3	-0.00159	mg/L	0.000020	-0.00159	mg/L	0.000020	1.24%
Al 396.153†	12.5	-0.0202	mg/L	0.00022	-0.0202	mg/L	0.00022	1.11%
As 188.979†	1.5	0.00053	mg/L	0.000267	0.00053	mg/L	0.000267	50.41%
Ba 233.527†	115.8	-0.00110	mg/L	0.000141	-0.00110	mg/L	0.000141	12.75%
Be 234.861†	11.7	-0.00007	mg/L	0.000042	-0.00007	mg/L	0.000042	57.81%
B 249.677†	39.0	-0.00011	mg/L	0.000317	-0.00011	mg/L	0.000317	287.53%
Ca 227.546†	330.8	0.977	mg/L	0.0326	0.977	mg/L	0.0326	3.34%
Cd 228.802†	-22.1	-0.00037	mg/L	0.000157	-0.00037	mg/L	0.000157	41.95%
Co 228.616†	0.8	-0.00025	mg/L	0.000028	-0.00025	mg/L	0.000028	10.87%
Cr 267.716†	-5.8	-0.00117	mg/L	0.000126	-0.00117	mg/L	0.000126	10.73%
Cu 327.393†	-67.6	-0.00127	mg/L	0.000102	-0.00127	mg/L	0.000102	8.08%
Fe 239.562†	31.4	0.00393	mg/L	0.000405	0.00393	mg/L	0.000405	10.32%
Mg 279.077†	414.6	0.157	mg/L	0.0055	0.157	mg/L	0.0055	3.51%
Mn 257.610†	100.0	-0.00197	mg/L	0.000009	-0.00197	mg/L	0.000009	0.46%
Mo 202.031†	-8.7	-0.00156	mg/L	0.000410	-0.00156	mg/L	0.000410	26.30%
Ni 231.604†	-15.2	-0.00210	mg/L	0.000191	-0.00210	mg/L	0.000191	9.11%
Pb 220.353†	-5.0	-0.00036	mg/L	0.001110	-0.00036	mg/L	0.001110	305.95%
Sb 206.836†	2.4	0.00031	mg/L	0.000868	0.00031	mg/L	0.000868	281.80%
Se 196.026†	0.7	0.00779	mg/L	0.006194	0.00779	mg/L	0.006194	79.54%
Si 251.611†	2630.9	0.0573	mg/L	0.00291	0.0573	mg/L	0.00291	5.08%
Sn 189.927†	-10.8	-0.00288	mg/L	0.000537	-0.00288	mg/L	0.000537	18.67%
Ti 334.940†	-107.7	-0.00070	mg/L	0.000136	-0.00070	mg/L	0.000136	19.57%
Tl 190.801†	-1.1	-0.00195	mg/L	0.003207	-0.00195	mg/L	0.003207	164.58%
V 290.880†	-647.2	-0.00576	mg/L	0.000619	-0.00576	mg/L	0.000619	10.76%
Zn 206.200†	145.8	0.00024	mg/L	0.000379	0.00024	mg/L	0.000379	161.22%
K 766.490†	183.8	-0.0576	mg/L	0.01530	-0.0576	mg/L	0.01530	26.58%
Na 589.592†	76915.7	5.71	mg/L	0.100	5.71	mg/L	0.100	1.74%
Sr 407.771†	15626.2	0.0106	mg/L	0.00030	0.0106	mg/L	0.00030	2.82%
Li 670.784†	9.3	-0.00438	mg/L	0.000322	-0.00438	mg/L	0.000322	7.36%

Approved: April 30, 2012

Sequence No.: 39 Autosampler Location: 93
Sample ID: L1204084406 0.01 Date Collected: 4/27/2012 7:51:59 PM
Analyst: KHR Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1204084406 0.01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204084406 0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1883133.5						29817.54	1.58%
YRADIAL	214481.0						2163.99	1.01%
Ga 417.206	1064387.4						16331.35	1.53%
GaRADIAL	64348.8						1980.24	3.08%
Ag 328.068†	-216.2	-0.00161	mg/L	0.000120	-0.00161	mg/L	0.000120	7.41%
Al 396.153†	3.7	-0.0219	mg/L	0.00283	-0.0219	mg/L	0.00283	12.94%
As 188.979†	-2.4	-0.00115	mg/L	0.001811	-0.00115	mg/L	0.001811	157.17%
Ba 233.527†	110.3	-0.00114	mg/L	0.000151	-0.00114	mg/L	0.000151	13.19%
Be 234.861†	26.5	-0.00006	mg/L	0.000009	-0.00006	mg/L	0.000009	15.81%
B 249.677†	28.2	-0.00027	mg/L	0.000208	-0.00027	mg/L	0.000208	78.10%
Ca 227.546†	335.3	0.990	mg/L	0.0471	0.990	mg/L	0.0471	4.76%
Cd 228.802†	-18.6	-0.00029	mg/L	0.000239	-0.00029	mg/L	0.000239	81.38%
Co 228.616†	0.1	-0.00028	mg/L	0.000211	-0.00028	mg/L	0.000211	76.03%
Cr 267.716†	-13.1	-0.00125	mg/L	0.000155	-0.00125	mg/L	0.000155	12.43%
Cu 327.393†	14.8	-0.00084	mg/L	0.000235	-0.00084	mg/L	0.000235	27.87%
Fe 239.562†	4.4	0.00186	mg/L	0.000291	0.00186	mg/L	0.000291	15.66%
Mg 279.077†	462.6	0.174	mg/L	0.0003	0.174	mg/L	0.0003	0.19%
Mn 257.610†	133.7	-0.00192	mg/L	0.000015	-0.00192	mg/L	0.000015	0.79%
Mo 202.031†	1.9	-0.00121	mg/L	0.000151	-0.00121	mg/L	0.000151	12.50%
Ni 231.604†	-6.5	-0.00194	mg/L	0.000522	-0.00194	mg/L	0.000522	26.83%
Pb 220.353†	-0.6	0.00009	mg/L	0.000661	0.00009	mg/L	0.000661	701.67%
Sb 206.836†	1.1	-0.00007	mg/L	0.000774	-0.00007	mg/L	0.000774	>999.9%
Se 196.026†	0.7	0.00776	mg/L	0.005653	0.00776	mg/L	0.005653	72.82%
Si 251.611†	2404.1	0.0505	mg/L	0.00182	0.0505	mg/L	0.00182	3.59%
Sn 189.927†	-11.4	-0.00295	mg/L	0.000250	-0.00295	mg/L	0.000250	8.48%
Ti 334.940†	-128.2	-0.00072	mg/L	0.000100	-0.00072	mg/L	0.000100	13.88%
Tl 190.801†	-2.9	-0.00250	mg/L	0.001626	-0.00250	mg/L	0.001626	65.01%
V 290.880†	-364.2	-0.00398	mg/L	0.001649	-0.00398	mg/L	0.001649	41.48%
Zn 206.200†	175.5	0.00099	mg/L	0.000250	0.00099	mg/L	0.000250	25.22%
K 766.490†	208.6	-0.0466	mg/L	0.00748	-0.0466	mg/L	0.00748	16.04%
Na 589.592†	81629.2	6.06	mg/L	0.110	6.06	mg/L	0.110	1.82%
Sr 407.771†	16543.2	0.0111	mg/L	0.00015	0.0111	mg/L	0.00015	1.34%
Li 670.784†	43.0	-0.00404	mg/L	0.000641	-0.00404	mg/L	0.000641	15.87%

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Sequence No.: 40 Autosampler Location: 12
Sample ID: ICSA Date Collected: 4/27/2012 7:58:56 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1734912.8						19635.51	1.13%
YRADIAL	214255.4						3024.51	1.41%
Ga 417.206	995927.6						14837.99	1.49%
GaRADIAL	65007.0						541.31	0.83%
Ag 328.068†	-10699.3	0.00013	mg/L	0.000854	0.00013	mg/L	0.000854	673.88%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1278338.2	249	mg/L	5.6	249	mg/L	5.6	2.23%

Approved: April 30, 2012

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   QC value within limits for Al 396.153  Recovery = 99.66%
As 188.979†            -20.7    -0.00267 mg/L      0.005777    -0.00267 mg/L      0.005777 216.17%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†            580.6     0.00002 mg/L      0.000320     0.00002 mg/L      0.000320 >999.9%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†          22055.5    -0.00092 mg/L      0.000384    -0.00092 mg/L      0.000384  41.72%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†            3494.5     0.00882 mg/L      0.004356     0.00882 mg/L      0.004356  49.39%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†          91763.3         261 mg/L           7.6         261 mg/L           7.6   2.93%
   QC value within limits for Ca 227.546  Recovery = 104.48%
Cd 228.802†            -2.2    -0.00010 mg/L      0.000138    -0.00010 mg/L      0.000138 138.10%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†            20.3    -0.00206 mg/L      0.000399    -0.00206 mg/L      0.000399  19.38%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            84.7    -0.00153 mg/L      0.000216    -0.00153 mg/L      0.000216  14.11%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†          -1172.6     0.00107 mg/L      0.000258     0.00107 mg/L      0.000258  24.12%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†         1241529.4        94.9 mg/L          2.23        94.9 mg/L          2.23   2.34%
   QC value within limits for Fe 239.562  Recovery = 94.91%
Mg 279.077†          715217.9         254 mg/L           6.3         254 mg/L           6.3   2.49%
   QC value within limits for Mg 279.077  Recovery = 101.52%
Mn 257.610†          -1984.4    -0.00237 mg/L      0.000407    -0.00237 mg/L      0.000407  17.16%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -62.1     0.00135 mg/L      0.000522     0.00135 mg/L      0.000522  38.78%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†            51.8    -0.00091 mg/L      0.000473    -0.00091 mg/L      0.000473  51.98%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†          -342.7     0.00482 mg/L      0.003761     0.00482 mg/L      0.003761  78.06%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†            -20.5    -0.00286 mg/L      0.003128    -0.00286 mg/L      0.003128 109.47%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -31.3      0.0115 mg/L       0.00195      0.0115 mg/L       0.00195  16.87%
   QC value greater than the upper limit for Se 196.026  Recovery = Not calculated
Si 251.611†           1238.1      0.0156 mg/L       0.00092      0.0156 mg/L       0.00092   5.87%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†          -349.4     -0.0420 mg/L       0.00016     -0.0420 mg/L       0.00016   0.37%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†         -29130.2     0.00071 mg/L      0.003145     0.00071 mg/L      0.003145 443.69%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†            -36.9    -0.00677 mg/L      0.004062    -0.00677 mg/L      0.004062  60.04%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†            2524.2    -0.00027 mg/L      0.000112    -0.00027 mg/L      0.000112  42.01%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†            220.0     0.00032 mg/L      0.000193     0.00032 mg/L      0.000193  60.42%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              28.0      -0.123 mg/L        0.0130      -0.123 mg/L        0.0130  10.56%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†            137.5    -0.00598 mg/L      0.002194    -0.00598 mg/L      0.002194  36.72%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†           1748.1    -0.00262 mg/L      0.000189    -0.00262 mg/L      0.000189   7.23%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†            154.4    -0.00292 mg/L      0.000705    -0.00292 mg/L      0.000705  24.12%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

================================================================================================
Sequence No.: 41                                  Autosampler Location: 13
Sample ID: ICSAB                                  Date Collected: 4/27/2012 8:04:52 PM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

------------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSAB
Analyte                Back Pressure    Flow
All                  149.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------------
Mean Data: ICSAB
                  Mean Corrected         Calib.                        Sample
```

Approved: April 30, 2012

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	1762123.9				32812.50	1.86%
YRADIAL	216793.5				4342.90	2.00%
Ga 417.206	1006052.1				11808.71	1.17%
GaRADIAL	65298.9				1053.57	1.61%
Ag 328.068†	113769.1	0.479 mg/L	0.0097	0.479 mg/L	0.0097	2.03%
QC value within limits for Ag 328.068 Recovery = 95.70%						
Al 396.153†	1256131.3	245 mg/L	7.2	245 mg/L	7.2	2.96%
QC value within limits for Al 396.153 Recovery = 97.93%						
As 188.979†	502.8	0.222 mg/L	0.0052	0.222 mg/L	0.0052	2.35%
QC value within limits for As 188.979 Recovery = 88.99%						
Ba 233.527†	33364.2	0.247 mg/L	0.0065	0.247 mg/L	0.0065	2.64%
QC value within limits for Ba 233.527 Recovery = 98.88%						
Be 234.861†	273712.7	0.232 mg/L	0.0037	0.232 mg/L	0.0037	1.59%
QC value within limits for Be 234.861 Recovery = 92.66%						
B 249.677†	3266.2	-0.00475 mg/L	0.003270	-0.00475 mg/L	0.003270	68.91%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	87518.4	250 mg/L	5.7	250 mg/L	5.7	2.29%
QC value within limits for Ca 227.546 Recovery = 99.81%						
Cd 228.802†	19710.5	0.399 mg/L	0.0028	0.399 mg/L	0.0028	0.71%
QC value less than the lower limit for Cd 228.802 Recovery = 79.72%						
Co 228.616†	7404.9	0.228 mg/L	0.0062	0.228 mg/L	0.0062	2.72%
QC value within limits for Co 228.616 Recovery = 91.07%						
Cr 267.716†	22120.1	0.245 mg/L	0.0050	0.245 mg/L	0.0050	2.02%
QC value within limits for Cr 267.716 Recovery = 97.93%						
Cu 327.393†	46171.1	0.242 mg/L	0.0045	0.242 mg/L	0.0045	1.85%
QC value within limits for Cu 327.393 Recovery = 96.82%						
Fe 239.562†	1209204.6	92.4 mg/L	2.87	92.4 mg/L	2.87	3.11%
QC value within limits for Fe 239.562 Recovery = 92.44%						
Mg 279.077†	693761.1	246 mg/L	7.6	246 mg/L	7.6	3.08%
QC value within limits for Mg 279.077 Recovery = 98.47%						
Mn 257.610†	159603.0	0.236 mg/L	0.0035	0.236 mg/L	0.0035	1.49%
QC value within limits for Mn 257.610 Recovery = 94.24%						
Mo 202.031†	-29.4	0.00247 mg/L	0.000365	0.00247 mg/L	0.000365	14.79%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	26216.0	0.462 mg/L	0.0120	0.462 mg/L	0.0120	2.60%
QC value within limits for Ni 231.604 Recovery = 92.32%						
Pb 220.353†	4073.9	0.468 mg/L	0.0122	0.468 mg/L	0.0122	2.60%
QC value within limits for Pb 220.353 Recovery = 93.61%						
Sb 206.836†	1568.9	0.457 mg/L	0.0018	0.457 mg/L	0.0018	0.38%
QC value within limits for Sb 206.836 Recovery = 91.49%						
Se 196.026†	291.0	0.228 mg/L	0.0066	0.228 mg/L	0.0066	2.91%
QC value within limits for Se 196.026 Recovery = 91.15%						
Si 251.611†	-306.1	-0.0307 mg/L	0.00024	-0.0307 mg/L	0.00024	0.79%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-310.9	-0.0375 mg/L	0.00196	-0.0375 mg/L	0.00196	5.23%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-27566.3	0.00085 mg/L	0.003330	0.00085 mg/L	0.003330	392.43%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1448.8	0.455 mg/L	0.0090	0.455 mg/L	0.0090	1.98%
QC value within limits for Tl 190.801 Recovery = 91.02%						
V 290.880†	40264.4	0.238 mg/L	0.0030	0.238 mg/L	0.0030	1.25%
QC value within limits for V 290.880 Recovery = 95.05%						
Zn 206.200†	18046.5	0.456 mg/L	0.0108	0.456 mg/L	0.0108	2.37%
QC value within limits for Zn 206.200 Recovery = 91.13%						
K 766.490†	10554.8	4.68 mg/L	0.051	4.68 mg/L	0.051	1.08%
QC value within limits for K 766.490 Recovery = 93.52%						
Na 589.592†	66117.3	4.91 mg/L	0.015	4.91 mg/L	0.015	0.32%
QC value within limits for Na 589.592 Recovery = 98.20%						
Sr 407.771†	1691.9	-0.00239 mg/L	0.000131	-0.00239 mg/L	0.000131	5.48%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	164.6	-0.00282 mg/L	0.000629	-0.00282 mg/L	0.000629	22.29%
QC value within limits for Li 670.784 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 42 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/27/2012 8:10:48 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 30, 2012

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	1854825.8						22699.37	1.22%
YRADIAL	225869.9						3577.45	1.58%
Ga 417.206	1008600.9						29155.99	2.89%
GaRADIAL	66753.0						1409.95	2.11%
Ag 328.068†	108729.6	0.421	mg/L	0.0199	0.421	mg/L	0.0199	4.73%
QC value within limits for Ag 328.068 Recovery = 105.33%								
Al 396.153†	51486.5	9.94	mg/L	0.037	9.94	mg/L	0.037	0.38%
QC value within limits for Al 396.153 Recovery = 99.42%								
As 188.979†	957.0	0.407	mg/L	0.0107	0.407	mg/L	0.0107	2.64%
QC value within limits for As 188.979 Recovery = 101.65%								
Ba 233.527†	138050.8	1.04	mg/L	0.028	1.04	mg/L	0.028	2.66%
QC value within limits for Ba 233.527 Recovery = 103.92%								
Be 234.861†	56744.6	0.0518	mg/L	0.00226	0.0518	mg/L	0.00226	4.36%
QC value within limits for Be 234.861 Recovery = 103.56%								
B 249.677†	35190.6	0.502	mg/L	0.0255	0.502	mg/L	0.0255	5.08%
QC value within limits for B 249.677 Recovery = 100.42%								
Ca 227.546†	3506.8	10.4	mg/L	0.36	10.4	mg/L	0.36	3.49%
QC value within limits for Ca 227.546 Recovery = 104.14%								
Cd 228.802†	2551.6	0.0503	mg/L	0.00225	0.0503	mg/L	0.00225	4.47%
QC value within limits for Cd 228.802 Recovery = 100.61%								
Co 228.616†	6638.2	0.205	mg/L	0.0035	0.205	mg/L	0.0035	1.69%
QC value within limits for Co 228.616 Recovery = 102.74%								
Cr 267.716†	46270.4	0.516	mg/L	0.0132	0.516	mg/L	0.0132	2.55%
QC value within limits for Cr 267.716 Recovery = 103.26%								
Cu 327.393†	103039.9	0.526	mg/L	0.0251	0.526	mg/L	0.0251	4.78%
QC value within limits for Cu 327.393 Recovery = 105.14%								
Fe 239.562†	52846.2	4.04	mg/L	0.027	4.04	mg/L	0.027	0.67%
QC value within limits for Fe 239.562 Recovery = 101.02%								
Mg 279.077†	28308.6	10.1	mg/L	0.04	10.1	mg/L	0.04	0.37%
QC value within limits for Mg 279.077 Recovery = 100.73%								
Mn 257.610†	357847.9	0.525	mg/L	0.0152	0.525	mg/L	0.0152	2.89%
QC value within limits for Mn 257.610 Recovery = 105.09%								
Mo 202.031†	31464.3	1.03	mg/L	0.031	1.03	mg/L	0.031	3.03%
QC value within limits for Mo 202.031 Recovery = 103.21%								
Ni 231.604†	29548.2	0.521	mg/L	0.0159	0.521	mg/L	0.0159	3.05%
QC value within limits for Ni 231.604 Recovery = 104.11%								
Pb 220.353†	4851.1	0.512	mg/L	0.0082	0.512	mg/L	0.0082	1.59%
QC value within limits for Pb 220.353 Recovery = 102.33%								
Sb 206.836†	4194.3	1.22	mg/L	0.040	1.22	mg/L	0.040	3.25%
QC value within limits for Sb 206.836 Recovery = 101.44%								
Se 196.026†	611.9	0.421	mg/L	0.0136	0.421	mg/L	0.0136	3.24%
QC value within limits for Se 196.026 Recovery = 105.13%								
Si 251.611†	176624.1	5.26	mg/L	0.231	5.26	mg/L	0.231	4.39%
QC value within limits for Si 251.611 Recovery = 105.28%								
Sn 189.927†	8888.6	1.02	mg/L	0.017	1.02	mg/L	0.017	1.64%
QC value within limits for Sn 189.927 Recovery = 102.43%								
Ti 334.940†	781704.5	1.00	mg/L	0.006	1.00	mg/L	0.006	0.64%
QC value within limits for Ti 334.940 Recovery = 100.49%								
Tl 190.801†	1634.2	0.521	mg/L	0.0016	0.521	mg/L	0.0016	0.31%
QC value within limits for Tl 190.801 Recovery = 104.17%								
V 290.880†	164369.4	1.03	mg/L	0.028	1.03	mg/L	0.028	2.70%
QC value within limits for V 290.880 Recovery = 103.20%								
Zn 206.200†	41637.1	1.06	mg/L	0.023	1.06	mg/L	0.023	2.17%
QC value within limits for Zn 206.200 Recovery = 105.93%								
K 766.490†	112374.4	51.4	mg/L	0.12	51.4	mg/L	0.12	0.24%
QC value within limits for K 766.490 Recovery = 102.77%								
Na 589.592†	680497.2	50.1	mg/L	1.17	50.1	mg/L	1.17	2.35%
QC value within limits for Na 589.592 Recovery = 100.19%								
Sr 407.771†	1788232.6	0.977	mg/L	0.0226	0.977	mg/L	0.0226	2.32%
QC value within limits for Sr 407.771 Recovery = 97.68%								
Li 670.784†	100202.1	0.999	mg/L	0.0047	0.999	mg/L	0.0047	0.47%
QC value within limits for Li 670.784 Recovery = 99.91%								

All analyte(s) passed QC.

Approved: April 30, 2012

Sequence No.: 43 Autosampler Location: 1
Sample ID: CCB Date Collected: 4/27/2012 8:16:49 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1935074.0						54438.58	2.81%
YRADIAL	221093.8						2824.33	1.28%
Ga 417.206	1070430.0						27045.76	2.53%
GaRADIAL	66168.3						1967.36	2.97%
Ag 328.068†	-143.6	-0.00134	mg/L	0.000204	-0.00134	mg/L	0.000204	15.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	9.9	-0.0207	mg/L	0.00315	-0.0207	mg/L	0.00315	15.25%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.1	-0.00059	mg/L	0.000468	-0.00059	mg/L	0.000468	79.52%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-23.2	-0.00215	mg/L	0.000092	-0.00215	mg/L	0.000092	4.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	50.7	-0.00004	mg/L	0.000038	-0.00004	mg/L	0.000038	100.11%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	85.2	0.00055	mg/L	0.000104	0.00055	mg/L	0.000104	18.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.1	0.0477	mg/L	0.02089	0.0477	mg/L	0.02089	43.81%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-10.3	-0.00013	mg/L	0.000234	-0.00013	mg/L	0.000234	181.16%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-3.4	-0.00039	mg/L	0.000203	-0.00039	mg/L	0.000203	52.48%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-19.0	-0.00132	mg/L	0.000092	-0.00132	mg/L	0.000092	6.96%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	10.0	-0.00087	mg/L	0.000196	-0.00087	mg/L	0.000196	22.52%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	74.4	0.00722	mg/L	0.000338	0.00722	mg/L	0.000338	4.69%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	21.8	0.0178	mg/L	0.00075	0.0178	mg/L	0.00075	4.20%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-9.2	-0.00213	mg/L	0.000014	-0.00213	mg/L	0.000014	0.65%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-5.3	-0.00145	mg/L	0.000354	-0.00145	mg/L	0.000354	24.45%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	10.8	-0.00164	mg/L	0.000611	-0.00164	mg/L	0.000611	37.24%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	6.2	0.00081	mg/L	0.001733	0.00081	mg/L	0.001733	214.89%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.8	0.00102	mg/L	0.001319	0.00102	mg/L	0.001319	129.11%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.8	0.00611	mg/L	0.002579	0.00611	mg/L	0.002579	42.20%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-46.7	-0.0230	mg/L	0.00053	-0.0230	mg/L	0.00053	2.30%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-0.1	-0.00164	mg/L	0.000178	-0.00164	mg/L	0.000178	10.87%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	11.5	-0.00068	mg/L	0.000105	-0.00068	mg/L	0.000105	15.35%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.3	-0.00235	mg/L	0.003102	-0.00235	mg/L	0.003102	131.92%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-899.8	-0.00734	mg/L	0.001537	-0.00734	mg/L	0.001537	20.93%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	8.1	-0.00326	mg/L	0.000015	-0.00326	mg/L	0.000015	0.45%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	48.8	-0.113	mg/L	0.0324	-0.113	mg/L	0.0324	28.62%

Approved: April 30, 2012

```
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†              77.5     -0.0105 mg/L       0.00537     -0.0105 mg/L       0.00537  51.40%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             -50.3     0.00210 mg/L      0.000021     0.00210 mg/L      0.000021   1.02%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†               9.3    -0.00438 mg/L      0.000771    -0.00438 mg/L      0.000771  17.62%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
```

Approved: April 30, 2012

2.3.2 Metals ICP-MS Data

2.3.2.1 Summary Data

Login Number: L12040844
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: WG396232 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 45591
Approved By: Sheri Pfalzgraf



Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-16I-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 11:38
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** NI.042612.113800
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	0.00161		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00338		0.00100	0.000500
Thallium, Total	7440-28-0	0.000182		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-02 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-16I-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 11:51
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** NI.042612.115156
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	0.00136		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00245		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000159		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-16S-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 11:54
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** NI.042612.115442
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	0.00255		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00194		0.00100	0.000500
Thallium, Total	7440-28-0	0.000143		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-04 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-16S-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 11:57
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** NI.042612.115728
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	0.00236		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00148		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000146		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-07-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 12:00
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** NI.042612.120015
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000897		0.00100	0.000500
Arsenic, Total	7440-38-2	0.00463		0.00100	0.000500
Lead, Total	7439-92-1	0.000809		0.00100	0.000500
Selenium, Total	7782-49-2	0.0104		0.00100	0.000500
Thallium, Total	7440-28-0	0.000249		0.000200	0.000100

Sample #: L12040844-06 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-07-042412 **Prep Method:** 3015 **Prep Date:** 04/26/2012 06:28
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 04/26/2012 10:03
Workgroup #: WG396232 **Analyst:** JYH **Run Date:** 04/26/2012 12:03
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** NI.042612.120302
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.000918		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00464		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0114		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000263		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:	WG396204	**SOP:**	ME407 Revison 12
Analyst:	VC	**Spike Solution:**	STD49281
Spike Analyst:	VC	**Spike Witness:**	REK
Run Date:	04/26/2012 06:28	**HNO3 Lot #:**	COA16033
Method:	3015	**Digestion Tubes Lot #:**	COA16074
Balance:	BAL016	**MS WG# 392559 Lot #:**	COA16041
Instrument:	MW-2		

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG396204-03	BLANK	1	40 mL	100 mL	204.471 g	204.454 g		
2	WG396204-04	LCS	1	40 mL	100 mL	208.936 g	208.912 g	.25 mL	
3	L12040844-01	SAMP	1	40 mL	100 mL	206.245 g	206.213 g		05/09/12
4	L12040844-02	SAMP	1	40 mL	100 mL	205.964 g	205.937 g		05/09/12
5	L12040844-03	SAMP	1	40 mL	100 mL	206.991 g	206.949 g		05/09/12
6	L12040844-04	SAMP	1	40 mL	100 mL	208.084 g	208.065 g		05/09/12
7	L12040844-05	SAMP	1	40 mL	100 mL	209.546 g	209.532 g		05/09/12
8	WG396204-01	REF	1	40 mL	100 mL	206.526 g	206.51 g		
9	L12040844-06	SAMP	1	40 mL	100 mL	206.526 g	206.51 g		05/09/12
10	L12040857-02	SAMP	1	40 mL	100 mL	208.194 g	208.169 g		05/02/12
11	WG396204-02	REF	2	40 mL	100 mL	206.965 g	206.953 g		
12	L12040858-01	SAMP	2	40 mL	100 mL	206.965 g	206.953 g		04/27/12
13	WG396204-05	MS	1	40 mL	100 mL	210.406 g	210.385 g	.25 mL	
14	WG396204-06	MSD	1	40 mL	100 mL	206.29 g	206.282 g	.25 mL	
15	WG396204-08	DUP	1	40 mL	100 mL	206.404 g	206.375 g		
16	WG396204-07	MS	1	40 mL	100 mL	206.542 g	206.526 g	.25 mL	

Analyst: 

Reviewer: 

MW_DIG - Modified 09/30/2009
PDF ID: 2391854
Report generated: 04/26/2012 07:20

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 042612A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: N/A Rev:
Maintenance Log ID: 41489

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD50968

Workgroups: 396235,396232

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.042612.095225	Blank	Blank		1		04/26/12 09:52
2	NI.042612.095512	WG396304-01	Calibration Point		1		04/26/12 09:55
3	NI.042612.095758	WG396304-02	Calibration Point		1		04/26/12 09:57
4	NI.042612.100044	WG396304-03	Calibration Point		1		04/26/12 10:00
5	NI.042612.100330	WG396304-04	Calibration Point		1		04/26/12 10:03
6	NI.042612.100619	WG396304-05	Initial Calibration Verification		1		04/26/12 10:06
7	NI.042612.100908	WG396304-06	Initial Calib Blank		1		04/26/12 10:09
8	NI.042612.101157	WG396304-07	Low Level Initial Calibration V		1		04/26/12 10:11
9	NI.042612.101443	WG396304-08	Interference Check		1		04/26/12 10:14
10	NI.042612.101729	WG396304-09	Interference Check		1		04/26/12 10:17
11	NI.042612.102018	WG396304-10	CCV		1		04/26/12 10:20
12	NI.042612.102303	WG396304-11	CCB		1		04/26/12 10:23
13	NI.042612.102551	WG396205-02	Method/Prep Blank	.5/200	1		04/26/12 10:25
14	NI.042612.102837	WG396205-03	Laboratory Control S	.5/200	1		04/26/12 10:28
15	NI.042612.103124	L12040850-01	1115-657-C-005	.53/200	5		04/26/12 10:31
16	NI.042612.103409	WG396205-01	Reference Sample		5	L12040864-04	04/26/12 10:34
17	NI.042612.103656	WG396205-04	Matrix Spike	.503/200	5	L12040864-04	04/26/12 10:36
18	NI.042612.103942	WG396205-05	Matrix Spike Duplica	.514/200	5	L12040864-04	04/26/12 10:39
19	NI.042612.104227	L12040854-01	1109-143-IIIC001	.51/200	5		04/26/12 10:42
20	NI.042612.104513	WG396235-01	Post Digestion Spike		5	L12040854-01	04/26/12 10:45
21	NI.042612.104759	WG396235-02	Serial Dilution		25	L12040854-01	04/26/12 10:47
22	NI.042612.105047	WG396304-12	CCV		1		04/26/12 10:50
23	NI.042612.105333	WG396304-13	CCB		1		04/26/12 10:53
24	NI.042612.105621	L12040854-02	1109-143-IIIC002	.531/200	5		04/26/12 10:56
25	NI.042612.105907	L12040854-03	1109-143-IIIC003	.523/200	5		04/26/12 10:59
26	NI.042612.110153	L12040854-04	1109-143-IIIC004	.515/200	5		04/26/12 11:01
27	NI.042612.110439	L12040854-05	1109-143-IIIC005	.515/200	5		04/26/12 11:04
28	NI.042612.110724	L12040854-06	1109-143-IIIC006	.506/200	5		04/26/12 11:07
29	NI.042612.111011	L12040864-01	SS-1	.529/200	5		04/26/12 11:10
30	NI.042612.111257	L12040864-02	SS-2	.508/200	5		04/26/12 11:12
31	NI.042612.111543	L12040864-03	SS-3	.528/200	5		04/26/12 11:15
32	NI.042612.111832	WG396304-14	CCV		1		04/26/12 11:18
33	NI.042612.112118	WG396304-15	CCB		1		04/26/12 11:21
34	NI.042612.112406	WG396204-03	Method/Prep Blank	40/100	1		04/26/12 11:24

Page: 1 Approved: April 27, 2012

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 042612A.REP

Analyst1: JYH Analyst2: N/A

Method: 6020 SOP: N/A Rev:

Maintenance Log ID: 41489

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984

ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150

CCV: STD51215 LLCCV: STD50968

Workgroups: 396235,396232

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.042612.112653	WG396204-04	Laboratory Control S	40/100	1		04/26/12 11:26
36	NI.042612.112939	L12040858-01	OUTFALL 002/COMP		2	WG396204-02	04/26/12 11:29
37	NI.042612.113226	WG396204-08	Duplicate	40/100	2	L12040858-01	04/26/12 11:32
38	NI.042612.113513	WG396204-07	Matrix Spike	40/100	2	L12040858-01	04/26/12 11:35
39	NI.042612.113800	L12040844-01	MW-16I-042412	40/100	1		04/26/12 11:38
40	NI.042612.114046	WG396232-01	Post Digestion Spike		1	L12040844-01	04/26/12 11:40
41	NI.042612.114333	WG396232-02	Serial Dilution		5	L12040844-01	04/26/12 11:43
42	NI.042612.114622	WG396304-16	CCV		1		04/26/12 11:46
43	NI.042612.114908	WG396304-17	CCB		1		04/26/12 11:49
44	NI.042612.115156	L12040844-02	MW-16I-042412	40/100	1		04/26/12 11:51
45	NI.042612.115442	L12040844-03	MW-16S-042412	40/100	1		04/26/12 11:54
46	NI.042612.115728	L12040844-04	MW-16S-042412	40/100	1		04/26/12 11:57
47	NI.042612.120015	L12040844-05	MW-07-042412	40/100	1		04/26/12 12:00
48	NI.042612.120302	L12040844-06	MW-07-042412		1	WG396204-01	04/26/12 12:03
49	NI.042612.120548	WG396204-05	Matrix Spike	40/100	1	L12040844-06	04/26/12 12:05
50	NI.042612.120834	WG396204-06	Matrix Spike Duplica	40/100	1	L12040844-06	04/26/12 12:08
51	NI.042612.121121	L12040857-02	AV-RW-26-042112	40/100	1		04/26/12 12:11
52	NI.042612.121408	WG396304-18	Interference Check		1		04/26/12 12:14
53	NI.042612.121654	WG396304-19	Interference Check		1		04/26/12 12:16
54	NI.042612.121943	WG396304-20	CCV		1		04/26/12 12:19
55	NI.042612.122230	WG396304-21	CCB		1		04/26/12 12:22
56	NI.042612.122519	WG396304-22	Low Level Continuing Calibra		1		04/26/12 12:25

 Approved: April 27, 2012

Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 26-APR-2012
Analyst: JYH
Analyst: NA
Method: 6020
Instrument: ICP-MS2
Curve Workgroup: 396304
Runlog ID: 46396
Analytical Workgroups: 396235,396232

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	X
Case Narrative	850,854,864,844,857,858
Client Forms	X
Level X	
Level 3	
Level 4	850,854,864,844,857
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:
27-APR-2012

CHECKLIST1 - Modified 03/05/2008
Generated: APR-27-2012 08:50:53

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6020 **AAB#:** WG396232

Login Number: L12040844

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-16I-042412	01	04/24/12					04/26/12	1.7	180		04/26/12	2	180	
MW-16I-042412	02	04/24/12					04/26/12	1.7	180		04/26/12	2	180	
MW-16S-042412	03	04/24/12					04/26/12	1.7	180		04/26/12	2	180	
MW-16S-042412	04	04/24/12					04/26/12	1.7	180		04/26/12	2	180	
MW-07-042412	05	04/24/12					04/26/12	1.7	180		04/26/12	1.9	180	
MW-07-042412	06	04/24/12					04/26/12	1.7	180		04/26/12	2	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2393144
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG396232
Blank File ID: NI.042612.112406
Blank Sample ID: WG396204-03
Prep Date: 04/26/12 06:28
Instrument ID: ICP-MS2
Analyzed Date: 04/26/12 11:24
Method: 6020
Analyst: JYH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396204-04	NI.042612.112653	04/26/12 11:26	01
DUP	WG396204-08	NI.042612.113226	04/26/12 11:32	DL01
MW-16I-042412	L12040844-01	NI.042612.113800	04/26/12 11:38	01
MW-16I-042412	L12040844-02	NI.042612.115156	04/26/12 11:51	01
MW-16S-042412	L12040844-03	NI.042612.115442	04/26/12 11:54	01
MW-16S-042412	L12040844-04	NI.042612.115728	04/26/12 11:57	01
MW-07-042412	L12040844-05	NI.042612.120015	04/26/12 12:00	01
MW-07-042412	L12040844-06	NI.042612.120302	04/26/12 12:03	01

Report Name: BLANK_SUMMARY
PDF File ID: 2393165
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/26/12 06:28 Sample ID: WG396204-03
Instrument ID: ICP-MS2 Run Date: 04/26/12 11:24 Prep Method: 3015
File ID: NI.042612.112406 Analyst: JYH Method: 6020
Workgroup (AAB#): WG396232 Matrix: Water Units: mg/L
Contract #: Cal ID: ICP-MS-26-APR-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: 2393166
26-APR-2012 14:01

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 **Run Date:** 04/26/2012 **Sample ID:** WG396204-04
Instrument ID: ICP-MS2 **Run Time:** 11:26 **Prep Method:** 3015
File ID: NI.042612.112653 **Analyst:** JYH **Method:** 6020
Workgroup (AAB#): WG396232 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD49281 **Cal ID:** ICP-MS-26-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0642	103	80 - 120	
Arsenic, Total	0.0625	0.0636	102	80 - 120	
Lead, Total	0.0625	0.0646	103	80 - 120	
Selenium, Total	0.0625	0.0641	102	80 - 120	
Thallium, Total	0.0625	0.0646	103	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 2393167
Report generated: 04/26/2012 14:01

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L12040844 Cal ID:ICP-MS2- Worknum:WG396232

Instrument ID:ICP-MS2 Contract #: Method:6020

Parent ID:WG396204-01 File ID:NI.042612.120302 Dil:1 Matrix:WATER

Sample ID:WG396204-05 MS File ID:NI.042612.120548 Dil:1 Units:mg/L

Sample ID:WG396204-06 MSD File ID:NI.042612.120834 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Dissolved	0.000918	0.0625	0.0669	106	0.0625	0.0681	107	1.76	80 - 120	20	
Arsenic, Dissolved	0.00464	0.0625	0.0722	108	0.0625	0.0732	110	1.34	80 - 120	20	
Lead, Dissolved	ND	0.0625	0.0674	108	0.0625	0.0693	111	2.87	80 - 120	20	
Selenium, Dissolved	0.0114	0.0625	0.0753	102	0.0625	0.0755	103	0.258	80 - 120	20	
Thallium, Dissolved	0.000263	0.0625	0.0686	109	0.0625	0.0702	112	2.40	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 05/26/2011

PDF File ID: 2394146

Report generated 04/27/2012 09:08

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12040844 **Worknum:** WG396232
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG396232-02 **File ID:** NI.042612.114333 **Dil:** 5 **Units:** ug/L
Sample: L12040844-01 **File ID:** NI.042612.113800 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	0.644	X	ND	U		
Lead	ND	U	ND	U		
Selenium	1.35	X	1.44	F	6.81	
Thallium	0.0729	F	0.228	F	212.00	

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: 2393163
04/26/2012 14:00

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12040844 **Worknum:** WG396232
Instrument ID: ICP-MS2 **Method:** 6020
Post Spike ID: WG396232-01 **File ID:** NI.042612.114046 **Dil:** 1 **Units:** ug/L
Sample ID: L12040844-01 **File ID:** NI.042612.113800 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	49.7		0	U	50	99.4	75 - 125	
ARSENIC	49.2		0.644		50	97.0	75 - 125	
LEAD	52.4		0	U	50	104.8	75 - 125	
SELENIUM	47.4		1.35		50	92.1	75 - 125	
THALLIUM	53.1		0.0729	F	50	106.1	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: 2393164
Report generated: 04/26/2012 14:01

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12040844**	Workgroup (AAB#):	**WG396232**
Analytical Method:	**6020**	Instrument ID:	**ICP-MS2**
ICAL Worknum:	**WG396304**	Initial Calibration Date:	**26-APR-2012 10:03**

	WG396304-01		WG396304-02		WG396304-03		WG396304-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	15.8	.4	605	50	600000	100	1170000	.999991	
ARSENIC	0	-105	.4	-44.6	50	68200	100	134000	.999977	
LEAD	0	1640	.4	4860	50	3040000	100	6070000	.99968	
SELENIUM	0	13.4	.4	22.0	50	6690	100	13200	.999957	
THALLIUM	0	32.7	.4	1040	50	974000	100	1910000	.999879	

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: 2393151
Report generated: 26-APR-2012 14:01

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-06
Instrument ID: ICP-MS2 Run Time: 10:09 Method: 6020
File ID: NI.042612.100908 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG396232 Cal ID: ICP-MS2 - 26-APR-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: 2393154
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-11

Instrument ID: ICP-MS2 Run Time: 10:23 Method: 6020

File ID: NI.042612.102303 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-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: 2393157
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-15

Instrument ID: ICP-MS2 Run Time: 11:21 Method: 6020

File ID: NI.042612.112118 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-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: 2393157
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-17

Instrument ID: ICP-MS2 Run Time: 11:49 Method: 6020

File ID: NI.042612.114908 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-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: 2393157
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-21

Instrument ID: ICP-MS2 Run Time: 12:22 Method: 6020

File ID: NI.042612.122230 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-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: 2393157
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-05
Instrument ID: ICP-MS2 Run Time: 10:06 Method: 6020
File ID: NI.042612.100619 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	50.0	100	90 - 110	
Arsenic		50	49.9	99.8	90 - 110	
Lead		50	49.6	99.2	90 - 110	
Selenium		50	50.5	101	90 - 110	
Thallium		50	49.9	99.8	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2393153
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-10

Instrument ID: ICP-MS2 Run Time: 10:20 Method: 6020

File ID: NI.042612.102018 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.6	ug/L	101	90 - 110		
Arsenic		50.0	50.1	ug/L	100	90 - 110		
Lead		50.0	49.7	ug/L	99.3	90 - 110		
Selenium		50.0	50.1	ug/L	100	90 - 110		
Thallium		50.0	50.4	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2393156

Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-14

Instrument ID: ICP-MS2 Run Time: 11:18 Method: 6020

File ID: NI.042612.111832 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.3	ug/L	98.5	90 - 110		
Arsenic		50.0	49.7	ug/L	99.5	90 - 110		
Lead		50.0	49.5	ug/L	99.1	90 - 110		
Selenium		50.0	50.7	ug/L	101	90 - 110		
Thallium		50.0	50.3	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2393156

Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-16

Instrument ID: ICP-MS2 Run Time: 11:46 Method: 6020

File ID: NI.042612.114622 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.6	ug/L	101	90 - 110		
Arsenic		50.0	50.0	ug/L	99.9	90 - 110		
Lead		50.0	49.3	ug/L	98.6	90 - 110		
Selenium		50.0	49.8	ug/L	99.6	90 - 110		
Thallium		50.0	49.6	ug/L	99.3	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2393156

Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396304-20

Instrument ID: ICP-MS2 Run Time: 12:19 Method: 6020

File ID: NI.042612.121943 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG396232 Cal ID: ICP-MS - 26-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.1	ug/L	102	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	49.9	ug/L	99.9	90 - 110		
Thallium		50.0	50.7	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2393156

Report generated 04/26/2012 14:01

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040844 **Workgroup (AAB#):** WG396232
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG396304-08 **File ID:** NI.042612.101443 **Units:** ug/L
Sol. AB : WG396304-09 **File ID:** NI.042612.101729 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0522	NS	100	101	101	
Arsenic	NS	0.0364	NS	100	99.0	99.0	
Lead	NS	0.0279	NS	100	101	101	
Selenium	NS	0.0436	NS	100	98.1	98.1	
Thallium	NS	0.0229	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: 2393155
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040844 **Workgroup (AAB#):** WG396232
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG396304-18 **File ID:** NI.042612.121408 **Units:** ug/L
Sol. AB : WG396304-19 **File ID:** NI.042612.121654 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0513	NS	100	98.9	98.9	
Arsenic	NS	0.0213	NS	100	99.6	99.6	
Lead	NS	0.0258	NS	100	102	102	
Selenium	NS	0.0408	NS	100	98.8	98.8	
Thallium	NS	0.0210	NS	100	99.0	99.0	

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: 2393155
Report generated 04/26/2012 14:01

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L12040844 **Analytical Method:** 6020
Analytical Workgroup: WG396232 **Matrix:** 1
Instrument: ICP-MS2 **Analyst:** JYH
ICAL Date: 26-APR-2012 09:55

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	Type	Run Date	% Rec	% Rec	% Rec	% Rec
L12040844-01	SAMP	26-APR-2012 11:38	89.922	101.397	106.213	109.137
L12040844-02	SAMP	26-APR-2012 11:51	87.636	95.128	100.832	104.43
L12040844-03	SAMP	26-APR-2012 11:54	87.017	93.883	99.142	104.079
L12040844-04	SAMP	26-APR-2012 11:57	87.761	96.13	101.033	104.791
L12040844-05	SAMP	26-APR-2012 12:00	76.067	88.239	91.356	96.332
L12040844-06	SAMP	26-APR-2012 12:03	75.052	87.062	90.716	96.565
WG396204-03	BLANK	26-APR-2012 11:24	94.251	94.433	96.093	96.94
WG396204-04	LCS	26-APR-2012 11:26	98.048	99.53	100.756	102.242
WG396204-05	MS	26-APR-2012 12:05	75.49	87.164	90.868	97.703
WG396204-06	MSD	26-APR-2012 12:08	75.625	88.718	92.074	97.696
WG396232-01	PSPK	26-APR-2012 11:40	88.46	100.802	106.682	109.945
WG396232-02	SERIAL	26-APR-2012 11:43	93.79	90.899	95.789	98.979
WG396304-05	ICV	26-APR-2012 10:06	97.426	100.418	99.183	102.432
WG396304-06	ICB	26-APR-2012 10:09	98.832	96.746	97.994	98.974
WG396304-07	LLICV	26-APR-2012 10:11	98.203	97.514	98.192	99.384
WG396304-08	ICS	26-APR-2012 10:14	92.756	91.767	90.927	98.236
WG396304-09	ICS	26-APR-2012 10:17	96.71	99.651	100.669	106.558
WG396304-10	CCV	26-APR-2012 10:20	95.982	97.103	101.967	104.427
WG396304-11	CCB	26-APR-2012 10:23	100.294	99.537	103.324	103.036
WG396304-14	CCV	26-APR-2012 11:18	93.968	95.175	97.965	100.899
WG396304-15	CCB	26-APR-2012 11:21	95	95.248	96.437	97.616
WG396304-16	CCV	26-APR-2012 11:46	94.264	95.464	101.534	104.06
WG396304-17	CCB	26-APR-2012 11:49	97.669	98.497	102.335	102.192
WG396304-18	ICS	26-APR-2012 12:14	90.628	94.613	99.247	102.454
WG396304-19	ICS	26-APR-2012 12:16	93.078	99.482	104.636	107.487
WG396304-20	CCV	26-APR-2012 12:19	93.148	100.883	104.8	104.456
WG396304-21	CCB	26-APR-2012 12:22	95.381	99.299	104.178	102.854
WG396304-22	LLCCV	26-APR-2012 12:25	94.806	100.072	102.942	101.675

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: 2393168
Report generated: 04/26/2012 14:01

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12040844 **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: 2393148
Report generated: 04/26/2012 14:01

2.3.2.3 Raw Data

MassCal File Name

Mass Calibration File Name Default.tun
MassCal File Path C:\NexION Data\MassCal\Default.tun
Peak Search Window: 1.00

Sample Information

Sample Date/Time: Thursday, April 26, 2012 09:34:33

Mass Calibration and Resolution

Analyte	E Mass	Meas Mass	Mass C DAC Val	Res DAC Value	Meas Peak WCustom Res
Li	7.016	7.025	1333	2020	0.714
Mg	23.985	23.975	4712	2019	0.718
In	114.904	114.925	22867	2023	0.694
U	238.050	238.075	47465	2035	0.691

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	7.967
5.575	3.581
5.625	4.718
5.675	3.512
5.725	1.902
5.775	4.261
5.825	3.307
5.875	3.696
5.925	3.017
5.975	2.486
6.025	1.537
6.075	1.832
6.125	1.949
6.175	0.504
6.225	2.299
6.275	2.893
6.325	24.845
6.375	223.607
6.425	38.030
6.475	23.883
6.525	4.687
6.575	3.773
6.625	3.761
6.675	2.765
6.725	3.307
6.775	2.130
6.825	2.278
6.875	2.443

Report Date/Time: Thursday, April 26, 2012 09:37:06
Page 1

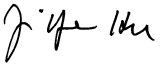
Approved: April 27, 2012

6.925	2.476
6.975	2.785
7.025	2.436
7.075	2.879
7.125	2.552
7.175	2.635
7.225	1.455
7.275	4.363
7.325	91.287
7.375	136.931
7.425	223.607
7.475	136.931
7.525	
7.575	
7.625	
7.675	
7.725	223.607
7.775	223.607
7.825	223.607
7.875	223.607
7.925	91.287
7.975	
8.025	136.931
8.075	
8.125	
8.175	
8.225	
8.275	
8.325	
8.375	136.931
8.425	91.287
8.475	34.499
22.525	6.189
22.575	2.621
22.625	1.001
22.675	1.397
22.725	1.882
22.775	0.998
22.825	0.820
22.875	0.765
22.925	1.212
22.975	0.663
23.025	0.705
23.075	0.763
23.125	0.693
23.175	0.765
23.225	0.735

Approved: April 27, 2012

23.275	3.972
23.325	45.644
23.375	136.931
23.425	108.327
23.475	8.376
23.525	5.025
23.575	3.672
23.625	2.138
23.675	0.947
23.725	2.351
23.775	1.185
23.825	0.555
23.875	0.618
23.925	1.020
23.975	1.298
24.025	1.248
24.075	1.120
24.125	0.914
24.175	0.704
24.225	1.983
24.275	2.389
24.325	149.071
24.375	
24.425	
24.475	37.378
24.525	14.475
24.575	10.409
24.625	6.650
24.675	5.890
24.725	4.575
24.775	5.300
24.825	3.889
24.875	2.588
24.925	1.229
24.975	2.925
25.025	1.867
25.075	4.291
25.125	4.456
25.175	5.642
25.225	2.230
25.275	14.438
25.325	136.931
25.375	136.931
25.425	223.607
25.475	30.842
113.525	26.435
113.575	5.139

Approved: April 27, 2012



113.625	3.794
113.675	3.962
113.725	5.596
113.775	2.851
113.825	1.324
113.875	3.607
113.925	2.902
113.975	3.006
114.025	2.580
114.075	4.196
114.125	2.177
114.175	3.492
114.225	4.870
114.275	4.426
114.325	19.174
114.375	79.756
114.425	27.311
114.475	14.762
114.525	7.088
114.575	5.377
114.625	0.946
114.675	3.331
114.725	1.383
114.775	2.375
114.825	2.059
114.875	1.653
114.925	1.803
114.975	1.786
115.025	2.112
115.075	2.329
115.125	2.360
115.175	2.097
115.225	0.887
115.275	4.525
115.325	12.205
115.375	136.931
115.425	91.287
115.475	35.355
115.525	17.535
115.575	14.439
115.625	3.546
115.675	5.560
115.725	2.957
115.775	3.973
115.825	5.311
115.875	5.202
115.925	2.244

Approved: April 27, 2012

115.975	3.884
116.025	1.731
116.075	3.270
116.125	6.362
116.175	2.972
116.225	2.897
116.275	9.982
116.325	119.523
116.375	223.607
116.425	
116.475	136.931
236.525	
236.575	
236.625	
236.675	
236.725	
236.775	
236.825	
236.875	
236.925	
236.975	
237.025	
237.075	
237.125	
237.175	
237.225	223.607
237.275	
237.325	
237.375	223.607
237.425	223.607
237.475	104.583
237.525	61.237
237.575	23.701
237.625	10.202
237.675	6.855
237.725	7.700
237.775	3.331
237.825	2.729
237.875	2.541
237.925	2.521
237.975	1.254
238.025	0.593
238.075	1.545
238.125	0.442
238.175	1.775
238.225	2.205
238.275	1.680

Approved: April 27, 2012

238.325	1.937
238.375	3.797
238.425	3.093
238.475	8.028
238.525	9.164
238.575	19.444
238.625	223.607
238.675	
238.725	
238.775	
238.825	136.931
238.875	
238.925	
238.975	223.607
239.025	
239.075	223.607
239.125	
239.175	223.607
239.225	
239.275	
239.325	
239.375	
239.425	
239.475	

Approved: April 27, 2012

Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Thursday, April 26, 2012 09:38:55
Sample Description:
Method File: C:\NexION Data\Method\Daily Performance.mth
Dataset File: C:\NexION Data\DataSet\042012\Daily Performance Check.565
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

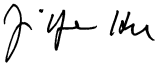
	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	5662.1	5662.058	115.727	2.0	Standard
	Mg	24.0	63096.6	63096.600	1019.438	1.6	Standard
	In	114.9	94584.8	94584.808	1118.797	1.2	Standard
	U	238.1	79333.2	79333.244	984.298	1.2	Standard
⌈	CeO	155.9	1982.7	0.017	0.000	1.1	Standard
| >	Ce	139.9	114692.7	114692.698	1219.970	1.1	Standard
⌊	Ce++	70.0	758.7	0.007	0.000	2.4	Standard
	Bkgd	220.0	0.1	0.067	0.091	136.9	Standard

Current Conditions File Data

Current Value	Description
0.99	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-8.75	Deflector Voltage
1600.00	ICP RF Power
-1881.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-2.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
1.00	DRC Mode NEB
-7.00	DRC Mode QRO
-1.50	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.70	Cell Gas A
200.00	Axial Field Voltage
-17.00	KED Mode CRO
-12.00	KED Mode QRO
-5.00	KED Mode Cell Entrance Voltage
-23.00	KED Mode Cell Exit Voltage
4.40	KED Cell Gas A
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: Daily Performance Check
Report Date/Time: Thursday, April 26, 2012 09:41:14
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Method 6020 - Summary Report

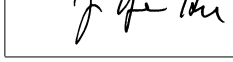
Sample ID: Blank
Sample Date/Time: Thursday, April 26, 2012 09:52:25
Number of Replicates: 3
Autosampler Position: 1
Sample Description:
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	24741.5	1.9				ug/L		Standard
	Be	9	10.7	28.6				ug/L		Standard
	Al	27	20240.2	2.2				ug/L		Standard
>	**Sc**	45	477679.3	1.6				ug/L		Standard
	Ti	47	98.7	5.9				ug/L		Standard
	V	51	7210.0	0.7				ug/L		Standard
	Cr	52	22889.9	1.0				ug/L		Standard
	Cr	53	565.3	8.3				ug/L		Standard
	Mn	55	1511.4	1.9				ug/L		Standard
	Co	59	149.0	8.6				ug/L		Standard
	Ni	60	54.3	12.5				ug/L		Standard
	Cu	65	142.0	3.7				ug/L		Standard
	Zn	66	799.7	18.1				ug/L		Standard
>	**Ge**	72	375255.3	1.7				ug/L		Standard
	As	75	-103.8	45.0				ug/L		Standard
	Se	82	18.0	18.1				ug/L		Standard
>	**Ga**	71	308497.5	1.6				mg/L		Standard
	Se-1	77	114.0	16.1				mg/L		Standard
	Rb	85	16.0	33.1				ug/L		Standard
>	**Y**	89	343723.2	1.8				ug/L		Standard
	Rh	103	2.0	0.0				ug/L		Standard
	Mo	98	6.8	90.2				ug/L		Standard
	Ag	107	142.7	17.6				ug/L		Standard
	Cd	111	597.3	9.6				mg/L		Standard
	Cd	114	1651.9	5.2				ug/L		Standard
>	**In**	115	1111887.5	1.0				ug/L		Standard
	Sn	118	928.0	5.8				ug/L		Standard
	Sb	123	16.2	24.7				ug/L		Standard
	Ba	135	57.7	9.9				ug/L		Standard
	Ce	140	62.7	26.8				ug/L		Standard
>	**Tb**	159	1172993.0	1.6				ug/L		Standard
	Ho	165	14.0	37.8				ug/L		Standard
	Tl	203	33.0	36.7				ug/L		Standard
	Tl	205	84.7	26.0				ug/L		Standard
	Pb	206	423.7	8.5				ug/L		Standard
	Pb	207	363.0	5.5				ug/L		Standard
	Pb	208	1661.0	3.8				ug/L		Standard
	U	238	5.0	20.0				ug/L		Standard
>	**Bi**	209	678708.9	1.0				ug/L		Standard
	Na	23	80.0	20.5				mg/L		Standard
	Mg	24	106.3	13.3				mg/L		Standard

Sample ID: Blank
Report Date/Time: Thursday, April 26, 2012 09:54:52
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	K	39	583.3	5.1		mg/L	Standard
	Ca	43	145.3	10.1		mg/L	Standard
	Fe	54	993.4	4.8		mg/L	Standard
	Fe	57	5581.0	2.8		mg/L	Standard
>	**Sc-1**	45	477679.3	1.6		mg/L	Standard
	Cl	35	75747.2	0.3		ug/L	Standard
	Kr	83	82.7	7.9		ug/L	Standard
	Br	81	17337.9	2.4		ug/L	Standard
	P	31	84853.0	2.5		ug/L	Standard
	S	34	850413.7	3.4		ug/L	Standard
	Sr	88	214.7	5.3		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			
>	Ga	71			
	Se-1	77			
	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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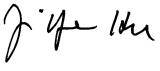
	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank
Report Date/Time: Thursday, April 26, 2012 09:54:52
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Method 6020 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, April 26, 2012 09:55:12
Number of Replicates: 3
Autosampler Position: 1
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	24379.6	3.4				ug/L	24742	Standard
|	**Be**	9	9.7	23.9				ug/L	11	Standard
|	**Al**	27	19879.7	2.2				ug/L	20240	Standard
⌊>	**Sc**	45	474491.0	4.5				ug/L	477679	Standard
⌈	**Ti**	47	110.0	4.8				ug/L	99	Standard
|	**V**	51	7127.6	0.7				ug/L	7210	Standard
|	**Cr**	52	22501.0	1.2				ug/L	22890	Standard
|	**Cr**	53	582.7	1.6				ug/L	565	Standard
|	**Mn**	55	1561.4	4.0				ug/L	1511	Standard
|	**Co**	59	155.0	7.8				ug/L	149	Standard
|	**Ni**	60	51.3	32.7				ug/L	54	Standard
|	**Cu**	65	162.3	11.1				ug/L	142	Standard
|	**Zn**	66	544.3	9.0				ug/L	800	Standard
| >	**Ge**	72	371110.7	2.0				ug/L	375255	Standard
|	**As**	75	-104.6	25.4				ug/L	-104	Standard
⌊	**Se**	82	13.4	43.5				ug/L	18	Standard
⌈ >	**Ga**	71	299245.6	3.8				mg/L	308497	Standard
⌊	**Se-1**	77	106.7	9.2				mg/L	114	Standard
⌈	**Rb**	85	16.7	38.6				ug/L	16	Standard
| >	**Y**	89	335483.1	2.6				ug/L	343723	Standard
⌊	**Rh**	103	2.7	43.3				ug/L	2	Standard
⌈	**Mo**	98	7.5	17.0				ug/L	7	Standard
|	**Ag**	107	68.0	8.2				ug/L	143	Standard
|	**Cd**	111	553.7	4.1				mg/L	597	Standard
|	**Cd**	114	1593.4	3.1				ug/L	1652	Standard
| >	**In**	115	1097346.7	1.9				ug/L	1111888	Standard
|	**Sn**	118	894.7	6.6				ug/L	928	Standard
|	**Sb**	123	15.8	38.0				ug/L	16	Standard
⌊	**Ba**	135	53.7	16.9				ug/L	58	Standard
⌈	**Ce**	140	55.3	7.5				ug/L	63	Standard
⌊>	**Tb**	159	1162563.2	3.1				ug/L	1172993	Standard
⌈	**Ho**	165	18.0	0.0				ug/L	14	Standard
|	**Tl**	203	32.7	20.4				ug/L	33	Standard
|	**Tl**	205	84.7	22.3				ug/L	85	Standard
|	**Pb**	206	419.3	4.4				ug/L	424	Standard
|	**Pb**	207	352.3	4.0				ug/L	363	Standard
|	**Pb**	208	1636.7	2.1				ug/L	1661	Standard
|	**U**	238	5.0	52.9				ug/L	5	Standard
⌊>	**Bi**	209	669678.9	2.1				ug/L	678709	Standard
⌈	**Na**	23	71.3	15.9				mg/L	80	Standard
|	**Mg**	24	111.7	6.8				mg/L	106	Standard

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	K	39	570.0	11.6	mg/L	583	Standard
	Ca	43	146.0	4.1	mg/L	145	Standard
	Fe	54	967.0	7.7	mg/L	993	Standard
	Fe	57	5170.9	6.1	mg/L	5581	Standard
>	**Sc-1**	45	474491.0	4.5	mg/L	477679	Standard
	Cl	35	74889.3	1.1	ug/L	75747	Standard
	Kr	83	77.7	19.7	ug/L	83	Standard
	Br	81	16827.7	2.4	ug/L	17338	Standard
	P	31	78152.9	3.3	ug/L	84853	Standard
	S	34	798748.0	3.7	ug/L	850414	Standard
	Sr	88	205.3	4.9	ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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			
>	Ga	71			
	Se-1	77			
	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
Report Date/Time: Thursday, April 26, 2012 09:57:38
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Method 6020 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, April 26, 2012 09:57:58
Number of Replicates: 3
Autosampler Position: 2
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25333.5	0.3				ug/L	24742	Standard
|	**Be**	9	221.0	3.1				ug/L	11	Standard
|	**Al**	27	16119.2	1.4				ug/L	20240	Standard
⌊>	**Sc**	45	485340.3	2.4				ug/L	477679	Standard
⌈	**Ti**	47	319.3	13.9				ug/L	99	Standard
|	**V**	51	8511.8	0.2				ug/L	7210	Standard
|	**Cr**	52	23844.4	0.3				ug/L	22890	Standard
|	**Cr**	53	677.3	5.2				ug/L	565	Standard
|	**Mn**	55	2797.6	1.8				ug/L	1511	Standard
|	**Co**	59	1084.0	2.8				ug/L	149	Standard
|	**Ni**	60	274.3	7.3				ug/L	54	Standard
|	**Cu**	65	316.7	5.7				ug/L	142	Standard
|	**Zn**	66	629.7	4.4				ug/L	800	Standard
| >	**Ge**	72	379638.9	1.4				ug/L	375255	Standard
|	**As**	75	-44.6	74.7				ug/L	-104	Standard
⌊	**Se**	82	22.0	45.6				ug/L	18	Standard
⌈ >	**Ga**	71	314408.0	0.1				mg/L	308497	Standard
⌊	**Se-1**	77	127.3	8.7				mg/L	114	Standard
⌈	**Rb**	85	10.7	21.7				ug/L	16	Standard
| >	**Y**	89	343190.3	2.1				ug/L	343723	Standard
⌊	**Rh**	103	2.0	100.0				ug/L	2	Standard
⌈	**Mo**	98	496.1	7.0				ug/L	7	Standard
|	**Ag**	107	545.0	0.6				ug/L	143	Standard
|	**Cd**	111	820.0	3.6				mg/L	597	Standard
|	**Cd**	114	2308.5	5.3				ug/L	1652	Standard
| >	**In**	115	1113585.1	1.6				ug/L	1111888	Standard
|	**Sn**	118	1925.5	1.3				ug/L	928	Standard
|	**Sb**	123	605.1	4.0				ug/L	16	Standard
⌊	**Ba**	135	356.0	3.5				ug/L	58	Standard
⌈	**Ce**	140	61.3	8.2				ug/L	63	Standard
⌊>	**Tb**	159	1187543.5	1.5				ug/L	1172993	Standard
⌈	**Ho**	165	12.7	39.7				ug/L	14	Standard
|	**Tl**	203	1042.4	3.7				ug/L	33	Standard
|	**Tl**	205	2555.5	0.7				ug/L	85	Standard
|	**Pb**	206	1272.7	3.0				ug/L	424	Standard
|	**Pb**	207	1041.0	1.4				ug/L	363	Standard
|	**Pb**	208	4858.0	2.3				ug/L	1661	Standard
|	**U**	238	2740.9	2.9				ug/L	5	Standard
⌊>	**Bi**	209	681601.8	1.8				ug/L	678709	Standard
⌈	**Na**	23	96.7	6.7				mg/L	80	Standard
|	**Mg**	24	1627.1	2.6				mg/L	106	Standard

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	K	39	615.3	1.8	mg/L	583	Standard
	Ca	43	154.0	16.3	mg/L	145	Standard
	Fe	54	1072.9	4.5	mg/L	993	Standard
	Fe	57	6158.6	3.6	mg/L	5581	Standard
>	**Sc-1**	45	485340.3	2.4	mg/L	477679	Standard
	Cl	35	74641.4	1.4	ug/L	75747	Standard
	Kr	83	80.7	10.4	ug/L	83	Standard
	Br	81	17067.9	0.9	ug/L	17338	Standard
	P	31	83090.4	3.3	ug/L	84853	Standard
	S	34	812682.2	1.6	ug/L	850414	Standard
	Sr	88	169.3	6.1	ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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			
>	Ga	71			
	Se-1	77			
	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
Report Date/Time: Thursday, April 26, 2012 10:00:24
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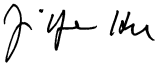
Approved: April 27, 2012

	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: April 27, 2012



SmartTune Wizard - Summary

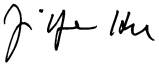
Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 4/26/2012 9:38:52 AM
End Time: 4/26/2012 9:41:15 AM

Daily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 5662.06
Obtained Intensity (Mg 23.985): 63096.60
Obtained Intensity (In 114.904): 94584.81
Obtained Intensity (U 238.05): 79333.24
Obtained Intensity (Bkgd 220): 0.07
Obtained Formula (CeO 155.9 / Ce 139.905): 0.017 (=1982.66 / 114692.70)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.007 (=758.69 / 114692.70)

Approved: April 27, 2012



SmartTune Wizard - Details

```
Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 4/26/2012 9:38:52 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): 5662.06
                Obtained Intensity (Mg 23.985): 63096.60
                Obtained Intensity (In 114.904): 94584.81
                Obtained Intensity (U 238.05): 79333.24
                Obtained Intensity (Bkgd 220): 0.07
                Obtained Formula (CeO 155.9 / Ce 139.905): 0.017 (=1982.66 / 114692.70)
                Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.007 (=758.69 / 114692.70)
[Passed]  Optimum value(s): N/A

End Time: 4/26/2012 9:41:15 AM
```


Approved: April 27, 2012

Method 6020 - Summary Report

Sample ID: Standard 3
Sample Date/Time: Thursday, April 26, 2012 10:00:44
Number of Replicates: 3
Autosampler Position: 3
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25571.9	1.5	**50.0000**	269.415	538.8	ug/L	24742	Standard
|	**Be**	9	194735.6	1.3	**50.0000**	0.569	1.1	ug/L	11	Standard
|	**Al**	27	1236779.6	2.0	**50.0000**	0.771	1.5	ug/L	20240	Standard
⌊>	**Sc**	45	488042.2	0.8				ug/L	477679	Standard
⌈	**Ti**	47	207953.4	0.8	**100.0000**	1.220	1.2	ug/L	99	Standard
|	**V**	51	1232305.4	2.1	**50.0000**	0.917	1.8	ug/L	7210	Standard
|	**Cr**	52	1026093.8	3.1	**50.0000**	1.268	2.5	ug/L	22890	Standard
|	**Cr**	53	114784.5	1.1	**50.0000**	0.238	0.5	ug/L	565	Standard
|	**Mn**	55	1339232.1	1.4	**50.0000**	0.517	1.0	ug/L	1511	Standard
|	**Co**	59	926479.5	0.8	**50.0000**	0.288	0.6	ug/L	149	Standard
|	**Ni**	60	193757.2	1.4	**50.0000**	0.394	0.8	ug/L	54	Standard
|	**Cu**	65	176002.4	0.6	**50.0000**	0.418	0.8	ug/L	142	Standard
|	**Zn**	66	77088.3	0.6	**50.0000**	0.173	0.3	ug/L	800	Standard
| >	**Ge**	72	379047.9	0.6				ug/L	375255	Standard
|	**As**	75	68217.2	2.0	**50.0000**	0.877	1.8	ug/L	-104	Standard
⌊	**Se**	82	6687.1	1.8	**50.0000**	0.686	1.4	ug/L	18	Standard
⌈>	**Ga**	71	307652.2	0.7				mg/L	308497	Standard
⌊	**Se-1**	77	4692.7	1.6	**50.0000**	0.598	1.2	mg/L	114	Standard
⌈	**Rb**	85	1060.7	5.4				ug/L	16	Standard
| >	**Y**	89	348581.1	0.9				ug/L	343723	Standard
⌊	**Rh**	103	48.0	34.1				ug/L	2	Standard
⌈	**Mo**	98	459450.0	1.0	**100.0000**	1.387	1.4	ug/L	7	Standard
|	**Ag**	107	459926.2	2.6	**50.0000**	1.083	2.2	ug/L	143	Standard
|	**Cd**	111	249525.3	1.2	**50.0000**	0.394	0.8	mg/L	597	Standard
|	**Cd**	114	696120.2	1.9	**50.0000**	0.746	1.5	ug/L	1652	Standard
| >	**In**	115	1119407.4	0.4				ug/L	1111888	Standard
|	**Sn**	118	921773.8	2.7	**50.0000**	1.218	2.4	ug/L	928	Standard
|	**Sb**	123	599634.5	1.8	**50.0000**	0.738	1.5	ug/L	16	Standard
⌊	**Ba**	135	289426.6	1.5	**50.0000**	0.550	1.1	ug/L	58	Standard
⌈	**Ce**	140	1096.7	8.4				ug/L	63	Standard
⌊>	**Tb**	159	1197278.4	0.9				ug/L	1172993	Standard
⌈	**Ho**	165	28.0	25.8				ug/L	14	Standard
|	**Tl**	203	974204.8	0.9	**50.0000**	0.484	1.0	ug/L	33	Standard
|	**Tl**	205	2501517.1	1.7	**50.0000**	1.081	2.2	ug/L	85	Standard
|	**Pb**	206	789857.6	0.9	**50.0000**	0.645	1.3	ug/L	424	Standard
|	**Pb**	207	660278.0	1.6	**50.0000**	0.803	1.6	ug/L	363	Standard
|	**Pb**	208	3037359.4	1.4	**50.0000**	0.742	1.5	ug/L	1661	Standard
|	**U**	238	2838914.2	1.4	**50.0000**	0.727	1.5	ug/L	5	Standard
⌊>	**Bi**	209	669137.3	0.5				ug/L	678709	Standard
⌈	**Na**	23	16451.6	1.6	**5.0000**	0.092	1.8	mg/L	80	Standard
|	**Mg**	24	1507378.0	1.9	**5.0000**	0.075	1.5	mg/L	106	Standard

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	K	39	55702.9	1.1	**5.0000**	0.056	1.1	mg/L	583	Standard
	Ca	43	3749.8	0.9	**5.0000**	0.035	0.7	mg/L	145	Standard
	Fe	54	31891.8	2.5	**5.0000**	0.112	2.2	mg/L	993	Standard
	Fe	57	894677.3	1.8	**5.0000**	0.068	1.4	mg/L	5581	Standard
>	**Sc-1**	45	488042.2	0.8				mg/L	477679	Standard
	Cl	35	80287.5	1.5				ug/L	75747	Standard
	Kr	83	84.7	11.2				ug/L	83	Standard
	Br	81	16809.3	2.9				ug/L	17338	Standard
	P	31	92759.8	1.2				ug/L	84853	Standard
	S	34	868800.1	0.9				ug/L	850414	Standard
	Sr	88	684.7	6.1				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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			
>	Ga	71			
	Se-1	77			
	Rb	85			
>	Y	89			
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
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Method 6020 - Summary Report

Sample ID: Standard 4
Sample Date/Time: Thursday, April 26, 2012 10:03:30
Number of Replicates: 3
Autosampler Position: 4
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26536.2	1.5	**182.4114**	47.752	26.2	ug/L	24742	Standard
|	**Be**	9	381354.9	1.4	**100.4965**	1.529	1.5	ug/L	11	Standard
|	**Al**	27	2506556.8	0.4	**102.5294**	1.248	1.2	ug/L	20240	Standard
⌊>	**Sc**	45	473193.9	0.9				ug/L	477679	Standard
⌈	**Ti**	47	406160.4	1.2	**200.6754**	2.500	1.2	ug/L	99	Standard
|	**V**	51	2506272.2	1.2	**102.5029**	0.680	0.7	ug/L	7210	Standard
|	**Cr**	52	1971866.8	1.5	**100.0765**	0.337	0.3	ug/L	22890	Standard
|	**Cr**	53	223744.3	1.9	**100.3457**	0.606	0.6	ug/L	565	Standard
|	**Mn**	55	2652907.8	1.9	**101.0547**	0.629	0.6	ug/L	1511	Standard
|	**Co**	59	1811860.0	1.4	**100.3919**	0.640	0.6	ug/L	149	Standard
|	**Ni**	60	375083.7	2.2	**99.8878**	1.116	1.1	ug/L	54	Standard
|	**Cu**	65	334477.3	2.1	**98.9718**	1.168	1.2	ug/L	142	Standard
|	**Zn**	66	145701.6	2.9	**98.8486**	1.055	1.1	ug/L	800	Standard
| >	**Ge**	72	367798.5	1.8				ug/L	375255	Standard
|	**As**	75	134278.7	1.4	**100.6710**	0.417	0.4	ug/L	-104	Standard
⌊	**Se**	82	13204.4	1.3	**100.9307**	0.687	0.7	ug/L	18	Standard
⌈>	**Ga**	71	298728.2	2.0				mg/L	308497	Standard
⌊	**Se-1**	77	9317.5	2.3	**101.7894**	3.244	3.2	mg/L	114	Standard
⌈	**Rb**	85	7584.6	2.4				ug/L	16	Standard
| >	**Y**	89	339721.9	1.9				ug/L	343723	Standard
⌊	**Rh**	103	96.0	11.6				ug/L	2	Standard
⌈	**Mo**	98	899189.3	0.8	**200.9699**	1.024	0.5	ug/L	7	Standard
|	**Ag**	107	878408.9	2.2	**99.2664**	1.000	1.0	ug/L	143	Standard
|	**Cd**	111	481089.2	1.8	**99.7910**	0.641	0.6	mg/L	597	Standard
|	**Cd**	114	1366296.6	1.4	**100.6874**	0.440	0.4	ug/L	1652	Standard
| >	**In**	115	1084861.5	1.2				ug/L	1111888	Standard
|	**Sn**	118	1834874.1	2.1	**101.3648**	2.285	2.3	ug/L	928	Standard
|	**Sb**	123	1171774.7	1.7	**100.4119**	1.729	1.7	ug/L	16	Standard
⌊	**Ba**	135	567354.0	1.9	**100.5745**	2.085	2.1	ug/L	58	Standard
⌈	**Ce**	140	411.3	7.2				ug/L	63	Standard
⌊>	**Tb**	159	1209277.7	1.9				ug/L	1172993	Standard
⌈	**Ho**	165	29.3	27.6				ug/L	14	Standard
|	**Tl**	203	1908345.6	0.8	**101.5514**	0.773	0.8	ug/L	33	Standard
|	**Tl**	205	4867159.1	0.8	**101.2094**	0.701	0.7	ug/L	85	Standard
|	**Pb**	206	1538349.7	0.4	**101.2769**	0.784	0.8	ug/L	424	Standard
|	**Pb**	207	1273475.8	1.1	**100.7865**	0.153	0.2	ug/L	363	Standard
|	**Pb**	208	6065743.7	1.1	**102.5272**	0.297	0.3	ug/L	1661	Standard
|	**U**	238	5908300.7	0.7	**104.5721**	0.723	0.7	ug/L	5	Standard
⌊>	**Bi**	209	635369.7	0.9				ug/L	678709	Standard
⌈	**Na**	23	32370.6	2.4	**10.0855**	0.267	2.6	mg/L	80	Standard
|	**Mg**	24	2988587.7	1.9	**10.1112**	0.188	1.9	mg/L	106	Standard

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	K	39	108007.6	1.4	**10.0252**	0.161	1.6	mg/L	583	Standard
	Ca	43	7352.5	2.1	**10.1611**	0.301	3.0	mg/L	145	Standard
	Fe	54	61398.4	1.5	**10.0480**	0.190	1.9	mg/L	993	Standard
	Fe	57	1784065.7	2.1	**10.1557**	0.280	2.8	mg/L	5581	Standard
>	**Sc-1**	45	473193.9	0.9				mg/L	477679	Standard
	Cl	35	79557.0	0.7				ug/L	75747	Standard
	Kr	83	79.7	11.4				ug/L	83	Standard
	Br	81	16280.7	1.4				ug/L	17338	Standard
	P	31	92720.2	1.5				ug/L	84853	Standard
	S	34	844575.8	1.2				ug/L	850414	Standard
	Sr	88	17365.3	0.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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			
>	Ga	71			
	Se-1	77			
	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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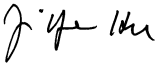
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	U	238
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 4
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Method 6020 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, April 26, 2012 10:06:19
Number of Replicates: 3
Autosampler Position: 201
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	24822.0	1.7	**-46.7812**	46.707	99.8	ug/L	24742	Standard
|	**Be**	9	194186.9	1.3	**49.9631**	0.700	1.4	ug/L	11	Standard
|	**Al**	27	1233893.8	1.6	**48.9699**	0.808	1.7	ug/L	20240	Standard
⌊>	**Sc**	45	484638.5	1.4				ug/L	477679	Standard
⌈	**Ti**	47	207900.1	1.2	**100.2299**	1.073	1.1	ug/L	99	Standard
|	**V**	51	1243876.7	1.8	**49.5028**	0.415	0.8	ug/L	7210	Standard
|	**Cr**	52	1021393.4	1.8	**50.0348**	0.597	1.2	ug/L	22890	Standard
|	**Cr**	53	113443.2	1.7	**49.5398**	0.855	1.7	ug/L	565	Standard
|	**Mn**	55	1323770.3	0.8	**49.2001**	0.938	1.9	ug/L	1511	Standard
|	**Co**	59	911115.5	0.5	**49.2742**	0.635	1.3	ug/L	149	Standard
|	**Ni**	60	189411.9	2.1	**49.2219**	0.221	0.4	ug/L	54	Standard
|	**Cu**	65	171382.3	1.6	**49.4776**	0.190	0.4	ug/L	142	Standard
|	**Zn**	66	77930.3	2.3	**51.4344**	0.569	1.1	ug/L	800	Standard
|>	**Ge**	72	376825.3	1.8				ug/L	375255	Standard
|	**As**	75	68155.8	1.7	**49.9172**	0.790	1.6	ug/L	-104	Standard
⌊	**Se**	82	6776.6	1.6	**50.5053**	1.046	2.1	ug/L	18	Standard
⌈>	**Ga**	71	306462.8	1.6				mg/L	308497	Standard
⌊	**Se-1**	77	4643.4	1.4	**48.7721**	0.508	1.0	mg/L	114	Standard
⌈	**Rb**	85	1039.4	4.8				ug/L	16	Standard
|>	**Y**	89	339136.6	3.9				ug/L	343723	Standard
⌊	**Rh**	103	51.3	22.2				ug/L	2	Standard
⌈	**Mo**	98	451820.0	2.2	**99.3241**	1.430	1.4	ug/L	7	Standard
|	**Ag**	107	457141.7	1.4	**50.8170**	0.346	0.7	ug/L	143	Standard
|	**Cd**	111	247967.9	1.3	**50.5425**	0.377	0.7	mg/L	597	Standard
|	**Cd**	114	694934.5	0.8	**50.3225**	0.452	0.9	ug/L	1652	Standard
|>	**In**	115	1102808.9	0.8				ug/L	1111888	Standard
|	**Sn**	118	921018.3	3.0	**50.0157**	1.100	2.2	ug/L	928	Standard
|	**Sb**	123	593056.8	2.7	**49.9859**	0.996	2.0	ug/L	16	Standard
⌊	**Ba**	135	289633.0	1.8	**50.4955**	0.545	1.1	ug/L	58	Standard
⌈	**Ce**	140	1045.4	2.4				ug/L	63	Standard
⌊>	**Tb**	159	1201522.3	1.7				ug/L	1172993	Standard
⌈	**Ho**	165	25.3	19.9				ug/L	14	Standard
|	**Tl**	203	975610.4	1.0	**49.8852**	0.238	0.5	ug/L	33	Standard
|	**Tl**	205	2521087.3	0.9	**50.3753**	0.337	0.7	ug/L	85	Standard
|	**Pb**	206	796850.5	1.0	**50.3939**	0.239	0.5	ug/L	424	Standard
|	**Pb**	207	662461.9	1.8	**50.3634**	0.170	0.3	ug/L	363	Standard
|	**Pb**	208	3055758.5	1.4	**49.6165**	0.116	0.2	ug/L	1661	Standard
|	**U**	238	2859040.0	1.3	**48.6267**	0.504	1.0	ug/L	5	Standard
⌊>	**Bi**	209	661240.3	1.5				ug/L	678709	Standard
⌈	**Na**	23	16576.4	1.1	**5.0311**	0.120	2.4	mg/L	80	Standard
|	**Mg**	24	1511778.9	0.9	**4.9940**	0.026	0.5	mg/L	106	Standard

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	K	39	55517.6	1.9	**5.0066**	0.131	2.6	mg/L	583	Standard
	Ca	43	3767.1	1.8	**4.9803**	0.143	2.9	mg/L	145	Standard
	Fe	54	31568.5	1.1	**4.9602**	0.067	1.3	mg/L	993	Standard
	Fe	57	839615.2	0.4	**4.6506**	0.048	1.0	mg/L	5581	Standard
>	**Sc-1**	45	484638.5	1.4				mg/L	477679	Standard
	Cl	35	81175.9	0.7				ug/L	75747	Standard
	Kr	83	92.7	5.5				ug/L	83	Standard
	Br	81	16562.7	2.8				ug/L	17338	Standard
	P	31	94265.4	2.1				ug/L	84853	Standard
	S	34	868139.6	1.2				ug/L	850414	Standard
	Sr	88	565.3	4.1				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9	99.926		
	Al	27	97.940		
>	Sc	45			
	Ti	47	100.230		
	V	51	99.006		
	Cr	52	100.070		
	Cr	53	99.080		
	Mn	55	98.400		
	Co	59	98.548		
	Ni	60	98.444		
	Cu	65	98.955		
	Zn	66	102.869		
>	Ge	72		100.418	
	As	75	99.834		
	Se	82	101.011		
>	Ga	71		99.340	
	Se-1	77			
	Rb	85			
>	Y	89		98.666	
	Rh	103			
	Mo	98	99.324		
	Ag	107	101.634		
	Cd	111	101.085		
	Cd	114			
>	In	115		99.183	
	Sn	118	100.031		
	Sb	123	99.972		
	Ba	135	100.991		
	Ce	140			
>	Tb	159		102.432	
	Ho	165			
	Tl	203	99.770		
	Tl	205			
	Pb	206	100.788		

Sample ID: QC Std 1
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	Pb	207	100.727	
	Pb	208	99.233	
	U	238	97.253	
>	Bi	209		97.426
	Na	23	100.623	
	Mg	24	99.879	
	K	39	100.133	
	Ca	43	99.607	
	Fe	54	99.203	
	Fe	57	93.012	
>	Sc-1	45		
	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
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Method 6020 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, April 26, 2012 10:09:08
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: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	24249.4	2.5	**-73.1880**	39.377	53.8	ug/L	24742	Standard
|	**Be**	9	26.3	38.8	**0.0000**	0.003	6221.3	ug/L	11	Standard
|	**Al**	27	13940.4	1.1	**-0.0297**	0.009	31.1	ug/L	20240	Standard
⌊>	**Sc**	45	478679.0	2.4				ug/L	477679	Standard
⌈	**Ti**	47	137.3	28.6	**0.0156**	0.018	117.0	ug/L	99	Standard
|	**V**	51	6862.1	2.5	**-0.0031**	0.002	62.9	ug/L	7210	Standard
|	**Cr**	52	21356.4	1.6	**-0.0252**	0.007	26.4	ug/L	22890	Standard
|	**Cr**	53	511.3	1.6	**-0.0120**	0.005	44.9	ug/L	565	Standard
|	**Mn**	55	1609.8	6.2	**0.0088**	0.003	35.7	ug/L	1511	Standard
|	**Co**	59	212.7	26.6	**0.0037**	0.003	80.8	ug/L	149	Standard
|	**Ni**	60	70.7	14.5	**-0.0017**	0.002	135.0	ug/L	54	Standard
|	**Cu**	65	129.7	5.8	**-0.0019**	0.001	76.2	ug/L	142	Standard
|	**Zn**	66	346.3	7.4	**-0.1266**	0.013	10.5	ug/L	800	Standard
|>	**Ge**	72	363042.9	2.2				ug/L	375255	Standard
|	**As**	75	-103.4	24.7	**0.0037**	0.021	567.5	ug/L	-104	Standard
⌊	**Se**	82	14.8	75.4	**0.0005**	0.085	16380.7	ug/L	18	Standard
⌈>	**Ga**	71	298691.8	3.0				mg/L	308497	Standard
⌊	**Se-1**	77	108.7	16.7	**-0.0894**	0.169	188.5	mg/L	114	Standard
⌈	**Rb**	85	10.7	43.3				ug/L	16	Standard
|>	**Y**	89	333290.5	2.9				ug/L	343723	Standard
⌊	**Rh**	103	3.3	69.3				ug/L	2	Standard
⌈	**Mo**	98	128.5	29.2	**0.0204**	0.008	38.2	ug/L	7	Standard
|	**Ag**	107	123.7	64.8	**0.0040**	0.009	234.1	ug/L	143	Standard
|	**Cd**	111	569.8	6.6	**0.0020**	0.009	456.4	mg/L	597	Standard
|	**Cd**	114	1691.3	5.0	**0.0085**	0.009	102.8	ug/L	1652	Standard
|>	**In**	115	1089581.6	2.1				ug/L	1111888	Standard
|	**Sn**	118	1174.7	4.1	**0.0110**	0.004	33.5	ug/L	928	Standard
|	**Sb**	123	279.8	23.3	**0.0234**	0.006	25.4	ug/L	16	Standard
⌊	**Ba**	135	81.0	44.6	**0.0029**	0.007	232.1	ug/L	58	Standard
⌈	**Ce**	140	46.0	26.1				ug/L	63	Standard
⌊>	**Tb**	159	1160953.9	1.1				ug/L	1172993	Standard
⌈	**Ho**	165	14.0	37.8				ug/L	14	Standard
|	**Tl**	203	107.0	52.7	**0.0037**	0.003	80.6	ug/L	33	Standard
|	**Tl**	205	236.7	35.1	**0.0051**	0.002	34.3	ug/L	85	Standard
|	**Pb**	206	492.3	9.2	**0.0026**	0.003	129.1	ug/L	424	Standard
|	**Pb**	207	408.3	10.7	**0.0039**	0.004	104.8	ug/L	363	Standard
|	**Pb**	208	1887.4	5.6	**0.0037**	0.002	64.3	ug/L	1661	Standard
|	**U**	238	129.0	30.5	**0.0069**	0.001	10.3	ug/L	5	Standard
⌊>	**Bi**	209	670781.1	2.4				ug/L	678709	Standard
⌈	**Na**	23	88.7	12.4	**0.0029**	0.003	103.4	mg/L	80	Standard
|	**Mg**	24	164.0	13.9	**0.0002**	0.000	48.6	mg/L	106	Standard

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	K	39	594.7	9.4	**0.0038**	0.005	118.8	mg/L	583	Standard
	Ca	43	138.7	15.9	**-0.0126**	0.035	280.0	mg/L	145	Standard
	Fe	54	978.9	1.8	**-0.0080**	0.004	47.6	mg/L	993	Standard
	Fe	57	4919.5	3.0	**-0.0015**	0.001	40.5	mg/L	5581	Standard
>	**Sc-1**	45	478679.0	2.4				mg/L	477679	Standard
	Cl	35	79710.1	1.0				ug/L	75747	Standard
	Kr	83	86.0	8.1				ug/L	83	Standard
	Br	81	16603.8	2.4				ug/L	17338	Standard
	P	31	86215.8	3.5				ug/L	84853	Standard
	S	34	858688.4	1.7				ug/L	850414	Standard
	Sr	88	185.3	21.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.746	
	As	75			
	Se	82			
>	Ga	71		96.821	
	Se-1	77			
	Rb	85			
>	Y	89		96.965	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.994	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.974	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

98.832

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
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Method 6020 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, April 26, 2012 10:11:57
Number of Replicates: 3
Autosampler Position: 202
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	24192.3	1.8	**-69.0905**	36.873	53.4	ug/L	24742	Standard
|	**Be**	9	21.7	14.1	**-0.0012**	0.001	70.6	ug/L	11	Standard
|	**Al**	27	16483.0	0.2	**0.0764**	0.003	4.0	ug/L	20240	Standard
⌊>	**Sc**	45	476684.1	0.4				ug/L	477679	Standard
⌈	**Ti**	47	108.7	19.2	**0.0012**	0.011	923.9	ug/L	99	Standard
|	**V**	51	16031.2	0.7	**0.3726**	0.005	1.4	ug/L	7210	Standard
|	**Cr**	52	37055.9	1.3	**0.7759**	0.016	2.0	ug/L	22890	Standard
|	**Cr**	53	2288.2	1.8	**0.7890**	0.020	2.6	ug/L	565	Standard
|	**Mn**	55	14092.6	2.1	**0.4865**	0.009	1.8	ug/L	1511	Standard
|	**Co**	59	7153.4	1.4	**0.3902**	0.006	1.5	ug/L	149	Standard
|	**Ni**	60	6112.2	1.7	**1.6157**	0.030	1.8	ug/L	54	Standard
|	**Cu**	65	2852.9	2.4	**0.8080**	0.016	2.0	ug/L	142	Standard
|	**Zn**	66	10866.9	2.2	**7.0727**	0.123	1.7	ug/L	800	Standard
|>	**Ge**	72	365925.5	0.6				ug/L	375255	Standard
|	**As**	75	418.3	14.2	**0.3975**	0.047	11.7	ug/L	-104	Standard
⌊	**Se**	82	70.7	4.9	**0.4295**	0.024	5.6	ug/L	18	Standard
⌈>	**Ga**	71	304568.9	2.1				mg/L	308497	Standard
⌊	**Se-1**	77	145.3	21.0	**0.2882**	0.326	113.0	mg/L	114	Standard
⌈	**Rb**	85	11.3	10.2				ug/L	16	Standard
|>	**Y**	89	337356.6	1.1				ug/L	343723	Standard
⌊	**Rh**	103	2.7	43.3				ug/L	2	Standard
⌈	**Mo**	98	50.9	5.2	**0.0032**	0.000	14.7	ug/L	7	Standard
|	**Ag**	107	3610.4	2.2	**0.3954**	0.006	1.6	ug/L	143	Standard
|	**Cd**	111	1753.0	1.5	**0.2459**	0.002	0.8	mg/L	597	Standard
|	**Cd**	114	4867.2	2.0	**0.2410**	0.009	3.8	ug/L	1652	Standard
|>	**In**	115	1091782.8	1.1				ug/L	1111888	Standard
|	**Sn**	118	1026.7	4.7	**0.0027**	0.003	99.1	ug/L	928	Standard
|	**Sb**	123	4678.8	2.1	**0.3979**	0.006	1.4	ug/L	16	Standard
⌊	**Ba**	135	4199.2	1.2	**0.7282**	0.006	0.8	ug/L	58	Standard
⌈	**Ce**	140	57.3	8.8				ug/L	63	Standard
⌊>	**Tb**	159	1165770.3	0.1				ug/L	1172993	Standard
⌈	**Ho**	165	10.0	69.3				ug/L	14	Standard
|	**Tl**	203	1566.1	4.9	**0.0777**	0.003	3.9	ug/L	33	Standard
|	**Tl**	205	3794.5	1.0	**0.0757**	0.000	0.6	ug/L	85	Standard
|	**Pb**	206	3530.7	3.6	**0.1935**	0.008	3.9	ug/L	424	Standard
|	**Pb**	207	2959.6	1.7	**0.1965**	0.003	1.7	ug/L	363	Standard
|	**Pb**	208	13681.7	1.0	**0.1940**	0.001	0.4	ug/L	1661	Standard
|	**U**	238	20799.3	1.6	**0.3557**	0.002	0.5	ug/L	5	Standard
⌊>	**Bi**	209	666511.0	1.1				ug/L	678709	Standard
⌈	**Na**	23	84.0	15.6	**0.0016**	0.004	251.1	mg/L	80	Standard
|	**Mg**	24	120.3	6.2	**0.0000**	0.000	69.1	mg/L	106	Standard

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	K	39	558.0	7.0	**0.0007**	0.004	545.8	mg/L	583	Standard
	Ca	43	124.7	4.0	**-0.0319**	0.007	23.2	mg/L	145	Standard
	Fe	54	985.5	4.4	**-0.0063**	0.007	104.0	mg/L	993	Standard
	Fe	57	5017.5	7.6	**-0.0008**	0.002	242.8	mg/L	5581	Standard
>	**Sc-1**	45	476684.1	0.4				mg/L	477679	Standard
	Cl	35	77458.8	0.6				ug/L	75747	Standard
	Kr	83	80.3	13.4				ug/L	83	Standard
	Br	81	16196.7	0.9				ug/L	17338	Standard
	P	31	85959.9	1.9				ug/L	84853	Standard
	S	34	813189.0	2.0				ug/L	850414	Standard
	Sr	88	178.7	15.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	93.149		
	Cr	52	96.982		
	Cr	53			
	Mn	55	97.306		
	Co	59	97.554		
	Ni	60	100.980		
	Cu	65	101.002		
	Zn	66	113.163		
>	Ge	72		97.514	
	As	75	99.369		
	Se	82	107.371		
>	Ga	71		98.727	
	Se-1	77			
	Rb	85			
>	Y	89		98.148	
	Rh	103			
	Mo	98			
	Ag	107	98.862		
	Cd	111	102.449		
	Cd	114			
>	In	115		98.192	
	Sn	118			
	Sb	123	99.465		
	Ba	135	97.097		
	Ce	140			
>	Tb	159		99.384	
	Ho	165			
	Tl	203	97.135		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	96.977		
	U	238	88.914		
>	Bi	209		98.203	
	Na	23			
	Mg	24			
	K	39			
	Ca	43			
	Fe	54			
	Fe	57			
>	Sc-1	45			
	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: Thursday, April 26, 2012 10:14:43
Number of Replicates: 3
Autosampler Position: 203
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	24225.0	0.3	**83.1409**	23.616	28.4	ug/L	24742	Standard
|	**Be**	9	18.7	32.3	**-0.0016**	0.002	100.7	ug/L	11	Standard
|	**Al**	27	112980151.4	1.1	**4899.8004**	38.823	0.8	ug/L	20240	Standard
⌊>	**Sc**	45	448820.1	0.8				ug/L	477679	Standard
⌈	**Ti**	47	206499.8	1.0	**108.9397**	0.618	0.6	ug/L	99	Standard
|	**V**	51	7202.0	1.5	**0.0272**	0.001	2.1	ug/L	7210	Standard
|	**Cr**	52	22258.3	0.2	**0.0846**	0.016	19.4	ug/L	22890	Standard
|	**Cr**	53	2792.9	9.7	**1.0959**	0.125	11.4	ug/L	565	Standard
|	**Mn**	55	1808.4	2.7	**0.0203**	0.002	8.8	ug/L	1511	Standard
|	**Co**	59	484.3	4.2	**0.0205**	0.001	5.0	ug/L	149	Standard
|	**Ni**	60	1300.1	0.9	**0.3491**	0.007	1.9	ug/L	54	Standard
|	**Cu**	65	590.0	6.6	**0.1458**	0.013	8.7	ug/L	142	Standard
|	**Zn**	66	3454.7	3.2	**2.1477**	0.082	3.8	ug/L	800	Standard
|>	**Ge**	72	344362.2	1.5				ug/L	375255	Standard
|	**As**	75	-57.4	22.4	**0.0364**	0.011	30.1	ug/L	-104	Standard
⌊	**Se**	82	19.3	31.1	**0.0436**	0.047	108.7	ug/L	18	Standard
⌈>	**Ga**	71	271356.4	0.7				mg/L	308497	Standard
⌊	**Se-1**	77	261.3	5.2	**1.8937**	0.164	8.7	mg/L	114	Standard
⌈	**Rb**	85	3265.7	1.2				ug/L	16	Standard
|>	**Y**	89	303443.0	3.1				ug/L	343723	Standard
⌊	**Rh**	103	8.7	58.1				ug/L	2	Standard
⌈	**Mo**	98	396729.7	0.7	**95.2051**	3.168	3.3	ug/L	7	Standard
|	**Ag**	107	136.0	8.3	**0.0065**	0.001	18.9	ug/L	143	Standard
|	**Cd**	111	988.3	5.3	**0.1046**	0.015	14.6	mg/L	597	Standard
|	**Cd**	114	3418.7	1.3	**0.1549**	0.007	4.7	ug/L	1652	Standard
|>	**In**	115	1011006.3	3.2				ug/L	1111888	Standard
|	**Sn**	118	1007.4	4.6	**0.0061**	0.003	52.3	ug/L	928	Standard
|	**Sb**	123	573.5	4.4	**0.0522**	0.001	1.3	ug/L	16	Standard
⌊	**Ba**	135	109.7	1.9	**0.0094**	0.001	11.3	ug/L	58	Standard
⌈	**Ce**	140	2178.2	2.8				ug/L	63	Standard
⌊>	**Tb**	159	1152306.7	2.0				ug/L	1172993	Standard
⌈	**Ho**	165	14.7	7.9				ug/L	14	Standard
|	**Tl**	203	459.0	5.5	**0.0229**	0.002	6.7	ug/L	33	Standard
|	**Tl**	205	1078.0	3.0	**0.0231**	0.001	3.0	ug/L	85	Standard
|	**Pb**	206	845.4	9.2	**0.0280**	0.005	16.4	ug/L	424	Standard
|	**Pb**	207	681.3	4.4	**0.0276**	0.002	7.0	ug/L	363	Standard
|	**Pb**	208	3190.8	4.6	**0.0279**	0.002	7.0	ug/L	1661	Standard
|	**U**	238	11.3	48.6	**0.0050**	0.000	2.0	ug/L	5	Standard
⌊>	**Bi**	209	629542.8	1.1				ug/L	678709	Standard
⌈	**Na**	23	37350.0	0.7	**12.2739**	0.150	1.2	mg/L	80	Standard
|	**Mg**	24	1412268.6	0.9	**5.0374**	0.038	0.8	mg/L	106	Standard

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	K	39	51677.3	1.2	**5.0316**	0.040	0.8	mg/L	583	Standard
	Ca	43	10312.8	0.8	**15.1231**	0.145	1.0	mg/L	145	Standard
	Fe	54	67469.8	1.5	**11.6680**	0.220	1.9	mg/L	993	Standard
	Fe	57	1698267.1	1.8	**10.1911**	0.179	1.8	mg/L	5581	Standard
>	**Sc-1**	45	448820.1	0.8				mg/L	477679	Standard
	Cl	35	9621648.1	0.6				ug/L	75747	Standard
	Kr	83	83.3	6.6				ug/L	83	Standard
	Br	81	14605.0	1.3				ug/L	17338	Standard
	P	31	8373690.8	0.7				ug/L	84853	Standard
	S	34	1563066.2	0.4				ug/L	850414	Standard
	Sr	88	1093.4	6.3				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.996		
>	Sc	45			
	Ti	47	108.940		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.767	
	As	75			
	Se	82			
>	Ga	71		87.961	
	Se-1	77			
	Rb	85			
>	Y	89		88.281	
	Rh	103			
	Mo	98	95.205		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.927	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.236	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		92.756
	Na	23	98.191	
	Mg	24	100.747	
	K	39	100.632	
	Ca	43	100.821	
	Fe	54	93.344	
	Fe	57	81.529	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
Report Date/Time: Thursday, April 26, 2012 10:17:09
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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, April 26, 2012 10:17:29
Number of Replicates: 3
Autosampler Position: 204
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26978.3	0.6	**64.4543**	26.721	41.5	ug/L	24742	Standard
|	**Be**	9	396037.3	0.8	**98.0750**	0.173	0.2	ug/L	11	Standard
|	**Al**	27	136141434.0	0.5	**5262.8895**	11.741	0.2	ug/L	20240	Standard
⌊>	**Sc**	45	503525.2	0.7				ug/L	477679	Standard
⌈	**Ti**	47	255268.6	1.3	**124.0192**	1.399	1.1	ug/L	99	Standard
|	**V**	51	2588638.4	0.7	**104.1365**	1.391	1.3	ug/L	7210	Standard
|	**Cr**	52	2070029.1	3.9	**103.3445**	2.988	2.9	ug/L	22890	Standard
|	**Cr**	53	229431.1	1.8	**101.2045**	1.247	1.2	ug/L	565	Standard
|	**Mn**	55	2776618.1	1.9	**104.0303**	1.616	1.6	ug/L	1511	Standard
|	**Co**	59	1816705.2	0.9	**99.0090**	1.534	1.5	ug/L	149	Standard
|	**Ni**	60	374292.8	1.1	**98.0497**	1.761	1.8	ug/L	54	Standard
|	**Cu**	65	328685.8	1.0	**95.6661**	1.536	1.6	ug/L	142	Standard
|	**Zn**	66	150464.1	0.5	**100.4321**	1.587	1.6	ug/L	800	Standard
| >	**Ge**	72	373946.1	1.1				ug/L	375255	Standard
|	**As**	75	134286.6	1.3	**99.0283**	1.814	1.8	ug/L	-104	Standard
⌊	**Se**	82	13051.8	2.5	**98.1277**	2.987	3.0	ug/L	18	Standard
⌈>	**Ga**	71	298894.9	1.0				mg/L	308497	Standard
⌊	**Se-1**	77	9457.0	2.0	**103.2555**	2.674	2.6	mg/L	114	Standard
⌈	**Rb**	85	3982.5	3.3				ug/L	16	Standard
| >	**Y**	89	339229.5	1.7				ug/L	343723	Standard
⌊	**Rh**	103	75.3	24.1				ug/L	2	Standard
⌈	**Mo**	98	482105.8	1.4	**104.4244**	1.259	1.2	ug/L	7	Standard
|	**Ag**	107	327866.9	2.2	**35.9074**	0.823	2.3	ug/L	143	Standard
|	**Cd**	111	502109.3	1.0	**100.9495**	0.897	0.9	mg/L	597	Standard
|	**Cd**	114	1388454.7	1.1	**99.1688**	1.096	1.1	ug/L	1652	Standard
| >	**In**	115	1119325.5	0.2				ug/L	1111888	Standard
|	**Sn**	118	1597.4	2.8	**0.0319**	0.002	6.9	ug/L	928	Standard
|	**Sb**	123	1215617.1	1.0	**100.9558**	0.790	0.8	ug/L	16	Standard
⌊	**Ba**	135	577410.6	1.0	**99.1985**	0.940	0.9	ug/L	58	Standard
⌈	**Ce**	140	2660.9	2.5				ug/L	63	Standard
⌊>	**Tb**	159	1249917.9	0.6				ug/L	1172993	Standard
⌈	**Ho**	165	26.7	37.0				ug/L	14	Standard
|	**Tl**	203	1908267.4	0.4	**98.3049**	1.422	1.4	ug/L	33	Standard
|	**Tl**	205	4918659.7	1.0	**99.0180**	1.938	2.0	ug/L	85	Standard
|	**Pb**	206	1548602.0	0.4	**98.6953**	1.528	1.5	ug/L	424	Standard
|	**Pb**	207	1315584.7	0.5	**100.7997**	1.634	1.6	ug/L	363	Standard
|	**Pb**	208	6200886.1	0.4	**101.4687**	1.505	1.5	ug/L	1661	Standard
|	**U**	238	5735351.3	1.2	**98.2766**	2.281	2.3	ug/L	5	Standard
⌊>	**Bi**	209	656376.7	1.1				ug/L	678709	Standard
⌈	**Na**	23	43456.2	1.5	**12.7301**	0.246	1.9	mg/L	80	Standard
|	**Mg**	24	1626819.4	0.9	**5.1725**	0.083	1.6	mg/L	106	Standard

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	K	39	59574.2	0.5	**5.1720**	0.051	1.0	mg/L	583	Standard
	Ca	43	11502.4	1.6	**15.0349**	0.346	2.3	mg/L	145	Standard
	Fe	54	80917.9	1.9	**12.4855**	0.317	2.5	mg/L	993	Standard
	Fe	57	2327117.4	3.2	**12.4525**	0.317	2.5	mg/L	5581	Standard
>	**Sc-1**	45	503525.2	0.7				mg/L	477679	Standard
	Cl	35	11620098.5	1.2				ug/L	75747	Standard
	Kr	83	88.0	9.1				ug/L	83	Standard
	Br	81	17352.6	1.9				ug/L	17338	Standard
	P	31	9307049.1	0.4				ug/L	84853	Standard
	S	34	1794668.0	0.6				ug/L	850414	Standard
	Sr	88	1467.4	6.4				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	105.258		
>	Sc	45			
	Ti	47	124.019		
	V	51	104.137		
	Cr	52	103.344		
	Cr	53			
	Mn	55	104.030		
	Co	59	99.009		
	Ni	60	98.050		
	Cu	65	95.666		
	Zn	66	100.432		
>	Ge	72		99.651	
	As	75	99.028		
	Se	82	98.128		
>	Ga	71		96.887	
	Se-1	77			
	Rb	85			
>	Y	89		98.693	
	Rh	103			
	Mo	98	104.424		
	Ag	107	35.907		
	Cd	111	100.949		
	Cd	114			
>	In	115		100.669	
	Sn	118			
	Sb	123	100.956		
	Ba	135	99.199		
	Ce	140			
>	Tb	159		106.558	
	Ho	165			
	Tl	203	98.305		
	Tl	205			
	Pb	206	98.695		

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	Pb	207	100.800	
	Pb	208	101.469	
	U	238	98.277	
>	Bi	209		96.710
	Na	23	101.841	
	Mg	24	103.451	
	K	39	103.439	
	Ca	43	100.232	
	Fe	54	99.884	
	Fe	57	99.620	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	
QC Std 5	Ag	107	

Sample ID: QC Std 5
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, April 26, 2012 10:20:18
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25452.4	2.1	**16.0198**	30.308	189.2	ug/L	24742	Standard
|	**Be**	9	195979.8	1.4	**50.4650**	1.133	2.2	ug/L	11	Standard
|	**Al**	27	1216816.3	3.6	**48.3221**	1.879	3.9	ug/L	20240	Standard
⌊>	**Sc**	45	484282.0	1.1				ug/L	477679	Standard
⌈	**Ti**	47	207599.4	1.5	**103.4949**	1.297	1.3	ug/L	99	Standard
|	**V**	51	1229828.2	2.4	**50.6152**	0.685	1.4	ug/L	7210	Standard
|	**Cr**	52	1007970.3	3.2	**51.0765**	1.115	2.2	ug/L	22890	Standard
|	**Cr**	53	114113.1	3.4	**51.5307**	1.276	2.5	ug/L	565	Standard
|	**Mn**	55	1307281.2	1.2	**50.2363**	0.077	0.2	ug/L	1511	Standard
|	**Co**	59	905328.6	2.1	**50.6222**	0.598	1.2	ug/L	149	Standard
|	**Ni**	60	187932.0	0.4	**50.5089**	0.313	0.6	ug/L	54	Standard
|	**Cu**	65	167697.4	2.6	**50.0608**	0.847	1.7	ug/L	142	Standard
|	**Zn**	66	73517.6	1.9	**50.1681**	0.473	0.9	ug/L	800	Standard
|>	**Ge**	72	364385.5	1.0				ug/L	375255	Standard
|	**As**	75	66160.3	1.2	**50.1044**	0.159	0.3	ug/L	-104	Standard
⌊	**Se**	82	6499.6	2.4	**50.0881**	1.269	2.5	ug/L	18	Standard
⌈>	**Ga**	71	299787.6	3.4				mg/L	308497	Standard
⌊	**Se-1**	77	4622.7	0.2	**49.6944**	1.693	3.4	mg/L	114	Standard
⌈	**Rb**	85	1047.4	4.9				ug/L	16	Standard
|>	**Y**	89	342472.6	1.7				ug/L	343723	Standard
⌊	**Rh**	103	42.0	8.2				ug/L	2	Standard
⌈	**Mo**	98	439025.1	1.4	**93.8843**	0.534	0.6	ug/L	7	Standard
|	**Ag**	107	446446.5	1.5	**48.2795**	0.909	1.9	ug/L	143	Standard
|	**Cd**	111	250057.9	2.1	**49.5747**	0.666	1.3	mg/L	597	Standard
|	**Cd**	114	698675.7	1.9	**49.2074**	0.509	1.0	ug/L	1652	Standard
|>	**In**	115	1133756.3	1.4				ug/L	1111888	Standard
|	**Sn**	118	938393.5	1.2	**49.5747**	0.284	0.6	ug/L	928	Standard
|	**Sb**	123	616602.6	2.0	**50.5540**	0.316	0.6	ug/L	16	Standard
⌊	**Ba**	135	288480.9	1.6	**48.9234**	0.234	0.5	ug/L	58	Standard
⌈	**Ce**	140	1124.0	4.3				ug/L	63	Standard
⌊>	**Tb**	159	1224918.0	1.1				ug/L	1172993	Standard
⌈	**Ho**	165	22.0	18.2				ug/L	14	Standard
|	**Tl**	203	970157.3	1.1	**50.3541**	0.543	1.1	ug/L	33	Standard
|	**Tl**	205	2486663.7	1.1	**50.4410**	1.052	2.1	ug/L	85	Standard
|	**Pb**	206	784828.3	1.1	**50.3845**	0.847	1.7	ug/L	424	Standard
|	**Pb**	207	651828.7	1.5	**50.3057**	0.737	1.5	ug/L	363	Standard
|	**Pb**	208	3012711.0	1.1	**49.6579**	0.656	1.3	ug/L	1661	Standard
|	**U**	238	2873330.1	2.4	**49.5999**	0.754	1.5	ug/L	5	Standard
⌊>	**Bi**	209	651441.1	1.5				ug/L	678709	Standard
⌈	**Na**	23	16196.0	1.3	**4.9185**	0.117	2.4	mg/L	80	Standard
|	**Mg**	24	1502237.5	2.1	**4.9658**	0.084	1.7	mg/L	106	Standard

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	K	39	55833.4	1.5	**5.0384**	0.065	1.3	mg/L	583	Standard
	Ca	43	3711.8	1.0	**4.9076**	0.105	2.1	mg/L	145	Standard
	Fe	54	29962.3	1.8	**4.7026**	0.093	2.0	mg/L	993	Standard
	Fe	57	831103.1	4.3	**4.6052**	0.154	3.3	mg/L	5581	Standard
>	**Sc-1**	45	484282.0	1.1				mg/L	477679	Standard
	Cl	35	158434.1	37.7				ug/L	75747	Standard
	Kr	83	92.0	11.5				ug/L	83	Standard
	Br	81	16467.6	2.5				ug/L	17338	Standard
	P	31	88195.3	1.2				ug/L	84853	Standard
	S	34	821614.8	0.4				ug/L	850414	Standard
	Sr	88	558.7	6.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.644		
>	Sc	45			
	Ti	47	103.495		
	V	51	101.230		
	Cr	52	102.153		
	Cr	53			
	Mn	55	100.473		
	Co	59	101.244		
	Ni	60	101.018		
	Cu	65	100.122		
	Zn	66	100.336		
>	Ge	72		97.103	
	As	75	100.209		
	Se	82	100.176		
>	Ga	71		97.177	
	Se-1	77			
	Rb	85			
>	Y	89		99.636	
	Rh	103			
	Mo	98	93.884		
	Ag	107	96.559		
	Cd	111	99.149		
	Cd	114			
>	In	115		101.967	
	Sn	118	99.149		
	Sb	123	101.108		
	Ba	135	97.847		
	Ce	140			
>	Tb	159		104.427	
	Ho	165			
	Tl	203	100.708		
	Tl	205			
	Pb	206	100.769		

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	Pb	207	100.611	
	Pb	208	99.316	
	U	238	99.200	
>	Bi	209		95.982
	Na	23	98.370	
	Mg	24	99.316	
	K	39	100.768	
	Ca	43	98.151	
	Fe	54	94.052	
	Fe	57	92.104	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, April 26, 2012 10:23:03
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25358.5	2.4	**-13.4428**	47.795	355.5	ug/L	24742	Standard
|	**Be**	9	42.0	109.6	**0.0040**	0.012	299.8	ug/L	11	Standard
|	**Al**	27	14323.4	2.6	**-0.0256**	0.019	76.0	ug/L	20240	Standard
⌊>	**Sc**	45	488346.9	1.7				ug/L	477679	Standard
⌈	**Ti**	47	132.7	22.4	**0.0117**	0.014	123.6	ug/L	99	Standard
|	**V**	51	7165.2	3.4	**0.0011**	0.010	864.7	ug/L	7210	Standard
|	**Cr**	52	22625.9	0.4	**0.0077**	0.003	40.6	ug/L	22890	Standard
|	**Cr**	53	590.0	6.5	**0.0162**	0.017	102.1	ug/L	565	Standard
|	**Mn**	55	1735.1	5.2	**0.0118**	0.003	29.0	ug/L	1511	Standard
|	**Co**	59	260.3	10.2	**0.0060**	0.001	24.4	ug/L	149	Standard
|	**Ni**	60	103.0	17.5	**0.0062**	0.005	75.8	ug/L	54	Standard
|	**Cu**	65	144.0	11.6	**0.0012**	0.005	410.2	ug/L	142	Standard
|	**Zn**	66	359.7	4.9	**-0.1242**	0.012	9.5	ug/L	800	Standard
| >	**Ge**	72	373517.3	0.2				ug/L	375255	Standard
|	**As**	75	-67.5	18.6	**0.0326**	0.009	28.7	ug/L	-104	Standard
⌊	**Se**	82	24.4	12.3	**0.0698**	0.023	32.7	ug/L	18	Standard
⌈>	**Ga**	71	310960.7	0.8				mg/L	308497	Standard
⌊	**Se-1**	77	114.7	15.8	**-0.0705**	0.186	264.3	mg/L	114	Standard
⌈	**Rb**	85	15.3	39.8				ug/L	16	Standard
| >	**Y**	89	338220.6	1.6				ug/L	343723	Standard
⌊	**Rh**	103	4.0	100.0				ug/L	2	Standard
⌈	**Mo**	98	109.2	46.8	**0.0149**	0.011	72.1	ug/L	7	Standard
|	**Ag**	107	99.3	4.1	**0.0006**	0.000	70.9	ug/L	143	Standard
|	**Cd**	111	611.9	1.0	**0.0041**	0.001	28.4	mg/L	597	Standard
|	**Cd**	114	1698.9	4.4	**0.0025**	0.005	210.6	ug/L	1652	Standard
| >	**In**	115	1148851.2	0.3				ug/L	1111888	Standard
|	**Sn**	118	1112.7	3.7	**0.0044**	0.002	49.8	ug/L	928	Standard
|	**Sb**	123	486.8	17.5	**0.0389**	0.007	17.8	ug/L	16	Standard
⌊	**Ba**	135	57.0	13.2	**-0.0019**	0.001	66.7	ug/L	58	Standard
⌈	**Ce**	140	50.7	12.7				ug/L	63	Standard
⌊>	**Tb**	159	1208608.2	0.3				ug/L	1172993	Standard
⌈	**Ho**	165	21.3	32.9				ug/L	14	Standard
|	**Tl**	203	116.0	34.5	**0.0040**	0.002	49.3	ug/L	33	Standard
|	**Tl**	205	278.0	26.8	**0.0059**	0.001	24.8	ug/L	85	Standard
|	**Pb**	206	484.3	10.7	**0.0017**	0.003	194.8	ug/L	424	Standard
|	**Pb**	207	401.3	2.9	**0.0028**	0.001	30.8	ug/L	363	Standard
|	**Pb**	208	1847.0	6.8	**0.0026**	0.002	77.4	ug/L	1661	Standard
|	**U**	238	117.7	75.0	**0.0067**	0.001	21.8	ug/L	5	Standard
⌊>	**Bi**	209	680707.4	0.1				ug/L	678709	Standard
⌈	**Na**	23	92.0	13.6	**0.0034**	0.003	103.4	mg/L	80	Standard
|	**Mg**	24	136.7	23.5	**0.0001**	0.000	137.7	mg/L	106	Standard

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	K	39	632.0	1.4	**0.0062**	0.002	28.4	mg/L	583	Standard
	Ca	43	132.7	9.2	**-0.0250**	0.019	76.5	mg/L	145	Standard
	Fe	54	951.8	4.0	**-0.0156**	0.008	52.7	mg/L	993	Standard
	Fe	57	4904.8	1.0	**-0.0021**	0.000	9.8	mg/L	5581	Standard
>	**Sc-1**	45	488346.9	1.7				mg/L	477679	Standard
	Cl	35	101094.8	3.8				ug/L	75747	Standard
	Kr	83	82.7	1.4				ug/L	83	Standard
	Br	81	16623.4	0.8				ug/L	17338	Standard
	P	31	88515.5	1.6				ug/L	84853	Standard
	S	34	869858.7	0.9				ug/L	850414	Standard
	Sr	88	184.0	11.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.537	
	As	75			
	Se	82			
>	Ga	71		100.798	
	Se-1	77			
	Rb	85			
>	Y	89		98.399	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.324	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.036	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	100.294
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: PBS 67 WG396205-02
Sample Date/Time: Thursday, April 26, 2012 10:25:51
Number of Replicates: 3
Autosampler Position: 205
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	24984.9	3.4	**-18.1723**	52.330	288.0	ug/L	24742	Standard
|	**Be**	9	86.3	108.2	**0.0154**	0.024	154.9	ug/L	11	Standard
|	**Al**	27	20940.8	19.9	**0.2504**	0.179	71.6	ug/L	20240	Standard
⌊>	**Sc**	45	481979.0	1.5				ug/L	477679	Standard
⌈	**Ti**	47	126.7	4.0	**0.0101**	0.005	48.7	ug/L	99	Standard
|	**V**	51	7084.7	4.1	**0.0033**	0.007	201.5	ug/L	7210	Standard
|	**Cr**	52	22250.3	1.6	**0.0108**	0.030	275.2	ug/L	22890	Standard
|	**Cr**	53	568.0	4.4	**0.0112**	0.002	15.1	ug/L	565	Standard
|	**Mn**	55	2268.2	7.3	**0.0334**	0.004	12.7	ug/L	1511	Standard
|	**Co**	59	189.7	33.9	**0.0023**	0.003	140.4	ug/L	149	Standard
|	**Ni**	60	119.3	17.2	**0.0110**	0.005	41.4	ug/L	54	Standard
|	**Cu**	65	157.3	3.7	**0.0060**	0.001	22.7	ug/L	142	Standard
|	**Zn**	66	3802.1	5.0	**2.2318**	0.025	1.1	ug/L	800	Standard
| >	**Ge**	72	366606.1	4.2				ug/L	375255	Standard
|	**As**	75	-82.6	55.5	**0.0203**	0.034	167.3	ug/L	-104	Standard
⌊	**Se**	82	13.3	44.0	**-0.0110**	0.047	430.1	ug/L	18	Standard
⌈>	**Ga**	71	297698.3	4.3				mg/L	308497	Standard
⌊	**Se-1**	77	112.0	11.2	**-0.0436**	0.152	349.1	mg/L	114	Standard
⌈	**Rb**	85	16.0	43.3				ug/L	16	Standard
| >	**Y**	89	338684.1	3.7				ug/L	343723	Standard
⌊	**Rh**	103	3.3	69.3				ug/L	2	Standard
⌈	**Mo**	98	57.5	29.1	**0.0044**	0.003	74.9	ug/L	7	Standard
|	**Ag**	107	68.0	9.2	**-0.0025**	0.000	18.8	ug/L	143	Standard
|	**Cd**	111	622.9	4.3	**0.0110**	0.004	39.1	mg/L	597	Standard
|	**Cd**	114	1670.0	4.9	**0.0049**	0.003	58.2	ug/L	1652	Standard
| >	**In**	115	1106112.3	3.2				ug/L	1111888	Standard
|	**Sn**	118	1146.7	8.0	**0.0085**	0.004	48.2	ug/L	928	Standard
|	**Sb**	123	333.2	10.1	**0.0276**	0.004	12.9	ug/L	16	Standard
⌊	**Ba**	135	188.0	102.8	**0.0219**	0.035	160.7	ug/L	58	Standard
⌈	**Ce**	140	67.3	14.0				ug/L	63	Standard
⌊>	**Tb**	159	1171983.9	2.0				ug/L	1172993	Standard
⌈	**Ho**	165	15.3	7.5				ug/L	14	Standard
|	**Tl**	203	401.3	137.6	**0.0192**	0.029	151.0	ug/L	33	Standard
|	**Tl**	205	888.7	128.8	**0.0185**	0.024	126.9	ug/L	85	Standard
|	**Pb**	206	635.0	45.7	**0.0123**	0.019	157.4	ug/L	424	Standard
|	**Pb**	207	506.0	38.4	**0.0119**	0.016	132.5	ug/L	363	Standard
|	**Pb**	208	2296.1	36.8	**0.0109**	0.015	133.9	ug/L	1661	Standard
|	**U**	238	318.3	141.6	**0.0103**	0.008	76.5	ug/L	5	Standard
⌊>	**Bi**	209	661161.2	2.2				ug/L	678709	Standard
⌈	**Na**	23	95.3	22.2	**0.0047**	0.006	129.7	mg/L	80	Standard
|	**Mg**	24	657.4	101.0	**0.0018**	0.002	120.4	mg/L	106	Standard

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	K	39	645.3	7.9	**0.0081**	0.005	59.7	mg/L	583	Standard
	Ca	43	145.3	8.7	**-0.0053**	0.016	296.0	mg/L	145	Standard
	Fe	54	998.5	5.6	**-0.0060**	0.008	137.8	mg/L	993	Standard
	Fe	57	5153.5	8.5	**-0.0004**	0.002	535.1	mg/L	5581	Standard
>	**Sc-1**	45	481979.0	1.5				mg/L	477679	Standard
	Cl	35	92340.7	3.4				ug/L	75747	Standard
	Kr	83	86.0	5.1				ug/L	83	Standard
	Br	81	16259.1	1.7				ug/L	17338	Standard
	P	31	84310.6	4.4				ug/L	84853	Standard
	S	34	833653.8	3.1				ug/L	850414	Standard
	Sr	88	226.0	5.4				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.695	
	As	75			
	Se	82			
>	Ga	71		96.499	
	Se-1	77			
	Rb	85			
>	Y	89		98.534	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.481	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.914	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.415
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBS 67 WG396205-02
Report Date/Time: Thursday, April 26, 2012 10:28:17
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Method 6020 - Summary Report

Sample ID: LCSS 67 WG396205-03

Sample Date/Time: Thursday, April 26, 2012 10:28:37
Number of Replicates: 3
Autosampler Position: 206
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	28675.4	0.1	**-42.0858**	48.243	114.6	ug/L	24742	Standard
	Be	9	104679.4	0.9	**23.3572**	0.569	2.4	ug/L	11	Standard
	Al	27	751760.6	0.9	**25.5925**	0.288	1.1	ug/L	20240	Standard
>	**Sc**	45	558881.1	2.0				ug/L	477679	Standard
	Ti	47	152.0	7.0	**0.0137**	0.003	24.2	ug/L	99	Standard
	V	51	720197.2	1.9	**25.8886**	0.395	1.5	ug/L	7210	Standard
	Cr	52	623361.3	1.8	**27.2191**	0.173	0.6	ug/L	22890	Standard
	Cr	53	68528.7	2.2	**27.0573**	0.066	0.2	ug/L	565	Standard
	Mn	55	796927.7	2.2	**26.8629**	0.237	0.9	ug/L	1511	Standard
	Co	59	543474.7	1.5	**26.6807**	0.227	0.9	ug/L	149	Standard
	Ni	60	112492.4	1.2	**26.5372**	0.333	1.3	ug/L	54	Standard
	Cu	65	99193.2	3.1	**25.9778**	0.347	1.3	ug/L	142	Standard
	Zn	66	42457.4	2.1	**25.2585**	0.043	0.2	ug/L	800	Standard
>	**Ge**	72	415036.3	2.1				ug/L	375255	Standard
	As	75	35742.3	2.8	**23.8067**	0.217	0.9	ug/L	-104	Standard
	Se	82	3361.7	1.4	**22.6843**	0.273	1.2	ug/L	18	Standard
>	**Ga**	71	354958.0	1.9				mg/L	308497	Standard
	Se-1	77	2429.5	3.7	**21.3261**	0.765	3.6	mg/L	114	Standard
	Rb	85	58.7	25.8				ug/L	16	Standard
>	**Y**	89	388013.5	3.6				ug/L	343723	Standard
	Rh	103	26.0	23.1				ug/L	2	Standard
	Mo	98	436.7	100.3	**0.0752**	0.082	109.6	ug/L	7	Standard
	Ag	107	259716.5	2.8	**25.1680**	0.182	0.7	ug/L	143	Standard
	Cd	111	140013.9	2.4	**24.8256**	0.175	0.7	mg/L	597	Standard
	Cd	114	377629.4	1.8	**23.7843**	0.135	0.6	ug/L	1652	Standard
>	**In**	115	1264730.0	2.1				ug/L	1111888	Standard
	Sn	118	4133.2	7.5	**0.1423**	0.014	9.7	ug/L	928	Standard
	Sb	123	335064.8	1.9	**24.6287**	0.212	0.9	ug/L	16	Standard
	Ba	135	164080.3	2.2	**24.9398**	0.205	0.8	ug/L	58	Standard
	Ce	140	158.0	9.9				ug/L	63	Standard
>	**Tb**	159	1322260.9	2.0				ug/L	1172993	Standard
	Ho	165	13.3	17.3				ug/L	14	Standard
	Tl	203	543266.1	2.2	**25.9818**	0.275	1.1	ug/L	33	Standard
	Tl	205	1302823.8	2.8	**24.3481**	0.387	1.6	ug/L	85	Standard
	Pb	206	438151.9	2.4	**25.9041**	0.336	1.3	ug/L	424	Standard
	Pb	207	377292.8	2.4	**26.8186**	0.344	1.3	ug/L	363	Standard
	Pb	208	1715134.7	2.1	**26.0372**	0.269	1.0	ug/L	1661	Standard
	U	238	1477509.1	2.3	**23.5071**	0.262	1.1	ug/L	5	Standard
>	**Bi**	209	706856.4	1.2				ug/L	678709	Standard
	Na	23	86.7	13.9	**-0.0015**	0.003	221.7	mg/L	80	Standard
	Mg	24	415.3	24.6	**0.0008**	0.000	33.8	mg/L	106	Standard

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	K	39	584.7	7.5	**-0.0048**	0.003	63.3	mg/L	583	Standard
	Ca	43	114.7	7.3	**-0.0695**	0.010	14.8	mg/L	145	Standard
	Fe	54	1667.4	6.9	**0.0657**	0.012	17.7	mg/L	993	Standard
	Fe	57	6748.2	3.3	**0.0033**	0.001	27.0	mg/L	5581	Standard
>	**Sc-1**	45	558881.1	2.0				mg/L	477679	Standard
	Cl	35	104190.1	2.2				ug/L	75747	Standard
	Kr	83	96.3	1.6				ug/L	83	Standard
	Br	81	20207.5	2.9				ug/L	17338	Standard
	P	31	157681.4	2.9				ug/L	84853	Standard
	S	34	935532.6	2.1				ug/L	850414	Standard
	Sr	88	588.0	9.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.601	
	As	75			
	Se	82			
>	Ga	71		115.060	
	Se-1	77			
	Rb	85			
>	Y	89		112.885	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		113.746	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.725	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: LCSS 67 WG396205-03
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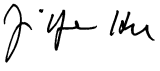
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	104.147
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSS 67 WG396205-03
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Method 6020 - Summary Report

Sample ID: L1204085001
Sample Date/Time: Thursday, April 26, 2012 10:31:24
Number of Replicates: 3
Autosampler Position: 207
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	282775.0	2.0	**25307.8728**	328.221	1.3	ug/L	24742	Standard
|	**Be**	9	778.0	2.4	**0.1952**	0.001	0.7	ug/L	11	Standard
|	**Al**	27	88216147.7	1.3	**3576.4894**	105.326	2.9	ug/L	20240	Standard
⌊>	**Sc**	45	480356.4	3.1				ug/L	477679	Standard
⌈	**Ti**	47	12771.4	2.7	**6.8580**	0.191	2.8	ug/L	99	Standard
|	**V**	51	146853.0	0.6	**6.3070**	0.090	1.4	ug/L	7210	Standard
|	**Cr**	52	135887.7	1.4	**6.5025**	0.172	2.6	ug/L	22890	Standard
|	**Cr**	53	13736.2	2.8	**6.5189**	0.253	3.9	ug/L	565	Standard
|	**Mn**	55	3705598.2	1.6	**154.6016**	2.757	1.8	ug/L	1511	Standard
|	**Co**	59	66444.4	2.1	**4.0237**	0.106	2.6	ug/L	149	Standard
|	**Ni**	60	46720.9	2.3	**13.6073**	0.341	2.5	ug/L	54	Standard
|	**Cu**	65	37684.1	1.4	**12.1780**	0.390	3.2	ug/L	142	Standard
|	**Zn**	66	61184.0	1.9	**45.2786**	1.704	3.8	ug/L	800	Standard
|>	**Ge**	72	335916.8	1.9				ug/L	375255	Standard
|	**As**	75	7217.1	1.0	**6.0024**	0.070	1.2	ug/L	-104	Standard
⌊	**Se**	82	52.9	15.8	**0.3289**	0.065	19.7	ug/L	18	Standard
⌈>	**Ga**	71	269576.4	3.0				mg/L	308497	Standard
⌊	**Se-1**	77	122.0	2.8	**0.2088**	0.085	40.7	mg/L	114	Standard
⌈	**Rb**	85	87296.1	1.0				ug/L	16	Standard
|>	**Y**	89	403622.1	2.5				ug/L	343723	Standard
⌊	**Rh**	103	43.3	18.7				ug/L	2	Standard
⌈	**Mo**	98	8989.1	0.6	**2.1739**	0.043	2.0	ug/L	7	Standard
|	**Ag**	107	514.7	13.3	**0.0532**	0.009	17.0	ug/L	143	Standard
|	**Cd**	111	637.8	3.8	**0.0280**	0.006	20.7	mg/L	597	Standard
|	**Cd**	114	1773.7	3.5	**0.0262**	0.005	17.2	ug/L	1652	Standard
|>	**In**	115	999057.5	1.4				ug/L	1111888	Standard
|	**Sn**	118	785.4	6.2	**-0.0065**	0.003	52.5	ug/L	928	Standard
|	**Sb**	123	378.8	18.4	**0.0347**	0.006	17.3	ug/L	16	Standard
⌊	**Ba**	135	100394.2	1.6	**19.3147**	0.169	0.9	ug/L	58	Standard
⌈	**Ce**	140	699280.2	0.9				ug/L	63	Standard
⌊>	**Tb**	159	1144728.8	2.2				ug/L	1172993	Standard
⌈	**Ho**	165	14481.6	1.9				ug/L	14	Standard
|	**Tl**	203	3967.2	1.0	**0.2151**	0.002	1.1	ug/L	33	Standard
|	**Tl**	205	9603.7	2.3	**0.2056**	0.007	3.2	ug/L	85	Standard
|	**Pb**	206	113270.5	0.4	**7.6342**	0.074	1.0	ug/L	424	Standard
|	**Pb**	207	91481.7	0.3	**7.4133**	0.128	1.7	ug/L	363	Standard
|	**Pb**	208	426430.8	0.4	**7.3799**	0.080	1.1	ug/L	1661	Standard
|	**U**	238	29304.0	1.3	**0.5375**	0.000	0.1	ug/L	5	Standard
⌊>	**Bi**	209	618554.8	1.4				ug/L	678709	Standard
⌈	**Na**	23	275.3	13.4	**0.0605**	0.014	23.3	mg/L	80	Standard
|	**Mg**	24	1252833.9	1.0	**4.1771**	0.090	2.1	mg/L	106	Standard

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	K	39	6476.7	1.4	**0.5447**	0.027	4.9	mg/L	583	Standard
	Ca	43	33170.9	1.7	**45.8773**	0.796	1.7	mg/L	145	Standard
	Fe	54	64217.5	2.2	**10.3591**	0.104	1.0	mg/L	993	Standard
	Fe	57	1598739.8	4.9	**8.9581**	0.248	2.8	mg/L	5581	Standard
>	**Sc-1**	45	480356.4	3.1				mg/L	477679	Standard
	Cl	35	83787.8	2.1				ug/L	75747	Standard
	Kr	83	94.0	10.5				ug/L	83	Standard
	Br	81	13372.9	2.3				ug/L	17338	Standard
	P	31	437762.5	1.5				ug/L	84853	Standard
	S	34	801881.8	2.3				ug/L	850414	Standard
	Sr	88	1828547.7	1.2				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.517	
	As	75			
	Se	82			
>	Ga	71		87.384	
	Se-1	77			
	Rb	85			
>	Y	89		117.427	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.852	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.590	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.137
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 27, 2012



Method 6020 - Summary Report

Sample ID: L1204086404 WG393205-01
Sample Date/Time: Thursday, April 26, 2012 10:34:09
Number of Replicates: 3
Autosampler Position: 208
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	198961.9	0.7	**17215.8192**	162.493	0.9	ug/L	24742	Standard
	Be	9	2533.9	0.6	**0.6558**	0.002	0.2	ug/L	11	Standard
	Al	27	105528559.6	0.9	**4307.6511**	60.835	1.4	ug/L	20240	Standard
>	**Sc**	45	476867.0	0.9				ug/L	477679	Standard
	Ti	47	73521.3	2.1	**40.7864**	0.259	0.6	ug/L	99	Standard
	V	51	261966.1	0.4	**11.7919**	0.271	2.3	ug/L	7210	Standard
	Cr	52	92946.6	0.7	**4.2280**	0.091	2.1	ug/L	22890	Standard
	Cr	53	8767.2	2.7	**4.1856**	0.070	1.7	ug/L	565	Standard
	Mn	55	11965362.8	0.9	**512.7090**	11.646	2.3	ug/L	1511	Standard
	Co	59	39586.0	1.4	**2.4581**	0.059	2.4	ug/L	149	Standard
	Ni	60	37052.3	0.7	**11.0763**	0.222	2.0	ug/L	54	Standard
	Cu	65	23028.5	1.5	**7.6228**	0.076	1.0	ug/L	142	Standard
	Zn	66	80505.7	1.3	**61.2732**	0.797	1.3	ug/L	800	Standard
>	**Ge**	72	327212.8	2.4				ug/L	375255	Standard
	As	75	7796.5	1.0	**6.6484**	0.097	1.5	ug/L	-104	Standard
	Se	82	83.8	15.5	**0.6064**	0.108	17.8	ug/L	18	Standard
>	**Ga**	71	259932.8	0.8				mg/L	308497	Standard
	Se-1	77	139.3	12.4	**0.4836**	0.226	46.8	mg/L	114	Standard
	Rb	85	40893.8	0.6				ug/L	16	Standard
>	**Y**	89	436925.0	0.2				ug/L	343723	Standard
	Rh	103	41.3	14.0				ug/L	2	Standard
	Mo	98	5384.4	1.5	**1.3116**	0.026	1.9	ug/L	7	Standard
	Ag	107	495.3	11.1	**0.0514**	0.007	13.1	ug/L	143	Standard
	Cd	111	1009.2	3.5	**0.1139**	0.007	6.3	mg/L	597	Standard
	Cd	114	2952.0	0.9	**0.1229**	0.001	1.1	ug/L	1652	Standard
>	**In**	115	989332.9	0.4				ug/L	1111888	Standard
	Sn	118	22482.7	5.1	**1.3090**	0.073	5.6	ug/L	928	Standard
	Sb	123	279.2	3.5	**0.0257**	0.001	3.9	ug/L	16	Standard
	Ba	135	211829.2	0.6	**41.1669**	0.137	0.3	ug/L	58	Standard
	Ce	140	898780.6	0.4				ug/L	63	Standard
>	**Tb**	159	1130363.5	0.6				ug/L	1172993	Standard
	Ho	165	18902.5	1.1				ug/L	14	Standard
	Tl	203	1678.8	3.3	**0.0934**	0.003	3.3	ug/L	33	Standard
	Tl	205	4066.5	3.4	**0.0905**	0.003	3.4	ug/L	85	Standard
	Pb	206	253656.7	0.5	**17.7587**	0.087	0.5	ug/L	424	Standard
	Pb	207	206187.2	0.9	**17.3547**	0.157	0.9	ug/L	363	Standard
	Pb	208	952483.8	0.6	**17.1219**	0.106	0.6	ug/L	1661	Standard
	U	238	47641.8	0.9	**0.9026**	0.008	0.9	ug/L	5	Standard
>	**Bi**	209	596665.5	0.1				ug/L	678709	Standard
	Na	23	709.3	2.9	**0.1954**	0.007	3.4	mg/L	80	Standard
	Mg	24	3911992.3	0.4	**13.1342**	0.160	1.2	mg/L	106	Standard

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	K	39	4644.7	2.7	**0.3790**	0.010	2.7	mg/L	583	Standard
	Ca	43	46472.5	0.5	**64.8120**	0.742	1.1	mg/L	145	Standard
	Fe	54	58664.0	0.4	**9.5174**	0.057	0.6	mg/L	993	Standard
	Fe	57	1413182.5	1.9	**7.9762**	0.213	2.7	mg/L	5581	Standard
>	**Sc-1**	45	476867.0	0.9				mg/L	477679	Standard
	Cl	35	101987.1	1.2				ug/L	75747	Standard
	Kr	83	107.0	10.8				ug/L	83	Standard
	Br	81	14101.2	1.9				ug/L	17338	Standard
	P	31	397141.1	0.9				ug/L	84853	Standard
	S	34	1079434.0	0.9				ug/L	850414	Standard
	Sr	88	1231633.9	1.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.197	
	As	75			
	Se	82			
>	Ga	71		84.258	
	Se-1	77			
	Rb	85			
>	Y	89		127.115	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		88.978	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.366	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.912
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: April 27, 2012

Method 6020 - Summary Report

Sample ID: L1204086404S WG396205-04

Sample Date/Time: Thursday, April 26, 2012 10:36:56
Number of Replicates: 3
Autosampler Position: 209
Sample Description: 5
Method File: C:\NexION\Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	169469.9	1.0	**15080.6097**	162.374	1.1	ug/L	24742	Standard
	Be	9	21373.1	0.6	**5.8431**	0.024	0.4	ug/L	11	Standard
	Al	27	95702776.0	0.3	**4088.7268**	40.115	1.0	ug/L	20240	Standard
>	**Sc**	45	455615.2	0.9				ug/L	477679	Standard
	Ti	47	75270.5	0.6	**43.3884**	0.699	1.6	ug/L	99	Standard
	V	51	292119.7	1.1	**13.7019**	0.053	0.4	ug/L	7210	Standard
	Cr	52	151848.1	0.2	**7.9665**	0.103	1.3	ug/L	22890	Standard
	Cr	53	15208.3	1.2	**7.7399**	0.093	1.2	ug/L	565	Standard
	Mn	55	9687229.9	1.1	**431.1007**	1.505	0.3	ug/L	1511	Standard
	Co	59	115650.1	1.6	**7.4748**	0.033	0.4	ug/L	149	Standard
	Ni	60	42232.4	0.9	**13.1163**	0.066	0.5	ug/L	54	Standard
	Cu	65	31428.9	2.1	**10.8252**	0.285	2.6	ug/L	142	Standard
	Zn	66	54896.9	0.3	**43.2984**	0.605	1.4	ug/L	800	Standard
>	**Ge**	72	314958.6	1.3				ug/L	375255	Standard
	As	75	26465.6	0.6	**23.2360**	0.381	1.6	ug/L	-104	Standard
	Se	82	769.2	1.2	**6.7598**	0.147	2.2	ug/L	18	Standard
>	**Ga**	71	248111.2	1.3				mg/L	308497	Standard
	Se-1	77	618.0	8.3	**6.9362**	0.573	8.3	mg/L	114	Standard
	Rb	85	30803.3	1.0				ug/L	16	Standard
>	**Y**	89	399307.4	0.6				ug/L	343723	Standard
	Rh	103	35.3	6.5				ug/L	2	Standard
	Mo	98	3438.5	1.7	**0.8685**	0.005	0.5	ug/L	7	Standard
	Ag	107	36693.4	0.7	**4.7212**	0.045	1.0	ug/L	143	Standard
	Cd	111	24179.5	1.1	**5.6125**	0.048	0.8	mg/L	597	Standard
	Cd	114	67649.7	0.8	**5.5779**	0.053	1.0	ug/L	1652	Standard
>	**In**	115	951054.2	1.5				ug/L	1111888	Standard
	Sn	118	2883.6	5.4	**0.1282**	0.011	8.6	ug/L	928	Standard
	Sb	123	7573.3	1.7	**0.7397**	0.004	0.5	ug/L	16	Standard
	Ba	135	222747.8	1.0	**45.0351**	0.359	0.8	ug/L	58	Standard
	Ce	140	829796.2	1.0				ug/L	63	Standard
>	**Tb**	159	1083869.4	0.7				ug/L	1172993	Standard
	Ho	165	14882.0	0.8				ug/L	14	Standard
	Tl	203	87300.8	0.7	**4.9692**	0.067	1.3	ug/L	33	Standard
	Tl	205	212140.8	0.6	**4.7203**	0.026	0.5	ug/L	85	Standard
	Pb	206	261917.8	0.5	**18.4262**	0.091	0.5	ug/L	424	Standard
	Pb	207	217339.8	0.8	**18.3830**	0.167	0.9	ug/L	363	Standard
	Pb	208	1000159.9	0.3	**18.0669**	0.131	0.7	ug/L	1661	Standard
	U	238	283704.2	0.5	**5.3771**	0.030	0.6	ug/L	5	Standard
>	**Bi**	209	593826.6	0.8				ug/L	678709	Standard
	Na	23	612.0	4.9	**0.1741**	0.011	6.4	mg/L	80	Standard
	Mg	24	2966851.1	0.3	**10.4253**	0.081	0.8	mg/L	106	Standard

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	K	39	4042.5	1.2	**0.3407**	0.008	2.4	mg/L	583	Standard
	Ca	43	43137.3	0.6	**62.9618**	0.838	1.3	mg/L	145	Standard
	Fe	54	36326.1	1.4	**6.1085**	0.049	0.8	mg/L	993	Standard
	Fe	57	849042.4	0.9	**5.0045**	0.076	1.5	mg/L	5581	Standard
>	**Sc-1**	45	455615.2	0.9				mg/L	477679	Standard
	Cl	35	89866.4	0.7				ug/L	75747	Standard
	Kr	83	87.0	18.2				ug/L	83	Standard
	Br	81	13458.0	3.3				ug/L	17338	Standard
	P	31	257817.0	0.6				ug/L	84853	Standard
	S	34	990778.9	1.7				ug/L	850414	Standard
	Sr	88	1126322.9	1.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		83.932	
	As	75			
	Se	82			
>	Ga	71		80.426	
	Se-1	77			
	Rb	85			
>	Y	89		116.171	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		85.535	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.402	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204086404S WG396205-04
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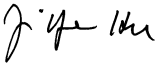
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.494
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 27, 2012



Method 6020 - Summary Report

Sample ID: L1204086404SD WG396205-05

Sample Date/Time: Thursday, April 26, 2012 10:39:42
Number of Replicates: 3
Autosampler Position: 210
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	191596.0	1.5	**15973.8210**	171.445	1.1	ug/L	24742	Standard
|	**Be**	9	24246.1	0.1	**6.1634**	0.143	2.3	ug/L	11	Standard
|	**Al**	27	103161595.3	1.3	**4097.1161**	69.399	1.7	ug/L	20240	Standard
⌊>	**Sc**	45	490196.7	2.3				ug/L	477679	Standard
⌈	**Ti**	47	71798.4	0.8	**39.7219**	0.547	1.4	ug/L	99	Standard
|	**V**	51	333019.8	0.7	**15.0231**	0.265	1.8	ug/L	7210	Standard
|	**Cr**	52	169357.3	1.2	**8.6096**	0.199	2.3	ug/L	22890	Standard
|	**Cr**	53	17066.9	1.7	**8.3567**	0.158	1.9	ug/L	565	Standard
|	**Mn**	55	12736837.6	0.7	**544.1641**	9.130	1.7	ug/L	1511	Standard
|	**Co**	59	116430.8	2.1	**7.2238**	0.145	2.0	ug/L	149	Standard
|	**Ni**	60	47267.0	1.4	**14.0936**	0.230	1.6	ug/L	54	Standard
|	**Cu**	65	34195.2	1.0	**11.3074**	0.193	1.7	ug/L	142	Standard
|	**Zn**	66	60788.0	1.5	**46.0426**	0.657	1.4	ug/L	800	Standard
|>	**Ge**	72	328106.1	1.1				ug/L	375255	Standard
|	**As**	75	14207.5	2.0	**12.0114**	0.125	1.0	ug/L	-104	Standard
⌊	**Se**	82	883.1	3.9	**7.4612**	0.294	3.9	ug/L	18	Standard
⌈>	**Ga**	71	262955.5	2.1				mg/L	308497	Standard
⌊	**Se-1**	77	742.0	9.1	**8.0265**	0.679	8.5	mg/L	114	Standard
⌈	**Rb**	85	33274.5	1.1				ug/L	16	Standard
|>	**Y**	89	578459.1	1.5				ug/L	343723	Standard
⌊	**Rh**	103	40.0	50.7				ug/L	2	Standard
⌈	**Mo**	98	5014.3	2.1	**1.2017**	0.027	2.3	ug/L	7	Standard
|	**Ag**	107	41138.8	0.8	**5.0091**	0.026	0.5	ug/L	143	Standard
|	**Cd**	111	26748.6	1.5	**5.8806**	0.096	1.6	mg/L	597	Standard
|	**Cd**	114	76597.8	0.7	**5.9842**	0.006	0.1	ug/L	1652	Standard
|>	**In**	115	1005040.0	0.6				ug/L	1111888	Standard
|	**Sn**	118	2373.5	5.9	**0.0879**	0.009	9.8	ug/L	928	Standard
|	**Sb**	123	11099.7	1.4	**1.0262**	0.014	1.4	ug/L	16	Standard
⌊	**Ba**	135	238413.1	0.4	**45.6117**	0.347	0.8	ug/L	58	Standard
⌈	**Ce**	140	1656908.1	0.7				ug/L	63	Standard
⌊>	**Tb**	159	1174178.4	0.9				ug/L	1172993	Standard
⌈	**Ho**	165	36244.6	1.1				ug/L	14	Standard
|	**Tl**	203	97423.9	1.2	**5.3838**	0.098	1.8	ug/L	33	Standard
|	**Tl**	205	235942.3	1.1	**5.0970**	0.088	1.7	ug/L	85	Standard
|	**Pb**	206	259235.3	0.5	**17.7043**	0.132	0.7	ug/L	424	Standard
|	**Pb**	207	214005.8	0.6	**17.5714**	0.106	0.6	ug/L	363	Standard
|	**Pb**	208	987666.2	0.2	**17.3194**	0.118	0.7	ug/L	1661	Standard
|	**U**	238	314049.4	0.5	**5.7781**	0.023	0.4	ug/L	5	Standard
⌊>	**Bi**	209	611679.6	0.8				ug/L	678709	Standard
⌈	**Na**	23	702.7	6.5	**0.1873**	0.009	4.9	mg/L	80	Standard
|	**Mg**	24	4339176.6	0.7	**14.1749**	0.231	1.6	mg/L	106	Standard

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	K	39	4169.9	2.4	**0.3248**	0.018	5.4	mg/L	583	Standard
	Ca	43	41678.6	0.5	**56.5387**	1.510	2.7	mg/L	145	Standard
	Fe	54	42579.7	0.6	**6.6725**	0.153	2.3	mg/L	993	Standard
	Fe	57	1040484.2	0.8	**5.7052**	0.088	1.5	mg/L	5581	Standard
>	**Sc-1**	45	490196.7	2.3				mg/L	477679	Standard
	Cl	35	97452.7	1.0				ug/L	75747	Standard
	Kr	83	126.7	4.8				ug/L	83	Standard
	Br	81	14179.0	0.7				ug/L	17338	Standard
	P	31	1946295.9	0.3				ug/L	84853	Standard
	S	34	1063945.5	1.3				ug/L	850414	Standard
	Sr	88	1103381.6	0.9				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.435	
	As	75			
	Se	82			
>	Ga	71		85.237	
	Se-1	77			
	Rb	85			
>	Y	89		168.292	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.390	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.101	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204086404SD WG396205-05
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	90.124
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1204086404SD WG396205-05
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Method 6020 - Summary Report

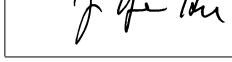
Sample ID: L1204085401
Sample Date/Time: Thursday, April 26, 2012 10:42:27
Number of Replicates: 3
Autosampler Position: 211
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	57608.4	2.4	**2846.1123**	169.670	6.0	ug/L	24742	Standard
|	**Be**	9	327.0	3.2	**0.0728**	0.003	3.7	ug/L	11	Standard
|	**Al**	27	36543219.1	3.2	**1389.4397**	55.822	4.0	ug/L	20240	Standard
⌊>	**Sc**	45	511892.3	0.9				ug/L	477679	Standard
⌈	**Ti**	47	36948.4	4.7	**17.8213**	0.339	1.9	ug/L	99	Standard
|	**V**	51	73819.8	3.5	**2.6762**	0.017	0.6	ug/L	7210	Standard
|	**Cr**	52	55546.4	4.3	**1.6554**	0.040	2.4	ug/L	22890	Standard
|	**Cr**	53	4194.6	2.1	**1.6027**	0.061	3.8	ug/L	565	Standard
|	**Mn**	55	2190032.5	3.0	**81.6856**	0.092	0.1	ug/L	1511	Standard
|	**Co**	59	19979.8	2.4	**1.0761**	0.007	0.6	ug/L	149	Standard
|	**Ni**	60	9625.1	2.4	**2.4902**	0.014	0.6	ug/L	54	Standard
|	**Cu**	65	5122.2	5.3	**1.4435**	0.036	2.5	ug/L	142	Standard
|	**Zn**	66	23594.7	3.1	**15.3715**	0.253	1.6	ug/L	800	Standard
|>	**Ge**	72	375573.1	2.9				ug/L	375255	Standard
|	**As**	75	1047.7	4.1	**0.8509**	0.018	2.1	ug/L	-104	Standard
⌊	**Se**	82	18.7	36.2	**0.0255**	0.049	194.0	ug/L	18	Standard
⌈>	**Ga**	71	310018.6	2.3				mg/L	308497	Standard
⌊	**Se-1**	77	134.0	11.8	**0.1403**	0.170	121.4	mg/L	114	Standard
⌈	**Rb**	85	22337.1	0.9				ug/L	16	Standard
|>	**Y**	89	424233.2	4.2				ug/L	343723	Standard
⌊	**Rh**	103	5.3	86.6				ug/L	2	Standard
⌈	**Mo**	98	1220.9	1.6	**0.2449**	0.010	4.1	ug/L	7	Standard
|	**Ag**	107	189.3	16.6	**0.0099**	0.004	38.6	ug/L	143	Standard
|	**Cd**	111	836.6	2.8	**0.0451**	0.004	7.9	mg/L	597	Standard
|	**Cd**	114	2337.4	2.1	**0.0441**	0.008	18.2	ug/L	1652	Standard
|>	**In**	115	1171335.2	4.5				ug/L	1111888	Standard
|	**Sn**	118	1891.5	6.8	**0.0434**	0.010	22.7	ug/L	928	Standard
|	**Sb**	123	301.3	15.4	**0.0233**	0.003	11.4	ug/L	16	Standard
⌊	**Ba**	135	35117.7	2.2	**5.7590**	0.165	2.9	ug/L	58	Standard
⌈	**Ce**	140	593063.0	2.9				ug/L	63	Standard
⌊>	**Tb**	159	1254378.8	4.1				ug/L	1172993	Standard
⌈	**Ho**	165	9405.6	3.9				ug/L	14	Standard
|	**Tl**	203	515.7	7.3	**0.0241**	0.002	6.9	ug/L	33	Standard
|	**Tl**	205	1259.4	8.6	**0.0251**	0.002	7.6	ug/L	85	Standard
|	**Pb**	206	32358.5	1.5	**1.9760**	0.014	0.7	ug/L	424	Standard
|	**Pb**	207	25834.0	3.2	**1.8965**	0.043	2.3	ug/L	363	Standard
|	**Pb**	208	120865.6	2.4	**1.8953**	0.030	1.6	ug/L	1661	Standard
|	**U**	238	11609.8	2.7	**0.1980**	0.003	1.7	ug/L	5	Standard
⌊>	**Bi**	209	675527.6	1.0				ug/L	678709	Standard
⌈	**Na**	23	120.0	4.4	**0.0102**	0.002	15.4	mg/L	80	Standard
|	**Mg**	24	104146.5	2.1	**0.3254**	0.009	2.8	mg/L	106	Standard

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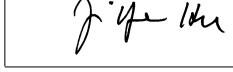
	K	39	1350.1	5.0	**0.0654**	0.006	8.4	mg/L	583	Standard
	Ca	43	2018.1	3.3	**2.4243**	0.106	4.4	mg/L	145	Standard
	Fe	54	16796.6	4.1	**2.4149**	0.118	4.9	mg/L	993	Standard
	Fe	57	443812.4	7.7	**2.3136**	0.201	8.7	mg/L	5581	Standard
>	**Sc-1**	45	511892.3	0.9				mg/L	477679	Standard
	Cl	35	83424.8	2.3				ug/L	75747	Standard
	Kr	83	96.7	3.2				ug/L	83	Standard
	Br	81	17946.0	4.5				ug/L	17338	Standard
	P	31	627543.9	3.3				ug/L	84853	Standard
	S	34	938520.3	4.8				ug/L	850414	Standard
	Sr	88	50986.5	5.4				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.085	
	As	75			
	Se	82			
>	Ga	71		100.493	
	Se-1	77			
	Rb	85			
>	Y	89		123.423	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.347	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.938	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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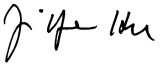


	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.531
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1204085401PS WG396235-01
Sample Date/Time: Thursday, April 26, 2012 10:45:13
Number of Replicates: 3
Autosampler Position: 212
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	56963.2	1.3	**2817.6179**	31.653	1.1	ug/L	24742	Standard
	Be	9	204735.3	2.0	**50.1720**	0.805	1.6	ug/L	11	Standard
	Al	27	38228700.3	1.8	**1462.1534**	27.783	1.9	ug/L	20240	Standard
>	**Sc**	45	508786.0	0.7				ug/L	477679	Standard
	Ti	47	37194.3	2.8	**18.2421**	0.518	2.8	ug/L	99	Standard
	V	51	1328677.5	1.3	**53.9513**	0.832	1.5	ug/L	7210	Standard
	Cr	52	1088695.6	0.8	**54.4861**	0.577	1.1	ug/L	22890	Standard
	Cr	53	120676.8	2.2	**53.7584**	1.193	2.2	ug/L	565	Standard
	Mn	55	3581956.3	2.3	**135.8321**	2.997	2.2	ug/L	1511	Standard
	Co	59	963154.7	1.7	**53.1139**	0.898	1.7	ug/L	149	Standard
	Ni	60	204671.1	2.0	**54.2461**	1.139	2.1	ug/L	54	Standard
	Cu	65	181472.4	1.4	**53.4312**	0.749	1.4	ug/L	142	Standard
	Zn	66	99198.7	1.5	**66.8801**	1.031	1.5	ug/L	800	Standard
>	**Ge**	72	369503.0	0.3				ug/L	375255	Standard
	As	75	68630.4	1.3	**51.2545**	0.693	1.4	ug/L	-104	Standard
	Se	82	6628.8	1.7	**50.3749**	0.930	1.8	ug/L	18	Standard
>	**Ga**	71	302689.7	0.9				mg/L	308497	Standard
	Se-1	77	4752.1	4.0	**50.5769**	1.888	3.7	mg/L	114	Standard
	Rb	85	22564.1	0.8				ug/L	16	Standard
>	**Y**	89	410236.3	2.0				ug/L	343723	Standard
	Rh	103	44.7	17.0				ug/L	2	Standard
	Mo	98	1374.0	0.8	**0.2866**	0.008	2.8	ug/L	7	Standard
	Ag	107	475080.6	2.7	**51.5013**	0.683	1.3	ug/L	143	Standard
	Cd	111	255526.4	2.1	**50.7943**	0.513	1.0	mg/L	597	Standard
	Cd	114	716616.8	1.9	**50.6069**	0.225	0.4	ug/L	1652	Standard
>	**In**	115	1130836.1	2.0				ug/L	1111888	Standard
	Sn	118	1622.1	3.7	**0.0324**	0.004	11.6	ug/L	928	Standard
	Sb	123	620305.5	0.8	**51.0026**	0.896	1.8	ug/L	16	Standard
	Ba	135	334155.8	1.5	**56.8242**	0.658	1.2	ug/L	58	Standard
	Ce	140	606533.0	1.5				ug/L	63	Standard
>	**Tb**	159	1230255.3	2.2				ug/L	1172993	Standard
	Ho	165	9619.7	1.1				ug/L	14	Standard
	Tl	203	1004205.2	1.6	**50.5183**	0.488	1.0	ug/L	33	Standard
	Tl	205	2610842.9	0.7	**51.3296**	0.490	1.0	ug/L	85	Standard
	Pb	206	843164.3	1.0	**52.4657**	0.451	0.9	ug/L	424	Standard
	Pb	207	717556.7	1.2	**53.6780**	0.252	0.5	ug/L	363	Standard
	Pb	208	3273874.1	1.5	**52.3028**	0.238	0.5	ug/L	1661	Standard
	U	238	2985357.0	1.9	**49.9519**	0.268	0.5	ug/L	5	Standard
>	**Bi**	209	672080.2	1.6				ug/L	678709	Standard
	Na	23	104.7	34.2	**0.0060**	0.011	177.5	mg/L	80	Standard
	Mg	24	105640.1	1.8	**0.3320**	0.005	1.4	mg/L	106	Standard

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	K	39	1280.1	7.7	**0.0601**	0.009	15.4	mg/L	583	Standard
	Ca	43	2061.5	4.3	**2.4968**	0.121	4.8	mg/L	145	Standard
	Fe	54	17015.3	2.8	**2.4641**	0.068	2.8	mg/L	993	Standard
	Fe	57	444003.0	2.6	**2.3278**	0.057	2.5	mg/L	5581	Standard
>	**Sc-1**	45	508786.0	0.7				mg/L	477679	Standard
	Cl	35	80400.1	0.2				ug/L	75747	Standard
	Kr	83	93.0	4.9				ug/L	83	Standard
	Br	81	16902.1	0.8				ug/L	17338	Standard
	P	31	602621.9	1.4				ug/L	84853	Standard
	S	34	845313.0	1.4				ug/L	850414	Standard
	Sr	88	51019.8	1.4				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.467	
	As	75			
	Se	82			
>	Ga	71		98.117	
	Se-1	77			
	Rb	85			
>	Y	89		119.351	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.704	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.882	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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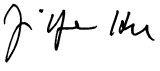
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.023
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1204085401SDL WG396235-02
Sample Date/Time: Thursday, April 26, 2012 10:47:59
Number of Replicates: 3
Autosampler Position: 213
Sample Description: 25
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	28383.9	4.0	**647.1022**	36.142	5.6	ug/L	24742	Standard
	Be	9	86.7	15.7	**0.0182**	0.003	16.4	ug/L	11	Standard
	Al	27	7219219.4	2.7	**325.9983**	6.945	2.1	ug/L	20240	Standard
>	**Sc**	45	430467.4	3.7				ug/L	477679	Standard
	Ti	47	7013.6	1.6	**3.7261**	0.033	0.9	ug/L	99	Standard
	V	51	18081.0	2.2	**0.5202**	0.006	1.1	ug/L	7210	Standard
	Cr	52	23128.6	1.3	**0.1586**	0.013	8.0	ug/L	22890	Standard
	Cr	53	1072.0	1.9	**0.2805**	0.003	1.1	ug/L	565	Standard
	Mn	55	390330.3	2.1	**16.1666**	0.224	1.4	ug/L	1511	Standard
	Co	59	3934.2	1.7	**0.2295**	0.001	0.6	ug/L	149	Standard
	Ni	60	1909.5	4.4	**0.5336**	0.018	3.3	ug/L	54	Standard
	Cu	65	1097.4	2.6	**0.3135**	0.012	4.0	ug/L	142	Standard
	Zn	66	8575.4	1.2	**6.0025**	0.043	0.7	ug/L	800	Standard
>	**Ge**	72	337340.2	1.8				ug/L	375255	Standard
	As	75	194.3	25.8	**0.2416**	0.043	17.9	ug/L	-104	Standard
	Se	82	8.4	75.4	**-0.0448**	0.051	113.8	ug/L	18	Standard
>	**Ga**	71	268554.4	2.0				mg/L	308497	Standard
	Se-1	77	109.3	10.1	**0.0582**	0.152	260.7	mg/L	114	Standard
	Rb	85	4187.2	0.5				ug/L	16	Standard
>	**Y**	89	309066.6	2.1				ug/L	343723	Standard
	Rh	103	3.3	124.9				ug/L	2	Standard
	Mo	98	225.3	4.5	**0.0461**	0.004	8.0	ug/L	7	Standard
	Ag	107	85.3	10.0	**0.0003**	0.001	209.8	ug/L	143	Standard
	Cd	111	317.0	5.9	**-0.0451**	0.004	8.4	mg/L	597	Standard
	Cd	114	922.9	5.1	**-0.0427**	0.002	5.4	ug/L	1652	Standard
>	**In**	115	1008981.9	3.2				ug/L	1111888	Standard
	Sn	118	711.4	1.0	**-0.0114**	0.001	9.6	ug/L	928	Standard
	Sb	123	878.9	20.9	**0.0802**	0.014	17.6	ug/L	16	Standard
	Ba	135	6999.6	2.0	**1.3230**	0.016	1.2	ug/L	58	Standard
	Ce	140	118825.5	1.7				ug/L	63	Standard
>	**Tb**	159	1089072.6	3.4				ug/L	1172993	Standard
	Ho	165	1838.1	6.0				ug/L	14	Standard
	Tl	203	163.7	14.1	**0.0070**	0.001	13.3	ug/L	33	Standard
	Tl	205	397.3	9.8	**0.0087**	0.001	6.1	ug/L	85	Standard
	Pb	206	7027.3	2.0	**0.4349**	0.006	1.5	ug/L	424	Standard
	Pb	207	5614.0	3.8	**0.4178**	0.007	1.6	ug/L	363	Standard
	Pb	208	26238.4	2.5	**0.4173**	0.006	1.4	ug/L	1661	Standard
	U	238	2410.9	2.2	**0.0475**	0.002	3.5	ug/L	5	Standard
>	**Bi**	209	635143.5	3.4				ug/L	678709	Standard
	Na	23	65.3	21.7	**-0.0019**	0.006	300.1	mg/L	80	Standard
	Mg	24	21569.3	2.3	**0.0799**	0.003	3.6	mg/L	106	Standard

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	K	39	742.0	6.1	**0.0251**	0.003	11.5	mg/L	583	Standard
	Ca	43	536.7	7.5	**0.6270**	0.086	13.7	mg/L	145	Standard
	Fe	54	3476.0	3.6	**0.4677**	0.044	9.4	mg/L	993	Standard
	Fe	57	74813.1	3.9	**0.4403**	0.015	3.4	mg/L	5581	Standard
>	**Sc-1**	45	430467.4	3.7				mg/L	477679	Standard
	Cl	35	68252.2	3.4				ug/L	75747	Standard
	Kr	83	82.3	9.0				ug/L	83	Standard
	Br	81	13464.0	0.5				ug/L	17338	Standard
	P	31	147082.3	2.2				ug/L	84853	Standard
	S	34	673848.9	1.4				ug/L	850414	Standard
	Sr	88	9877.9	1.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.896	
	As	75			
	Se	82			
>	Ga	71		87.052	
	Se-1	77			
	Rb	85			
>	Y	89		89.917	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.745	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.846	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204085401SDL WG396235-02
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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

93.581

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1204085401SDL WG396235-02
Report Date/Time: Thursday, April 26, 2012 10:50:25
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, April 26, 2012 10:50:47
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25858.1	3.0	**31.5424**	35.110	111.3	ug/L	24742	Standard
|	**Be**	9	201201.4	1.9	**51.3150**	0.591	1.2	ug/L	11	Standard
|	**Al**	27	1284207.2	3.1	**50.5831**	2.959	5.8	ug/L	20240	Standard
⌊>	**Sc**	45	488983.1	2.9				ug/L	477679	Standard
⌈	**Ti**	47	208693.8	2.0	**103.8053**	0.129	0.1	ug/L	99	Standard
|	**V**	51	1226979.9	3.2	**50.3788**	0.637	1.3	ug/L	7210	Standard
|	**Cr**	52	1016663.3	2.7	**51.4109**	0.454	0.9	ug/L	22890	Standard
|	**Cr**	53	113400.3	2.2	**51.0974**	0.212	0.4	ug/L	565	Standard
|	**Mn**	55	1298716.3	2.6	**49.7908**	0.288	0.6	ug/L	1511	Standard
|	**Co**	59	898550.6	4.1	**50.1186**	1.082	2.2	ug/L	149	Standard
|	**Ni**	60	189854.3	2.7	**50.9039**	0.378	0.7	ug/L	54	Standard
|	**Cu**	65	170247.6	2.6	**50.7102**	0.503	1.0	ug/L	142	Standard
|	**Zn**	66	73897.8	1.8	**50.3193**	0.320	0.6	ug/L	800	Standard
|>	**Ge**	72	365210.2	2.0				ug/L	375255	Standard
|	**As**	75	66523.0	1.9	**50.2666**	0.210	0.4	ug/L	-104	Standard
⌊	**Se**	82	6585.2	1.6	**50.6349**	0.243	0.5	ug/L	18	Standard
⌈>	**Ga**	71	296326.5	3.4				mg/L	308497	Standard
⌊	**Se-1**	77	4725.4	1.8	**51.4589**	2.748	5.3	mg/L	114	Standard
⌈	**Rb**	85	1048.7	6.9				ug/L	16	Standard
|>	**Y**	89	336029.7	3.1				ug/L	343723	Standard
⌊	**Rh**	103	40.0	21.8				ug/L	2	Standard
⌈	**Mo**	98	441166.1	2.3	**95.4991**	0.591	0.6	ug/L	7	Standard
|	**Ag**	107	445408.9	2.8	**48.7521**	0.662	1.4	ug/L	143	Standard
|	**Cd**	111	246963.8	3.2	**49.5617**	1.024	2.1	mg/L	597	Standard
|	**Cd**	114	691231.3	2.3	**49.2829**	0.414	0.8	ug/L	1652	Standard
|>	**In**	115	1119950.5	1.9				ug/L	1111888	Standard
|	**Sn**	118	915294.0	2.9	**48.9428**	0.537	1.1	ug/L	928	Standard
|	**Sb**	123	595222.5	2.6	**49.4015**	0.536	1.1	ug/L	16	Standard
⌊	**Ba**	135	287566.3	3.1	**49.3628**	0.655	1.3	ug/L	58	Standard
⌈	**Ce**	140	1125.4	4.7				ug/L	63	Standard
⌊>	**Tb**	159	1221386.6	1.6				ug/L	1172993	Standard
⌈	**Ho**	165	26.7	22.9				ug/L	14	Standard
|	**Tl**	203	960013.6	1.5	**49.7640**	0.782	1.6	ug/L	33	Standard
|	**Tl**	205	2498744.7	1.4	**50.6183**	0.961	1.9	ug/L	85	Standard
|	**Pb**	206	776132.8	1.9	**49.7560**	0.638	1.3	ug/L	424	Standard
|	**Pb**	207	647348.8	1.5	**49.8921**	0.316	0.6	ug/L	363	Standard
|	**Pb**	208	2983921.8	1.6	**49.1154**	0.386	0.8	ug/L	1661	Standard
|	**U**	238	2859096.4	1.0	**49.2958**	0.360	0.7	ug/L	5	Standard
⌊>	**Bi**	209	652288.2	1.6				ug/L	678709	Standard
⌈	**Na**	23	16746.6	1.2	**5.0383**	0.090	1.8	mg/L	80	Standard
|	**Mg**	24	1538608.6	1.2	**5.0390**	0.100	2.0	mg/L	106	Standard

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	K	39	56671.1	1.1	**5.0668**	0.096	1.9	mg/L	583	Standard
	Ca	43	3723.1	1.9	**4.8742**	0.059	1.2	mg/L	145	Standard
	Fe	54	31267.5	3.1	**4.8656**	0.057	1.2	mg/L	993	Standard
	Fe	57	857137.4	3.6	**4.7047**	0.035	0.8	mg/L	5581	Standard
>	**Sc-1**	45	488983.1	2.9				mg/L	477679	Standard
	Cl	35	78030.8	1.0				ug/L	75747	Standard
	Kr	83	80.0	8.7				ug/L	83	Standard
	Br	81	16310.8	0.8				ug/L	17338	Standard
	P	31	91992.2	2.6				ug/L	84853	Standard
	S	34	869361.0	3.5				ug/L	850414	Standard
	Sr	88	587.3	11.1				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	101.166		
>	Sc	45			
	Ti	47	103.805		
	V	51	100.758		
	Cr	52	102.822		
	Cr	53			
	Mn	55	99.582		
	Co	59	100.237		
	Ni	60	101.808		
	Cu	65	101.420		
	Zn	66	100.639		
>	Ge	72		97.323	
	As	75	100.533		
	Se	82	101.270		
>	Ga	71		96.055	
	Se-1	77			
	Rb	85			
>	Y	89		97.762	
	Rh	103			
	Mo	98	95.499		
	Ag	107	97.504		
	Cd	111	99.123		
	Cd	114			
>	In	115		100.725	
	Sn	118	97.886		
	Sb	123	98.803		
	Ba	135	98.726		
	Ce	140			
>	Tb	159		104.126	
	Ho	165			
	Tl	203	99.528		
	Tl	205			
	Pb	206	99.512		

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	Pb	207	99.784	
	Pb	208	98.231	
	U	238	98.592	
>	Bi	209		96.107
	Na	23	100.766	
	Mg	24	100.781	
	K	39	101.337	
	Ca	43	97.484	
	Fe	54	97.313	
	Fe	57	94.094	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Thursday, April 26, 2012 10:53:13
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, April 26, 2012 10:53:33
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	24888.5	4.8	**22.3678**	76.971	344.1	ug/L	24742	Standard
|	**Be**	9	21.3	14.3	**-0.0012**	0.001	57.6	ug/L	11	Standard
|	**Al**	27	14182.6	1.9	**-0.0121**	0.005	40.7	ug/L	20240	Standard
⌊>	**Sc**	45	472250.6	2.3				ug/L	477679	Standard
⌈	**Ti**	47	96.7	13.1	**-0.0033**	0.008	244.6	ug/L	99	Standard
|	**V**	51	6726.6	4.0	**-0.0029**	0.010	353.4	ug/L	7210	Standard
|	**Cr**	52	21481.6	2.3	**0.0046**	0.031	678.5	ug/L	22890	Standard
|	**Cr**	53	447.3	4.0	**-0.0370**	0.004	10.3	ug/L	565	Standard
|	**Mn**	55	1508.7	11.0	**0.0061**	0.004	73.9	ug/L	1511	Standard
|	**Co**	59	172.3	27.3	**0.0016**	0.002	145.2	ug/L	149	Standard
|	**Ni**	60	64.7	15.5	**-0.0030**	0.002	73.5	ug/L	54	Standard
|	**Cu**	65	125.0	7.0	**-0.0026**	0.001	53.4	ug/L	142	Standard
|	**Zn**	66	245.0	5.8	**-0.1928**	0.010	5.3	ug/L	800	Standard
|>	**Ge**	72	355771.7	3.7				ug/L	375255	Standard
|	**As**	75	-141.7	8.6	**-0.0277**	0.013	47.8	ug/L	-104	Standard
⌊	**Se**	82	14.1	58.4	**-0.0032**	0.064	2033.2	ug/L	18	Standard
⌈>	**Ga**	71	291891.8	4.9				mg/L	308497	Standard
⌊	**Se-1**	77	92.7	17.4	**-0.2320**	0.232	100.0	mg/L	114	Standard
⌈	**Rb**	85	22.7	57.4				ug/L	16	Standard
|>	**Y**	89	326024.1	2.3				ug/L	343723	Standard
⌊	**Rh**	103	4.7	89.2				ug/L	2	Standard
⌈	**Mo**	98	98.6	46.1	**0.0138**	0.009	68.4	ug/L	7	Standard
|	**Ag**	107	102.3	5.4	**0.0016**	0.001	36.4	ug/L	143	Standard
|	**Cd**	111	545.5	5.4	**-0.0024**	0.003	123.1	mg/L	597	Standard
|	**Cd**	114	1663.4	2.4	**0.0071**	0.003	45.1	ug/L	1652	Standard
|>	**In**	115	1082920.8	2.8				ug/L	1111888	Standard
|	**Sn**	118	1092.7	0.8	**0.0068**	0.001	17.5	ug/L	928	Standard
|	**Sb**	123	306.5	25.0	**0.0257**	0.006	22.4	ug/L	16	Standard
⌊	**Ba**	135	60.7	9.9	**-0.0007**	0.001	170.1	ug/L	58	Standard
⌈	**Ce**	140	46.7	23.6				ug/L	63	Standard
⌊>	**Tb**	159	1153861.8	2.7				ug/L	1172993	Standard
⌈	**Ho**	165	9.3	12.4				ug/L	14	Standard
|	**Tl**	203	69.3	39.8	**0.0019**	0.002	80.2	ug/L	33	Standard
|	**Tl**	205	180.7	33.0	**0.0041**	0.001	31.0	ug/L	85	Standard
|	**Pb**	206	431.0	5.0	**-0.0004**	0.001	349.1	ug/L	424	Standard
|	**Pb**	207	390.7	8.4	**0.0034**	0.003	98.6	ug/L	363	Standard
|	**Pb**	208	1737.7	6.2	**0.0021**	0.002	85.6	ug/L	1661	Standard
|	**U**	238	139.7	71.7	**0.0072**	0.002	25.3	ug/L	5	Standard
⌊>	**Bi**	209	651334.5	3.4				ug/L	678709	Standard
⌈	**Na**	23	67.3	32.0	**-0.0033**	0.007	218.4	mg/L	80	Standard
|	**Mg**	24	169.0	32.8	**0.0002**	0.000	91.4	mg/L	106	Standard

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	K	39	600.0	2.3	**0.0051**	0.002	45.6	mg/L	583	Standard
	Ca	43	122.7	8.4	**-0.0329**	0.018	55.2	mg/L	145	Standard
	Fe	54	1007.8	2.6	**-0.0010**	0.005	510.8	mg/L	993	Standard
	Fe	57	4754.7	5.8	**-0.0021**	0.001	46.4	mg/L	5581	Standard
>	**Sc-1**	45	472250.6	2.3				mg/L	477679	Standard
	Cl	35	72432.8	3.1				ug/L	75747	Standard
	Kr	83	82.0	4.9				ug/L	83	Standard
	Br	81	15712.5	2.7				ug/L	17338	Standard
	P	31	81152.1	7.0				ug/L	84853	Standard
	S	34	812827.1	5.2				ug/L	850414	Standard
	Sr	88	199.3	7.7				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.808	
	As	75			
	Se	82			
>	Ga	71		94.617	
	Se-1	77			
	Rb	85			
>	Y	89		94.851	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.395	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.369	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.967
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Thursday, April 26, 2012 10:55:59
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Method 6020 - Summary Report

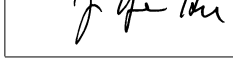
Sample ID: L1204085402
Sample Date/Time: Thursday, April 26, 2012 10:56:21
Number of Replicates: 3
Autosampler Position: 214
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	55263.9	0.7	**3309.9693**	105.879	3.2	ug/L	24742	Standard
|	**Be**	9	532.7	5.8	**0.1404**	0.011	8.2	ug/L	11	Standard
|	**Al**	27	52903279.9	1.8	**2279.8768**	12.023	0.5	ug/L	20240	Standard
⌊>	**Sc**	45	451620.6	2.0				ug/L	477679	Standard
⌈	**Ti**	47	52940.4	2.5	**28.2115**	0.441	1.6	ug/L	99	Standard
|	**V**	51	87151.1	0.3	**3.5742**	0.066	1.9	ug/L	7210	Standard
|	**Cr**	52	56739.0	0.8	**2.0113**	0.053	2.6	ug/L	22890	Standard
|	**Cr**	53	4730.1	0.7	**2.0529**	0.018	0.9	ug/L	565	Standard
|	**Mn**	55	1191452.8	1.0	**49.0148**	0.608	1.2	ug/L	1511	Standard
|	**Co**	59	16860.4	3.1	**1.0012**	0.028	2.8	ug/L	149	Standard
|	**Ni**	60	9986.3	1.9	**2.8534**	0.049	1.7	ug/L	54	Standard
|	**Cu**	65	9635.7	2.2	**3.0411**	0.047	1.5	ug/L	142	Standard
|	**Zn**	66	22996.8	3.4	**16.5619**	0.728	4.4	ug/L	800	Standard
|>	**Ge**	72	340398.8	1.4				ug/L	375255	Standard
|	**As**	75	1179.3	3.3	**1.0367**	0.018	1.7	ug/L	-104	Standard
⌊	**Se**	82	29.6	28.4	**0.1303**	0.069	52.7	ug/L	18	Standard
⌈>	**Ga**	71	274301.1	1.7				mg/L	308497	Standard
⌊	**Se-1**	77	109.3	13.2	**0.0304**	0.192	631.0	mg/L	114	Standard
⌈	**Rb**	85	25420.0	1.3				ug/L	16	Standard
|>	**Y**	89	375311.3	1.3				ug/L	343723	Standard
⌊	**Rh**	103	6.7	17.3				ug/L	2	Standard
⌈	**Mo**	98	1134.2	2.7	**0.2624**	0.009	3.2	ug/L	7	Standard
|	**Ag**	107	143.0	8.5	**0.0072**	0.002	21.4	ug/L	143	Standard
|	**Cd**	111	597.1	7.5	**0.0165**	0.010	62.7	mg/L	597	Standard
|	**Cd**	114	1716.4	5.0	**0.0192**	0.006	31.5	ug/L	1652	Standard
|>	**In**	115	1016566.1	0.5				ug/L	1111888	Standard
|	**Sn**	118	934.0	12.9	**0.0014**	0.007	494.9	ug/L	928	Standard
|	**Sb**	123	230.7	3.7	**0.0206**	0.001	3.4	ug/L	16	Standard
⌊	**Ba**	135	47630.1	0.5	**8.9996**	0.048	0.5	ug/L	58	Standard
⌈	**Ce**	140	716627.1	1.4				ug/L	63	Standard
⌊>	**Tb**	159	1124699.7	1.2				ug/L	1172993	Standard
⌈	**Ho**	165	9969.9	1.3				ug/L	14	Standard
|	**Tl**	203	496.7	2.2	**0.0243**	0.001	3.3	ug/L	33	Standard
|	**Tl**	205	1218.7	3.8	**0.0254**	0.001	4.8	ug/L	85	Standard
|	**Pb**	206	151093.6	0.6	**9.7768**	0.115	1.2	ug/L	424	Standard
|	**Pb**	207	134042.3	0.4	**10.4303**	0.118	1.1	ug/L	363	Standard
|	**Pb**	208	595303.4	0.7	**9.8917**	0.081	0.8	ug/L	1661	Standard
|	**U**	238	8379.0	1.0	**0.1509**	0.001	0.5	ug/L	5	Standard
⌊>	**Bi**	209	644814.3	1.5				ug/L	678709	Standard
⌈	**Na**	23	91.3	17.7	**0.0055**	0.006	104.7	mg/L	80	Standard
|	**Mg**	24	83171.3	1.2	**0.2945**	0.003	0.9	mg/L	106	Standard

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	K	39	1228.0	4.4	**0.0691**	0.006	8.4	mg/L	583	Standard
	Ca	43	700.0	4.3	**0.8280**	0.051	6.2	mg/L	145	Standard
	Fe	54	19733.0	1.1	**3.2717**	0.036	1.1	mg/L	993	Standard
	Fe	57	432777.2	2.3	**2.5592**	0.045	1.8	mg/L	5581	Standard
>	**Sc-1**	45	451620.6	2.0				mg/L	477679	Standard
	Cl	35	65757.8	3.0				ug/L	75747	Standard
	Kr	83	93.7	8.6				ug/L	83	Standard
	Br	81	14201.3	1.7				ug/L	17338	Standard
	P	31	595681.0	1.0				ug/L	84853	Standard
	S	34	644066.5	4.6				ug/L	850414	Standard
	Sr	88	36952.4	2.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.711	
	As	75			
	Se	82			
>	Ga	71		88.915	
	Se-1	77			
	Rb	85			
>	Y	89		109.190	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.427	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.883	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204085402
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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

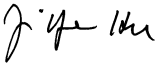
95.006

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1204085402
Report Date/Time: Thursday, April 26, 2012 10:58:47
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Method 6020 - Summary Report

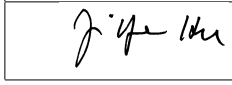
Sample ID: L1204085403
Sample Date/Time: Thursday, April 26, 2012 10:59:07
Number of Replicates: 3
Autosampler Position: 215
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	119489.3	0.6	**9603.9005**	81.667	0.9	ug/L	24742	Standard
|	**Be**	9	909.4	2.2	**0.2360**	0.007	2.8	ug/L	11	Standard
|	**Al**	27	78910875.6	2.1	**3288.6241**	72.262	2.2	ug/L	20240	Standard
⌊>	**Sc**	45	467052.0	1.0				ug/L	477679	Standard
⌈	**Ti**	47	33725.5	3.8	**17.9900**	0.511	2.8	ug/L	99	Standard
|	**V**	51	130128.5	1.4	**5.4902**	0.013	0.2	ug/L	7210	Standard
|	**Cr**	52	92060.6	2.4	**3.9802**	0.071	1.8	ug/L	22890	Standard
|	**Cr**	53	8530.4	2.1	**3.9074**	0.043	1.1	ug/L	565	Standard
|	**Mn**	55	5068210.1	2.9	**209.0757**	3.474	1.7	ug/L	1511	Standard
|	**Co**	59	47095.4	2.5	**2.8172**	0.044	1.6	ug/L	149	Standard
|	**Ni**	60	26517.9	2.3	**7.6269**	0.086	1.1	ug/L	54	Standard
|	**Cu**	65	14785.5	1.9	**4.6982**	0.032	0.7	ug/L	142	Standard
|	**Zn**	66	38217.8	1.1	**27.8177**	0.131	0.5	ug/L	800	Standard
|>	**Ge**	72	339670.9	1.2				ug/L	375255	Standard
|	**As**	75	1483.9	1.5	**1.2860**	0.015	1.1	ug/L	-104	Standard
⌊	**Se**	82	38.9	46.7	**0.2067**	0.147	71.0	ug/L	18	Standard
⌈>	**Ga**	71	277646.2	0.8				mg/L	308497	Standard
⌊	**Se-1**	77	135.3	11.1	**0.3234**	0.192	59.4	mg/L	114	Standard
⌈	**Rb**	85	49567.7	3.4				ug/L	16	Standard
|>	**Y**	89	462912.2	2.9				ug/L	343723	Standard
⌊	**Rh**	103	24.0	30.0				ug/L	2	Standard
⌈	**Mo**	98	1298.2	7.0	**0.2991**	0.017	5.6	ug/L	7	Standard
|	**Ag**	107	169.0	19.5	**0.0102**	0.004	39.7	ug/L	143	Standard
|	**Cd**	111	1067.2	2.2	**0.1190**	0.009	7.6	mg/L	597	Standard
|	**Cd**	114	2991.4	0.1	**0.1180**	0.004	3.7	ug/L	1652	Standard
|>	**In**	115	1024056.2	1.9				ug/L	1111888	Standard
|	**Sn**	118	1400.1	1.1	**0.0283**	0.001	2.5	ug/L	928	Standard
|	**Sb**	123	177.4	7.3	**0.0156**	0.001	9.3	ug/L	16	Standard
⌊	**Ba**	135	54493.9	2.5	**10.2222**	0.113	1.1	ug/L	58	Standard
⌈	**Ce**	140	1023144.0	2.9				ug/L	63	Standard
⌊>	**Tb**	159	1156877.5	1.4				ug/L	1172993	Standard
⌈	**Ho**	165	19982.5	1.9				ug/L	14	Standard
|	**Tl**	203	834.0	4.3	**0.0429**	0.002	4.4	ug/L	33	Standard
|	**Tl**	205	2008.1	4.0	**0.0424**	0.002	4.3	ug/L	85	Standard
|	**Pb**	206	646220.8	1.3	**42.7392**	0.459	1.1	ug/L	424	Standard
|	**Pb**	207	568662.6	1.0	**45.2173**	0.405	0.9	ug/L	363	Standard
|	**Pb**	208	2538232.4	1.2	**43.1036**	0.499	1.2	ug/L	1661	Standard
|	**U**	238	10329.2	1.2	**0.1885**	0.002	1.1	ug/L	5	Standard
⌊>	**Bi**	209	632193.0	0.5				ug/L	678709	Standard
⌈	**Na**	23	179.3	5.5	**0.0323**	0.004	11.2	mg/L	80	Standard
|	**Mg**	24	383005.5	1.5	**1.3126**	0.022	1.7	mg/L	106	Standard

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	K	39	3067.0	1.3	**0.2389**	0.001	0.5	mg/L	583	Standard
	Ca	43	15535.3	1.4	**21.9842**	0.263	1.2	mg/L	145	Standard
	Fe	54	35845.2	1.1	**5.8742**	0.092	1.6	mg/L	993	Standard
	Fe	57	859218.8	3.4	**4.9390**	0.121	2.4	mg/L	5581	Standard
>	**Sc-1**	45	467052.0	1.0				mg/L	477679	Standard
	Cl	35	74813.9	1.1				ug/L	75747	Standard
	Kr	83	99.7	5.5				ug/L	83	Standard
	Br	81	15673.4	0.7				ug/L	17338	Standard
	P	31	567803.3	1.6				ug/L	84853	Standard
	S	34	802570.8	2.4				ug/L	850414	Standard
	Sr	88	517275.9	1.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.517	
	As	75			
	Se	82			
>	Ga	71		90.000	
	Se-1	77			
	Rb	85			
>	Y	89		134.676	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.101	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.626	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204085403
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.146
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

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Method 6020 - Summary Report

Sample ID: L1204085404
Sample Date/Time: Thursday, April 26, 2012 11:01:53
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: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	42641.6	1.1	**1942.5216**	57.436	3.0	ug/L	24742	Standard
|	**Be**	9	378.7	3.7	**0.0966**	0.004	3.8	ug/L	11	Standard
|	**Al**	27	35514043.6	0.5	**1513.7346**	10.900	0.7	ug/L	20240	Standard
⌊>	**Sc**	45	456546.6	0.3				ug/L	477679	Standard
⌈	**Ti**	47	19445.1	2.0	**10.5399**	0.359	3.4	ug/L	99	Standard
|	**V**	51	58643.2	0.3	**2.3625**	0.043	1.8	ug/L	7210	Standard
|	**Cr**	52	47095.1	0.5	**1.5283**	0.025	1.6	ug/L	22890	Standard
|	**Cr**	53	3563.8	0.7	**1.5209**	0.021	1.4	ug/L	565	Standard
|	**Mn**	55	2585766.6	0.7	**108.5588**	0.875	0.8	ug/L	1511	Standard
|	**Co**	59	17850.8	1.7	**1.0819**	0.019	1.8	ug/L	149	Standard
|	**Ni**	60	8629.1	2.8	**2.5120**	0.044	1.8	ug/L	54	Standard
|	**Cu**	65	5376.3	1.6	**1.7131**	0.017	1.0	ug/L	142	Standard
|	**Zn**	66	15826.3	0.1	**11.5140**	0.175	1.5	ug/L	800	Standard
|>	**Ge**	72	333747.9	1.5				ug/L	375255	Standard
|	**As**	75	897.8	7.6	**0.8232**	0.050	6.0	ug/L	-104	Standard
⌊	**Se**	82	21.9	60.2	**0.0706**	0.113	159.6	ug/L	18	Standard
⌈>	**Ga**	71	268507.1	1.1				mg/L	308497	Standard
⌊	**Se-1**	77	106.0	20.4	**0.0145**	0.252	1733.4	mg/L	114	Standard
⌈	**Rb**	85	18141.5	2.4				ug/L	16	Standard
|>	**Y**	89	377890.0	1.7				ug/L	343723	Standard
⌊	**Rh**	103	8.0	43.3				ug/L	2	Standard
⌈	**Mo**	98	639.2	2.3	**0.1468**	0.003	2.2	ug/L	7	Standard
|	**Ag**	107	100.0	10.4	**0.0022**	0.001	51.2	ug/L	143	Standard
|	**Cd**	111	491.4	1.4	**-0.0052**	0.001	23.3	mg/L	597	Standard
|	**Cd**	114	1313.8	3.6	**-0.0108**	0.003	24.4	ug/L	1652	Standard
|>	**In**	115	1000751.9	1.3				ug/L	1111888	Standard
|	**Sn**	118	1080.0	11.6	**0.0110**	0.007	61.0	ug/L	928	Standard
|	**Sb**	123	183.3	12.8	**0.0165**	0.002	13.0	ug/L	16	Standard
⌊	**Ba**	135	43120.6	2.0	**8.2777**	0.275	3.3	ug/L	58	Standard
⌈	**Ce**	140	622484.6	1.7				ug/L	63	Standard
⌊>	**Tb**	159	1107611.9	0.3				ug/L	1172993	Standard
⌈	**Ho**	165	10797.8	1.0				ug/L	14	Standard
|	**Tl**	203	492.0	3.6	**0.0243**	0.001	3.7	ug/L	33	Standard
|	**Tl**	205	1105.4	7.2	**0.0233**	0.002	6.6	ug/L	85	Standard
|	**Pb**	206	45200.3	0.5	**2.9295**	0.014	0.5	ug/L	424	Standard
|	**Pb**	207	36130.0	1.1	**2.8153**	0.036	1.3	ug/L	363	Standard
|	**Pb**	208	168213.8	1.0	**2.7994**	0.026	0.9	ug/L	1661	Standard
|	**U**	238	13513.7	2.1	**0.2424**	0.004	1.6	ug/L	5	Standard
⌊>	**Bi**	209	639425.6	0.5				ug/L	678709	Standard
⌈	**Na**	23	83.3	3.7	**0.0025**	0.001	36.3	mg/L	80	Standard
|	**Mg**	24	118047.8	0.6	**0.4136**	0.003	0.8	mg/L	106	Standard

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	K	39	1223.4	2.8	**0.0673**	0.003	4.5	mg/L	583	Standard
	Ca	43	1273.4	9.0	**1.6540**	0.162	9.8	mg/L	145	Standard
	Fe	54	14381.9	1.8	**2.3113**	0.050	2.2	mg/L	993	Standard
	Fe	57	328761.6	2.2	**1.9158**	0.046	2.4	mg/L	5581	Standard
>	**Sc-1**	45	456546.6	0.3				mg/L	477679	Standard
	Cl	35	67419.4	2.1				ug/L	75747	Standard
	Kr	83	91.3	9.1				ug/L	83	Standard
	Br	81	14391.2	2.4				ug/L	17338	Standard
	P	31	703481.9	0.9				ug/L	84853	Standard
	S	34	743117.7	1.5				ug/L	850414	Standard
	Sr	88	49448.6	0.3				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.939	
	As	75			
	Se	82			
>	Ga	71		87.037	
	Se-1	77			
	Rb	85			
>	Y	89		109.940	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.005	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.426	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.212
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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

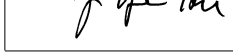
Sample ID: L1204085405
Sample Date/Time: Thursday, April 26, 2012 11:04:39
Number of Replicates: 3
Autosampler Position: 217
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	54585.8	0.9	**3361.6234**	82.320	2.4	ug/L	24742	Standard
	Be	9	408.3	7.3	**0.1083**	0.008	7.3	ug/L	11	Standard
	Al	27	48248914.4	0.8	**2124.3466**	30.305	1.4	ug/L	20240	Standard
>	**Sc**	45	442049.0	0.8				ug/L	477679	Standard
	Ti	47	56769.5	1.0	**31.4623**	0.190	0.6	ug/L	99	Standard
	V	51	130351.7	1.2	**5.7176**	0.087	1.5	ug/L	7210	Standard
	Cr	52	61329.9	1.0	**2.4007**	0.048	2.0	ug/L	22890	Standard
	Cr	53	5248.2	1.9	**2.4063**	0.082	3.4	ug/L	565	Standard
	Mn	55	1922616.6	1.2	**82.2636**	0.348	0.4	ug/L	1511	Standard
	Co	59	22703.0	0.6	**1.4051**	0.018	1.3	ug/L	149	Standard
	Ni	60	10686.1	1.7	**3.1772**	0.068	2.1	ug/L	54	Standard
	Cu	65	4110.9	0.8	**1.3264**	0.014	1.0	ug/L	142	Standard
	Zn	66	22165.2	1.4	**16.5935**	0.272	1.6	ug/L	800	Standard
>	**Ge**	72	327410.2	1.5				ug/L	375255	Standard
	As	75	1281.0	2.2	**1.1603**	0.018	1.6	ug/L	-104	Standard
	Se	82	17.7	39.9	**0.0372**	0.059	157.9	ug/L	18	Standard
>	**Ga**	71	263025.2	1.9				mg/L	308497	Standard
	Se-1	77	92.7	22.2	**-0.1208**	0.276	228.9	mg/L	114	Standard
	Rb	85	14871.3	1.2				ug/L	16	Standard
>	**Y**	89	387653.2	1.6				ug/L	343723	Standard
	Rh	103	3.3	124.9				ug/L	2	Standard
	Mo	98	1012.2	2.3	**0.2386**	0.005	2.1	ug/L	7	Standard
	Ag	107	108.0	1.6	**0.0033**	0.000	6.5	ug/L	143	Standard
	Cd	111	479.3	2.6	**-0.0073**	0.003	36.4	mg/L	597	Standard
	Cd	114	1369.6	3.0	**-0.0057**	0.004	64.4	ug/L	1652	Standard
>	**In**	115	994909.1	0.3				ug/L	1111888	Standard
	Sn	118	961.4	1.5	**0.0043**	0.001	24.1	ug/L	928	Standard
	Sb	123	134.1	10.0	**0.0120**	0.001	10.3	ug/L	16	Standard
	Ba	135	36830.7	0.9	**7.1082**	0.074	1.0	ug/L	58	Standard
	Ce	140	774564.9	1.5				ug/L	63	Standard
>	**Tb**	159	1089875.3	0.4				ug/L	1172993	Standard
	Ho	165	13006.2	0.8				ug/L	14	Standard
	Tl	203	372.3	4.9	**0.0181**	0.001	4.8	ug/L	33	Standard
	Tl	205	879.4	2.7	**0.0188**	0.000	2.4	ug/L	85	Standard
	Pb	206	27819.5	0.8	**1.8074**	0.020	1.1	ug/L	424	Standard
	Pb	207	21914.2	2.0	**1.7115**	0.043	2.5	ug/L	363	Standard
	Pb	208	102922.2	0.8	**1.7170**	0.023	1.3	ug/L	1661	Standard
	U	238	12769.7	1.2	**0.2312**	0.003	1.1	ug/L	5	Standard
>	**Bi**	209	634153.5	0.5				ug/L	678709	Standard
	Na	23	89.3	10.1	**0.0054**	0.003	54.6	mg/L	80	Standard
	Mg	24	81312.0	1.2	**0.2941**	0.005	1.9	mg/L	106	Standard

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	K	39	1077.4	6.7	**0.0566**	0.007	12.7	mg/L	583	Standard
	Ca	43	558.0	7.0	**0.6356**	0.057	8.9	mg/L	145	Standard
	Fe	54	21292.5	1.3	**3.6239**	0.078	2.2	mg/L	993	Standard
	Fe	57	495708.3	2.5	**2.9994**	0.057	1.9	mg/L	5581	Standard
>	**Sc-1**	45	442049.0	0.8				mg/L	477679	Standard
	Cl	35	60505.6	2.1				ug/L	75747	Standard
	Kr	83	95.0	2.8				ug/L	83	Standard
	Br	81	14332.4	0.0				ug/L	17338	Standard
	P	31	541539.2	1.1				ug/L	84853	Standard
	S	34	627863.9	2.5				ug/L	850414	Standard
	Sr	88	29516.1	2.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.250	
	As	75			
	Se	82			
>	Ga	71		85.260	
	Se-1	77			
	Rb	85			
>	Y	89		112.781	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.479	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.914	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204085405
Report Date/Time: Thursday, April 26, 2012 11:07:04
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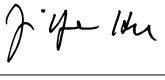
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.435
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

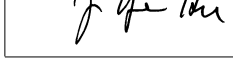
Sample ID: L1204085406
Sample Date/Time: Thursday, April 26, 2012 11:07:24
Number of Replicates: 3
Autosampler Position: 218
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	58198.3	2.6	**3582.1209**	99.344	2.8	ug/L	24742	Standard
	Be	9	494.7	7.5	**0.1290**	0.010	7.8	ug/L	11	Standard
	Al	27	53187168.2	2.8	**2279.7257**	54.780	2.4	ug/L	20240	Standard
>	**Sc**	45	454042.9	1.1				ug/L	477679	Standard
	Ti	47	67520.1	1.0	**36.6416**	0.743	2.0	ug/L	99	Standard
	V	51	175948.5	0.1	**7.6477**	0.157	2.1	ug/L	7210	Standard
	Cr	52	75238.7	0.9	**3.1112**	0.082	2.6	ug/L	22890	Standard
	Cr	53	6927.6	2.2	**3.1815**	0.146	4.6	ug/L	565	Standard
	Mn	55	638663.1	1.2	**26.7143**	0.412	1.5	ug/L	1511	Standard
	Co	59	19285.9	1.2	**1.1671**	0.025	2.2	ug/L	149	Standard
	Ni	60	8259.3	1.4	**2.3984**	0.021	0.9	ug/L	54	Standard
	Cu	65	3330.4	3.0	**1.0430**	0.012	1.2	ug/L	142	Standard
	Zn	66	16330.5	0.9	**11.8655**	0.223	1.9	ug/L	800	Standard
>	**Ge**	72	334515.5	2.1				ug/L	375255	Standard
	As	75	1307.4	4.2	**1.1599**	0.063	5.4	ug/L	-104	Standard
	Se	82	29.7	56.4	**0.1371**	0.145	105.8	ug/L	18	Standard
>	**Ga**	71	266553.6	2.1				mg/L	308497	Standard
	Se-1	77	100.0	20.3	**-0.0511**	0.231	452.4	mg/L	114	Standard
	Rb	85	10212.1	2.4				ug/L	16	Standard
>	**Y**	89	391344.3	1.6				ug/L	343723	Standard
	Rh	103	5.3	78.1				ug/L	2	Standard
	Mo	98	671.8	4.2	**0.1551**	0.009	5.8	ug/L	7	Standard
	Ag	107	109.7	7.4	**0.0035**	0.001	34.7	ug/L	143	Standard
	Cd	111	388.1	4.2	**-0.0283**	0.004	13.1	mg/L	597	Standard
	Cd	114	1063.6	8.5	**-0.0305**	0.009	28.0	ug/L	1652	Standard
>	**In**	115	998323.3	1.7				ug/L	1111888	Standard
	Sn	118	1010.7	3.8	**0.0071**	0.003	47.1	ug/L	928	Standard
	Sb	123	139.4	5.4	**0.0125**	0.001	6.9	ug/L	16	Standard
	Ba	135	41060.2	1.2	**7.8996**	0.126	1.6	ug/L	58	Standard
	Ce	140	1053869.2	1.1				ug/L	63	Standard
>	**Tb**	159	1113436.1	1.7				ug/L	1172993	Standard
	Ho	165	16380.2	2.3				ug/L	14	Standard
	Tl	203	332.3	8.7	**0.0160**	0.002	9.7	ug/L	33	Standard
	Tl	205	823.4	2.0	**0.0177**	0.000	1.9	ug/L	85	Standard
	Pb	206	257556.7	0.7	**17.0062**	0.174	1.0	ug/L	424	Standard
	Pb	207	223858.3	0.8	**17.7725**	0.221	1.2	ug/L	363	Standard
	Pb	208	1006261.8	1.1	**17.0604**	0.172	1.0	ug/L	1661	Standard
	U	238	21578.7	2.5	**0.3883**	0.005	1.4	ug/L	5	Standard
>	**Bi**	209	632676.1	1.7				ug/L	678709	Standard
	Na	23	86.7	5.3	**0.0037**	0.001	32.4	mg/L	80	Standard
	Mg	24	80431.0	2.5	**0.2832**	0.005	1.9	mg/L	106	Standard

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	K	39	900.0	2.9	**0.0365**	0.002	5.0	mg/L	583	Standard
	Ca	43	612.7	2.5	**0.6940**	0.029	4.2	mg/L	145	Standard
	Fe	54	24308.9	2.3	**4.0461**	0.057	1.4	mg/L	993	Standard
	Fe	57	574525.5	3.6	**3.3879**	0.089	2.6	mg/L	5581	Standard
>	**Sc-1**	45	454042.9	1.1				mg/L	477679	Standard
	Cl	35	63570.5	9.1				ug/L	75747	Standard
	Kr	83	95.0	14.8				ug/L	83	Standard
	Br	81	14911.3	2.6				ug/L	17338	Standard
	P	31	625263.2	1.9				ug/L	84853	Standard
	S	34	588769.9	4.1				ug/L	850414	Standard
	Sr	88	30889.5	3.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.143	
	As	75			
	Se	82			
>	Ga	71		86.404	
	Se-1	77			
	Rb	85			
>	Y	89		113.855	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.786	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.923	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.218
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1204086401
Sample Date/Time: Thursday, April 26, 2012 11:10:11
Number of Replicates: 3
Autosampler Position: 219
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	166787.4	1.5	**14984.2715**	261.536	1.7	ug/L	24742	Standard
	Be	9	3196.3	2.2	**0.8772**	0.020	2.3	ug/L	11	Standard
	Al	27	109107419.3	1.1	**4710.2226**	37.561	0.8	ug/L	20240	Standard
>	**Sc**	45	450880.7	0.9				ug/L	477679	Standard
	Ti	47	47238.9	1.1	**28.5915**	0.601	2.1	ug/L	99	Standard
	V	51	94201.1	1.0	**4.4524**	0.103	2.3	ug/L	7210	Standard
	Cr	52	138946.6	1.0	**7.6150**	0.147	1.9	ug/L	22890	Standard
	Cr	53	13800.3	2.8	**7.3671**	0.195	2.7	ug/L	565	Standard
	Mn	55	9447018.2	2.1	**441.6894**	7.490	1.7	ug/L	1511	Standard
	Co	59	25388.9	2.5	**1.7176**	0.025	1.4	ug/L	149	Standard
	Ni	60	20460.8	0.9	**6.6663**	0.065	1.0	ug/L	54	Standard
	Cu	65	32494.5	0.9	**11.7620**	0.188	1.6	ug/L	142	Standard
	Zn	66	48862.3	1.1	**40.4648**	0.585	1.4	ug/L	800	Standard
>	**Ge**	72	299791.7	1.7				ug/L	375255	Standard
	As	75	3084.6	2.2	**2.9170**	0.020	0.7	ug/L	-104	Standard
	Se	82	95.2	21.2	**0.7779**	0.174	22.4	ug/L	18	Standard
>	**Ga**	71	234451.0	3.0				mg/L	308497	Standard
	Se-1	77	148.7	13.8	**0.8122**	0.332	40.9	mg/L	114	Standard
	Rb	85	28241.6	1.2				ug/L	16	Standard
>	**Y**	89	389299.8	1.4				ug/L	343723	Standard
	Rh	103	39.3	21.2				ug/L	2	Standard
	Mo	98	3055.0	1.1	**0.8200**	0.010	1.2	ug/L	7	Standard
	Ag	107	327.0	3.2	**0.0348**	0.002	6.9	ug/L	143	Standard
	Cd	111	2270.2	0.3	**0.4560**	0.012	2.5	mg/L	597	Standard
	Cd	114	6462.9	1.5	**0.4625**	0.010	2.2	ug/L	1652	Standard
>	**In**	115	894617.6	2.3				ug/L	1111888	Standard
	Sn	118	1436.7	3.5	**0.0426**	0.004	8.8	ug/L	928	Standard
	Sb	123	573.3	22.9	**0.0589**	0.012	20.7	ug/L	16	Standard
	Ba	135	217106.8	0.7	**46.6768**	1.072	2.3	ug/L	58	Standard
	Ce	140	798350.8	1.5				ug/L	63	Standard
>	**Tb**	159	1043417.4	1.8				ug/L	1172993	Standard
	Ho	165	14109.2	1.6				ug/L	14	Standard
	Tl	203	999.7	7.2	**0.0595**	0.004	6.7	ug/L	33	Standard
	Tl	205	2420.9	5.4	**0.0584**	0.003	5.1	ug/L	85	Standard
	Pb	206	253984.2	0.8	**19.2136**	0.102	0.5	ug/L	424	Standard
	Pb	207	203221.5	0.9	**18.4820**	0.095	0.5	ug/L	363	Standard
	Pb	208	946147.6	0.3	**18.3777**	0.100	0.5	ug/L	1661	Standard
	U	238	36496.9	1.0	**0.7479**	0.004	0.6	ug/L	5	Standard
>	**Bi**	209	552268.3	0.8				ug/L	678709	Standard
	Na	23	661.3	1.7	**0.1923**	0.002	1.3	mg/L	80	Standard
	Mg	24	7096433.1	0.7	**25.1979**	0.090	0.4	mg/L	106	Standard

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	K	39	3990.5	0.8	**0.3397**	0.000	0.1	mg/L	583	Standard
	Ca	43	55696.2	0.6	**82.2078**	1.013	1.2	mg/L	145	Standard
	Fe	54	29125.6	1.6	**4.9177**	0.114	2.3	mg/L	993	Standard
	Fe	57	669695.1	3.7	**3.9820**	0.117	2.9	mg/L	5581	Standard
>	**Sc-1**	45	450880.7	0.9				mg/L	477679	Standard
	Cl	35	95004.9	0.4				ug/L	75747	Standard
	Kr	83	98.3	15.6				ug/L	83	Standard
	Br	81	13914.7	3.0				ug/L	17338	Standard
	P	31	339896.5	1.2				ug/L	84853	Standard
	S	34	875512.2	0.9				ug/L	850414	Standard
	Sr	88	977732.3	1.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		79.890	
	As	75			
	Se	82			
>	Ga	71		75.998	
	Se-1	77			
	Rb	85			
>	Y	89		113.260	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		80.459	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		88.953	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	81.370
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1204086402
Sample Date/Time: Thursday, April 26, 2012 11:12:57
Number of Replicates: 3
Autosampler Position: 220
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	564469.8	1.8	**51813.2537**	895.539	1.7	ug/L	24742	Standard
|	**Be**	9	3283.4	4.3	**0.8276**	0.021	2.6	ug/L	11	Standard
|	**Al**	27	311067919.9	2.0	**12345.2834**	237.456	1.9	ug/L	20240	Standard
⌊>	**Sc**	45	490552.2	1.9				ug/L	477679	Standard
⌈	**Ti**	47	10945.3	0.9	**6.0581**	0.115	1.9	ug/L	99	Standard
|	**V**	51	150486.3	2.4	**6.6827**	0.025	0.4	ug/L	7210	Standard
|	**Cr**	52	159045.3	1.9	**8.0857**	0.083	1.0	ug/L	22890	Standard
|	**Cr**	53	16453.6	3.2	**8.1109**	0.213	2.6	ug/L	565	Standard
|	**Mn**	55	2825153.0	2.9	**121.5607**	1.171	1.0	ug/L	1511	Standard
|	**Co**	59	58528.6	2.9	**3.6548**	0.040	1.1	ug/L	149	Standard
|	**Ni**	60	182436.9	1.3	**54.8804**	0.821	1.5	ug/L	54	Standard
|	**Cu**	65	41172.9	1.1	**13.7303**	0.306	2.2	ug/L	142	Standard
|	**Zn**	66	160697.1	1.4	**123.2752**	1.874	1.5	ug/L	800	Standard
| >	**Ge**	72	325638.5	2.8				ug/L	375255	Standard
|	**As**	75	5298.5	2.2	**4.5664**	0.105	2.3	ug/L	-104	Standard
⌊	**Se**	82	103.8	18.3	**0.7854**	0.181	23.1	ug/L	18	Standard
⌈>	**Ga**	71	263936.1	2.7				mg/L	308497	Standard
⌊	**Se-1**	77	250.0	8.4	**1.8461**	0.324	17.6	mg/L	114	Standard
⌈	**Rb**	85	89980.0	3.7				ug/L	16	Standard
| >	**Y**	89	837441.5	2.6				ug/L	343723	Standard
⌊	**Rh**	103	12.0	16.7				ug/L	2	Standard
⌈	**Mo**	98	3423.5	1.8	**0.8449**	0.004	0.5	ug/L	7	Standard
|	**Ag**	107	309.7	23.0	**0.0291**	0.010	33.1	ug/L	143	Standard
|	**Cd**	111	1704.3	2.2	**0.2789**	0.015	5.2	mg/L	597	Standard
|	**Cd**	114	4908.2	2.0	**0.2879**	0.010	3.6	ug/L	1652	Standard
| >	**In**	115	973145.4	1.7				ug/L	1111888	Standard
|	**Sn**	118	743.4	11.6	**-0.0079**	0.005	68.5	ug/L	928	Standard
|	**Sb**	123	334.7	13.5	**0.0315**	0.005	15.1	ug/L	16	Standard
⌊	**Ba**	135	464468.6	1.1	**91.7868**	0.553	0.6	ug/L	58	Standard
⌈	**Ce**	140	1365847.6	0.6				ug/L	63	Standard
⌊>	**Tb**	159	1178448.4	2.4				ug/L	1172993	Standard
⌈	**Ho**	165	80551.6	0.6				ug/L	14	Standard
|	**Tl**	203	3344.4	3.3	**0.1839**	0.009	5.0	ug/L	33	Standard
|	**Tl**	205	8094.8	0.3	**0.1759**	0.003	2.0	ug/L	85	Standard
|	**Pb**	206	59746.6	0.5	**4.0734**	0.075	1.9	ug/L	424	Standard
|	**Pb**	207	48299.5	1.6	**3.9585**	0.003	0.1	ug/L	363	Standard
|	**Pb**	208	225202.7	0.7	**3.9424**	0.041	1.0	ug/L	1661	Standard
|	**U**	238	60421.9	1.6	**1.1193**	0.007	0.6	ug/L	5	Standard
⌊>	**Bi**	209	609596.8	1.7				ug/L	678709	Standard
⌈	**Na**	23	269.3	3.8	**0.0567**	0.002	3.8	mg/L	80	Standard
|	**Mg**	24	473673.2	1.3	**1.5459**	0.032	2.1	mg/L	106	Standard

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	K	39	3840.5	4.0	**0.2945**	0.010	3.3	mg/L	583	Standard
	Ca	43	2392.9	1.3	**3.0483**	0.057	1.9	mg/L	145	Standard
	Fe	54	63276.0	1.2	**9.9902**	0.261	2.6	mg/L	993	Standard
	Fe	57	1413903.1	6.4	**7.7536**	0.417	5.4	mg/L	5581	Standard
>	**Sc-1**	45	490552.2	1.9				mg/L	477679	Standard
	Cl	35	62599.8	3.4				ug/L	75747	Standard
	Kr	83	154.3	8.1				ug/L	83	Standard
	Br	81	14666.8	2.1				ug/L	17338	Standard
	P	31	184010.8	1.7				ug/L	84853	Standard
	S	34	633719.5	3.7				ug/L	850414	Standard
	Sr	88	279694.1	3.0				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		86.778	
	As	75			
	Se	82			
>	Ga	71		85.555	
	Se-1	77			
	Rb	85			
>	Y	89		243.638	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		87.522	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.465	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204086402
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	89.817
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Y 89 Int Std for sample	Y	89	Rerun sample

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Method 6020 - Summary Report

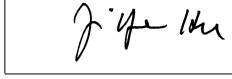
Sample ID: L1204086403
Sample Date/Time: Thursday, April 26, 2012 11:15:43
Number of Replicates: 3
Autosampler Position: 221
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	389083.4	0.2	**30808.0065**	463.362	1.5	ug/L	24742	Standard
|	**Be**	9	8525.7	1.9	**1.9207**	0.040	2.1	ug/L	11	Standard
|	**Al**	27	322993967.4	0.9	**11398.6398**	63.460	0.6	ug/L	20240	Standard
⌊>	**Sc**	45	551621.8	1.4				ug/L	477679	Standard
⌈	**Ti**	47	145896.5	1.8	**84.5451**	2.964	3.5	ug/L	99	Standard
|	**V**	51	96863.4	0.8	**4.3724**	0.109	2.5	ug/L	7210	Standard
|	**Cr**	52	83586.3	1.0	**3.8976**	0.119	3.0	ug/L	22890	Standard
|	**Cr**	53	7653.3	1.4	**3.7910**	0.023	0.6	ug/L	565	Standard
|	**Mn**	55	37159969.5	0.3	**1661.4175**	24.849	1.5	ug/L	1511	Standard
|	**Co**	59	40934.6	1.1	**2.6530**	0.070	2.6	ug/L	149	Standard
|	**Ni**	60	22447.0	1.6	**6.9949**	0.229	3.3	ug/L	54	Standard
|	**Cu**	65	15289.0	0.9	**5.2690**	0.117	2.2	ug/L	142	Standard
|	**Zn**	66	45375.8	0.3	**35.8894**	0.722	2.0	ug/L	800	Standard
|>	**Ge**	72	313568.5	1.7				ug/L	375255	Standard
|	**As**	75	3166.1	1.7	**2.8643**	0.026	0.9	ug/L	-104	Standard
⌊	**Se**	82	151.6	10.8	**1.2463**	0.134	10.8	ug/L	18	Standard
⌈>	**Ga**	71	252765.7	1.0				mg/L	308497	Standard
⌊	**Se-1**	77	210.7	10.4	**1.4640**	0.264	18.0	mg/L	114	Standard
⌈	**Rb**	85	45394.6	1.5				ug/L	16	Standard
|>	**Y**	89	540270.9	0.9				ug/L	343723	Standard
⌊	**Rh**	103	69.3	15.9				ug/L	2	Standard
⌈	**Mo**	98	3073.4	2.4	**0.7734**	0.014	1.8	ug/L	7	Standard
|	**Ag**	107	534.3	1.7	**0.0587**	0.002	3.4	ug/L	143	Standard
|	**Cd**	111	1770.5	1.9	**0.3025**	0.007	2.2	mg/L	597	Standard
|	**Cd**	114	4898.6	0.2	**0.2954**	0.006	2.1	ug/L	1652	Standard
|>	**In**	115	953467.2	1.3				ug/L	1111888	Standard
|	**Sn**	118	1399.4	4.7	**0.0343**	0.003	9.4	ug/L	928	Standard
|	**Sb**	123	313.7	3.7	**0.0301**	0.001	3.5	ug/L	16	Standard
⌊	**Ba**	135	550292.4	0.5	**110.9950**	0.986	0.9	ug/L	58	Standard
⌈	**Ce**	140	2301319.1	1.3				ug/L	63	Standard
⌊>	**Tb**	159	1116772.8	0.1				ug/L	1172993	Standard
⌈	**Ho**	165	31135.3	0.9				ug/L	14	Standard
|	**Tl**	203	1031.0	3.0	**0.0593**	0.002	2.9	ug/L	33	Standard
|	**Tl**	205	2527.5	3.4	**0.0589**	0.002	2.9	ug/L	85	Standard
|	**Pb**	206	545185.0	0.6	**39.9126**	0.137	0.3	ug/L	424	Standard
|	**Pb**	207	439528.8	0.7	**38.6840**	0.126	0.3	ug/L	363	Standard
|	**Pb**	208	2043045.4	0.4	**38.4030**	0.066	0.2	ug/L	1661	Standard
|	**U**	238	73965.4	0.9	**1.4611**	0.011	0.8	ug/L	5	Standard
⌊>	**Bi**	209	571097.0	0.4				ug/L	678709	Standard
⌈	**Na**	23	1513.4	0.8	**0.3811**	0.009	2.3	mg/L	80	Standard
|	**Mg**	24	4865301.9	1.0	**14.1211**	0.129	0.9	mg/L	106	Standard

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	K	39	9264.2	1.7	**0.6903**	0.002	0.3	mg/L	583	Standard
	Ca	43	69545.3	1.0	**83.9177**	1.849	2.2	mg/L	145	Standard
	Fe	54	34203.3	0.6	**4.7138**	0.086	1.8	mg/L	993	Standard
	Fe	57	856916.7	2.5	**4.1664**	0.067	1.6	mg/L	5581	Standard
>	**Sc-1**	45	551621.8	1.4				mg/L	477679	Standard
	Cl	35	72586.1	1.4				ug/L	75747	Standard
	Kr	83	131.3	8.0				ug/L	83	Standard
	Br	81	14217.3	2.5				ug/L	17338	Standard
	P	31	212249.0	0.7				ug/L	84853	Standard
	S	34	954302.5	0.3				ug/L	850414	Standard
	Sr	88	2186546.1	1.0				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		83.561	
	As	75			
	Se	82			
>	Ga	71		81.934	
	Se-1	77			
	Rb	85			
>	Y	89		157.182	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		85.752	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.207	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	84.145
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, April 26, 2012 11:18:32
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25963.9	0.9	**87.8610**	29.565	33.6	ug/L	24742	Standard
|	**Be**	9	199211.7	2.0	**51.7303**	0.777	1.5	ug/L	11	Standard
|	**Al**	27	1261851.5	1.8	**50.5624**	0.614	1.2	ug/L	20240	Standard
⌊>	**Sc**	45	480179.3	1.7				ug/L	477679	Standard
⌈	**Ti**	47	204119.9	1.3	**103.8184**	0.534	0.5	ug/L	99	Standard
|	**V**	51	1194313.1	1.4	**50.1498**	0.318	0.6	ug/L	7210	Standard
|	**Cr**	52	988398.6	2.2	**51.1040**	0.731	1.4	ug/L	22890	Standard
|	**Cr**	53	110160.5	2.4	**50.7535**	0.863	1.7	ug/L	565	Standard
|	**Mn**	55	1304502.6	1.5	**51.1450**	0.355	0.7	ug/L	1511	Standard
|	**Co**	59	890073.8	1.9	**50.7789**	0.675	1.3	ug/L	149	Standard
|	**Ni**	60	184086.7	1.4	**50.4741**	0.298	0.6	ug/L	54	Standard
|	**Cu**	65	165657.1	2.7	**50.4541**	0.930	1.8	ug/L	142	Standard
|	**Zn**	66	71964.5	1.5	**50.1042**	0.357	0.7	ug/L	800	Standard
|>	**Ge**	72	357148.8	0.8				ug/L	375255	Standard
|	**As**	75	64382.7	1.4	**49.7458**	0.335	0.7	ug/L	-104	Standard
⌊	**Se**	82	6450.1	3.5	**50.7067**	1.424	2.8	ug/L	18	Standard
⌈>	**Ga**	71	286428.3	1.3				mg/L	308497	Standard
⌊	**Se-1**	77	4560.0	4.7	**51.2963**	1.854	3.6	mg/L	114	Standard
⌈	**Rb**	85	1026.0	3.7				ug/L	16	Standard
|>	**Y**	89	328034.3	0.1				ug/L	343723	Standard
⌊	**Rh**	103	48.0	31.5				ug/L	2	Standard
⌈	**Mo**	98	433160.8	2.9	**96.4100**	2.501	2.6	ug/L	7	Standard
|	**Ag**	107	438158.4	2.0	**49.3146**	0.911	1.8	ug/L	143	Standard
|	**Cd**	111	242481.6	1.1	**50.0386**	0.266	0.5	mg/L	597	Standard
|	**Cd**	114	681907.8	0.5	**49.9934**	0.347	0.7	ug/L	1652	Standard
|>	**In**	115	1089262.6	1.0				ug/L	1111888	Standard
|	**Sn**	118	910042.2	0.9	**50.0414**	0.390	0.8	ug/L	928	Standard
|	**Sb**	123	577309.3	1.7	**49.2680**	0.595	1.2	ug/L	16	Standard
⌊	**Ba**	135	283176.3	2.3	**49.9848**	0.927	1.9	ug/L	58	Standard
⌈	**Ce**	140	1198.7	7.2				ug/L	63	Standard
⌊>	**Tb**	159	1183543.2	0.8				ug/L	1172993	Standard
⌈	**Ho**	165	34.7	6.7				ug/L	14	Standard
|	**Tl**	203	948570.6	0.9	**50.2855**	0.462	0.9	ug/L	33	Standard
|	**Tl**	205	2496559.6	1.3	**51.7179**	0.645	1.2	ug/L	85	Standard
|	**Pb**	206	767844.5	1.5	**50.3448**	0.779	1.5	ug/L	424	Standard
|	**Pb**	207	634692.0	1.0	**50.0293**	0.500	1.0	ug/L	363	Standard
|	**Pb**	208	2941952.9	1.1	**49.5267**	0.570	1.2	ug/L	1661	Standard
|	**U**	238	2796833.7	1.2	**49.3169**	0.618	1.3	ug/L	5	Standard
⌊>	**Bi**	209	637767.7	0.1				ug/L	678709	Standard
⌈	**Na**	23	17201.8	0.8	**5.2702**	0.071	1.3	mg/L	80	Standard
|	**Mg**	24	1544446.7	1.2	**5.1494**	0.047	0.9	mg/L	106	Standard

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	K	39	56054.2	1.3	**5.1031**	0.108	2.1	mg/L	583	Standard
	Ca	43	3709.1	1.1	**4.9472**	0.033	0.7	mg/L	145	Standard
	Fe	54	31162.1	1.3	**4.9419**	0.122	2.5	mg/L	993	Standard
	Fe	57	796901.2	2.9	**4.4530**	0.083	1.9	mg/L	5581	Standard
>	**Sc-1**	45	480179.3	1.7				mg/L	477679	Standard
	Cl	35	72941.0	4.1				ug/L	75747	Standard
	Kr	83	84.0	2.1				ug/L	83	Standard
	Br	81	16094.9	2.6				ug/L	17338	Standard
	P	31	93943.7	1.3				ug/L	84853	Standard
	S	34	882984.5	2.8				ug/L	850414	Standard
	Sr	88	664.7	8.2				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	101.125		
>	Sc	45			
	Ti	47	103.818		
	V	51	100.300		
	Cr	52	102.208		
	Cr	53			
	Mn	55	102.290		
	Co	59	101.558		
	Ni	60	100.948		
	Cu	65	100.908		
	Zn	66	100.208		
>	Ge	72		95.175	
	As	75	99.492		
	Se	82	101.413		
>	Ga	71		92.846	
	Se-1	77			
	Rb	85			
>	Y	89		95.436	
	Rh	103			
	Mo	98	96.410		
	Ag	107	98.629		
	Cd	111	100.077		
	Cd	114			
>	In	115		97.965	
	Sn	118	100.083		
	Sb	123	98.536		
	Ba	135	99.970		
	Ce	140			
>	Tb	159		100.899	
	Ho	165			
	Tl	203	100.571		
	Tl	205			
	Pb	206	100.690		

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	Pb	207	100.059	
	Pb	208	99.053	
	U	238	98.634	
>	Bi	209		93.968
	Na	23	105.403	
	Mg	24	102.988	
	K	39	102.061	
	Ca	43	98.943	
	Fe	54	98.838	
	Fe	57	89.061	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, April 26, 2012 11:21:18
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25528.8	0.3	**123.3997**	23.883	19.4	ug/L	24742	Standard
|	**Be**	9	33.3	18.1	**0.0021**	0.002	77.7	ug/L	11	Standard
|	**Al**	27	34397.6	48.0	**0.8383**	0.683	81.5	ug/L	20240	Standard
⌊>	**Sc**	45	465611.6	0.8				ug/L	477679	Standard
⌈	**Ti**	47	113.3	17.1	**0.0048**	0.010	206.0	ug/L	99	Standard
|	**V**	51	6631.6	1.2	**-0.0083**	0.006	77.4	ug/L	7210	Standard
|	**Cr**	52	21186.1	1.3	**-0.0165**	0.030	180.6	ug/L	22890	Standard
|	**Cr**	53	439.3	0.9	**-0.0417**	0.005	11.2	ug/L	565	Standard
|	**Mn**	55	3396.8	48.2	**0.0806**	0.066	81.5	ug/L	1511	Standard
|	**Co**	59	227.3	19.1	**0.0048**	0.003	55.1	ug/L	149	Standard
|	**Ni**	60	81.3	26.0	**0.0016**	0.006	387.6	ug/L	54	Standard
|	**Cu**	65	131.3	8.5	**-0.0008**	0.004	479.7	ug/L	142	Standard
|	**Zn**	66	251.0	3.8	**-0.1894**	0.007	3.9	ug/L	800	Standard
| >	**Ge**	72	357424.7	1.5				ug/L	375255	Standard
|	**As**	75	-117.4	36.4	**-0.0081**	0.033	409.7	ug/L	-104	Standard
⌊	**Se**	82	11.6	74.3	**-0.0224**	0.069	307.6	ug/L	18	Standard
⌈>	**Ga**	71	292498.0	1.4				mg/L	308497	Standard
⌊	**Se-1**	77	115.3	8.9	**0.0139**	0.102	732.6	mg/L	114	Standard
⌈	**Rb**	85	26.7	28.4				ug/L	16	Standard
| >	**Y**	89	322425.8	1.6				ug/L	343723	Standard
⌊	**Rh**	103	0.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	114.3	25.8	**0.0177**	0.007	37.0	ug/L	7	Standard
|	**Ag**	107	107.3	13.3	**0.0022**	0.002	70.5	ug/L	143	Standard
|	**Cd**	111	593.2	3.8	**0.0088**	0.005	59.5	mg/L	597	Standard
|	**Cd**	114	1663.9	1.7	**0.0083**	0.002	29.3	ug/L	1652	Standard
| >	**In**	115	1072267.9	0.5				ug/L	1111888	Standard
|	**Sn**	118	1150.7	2.9	**0.0107**	0.002	21.0	ug/L	928	Standard
|	**Sb**	123	254.6	22.3	**0.0216**	0.005	22.5	ug/L	16	Standard
⌊	**Ba**	135	127.0	25.7	**0.0113**	0.006	51.6	ug/L	58	Standard
⌈	**Ce**	140	182.7	54.5				ug/L	63	Standard
⌊>	**Tb**	159	1145033.2	0.3				ug/L	1172993	Standard
⌈	**Ho**	165	16.0	37.5				ug/L	14	Standard
|	**Tl**	203	109.3	13.8	**0.0040**	0.001	21.2	ug/L	33	Standard
|	**Tl**	205	272.0	20.4	**0.0060**	0.001	19.7	ug/L	85	Standard
|	**Pb**	206	538.3	5.8	**0.0068**	0.002	32.0	ug/L	424	Standard
|	**Pb**	207	459.3	4.4	**0.0090**	0.002	20.2	ug/L	363	Standard
|	**Pb**	208	2051.7	4.9	**0.0076**	0.002	26.0	ug/L	1661	Standard
|	**U**	238	265.7	29.4	**0.0094**	0.001	15.0	ug/L	5	Standard
⌊>	**Bi**	209	644776.7	1.2				ug/L	678709	Standard
⌈	**Na**	23	73.3	13.7	**-0.0012**	0.003	288.5	mg/L	80	Standard
|	**Mg**	24	500.0	53.4	**0.0013**	0.001	67.6	mg/L	106	Standard

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	K	39	638.0	8.2	**0.0095**	0.005	48.7	mg/L	583	Standard
	Ca	43	142.7	24.6	**-0.0022**	0.049	2234.4	mg/L	145	Standard
	Fe	54	990.7	6.7	**-0.0015**	0.012	790.3	mg/L	993	Standard
	Fe	57	4867.4	0.7	**-0.0010**	0.000	22.0	mg/L	5581	Standard
>	**Sc-1**	45	465611.6	0.8				mg/L	477679	Standard
	Cl	35	68573.5	1.8				ug/L	75747	Standard
	Kr	83	74.7	20.8				ug/L	83	Standard
	Br	81	15637.1	1.3				ug/L	17338	Standard
	P	31	82996.0	0.9				ug/L	84853	Standard
	S	34	832529.5	1.0				ug/L	850414	Standard
	Sr	88	284.7	31.7				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.248	
	As	75			
	Se	82			
>	Ga	71		94.814	
	Se-1	77			
	Rb	85			
>	Y	89		93.804	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.437	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.616	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.000
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
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Method 6020 - Summary Report

Sample ID: PBW 76 WG396204-03
Sample Date/Time: Thursday, April 26, 2012 11:24:06
Number of Replicates: 3
Autosampler Position: 222
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	25032.3	0.8	**65.1644**	28.208	43.3	ug/L	24742	Standard
	Be	9	17.3	26.0	**-0.0022**	0.001	54.1	ug/L	11	Standard
	Al	27	30258.5	21.9	**0.6626**	0.266	40.2	ug/L	20240	Standard
>	**Sc**	45	467108.3	1.7				ug/L	477679	Standard
	Ti	47	99.3	28.9	**-0.0019**	0.015	768.3	ug/L	99	Standard
	V	51	6688.6	4.2	**-0.0035**	0.012	334.9	ug/L	7210	Standard
	Cr	52	21089.0	2.0	**-0.0122**	0.025	205.5	ug/L	22890	Standard
	Cr	53	452.0	8.3	**-0.0341**	0.016	46.6	ug/L	565	Standard
	Mn	55	2259.2	24.5	**0.0361**	0.022	61.1	ug/L	1511	Standard
	Co	59	142.3	13.4	**-0.0000**	0.001	22993.9	ug/L	149	Standard
	Ni	60	64.3	13.2	**-0.0030**	0.002	73.3	ug/L	54	Standard
	Cu	65	139.0	12.5	**0.0019**	0.005	257.3	ug/L	142	Standard
	Zn	66	2769.3	1.4	**1.5923**	0.039	2.4	ug/L	800	Standard
>	**Ge**	72	354365.9	1.3				ug/L	375255	Standard
	As	75	-106.0	34.5	**-0.0001**	0.029	51234.2	ug/L	-104	Standard
	Se	82	23.5	47.4	**0.0722**	0.087	119.9	ug/L	18	Standard
>	**Ga**	71	290741.8	0.8				mg/L	308497	Standard
	Se-1	77	100.0	24.0	**-0.1531**	0.264	172.4	mg/L	114	Standard
	Rb	85	23.3	4.9				ug/L	16	Standard
>	**Y**	89	319566.3	0.6				ug/L	343723	Standard
	Rh	103	4.0	86.6				ug/L	2	Standard
	Mo	98	54.2	15.1	**0.0042**	0.002	43.4	ug/L	7	Standard
	Ag	107	59.3	15.7	**-0.0032**	0.001	33.3	ug/L	143	Standard
	Cd	111	579.3	3.6	**0.0063**	0.005	78.1	mg/L	597	Standard
	Cd	114	1565.8	3.5	**0.0014**	0.003	244.4	ug/L	1652	Standard
>	**In**	115	1068444.0	0.7				ug/L	1111888	Standard
	Sn	118	1006.0	3.3	**0.0028**	0.002	73.3	ug/L	928	Standard
	Sb	123	95.0	22.3	**0.0078**	0.002	23.5	ug/L	16	Standard
	Ba	135	77.0	27.5	**0.0024**	0.004	158.5	ug/L	58	Standard
	Ce	140	108.7	32.3				ug/L	63	Standard
>	**Tb**	159	1137101.7	0.5				ug/L	1172993	Standard
	Ho	165	11.3	36.7				ug/L	14	Standard
	Tl	203	48.7	30.8	**0.0009**	0.001	90.6	ug/L	33	Standard
	Tl	205	119.3	27.1	**0.0029**	0.001	22.6	ug/L	85	Standard
	Pb	206	457.3	1.2	**0.0018**	0.000	21.9	ug/L	424	Standard
	Pb	207	382.0	4.3	**0.0032**	0.001	34.6	ug/L	363	Standard
	Pb	208	1734.7	4.5	**0.0026**	0.001	49.5	ug/L	1661	Standard
	U	238	85.0	40.8	**0.0063**	0.001	9.7	ug/L	5	Standard
>	**Bi**	209	639691.1	1.2				ug/L	678709	Standard
	Na	23	62.7	9.8	**-0.0046**	0.002	47.5	mg/L	80	Standard
	Mg	24	288.3	35.7	**0.0006**	0.000	55.9	mg/L	106	Standard

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	K	39	593.3	3.5	**0.0051**	0.002	31.2	mg/L	583	Standard
	Ca	43	118.0	7.4	**-0.0380**	0.011	28.4	mg/L	145	Standard
	Fe	54	1000.7	8.2	**-0.0003**	0.016	5940.1	mg/L	993	Standard
	Fe	57	4626.0	6.7	**-0.0025**	0.001	54.2	mg/L	5581	Standard
>	**Sc-1**	45	467108.3	1.7				mg/L	477679	Standard
	Cl	35	66521.4	0.9				ug/L	75747	Standard
	Kr	83	69.3	7.9				ug/L	83	Standard
	Br	81	15550.6	3.1				ug/L	17338	Standard
	P	31	79723.6	1.8				ug/L	84853	Standard
	S	34	804101.9	1.7				ug/L	850414	Standard
	Sr	88	250.7	16.8				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.433	
	As	75			
	Se	82			
>	Ga	71		94.244	
	Se-1	77			
	Rb	85			
>	Y	89		92.972	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.093	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.940	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.251
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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 76 WG396204-03
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Method 6020 - Summary Report

Sample ID: LCSW 76 WG396204-04
Sample Date/Time: Thursday, April 26, 2012 11:26:53
Number of Replicates: 3
Autosampler Position: 223
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	26574.6	1.5	**73.4087**	57.285	78.0	ug/L	24742	Standard
	Be	9	104528.0	1.3	**26.3655**	0.366	1.4	ug/L	11	Standard
	Al	27	698904.1	2.3	**26.9270**	0.391	1.5	ug/L	20240	Standard
>	Sc	45	494280.0	0.9				ug/L	477679	Standard
	Ti	47	124.0	9.7	**0.0075**	0.006	83.9	ug/L	99	Standard
	V	51	651277.9	0.8	**26.0200**	0.614	2.4	ug/L	7210	Standard
	Cr	52	546770.7	1.4	**26.5084**	0.810	3.1	ug/L	22890	Standard
	Cr	53	59850.6	0.9	**26.2589**	0.637	2.4	ug/L	565	Standard
	Mn	55	706969.3	0.3	**26.4848**	0.457	1.7	ug/L	1511	Standard
	Co	59	483694.6	0.7	**26.3872**	0.287	1.1	ug/L	149	Standard
	Ni	60	100948.6	1.7	**26.4618**	0.540	2.0	ug/L	54	Standard
	Cu	65	91560.5	1.0	**26.6544**	0.518	1.9	ug/L	142	Standard
	Zn	66	44943.6	1.4	**29.7787**	0.473	1.6	ug/L	800	Standard
>	Ge	72	373492.7	1.6				ug/L	375255	Standard
	As	75	34377.2	1.9	**25.4459**	0.685	2.7	ug/L	-104	Standard
	Se	82	3415.2	0.6	**25.6237**	0.396	1.5	ug/L	18	Standard
>	Ga	71	303424.8	2.6				mg/L	308497	Standard
	Se-1	77	2345.5	1.5	**24.2683**	1.008	4.2	mg/L	114	Standard
	Rb	85	35.3	17.3				ug/L	16	Standard
>	Y	89	346764.3	1.4				ug/L	343723	Standard
	Rh	103	30.7	3.8				ug/L	2	Standard
	Mo	98	44.2	17.7	**0.0015**	0.002	120.9	ug/L	7	Standard
	Ag	107	238300.4	0.9	**26.0739**	0.263	1.0	ug/L	143	Standard
	Cd	111	130686.2	1.0	**26.1666**	0.053	0.2	mg/L	597	Standard
	Cd	114	361372.0	1.7	**25.7033**	0.410	1.6	ug/L	1652	Standard
>	In	115	1120291.6	1.1				ug/L	1111888	Standard
	Sn	118	1839.4	0.6	**0.0448**	0.002	3.6	ug/L	928	Standard
	Sb	123	309404.2	0.4	**25.6752**	0.258	1.0	ug/L	16	Standard
	Ba	135	152723.5	0.2	**26.2088**	0.295	1.1	ug/L	58	Standard
	Ce	140	136.7	11.9				ug/L	63	Standard
>	Tb	159	1199292.6	0.3				ug/L	1172993	Standard
	Ho	165	19.3	26.0				ug/L	14	Standard
	Tl	203	508421.7	0.6	**25.8325**	0.398	1.5	ug/L	33	Standard
	Tl	205	1223078.5	0.6	**24.2850**	0.342	1.4	ug/L	85	Standard
	Pb	206	409995.0	0.7	**25.7518**	0.398	1.5	ug/L	424	Standard
	Pb	207	352407.3	0.8	**26.6123**	0.405	1.5	ug/L	363	Standard
	Pb	208	1602506.3	0.7	**25.8437**	0.292	1.1	ug/L	1661	Standard
	U	238	1361844.7	1.2	**23.0187**	0.394	1.7	ug/L	5	Standard
>	Bi	209	665458.7	0.9				ug/L	678709	Standard
	Na	23	78.7	6.4	**-0.0009**	0.001	145.6	mg/L	80	Standard
	Mg	24	693.3	0.9	**0.0019**	0.000	1.1	mg/L	106	Standard

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	K	39	578.7	7.0	**0.0007**	0.004	563.5	mg/L	583	Standard
	Ca	43	106.0	20.4	**-0.0635**	0.028	44.2	mg/L	145	Standard
	Fe	54	1098.4	3.6	**0.0058**	0.005	81.1	mg/L	993	Standard
	Fe	57	5683.1	4.4	**0.0018**	0.002	85.3	mg/L	5581	Standard
>	**Sc-1**	45	494280.0	0.9				mg/L	477679	Standard
	Cl	35	89099.2	0.7				ug/L	75747	Standard
	Kr	83	82.0	1.2				ug/L	83	Standard
	Br	81	17061.6	0.6				ug/L	17338	Standard
	P	31	96055.5	1.0				ug/L	84853	Standard
	S	34	834244.1	0.5				ug/L	850414	Standard
	Sr	88	694.0	3.2				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.530	
	As	75			
	Se	82			
>	Ga	71		98.356	
	Se-1	77			
	Rb	85			
>	Y	89		100.885	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.756	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.242	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.048
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 27, 2012

Method 6020 - Summary Report

Sample ID: L1204085801 WG396204-02
Sample Date/Time: Thursday, April 26, 2012 11:29:39
Number of Replicates: 3
Autosampler Position: 224
Sample Description: 2
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	474732.1	0.7	**39836.5923**	286.249	0.7	ug/L	24742	Standard
	Be	9	65.3	14.5	**0.0086**	0.002	27.2	ug/L	11	Standard
	Al	27	729020.6	2.6	**26.2222**	1.037	4.0	ug/L	20240	Standard
>	**Sc**	45	529352.4	1.3				ug/L	477679	Standard
	Ti	47	1376.7	9.9	**0.5844**	0.060	10.2	ug/L	99	Standard
	V	51	43276.4	1.9	**1.3746**	0.017	1.3	ug/L	7210	Standard
	Cr	52	40839.0	2.0	**0.8281**	0.020	2.4	ug/L	22890	Standard
	Cr	53	2118.1	2.8	**0.6472**	0.018	2.8	ug/L	565	Standard
	Mn	55	176081.2	2.2	**6.2346**	0.113	1.8	ug/L	1511	Standard
	Co	59	4514.3	2.2	**0.2262**	0.007	3.2	ug/L	149	Standard
	Ni	60	5347.9	1.6	**1.3140**	0.024	1.8	ug/L	54	Standard
	Cu	65	3557.8	2.5	**0.9459**	0.018	1.9	ug/L	142	Standard
	Zn	66	6677.5	1.5	**3.8961**	0.091	2.3	ug/L	800	Standard
>	**Ge**	72	392530.9	0.9				ug/L	375255	Standard
	As	75	4436.9	2.7	**3.1962**	0.062	1.9	ug/L	-104	Standard
	Se	82	68.6	12.6	**0.3776**	0.061	16.2	ug/L	18	Standard
>	**Ga**	71	322799.8	0.7				mg/L	308497	Standard
	Se-1	77	151.3	10.8	**0.2610**	0.169	64.9	mg/L	114	Standard
	Rb	85	14342.8	2.8				ug/L	16	Standard
>	**Y**	89	356590.9	0.9				ug/L	343723	Standard
	Rh	103	89.3	18.1				ug/L	2	Standard
	Mo	98	24303.6	1.0	**5.0148**	0.110	2.2	ug/L	7	Standard
	Ag	107	90.7	11.0	**-0.0005**	0.001	212.0	ug/L	143	Standard
	Cd	111	935.3	4.3	**0.0638**	0.009	14.0	mg/L	597	Standard
	Cd	114	2604.3	1.5	**0.0618**	0.003	5.1	ug/L	1652	Standard
>	**In**	115	1173389.3	1.2				ug/L	1111888	Standard
	Sn	118	1438.7	2.7	**0.0198**	0.002	7.8	ug/L	928	Standard
	Sb	123	3731.1	3.6	**0.2952**	0.014	4.8	ug/L	16	Standard
	Ba	135	149962.5	0.8	**24.5685**	0.121	0.5	ug/L	58	Standard
	Ce	140	3040.3	2.4				ug/L	63	Standard
>	**Tb**	159	1255913.8	1.3				ug/L	1172993	Standard
	Ho	165	117.3	9.7				ug/L	14	Standard
	Tl	203	6432.4	1.3	**0.3266**	0.002	0.5	ug/L	33	Standard
	Tl	205	15605.4	3.1	**0.3117**	0.008	2.7	ug/L	85	Standard
	Pb	206	1086.4	2.3	**0.0405**	0.002	4.1	ug/L	424	Standard
	Pb	207	892.7	1.0	**0.0410**	0.001	2.5	ug/L	363	Standard
	Pb	208	4096.2	1.3	**0.0399**	0.001	2.7	ug/L	1661	Standard
	U	238	14033.8	1.7	**0.2430**	0.004	1.7	ug/L	5	Standard
>	**Bi**	209	662472.1	0.8				ug/L	678709	Standard
	Na	23	20347.7	3.0	**5.6574**	0.220	3.9	mg/L	80	Standard
	Mg	24	727750.8	0.4	**2.2009**	0.034	1.5	mg/L	106	Standard

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	K	39	9420.9	3.5	**0.7348**	0.032	4.3	mg/L	583	Standard
	Ca	43	8489.7	2.0	**10.4957**	0.337	3.2	mg/L	145	Standard
	Fe	54	1361.6	3.1	**0.0334**	0.005	14.4	mg/L	993	Standard
	Fe	57	15270.4	2.0	**0.0487**	0.002	5.0	mg/L	5581	Standard
>	**Sc-1**	45	529352.4	1.3				mg/L	477679	Standard
	Cl	35	767883.2	1.3				ug/L	75747	Standard
	Kr	83	82.0	6.5				ug/L	83	Standard
	Br	81	29102.9	1.7				ug/L	17338	Standard
	P	31	120436.1	0.4				ug/L	84853	Standard
	S	34	2742725.0	1.1				ug/L	850414	Standard
	Sr	88	2984421.4	2.1				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.604	
	As	75			
	Se	82			
>	Ga	71		104.636	
	Se-1	77			
	Rb	85			
>	Y	89		103.744	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.531	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.069	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204085801 WG396204-02
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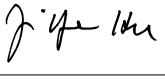
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.608
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 27, 2012



Method 6020 - Summary Report

Sample ID: L1204085801DP WG396204-08
Sample Date/Time: Thursday, April 26, 2012 11:32:26
Number of Replicates: 3
Autosampler Position: 225
Sample Description: 2
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	489388.1	1.3	**41945.2059**	217.003	0.5	ug/L	24742	Standard
	Be	9	69.7	15.8	**0.0099**	0.002	25.2	ug/L	11	Standard
	Al	27	763279.5	4.8	**27.9801**	0.858	3.1	ug/L	20240	Standard
>	**Sc**	45	519779.7	1.7				ug/L	477679	Standard
	Ti	47	1589.4	6.8	**0.7015**	0.040	5.7	ug/L	99	Standard
	V	51	43470.3	3.0	**1.4247**	0.017	1.2	ug/L	7210	Standard
	Cr	52	40171.9	2.0	**0.8457**	0.013	1.5	ug/L	22890	Standard
	Cr	53	2244.8	1.3	**0.7251**	0.020	2.8	ug/L	565	Standard
	Mn	55	178651.8	0.6	**6.4913**	0.111	1.7	ug/L	1511	Standard
	Co	59	4498.0	3.1	**0.2313**	0.005	2.2	ug/L	149	Standard
	Ni	60	5562.7	1.1	**1.4035**	0.029	2.1	ug/L	54	Standard
	Cu	65	3589.8	1.8	**0.9807**	0.029	2.9	ug/L	142	Standard
	Zn	66	8094.2	2.0	**4.9347**	0.210	4.3	ug/L	800	Standard
>	**Ge**	72	382747.4	2.3				ug/L	375255	Standard
	As	75	4437.8	1.8	**3.2770**	0.019	0.6	ug/L	-104	Standard
	Se	82	63.2	13.6	**0.3504**	0.056	15.9	ug/L	18	Standard
>	**Ga**	71	311972.4	0.5				mg/L	308497	Standard
	Se-1	77	154.0	6.7	**0.3429**	0.111	32.5	mg/L	114	Standard
	Rb	85	14274.7	2.1				ug/L	16	Standard
>	**Y**	89	353874.6	1.3				ug/L	343723	Standard
	Rh	103	100.0	14.0				ug/L	2	Standard
	Mo	98	24396.5	2.0	**5.0244**	0.036	0.7	ug/L	7	Standard
	Ag	107	69.7	21.5	**-0.0027**	0.002	59.9	ug/L	143	Standard
	Cd	111	970.2	1.9	**0.0701**	0.002	2.7	mg/L	597	Standard
	Cd	114	2676.4	3.3	**0.0664**	0.005	8.2	ug/L	1652	Standard
>	**In**	115	1175368.9	1.3				ug/L	1111888	Standard
	Sn	118	1483.4	2.4	**0.0220**	0.002	8.2	ug/L	928	Standard
	Sb	123	3454.9	3.6	**0.2727**	0.007	2.4	ug/L	16	Standard
	Ba	135	151604.7	0.5	**24.7970**	0.230	0.9	ug/L	58	Standard
	Ce	140	3617.8	19.3				ug/L	63	Standard
>	**Tb**	159	1257023.8	1.4				ug/L	1172993	Standard
	Ho	165	106.7	5.4				ug/L	14	Standard
	Tl	203	6583.1	2.0	**0.3381**	0.006	1.7	ug/L	33	Standard
	Tl	205	15840.3	2.6	**0.3199**	0.004	1.1	ug/L	85	Standard
	Pb	206	1115.0	6.3	**0.0431**	0.003	7.9	ug/L	424	Standard
	Pb	207	909.0	2.2	**0.0430**	0.003	6.0	ug/L	363	Standard
	Pb	208	4238.6	0.3	**0.0430**	0.001	2.4	ug/L	1661	Standard
	U	238	14180.0	2.3	**0.2482**	0.004	1.7	ug/L	5	Standard
>	**Bi**	209	654986.8	1.5				ug/L	678709	Standard
	Na	23	20483.2	1.2	**5.7998**	0.092	1.6	mg/L	80	Standard
	Mg	24	741224.2	1.2	**2.2828**	0.016	0.7	mg/L	106	Standard

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	K	39	9236.8	3.1	**0.7334**	0.019	2.6	mg/L	583	Standard
	Ca	43	8513.1	1.3	**10.7208**	0.111	1.0	mg/L	145	Standard
	Fe	54	1356.5	1.9	**0.0364**	0.000	1.0	mg/L	993	Standard
	Fe	57	14524.3	4.1	**0.0462**	0.002	3.8	mg/L	5581	Standard
>	**Sc-1**	45	519779.7	1.7				mg/L	477679	Standard
	Cl	35	805514.5	0.7				ug/L	75747	Standard
	Kr	83	85.3	15.3				ug/L	83	Standard
	Br	81	30036.4	2.0				ug/L	17338	Standard
	P	31	117913.1	4.8				ug/L	84853	Standard
	S	34	2811144.0	2.1				ug/L	850414	Standard
	Sr	88	2994145.9	1.9				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.997	
	As	75			
	Se	82			
>	Ga	71		101.126	
	Se-1	77			
	Rb	85			
>	Y	89		102.953	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.709	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.164	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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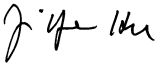
Approved: April 27, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.505
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: April 27, 2012



Method 6020 - Summary Report

Sample ID: L1204085801S WG396204-07

Sample Date/Time: Thursday, April 26, 2012 11:35:13
Number of Replicates: 3
Autosampler Position: 226
Sample Description: 2
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	480967.2	2.0	**40697.9852**	429.557	1.1	ug/L	24742	Standard
	Be	9	90.7	13.3	**0.0147**	0.003	17.5	ug/L	11	Standard
	Al	27	790102.4	2.0	**28.6682**	0.285	1.0	ug/L	20240	Standard
>	**Sc**	45	525555.7	1.4				ug/L	477679	Standard
	Ti	47	1556.7	0.9	**0.6979**	0.009	1.3	ug/L	99	Standard
	V	51	43492.0	0.7	**1.4526**	0.034	2.3	ug/L	7210	Standard
	Cr	52	40528.2	2.3	**0.8940**	0.017	1.9	ug/L	22890	Standard
	Cr	53	2264.8	4.0	**0.7492**	0.055	7.3	ug/L	565	Standard
	Mn	55	179637.1	1.3	**6.6280**	0.061	0.9	ug/L	1511	Standard
	Co	59	4423.6	4.5	**0.2309**	0.006	2.6	ug/L	149	Standard
	Ni	60	5268.6	2.9	**1.3489**	0.045	3.3	ug/L	54	Standard
	Cu	65	3533.1	2.0	**0.9800**	0.028	2.8	ug/L	142	Standard
	Zn	66	5181.2	2.8	**3.0781**	0.088	2.9	ug/L	800	Standard
>	**Ge**	72	376927.5	2.1				ug/L	375255	Standard
	As	75	4427.8	2.9	**3.3195**	0.105	3.2	ug/L	-104	Standard
	Se	82	66.7	16.2	**0.3841**	0.084	21.8	ug/L	18	Standard
>	**Ga**	71	310646.9	3.1				mg/L	308497	Standard
	Se-1	77	151.3	17.0	**0.3215**	0.266	82.7	mg/L	114	Standard
	Rb	85	14228.7	1.8				ug/L	16	Standard
>	**Y**	89	345341.0	1.2				ug/L	343723	Standard
	Rh	103	76.0	12.1				ug/L	2	Standard
	Mo	98	23741.0	1.1	**4.9278**	0.075	1.5	ug/L	7	Standard
	Ag	107	87.3	42.3	**-0.0009**	0.004	423.6	ug/L	143	Standard
	Cd	111	946.1	4.4	**0.0668**	0.005	7.0	mg/L	597	Standard
	Cd	114	2591.8	1.5	**0.0620**	0.003	4.9	ug/L	1652	Standard
>	**In**	115	1166418.3	1.9				ug/L	1111888	Standard
	Sn	118	3047.6	1.7	**0.1030**	0.000	0.5	ug/L	928	Standard
	Sb	123	3437.6	4.2	**0.2734**	0.007	2.4	ug/L	16	Standard
	Ba	135	150103.7	1.9	**24.7380**	0.076	0.3	ug/L	58	Standard
	Ce	140	4389.3	6.9				ug/L	63	Standard
>	**Tb**	159	1238336.0	2.3				ug/L	1172993	Standard
	Ho	165	104.0	3.3				ug/L	14	Standard
	Tl	203	6522.1	4.6	**0.3372**	0.013	3.9	ug/L	33	Standard
	Tl	205	15698.8	1.2	**0.3193**	0.001	0.4	ug/L	85	Standard
	Pb	206	1207.0	8.3	**0.0495**	0.006	11.6	ug/L	424	Standard
	Pb	207	912.7	2.5	**0.0437**	0.001	3.0	ug/L	363	Standard
	Pb	208	4471.6	6.0	**0.0473**	0.004	8.1	ug/L	1661	Standard
	U	238	14039.2	2.7	**0.2474**	0.005	1.8	ug/L	5	Standard
>	**Bi**	209	650527.0	0.9				ug/L	678709	Standard
	Na	23	20526.6	0.9	**5.7475**	0.029	0.5	mg/L	80	Standard
	Mg	24	731535.1	0.7	**2.2283**	0.024	1.1	mg/L	106	Standard

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	K	39	9274.8	1.9	**0.7282**	0.021	2.9	mg/L	583	Standard
	Ca	43	8529.1	1.3	**10.6227**	0.280	2.6	mg/L	145	Standard
	Fe	54	1358.8	1.9	**0.0345**	0.003	8.5	mg/L	993	Standard
	Fe	57	14735.2	3.6	**0.0465**	0.002	4.3	mg/L	5581	Standard
>	**Sc-1**	45	525555.7	1.4				mg/L	477679	Standard
	Cl	35	817676.3	1.3				ug/L	75747	Standard
	Kr	83	77.0	4.7				ug/L	83	Standard
	Br	81	30666.3	2.4				ug/L	17338	Standard
	P	31	114156.3	5.5				ug/L	84853	Standard
	S	34	2754272.6	2.7				ug/L	850414	Standard
	Sr	88	2976417.3	0.4				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.446	
	As	75			
	Se	82			
>	Ga	71		100.697	
	Se-1	77			
	Rb	85			
>	Y	89		100.471	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.904	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.571	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204085801S WG396204-07
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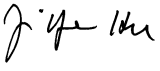
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.848
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 27, 2012



Method 6020 - Summary Report

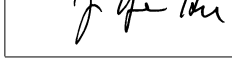
Sample ID: L1204084401
Sample Date/Time: Thursday, April 26, 2012 11:38:00
Number of Replicates: 3
Autosampler Position: 227
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	441723.4	1.8	**34338.0867**	31.690	0.1	ug/L	24742	Standard
	Be	9	18.0	47.5	**-0.0029**	0.002	63.9	ug/L	11	Standard
	Al	27	258990.6	2.8	**8.3083**	0.111	1.3	ug/L	20240	Standard
>	Sc	45	566101.9	1.7				ug/L	477679	Standard
	Ti	47	1391.4	7.7	**0.6114**	0.042	6.9	ug/L	99	Standard
	V	51	10656.6	2.3	**0.1342**	0.006	4.4	ug/L	7210	Standard
	Cr	52	33659.7	3.3	**0.5339**	0.035	6.6	ug/L	22890	Standard
	Cr	53	1827.4	5.8	**0.5489**	0.035	6.3	ug/L	565	Standard
	Mn	55	3112317.3	2.3	**114.5956**	1.092	1.0	ug/L	1511	Standard
	Co	59	3964.2	2.9	**0.2041**	0.003	1.6	ug/L	149	Standard
	Ni	60	9173.8	7.6	**2.3399**	0.148	6.3	ug/L	54	Standard
	Cu	65	4149.6	3.1	**1.1464**	0.020	1.7	ug/L	142	Standard
	Zn	66	50910.8	2.8	**33.1450**	0.545	1.6	ug/L	800	Standard
>	Ge	72	380499.4	1.4				ug/L	375255	Standard
	As	75	775.3	8.1	**0.6436**	0.041	6.3	ug/L	-104	Standard
	Se	82	198.0	2.2	**1.3501**	0.024	1.8	ug/L	18	Standard
>	Ga	71	310801.8	2.3				mg/L	308497	Standard
	Se-1	77	212.0	16.4	**0.9693**	0.394	40.6	mg/L	114	Standard
	Rb	85	35191.5	3.1				ug/L	16	Standard
>	Y	89	357321.5	2.1				ug/L	343723	Standard
	Rh	103	144.7	7.1				ug/L	2	Standard
	Mo	98	569.6	3.8	**0.1088**	0.004	3.4	ug/L	7	Standard
	Ag	107	88.7	18.1	**-0.0008**	0.002	217.7	ug/L	143	Standard
	Cd	111	6578.3	2.2	**1.1392**	0.030	2.7	mg/L	597	Standard
	Cd	114	17994.4	2.8	**1.1035**	0.022	1.9	ug/L	1652	Standard
>	In	115	1180973.4	1.1				ug/L	1111888	Standard
	Sn	118	5160.2	3.2	**0.2083**	0.006	2.7	ug/L	928	Standard
	Sb	123	1525.3	2.8	**0.1196**	0.003	2.9	ug/L	16	Standard
	Ba	135	334084.8	2.9	**54.3901**	1.222	2.2	ug/L	58	Standard
	Ce	140	816.7	4.8				ug/L	63	Standard
>	Tb	159	1280165.1	2.1				ug/L	1172993	Standard
	Ho	165	31.3	35.2				ug/L	14	Standard
	Tl	203	1347.4	1.6	**0.0729**	0.001	1.8	ug/L	33	Standard
	Tl	205	3241.0	1.1	**0.0706**	0.001	0.8	ug/L	85	Standard
	Pb	206	1071.0	3.2	**0.0453**	0.002	4.8	ug/L	424	Standard
	Pb	207	891.0	1.1	**0.0466**	0.001	1.3	ug/L	363	Standard
	Pb	208	4068.9	3.1	**0.0451**	0.002	4.8	ug/L	1661	Standard
	U	238	9521.0	1.1	**0.1802**	0.001	0.8	ug/L	5	Standard
>	Bi	209	610305.7	0.3				ug/L	678709	Standard
	Na	23	89249.5	1.4	**23.2744**	0.105	0.5	mg/L	80	Standard
	Mg	24	3413207.4	2.4	**9.6517**	0.069	0.7	mg/L	106	Standard

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	K	39	21824.4	1.0	**1.6510**	0.015	0.9	mg/L	583	Standard
	Ca	43	41187.3	2.7	**48.3256**	0.513	1.1	mg/L	145	Standard
	Fe	54	23426.2	1.9	**3.0891**	0.016	0.5	mg/L	993	Standard
	Fe	57	711120.2	7.2	**3.3619**	0.195	5.8	mg/L	5581	Standard
>	**Sc-1**	45	566101.9	1.7				mg/L	477679	Standard
	Cl	35	3845884.0	0.6				ug/L	75747	Standard
	Kr	83	89.3	7.2				ug/L	83	Standard
	Br	81	99913.7	1.3				ug/L	17338	Standard
	P	31	150370.5	3.8				ug/L	84853	Standard
	S	34	3071851.4	2.9				ug/L	850414	Standard
	Sr	88	6322476.8	2.3				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.397	
	As	75			
	Se	82			
>	Ga	71		100.747	
	Se-1	77			
	Rb	85			
>	Y	89		103.956	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		106.213	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		109.137	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		89.922
	Na	23		
	Mg	24		
	K	39		
	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	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: April 27, 2012

Method 6020 - Summary Report

Sample ID: L1204084401PS WG396232-01
Sample Date/Time: Thursday, April 26, 2012 11:40:46
Number of Replicates: 3
Autosampler Position: 228
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	450939.7	0.9	**35523.9403**	821.174	2.3	ug/L	24742	Standard
	Be	9	207531.4	1.0	**46.2161**	0.974	2.1	ug/L	11	Standard
	Al	27	1545260.6	2.8	**53.1402**	2.173	4.1	ug/L	20240	Standard
>	Sc	45	559987.6	1.4				ug/L	477679	Standard
	Ti	47	1811.4	18.1	**0.8194**	0.173	21.1	ug/L	99	Standard
	V	51	1366228.5	2.3	**54.2072**	1.649	3.0	ug/L	7210	Standard
	Cr	52	1125780.8	2.4	**55.0744**	2.192	4.0	ug/L	22890	Standard
	Cr	53	125941.4	1.7	**54.8331**	1.830	3.3	ug/L	565	Standard
	Mn	55	4695602.9	1.3	**174.0238**	4.997	2.9	ug/L	1511	Standard
	Co	59	970842.3	1.2	**52.3163**	1.391	2.7	ug/L	149	Standard
	Ni	60	205741.0	1.6	**53.2881**	1.692	3.2	ug/L	54	Standard
	Cu	65	173954.7	1.6	**50.0420**	1.180	2.4	ug/L	142	Standard
	Zn	66	122543.3	1.8	**80.8111**	2.466	3.1	ug/L	800	Standard
>	Ge	72	378264.2	2.3				ug/L	375255	Standard
	As	75	67368.3	0.8	**49.1641**	1.018	2.1	ug/L	-104	Standard
	Se	82	6384.4	0.9	**47.4000**	0.938	2.0	ug/L	18	Standard
>	Ga	71	310285.7	1.9				mg/L	308497	Standard
	Se-1	77	4638.7	1.7	**48.1048**	0.333	0.7	mg/L	114	Standard
	Rb	85	35128.0	1.9				ug/L	16	Standard
>	Y	89	361654.3	4.2				ug/L	343723	Standard
	Rh	103	198.7	3.2				ug/L	2	Standard
	Mo	98	707.9	3.9	**0.1368**	0.010	7.0	ug/L	7	Standard
	Ag	107	465019.9	1.2	**48.0802**	1.194	2.5	ug/L	143	Standard
	Cd	111	266081.0	1.5	**50.4424**	1.239	2.5	mg/L	597	Standard
	Cd	114	719886.4	1.6	**48.4753**	1.008	2.1	ug/L	1652	Standard
>	In	115	1186182.2	2.8				ug/L	1111888	Standard
	Sn	118	1840.8	5.9	**0.0395**	0.007	18.0	ug/L	928	Standard
	Sb	123	634084.6	1.4	**49.7055**	0.750	1.5	ug/L	16	Standard
	Ba	135	634696.3	0.9	**102.9361**	2.346	2.3	ug/L	58	Standard
	Ce	140	1129.4	35.0				ug/L	63	Standard
>	Tb	159	1289644.4	0.8				ug/L	1172993	Standard
	Ho	165	32.7	35.9				ug/L	14	Standard
	Tl	203	943310.0	0.8	**53.1247**	0.805	1.5	ug/L	33	Standard
	Tl	205	2502874.4	1.0	**55.0839**	1.084	2.0	ug/L	85	Standard
	Pb	206	755127.6	1.2	**52.6015**	1.106	2.1	ug/L	424	Standard
	Pb	207	643354.0	1.2	**53.8787**	1.122	2.1	ug/L	363	Standard
	Pb	208	2928347.2	1.1	**52.3749**	1.051	2.0	ug/L	1661	Standard
	U	238	3165087.1	1.4	**59.2921**	1.361	2.3	ug/L	5	Standard
>	Bi	209	600384.8	0.9				ug/L	678709	Standard
	Na	23	90763.7	1.4	**23.9323**	0.588	2.5	mg/L	80	Standard
	Mg	24	3477395.9	1.6	**9.9440**	0.288	2.9	mg/L	106	Standard

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	K	39	22150.9	2.0	**1.6956**	0.057	3.4	mg/L	583	Standard
	Ca	43	41540.9	1.8	**49.2935**	1.402	2.8	mg/L	145	Standard
	Fe	54	23670.9	2.9	**3.1603**	0.136	4.3	mg/L	993	Standard
	Fe	57	718172.7	2.7	**3.4360**	0.140	4.1	mg/L	5581	Standard
>	**Sc-1**	45	559987.6	1.4				mg/L	477679	Standard
	Cl	35	3936604.2	0.9				ug/L	75747	Standard
	Kr	83	92.7	9.8				ug/L	83	Standard
	Br	81	100975.4	1.0				ug/L	17338	Standard
	P	31	151980.4	2.5				ug/L	84853	Standard
	S	34	3090558.4	1.8				ug/L	850414	Standard
	Sr	88	6243624.8	1.7				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.802	
	As	75			
	Se	82			
>	Ga	71		100.580	
	Se-1	77			
	Rb	85			
>	Y	89		105.217	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		106.682	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		109.945	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.460
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1204084401SDL WG396232-02

Sample Date/Time: Thursday, April 26, 2012 11:43:33
Number of Replicates: 3
Autosampler Position: 229
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	100238.8	0.7	**7787.9529**	213.474	2.7	ug/L	24742	Standard
|	**Be**	9	29.3	18.8	**0.0011**	0.002	144.2	ug/L	11	Standard
|	**Al**	27	70688.5	1.2	**2.3872**	0.085	3.5	ug/L	20240	Standard
⌊>	**Sc**	45	461310.4	1.8				ug/L	477679	Standard
⌈	**Ti**	47	439.3	41.6	**0.1810**	0.096	53.1	ug/L	99	Standard
|	**V**	51	6986.8	1.4	**0.0208**	0.005	23.1	ug/L	7210	Standard
|	**Cr**	52	21309.3	1.2	**0.0436**	0.011	26.0	ug/L	22890	Standard
|	**Cr**	53	667.3	8.4	**0.0785**	0.025	31.9	ug/L	565	Standard
|	**Mn**	55	521903.9	0.5	**21.3964**	0.231	1.1	ug/L	1511	Standard
|	**Co**	59	802.4	8.4	**0.0398**	0.004	10.5	ug/L	149	Standard
|	**Ni**	60	1613.1	1.9	**0.4426**	0.014	3.2	ug/L	54	Standard
|	**Cu**	65	927.0	2.5	**0.2551**	0.007	2.6	ug/L	142	Standard
|	**Zn**	66	14593.4	1.1	**10.3533**	0.263	2.5	ug/L	800	Standard
| >	**Ge**	72	341105.1	1.5				ug/L	375255	Standard
|	**As**	75	118.8	20.3	**0.1784**	0.020	11.1	ug/L	-104	Standard
⌊	**Se**	82	48.8	5.7	**0.2884**	0.028	9.9	ug/L	18	Standard
⌈>	**Ga**	71	271486.7	0.2				mg/L	308497	Standard
⌊	**Se-1**	77	100.7	6.1	**-0.0631**	0.072	114.4	mg/L	114	Standard
⌈	**Rb**	85	6056.5	2.0				ug/L	16	Standard
| >	**Y**	89	306268.9	1.5				ug/L	343723	Standard
⌊	**Rh**	103	18.7	27.0				ug/L	2	Standard
⌈	**Mo**	98	164.7	3.2	**0.0294**	0.001	4.8	ug/L	7	Standard
|	**Ag**	107	86.0	24.0	**-0.0001**	0.002	1989.5	ug/L	143	Standard
|	**Cd**	111	1472.8	1.5	**0.1957**	0.007	3.4	mg/L	597	Standard
|	**Cd**	114	4380.6	1.4	**0.2133**	0.003	1.5	ug/L	1652	Standard
| >	**In**	115	1065067.7	0.9				ug/L	1111888	Standard
|	**Sn**	118	996.7	4.6	**0.0024**	0.003	120.5	ug/L	928	Standard
|	**Sb**	123	1140.8	18.7	**0.0991**	0.019	19.2	ug/L	16	Standard
⌊	**Ba**	135	62865.5	1.2	**11.3408**	0.163	1.4	ug/L	58	Standard
⌈	**Ce**	140	241.3	32.3				ug/L	63	Standard
⌊>	**Tb**	159	1161013.0	1.7				ug/L	1172993	Standard
⌈	**Ho**	165	18.7	16.4				ug/L	14	Standard
|	**Tl**	203	889.4	7.4	**0.0455**	0.003	7.1	ug/L	33	Standard
|	**Tl**	205	2212.8	7.6	**0.0464**	0.003	6.0	ug/L	85	Standard
|	**Pb**	206	566.3	8.3	**0.0091**	0.002	27.2	ug/L	424	Standard
|	**Pb**	207	504.3	4.1	**0.0130**	0.001	9.4	ug/L	363	Standard
|	**Pb**	208	2269.1	5.8	**0.0117**	0.002	13.3	ug/L	1661	Standard
|	**U**	238	1926.1	5.9	**0.0388**	0.002	4.1	ug/L	5	Standard
⌊>	**Bi**	209	636561.0	1.8				ug/L	678709	Standard
⌈	**Na**	23	18194.3	2.2	**5.8062**	0.212	3.6	mg/L	80	Standard
|	**Mg**	24	602446.2	1.1	**2.0908**	0.043	2.1	mg/L	106	Standard

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	K	39	4908.8	1.0	**0.4189**	0.013	3.0	mg/L	583	Standard
	Ca	43	8334.3	1.4	**11.8481**	0.221	1.9	mg/L	145	Standard
	Fe	54	4778.3	2.1	**0.6466**	0.018	2.8	mg/L	993	Standard
	Fe	57	106837.4	5.3	**0.5962**	0.030	5.1	mg/L	5581	Standard
>	**Sc-1**	45	461310.4	1.8				mg/L	477679	Standard
	Cl	35	783432.8	2.2				ug/L	75747	Standard
	Kr	83	74.7	3.4				ug/L	83	Standard
	Br	81	29771.6	1.8				ug/L	17338	Standard
	P	31	45174.3	2.8				ug/L	84853	Standard
	S	34	1131202.6	2.8				ug/L	850414	Standard
	Sr	88	1042570.0	0.7				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			90.899
	As	75			
	Se	82			
>	Ga	71			88.003
	Se-1	77			
	Rb	85			
>	Y	89			89.103
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			95.789
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			98.979
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

93.790

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, April 26, 2012 11:46:22
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26521.5	0.7	**95.8512**	20.724	21.6	ug/L	24742	Standard
|	**Be**	9	205595.3	1.3	**52.4356**	0.940	1.8	ug/L	11	Standard
|	**Al**	27	1260403.1	1.8	**49.5890**	0.848	1.7	ug/L	20240	Standard
⌊>	**Sc**	45	488922.4	1.0				ug/L	477679	Standard
⌈	**Ti**	47	211125.7	1.7	**107.0736**	1.773	1.7	ug/L	99	Standard
|	**V**	51	1236726.5	1.8	**51.7967**	1.348	2.6	ug/L	7210	Standard
|	**Cr**	52	1016327.5	1.8	**52.4334**	1.350	2.6	ug/L	22890	Standard
|	**Cr**	53	113920.3	3.5	**52.3544**	2.205	4.2	ug/L	565	Standard
|	**Mn**	55	1322429.3	1.8	**51.7113**	1.637	3.2	ug/L	1511	Standard
|	**Co**	59	913524.1	1.5	**51.9652**	0.514	1.0	ug/L	149	Standard
|	**Ni**	60	185779.1	2.3	**50.7895**	1.038	2.0	ug/L	54	Standard
|	**Cu**	65	165356.8	2.4	**50.2167**	0.923	1.8	ug/L	142	Standard
|	**Zn**	66	72395.2	0.2	**50.2663**	0.969	1.9	ug/L	800	Standard
|>	**Ge**	72	358232.0	1.9				ug/L	375255	Standard
|	**As**	75	64854.7	1.0	**49.9666**	0.584	1.2	ug/L	-104	Standard
⌊	**Se**	82	6349.4	1.4	**49.7763**	0.988	2.0	ug/L	18	Standard
⌈>	**Ga**	71	287941.9	1.3				mg/L	308497	Standard
⌊	**Se-1**	77	4611.4	1.8	**51.6358**	1.616	3.1	mg/L	114	Standard
⌈	**Rb**	85	1042.0	2.2				ug/L	16	Standard
|>	**Y**	89	326504.2	2.2				ug/L	343723	Standard
⌊	**Rh**	103	33.3	9.2				ug/L	2	Standard
⌈	**Mo**	98	430649.6	1.7	**92.4891**	1.231	1.3	ug/L	7	Standard
|	**Ag**	107	447458.3	2.7	**48.5866**	0.809	1.7	ug/L	143	Standard
|	**Cd**	111	256725.5	1.5	**51.1191**	0.089	0.2	mg/L	597	Standard
|	**Cd**	114	710031.7	1.1	**50.2318**	0.892	1.8	ug/L	1652	Standard
|>	**In**	115	1128943.1	1.6				ug/L	1111888	Standard
|	**Sn**	118	947612.1	2.0	**50.2727**	0.213	0.4	ug/L	928	Standard
|	**Sb**	123	614378.3	1.6	**50.5892**	0.039	0.1	ug/L	16	Standard
⌊	**Ba**	135	287387.3	1.5	**48.9469**	0.086	0.2	ug/L	58	Standard
⌈	**Ce**	140	1046.7	5.8				ug/L	63	Standard
⌊>	**Tb**	159	1220614.1	0.4				ug/L	1172993	Standard
⌈	**Ho**	165	21.3	10.8				ug/L	14	Standard
|	**Tl**	203	939243.1	0.5	**49.6347**	0.164	0.3	ug/L	33	Standard
|	**Tl**	205	2491399.9	0.8	**51.4496**	0.423	0.8	ug/L	85	Standard
|	**Pb**	206	765402.3	1.0	**50.0265**	0.420	0.8	ug/L	424	Standard
|	**Pb**	207	634821.7	1.8	**49.8826**	0.885	1.8	ug/L	363	Standard
|	**Pb**	208	2937346.7	1.3	**49.2936**	0.618	1.3	ug/L	1661	Standard
|	**U**	238	2950555.5	0.9	**51.8646**	0.583	1.1	ug/L	5	Standard
⌊>	**Bi**	209	639776.2	0.4				ug/L	678709	Standard
⌈	**Na**	23	17048.3	1.9	**5.1281**	0.048	0.9	mg/L	80	Standard
|	**Mg**	24	1569024.2	0.7	**5.1376**	0.040	0.8	mg/L	106	Standard

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	K	39	57375.1	0.3	**5.1295**	0.056	1.1	mg/L	583	Standard
	Ca	43	3830.5	2.5	**5.0198**	0.085	1.7	mg/L	145	Standard
	Fe	54	31091.7	1.7	**4.8380**	0.068	1.4	mg/L	993	Standard
	Fe	57	825292.7	2.5	**4.5297**	0.078	1.7	mg/L	5581	Standard
>	**Sc-1**	45	488922.4	1.0				mg/L	477679	Standard
	Cl	35	86498.8	8.9				ug/L	75747	Standard
	Kr	83	90.3	7.1				ug/L	83	Standard
	Br	81	16524.0	3.4				ug/L	17338	Standard
	P	31	87641.8	1.8				ug/L	84853	Standard
	S	34	849716.1	2.2				ug/L	850414	Standard
	Sr	88	1421.4	95.2				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	99.178		
>	Sc	45			
	Ti	47	107.074		
	V	51	103.593		
	Cr	52	104.867		
	Cr	53			
	Mn	55	103.423		
	Co	59	103.930		
	Ni	60	101.579		
	Cu	65	100.433		
	Zn	66	100.533		
>	Ge	72		95.464	
	As	75	99.933		
	Se	82	99.553		
>	Ga	71		93.337	
	Se-1	77			
	Rb	85			
>	Y	89		94.990	
	Rh	103			
	Mo	98	92.489		
	Ag	107	97.173		
	Cd	111	102.238		
	Cd	114			
>	In	115		101.534	
	Sn	118	100.545		
	Sb	123	101.178		
	Ba	135	97.894		
	Ce	140			
>	Tb	159		104.060	
	Ho	165			
	Tl	203	99.269		
	Tl	205			
	Pb	206	100.053		

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	Pb	207	99.765	
	Pb	208	98.587	
	U	238	103.729	
>	Bi	209		94.264
	Na	23	102.562	
	Mg	24	102.752	
	K	39	102.591	
	Ca	43	100.395	
	Fe	54	96.760	
	Fe	57	90.593	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, April 26, 2012 11:49:08
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: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	27570.4	2.1	**122.9372**	25.962	21.1	ug/L	24742	Standard
|	**Be**	9	28.7	44.2	**0.0002**	0.003	1214.8	ug/L	11	Standard
|	**Al**	27	15257.0	1.8	**-0.0060**	0.017	286.5	ug/L	20240	Standard
⌊>	**Sc**	45	502893.4	1.5				ug/L	477679	Standard
⌈	**Ti**	47	117.3	15.4	**0.0048**	0.008	171.7	ug/L	99	Standard
|	**V**	51	6948.1	2.6	**-0.0047**	0.004	84.9	ug/L	7210	Standard
|	**Cr**	52	22032.7	1.3	**-0.0105**	0.008	80.8	ug/L	22890	Standard
|	**Cr**	53	486.0	7.5	**-0.0276**	0.014	50.1	ug/L	565	Standard
|	**Mn**	55	1668.1	9.1	**0.0099**	0.005	50.5	ug/L	1511	Standard
|	**Co**	59	198.7	32.2	**0.0027**	0.003	123.3	ug/L	149	Standard
|	**Ni**	60	71.3	17.8	**-0.0019**	0.003	164.5	ug/L	54	Standard
|	**Cu**	65	141.0	7.5	**0.0007**	0.003	396.9	ug/L	142	Standard
|	**Zn**	66	247.0	9.0	**-0.1981**	0.014	6.9	ug/L	800	Standard
| >	**Ge**	72	369616.7	1.2				ug/L	375255	Standard
|	**As**	75	-124.2	27.3	**-0.0103**	0.026	248.8	ug/L	-104	Standard
⌊	**Se**	82	10.6	50.0	**-0.0334**	0.039	118.3	ug/L	18	Standard
⌈>	**Ga**	71	302956.3	0.7				mg/L	308497	Standard
⌊	**Se-1**	77	126.7	3.6	**0.0934**	0.054	58.1	mg/L	114	Standard
⌈	**Rb**	85	16.7	42.1				ug/L	16	Standard
| >	**Y**	89	332429.0	3.2				ug/L	343723	Standard
⌊	**Rh**	103	1.3	86.6				ug/L	2	Standard
⌈	**Mo**	98	107.7	47.8	**0.0147**	0.011	72.0	ug/L	7	Standard
|	**Ag**	107	106.3	19.2	**0.0014**	0.002	144.8	ug/L	143	Standard
|	**Cd**	111	621.5	3.8	**0.0072**	0.005	69.6	mg/L	597	Standard
|	**Cd**	114	1679.7	2.5	**0.0023**	0.005	199.8	ug/L	1652	Standard
| >	**In**	115	1137850.5	1.6				ug/L	1111888	Standard
|	**Sn**	118	1208.7	5.5	**0.0100**	0.003	27.2	ug/L	928	Standard
|	**Sb**	123	318.7	18.2	**0.0255**	0.004	17.0	ug/L	16	Standard
⌊	**Ba**	135	70.3	24.0	**0.0004**	0.003	721.2	ug/L	58	Standard
⌈	**Ce**	140	51.3	11.2				ug/L	63	Standard
⌊>	**Tb**	159	1198708.9	0.5				ug/L	1172993	Standard
⌈	**Ho**	165	22.7	20.4				ug/L	14	Standard
|	**Tl**	203	100.7	37.7	**0.0034**	0.002	57.6	ug/L	33	Standard
|	**Tl**	205	269.3	38.2	**0.0058**	0.002	35.7	ug/L	85	Standard
|	**Pb**	206	480.0	9.9	**0.0022**	0.003	148.7	ug/L	424	Standard
|	**Pb**	207	409.3	5.9	**0.0042**	0.002	49.8	ug/L	363	Standard
|	**Pb**	208	1853.0	7.6	**0.0035**	0.003	73.2	ug/L	1661	Standard
|	**U**	238	195.7	29.3	**0.0081**	0.001	12.4	ug/L	5	Standard
⌊>	**Bi**	209	662885.9	1.0				ug/L	678709	Standard
⌈	**Na**	23	68.7	13.1	**-0.0043**	0.002	57.3	mg/L	80	Standard
|	**Mg**	24	227.3	32.7	**0.0004**	0.000	63.6	mg/L	106	Standard

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	K	39	594.7	3.5	**0.0012**	0.002	126.0	mg/L	583	Standard
	Ca	43	118.7	13.6	**-0.0490**	0.021	42.8	mg/L	145	Standard
	Fe	54	1045.2	0.8	**-0.0054**	0.004	68.4	mg/L	993	Standard
	Fe	57	5066.2	4.8	**-0.0021**	0.001	45.5	mg/L	5581	Standard
>	**Sc-1**	45	502893.4	1.5				mg/L	477679	Standard
	Cl	35	76728.9	2.3				ug/L	75747	Standard
	Kr	83	83.0	1.2				ug/L	83	Standard
	Br	81	16500.0	3.1				ug/L	17338	Standard
	P	31	88970.3	3.5				ug/L	84853	Standard
	S	34	864129.9	2.1				ug/L	850414	Standard
	Sr	88	244.7	10.9				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.497	
	As	75			
	Se	82			
>	Ga	71		98.204	
	Se-1	77			
	Rb	85			
>	Y	89		96.714	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.335	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.192	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.669
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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

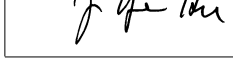
Sample ID: L1204084402
Sample Date/Time: Thursday, April 26, 2012 11:51:56
Number of Replicates: 3
Autosampler Position: 230
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	413995.6	0.7	**34980.5402**	1212.610	3.5	ug/L	24742	Standard
	Be	9	16.0	0.0	**-0.0030**	0.000	4.3	ug/L	11	Standard
	Al	27	94283.8	1.2	**2.9239**	0.156	5.3	ug/L	20240	Standard
>	**Sc**	45	521832.7	3.3				ug/L	477679	Standard
	Ti	47	1025.4	0.3	**0.4692**	0.004	0.8	ug/L	99	Standard
	V	51	13399.6	4.9	**0.2779**	0.025	9.0	ug/L	7210	Standard
	Cr	52	41244.1	4.6	**1.0452**	0.096	9.2	ug/L	22890	Standard
	Cr	53	1662.1	2.0	**0.5250**	0.016	3.1	ug/L	565	Standard
	Mn	55	2880711.8	0.6	**113.0693**	0.603	0.5	ug/L	1511	Standard
	Co	59	3664.4	1.1	**0.2010**	0.001	0.6	ug/L	149	Standard
	Ni	60	8435.0	3.9	**2.2944**	0.095	4.1	ug/L	54	Standard
	Cu	65	1578.1	1.6	**0.4405**	0.009	2.0	ug/L	142	Standard
	Zn	66	47146.2	1.1	**32.7180**	0.464	1.4	ug/L	800	Standard
>	**Ge**	72	356972.4	0.9				ug/L	375255	Standard
	As	75	599.6	9.8	**0.5450**	0.043	7.9	ug/L	-104	Standard
	Se	82	139.0	3.4	**0.9814**	0.035	3.6	ug/L	18	Standard
>	**Ga**	71	287850.9	1.3				mg/L	308497	Standard
	Se-1	77	178.7	7.6	**0.7632**	0.166	21.8	mg/L	114	Standard
	Rb	85	32554.9	1.5				ug/L	16	Standard
>	**Y**	89	331934.5	2.3				ug/L	343723	Standard
	Rh	103	114.7	5.6				ug/L	2	Standard
	Mo	98	549.1	6.3	**0.1106**	0.007	6.7	ug/L	7	Standard
	Ag	107	83.7	17.4	**-0.0009**	0.002	181.9	ug/L	143	Standard
	Cd	111	1645.3	3.6	**0.2148**	0.012	5.6	mg/L	597	Standard
	Cd	114	4485.9	2.7	**0.2044**	0.009	4.2	ug/L	1652	Standard
>	**In**	115	1121142.2	0.0				ug/L	1111888	Standard
	Sn	118	1347.4	5.3	**0.0184**	0.004	20.7	ug/L	928	Standard
	Sb	123	1456.6	2.3	**0.1203**	0.003	2.3	ug/L	16	Standard
	Ba	135	318116.1	2.1	**54.5583**	1.153	2.1	ug/L	58	Standard
	Ce	140	724.0	2.4				ug/L	63	Standard
>	**Tb**	159	1224962.0	0.6				ug/L	1172993	Standard
	Ho	165	28.0	51.5				ug/L	14	Standard
	Tl	203	1146.0	3.0	**0.0635**	0.003	4.5	ug/L	33	Standard
	Tl	205	2780.3	1.9	**0.0622**	0.002	3.2	ug/L	85	Standard
	Pb	206	1265.7	2.5	**0.0609**	0.003	5.4	ug/L	424	Standard
	Pb	207	1060.4	2.3	**0.0629**	0.003	5.0	ug/L	363	Standard
	Pb	208	4857.3	2.3	**0.0612**	0.003	5.1	ug/L	1661	Standard
	U	238	8921.3	1.5	**0.1735**	0.004	2.5	ug/L	5	Standard
>	**Bi**	209	594795.5	1.4				ug/L	678709	Standard
	Na	23	86944.7	0.2	**24.6157**	0.839	3.4	mg/L	80	Standard
	Mg	24	3314073.8	0.8	**10.1756**	0.386	3.8	mg/L	106	Standard

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	K	39	21313.0	1.8	**1.7540**	0.093	5.3	mg/L	583	Standard
	Ca	43	40232.7	1.8	**51.2821**	2.493	4.9	mg/L	145	Standard
	Fe	54	21771.0	1.6	**3.1194**	0.161	5.2	mg/L	993	Standard
	Fe	57	626702.6	3.2	**3.2191**	0.208	6.5	mg/L	5581	Standard
>	**Sc-1**	45	521832.7	3.3				mg/L	477679	Standard
	Cl	35	3608211.9	1.4				ug/L	75747	Standard
	Kr	83	81.0	6.2				ug/L	83	Standard
	Br	81	69001.5	1.9				ug/L	17338	Standard
	P	31	102230.1	0.5				ug/L	84853	Standard
	S	34	2900219.9	1.0				ug/L	850414	Standard
	Sr	88	5780495.8	0.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.128	
	As	75			
	Se	82			
>	Ga	71		93.307	
	Se-1	77			
	Rb	85			
>	Y	89		96.570	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.832	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.430	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.636
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: L1204084403
Sample Date/Time: Thursday, April 26, 2012 11:54:42
Number of Replicates: 3
Autosampler Position: 231
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	395095.5	1.8	**33229.9729**	216.842	0.7	ug/L	24742	Standard
|	**Be**	9	21.0	24.7	**-0.0018**	0.001	74.9	ug/L	11	Standard
|	**Al**	27	80910.1	7.0	**2.4232**	0.263	10.9	ug/L	20240	Standard
⌊>	**Sc**	45	522120.9	2.5				ug/L	477679	Standard
⌈	**Ti**	47	1802.1	18.8	**0.8756**	0.163	18.7	ug/L	99	Standard
|	**V**	51	10769.8	2.9	**0.1728**	0.003	2.0	ug/L	7210	Standard
|	**Cr**	52	33794.0	3.2	**0.6748**	0.019	2.9	ug/L	22890	Standard
|	**Cr**	53	1625.4	4.1	**0.5177**	0.015	2.8	ug/L	565	Standard
|	**Mn**	55	4740819.2	1.5	**188.5995**	1.504	0.8	ug/L	1511	Standard
|	**Co**	59	1451.1	4.4	**0.0758**	0.004	5.7	ug/L	149	Standard
|	**Ni**	60	5083.2	3.9	**1.3926**	0.036	2.6	ug/L	54	Standard
|	**Cu**	65	914.0	9.0	**0.2416**	0.023	9.7	ug/L	142	Standard
|	**Zn**	66	7895.1	5.5	**5.2452**	0.189	3.6	ug/L	800	Standard
| >	**Ge**	72	352302.5	2.3				ug/L	375255	Standard
|	**As**	75	1197.2	6.8	**1.0183**	0.052	5.1	ug/L	-104	Standard
⌊	**Se**	82	111.1	6.0	**0.7746**	0.074	9.5	ug/L	18	Standard
⌈>	**Ga**	71	284790.2	3.3				mg/L	308497	Standard
⌊	**Se-1**	77	164.0	11.8	**0.6112**	0.170	27.8	mg/L	114	Standard
⌈	**Rb**	85	35722.7	2.1				ug/L	16	Standard
| >	**Y**	89	327853.1	1.7				ug/L	343723	Standard
⌊	**Rh**	103	92.7	28.5				ug/L	2	Standard
⌈	**Mo**	98	236.8	16.6	**0.0441**	0.009	21.6	ug/L	7	Standard
|	**Ag**	107	79.3	42.0	**-0.0012**	0.004	333.3	ug/L	143	Standard
|	**Cd**	111	649.3	8.6	**0.0170**	0.013	75.9	mg/L	597	Standard
|	**Cd**	114	1831.7	4.0	**0.0172**	0.006	34.0	ug/L	1652	Standard
| >	**In**	115	1102352.4	2.3				ug/L	1111888	Standard
|	**Sn**	118	1729.4	4.4	**0.0404**	0.002	6.1	ug/L	928	Standard
|	**Sb**	123	338.2	10.1	**0.0281**	0.003	12.2	ug/L	16	Standard
⌊	**Ba**	135	380498.8	1.1	**66.3843**	0.811	1.2	ug/L	58	Standard
⌈	**Ce**	140	1775.4	5.2				ug/L	63	Standard
⌊>	**Tb**	159	1220839.6	1.8				ug/L	1172993	Standard
⌈	**Ho**	165	44.7	18.1				ug/L	14	Standard
|	**Tl**	203	1030.4	2.6	**0.0573**	0.003	4.7	ug/L	33	Standard
|	**Tl**	205	2504.2	2.6	**0.0565**	0.003	4.5	ug/L	85	Standard
|	**Pb**	206	1558.7	3.9	**0.0823**	0.002	2.7	ug/L	424	Standard
|	**Pb**	207	1259.4	2.0	**0.0805**	0.004	4.5	ug/L	363	Standard
|	**Pb**	208	5899.4	0.9	**0.0808**	0.001	1.6	ug/L	1661	Standard
|	**U**	238	4410.3	2.3	**0.0887**	0.000	0.4	ug/L	5	Standard
⌊>	**Bi**	209	590592.6	2.0				ug/L	678709	Standard
⌈	**Na**	23	87850.0	1.9	**24.8425**	0.217	0.9	mg/L	80	Standard
|	**Mg**	24	2996585.8	1.9	**9.1895**	0.141	1.5	mg/L	106	Standard

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	K	39	20144.7	0.9	**1.6527**	0.039	2.4	mg/L	583	Standard
	Ca	43	39387.8	1.5	**50.1283**	0.474	0.9	mg/L	145	Standard
	Fe	54	56389.7	1.9	**8.3365**	0.177	2.1	mg/L	993	Standard
	Fe	57	1640988.8	4.8	**8.4578**	0.267	3.2	mg/L	5581	Standard
>	**Sc-1**	45	522120.9	2.5				mg/L	477679	Standard
	Cl	35	4071353.0	0.9				ug/L	75747	Standard
	Kr	83	80.0	10.7				ug/L	83	Standard
	Br	81	63894.5	1.8				ug/L	17338	Standard
	P	31	135057.8	3.8				ug/L	84853	Standard
	S	34	2438749.2	2.1				ug/L	850414	Standard
	Sr	88	5029360.2	2.2				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.883	
	As	75			
	Se	82			
>	Ga	71		92.315	
	Se-1	77			
	Rb	85			
>	Y	89		95.383	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.142	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.079	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204084403
Report Date/Time: Thursday, April 26, 2012 11:57:08

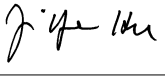
Approved: April 27, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.017
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: April 27, 2012



Method 6020 - Summary Report

Sample ID: L1204084404
Sample Date/Time: Thursday, April 26, 2012 11:57:28
Number of Replicates: 3
Autosampler Position: 232
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	415036.2	1.6	**33724.6475**	213.219	0.6	ug/L	24742	Standard
|	**Be**	9	21.7	22.8	**-0.0018**	0.001	66.6	ug/L	11	Standard
|	**Al**	27	40928.5	1.0	**0.8763**	0.016	1.8	ug/L	20240	Standard
⌊>	**Sc**	45	540943.4	1.8				ug/L	477679	Standard
⌈	**Ti**	47	1383.4	4.5	**0.6441**	0.031	4.7	ug/L	99	Standard
|	**V**	51	14423.5	3.2	**0.3149**	0.021	6.7	ug/L	7210	Standard
|	**Cr**	52	45539.0	2.8	**1.2477**	0.081	6.5	ug/L	22890	Standard
|	**Cr**	53	2255.5	50.6	**0.7872**	0.517	65.7	ug/L	565	Standard
|	**Mn**	55	4915088.4	2.8	**190.9313**	4.458	2.3	ug/L	1511	Standard
|	**Co**	59	1523.4	5.3	**0.0779**	0.005	6.1	ug/L	149	Standard
|	**Ni**	60	5196.2	4.1	**1.3903**	0.051	3.7	ug/L	54	Standard
|	**Cu**	65	798.4	0.1	**0.2002**	0.002	0.8	ug/L	142	Standard
|	**Zn**	66	4566.7	9.1	**2.8065**	0.304	10.8	ug/L	800	Standard
|>	**Ge**	72	360732.2	0.7				ug/L	375255	Standard
|	**As**	75	1130.4	6.5	**0.9455**	0.051	5.4	ug/L	-104	Standard
⌊	**Se**	82	90.8	11.9	**0.5936**	0.080	13.4	ug/L	18	Standard
⌈>	**Ga**	71	292348.9	0.7				mg/L	308497	Standard
⌊	**Se-1**	77	168.7	11.5	**0.6180**	0.218	35.3	mg/L	114	Standard
⌈	**Rb**	85	37064.6	1.1				ug/L	16	Standard
|>	**Y**	89	334711.0	6.2				ug/L	343723	Standard
⌊	**Rh**	103	110.0	17.9				ug/L	2	Standard
⌈	**Mo**	98	210.9	15.7	**0.0376**	0.009	22.7	ug/L	7	Standard
|	**Ag**	107	81.7	28.0	**-0.0011**	0.003	269.1	ug/L	143	Standard
|	**Cd**	111	660.1	4.0	**0.0166**	0.006	37.6	mg/L	597	Standard
|	**Cd**	114	1827.6	2.3	**0.0144**	0.002	13.5	ug/L	1652	Standard
|>	**In**	115	1123372.3	3.2				ug/L	1111888	Standard
|	**Sn**	118	1558.7	6.6	**0.0297**	0.008	25.9	ug/L	928	Standard
|	**Sb**	123	283.5	14.2	**0.0230**	0.004	18.0	ug/L	16	Standard
⌊	**Ba**	135	393941.5	1.7	**67.4683**	2.023	3.0	ug/L	58	Standard
⌈	**Ce**	140	900.7	2.1				ug/L	63	Standard
⌊>	**Tb**	159	1229193.4	2.0				ug/L	1172993	Standard
⌈	**Ho**	165	31.3	35.2				ug/L	14	Standard
|	**Tl**	203	1056.7	1.8	**0.0583**	0.000	0.6	ug/L	33	Standard
|	**Tl**	205	2476.2	1.6	**0.0554**	0.000	0.4	ug/L	85	Standard
|	**Pb**	206	698.7	2.3	**0.0210**	0.001	2.9	ug/L	424	Standard
|	**Pb**	207	582.0	3.3	**0.0223**	0.002	7.0	ug/L	363	Standard
|	**Pb**	208	2689.1	2.5	**0.0219**	0.001	6.5	ug/L	1661	Standard
|	**U**	238	4562.4	1.4	**0.0909**	0.001	1.6	ug/L	5	Standard
⌊>	**Bi**	209	595638.5	1.3				ug/L	678709	Standard
⌈	**Na**	23	90789.2	1.7	**24.7783**	0.130	0.5	mg/L	80	Standard
|	**Mg**	24	3060816.3	1.6	**9.0588**	0.051	0.6	mg/L	106	Standard

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	K	39	20560.6	2.8	**1.6266**	0.017	1.0	mg/L	583	Standard
	Ca	43	40165.8	1.4	**49.3313**	0.232	0.5	mg/L	145	Standard
	Fe	54	56779.9	2.7	**8.0947**	0.076	0.9	mg/L	993	Standard
	Fe	57	1708704.2	3.4	**8.5011**	0.140	1.7	mg/L	5581	Standard
>	**Sc-1**	45	540943.4	1.8				mg/L	477679	Standard
	Cl	35	4159499.7	1.6				ug/L	75747	Standard
	Kr	83	94.7	0.6				ug/L	83	Standard
	Br	81	61103.3	1.9				ug/L	17338	Standard
	P	31	132240.3	3.1				ug/L	84853	Standard
	S	34	2525320.5	2.7				ug/L	850414	Standard
	Sr	88	5248150.7	2.8				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.130	
	As	75			
	Se	82			
>	Ga	71		94.765	
	Se-1	77			
	Rb	85			
>	Y	89		97.378	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.033	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.791	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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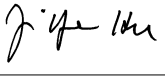
Approved: April 27, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.761
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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

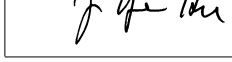
Sample ID: L1204084405
Sample Date/Time: Thursday, April 26, 2012 12:00:15
Number of Replicates: 3
Autosampler Position: 233
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	340412.4	0.7	**29458.5446**	140.728	0.5	ug/L	24742	Standard
|	**Be**	9	45.7	20.8	**0.0045**	0.002	52.4	ug/L	11	Standard
|	**Al**	27	5209479.0	1.3	**201.0367**	2.306	1.1	ug/L	20240	Standard
⌊>	**Sc**	45	502965.3	0.9				ug/L	477679	Standard
⌈	**Ti**	47	8278.9	10.2	**4.5036**	0.596	13.2	ug/L	99	Standard
|	**V**	51	309951.0	1.6	**13.8377**	0.379	2.7	ug/L	7210	Standard
|	**Cr**	52	47591.0	0.5	**1.5793**	0.089	5.6	ug/L	22890	Standard
|	**Cr**	53	9629.7	5.3	**4.5720**	0.396	8.7	ug/L	565	Standard
|	**Mn**	55	119880.8	1.9	**5.0256**	0.207	4.1	ug/L	1511	Standard
|	**Co**	59	2241.2	1.3	**0.1299**	0.006	4.4	ug/L	149	Standard
|	**Ni**	60	8062.8	2.9	**2.3675**	0.137	5.8	ug/L	54	Standard
|	**Cu**	65	5087.5	0.9	**1.6328**	0.037	2.3	ug/L	142	Standard
|	**Zn**	66	25023.0	0.9	**18.5757**	0.607	3.3	ug/L	800	Standard
| >	**Ge**	72	331121.0	3.1				ug/L	375255	Standard
|	**As**	75	2123.9	1.5	**1.8501**	0.031	1.7	ug/L	-104	Standard
⌊	**Se**	82	504.6	8.1	**4.1718**	0.268	6.4	ug/L	18	Standard
⌈>	**Ga**	71	265067.8	4.2				mg/L	308497	Standard
⌊	**Se-1**	77	1013.4	8.5	**11.3871**	1.604	14.1	mg/L	114	Standard
⌈	**Rb**	85	28969.0	1.1				ug/L	16	Standard
| >	**Y**	89	311349.3	0.9				ug/L	343723	Standard
⌊	**Rh**	103	152.0	8.0				ug/L	2	Standard
⌈	**Mo**	98	10980.8	1.4	**2.6130**	0.021	0.8	ug/L	7	Standard
|	**Ag**	107	80.3	10.1	**-0.0003**	0.001	291.8	ug/L	143	Standard
|	**Cd**	111	5422.9	2.2	**1.0870**	0.027	2.5	mg/L	597	Standard
|	**Cd**	114	14585.1	2.9	**1.0335**	0.037	3.6	ug/L	1652	Standard
| >	**In**	115	1015773.6	0.7				ug/L	1111888	Standard
|	**Sn**	118	1364.1	4.7	**0.0269**	0.004	15.6	ug/L	928	Standard
|	**Sb**	123	3924.0	1.8	**0.3586**	0.004	1.1	ug/L	16	Standard
⌊	**Ba**	135	223647.6	0.9	**42.3323**	0.115	0.3	ug/L	58	Standard
⌈	**Ce**	140	13917.7	4.2				ug/L	63	Standard
⌊>	**Tb**	159	1129972.4	0.8				ug/L	1172993	Standard
⌈	**Ho**	165	246.7	11.7				ug/L	14	Standard
|	**Tl**	203	1543.1	1.8	**0.0994**	0.003	2.5	ug/L	33	Standard
|	**Tl**	205	3786.5	0.2	**0.0974**	0.001	1.5	ug/L	85	Standard
|	**Pb**	206	4411.6	1.6	**0.3295**	0.010	3.0	ug/L	424	Standard
|	**Pb**	207	3680.4	2.0	**0.3317**	0.003	0.8	ug/L	363	Standard
|	**Pb**	208	16823.6	1.2	**0.3235**	0.002	0.6	ug/L	1661	Standard
|	**U**	238	34968.3	1.0	**0.7664**	0.005	0.7	ug/L	5	Standard
⌊>	**Bi**	209	516270.3	1.3				ug/L	678709	Standard
⌈	**Na**	23	656143.0	0.4	**192.7724**	2.495	1.3	mg/L	80	Standard
|	**Mg**	24	1673848.0	0.4	**5.3278**	0.028	0.5	mg/L	106	Standard

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	K	39	18214.9	0.7	**1.5478**	0.021	1.4	mg/L	583	Standard
	Ca	43	22503.4	0.3	**29.6430**	0.172	0.6	mg/L	145	Standard
	Fe	54	1408.2	9.1	**0.0513**	0.018	35.7	mg/L	993	Standard
	Fe	57	34546.7	2.4	**0.1562**	0.003	1.8	mg/L	5581	Standard
>	**Sc-1**	45	502965.3	0.9				mg/L	477679	Standard
	Cl	35	34237308.0	0.6				ug/L	75747	Standard
	Kr	83	135.0	10.4				ug/L	83	Standard
	Br	81	132341.5	1.1				ug/L	17338	Standard
	P	31	127662.3	0.8				ug/L	84853	Standard
	S	34	2257604.3	0.6				ug/L	850414	Standard
	Sr	88	6949741.1	0.9				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.239	
	As	75			
	Se	82			
>	Ga	71		85.922	
	Se-1	77			
	Rb	85			
>	Y	89		90.581	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.356	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.332	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	76.067
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1204084406 WG396204-01
Sample Date/Time: Thursday, April 26, 2012 12:03:02
Number of Replicates: 3
Autosampler Position: 234
Sample Description: 1
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	365386.2	1.0	**32060.1826**	234.381	0.7	ug/L	24742	Standard
|	**Be**	9	34.7	6.7	**0.0018**	0.001	32.5	ug/L	11	Standard
|	**Al**	27	77207.6	2.0	**2.4142**	0.055	2.3	ug/L	20240	Standard
⌊>	**Sc**	45	499166.7	0.4				ug/L	477679	Standard
⌈	**Ti**	47	1376.1	8.7	**0.7126**	0.064	9.0	ug/L	99	Standard
|	**V**	51	313893.3	1.5	**14.2062**	0.355	2.5	ug/L	7210	Standard
|	**Cr**	52	42924.7	0.4	**1.3446**	0.020	1.5	ug/L	22890	Standard
|	**Cr**	53	11217.5	4.8	**5.4320**	0.252	4.6	ug/L	565	Standard
|	**Mn**	55	146545.1	4.2	**6.2332**	0.209	3.3	ug/L	1511	Standard
|	**Co**	59	1924.5	16.1	**0.1118**	0.018	16.3	ug/L	149	Standard
|	**Ni**	60	8021.1	1.5	**2.3844**	0.016	0.7	ug/L	54	Standard
|	**Cu**	65	4582.0	2.2	**1.4865**	0.048	3.2	ug/L	142	Standard
|	**Zn**	66	24031.4	3.5	**18.0631**	0.777	4.3	ug/L	800	Standard
|>	**Ge**	72	326704.3	1.0				ug/L	375255	Standard
|	**As**	75	2103.0	6.8	**1.8560**	0.122	6.6	ug/L	-104	Standard
⌊	**Se**	82	541.2	3.5	**4.5488**	0.189	4.2	ug/L	18	Standard
⌈>	**Ga**	71	266763.2	0.4				mg/L	308497	Standard
⌊	**Se-1**	77	1046.0	6.0	**11.6659**	0.755	6.5	mg/L	114	Standard
⌈	**Rb**	85	26525.9	1.4				ug/L	16	Standard
|>	**Y**	89	307176.1	1.0				ug/L	343723	Standard
⌊	**Rh**	103	176.7	8.0				ug/L	2	Standard
⌈	**Mo**	98	11324.4	2.0	**2.7144**	0.068	2.5	ug/L	7	Standard
|	**Ag**	107	235.7	5.6	**0.0186**	0.002	9.1	ug/L	143	Standard
|	**Cd**	111	5283.1	2.1	**1.0641**	0.015	1.4	mg/L	597	Standard
|	**Cd**	114	14732.6	1.6	**1.0532**	0.016	1.5	ug/L	1652	Standard
|>	**In**	115	1008664.4	0.9				ug/L	1111888	Standard
|	**Sn**	118	1263.4	0.4	**0.0214**	0.000	2.0	ug/L	928	Standard
|	**Sb**	123	3990.4	0.8	**0.3673**	0.005	1.3	ug/L	16	Standard
⌊	**Ba**	135	230108.7	1.3	**43.8661**	0.735	1.7	ug/L	58	Standard
⌈	**Ce**	140	1602.8	4.8				ug/L	63	Standard
⌊>	**Tb**	159	1132697.0	0.3				ug/L	1172993	Standard
⌈	**Ho**	165	84.0	21.8				ug/L	14	Standard
|	**Tl**	203	1612.1	2.5	**0.1053**	0.002	2.2	ug/L	33	Standard
|	**Tl**	205	3839.8	0.5	**0.1000**	0.000	0.2	ug/L	85	Standard
|	**Pb**	206	1034.4	2.7	**0.0568**	0.002	3.6	ug/L	424	Standard
|	**Pb**	207	860.7	4.6	**0.0582**	0.004	7.3	ug/L	363	Standard
|	**Pb**	208	3903.9	1.3	**0.0558**	0.001	2.5	ug/L	1661	Standard
|	**U**	238	37189.6	0.7	**0.8257**	0.003	0.4	ug/L	5	Standard
⌊>	**Bi**	209	509383.8	0.4				ug/L	678709	Standard
⌈	**Na**	23	710284.8	0.3	**210.2537**	0.433	0.2	mg/L	80	Standard
|	**Mg**	24	1798097.7	1.6	**5.7667**	0.088	1.5	mg/L	106	Standard

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	K	39	18626.8	1.0	**1.5962**	0.010	0.6	mg/L	583	Standard
	Ca	43	23790.0	0.8	**31.5896**	0.376	1.2	mg/L	145	Standard
	Fe	54	922.5	0.6	**-0.0236**	0.001	4.6	mg/L	993	Standard
	Fe	57	20531.2	3.6	**0.0818**	0.004	4.6	mg/L	5581	Standard
>	**Sc-1**	45	499166.7	0.4				mg/L	477679	Standard
	Cl	35	37210098.8	0.9				ug/L	75747	Standard
	Kr	83	131.3	9.4				ug/L	83	Standard
	Br	81	144387.2	1.8				ug/L	17338	Standard
	P	31	120479.6	2.0				ug/L	84853	Standard
	S	34	2400664.0	0.9				ug/L	850414	Standard
	Sr	88	7226036.9	2.2				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.062	
	As	75			
	Se	82			
>	Ga	71		86.472	
	Se-1	77			
	Rb	85			
>	Y	89		89.367	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.716	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.565	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204084406 WG396204-01
Report Date/Time: Thursday, April 26, 2012 12:05:28
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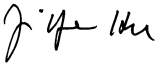
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	75.052
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEE	Na	23	

Approved: April 27, 2012



Method 6020 - Summary Report

Sample ID: L1204084406S WG396204-05

Sample Date/Time: Thursday, April 26, 2012 12:05:48
Number of Replicates: 3
Autosampler Position: 235
Sample Description: 1
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	377896.7	1.7	**33006.2185**	427.428	1.3	ug/L	24742	Standard
	Be	9	100252.6	1.2	**24.8730**	0.200	0.8	ug/L	11	Standard
	Al	27	686635.7	1.1	**26.0054**	0.309	1.2	ug/L	20240	Standard
>	**Sc**	45	502490.4	1.1				ug/L	477679	Standard
	Ti	47	1232.1	2.2	**0.6317**	0.010	1.6	ug/L	99	Standard
	V	51	927392.6	1.1	**42.4816**	0.590	1.4	ug/L	7210	Standard
	Cr	52	522965.2	0.4	**29.0496**	0.304	1.0	ug/L	22890	Standard
	Cr	53	67149.2	1.7	**33.7005**	0.246	0.7	ug/L	565	Standard
	Mn	55	762696.2	0.7	**32.6351**	0.317	1.0	ug/L	1511	Standard
	Co	59	427903.2	1.4	**26.6534**	0.263	1.0	ug/L	149	Standard
	Ni	60	92472.7	1.7	**27.6757**	0.175	0.6	ug/L	54	Standard
	Cu	65	78021.4	1.5	**25.9295**	0.116	0.4	ug/L	142	Standard
	Zn	66	56330.5	1.5	**42.7759**	0.784	1.8	ug/L	800	Standard
>	**Ge**	72	327089.3	1.4				ug/L	375255	Standard
	As	75	34210.4	1.0	**28.8990**	0.243	0.8	ug/L	-104	Standard
	Se	82	3514.6	0.4	**30.1310**	0.533	1.8	ug/L	18	Standard
>	**Ga**	71	270003.6	2.7				mg/L	308497	Standard
	Se-1	77	3321.0	4.3	**39.3821**	2.470	6.3	mg/L	114	Standard
	Rb	85	26319.5	3.5				ug/L	16	Standard
>	**Y**	89	316104.4	2.2				ug/L	343723	Standard
	Rh	103	185.3	4.1				ug/L	2	Standard
	Mo	98	11600.0	1.7	**2.7759**	0.046	1.6	ug/L	7	Standard
	Ag	107	185763.2	0.3	**22.5382**	0.307	1.4	ug/L	143	Standard
	Cd	111	122141.6	1.1	**27.1252**	0.477	1.8	mg/L	597	Standard
	Cd	114	336639.1	1.8	**26.5551**	0.491	1.8	ug/L	1652	Standard
>	**In**	115	1010349.0	1.7				ug/L	1111888	Standard
	Sn	118	2122.1	7.6	**0.0724**	0.012	16.1	ug/L	928	Standard
	Sb	123	290905.2	1.5	**26.7659**	0.161	0.6	ug/L	16	Standard
	Ba	135	366243.7	1.6	**69.7040**	0.275	0.4	ug/L	58	Standard
	Ce	140	1536.7	1.9				ug/L	63	Standard
>	**Tb**	159	1146055.2	1.4				ug/L	1172993	Standard
	Ho	165	79.3	9.5				ug/L	14	Standard
	Tl	203	415747.1	1.0	**27.4333**	0.048	0.2	ug/L	33	Standard
	Tl	205	999731.8	1.4	**25.7794**	0.230	0.9	ug/L	85	Standard
	Pb	206	330363.3	1.0	**26.9496**	0.117	0.4	ug/L	424	Standard
	Pb	207	282408.1	1.1	**27.6974**	0.127	0.5	ug/L	363	Standard
	Pb	208	1286688.0	1.3	**26.9504**	0.203	0.8	ug/L	1661	Standard
	U	238	1353705.7	1.1	**29.7143**	0.072	0.2	ug/L	5	Standard
>	**Bi**	209	512354.1	0.9				ug/L	678709	Standard
	Na	23	733450.2	2.5	**215.6777**	5.042	2.3	mg/L	80	Standard
	Mg	24	1839812.9	1.4	**5.8616**	0.081	1.4	mg/L	106	Standard

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	K	39	19203.5	0.9	**1.6361**	0.021	1.3	mg/L	583	Standard
	Ca	43	24039.7	1.2	**31.7131**	0.592	1.9	mg/L	145	Standard
	Fe	54	971.6	3.7	**-0.0169**	0.005	32.6	mg/L	993	Standard
	Fe	57	21040.0	5.8	**0.0838**	0.006	6.7	mg/L	5581	Standard
>	**Sc-1**	45	502490.4	1.1				mg/L	477679	Standard
	Cl	35	37758381.9	0.9				ug/L	75747	Standard
	Kr	83	119.7	12.2				ug/L	83	Standard
	Br	81	124048.2	1.9				ug/L	17338	Standard
	P	31	122655.2	1.1				ug/L	84853	Standard
	S	34	2426432.8	0.6				ug/L	850414	Standard
	Sr	88	7435531.2	1.2				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.164	
	As	75			
	Se	82			
>	Ga	71		87.522	
	Se-1	77			
	Rb	85			
>	Y	89		91.965	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.868	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.703	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204084406S WG396204-05
Report Date/Time: Thursday, April 26, 2012 12:08:14
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	75.490
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1204084406SD WG396204-06

Sample Date/Time: Thursday, April 26, 2012 12:08:34
Number of Replicates: 3
Autosampler Position: 236
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	386236.4	0.5	**33020.5750**	377.661	1.1	ug/L	24742	Standard
	Be	9	104288.7	1.1	**25.3258**	0.375	1.5	ug/L	11	Standard
	Al	27	713226.6	1.7	**26.4501**	0.629	2.4	ug/L	20240	Standard
>	**Sc**	45	513411.0	1.1				ug/L	477679	Standard
	Ti	47	1227.4	6.1	**0.6170**	0.034	5.6	ug/L	99	Standard
	V	51	960768.3	1.4	**43.2407**	0.118	0.3	ug/L	7210	Standard
	Cr	52	543339.9	1.0	**29.6746**	0.235	0.8	ug/L	22890	Standard
	Cr	53	70593.4	1.7	**34.8162**	0.265	0.8	ug/L	565	Standard
	Mn	55	785468.9	0.9	**33.0202**	0.223	0.7	ug/L	1511	Standard
	Co	59	444084.4	0.6	**27.1779**	0.249	0.9	ug/L	149	Standard
	Ni	60	96007.6	0.7	**28.2327**	0.165	0.6	ug/L	54	Standard
	Cu	65	80332.8	2.6	**26.2293**	0.533	2.0	ug/L	142	Standard
	Zn	66	58471.7	2.5	**43.6253**	0.844	1.9	ug/L	800	Standard
>	**Ge**	72	332918.4	1.1				ug/L	375255	Standard
	As	75	35290.4	0.2	**29.2892**	0.312	1.1	ug/L	-104	Standard
	Se	82	3587.0	1.1	**30.2088**	0.166	0.6	ug/L	18	Standard
>	**Ga**	71	272976.8	1.6				mg/L	308497	Standard
	Se-1	77	3313.7	1.7	**38.8247**	1.000	2.6	mg/L	114	Standard
	Rb	85	26648.1	2.0				ug/L	16	Standard
>	**Y**	89	312456.3	0.8				ug/L	343723	Standard
	Rh	103	184.7	11.0				ug/L	2	Standard
	Mo	98	11458.5	1.6	**2.7060**	0.054	2.0	ug/L	7	Standard
	Ag	107	190919.1	0.9	**22.8578**	0.096	0.4	ug/L	143	Standard
	Cd	111	126439.2	0.8	**27.7111**	0.148	0.5	mg/L	597	Standard
	Cd	114	342630.5	1.7	**26.6737**	0.500	1.9	ug/L	1652	Standard
>	**In**	115	1023759.6	1.3				ug/L	1111888	Standard
	Sn	118	1740.1	5.5	**0.0482**	0.005	9.5	ug/L	928	Standard
	Sb	123	299999.7	1.1	**27.2422**	0.335	1.2	ug/L	16	Standard
	Ba	135	369653.1	1.7	**69.4381**	1.453	2.1	ug/L	58	Standard
	Ce	140	1565.4	0.6				ug/L	63	Standard
>	**Tb**	159	1145969.1	0.7				ug/L	1172993	Standard
	Ho	165	84.0	35.2				ug/L	14	Standard
	Tl	203	426596.0	0.8	**28.0994**	0.075	0.3	ug/L	33	Standard
	Tl	205	1023051.7	0.2	**26.3355**	0.247	0.9	ug/L	85	Standard
	Pb	206	342150.3	0.9	**27.8623**	0.080	0.3	ug/L	424	Standard
	Pb	207	290585.9	0.9	**28.4497**	0.119	0.4	ug/L	363	Standard
	Pb	208	1326440.0	0.8	**27.7350**	0.138	0.5	ug/L	1661	Standard
	U	238	1387136.3	1.5	**30.3934**	0.272	0.9	ug/L	5	Standard
>	**Bi**	209	513274.6	1.0				ug/L	678709	Standard
	Na	23	743891.7	0.7	**214.1018**	1.612	0.8	mg/L	80	Standard
	Mg	24	1840920.8	1.2	**5.7408**	0.105	1.8	mg/L	106	Standard

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	K	39	19116.1	0.2	**1.5927**	0.018	1.1	mg/L	583	Standard
	Ca	43	24306.8	0.2	**31.3806**	0.347	1.1	mg/L	145	Standard
	Fe	54	945.9	4.1	**-0.0240**	0.007	27.7	mg/L	993	Standard
	Fe	57	21020.6	1.0	**0.0813**	0.000	0.1	mg/L	5581	Standard
>	**Sc-1**	45	513411.0	1.1				mg/L	477679	Standard
	Cl	35	38136115.2	0.8				ug/L	75747	Standard
	Kr	83	118.0	12.2				ug/L	83	Standard
	Br	81	117861.7	1.5				ug/L	17338	Standard
	P	31	127491.8	1.0				ug/L	84853	Standard
	S	34	2446746.1	2.2				ug/L	850414	Standard
	Sr	88	7425503.9	1.6				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.718	
	As	75			
	Se	82			
>	Ga	71		88.486	
	Se-1	77			
	Rb	85			
>	Y	89		90.903	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.074	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.696	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	75.625
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEE	Na	23	

Approved: April 27, 2012

Method 6020 - Summary Report

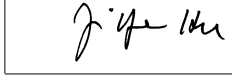
Sample ID: L1204085702
Sample Date/Time: Thursday, April 26, 2012 12:11:21
Number of Replicates: 3
Autosampler Position: 237
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	1142777.2	0.4	**99249.2379**	1326.731	1.3	ug/L	24742	Standard
|	**Be**	9	116.7	7.9	**0.0206**	0.003	12.3	ug/L	11	Standard
|	**Al**	27	605038.6	2.7	**21.6265**	0.392	1.8	ug/L	20240	Standard
⌊>	**Sc**	45	529969.4	1.5				ug/L	477679	Standard
⌈	**Ti**	47	1595.4	15.4	**0.7503**	0.116	15.5	ug/L	99	Standard
|	**V**	51	11562.7	2.5	**0.1954**	0.018	9.3	ug/L	7210	Standard
|	**Cr**	52	34978.3	1.0	**0.6949**	0.018	2.5	ug/L	22890	Standard
|	**Cr**	53	2009.5	7.9	**0.6759**	0.066	9.8	ug/L	565	Standard
|	**Mn**	55	493486.0	1.4	**19.1243**	0.178	0.9	ug/L	1511	Standard
|	**Co**	59	2989.6	4.0	**0.1607**	0.007	4.2	ug/L	149	Standard
|	**Ni**	60	5137.9	2.0	**1.3748**	0.035	2.5	ug/L	54	Standard
|	**Cu**	65	1937.1	3.4	**0.5438**	0.013	2.4	ug/L	142	Standard
|	**Zn**	66	5996.5	2.7	**3.7987**	0.103	2.7	ug/L	800	Standard
|>	**Ge**	72	360715.1	1.3				ug/L	375255	Standard
|	**As**	75	542.5	5.8	**0.4966**	0.021	4.2	ug/L	-104	Standard
⌊	**Se**	82	55.6	14.2	**0.3190**	0.056	17.6	ug/L	18	Standard
⌈>	**Ga**	71	289989.7	1.1				mg/L	308497	Standard
⌊	**Se-1**	77	142.0	10.2	**0.3297**	0.163	49.4	mg/L	114	Standard
⌈	**Rb**	85	8172.2	1.1				ug/L	16	Standard
|>	**Y**	89	329369.8	1.1				ug/L	343723	Standard
⌊	**Rh**	103	1341.4	5.4				ug/L	2	Standard
⌈	**Mo**	98	180.4	15.9	**0.0321**	0.006	20.1	ug/L	7	Standard
|	**Ag**	107	123.0	26.2	**0.0038**	0.004	95.1	ug/L	143	Standard
|	**Cd**	111	659.4	2.1	**0.0205**	0.003	13.8	mg/L	597	Standard
|	**Cd**	114	1807.5	6.2	**0.0170**	0.008	48.9	ug/L	1652	Standard
|>	**In**	115	1089240.3	0.1				ug/L	1111888	Standard
|	**Sn**	118	1214.0	2.2	**0.0131**	0.002	11.5	ug/L	928	Standard
|	**Sb**	123	735.1	4.3	**0.0622**	0.003	4.4	ug/L	16	Standard
⌊	**Ba**	135	100426.4	0.2	**17.7203**	0.031	0.2	ug/L	58	Standard
⌈	**Ce**	140	4956.2	15.5				ug/L	63	Standard
⌊>	**Tb**	159	1271719.3	1.3				ug/L	1172993	Standard
⌈	**Ho**	165	296.7	4.3				ug/L	14	Standard
|	**Tl**	203	873.4	13.7	**0.0552**	0.007	13.5	ug/L	33	Standard
|	**Tl**	205	2124.8	14.5	**0.0546**	0.007	13.7	ug/L	85	Standard
|	**Pb**	206	3161.0	1.9	**0.2270**	0.004	1.8	ug/L	424	Standard
|	**Pb**	207	2492.9	3.4	**0.2151**	0.007	3.1	ug/L	363	Standard
|	**Pb**	208	11525.7	1.8	**0.2123**	0.003	1.5	ug/L	1661	Standard
|	**U**	238	4530.3	3.4	**0.1030**	0.003	2.6	ug/L	5	Standard
⌊>	**Bi**	209	518297.8	0.8				ug/L	678709	Standard
⌈	**Na**	23	87540.2	0.5	**24.3881**	0.286	1.2	mg/L	80	Standard
|	**Mg**	24	3140780.6	1.8	**9.4873**	0.032	0.3	mg/L	106	Standard

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	K	39	3445.1	0.3	**0.2360**	0.005	2.2	mg/L	583	Standard
	Ca	43	24225.4	1.9	**30.2923**	0.672	2.2	mg/L	145	Standard
	Fe	54	4218.1	3.9	**0.4575**	0.016	3.5	mg/L	993	Standard
	Fe	57	115128.6	2.6	**0.5574**	0.006	1.1	mg/L	5581	Standard
>	**Sc-1**	45	529969.4	1.5				mg/L	477679	Standard
	Cl	35	1170531.3	14.4				ug/L	75747	Standard
	Kr	83	93.7	3.7				ug/L	83	Standard
	Br	81	32794.1	1.9				ug/L	17338	Standard
	P	31	100532.1	1.2				ug/L	84853	Standard
	S	34	5576240.4	0.7				ug/L	850414	Standard
	Sr	88	53978181.1	1.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.125	
	As	75			
	Se	82			
>	Ga	71		94.001	
	Se-1	77			
	Rb	85			
>	Y	89		95.824	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.963	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.417	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204085702
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	76.365
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: April 27, 2012

Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, April 26, 2012 12:14:08
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: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26951.3	1.5	**200.9655**	47.816	23.8	ug/L	24742	Standard
|	**Be**	9	16.0	59.6	**-0.0026**	0.002	94.3	ug/L	11	Standard
|	**Al**	27	117103181.9	3.0	**4776.3490**	150.515	3.2	ug/L	20240	Standard
⌊>	**Sc**	45	477236.1	0.3				ug/L	477679	Standard
⌈	**Ti**	47	220930.6	1.2	**113.0414**	0.855	0.8	ug/L	99	Standard
|	**V**	51	7662.5	0.4	**0.0373**	0.002	6.6	ug/L	7210	Standard
|	**Cr**	52	24116.2	0.3	**0.1465**	0.011	7.8	ug/L	22890	Standard
|	**Cr**	53	3136.3	1.7	**1.2157**	0.015	1.3	ug/L	565	Standard
|	**Mn**	55	2030.1	3.5	**0.0269**	0.003	12.3	ug/L	1511	Standard
|	**Co**	59	531.3	3.2	**0.0223**	0.001	3.5	ug/L	149	Standard
|	**Ni**	60	1412.1	2.7	**0.3689**	0.012	3.3	ug/L	54	Standard
|	**Cu**	65	672.0	2.8	**0.1653**	0.006	3.8	ug/L	142	Standard
|	**Zn**	66	4862.8	1.5	**3.0652**	0.032	1.0	ug/L	800	Standard
|>	**Ge**	72	355041.0	0.6				ug/L	375255	Standard
|	**As**	75	-78.6	40.3	**0.0213**	0.025	116.2	ug/L	-104	Standard
⌊	**Se**	82	19.6	21.6	**0.0408**	0.033	80.0	ug/L	18	Standard
⌈>	**Ga**	71	279455.8	1.1				mg/L	308497	Standard
⌊	**Se-1**	77	285.3	13.7	**2.0882**	0.492	23.6	mg/L	114	Standard
⌈	**Rb**	85	3494.4	5.2				ug/L	16	Standard
|>	**Y**	89	311601.6	0.3				ug/L	343723	Standard
⌊	**Rh**	103	4.7	65.5				ug/L	2	Standard
⌈	**Mo**	98	400828.9	1.1	**88.0629**	0.174	0.2	ug/L	7	Standard
|	**Ag**	107	104.3	7.8	**0.0016**	0.001	63.3	ug/L	143	Standard
|	**Cd**	111	1013.9	6.5	**0.0912**	0.015	16.4	mg/L	597	Standard
|	**Cd**	114	3414.4	2.2	**0.1318**	0.003	2.5	ug/L	1652	Standard
|>	**In**	115	1103511.8	0.9				ug/L	1111888	Standard
|	**Sn**	118	994.7	6.4	**0.0004**	0.004	948.7	ug/L	928	Standard
|	**Sb**	123	614.8	3.2	**0.0513**	0.002	3.1	ug/L	16	Standard
⌊	**Ba**	135	132.0	7.5	**0.0115**	0.002	14.9	ug/L	58	Standard
⌈	**Ce**	140	2184.8	1.8				ug/L	63	Standard
⌊>	**Tb**	159	1201772.6	0.7				ug/L	1172993	Standard
⌈	**Ho**	165	14.7	41.7				ug/L	14	Standard
|	**Tl**	203	414.0	5.9	**0.0210**	0.001	5.1	ug/L	33	Standard
|	**Tl**	205	1056.0	5.8	**0.0231**	0.001	6.4	ug/L	85	Standard
|	**Pb**	206	791.0	2.3	**0.0257**	0.001	2.8	ug/L	424	Standard
|	**Pb**	207	640.7	8.0	**0.0255**	0.004	13.8	ug/L	363	Standard
|	**Pb**	208	3000.4	4.4	**0.0258**	0.002	6.5	ug/L	1661	Standard
|	**U**	238	26.0	26.9	**0.0052**	0.000	2.3	ug/L	5	Standard
⌊>	**Bi**	209	615100.3	1.2				ug/L	678709	Standard
⌈	**Na**	23	39220.0	0.5	**12.1202**	0.085	0.7	mg/L	80	Standard
|	**Mg**	24	1473426.5	2.4	**4.9427**	0.130	2.6	mg/L	106	Standard

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	K	39	53565.9	1.1	**4.9038**	0.069	1.4	mg/L	583	Standard
	Ca	43	10518.3	1.5	**14.4977**	0.262	1.8	mg/L	145	Standard
	Fe	54	70736.9	1.1	**11.5017**	0.156	1.4	mg/L	993	Standard
	Fe	57	1971204.5	1.2	**11.1276**	0.170	1.5	mg/L	5581	Standard
>	**Sc-1**	45	477236.1	0.3				mg/L	477679	Standard
	Cl	35	10127969.0	0.8				ug/L	75747	Standard
	Kr	83	76.7	13.9				ug/L	83	Standard
	Br	81	16243.0	2.2				ug/L	17338	Standard
	P	31	8895054.7	0.8				ug/L	84853	Standard
	S	34	1629091.7	0.4				ug/L	850414	Standard
	Sr	88	3561.8	31.0				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	95.527		
>	Sc	45			
	Ti	47	113.041		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.613	
	As	75			
	Se	82			
>	Ga	71		90.586	
	Se-1	77			
	Rb	85			
>	Y	89		90.655	
	Rh	103			
	Mo	98	88.063		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.247	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.454	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		90.628
	Na	23	96.962	
	Mg	24	98.855	
	K	39	98.076	
	Ca	43	96.652	
	Fe	54	92.014	
	Fe	57	89.021	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, April 26, 2012 12:16:54
Number of Replicates: 3
Autosampler Position: 204
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	28450.0	1.5	**151.1768**	48.769	32.3	ug/L	24742	Standard
|	**Be**	9	420983.2	0.6	**102.2626**	1.853	1.8	ug/L	11	Standard
|	**Al**	27	136088810.7	0.7	**5160.0799**	69.483	1.3	ug/L	20240	Standard
⌊>	**Sc**	45	513400.0	1.2				ug/L	477679	Standard
⌈	**Ti**	47	260221.6	0.3	**126.6397**	0.874	0.7	ug/L	99	Standard
|	**V**	51	2648403.4	0.3	**106.7210**	0.515	0.5	ug/L	7210	Standard
|	**Cr**	52	2164217.7	1.0	**108.3033**	0.529	0.5	ug/L	22890	Standard
|	**Cr**	53	238544.1	1.5	**105.4121**	1.176	1.1	ug/L	565	Standard
|	**Mn**	55	2845232.0	1.4	**106.7896**	1.964	1.8	ug/L	1511	Standard
|	**Co**	59	1843103.9	0.5	**100.6084**	0.012	0.0	ug/L	149	Standard
|	**Ni**	60	383694.3	0.4	**100.6737**	0.492	0.5	ug/L	54	Standard
|	**Cu**	65	332957.6	1.1	**97.0690**	1.400	1.4	ug/L	142	Standard
|	**Zn**	66	153242.1	0.7	**102.4594**	1.294	1.3	ug/L	800	Standard
| >	**Ge**	72	373313.1	0.6				ug/L	375255	Standard
|	**As**	75	134799.1	0.9	**99.5643**	0.674	0.7	ug/L	-104	Standard
⌊	**Se**	82	13116.2	0.9	**98.7647**	0.349	0.4	ug/L	18	Standard
⌈>	**Ga**	71	306306.5	1.7				mg/L	308497	Standard
⌊	**Se-1**	77	9543.0	3.0	**101.6986**	4.910	4.8	mg/L	114	Standard
⌈	**Rb**	85	4215.3	2.8				ug/L	16	Standard
| >	**Y**	89	338407.4	0.3				ug/L	343723	Standard
⌊	**Rh**	103	80.0	26.1				ug/L	2	Standard
⌈	**Mo**	98	477436.1	1.3	**99.5306**	3.116	3.1	ug/L	7	Standard
|	**Ag**	107	340979.3	3.0	**35.9362**	1.292	3.6	ug/L	143	Standard
|	**Cd**	111	524692.6	0.4	**101.5168**	2.120	2.1	mg/L	597	Standard
|	**Cd**	114	1431483.3	0.6	**98.3871**	1.949	2.0	ug/L	1652	Standard
| >	**In**	115	1163438.9	1.8				ug/L	1111888	Standard
|	**Sn**	118	1624.1	5.8	**0.0300**	0.004	12.7	ug/L	928	Standard
|	**Sb**	123	1237807.1	1.0	**98.9199**	1.764	1.8	ug/L	16	Standard
⌊	**Ba**	135	565561.9	1.3	**93.5016**	2.277	2.4	ug/L	58	Standard
⌈	**Ce**	140	2638.9	4.1				ug/L	63	Standard
⌊>	**Tb**	159	1260815.7	1.3				ug/L	1172993	Standard
⌈	**Ho**	165	27.3	18.4				ug/L	14	Standard
|	**Tl**	203	1848965.1	0.4	**98.9709**	1.719	1.7	ug/L	33	Standard
|	**Tl**	205	4786933.6	0.9	**100.1324**	2.254	2.3	ug/L	85	Standard
|	**Pb**	206	1487512.2	0.9	**98.5033**	1.796	1.8	ug/L	424	Standard
|	**Pb**	207	1267729.6	0.0	**100.9233**	1.410	1.4	ug/L	363	Standard
|	**Pb**	208	6011341.6	0.4	**102.2085**	1.661	1.6	ug/L	1661	Standard
|	**U**	238	5887817.7	0.9	**104.8120**	0.756	0.7	ug/L	5	Standard
⌊>	**Bi**	209	631731.4	1.4				ug/L	678709	Standard
⌈	**Na**	23	43853.4	1.0	**12.6000**	0.246	2.0	mg/L	80	Standard
|	**Mg**	24	1646253.7	1.3	**5.1335**	0.066	1.3	mg/L	106	Standard

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	K	39	60471.1	0.5	**5.1488**	0.060	1.2	mg/L	583	Standard
	Ca	43	11772.6	1.5	**15.0945**	0.404	2.7	mg/L	145	Standard
	Fe	54	81421.4	1.4	**12.3204**	0.309	2.5	mg/L	993	Standard
	Fe	57	2528787.3	2.2	**13.2752**	0.281	2.1	mg/L	5581	Standard
>	**Sc-1**	45	513400.0	1.2				mg/L	477679	Standard
	Cl	35	11747162.1	1.0				ug/L	75747	Standard
	Kr	83	96.7	9.6				ug/L	83	Standard
	Br	81	18083.8	0.3				ug/L	17338	Standard
	P	31	9454804.6	0.8				ug/L	84853	Standard
	S	34	1826358.4	0.9				ug/L	850414	Standard
	Sr	88	1698.1	15.3				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	103.202		
>	Sc	45			
	Ti	47	126.640		
	V	51	106.721		
	Cr	52	108.303		
	Cr	53			
	Mn	55	106.790		
	Co	59	100.608		
	Ni	60	100.674		
	Cu	65	97.069		
	Zn	66	102.459		
>	Ge	72		99.482	
	As	75	99.564		
	Se	82	98.765		
>	Ga	71		99.290	
	Se-1	77			
	Rb	85			
>	Y	89		98.453	
	Rh	103			
	Mo	98	99.531		
	Ag	107	35.936		
	Cd	111	101.517		
	Cd	114			
>	In	115		104.636	
	Sn	118			
	Sb	123	98.920		
	Ba	135	93.502		
	Ce	140			
>	Tb	159		107.487	
	Ho	165			
	Tl	203	98.971		
	Tl	205			
	Pb	206	98.503		

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	Pb	207	100.923	
	Pb	208	102.208	
	U	238	104.812	
>	Bi	209		93.078
	Na	23	100.800	
	Mg	24	102.670	
	K	39	102.977	
	Ca	43	100.630	
	Fe	54	98.563	
	Fe	57	106.202	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ti	47	
QC Std 5	Ag	107	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, April 26, 2012 12:19:43
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	27719.0	2.0	**128.6696**	43.157	33.5	ug/L	24742	Standard
|	**Be**	9	211527.7	1.9	**52.2759**	0.588	1.1	ug/L	11	Standard
|	**Al**	27	1308499.0	5.4	**49.9098**	3.110	6.2	ug/L	20240	Standard
⌊>	**Sc**	45	504507.3	1.2				ug/L	477679	Standard
⌈	**Ti**	47	215369.5	1.7	**103.3548**	2.094	2.0	ug/L	99	Standard
|	**V**	51	1279906.5	0.7	**50.7129**	0.648	1.3	ug/L	7210	Standard
|	**Cr**	52	1064362.6	1.5	**51.9438**	0.865	1.7	ug/L	22890	Standard
|	**Cr**	53	119604.9	0.9	**52.0035**	0.878	1.7	ug/L	565	Standard
|	**Mn**	55	1390166.7	2.0	**51.4198**	0.531	1.0	ug/L	1511	Standard
|	**Co**	59	946639.9	2.1	**50.9496**	0.561	1.1	ug/L	149	Standard
|	**Ni**	60	194792.0	1.6	**50.3882**	0.304	0.6	ug/L	54	Standard
|	**Cu**	65	171038.4	1.1	**49.1517**	0.420	0.9	ug/L	142	Standard
|	**Zn**	66	75748.3	2.0	**49.7528**	0.649	1.3	ug/L	800	Standard
|>	**Ge**	72	378569.6	1.4				ug/L	375255	Standard
|	**As**	75	67955.2	1.5	**49.5367**	0.105	0.2	ug/L	-104	Standard
⌊	**Se**	82	6733.3	1.3	**49.9418**	0.100	0.2	ug/L	18	Standard
⌈>	**Ga**	71	304852.4	0.6				mg/L	308497	Standard
⌊	**Se-1**	77	4747.4	2.2	**50.1611**	1.060	2.1	mg/L	114	Standard
⌈	**Rb**	85	1066.0	4.9				ug/L	16	Standard
|>	**Y**	89	337233.4	2.7				ug/L	343723	Standard
⌊	**Rh**	103	42.0	29.0				ug/L	2	Standard
⌈	**Mo**	98	443394.9	1.5	**92.2578**	0.849	0.9	ug/L	7	Standard
|	**Ag**	107	466088.8	1.4	**49.0377**	0.202	0.4	ug/L	143	Standard
|	**Cd**	111	268416.3	1.8	**51.7821**	0.443	0.9	mg/L	597	Standard
|	**Cd**	114	736309.9	2.0	**50.4605**	0.574	1.1	ug/L	1652	Standard
|>	**In**	115	1165261.0	1.7				ug/L	1111888	Standard
|	**Sn**	118	975043.3	2.0	**50.1175**	0.606	1.2	ug/L	928	Standard
|	**Sb**	123	641020.7	2.1	**51.1366**	0.480	0.9	ug/L	16	Standard
⌊	**Ba**	135	290078.1	1.4	**47.8672**	0.392	0.8	ug/L	58	Standard
⌈	**Ce**	140	1050.0	2.0				ug/L	63	Standard
⌊>	**Tb**	159	1225257.7	2.1				ug/L	1172993	Standard
⌈	**Ho**	165	33.3	25.0				ug/L	14	Standard
|	**Tl**	203	948868.1	1.3	**50.7440**	0.274	0.5	ug/L	33	Standard
|	**Tl**	205	2468932.1	1.4	**51.5957**	0.304	0.6	ug/L	85	Standard
|	**Pb**	206	767271.9	1.2	**50.7517**	0.545	1.1	ug/L	424	Standard
|	**Pb**	207	634514.2	0.9	**50.4569**	0.172	0.3	ug/L	363	Standard
|	**Pb**	208	2947139.9	1.0	**50.0521**	0.373	0.7	ug/L	1661	Standard
|	**U**	238	2976949.3	2.3	**52.9515**	0.823	1.6	ug/L	5	Standard
⌊>	**Bi**	209	632206.6	1.2				ug/L	678709	Standard
⌈	**Na**	23	16980.8	2.1	**4.9501**	0.128	2.6	mg/L	80	Standard
|	**Mg**	24	1545805.7	0.3	**4.9054**	0.045	0.9	mg/L	106	Standard

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	K	39	56562.7	0.9	**4.8987**	0.088	1.8	mg/L	583	Standard
	Ca	43	3777.8	1.5	**4.7897**	0.107	2.2	mg/L	145	Standard
	Fe	54	32205.3	1.0	**4.8579**	0.104	2.1	mg/L	993	Standard
	Fe	57	955183.7	3.2	**5.0840**	0.115	2.3	mg/L	5581	Standard
>	**Sc-1**	45	504507.3	1.2				mg/L	477679	Standard
	Cl	35	222689.3	27.1				ug/L	75747	Standard
	Kr	83	82.7	3.9				ug/L	83	Standard
	Br	81	17665.6	2.9				ug/L	17338	Standard
	P	31	93419.1	0.5				ug/L	84853	Standard
	S	34	866561.2	0.8				ug/L	850414	Standard
	Sr	88	759.4	17.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	99.820		
>	Sc	45			
	Ti	47	103.355		
	V	51	101.426		
	Cr	52	103.888		
	Cr	53			
	Mn	55	102.840		
	Co	59	101.899		
	Ni	60	100.776		
	Cu	65	98.303		
	Zn	66	99.506		
>	Ge	72		100.883	
	As	75	99.073		
	Se	82	99.884		
>	Ga	71		98.818	
	Se-1	77			
	Rb	85			
>	Y	89		98.112	
	Rh	103			
	Mo	98	92.258		
	Ag	107	98.075		
	Cd	111	103.564		
	Cd	114			
>	In	115		104.800	
	Sn	118	100.235		
	Sb	123	102.273		
	Ba	135	95.734		
	Ce	140			
>	Tb	159		104.456	
	Ho	165			
	Tl	203	101.488		
	Tl	205			
	Pb	206	101.503		

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	Pb	207	100.914	
	Pb	208	100.104	
	U	238	105.903	
>	Bi	209		93.148
	Na	23	99.001	
	Mg	24	98.108	
	K	39	97.975	
	Ca	43	95.795	
	Fe	54	97.158	
	Fe	57	101.679	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, April 26, 2012 12:22:30
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26919.6	1.8	**62.3322**	33.216	53.3	ug/L	24742	Standard
|	**Be**	9	26.7	18.5	**-0.0002**	0.001	585.7	ug/L	11	Standard
|	**Al**	27	15915.0	7.0	**0.0193**	0.040	206.5	ug/L	20240	Standard
⌊>	**Sc**	45	502812.1	0.6				ug/L	477679	Standard
⌈	**Ti**	47	120.0	29.6	**0.0057**	0.018	307.1	ug/L	99	Standard
|	**V**	51	7060.4	2.8	**-0.0024**	0.008	325.7	ug/L	7210	Standard
|	**Cr**	52	22509.4	0.9	**0.0046**	0.011	234.2	ug/L	22890	Standard
|	**Cr**	53	663.3	9.1	**0.0495**	0.028	57.0	ug/L	565	Standard
|	**Mn**	55	1694.8	3.5	**0.0105**	0.003	24.0	ug/L	1511	Standard
|	**Co**	59	193.3	19.2	**0.0024**	0.002	86.7	ug/L	149	Standard
|	**Ni**	60	70.0	6.5	**-0.0024**	0.001	54.9	ug/L	54	Standard
|	**Cu**	65	142.0	11.5	**0.0007**	0.005	692.8	ug/L	142	Standard
|	**Zn**	66	231.0	7.4	**-0.2101**	0.011	5.5	ug/L	800	Standard
| >	**Ge**	72	372623.1	0.6				ug/L	375255	Standard
|	**As**	75	-104.0	35.2	**0.0054**	0.027	511.2	ug/L	-104	Standard
⌊	**Se**	82	12.7	51.1	**-0.0183**	0.049	265.7	ug/L	18	Standard
⌈>	**Ga**	71	308783.5	0.9				mg/L	308497	Standard
⌊	**Se-1**	77	124.7	2.5	**0.0460**	0.041	88.9	mg/L	114	Standard
⌈	**Rb**	85	20.7	14.8				ug/L	16	Standard
| >	**Y**	89	336541.6	1.3				ug/L	343723	Standard
⌊	**Rh**	103	2.7	43.3				ug/L	2	Standard
⌈	**Mo**	98	122.2	35.3	**0.0174**	0.009	50.3	ug/L	7	Standard
|	**Ag**	107	105.7	5.8	**0.0012**	0.001	61.7	ug/L	143	Standard
|	**Cd**	111	609.5	8.2	**0.0026**	0.009	330.5	mg/L	597	Standard
|	**Cd**	114	1755.4	0.9	**0.0054**	0.001	21.0	ug/L	1652	Standard
| >	**In**	115	1158343.5	1.5				ug/L	1111888	Standard
|	**Sn**	118	1144.0	2.0	**0.0055**	0.001	15.5	ug/L	928	Standard
|	**Sb**	123	504.1	19.6	**0.0399**	0.007	18.6	ug/L	16	Standard
⌊	**Ba**	135	95.7	38.3	**0.0044**	0.006	137.3	ug/L	58	Standard
⌈	**Ce**	140	42.7	19.5				ug/L	63	Standard
⌊>	**Tb**	159	1206470.6	0.7				ug/L	1172993	Standard
⌈	**Ho**	165	14.7	20.8				ug/L	14	Standard
|	**Tl**	203	152.0	22.1	**0.0062**	0.002	28.9	ug/L	33	Standard
|	**Tl**	205	353.3	17.7	**0.0077**	0.001	16.2	ug/L	85	Standard
|	**Pb**	206	440.3	5.2	**0.0004**	0.002	520.1	ug/L	424	Standard
|	**Pb**	207	385.0	8.1	**0.0031**	0.003	94.4	ug/L	363	Standard
|	**Pb**	208	1758.4	3.2	**0.0026**	0.001	49.9	ug/L	1661	Standard
|	**U**	238	294.0	16.1	**0.0099**	0.001	9.3	ug/L	5	Standard
⌊>	**Bi**	209	647360.0	2.1				ug/L	678709	Standard
⌈	**Na**	23	94.7	10.0	**0.0034**	0.003	86.5	mg/L	80	Standard
|	**Mg**	24	195.3	17.6	**0.0003**	0.000	44.3	mg/L	106	Standard

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	K	39	611.3	2.9	**0.0027**	0.002	70.1	mg/L	583	Standard
	Ca	43	118.0	11.7	**-0.0499**	0.018	36.7	mg/L	145	Standard
	Fe	54	1023.4	8.6	**-0.0089**	0.013	146.0	mg/L	993	Standard
	Fe	57	5409.6	4.3	**-0.0002**	0.001	573.3	mg/L	5581	Standard
>	**Sc-1**	45	502812.1	0.6				mg/L	477679	Standard
	Cl	35	147218.5	4.7				ug/L	75747	Standard
	Kr	83	80.7	4.0				ug/L	83	Standard
	Br	81	16870.4	1.9				ug/L	17338	Standard
	P	31	88358.8	4.0				ug/L	84853	Standard
	S	34	870263.4	2.1				ug/L	850414	Standard
	Sr	88	215.3	7.4				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.299	
	As	75			
	Se	82			
>	Ga	71		100.093	
	Se-1	77			
	Rb	85			
>	Y	89		97.911	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.178	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.854	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.381
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Thursday, April 26, 2012 12:25:19
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: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26969.3	1.2	**108.6493**	23.903	22.0	ug/L	24742	Standard
|	**Be**	9	18.3	38.7	**-0.0022**	0.002	76.1	ug/L	11	Standard
|	**Al**	27	17253.2	3.8	**0.0820**	0.014	16.5	ug/L	20240	Standard
⌊>	**Sc**	45	494730.3	1.8				ug/L	477679	Standard
⌈	**Ti**	47	101.3	11.6	**-0.0038**	0.006	143.8	ug/L	99	Standard
|	**V**	51	17054.6	2.3	**0.3968**	0.013	3.3	ug/L	7210	Standard
|	**Cr**	52	38791.6	1.5	**0.8142**	0.021	2.6	ug/L	22890	Standard
|	**Cr**	53	2455.5	4.8	**0.8362**	0.047	5.7	ug/L	565	Standard
|	**Mn**	55	15083.5	1.7	**0.5097**	0.008	1.6	ug/L	1511	Standard
|	**Co**	59	7513.9	0.7	**0.3996**	0.001	0.3	ug/L	149	Standard
|	**Ni**	60	6232.9	1.9	**1.6054**	0.037	2.3	ug/L	54	Standard
|	**Cu**	65	2856.9	0.2	**0.7875**	0.003	0.4	ug/L	142	Standard
|	**Zn**	66	11614.8	2.7	**7.3814**	0.186	2.5	ug/L	800	Standard
| >	**Ge**	72	375527.1	0.4				ug/L	375255	Standard
|	**As**	75	369.5	8.6	**0.3535**	0.024	6.7	ug/L	-104	Standard
⌊	**Se**	82	61.1	15.2	**0.3437**	0.072	20.8	ug/L	18	Standard
⌈>	**Ga**	71	313373.7	2.7				mg/L	308497	Standard
⌊	**Se-1**	77	146.0	3.6	**0.2513**	0.043	17.3	mg/L	114	Standard
⌈	**Rb**	85	14.0	37.8				ug/L	16	Standard
| >	**Y**	89	333528.1	1.3				ug/L	343723	Standard
⌊	**Rh**	103	6.0	66.7				ug/L	2	Standard
⌈	**Mo**	98	44.2	9.5	**0.0012**	0.001	72.3	ug/L	7	Standard
|	**Ag**	107	3625.4	2.9	**0.3784**	0.012	3.1	ug/L	143	Standard
|	**Cd**	111	1857.4	1.7	**0.2497**	0.007	2.6	mg/L	597	Standard
|	**Cd**	114	5013.3	3.3	**0.2347**	0.012	5.2	ug/L	1652	Standard
| >	**In**	115	1144595.7	0.2				ug/L	1111888	Standard
|	**Sn**	118	1001.4	2.0	**-0.0012**	0.001	82.4	ug/L	928	Standard
|	**Sb**	123	5081.4	1.6	**0.4122**	0.007	1.7	ug/L	16	Standard
⌊	**Ba**	135	4239.3	1.6	**0.7008**	0.012	1.8	ug/L	58	Standard
⌈	**Ce**	140	48.0	23.2				ug/L	63	Standard
⌊>	**Tb**	159	1192644.3	1.9				ug/L	1172993	Standard
⌈	**Ho**	165	10.0	20.0				ug/L	14	Standard
|	**Tl**	203	1579.7	3.4	**0.0813**	0.002	2.3	ug/L	33	Standard
|	**Tl**	205	3743.1	2.4	**0.0773**	0.001	1.6	ug/L	85	Standard
|	**Pb**	206	3531.7	2.2	**0.2015**	0.002	1.0	ug/L	424	Standard
|	**Pb**	207	2831.6	1.2	**0.1945**	0.001	0.7	ug/L	363	Standard
|	**Pb**	208	13293.9	2.0	**0.1954**	0.002	1.0	ug/L	1661	Standard
|	**U**	238	21341.4	2.2	**0.3777**	0.004	1.0	ug/L	5	Standard
⌊>	**Bi**	209	643458.6	1.4				ug/L	678709	Standard
⌈	**Na**	23	88.0	11.8	**0.0019**	0.004	187.4	mg/L	80	Standard
|	**Mg**	24	128.0	8.6	**0.0000**	0.000	84.4	mg/L	106	Standard

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	K	39	569.3	3.0	**-0.0002**	0.001	589.5	mg/L	583	Standard
	Ca	43	112.0	13.9	**-0.0551**	0.024	42.8	mg/L	145	Standard
	Fe	54	970.6	1.6	**-0.0146**	0.002	16.4	mg/L	993	Standard
	Fe	57	5391.0	3.9	**0.0002**	0.001	699.0	mg/L	5581	Standard
>	**Sc-1**	45	494730.3	1.8				mg/L	477679	Standard
	Cl	35	129795.8	3.8				ug/L	75747	Standard
	Kr	83	76.0	6.6				ug/L	83	Standard
	Br	81	16487.6	1.0				ug/L	17338	Standard
	P	31	87938.9	2.5				ug/L	84853	Standard
	S	34	848631.9	2.4				ug/L	850414	Standard
	Sr	88	222.7	6.5				ug/L	215	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	99.190		
	Cr	52	101.776		
	Cr	53			
	Mn	55	101.946		
	Co	59	99.895		
	Ni	60	100.337		
	Cu	65	98.440		
	Zn	66	118.102		
>	Ge	72		100.072	
	As	75	88.379		
	Se	82	85.932		
>	Ga	71		101.581	
	Se-1	77			
	Rb	85			
>	Y	89		97.034	
	Rh	103			
	Mo	98			
	Ag	107	94.593		
	Cd	111	104.060		
	Cd	114			
>	In	115		102.942	
	Sn	118			
	Sb	123	103.049		
	Ba	135	93.444		
	Ce	140			
>	Tb	159		101.675	
	Ho	165			
	Tl	203	101.601		
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208	97.684	
	U	238	94.423	
>	Bi	209		94.806
	Na	23		
	Mg	24		
	K	39		
	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	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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2.3.3 Metals CVAA Data (Mercury)

2.3.3.1 Summary Data

Login Number: L12040844
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: WG396375 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 45685
Approved By: Sheri Pfalzgraf

Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-16I-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:11
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** HY.043012.111155
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.000104		0.000200	0.000100

Sample #: L12040844-02 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-16I-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:15
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** HY.043012.111554
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 #: L12040844-03 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-16S-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:17
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** HY.043012.111745
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6		U	0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040844-04 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-16S-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:19
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** HY.043012.111929
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 #: L12040844-05 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-07-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:21
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** HY.043012.112125
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 #: L12040844-06 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-07-042412 **Prep Method:** 7470A **Prep Date:** 04/26/2012 09:43
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 04/30/2012 09:57
Workgroup #: WG396375 **Analyst:** PDM **Run Date:** 04/30/2012 11:23
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** HY.043012.112309
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.000138		0.000200	0.000100

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: WG396253
Analyst: BRG
Spike Analyst: BRG
Method: 7470A
Run Date: 04/26/2012 09:43
Hotblock Start Temp: 94 @ 09:30
Hotblock End Temp: 95.7 @ 11:30

SOP: ME404 Revison 13
Spike Solution: STD51346
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 #: STD51348
HG H2O STDS 10PPM Lot #: STD51354

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG396253-02	BLANK	1	40 mL	40 mL		
2	WG396184-01	FBLK	17	4 mL	40 mL		
3	WG396253-03	LCS	1	40 mL	40 mL	4 mL	
4	L12040769-01	SAMP	17	4 mL	40 mL		04/30/12
5	L12040770-01	SAMP	17	4 mL	40 mL		04/30/12
6	L12040770-02	SAMP	17	4 mL	40 mL		04/30/12
7	L12040770-03	SAMP	17	4 mL	40 mL		04/30/12
8	L12040770-05	SAMP	17	.04 mL	40 mL		04/30/12
9	WG396253-01	REF	17	4 mL	40 mL		
10	L12040781-01	SAMP	17	4 mL	40 mL		05/01/12
11	L12040788-01	SAMP	17	4 mL	40 mL		04/30/12
12	L12040788-02	SAMP	17	4 mL	40 mL		04/30/12
13	L12040788-03	SAMP	17	4 mL	40 mL		04/30/12
14	L12040788-05	SAMP	17	.04 mL	40 mL		04/30/12
15	L12040828-01	SAMP	17	4 mL	40 mL		04/27/12
16	L12040844-01	SAMP	1	40 mL	40 mL		05/09/12
17	L12040844-02	SAMP	1	40 mL	40 mL		05/09/12
18	L12040844-03	SAMP	1	40 mL	40 mL		05/09/12
19	L12040844-04	SAMP	1	40 mL	40 mL		05/09/12
20	L12040844-05	SAMP	1	40 mL	40 mL		05/09/12
21	L12040844-06	SAMP	1	40 mL	40 mL		05/09/12
22	L12040857-02	SAMP	1	40 mL	40 mL		05/02/12
23	WG396253-04	MS	1	4 mL	40 mL	4 mL	
24	WG396253-05	MSD	1	4 mL	40 mL	4 mL	

L12040770-05	.040ul HG QC; Very High HG
L12040788-01	added 1ml add'l KMNO4
L12040788-02	added 1ml add'l KMNO4
L12040788-03	added 1ml add'l KMNO4
L12040788-05	.040ul HG QC; Very High HG

HB_DIG - Modified 09/30/2009
PDF ID: 2392675
Report generated: 04/26/2012 12:53

Microbac Laboratories Inc.
Metals Digest Log

Workgroup:	WG396253
Analyst:	BRG
Spike Analyst:	BRG
Method:	7470A
Run Date:	04/26/2012 09:43
Hotblock Start Temp:	94 @ 09:30
Hotblock End Temp:	95.7 @ 11:30

SOP:	ME404 Revison 13
Spike Solution:	STD51346
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 #:	STD51348
HG H2O STDS 10PPM Lot #:	STD51354

Analyst: Brenda Gregory

Reviewer: Vicki Collins

HB_DIG - Modified 09/30/2009
PDF ID: 2392675
Report generated: 04/26/2012 12:53

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 042712D.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 13
Maintenance Log ID: 41518

Calibration Std: STD51354 ICV Std: STD51348 Post Spike: STD51354
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

396375
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.042712.144611	WG396457-01	Calibration Point		1		04/27/12 14:46
2	HY.042712.144757	WG396457-02	Calibration Point		1		04/27/12 14:47
3	HY.042712.144943	WG396457-03	Calibration Point		1		04/27/12 14:49
4	HY.042712.145125	WG396457-04	Calibration Point		1		04/27/12 14:51
5	HY.042712.145312	WG396457-05	Calibration Point		1		04/27/12 14:53
6	HY.042712.145459	WG396457-06	Calibration Point		1		04/27/12 14:54
7	HY.042712.145740	WG396457-07	Initial Calibration Verification		1		04/27/12 14:57
8	HY.042712.150014	WG396457-08	Initial Calib Blank		1		04/27/12 15:00
9	HY.042712.150216	WG396457-09	CCV		1		04/27/12 15:02
10	HY.042712.150409	WG396457-10	CCB		1		04/27/12 15:04
11	HY.042712.150621	WG396253-02	Method/Prep Blank	40/40	1		04/27/12 15:06
12	HY.042712.150808	WG396253-03	Laboratory Control S	40/40	1		04/27/12 15:08
13	HY.042712.151011	WG396184-01	Fluid Blank		1		04/27/12 15:10
14	HY.042712.151157	WG396253-01	Reference Sample	4/40	1	L12040781-01	04/27/12 15:11
15	HY.042712.151340	WG396253-04	Matrix Spike	4/40	1	L12040781-01	04/27/12 15:13
16	HY.042712.151522	WG396253-05	Matrix Spike Duplica	4/40	1	L12040781-01	04/27/12 15:15
17	HY.042712.151719	L12040828-01	RITCHIE COUNTY \#1	4/40	1		04/27/12 15:17
18	HY.042712.151904	WG396375-01	Post Digestion Spike		1	L12040828-01	04/27/12 15:19
19	HY.042712.152047	WG396457-11	CCV		1		04/27/12 15:20
20	HY.042712.152229	WG396457-12	CCB		1		04/27/12 15:22

Page: 1 Approved: April 27, 2012

Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 043012B.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 13
Maintenance Log ID: 41533

Calibration Std: STD51354 ICV Std: STD51348 Post Spike: STD51354
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

396375
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.043012.094818	WG396564-01	Calibration Point		1		04/30/12 09:48
2	HY.043012.095000	WG396564-02	Calibration Point		1		04/30/12 09:50
3	HY.043012.095147	WG396564-03	Calibration Point		1		04/30/12 09:51
4	HY.043012.095329	WG396564-04	Calibration Point		1		04/30/12 09:53
5	HY.043012.095535	WG396564-05	Calibration Point		1		04/30/12 09:55
6	HY.043012.095723	WG396564-06	Calibration Point		1		04/30/12 09:57
7	HY.043012.100210	WG396564-07	Initial Calibration Verification		1		04/30/12 10:02
8	HY.043012.100352	WG396564-08	Initial Calib Blank		1		04/30/12 10:03
9	HY.043012.100544	WG396564-09	CCV		1		04/30/12 10:05
10	HY.043012.100737	WG396564-10	CCB		1		04/30/12 10:07
11	HY.043012.104942	L12040769-01	2041302-01	4/40	1		04/30/12 10:49
12	HY.043012.105144	L12040770-01	2041325-01		2		04/30/12 10:51
13	HY.043012.105325	WG396375-03	Serial Dilution		10	L12040770-01	04/30/12 10:53
14	HY.043012.105523	L12040770-02	2041325-02		2		04/30/12 10:55
15	HY.043012.105716	L12040770-03	2041325-03	4/40	2		04/30/12 10:57
16	HY.043012.105859	L12040770-05	2041325-08/ 3/29 HG QC	.04/40	1		04/30/12 10:58
17	HY.043012.110102	L12040788-01	2041323-01	4/40	1		04/30/12 11:01
18	HY.043012.110256	L12040788-02	2041323-02	4/40	1		04/30/12 11:02
19	HY.043012.110438	L12040788-03	2041323-03	4/40	1		04/30/12 11:04
20	HY.043012.110622	L12040788-05	2041323-08/ 3/29-HG QC	.04/40	1		04/30/12 11:06
21	HY.043012.110827	WG396564-11	CCV		1		04/30/12 11:08
22	HY.043012.111011	WG396564-12	CCB		1		04/30/12 11:10
23	HY.043012.111155	L12040844-01	MW-16I-042412	40/40	1		04/30/12 11:11
24	HY.043012.111350	WG396375-02	Post Digestion Spike		1	L12040844-01	04/30/12 11:13
25	HY.043012.111554	L12040844-02	MW-16I-042412	40/40	1		04/30/12 11:15
26	HY.043012.111745	L12040844-03	MW-16S-042412	40/40	1		04/30/12 11:17
27	HY.043012.111929	L12040844-04	MW-16S-042412	40/40	1		04/30/12 11:19
28	HY.043012.112125	L12040844-05	MW-07-042412	40/40	1		04/30/12 11:21
29	HY.043012.112309	L12040844-06	MW-07-042412	40/40	1		04/30/12 11:23
30	HY.043012.112451	L12040857-02	AV-RW-26-042112	40/40	1		04/30/12 11:24
31	HY.043012.112645	WG396564-13	CCV		1		04/30/12 11:26
32	HY.043012.112827	WG396564-14	CCB		1		04/30/12 11:28
33	HY.043012.113012	L12040770-01	2041325-01	4/40	5		04/30/12 11:30
34	HY.043012.113204	WG396375-03	Serial Dilution		25	L12040770-01	04/30/12 11:32

Page: 1 Approved: April 30, 2012

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 043012B.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 13
Maintenance Log ID: 41533

Calibration Std: STD51354 ICV Std: STD51348 Post Spike: STD51354
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

396375
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.043012.113357	L12040770-02	2041325-02	4/40	5		04/30/12 11:33
36	HY.043012.113539	WG396564-15	Ck4CCV		1		04/30/12 11:35
37	HY.043012.115500	WG396564-16	Ck2ICV		1		04/30/12 11:55
38	HY.043012.115643	WG396564-17	CCV		1		04/30/12 11:56
39	HY.043012.115825	WG396564-18	CCB		1		04/30/12 11:58

Comments

Seq.	Rerun	Dil.	Reason	Analytes
36			No standard solution was in the cup.	
37			Probe was sent to the wrong autosampler location.	

Page: 2 Approved: April 30, 2012

Maren Berry

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 27-APR-2012
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: 396457
Runlog ID: 46443
Analytical Workgroups: 396375

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	0828
Client Forms	
Level X	
Level 3	
Level 4	
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	SLP
Comments	

Primary Reviewer:
27-APR-2012
Pierce Morris

Secondary Reviewer:
27-APR-2012
Sheri L. Babcock

CHECKLIST1 - Modified 03/05/2008
Generated: APR-27-2012 16:19:22

Microbac Laboratories Inc.

Data Checklist

Date: 30-APR-2012
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: 396564
Runlog ID: 46463
Analytical Workgroups: 396375

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	0857,0769,0770,844,0788
Client Forms	X
Level X	
Level 3	
Level 4	085,0770,0788,0844
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:
30-APR-2012
Pierce Morris

Secondary Reviewer:
30-APR-2012
Maren Berry

CHECKLIST1 - Modified 03/05/2008
Generated: APR-30-2012 13:39:25

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A **AAB#:** WG396375

Login Number: L12040844

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-16I-042412	01	04/24/12					04/26/12	1.9	28		04/30/12	5.9	28	
MW-16S-042412	03	04/24/12					04/26/12	1.9	28		04/30/12	5.9	28	
MW-07-042412	05	04/24/12					04/26/12	1.9	28		04/30/12	5.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2395236
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A **AAB#:** WG396375

Login Number: L12040844

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-16I-042412	02	04/24/12					04/26/12	1.9	28		04/30/12	5.9	28	
MW-16S-042412	04	04/24/12					04/26/12	1.9	28		04/30/12	5.9	28	
MW-07-042412	06	04/24/12					04/26/12	1.9	28		04/30/12	5.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2395280
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Blank File ID: HY.042712.150621
Prep Date: 04/26/12 09:43
Analyzed Date: 04/27/12 15:06
Analyst: PDM

Work Group: WG396375
Blank Sample ID: WG396253-02
Instrument ID: HYDRA
Method: 7470A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396253-03	HY.042712.150808	04/27/12 15:08	01
MW-16I-042412	L12040844-01	HY.043012.111155	04/30/12 11:11	01
MW-16I-042412	L12040844-02	HY.043012.111554	04/30/12 11:15	01
MW-16S-042412	L12040844-03	HY.043012.111745	04/30/12 11:17	01
MW-16S-042412	L12040844-04	HY.043012.111929	04/30/12 11:19	01
MW-07-042412	L12040844-05	HY.043012.112125	04/30/12 11:21	01
MW-07-042412	L12040844-06	HY.043012.112309	04/30/12 11:23	01

Report Name: BLANK_SUMMARY
PDF File ID: 2395237
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG396375
Blank File ID: HY.042712.150621
Blank Sample ID: WG396253-02
Prep Date: 04/26/12 09:43
Instrument ID: HYDRA
Analyzed Date: 04/27/12 15:06
Method: 7470A
Analyst: PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396253-03	HY.042712.150808	04/27/12 15:08	01
MW-16I-042412	L12040844-01	HY.043012.111155	04/30/12 11:11	01
MW-16I-042412	L12040844-02	HY.043012.111554	04/30/12 11:15	01
MW-16S-042412	L12040844-03	HY.043012.111745	04/30/12 11:17	01
MW-16S-042412	L12040844-04	HY.043012.111929	04/30/12 11:19	01
MW-07-042412	L12040844-05	HY.043012.112125	04/30/12 11:21	01
MW-07-042412	L12040844-06	HY.043012.112309	04/30/12 11:23	01

Report Name: BLANK_SUMMARY
PDF File ID: 2395281
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/26/12 09:43 Sample ID: WG396253-02
Instrument ID: HYDRA Run Date: 04/27/12 15:06 Prep Method: 7470A
File ID: HY.042712.150621 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG396375 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-27-APR-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: 2395238
30-APR-2012 12:51

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/26/12 09:43 Sample ID: WG396253-02
Instrument ID: HYDRA Run Date: 04/27/12 15:06 Prep Method: 7470A
File ID: HY.042712.150621 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG396375 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-27-APR-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: 2395282
09-MAY-2012 15:52

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 **Run Date:** 04/27/2012 **Sample ID:** WG396253-03
Instrument ID: HYDRA **Run Time:** 15:08 **Prep Method:** 7470A
File ID: HY.042712.150808 **Analyst:** PDM **Method:** 7470A
Workgroup (AAB#): WG396375 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD51346 **Cal ID:** HYDRA - 27-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00457	114	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2395239
Report generated: 04/30/2012 12:51

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 **Run Date:** 04/27/2012 **Sample ID:** WG396253-03
Instrument ID: HYDRA **Run Time:** 15:08 **Prep Method:** 7470A
File ID: HY.042712.150808 **Analyst:** PDM **Method:** 7470A
Workgroup (AAB#): WG396375 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD51346 **Cal ID:** HYDRA - 27-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, Dissolved	0.00400	0.00457	114	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2395283
Report generated: 05/09/2012 15:52

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12040844 Cal ID: HYDRA- Worknum: WG396375

Instrument ID: HYDRA Contract #: Method: 7470A

Parent ID: WG396253-01 File ID: HY.042712.151157 Dil: 1 Matrix: WATER

Sample ID: WG396253-04 MS File ID: HY.042712.151340 Dil: 1 Units: mg/L

Sample ID: WG396253-05 MSD File ID: HY.042712.151522 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	ND	0.0400	0.0450	113	0.0400	0.0435	109	3.39	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 05/26/2011

PDF File ID: 2408230

Report generated 05/09/2012 15:57

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L12040844 Cal ID:HYDRA- Worknum:WG396375

Instrument ID:HYDRA Contract #: Method:7470A

Parent ID:WG396253-01 File ID:HY.042712.151157 Dil:1 Matrix:WATER

Sample ID:WG396253-04 MS File ID:HY.042712.151340 Dil:1 Units:mg/L

Sample ID:WG396253-05 MSD File ID:HY.042712.151522 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Dissolved	ND	0.0400	0.0450	113	0.0400	0.0435	109	3.39	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 05/26/2011

PDF File ID: 2408206

Report generated 05/09/2012 15:52

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12040844 **Worknum:** WG396375
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG396375-02 **File ID:** HY.043012.111350 **Dil:** 1 **Units:** ug/L
Sample ID: L12040844-01 **File ID:** HY.043012.111155 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.17		0.104	F	1	107.6	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: 2395235
Report generated: 04/30/2012 12:51

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12040844 **Worknum:** WG396375
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG396375-02 **File ID:** HY.043012.111350 **Dil:** 1 **Units:** ug/L
Sample ID: L12040844-01 **File ID:** HY.043012.111155 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.17		0.104	F	1	107.6	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: 2395279
Report generated: 05/09/2012 15:52

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844
Analytical Method: 7470A
ICAL Worknum: WG396457

Workgroup (AAB#): WG396375
Instrument ID: HYDRA
Initial Calibration Date: 04/27/2012 14:54

Analyte	WG396457-01		WG396457-02		WG396457-03		WG396457-04		WG396457-05		WG396457-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	5	0.200	536	1.00	2558	2.00	4727	5.00	13121	10.0	25537

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: 2395240
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844
Analytical Method: 7470A
ICAL Worknum: WG396457

Workgroup (AAB#): WG396375
Instrument ID: HYDRA
Initial Calibration Date: 04/27/2012 14:54

Analyte	R	Q
Mercury	0.9995	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 2395240
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844
Analytical Method: 7470A
ICAL Worknum: WG396564

Workgroup (AAB#): WG396375
Instrument ID: HYDRA
Initial Calibration Date: 04/30/2012 09:57

Analyte	WG396564-01		WG396564-02		WG396564-03		WG396564-04		WG396564-05		WG396564-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-89	0.200	518	1.00	2667	2.00	4811	5.00	14026	10.0	27090

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: 2395240
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844
Analytical Method: 7470A
ICAL Worknum: WG396564

Workgroup (AAB#): WG396375
Instrument ID: HYDRA
Initial Calibration Date: 04/30/2012 09:57

Analyte	R	Q
Mercury	0.9995	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 2395240
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844
Analytical Method: 7470A
ICAL Worknum: WG396457

Workgroup (AAB#): WG396375
Instrument ID: HYDRA
Initial Calibration Date: 04/27/2012 14:54

Analyte	WG396457-01		WG396457-02		WG396457-03		WG396457-04		WG396457-05		WG396457-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	5	0.200	536	1.00	2558	2.00	4727	5.00	13121	10.0	25537

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: 2395284
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844
Analytical Method: 7470A
ICAL Worknum: WG396457

Workgroup (AAB#): WG396375
Instrument ID: HYDRA
Initial Calibration Date: 04/27/2012 14:54

Analyte	R	Q
Mercury	0.9995	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 2395284
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844
Analytical Method: 7470A
ICAL Worknum: WG396564

Workgroup (AAB#): WG396375
Instrument ID: HYDRA
Initial Calibration Date: 04/30/2012 09:57

Analyte	WG396564-01		WG396564-02		WG396564-03		WG396564-04		WG396564-05		WG396564-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-89	0.200	518	1.00	2667	2.00	4811	5.00	14026	10.0	27090

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: 2395284
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040844
Analytical Method: 7470A
ICAL Worknum: WG396564

Workgroup (AAB#): WG396375
Instrument ID: HYDRA
Initial Calibration Date: 04/30/2012 09:57

Analyte	R	Q
Mercury	0.9995	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 2395284
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040844 Run Date: 04/27/2012 Sample ID: WG396457-08
Instrument ID: HYDRA Run Time: 15:00 Method: 7470A
File ID: HY.042712.150014 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 27-APR-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2395242
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-08
Instrument ID: HYDRA Run Time: 10:03 Method: 7470A
File ID: HY.043012.100352 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2395242
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040844 Run Date: 04/27/2012 Sample ID: WG396457-08
Instrument ID: HYDRA Run Time: 15:00 Method: 7470A
File ID: HY.042712.150014 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 27-APR-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2395286
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number:	L12040844	**Run Date:**	04/30/2012	**Sample ID:**	WG396564-08
Instrument ID:	HYDRA	**Run Time:**	10:03	**Method:**	7470A
File ID:	HY.043012.100352	**Analyst:**	PDM	**Units:**	ug/L
Workgroup (AAB#):	WG396375	**Cal ID:**	HYDRA - 30-APR-12		
Matrix:	WATER				

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2395286
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/27/2012	Sample ID:	WG396457-10
Instrument ID:	HYDRA	Run Time:	15:04	Method:	7470A
File ID:	HY.042712.150409	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 27-APR-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: 2395244
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/27/2012	Sample ID:	WG396457-12
Instrument ID:	HYDRA	Run Time:	15:22	Method:	7470A
File ID:	HY.042712.152229	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 27-APR-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: 2395244
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/30/2012	Sample ID:	WG396564-10
Instrument ID:	HYDRA	Run Time:	10:07	Method:	7470A
File ID:	HY.043012.100737	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 30-APR-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.109	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: 2395244
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/30/2012	Sample ID:	WG396564-12
Instrument ID:	HYDRA	Run Time:	11:10	Method:	7470A
File ID:	HY.043012.111011	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 30-APR-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: 2395244
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-14

Instrument ID: HYDRA Run Time: 11:28 Method: 7470A

File ID: HY.043012.112827 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-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: 2395244
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/30/2012	Sample ID:	WG396564-18
Instrument ID:	HYDRA	Run Time:	11:58	Method:	7470A
File ID:	HY.043012.115825	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 30-APR-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: 2395244
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/27/2012	Sample ID:	WG396457-10
Instrument ID:	HYDRA	Run Time:	15:04	Method:	7470A
File ID:	HY.042712.150409	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 27-APR-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: 2395288
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/27/2012	Sample ID:	WG396457-12
Instrument ID:	HYDRA	Run Time:	15:22	Method:	7470A
File ID:	HY.042712.152229	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 27-APR-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: 2395288
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/30/2012	Sample ID:	WG396564-10
Instrument ID:	HYDRA	Run Time:	10:07	Method:	7470A
File ID:	HY.043012.100737	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 30-APR-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.109	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: 2395288
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/30/2012	Sample ID:	WG396564-12
Instrument ID:	HYDRA	Run Time:	11:10	Method:	7470A
File ID:	HY.043012.111011	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 30-APR-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: 2395288
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/30/2012	Sample ID:	WG396564-14
Instrument ID:	HYDRA	Run Time:	11:28	Method:	7470A
File ID:	HY.043012.112827	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 30-APR-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: 2395288
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040844	Run Date:	04/30/2012	Sample ID:	WG396564-18
Instrument ID:	HYDRA	Run Time:	11:58	Method:	7470A
File ID:	HY.043012.115825	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396375	Cal ID:	HYDRA - 30-APR-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: 2395288
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040844 Run Date: 04/27/2012 Sample ID: WG396457-07
Instrument ID: HYDRA Run Time: 14:57 Method: 7470A
File ID: HY.042712.145740 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 27-APR-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.14	107	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2395241
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-07
Instrument ID: HYDRA Run Time: 10:02 Method: 7470A
File ID: HY.043012.100210 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.16	108	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2395241
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040844 Run Date: 04/27/2012 Sample ID: WG396457-07
Instrument ID: HYDRA Run Time: 14:57 Method: 7470A
File ID: HY.042712.145740 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 27-APR-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.14	107	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2395285
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-07
Instrument ID: HYDRA Run Time: 10:02 Method: 7470A
File ID: HY.043012.100210 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.16	108	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2395285
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/27/2012 Sample ID: WG396457-09
Instrument ID: HYDRA Run Time: 15:02 Method: 7470A
File ID: HY.042712.150216 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 27-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00215	mg/L	108	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2395243
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/27/2012 Sample ID: WG396457-11

Instrument ID: HYDRA Run Time: 15:20 Method: 7470A

File ID: HY.042712.152047 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 27-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00213	mg/L	107	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395243

Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-09

Instrument ID: HYDRA Run Time: 10:05 Method: 7470A

File ID: HY.043012.100544 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00219	mg/L	110	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395243

Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-11

Instrument ID: HYDRA Run Time: 11:08 Method: 7470A

File ID: HY.043012.110827 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00213	mg/L	107	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395243

Report generated 04/30/2012 12:51

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-13
Instrument ID: HYDRA Run Time: 11:26 Method: 7470A
File ID: HY.043012.112645 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00216	mg/L	108	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2395243
Report generated 04/30/2012 12:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-17

Instrument ID: HYDRA Run Time: 11:56 Method: 7470A

File ID: HY.043012.115643 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00211	mg/L	106	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395243

Report generated 04/30/2012 12:51

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/27/2012 Sample ID: WG396457-09
Instrument ID: HYDRA Run Time: 15:02 Method: 7470A
File ID: HY.042712.150216 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG396375 Cal ID: HYDRA - 27-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00215	mg/L	108	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2395287
Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/27/2012 Sample ID: WG396457-11

Instrument ID: HYDRA Run Time: 15:20 Method: 7470A

File ID: HY.042712.152047 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 27-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00213	mg/L	107	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395287

Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-09

Instrument ID: HYDRA Run Time: 10:05 Method: 7470A

File ID: HY.043012.100544 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00219	mg/L	110	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395287

Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-11

Instrument ID: HYDRA Run Time: 11:08 Method: 7470A

File ID: HY.043012.110827 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00213	mg/L	107	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395287

Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-13

Instrument ID: HYDRA Run Time: 11:26 Method: 7470A

File ID: HY.043012.112645 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00216	mg/L	108	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395287

Report generated 05/09/2012 15:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040844 Run Date: 04/30/2012 Sample ID: WG396564-17

Instrument ID: HYDRA Run Time: 11:56 Method: 7470A

File ID: HY.043012.115643 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396375 Cal ID: HYDRA - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00211	mg/L	106	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2395287

Report generated 05/09/2012 15:52

2.3.3.3 Raw Data

Protocol: standard

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 14:46:11 27 Apr 12 HG

Hg .000 ppb 5

*** Standard: 2 Rep: 1 Seq: 2 14:47:57 27 Apr 12 HG

Hg .200 ppb 536

*** Standard: 3 Rep: 1 Seq: 3 14:49:43 27 Apr 12 HG

Hg 1.00 ppb 2558

*** Standard: 4 Rep: 1 Seq: 4 14:51:25 27 Apr 12 HG

Hg 2.00 ppb 4727

*** Standard: 5 Rep: 1 Seq: 5 14:53:12 27 Apr 12 HG

Hg 5.00 ppb 13121

*** Standard: 6 Rep: 1 Seq: 6 14:54:59 27 Apr 12 HG

Hg 10.0 ppb 25537

*** Check Standard: 2 Ck2ICV Seq: 7 14:57:40 27 Apr 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	2.14	2.00	ppb	.000

*** Check Standard: 3 Ck3ICB Seq: 8 15:00:14 27 Apr 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-3.48	-.007	.200	ppb	.000

*** Check Standard: 4 Ck4CCV Seq: 9 15:02:16 27 Apr 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	2.15	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 10 15:04:09 27 Apr 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-6.40	-.013	.200	ppb	.000

*** Sample ID: WG39625302 042712D Seq: 11 15:06:21 27 Apr 12 HG

PBW 9P

Hg .014 ppb .000 .014

==========

*** Sample ID: WG39625303 042712D Seq: 12 15:08:08 27 Apr 12 HG

LCSW 9P

Hg 4.57 ppb .000 4.57

=

==========

Approved: 04/27/2012 15:45

Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID: WG39618401 042712D    Seq:  13     15:10:11 27 Apr 12   HG
                          TCLP BLANK
Hg    .007    ppb       .000      .007
                                                                              =
================================================================================
*** Sample ID: 1204078101 042712D    Seq:  14     15:11:57 27 Apr 12   HG
                          WG39625301
Hg    .032    ppb       .000      .032
                                                                              =
================================================================================
*** Sample ID: WG39625304 042712D    Seq:  15     15:13:40 27 Apr 12   HG
                          1204078101S
Hg    4.50    ppb       .000      4.50
                                                                              =
================================================================================
*** Sample ID: WG39625305 042712D    Seq:  16     15:15:22 27 Apr 12   HG
                          1204078101SD
Hg    4.35    ppb       .000      4.35
                                                                              =
================================================================================
*** Sample ID: 1204082801 042712D    Seq:  17     15:17:19 27 Apr 12   HG

Hg   -.016    ppb       .000     -.016
                                                                              =
================================================================================
*** Sample ID: WG39637501 042712D    Seq:  18     15:19:04 27 Apr 12   HG
                          1204082801PS.9
Hg    1.03    ppb       .000      1.03
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  19     15:20:47 27 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          106.     2.13    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  20     15:22:29 27 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -15.6    -.031    .200   ppb        .000
                                                                              =
```

Approved: 04/27/2012 15:45

Pierce Morris

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 09:48:18 30 Apr 12 HG

Hg .000 ppb -89

*** Standard: 2 Rep: 1 Seq: 2 09:50:00 30 Apr 12 HG

Hg .200 ppb 518

*** Standard: 3 Rep: 1 Seq: 3 09:51:47 30 Apr 12 HG

Hg 1.00 ppb 2667

*** Standard: 4 Rep: 1 Seq: 4 09:53:29 30 Apr 12 HG

Hg 2.00 ppb 4811

*** Standard: 5 Rep: 1 Seq: 5 09:55:35 30 Apr 12 HG

Hg 5.00 ppb 14026

*** Standard: 6 Rep: 1 Seq: 6 09:57:23 30 Apr 12 HG

Hg 10.0 ppb 27090

*** Check Standard: 2 Ck2ICV Seq: 7 10:02:10 30 Apr 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		108.	2.16	2.00	ppb	.000

*** Check Standard: 3 Ck3ICB Seq: 8 10:03:52 30 Apr 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-2.42	-.005	.200	ppb	.000

*** Check Standard: 4 Ck4CCV Seq: 9 10:05:44 30 Apr 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.	2.19	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 10 10:07:37 30 Apr 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		54.7	.109	.200	ppb	.000

*** Sample ID: 1204076901 043012B Seq: 11 10:49:42 30 Apr 12 HG

Hg .216 ppb .000 .216

Reanalyzed at a greater dilution.

*** Sample ID: 1204077001 043012B Seq: 12 10:51:44 30 Apr 12 HG
DL0.5
Hg 10.5 H ppb .000 10.5

Approved: 04/30/2012 13:17
Pierce Morris

Reanalyzed at a greater dilution.

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: WG39637503 043012B    Seq:  13     10:53:25 30 Apr 12   HG
                          104077001DL.0.1
Hg    1.82    ppb       .000      1.82
                                                                              =
===============================================================================
*** Sample ID: 1204077002 043012B    Seq:  14     10:55:23 30 Apr 12   HG
                          DL0.5
Hg    10.4  H ppb       .000      10.4
                                                                              =
===============================================================================
*** Sample ID: 1204077003 043012B    Seq:  15     10:57:16 30 Apr 12   HG
                          DL0.5
Hg    9.91    ppb       .000      9.91
                                                                              =
===============================================================================
*** Sample ID: 1204077005 043012B    Seq:  16     10:58:59 30 Apr 12   HG

Hg    3.23    ppb       .000      3.23
                                                                              =
===============================================================================
*** Sample ID: 1204078801 043012B    Seq:  17     11:01:02 30 Apr 12   HG

Hg    .049    ppb       .000      .049
                                                                              =
===============================================================================
*** Sample ID: 1204078802 043012B    Seq:  18     11:02:56 30 Apr 12   HG

Hg    .050    ppb       .000      .050
                                                                              =
===============================================================================
*** Sample ID: 1204078803 043012B    Seq:  19     11:04:38 30 Apr 12   HG

Hg    .107    ppb       .000      .107
                                                                              =
===============================================================================
*** Sample ID: 1204078805 043012B    Seq:  20     11:06:22 30 Apr 12   HG

Hg    3.47    ppb       .000      3.47
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  21     11:08:27 30 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          106.     2.13    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  22     11:10:11 30 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -5.16    -.010    .200   ppb        .000
                                                                              =
```

Approved: 04/30/2012 13:17
Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: 1204084401 043012B    Seq:  23     11:11:55 30 Apr 12   HG

Hg    .104    ppb       .000      .104
                                                                              =
===============================================================================
*** Sample ID: WG39637502 043012B    Seq:  24     11:13:50 30 Apr 12   HG
                          1204084401PS.9
Hg    1.17    ppb       .000      1.17
                                                                              =
===============================================================================
*** Sample ID: 1204084402 043012B    Seq:  25     11:15:54 30 Apr 12   HG

Hg   -.016    ppb       .000     -.016
                                                                              =
===============================================================================
*** Sample ID: 1204084403 043012B    Seq:  26     11:17:45 30 Apr 12   HG

Hg    .061    ppb       .000      .061
                                                                              =
===============================================================================
*** Sample ID: 1204084404 043012B    Seq:  27     11:19:29 30 Apr 12   HG

Hg    .036    ppb       .000      .036
                                                                              =
===============================================================================
*** Sample ID: 1204084405 043012B    Seq:  28     11:21:25 30 Apr 12   HG

Hg    .066    ppb       .000      .066
                                                                              =
===============================================================================
*** Sample ID: 1204084406 043012B    Seq:  29     11:23:09 30 Apr 12   HG

Hg    .138    ppb       .000      .138
                                                                              =
===============================================================================
*** Sample ID: 1204085702 043012B    Seq:  30     11:24:51 30 Apr 12   HG

Hg    .014    ppb       .000      .014
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  31     11:26:45 30 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          108.     2.16    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  32     11:28:27 30 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          11.1     .022    .200   ppb        .000
                                                                              =
```

Approved: 04/30/2012 13:17
Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: 1204077001 043012B    Seq:  33     11:30:12 30 Apr 12   HG
                          DL0.2
Hg    3.99    ppb       .000      3.99
                                                                        =
================================================================================
*** Sample ID: WG39637503 043012B    Seq:  34     11:32:04 30 Apr 12   HG
                          104077001DL.0.4
Hg    .749    ppb       .000      .749
                                                                        =
================================================================================
*** Sample ID: 1204077002 043012B    Seq:  35     11:33:57 30 Apr 12   HG
                          DL0.2
Hg    3.93    ppb       .000      3.93
                                                                        =
*** Check Standard: 4  Ck4CCV       Seq:  36     11:35:39 30 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg      L   1.06    -.021    2.00  ppb         .000
                                                                        =
*** Check Standard: 2  Ck2ICV       Seq:  37     11:55:00 30 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg      L   1.20     .024    2.00  ppb         .000
                                                                        =
*** Check Standard: 4  Ck4CCV       Seq:  38     11:56:43 30 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          105.     2.11    2.00  ppb         .000
                                                                        =
*** Check Standard: 5  Ck5CCB       Seq:  39     11:58:25 30 Apr 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          12.2     .024    .200  ppb         .000
                                                                        =
```

Ran out of standard

Sent to the wrong location, no standard in cup.

Approved: 04/30/2012 13:17
Pierce Morris

2.4 General Chemistry Data

2.4.1 Alkalinity Data

2.4.1.1 Summary Data

Login Number: L12040844
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 310.2 (Alkalinity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

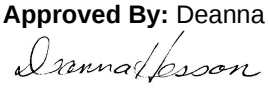
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46058
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16I-042412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 04/26/2012 13:48
Workgroup #: WG396308 **Analyst:** DIH **Run Date:** 04/26/2012 14:10
Collect Date: 04/24/2012 12:35 **Dilution:** 2 **File ID:** SC120426005.045
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		412		40.0	20.0

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16S-042412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 04/26/2012 13:48
Workgroup #: WG396308 **Analyst:** DIH **Run Date:** 04/26/2012 14:11
Collect Date: 04/24/2012 12:37 **Dilution:** 2 **File ID:** SC120426005.046
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		408		40.0	20.0

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-07-042412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 04/26/2012 13:48
Workgroup #: WG396308 **Analyst:** DIH **Run Date:** 04/26/2012 14:11
Collect Date: 04/24/2012 13:15 **Dilution:** 2 **File ID:** SC120426005.047
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		287		40.0	20.0

2.4.1.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 26-APR-2012
Analyst: DIH
Analyst: NA
Method: ALK
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396281 WG396283 WG396308

Calibration/Linearity	4/26/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
27-APR-2012
Dianna Hesson

Secondary Reviewer:
27-APR-2012
Dianna Hesson

CHECKLIST1 - Modified 03/05/2008
Generated: APR-27-2012 16:15:09

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 310.2 **AAB#:** WG396308

Login Number: L12040844

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-16I-042412	01	04/24/12							14		04/26/12	2.1	14	
MW-16S-042412	03	04/24/12							14		04/26/12	2.1	14	
MW-07-042412	05	04/24/12							14		04/26/12	2	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2395303
Report generated 04/27/2012 14:24

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG396308
Blank File ID: SC120426005.040
Blank Sample ID: WG396308-01
Prep Date: 04/26/12 14:07
Instrument ID: SMARTCHEM
Analyzed Date: 04/26/12 14:07
Method: 310.2
Analyst: DIH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396308-02	SC120426005.041	04/26/12 14:08	01
LCS2	WG396308-03	SC120426005.042	04/26/12 14:09	01
MW-16I-042412	L12040844-01	SC120426005.045	04/26/12 14:10	DL01
MW-16S-042412	L12040844-03	SC120426005.046	04/26/12 14:11	DL01
MW-07-042412	L12040844-05	SC120426005.047	04/26/12 14:11	DL01
DUP	WG396308-05	SC120426005.048	04/26/12 14:12	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2395304
Report generated 04/27/2012 14:24

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/26/12 14:07 Sample ID: WG396308-01
Instrument ID: SMARTCHEM Run Date: 04/26/12 14:07 Prep Method: 310.2
File ID: SC120426005.040 Analyst: DIH Method: 310.2
Workgroup (AAB#): WG396308 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-26-APR-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: 2395305
27-APR-2012 14:24

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 **Analyst:** DIH **Prep Method:** 310.2
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 310.2
Workgroup (AAB#): WG396308 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51238

Sample ID: WG396308-02 LCS **File ID:** SC120426005.041 **Run Date:** 04/26/2012 14:08
Sample ID: WG396308-03 LCS2 **File ID:** SC120426005.042 **Run Date:** 04/26/2012 14:09

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Alkalinity, Total (as CaCO3)	200	206	103	200	206	103	0.0330	85 - 115	25	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2395306
Report generated: 04/27/2012 14:24

2.4.1.3 Raw Data

WORKGROUP: WG396281 A

396283 B
396308

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # _____

1) **Workgroup** A
Plan # 20120426004
2) **Workgroup** _____
Plan # _____
3) **Workgroup** B
Plan # 20120426005

Analyte		1	2	3
		A NK		
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 250			
1-2	BLK			
1-3	LCS 200			
1-4	LCSDUP			
1-5	04-001-01			
1-6	04-003-01			
1-7	04-712-02	1/5		color
1-8	03	1/5		↓
1-9	05	1/5		
1-10	06	1/5		
1-11	08	1/5		
1-12	09	1/5		↓
1-13	04-667-04			
1-14	05			
1-15	06			
1-16	07			
1-17	11			
1-18	12			
1-19	04-698-04			
1-20	05			
1-21	07			
1-22	08			
2-1	09			
2-2	10			
2-3	04-722-01	1/10		

Position	Analyte	1	2	3
	Run #2			
2-4 1	ICV			
2-5 2	BLK			
2-6 3	LCS			
2-7 4	LCSDUP			
2-8 5	04-722-05			
2-9 6	07			
2-10 7	04-806-02	1/5		color
2-11 8	03	1/5		↓
2-12 9	05	1/5		
2-13 10	06	1/5		
2-14 11	04-722-09	1/3		
2-15 12	11			
2-16 13	13	1/3		
2-17 14	15	1/2		
2-18 15	17	1/5		
2-19 16	19	1/3		
2-20 17	21	~~1/4~~		
2-21 18	23	1/4		
2-22 19	25	1/3		
2-23 20	27	1/2		
2-24 21	DUP 27	1/2		
2-25 22	MS 29	1/2		
2-26 1	MSd 31	1/2		
3-1 2	33	1/5		
3-2 3	35			
4	37	1/5		
5				

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

2-4 722-03 1/4
-5 DUP ↓ 1/4
6 RR 04-003-01
7 RR BLK
8

DCN#90672

SMARTCHEM RUN LOG

Position	Analyte	1	2	3
3-3	6 BLK			
3-4	7 LCS			
3-5	8 LCSDUP			
3-6	9 04-8440	1/2		
3-7	10 03	1/2		
3-8	11 05	1/2		
3-9	12 DUP 05	1/2		
3-10				
3-11				
3-12				
3-13				
3-14				
3-15				

Position	Analyte	1	2	3
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- ☐ Chloride — EPA 325.2/SM 4500-Cl⁻E
- ☐ Sulfate — EPA 375.4/SM 426C(15th)
- ☑ Alkalinity — EPA 310.2
- ☐ Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- ☐ Ammonia — EPA 350.1/SM 4500-NH3 B
- ☐ TKN — EPA 351.2
- ☐ Phos — EPA 365.4

Analyte	ALK		Reagents
SOP & Revision	IR 3102 RM		Rgt 17304
Curve Stock (SC made)	std50178		Rgt
Curve ID (user made)			
ICV	std51237		
CCV	std51236	LOQ	1/20 (200) = 10
LCS	std51238		2/20 (200) = 20
MS	std50179		
	Dilution 0.2/5 (250) = 100		

Comments: _____

Analyst: Deanna Hoon Date: 4/27/12

DCN#90672

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	0.6509	0.00		1:42:46 PM
DIL-1	RBL	0.0	0.6410	0.00		1:43:03 PM
DIL-1	RBL	0.0	0.6604	0.00		1:43:57 PM
DIL-1	Std-1	0.0	-0.0084	0.00		1:44:15 PM
SR5-1	Std-2	10.0	-0.0210	0.00		1:45:09 PM
SR5-2	Std-3	20.0	-0.0226	0.00		1:45:27 PM
SR5-3	Std-4	50.0	-0.0735	0.00		1:46:21 PM
SR5-4	Std-5	100.0	-0.1494	0.00		1:46:39 PM
SR5-5	Std-6	200.0	-0.3023	0.00		1:47:33 PM
SR5-6	Std-7	250.0	-0.3778	0.00		1:47:51 PM
SR5-7	Std-8	300.0	-0.4412	0.00		1:48:45 PM
1	ICV 250	245.9	-0.3670	0.00		1:49:03 PM
2	WG396283-01 BLK	-8.2	0.0113	0.00	INV,><,LL	1:49:57 PM
3	WG396283-02 LCS	197.6	-0.2965	0.00		1:50:15 PM
4	WG396283-03 LCSDUP	200.9	-0.3013	0.00		1:51:09 PM
5	L12040722-05	266.9	-0.3976	0.00		1:51:27 PM
6	L12040722-07	56.0	-0.0860	0.00		1:52:22 PM
7	L12040806-02 (5)	202.9	-0.3042	0.00		1:52:40 PM
8	L12040806-03 (5)	156.3	-0.2356	0.00		1:53:34 PM
9	L12040806-05 (5)	212.6	-0.3184	0.00		1:53:52 PM
10	L12040806-06 (5)	121.7	-0.1843	0.00		1:54:46 PM
ST-2	CCV (150 mg/L)	143.0	-0.2159	95.33		1:55:04 PM
ST-3	CCB (0 mg/L)	-4.6	0.0059	0.00	INV,><,LL	1:55:58 PM
11	L12040722-09 (3)	171.0	-0.2573	0.00		1:56:16 PM
12	L12040722-11	174.0	-0.2618	0.00		1:57:10 PM
13	L12040722-13 (3)	185.5	-0.2786	0.00		1:57:28 PM
14	L12040722-15 (2)	197.5	-0.2963	0.00		1:58:22 PM
15	L12040722-17 (5)	132.6	-0.2005	0.00		1:58:40 PM
16	L12040722-19 (3)	95.1	-0.1446	0.00		1:59:34 PM
17	L12040722-21	165.5	-0.2492	0.00		1:59:52 PM
18	L12040722-23 (4)	274.4	-0.4084	0.00		2:00:46 PM
19	L12040722-25 (3)	130.0	-0.1966	0.00		2:01:04 PM

Report Date :04/26/2012 **Run Date :4/26/2012** **Operator : WESTCO** **Plan # :20120426005**

Plan Description : ALK-B-DIH/4/26/2012

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	L12040722-27 (2)	129.8	-0.1964	0.00		2:01:58 PM
ST-2	CCV (150 mg/L)	147.0	-0.2219	98.03		2:02:16 PM
ST-3	CCB (0 mg/L)	-3.1	0.0036	0.00	INV,><,LL	2:03:10 PM
21	WG396283-05 (2) DUP	131.5	-0.1989	0.00		2:03:28 PM
22	L12040722-29 (2) MS	149.5	-0.2255	0.00		2:04:22 PM
23	L12040722-31 (2) MSD	143.3	-0.2164	0.00		2:04:40 PM
24	L12040722-33 (5)	234.5	-0.3504	0.00		2:05:34 PM
25	L12040722-35	214.4	-0.3210	0.00		2:05:52 PM
26	L12040722-37 (5)	25.6	-0.0400	0.00		2:06:46 PM
27	ID 27	8.2	-0.0136	0.00		2:07:04 PM
28	WG396308-01 BLK	7.9	-0.0131	0.00		2:07:58 PM
29	WG396308-02 LCS	206.4	-0.3093	0.00		2:08:16 PM
30	WG396308-03 LCSDUP	206.4	-0.3094	0.00		2:09:10 PM
ST-2	CCV (150 mg/L)	157.2	-0.2369	104.78		2:09:28 PM
ST-3	CCB (0 mg/L)	12.5	-0.0202	0.00		2:10:22 PM
31	L12040844-01 (2)	206.2	-0.3091	0.00		2:10:40 PM
32	L12040844-03 (2)	204.1	-0.3060	0.00		2:11:34 PM
33	L12040844-05 (2)	143.7	-0.2170	0.00		2:11:52 PM
34	WG396308-05 (2) DUP	142.6	-0.2153	0.00		2:12:46 PM
35	ID 35	12.2	-0.0197	0.00		2:13:04 PM
36	ID 36	11.4	-0.0184	0.00		2:13:58 PM
ST-2	CCV (150 mg/L)	155.6	-0.2345	103.70		2:14:16 PM
ST-3	CCB (0 mg/L)	13.5	-0.0217	0.00		2:15:10 PM

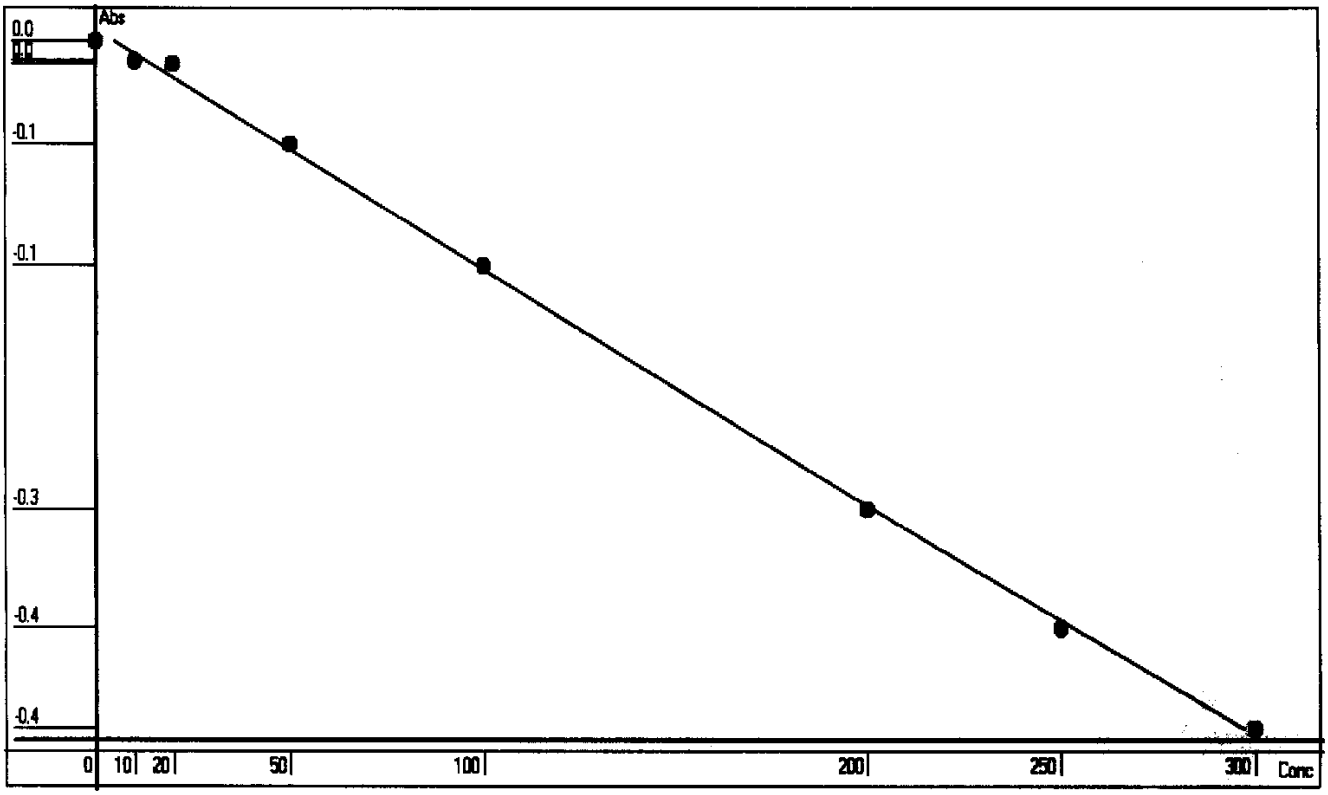
Report Date :04/26/2012 **Run Date :4/26/2012** **Operator : WESTCO** **Plan # :20120426005**

Plan Description : ALK-B-DIH/4/26/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120426005 Description : [ALK-B-DIH/4/26/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0084	0	4.7398	473.98
2	-0.0210	10	13.0310	30.31
3	-0.0226	20	14.0848	-29.58
4	-0.0735	50	47.7192	-4.56
5	-0.1494	100	98.2715	-1.73
6	-0.3023	200	201.5559	0.78
7	-0.3778	250	253.2696	1.31
8	-0.4412	300	297.0597	-0.98

Conc= +41.3647*Abso^2 -656.8182*Abso -0.7804 R^2=0.9990

RBL
0.6656
0

Report Date 4/26/2012 Run Date 4/26/2012

2.4.2 Nitrate Data

2.4.2.1 Summary Data

Login Number: L12040844
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.

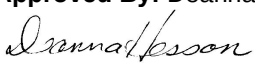
Duplicates: All acceptance criteria were met.

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: 46061
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16I-042412 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 04/26/2012 07:59
Workgroup #: WG396230 **Analyst:** DIH **Run Date:** 04/26/2012 10:18
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** SC12042713524901
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.103		0.0500	0.0250

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16S-042412 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 04/26/2012 07:59
Workgroup #: WG396230 **Analyst:** DIH **Run Date:** 04/26/2012 10:18
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** SC12042713525701
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.116		0.0500	0.0250

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-07-042412 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 04/26/2012 07:59
Workgroup #: WG396230 **Analyst:** DIH **Run Date:** 04/26/2012 10:18
Collect Date: 04/24/2012 13:15 **Dilution:** 4 **File ID:** SC12042713530801
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	2.48		0.200	0.100

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: 26-APR-2012
Analyst: DIH
Analyst: NA
Method: NO3
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396230 WG396234

Calibration/Linearity	4/26/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
27-APR-2012

Secondary Reviewer:
27-APR-2012

CHECKLIST1 - Modified 03/05/2008
Generated: APR-27-2012 16:15:11

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 353.2 AAB#: WG396230

Login Number: L12040844

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-16I-042412	01	04/24/12							2		04/26/12	1.9	2	
MW-16S-042412	03	04/24/12							2		04/26/12	1.9	2	
MW-07-042412	05	04/24/12							2		04/26/12	1.9	2	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2395598
Report generated 04/27/2012 14:55

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG396230
Blank File ID: SC12042713481801
Blank Sample ID: WG396230-01
Prep Date: 04/26/12 10:18
Instrument ID: SMARTCHEM
Analyzed Date: 04/26/12 10:18
Method: 353.2
Analyst: DIH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS2	WG396230-03	SC12042713483101	04/26/12 10:18	
MW-07-042412	L12040844-05	SC12042713530801	04/26/12 10:18	
MW-07-042412	L12040844-05	SC12042713531801	04/26/12 10:18	
MW-16I-042412	L12040844-01	SC12042713525201	04/26/12 10:18	
MW-16I-042412	L12040844-01	SC12042713524901	04/26/12 10:18	
MW-16S-042412	L12040844-03	SC12042713530201	04/26/12 10:18	
DUP	WG396230-05	SC12042713484901	04/26/12 10:18	
MW-16S-042412	L12040844-03	SC12042713525701	04/26/12 10:18	
LCS	WG396230-02	SC12042713482701	04/26/12 10:18	

Report Name: BLANK_SUMMARY
PDF File ID: 2395599
Report generated 04/27/2012 14:55

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/26/12 10:18 Sample ID: WG396230-01
Instrument ID: SMARTCHEM Run Date: 04/26/12 10:18 Prep Method: 353.2
File ID: SC12042713481801 Analyst: DIH Method: 353.2
Workgroup (AAB#): WG396230 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-26-APR-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: 2395600
27-APR-2012 14:55

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 **Analyst:** DIH **Prep Method:** 353.2
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 353.2
Workgroup (AAB#): WG396230 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51196

Sample ID: WG396230-02 LCS **File ID:** SC12042713482701 **Run Date:** 04/26/2012 10:18
Sample ID: WG396230-03 LCS2 **File ID:** SC12042713483101 **Run Date:** 04/26/2012 10:18

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Nitrate (as N)	1.00	1.03	103	1.00	1.06	106	2.88	90 - 110	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2395601
Report generated: 04/27/2012 14:55

2.4.2.3 Raw Data

WORKGROUP: WG396230

SMARTCHEM RUN LOG

396234

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 # 134351

1) **Workgroup** _____
Plan # 20120426003
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	04-695-01			
1-7	02			
1-8	03			
1-9	04			
1-10	04-704-02	1/5		
1-11	04-824-01			
1-12	02			
1-13	03			
1-14	04			
1-15	04-825-01			
1-16	02			
1-17	03			
1-18	04			
1-19	04-841-02	1/5		
1-20	04-844-01			
1-21	03			
1-22	05			
2-1	04-722-01			
2-2	03			
2-3	05			

Position	Analyte	1	2	3
2-4	DUP 695-01			
2-5	MS ↓			
2-6	MS 824-01			
2-7	BLK			
2-8	LCS 1			
2-9	LCSDUP			
2-10	04-722-07			
2-11	09			
2-12	11			
2-13	13			
2-14	15			
2-15	17			auto ½
2-16	19	1/4		
2-17	21			
2-18	23			
2-19	25			
2-20	27			
2-21	DUP 27			
2-22	MS 29			
2-23	MSd 31			
2-24	33			
2-25	35			
2-26	37			
3-1	MS ↓			
3-2 R	04-722-19			

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

DCN#90669

SMARTCHEM RUN LOG

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

Position	Analyte	1	2	3
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- [ ] Chloride — EPA 325.2/SM 4500-Cl⁻ E
- [ ] Sulfate — EPA 375.4/SM 426C(15th)
- [ ] Alkalinity — EPA 310.2
- [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	R3532 R18		R0+17239
Curve Stock (SC made)	std 50996		R0+17254
Curve ID (user made) NO2	std 51363		
ICV	std 50998		
CCV	std 50997		
LCS	std 51196		
MS	std 48249 Dilution 0.1/5(25)=0.5		

Comments: _____

Analyst: Deanna Hasson Date: 4/26/12

DCN#90669

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	0.0234	0.00		10:05:13 AM
DIL-1	RBL	0.000	0.0157	0.00		10:06:25 AM
DIL-1	RBL	0.000	0.0165	0.00		10:07:37 AM
DIL-1	RBL	0.000	0.0179	0.00		10:08:49 AM
DIL-1	Std-1	0.000	0.0006	0.00		10:10:01 AM
SR5-1	Std-2	0.040	0.0134	0.00		10:11:13 AM
SR5-2	Std-3	0.100	0.0324	0.00		10:12:25 AM
SR5-3	Std-4	0.500	0.1605	0.00		10:13:37 AM
SR5-4	Std-5	1.000	0.3430	0.00		10:14:49 AM
ST-1	Std-6	2.000	0.6641	0.00		10:16:01 AM
1	ICV 1.5	1.590	0.5304	0.00		10:17:13 AM
2	WG396230-01 BLK	-0.007	-0.0025	0.00	INV,><,LL	10:18:25 AM
3	WG396230-02 LCS	1.026	0.3423	0.00		10:19:37 AM
4	WG396230-03 LCSDUP	1.056	0.3524	0.00		10:20:49 AM
5	NO2 1	0.984	0.3284	0.00	NO2	10:22:01 AM
6	L12040695-01	0.758	0.2529	0.00	0	10:23:13 AM
7	L12040965-02	1.389	0.4635	0.00	0	10:24:25 AM
8	L12040965-03	0.481	0.1603	0.00	0	10:25:37 AM
9	L12040695-04	2.142X	0.7149	0.00	><,LH	10:26:49 AM
10	L12040704-02 (15)	1.968	0.6568	0.00	0.157	10:28:01 AM
ST-2	CCV (1 mg/L)	0.964	0.3216	96.40		10:29:13 AM
ST-3	CCB (0 mg/L)	-0.003	-0.0013	0.00	INV,><,LL	10:30:25 AM
11	L12040824-01	0.118	0.0393	0.00	0	10:31:37 AM
12	L12040824-02	0.001	0.0000	0.00	>< 0	10:32:49 AM
13	L12040824-03	0.009	0.0027	0.00	0	10:34:01 AM
14	L12040824-04	0.022	0.0070	0.00	0	10:35:13 AM
15	L12040825-01	0.346	0.1154	0.00	0	10:36:25 AM
16	L12040825-02	0.323	0.1078	0.00		10:37:37 AM
17	L12040825-03	0.584	0.1946	0.00		10:38:50 AM
18	L12040825-04	0.783	0.2613	0.00		10:40:01 AM
19	L12040841-02 (15)	1.242	0.4144	0.00	0.214	10:41:14 AM
20	L12040844-01	0.120	0.0398	0.00	0.017	10:42:26 AM

Report Date :04/26/2012 **Run Date :4/26/2012** **Operator : WESTCO** **Plan # :20120426003**

Plan Description : NO3-A-DIH/4/26/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
ST-2	CCV (1 mg/L)	0.932	0.3109	93.19		10:43:38 AM
ST-3	CCB (0 mg/L)	-0.003	-0.0012	0.00	INV,><,LL	10:44:50 AM
21	L12040844-03	0.116	0.0384	0.00		10:46:02 AM
22	L12040844-05	2.274 X	0.7588	0.00	><,LH	10:47:14 AM
23	L12040722-01	7.595 X	2.5350	0.00	EPL,><,LH	10:48:26 AM
24	L12040722-03	0.090	0.0299	0.00		10:49:38 AM
25	L12040722-05	0.386	0.1287	0.00		10:50:50 AM
26	DUP 695-01	0.758	0.2527	0.00		10:52:02 AM
27	MS 695-01	1.244	0.4151	0.00		10:53:14 AM
28	MS 824-01	0.638	0.2128	0.00		10:54:26 AM
29	WG396234-01 BLK	-0.012	-0.0040	0.00	INV,><,LL	10:55:38 AM
30	WG396234-02 LCS	1.019	0.3401	0.00		10:56:50 AM
ST-2	CCV (1 mg/L)	0.952	0.3176	95.20		10:58:02 AM
ST-3	CCB (0 mg/L)	0.002	0.0004	0.00	><	10:59:14 AM
31	WG396234-03 LCSDUP	1.024	0.3417	0.00		11:00:26 AM
32	L12040722-07	0.820	0.2734	0.00		11:01:38 AM
33	L12040722-09	0.020	0.0064	0.00		11:02:50 AM
34	L12040722-11	0.032	0.0104	0.00		11:04:02 AM
35	L12040722-13	0.139	0.0463	0.00		11:05:14 AM
36	L12040722-15	0.176	0.0587	0.00		11:06:26 AM
37	L12040722-17	11.319 X	3.7780	0.00	EPL,><,LH	11:07:38 AM
38	L12040722-19 (4)	0.038 X	0.0125	0.00		11:08:50 AM
39	L12040722-21	0.042	0.0140	0.00		11:10:02 AM
40	L12040722-23	0.584	0.1948	0.00		11:11:14 AM
ST-2	CCV (1 mg/L)	0.957	0.3193	95.71		11:12:26 AM
ST-3	CCB (0 mg/L)	-0.009	-0.0032	0.00	INV,><,LL	11:13:38 AM
41	L12040722-25	0.134	0.0446	0.00		11:14:50 AM
42	L12040722-27	0.363	0.1209	0.00		11:16:02 AM
43	DUP 722-27	0.367	0.1223	0.00		11:17:14 AM
44	L12040722-29 MS	0.760	0.2535	0.00		11:18:26 AM
45	L12040722-31 MSD	0.836	0.2789	0.00		11:19:38 AM
46	L12040722-33	1.062	0.3542	0.00		11:20:50 AM

Report Date :04/26/2012 **Run Date :4/26/2012** **Operator : WESTCO** **Plan # :20120426003**

Plan Description : NO3-A-DIH/4/26/2012

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
47	L12040722-35	0.031	0.0102	0.00			11:22:03 AM
48	L12040722-37	1.151	0.3839	0.00			11:23:14 AM
49	MS 722-37	1.601	0.5341	0.00			11:24:27 AM
50	ID 50 04-722-19	0.140	0.0464	0.00			11:25:39 AM
ST-2	CCV (1 mg/L)	0.934	0.3117	93.43			11:26:51 AM
ST-3	CCB (0 mg/L)	0.006	0.0017	0.00			11:28:03 AM
51	ID 51	0.951	0.3171	0.00			11:29:15 AM
52	ID 52	-0.005	-0.0019	0.00	INV,><,LL		11:30:27 AM
53	ID 53	-0.005	-0.0017	0.00	INV,><,LL		11:31:39 AM
ST-2	CCV (1 mg/L)	0.960	0.3204	96.04			11:32:51 AM
ST-3	CCB (0 mg/L)	0.004	0.0012	0.00			11:34:03 AM
9-[1/4]	L12040695-04	2.195	0.1830	0.00	LH	O	11:43:13 AM
22-[1/4]	L12040844-05	2.478	0.2066	0.00	LH	O	11:45:19 AM
23-[1/4]	L12040722-01	7.831	0.6533	0.00	LH		11:47:25 AM
37-[1/4]	L12040722-17 (2)	5.890	0.4913	0.00	LH		11:49:31 AM
ST-2	CCV (1 mg/L)	0.938	0.3128	93.76			11:50:25 AM
ST-3	CCB (0 mg/L)	-0.007	-0.0026	0.00	INV,><,LL		11:51:37 AM

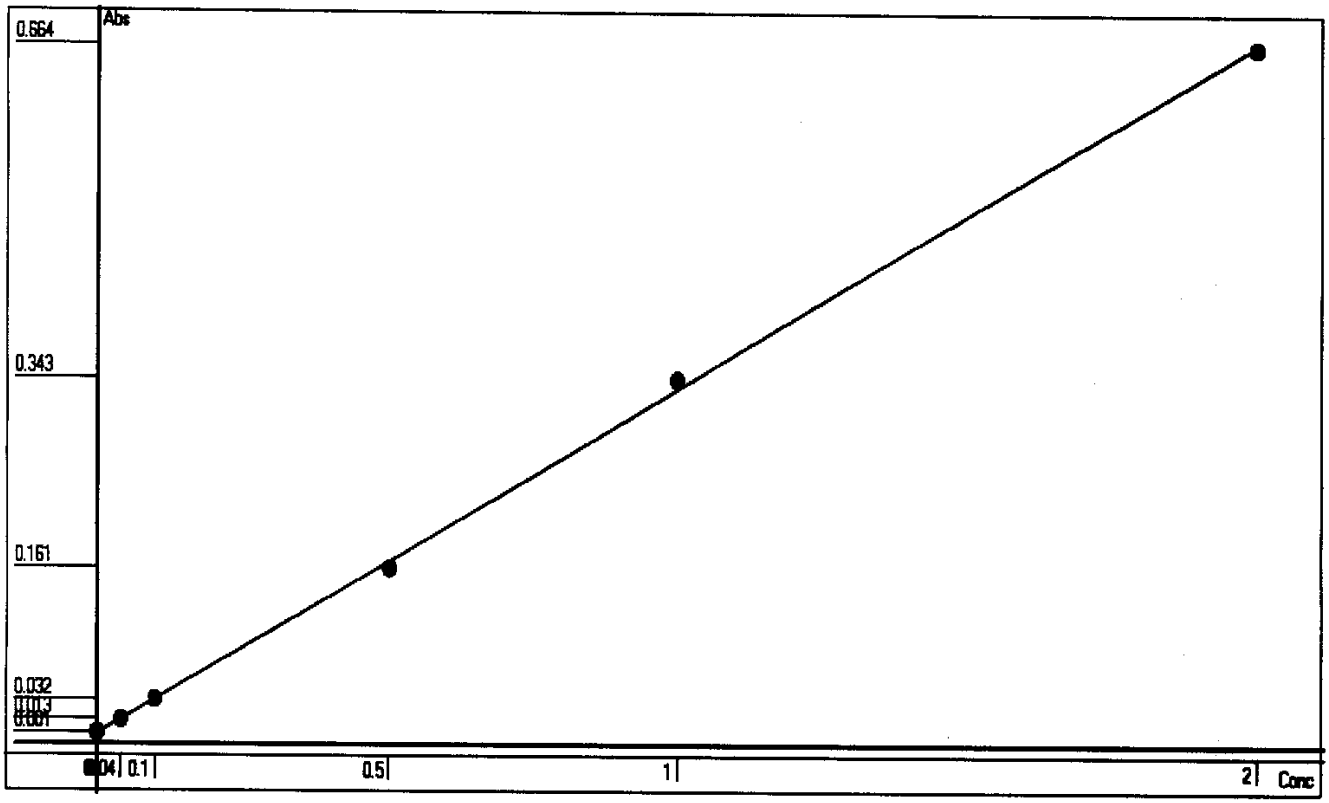
Report Date :04/26/2012 **Run Date :4/26/2012** **Operator : WESTCO** **Plan # :20120426003**

Plan Description : NO3-A-DIH/4/26/2012

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120426003 Description : [NO3-A-DIH/4/26/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0006	0	0.0023	0.23
2	0.0134	0.04	0.0406	1.50
3	0.0324	0.1	0.0976	-2.40
4	0.1605	0.5	0.4814	-3.72
5	0.3430	1	1.0281	2.81
6	0.6641	2	1.9901	-0.50

Conc= +2.996*Abso +0.0005 **R^2=0.9996**

RBL
0.0172
0

Report Date 4/26/2012 Run Date 4/26/2012

2.4.3 Phosphorus Data

2.4.3.1 Summary Data

Login Number: L12040844
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 365.4 (Phosphorus)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

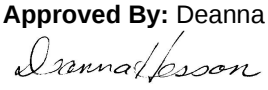
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46059
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16I-042412 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/26/2012 08:43
Workgroup #: WG396212 **Analyst:** DIH **Run Date:** 04/26/2012 08:48
Collect Date: 04/24/2012 12:35 **Dilution:** 1 **File ID:** SC120426002.014
Sample Tag: 01 **Units:** mg/L

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

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16S-042412 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/26/2012 08:43
Workgroup #: WG396212 **Analyst:** DIH **Run Date:** 04/26/2012 08:48
Collect Date: 04/24/2012 12:37 **Dilution:** 1 **File ID:** SC120426002.015
Sample Tag: 01 **Units:** mg/L

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

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-07-042412 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/26/2012 08:43
Workgroup #: WG396212 **Analyst:** DIH **Run Date:** 04/26/2012 08:49
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** SC120426002.016
Sample Tag: 01 **Units:** mg/L

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

U	Not detected at or above adjusted sample detection limit.

2.4.3.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 26-APR-2012
Analyst: DIH
Analyst: NA
Method: PHOS
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396212

Calibration/Linearity	4/26/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
30-APR-2012
Dianna Ibsson

Secondary Reviewer:
30-APR-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: APR-30-2012 08:52:38

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 365.4 **AAB#:** WG396212

Login Number: L12040844

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-16I-042412	01	04/24/12							28		04/26/12	1.8	28	
MW-16S-042412	03	04/24/12							28		04/26/12	1.8	28	
MW-07-042412	05	04/24/12							28		04/26/12	1.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2395925
Report generated 04/27/2012 17:04

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG396212
Blank File ID: SC120426002.008
Blank Sample ID: WG396212-01
Prep Date: 04/26/12 08:44
Instrument ID: SMARTCHEM
Analyzed Date: 04/26/12 08:44
Method: 365.4
Analyst: DIH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396212-02	SC120426002.009	04/26/12 08:45	01
MW-16I-042412	L12040844-01	SC120426002.014	04/26/12 08:48	01
MW-16S-042412	L12040844-03	SC120426002.015	04/26/12 08:48	01
MW-07-042412	L12040844-05	SC120426002.016	04/26/12 08:49	01
DUP	WG396212-04	SC120426002.019	04/26/12 08:51	01

Report Name: BLANK_SUMMARY
PDF File ID: 2395926
Report generated 04/27/2012 17:04

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 04/26/12 08:44 Sample ID: WG396212-01
Instrument ID: SMARTCHEM Run Date: 04/26/12 08:44 Prep Method: 365.4
File ID: SC120426002.008 Analyst: DIH Method: 365.4
Workgroup (AAB#): WG396212 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-26-APR-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: 2395927
27-APR-2012 17:04

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 Run Date: 04/26/2012 Sample ID: WG396212-02
Instrument ID: SMARTCHEM Run Time: 08:45 Prep Method: 365.4
File ID: SC120426002.009 Analyst: DIH Method: 365.4
Workgroup (AAB#): WG396212 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51133 Cal ID: SMARTC-26-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Phosphorus, Total	1.00	0.991	99.1	70 - 130	

LCS - Modified 03/06/2008
PDF File ID: 2395928
Report generated: 04/27/2012 17:04

2.4.3.3 Raw Data

WORKGROUP: WG396212

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 # 20120426002
2) **Workgroup** _____
Plan # _____
3) **Workgroup** _____
Plan # _____

Analyte		1	2	3
		PNO3		
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 1.5			
1-2	BLK			
1-3	LCS 1			
1-4	04-6594			
1-5	02			
1-6	03			
1-7	04-8350 3	1/250		
1-8	04-8440 1			
1-9	0302			
1-10	0503			
1-11	DUP 6594			
1-12	MS ↓			
1-13				
1-14				
1-15				
1-16				
1-17				
1-18				
1-19				
1-20				
1-21				
1-22				
2-1				
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#90668



SMARTCHEM RUN LOG

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

Position	Analyte	1	2	3
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- [ ] Chloride — EPA 325.2/SM 4500-Cl⁻ E
- [ ] Sulfate — EPA 375.4/SM 426C(15th)
- [ ] Alkalinity — EPA 310.2
- [ ] Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- [ ] Ammonia — EPA 350.1/SM 4500-NH3 B
- [ ] TKN — EPA 351.2
- [x] Phos — EPA 365.4

Analyte	PHOS		Reagents
SOP & Revision	R 3654 R	16	R6F17302
Curve Stock (SC made)			R6F17276
Curve ID (user made)			R6F16897
ICV			
CCV			
LCS			
MS	Dilution		

Comments: Del digest lvg

Analyst: [signature] Date: 4/26/12

DCN#90668

TKN/Phosphorus Digestion Log

TKN WG: 396208
TKN Std: 509169
TKN CCV: ↓ (½)(5)=2.5
TKN ICV: Std 51194
TKN LCS: Std 51195

Phos WG: 396212
Phos Std: 509169
Phos CCV: ↓ ½(2)=1
Phos ICV: Std 51132
Phos LCS: Std 51132 K3 dm 4/26/12

MS/MSD: Std 48655
Daily Dilution: 1/25(25)=1

Block Digester Temperature: 380 °C
Digest Reagent: ROT 17224

	Sample	Volume	TKN Dilution	Phos Dilution		Sample	Volume	TKN Dilution	Phos Dilution
1	Std		5	2	26	B 04-844-03			X
2	CCV		2.5	1	27	C -05			X
3	ICV T		2		28				
4	ICV P			1.5	29				
5	BLK		✓	✓	30				
6	LCS T		1		31				
7	LCS P			1	32				
8	04-786-01		X		33				
9	02		X		34				
10	04-712-02		1/50		35				
11	05		1/50		36				
12	08		1/50		37				
13	04-659-01		X	X	38				
14	02		X	X	39				
15	03		X	X	40				
16	04-806-02		1/50		41				
17	05		1/50		42				
18	04-790-01		X		43				
19	04-791-01		X		44				
20	DUP 659-01		X	✓	45				
21	MS ↓		X	✓	46				
22	MS 791-01		X		47				
23	Alp 04-835-03			1/250 X	48				
24	MKBLDI 04-832-01		X	X	49				
25	A 04-844-01			X	50				

Analyst: Tammy Morris Date: 4/25/12

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	0.0247	0.00		8:38:52 AM
DIL-1	RBL	0.000	0.0222	0.00		8:39:09 AM
DIL-1	RBL	0.000	0.0257	0.00		8:40:04 AM
SR5-1	Std-1	0.010	0.0024	0.00		8:40:21 AM
SR5-2	Std-2	0.200	0.0272	0.00		8:41:16 AM
SR5-3	Std-3	0.500	0.0701	0.00		8:41:33 AM
SR5-4	Std-4	1.000	0.1393	0.00		8:42:28 AM
SR5-5	Std-5	1.500	0.1998	0.00		8:42:45 AM
ST-1	Std-6	2.000	0.2642	0.00		8:43:40 AM
1	ICV 1.5	1.409	0.1884	0.00		8:43:57 AM
2	WG396212-01 BLK	-0.095	-0.0099	0.00	INV,><,LL	8:44:52 AM
3	WG396212-02 LCS	0.991	0.1333	0.00		8:45:09 AM
4	L12040659-01	0.042	0.0062	0.00		8:46:04 AM
5	L12040659-02	0.110	0.0172	0.00		8:46:21 AM
6	L12040659-03	0.087	0.0141	0.00		8:47:16 AM
7	L12040835-03 (250)	1.518	0.2028	0.00		8:47:34 AM
8	L12040844-01	-0.056	-0.0047	0.00	INV,><,LL	8:48:28 AM
9	L12040844-03	-0.049	-0.0038	0.00	INV,><,LL	8:48:45 AM
10	L12040855-05	0.005	0.0033	0.00		8:49:40 AM
ST-2	CCV (1 mg/L)	1.114	0.1496	111.43		8:49:58 AM
ST-3	CCB (0 mg/L)	-0.081	-0.0080	0.00	INV,><,LL	8:50:52 AM
11	WG396212-04 DUP	0.104	0.0163	0.00		8:51:10 AM
12	WG396212-05 MS	1.054	0.1416	0.00	EPL	8:52:04 AM
13	ID 13	-0.099	-0.0104	0.00	INV,><,LL	8:52:22 AM
14	ID 14	1.067	0.1434	0.00		8:53:16 AM
ST-2	CCV (1 mg/L)	1.145	0.1536	114.46		8:53:34 AM
ST-3	CCB (0 mg/L)	-0.051	-0.0041	0.00	INV,><,LL	8:54:28 AM

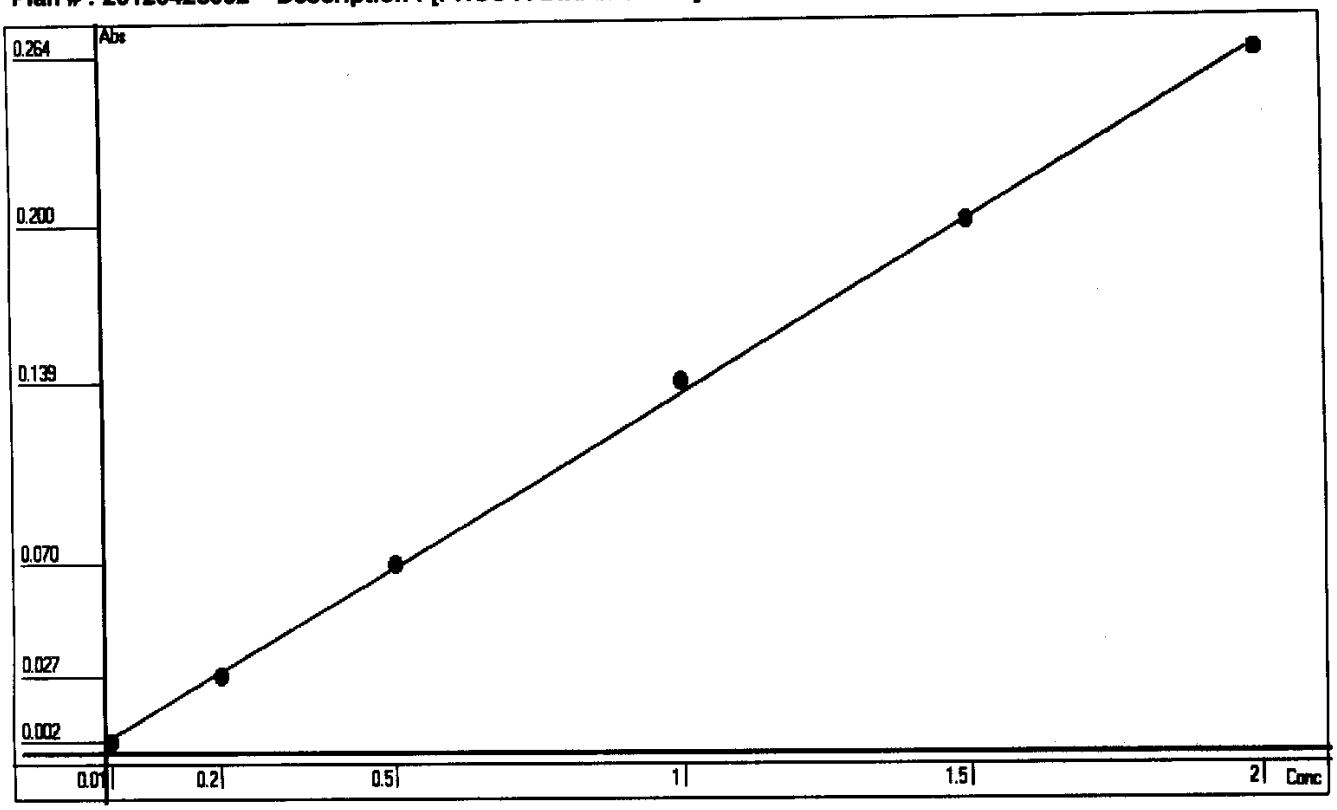
Report Date :04/26/2012 **Run Date :4/26/2012** **Operator : WESTCO** **Plan # :20120426002**

Plan Description : PHOS-A-DIH/4/26/2012

Calibrant Report - WTPH -

Calib Lot #:010104 Exp Date:6/18/2020 User:MICROBAC

Plan # : 20120426002 Description : [PHOS-A-DIH/4/26/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0024	0.01	-0.0019	-119.00
2	0.0272	0.2	0.1862	-6.90
3	0.0701	0.5	0.5115	2.30
4	0.1393	1	1.0362	3.62
5	0.1998	1.5	1.4950	-0.33
6	0.2642	2	1.9833	-0.84

Conc= +7.5829*Abso -0.0201 R^2=0.9993

RBL
0.0252
0

Report Date 4/26/2012 Run Date 4/26/2012

2.4.4 Sulfate Data

2.4.4.1 Summary Data

Login Number: L12040844
Department: Conventionals
Analyst: Deanna Hesson

METHOD

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

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

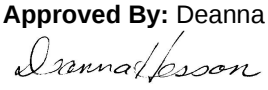
Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46060
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16I-042412 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/03/2012 07:30
Workgroup #: WG396805 **Analyst:** DIH **Run Date:** 05/03/2012 07:34
Collect Date: 04/24/2012 12:35 **Dilution:** 4 **File ID:** SC120503001.016
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	78.5		20.0	10.0

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-16S-042412 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/03/2012 07:30
Workgroup #: WG396805 **Analyst:** DIH **Run Date:** 05/03/2012 07:35
Collect Date: 04/24/2012 12:37 **Dilution:** 2 **File ID:** SC120503001.017
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	56.5		10.0	5.00

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-07-042412 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/03/2012 07:30
Workgroup #: WG396805 **Analyst:** DIH **Run Date:** 05/03/2012 07:36
Collect Date: 04/24/2012 13:15 **Dilution:** 2 **File ID:** SC120503001.019
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	53.9		10.0	5.00

2.4.4.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 03-MAY-2012
Analyst: DIH
Analyst: NA
Method: SO4
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396835 WG396805

Calibration/Linearity	5/3/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
03-MAY-2012

Secondary Reviewer:
05-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-05-2012 11:57:07

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 375.4 **AAB#:** WG396805

Login Number: L12040844

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-16I-042412	01	04/24/12							28		05/03/12	8.8	28	
MW-16S-042412	03	04/24/12							28		05/03/12	8.8	28	
MW-07-042412	05	04/24/12							28		05/03/12	8.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2401455
Report generated 05/03/2012 15:22

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Blank File ID: SC120503001.010
Prep Date: 05/03/12 07:31
Analyzed Date: 05/03/12 07:31
Analyst: DIH

Work Group: WG396805
Blank Sample ID: WG396805-01
Instrument ID: SMARTCHEM
Method: 375.4

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396805-02	SC120503001.011	05/03/12 07:31	01
LCS2	WG396805-03	SC120503001.012	05/03/12 07:32	01
MW-16I-042412	L12040844-01	SC120503001.016	05/03/12 07:34	DL01
MW-16S-042412	L12040844-03	SC120503001.017	05/03/12 07:35	DL01
MW-07-042412	L12040844-05	SC120503001.019	05/03/12 07:36	DL01
DUP	WG396805-05	SC120503001.031	05/03/12 07:43	01

Report Name: BLANK_SUMMARY
PDF File ID: 2401456
Report generated 05/03/2012 15:22

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040844 Prep Date: 05/03/12 07:31 Sample ID: WG396805-01
Instrument ID: SMARTCHEM Run Date: 05/03/12 07:31 Prep Method: 375.4
File ID: SC120503001.010 Analyst: DIH Method: 375.4
Workgroup (AAB#): WG396805 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-03-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Sulfate	2.50	5.00	2.50	1	U

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

Report Name:BLANK
PDF ID: 2401457
03-MAY-2012 15:22

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 **Analyst:** DIH **Prep Method:** 375.4
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 375.4
Workgroup (AAB#): WG396805 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51193

Sample ID: WG396805-02 LCS **File ID:** SC120503001.011 **Run Date:** 05/03/2012 07:31
Sample ID: WG396805-03 LCS2 **File ID:** SC120503001.012 **Run Date:** 05/03/2012 07:32

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Sulfate	20.0	19.6	98.1	20.0	19.7	98.7	0.673	85 - 115	10	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2401458
Report generated: 05/03/2012 15:22

2.4.4.3 Raw Data

WORKGROUP: WG396805

SMARTCHEM RUN LOG

396835

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

Syringe filter lot # _____

- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

1) **Workgroup** _____ **Plan #** 20120503a1
2) **Workgroup** _____ **Plan #** _____
3) **Workgroup** _____ **Plan #** _____

	Analyte	1	2	3
		504		
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 30			
1-2	BIK			
1-3	LCS 20			
1-4	LCSDUP			
1-5	04-835-02	1/500	color	
1-6	06	1/100	↓	
1-7	04-844-01	1/4		
1-8	03	~~1/5~~	1/2	
1-9	05	~~1/4~~	1/2	
1-10	05-044-02	1/500	color	
1-11	06	1/100	↓	
1-12	04-898-01	1/100	color	
1-13	03	~~1/100~~	1/20	
1-14	05	1/100		
1-15	08	1/10		
1-16	10	1/50	color	
1-17	12	1/10		
1-18	04-928-01	~~1/2~~	-	
1-19	DUP 01	~~1/2~~	-	
1-20	MS 08	~~1/2~~	-	
1-21	MSD 10	~~1/2~~	-	
1-22	03	1/3		
2-1	04-963-01		1/2	
2-2	03	1/2		
2-3	07	1/3		

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

Position	Analyte	1	2	3
2-4	05-011-01	~~1/20~~ ~~1/2~~		
2-5	03	~~1/10~~ ~~1/2~~		
2-6	BIK			
2-7	LCS			?
2-8	LCSDUP			?
2-9	05-050-01	~~1/2~~	1/4	
2-10	03	1/5		
2-11	05	~~1/10~~		
2-12	07	~~1/5~~	1/4	
2-13	DUP	~~1/5~~	1/4	
2-14	MS ↓	~~1/5~~	1/4	
2-15	RR LCS			
2-16	RR BIK			
2-17	RR LCS			
2-18	RR LCS			
2-19				
2-20				
2-21				
2-22				
2-23				
2-24				
2-25				
2-26				
3-1				
3-2				

~~* poured out NO3 LCS~~ for 2nd wg + renuna

DCN#90728

WORKGROUP: WG396805

SMARTCHEM RUN LOG

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

Position	Analyte	1	2	3
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- ☐ Chloride — EPA 325.2/SM 4500-Cl⁻ E
- ☑ Sulfate — EPA 375.4/SM 426C(15th)
- ☐ Alkalinity — EPA 310.2
- ☐ Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- ☐ Ammonia — EPA 350.1/SM 4500-NH3 B
- ☐ TKN — EPA 351.2
- ☐ Phos — EPA 365.4

Analyte	504		Reagents
SOP & Revision	R3754 16		R6t17164
Curve Stock (SC made)	std50590		R6t16922
Curve ID (user made)			
ICV	std 51192		
CCV	std 51191		
LCS	std 51193		
MS	std 49132 Dilution 0.1/10 (100) = 10		

Comments: _____

Analyst: Deanne Hesson Date: 5/3/12

DCN#90728

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WSO4 - EPA 375.4/SM 426 C (15TH)

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.00	0.0032	0.00		7:24:04 AM
DIL-1	RBL	0.00	0.0017	0.00		7:24:22 AM
DIL-1	RBL	0.00	0.0016	0.00		7:25:16 AM
DIL-1	Std-1	0.00	0.0003	0.00		7:25:34 AM
SR5-1	Std-2	5.00	0.0224	0.00		7:26:28 AM
SR5-2	Std-3	10.00	0.0542	0.00		7:26:47 AM
SR5-3	Std-4	15.00	0.0853	0.00		7:27:40 AM
SR5-4	Std-5	20.00	0.1068	0.00		7:27:58 AM
SR5-5	Std-6	25.00	0.1292	0.00		7:28:52 AM
SR5-6	Std-7	30.00	0.1508	0.00		7:29:10 AM
SR5-7	Std-8	35.00	0.1649	0.00		7:30:04 AM
1	ICV 30	29.90	0.1481	0.00		7:30:22 AM
2	WG396805-01 BLK	0.59	-0.0013	0.00	INV,><	7:31:16 AM
3	WG396805-02 LCS	19.61	0.1047	0.00		7:31:34 AM
4	WG396805-03 LCSDUP	19.74	0.1053	0.00		7:32:28 AM
R-3	CCV (30 mg/L)	30.33	0.1498	101.11		7:32:46 AM
5	L12040835-02 (500)	23.42	0.1215	0.00		7:33:40 AM
6	L12040835-06 (100)	4.30	0.0238	0.00		7:33:58 AM
7	L12040844-01 (4)	19.63	0.1048	0.00		7:34:52 AM
8	L12040844-03 (2)	28.24	0.1415	0.00		7:35:10 AM
R-3	CCV (30 mg/L)	30.16	0.1491	100.52		7:36:04 AM
9	L12040844-05 (2)	26.96	0.1363	0.00		7:36:22 AM
10	L12050044-02 (500)	22.98	0.1196	0.00		7:37:16 AM
11	L12050044-06 (100)	3.52	0.0188	0.00		7:37:34 AM
12	L12040898-01 (100)	7.36	0.0423	0.00		7:38:28 AM
R-3	CCV (30 mg/L)	29.04	0.1447	96.81		7:38:46 AM
13	L12040898-03 (20)	12.97	0.0728	0.00		7:39:40 AM
14	L12040898-05 (100)	14.38	0.0799	0.00		7:39:58 AM
15	L12040898-08 (10)	25.84	0.1317	0.00		7:40:53 AM
16	L12040898-10 (50)	10.14	0.0579	0.00		7:41:11 AM
R-3	CCV (30 mg/L)	29.40	0.1461	97.98		7:42:05 AM
17	L12040898-12 (10)	28.19	0.1413	0.00		7:42:23 AM

Report Date :05/03/2012 **Run Date :5/3/2012** **Operator : WESTCO** **Plan # :20120503001**

Plan Description : SO4-A-DIH/5/3/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WSO4 - EPA 375.4/SM 426 C (15TH)

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
18	L12040928-01	9.45	0.0541	0.00		7:43:17 AM
19	WG396805-05 DUP	8.96	0.0514	0.00		7:43:35 AM
20	L12040928-08 MS	22.06	0.1156	0.00		7:44:29 AM
R-3	CCV (30 mg/L)	29.40	0.1461	97.98		7:44:47 AM
21	L12040928-10 MSD	21.70	0.1140	0.00		7:45:41 AM
22	L12040928-03 (3)	33.26	0.1611	0.00		7:45:59 AM
23	L12040963-01 (2)	23.31	0.1210	0.00		7:46:53 AM
24	L12040963-03 (2)	34.94	0.1674	0.00	><	7:47:11 AM
R-3	CCV (30 mg/L)	28.94	0.1443	96.47		7:48:10 AM
25	L12040963-07 (3)	21.54	0.1133	0.00		7:48:26 AM
26	L12050011-01 (20)	22.96	0.1195	0.00		7:49:20 AM
27	L12050011-03 (10)	45.76X	0.2056	0.00	><,LH	7:49:38 AM
28	WG396835-01 BLK	0.53	-0.0017	0.00	INV,><	7:50:32 AM
R-3	CCV (30 mg/L)	31.02	0.1525	103.42		7:50:50 AM
29	WG396835-02 LCS	19.77	0.1054	0.00		7:51:44 AM
30	WG396835-03 LCSDUP	19.20	0.1028	0.00		7:52:02 AM
31	L12050050-01 (4)	20.88	0.1104	0.00		7:52:56 AM
32	L12050050-03 (5)	29.75	0.1475	0.00		7:53:14 AM
R-3	CCV (30 mg/L)	29.62	0.1470	98.74		7:54:08 AM
33	L12050050-05 (10)	26.47	0.1343	0.00		7:54:26 AM
34	L12050050-07 (4)	18.15	0.0980	0.00		7:55:20 AM
35	WG396835-05 (4) DUP	18.20	0.0982	0.00		7:55:38 AM
36	WG396835-06 (4) MS	14.69	0.0814	0.00		7:56:32 AM
R-3	CCV (30 mg/L)	28.69	0.1433	95.64		7:56:50 AM
37	ID 37	0.43X	-0.0024	0.00	INV,><	7:57:44 AM
38	ID 38	0.57X	-0.0014	0.00	INV,><	7:58:02 AM
39	ID 39	0.59X	-0.0013	0.00	INV,><	7:58:56 AM
40	ID 40	0.54X	-0.0016	0.00	INV,><	7:59:14 AM
R-3	CCV (30 mg/L)	29.80	0.1477	99.33		8:00:08 AM
27-[1/2]	L12050011-03 (10)	42.80	0.1127	0.00	LH	8:08:06 AM
R-3	CCV (30 mg/L)	30.00	0.1485	100.01		8:08:06 AM

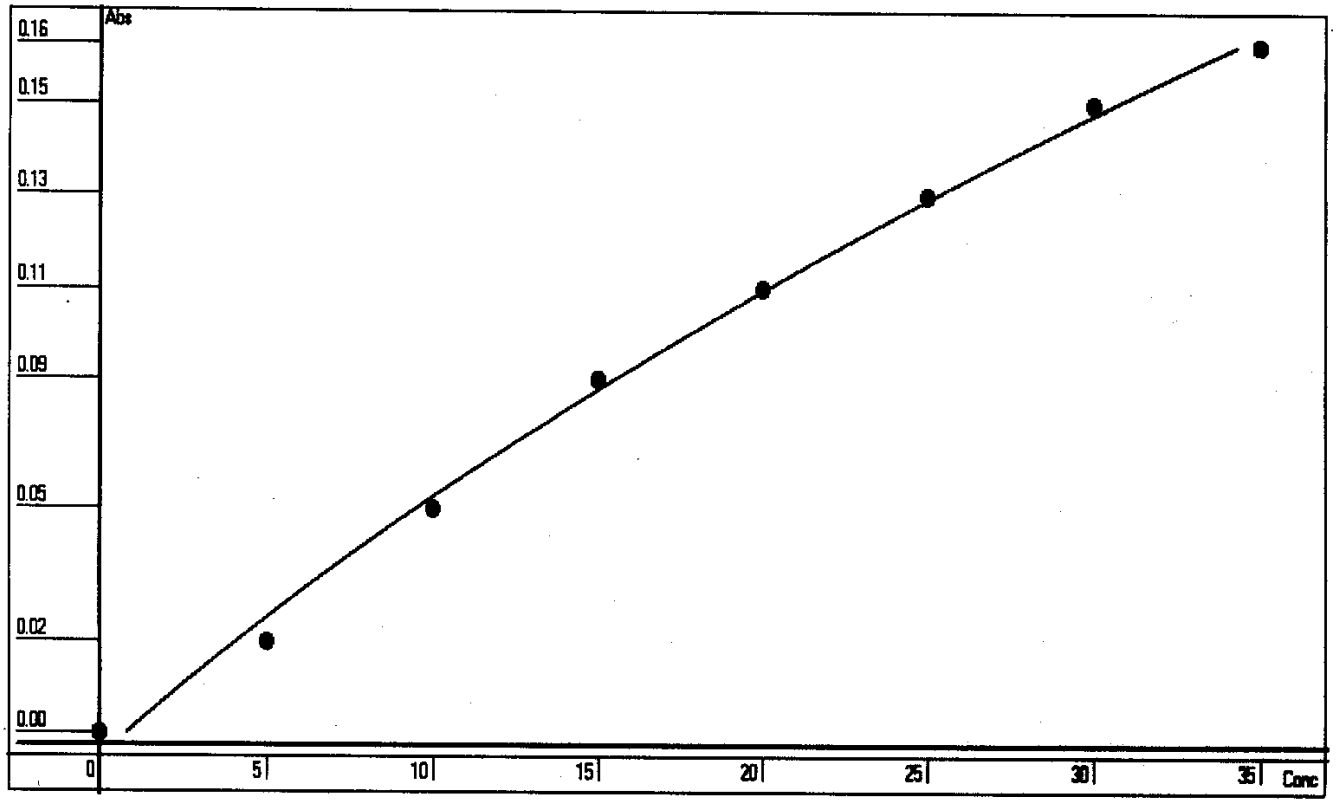
Report Date :05/03/2012 **Run Date :5/3/2012** **Operator : WESTCO** **Plan # :20120503001**

Plan Description : SO4-A-DIH/5/3/2012

Calibrant Report - WSO4 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120503001 Description : [SO4-A-DIH/5/3/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0003	0	0.8019	80.19
2	0.0224	5	4.0869	-18.26
3	0.0542	10	9.4728	-5.27
4	0.0853	15	15.4920	3.28
5	0.1068	20	20.0880	0.44
6	0.1292	25	25.2544	1.02
7	0.1508	30	30.6017	2.01
8	0.1649	35	34.2858	-2.04

Conc= +384.4338*Abso^2 +139.9174*Abso +0.7599 R^2=0.9972

RBL
0.0017
0

Report Date 5/3/2012 Run Date 5/3/2012

2.4.5 Total Organic Carbon Data

2.4.5.1 Summary Data

Login Number: L12040844
Department: Conventionals
Analyst: Deanna Hesson

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.

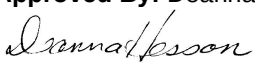
Matrix Spikes: All acceptance criteria were met.

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: 46062
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040844-01 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-16I-042412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396600 **Analyst:** DIH **Run Date:** 05/02/2012 01:09
Collect Date: 04/24/2012 12:35 **Dilution:** 3 **File ID:** TC05012012.053
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		4.93		3.00	1.50

Sample #: L12040844-03 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-16S-042412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396600 **Analyst:** DIH **Run Date:** 05/02/2012 01:21
Collect Date: 04/24/2012 12:37 **Dilution:** 2 **File ID:** TC05012012.054
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		3.64		2.00	1.00

Sample #: L12040844-05 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-07-042412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396600 **Analyst:** DIH **Run Date:** 05/01/2012 14:23
Collect Date: 04/24/2012 13:15 **Dilution:** 1 **File ID:** TC05012012.013
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		5.56		1.00	0.500

2.4.5.2 QC Summary Data

Total Organic Carbon Example Calculations
(Direct Readout Parameter)

(Readout)/(dilution) = mg/L

where:

Readout = direct readout from the instrument
dilution = dilution in decimal form (ex. 1/5 dilution = 0.2)

Microbac Laboratories Inc.

Data Checklist

Date: 01-MAY-2012
Analyst: DIH
Analyst: NA
Method: TOC
Instrument: TOC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396601 WG396600

Calibration/Linearity	12/6/2011
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	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
05-MAY-2012
Dianna Ibsson

Secondary Reviewer:
05-MAY-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-05-2012 11:47:57

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 415.1 **AAB#:** WG396600

Login Number: L12040844

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-16I-042412	01	04/24/12							28		05/02/12	7.5	28	
MW-16S-042412	03	04/24/12							28		05/02/12	7.5	28	
MW-07-042412	05	04/24/12							28		05/01/12	7	28	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2403169
Report generated 05/04/2012 17:17

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040844
Work Group: WG396600
Blank File ID: TC05012012.003
Blank Sample ID: WG396600-01
Prep Date: 05/01/12 12:06
Instrument ID: TOC-VWP
Analyzed Date: 05/01/12 12:06
Method: 415.1
Analyst: DIH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396600-02	TC05012012.004	05/01/12 12:18	01
LCS2	WG396600-03	TC05012012.005	05/01/12 12:30	01
DUP	WG396600-05	TC05012012.007	05/01/12 12:57	01
MW-07-042412	L12040844-05	TC05012012.013	05/01/12 14:23	01
MW-16I-042412	L12040844-01	TC05012012.053	05/02/12 01:09	DL01
MW-16S-042412	L12040844-03	TC05012012.054	05/02/12 01:21	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2403170
Report generated 05/04/2012 17:17

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040844 Prep Date:05/01/12 12:06 Sample ID:WG396600-01
Instrument ID:TOC-VWP Run Date:05/01/12 12:06 Prep Method:415.1
File ID:TC05012012.003 Analyst:DIH Method:415.1
Workgroup (AAB#):WG396600 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: 2403171
04-MAY-2012 17:17

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040844 **Analyst:** DIH **Prep Method:** 415.1
Instrument ID: TOC-VWP **Matrix:** Water **Method:** 415.1
Workgroup (AAB#): WG396600 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD50986

Sample ID: WG396600-02 LCS **File ID:** TC05012012.004 **Run Date:** 05/01/2012 12:18
Sample ID: WG396600-03 LCS2 **File ID:** TC05012012.005 **Run Date:** 05/01/2012 12:30

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	23.2	92.6	25.0	23.2	92.9	0.302	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2403172
Report generated: 05/04/2012 17:17

2.4.5.3 Raw Data

WG384145

TC/TIC CURVES

Total Organic Carbon

MAKE DAILY

CCV (TOC): _____ (5/200)(1000) = 25mg/L

LCS (TOC): _____ (5/200)(1000) = 25mg/L

CCV (TIC): _____ (5/200)(1000) = 25mg/L

See Below

MS (TOC): _____

Calibration Curve Date: _____

Reagent: RGT 16590 RGT 16642

☑ SM5310-C : Matrix 2 WG_____

☐ EPA 415.1/9060A(mod): Matrix 1 WG_____ WG_____

SOP: K 4151 Rev. 13

Instrument: Shimadza TOC-VWP/ASI

DAILY CHECK

☑ drain reservoir filled
☑ ASI water bottle full
☑ dilution water bottle full

☑ 3rd bottle full
☑ sufficient gas
☑ sufficient persulfate

☑ sufficient acid
☑ waste container

Position	Sample ID	Dilution
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	STD47722	
28		
29	TIC Curve	
30	STD47189	
31		
32		
33		
34		
35		
36		
37	TC ICV	
38	STD47544	
39		
40	TIC ICV	
41	STD47190	
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

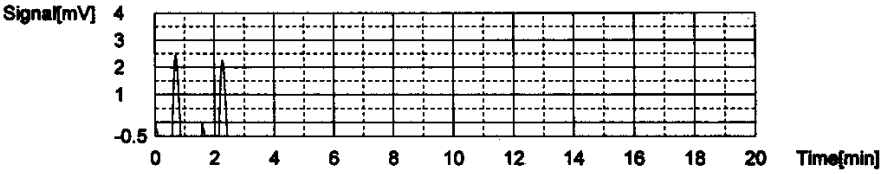
Sample Name:	TC CURVE
Sample ID:	Untitled
Cal. Curve:	TCCURVE-12-06-2011.2011_12_06_08_40_57.cal
Status	Completed

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

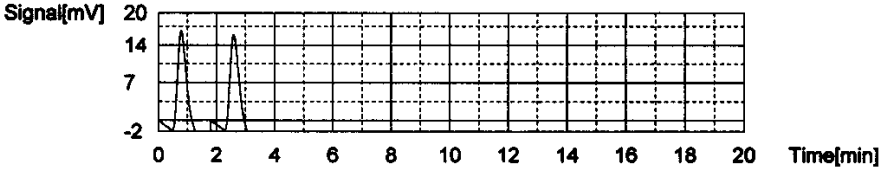
Acid Add. 0.000%
Mean Area 5.716



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

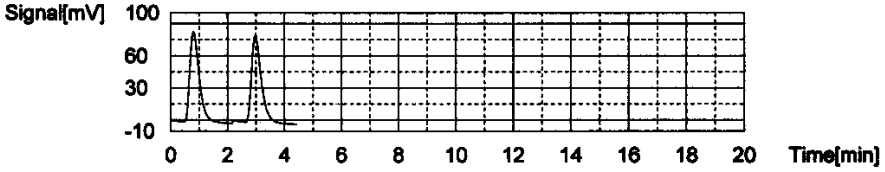
Acid Add. 0.000%
Mean Area 39.48



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

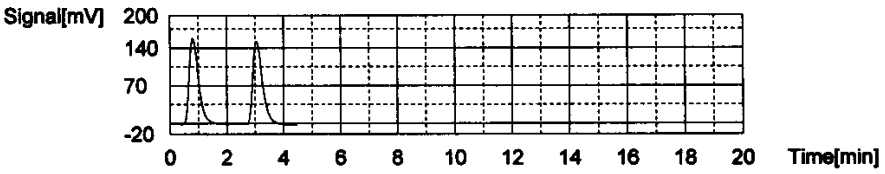
Acid Add. 0.000%
Mean Area 190.6



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

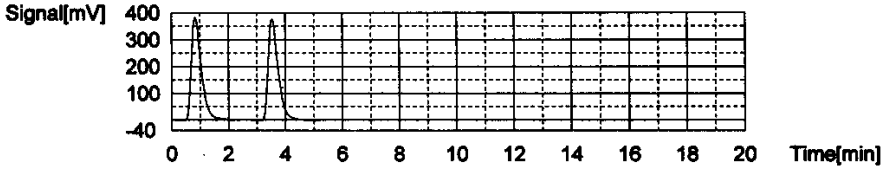
Acid Add. 0.000%
Mean Area 367.4



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

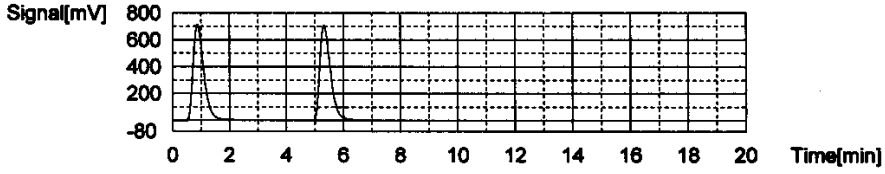
Acid Add. 0.000%
Mean Area 933.4



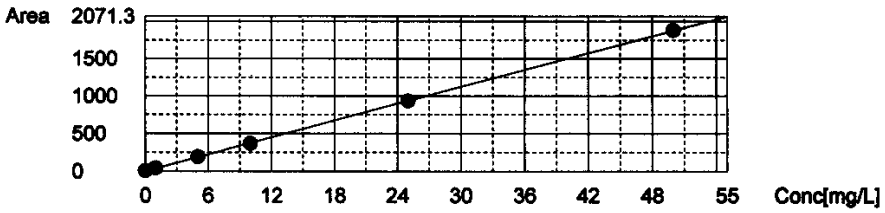
Conc: 50.00mg/L

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

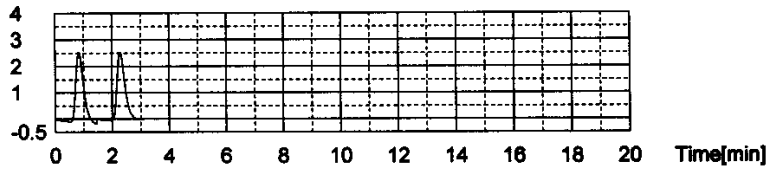
Sample Name: TIC CURVE
Sample ID: Untitled
Cal. Curve: TICCURVE-12-06-2011B.2011_12_06_15_47_44.cal
Status Completed

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

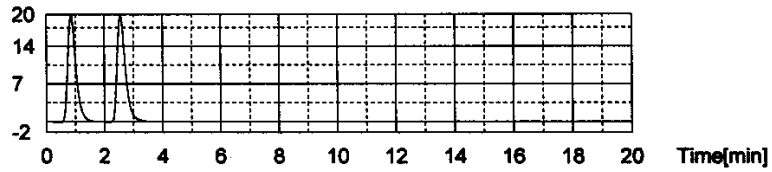
Acid Add. 10.00%
Mean Area 4.883



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

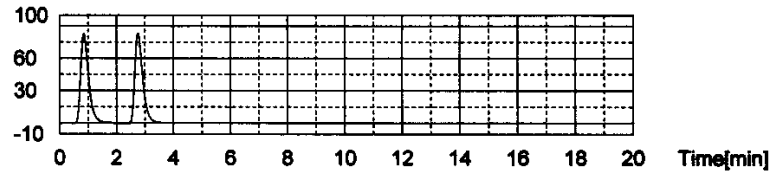
Acid Add. 10.00%
Mean Area 38.90



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

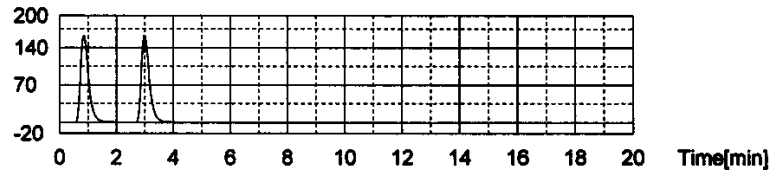
Acid Add. 10.00%
Mean Area 161.3



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

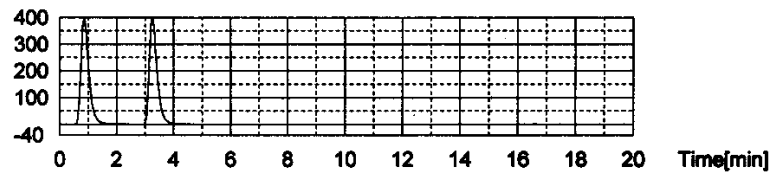
Acid Add. 10.00%
Mean Area 318.9



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

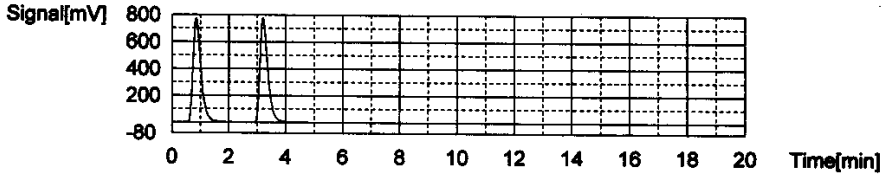
Acid Add. 10.00%
Mean Area 765.5



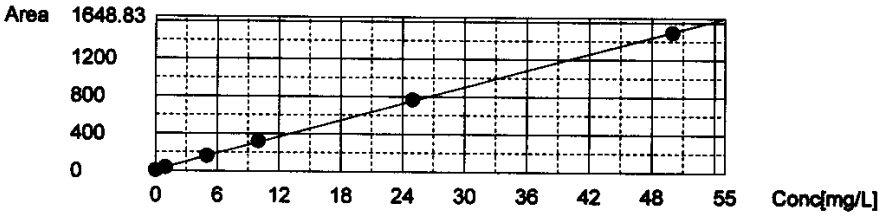
Conc: 50.00mg/L

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

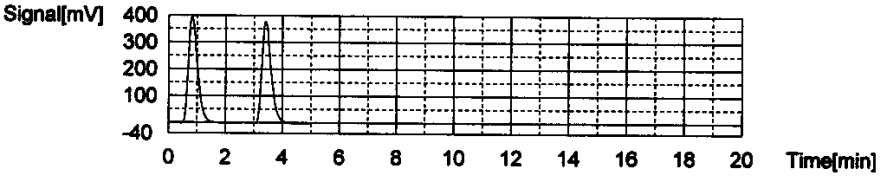
Type	Anal.	Dil.	Result
Unknown	TC	1.000	TC:23.27mg/L

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

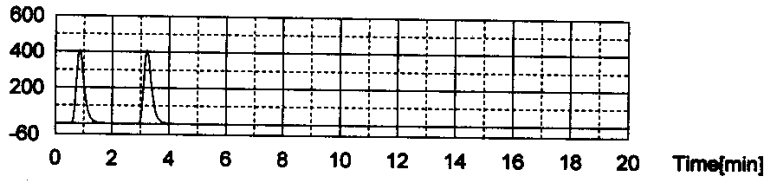
Type	Anal.	Dil.	Result
Unknown	IC	1.000	IC:26.21mg/L

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: WG396600

Total Organic Carbon

396601

MAKE DAILY

CCV (TOC): std 48750 / (5/200)(1000) = 25mg/L

LCS (TOC): std 50986 / (5/200)(1000) = 25mg/L

CCV (TIC): std 50244 / (5/200)(1000) = 25mg/L

MS (TOC): 0.4/4d(100c)=10

Calibration Curve Date: 12/6/12

Reagent: ROT 17216 / ROT 17280

☑ SM5310-C : Matrix 2 WG 396601

☐ EPA 415.1/9060A(mod): Matrix 1 WG 396600 SOP: K 4151 Rev. 14

WG _____ Instrument: Shimadza TOC-VWP/ASI

☑ drain reservoir filled
☑ ASI water bottle full
☑ dilution water bottle full

DAILY CHECK
☑ 3rd bottle full
☑ sufficient gas
☑ sufficient persulfate

☑ sufficient acid waste container

Position	Sample ID	Dilution
1	TIC 25	
2	CCV 25	
3	BIK	
4	LCS 25	
5	LCSDUP	
6	04-826-01	
7	DUP 01	
8	MS 02	
9	MSD 03	
10	04	
11	04-844-01	
12	03	
13	05	
14	CCV	
15	CCB	
16	04-898-01	1/100
17	03	1/3
18	05	1/5
19	08	1/5
20	10	1/100
21	12	1/5
22	04-910-01	
23	MS 02	
24	MSD 03	
25	~~05~~ 06	

Position	Sample ID	Dilution
26	CCV	
27	CCB	
28	04-910-10	
29	13	
30	16	
31	19	
32	22	
33	28	
34	31	
35	BIK	
36	LCS	
37	LCSDUP	
38	CCV	
39	CCB	
40	04-976-01	
41	02	
42	04-928-01	
43	DUP 01	
44	MS 08	
45	MSD 10	
46	03	
47	04-963-01	
48	03	
49	05	1/50
50	CCV	

Position	Sample ID	Dilution
51	CCB	
52	04-963-07	
53 R	04-844-01	1/3
54 R	03	1/2
55	CCV	
56	CCB	
57		
58		
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Analyst: Deanna Hesson 5/11/12 Date/Time: 5/1/12

DCN#90712

	Analys	Sample Name	Result	Status	Date / Time	Vial
1	TOC	TIC 25	TOC:1.330mg/L TC:24.95mg/L IC:23.62mg/L	Complet	05/01/2012 11:49:33 AM	1
2	TOC	CCV 25	!!Error!! TOC:23.48mg/L TC:23.25mg/L IC:-0.2257mg/	Complet	05/01/2012 12:01:37 PM	2
3	TOC	WG396600-01 BLK	!!Error!! TOC:0.4515mg/L TC:0.1155mg/L IC:-0.3360m	Complet	05/01/2012 12:10:29 PM	0
4	TOC	WG396600-02 LCS	!!Error!! TOC:23.15mg/L TC:22.89mg/L IC:-0.2660mg/	Complet	05/01/2012 12:22:37 PM	4
5	TOC	WG396600-03 LCSDUP	!!Error!! TOC:23.22mg/L TC:22.96mg/L IC:-0.2649mg/	Complet	05/01/2012 12:34:56 PM	5
6	TOC	L12040826-01	TOC:3.942mg/L TC:17.34mg/L IC:13.40mg/L	Complet	05/01/2012 12:48:48 PM	6
7	TOC	WG396600-05 DUP	TOC:3.770mg/L TC:17.50mg/L IC:13.73mg/L	Complet	05/01/2012 01:02:50 PM	7
8	TOC	L12040826-02 MS	TOC:12.20mg/L TC:21.99mg/L IC:9.792mg/L	Complet	05/01/2012 01:16:41 PM	8
9	TOC	L12040826-03 MSD	TOC:12.03mg/L TC:20.00mg/L IC:7.971mg/L	Complet	05/01/2012 01:30:32 PM	9
10	TOC	L12040826-04	TOC:3.428mg/L TC:10.60mg/L IC:7.174mg/L	Complet	05/01/2012 01:44:21 PM	10
11	TOC		!!Error!! TOC:-1.008mg/L TC:70.29mg/L IC:71.30mg/L	Complet	05/01/2012 01:59:30 PM	11
12	TOC		!!Error!! TOC:-0.1197mg/L TC:68.46mg/L IC:68.57mg/	Complet	05/01/2012 02:14:45 PM	12
13	TOC	L12040844-05	TOC:5.557mg/L TC:37.69mg/L IC:32.13mg/L	Complet	05/01/2012 02:28:57 PM	13
14	TOC	CCV	!!Error!! TOC:23.60mg/L TC:23.52mg/L IC:-0.07893mg	Complet	05/01/2012 02:41:11 PM	14
15	TOC	CCB	!!Error!! TOC:0.3879mg/L TC:0.08777mg/L IC:-0.3001	Complet	05/01/2012 02:50:06 PM	0
16	TOC	L12040898-01 (100)	TOC:4.188mg/L TC:8.832mg/L IC:4.644mg/L	Complet	05/01/2012 03:03:12 PM	16
17	TOC	L12040898-03 (3)	TOC:3.994mg/L TC:23.76mg/L IC:19.76mg/L	Complet	05/01/2012 03:16:08 PM	17
18	TOC	L12040898-05 (5)	TOC:5.212mg/L TC:29.86mg/L IC:24.65mg/L	Complet	05/01/2012 03:29:13 PM	18
19	TOC	L12040898-08 (5)	TOC:2.285mg/L TC:13.56mg/L IC:11.28mg/L	Complet	05/01/2012 03:42:00 PM	19
20	TOC	L12040898-10 (100)	TOC:1.233mg/L TC:3.202mg/L IC:1.969mg/L	Complet	05/01/2012 03:53:47 PM	20
21	TOC	L12040898-12 (5)	TOC:2.358mg/L TC:17.45mg/L IC:15.09mg/L	Complet	05/01/2012 04:06:54 PM	21
22	TOC	L12040910-01	TOC:1.639mg/L TC:17.41mg/L IC:15.77mg/L	Complet	05/01/2012 04:19:48 PM	22
23	TOC	L12040910-02 MS	TOC:10.80mg/L TC:17.29mg/L IC:6.494mg/L	Complet	05/01/2012 04:32:23 PM	23
24	TOC	L12040910-03 MSD	TOC:10.41mg/L TC:16.91mg/L IC:6.504mg/L	Complet	05/01/2012 04:45:01 PM	24
25	TOC	L12040910-25	TOC:0.6818mg/L TC:7.597mg/L IC:6.915mg/L	Complet	05/01/2012 04:56:57 PM	25
26	TOC	CCV	!!Error!! TOC:23.11mg/L TC:22.91mg/L IC:-0.2033mg/	Complet	05/01/2012 05:09:05 PM	26
27	TOC	CCB	!!Error!! TOC:0.4239mg/L TC:0.1049mg/L IC:-0.3189m	Complet	05/01/2012 05:17:53 PM	0
28	TOC	L12040910-10	TOC:0.8453mg/L TC:7.054mg/L IC:6.208mg/L	Complet	05/01/2012 05:30:08 PM	28
29	TOC	L12040910-13	TOC:0.5666mg/L TC:7.128mg/L IC:6.561mg/L	Complet	05/01/2012 05:42:14 PM	29
30	TOC	L12040910-16	TOC:1.116mg/L TC:5.914mg/L IC:4.798mg/L	Complet	05/01/2012 05:54:24 PM	30
31	TOC	L12040910-19	TOC:0.8519mg/L TC:5.284mg/L IC:4.432mg/L	Complet	05/01/2012 06:06:25 PM	31
32	TOC	L12040910-22	TOC:1.170mg/L TC:6.564mg/L IC:5.394mg/L	Complet	05/01/2012 06:18:42 PM	32
33	TOC	L12040910-28	!!Error!! TOC:1.260mg/L TC:1.169mg/L IC:-0.09171mg	Complet	05/01/2012 06:30:13 PM	33
34	TOC	L12040910-31	!!Error!! TOC:1.256mg/L TC:1.148mg/L IC:-0.1083mg/	Complet	05/01/2012 06:41:45 PM	34
35	TOC	WG396601-01 BLK	!!Error!! TOC:0.3870mg/L TC:0.06872mg/L IC:-0.3183	Complet	05/01/2012 06:57:44 PM	0
36	TOC	WG396601-02 LCS	!!Error!! TOC:22.89mg/L TC:22.65mg/L IC:-0.2385mg/	Complet	05/01/2012 07:18:43 PM	36
37	TOC	WG396601-03 LCSDUP	!!Error!! TOC:23.49mg/L TC:23.25mg/L IC:-0.2368mg/	Complet	05/01/2012 07:39:50 PM	37
38	TOC	CCV	!!Error!! TOC:25.04mg/L TC:24.81mg/L IC:-0.2324mg/	Complet	05/01/2012 07:52:34 PM	38
39	TOC	CCB	!!Error!! TOC:0.3988mg/L TC:0.08027mg/L IC:-0.3185	Complet	05/01/2012 08:01:17 PM	0
40	TOC	L12040976-01	TOC:5.393mg/L TC:9.212mg/L IC:3.819mg/L	Complet	05/01/2012 08:23:15 PM	40
41	TOC	L12040976-02	TOC:5.885mg/L TC:13.23mg/L IC:7.347mg/L	Complet	05/01/2012 08:45:37 PM	41
42	TOC	WG396601-04	!!Error!! TOC:-0.1244mg/L TC:92.42mg/L IC:92.55mg/	Complet	05/01/2012 09:16:42 PM	42
43	TOC	WG396601-05 DUP	TOC:1.558mg/L TC:90.89mg/L IC:89.33mg/L	Complet	05/01/2012 09:47:26 PM	43
44	TOC	WG396601-06 MS	TOC:2.603mg/L TC:91.65mg/L IC:89.05mg/L	Complet	05/01/2012 10:15:29 PM	44
45	TOC	WG396601-07 MSD	TOC:5.712mg/L TC:99.37mg/L IC:93.66mg/L	Complet	05/01/2012 10:47:24 PM	45
46	TOC	L12040928-03	TOC:4.582mg/L TC:19.00mg/L IC:14.42mg/L	Complet	05/01/2012 11:10:52 PM	46
47	TOC	L12040963-01	TOC:3.421mg/L TC:24.47mg/L IC:21.05mg/L	Complet	05/01/2012 11:33:48 PM	47
48	TOC	L12040963-03	TOC:4.001mg/L TC:16.05mg/L IC:12.05mg/L	Complet	05/01/2012 11:57:08 PM	48
49	TOC	<Untitled>	TOC:2.493mg/L TC:2.989mg/L IC:0.4963mg/L	Complet	05/02/2012 12:17:36 AM	49
50	TOC	CCV	!!Error!! TOC:23.62mg/L TC:23.41mg/L IC:-0.2093mg/	Complet	05/02/2012 12:29:52 AM	50
51	TOC	CCB	!!Error!! TOC:0.4232mg/L TC:0.1438mg/L IC:-0.2794m	Complet	05/02/2012 12:38:45 AM	0
52	TOC	L12040963-07	TOC:4.005mg/L TC:14.50mg/L IC:10.50mg/L	Complet	05/02/2012 01:01:43 AM	52
53	TOC	L12040844-01 (3)	TOC:1.643mg/L TC:6.747mg/L IC:5.105mg/L	Complet	05/02/2012 01:14:09 AM	53
54	TOC	L12040844-03 (2)	TOC:1.820mg/L TC:5.872mg/L IC:4.051mg/L	Complet	05/02/2012 01:26:29 AM	54
55	TOC	CCV	!!Error!! TOC:24.14mg/L TC:23.94mg/L IC:-0.2017mg/	Complet	05/02/2012 01:38:37 AM	55
56	TOC	CCB	!!Error!! TOC:0.3763mg/L TC:0.09680mg/L IC:-0.2795	Complet	05/02/2012 01:47:27 AM	0

Instr.Information

System TOCVW ASI
Detector Wet Chemical

Sample

Sample Name: TIC 25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

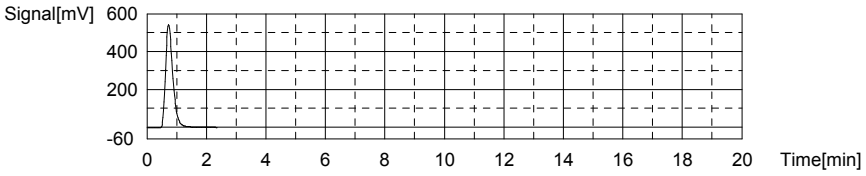
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.330mg/L TC:24.95mg/L IC:23.62mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	937.6	24.95mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 11:43:46 AM

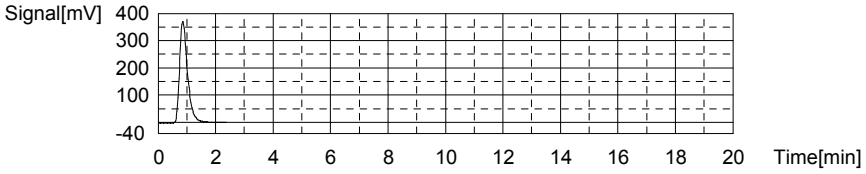
Mean Area 937.6
Mean Conc. 24.95mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	715.0	23.62mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 11:49:33 AM

Mean Area 715.0
Mean Conc. 23.62mg/L



Sample

Sample Name: CCV 25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

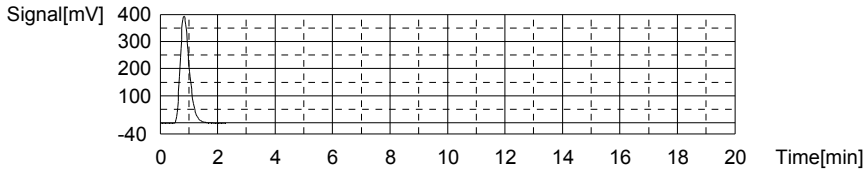
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.48mg/L TC:23.25mg/L IC:-0.2257mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	873.7	23.25mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 11:57:17 AM

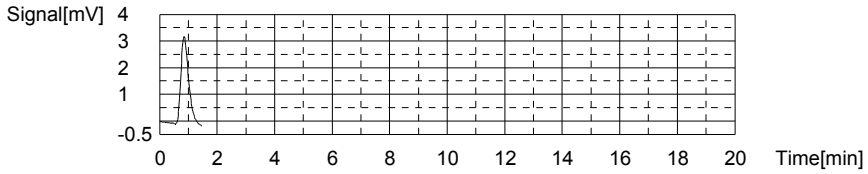
Mean Area 873.7
Mean Conc. 23.25mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.177	-0.2257mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 12:01:37 PM

Mean Area 6.177
Mean Conc. -0.2257mg/L



Sample

Sample Name: WG396600-01 BLK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

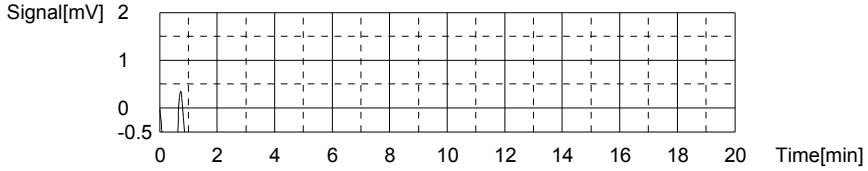
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4515mg/L TC:0.1155mg/L IC:-0.3360mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.432	0.1155mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 12:06:41 PM

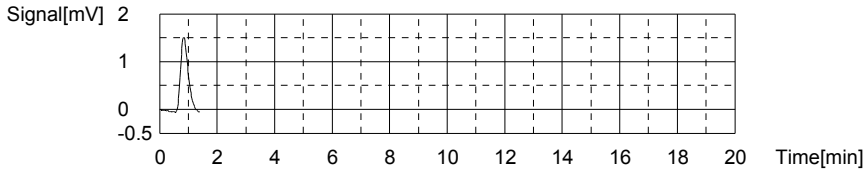
Mean Area 4.432
Mean Conc. 0.1155mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.899	-0.3360mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 12:10:29 PM

Mean Area 2.899
Mean Conc. -0.3360mg/L



Sample

Sample Name: WG396600-02 LCS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

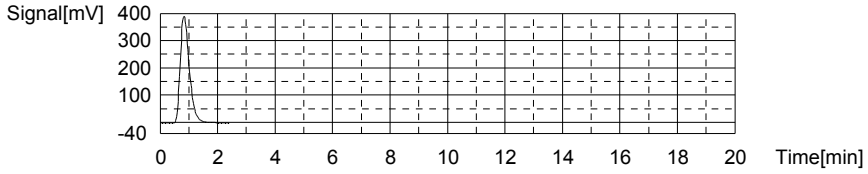
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.15mg/L TC:22.89mg/L IC:-0.2660mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	859.9	22.89mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 12:18:20 PM

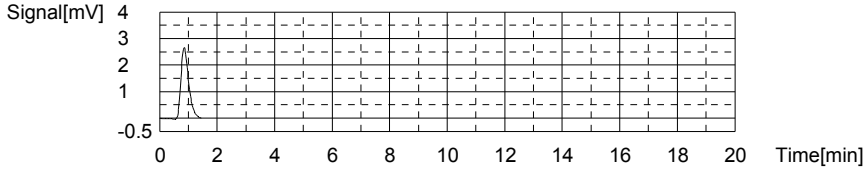
Mean Area 859.9
Mean Conc. 22.89mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.981	-0.2660mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 12:22:37 PM

Mean Area 4.981
Mean Conc. -0.2660mg/L



Sample

Sample Name: WG396600-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

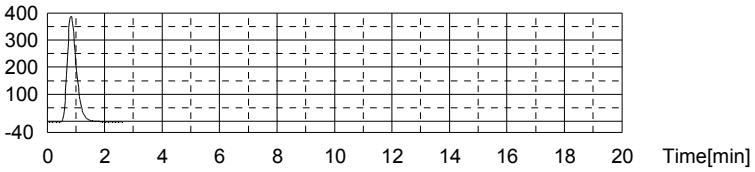
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.22mg/L TC:22.96mg/L IC:-0.2649mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	862.7	22.96mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 12:30:39 PM

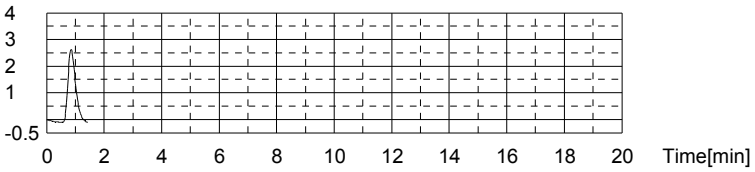
Mean Area 862.7
Mean Conc. 22.96mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.013	-0.2649mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 12:34:56 PM

Mean Area 5.013
Mean Conc. -0.2649mg/L



Sample

Sample Name: L12040826-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

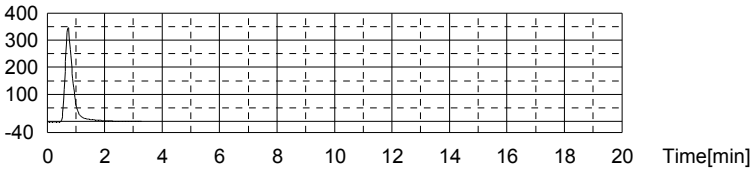
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.942mg/L TC:17.34mg/L IC:13.40mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	651.6	17.34mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 12:43:38 PM

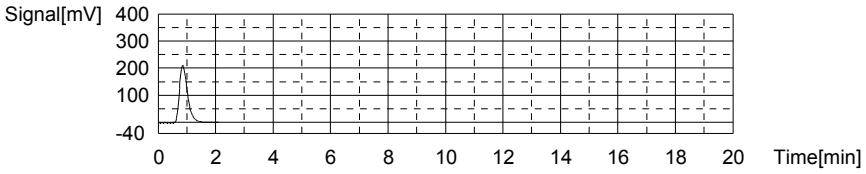
Mean Area 651.6
Mean Conc. 17.34mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	411.1	13.40mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 12:48:48 PM

Mean Area 411.1
Mean Conc. 13.40mg/L



Sample

Sample Name: WG396600-05 DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

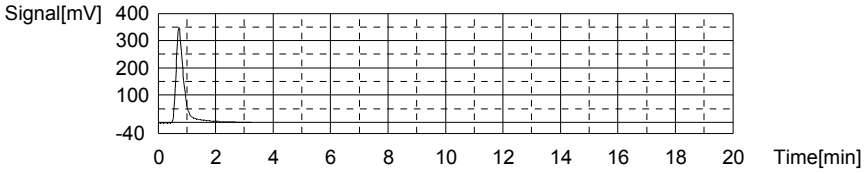
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.770mg/L TC:17.50mg/L IC:13.73mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	657.5	17.50mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 12:57:29 PM

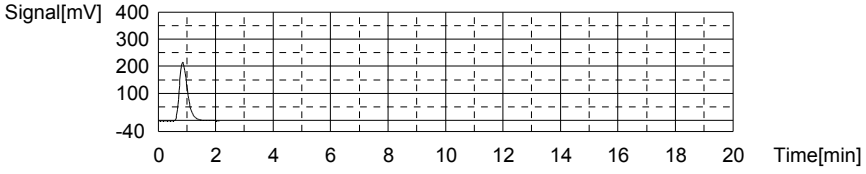
Mean Area 657.5
Mean Conc. 17.50mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	420.9	13.73mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 01:02:50 PM

Mean Area 420.9
Mean Conc. 13.73mg/L



Sample

Sample Name: L12040826-02 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

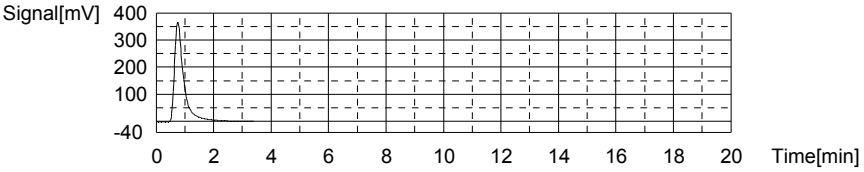
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.20mg/L TC:21.99mg/L IC:9.792mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	826.3	21.99mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 01:11:40 PM

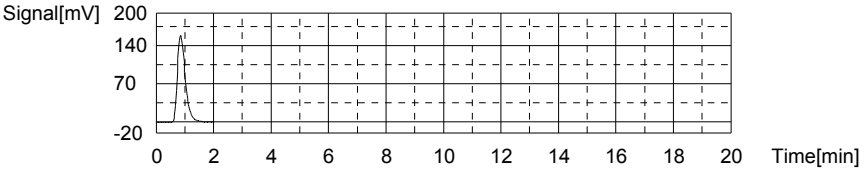
Mean Area 826.3
Mean Conc. 21.99mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	303.9	9.792mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 01:16:41 PM

Mean Area 303.9
Mean Conc. 9.792mg/L



Sample

Sample Name: L12040826-03 MSD
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

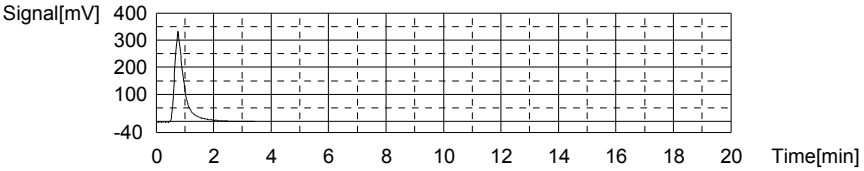
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.03mg/L TC:20.00mg/L IC:7.971mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	751.4	20.00mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 01:25:33 PM

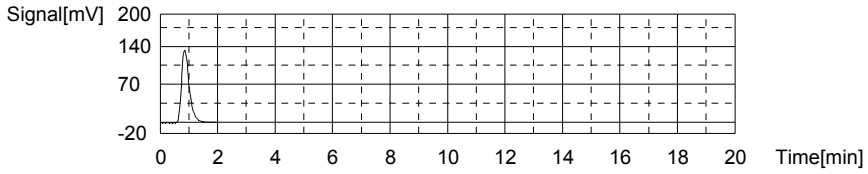
Mean Area 751.4
Mean Conc. 20.00mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	249.8	7.971mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 01:30:32 PM

Mean Area 249.8
Mean Conc. 7.971mg/L



Sample

Sample Name: L12040826-04
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

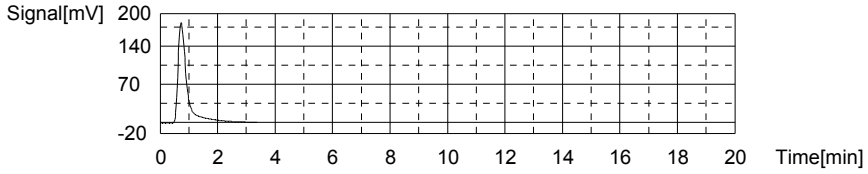
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.428mg/L TC:10.60mg/L IC:7.174mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	398.4	10.60mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 01:39:21 PM

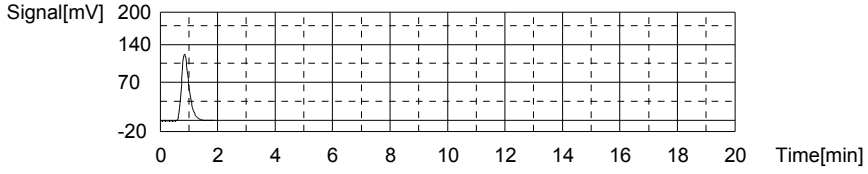
Mean Area 398.4
Mean Conc. 10.60mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	226.1	7.174mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 01:44:21 PM

Mean Area 226.1
Mean Conc. 7.174mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

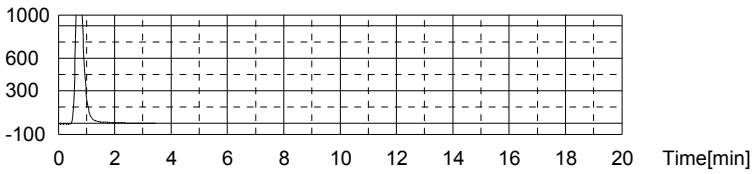
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-1.008mg/L TC:70.29mg/L IC:71.30mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2641	70.29mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 01:53:14 PM

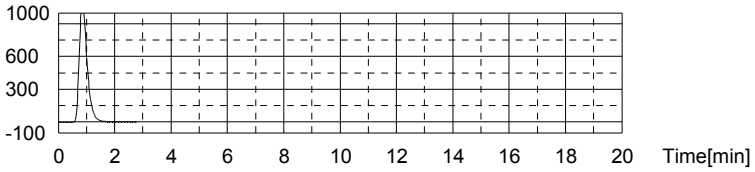
Mean Area 2641
Mean Conc. 70.29mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2132	71.30mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 01:59:30 PM

Mean Area 2132
Mean Conc. 71.30mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

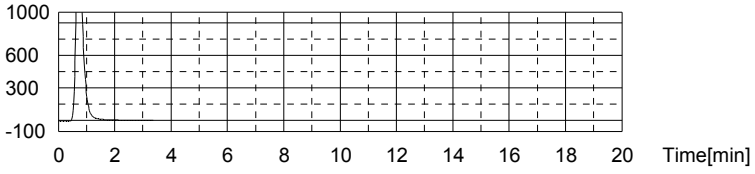
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-0.1197mg/L TC:68.46mg/L IC:68.57mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2572	68.46mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 02:08:17 PM

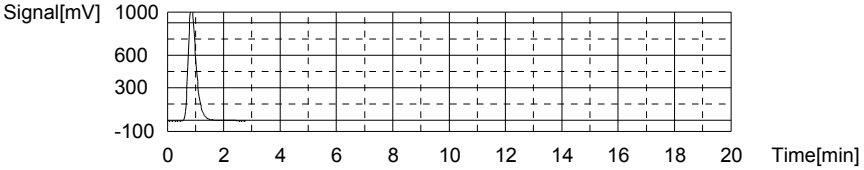
Mean Area 2572
Mean Conc. 68.46mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2051	68.57mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 02:14:45 PM

Mean Area 2051
Mean Conc. 68.57mg/L



Sample

Sample Name: L12040844-05
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

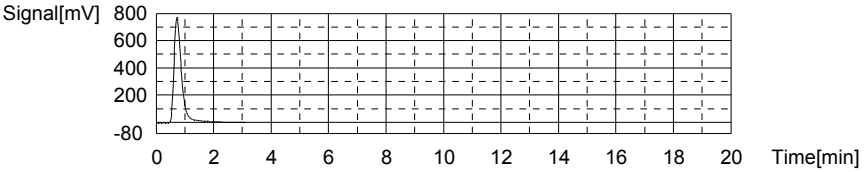
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.557mg/L TC:37.69mg/L IC:32.13mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1416	37.69mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 02:23:18 PM

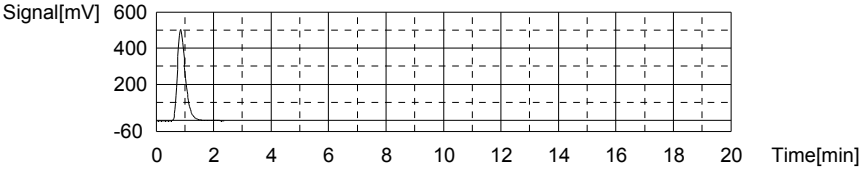
Mean Area 1416
Mean Conc. 37.69mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	967.8	32.13mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 02:28:57 PM

Mean Area 967.8
Mean Conc. 32.13mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

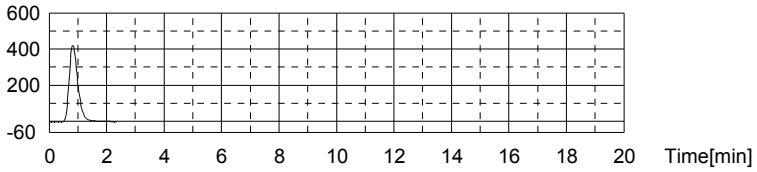
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.60mg/L TC:23.52mg/L IC:-0.07893mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	883.7	23.52mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 02:36:44 PM

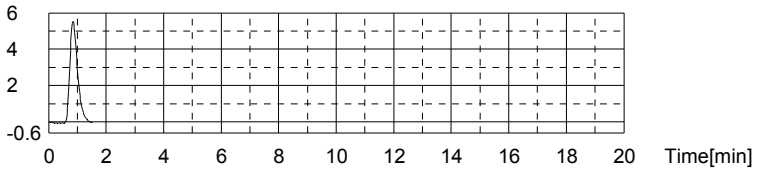
Mean Area 883.7
Mean Conc. 23.52mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.54	-0.07893mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 02:41:11 PM

Mean Area 10.54
Mean Conc. -0.07893mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

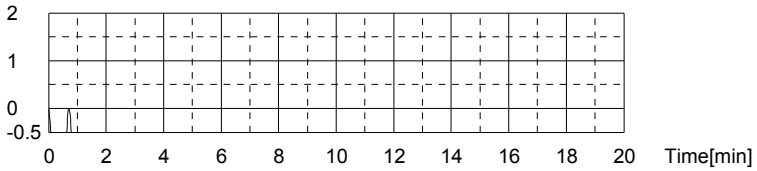
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3879mg/L TC:0.08777mg/L IC:-0.3001mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.391	0.08777mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 02:46:17 PM

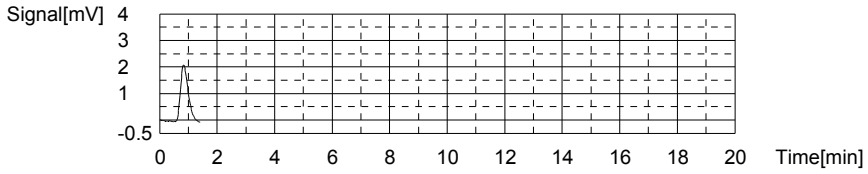
Mean Area 3.391
Mean Conc. 0.08777mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.965	-0.3001mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 02:50:06 PM

Mean Area 3.965
Mean Conc. -0.3001mg/L



Sample

Sample Name: L12040898-01 (100)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

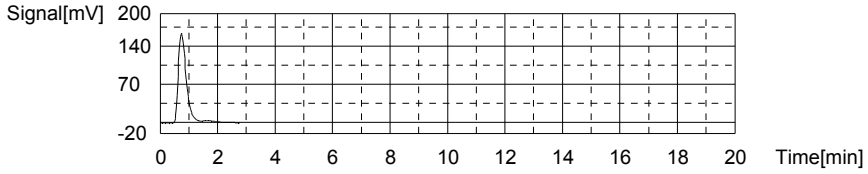
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.188mg/L TC:8.832mg/L IC:4.644mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	331.9	8.832mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 02:58:19 PM

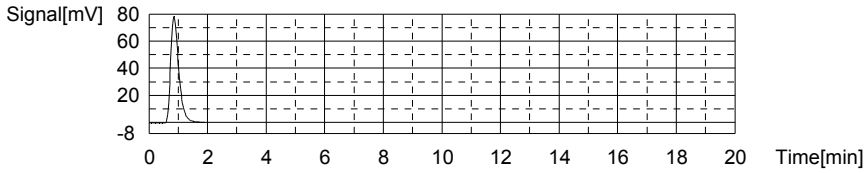
Mean Area 331.9
Mean Conc. 8.832mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	150.9	4.644mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 03:03:12 PM

Mean Area 150.9
Mean Conc. 4.644mg/L



Sample

Sample Name: L12040898-03 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

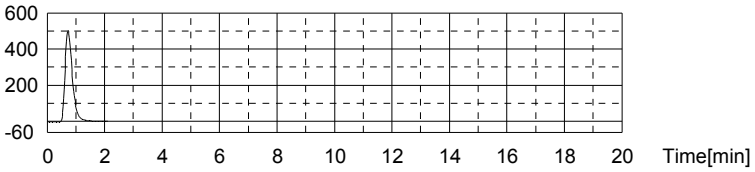
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.994mg/L TC:23.76mg/L IC:19.76mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	892.7	23.76mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 03:10:44 PM

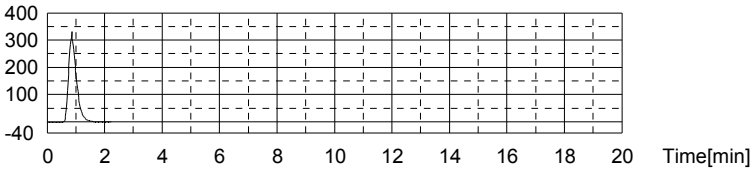
Mean Area 892.7
Mean Conc. 23.76mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	600.3	19.76mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 03:16:08 PM

Mean Area 600.3
Mean Conc. 19.76mg/L



Sample

Sample Name: L12040898-05 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

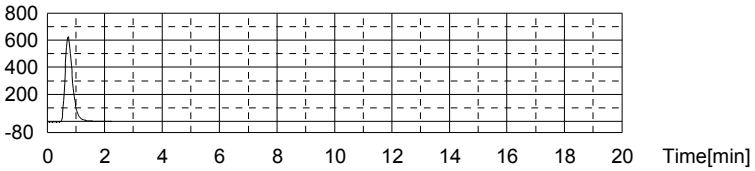
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.212mg/L TC:29.86mg/L IC:24.65mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1122	29.86mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 03:23:49 PM

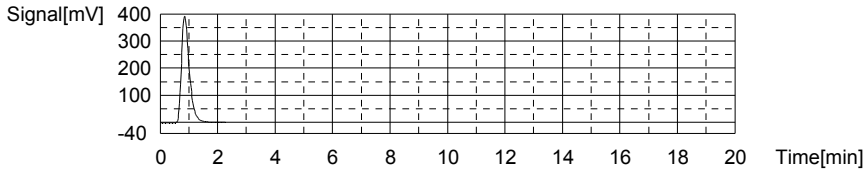
Mean Area 1122
Mean Conc. 29.86mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	745.5	24.65mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 03:29:13 PM

Mean Area 745.5
Mean Conc. 24.65mg/L



Sample

Sample Name: L12040898-08 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

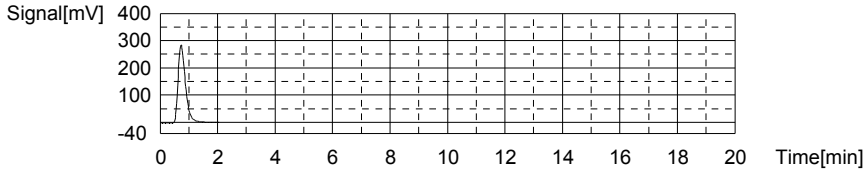
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.285mg/L TC:13.56mg/L IC:11.28mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	509.7	13.56mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 03:36:42 PM

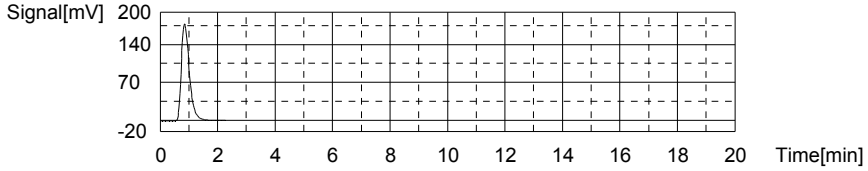
Mean Area 509.7
Mean Conc. 13.56mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	348.1	11.28mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 03:42:00 PM

Mean Area 348.1
Mean Conc. 11.28mg/L



Sample

Sample Name: L12040898-10 (100)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

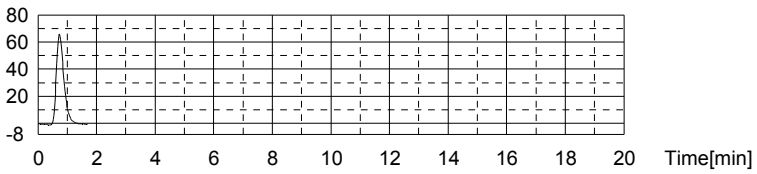
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.233mg/L TC:3.202mg/L IC:1.969mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	120.4	3.202mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 03:49:08 PM

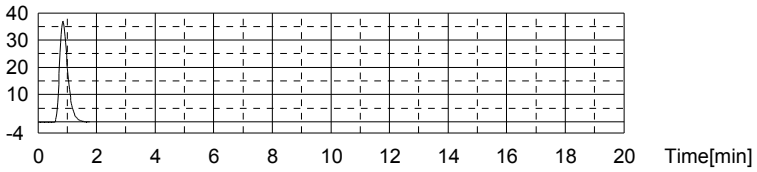
Mean Area 120.4
Mean Conc. 3.202mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	71.41	1.969mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 03:53:47 PM

Mean Area 71.41
Mean Conc. 1.969mg/L



Sample

Sample Name: L12040898-12 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

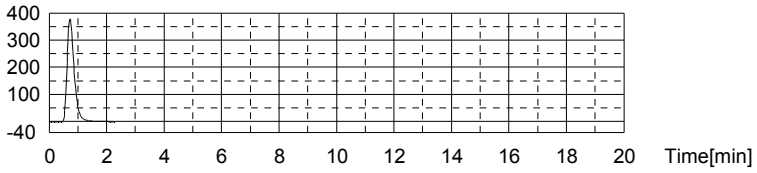
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.358mg/L TC:17.45mg/L IC:15.09mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	655.8	17.45mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 04:01:30 PM

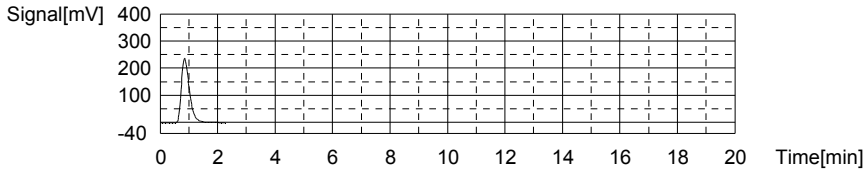
Mean Area 655.8
Mean Conc. 17.45mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	461.5	15.09mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 04:06:54 PM

Mean Area 461.5
Mean Conc. 15.09mg/L



Sample

Sample Name: L12040910-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

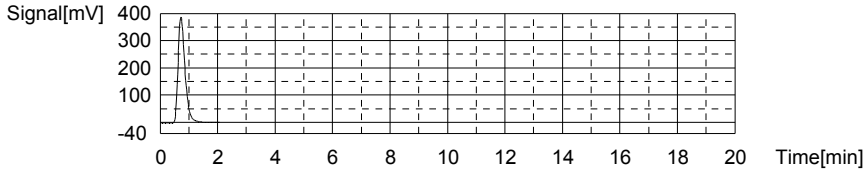
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.639mg/L TC:17.41mg/L IC:15.77mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	654.3	17.41mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 04:14:25 PM

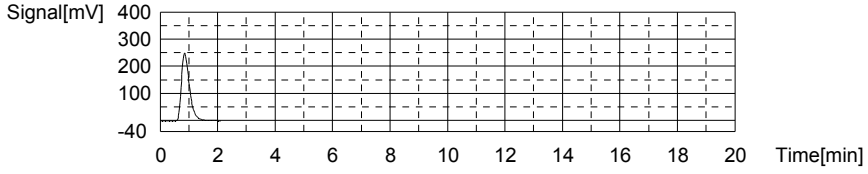
Mean Area 654.3
Mean Conc. 17.41mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	481.7	15.77mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 04:19:46 PM

Mean Area 481.7
Mean Conc. 15.77mg/L



Sample

Sample Name: L12040910-02 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

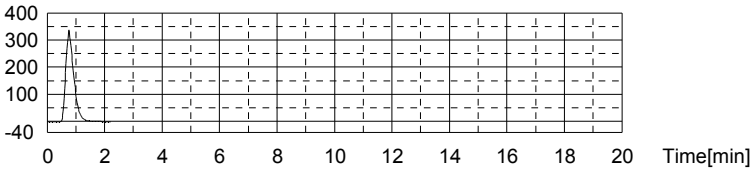
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.80mg/L TC:17.29mg/L IC:6.494mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	649.7	17.29mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 04:27:26 PM

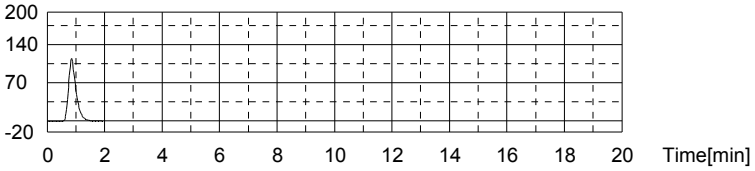
Mean Area 649.7
Mean Conc. 17.29mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	205.9	6.494mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 04:32:23 PM

Mean Area 205.9
Mean Conc. 6.494mg/L



Sample

Sample Name: L12040910-03 MSD
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

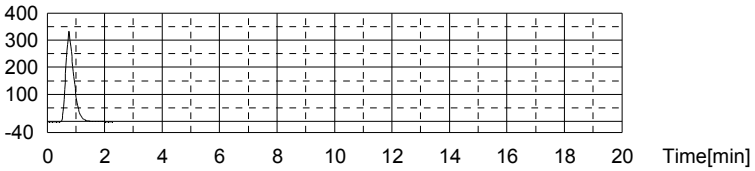
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.41mg/L TC:16.91mg/L IC:6.504mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	635.6	16.91mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 04:40:05 PM

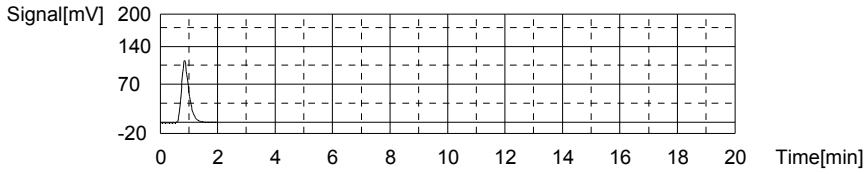
Mean Area 635.6
Mean Conc. 16.91mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	206.2	6.504mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 04:45:01 PM

Mean Area 206.2
Mean Conc. 6.504mg/L



Sample

Sample Name: L12040910-25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

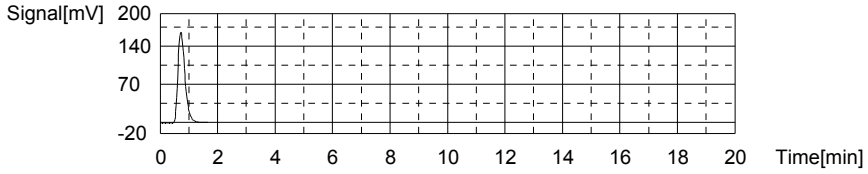
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.6818mg/L TC:7.597mg/L IC:6.915mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	285.5	7.597mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 04:52:07 PM

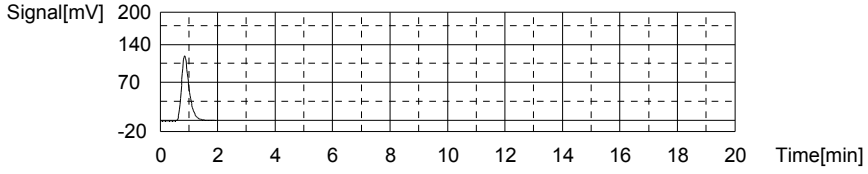
Mean Area 285.5
Mean Conc. 7.597mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	218.4	6.915mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 04:56:57 PM

Mean Area 218.4
Mean Conc. 6.915mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

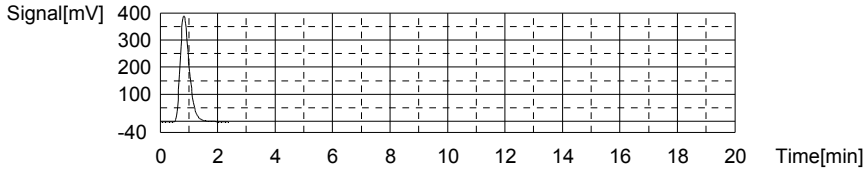
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.11mg/L TC:22.91mg/L IC:-0.2033mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	860.8	22.91mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 05:04:46 PM

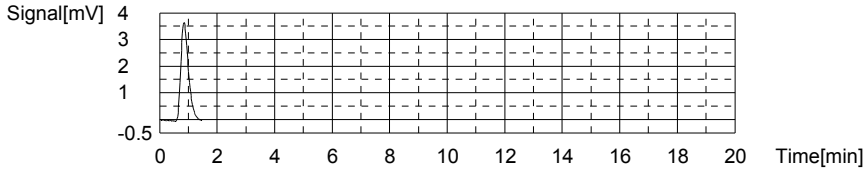
Mean Area 860.8
Mean Conc. 22.91mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.844	-0.2033mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 05:09:05 PM

Mean Area 6.844
Mean Conc. -0.2033mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

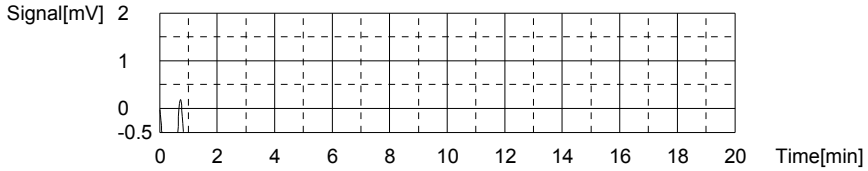
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4239mg/L TC:0.1049mg/L IC:-0.3189mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.036	0.1049mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 05:14:05 PM

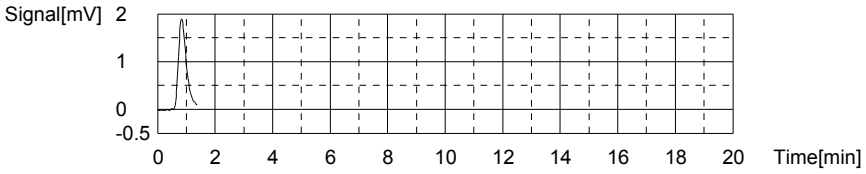
Mean Area 4.036
Mean Conc. 0.1049mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.407	-0.3189mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 05:17:53 PM

Mean Area 3.407
Mean Conc. -0.3189mg/L



Sample

Sample Name: L12040910-10
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

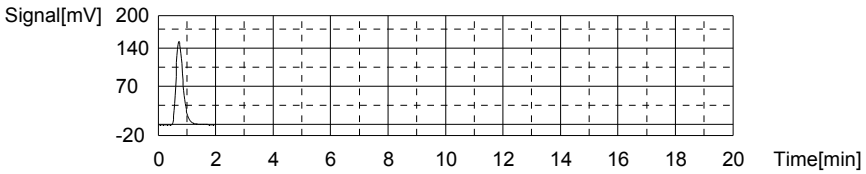
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8453mg/L TC:7.054mg/L IC:6.208mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	265.1	7.054mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 05:25:17 PM

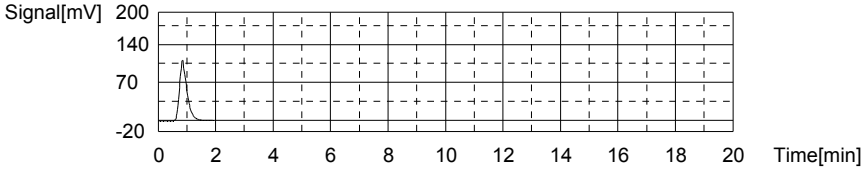
Mean Area 265.1
Mean Conc. 7.054mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	197.4	6.208mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 05:30:08 PM

Mean Area 197.4
Mean Conc. 6.208mg/L



Sample

Sample Name: L12040910-13
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

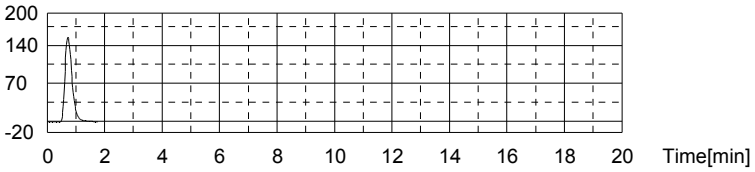
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.5666mg/L TC:7.128mg/L IC:6.561mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	267.9	7.128mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 05:37:21 PM

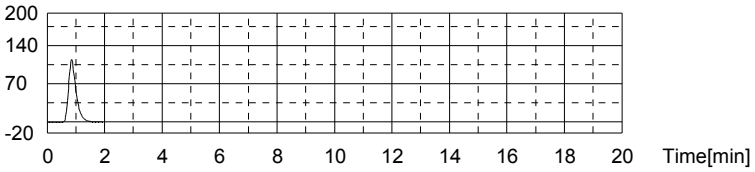
Mean Area 267.9
Mean Conc. 7.128mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	207.9	6.561mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 05:42:14 PM

Mean Area 207.9
Mean Conc. 6.561mg/L



Sample

Sample Name: L12040910-16
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

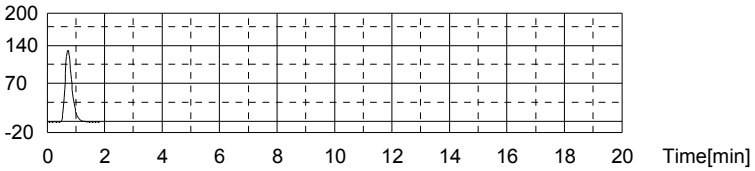
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.116mg/L TC:5.914mg/L IC:4.798mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	222.3	5.914mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 05:49:32 PM

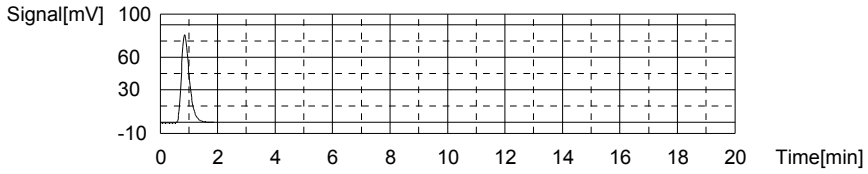
Mean Area 222.3
Mean Conc. 5.914mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	155.5	4.798mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 05:54:24 PM

Mean Area 155.5
Mean Conc. 4.798mg/L



Sample

Sample Name: L12040910-19
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

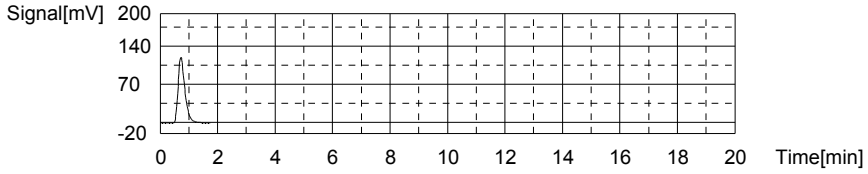
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8519mg/L TC:5.284mg/L IC:4.432mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	198.6	5.284mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 06:01:36 PM

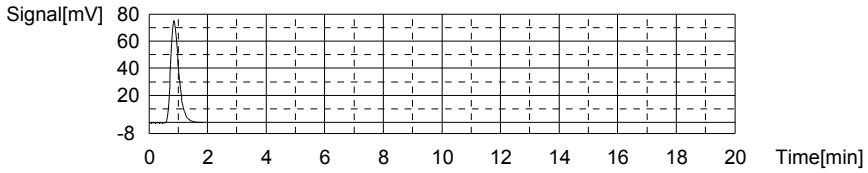
Mean Area 198.6
Mean Conc. 5.284mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	144.6	4.432mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 06:06:25 PM

Mean Area 144.6
Mean Conc. 4.432mg/L



Sample

Sample Name: L12040910-22
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

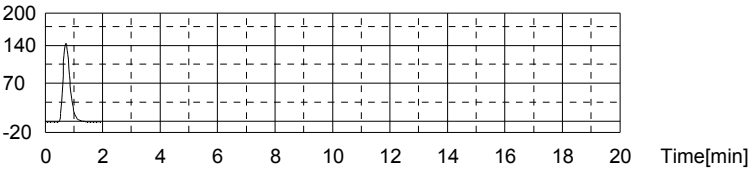
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.170mg/L TC:6.564mg/L IC:5.394mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	246.7	6.564mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 06:13:47 PM

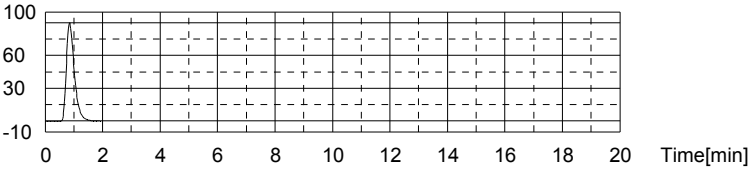
Mean Area 246.7
Mean Conc. 6.564mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	173.2	5.394mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 06:18:42 PM

Mean Area 173.2
Mean Conc. 5.394mg/L



Sample

Sample Name: L12040910-28
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

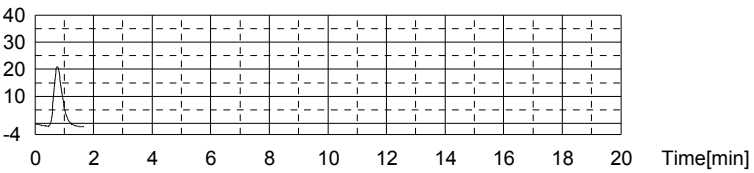
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:1.260mg/L TC:1.169mg/L IC:-0.09171mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.00	1.169mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 06:25:49 PM

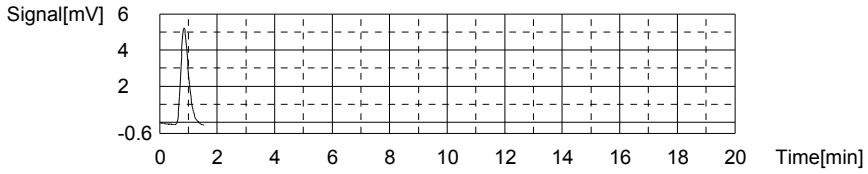
Mean Area 44.00
Mean Conc. 1.169mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.16	-0.09171mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 06:30:13 PM

Mean Area 10.16
Mean Conc. -0.09171mg/L



Sample

Sample Name: L12040910-31
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

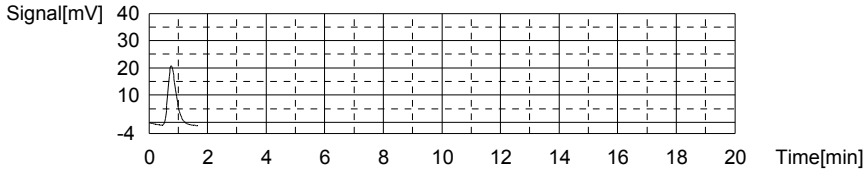
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:1.256mg/L TC:1.148mg/L IC:-0.1083mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.23	1.148mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 06:37:21 PM

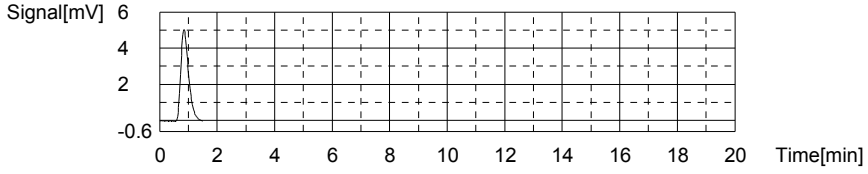
Mean Area 43.23
Mean Conc. 1.148mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.667	-0.1083mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 06:41:45 PM

Mean Area 9.667
Mean Conc. -0.1083mg/L



Sample

Sample Name: WG396601-01 BLK
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

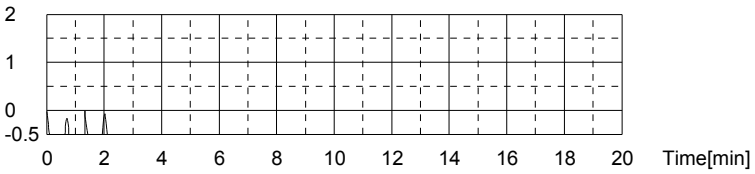
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3870mg/L TC:0.06872mg/L IC:-0.3183mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.672	0.06864mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 06:46:42 PM
2	2.678	0.06879mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 06:50:08 PM

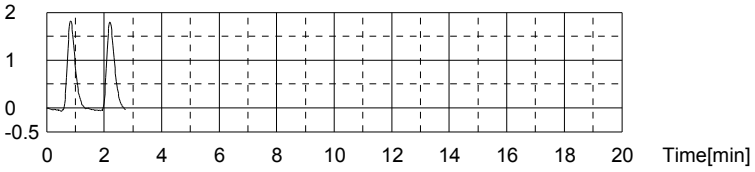
Mean Area 2.675
Mean Conc. 0.06872mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.439	-0.3178mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 06:53:57 PM
2	3.413	-0.3187mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 06:57:44 PM

Mean Area 3.426
Mean Conc. -0.3183mg/L



Sample

Sample Name: WG396601-02 LCS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

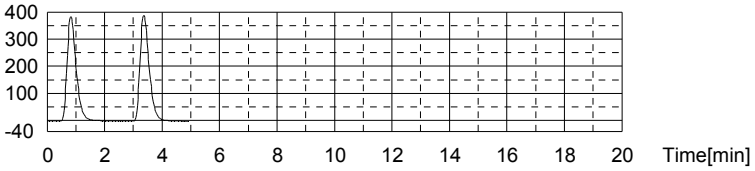
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.89mg/L TC:22.65mg/L IC:-0.2385mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	839.2	22.33mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 07:05:44 PM
2	862.7	22.96mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 07:10:24 PM

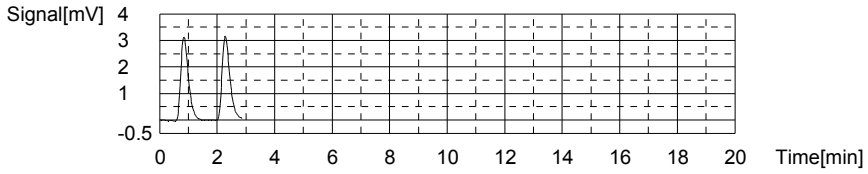
Mean Area 851.0
Mean Conc. 22.65mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.796	-0.2385mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 07:14:39 PM
2	5.800	-0.2384mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 07:18:43 PM

Mean Area 5.798
Mean Conc. -0.2385mg/L



Sample

Sample Name: WG396601-03 LCSDUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

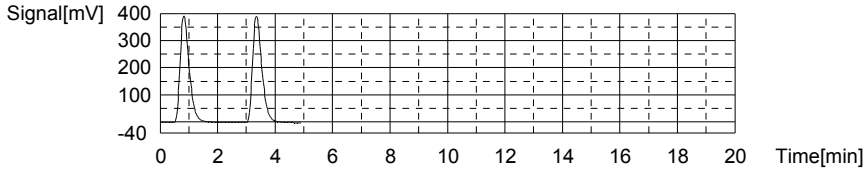
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.49mg/L TC:23.25mg/L IC:-0.2368mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	865.3	23.03mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 07:26:42 PM
2	882.1	23.48mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 07:31:21 PM

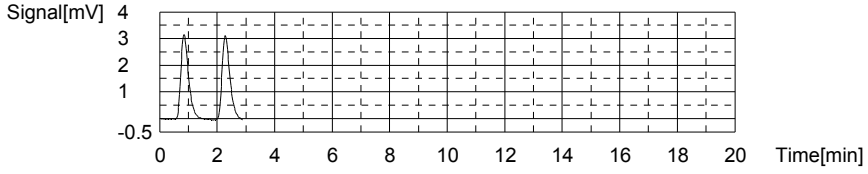
Mean Area 873.7
Mean Conc. 23.25mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.808	-0.2381mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 07:35:42 PM
2	5.887	-0.2355mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 07:39:50 PM

Mean Area 5.848
Mean Conc. -0.2368mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

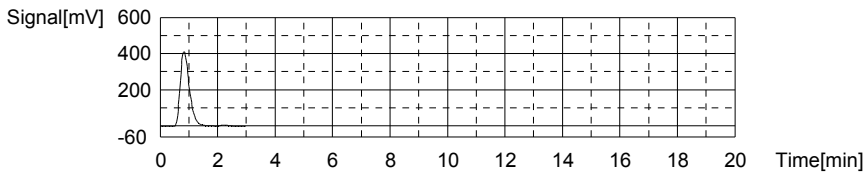
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.04mg/L TC:24.81mg/L IC:-0.2324mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	932.1	24.81mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 07:48:16 PM

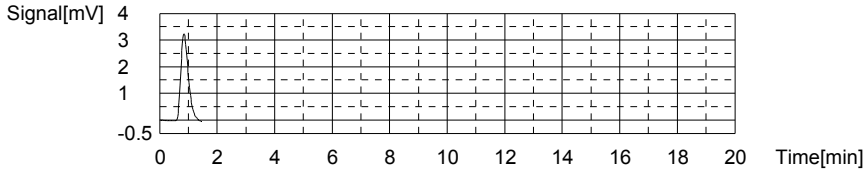
Mean Area 932.1
Mean Conc. 24.81mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.978	-0.2324mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 07:52:34 PM

Mean Area 5.978
Mean Conc. -0.2324mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

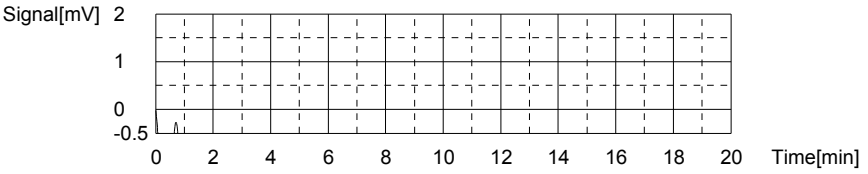
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3988mg/L TC:0.08027mg/L IC:-0.3185mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.109	0.08027mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 07:57:30 PM

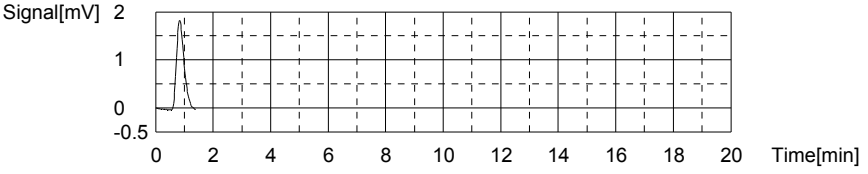
Mean Area 3.109
Mean Conc. 0.08027mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.419	-0.3185mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 08:01:17 PM

Mean Area 3.419
Mean Conc. -0.3185mg/L



Sample

Sample Name: L12040976-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

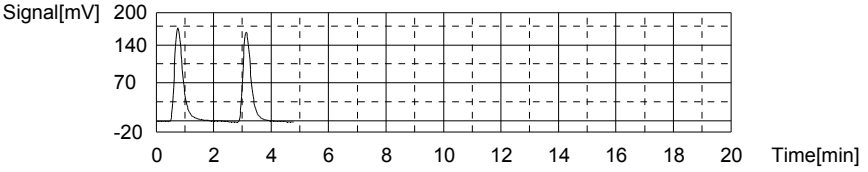
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.393mg/L TC:9.212mg/L IC:3.819mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	359.1	9.556mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 08:09:08 PM
2	333.3	8.869mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 08:13:55 PM

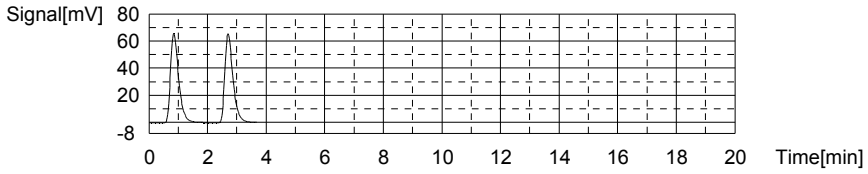
Mean Area 346.2
Mean Conc. 9.212mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	127.0	3.840mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 08:18:43 PM
2	125.8	3.799mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 08:23:15 PM

Mean Area 126.4
Mean Conc. 3.819mg/L



Sample

Sample Name: L12040976-02
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

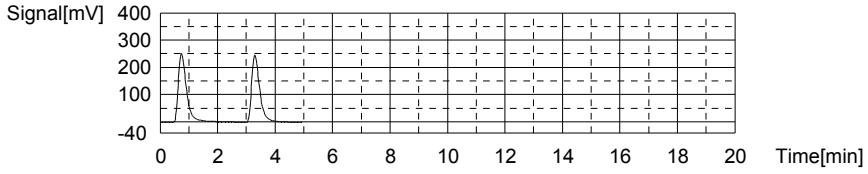
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.885mg/L TC:13.23mg/L IC:7.347mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	504.0	13.41mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 08:31:16 PM
2	490.5	13.05mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 08:35:55 PM

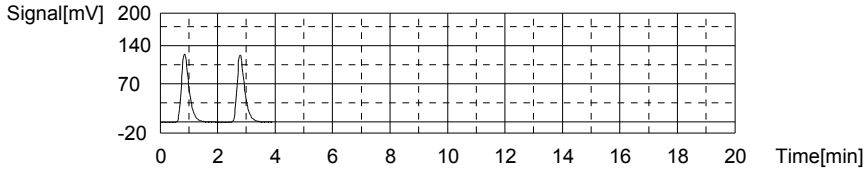
Mean Area 497.3
Mean Conc. 13.23mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	233.5	7.423mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 08:40:51 PM
2	229.0	7.271mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 08:45:37 PM

Mean Area 231.3
Mean Conc. 7.347mg/L



Sample

Sample Name: WG396601-04
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

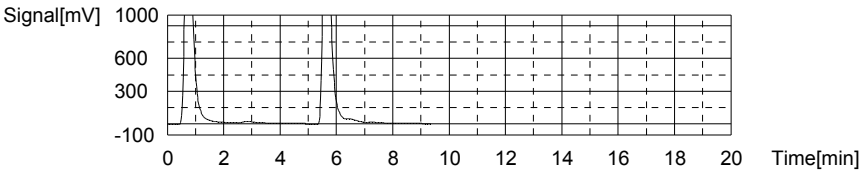
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-0.1244mg/L TC:92.42mg/L IC:92.55mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3465	92.22mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 08:55:59 PM
2	3480	92.62mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 09:03:35 PM

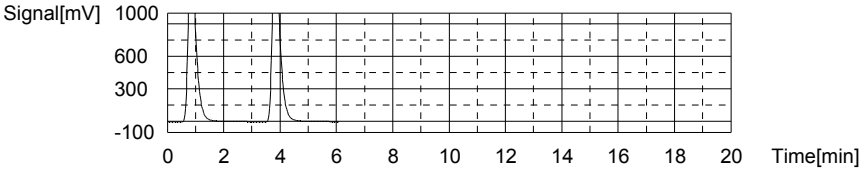
Mean Area 3473
Mean Conc. 92.42mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2757	92.33mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 09:10:12 PM
2	2770	92.77mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 09:16:42 PM

Mean Area 2764
Mean Conc. 92.55mg/L



Sample

Sample Name: WG396601-05 DUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

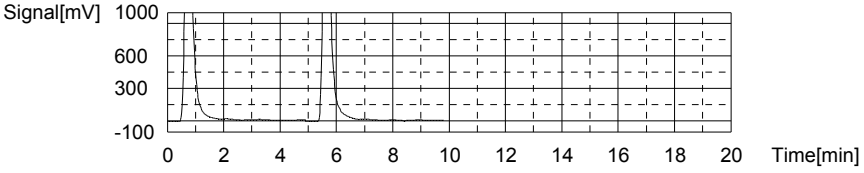
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.558mg/L TC:90.89mg/L IC:89.33mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3379	89.93mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 09:27:04 PM
2	3451	91.85mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 09:35:03 PM

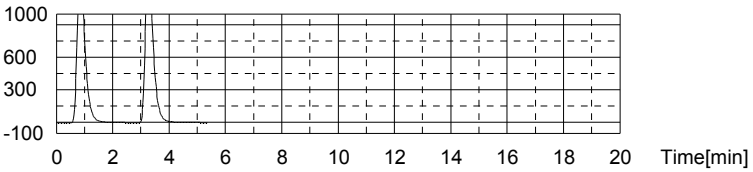
Mean Area 3415
Mean Conc. 90.89mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2649	88.70mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 09:41:09 PM
2	2687	89.97mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 09:47:26 PM

Mean Area 2668
Mean Conc. 89.33mg/L



Sample

Sample Name: WG396601-06 MS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

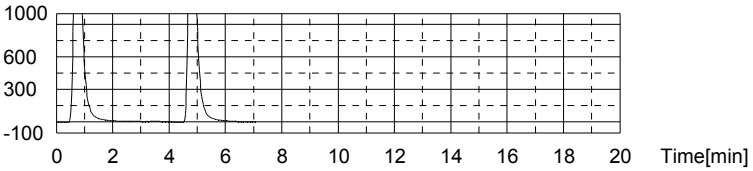
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.603mg/L TC:91.65mg/L IC:89.05mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3471	92.38mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 09:56:58 PM
2	3416	90.92mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 10:02:18 PM

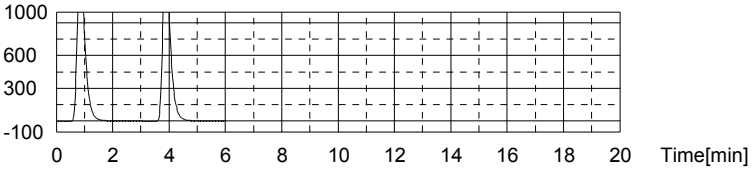
Mean Area 3444
Mean Conc. 91.65mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2670	89.40mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 10:09:08 PM
2	2649	88.70mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 10:15:29 PM

Mean Area 2660
Mean Conc. 89.05mg/L



Sample

Sample Name: WG396601-07 MSD
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

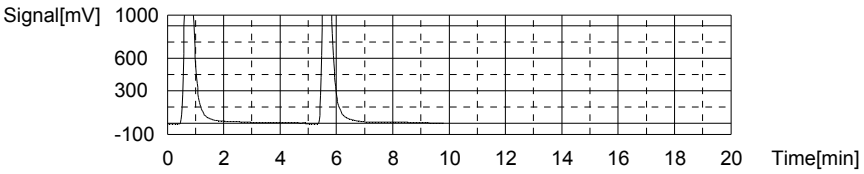
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.712mg/L TC:99.37mg/L IC:93.66mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3705	98.61mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 10:25:51 PM
2	3762	100.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 10:34:02 PM

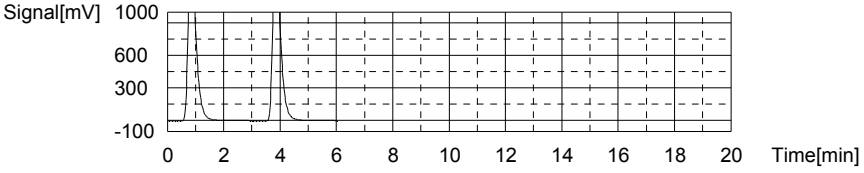
Mean Area 3734
Mean Conc. 99.37mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2804	93.91mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 10:40:49 PM
2	2789	93.41mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 10:47:24 PM

Mean Area 2797
Mean Conc. 93.66mg/L



Sample

Sample Name: L12040928-03
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

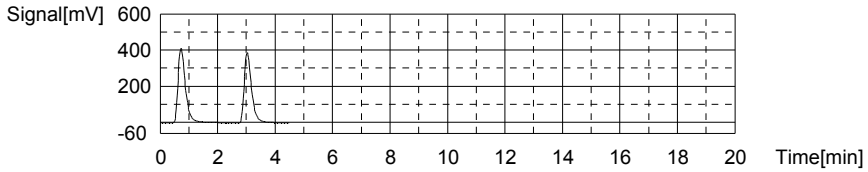
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.582mg/L TC:19.00mg/L IC:14.42mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	733.8	19.53mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 10:55:10 PM
2	694.1	18.47mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 11:00:38 PM

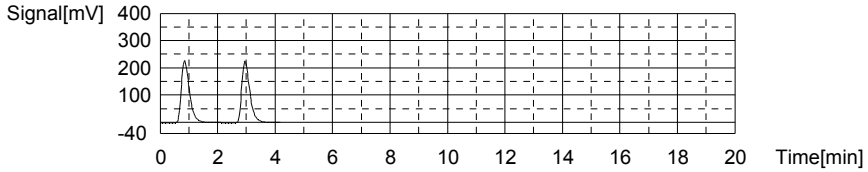
Mean Area 714.0
Mean Conc. 19.00mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	445.4	14.55mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 11:05:57 PM
2	437.4	14.28mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 11:10:52 PM

Mean Area 441.4
Mean Conc. 14.42mg/L



Sample

Sample Name: L12040963-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

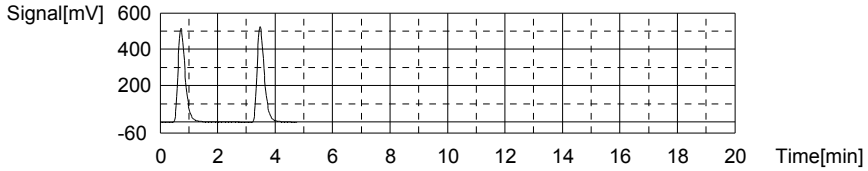
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.421mg/L TC:24.47mg/L IC:21.05mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	915.4	24.36mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 11:19:05 PM
2	923.7	24.58mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 11:23:27 PM

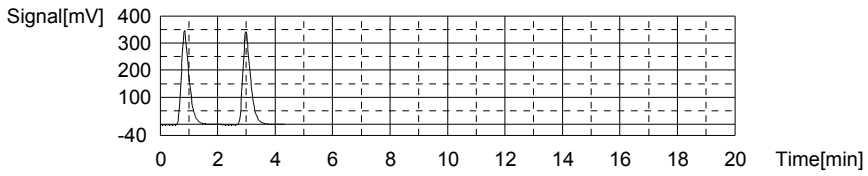
Mean Area 919.6
Mean Conc. 24.47mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	641.2	21.14mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 11:28:43 PM
2	635.9	20.96mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 11:33:48 PM

Mean Area 638.5
Mean Conc. 21.05mg/L



Sample

Sample Name: L12040963-03
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

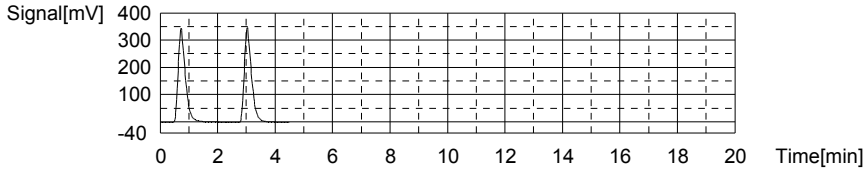
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.001mg/L TC:16.05mg/L IC:12.05mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	598.9	15.94mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 11:41:35 PM
2	607.3	16.16mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/01/2012 11:47:02 PM

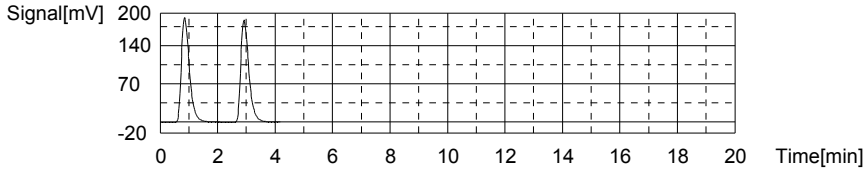
Mean Area 603.1
Mean Conc. 16.05mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	374.3	12.16mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 11:52:11 PM
2	367.7	11.94mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/01/2012 11:57:08 PM

Mean Area 371.0
Mean Conc. 12.05mg/L



Sample

Sample Name: <Untitled>
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

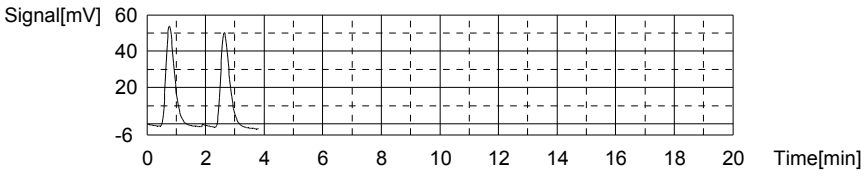
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.493mg/L TC:2.989mg/L IC:0.4963mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	114.0	3.032mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 12:04:29 AM
2	110.8	2.947mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 12:08:42 AM

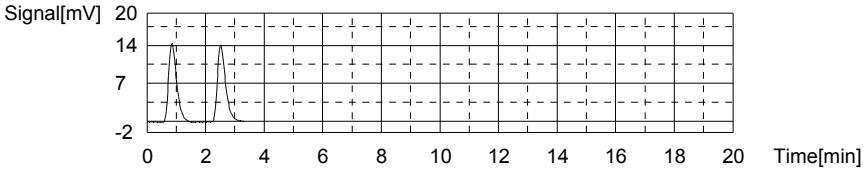
Mean Area 112.4
Mean Conc. 2.989mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.08	0.5112mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 12:13:21 AM
2	27.19	0.4813mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 12:17:38 AM

Mean Area 27.64
Mean Conc. 0.4963mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

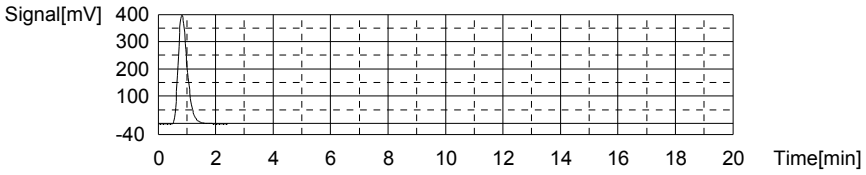
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.62mg/L TC:23.41mg/L IC:-0.2093mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	879.6	23.41mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 12:25:32 AM

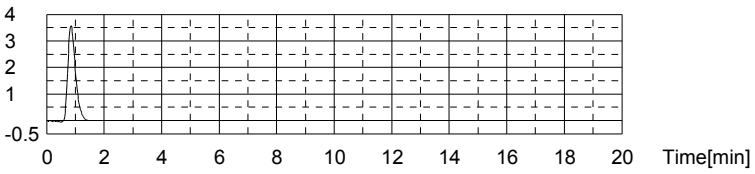
Mean Area 879.6
Mean Conc. 23.41mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.665	-0.2093mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 12:29:52 AM

Mean Area 6.665
Mean Conc. -0.2093mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

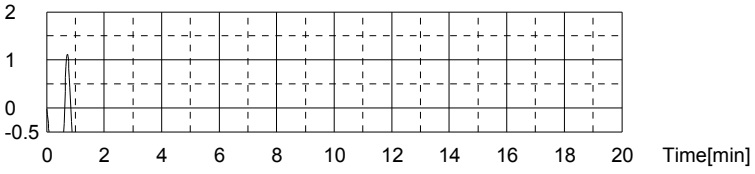
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4232mg/L TC:0.1438mg/L IC:-0.2794mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.497	0.1438mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 12:34:56 AM

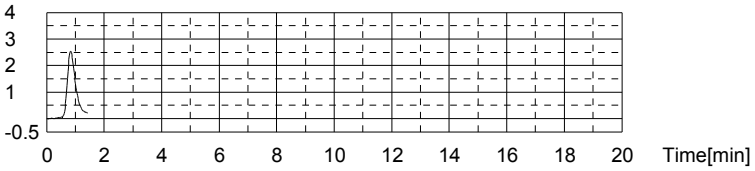
Mean Area 5.497
Mean Conc. 0.1438mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.583	-0.2794mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 12:38:45 AM

Mean Area 4.583
Mean Conc. -0.2794mg/L



Sample

Sample Name: L12040963-07
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

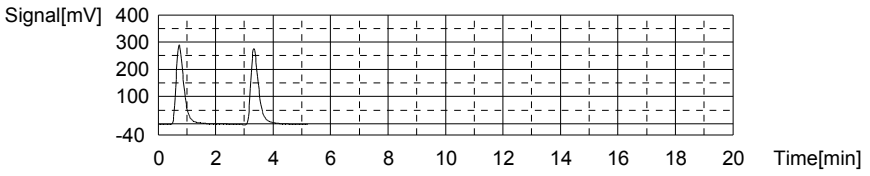
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.005mg/L TC:14.50mg/L IC:10.50mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	550.9	14.66mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 12:46:50 AM
2	539.2	14.35mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 12:51:48 AM

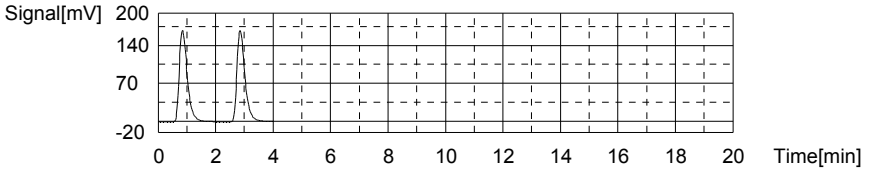
Mean Area 545.0
Mean Conc. 14.50mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	324.4	10.48mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 12:56:56 AM
2	325.5	10.52mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 01:01:43 AM

Mean Area 325.0
Mean Conc. 10.50mg/L



Sample

Sample Name: L12040844-01 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

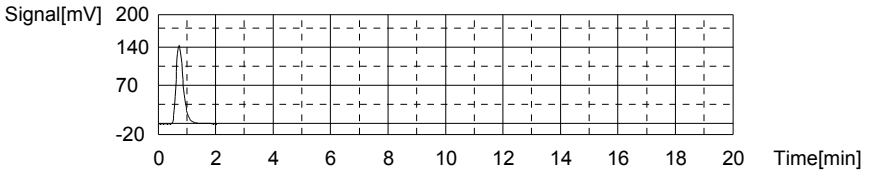
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.643mg/L TC:6.747mg/L IC:5.105mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	253.6	6.747mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 01:09:14 AM

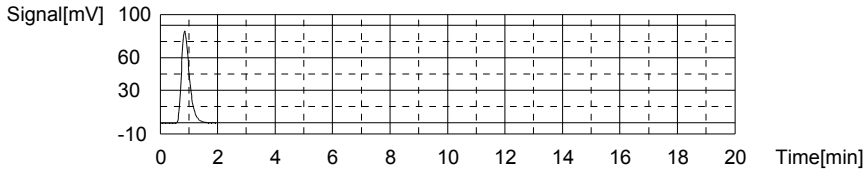
Mean Area 253.6
Mean Conc. 6.747mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	164.6	5.105mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 01:14:09 AM

Mean Area 164.6
Mean Conc. 5.105mg/L



Sample

Sample Name: L12040844-03 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

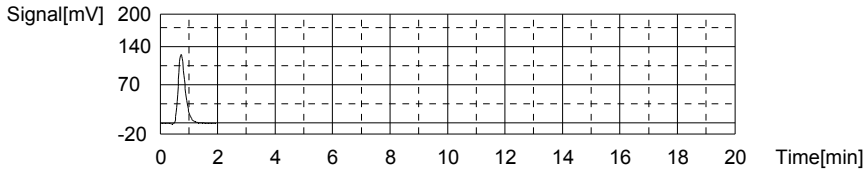
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.820mg/L TC:5.872mg/L IC:4.051mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	220.7	5.872mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 01:21:40 AM

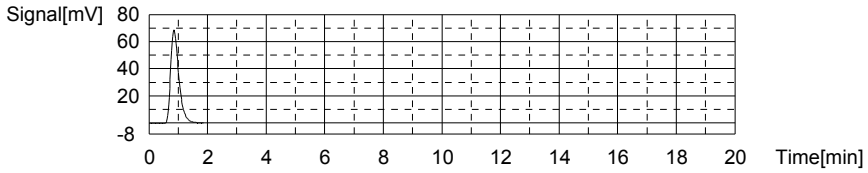
Mean Area 220.7
Mean Conc. 5.872mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	133.3	4.051mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 01:26:29 AM

Mean Area 133.3
Mean Conc. 4.051mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

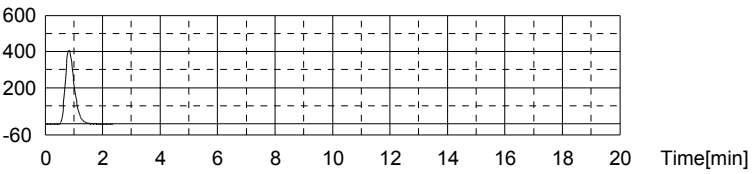
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.14mg/L TC:23.94mg/L IC:-0.2017mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	899.6	23.94mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 01:34:19 AM

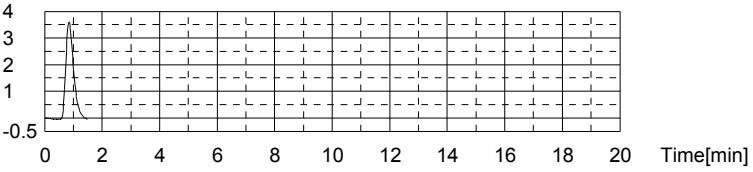
Mean Area 899.6
Mean Conc. 23.94mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.892	-0.2017mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/02/2012 01:38:37 AM

Mean Area 6.892
Mean Conc. -0.2017mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

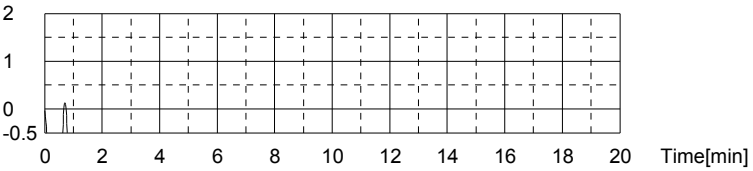
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3763mg/L TC:0.09680mg/L IC:-0.2795mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.730	0.09680mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/02/2012 01:43:37 AM

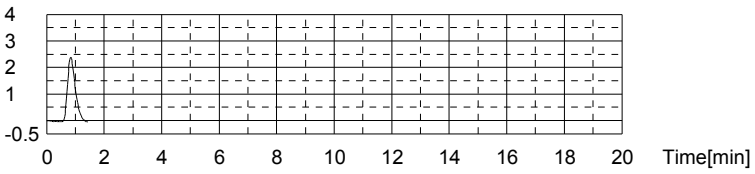
Mean Area 3.730
Mean Conc. 0.09680mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.579	-0.2795mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/02/2012 01:47:27 AM

Mean Area 4.579
Mean Conc. -0.2795mg/L



3.0 Attachments

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
May 10, 2012

ADC – ANTHONY D. CANTER	AJF – AMANDA J. FICKIESEN	ALB – ANNIE L. BROWN
ALV – AMY L. VALENTINE	AML – TONY M. LONG	AZH – AFTER HOURS
BLG – BRENDA L. GREENWALT	BRG – BRENDA R. GREGORY	CAA – CASSIE A. AUGENSTEIN
CAF – CHERYL A. FLOWERS	CEB – CHAD E. BARNES	CLC – CHRYS L. CRAWFORD
CLS – CARA L. STRICKLER	CLW – CHARISSA L. WINTERS	CPD – CHAD P. DAVIS
CS – CODY M. STRAHLER	CSH – CHRIS S. HILL	DDE – DEBRA D. ELLIOTT
DEV – DAVID E. VANDENBERG	DGB – DOUGLAS G. BUTCHER	DIH – DEANNA I. HESSON
DLB – DAVID L. BUMGARNER	DLP – DOROTHY L. PAYNE	DLR – DIANNA L. RAUCH
DSM – DAVID S. MOSSOR	ECL – ERIC C. LAWSON	EDL – ERIN D. LONG
ERP – ERIN R. PORTER	FJB – FRANCES J. BOLDEN	HAV – HEMA VILASAGAR
HJR – HOLLY J. REED	JAL – JOHN A. LENT	JBK – JEREMY B. KINNEY
JDH – JUSTIN D. HESSON	JKS – JANE K. SCHAAD	JLL – JOHN L. LENT
JWR – JOHN W. RICHARDS	JWS – JACK W. SHEAVES	JYH – JI Y. HU
KEB – KATIE E. BARNES	KHR – KIM H. RHODES	KRA – KATHY R. ALBERTSON
LKN – LINDA K. NEDEFF	LSB – LESLIE S. BUCINA	MDA – MIKE D. ALBERTSON
MDC – MIKE D. COCHRAN	MES – MARY E. SCHILLING	MMB – MAREN M. BEERY
MRT – MICHELLE R. TAYLOR	MSW – MATT S. WILSON	PDM – PIERCE D. MORRIS
PWD – PAUL W. DENT	QX – QIN XU	RAH – ROY A. HALSTEAD
REK – BOB E. KYER	RLB – BOB BUCHANAN	RLK – ROBIN L. KLINGER
RS – ROSEMARY SCOTT	RWC – RODNEY W. CAMPBELL	SJP – SUZANNE J. PAUGH
SLM – STEPHANIE L. MOSSBURG	SLP – SHERI L. PFALZGRAF	TIP – TAE I. PARRISH
TMB – TIFFANY M. BAILEY	TMM – TAMMY M. MORRIS	VC – VICKI COLLIER
WJB – WILL J. BEASLEY	WTD – WADE T. DELONG	XXX – UNAVAILABLE OR SUBCONTRACT

Microbac Laboratories Inc.
List of Valid Qualifiers
May 10, 2012

Qualkey: WATERLOO

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to interference.
E	Semiquantitative result (out of calibration range)
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration.
J	The analyte was positively identified, but the quantitation was below the RL.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Not detected at or above adjusted sample detection limit.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

Microbac

Co.Name:	CH2M HILL	**TAT:**	Standard
Prj Contact:	Dave Newman	**Phone:**	973 316 9300
Prj Name:	Dow Waterloo		
Location:	Waterloo, NY	**Job Name:**	Waterloo

Sampler Print

Graham Sharkey
Alexandra Crane
Michael Murphy

Sampler Sign

GSharkey

COC No. 042412-1

Sample ID	Comp	Grab	Date	Time	Hold	# of Containers	VOC_8260	SVOC_PAH	SVOC_8270	D_Gases_RSK	Alkalinity	PHOS_T, TOC, NO3NO2	Nitrate_calc, SO4	Metals	Dissolved Metals		Notes:
MW-16I-042412		X	4/24/12	12:35		15	X	X	X	X	X	X	X	X	X		
MW-16S-042412		X	4/24/12	12:37		15	X	X	X	X	X	X	X	X	X		
MW-07-042412		X	4/24/12	13:15		15	X	X	X	X	X	X	X	X	X		
TB-042412		X	4/24/12	8:05		2	X										

Relinquished By: GSharkey	Received By: FEDEX	Relinquished By	Received By:
Date/Time 4/24/12 @ 1730	Date/Time 4/24/12	Date/Time:	Date/Time:
Relinquished By:	Microbac OVD Received: 04/25/2012 10:45 By: BRENDA GREENWALT 221000024458	Cooler Temp(s):	Comments:
Date/Time	Brenda Greenwalt		

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-01	963923	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:14	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:15	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:15	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12040844-01	963924	RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-01	963925	826-SPE 827-PAHL 827-SPE-DIOX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	PREP	W1	EXT	25-APR-2012 14:27	CEB	JKS	
3	DISP	EXT	DISP	26-APR-2012 09:57	BLG	BLG	
4	ANALYZ*	EXT	SEMI	30-APR-2012 08:05	CAA	CEB	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	STORE	W1	A1	27-APR-2012 08:10	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12040844-01	963926	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	PREP	W1	EXT	27-APR-2012 06:31	CEB	AZH	

Comments:Products cancelled.

3	DISP	EXT	DISP	30-APR-2012 08:36	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	STORE	W1	A1	27-APR-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12040844-01	963927	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	ANALYZ	W1	WET	26-APR-2012 09:02	DIH	JKS	
3	STORE	WET	A2	27-APR-2012 06:50	AZH	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-01	963928	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	ANALYZ	W1	WET	25-APR-2012 15:41	ERP	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040844-01	963929	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	W1	WET	25-APR-2012 15:41	ERP	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040844-01	963930	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	25-APR-2012 14:18	CLS		
2	PREP	W1	DIG	26-APR-2012 05:24	REK	AZH	
3	ANALYZ*	DIG	METALS	26-APR-2012 08:46	JYH	REK	
4	STORE	DIG	A2	26-APR-2012 13:59	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12040844-02	963931	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	25-APR-2012 14:18	CLS		
2	PREP	W1	DIG	26-APR-2012 05:24	REK	AZH	
3	ANALYZ*	DIG	METALS	26-APR-2012 08:46	JYH	REK	
4	STORE	DIG	A2	26-APR-2012 13:59	CLS	BRG	

Sample extract/digestate/leachate

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-03	963932	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:15	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:15	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:15	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12040844-03	963933	RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-03	963934	826-SPE 827-PAHL 827-SPE-DIOX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	PREP	W1	EXT	25-APR-2012 14:27	CEB	JKS	
3	DISP	EXT	DISP	26-APR-2012 09:57	BLG	BLG	
4	ANALYZ*	EXT	SEMI	30-APR-2012 08:05	CAA	CEB	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	STORE	W1	A1	27-APR-2012 08:10	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12040844-03	963935	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	PREP	W1	EXT	27-APR-2012 06:31	CEB	AZH	

Comments:Products cancelled.

3	DISP	EXT	DISP	30-APR-2012 08:36	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	STORE	W1	A1	27-APR-2012 08:11	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12040844-03	963936	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	ANALYZ	W1	WET	26-APR-2012 09:02	DIH	JKS	
3	STORE	WET	A2	27-APR-2012 06:50	AZH	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-03	963937	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	ANALYZ	W1	WET	25-APR-2012 15:41	ERP	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040844-03	963938	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	W1	WET	25-APR-2012 15:41	ERP	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040844-03	963939	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	25-APR-2012 14:18	CLS		
2	PREP	W1	DIG	26-APR-2012 05:24	REK	AZH	
3	ANALYZ*	DIG	METALS	26-APR-2012 08:46	JYH	REK	
4	STORE	DIG	A2	26-APR-2012 13:59	CLS	BRG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12040844-04	963940	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	25-APR-2012 14:18	CLS		
2	PREP	W1	DIG	26-APR-2012 05:24	REK	AZH	
3	ANALYZ*	DIG	METALS	26-APR-2012 08:46	JYH	REK	
4	STORE	DIG	A2	26-APR-2012 13:59	CLS	BRG	

***Sample extract/digestate/leachate**

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-05	963941	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:14	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:14	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:14	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12040844-05	963942	RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		
2	ANALYZ	V1	ORG4	26-APR-2012 08:12	MRT	JKT	
3	STORE	ORG4	A2	08-MAY-2012 07:35	JKT	MRT	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-05	963943	826-SPE 827-PAHL 827-SPE-DIOX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	PREP	W1	EXT	25-APR-2012 14:27	CEB	JKS	
3	DISP	EXT	DISP	26-APR-2012 09:57	BLG	BLG	
4	ANALYZ*	EXT	SEMI	30-APR-2012 08:05	CAA	CEB	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	STORE	W1	A1	27-APR-2012 08:11	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12040844-05	963944	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	PREP	W1	EXT	27-APR-2012 06:31	CEB	AZH	

Comments:Products cancelled.

3	DISP	EXT	DISP	30-APR-2012 08:37	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	STORE	W1	A1	27-APR-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12040844-05	963945	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	ANALYZ	W1	WET	26-APR-2012 09:02	DIH	JKS	
3	STORE	WET	A2	27-APR-2012 06:50	AZH	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-05	963946	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		
2	ANALYZ	W1	WET	25-APR-2012 15:41	ERP	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040844-05	963947	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	W1	WET	25-APR-2012 15:41	ERP	JKS	
3	STORE	WET	A2	04-MAY-2012 07:40	RLK	DIH	

Samplenum	Container ID	Products
L12040844-05	963948	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	25-APR-2012 14:18	CLS		
2	PREP	W1	DIG	26-APR-2012 05:24	REK	AZH	
3	ANALYZ*	DIG	METALS	26-APR-2012 08:46	JYH	REK	
4	STORE	DIG	A2	26-APR-2012 13:59	CLS	BRG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12040844-06	963949	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	25-APR-2012 14:18	CLS		
2	PREP	W1	DIG	26-APR-2012 05:24	REK	AZH	
3	ANALYZ*	DIG	METALS	26-APR-2012 08:46	JYH	REK	
4	STORE	DIG	A2	26-APR-2012 13:59	CLS	BRG	

***Sample extract/digestate/leachate**

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040844
Account: 2736
Project: 2736.061
Samples: 7
Due Date: 09-MAY-2012

Samplenum	Container ID	Products
L12040844-07	963950	826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:14	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	25-APR-2012 14:18	CLS		<2
2	ANALYZ	V1	ORG4	26-APR-2012 08:14	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:53	JKT	MRT	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

NELAP Addendum - March 4, 2011

Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
Total Halide by Bomb Combustion (TX)
Particle Sizing - 200 Mesh (PS200)
Sulfate (SO4) - 9038
Specific Gravity/Density (SPGRAV)
Total Residual Chlorine (CL-TRL)
Total Volatile Solids (all forms) (TVS)
Total Coliform Bacteria (all methods)
Fecal Coliform Bacteria (all methods)
Sulfite (SO3)
Thiodiglycol (TDG-LCMS)

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL HPLC02/HPLC-UV

Nitroglycerin
Nitroguanidine
Acetic acid
Butyric acid
Lactic acid
Propionic acid
Pyruvic acid

OVL KNITRO-C-WUV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene
1,4-Dioxane
Atrazine
Benzaldehyde
Biphenyl
Caprolactam
Hexamethylphosphoramide (HMPA)
Pentachlorobenzene
Pentachloroethane

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL MSV0I/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL RSKOI/GC-FID

Isobutane
n-Butane
Propane
Propylene
Propyne

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

SOLID AND HAZARDOUS CHEMICALS

OVL HPLCOS-HPLC-UV

Nitroguanidine

OVL KNITRO-C-S/UV-VIS

Nitrocellulose

OVL MSS0I/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

NELAP Accreditation by Laboratory SOP

SOLID AND HAZARDOUS CHEMICALS

OVL MSV0I/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
lsoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)