Microbac

Laboratory Report Number: L12040928

Shane Lowe
CH2MHILL, Inc
CH2MHILL
Richmond Heights, MO 63117

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

Laboratory Contact:
Kathy Albertson – Team Chemist/Data Specialist
(740) 373-4071
Kathy.Albertson@microbac.com

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

This report was certified on May 15 2012

David E. Vandenberg

David Vandenberg – Managing Director

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

Microbac

Lab Report #: L12040928
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.

The following discrepancies were noted:

Discrepancy	Resolution
The pH range is not acceptable for on the Diss. Metals for ID MW-31-042612. Added 5mL, Lot # RGT 17283, on 4/27/12 at 1350. The pH range was acceptable. RLK	Per client, please adjust.

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #
0017248	G	1.0		1002239573910004575000872087763739
0017247	G	1.0		1002239573910004575000872087763658
0016482	G	2.0		1002239573910004575000872087763740
0015862	G	3.0		1002239573910004575000872087763750

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)	No
12	Were VOA samples free of headspace (less than 6mm)?	Yes

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
MW-27-042612	L12040928-01	04/26/2012 10:37	04/27/2012 10:52
MW-27-042612	L12040928-02	04/26/2012 10:37	04/27/2012 10:52
MW-10-042612	L12040928-03	04/26/2012 12:05	04/27/2012 10:52
MW-10-042612	L12040928-04	04/26/2012 12:05	04/27/2012 10:52
MW-31-042612	L12040928-05	04/26/2012 12:30	04/27/2012 10:52
MW-31-042612	L12040928-06	04/26/2012 12:30	04/27/2012 10:52
TB-042612	L12040928-07	04/26/2012 08:05	04/27/2012 10:52
MW-27-042612-MS	L12040928-08	04/26/2012 10:37	04/27/2012 10:52
MW-27-042612-MS	L12040928-09	04/26/2012 10:37	04/27/2012 10:52
MW-27-042612-MSD	L12040928-10	04/26/2012 10:37	04/27/2012 10:52
MW-27-042612-MSD	L12040928-11	04/26/2012 10:37	04/27/2012 10:52

Microbac REPORT L12040928
PREPARED FOR CH2MHILL, Inc
WORK ID:

1.0 Summary Data

1.1 Narratives

Login Number: L12040928
Department: Volatiles
Analyst: Anthony Canter

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

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

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

Matrix Spikes: Recoveries out of range were observed for the following analytes: Methyl acetate, Vinyl chloride. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: Samples 05, were run at a dilution.

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: 46147
Approved By: Michael Albertson

Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Methane. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Samples: 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: 45807
Approved By: Franci Bolden

Login Number: L12040928
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, 2,4-Dinitrophenol. 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.

Matrix Spikes: Recoveries and RPDs out of range were observed for the following analytes:1,4-Dioxane, 3-Nitroaniline, Hexachlorocyclopentadiene. Please see the applicable QC report for a detailed presentation of the failures.

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: 46250
Approved By: Mike Cochran

Login Number: L12040928
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3510C

Analysis SW-846 8270C

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: The MS/MSD pair exceeded % RPD criteria for 8 compounds, however the recoveries for both the MS and MSD are within specified limits.

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.

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: 45937
Approved By: Mike Cochran

Login Number: L12040928
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: WG396548 - All acceptance criteria were met.

Matrix Spikes: WG396548 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 08(MS) and 10(MSD) yielded noncompliant recoveries for five analytes. Sample 02 was chosen by the client for MS/MSD analysis. Samples 09(MS) and 11(MSD) yielded noncompliant recoveries for four analytes.

SAMPLES

Samples: WG396548 - Client samples 05 and 06 required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 45819
Approved By: Sheri Pfalzgraf

Login Number: L12040928
Department: Metals
Analyst: Sheri Pfalzgraf

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: WG396659 - All acceptance criteria were met.

Matrix Spikes: WG396659 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 08(MS) and 10(MSD) met all acceptance criteria. Sample 02 was chosen by the client for MS/MSD analysis. Samples 09(MS) and 11(MSD) met all acceptance criteria.

SAMPLES

Samples: WG396659 - Client samples 05 and 06 required dilution analyses in order to obtain results for lead within the linear range.

Narrative ID: 45750
Approved By: Sheri Pfalzgraf

Login Number: L12040928
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.

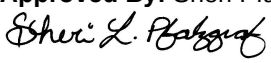
Serial Dilution/Post Digestion Spikes: WG396767 - All acceptance criteria were met.

Matrix Spikes: WG396767 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 08(MS) and 10(MSD) met all acceptance criteria. Sample 02 was chosen by the client for MS/MSD analysis. Samples 09(MS) and 11(MSD) met all acceptance criteria.

SAMPLES

Samples: WG3967667 - Client samples 05 and 06 contained significant amounts of sediment.

Narrative ID: 45820
Approved By: Sheri Pfalzgraf



Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Alkalinity, Total (as CaCO3). Please see the applicable QC report for a detailed presentation of the failures.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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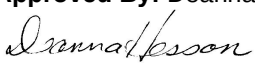
Narrative ID: 46068
Approved By: Deanna Hesson



Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Nitrate (as N). Please see the applicable QC report for a detailed presentation of the failures.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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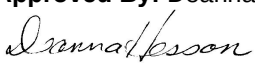
Narrative ID: 46071
Approved By: Deanna Hesson



Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Phosphorus, Total. Please see the applicable QC report for a detailed presentation of the failures.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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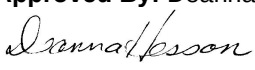
Narrative ID: 46069
Approved By: Deanna Hesson



Login Number: L12040928
Department: Conventionals
Analyst: Deanna Hesson

METHOD

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

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

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

SAMPLES

Samples: All acceptance criteria were met.

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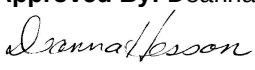
Narrative ID: 46070
Approved By: Deanna Hesson



Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Total Organic Carbon. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Samples: All acceptance criteria were met.

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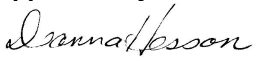
Narrative ID: 46072
Approved By: Deanna Hesson



1.2 Certificate of Analysis

Certificate of Analysis

Sample #: L12040928-01
Client ID: MW-27-042612
Matrix: Water
Workgroup #: WG397043
Collect Date: 04/26/2012 10:37
Sample Tag: 01

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

Instrument: HPMS11
Prep Date: N/A
Cal Date: 05/03/2012 21:37
Run Date: 05/05/2012 00:42
File ID: 11M83365

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 #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS11
Client ID:	MW-27-042612	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	05/03/2012 21:37
Workgroup #:	WG397043	**Analyst:**	ADC	**Run Date:**	05/05/2012 00:42
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	11M83365
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	93.4	80	120	
Dibromofluoromethane	98.7	86	118	
p-Bromofluorobenzene	103	86	115	
Toluene-d8	104	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-27-042612	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG396527	**Analyst:**	MDA	**Run Date:**	04/30/2012 17:39
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	16G32114
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	430		5.00	1.00
Carbon Dioxide	124-38-9	163000		10000	2500

Sample #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 17:45
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60760
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		4.09		0.000	0.000
unknown		5.65		0.000	0.000

Certificate of Analysis

Sample #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 17:45
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60760
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 #: L12040928-01
Client ID: MW-27-042612
Matrix: Water
Workgroup #: WG396821
Collect Date: 04/26/2012 10:37
Sample Tag: 01

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

Instrument: HPMS4
Prep Date: 04/30/2012 10:30
Cal Date: 04/19/2012 13:23
Run Date: 05/09/2012 17:45
File ID: 4M60760

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	91.3	10	123	
2-Fluorobiphenyl	79.0	43	116	
2-Fluorophenol	61.5	21	100	
Nitrobenzene-d5	76.8	35	114	
p-Terphenyl-d14	92.8	33	141	

Certificate of Analysis

Sample #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 17:45
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60760
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	65.7	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-27-042612	**Prep Method:**	3510C	**Prep Date:**	05/03/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397013	**Analyst:**	CAA	**Run Date:**	05/04/2012 11:51
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	7M54889
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	63.4	43	116	
Nitrobenzene-d5	67.2	35	114	
p-Terphenyl-d14	63.7	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040928-01 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-27-042612 | **Prep Method:** 3005A | **Prep Date:** 04/30/2012 08:42
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 | **Analyst:** KHR | **Run Date:** 05/03/2012 16:13
Collect Date: 04/26/2012 10:37 | **Dilution:** 1 | **File ID:** P2.050312.161304
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	0.221		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000409		0.000500	0.000250
Calcium, Total	7440-70-2	247		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	26.0		0.100	0.0250
Magnesium, Total	7439-95-4	41.4		0.500	0.250
Manganese, Total	7439-96-5	4.14		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	12.1		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	84.5		0.500	0.250
Vanadium, Total	7440-62-2	0.00731		0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-01 | **PrePrep Method:** N/A | **Instrument:** ICP-MS2
Client ID: MW-27-042612 | **Prep Method:** 3015 | **Prep Date:** 05/01/2012 08:15
Matrix: Water | **Analytical Method:** 6020 | **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 | **Analyst:** SLP | **Run Date:** 05/01/2012 11:30
Collect Date: 04/26/2012 10:37 | **Dilution:** 1 | **File ID:** NI.050112.113035
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	0.00457		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00433		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100

Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-27-042612 **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 11:30
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** NI.050112.113035
Sample Tag: 01 **Units:** mg/L

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:29
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.112944
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 #: L12040928-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/04/2012 13:10
Workgroup #: WG397052 **Analyst:** DIH **Run Date:** 05/04/2012 13:26
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** SC120504003.035
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		726		100	50.0

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/01/2012 15:43
Workgroup #: WG396738 **Analyst:** DIH **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 10:37 **Dilution:** 20 **File ID:** SC12050709023701
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8		U	1.00	0.500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/30/2012 09:56
Workgroup #: WG396495 **Analyst:** DIH **Run Date:** 04/30/2012 10:13
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120430004.034
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	0.998		0.200	0.100

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612 **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 07:43
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120503001.030
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	9.45		5.00	2.50

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-27-042612 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396993 **Analyst:** DIH **Run Date:** 05/04/2012 10:58
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** TC05042012.006
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		26.7		5.00	2.50

Certificate of Analysis

Sample #: L12040928-02 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-27-042612 | **Prep Method:** 3005A | **Prep Date:** 04/30/2012 08:42
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 | **Analyst:** KHR | **Run Date:** 05/03/2012 16:19
Collect Date: 04/26/2012 10:37 | **Dilution:** 1 | **File ID:** P2.050312.161905
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	0.249		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	273		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	32.4		0.100	0.0250
Magnesium, Dissolved	7439-95-4	44.1		0.500	0.250
Manganese, Dissolved	7439-96-5	5.52		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	13.5		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	102		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-02 | **PrePrep Method:** N/A | **Instrument:** ICP-MS2
Client ID: MW-27-042612 | **Prep Method:** 3015 | **Prep Date:** 05/01/2012 08:15
Matrix: Water | **Analytical Method:** 6020 | **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 | **Analyst:** SLP | **Run Date:** 05/01/2012 11:33
Collect Date: 04/26/2012 10:37 | **Dilution:** 1 | **File ID:** NI.050112.113322
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	0.00352		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00419		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040928-02 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.113526
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 #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HPMS11
Client ID: MW-10-042612 **Prep Method:** 5030B/5030C/5035A **Prep Date:** N/A
Matrix: Water **Analytical Method:** 8260B **Cal Date:** 05/03/2012 21:37
Workgroup #: WG397043 **Analyst:** ADC **Run Date:** 05/05/2012 01:13
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 11M83366
Sample Tag: 01 **Units:** ug/L

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

Certificate of Analysis

Sample #:	L12040928-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS11
Client ID:	MW-10-042612	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	05/03/2012 21:37
Workgroup #:	WG397043	**Analyst:**	ADC	**Run Date:**	05/05/2012 01:13
Collect Date:	04/26/2012 12:05	**Dilution:**	1	**File ID:**	11M83366
Sample Tag:	01	**Units:**	ug/L		

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	91.5	80	120	

Certificate of Analysis

Sample #:	L12040928-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS11
Client ID:	MW-10-042612	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	05/03/2012 21:37
Workgroup #:	WG397043	**Analyst:**	ADC	**Run Date:**	05/05/2012 01:13
Collect Date:	04/26/2012 12:05	**Dilution:**	1	**File ID:**	11M83366
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	98.2	86	118	
p-Bromofluorobenzene	106	86	115	
Toluene-d8	106	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12040928-03	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-10-042612	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG396527	**Analyst:**	MDA	**Run Date:**	04/30/2012 18:07
Collect Date:	04/26/2012 12:05	**Dilution:**	1	**File ID:**	16G32117
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	11.8		5.00	1.00
Carbon Dioxide	124-38-9	30600		10000	2500

Certificate of Analysis

Sample #:	L12040928-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-10-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 18:20
Collect Date:	04/26/2012 12:05	**Dilution:**	1	**File ID:**	4M60761
Sample Tag:	01	**Units:**	ug/L		

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

Certificate of Analysis

Sample #:	L12040928-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-10-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 18:20
Collect Date:	04/26/2012 12:05	**Dilution:**	1	**File ID:**	4M60761
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.00	2.50
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.00	2.50
bis(2-Ethylhexyl)phthalate	117-81-7	3.32		5.00	2.50
Butylbenzylphthalate	85-68-7		U	5.00	2.50
Carbazole	86-74-8		U	20.0	2.50
Chrysene	218-01-9		U	5.00	2.50
Di-N-Butylphthalate	84-74-2		U	5.00	2.50
Di-n-octylphthalate	117-84-0		U	5.00	2.50
Dibenzo(a,h)Anthracene	53-70-3		U	5.00	2.50
Dibenzofuran	132-64-9		U	5.00	2.50
Diethylphthalate	84-66-2		U	5.00	2.50
Dimethylphthalate	131-11-3		U	5.00	2.50
Fluoranthene	206-44-0		U	5.00	2.50
Fluorene	86-73-7		U	5.00	2.50
Hexachlorobenzene	118-74-1		U	5.00	2.50
Hexachlorobutadiene	87-68-3		U	5.00	2.50
Hexachlorocyclopentadiene	77-47-4		U	5.00	2.50
Hexachloroethane	67-72-1		U	5.00	2.50
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.00	2.50
Isophorone	78-59-1		U	5.00	2.50
N-Nitrosodiphenylamine	86-30-6		U	5.00	2.50
Naphthalene	91-20-3		U	5.00	2.50
Nitrobenzene	98-95-3		U	5.00	2.50
Pentachlorophenol	87-86-5		U	25.0	12.5
Phenanthrene	85-01-8		U	5.00	2.50
Phenol	108-95-2		U	5.00	2.50
Pyrene	129-00-0		U	5.00	2.50

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	80.7	10	123	
2-Fluorobiphenyl	71.8	43	116	
2-Fluorophenol	63.1	21	100	
Nitrobenzene-d5	69.2	35	114	
p-Terphenyl-d14	97.3	33	141	

Certificate of Analysis

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-10-042612 **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/09/2012 18:20
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 4M60761
Sample Tag: 01 **Units:** ug/L

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	68.9	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-10-042612 **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/09/2012 18:20
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 4M60761
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
unknown		4.25		0.000	0.000
unknown		6.00		0.000	0.000

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HPMS7
Client ID: MW-10-042612 **Prep Method:** 3510C **Prep Date:** 05/03/2012 09:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397013 **Analyst:** CAA **Run Date:** 05/04/2012 12:19
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 7M54890
Sample Tag: 01 **Units:** ug/L

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

Certificate of Analysis

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HPMS7
Client ID: MW-10-042612 **Prep Method:** 3510C **Prep Date:** 05/03/2012 09:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397013 **Analyst:** CAA **Run Date:** 05/04/2012 12:19
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 7M54890
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Fluoranthene	206-44-0		U	0.0549	0.0275
Fluorene	86-73-7		U	0.0549	0.0275
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0549	0.0275
Naphthalene	91-20-3		U	0.0549	0.0275
Phenanthrene	85-01-8		U	0.0549	0.0275
Pyrene	129-00-0		U	0.0549	0.0275

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	63.1	43	116	
Nitrobenzene-d5	66.1	35	114	
p-Terphenyl-d14	84.3	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-10-042612 **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 15:41
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** P2.050312.154116
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.0792		0.100	0.0500
Barium, Total	7440-39-3	0.0397		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000357		0.000500	0.000250
Calcium, Total	7440-70-2	73.7		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	0.266		0.100	0.0250
Magnesium, Total	7439-95-4	30.8		0.500	0.250
Manganese, Total	7439-96-5	0.00997		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	0.828		1.00	0.250

Certificate of Analysis

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-10-042612 **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 15:41
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** P2.050312.154116
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	141		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.

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-10-042612 **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 11:36
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** NI.050112.113609
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	0.00133		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00666		0.00100	0.000500
Thallium, Total	7440-28-0	0.000134		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-10-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:37
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** HY.050212.113729
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 #: L12040928-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-10-042612 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/04/2012 13:10
Workgroup #: WG397052 **Analyst:** DIH **Run Date:** 05/04/2012 13:28
Collect Date: 04/26/2012 12:05 **Dilution:** 2 **File ID:** SC120504003.038
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		405		40.0	20.0

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-10-042612 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/01/2012 15:43
Workgroup #: WG396738 **Analyst:** DIH **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 12:05 **Dilution:** 4 **File ID:** SC12050709033801
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	2.96		0.200	0.100

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-10-042612 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/30/2012 09:56
Workgroup #: WG396495 **Analyst:** DIH **Run Date:** 04/30/2012 10:14
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** SC120430004.037
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 #: L12040928-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-10-042612 **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 07:45
Collect Date: 04/26/2012 12:05 **Dilution:** 3 **File ID:** SC120503001.035
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	99.8		15.0	7.50

Certificate of Analysis

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-10-042612 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396601 **Analyst:** DIH **Run Date:** 05/01/2012 22:55
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** TC05012012.046
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		4.58		1.00	0.500

Sample #: L12040928-04 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-10-042612 **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 16:25
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** P2.050312.162510
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	0.0415		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	68.6		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	0.0835		0.100	0.0250
Magnesium, Dissolved	7439-95-4	32.1		0.500	0.250
Manganese, Dissolved	7439-96-5	0.00621		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	0.664		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	134		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 #:	L12040928-04	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-10-042612	**Prep Method:**	3015	**Prep Date:**	05/01/2012 08:15
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/01/2012 10:10
Workgroup #:	WG396659	**Analyst:**	SLP	**Run Date:**	05/01/2012 11:44
Collect Date:	04/26/2012 12:05	**Dilution:**	1	**File ID:**	NI.050112.114432
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.000527		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00118		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00614		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000142		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12040928-04	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-10-042612	**Prep Method:**	7470A	**Prep Date:**	05/01/2012 10:41
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/02/2012 10:19
Workgroup #:	WG396767	**Analyst:**	PDM	**Run Date:**	05/02/2012 11:40
Collect Date:	04/26/2012 12:05	**Dilution:**	1	**File ID:**	HY.050212.114055
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 #:	L12040928-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-31-042612	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397118	**Analyst:**	MES	**Run Date:**	05/05/2012 21:48
Collect Date:	04/26/2012 12:30	**Dilution:**	2	**File ID:**	6M107903
Sample Tag:	DL01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	2.00	0.500
1,1,2,2-Tetrachloroethane	79-34-5		U	2.00	0.400
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	4.00
1,1,2-Trichloroethane	79-00-5		U	2.00	0.500
1,1-Dichloroethane	75-34-3		U	2.00	0.250
1,1-Dichloroethene	75-35-4		U	2.00	1.00
1,2,3-Trichlorobenzene	87-61-6		U	2.00	1.00
1,2,4-Trichlorobenzene	120-82-1		U	2.00	0.400
1,2-Dibromo-3-chloropropane	96-12-8		U	10.0	2.00
1,2-Dibromoethane	106-93-4		U	2.00	0.500
1,2-Dichlorobenzene	95-50-1		U	2.00	0.250
1,2-Dichloroethane	107-06-2		U	2.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	2.00	0.500
trans-1,2-Dichloroethene	156-60-5		U	2.00	0.500
1,2-Dichloropropane	78-87-5		U	2.00	0.400
1,3-Dichlorobenzene	541-73-1		U	2.00	0.500
1,4-Dichlorobenzene	106-46-7		U	2.00	0.250
2-Butanone	78-93-3	15.9		20.0	5.00
2-Hexanone	591-78-6		U	20.0	5.00
4-Methyl-2-pentanone	108-10-1		U	20.0	5.00
Acetone	67-64-1	58.2		20.0	5.00
Benzene	71-43-2		U	2.00	0.250
Bromochloromethane	74-97-5		U	2.00	0.400
Bromodichloromethane	75-27-4		U	2.00	0.500
Bromoform	75-25-2		U	2.00	1.00
Bromomethane	74-83-9		U	2.00	1.00
Carbon disulfide	75-15-0	1.78		2.00	1.00
Carbon tetrachloride	56-23-5		U	2.00	0.500
Chlorobenzene	108-90-7		U	2.00	0.250
Chloroethane	75-00-3		U	2.00	1.00
Chloroform	67-66-3		U	2.00	0.250
Chloromethane	74-87-3		U	2.00	1.00
cis-1,3-Dichloropropene	10061-01-5		U	2.00	0.500

Certificate of Analysis

Sample #:	L12040928-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-31-042612	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397118	**Analyst:**	MES	**Run Date:**	05/05/2012 21:48
Collect Date:	04/26/2012 12:30	**Dilution:**	2	**File ID:**	6M107903
Sample Tag:	DL01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Cyclohexane	110-82-7		U	10.0	2.00
Dibromochloromethane	124-48-1		U	2.00	0.500
Dichlorodifluoromethane	75-71-8		U	2.00	0.500
Ethyl benzene	100-41-4		U	2.00	0.500
Isopropylbenzene	98-82-8		U	2.00	0.500
Methyl acetate	79-20-9		U	10.0	2.00
Methyl tert-butyl ether	1634-04-4		U	2.00	1.00
Methylcyclohexane	108-87-2		U	10.0	2.00
Methylene chloride	75-09-2		U	10.0	0.500
m,p-Xylene	179601-23-1		U	2.00	1.00
o-Xylene	95-47-6		U	2.00	0.500
Styrene	100-42-5		U	2.00	0.250
Tetrachloroethene	127-18-4		U	2.00	0.500
Toluene	108-88-3		U	2.00	0.500
trans-1,3-Dichloropropene	10061-02-6		U	2.00	1.00
Trichloroethene	79-01-6		U	2.00	0.500
Trichlorofluoromethane	75-69-4		U	2.00	0.500
Vinyl chloride	75-01-4		U	2.00	0.500
Epichlorohydrin	106-89-8			0.000	0.000

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	108	80	120	
Dibromofluoromethane	109	86	118	
p-Bromofluorobenzene	97.7	86	115	
Toluene-d8	105	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040928-05 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-31-042612 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG396527 **Analyst:** MDA **Run Date:** 04/30/2012 19:04
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** 16G32123
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	397		5.00	1.00
Carbon Dioxide	124-38-9	3280		10000	2500

Sample #: L12040928-05 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-31-042612 **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 16:32
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** P2.050312.163207
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	53.8		0.100	0.0500
Barium, Total	7440-39-3	0.369		0.0100	0.00250
Beryllium, Total	7440-41-7	0.00154		0.00200	0.000500
Cadmium, Total	7440-43-9	0.135		0.000500	0.000250
Calcium, Total	7440-70-2	57.6		0.200	0.100
Chromium, Total	7440-47-3	0.655		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0216		0.0200	0.00250
Copper, Total	7440-50-8	0.380		0.0200	0.00500
Iron, Total	7439-89-6	49.5		0.100	0.0250
Magnesium, Total	7439-95-4	27.6		0.500	0.250
Manganese, Total	7439-96-5	0.484		0.0100	0.00500
Nickel, Total	7440-02-0	0.104		0.0400	0.00500
Potassium, Total	7440-09-7	28.8		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.280		0.0100	0.00500
Zinc, Total	7440-66-6	7.70		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040928-05 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-31-042612 **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 16:44
Collect Date: 04/26/2012 12:30 **Dilution:** 10 **File ID:** P2.050312.164411
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	1850		5.00	2.50

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-05 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-31-042612 **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 11:52
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** NI.050112.115257
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0175		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0536		0.00100	0.000500
Selenium, Total	7782-49-2	0.00910		0.00100	0.000500
Thallium, Total	7440-28-0	0.00102		0.000200	0.000100

E	Semiquantitative result (out of calibration range)

Sample #: L12040928-05 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-31-042612 **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 14:58
Collect Date: 04/26/2012 12:30 **Dilution:** 250 **File ID:** NI.050112.145800
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Lead, Total	7439-92-1	3.50		0.250	0.125

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040928-05 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-31-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:42
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** HY.050212.114239
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00401		0.000200	0.000100

Sample #: L12040928-06 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-31-042612 **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 16:38
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** P2.050312.163809
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	43.7		0.100	0.0500
Barium, Dissolved	7440-39-3	0.315		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.00161		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.102		0.000500	0.000250
Calcium, Dissolved	7440-70-2	48.4		0.200	0.100
Chromium, Dissolved	7440-47-3	0.587		0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0175		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.288		0.0200	0.00500
Iron, Dissolved	7439-89-6	38.4		0.100	0.0250
Magnesium, Dissolved	7439-95-4	23.4		0.500	0.250
Manganese, Dissolved	7439-96-5	0.389		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.0882		0.0400	0.00500
Potassium, Dissolved	7440-09-7	25.7		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.252		0.0100	0.00500
Zinc, Dissolved	7440-66-6	5.95		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040928-06 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-31-042612 **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 16:50
Collect Date: 04/26/2012 12:30 **Dilution:** 10 **File ID:** P2.050312.165012
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	1760		5.00	2.50

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-06 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-31-042612 **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 11:55
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** NI.050112.115545
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.0184		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0514		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0106		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000873		0.000200	0.000100

E	Semiquantitative result (out of calibration range)

Sample #: L12040928-06 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-31-042612 **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 15:01
Collect Date: 04/26/2012 12:30 **Dilution:** 250 **File ID:** NI.050112.150137
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Lead, Dissolved	7439-92-1	2.94		0.250	0.125

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12040928-06 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-31-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:44
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** HY.050212.114434
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00523		0.000200	0.000100

Sample #: L12040928-07 **PrePrep Method:** N/A **Instrument:** HPMS11
Client ID: TB-042612 **Prep Method:** 5030B/5030C/5035A **Prep Date:** N/A
Matrix: Water **Analytical Method:** 8260B **Cal Date:** 05/03/2012 21:37
Workgroup #: WG397043 **Analyst:** ADC **Run Date:** 05/04/2012 19:34
Collect Date: 04/26/2012 08:05 **Dilution:** 1 **File ID:** 11M83355
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

Certificate of Analysis

Sample #:	L12040928-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS11
Client ID:	TB-042612	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	05/03/2012 21:37
Workgroup #:	WG397043	**Analyst:**	ADC	**Run Date:**	05/04/2012 19:34
Collect Date:	04/26/2012 08:05	**Dilution:**	1	**File ID:**	11M83355
Sample Tag:	01	**Units:**	ug/L		

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

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

Certificate of Analysis

Sample #: L12040928-07 **PrePrep Method:** N/A **Instrument:** HPMS11
Client ID: TB-042612 **Prep Method:** 5030B/5030C/5035A **Prep Date:** N/A
Matrix: Water **Analytical Method:** 8260B **Cal Date:** 05/03/2012 21:37
Workgroup #: WG397043 **Analyst:** ADC **Run Date:** 05/04/2012 19:34
Collect Date: 04/26/2012 08:05 **Dilution:** 1 **File ID:** 11M83355
Sample Tag: 01 **Units:** ug/L

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Toluene-d8	109	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** HPMS11
Client ID: MW-27-042612-MS **Prep Method:** 5030B/5030C/5035A **Prep Date:** N/A
Matrix: Water **Analytical Method:** 8260B **Cal Date:** 05/03/2012 21:37
Workgroup #: WG397043 **Analyst:** ADC **Run Date:** 05/04/2012 18:02
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 11M83352
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6	20.0		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	23.2		1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	19.0		5.00	2.00
1,1,2-Trichloroethane	79-00-5	21.5		1.00	0.250
1,1-Dichloroethane	75-34-3	20.7		1.00	0.125
1,1-Dichloroethene	75-35-4	21.1		1.00	0.500
1,2,3-Trichlorobenzene	87-61-6	23.1		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	24.0		1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8	21.6		5.00	1.00
1,2-Dibromoethane	106-93-4	20.6		1.00	0.250
1,2-Dichlorobenzene	95-50-1	20.2		1.00	0.125
1,2-Dichloroethane	107-06-2	20.8		1.00	0.250
cis-1,2-Dichloroethene	156-59-2	20.8		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	20.3		1.00	0.250
1,2-Dichloropropane	78-87-5	21.4		1.00	0.200
1,3-Dichlorobenzene	541-73-1	20.0		1.00	0.250
1,4-Dichlorobenzene	106-46-7	19.8		1.00	0.125
2-Butanone	78-93-3	19.2		10.0	2.50
2-Hexanone	591-78-6	19.6		10.0	2.50
4-Methyl-2-pentanone	108-10-1	20.4		10.0	2.50
Acetone	67-64-1	24.0		10.0	2.50
Benzene	71-43-2	19.8		1.00	0.125

Certificate of Analysis

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HPMS11
Client ID:	MW-27-042612-MS	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	05/03/2012 21:37
Workgroup #:	WG397043	**Analyst:**	ADC	**Run Date:**	05/04/2012 18:02
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	11M83352
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bromochloromethane	74-97-5	20.7		1.00	0.200
Bromodichloromethane	75-27-4	22.8		1.00	0.250
Bromoform	75-25-2	23.7		1.00	0.500
Bromomethane	74-83-9	21.0		1.00	0.500
Carbon disulfide	75-15-0	20.5		1.00	0.500
Carbon tetrachloride	56-23-5	18.3		1.00	0.250
Chlorobenzene	108-90-7	20.9		1.00	0.125
Chloroethane	75-00-3	20.4		1.00	0.500
Chloroform	67-66-3	20.4		1.00	0.125
Chloromethane	74-87-3	23.2		1.00	0.500
cis-1,3-Dichloropropene	10061-01-5	21.6		1.00	0.250
Cyclohexane	110-82-7	20.1		5.00	1.00
Dibromochloromethane	124-48-1	21.5		1.00	0.250
Dichlorodifluoromethane	75-71-8	25.7		1.00	0.250
Ethyl benzene	100-41-4	20.6		1.00	0.250
Isopropylbenzene	98-82-8	18.3		1.00	0.250
Methyl acetate	79-20-9	14.1		5.00	1.00
Methyl tert-butyl ether	1634-04-4	20.6		1.00	0.500
Methylcyclohexane	108-87-2	19.9		5.00	1.00
Methylene chloride	75-09-2	20.4		5.00	0.250
m,p-Xylene	179601-23-1	40.0		1.00	0.500
o-Xylene	95-47-6	19.1		1.00	0.250
Styrene	100-42-5	20.8		1.00	0.125
Tetrachloroethene	127-18-4	21.3		1.00	0.250
Toluene	108-88-3	20.2		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	21.1		1.00	0.500
Trichloroethene	79-01-6	18.5		1.00	0.250
Trichlorofluoromethane	75-69-4	19.0		1.00	0.250
Vinyl chloride	75-01-4	21.7		1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	98.0	80	120	
Dibromofluoromethane	100	86	118	

Certificate of Analysis

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HPMS11
Client ID:	MW-27-042612-MS	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	05/03/2012 21:37
Workgroup #:	WG397043	**Analyst:**	ADC	**Run Date:**	05/04/2012 18:02
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	11M83352
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
p-Bromofluorobenzene	104	86	115	
Toluene-d8	104	88	110	

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-27-042612-MS	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG396527	**Analyst:**	MDA	**Run Date:**	04/30/2012 17:48
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	16G32115
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	2150	E	5.00	1.00
Carbon Dioxide	124-38-9	202000		10000	2500

E	Semiquantitative result (out of calibration range)

Certificate of Analysis

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612-MS	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/10/2012 10:11
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60766
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4	36.0		20.0	2.50
1,3,5-Trinitrobenzene	99-35-4	53.9		5.00	2.50
1,3-Dinitrobenzene	99-65-0	48.0		5.00	2.50
1,4-Dioxane	123-91-1	26.9		10.0	5.00
2,4,5-Trichlorophenol	95-95-4	49.9		5.00	2.50
2,4,6-Trichlorophenol	88-06-2	45.4		5.00	2.50
2,4-Dichlorophenol	120-83-2	39.9		5.00	2.50
2,4-Dimethylphenol	105-67-9	38.0		5.00	2.50
2,4-Dinitrophenol	51-28-5	54.1		25.0	12.5
2,4-Dinitrotoluene	121-14-2	52.6		5.00	2.50
2,6-Dinitrotoluene	606-20-2	48.8		5.00	2.50
2-Chloronaphthalene	91-58-7	46.2		5.00	2.50
2-Chlorophenol	95-57-8	35.3		5.00	2.50
2-Methylnaphthalene	91-57-6	36.8		5.00	2.50
2-Methylphenol	95-48-7	37.2		5.00	2.50
2-Nitroaniline	88-74-4	45.2		25.0	12.5
2-Nitrophenol	88-75-5	37.8		5.00	2.50
3-Nitroaniline	99-09-2	65.8		25.0	12.5
3,3'-Dichlorobenzidine	91-94-1	55.2		5.00	2.50
3-,4-Methylphenol	106-44-5	42.9		5.00	2.50
4-Bromophenyl-phenylether	101-55-3	47.7		5.00	2.50
4-Chloroaniline	106-47-8	39.2		5.00	2.50
4-Nitrophenol	100-02-7	52.2		25.0	12.5
Acenaphthene	83-32-9	41.8		5.00	2.50
Acenaphthylene	208-96-8	43.5		5.00	2.50
Anthracene	120-12-7	43.4		5.00	2.50
Benzo(a)anthracene	56-55-3	47.9		5.00	2.50
Benzo(a)pyrene	50-32-8	50.0		5.00	2.50
Benzo(b)fluoranthene	205-99-2	51.5		5.00	2.50
Benzo(g,h,i)Perylene	191-24-2	51.6		5.00	2.50
Benzo(k)fluoranthene	207-08-9	47.7		5.00	2.50
Benzoic acid	65-85-0	25.1		20.0	10.0
Benzyl alcohol	100-51-6	38.6		5.00	2.50

Certificate of Analysis

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612-MS	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/10/2012 10:11
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60766
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4	36.2		5.00	2.50
Bis(2-Chloroethoxy)Methane	111-91-1	42.9		5.00	2.50
bis(2-Ethylhexyl)phthalate	117-81-7	54.3		5.00	2.50
Butylbenzylphthalate	85-68-7	55.0		5.00	2.50
Carbazole	86-74-8	51.5		20.0	2.50
Chrysene	218-01-9	50.0		5.00	2.50
Di-N-Butylphthalate	84-74-2	50.5		5.00	2.50
Di-n-octylphthalate	117-84-0	53.1		5.00	2.50
Dibenzo(a,h)Anthracene	53-70-3	52.2		5.00	2.50
Dibenzofuran	132-64-9	44.1		5.00	2.50
Diethylphthalate	84-66-2	52.1		5.00	2.50
Dimethylphthalate	131-11-3	49.8		5.00	2.50
Fluoranthene	206-44-0	48.0		5.00	2.50
Fluorene	86-73-7	44.7		5.00	2.50
Hexachlorobenzene	118-74-1	46.4		5.00	2.50
Hexachlorobutadiene	87-68-3	29.3		5.00	2.50
Hexachlorocyclopentadiene	77-47-4	9.46		5.00	2.50
Hexachloroethane	67-72-1	21.9		5.00	2.50
Indeno(1,2,3-cd)pyrene	193-39-5	52.2		5.00	2.50
Isophorone	78-59-1	41.1		5.00	2.50
N-Nitrosodiphenylamine	86-30-6	82.4		5.00	2.50
Naphthalene	91-20-3	35.6		5.00	2.50
Nitrobenzene	98-95-3	39.6		5.00	2.50
Pentachlorophenol	87-86-5	57.1		25.0	12.5
Phenanthrene	85-01-8	48.1		5.00	2.50
Phenol	108-95-2	36.9		5.00	2.50
Pyrene	129-00-0	49.3		5.00	2.50

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	101	10	123	
2-Fluorobiphenyl	79.7	43	116	
2-Fluorophenol	69.4	21	100	
Nitrobenzene-d5	76.8	35	114	
p-Terphenyl-d14	104	33	141	

Certificate of Analysis

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612-MS	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/10/2012 10:11
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60766
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	75.8	10	94	

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-27-042612-MS	**Prep Method:**	3510C	**Prep Date:**	05/03/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397013	**Analyst:**	CAA	**Run Date:**	05/04/2012 12:46
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	7M54891
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6	0.498		0.0500	0.0250
Acenaphthene	83-32-9	0.420		0.0500	0.0250
Acenaphthylene	208-96-8	0.440		0.0500	0.0250
Anthracene	120-12-7	0.469		0.0500	0.0250
Benzo(a)anthracene	56-55-3	0.711		0.0500	0.0250
Benzo(a)pyrene	50-32-8	0.711		0.0500	0.0250
Benzo(b)fluoranthene	205-99-2	0.678		0.0500	0.0250
Benzo(g,h,i)perylene	191-24-2	0.462		0.0500	0.0250
Benzo(k)fluoranthene	207-08-9	0.697		0.0500	0.0250
Chrysene	218-01-9	0.797		0.0500	0.0250
Dibenzo(a,h)anthracene	53-70-3	0.378		0.0500	0.0250
Fluoranthene	206-44-0	0.769		0.0500	0.0250
Fluorene	86-73-7	0.410		0.0500	0.0250
Indeno(1,2,3-cd)pyrene	193-39-5	0.530		0.0500	0.0250
Naphthalene	91-20-3	0.464		0.0500	0.0250
Phenanthrene	85-01-8	0.456		0.0500	0.0250
Pyrene	129-00-0	0.793		0.0500	0.0250

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	39.4	43	116	*
Nitrobenzene-d5	43.8	35	114	
p-Terphenyl-d14	74.3	33	141	

Certificate of Analysis

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-27-042612-MS **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 17:09
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** P2.050312.170905
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	4.99		0.100	0.0500
Barium, Total	7440-39-3	0.707		0.0100	0.00250
Beryllium, Total	7440-41-7	0.0231		0.00200	0.000500
Cadmium, Total	7440-43-9	0.0218		0.000500	0.000250
Calcium, Total	7440-70-2	257		0.200	0.100
Chromium, Total	7440-47-3	0.251		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0948		0.0200	0.00250
Copper, Total	7440-50-8	0.236		0.0200	0.00500
Iron, Total	7439-89-6	30.6		0.100	0.0250
Magnesium, Total	7439-95-4	47.7		0.500	0.250
Manganese, Total	7439-96-5	4.57		0.0100	0.00500
Nickel, Total	7440-02-0	0.244		0.0400	0.00500
Potassium, Total	7440-09-7	36.9		1.00	0.250
Silver, Total	7440-22-4	0.187		0.0100	0.00500
Sodium, Total	7440-23-5	113		0.500	0.250
Vanadium, Total	7440-62-2	0.493		0.0100	0.00500
Zinc, Total	7440-66-6	0.463		0.0200	0.00500

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-27-042612-MS **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 11:58
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** NI.050112.115832
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0663		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0716		0.00100	0.000500
Lead, Total	7439-92-1	0.0662		0.00100	0.000500
Selenium, Total	7782-49-2	0.0716		0.00100	0.000500
Thallium, Total	7440-28-0	0.0673		0.000200	0.000100

Certificate of Analysis

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612-MS **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:40
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:46
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.114628
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00469		0.000222	0.000111

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MS **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/04/2012 13:10
Workgroup #: WG397052 **Analyst:** DIH **Run Date:** 05/04/2012 13:27
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** SC120504003.036
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		794		100	50.0

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MS **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/01/2012 15:43
Workgroup #: WG396738 **Analyst:** DIH **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 10:37 **Dilution:** 20 **File ID:** SC12050709034601
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.880		1.00	0.500

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MS **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/30/2012 09:56
Workgroup #: WG396495 **Analyst:** DIH **Run Date:** 04/30/2012 10:13
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120430004.035
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	1.94		0.200	0.100

Certificate of Analysis

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MS **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 07:44
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120503001.032
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	22.1		5.00	2.50

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-27-042612-MS **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396993 **Analyst:** DIH **Run Date:** 05/04/2012 11:12
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** TC05042012.007
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		31.8		5.00	2.50

Sample #: L12040928-09 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-27-042612-MS **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 17:15
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** P2.050312.171506
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	4.96		0.100	0.0500
Barium, Dissolved	7440-39-3	0.716		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.0229		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.0215		0.000500	0.000250
Calcium, Dissolved	7440-70-2	266		0.200	0.100
Chromium, Dissolved	7440-47-3	0.242		0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0936		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.237		0.0200	0.00500
Iron, Dissolved	7439-89-6	32.8		0.100	0.0250
Magnesium, Dissolved	7439-95-4	45.9		0.500	0.250
Manganese, Dissolved	7439-96-5	5.52		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.247		0.0400	0.00500
Potassium, Dissolved	7440-09-7	38.1		1.00	0.250

Certificate of Analysis

Sample #: L12040928-09 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-27-042612-MS **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 17:15
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** P2.050312.171506
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Silver, Dissolved	7440-22-4	0.189		0.0100	0.00500
Sodium, Dissolved	7440-23-5	127		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.494		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.450		0.0200	0.00500

Sample #: L12040928-09 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-27-042612-MS **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 12:01
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** NI.050112.120119
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.0666		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0697		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.0656		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0695		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.0673		0.000200	0.000100

Sample #: L12040928-09 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612-MS **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:40
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:48
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.114811
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00477		0.000222	0.000111

Certificate of Analysis

Sample #: L12040928-10
Client ID: MW-27-042612-MSD
Matrix: Water
Workgroup #: WG397043
Collect Date: 04/26/2012 10:37
Sample Tag: 01

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

Instrument: HPMS11
Prep Date: N/A
Cal Date: 05/03/2012 21:37
Run Date: 05/04/2012 18:33
File ID: 11M83353

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6	20.7		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	24.7		1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	19.4		5.00	2.00
1,1,2-Trichloroethane	79-00-5	22.2		1.00	0.250
1,1-Dichloroethane	75-34-3	21.5		1.00	0.125
1,1-Dichloroethene	75-35-4	22.0		1.00	0.500
1,2,3-Trichlorobenzene	87-61-6	23.5		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	24.4		1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8	23.0		5.00	1.00
1,2-Dibromoethane	106-93-4	22.1		1.00	0.250
1,2-Dichlorobenzene	95-50-1	20.6		1.00	0.125
1,2-Dichloroethane	107-06-2	22.2		1.00	0.250
cis-1,2-Dichloroethene	156-59-2	21.6		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	20.9		1.00	0.250
1,2-Dichloropropane	78-87-5	22.0		1.00	0.200
1,3-Dichlorobenzene	541-73-1	20.2		1.00	0.250
1,4-Dichlorobenzene	106-46-7	20.1		1.00	0.125
2-Butanone	78-93-3	21.2		10.0	2.50
2-Hexanone	591-78-6	21.6		10.0	2.50
4-Methyl-2-pentanone	108-10-1	21.3		10.0	2.50
Acetone	67-64-1	25.3		10.0	2.50
Benzene	71-43-2	20.6		1.00	0.125
Bromochloromethane	74-97-5	21.9		1.00	0.200
Bromodichloromethane	75-27-4	23.8		1.00	0.250
Bromoform	75-25-2	24.9		1.00	0.500
Bromomethane	74-83-9	22.4		1.00	0.500
Carbon disulfide	75-15-0	20.9		1.00	0.500
Carbon tetrachloride	56-23-5	19.0		1.00	0.250
Chlorobenzene	108-90-7	21.4		1.00	0.125
Chloroethane	75-00-3	21.1		1.00	0.500
Chloroform	67-66-3	21.4		1.00	0.125
Chloromethane	74-87-3	24.9		1.00	0.500
cis-1,3-Dichloropropene	10061-01-5	22.2		1.00	0.250

Certificate of Analysis

Sample #:	L12040928-10	**PrePrep Method:**	N/A	**Instrument:**	HPMS11
Client ID:	MW-27-042612-MSD	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	05/03/2012 21:37
Workgroup #:	WG397043	**Analyst:**	ADC	**Run Date:**	05/04/2012 18:33
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	11M83353
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Cyclohexane	110-82-7	20.0		5.00	1.00
Dibromochloromethane	124-48-1	22.5		1.00	0.250
Dichlorodifluoromethane	75-71-8	25.9		1.00	0.250
Ethyl benzene	100-41-4	21.1		1.00	0.250
Isopropylbenzene	98-82-8	18.5		1.00	0.250
Methyl acetate	79-20-9	14.8		5.00	1.00
Methyl tert-butyl ether	1634-04-4	21.6		1.00	0.500
Methylcyclohexane	108-87-2	19.3		5.00	1.00
Methylene chloride	75-09-2	21.4		5.00	0.250
m,p-Xylene	179601-23-1	41.1		1.00	0.500
o-Xylene	95-47-6	19.6		1.00	0.250
Styrene	100-42-5	21.4		1.00	0.125
Tetrachloroethene	127-18-4	21.8		1.00	0.250
Toluene	108-88-3	21.0		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	22.2		1.00	0.500
Trichloroethene	79-01-6	19.1		1.00	0.250
Trichlorofluoromethane	75-69-4	19.6		1.00	0.250
Vinyl chloride	75-01-4	28.9		1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	101	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	103	86	115	
Toluene-d8	104	88	110	

Certificate of Analysis

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-27-042612-MSD **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG396527 **Analyst:** MDA **Run Date:** 04/30/2012 17:58
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 16G32116
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	1830	E	5.00	1.00
Carbon Dioxide	124-38-9	190000		10000	2500

E	Semiquantitative result (out of calibration range)

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-27-042612-MSD **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/10/2012 10:46
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 4M60767
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4	41.6		24.7	3.09
1,3,5-Trinitrobenzene	99-35-4	70.1		6.17	3.09
1,3-Dinitrobenzene	99-65-0	61.9		6.17	3.09
1,4-Dioxane	123-91-1	29.4		12.3	6.17
2,4,5-Trichlorophenol	95-95-4	64.2		6.17	3.09
2,4,6-Trichlorophenol	88-06-2	57.0		6.17	3.09
2,4-Dichlorophenol	120-83-2	46.7		6.17	3.09
2,4-Dimethylphenol	105-67-9	44.6		6.17	3.09
2,4-Dinitrophenol	51-28-5	69.9		30.9	15.4
2,4-Dinitrotoluene	121-14-2	67.6		6.17	3.09
2,6-Dinitrotoluene	606-20-2	63.7		6.17	3.09
2-Chloronaphthalene	91-58-7	53.6		6.17	3.09
2-Chlorophenol	95-57-8	38.2		6.17	3.09
2-Methylnaphthalene	91-57-6	41.3		6.17	3.09
2-Methylphenol	95-48-7	41.1		6.17	3.09
2-Nitroaniline	88-74-4	59.5		30.9	15.4
2-Nitrophenol	88-75-5	39.9		6.17	3.09
3-Nitroaniline	99-09-2	80.1		30.9	15.4
3,3'-Dichlorobenzidine	91-94-1	49.1		6.17	3.09
3-,4-Methylphenol	106-44-5	48.8		6.17	3.09
4-Bromophenyl-phenylether	101-55-3	51.9		6.17	3.09

Certificate of Analysis

Sample #:	L12040928-10	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612-MSD	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/10/2012 10:46
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60767
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
4-Chloroaniline	106-47-8	46.4		6.17	3.09
4-Nitrophenol	100-02-7	63.4		30.9	15.4
Acenaphthene	83-32-9	51.3		6.17	3.09
Acenaphthylene	208-96-8	53.4		6.17	3.09
Anthracene	120-12-7	47.6		6.17	3.09
Benzo(a)anthracene	56-55-3	47.4		6.17	3.09
Benzo(a)pyrene	50-32-8	48.5		6.17	3.09
Benzo(b)fluoranthene	205-99-2	49.6		6.17	3.09
Benzo(g,h,i)Perylene	191-24-2	50.0		6.17	3.09
Benzo(k)fluoranthene	207-08-9	47.7		6.17	3.09
Benzoic acid	65-85-0	30.8		24.7	12.3
Benzyl alcohol	100-51-6	42.9		6.17	3.09
Bis(2-Chloroethyl)ether	111-44-4	39.2		6.17	3.09
Bis(2-Chloroethoxy)Methane	111-91-1	47.2		6.17	3.09
bis(2-Ethylhexyl)phthalate	117-81-7	53.0		6.17	3.09
Butylbenzylphthalate	85-68-7	56.3		6.17	3.09
Carbazole	86-74-8	64.9		24.7	3.09
Chrysene	218-01-9	49.3		6.17	3.09
Di-N-Butylphthalate	84-74-2	54.9		6.17	3.09
Di-n-octylphthalate	117-84-0	53.6		6.17	3.09
Dibenzo(a,h)Anthracene	53-70-3	50.5		6.17	3.09
Dibenzofuran	132-64-9	55.0		6.17	3.09
Diethylphthalate	84-66-2	66.7		6.17	3.09
Dimethylphthalate	131-11-3	64.5		6.17	3.09
Fluoranthene	206-44-0	49.2		6.17	3.09
Fluorene	86-73-7	54.6		6.17	3.09
Hexachlorobenzene	118-74-1	46.9		6.17	3.09
Hexachlorobutadiene	87-68-3	29.4		6.17	3.09
Hexachlorocyclopentadiene	77-47-4		U	6.17	3.09
Hexachloroethane	67-72-1	24.8		6.17	3.09
Indeno(1,2,3-cd)pyrene	193-39-5	50.6		6.17	3.09
Isophorone	78-59-1	45.9		6.17	3.09
N-Nitrosodiphenylamine	86-30-6	85.6		6.17	3.09

Certificate of Analysis

Sample #: L12040928-10 | **PrePrep Method:** N/A | **Instrument:** HPMS4
Client ID: MW-27-042612-MSD | **Prep Method:** 3520C | **Prep Date:** 04/30/2012 10:30
Matrix: Water | **Analytical Method:** 8270C | **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 | **Analyst:** CAA | **Run Date:** 05/10/2012 10:46
Collect Date: 04/26/2012 10:37 | **Dilution:** 1 | **File ID:** 4M60767
Sample Tag: 01 | **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Naphthalene	91-20-3	39.5		6.17	3.09
Nitrobenzene	98-95-3	42.9		6.17	3.09
Pentachlorophenol	87-86-5	71.0		30.9	15.4
Phenanthrene	85-01-8	55.2		6.17	3.09
Phenol	108-95-2	40.3		6.17	3.09
Pyrene	129-00-0	51.5		6.17	3.09

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	102	10	123	
2-Fluorobiphenyl	74.1	43	116	
2-Fluorophenol	60.4	21	100	
Nitrobenzene-d5	69.2	35	114	
p-Terphenyl-d14	104	33	141	
Phenol-d5	67.0	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-10 | **PrePrep Method:** N/A | **Instrument:** HPMS7
Client ID: MW-27-042612-MSD | **Prep Method:** 3510C | **Prep Date:** 05/03/2012 09:30
Matrix: Water | **Analytical Method:** 8270C | **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397013 | **Analyst:** CAA | **Run Date:** 05/04/2012 13:14
Collect Date: 04/26/2012 10:37 | **Dilution:** 1 | **File ID:** 7M54892
Sample Tag: 01 | **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6	0.696		0.0500	0.0250
Acenaphthene	83-32-9	0.641		0.0500	0.0250
Acenaphthylene	208-96-8	0.628		0.0500	0.0250
Anthracene	120-12-7	0.669		0.0500	0.0250
Benzo(a)anthracene	56-55-3	0.786		0.0500	0.0250
Benzo(a)pyrene	50-32-8	0.815		0.0500	0.0250
Benzo(b)fluoranthene	205-99-2	0.803		0.0500	0.0250
Benzo(g,h,i)perylene	191-24-2	0.595		0.0500	0.0250
Benzo(k)fluoranthene	207-08-9	0.845		0.0500	0.0250
Chrysene	218-01-9	0.874		0.0500	0.0250

Certificate of Analysis

Sample #: L12040928-10 | **PrePrep Method:** N/A | **Instrument:** HPMS7
Client ID: MW-27-042612-MSD | **Prep Method:** 3510C | **Prep Date:** 05/03/2012 09:30
Matrix: Water | **Analytical Method:** 8270C | **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397013 | **Analyst:** CAA | **Run Date:** 05/04/2012 13:14
Collect Date: 04/26/2012 10:37 | **Dilution:** 1 | **File ID:** 7M54892
Sample Tag: 01 | **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Dibenzo(a,h)anthracene	53-70-3	0.515		0.0500	0.0250
Fluoranthene	206-44-0	0.853		0.0500	0.0250
Fluorene	86-73-7	0.595		0.0500	0.0250
Indeno(1,2,3-cd)pyrene	193-39-5	0.665		0.0500	0.0250
Naphthalene	91-20-3	0.634		0.0500	0.0250
Phenanthrene	85-01-8	0.655		0.0500	0.0250
Pyrene	129-00-0	0.859		0.0500	0.0250

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	55.4	43	116	
Nitrobenzene-d5	59.9	35	114	
p-Terphenyl-d14	82.7	33	141	

Sample #: L12040928-10 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-27-042612-MSD | **Prep Method:** 3005A | **Prep Date:** 04/30/2012 08:42
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 | **Analyst:** KHR | **Run Date:** 05/03/2012 17:21
Collect Date: 04/26/2012 10:37 | **Dilution:** 1 | **File ID:** P2.050312.172106
Sample Tag: 01 | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	5.07		0.100	0.0500
Barium, Total	7440-39-3	0.726		0.0100	0.00250
Beryllium, Total	7440-41-7	0.0230		0.00200	0.000500
Cadmium, Total	7440-43-9	0.0218		0.000500	0.000250
Calcium, Total	7440-70-2	269		0.200	0.100
Chromium, Total	7440-47-3	0.253		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0952		0.0200	0.00250
Copper, Total	7440-50-8	0.240		0.0200	0.00500
Iron, Total	7439-89-6	34.5		0.100	0.0250
Magnesium, Total	7439-95-4	47.9		0.500	0.250
Manganese, Total	7439-96-5	5.37		0.0100	0.00500
Nickel, Total	7440-02-0	0.247		0.0400	0.00500
Potassium, Total	7440-09-7	37.9		1.00	0.250

Certificate of Analysis

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-27-042612-MSD **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 17:21
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** P2.050312.172106
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Silver, Total	7440-22-4	0.189		0.0100	0.00500
Sodium, Total	7440-23-5	126		0.500	0.250
Vanadium, Total	7440-62-2	0.499		0.0100	0.00500
Zinc, Total	7440-66-6	0.466		0.0200	0.00500

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-27-042612-MSD **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 12:04
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** NI.050112.120407
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0670		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0716		0.00100	0.000500
Lead, Total	7439-92-1	0.0672		0.00100	0.000500
Selenium, Total	7782-49-2	0.0714		0.00100	0.000500
Thallium, Total	7440-28-0	0.0689		0.000200	0.000100

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612-MSD **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:40
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:49
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.114953
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00459		0.000222	0.000111

Certificate of Analysis

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MSD **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/04/2012 13:10
Workgroup #: WG397052 **Analyst:** DIH **Run Date:** 05/04/2012 13:27
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** SC120504003.037
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		774		100	50.0

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MSD **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/01/2012 15:43
Workgroup #: WG396738 **Analyst:** DIH **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 10:37 **Dilution:** 20 **File ID:** SC12050709035401
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.720		1.00	0.500

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MSD **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/30/2012 09:56
Workgroup #: WG396495 **Analyst:** DIH **Run Date:** 04/30/2012 10:14
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120430004.036
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	1.45		0.200	0.100

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MSD **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 07:45
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120503001.034
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	21.7		5.00	2.50

Certificate of Analysis

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-27-042612-MSD **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396993 **Analyst:** DIH **Run Date:** 05/04/2012 11:26
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** TC05042012.008
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		41.4		5.00	2.50

Sample #: L12040928-11 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-27-042612-MSD **Prep Method:** 3005A **Prep Date:** 04/30/2012 08:42
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/03/2012 10:57
Workgroup #: WG396548 **Analyst:** KHR **Run Date:** 05/03/2012 17:27
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** P2.050312.172708
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	5.09		0.100	0.0500
Barium, Dissolved	7440-39-3	0.736		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.0237		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.0225		0.000500	0.000250
Calcium, Dissolved	7440-70-2	277		0.200	0.100
Chromium, Dissolved	7440-47-3	0.255		0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0956		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.245		0.0200	0.00500
Iron, Dissolved	7439-89-6	33.8		0.100	0.0250
Magnesium, Dissolved	7439-95-4	47.8		0.500	0.250
Manganese, Dissolved	7439-96-5	5.68		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.248		0.0400	0.00500
Potassium, Dissolved	7440-09-7	39.3		1.00	0.250
Silver, Dissolved	7440-22-4	0.195		0.0100	0.00500
Sodium, Dissolved	7440-23-5	131		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.503		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.470		0.0200	0.00500

Certificate of Analysis

Sample #: L12040928-11 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-27-042612-MSD **Prep Method:** 3015 **Prep Date:** 05/01/2012 08:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/01/2012 10:10
Workgroup #: WG396659 **Analyst:** SLP **Run Date:** 05/01/2012 12:06
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** NI.050112.120655
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.0652		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0693		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.0641		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0705		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.0659		0.000200	0.000100

Sample #: L12040928-11 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612-MSD **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:40
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:51
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.115140
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00488		0.000222	0.000111

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: L12040928
Department: Volatiles
Analyst: Anthony Canter

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

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

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

Matrix Spikes: Recoveries out of range were observed for the following analytes: Methyl acetate, Vinyl chloride. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: Samples 05, were run at a dilution.

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: 46147
Approved By: Michael Albertson

2.1.1.2 QC Summary Data

Example 8260 Calculations

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

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

where:	Example
Ax = Area of the characteristic ion for the compound being measured:	3399156
Cis = Concentration of the specific internal standard (ug/mL)	25
Ais = Area of the characteristic ion of the specific internal standard	846471
Cx = Concentration of the compound in the standard being measured (ug/mL)	100
RF = Calculated Response Factor	**1.0039**

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

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

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

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

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

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

Dry weight correction:

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

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

4.0 Concentration from Linear Regression

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

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

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

m = slope from curve = 0.213

b = intercept from curve = - 0.00642

Step 2: Calculate y from Quantitation Report

y = 86550/593147 = 0.1459

Step 3: Solve for x

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

Step 4: Solve for analyte concentration Cx

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

Example Spreadsheet Calculation:

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

5.0 Concentration from Quadratic Regression

Step 1 - Retrieve Curve Data from Plot, y = Ax^2 + Bx + C
Where:
Ax^2 + Bx + (C - y) = 0
A, B, C = constants from the ICAL quadratic regression
y = Response ratio = Area of analyte/Area of internal standard (IS)
x = Amount ratio = Concentration of analyte/concentration of IS

Step 2: Calculate y from Quantitation Report

y = Ax/Ais

Step 3: Solve for x using the quadratic formula
Ax^2 + Bx + C - y = 0

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

Step 4: Solve for analyte concentration Cx

Cx = (Cis)(Amount ratio)

Example Spreadsheet Calculation:

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

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS11 Dataset: 061511
Analyst1: FJB Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13
Method: 624 SOP: MSV10 Rev: 8
Maintenance Log ID: 37956

Internal Standard: STD45634 Surrogate Standard: STD45834
CCV: STD45988 LCS: STD45989 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG367610

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M75190	WG367610-02 50ug/L CCV 8260	NA	1	1	STD45884	06/15/11 09:51
2	11M75191	WG367610-02 50ug/L CCV 8260	NA	1	1	STD45884	06/15/11 10:28
3	11M75192	WG367610-01 BFB 50ng A9FOO	NA	1	1	STD45934	06/15/11 17:01
4	11M75193	RINSE	NA	1	1		06/15/11 17:28
5	11M75194	WG367610-02 5ug/L STD A9FOO	NA	1	1	STD45988	06/15/11 17:59
6	11M75195	WG367610-03 20ug/L STD A9FOO	NA	1	1	STD45988	06/15/11 18:30
7	11M75196	WG367610-04 50ug/L STD A9FOO	NA	1	1	STD45988	06/15/11 19:01
8	11M75197	WG367610-05 100ug/L STD A9FOO	NA	1	1	STD45988	06/15/11 19:31
9	11M75198	WG367610-06 200ug/L STD A9FOO	NA	1	1	STD45988	06/15/11 20:02
10	11M75199	WG367610-07 300ug/L STD A9FOO	NA	1	1	STD45988	06/15/11 20:33
11	11M75200	WG367610-08 400ug/L STD A9FOO	NA	1	1	STD45988	06/15/11 21:04
12	11M75201	WG367610-09 500ug/L STD A9FOO	NA	1	1	STD45988	06/15/11 21:34
13	11M75202	RINSE	NA	1	1		06/15/11 22:05
14	11M75203	WG367610-10 100ug/L ALT SRC A9FOO	NA	1	1	STD45989	06/15/11 22:36
15	11M75204	RINSE	NA	1	1		06/15/11 23:07
16	11M75189	WG367610-01 BFB 50ng 8260	NA	1	1	STD45934	06/15/11 09:26

Approved: June 23, 2011

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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:

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: HPMS11 Dataset: 050312
Analyst1: ADC Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 624 SOP: MSV10 Rev: 8
Method: 5030C/5035A SOP: PAT01 Rev: 13
Maintenance Log ID: 41642

Internal Standard: STD51423 Surrogate Standard: STD51518
CCV: NA LCS: STD51372 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG396851

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
11M83323	RINSE	NA	1	1		05/03/12 12:10
11M83324	RINSE	NA	1	1		05/03/12 13:03
11M83325	RINSE	NA	1	1		05/03/12 13:43
11M83326	RINSE	NA	1	1		05/03/12 14:37
11M83327	WG396851-01 BFB 50ng 8260	NA	1	1	STD51241	05/03/12 15:46
11M83328	WG396851-01 BFB 50ng 8260	NA	1	1	STD51241	05/03/12 15:58
11M83329	WG396851-01 BFB 50ng 8260	NA	1	1	STD51241	05/03/12 16:30
11M83330	WG396851-02 0.3ug/L STD 8260	NA	1	1	STD51468	05/03/12 17:01
11M83331	WG396851-03 0.4ug/L STD 8260	NA	1	1	STD51468	05/03/12 17:32
11M83332	WG396851-04 1ug/L STD 8260	NA	1	1	STD51468	05/03/12 18:02
11M83333	WG396851-05 2ug/L STD 8260	NA	1	1	STD51468	05/03/12 18:33
11M83334	WG396851-06 5ug/L STD 8260	NA	1	1	STD51468	05/03/12 19:04
11M83335	WG396851-07 20ug/L STD 8260	NA	1	1	STD51468	05/03/12 19:34
11M83336	WG396851-08 50ug/L STD 8260	NA	1	1	STD51468	05/03/12 20:05
11M83337	WG396851-09 100ug/L STD 8260	NA	1	1	STD51468	05/03/12 20:35
11M83338	WG396851-10 200ug/L STD 8260	NA	1	1	STD51468	05/03/12 21:06
11M83339	WG396851-11 300ug/L STD 8260	NA	1	1	STD51468	05/03/12 21:37
11M83340	RINSE	NA	1	1		05/03/12 22:08
11M83341	WG396851-12 50ug/L ALT SRC 8260	NA	1	1	STD51372	05/03/12 22:38
11M83342	RINSE	NA	1	1		05/03/12 23:09

Approved: May 09, 2012

Page: 1

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS11 Dataset: 050412
Analyst1: ADC Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 624 SOP: MSV10 Rev: 8
Method: 5030C/5035A SOP: PAT01 Rev: 13
Maintenance Log ID: 41661

Internal Standard: STD51423 Surrogate Standard: STD51518
CCV: STD51371 LCS: STD51372 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397043

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
11M83347	WG397041-01 BFB 50ng 8260	NA	1	1	STD51241	05/04/12 15:25
11M83348	WG397041-02 50ug/L STD 8260	NA	1	1	STD51468	05/04/12 15:50
11M83349	WG396XXX-01 100ug/L A9FOO STD	NA	1	1	STDXXXXX	05/04/12 16:21
11M83350	WG397043-01 VBLK 0504 8260	NA	1	1		05/04/12 17:01
11M83351	WG397043-02 20ug/L LCS STD 8260	NA	1	1	STD51372	05/04/12 17:32
11M83352	L12040928-08 A MS 826-SPE	<2	1	1	STD51372	05/04/12 18:02
11M83353	L12040928-10 A MSD 826-SPE	<2	1	1	STD51372	05/04/12 18:33
11M83354	RINSE	NA	1	1		05/04/12 19:04
11M83355	L12040928-07 A 826-SPE	<2	1	1		05/04/12 19:34
11M83356	L12040898-07 A 826-SPE	<2	1	1		05/04/12 20:05
11M83357	L12040898-14 A 826-SPE	<2	1	1		05/04/12 20:36
11M83358	L12040859-24 A 826-SPE	<2	1	1		05/04/12 21:07
11M83359	L12040859-27 A 826-SPE	<2	1	1		05/04/12 21:38
11M83360	L12040859-30 A 826-SPE	<2	1	1		05/04/12 22:08
11M83361	L12040898-03 A 826-SPE	<2	1	1		05/04/12 22:39
11M83362	L12040898-05 A 826-SPE	<2	1	1		05/04/12 23:10
11M83363	L12040898-08 A 826-SPE	<2	1	1		05/04/12 23:40
11M83364	L12040898-12 A 826-SPE	<2	1	1		05/05/12 00:11
11M83365	L12040928-01 A 826-SPE	<2	1	1		05/05/12 00:42
11M83366	L12040928-03 A 826-SPE	<2	1	1		05/05/12 01:13
11M83367	L12040828-01 A 5X 826-SPE	<2	1	5		05/05/12 01:43
11M83368	L12040828-10 A 5X 826-SPE	<2	1	5		05/05/12 02:14
11M83369	L12040928-05 A 50X 826-SPE	<2	1	50		05/05/12 02:45
11M83370	RINSE	NA	1	1		05/05/12 03:15
11M83371	RINSE	NA	1	1		05/05/12 03:46
11M83372	L12040674-01 A 826-REF-BLK	<2	1	1		05/05/12 04:17
11M83373	L12040674-02 A 826-REF-BLK	<2	1	1		05/05/12 04:47
11M83374	L12040674-03 A 826-REF-BLK	<2	1	1		05/05/12 05:18
11M83375	L12040674-04 A 826-REF-BLK	<2	1	1		05/05/12 05:49
11M83376	L12040674-05 A 826-REF-BLK	<2	1	1		05/05/12 06:20

Comments

Seq.	Rerun	Dil.	Reason	Analytes

Approved: May 10, 2012

Page: 1

Microbac Laboratories Inc.

Instrument Run Log

Instrument:	HPMS11	Dataset:	050412		
Analyst1:	ADC	Analyst2:	NA		
Method:	8260B	SOP:	MSV01	Rev:	14
Method:	624	SOP:	MSV10	Rev:	8
Method:	5030C/5035A	SOP:	PAT01	Rev:	13
Maintenance Log ID:	41661				

Internal Standard: STD51423 Surrogate Standard: STD51518

CCV: STD51371 LCS: STD51372 MS/MSD: NA

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

Workgroups: WG397043

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
21				
File ID: 11M83367				
	L12040828-01 DNR RR STR			
22				
File ID: 11M83368				
	L12040828-10 DNR RR STR			
23				
File ID: 11M83369				
	L12040928-05 DNR RR STR			

Approved: May 10, 2012

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS6 Dataset: 050512
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: 41619

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

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397118

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
6M107885	WG397117-01 50ng BFB STD 8260	NA	1	1	STD51241	05/05/12 12:02
6M107886	WG397117-02 50ug/L CCV STD 8260	NA	1	1	STD51468	05/05/12 12:30
6M107887	WG397117-02 50ug/L CCV STD 8260	NA	1	1	STD51468	05/05/12 13:04
6M107888	WG396XXX-01 100ug/L A9CCV STD 8260	NA	1	1	STD51240	05/05/12 13:37
6M107889	WG397118-01 BLANK 05/05 8260	NA	1	1		05/05/12 14:10
6M107890	WG397118-02 20ug/L LCS 8260	NA	1	1	STD51372	05/05/12 14:42
6M107891	L12040879-05 A MS 826-SPE1	<2	1	1	STD5137	05/05/12 15:18
6M107892	L12040879-08 A MSD 826-SPE1	<2	1	1	STD5137	05/05/12 15:50
6M107893	L12050070-07 A 826-SPE7	<2	1	1		05/05/12 16:23
6M107894	L12050070-05 A 826-SPE7	<2	1	1		05/05/12 16:55
6M107895	L12050070-06 A 826-SPE7	<2	1	1		05/05/12 17:28
6M107896	L12040963-06 A 826-SPE	<2	1	1		05/05/12 18:01
6M107897	L12040879-03 B 826-SPE	<2	1	1		05/05/12 18:33
6M107898	L12040879-04 A 826-SPE	<2	1	1		05/05/12 19:06
6M107899	L12040930-03 A 826-LOW	<2	1	1		05/05/12 19:38
6M107900	L12040963-01 A 826-SPE	<2	1	1		05/05/12 20:11
6M107901	L12040963-03 A 826-SPE	<2	1	1		05/05/12 20:43
6M107902	L12040963-07 A 826-SPE	<2	1	1		05/05/12 21:16
6M107903	L12040928-05 B 2X 826-SPE	7	1	2		05/05/12 21:48
6M107904	L12040930-01 A 826-LOW	<2	1	1		05/05/12 22:21
6M107905	L12040930-02 A 826-LOW	<2	1	1		05/05/12 22:53
6M107906	L12050138-01 A 10X 826-TC	<2	17	10		05/05/12 23:26
6M107907	L12050029-01 A 10X 826-TC	<2	17	10		05/05/12 23:58
6M107908	RINSE	NA	1	1		05/06/12 00:31
6M107909	RINSE	NA	1	1		05/06/12 01:03
6M107910	WG397118-06 624 BLANK	NA	1	1		05/06/12 01:36
6M107911	L12050147-02 A 624-SPE	7	2	1		05/06/12 02:08
6M107912	L12050147-04 A 624-SPE	7	2	1		05/06/12 02:41
6M107913	RINSE	NA	1	1		05/06/12 03:13
6M107914	RINSE	NA	1	1		05/06/12 03:46
6M107915	RINSE	NA	1	1		05/06/12 04:18

Comments

Approved: May 07, 2012

Page: 1

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS6 Dataset: 050512
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: 41619

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

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397118

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
14	X	20	Over Calibration Range	DEE
File ID: 6M107898				
L12040879-04				
19				
File ID: 6M107903				
L12040928-05 was analyzed no more concentrated due to the viscosity and dark color of the sample matrix.				

Approved: May 07, 2012

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Microbac Laboratories Inc.

Data Checklist

Date: 15-JUN-2011
Analyst: FJB
Analyst: NA
Method: 8260/624
Instrument: HPMS11
Curve Workgroup: NA
Runlog ID: 41241
Analytical Workgroups: WG367610

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

Primary Reviewer: 22-JUN-2011

Secondary Reviewer: 23-JUN-2011

CHECKLIST1 - Modified 03/05/2008
Generated: JUN-23-2011 08:31:09

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: 03-MAY-2012
Analyst: ADC
Analyst: NA
Method: 8260
Instrument: HPMS11
Curve Workgroup: WG396851
Runlog ID: 46590
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:
08-MAY-2012

Secondary Reviewer:
09-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-09-2012 09:21:12

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
Analyst: ADC
Analyst: NA
Method: 8260
Instrument: HPMS11
Curve Workgroup: NA
Runlog ID: 46665
Analytical Workgroups: WG397043

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	X
Samples	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 13:14:15

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B **AAB#:** WG397043

Login Number: L12040928

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-27-042612	01	04/26/12							14		05/05/12	8.6	14	
MW-10-042612	03	04/26/12							14		05/05/12	8.5	14	
TB-042612	07	04/26/12							14		05/04/12	8.5	14	
MW-27-042612-MS	08	04/26/12							14		05/04/12	8.3	14	
MW-27-042612-MSD	10	04/26/12							14		05/04/12	8.3	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2409846
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B **AAB#:** WG397118

Login Number: L12040928

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-31-042612	05	04/26/12							14		05/05/12	9.4	14	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2409846
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12040928 **Method:** 8260
Instrument Id: HPMS11 **CAL ID:** HPMS11-03-MAY-12
Workgroup (AAB#): WG397043 **Matrix:** Water

Sample Number	Dilution	Tag	1	2	3	4
L12040928-01	1.00	01	93.4	98.7	103	104
L12040928-03	1.00	01	91.5	98.2	106	106
L12040928-07	1.00	01	98.7	101	110	109
L12040928-08	1.00	01	98.0	100	104	104
L12040928-10	1.00	01	101	103	103	104
WG397043-01	1.00	01	97.3	101	109	106
WG397043-02	1.00	01	101	102	103	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: 2404497
Report generated: 05/10/2012 13:58

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12040928 **Method:** 8260
Instrument Id: HPMS6 **CAL ID:** HPMS6-25-APR-12
Workgroup (AAB#): WG397118 **Matrix:** Water

Sample Number	Dilution	Tag	1	2	3	4
L12040928-05	2.00	DL01	108	109	97.7	105
WG397118-01	1.00	01	107	108	105	101
WG397118-02	1.00	01	106	106	106	103
WG397118-06	1.00	01	112	111	110	105

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: 2404497
Report generated: 05/10/2012 13:58

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Blank File ID: 11M83350
Prep Date: 05/04/12 17:01
Analyzed Date: 05/04/12 17:01
Analyst: ADC

Work Group: WG397043
Blank Sample ID: WG397043-01
Instrument ID: HPMS11
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397043-02	11M83351	05/04/12 17:32	01
MW-27-042612-MS	L12040928-08	11M83352	05/04/12 18:02	01
MW-27-042612-MSD	L12040928-10	11M83353	05/04/12 18:33	01
TB-042612	L12040928-07	11M83355	05/04/12 19:34	01
MW-27-042612	L12040928-01	11M83365	05/05/12 00:42	01
MW-10-042612	L12040928-03	11M83366	05/05/12 01:13	01

Report Name: BLANK_SUMMARY
PDF File ID: 2409847
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12040928	Work Group:	WG397118
Blank File ID:	6M107889	Blank Sample ID:	WG397118-01
Prep Date:	05/05/12 14:10	Instrument ID:	HPMS6
Analyzed Date:	05/05/12 14:10	Method:	8260B
Analyst:	MES		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397118-02	6M107890	05/05/12 14:42	01
MW-31-042612	L12040928-05	6M107903	05/05/12 21:48	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2409847
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040928 Prep Date:05/04/12 17:01 Sample ID:WG397043-01
Instrument ID:HPMS11 Run Date:05/04/12 17:01 Prep Method:5030B/5030C/503
File ID:11M83350 Analyst:ADC Method:8260B
Workgroup (AAB#):WG397043 Matrix:Water Units:ug/L
Contract #: Cal ID:HPMS11-03-MAY-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
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Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/04/12 17:01 Sample ID: WG397043-01
Instrument ID: HPMS11 Run Date: 05/04/12 17:01 Prep Method: 5030B/5030C/503
File ID: 11M83350 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG397043 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS11-03-MAY-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	97.3	80 - 120	PASS
Dibromofluoromethane	101	86 - 118	PASS
p-Bromofluorobenzene	109	86 - 115	PASS
Toluene-d8	106	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: 2409848
10-MAY-2012 13:57

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040928 Prep Date:05/05/12 14:10 Sample ID:WG397118-01
Instrument ID:HPMS6 Run Date:05/05/12 14:10 Prep Method:5030B/5030C/503
File ID:6M107889 Analyst:MES Method:8260B
Workgroup (AAB#):WG397118 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
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Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/05/12 14:10 Sample ID: WG397118-01
Instrument ID: HPMS6 Run Date: 05/05/12 14:10 Prep Method: 5030B/5030C/503
File ID: 6M107889 Analyst: MES Method: 8260B
Workgroup (AAB#): WG397118 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	108	86 - 118	PASS
p-Bromofluorobenzene	105	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: 2409848
10-MAY-2012 13:57

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Run Date: 05/04/2012 Sample ID: WG397043-02
Instrument ID: HPMS11 Run Time: 17:32 Prep Method: 5030B/5030C/503
File ID: 11M83351 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG397043 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51372 Cal ID: HPMS11-03-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,1,1-Trichloroethane	20.0	20.3	102	80 - 134	
1,1,2,2-Tetrachloroethane	20.0	22.6	113	79 - 125	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	20.3	102	80 - 130	
1,1,2-Trichloroethane	20.0	21.6	108	80 - 125	
1,1-Dichloroethane	20.0	21.2	106	80 - 125	
1,1-Dichloroethene	20.0	21.7	108	80 - 132	
1,2,3-Trichlorobenzene	20.0	22.5	112	55 - 140	
1,2,4-Trichlorobenzene	20.0	23.8	119	65 - 135	
1,2-Dibromo-3-chloropropane	20.0	20.5	102	50 - 130	
1,2-Dibromoethane	20.0	20.7	104	80 - 125	
1,2-Dichlorobenzene	20.0	19.7	98.6	80 - 125	
1,2-Dichloroethane	20.0	21.6	108	80 - 129	
cis-1,2-Dichloroethene	20.0	21.2	106	70 - 125	
trans-1,2-Dichloroethene	20.0	20.7	104	80 - 127	
1,2-Dichloropropane	20.0	21.6	108	80 - 120	
1,3-Dichlorobenzene	20.0	19.5	97.3	80 - 120	
1,4-Dichlorobenzene	20.0	19.5	97.5	80 - 120	
2-Butanone	20.0	21.3	106	30 - 150	
2-Hexanone	20.0	19.8	99.0	55 - 130	
4-Methyl-2-pentanone	20.0	20.7	104	64 - 140	
Acetone	20.0	19.5	97.5	40 - 142	
Benzene	20.0	20.2	101	80 - 121	
Bromochloromethane	20.0	21.0	105	65 - 130	
Bromodichloromethane	20.0	23.2	116	80 - 131	
Bromoform	20.0	24.2	121	70 - 130	
Bromomethane	20.0	20.5	103	30 - 145	
Carbon disulfide	20.0	20.6	103	58 - 138	
Carbon tetrachloride	20.0	19.7	98.5	65 - 140	
Chlorobenzene	20.0	21.1	105	80 - 120	
Chloroethane	20.0	20.7	104	60 - 135	
Chloroform	20.0	20.9	104	80 - 125	
Chloromethane	20.0	25.3	127	40 - 125	*
cis-1,3-Dichloropropene	20.0	22.0	110	70 - 130	
Cyclohexane	20.0	21.1	105	80 - 130	
Dibromochloromethane	20.0	21.4	107	60 - 135	
Dichlorodifluoromethane	20.0	26.6	133	50 - 133	
Ethyl benzene	20.0	20.7	104	80 - 122	
Isopropylbenzene	20.0	18.3	91.6	80 - 122	
Methyl acetate	20.0	17.0	85.1	80 - 130	
Methyl tert-butyl ether	20.0	20.5	103	65 - 125	
Methylcyclohexane	20.0	21.2	106	80 - 130	

LCS - Modified 03/06/2008
PDF File ID: 2404494
Report generated: 05/10/2012 13:57

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Run Date: 05/04/2012 Sample ID: WG397043-02
Instrument ID: HPMS11 Run Time: 17:32 Prep Method: 5030B/5030C/503
File ID: 11M83351 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG397043 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51372 Cal ID: HPMS11-03-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Methylene chloride	20.0	20.6	103	80 - 123	
m,p-Xylene	40.0	40.3	101	80 - 122	
o-Xylene	20.0	19.4	97.0	80 - 122	
Styrene	20.0	20.9	105	80 - 123	
Tetrachloroethene	20.0	21.6	108	80 - 124	
Toluene	20.0	20.3	101	80 - 124	
trans-1,3-Dichloropropene	20.0	21.4	107	80 - 130	
Trichloroethene	20.0	18.9	94.3	80 - 122	
Trichlorofluoromethane	20.0	19.6	97.8	62 - 151	
Vinyl chloride	20.0	25.4	127	65 - 140	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	101	80 - 120	PASS
Dibromofluoromethane	102	86 - 118	PASS
p-Bromofluorobenzene	103	86 - 115	PASS
Toluene-d8	104	88 - 110	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2404494
Report generated: 05/10/2012 13:57

Login Number: L12040928 Run Date: 05/05/2012 Sample ID: WG397118-02
Instrument ID: HPMS6 Run Time: 14:42 Prep Method: 5030B/5030C/503
File ID: 6M107890 Analyst: MES Method: 8260B
Workgroup (AAB#): WG397118 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51372 Cal ID: HPMS6-25-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,1,1-Trichloroethane	20.0	19.7	98.5	80 - 134	
1,1,2,2-Tetrachloroethane	20.0	19.3	96.7	79 - 125	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	17.9	89.4	80 - 130	
1,1,2-Trichloroethane	20.0	20.1	100	80 - 125	
1,1-Dichloroethane	20.0	19.6	97.9	80 - 125	
1,1-Dichloroethene	20.0	19.6	97.9	80 - 132	
1,2,3-Trichlorobenzene	20.0	20.0	99.8	55 - 140	
1,2,4-Trichlorobenzene	20.0	19.8	99.0	65 - 135	
1,2-Dibromo-3-chloropropane	20.0	17.2	86.2	50 - 130	
1,2-Dibromoethane	20.0	19.1	95.5	80 - 125	
1,2-Dichlorobenzene	20.0	18.6	92.8	80 - 125	
1,2-Dichloroethane	20.0	20.3	102	80 - 129	
cis-1,2-Dichloroethene	20.0	20.3	102	70 - 125	
trans-1,2-Dichloroethene	20.0	18.9	94.7	80 - 127	
1,2-Dichloropropane	20.0	20.5	102	80 - 120	
1,3-Dichlorobenzene	20.0	18.9	94.3	80 - 120	
1,4-Dichlorobenzene	20.0	18.4	92.0	80 - 120	
2-Butanone	20.0	20.3	102	30 - 150	
2-Hexanone	20.0	19.2	96.1	55 - 130	
4-Methyl-2-pentanone	20.0	19.8	99.1	64 - 140	
Acetone	20.0	18.1	90.7	40 - 142	
Benzene	20.0	19.5	97.4	80 - 121	
Bromochloromethane	20.0	21.5	108	65 - 130	
Bromodichloromethane	20.0	21.0	105	80 - 131	
Bromoform	20.0	19.6	98.1	70 - 130	
Bromomethane	20.0	17.9	89.4	30 - 145	
Carbon disulfide	20.0	18.8	94.1	58 - 138	
Carbon tetrachloride	20.0	20.5	102	65 - 140	
Chlorobenzene	20.0	18.4	92.2	80 - 120	
Chloroethane	20.0	19.3	96.7	60 - 135	
Chloroform	20.0	20.2	101	80 - 125	
Chloromethane	20.0	25.0	125	40 - 125	
cis-1,3-Dichloropropene	20.0	18.9	94.7	70 - 130	
Cyclohexane	20.0	19.2	95.8	80 - 130	
Dibromochloromethane	20.0	18.4	92.1	60 - 135	
Dichlorodifluoromethane	20.0	24.1	121	50 - 133	
Ethyl benzene	20.0	18.9	94.6	80 - 122	
Isopropylbenzene	20.0	16.5	82.5	80 - 122	
Methyl acetate	20.0	17.2	86.2	80 - 130	
Methyl tert-butyl ether	20.0	18.7	93.5	65 - 125	
Methylcyclohexane	20.0	20.6	103	80 - 130	

LCS - Modified 03/06/2008
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Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Run Date: 05/05/2012 Sample ID: WG397118-02
Instrument ID: HPMS6 Run Time: 14:42 Prep Method: 5030B/5030C/503
File ID: 6M107890 Analyst: MES Method: 8260B
Workgroup (AAB#): WG397118 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51372 Cal ID: HPMS6-25-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Methylene chloride	20.0	19.2	96.1	80 - 123	
m,p-Xylene	40.0	37.4	93.4	80 - 122	
o-Xylene	20.0	18.6	92.9	80 - 122	
Styrene	20.0	17.6	87.9	80 - 123	
Tetrachloroethene	20.0	19.4	96.8	80 - 124	
Toluene	20.0	18.8	94.0	80 - 124	
trans-1,3-Dichloropropene	20.0	16.5	82.7	80 - 130	
Trichloroethene	20.0	19.6	98.2	80 - 122	
Trichlorofluoromethane	20.0	18.2	91.1	62 - 151	
Vinyl chloride	20.0	21.3	106	65 - 140	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	106	80 - 120	PASS
Dibromofluoromethane	106	86 - 118	PASS
p-Bromofluorobenzene	106	86 - 115	PASS
Toluene-d8	103	88 - 110	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2404494
Report generated: 05/10/2012 13:57

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum: L12040928 Cal ID: HPMS11- 03-MAY-12 Worknum: WG397043

Instrument ID: HPMS11 Contract #: Prep Method: 5030B/5030C/

Parent ID: L12040928-01 File ID: 11M83365 Dil: 1 Method: 5035A

Sample ID: L12040928-08 MS File ID: 11M83352 Dil: 1 Matrix: 8260B

Sample ID: L12040928-10 MSD File ID: 11M83353 Dil: 1 Units: Water

ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
1,1,1-Trichloroethane	U	20.0	20.0	100	20.0	20.7	104	3.51	80 - 134	30	
1,1,2,2-Tetrachloroethane	U	20.0	23.2	116	20.0	24.7	123	6.39	79 - 125	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	U	20.0	19.0	94.9	20.0	19.4	97.1	2.31	80 - 130	30	
1,1,2-Trichloroethane	U	20.0	21.5	108	20.0	22.2	111	2.89	80 - 125	30	
1,1-Dichloroethane	U	20.0	20.7	104	20.0	21.5	107	3.61	80 - 125	30	
1,1-Dichloroethene	U	20.0	21.1	105	20.0	22.0	110	4.61	80 - 132	30	
1,2,3-Trichlorobenzene	U	20.0	23.1	115	20.0	23.5	117	1.60	55 - 140	30	
1,2,4-Trichlorobenzene	U	20.0	24.0	120	20.0	24.4	122	1.65	65 - 135	30	
1,2-Dibromo-3-chloropropane	U	20.0	21.6	108	20.0	23.0	115	6.47	50 - 130	30	
1,2-Dibromoethane	U	20.0	20.6	103	20.0	22.1	110	6.80	80 - 125	30	
1,2-Dichlorobenzene	U	20.0	20.2	101	20.0	20.6	103	1.67	80 - 125	30	
1,2-Dichloroethane	U	20.0	20.8	104	20.0	22.2	111	6.34	80 - 129	30	
cis-1,2-Dichloroethene	U	20.0	20.8	104	20.0	21.6	108	3.73	70 - 125	30	
trans-1,2-Dichloroethene	U	20.0	20.3	101	20.0	20.9	105	3.11	80 - 127	30	
1,2-Dichloropropane	U	20.0	21.4	107	20.0	22.0	110	2.72	80 - 120	30	
1,3-Dichlorobenzene	U	20.0	20.0	99.8	20.0	20.2	101	1.25	80 - 120	30	
1,4-Dichlorobenzene	U	20.0	19.8	99	20.0	20.1	100	1.46	80 - 120	30	
2-Butanone	U	20.0	19.2	96	20.0	21.2	106	9.85	30 - 150	30	
2-Hexanone	U	20.0	19.6	97.9	20.0	21.6	108	9.68	55 - 130	30	
4-Methyl-2-pentanone	U	20.0	20.4	102	20.0	21.3	106	3.96	64 - 140	30	
Acetone	U	20.0	24.0	120	20.0	25.3	126	5.35	40 - 142	30	
Benzene	U	20.0	19.8	98.9	20.0	20.6	103	4.18	80 - 121	30	
Bromochloromethane	U	20.0	20.7	104	20.0	21.9	110	5.60	65 - 130	30	
Bromodichloromethane	U	20.0	22.8	114	20.0	23.8	119	4.45	80 - 131	30	
Bromoform	U	20.0	23.7	118	20.0	24.9	125	5.11	70 - 130	30	
Bromomethane	U	20.0	21.0	105	20.0	22.4	112	6.18	30 - 145	30	
Carbon disulfide	U	20.0	20.5	102	20.0	20.9	105	2.14	58 - 138	30	
Carbon tetrachloride	U	20.0	18.3	91.4	20.0	19.0	94.9	3.80	65 - 140	30	
Chlorobenzene	U	20.0	20.9	105	20.0	21.4	107	2.06	80 - 120	30	
Chloroethane	U	20.0	20.4	102	20.0	21.1	105	3.09	60 - 135	30	
Chloroform	U	20.0	20.4	102	20.0	21.4	107	4.71	80 - 125	30	
Chloromethane	U	20.0	23.2	116	20.0	24.9	124	7.07	40 - 125	30	
cis-1,3-Dichloropropene	U	20.0	21.6	108	20.0	22.2	111	3.05	70 - 130	30	
Cyclohexane	U	20.0	20.1	100	20.0	20.0	100	0.130	80 - 130	30	
Dibromochloromethane	U	20.0	21.5	107	20.0	22.5	113	4.76	60 - 135	30	
Dichlorodifluoromethane	U	20.0	25.7	128	20.0	25.9	129	0.702	50 - 133	30	
Ethyl benzene	U	20.0	20.6	103	20.0	21.1	105	1.98	80 - 122	30	
Isopropylbenzene	U	20.0	18.3	91.3	20.0	18.5	92.3	1.16	80 - 122	30	
Methyl acetate	U	20.0	14.1	70.5	20.0	14.8	73.8	4.63	80 - 130	30	*
Methyl tert-butyl ether	U	20.0	20.6	103	20.0	21.6	108	4.43	65 - 125	30	
Methylcyclohexane	U	20.0	19.9	99.4	20.0	19.3	96.5	2.96	80 - 130	30	

MS_MSD - Modified 03/06/2008

PDF File ID: 2409511

Report generated 05/10/2012 13:57

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum: L12040928 Cal ID: HPMS11 03-MAY-12 Worknum: WG397043

Instrument ID: HPMS11 Contract #: Prep Method: 5030B/5030C/

Parent ID: L12040928-01 File ID: 11M83365 Dil: 1 Method: 5035A

Sample ID: L12040928-08 MS File ID: 11M83352 Dil: 1 Matrix: 8260B

Sample ID: L12040928-10 MSD File ID: 11M83353 Dil: 1 Units: Water

ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Methylene chloride	U	20.0	20.4	102	20.0	21.4	107	5.07	80 - 123	30	
m,p-Xylene	U	40.0	40.0	100	40.0	41.1	103	2.79	80 - 122	30	
o-Xylene	U	20.0	19.1	95.6	20.0	19.6	98.1	2.50	80 - 122	30	
Styrene	U	20.0	20.8	104	20.0	21.4	107	3.04	80 - 123	30	
Tetrachloroethene	U	20.0	21.3	106	20.0	21.8	109	2.30	80 - 124	30	
Toluene	U	20.0	20.2	101	20.0	21.0	105	3.71	80 - 124	30	
trans-1,3-Dichloropropene	U	20.0	21.1	106	20.0	22.2	111	5.07	80 - 130	30	
Trichloroethene	U	20.0	18.5	92.4	20.0	19.1	95.7	3.53	80 - 122	30	
Trichlorofluoromethane	U	20.0	19.0	94.9	20.0	19.6	97.8	3.01	62 - 151	30	
Vinyl chloride	U	20.0	21.7	108	20.0	28.9	144	28.6	65 - 140	30	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2409511

Report generated 05/10/2012 13:57

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12040928
Instrument: HPMS11
Analyst: FJB
Workgroup: WG367610

Tune ID: WG367610-01
Run Date: 06/15/2011
Run Time: 17:01
File ID: 11M75192
Cal ID: HPMS11 -

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	21.5	5924	PASS
75.0	95.0	30.0	60.0	53.9	14838	PASS
95.0	95.0	100	100	100	27520	PASS
96.0	95.0	5.00	9.00	7.93	2181	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	84.5	23252	PASS
175	174	5.00	9.00	7.57	1760	PASS
176	174	95.0	101	96.4	22424	PASS
177	176	5.00	9.00	6.05	1357	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG367610-02	STD	01	06/15/2011 17:59	
WG367610-03	STD	01	06/15/2011 18:30	
WG367610-04	STD	01	06/15/2011 19:01	
WG367610-05	STD-CCV	01	06/15/2011 19:31	
WG367610-06	STD	01	06/15/2011 20:02	
WG367610-07	STD	01	06/15/2011 20:33	
WG367610-08	STD	01	06/15/2011 21:04	
WG367610-09	STD	01	06/15/2011 21:34	
WG367610-10	SSCV	01	06/15/2011 22:36	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2409849
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12040928
Instrument: HPMS11
Analyst: ADC
Workgroup: WG396851

Tune ID: WG396851-01
Run Date: 05/03/2012
Run Time: 16:30
File ID: 11M83329
Cal ID: HPMS11 -

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	20.3	3670	PASS
75.0	95.0	30.0	60.0	51.8	9391	PASS
95.0	95.0	100	100	100	18119	PASS
96.0	95.0	5.00	9.00	7.25	1313	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	85.2	15443	PASS
175	174	5.00	9.00	8.49	1311	PASS
176	174	95.0	101	98.2	15168	PASS
177	176	5.00	9.00	6.63	1006	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG396851-02	STD	01	05/03/2012 17:01	
WG396851-03	STD	01	05/03/2012 17:32	
WG396851-04	STD	01	05/03/2012 18:02	
WG396851-05	STD	01	05/03/2012 18:33	
WG396851-06	STD	01	05/03/2012 19:04	
WG396851-07	STD	01	05/03/2012 19:34	
WG396851-08	STD-CCV	01	05/03/2012 20:05	
WG396851-09	STD	01	05/03/2012 20:35	
WG396851-10	STD	01	05/03/2012 21:06	
WG396851-11	STD	01	05/03/2012 21:37	
WG396851-12	SSCV	01	05/03/2012 22:38	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2409849
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12040928
Instrument: HPMS11
Analyst: ADC
Workgroup: WG397041

Tune ID: WG397041-01
Run Date: 05/04/2012
Run Time: 15:25
File ID: 11M83347
Cal ID: HPMS11-03-MAY-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	22.1	5392	PASS
75.0	95.0	30.0	60.0	52.4	12789	PASS
95.0	95.0	100	100	100	24392	PASS
96.0	95.0	5.00	9.00	7.26	1770	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	92.0	22445	PASS
175	174	5.00	9.00	7.71	1731	PASS
176	174	95.0	101	96.6	21689	PASS
177	176	5.00	9.00	6.22	1349	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397041-02	CCV	01	05/04/2012 15:50	
WG397043-01	BLANK	01	05/04/2012 17:01	
WG397043-01	BLANK	01	05/04/2012 17:01	
WG397043-02	LCS	01	05/04/2012 17:32	
L12040928-08	MW-27-042612-MS	01	05/04/2012 18:02	
L12040928-10	MW-27-042612-MSD	01	05/04/2012 18:33	
L12040928-07	TB-042612	01	05/04/2012 19:34	
L12040928-01	MW-27-042612	01	05/05/2012 00:42	
L12040928-03	MW-10-042612	01	05/05/2012 01:13	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2409849
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12040928
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: 2409849
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12040928
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: 2409849
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12040928
Instrument: HPMS6
Analyst: MES
Workgroup: WG397117

Tune ID: WG397117-01
Run Date: 05/05/2012
Run Time: 12:02
File ID: 6M107885
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	24.4	1759	PASS
75.0	95.0	30.0	60.0	53.5	3866	PASS
95.0	95.0	100	100	100	7221	PASS
96.0	95.0	5.00	9.00	7.40	534	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	80.4	5805	PASS
175	174	5.00	9.00	6.86	398	PASS
176	174	95.0	101	98.4	5711	PASS
177	176	5.00	9.00	7.48	427	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397117-02	CCV	01	05/05/2012 13:04	
WG397118-01	BLANK	01	05/05/2012 14:10	
WG397118-01	BLANK	01	05/05/2012 14:10	
WG397118-02	LCS	01	05/05/2012 14:42	
L12040928-05	MW-31-042612	DL01	05/05/2012 21:48	
WG397118-06	BLANK2	01	05/06/2012 01:36	*
WG397118-06	BLANK2	01	05/06/2012 01:36	*

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2409849
Report generated 05/10/2012 13:57

Calibration Table Report
Method: A9WTR.M
Title: Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Calibration: Wed Jun 22 15:51:11 2011
Curve:WG367610
Calibration Files

Compound	5 11M75194.D	20 11M75195.D	50 11M75196.D	100 11M75197.D	200 11M75198.D	300 11M75199.D	400 11M75200.D	500 11M75201.D	Avg	%RSD
Fluorobenzene	ISTD									
Acetonitrile	0.021	0.022	0.020	0.023	0.023	0.022	0.022	0.022	0.022	3.702
3-Chloro-1-propene	0.363	0.381	0.398	0.432	0.444	0.465	0.476	0.481	0.430	10.384
2-Chloro-1,3-butadiene	0.393	0.421	0.444	0.471	0.486	0.513	0.522	0.529	0.472	10.458
Methacrylonitrile	0.110	0.116	0.122	0.126	0.125	0.126	0.129	0.128	0.123	5.434
Isobutyl Alcohol			0.010	0.010	0.011	0.010	0.011	0.011	0.011	5.149
1-Butanol			0.002	0.002	0.003	0.003	0.003	0.002	0.003	5.804
Cyclohexanone		0.023	0.026	0.030	0.032	0.031	0.032	0.031	0.029	11.698
2-Nitropropane	0.038	0.044	0.048	0.054	0.057	0.056	0.058	0.058	0.052	14.467
Ethyl Acetate	0.152	0.148	0.155	0.163	0.162	0.160	0.162	0.161	0.158	3.427
Methyl methacrylate	0.126	0.147	0.157	0.169	0.174	0.176	0.183	0.185	0.165	12.344
Chlorobenzene-d5	ISTD									
1,4-Dichlorobenzene-d4	ISTD									

Wed Jun 22 15:52:23 2011

Calibration Table Report
Method: 8260WTR.M
Title: 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Calibration: Fri May 04 08:32:33 2012
Curve: WG396851
Calibration Files

Compound	0.3	0.4	1	2	5	20	50	100	200	300	Avg	%RSD	R^2 Linear	R^2 Quadratic
	11M83330.D	11M83331.D	11M83332.D	11M83333.D	11M83334.D	11M83335.D	11M83336.D	11M83337.D	11M83338.D	11M83339.D				
Fluorobenzene	ISTD													
Dichlorodifluoromethane			0.343	0.307	0.307	0.329	0.331	0.322	0.319		0.323	4.030		
Chloromethane		0.528	0.589	0.549	0.516	0.550	0.584	0.566	0.551		0.554	4.540		
Vinyl Chloride		0.418	0.678	0.556	0.652	0.683	0.501	0.434			0.560	20.219		0.995
1,3-Butadiene				0.499	0.433	0.319	0.279	0.146	0.137	0.128	0.277	53.952	FAIL	
Bromomethane			0.197	0.177	0.160	0.162	0.178	0.187	0.183		0.178	7.555		
Chloroethane			0.203	0.194	0.169	0.185	0.196	0.191	0.198		0.191	5.816		
Trichlorofluoromethane		0.522	0.528	0.515	0.503	0.542	0.552	0.560	0.590		0.539	5.160		
Diethyl ether			0.179	0.182	0.182	0.190	0.189	0.204		0.206	0.190	5.786		
Isoprene		0.358	0.432	0.400	0.379	0.416	0.440	0.460	0.470		0.419	9.278		
Acrolein					0.012	0.013	0.013	0.013	0.014	0.013	0.013	4.103		
1,1,2-Trichloro-1,2,2-Trifluoroet		0.211	0.283	0.279	0.274	0.288	0.292	0.296	0.314		0.280	10.893		
Acetone			0.074	0.064	0.060	0.051	0.048	0.044	0.048	0.044	0.054	19.809	0.998	
1,1-Dichloroethene		0.324	0.370	0.370	0.375	0.387	0.391	0.395	0.425		0.379	7.552		
Tert-Butyl Alcohol				0.010	0.011	0.013	0.013	0.014		0.015	0.013	14.140		
Dimethyl Sulfide		0.308	0.313	0.299	0.281	0.302	0.314	0.317	0.351		0.311	6.421		
Iodomethane			0.258	0.305	0.330	0.406	0.417	0.384	0.380		0.354	16.522	0.999	
Methyl acetate			0.169	0.163	0.161	0.149	0.155	0.161	0.173		0.161	5.001		
Methylene Chloride			0.279	0.268	0.255	0.257	0.266	0.269	0.294		0.270	4.938		
Carbon Disulfide		0.733	0.784	0.740	0.706	0.751	0.782	0.798	0.893		0.774	7.406		
Acrylonitrile			0.043	0.048	0.058	0.056	0.060	0.059	0.063	0.053	0.055	11.971		
Methyl Tert Butyl Ether		0.611	0.650	0.620	0.596	0.620	0.632	0.638	0.676		0.630	3.913		
trans-1,2-Dichloroethene		0.224	0.275	0.257	0.265	0.273	0.279	0.285	0.310		0.271	9.090		
n-Hexane			0.260	0.258	0.257	0.271	0.282	0.284	0.303		0.274	6.307		
Diisopropyl ether			0.757	0.744	0.761	0.791	0.780	0.837		0.884	0.794	6.320		
Vinyl Acetate					0.099	0.126	0.163	0.165	0.158	0.172	0.147	19.242	0.998	
1,1-Dichloroethane		0.456	0.431	0.431	0.424	0.446	0.465	0.472	0.506		0.454	6.015		
Ethyl-Tert-Butyl ether			0.732	0.727	0.740	0.774	0.759	0.818		0.873	0.775	6.864		
2-Butanone			0.061	0.066	0.069	0.064	0.064	0.064	0.062	0.065	0.064	3.768		
Propionitrile			0.016	0.019	0.019	0.019	0.019	0.020		0.020	0.019	6.764		
2,2-Dichloropropane		0.338	0.365	0.326	0.343	0.361	0.379	0.400	0.422		0.367	8.895		
cis-1,2-Dichloroethene		0.272	0.289	0.288	0.273	0.289	0.301	0.307	0.329		0.294	6.386		
Chloroform	0.477	0.454	0.497	0.475	0.460	0.466	0.478	0.490	0.523		0.480	4.433		
1-Bromopropane			0.040	0.047	0.052	0.056	0.059	0.059	0.062	0.064	0.055	14.414		
Bromochloromethane		0.160	0.179	0.183	0.181	0.190	0.194	0.198	0.209		0.187	7.878		
Tetrahydrofuran			0.041	0.040	0.042	0.042	0.041	0.043		0.042	0.042	2.386		
Dibromofluoromethane			0.338	0.305	0.288	0.282	0.302	0.304	0.314		0.305	5.984		
1,1,1-Trichloroethane		0.400	0.444	0.422	0.406	0.441	0.466	0.486	0.537		0.450	10.054		
Cyclohexane		0.324	0.365	0.345	0.335	0.355	0.375	0.384	0.420		0.363	8.389		
1,1-Dichloropropene		0.311	0.357	0.337	0.337	0.361	0.373	0.380	0.408		0.358	8.375		
Carbon Tetrachloride		0.272	0.349	0.340	0.377	0.420	0.455	0.491	0.490		0.399	19.628	0.998	
Tert-Amyl-Methyl ether			0.658	0.661	0.68	0.708	0.703	0.759		0.79	0.70844	7.03178		
1,2-Dichloroethane-d4			0.353	0.284	0.272	0.267	0.286	0.285	0.292		0.29151	9.76338		
Heptane											0	0		
1,2-Dichloroethane		0.307	0.343	0.313	0.333	0.331	0.345	0.351	0.378		0.33748	6.65068		
Benzene		1.033	1.055	0.971	0.962	1.011	1.054	1.09	1.192		1.04612	6.99279		
Trichloroethene		0.373	0.361	0.332	0.308	0.326	0.332	0.34	0.372		0.34299	6.76518		
Methylcyclohexane		0.311	0.36	0.345	0.331	0.362	0.378	0.383	0.403		0.35909	8.27287		
1,2-Dichloropropane		0.223	0.246	0.235	0.226	0.236	0.245	0.249	0.267		0.24083	5.8499		
1,4-Dioxane				0.001	0.002	0.002	0.002	0.002		0.002	0.00171	14.9014		
Bromodichloromethane		0.264	0.307	0.304	0.314	0.336	0.356	0.366	0.391		0.32963	12.2734		
Dibromomethane		0.078	0.132	0.15	0.146	0.151	0.158	0.157	0.166		0.14223	19.524	0.999	
2-Chloroethyl Vinyl Ether			0.075	0.091	0.096	0.102	0.111	0.11	0.115	0.121	0.10273	14.3876		
4-Methyl-2-Pentanone				0.053	0.053	0.054	0.059	0.058	0.058	0.06	0.05626	5.46038		
cis-1,3-Dichloropropene		0.331	0.355	0.339	0.353	0.383	0.406	0.419	0.454		0.3797	11.3835		
Dimethyl Disulfide			0.097	0.107	0.116	0.18	0.23	0.256	0.296		0.18306	43.5133		0.999
Chlorobenzene-d5	ISTD													
Toluene-d8			1.539	1.306	1.259	1.191	1.261	1.301	1.374		1.31869	8.48083		
Toluene		1.494	1.412	1.423	1.376	1.454	1.518	1.597	1.756		1.5037	8.20773		
Ethyl Methacrylate			0.229	0.224	0.235	0.279	0.303	0.313	0.331		0.27352	16.0932	0.998	
Paraldehyde				0.001	0.002	0.003	0.004	0.004		0.004	0.00302	43.7361	0.99	
trans-1,3-Dichloropropene		0.366	0.353	0.36	0.369	0.43	0.462	0.481			0.40316	13.3116		
1,1,2-Trichloroethane		0.217	0.262	0.241	0.238	0.251	0.253	0.257	0.268		0.24838	6.50556		
2-Hexanone			0.128	0.126	0.119	0.124	0.127	0.128	0.125	0.128	0.12559	2.53673		
1,3-Dichloropropane		0.385	0.408	0.422	0.403	0.418	0.423	0.431	0.447		0.41721	4.49361		
Tetrachloroethene		0.228	0.303	0.31	0.296	0.309	0.319	0.332	0.367		0.30808	12.7266		
Dibromochloromethane		0.231	0.241	0.263	0.277	0.328	0.357	0.378	0.404		0.30977	21.2848		1
1,2-Dibromoethane		0.226	0.259	0.249	0.252	0.261	0.265	0.268	0.278		0.25721	6.0551		
1-Chlorohexane		0.344	0.418	0.387	0.403	0.441	0.457	0.476	0.523		0.4311	12.9061		
Chlorobenzene		0.907	0.96	0.932	0.946	0.999	1.073	1.19			1.00094	9.90877		
1,1,1,2-Tetrachloroethane		0.21	0.282	0.288	0.3	0.359	0.418	0.478	0.592		0.36596	34.0219		1
Ethylbenzene		0.453	0.52	0.489	0.514	0.547	0.599	0.68			0.54317	13.8903		
m-,p-Xylene		0.627	0.618	0.602	0.608	0.668	0.74	0.832			0.67074	12.7659		
o-Xylene		0.592	0.59	0.577	0.586	0.632	0.672	0.724	0.854		0.65339	14.6374		
Styrene		0.94	0.95	0.936	0.953	1.055	1.156	1.289			1.03962	13.1528		
Bromoform		0.083	0.108	0.133	0.143	0.184	0.216	0.231			0.15684	35.2652		0.999
Isopropylbenzene		1.332	1.485	1.423	1.433	1.573	1.698	1.824			1.53825	11.2018		
1,4-Dichlorobenzene-d4	ISTD													
1,1,2,2-Tetrachloroethane		0.409	0.406	0.416	0.452	0.467	0.47	0.469	0.471		0.44502	6.63947		
p-Bromofluorobenzene			0.959	0.82	0.789	0.765	0.791	0.811	0.85		0.82634	7.79135		

1,2,3-Trichloropropane			0.125	0.127	0.141	0.139	0.137	0.137	0.137	0.1347	4.53278			
trans-1,4-Dichloro-2-Butene				0.068	0.071	0.109	0.119	0.128	0.136	0.10505	27.7626	0.997		
n-Propylbenzene		3.012	3.211	3.053	3.098	3.22	3.304	3.441	3.684	3.25284	6.85924			
Bromobenzene	0.746	0.75	0.764	0.749	0.756	0.768	0.769	0.81	0.882	0.7771	5.62286			
1,3,5-Trimethylbenzene		2.167	2.356	2.258	2.245	2.361	2.44	2.6	2.897	2.41569	9.75123			
2-Chlorotoluene		2.105	2.156	2.069	2.046	2.128	2.191	2.3	2.506	2.18762	6.90226			
4-Chlorotoluene		1.745	1.924	1.732	1.744	1.843	1.928	2.043	2.357	1.91446	10.9638			
a-Methylstyrene			1.239	1.237	1.222	1.352	1.454	1.569		1.34534	10.5263			
tert-Butylbenzene		0.468	0.482	0.506	0.482	0.509	0.535	0.574	0.651	0.52573	11.5484			
1,2,4-Trimethylbenzene		2.174	2.259	2.243	2.29	2.449	2.647	2.869	3.177	2.5133	14.2017			
sec-Butylbenzene		2.399	2.782	2.567	2.646	2.79	2.932	3.071	3.379	2.8206	10.901			
p-Isopropyltoluene		2.003	2.269	2.088	2.249	2.415	2.551	2.727	3.059	2.4202	14.4534			
1,3-Dichlorobenzene		1.508	1.428	1.357	1.434	1.472	1.543	1.622	1.83	1.52412	9.65745			
1,4-Dichlorobenzene	1.567	1.467	1.467	1.436	1.471	1.489	1.562	1.644	1.86	1.55137	8.58086			
n-Butylbenzene		1.447	1.751	1.67	1.781	1.966	2.084	2.205		1.84356	14.0544			
1,2-Dichlorobenzene	1.291	1.327	1.316	1.278	1.315	1.375	1.413	1.481	1.637	1.38135	8.36434			
1,2-Dibromo-3-Chloropropane			0.1	0.029	0.052	0.067	0.074	0.082	0.083	0.06954	33.2561	0.994		
1,2,4-Trichlorobenzene		0.691	0.713	0.683	0.725	0.822	0.87	0.965		0.7812	13.6889			
Hexachlorobutadiene		0.141	0.275	0.285	0.258	0.292	0.29	0.302	0.322	0.27074	20.5111	0.998		
Naphthalene		1.072	1.322	1.298	1.38	1.591	1.714	1.887	1.927	1.52374	20.0108		0.999	
1,2,3-Trichlorobenzene		0.632	0.642	0.651	0.675	0.722	0.76	0.853	0.904	0.73004	13.9762			

Tue May 08 16:06:10 2012

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

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

Thu Feb 02 09:47:01 2012

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

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

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

Mon Apr 30 09:55:47 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396851-12
Instrument ID: HPMS11 Run Time: 22:38 Method: 8260B
File ID: 11M83341 Analyst: ADC QC Key: WATERLOO
ICal Workgroup: WG396851 Cal ID: HPMS11 - 03-MAY-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	54.9	ug/L	0.417	9.80	25	
1,2-Dichloropropane	CCC	50.0	53.9	ug/L	0.259	7.70	25	
Chloroform	CCC	50.0	53.7	ug/L	0.516	7.50	25	
Ethylbenzene	CCC	50.0	58.1	ug/L	0.631	16.1	25	
Toluene	CCC	50.0	52.8	ug/L	1.59	5.60	25	
Vinyl Chloride	CCC	50.0	46.8	ug/L	0.517	6.40	25	
1,1,2,2-Tetrachloroethane	SPCC	50.0	53.9	ug/L	0.480	7.80	25	
1,1-Dichloroethane	SPCC	50.0	54.1	ug/L	0.491	8.20	25	
Bromoform	SPCC	50.0	56.4	ug/L	0.237	12.9	25	
Chlorobenzene	SPCC	50.0	55.9	ug/L	1.12	11.7	25	
Chloromethane	SPCC	50.0	63.6	ug/L	0.705	27.2	25	*
1,1,1-Trichloroethane		50.0	54.4	ug/L	0.490	8.90	25	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	53.3	ug/L	0.298	6.50	25	
1,1,2-Trichloroethane		50.0	53.9	ug/L	0.268	7.70	25	
1,2,3-Trichlorobenzene		50.0	57.1	ug/L	0.833	14.2	25	
1,2,4-Trichlorobenzene		50.0	60.0	ug/L	0.937	20.0	25	
1,2-Dibromo-3-Chloropropane		50.0	53.4	ug/L	0.0854	6.80	25	
1,2-Dibromoethane		50.0	54.2	ug/L	0.279	8.40	25	
1,2-Dichlorobenzene		50.0	53.0	ug/L	1.46	6.00	25	
1,2-Dichloroethane		50.0	54.1	ug/L	0.365	8.20	25	
cis-1,2-Dichloroethene		50.0	53.9	ug/L	0.317	7.80	25	
trans-1,2-Dichloroethene		50.0	53.4	ug/L	0.290	6.80	25	
1,3-Dichlorobenzene		50.0	51.9	ug/L	1.58	3.80	25	
1,4-Dichlorobenzene		50.0	52.0	ug/L	1.61	4.00	25	
2-Butanone		50.0	52.0	ug/L	0.0670	4.10	25	
2-Hexanone		50.0	50.8	ug/L	0.128	1.60	25	
4-Methyl-2-Pentanone		50.0	52.4	ug/L	0.0590	4.80	25	
Acetone		50.0	53.7	ug/L	0.0496	7.40	25	
Benzene		50.0	53.0	ug/L	1.11	6.00	25	
Bromochloromethane		50.0	55.4	ug/L	0.207	10.9	25	
Bromodichloromethane		50.0	59.6	ug/L	0.393	19.1	25	
Bromomethane		50.0	56.3	ug/L	0.200	12.5	25	
Carbon Disulfide		50.0	53.7	ug/L	0.831	7.40	25	
Carbon Tetrachloride		50.0	51.6	ug/L	0.495	3.30	25	
Chloroethane		50.0	53.7	ug/L	0.205	7.40	25	
cis-1,3-Dichloropropene		50.0	55.7	ug/L	0.423	11.4	25	
Cyclohexane		50.0	52.0	ug/L	0.377	4.00	25	
Dibromochloromethane		50.0	54.0	ug/L	0.383	8.10	25	
Dichlorodifluoromethane		50.0	71.0	ug/L	0.458	41.9	25	*
Isopropylbenzene		50.0	49.7	ug/L	1.53	0.600	25	
Methyl acetate		50.0	42.5	ug/L	0.137	15.0	25	
Methyl Tert Butyl Ether		50.0	53.2	ug/L	0.670	6.40	25	

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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396851-12
Instrument ID: HPMS11 Run Time: 22:38 Method: 8260B
File ID: 11M83341 Analyst: ADC QC Key: WATERLOO
ICal Workgroup: WG396851 Cal ID: HPMS11 - 03-MAY-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Methylcyclohexane		50.0	53.3	ug/L	0.383	6.70	25	
Methylene Chloride		50.0	52.8	ug/L	0.285	5.60	25	
m-,p-Xylene		100	115	ug/L	0.769	14.6	25	
o-Xylene		50.0	52.7	ug/L	0.689	5.50	25	
Styrene		50.0	59.1	ug/L	1.23	18.1	25	
Tetrachloroethene		50.0	54.8	ug/L	0.338	9.60	25	
trans-1,3-Dichloropropene		50.0	54.0	ug/L	0.435	8.00	25	
Trichloroethene		50.0	51.1	ug/L	0.351	2.30	25	
Trichlorofluoromethane		50.0	52.9	ug/L	0.571	5.80	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

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Version 1.5 PDF File ID: 2404495
Report generated 05/10/2012 13:57

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number:L12040928 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	

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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 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

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Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/04/2012 Sample ID: WG397041-02

Instrument ID: HPMS11 Run Time: 15:50 Method: 8260B

File ID: 11M83348 Analyst: ADC QC Key: WATERLOO

Workgroup (AAB#): WG397043 Cal ID: HPMS11 - 03-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	50.5	ug/L	0.383	0.955	20	
1,2-Dichloropropane	CCC	50.0	50.2	ug/L	0.242	0.336	20	
Chloroform	CCC	50.0	48.7	ug/L	0.467	2.68	20	
Ethylbenzene	CCC	50.0	52.1	ug/L	0.566	4.13	20	
Toluene	CCC	50.0	48.7	ug/L	1.47	2.51	20	
Vinyl Chloride	CCC	50.0	48.7	ug/L	0.534	2.56	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	49.7	ug/L	0.443	0.545	20	
1,1-Dichloroethane	SPCC	50.0	50.4	ug/L	0.458	0.837	20	
Bromoform	SPCC	50.0	53.0	ug/L	0.220	5.96	20	
Chlorobenzene	SPCC	50.0	52.8	ug/L	1.06	5.52	20	
Chloromethane	SPCC	50.0	47.5	ug/L	0.526	5.04	20	
1,1,1-Trichloroethane		50.0	49.5	ug/L	0.445	1.10	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	46.8	ug/L	0.262	6.39	20	
1,1,2-Trichloroethane		50.0	48.7	ug/L	0.242	2.50	20	
1,2,3-Trichlorobenzene		50.0	54.0	ug/L	0.788	7.96	20	
1,2,4-Trichlorobenzene		50.0	58.2	ug/L	0.910	16.4	20	
1,2-Dibromo-3-Chloropropane		50.0	47.3	ug/L	0.0754	5.48	20	
1,2-Dibromoethane		50.0	48.1	ug/L	0.247	3.82	20	
1,2-Dichlorobenzene		50.0	49.2	ug/L	1.36	1.54	20	
1,2-Dichloroethane		50.0	50.2	ug/L	0.339	0.414	20	
cis-1,2-Dichloroethene		50.0	49.3	ug/L	0.289	1.47	20	
trans-1,2-Dichloroethene		50.0	49.4	ug/L	0.268	1.29	20	
1,3-Dichlorobenzene		50.0	49.1	ug/L	1.50	1.88	20	
1,4-Dichlorobenzene		50.0	48.9	ug/L	1.52	2.28	20	
2-Butanone		50.0	45.3	ug/L	0.0583	9.46	20	
2-Hexanone		50.0	44.7	ug/L	0.112	10.6	20	
4-Methyl-2-Pentanone		50.0	46.4	ug/L	0.0523	7.13	20	
Acetone		50.0	57.5	ug/L	0.0530	15.0	20	
Benzene		50.0	48.3	ug/L	1.01	3.49	20	
Bromochloromethane		50.0	47.6	ug/L	0.178	4.77	20	
Bromodichloromethane		50.0	52.9	ug/L	0.348	5.71	20	
Bromomethane		50.0	47.4	ug/L	0.168	5.26	20	
Carbon Disulfide		50.0	48.3	ug/L	0.747	3.48	20	
Carbon Tetrachloride		50.0	45.5	ug/L	0.435	9.07	20	
Chloroethane		50.0	48.1	ug/L	0.184	3.72	20	
cis-1,3-Dichloropropene		50.0	51.1	ug/L	0.388	2.28	20	
Cyclohexane		50.0	50.9	ug/L	0.369	1.70	20	
Dibromochloromethane		50.0	49.9	ug/L	0.352	0.243	20	
Dichlorodifluoromethane		50.0	44.3	ug/L	0.286	11.4	20	
Isopropylbenzene		50.0	51.8	ug/L	1.59	3.58	20	
Methyl acetate		50.0	45.5	ug/L	0.147	9.00	20	
Methyl Tert Butyl Ether		50.0	46.2	ug/L	0.582	7.68	20	

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Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/04/2012 Sample ID: WG397041-02

Instrument ID: HPMS11 Run Time: 15:50 Method: 8260B

File ID: 11M83348 Analyst: ADC QC Key: WATERLOO

Workgroup (AAB#): WG397043 Cal ID: HPMS11 - 03-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Methylcyclohexane		50.0	48.7	ug/L	0.350	2.53	20	
Methylene Chloride		50.0	47.5	ug/L	0.256	4.96	20	
m-,p-Xylene		100	104	ug/L	0.695	3.56	20	
o-Xylene		50.0	48.5	ug/L	0.634	2.93	20	
Styrene		50.0	52.1	ug/L	1.08	4.17	20	
Tetrachloroethene		50.0	50.0	ug/L	0.308	0.0342	20	
trans-1,3-Dichloropropene		50.0	55.9	ug/L	0.451	11.9	20	
Trichloroethene		50.0	45.1	ug/L	0.310	9.73	20	
Trichlorofluoromethane		50.0	45.3	ug/L	0.488	9.48	20	
1,2-Dichloroethene		100	98.6	ug/L	0.278	1.38	20	
Xylenes		150	152	ug/L	0.664	1.40	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2404496
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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/05/2012 Sample ID: WG397117-02
Instrument ID: HPMS6 Run Time: 13:04 Method: 8260B
File ID: 6M107887 Analyst: MES QC Key: WATERLOO
Workgroup (AAB#): WG397118 Cal ID: HPMS6 - 25-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	49.1	ug/L	0.451	1.75	20	
1,2-Dichloropropane	CCC	50.0	50.3	ug/L	0.287	0.591	20	
Chloroform	CCC	50.0	48.3	ug/L	0.495	3.40	20	
Ethylbenzene	CCC	50.0	49.6	ug/L	0.534	0.864	20	
Toluene	CCC	50.0	47.9	ug/L	1.57	4.15	20	
Vinyl Chloride	CCC	50.0	41.3	ug/L	0.343	17.3	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	49.5	ug/L	0.523	1.09	20	
1,1-Dichloroethane	SPCC	50.0	48.3	ug/L	0.547	3.46	20	
Bromoform	SPCC	50.0	53.8	ug/L	0.191	7.54	20	
Chlorobenzene	SPCC	50.0	47.5	ug/L	0.991	5.03	20	
Chloromethane	SPCC	50.0	46.4	ug/L	0.416	7.25	20	
1,1,1-Trichloroethane		50.0	50.3	ug/L	0.450	0.543	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	46.0	ug/L	0.262	8.10	20	
1,1,2-Trichloroethane		50.0	47.2	ug/L	0.249	5.51	20	
1,2,3-Trichlorobenzene		50.0	48.6	ug/L	0.601	2.71	20	
1,2,4-Trichlorobenzene		50.0	51.5	ug/L	0.732	3.02	20	
1,2-Dibromo-3-Chloropropane		50.0	42.5	ug/L	0.0710	15.0	20	
1,2-Dibromoethane		50.0	47.2	ug/L	0.245	5.54	20	
1,2-Dichlorobenzene		50.0	47.8	ug/L	1.25	4.47	20	
1,2-Dichloroethane		50.0	49.7	ug/L	0.350	0.560	20	
cis-1,2-Dichloroethene		50.0	49.8	ug/L	0.289	0.324	20	
trans-1,2-Dichloroethene		50.0	48.4	ug/L	0.269	3.17	20	
1,3-Dichlorobenzene		50.0	49.6	ug/L	1.43	0.762	20	
1,4-Dichlorobenzene		50.0	47.7	ug/L	1.45	4.57	20	
2-Butanone		50.0	51.2	ug/L	0.0679	2.49	20	
2-Hexanone		50.0	48.1	ug/L	0.121	3.73	20	
4-Methyl-2-Pentanone		50.0	51.2	ug/L	0.0509	2.46	20	
Acetone		50.0	43.4	ug/L	0.0411	13.3	20	
Benzene		50.0	49.1	ug/L	1.09	1.74	20	
Bromochloromethane		50.0	51.2	ug/L	0.158	2.39	20	
Bromodichloromethane		50.0	51.0	ug/L	0.350	2.05	20	
Bromomethane		50.0	43.0	ug/L	0.202	14.1	20	
Carbon Disulfide		50.0	51.6	ug/L	0.858	3.23	20	
Carbon Tetrachloride		50.0	52.7	ug/L	0.418	5.50	20	
Chloroethane		50.0	45.5	ug/L	0.214	8.98	20	
cis-1,3-Dichloropropene		50.0	48.6	ug/L	0.399	2.90	20	
Cyclohexane		50.0	53.8	ug/L	0.482	7.62	20	
Dibromochloromethane		50.0	47.2	ug/L	0.335	5.55	20	
Dichlorodifluoromethane		50.0	33.2	ug/L	0.218	33.6	20	*
Isopropylbenzene		50.0	50.7	ug/L	1.58	1.42	20	
Methyl acetate		50.0	46.7	ug/L	0.175	6.65	20	
Methyl Tert Butyl Ether		50.0	44.8	ug/L	0.536	10.4	20	

CCV - Modified 03/05/2008
PDF File ID: 2404496
Report generated 05/10/2012 13:58

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/05/2012 Sample ID: WG397117-02
Instrument ID: HPMS6 Run Time: 13:04 Method: 8260B
File ID: 6M107887 Analyst: MES QC Key: WATERLOO
Workgroup (AAB#): WG397118 Cal ID: HPMS6 - 25-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Methylcyclohexane		50.0	56.7	ug/L	0.363	13.5	20	
Methylene Chloride		50.0	47.9	ug/L	0.272	4.10	20	
m-,p-Xylene		100	101	ug/L	0.664	0.933	20	
o-Xylene		50.0	49.5	ug/L	0.621	1.00	20	
Styrene		50.0	46.3	ug/L	1.05	7.34	20	
Tetrachloroethene		50.0	50.8	ug/L	0.390	1.56	20	
trans-1,3-Dichloropropene		50.0	46.3	ug/L	0.497	7.35	20	
Trichloroethene		50.0	50.6	ug/L	0.281	1.25	20	
Trichlorofluoromethane		50.0	44.3	ug/L	0.473	11.3	20	
1,2-Dichloroethene		100	98.3	ug/L	0.279	1.75	20	
Xylenes		150	150	ug/L	0.642	0.288	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2404496
Report generated 05/10/2012 13:58

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040928
Instrument ID: HPMS11
Workgroup (AAB#): WG397043

CCV Number: WG397041-02
CAL ID: HPMS11-03-MAY-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397041-02	NA	NA	353376	627178	817770
Upper Limit	NA	NA	706752	1254356	1635540
Lower Limit	NA	NA	176688	313589	408885
L12040928-01	1.00	01	202339	399588	533042
L12040928-03	1.00	01	196019	389528	528079
L12040928-07	1.00	01	224619	445020	609960
L12040928-08	1.00	01	285790	518322	680725
L12040928-10	1.00	01	282816	508833	655347
WG397043-01	1.00	01	267840	522556	701420
WG397043-02	1.00	01	296163	528130	689774

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: 2409850
Report generated 05/10/2012 13:58

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040928
Instrument ID: HPMS6
Workgroup (AAB#): WG397118

CCV Number: WG397117-02
CAL ID: HPMS6-25-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397117-02	NA	NA	171904	340965	500004
Upper Limit	NA	NA	343808	681930	1000008
Lower Limit	NA	NA	85952	170483	250002
L12040928-05	2.00	DL01	141440	250533	362361
WG397118-01	1.00	01	142989	309951	440027
WG397118-02	1.00	01	154139	310631	452676
WG397118-06	1.00	01	124103	267321	383036

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: 2409850
Report generated 05/10/2012 13:58

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040928
Instrument ID: HPMS11
Workgroup (AAB#): WG397043

CCV Number: WG397041-02
CAL ID: HPMS11-03-MAY-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397041-02	NA	NA	16.75	13.94	10.31
Upper Limit	NA	NA	17.25	14.44	10.81
Lower Limit	NA	NA	16.25	13.44	9.81
L12040928-01	1.00	01	16.75	13.94	10.31
L12040928-03	1.00	01	16.75	13.94	10.31
L12040928-07	1.00	01	16.75	13.94	10.31
L12040928-08	1.00	01	16.74	13.94	10.31
L12040928-10	1.00	01	16.75	13.94	10.31
WG397043-01	1.00	01	16.75	13.94	10.31
WG397043-02	1.00	01	16.74	13.94	10.31

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: 2409851
Report generated 05/10/2012 13:58

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040928
Instrument ID: HPMS6
Workgroup (AAB#): WG397118

CCV Number: WG397117-02
CAL ID: HPMS6 - 25-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397117-02	NA	NA	18.6	15.03	10.54
Upper Limit	NA	NA	19.1	15.53	11.04
Lower Limit	NA	NA	18.1	14.53	10.04
L12040928-05	2.00	DL01	18.6	15.03	10.54
WG397118-01	1.00	01	18.6	15.03	10.54
WG397118-02	1.00	01	18.6	15.03	10.54
WG397118-06	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: 2409851
Report generated 05/10/2012 13:58

2.1.1.3 Sample Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\11M83365.D Vial: 19
Acq On : 5 May 2012 00:42 Operator: ADC
Sample : L12040928-01 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 10 11:21:50 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

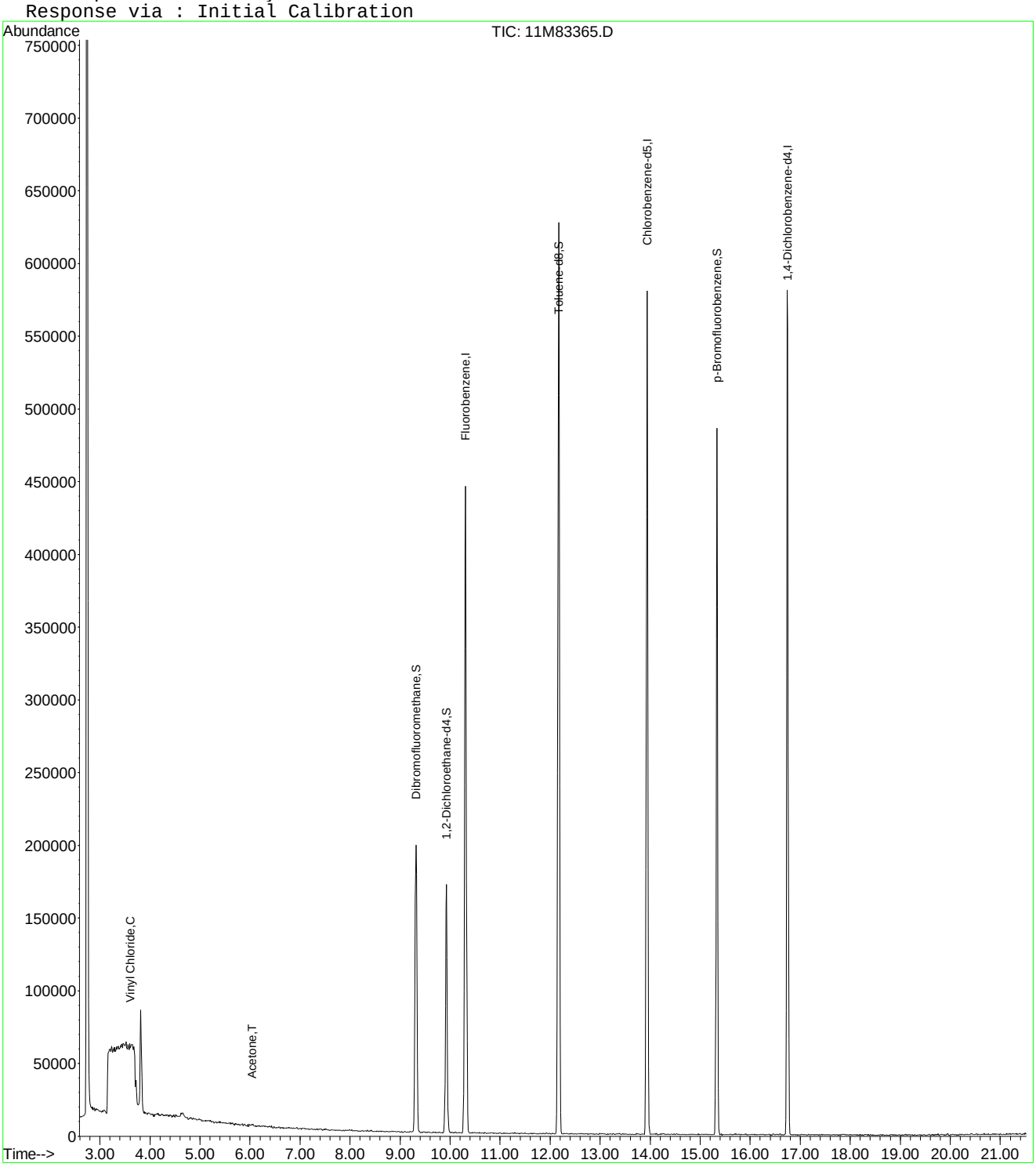
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	533042	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	399588	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	202339	25.00	ug/L	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	160197	24.6629	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 98.64%			
43) 1,2-Dichloroethane-d4	9.93	65	145209	23.3624	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 93.44%			
58) Toluene-d8	12.17	98	549489	26.0702	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 104.28%			
80) p-Bromofluorobenzene	15.33	95	172927	25.8562	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 103.44%			
Target Compounds						Qvalue
4) Vinyl Chloride	3.61	62	405	0.1379	ug/L #	1
13) Acetone	6.04	43	1927	1.1344	ug/L #	45

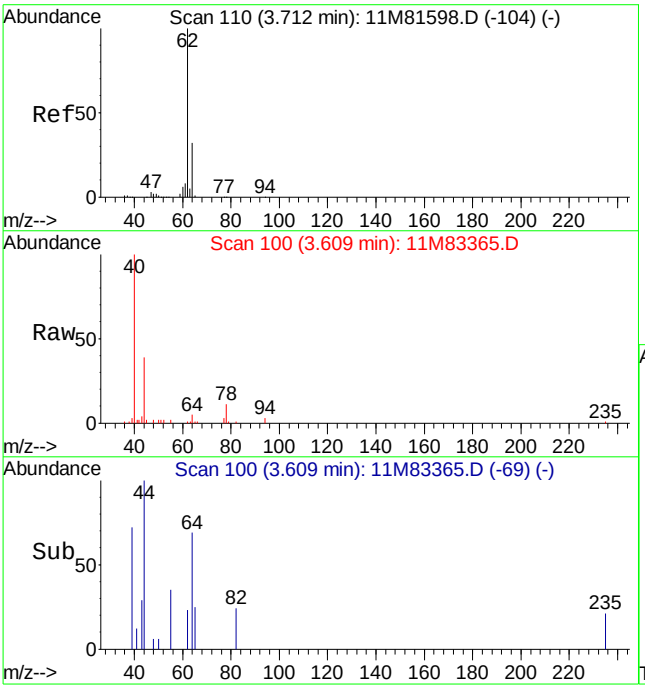
(#) = qualifier out of range (m) = manual integration
11M83365.D 8260WTR.M Thu May 10 11:21:51 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\11M83365.D Vial: 19
Acq On : 5 May 2012 00:42 Operator: ADC
Sample : L12040928-01 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 10 11:21 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration

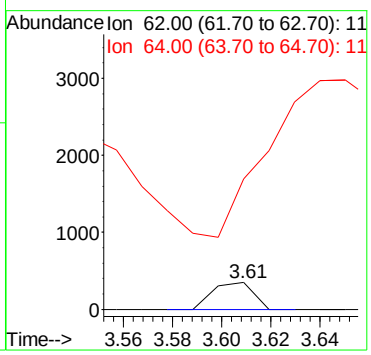


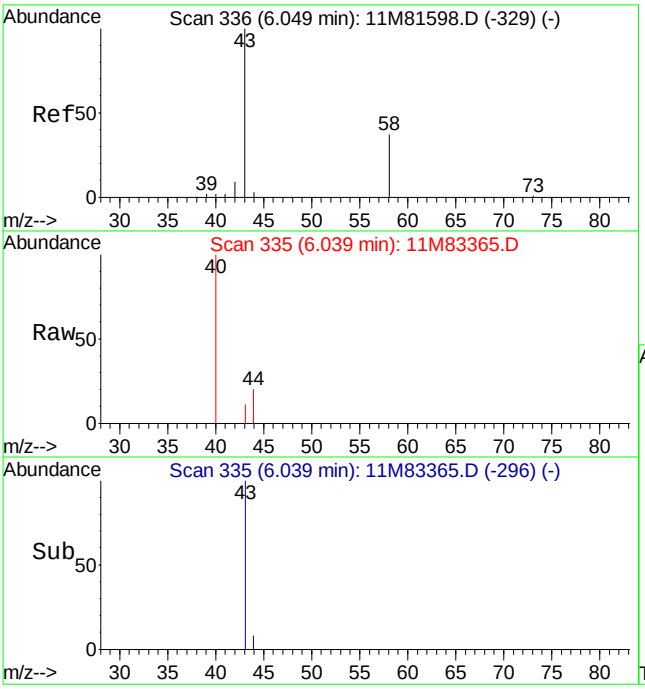


#4
Vinyl Chloride
Concen: 0.14 ug/L
RT: 3.61 min Scan# 100
Delta R.T. -0.08 min
Lab File: 11M83365.D
Acq: 5 May 2012 00:42

Tgt Ion: 62 Resp: 405

Ion	Ratio	Lower	Upper
62	100		
64	2582.2	19.9	46.5#

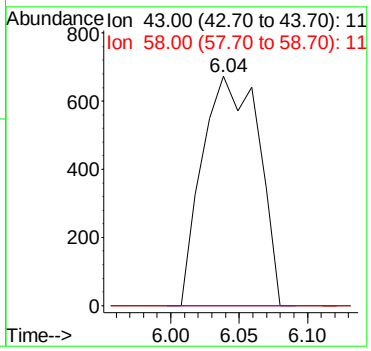




#13
Acetone
Concen: 1.13 ug/L
RT: 6.04 min Scan# 335
Delta R.T. 0.00 min
Lab File: 11M83365.D
Acq: 5 May 2012 00:42

Tgt Ion: 43 Resp: 1927

Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.6	41.2#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\11M83365.D Vial: 19
Acq On : 5 May 2012 00:42 Operator: ADC
Sample : L12040928-01 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
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

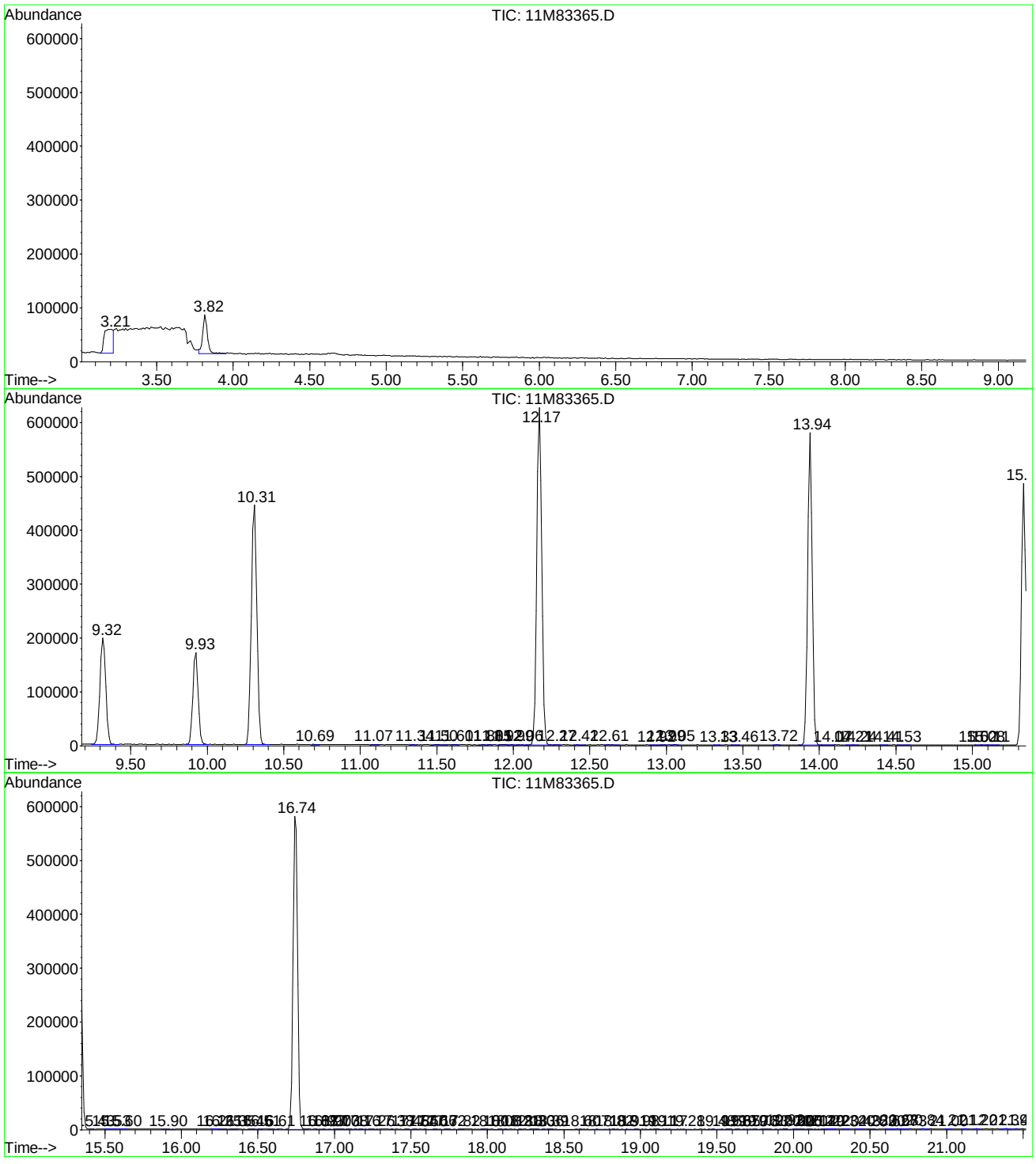
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.206	54	61	62	rBV2	44600	182012	12.76%	2.522%
2	3.816	116	120	133	rVB	72124	154586	10.84%	2.142%
3	9.316	645	652	662	rVB2	197878	520753	36.52%	7.214%
4	9.926	704	711	719	rBV	170737	407643	28.58%	5.647%
5	10.309	742	748	757	rVB	445078	1116490	78.29%	15.468%
6	10.691	784	785	789	rBV2	910	1570	0.11%	0.022%
7	11.074	821	822	827	rBV2	715	1182	0.08%	0.016%
8	11.343	846	848	850	rVB	417	730	0.05%	0.010%
9	11.498	860	863	870	rVB2	717	1871	0.13%	0.026%
10	11.601	872	873	877	rVB2	688	1215	0.09%	0.017%
11	11.798	890	892	895	rVB2	512	892	0.06%	0.012%
12	11.849	895	897	898	rBV	692	843	0.06%	0.012%
13	11.922	902	904	908	rVB2	1011	1790	0.13%	0.025%
14	11.994	908	911	913	rVB2	635	1061	0.07%	0.015%
15	12.056	914	917	920	rBV	464	909	0.06%	0.013%
16	12.170	920	928	937	rVB	626886	1426128	100.00%	19.757%
17	12.273	937	938	941	rBV2	503	778	0.05%	0.011%
18	12.418	950	952	957	rBV2	499	733	0.05%	0.010%
19	12.615	969	971	978	rVB2	668	1701	0.12%	0.024%
20	12.925	998	1001	1005	rVB2	395	1210	0.08%	0.017%
21	12.987	1005	1007	1008	rBV	720	906	0.06%	0.013%
22	13.049	1011	1013	1016	rBV2	583	1059	0.07%	0.015%
23	13.328	1038	1040	1042	rBV2	322	601	0.04%	0.008%
24	13.462	1049	1053	1054	rBV2	483	752	0.05%	0.010%
25	13.721	1076	1078	1080	rBV2	707	739	0.05%	0.010%
26	13.938	1092	1099	1106	rVB	580177	1183453	82.98%	16.395%
27	14.072	1106	1112	1114	rBV2	347	1045	0.07%	0.014%
28	14.207	1122	1125	1126	rVB	602	738	0.05%	0.010%
29	14.238	1126	1128	1129	rBV2	586	822	0.06%	0.011%
30	14.414	1143	1145	1148	rBV	482	957	0.07%	0.013%
31	14.527	1154	1156	1162	rVB2	695	1416	0.10%	0.020%
32	15.024	1203	1204	1207	rVV2	590	867	0.06%	0.012%
33	15.075	1207	1209	1211	rVV	527	733	0.05%	0.010%
34	15.106	1211	1212	1218	rVV2	545	1244	0.09%	0.017%
35	15.334	1228	1234	1241	rVV	485736	945523	66.30%	13.099%
36	15.427	1241	1243	1244	rVB2	1032	1054	0.07%	0.015%
37	15.530	1250	1253	1257	rVB2	291	904	0.06%	0.013%
38	15.603	1259	1260	1264	rVB	508	753	0.05%	0.010%
39	15.903	1286	1289	1294	rVB2	787	1834	0.13%	0.025%
40	16.213	1317	1319	1322	rVV	376	650	0.05%	0.009%
41	16.254	1322	1323	1328	rVB2	612	885	0.06%	0.012%
42	16.347	1328	1332	1334	rBV2	347	948	0.07%	0.013%

43	16.461	1340	1343	1346	rBV2	1118	2380	0.17%	0.033%
44	16.513	1346	1348	1350	rVV	889	1569	0.11%	0.022%
45	16.606	1353	1357	1360	rVV	1100	2732	0.19%	0.038%
46	16.740	1364	1370	1379	rVV	581239	1177089	82.54%	16.307%
47	16.885	1383	1384	1387	rVV	609	764	0.05%	0.011%
48	16.926	1387	1388	1390	rVB	673	751	0.05%	0.010%
49	16.968	1390	1392	1394	rBV	649	844	0.06%	0.012%
50	17.030	1394	1398	1402	rVV2	607	1955	0.14%	0.027%
51	17.081	1402	1403	1408	rVV	401	1040	0.07%	0.014%
52	17.164	1408	1411	1414	rVB	755	924	0.06%	0.013%
53	17.257	1414	1420	1423	rVB	403	1434	0.10%	0.020%
54	17.381	1430	1432	1433	rBV	516	695	0.05%	0.010%
55	17.485	1439	1442	1443	rVB	368	612	0.04%	0.008%
56	17.536	1444	1447	1448	rBV	390	618	0.04%	0.009%
57	17.598	1451	1453	1457	rBV	491	731	0.05%	0.010%
58	17.660	1457	1459	1461	rVB	435	736	0.05%	0.010%
59	17.722	1464	1465	1469	rVB2	460	1021	0.07%	0.014%
60	17.815	1473	1474	1477	rBV	738	1262	0.09%	0.017%
61	18.001	1487	1492	1493	rBV	345	976	0.07%	0.014%
62	18.084	1498	1500	1502	rVV	513	780	0.05%	0.011%
63	18.115	1502	1503	1505	rVB	541	650	0.05%	0.009%
64	18.208	1511	1512	1514	rVB	749	676	0.05%	0.009%
65	18.301	1518	1521	1526	rBV	558	1886	0.13%	0.026%
66	18.363	1526	1527	1529	rBV	750	657	0.05%	0.009%
67	18.394	1529	1530	1534	rVB	542	1243	0.09%	0.017%
68	18.601	1547	1550	1552	rBV	404	635	0.04%	0.009%
69	18.715	1558	1561	1566	rVB	404	1053	0.07%	0.015%
70	18.818	1566	1571	1575	rBV	573	1826	0.13%	0.025%
71	18.911	1579	1580	1582	rVB	705	627	0.04%	0.009%
72	18.984	1582	1587	1589	rBV	544	1352	0.09%	0.019%
73	19.108	1594	1599	1601	rBV	822	1785	0.13%	0.025%
74	19.170	1604	1605	1610	rBV	383	669	0.05%	0.009%
75	19.284	1615	1616	1620	rBV	587	1171	0.08%	0.016%
76	19.480	1631	1635	1638	rVB2	497	1116	0.08%	0.015%
77	19.583	1638	1645	1648	rVB2	849	2092	0.15%	0.029%
78	19.645	1648	1651	1653	rVB	909	1315	0.09%	0.018%
79	19.697	1653	1656	1659	rBV	992	1589	0.11%	0.022%
80	19.759	1659	1662	1664	rVB	994	1165	0.08%	0.016%
81	19.832	1664	1669	1675	rVB2	847	2694	0.19%	0.037%
82	19.935	1675	1679	1683	rVB	1258	3068	0.22%	0.043%
83	19.997	1683	1685	1687	rBV	779	1151	0.08%	0.016%
84	20.049	1687	1690	1693	rVB	688	1375	0.10%	0.019%
85	20.121	1693	1697	1698	rVB	586	1256	0.09%	0.017%
86	20.142	1698	1699	1702	rBV	484	781	0.05%	0.011%
87	20.193	1702	1704	1706	rBV2	943	1505	0.11%	0.021%
88	20.224	1706	1707	1712	rBV2	388	895	0.06%	0.012%
89	20.338	1716	1718	1720	rBV	576	620	0.04%	0.009%
90	20.431	1724	1727	1730	rVB	684	1441	0.10%	0.020%
91	20.535	1732	1737	1738	rVB2	949	2002	0.14%	0.028%
92	20.617	1743	1745	1747	rBV2	359	618	0.04%	0.009%
93	20.679	1747	1751	1753	rVB	912	1181	0.08%	0.016%
94	20.731	1753	1756	1758	rBV2	420	890	0.06%	0.012%
95	20.845	1765	1767	1771	rVB2	785	1323	0.09%	0.018%
96	21.000	1781	1782	1785	rBV2	754	1028	0.07%	0.014%
97	21.124	1791	1794	1796	rBV	797	666	0.05%	0.009%
98	21.196	1799	1801	1802	rVB	836	718	0.05%	0.010%
99	21.393	1816	1820	1823	rVB2	912	2006	0.14%	0.028%
100	21.455	1825	1826	1827	rBV	700	619	0.04%	0.009%

Sum of corrected areas: 7218237

File : C:\MSDCHEM\1\DATA\050412\11M83365.D
Operator : ADC
Acquired : 5 May 2012 00:42 using AcqMethod 8260WTR
Instrument : HPMS11
Sample Name: L12040928-01 A 826-SPE
Misc Info : 1,1
Vial Number: 19
Quant File :8260WTR.RES (RTE Integrator)



Data File : C:\MSDCHEM\1\DATA\050412\11M83365.D Vial: 19
Acq On : 5 May 2012 00:42 Operator: ADC
Sample : L12040928-01 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

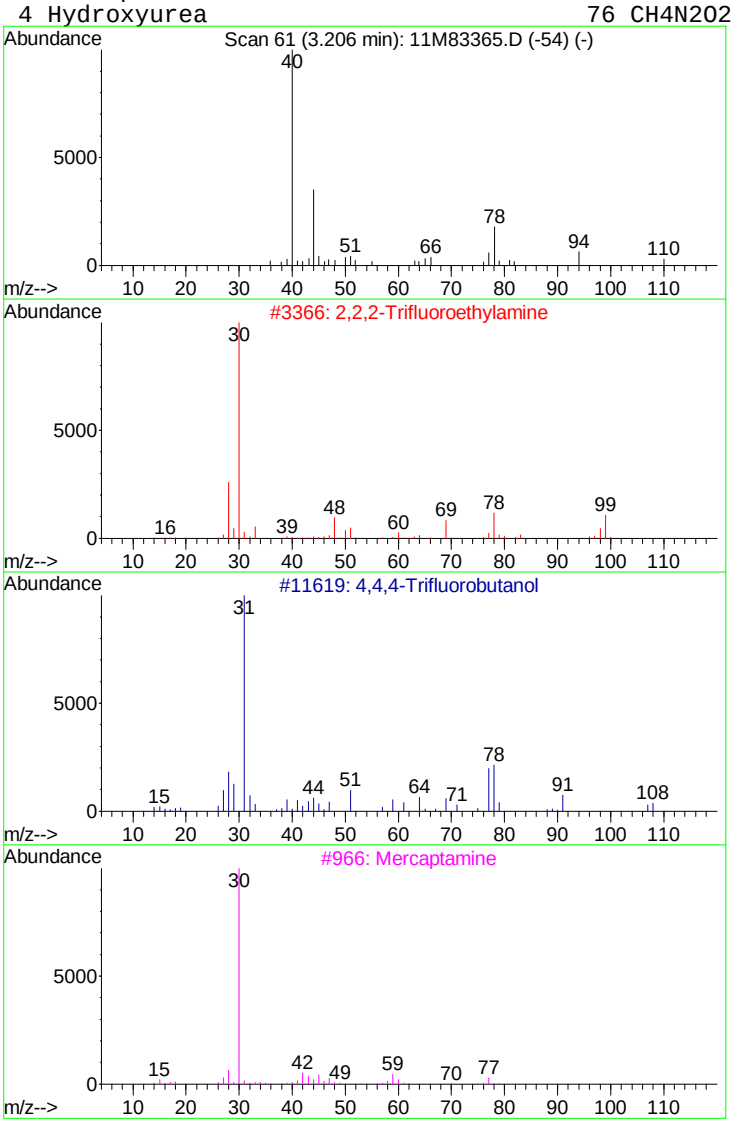
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library : C:\DATABASE\NIST02.L

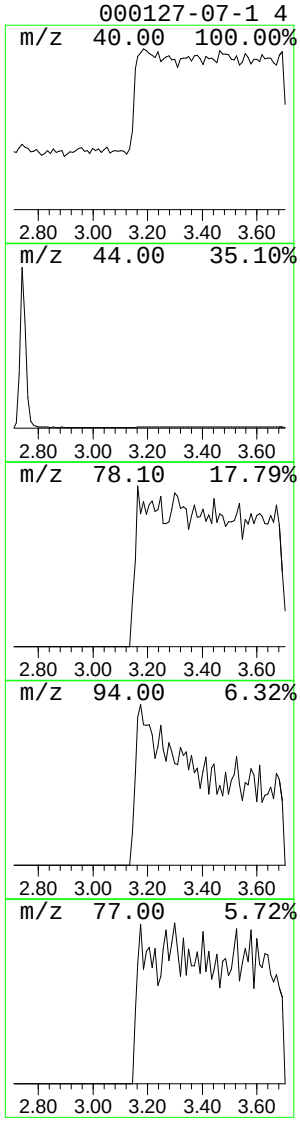
****

Peak Number 1 2,2,2-Trifluoroethylamine Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.21	4.08 ug/L	182012	Fluorobenzene	10.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2,2-Trifluoroethylamine	99	C2H4F3N	000753-90-2	4
2	4,4,4-Trifluorobutanol	128	C4H7F3O	000461-18-7	4
3	Mercaptamine	77	C2H7NS	000060-23-1	4
4	Hydroxyurea	76	CH4N2O2	000127-07-1	4





Data File : C:\MSDCHEM\1\DATA\050412\11M83365.D Vial: 19
Acq On : 5 May 2012 00:42 Operator: ADC
Sample : L12040928-01 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

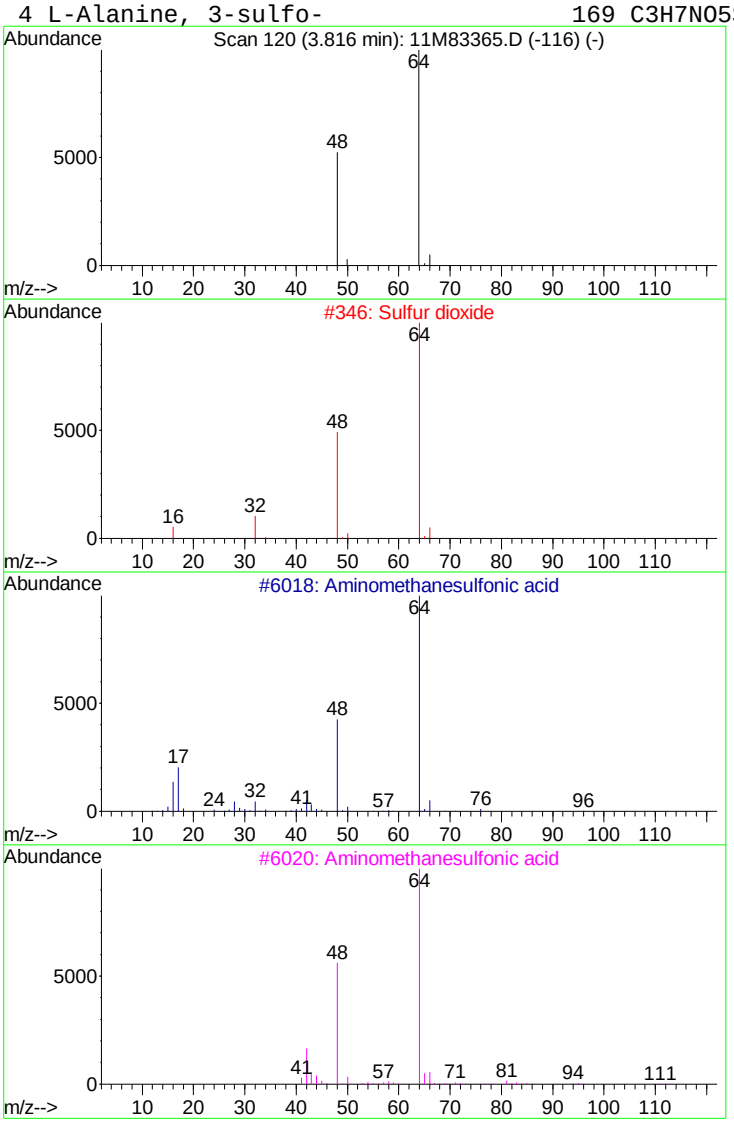
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library : C:\DATABASE\NIST02.L

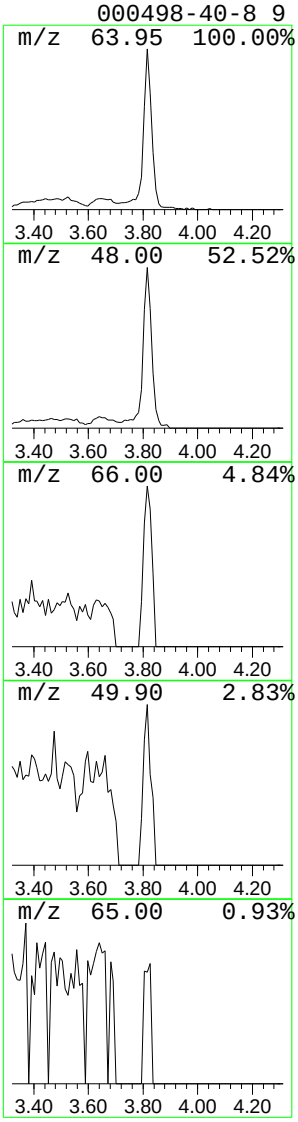
****

Peak Number 2 Sulfur dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.82	3.46 ug/L	154586	Fluorobenzene	10.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Sulfur dioxide	64	O2S	007446-09-5	90
2	Aminomethanesulfonic acid	111	CH5NO3S	013881-91-9	64
3	Aminomethanesulfonic acid	111	CH5NO3S	013881-91-9	9
4	L-Alanine, 3-sulfo-	169	C3H7NO5S	000498-40-8	9





Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 5 May 2012 00:42
Data File: C:\MSDCHEM\1\DATA\050412\11M83365.D
Name: L12040928-01 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library Searched: C:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2,2,2-Trifluoroet...	3.21	4.1	ug/L	182012	1	10.31	1116490	25.0
Sulfur dioxide	3.82	3.5	ug/L	154586	1	10.31	1116490	25.0

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\11M83366.D Vial: 20
Acq On : 5 May 2012 1:13 Operator: ADC
Sample : L12040928-03 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 10 11:21:52 2012 Quant Results File: 8260WTR.RES

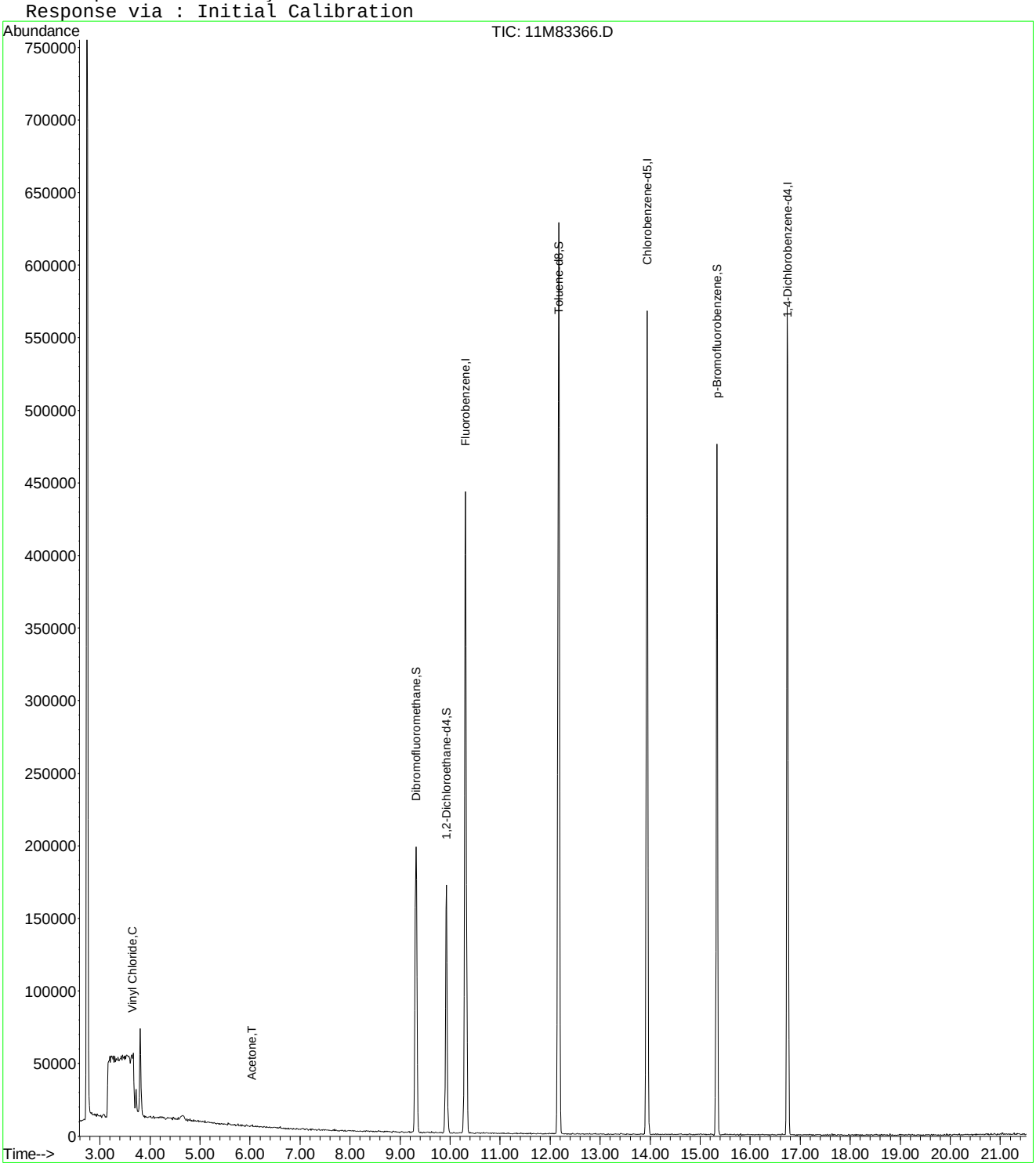
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

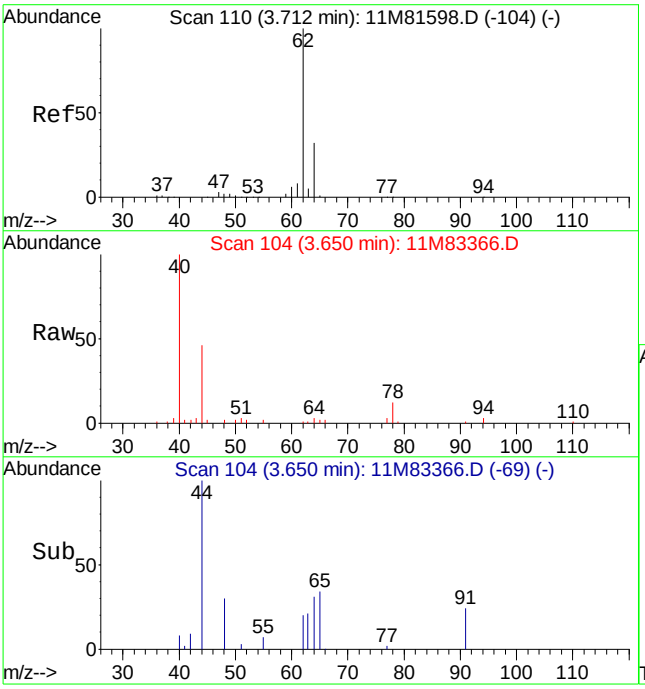
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	528079	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	389528	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	196019	25.00	ug/L	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	157902	24.5380	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 98.16%			
43) 1,2-Dichloroethane-d4	9.93	65	140883	22.8794	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 91.52%			
58) Toluene-d8	12.17	98	545407	26.5448	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 106.16%			
80) p-Bromofluorobenzene	15.33	95	171172	26.4190	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 105.68%			
Target Compounds						Qvalue
4) Vinyl Chloride	3.65	62	188	0.1227	ug/L #	1
13) Acetone	6.03	43	1176	0.3707	ug/L #	45

(#) = qualifier out of range (m) = manual integration
11M83366.D 8260WTR.M Thu May 10 11:21:53 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050412\11M83366.D Vial: 20
Acq On : 5 May 2012 1:13 Operator: ADC
Sample : L12040928-03 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 10 11:21 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration

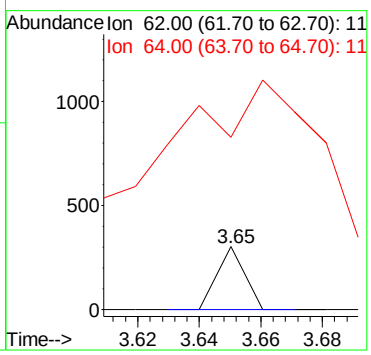


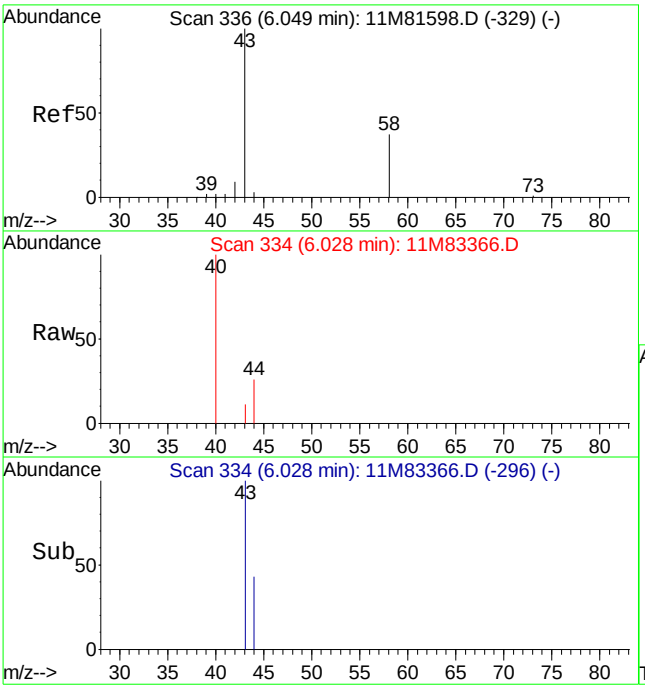


#4
Vinyl Chloride
Concen: 0.12 ug/L
RT: 3.65 min Scan# 104
Delta R.T. -0.04 min
Lab File: 11M83366.D
Acq: 5 May 2012 1:13

Tgt Ion: 62 Resp: 188

Ion	Ratio	Lower	Upper
62	100		
64	1197.3	19.9	46.5#

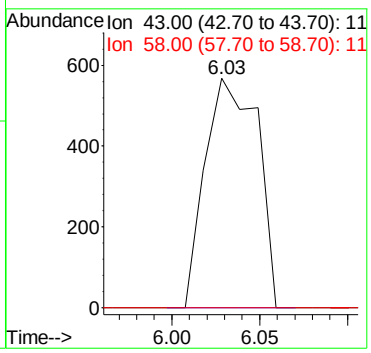




#13
Acetone
Concen: 0.37 ug/L
RT: 6.03 min Scan# 334
Delta R.T. -0.01 min
Lab File: 11M83366.D
Acq: 5 May 2012 1:13

Tgt Ion: 43 Resp: 1176

Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.6	41.2#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\11M83366.D Vial: 20
Acq On : 5 May 2012 1:13 Operator: ADC
Sample : L12040928-03 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
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

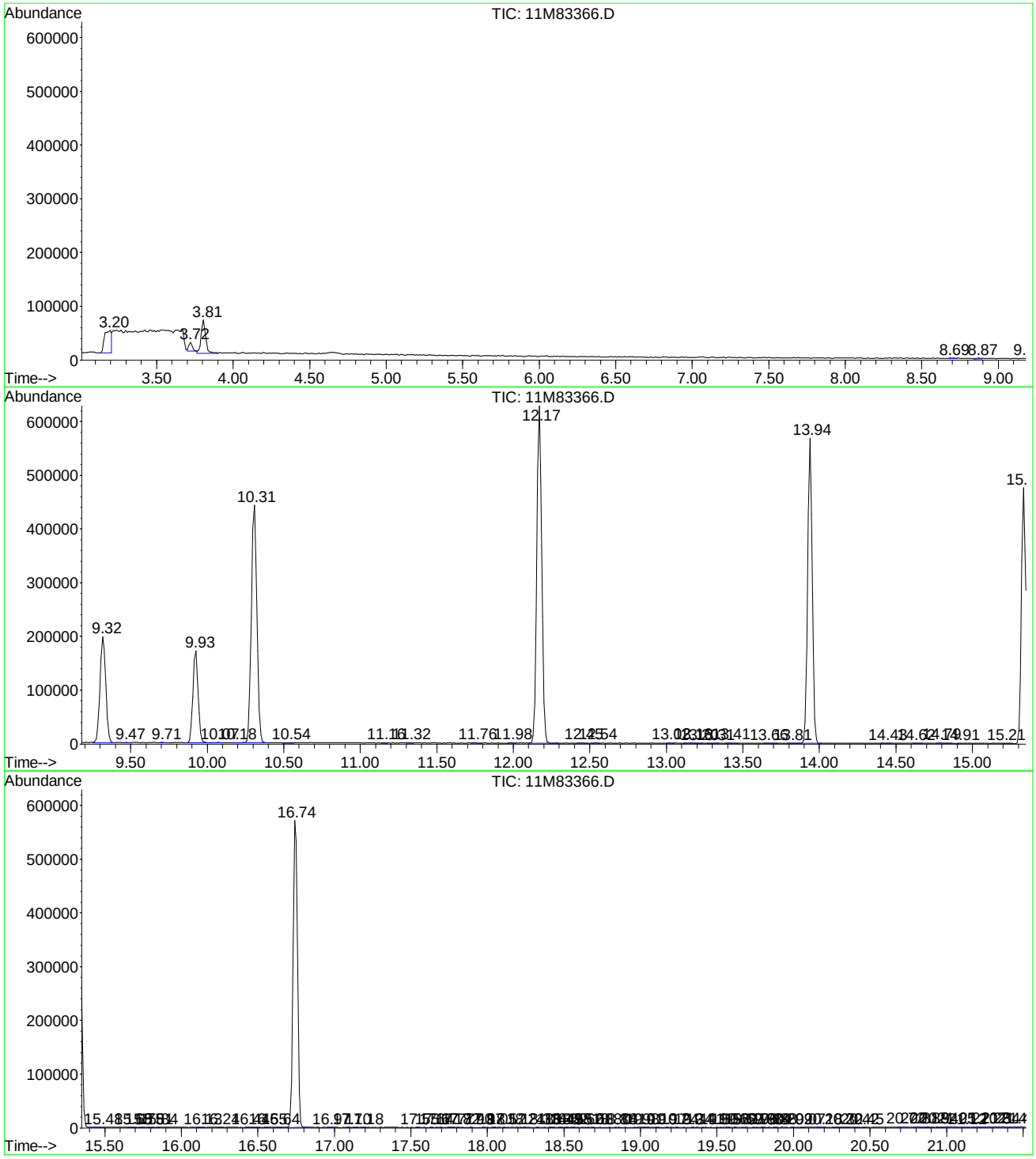
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.195	54	60	61	rBV3	42103	137739	9.69%	1.941%
2	3.723	109	111	115	rVB	15805	24437	1.72%	0.344%
3	3.805	115	119	128	rVB	61538	126526	8.91%	1.783%
4	8.686	590	591	595	rBV2	980	1764	0.12%	0.025%
5	8.872	606	609	611	rBV	1072	2255	0.16%	0.032%
6	9.172	636	638	643	rVB2	1078	2373	0.17%	0.033%
7	9.316	646	652	660	rVB	196898	509546	35.86%	7.182%
8	9.471	665	667	670	rBV	825	1483	0.10%	0.021%
9	9.709	688	690	693	rVB2	803	1099	0.08%	0.015%
10	9.926	704	711	720	rVB	171059	399976	28.15%	5.638%
11	10.071	723	725	728	rBV2	723	1294	0.09%	0.018%
12	10.185	734	736	740	rVB	451	947	0.07%	0.013%
13	10.309	740	748	756	rBV	442000	1107090	77.92%	15.604%
14	10.536	766	770	773	rBV	831	2241	0.16%	0.032%
15	11.157	828	830	832	rBV2	821	899	0.06%	0.013%
16	11.322	844	846	848	rVB	971	1254	0.09%	0.018%
17	11.756	885	888	891	rBV2	677	1381	0.10%	0.019%
18	11.984	908	910	913	rBV2	534	990	0.07%	0.014%
19	12.170	921	928	940	rVB	628108	1420773	100.00%	20.026%
20	12.449	952	955	958	rBV2	763	1667	0.12%	0.023%
21	12.542	961	964	966	rVB2	617	892	0.06%	0.013%
22	13.018	1008	1010	1013	rBV2	497	741	0.05%	0.010%
23	13.163	1019	1024	1026	rVB	722	1067	0.08%	0.015%
24	13.204	1026	1028	1031	rBV2	345	824	0.06%	0.012%
25	13.307	1034	1038	1041	rVV2	356	872	0.06%	0.012%
26	13.411	1046	1048	1053	rBV2	872	1577	0.11%	0.022%
27	13.659	1070	1072	1078	rVB2	603	1826	0.13%	0.026%
28	13.814	1085	1087	1092	rVV3	401	875	0.06%	0.012%
29	13.938	1092	1099	1106	rVV	567293	1169374	82.31%	16.482%
30	14.434	1144	1147	1150	rVB2	570	748	0.05%	0.011%
31	14.620	1164	1165	1170	rVB2	587	762	0.05%	0.011%
32	14.786	1179	1181	1188	rVB	817	1908	0.13%	0.027%
33	14.910	1191	1193	1194	rBV	564	890	0.06%	0.013%
34	15.210	1221	1222	1228	rVB2	1084	2927	0.21%	0.041%
35	15.334	1228	1234	1242	rBV	476218	940600	66.20%	13.258%
36	15.479	1242	1248	1249	rBV2	439	836	0.06%	0.012%
37	15.675	1264	1267	1271	rVB	517	1353	0.10%	0.019%
38	15.747	1271	1274	1276	rVB	777	1449	0.10%	0.020%
39	15.810	1276	1280	1282	rVB2	1077	1942	0.14%	0.027%
40	15.841	1282	1283	1285	rBV	554	871	0.06%	0.012%
41	16.130	1308	1311	1314	rVB2	319	713	0.05%	0.010%
42	16.244	1321	1322	1326	rVB2	566	771	0.05%	0.011%

43	16.440	1337	1341	1349	rBV2	929	2827	0.20%	0.040%
44	16.554	1349	1352	1354	rVV	685	981	0.07%	0.014%
45	16.637	1358	1360	1362	rVV	794	1047	0.07%	0.015%
46	16.740	1365	1370	1378	rVV	570762	1139869	80.23%	16.066%
47	16.968	1390	1392	1394	rBV	480	981	0.07%	0.014%
48	17.102	1402	1405	1411	rVB	582	1868	0.13%	0.026%
49	17.185	1411	1413	1416	rBV2	723	1136	0.08%	0.016%
50	17.547	1446	1448	1451	rBV	781	1369	0.10%	0.019%
51	17.640	1455	1457	1459	rBV	1021	1058	0.07%	0.015%
52	17.671	1459	1460	1465	rVB	735	1122	0.08%	0.016%
53	17.774	1465	1470	1472	rBV2	584	1612	0.11%	0.023%
54	17.815	1472	1474	1478	rVB	678	1372	0.10%	0.019%
55	17.898	1478	1482	1484	rBV	446	1074	0.08%	0.015%
56	17.971	1486	1489	1491	rBV	802	928	0.07%	0.013%
57	18.053	1494	1497	1498	rVB	642	1049	0.07%	0.015%
58	18.115	1501	1503	1504	rVB	760	765	0.05%	0.011%
59	18.239	1512	1515	1517	rBV	499	953	0.07%	0.013%
60	18.332	1519	1524	1527	rBV	791	1700	0.12%	0.024%
61	18.436	1530	1534	1535	rBV	500	1225	0.09%	0.017%
62	18.487	1535	1539	1540	rBV	658	1200	0.08%	0.017%
63	18.519	1540	1542	1544	rVB	782	782	0.06%	0.011%
64	18.550	1544	1545	1548	rVB	547	743	0.05%	0.010%
65	18.622	1550	1552	1555	rVB	885	1315	0.09%	0.019%
66	18.684	1555	1558	1561	rBV	535	1295	0.09%	0.018%
67	18.798	1565	1569	1572	rBV	1035	1276	0.09%	0.018%
68	18.839	1572	1573	1577	rBV	495	726	0.05%	0.010%
69	18.984	1582	1587	1588	rBV	754	1063	0.07%	0.015%
70	19.015	1588	1590	1595	rVB	635	1411	0.10%	0.020%
71	19.098	1597	1598	1602	rBV	633	1150	0.08%	0.016%
72	19.170	1602	1605	1609	rVB	866	1304	0.09%	0.018%
73	19.242	1609	1612	1615	rBV2	806	1172	0.08%	0.017%
74	19.335	1618	1621	1623	rBV2	586	1078	0.08%	0.015%
75	19.408	1627	1628	1631	rVB	631	812	0.06%	0.011%
76	19.501	1636	1637	1640	rBV	666	1158	0.08%	0.016%
77	19.573	1642	1644	1646	rVB	479	831	0.06%	0.012%
78	19.625	1646	1649	1651	rVB	868	893	0.06%	0.013%
79	19.666	1651	1653	1655	rBV	1087	1136	0.08%	0.016%
80	19.759	1659	1662	1663	rVB	662	900	0.06%	0.013%
81	19.801	1663	1666	1668	rBV	570	1381	0.10%	0.019%
82	19.842	1668	1670	1672	rVB	525	843	0.06%	0.012%
83	19.883	1672	1674	1677	rBV	996	1890	0.13%	0.027%
84	19.987	1683	1684	1689	rBV2	817	1751	0.12%	0.025%
85	20.069	1689	1692	1693	rBV	667	1400	0.10%	0.020%
86	20.183	1700	1703	1705	rBV	713	938	0.07%	0.013%
87	20.318	1709	1716	1721	rBV2	739	2960	0.21%	0.042%
88	20.421	1723	1726	1728	rVB2	909	1652	0.12%	0.023%
89	20.452	1728	1729	1731	rBV	808	1159	0.08%	0.016%
90	20.721	1751	1755	1756	rBV2	854	1658	0.12%	0.023%
91	20.814	1761	1764	1768	rBV2	870	1277	0.09%	0.018%
92	20.876	1768	1770	1775	rVB2	1153	2165	0.15%	0.031%
93	20.938	1775	1776	1780	rBV	882	1393	0.10%	0.020%
94	21.052	1781	1787	1789	rBV2	1225	2655	0.19%	0.037%
95	21.124	1791	1794	1796	rBV2	710	1275	0.09%	0.018%
96	21.196	1799	1801	1803	rVB2	887	782	0.06%	0.011%
97	21.279	1803	1809	1812	rBV	1432	2820	0.20%	0.040%
98	21.341	1814	1815	1822	rVB	917	2362	0.17%	0.033%
99	21.445	1822	1825	1826	rVB	792	906	0.06%	0.013%
100	21.465	1826	1827	1828	rBV	865	735	0.05%	0.010%

Sum of corrected areas: 7094735

File : C:\MSDCHEM\1\DATA\050412\11M83366.D
Operator : ADC
Acquired : 5 May 2012 1:13 using AcqMethod 8260WTR
Instrument : HPMS11
Sample Name: L12040928-03 A 826-SPE
Misc Info : 1,1
Vial Number: 20
Quant File :8260WTR.RES (RTE Integrator)



Data File : C:\MSDCHEM\1\DATA\050412\11M83366.D Vial: 20
Acq On : 5 May 2012 1:13 Operator: ADC
Sample : L12040928-03 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

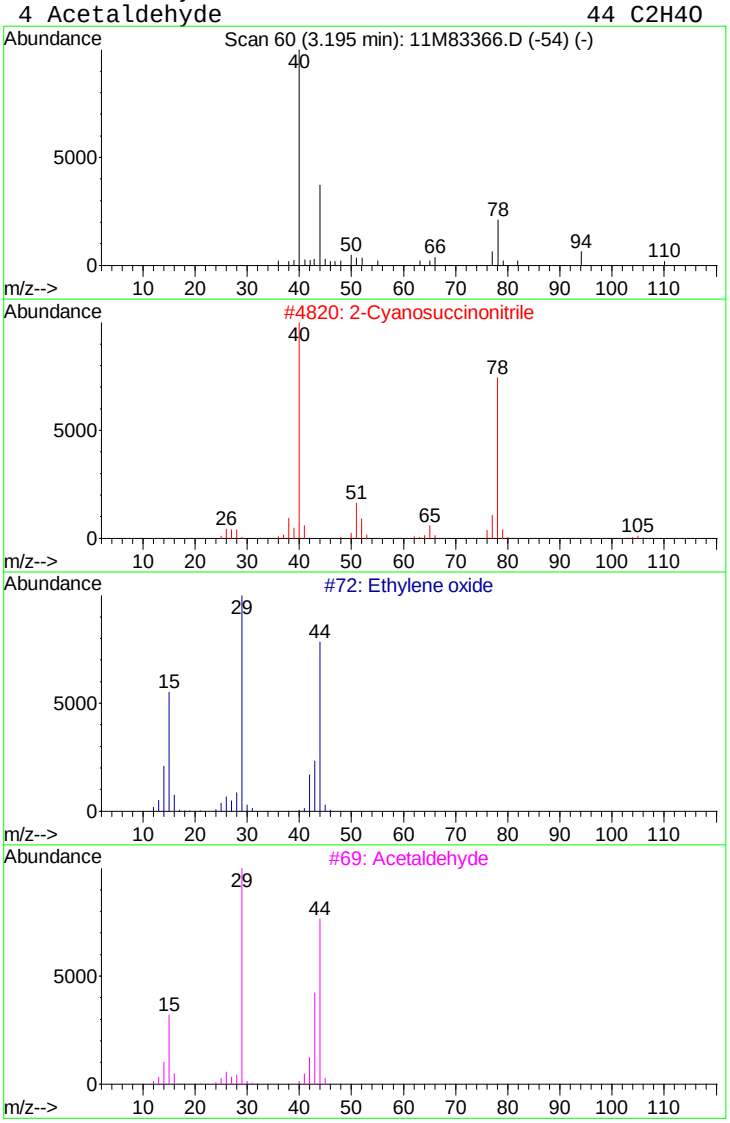
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library : C:\DATABASE\NIST02.L

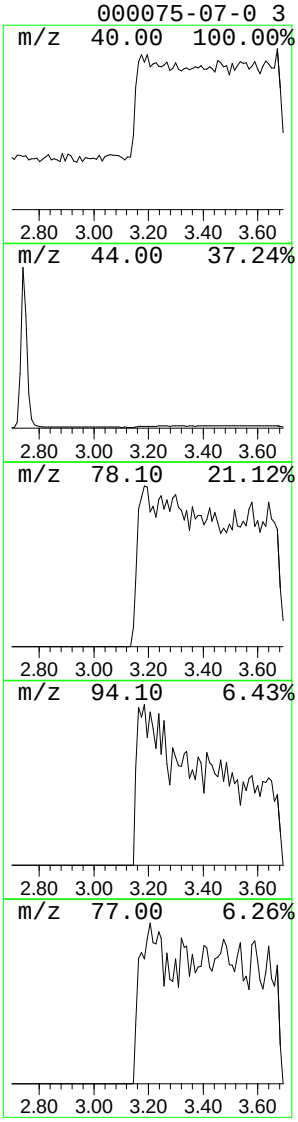
****

Peak Number 1 2-Cyanosuccinonitrile Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.20	3.11 ug/L	137739	Fluorobenzene	10.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyanosuccinonitrile	105	C5H3N3	039805-98-6	4
2	Ethylene oxide	44	C2H4O	000075-21-8	3
3	Acetaldehyde	44	C2H4O	000075-07-0	3
4	Acetaldehyde	44	C2H4O	000075-07-0	3





Data File : C:\MSDCHEM\1\DATA\050412\11M83366.D Vial: 20
Acq On : 5 May 2012 1:13 Operator: ADC
Sample : L12040928-03 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

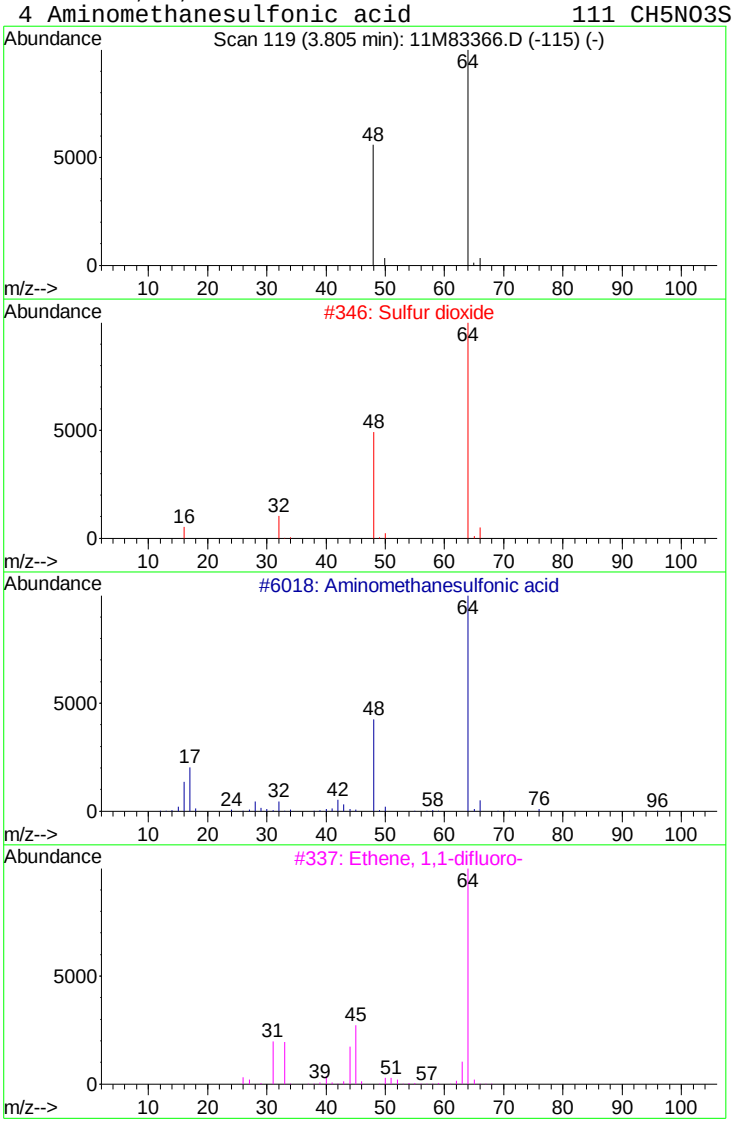
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library : C:\DATABASE\NIST02.L

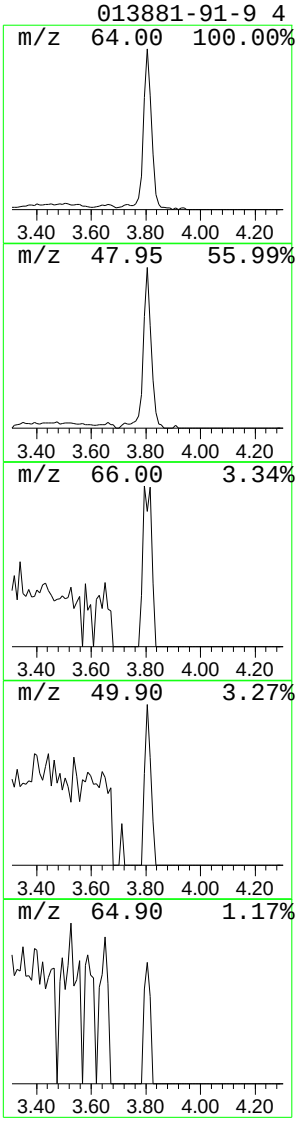
****

Peak Number 2 Sulfur dioxide Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.81	2.86 ug/L	126526	Fluorobenzene	10.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Sulfur dioxide	64	O2S	007446-09-5	90
2	Aminomethanesulfonic acid	111	CH5NO3S	013881-91-9	9
3	Ethene, 1,1-difluoro-	64	C2H2F2	000075-38-7	4
4	Aminomethanesulfonic acid	111	CH5NO3S	013881-91-9	4





Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 5 May 2012 1:13
Data File: C:\MSDCHEM\1\DATA\050412\11M83366.D
Name: L12040928-03 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library Searched: C:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Cyanosuccinonit...	3.20	3.1	ug/L	137739	1	10.31	1107090	25.0
Sulfur dioxide	3.81	2.9	ug/L	126526	1	10.31	1107090	25.0

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050512\6M107903.D Vial: 18
Acq On : 5 May 2012 21:48 Operator: MES
Sample : L12040928-05 B 2X 826-SPE Inst : HPMS6
Misc : 1,2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 11:33:37 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

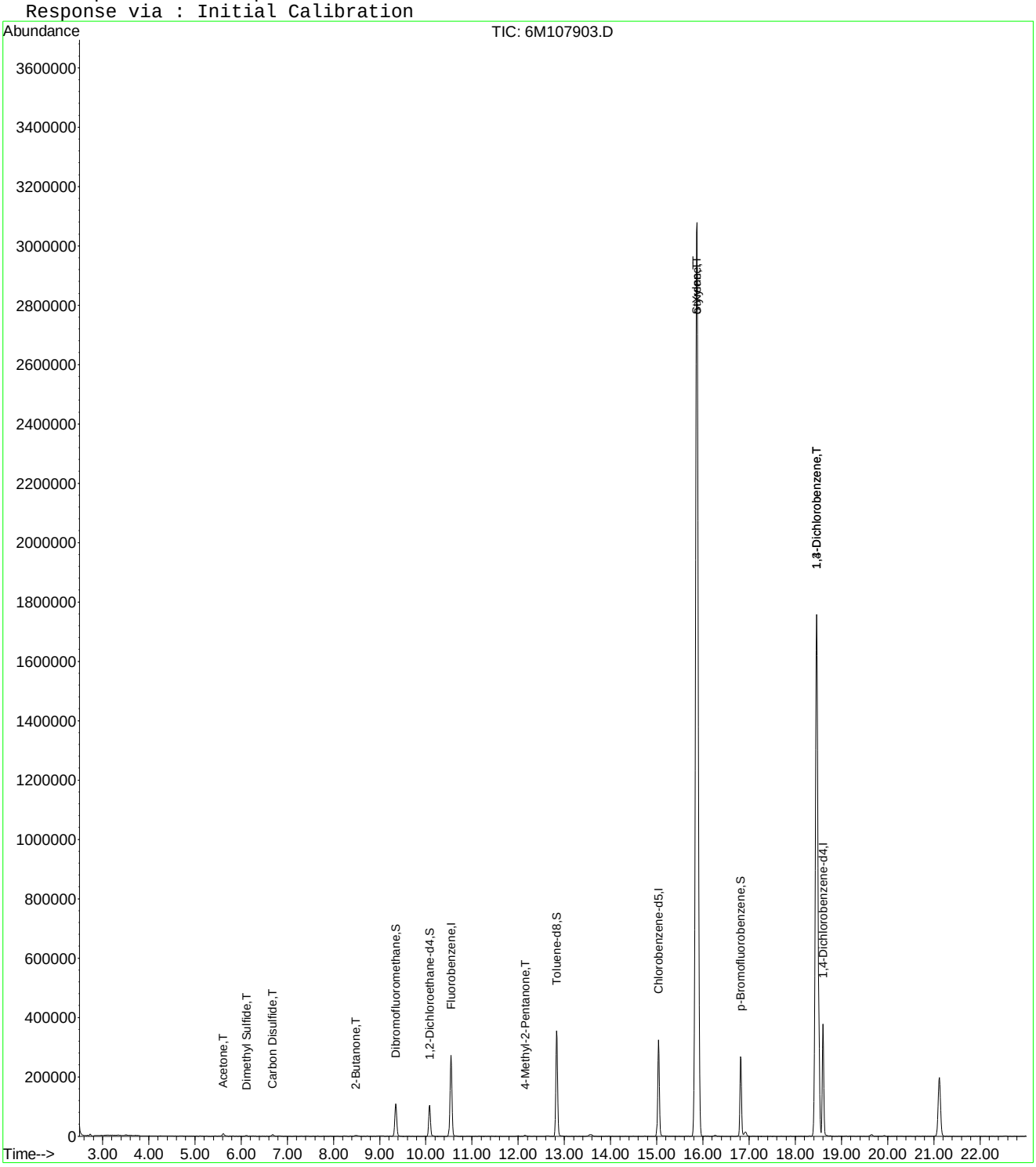
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	362361	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	250533	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	141440	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	106683	27.1904	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 108.76%			
43) 1,2-Dichloroethane-d4	10.08	65	104339	27.0967	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 108.40%			
58) Toluene-d8	12.83	98	356281	26.1660	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 104.68%			
80) p-Bromofluorobenzene	16.81	95	135585	24.4290	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 97.72%			
Target Compounds						Qvalue
13) Acetone	5.61	43	19994	29.1206	ug/L	97
16) Dimethyl Sulfide	6.12	62	1550	0.2937	ug/L	80
20) Carbon Disulfide	6.68	76	10699	0.8884	ug/L #	89
29) 2-Butanone	8.49	43	7623	7.9400	ug/L	95
54) 4-Methyl-2-Pentanone	12.15	58	1093	1.5167	ug/L #	67
74) o-Xylene	15.86	106	5691	0.9061	ug/L #	19
75) Styrene	15.86	104	62196	5.7020	ug/L #	27
93) 1,3-Dichlorobenzene	18.47	146	1533	0.1877	ug/L #	1
94) 1,4-Dichlorobenzene	18.47	146	1533	0.1789	ug/L #	1

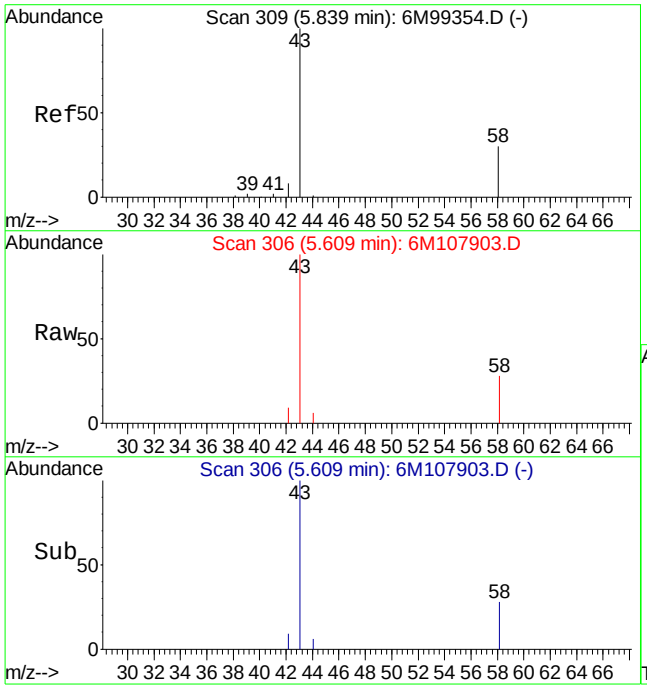
(#) = qualifier out of range (m) = manual integration
6M107903.D 8260WTR.M Mon May 07 11:33:38 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050512\6M107903.D Vial: 18
Acq On : 5 May 2012 21:48 Operator: MES
Sample : L12040928-05 B 2X 826-SPE Inst : HPMS6
Misc : 1,2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 11:33 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

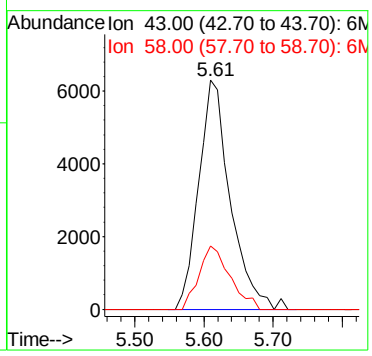


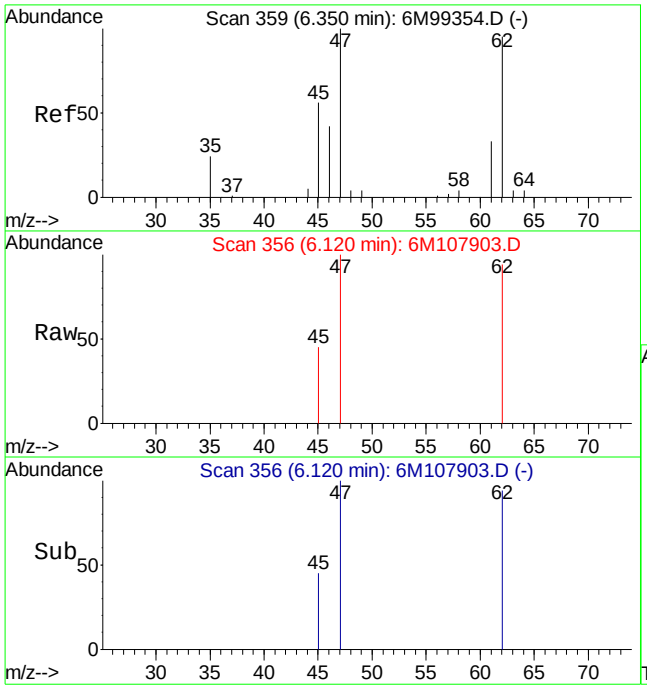


#13
Acetone
Concen: 29.12 ug/L
RT: 5.61 min Scan# 306
Delta R.T. 0.00 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion: 43 Resp: 19994

Ion	Ratio	Lower	Upper
43	100		
58	27.0	17.3	40.3

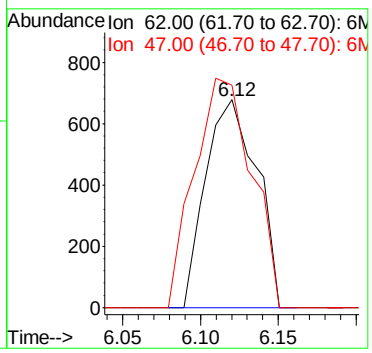


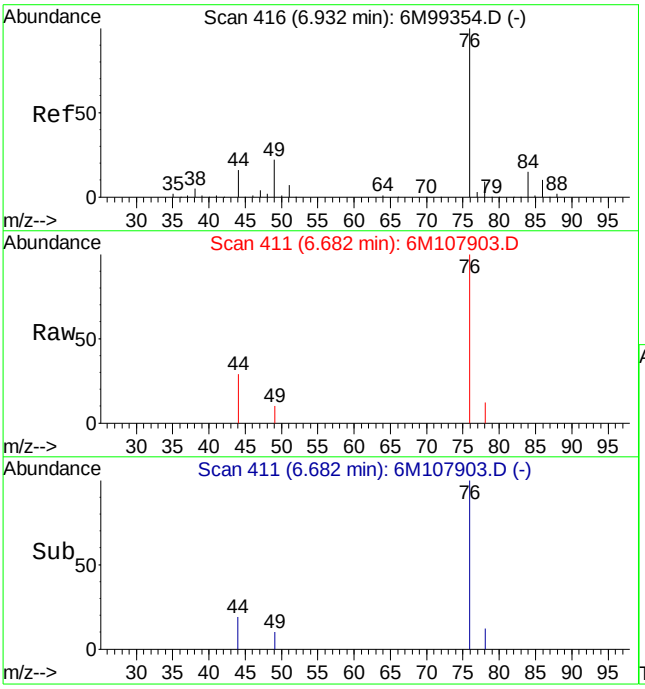


#16
Dimethyl Sulfide
Concen: 0.29 ug/L
RT: 6.12 min Scan# 356
Delta R.T. 0.01 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion: 62 Resp: 1550

Ion	Ratio	Lower	Upper
62	100		
47	123.9	62.0	144.8

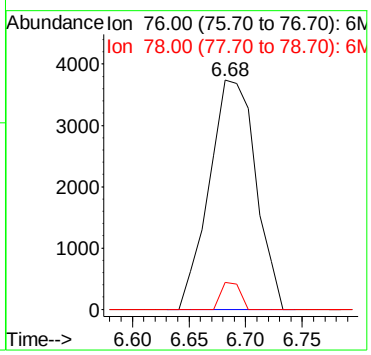


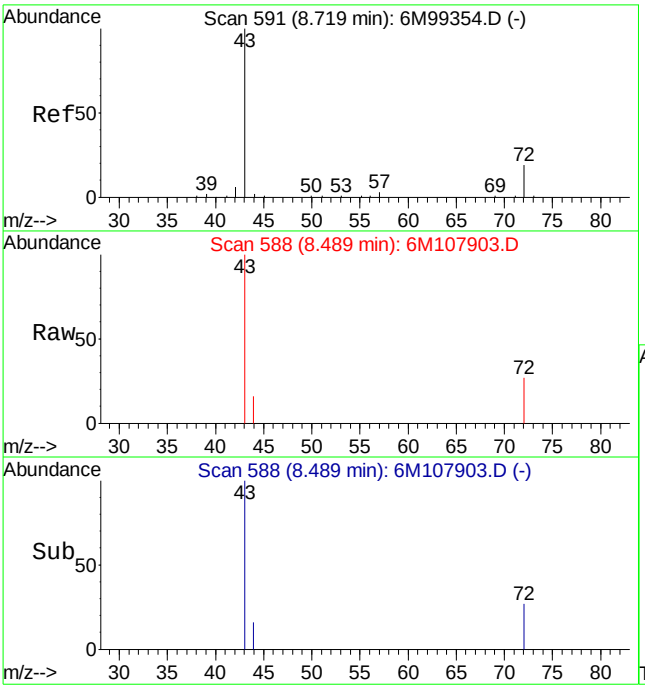


#20
Carbon Disulfide
Concen: 0.89 ug/L
RT: 6.68 min Scan# 411
Delta R.T. 0.00 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion: 76 Resp: 10699

Ion	Ratio	Lower	Upper
76	100		
78	4.9	5.4	12.6#

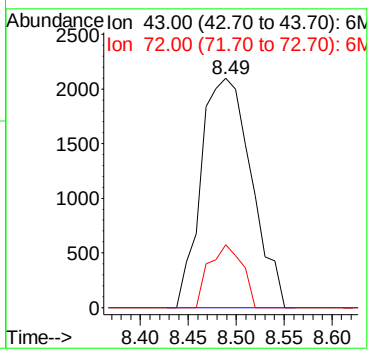


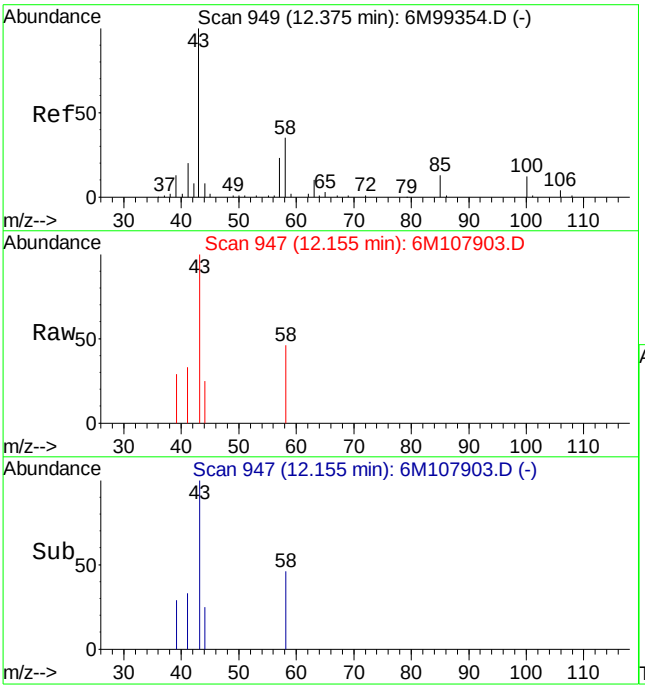


#29
2-Butanone
Concen: 7.94 ug/L
RT: 8.49 min Scan# 588
Delta R.T. 0.00 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion: 43 Resp: 7623

Ion	Ratio	Lower	Upper
43	100		
72	18.1	12.2	28.4

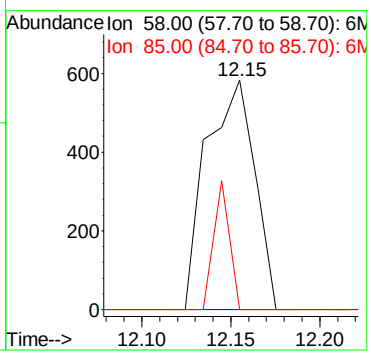


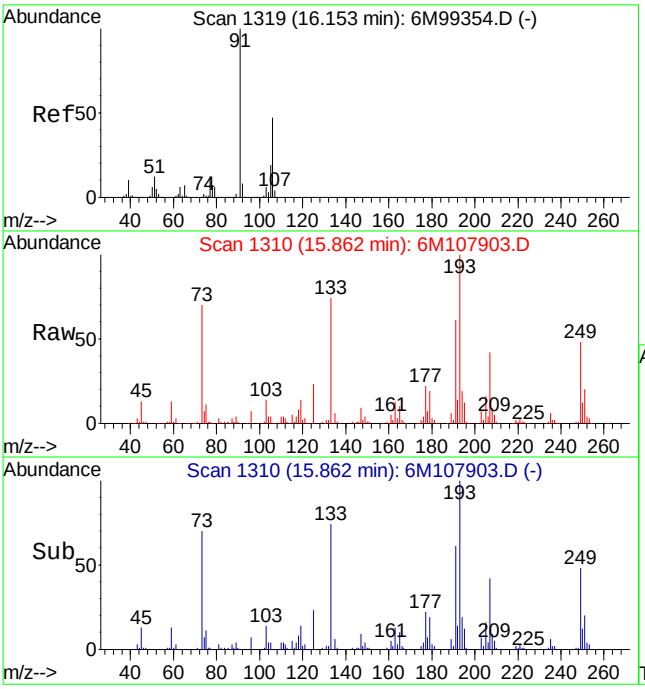


#54
4-Methyl-2-Pentanone
Concen: 1.52 ug/L
RT: 12.15 min Scan# 947
Delta R.T. 0.02 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion: 58 Resp: 1093

Ion	Ratio	Lower	Upper
58	100		
85	18.4	23.0	53.6#

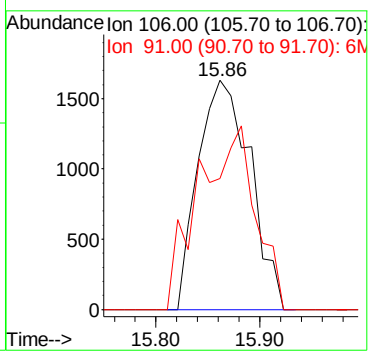


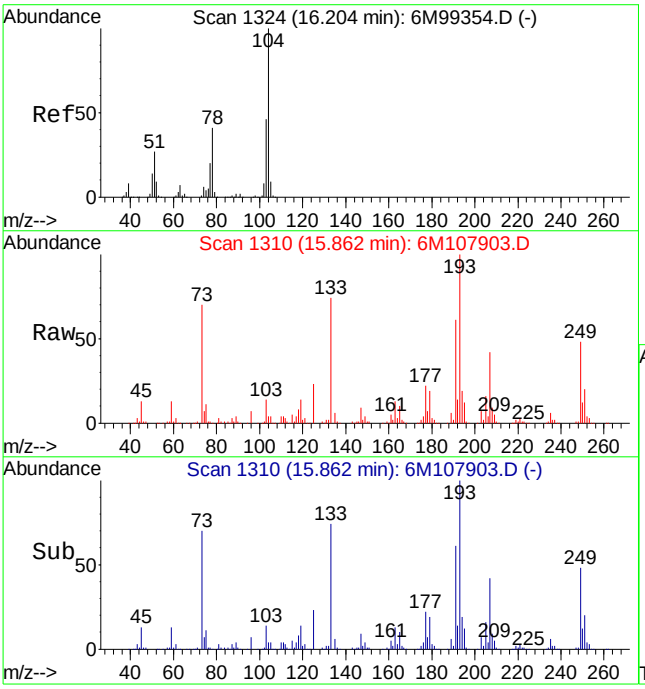


#74
o-Xylene
Concen: 0.91 ug/L
RT: 15.86 min Scan# 1310
Delta R.T. -0.04 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion:106 Resp: 5691

Ion	Ratio	Lower	Upper
106	100		
91	87.1	130.2	303.8#

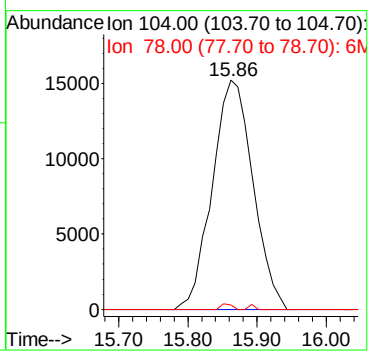


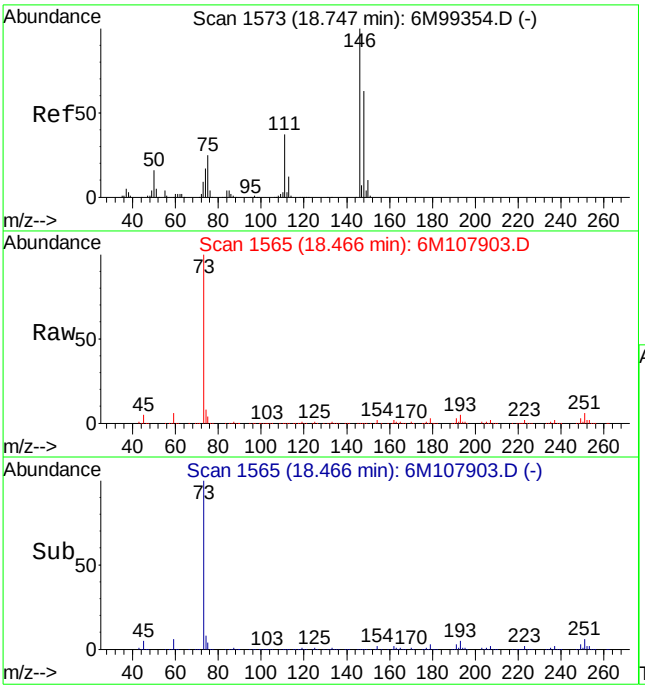


#75
Styrene
Concen: 5.70 ug/L
RT: 15.86 min Scan# 1310
Delta R.T. -0.09 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion:104 Resp: 62196

Ion	Ratio	Lower	Upper
104	100		
78	0.7	31.3	73.1#

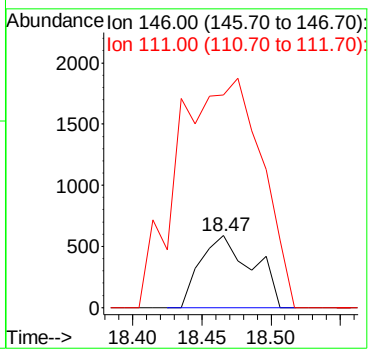


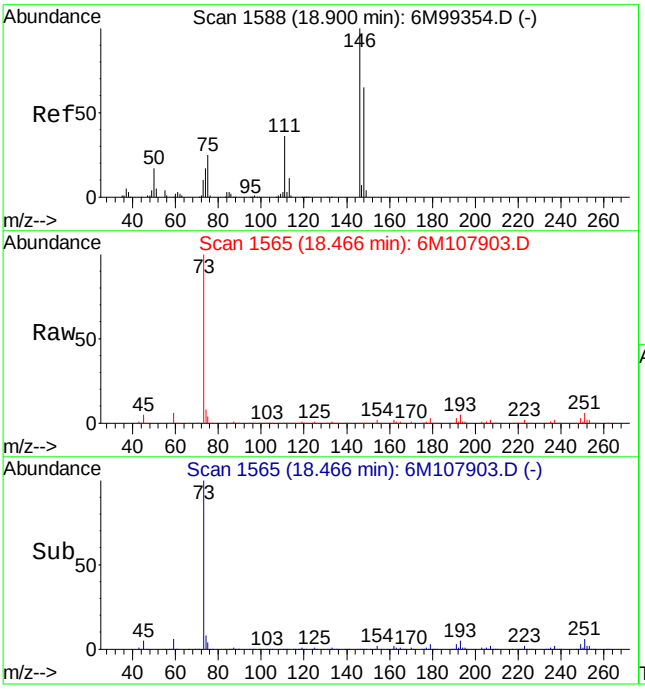


#93
1,3-Dichlorobenzene
Concen: 0.19 ug/L
RT: 18.47 min Scan# 1565
Delta R.T. -0.02 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion:146 Resp: 1533

Ion	Ratio	Lower	Upper
146	100		
111	514.5	24.8	57.8#

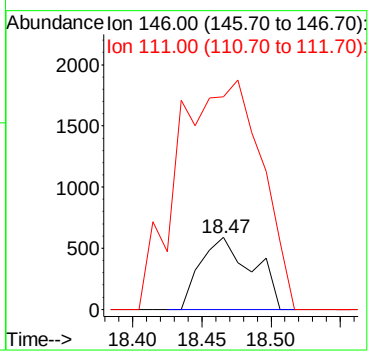




#94
1,4-Dichlorobenzene
Concen: 0.18 ug/L
RT: 18.47 min Scan# 1565
Delta R.T. -0.18 min
Lab File: 6M107903.D
Acq: 5 May 2012 21:48

Tgt Ion:146 Resp: 1533

Ion	Ratio	Lower	Upper
146	100		
111	514.5	24.5	57.1#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050512\6M107903.D Vial: 18
Acq On : 5 May 2012 21:48 Operator: MES
Sample : L12040928-05 B 2X 826-SPE Inst : HPMS6
Misc : 1,2 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	3.036	53	54	55	rBV	1841	1419	0.01%	0.006%
2	3.108	60	61	65	rBV2	1297	3074	0.02%	0.012%
3	3.516	96	101	105	rVB3	1675	6068	0.05%	0.024%
4	3.588	106	108	110	rBV	1052	1247	0.01%	0.005%
5	3.925	138	141	143	rVB	493	913	0.01%	0.004%
6	3.996	145	148	153	rVV	624	1264	0.01%	0.005%
7	4.149	158	163	167	rVB	899	2622	0.02%	0.010%
8	4.262	167	174	178	rBV	628	3004	0.02%	0.012%
9	4.456	190	193	196	rVB	477	482	0.00%	0.002%
10	4.558	202	203	208	rBB	506	1242	0.01%	0.005%
11	4.619	208	209	211	rBB	426	511	0.00%	0.002%
12	4.701	211	217	222	rBB	386	2171	0.02%	0.008%
13	4.762	222	223	225	rBB	401	445	0.00%	0.002%
14	4.803	225	227	228	rBB	361	439	0.00%	0.002%
15	4.844	228	231	232	rBB	521	762	0.01%	0.003%
16	4.895	235	236	238	rBB	423	455	0.00%	0.002%
17	4.936	238	240	241	rBB	402	474	0.00%	0.002%
18	4.956	241	242	244	rBB	679	689	0.01%	0.003%
19	5.038	246	250	253	rBB	537	1049	0.01%	0.004%
20	5.099	254	256	261	rBB	552	1491	0.01%	0.006%
21	5.160	261	262	264	rBB	383	452	0.00%	0.002%
22	5.262	268	272	274	rBB	379	674	0.01%	0.003%
23	5.364	280	282	285	rBB	355	411	0.00%	0.002%
24	5.426	286	288	293	rBB	370	1246	0.01%	0.005%
25	5.528	295	298	299	rBB	414	627	0.00%	0.002%
26	5.609	299	306	318	rBB	8971	30062	0.23%	0.117%
27	5.763	319	321	322	rBB	530	517	0.00%	0.002%
28	5.793	323	324	326	rBV	537	763	0.01%	0.003%
29	5.895	332	334	338	rBB	346	608	0.00%	0.002%
30	5.957	339	340	343	rBB	395	464	0.00%	0.002%
31	6.110	351	355	360	rBB	2487	5793	0.05%	0.023%
32	6.222	364	366	367	rBB	392	442	0.00%	0.002%
33	6.273	367	371	372	rBB	387	872	0.01%	0.003%
34	6.294	372	373	377	rBB	355	620	0.00%	0.002%
35	6.386	380	382	386	rBB	374	627	0.00%	0.002%
36	6.457	387	389	392	rBB	361	414	0.00%	0.002%
37	6.549	396	398	401	rBB	351	429	0.00%	0.002%
38	6.682	402	411	418	rBB	5620	15979	0.12%	0.062%
39	6.814	418	424	429	rBB	1011	3526	0.03%	0.014%
40	7.202	459	462	464	rBB	364	614	0.00%	0.002%
41	7.315	471	473	475	rBB	421	466	0.00%	0.002%
42	7.417	480	483	484	rBB	350	595	0.00%	0.002%

43	7.448	485	486	489	rBB	350	423	0.00%	0.002%
44	7.652	505	506	510	rBB	368	630	0.00%	0.002%
45	7.948	531	535	537	rBB	357	612	0.00%	0.002%
46	8.234	559	563	566	rBB	370	1013	0.01%	0.004%
47	8.285	566	568	570	rBB	361	431	0.00%	0.002%
48	8.377	573	577	579	rBB	370	619	0.00%	0.002%
49	8.489	583	588	597	rBB2	3010	10426	0.08%	0.041%
50	8.673	602	606	608	rBB2	456	463	0.00%	0.002%
51	8.734	609	612	615	rBB	388	651	0.01%	0.003%
52	8.867	624	625	629	rBB	364	407	0.00%	0.002%
53	9.020	630	640	643	rBV	1271	4957	0.04%	0.019%
54	9.061	643	644	649	rVB2	1014	2119	0.02%	0.008%
55	9.163	650	654	657	rBB	311	564	0.00%	0.002%
56	9.224	658	660	661	rBB	384	433	0.00%	0.002%
57	9.347	663	672	683	rBB	109503	331726	2.59%	1.296%
58	9.623	698	699	703	rBB	449	497	0.00%	0.002%
59	10.082	735	744	756	rBB	105183	293919	2.29%	1.148%
60	10.542	781	789	803	rBB	273238	793789	6.19%	3.101%
61	11.144	846	848	853	rBB	376	602	0.00%	0.002%
62	11.420	873	875	878	rBB	359	419	0.00%	0.002%
63	12.012	929	933	935	rBB	325	764	0.01%	0.003%
64	12.145	942	946	954	rBB3	3649	8916	0.07%	0.035%
65	12.339	963	965	969	rBB3	406	440	0.00%	0.002%
66	12.625	988	993	1000	rBB	570	2299	0.02%	0.009%
67	12.829	1006	1013	1031	rBB	354660	972549	7.58%	3.799%
68	13.043	1032	1034	1036	rBB	346	410	0.00%	0.002%
69	13.564	1075	1085	1093	rBB2	6249	26749	0.21%	0.104%
70	13.973	1123	1125	1127	rBB2	366	417	0.00%	0.002%
71	14.749	1198	1201	1203	rBB2	334	403	0.00%	0.002%
72	15.035	1222	1229	1242	rBV	324027	806068	6.28%	3.149%
73	15.198	1242	1245	1247	rVB	734	1248	0.01%	0.005%
74	15.637	1285	1288	1290	rBB	362	428	0.00%	0.002%
75	15.872	1297	1311	1323	rBB	3079209	12825357	100.00%	50.101%
76	16.035	1326	1327	1330	rBB	366	605	0.00%	0.002%
77	16.097	1330	1333	1338	rBB	387	899	0.01%	0.004%
78	16.260	1342	1349	1355	rBB2	4173	9041	0.07%	0.035%
79	16.638	1382	1386	1388	rBB2	343	410	0.00%	0.002%
80	16.811	1394	1403	1409	rBV	268422	659071	5.14%	2.575%
81	16.924	1409	1414	1423	rVB3	14891	55633	0.43%	0.217%
82	17.087	1426	1430	1432	rBB3	340	416	0.00%	0.002%
83	18.210	1537	1540	1542	rBB3	356	406	0.00%	0.002%
84	18.313	1546	1550	1552	rBB	740	1293	0.01%	0.005%
85	18.466	1553	1565	1574	rBV	1758361	7033647	54.84%	27.476%
86	18.598	1574	1578	1598	rVB	378326	872565	6.80%	3.409%
87	18.935	1609	1611	1613	rBB	342	417	0.00%	0.002%
88	19.007	1615	1618	1620	rBB	374	439	0.00%	0.002%
89	19.089	1625	1626	1630	rBB	362	628	0.00%	0.002%
90	19.170	1632	1634	1638	rBB	316	572	0.00%	0.002%
91	19.650	1673	1681	1688	rBB	6036	20461	0.16%	0.080%
92	19.926	1704	1708	1713	rBB	2577	5928	0.05%	0.023%
93	20.294	1743	1744	1748	rBB	378	425	0.00%	0.002%
94	20.641	1775	1778	1782	rBB	392	644	0.01%	0.003%
95	20.814	1793	1795	1797	rBB	387	471	0.00%	0.002%
96	21.121	1813	1825	1837	rBB	197953	746012	5.82%	2.914%
97	21.264	1838	1839	1843	rBB	406	440	0.00%	0.002%
98	21.897	1899	1901	1905	rBB	431	465	0.00%	0.002%
99	22.520	1960	1962	1963	rBB	350	405	0.00%	0.002%
100	22.560	1963	1966	1971	rBB	433	1043	0.01%	0.004%

Sum of corrected areas: 25599106

```
File       : C:\MSDCHEM\1\DATA\050512\6M107903.D
Operator   : MES
Acquired   :  5 May 2012  21:48     using AcqMethod 8260WTR
Instrument :   HPMS6
Sample Name: L12040928-05 B 2X 826-SPE
Misc Info  : 1,2
Vial Number: 18
Quant File :8260WTR.RES (RTE Integrator)
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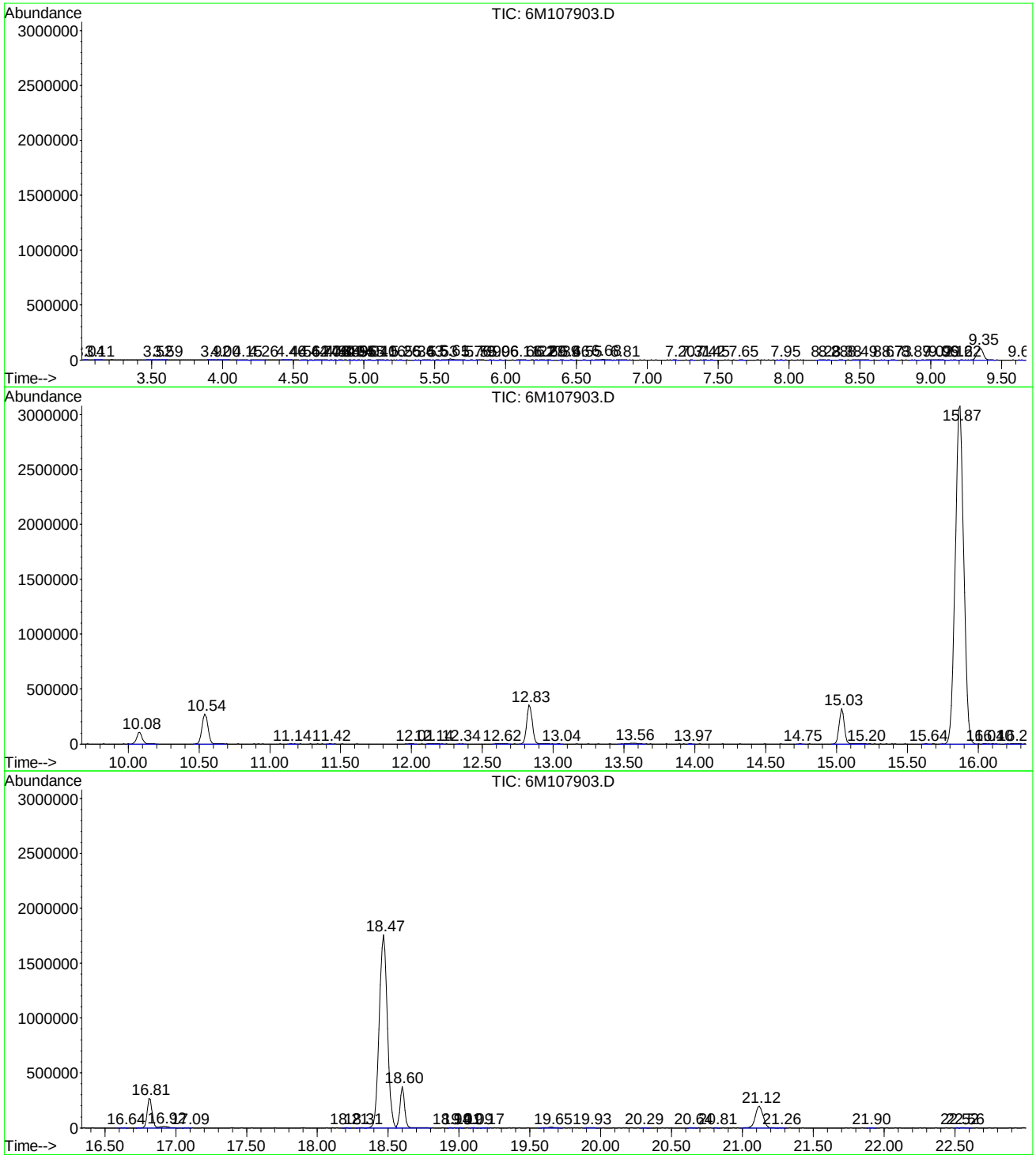


Data File : C:\MSDCHEM\1\DATA\050512\6M107903.D Vial: 18
Acq On : 5 May 2012 21:48 Operator: MES
Sample : L12040928-05 B 2X 826-SPE Inst : HPMS6
Misc : 1,2 Multiplr: 1.00
MS Integration Params: RTEINT.P

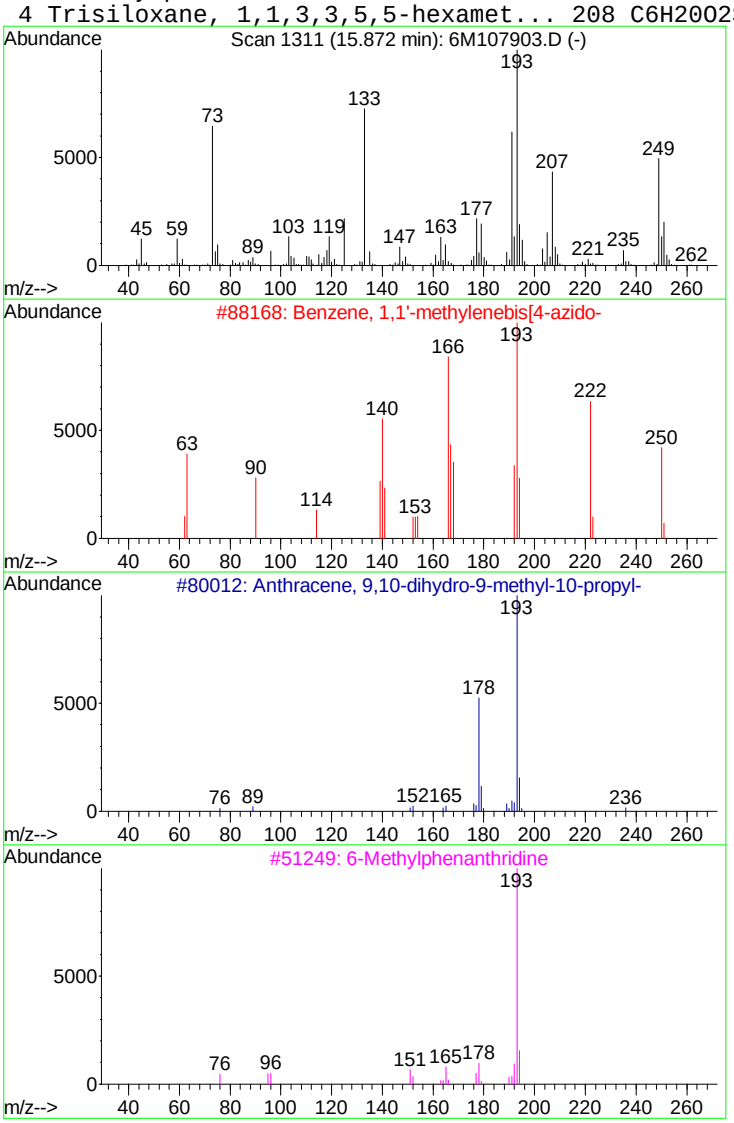
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library : C:\DATABASE\NIST02.L

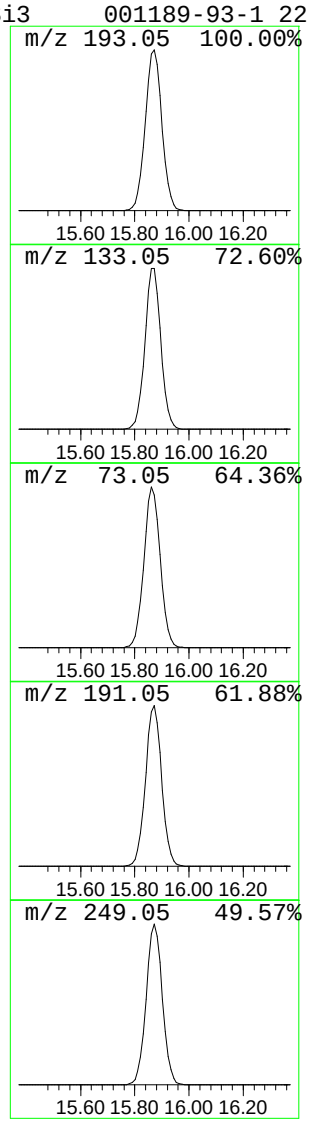
****

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.87	397.77 ug/L	12825400	Chlorobenzene-d5	15.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,1'-methylenebis[4-azido-	250	C13H10N6	002915-44-8	25
2	Anthracene, 9,10-dihydro-9-methy...	236	C18H20	110551-72-9	25
3	6-Methylphenanthridine	193	C14H11N	003955-65-5	25
4	Trisiloxane, 1,1,3,3,5,5-hexamet...	208	C6H20O2Si3	001189-93-1	22





Data File : C:\MSDCHEM\1\DATA\050512\6M107903.D Vial: 18
Acq On : 5 May 2012 21:48 Operator: MES
Sample : L12040928-05 B 2X 826-SPE Inst : HPMS6
Misc : 1,2 Multiplr: 1.00
MS Integration Params: RTEINT.P

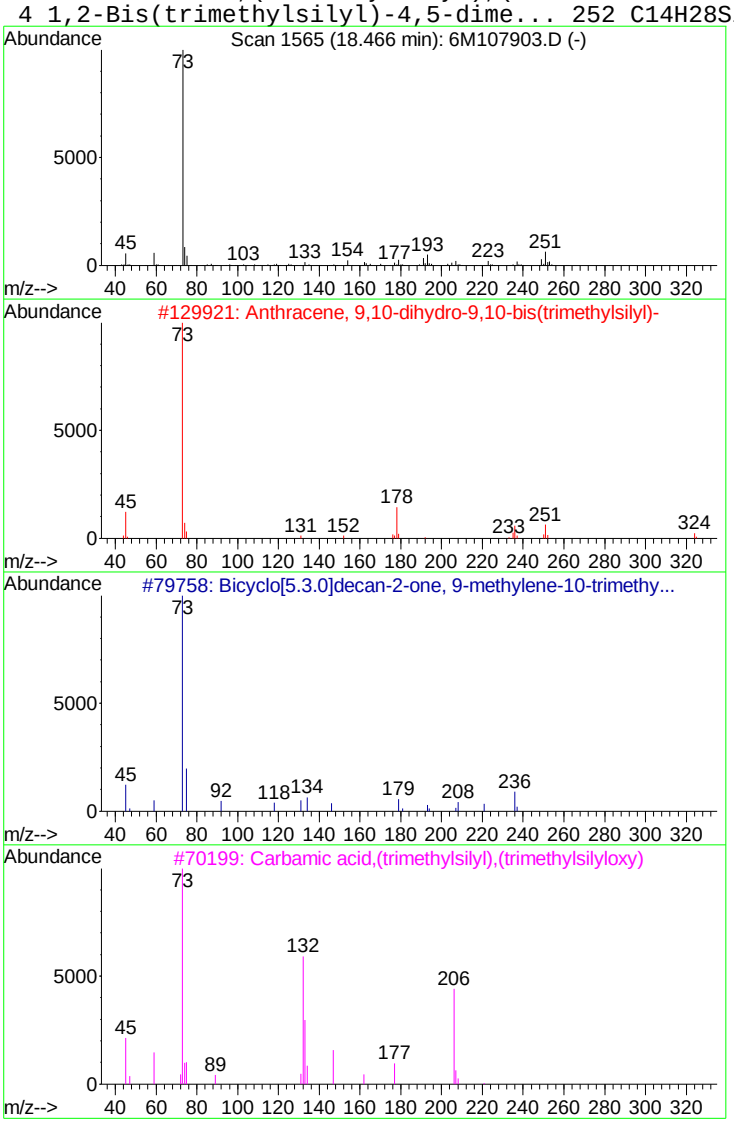
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library : C:\DATABASE\NIST02.L

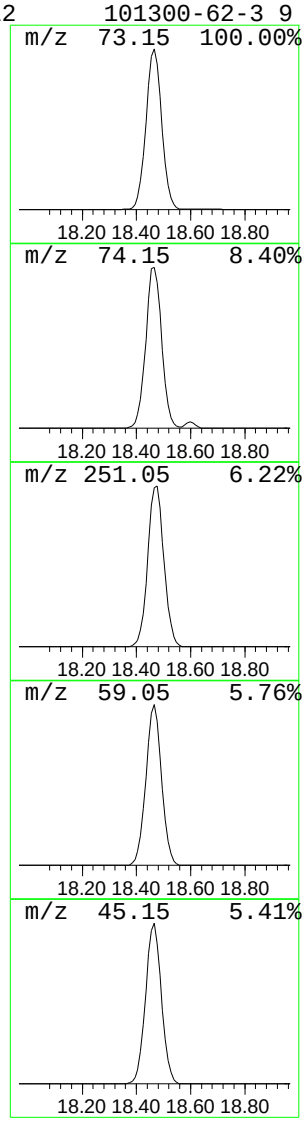
****

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.47	201.52 ug/L	7033650	1,4-Dichlorobenzene-d4	18.60

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 9,10-dihydro-9,10-bi...	324	C20H28Si2	018586-37-3	37
2	Bicyclo[5.3.0]decan-2-one, 9-met...	236	C14H24OSi	1000153-97-3	28
3	Carbamic acid,(trimethylsilyl),(...	221	C7H19NO3Si2	1000222-12-2	9
4	1,2-Bis(trimethylsilyl)-4,5-dime...	252	C14H28Si2	101300-62-3	9





Data File : C:\MSDCHEM\1\DATA\050512\6M107903.D Vial: 18
Acq On : 5 May 2012 21:48 Operator: MES
Sample : L12040928-05 B 2X 826-SPE Inst : HPMS6
Misc : 1,2 Multiplr: 1.00
MS Integration Params: RTEINT.P

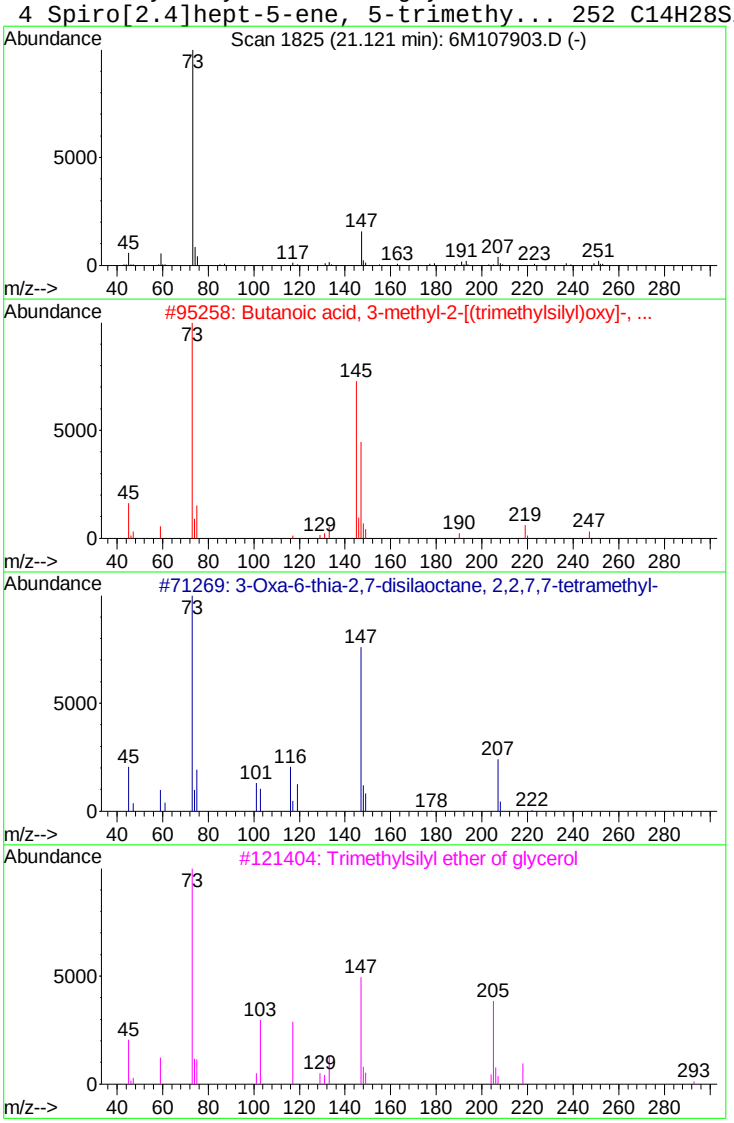
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library : C:\DATABASE\NIST02.L

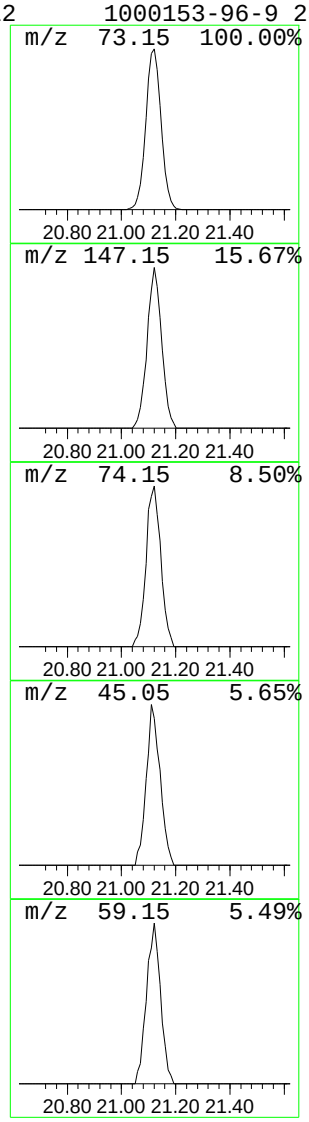
****

Peak Number 3 Butanoic acid, 3-methyl-2-[... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.12	21.37 ug/L	746012	1,4-Dichlorobenzene-d4	18.60

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanoic acid, 3-methyl-2-[(trim...	262	C11H26O3Si2	055124-92-0	38
2	3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSi2	078921-31-0	37
3	Trimethylsilyl ether of glycerol	308	C12H32O3Si3	006787-10-6	28
4	Spiro[2.4]hept-5-ene, 5-trimethy...	252	C14H28Si2	1000153-96-9	23





Tentatively Identified Compound (LSC) summary

Operator ID: MES Date Acquired: 5 May 2012 21:48
Data File: C:\MSDCHEM\1\DATA\050512\6M107903.D
Name: L12040928-05 B 2X 826-SPE
Misc: 1,2
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Benzene, 1,1'-met...	15.87	397.8	ug/L	12825400	2	15.03	806068	25.0
Anthracene, 9,10-...	18.47	201.5	ug/L	7033650	3	18.60	872565	25.0
Butanoic acid, 3-...	21.12	21.4	ug/L	746012	3	18.60	872565	25.0

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\11M83355.D Vial: 9
Acq On : 4 May 2012 19:34 Operator: ADC
Sample : L12040928-07 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 10 11:21:30 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

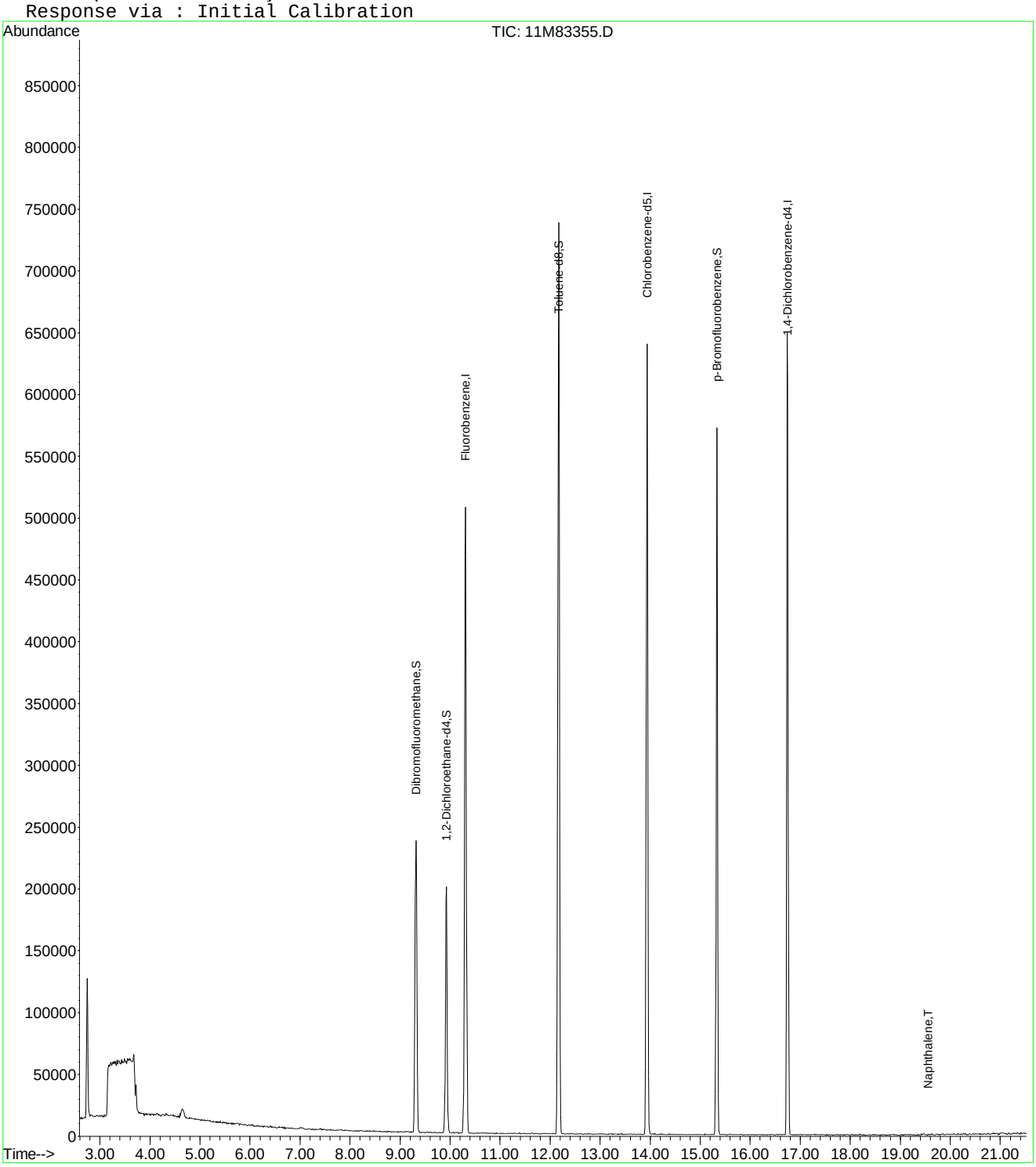
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	609960	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	445020	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	224619	25.00	ug/L	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	187348	25.2057	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.84%			
43) 1,2-Dichloroethane-d4	9.93	65	175505	24.6759	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 98.72%			
58) Toluene-d8	12.17	98	641891	27.3451	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 109.40%			
80) p-Bromofluorobenzene	15.33	95	204400	27.5306	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 110.12%			
Target Compounds						Qvalue
100) Naphthalene	19.55	128	607	0.2838	ug/L #	72

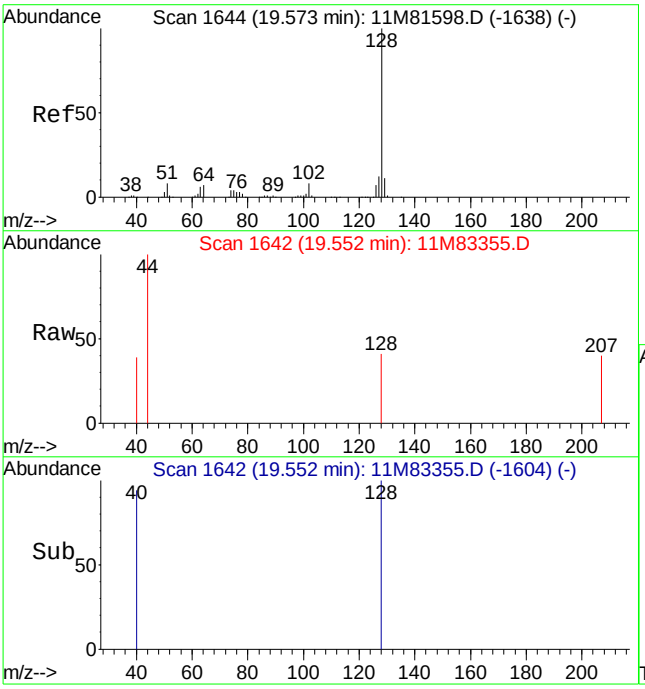
(#) = qualifier out of range (m) = manual integration
11M83355.D 8260WTR.M Thu May 10 11:21:30 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\11M83355.D Vial: 9
Acq On : 4 May 2012 19:34 Operator: ADC
Sample : L12040928-07 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 10 11:21 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration

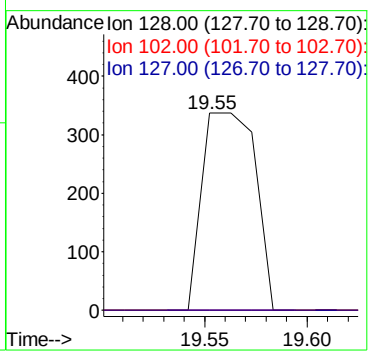




#100
Naphthalene
Concen: 0.28 ug/L
RT: 19.55 min Scan# 1642
Delta R.T. -0.01 min
Lab File: 11M83355.D
Acq: 4 May 2012 19:34

Tgt Ion:128 Resp: 607

Ion	Ratio	Lower	Upper
128	100		
102	0.0	7.2	8.8#
127	0.0	11.4	14.0#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\11M83355.D Vial: 9
Acq On : 4 May 2012 19:34 Operator: ADC
Sample : L12040928-07 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
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

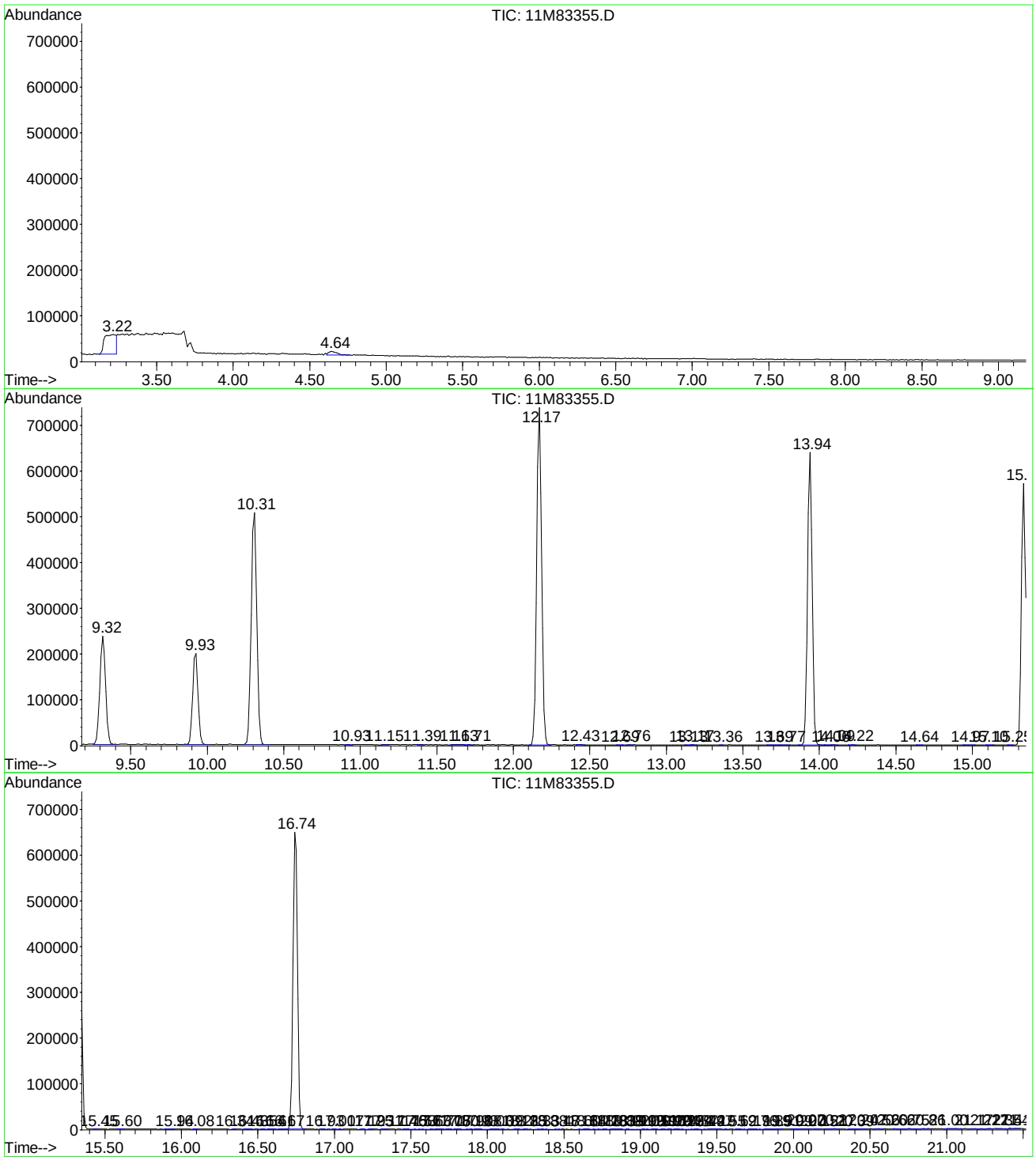
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.216	53	62	64	rBV3	42954	226427	13.66%	2.775%
2	4.643	197	200	211	rVB4	7666	29835	1.80%	0.366%
3	9.316	646	652	661	rVB	236362	608999	36.73%	7.463%
4	9.926	703	711	720	rVB	199030	477921	28.82%	5.857%
5	10.309	741	748	757	rVB	506882	1276953	77.01%	15.649%
6	10.929	805	808	810	rBV	918	1408	0.08%	0.017%
7	11.146	828	829	833	rBV2	386	887	0.05%	0.011%
8	11.394	851	853	855	rVB	1005	1324	0.08%	0.016%
9	11.632	872	876	881	rVB2	695	2670	0.16%	0.033%
10	11.715	881	884	886	rBV	820	1290	0.08%	0.016%
11	12.170	922	928	935	rBV	737812	1658141	100.00%	20.320%
12	12.428	951	953	957	rBV2	661	1366	0.08%	0.017%
13	12.687	977	978	981	rVB	401	385	0.02%	0.005%
14	12.759	983	985	987	rVB	671	553	0.03%	0.007%
15	13.131	1020	1021	1024	rBV2	505	857	0.05%	0.011%
16	13.173	1024	1025	1027	rBV	648	688	0.04%	0.008%
17	13.359	1042	1043	1044	rBV	503	321	0.02%	0.004%
18	13.690	1072	1075	1079	rBV2	362	894	0.05%	0.011%
19	13.773	1080	1083	1086	rBV	560	1352	0.08%	0.017%
20	13.938	1092	1099	1108	rVV	639724	1340653	80.85%	16.429%
21	14.062	1108	1111	1112	rVV	559	726	0.04%	0.009%
22	14.093	1112	1114	1116	rVB	972	1005	0.06%	0.012%
23	14.217	1123	1126	1128	rBV2	1005	1499	0.09%	0.018%
24	14.641	1166	1167	1170	rBV2	398	614	0.04%	0.008%
25	14.972	1196	1199	1203	rBV2	299	815	0.05%	0.010%
26	15.096	1210	1211	1215	rBV2	804	947	0.06%	0.012%
27	15.251	1224	1226	1227	rBV	561	571	0.03%	0.007%
28	15.334	1227	1234	1240	rVV	571957	1108417	66.85%	13.583%
29	15.448	1243	1245	1246	rVB	500	332	0.02%	0.004%
30	15.603	1258	1260	1262	rBV2	488	719	0.04%	0.009%
31	15.944	1287	1293	1294	rBV2	313	984	0.06%	0.012%
32	16.078	1305	1306	1309	rBV2	417	582	0.04%	0.007%
33	16.337	1330	1331	1333	rBV	373	305	0.02%	0.004%
34	16.430	1337	1340	1344	rBV	642	1329	0.08%	0.016%
35	16.544	1348	1351	1354	rBV2	696	1207	0.07%	0.015%
36	16.606	1354	1357	1359	rVB2	629	927	0.06%	0.011%
37	16.668	1359	1363	1365	rBV	576	1193	0.07%	0.015%
38	16.740	1365	1370	1377	rVB	649314	1305798	78.75%	16.002%
39	16.926	1387	1388	1390	rVB	460	376	0.02%	0.005%
40	16.998	1393	1395	1400	rBV2	701	1781	0.11%	0.022%
41	17.195	1411	1414	1415	rBV	525	832	0.05%	0.010%
42	17.247	1416	1419	1420	rVV2	513	823	0.05%	0.010%

43	17.309	1424	1425	1429	rBV2	656	937	0.06%	0.011%
44	17.464	1438	1440	1444	rVB2	738	1918	0.12%	0.024%
45	17.526	1444	1446	1448	rVB	1103	1180	0.07%	0.014%
46	17.557	1448	1449	1453	rBV2	750	1557	0.09%	0.019%
47	17.629	1453	1456	1458	rVB	694	1186	0.07%	0.015%
48	17.702	1458	1463	1465	rBV2	619	2021	0.12%	0.025%
49	17.753	1465	1468	1470	rVV	857	1459	0.09%	0.018%
50	17.805	1471	1473	1480	rVB2	562	1792	0.11%	0.022%
51	17.898	1480	1482	1483	rBV	402	551	0.03%	0.007%
52	17.929	1483	1485	1493	rVV2	484	1503	0.09%	0.018%
53	18.032	1493	1495	1500	rVB	994	1956	0.12%	0.024%
54	18.094	1500	1501	1504	rBV2	532	952	0.06%	0.012%
55	18.208	1507	1512	1514	rBV	714	1344	0.08%	0.016%
56	18.250	1514	1516	1518	rVB	355	601	0.04%	0.007%
57	18.332	1522	1524	1525	rBV	490	663	0.04%	0.008%
58	18.384	1525	1529	1531	rBV	346	817	0.05%	0.010%
59	18.467	1534	1537	1539	rBV	830	1264	0.08%	0.015%
60	18.601	1549	1550	1552	rVB	649	738	0.04%	0.009%
61	18.642	1552	1554	1560	rBV	871	2663	0.16%	0.033%
62	18.725	1560	1562	1563	rBV	656	652	0.04%	0.008%
63	18.777	1563	1567	1569	rVV2	843	1617	0.10%	0.020%
64	18.829	1569	1572	1575	rVV2	805	2022	0.12%	0.025%
65	18.880	1575	1577	1579	rVV	1077	1105	0.07%	0.014%
66	18.922	1579	1581	1584	rVB	685	1302	0.08%	0.016%
67	19.025	1586	1591	1592	rVB	963	2059	0.12%	0.025%
68	19.046	1592	1593	1595	rBV	723	947	0.06%	0.012%
69	19.108	1595	1599	1600	rBV2	626	1503	0.09%	0.018%
70	19.159	1601	1604	1605	rVV2	602	908	0.05%	0.011%
71	19.201	1606	1608	1609	rVB	795	862	0.05%	0.011%
72	19.242	1610	1612	1614	rVB	687	985	0.06%	0.012%
73	19.273	1614	1615	1619	rBV2	608	802	0.05%	0.010%
74	19.335	1619	1621	1622	rVB2	555	605	0.04%	0.007%
75	19.366	1622	1624	1626	rBV	1015	1374	0.08%	0.017%
76	19.418	1626	1629	1630	rBV	1299	1164	0.07%	0.014%
77	19.470	1632	1634	1639	rVB2	777	1544	0.09%	0.019%
78	19.552	1641	1642	1644	rBV2	1124	1488	0.09%	0.018%
79	19.625	1648	1649	1655	rBV	883	1269	0.08%	0.016%
80	19.759	1656	1662	1666	rBV	801	2557	0.15%	0.031%
81	19.852	1666	1671	1675	rBV3	891	2224	0.13%	0.027%
82	19.914	1675	1677	1678	rBV	728	947	0.06%	0.012%
83	19.987	1683	1684	1687	rVV	553	846	0.05%	0.010%
84	20.069	1687	1692	1696	rVV2	800	2370	0.14%	0.029%
85	20.152	1698	1700	1702	rBV	819	1278	0.08%	0.016%
86	20.214	1705	1706	1709	rVV2	693	710	0.04%	0.009%
87	20.266	1710	1711	1714	rBV	1211	1725	0.10%	0.021%
88	20.390	1719	1723	1726	rBV	1034	2874	0.17%	0.035%
89	20.473	1726	1731	1732	rVV2	841	2137	0.13%	0.026%
90	20.555	1736	1739	1742	rVB2	1021	1955	0.12%	0.024%
91	20.659	1748	1749	1754	rBB3	655	1429	0.09%	0.018%
92	20.752	1755	1758	1762	rVB	1138	2340	0.14%	0.029%
93	20.855	1762	1768	1772	rBV3	1309	4062	0.24%	0.050%
94	21.000	1780	1782	1792	rBV3	1595	7845	0.47%	0.096%
95	21.165	1796	1798	1802	rVB2	1404	2104	0.13%	0.026%
96	21.269	1802	1808	1811	rBV3	1360	3883	0.23%	0.048%
97	21.351	1813	1816	1820	rVB2	1451	3777	0.23%	0.046%
98	21.413	1820	1822	1824	rBV2	1617	2331	0.14%	0.029%
99	21.465	1825	1827	1828	rBV2	685	759	0.05%	0.009%

Sum of corrected areas: 8160169

File : C:\MSDCHEM\1\DATA\050412\11M83355.D
Operator : ADC
Acquired : 4 May 2012 19:34 using AcqMethod 8260WTR
Instrument : HPMS11
Sample Name: L12040928-07 A 826-SPE
Misc Info : 1,1
Vial Number: 9
Quant File :8260WTR.RES (RTE Integrator)



Data File : C:\MSDCHEM\1\DATA\050412\11M83355.D Vial: 9
Acq On : 4 May 2012 19:34 Operator: ADC
Sample : L12040928-07 A 826-SPE Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

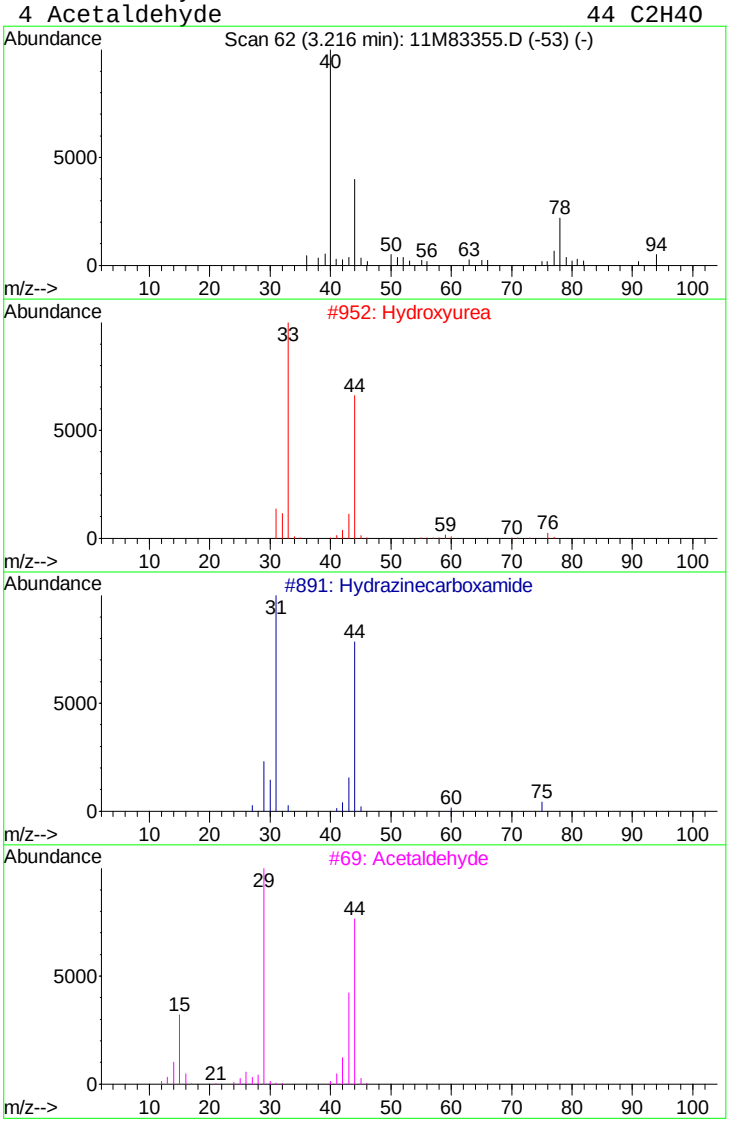
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library : C:\DATABASE\NIST02.L

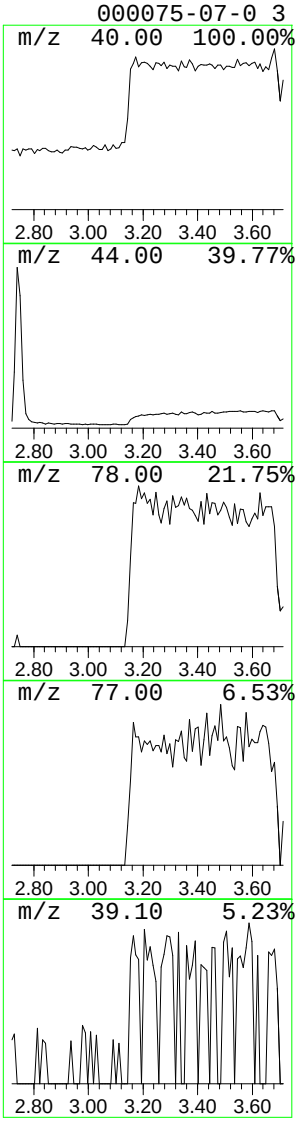
****

Peak Number 1 Hydroxyurea Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.22	4.43 ug/L	226427	Fluorobenzene	10.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydroxyurea	76	CH4N2O2	000127-07-1	4
2	Hydrazinecarboxamide	75	CH5N3O	000057-56-7	4
3	Acetaldehyde	44	C2H4O	000075-07-0	3
4	Acetaldehyde	44	C2H4O	000075-07-0	3





Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 4 May 2012 19:34
Data File: C:\MSDCHEM\1\DATA\050412\11M83355.D
Name: L12040928-07 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library Searched: C:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Hydroxyurea	3.22	4.4	ug/L	226427	1	10.31	1276950	25.0

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\050412\11M83352.D Vial: 6
Acq On : 4 May 2012 18:02 Operator: ADC
Sample : L12040928-08 A MS 826-SPE Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 18:24:29 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.31	96	680725	25.00 ug/L	0.00
57) Chlorobenzene-d5	13.94	117	518322	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	285790	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.32	111	207459	25.0099 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.04%		
43) 1,2-Dichloroethane-d4	9.93	65	194501	24.5039 ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 98.00%		
58) Toluene-d8	12.17	98	707710	25.8853 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.56%		
80) p-Bromofluorobenzene	15.33	95	246052	26.0472 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 104.20%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.05	85	225726	25.6974 ug/L	97
3) Chloromethane	3.48	50	349925	23.1958 ug/L	97
4) Vinyl Chloride	3.70	62	360113	21.6562 ug/L	99
5) 1,3-Butadiene	3.73	54	4157	0.5502 ug/L #	26
6) Bromomethane	4.57	94	101698	21.0221 ug/L	99
7) Chloroethane	4.72	64	106175	20.4243 ug/L	99
8) Trichlorofluoromethane	5.19	101	278549	18.9779 ug/L	100
9) Diethyl ether	5.73	59	4140	0.7991 ug/L #	34
10) Isoprene	5.74	67	203368	17.8085 ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.96	101	144420	18.9763 ug/L	99
13) Acetone	6.03	43	30706	23.9627 ug/L	100
14) 1,1-Dichloroethene	6.26	61	217536	21.0521 ug/L	99
15) Tert-Butyl Alcohol	6.36	59	3465	10.0941 ug/L #	60
16) Dimethyl Sulfide	6.50	62	172675	20.4032 ug/L	98
17) Iodomethane	6.75	142	230417	22.1126 ug/L	100
18) Methyl acetate	6.76	43	61991	14.0993 ug/L	98
19) Methylene Chloride	7.01	84	149575	20.3667 ug/L	97
20) Carbon Disulfide	7.04	76	431204	20.4694 ug/L	99
21) Acrylonitrile	7.18	53	33235	22.1578 ug/L	97
22) Methyl Tert Butyl Ether	7.22	73	354091	20.6367 ug/L	99
23) trans-1,2-Dichloroethene	7.44	96	149621	20.2806 ug/L	98
24) n-Hexane	7.53	57	130555	17.5156 ug/L	97
27) 1,1-Dichloroethane	8.03	63	256097	20.7149 ug/L	100
29) 2-Butanone	8.57	43	33651	19.2100 ug/L	95
31) 2,2-Dichloropropane	8.78	77	224831	22.4999 ug/L	99
32) cis-1,2-Dichloroethene	8.84	96	166401	20.8139 ug/L	95
33) Chloroform	9.04	83	267191	20.4425 ug/L	98
35) Bromochloromethane	9.26	130	105186	20.7104 ug/L	96
36) Tetrahydrofuran	9.31	42	199	0.1750 ug/L #	28
38) 1,1,1-Trichloroethane	9.54	97	245149	19.9934 ug/L	98
39) Cyclohexane	9.57	56	198249	20.0681 ug/L	96
40) 1,1-Dichloropropene	9.73	75	194499	19.9487 ug/L	99
41) Carbon Tetrachloride	9.87	117	235754	18.2821 ug/L	99
42) Tert-Amyl-Methyl ether	9.84	73	3087	0.1600 ug/L #	83
45) 1,2-Dichloroethane	10.03	62	191232	20.8104 ug/L	99
46) Benzene	10.07	78	563219	19.7725 ug/L	99
47) Trichloroethene	10.78	130	172514	18.4718 ug/L	99
48) Methylcyclohexane	10.87	83	194465	19.8890 ug/L	99
49) 1,2-Dichloropropane	10.98	63	140253	21.3884 ug/L	96
51) Bromodichloromethane	11.27	83	204472	22.7810 ug/L	98

(#) = qualifier out of range (m) = manual integration
11M83352.D 8260WTR.M Fri May 04 18:24:30 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\050412\11M83352.D Vial: 6
Acq On : 4 May 2012 18:02 Operator: ADC
Sample : L12040928-08 A MS 826-SPE Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 18:24:29 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

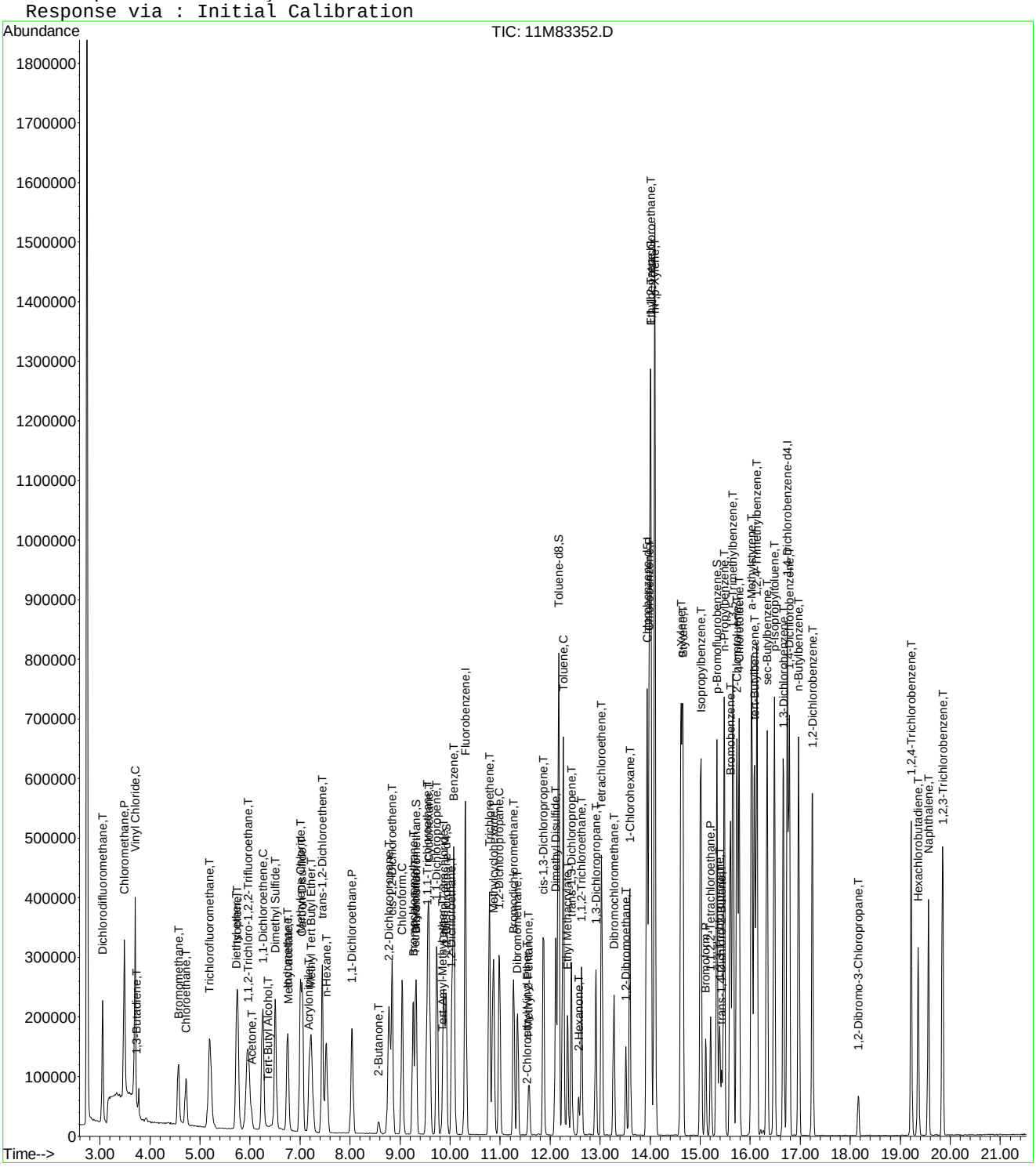
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
52)	Dibromomethane	11.34	93	86805	19.9208 ug/L	99
53)	2-Chloroethyl Vinyl Ether	11.54	63	1770	0.6328 ug/L #	69
54)	4-Methyl-2-Pentanone	11.57	58	31307	20.4355 ug/L	98
55)	cis-1,3-Dichloropropene	11.87	75	223077	21.5766 ug/L	99
56)	Dimethyl Disulfide	12.11	79	122547	21.9771 ug/L	95
59)	Toluene	12.26	91	629823	20.2022 ug/L	100
60)	Ethyl Methacrylate	12.35	69	137689	21.2593 ug/L	99
62)	trans-1,3-Dichloropropene	12.43	75	176691	21.1387 ug/L	100
63)	1,1,2-Trichloroethane	12.62	97	110932	21.5422 ug/L	100
64)	2-Hexanone	12.57	43	51007	19.5887 ug/L	96
65)	1,3-Dichloropropane	12.91	76	182890	21.1434 ug/L	100
66)	Tetrachloroethene	13.03	164	135955	21.2849 ug/L	96
67)	Dibromochloromethane	13.28	129	152000	21.4886 ug/L	100
68)	1,2-Dibromoethane	13.51	107	109867	20.6027 ug/L	100
69)	1-Chlorohexane	13.60	91	193881	21.6917 ug/L	98
70)	Chlorobenzene	13.98	112	434759	20.9499 ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.01	131	169147	21.7040 ug/L	98
72)	Ethylbenzene	14.01	106	232416	20.6381 ug/L	98
73)	m-,p-Xylene	14.09	106	556246	39.9996 ug/L	97
74)	o-Xylene	14.62	106	259127	19.1286 ug/L	98
75)	Styrene	14.65	104	447281	20.7513 ug/L	99
76)	Bromoform	15.11	173	93813	23.6728 ug/L	98
77)	Isopropylbenzene	15.01	105	582061	18.2508 ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.21	83	117811	23.1577 ug/L	99
81)	1,2,3-Trichloropropane	15.39	110	36776	23.8836 ug/L	98
82)	trans-1,4-Dichloro-2-Buten	15.43	53	29708	21.2436 ug/L	98
83)	n-Propylbenzene	15.48	91	763470	20.5316 ug/L	100
84)	Bromobenzene	15.60	156	191252	21.5288 ug/L	98
85)	1,3,5-Trimethylbenzene	15.65	105	554948	20.0958 ug/L	99
86)	2-Chlorotoluene	15.74	91	512635	20.4988 ug/L	99
87)	4-Chlorotoluene	15.78	91	423000	19.3280 ug/L	99
88)	a-Methylstyrene	16.03	118	317786	20.6631 ug/L	97
89)	tert-Butylbenzene	16.09	134	117124	19.4883 ug/L	98
90)	1,2,4-Trimethylbenzene	16.13	105	594435	20.6897 ug/L	99
91)	sec-Butylbenzene	16.34	105	642546	19.9276 ug/L	99
92)	p-Isopropyltoluene	16.48	119	568055	20.5320 ug/L	100
93)	1,3-Dichlorobenzene	16.67	146	347808	19.9624 ug/L	99
94)	1,4-Dichlorobenzene	16.78	146	351296	19.8085 ug/L	99
95)	n-Butylbenzene	16.97	91	486543	23.0864 ug/L	98
96)	1,2-Dichlorobenzene	17.25	146	319421	20.2280 ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.16	75	19397	21.5583 ug/L	98
98)	1,2,4-Trichlorobenzene	19.22	180	214647	24.0356 ug/L	95
99)	Hexachlorobutadiene	19.36	225	77981	22.1458 ug/L	94
100)	Naphthalene	19.56	128	383715	19.9065 ug/L	99
101)	1,2,3-Trichlorobenzene	19.85	180	192651	23.0842 ug/L	96

(#) = qualifier out of range (m) = manual integration
11M83352.D 8260WTR.M Fri May 04 18:24:30 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\050412\11M83352.D Vial: 6
Acq On : 4 May 2012 18:02 Operator: ADC
Sample : L12040928-08 A MS 826-SPE Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 18:24 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\050412\11M83353.D Vial: 7
Acq On : 4 May 2012 18:33 Operator: ADC
Sample : L12040928-10 A MSD 826-SPE Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 18:55:14 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.31	96	655347	25.00 ug/L	0.00
57) Chlorobenzene-d5	13.94	117	508833	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	282816	25.00 ug/L	0.01
System Monitoring Compounds					
37) Dibromofluoromethane	9.32	111	204786	25.6436 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.56%		
43) 1,2-Dichloroethane-d4	9.93	65	192485	25.1890 ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 100.76%		
58) Toluene-d8	12.17	98	696571	25.9530 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.80%		
80) p-Bromofluorobenzene	15.33	95	239780	25.6502 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 102.60%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.05	85	218842	25.8785 ug/L	98
3) Chloromethane	3.48	50	361582	24.8967 ug/L	99
4) Vinyl Chloride	3.70	62	450142	28.8978 ug/L	98
5) 1,3-Butadiene	3.73	54	4412	0.6066 ug/L #	49
6) Bromomethane	4.57	94	104147	22.3621 ug/L	100
7) Chloroethane	4.72	64	105422	21.0647 ug/L	98
8) Trichlorofluoromethane	5.19	101	276371	19.5587 ug/L	99
9) Diethyl ether	5.70	59	718	0.1439 ug/L #	28
10) Isoprene	5.75	67	196537	17.8768 ug/L	99
12) 1,1,2-Trichloro-1,2,2-Trif	5.96	101	142289	19.4203 ug/L	99
13) Acetone	6.03	43	31130	25.2797 ug/L	100
14) 1,1-Dichloroethene	6.26	61	219301	22.0447 ug/L	99
15) Tert-Butyl Alcohol	6.40	59	2227	6.7389 ug/L #	60
16) Dimethyl Sulfide	6.50	62	172459	21.1668 ug/L	98
17) Iodomethane	6.75	142	222476	22.1763 ug/L	100
18) Methyl acetate	6.76	43	62506	14.7670 ug/L	97
19) Methylene Chloride	7.01	84	151489	21.4261 ug/L	97
20) Carbon Disulfide	7.04	76	424128	20.9131 ug/L	99
21) Acrylonitrile	7.18	53	34686	24.0207 ug/L	95
22) Methyl Tert Butyl Ether	7.22	73	356334	21.5717 ug/L	98
23) trans-1,2-Dichloroethene	7.44	96	148595	20.9215 ug/L	97
24) n-Hexane	7.53	57	115446	16.0884 ug/L	95
27) 1,1-Dichloroethane	8.03	63	255604	21.4756 ug/L	99
29) 2-Butanone	8.57	43	35753	21.2003 ug/L	98
31) 2,2-Dichloropropane	8.78	77	220357	22.9061 ug/L	100
32) cis-1,2-Dichloroethene	8.84	96	166282	21.6044 ug/L	96
33) Chloroform	9.04	83	269630	21.4279 ug/L	97
35) Bromochloromethane	9.26	130	107097	21.9033 ug/L	97
38) 1,1,1-Trichloroethane	9.55	97	244434	20.7070 ug/L	97
39) Cyclohexane	9.57	56	190611	20.0421 ug/L	96
40) 1,1-Dichloropropene	9.73	75	197334	21.0232 ug/L	100
41) Carbon Tetrachloride	9.87	117	235906	18.9896 ug/L	99
45) 1,2-Dichloroethane	10.04	62	196148	22.1720 ug/L	99
46) Benzene	10.07	78	565376	20.6169 ug/L	99
47) Trichloroethene	10.78	130	172046	19.1351 ug/L	98
48) Methylcyclohexane	10.87	83	181761	19.3096 ug/L	99
49) 1,2-Dichloropropane	10.98	63	138752	21.9789 ug/L	98
51) Bromodichloromethane	11.27	83	205801	23.8170 ug/L	97
52) Dibromomethane	11.35	93	88508	21.0848 ug/L	97
54) 4-Methyl-2-Pentanone	11.58	58	31357	21.2608 ug/L	100

(#) = qualifier out of range (m) = manual integration
11M83353.D 8260WTR.M Fri May 04 18:55:15 2012 Page 1

Data File : C:\MSDchem\1\DATA\050412\11M83353.D Vial: 7
Acq On : 4 May 2012 18:33 Operator: ADC
Sample : L12040928-10 A MSD 826-SPE Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 18:55:14 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

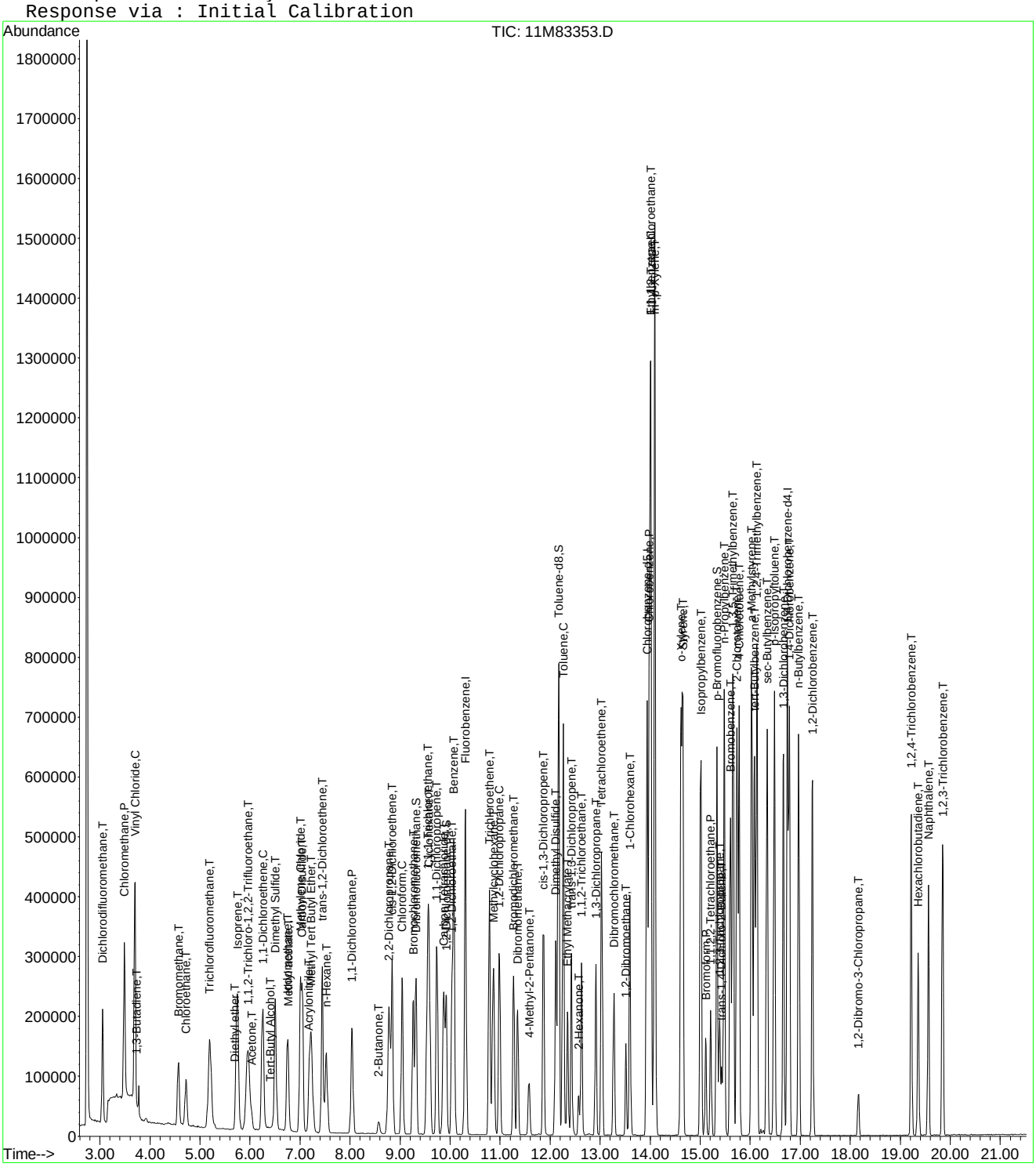
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
55)	cis-1,3-Dichloropropene	11.87	75	221419	22.2456 ug/L	100
56)	Dimethyl Disulfide	12.11	79	121323	22.5474 ug/L	95
59)	Toluene	12.26	91	641634	20.9648 ug/L	99
60)	Ethyl Methacrylate	12.35	69	142209	22.3363 ug/L	97
62)	trans-1,3-Dichloropropene	12.43	75	182475	22.2378 ug/L	99
63)	1,1,2-Trichloroethane	12.62	97	112093	22.1736 ug/L	98
64)	2-Hexanone	12.57	43	55168	21.5818 ug/L	98
65)	1,3-Dichloropropane	12.91	76	186808	21.9991 ug/L	99
66)	Tetrachloroethene	13.03	164	136567	21.7795 ug/L	97
67)	Dibromochloromethane	13.28	129	156734	22.5356 ug/L	99
68)	1,2-Dibromoethane	13.51	107	115451	22.0536 ug/L	99
69)	1-Chlorohexane	13.60	91	189443	21.5905 ug/L	99
70)	Chlorobenzene	13.98	112	435689	21.3862 ug/L	100
71)	1,1,1,2-Tetrachloroethane	14.01	131	167008	21.8199 ug/L	99
72)	Ethylbenzene	14.01	106	232720	21.0505 ug/L	95
73)	m-,p-Xylene	14.09	106	561511	41.1312 ug/L	98
74)	o-Xylene	14.62	106	260824	19.6129 ug/L	98
75)	Styrene	14.65	104	452630	21.3911 ug/L	100
76)	Bromoform	15.12	173	97327	24.9152 ug/L	98
77)	Isopropylbenzene	15.01	105	578097	18.4645 ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.21	83	124286	24.6874 ug/L	98
81)	1,2,3-Trichloropropane	15.39	110	37954	24.9079 ug/L	99
82)	trans-1,4-Dichloro-2-Buten	15.43	53	30505	21.9841 ug/L	96
83)	n-Propylbenzene	15.48	91	779629	21.1866 ug/L	99
84)	Bromobenzene	15.60	156	193577	22.0197 ug/L	97
85)	1,3,5-Trimethylbenzene	15.65	105	550254	20.1353 ug/L	100
86)	2-Chlorotoluene	15.74	91	507548	20.5088 ug/L	100
87)	4-Chlorotoluene	15.78	91	431979	19.9458 ug/L	100
88)	a-Methylstyrene	16.03	118	312059	20.5041 ug/L	98
89)	tert-Butylbenzene	16.09	134	119074	20.0211 ug/L	98
90)	1,2,4-Trimethylbenzene	16.13	105	602428	21.1884 ug/L	99
91)	sec-Butylbenzene	16.34	105	638735	20.0177 ug/L	99
92)	p-Isopropyltoluene	16.48	119	570336	20.8313 ug/L	99
93)	1,3-Dichlorobenzene	16.67	146	348518	20.2135 ug/L	98
94)	1,4-Dichlorobenzene	16.78	146	352744	20.0993 ug/L	99
95)	n-Butylbenzene	16.97	91	483469	23.1818 ug/L	98
96)	1,2-Dichlorobenzene	17.25	146	321430	20.5693 ug/L	99
97)	1,2-Dibromo-3-Chloropropan	18.16	75	20512	22.9999 ug/L	97
98)	1,2,4-Trichlorobenzene	19.22	180	215941	24.4347 ug/L	96
99)	Hexachlorobutadiene	19.36	225	77605	22.2694 ug/L	92
100)	Naphthalene	19.56	128	403197	21.1027 ug/L	99
101)	1,2,3-Trichlorobenzene	19.85	180	193713	23.4556 ug/L	95

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\050412\11M83353.D Vial: 7
Acq On : 4 May 2012 18:33 Operator: ADC
Sample : L12040928-10 A MSD 826-SPE Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 18:55 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



2.1.1.4 Standards Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75194.D Vial: 3
Acq On : 15 Jun 2011 17:59 Operator: FJB
Sample : WG367610-02 5ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 18:21:26 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

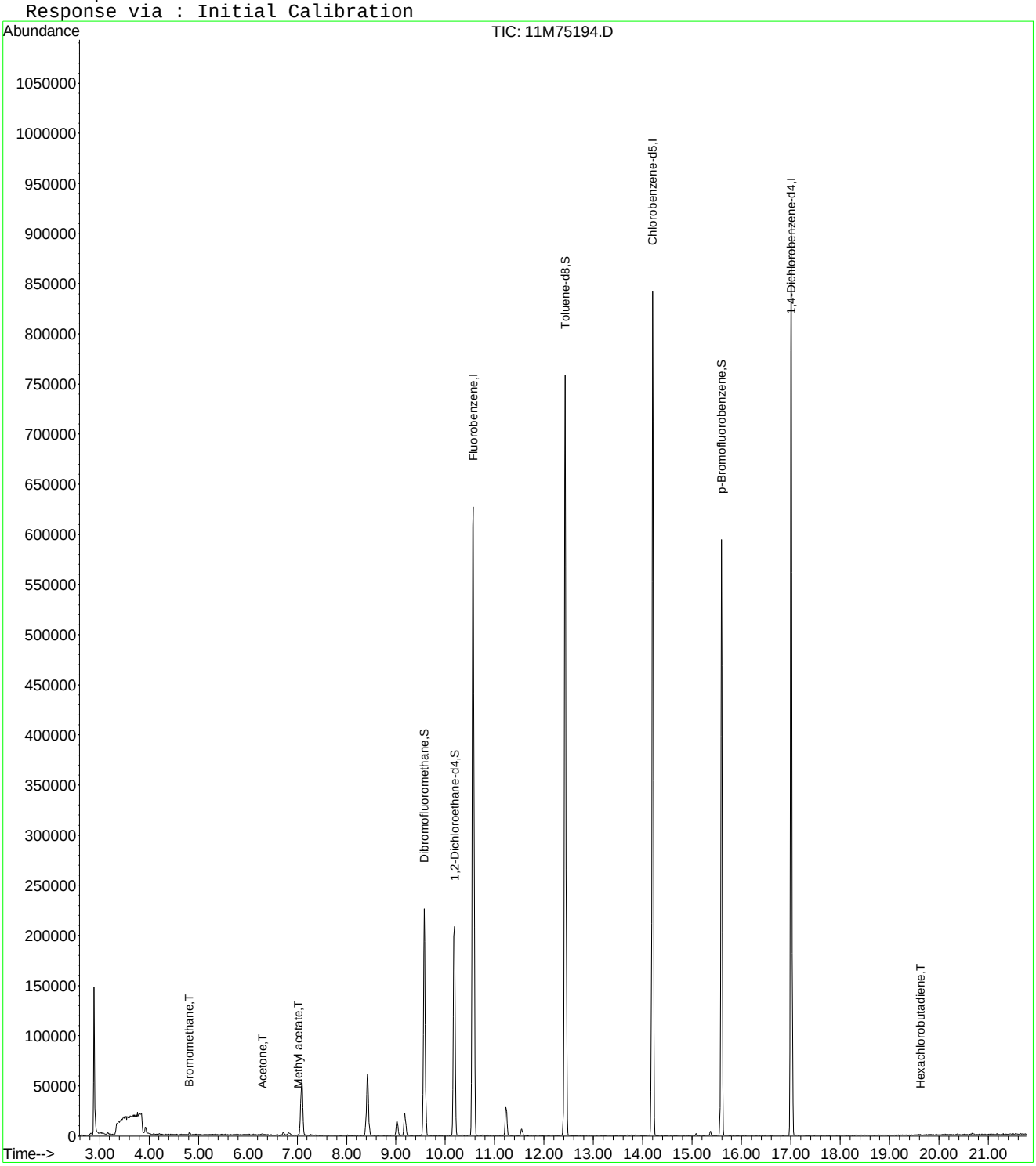
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.57	96	768026	25.00 ug/L	0.00
57) Chlorobenzene-d5	14.20	117	569767	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	311114	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.57	111	176117	24.6536 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 98.60%		
43) 1,2-Dichloroethane-d4	10.18	65	183556	23.8340 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 95.32%		
58) Toluene-d8	12.43	98	659375	25.2228 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.88%		
80) p-Bromofluorobenzene	15.59	95	231430	23.5322 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 94.12%		
Target Compounds					Qvalue
6) Bromomethane	4.81	94	2267	0.4289 ug/L #	60
13) Acetone	6.30	43	2336	1.5077 ug/L #	60
18) Methyl acetate	7.02	43	1289	0.2838 ug/L #	60
99) Hexachlorobutadiene	19.62	225	523	0.1574 ug/L #	53

(#) = qualifier out of range (m) = manual integration
11M75194.D 8260WTR.M Wed Jun 15 18:21:27 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75194.D Vial: 3
Acq On : 15 Jun 2011 17:59 Operator: FJB
Sample : WG367610-02 5ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 18:21 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75194.D Vial: 3
Acq On : 15 Jun 2011 17:59 Operator: FJB
Sample : WG367610-02 5ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41:26 2011 Quant Results File: A9WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

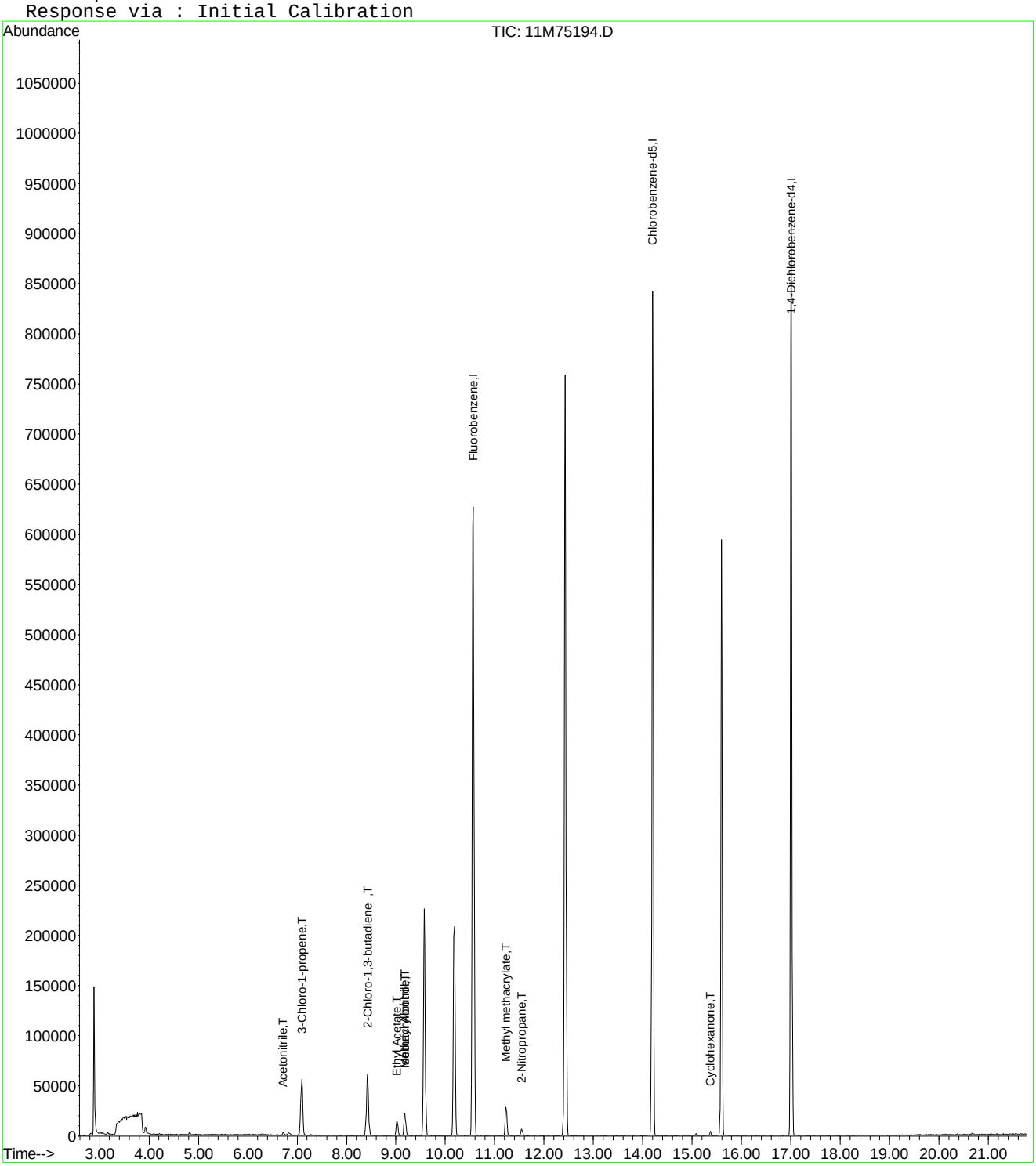
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	768026	25.00	ug/L		-0.05
13) Chlorobenzene-d5	14.20	117	569767	25.00	ug/L		-0.05
14) 1,4-Dichlorobenzene-d4	17.01	152	311114	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.71	41	3205	3.6177	ug/L	#	59
3) 3-Chloro-1-propene	7.09	41	55787	3.1821	ug/L		90
4) 2-Chloro-1,3-butadiene	8.43	53	60394	3.1910	ug/L		84
6) Methacrylonitrile	9.18	41	16846	3.1579	ug/L		78
7) Isobutyl Alcohol	9.18	43	842	1.8105	ug/L	#	20
9) Cyclohexanone	15.36	55	2369	6.0042	ug/L	#	83
10) 2-Nitropropane	11.55	43	5869	3.4590	ug/L		82
11) Ethyl Acetate	9.02	43	23369	3.3853	ug/L	#	91
12) Methyl methacrylate	11.23	41	19294	3.0591	ug/L		82

(#) = qualifier out of range (m) = manual integration
11M75194.D A9WTR.M Wed Jun 22 15:41:27 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75194.D Vial: 3
Acq On : 15 Jun 2011 17:59 Operator: FJB
Sample : WG367610-02 5ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75195.D Vial: 4
Acq On : 15 Jun 2011 18:30 Operator: FJB
Sample : WG367610-03 20ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 18:52:11 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

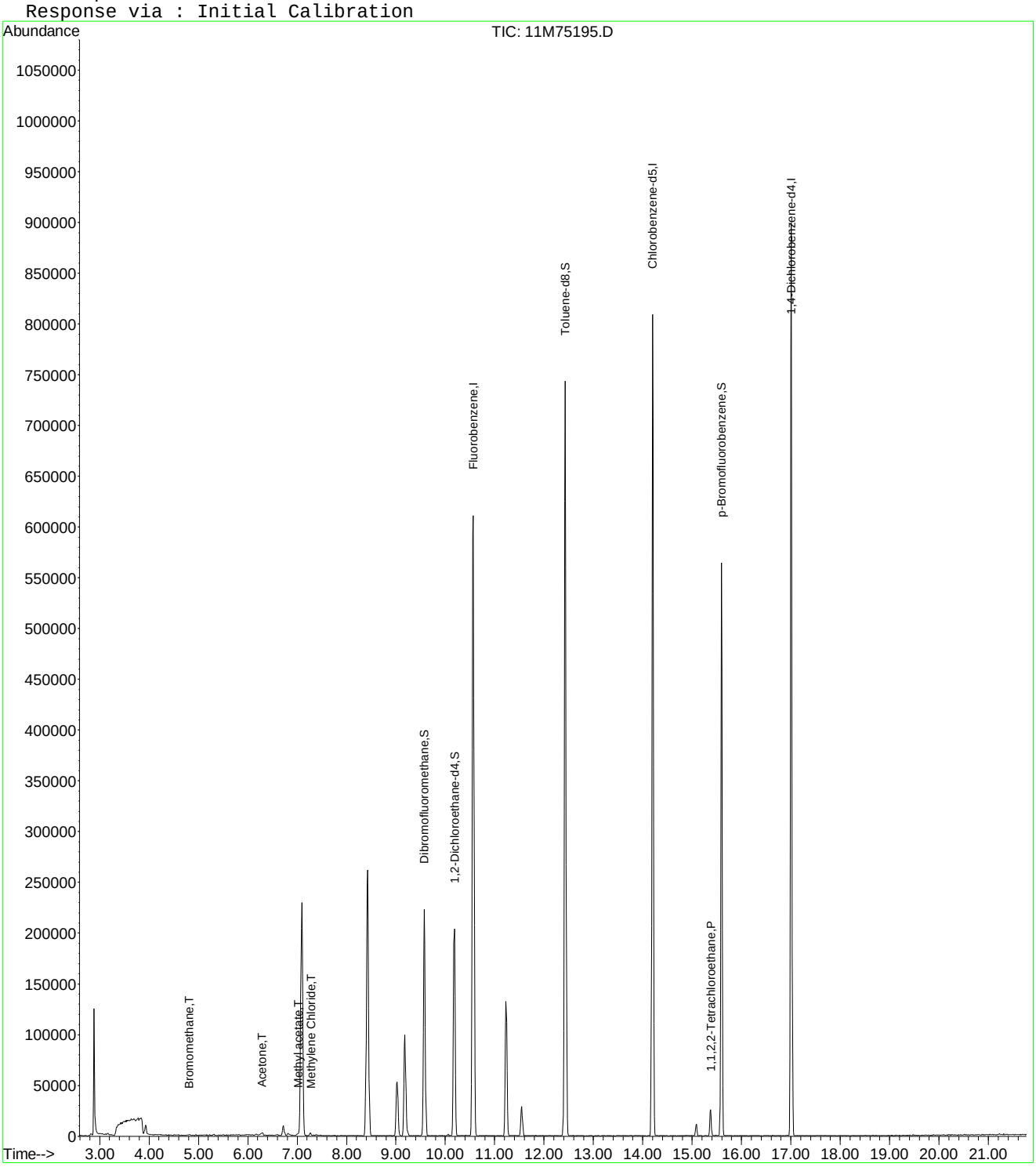
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	744899	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.20	117	555526	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	306562	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.57	111	174600	25.2001	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.80%			
43) 1,2-Dichloroethane-d4	10.18	65	176420	23.6186	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 94.48%			
58) Toluene-d8	12.43	98	640541	25.1305	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.52%			
80) p-Bromofluorobenzene	15.59	95	227184	23.4435	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 93.76%			
Target Compounds						Qvalue
6) Bromomethane	4.81	94	1098	0.2142	ug/L	98
13) Acetone	6.29	43	5786	3.8502	ug/L	93
18) Methyl acetate	7.02	43	4921	1.1170	ug/L #	74
19) Methylene Chloride	7.28	84	1531	0.2053	ug/L	78
79) 1,1,2,2-Tetrachloroethane	15.39	83	936	0.1607	ug/L #	18

(#) = qualifier out of range (m) = manual integration
11M75195.D 8260WTR.M Wed Jun 15 18:52:12 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75195.D Vial: 4
Acq On : 15 Jun 2011 18:30 Operator: FJB
Sample : WG367610-03 20ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 18:52 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



11M75195.D 8260WTR.M Wed Jun 15 18:52:12 2011 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75195.D Vial: 4
Acq On : 15 Jun 2011 18:30 Operator: FJB
Sample : WG367610-03 20ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41:27 2011 Quant Results File: A9WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

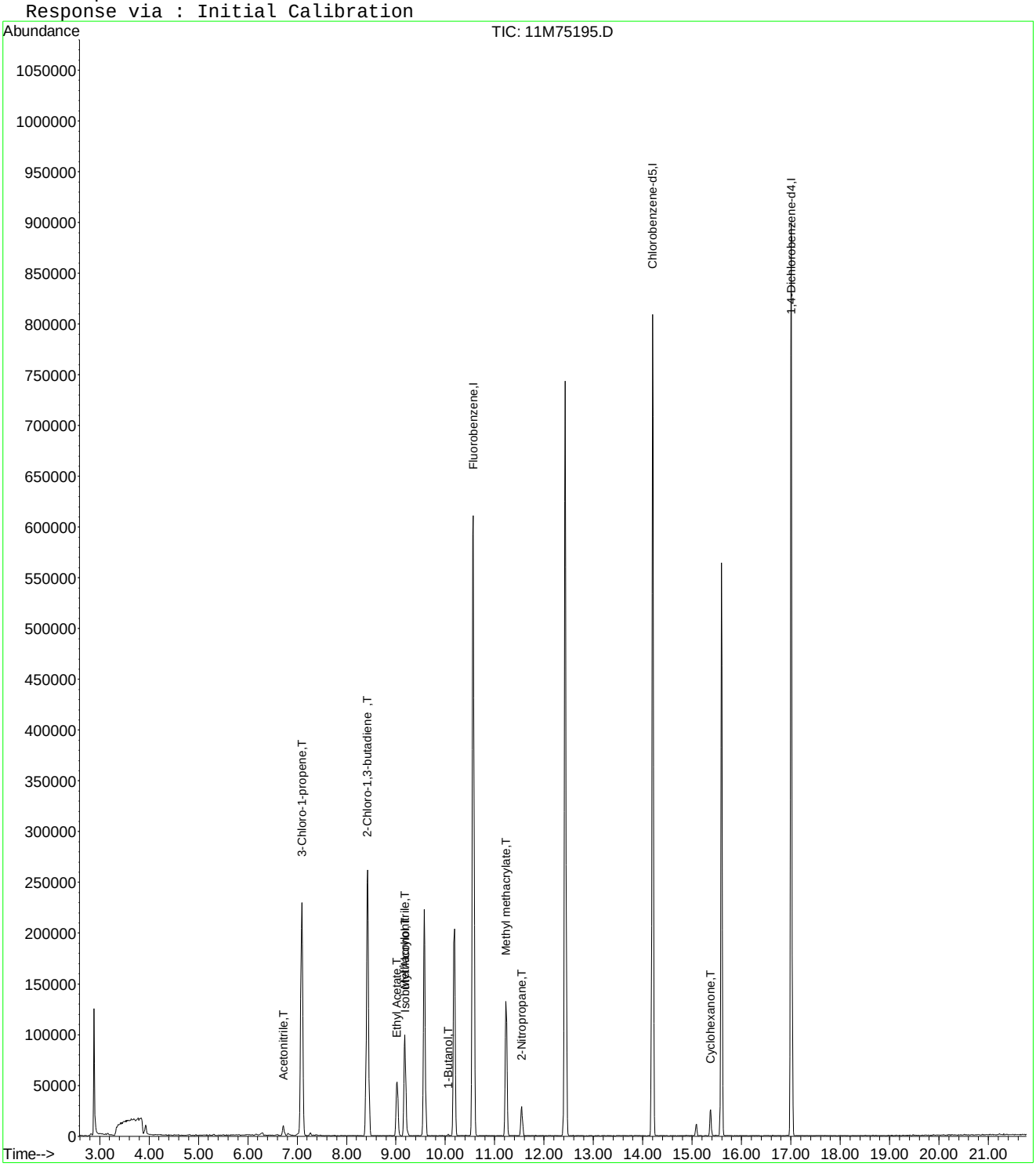
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	744899	25.00	ug/L		-0.05
13) Chlorobenzene-d5	14.20	117	555526	25.00	ug/L		-0.05
14) 1,4-Dichlorobenzene-d4	17.01	152	306562	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.72	41	12934	15.0526	ug/L		96
3) 3-Chloro-1-propene	7.09	41	227201	13.3618	ug/L		91
4) 2-Chloro-1,3-butadiene	8.42	53	251166	13.6828	ug/L		84
6) Methacrylonitrile	9.18	41	69283	13.3907	ug/L		87
7) Isobutyl Alcohol	9.19	43	5788	12.8323	ug/L		90
8) 1-Butanol	10.06	56	1159	11.5489	ug/L	#	75
9) Cyclohexanone	15.38	55	13758	35.9519	ug/L	#	84
10) 2-Nitropropane	11.55	43	26040	15.8235	ug/L		91
11) Ethyl Acetate	9.02	43	88467	13.2136	ug/L		94
12) Methyl methacrylate	11.23	41	87367	14.2825	ug/L		84

(#) = qualifier out of range (m) = manual integration
11M75195.D A9WTR.M Wed Jun 22 15:41:28 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75195.D Vial: 4
Acq On : 15 Jun 2011 18:30 Operator: FJB
Sample : WG367610-03 20ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75196.D Vial: 5
Acq On : 15 Jun 2011 19:01 Operator: FJB
Sample : WG367610-04 50ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 19:23:17 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

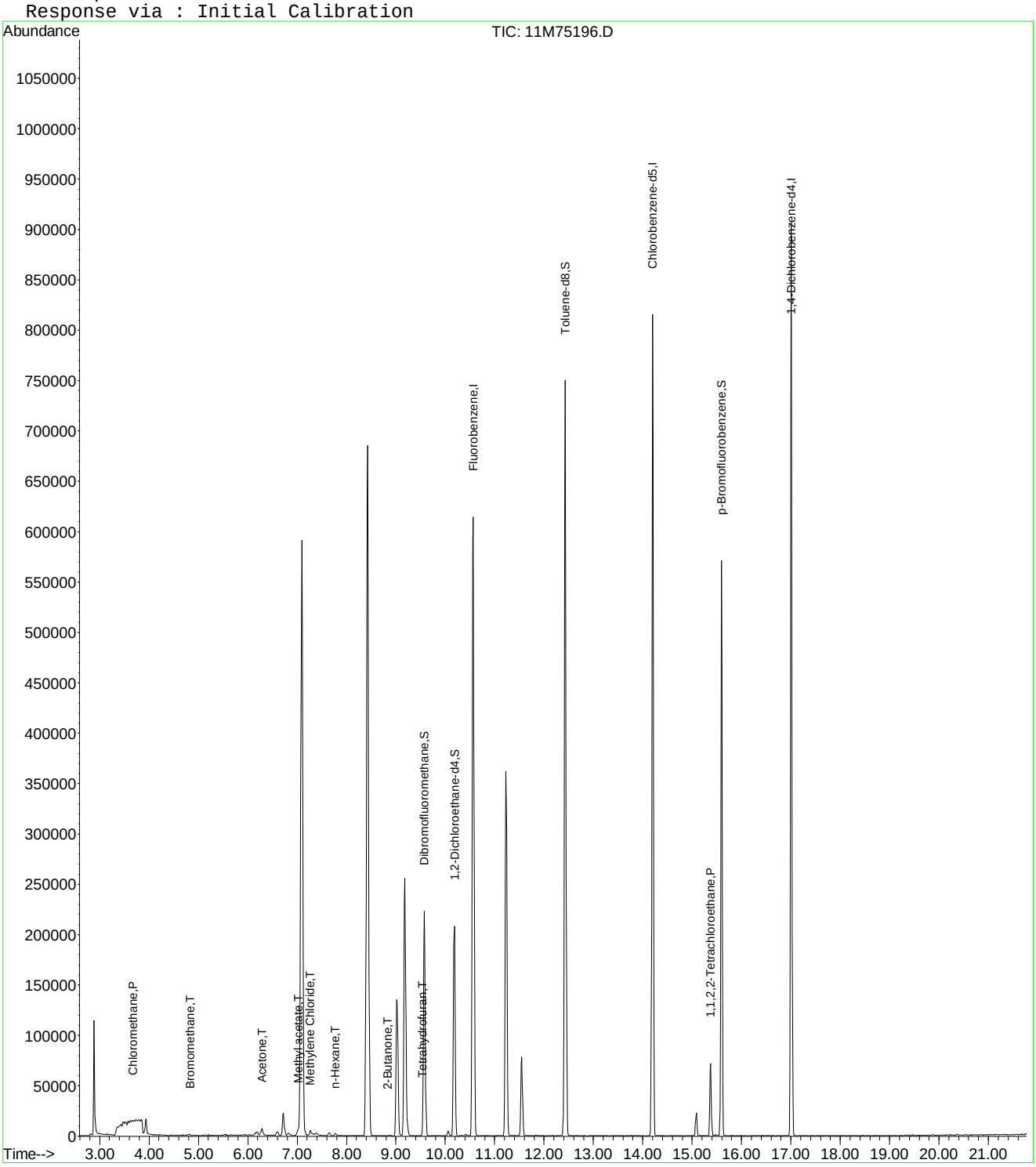
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	740688	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.20	117	551538	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	304489	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.57	111	175129	25.4201	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.68%			
43) 1,2-Dichloroethane-d4	10.18	65	178950	24.0935	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 96.36%			
58) Toluene-d8	12.43	98	641858	25.3643	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.44%			
80) p-Bromofluorobenzene	15.59	95	226088	23.4892	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 93.96%			
Target Compounds						Qvalue
3) Chloromethane	3.67	50	2042	0.1835	ug/L #	53
6) Bromomethane	4.83	94	1472	0.2887	ug/L	78
13) Acetone	6.29	43	12216	8.1752	ug/L	91
18) Methyl acetate	7.02	43	12828	2.9284	ug/L	93
19) Methylene Chloride	7.26	84	3609	0.4868	ug/L	82
24) n-Hexane	7.77	57	1588	0.1828	ug/L #	67
29) 2-Butanone	8.83	43	526	0.2412	ug/L #	50
36) Tetrahydrofuran	9.53	42	208	0.1522	ug/L #	33
79) 1,1,2,2-Tetrachloroethane	15.38	83	3314	0.5727	ug/L #	18

(#) = qualifier out of range (m) = manual integration
11M75196.D 8260WTR.M Wed Jun 15 19:23:18 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75196.D Vial: 5
Acq On : 15 Jun 2011 19:01 Operator: FJB
Sample : WG367610-04 50ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 19:23 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75196.D Vial: 5
Acq On : 15 Jun 2011 19:01 Operator: FJB
Sample : WG367610-04 50ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41:28 2011 Quant Results File: A9WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

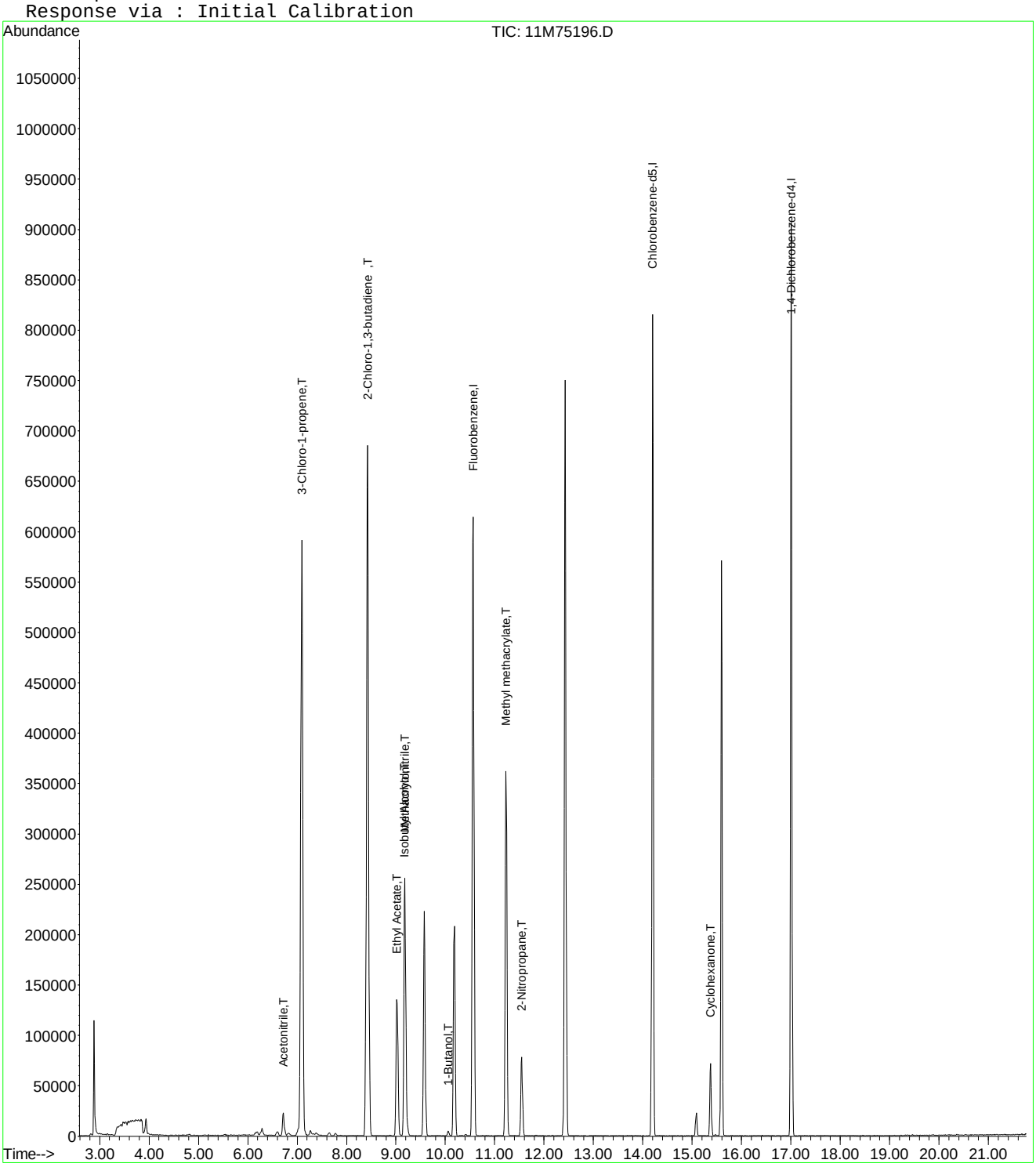
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	740688	25.00	ug/L		-0.05
13) Chlorobenzene-d5	14.20	117	551538	25.00	ug/L		-0.05
14) 1,4-Dichlorobenzene-d4	17.01	152	304489	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.72	41	30153	35.2916	ug/L		95
3) 3-Chloro-1-propene	7.09	41	589599	34.8717	ug/L		91
4) 2-Chloro-1,3-butadiene	8.43	53	657975	36.0485	ug/L		84
6) Methacrylonitrile	9.18	41	180626	35.1091	ug/L		85
7) Isobutyl Alcohol	9.17	43	14480	32.2853	ug/L		87
8) 1-Butanol	10.06	56	3641	36.4872	ug/L		96
9) Cyclohexanone	15.38	55	38048	99.9909	ug/L	#	86
10) 2-Nitropropane	11.55	43	71566	43.7350	ug/L		89
11) Ethyl Acetate	9.02	43	228964	34.3931	ug/L		93
12) Methyl methacrylate	11.23	41	232763	38.2677	ug/L		83

(#) = qualifier out of range (m) = manual integration
11M75196.D A9WTR.M Wed Jun 22 15:41:29 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75196.D Vial: 5
Acq On : 15 Jun 2011 19:01 Operator: FJB
Sample : WG367610-04 50ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75197.D Vial: 6
Acq On : 15 Jun 2011 19:31 Operator: FJB
Sample : WG367610-05 100ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 19:53:56 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

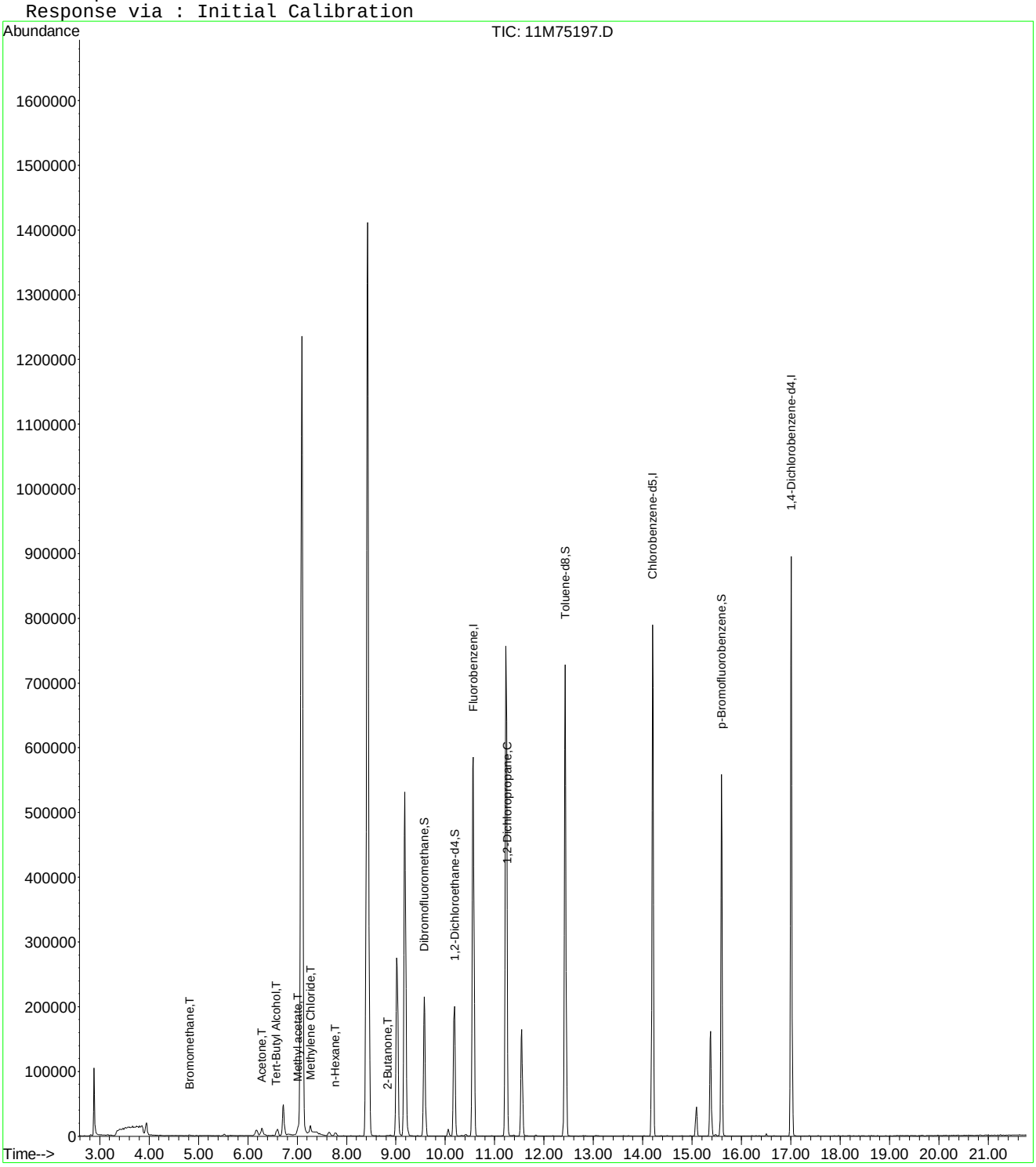
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.57	96	712986	25.00 ug/L	0.00
57) Chlorobenzene-d5	14.20	117	535391	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	298601	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.57	111	171018	25.7879 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.16%		
43) 1,2-Dichloroethane-d4	10.18	65	173001	24.1976 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 96.80%		
58) Toluene-d8	12.43	98	618511	25.1788 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.72%		
80) p-Bromofluorobenzene	15.59	95	219744	23.2803 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 93.12%		
Target Compounds					Qvalue
6) Bromomethane	4.82	94	839	0.1710 ug/L	76
13) Acetone	6.28	43	22375	15.5557 ug/L	93
15) Tert-Butyl Alcohol	6.58	59	423	0.9116 ug/L #	1
18) Methyl acetate	7.01	43	27641	6.5550 ug/L	96
19) Methylene Chloride	7.27	84	6354	0.8903 ug/L	98
24) n-Hexane	7.77	57	4178	0.4997 ug/L #	67
29) 2-Butanone	8.83	43	1450	0.6906 ug/L #	50
49) 1,2-Dichloropropane	11.25	63	1387	0.1934 ug/L #	31

(#) = qualifier out of range (m) = manual integration
11M75197.D 8260WTR.M Wed Jun 15 19:53:57 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75197.D Vial: 6
Acq On : 15 Jun 2011 19:31 Operator: FJB
Sample : WG367610-05 100ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 19:53 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75197.D Vial: 6
Acq On : 15 Jun 2011 19:31 Operator: FJB
Sample : WG367610-05 100ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41:29 2011 Quant Results File: A9WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

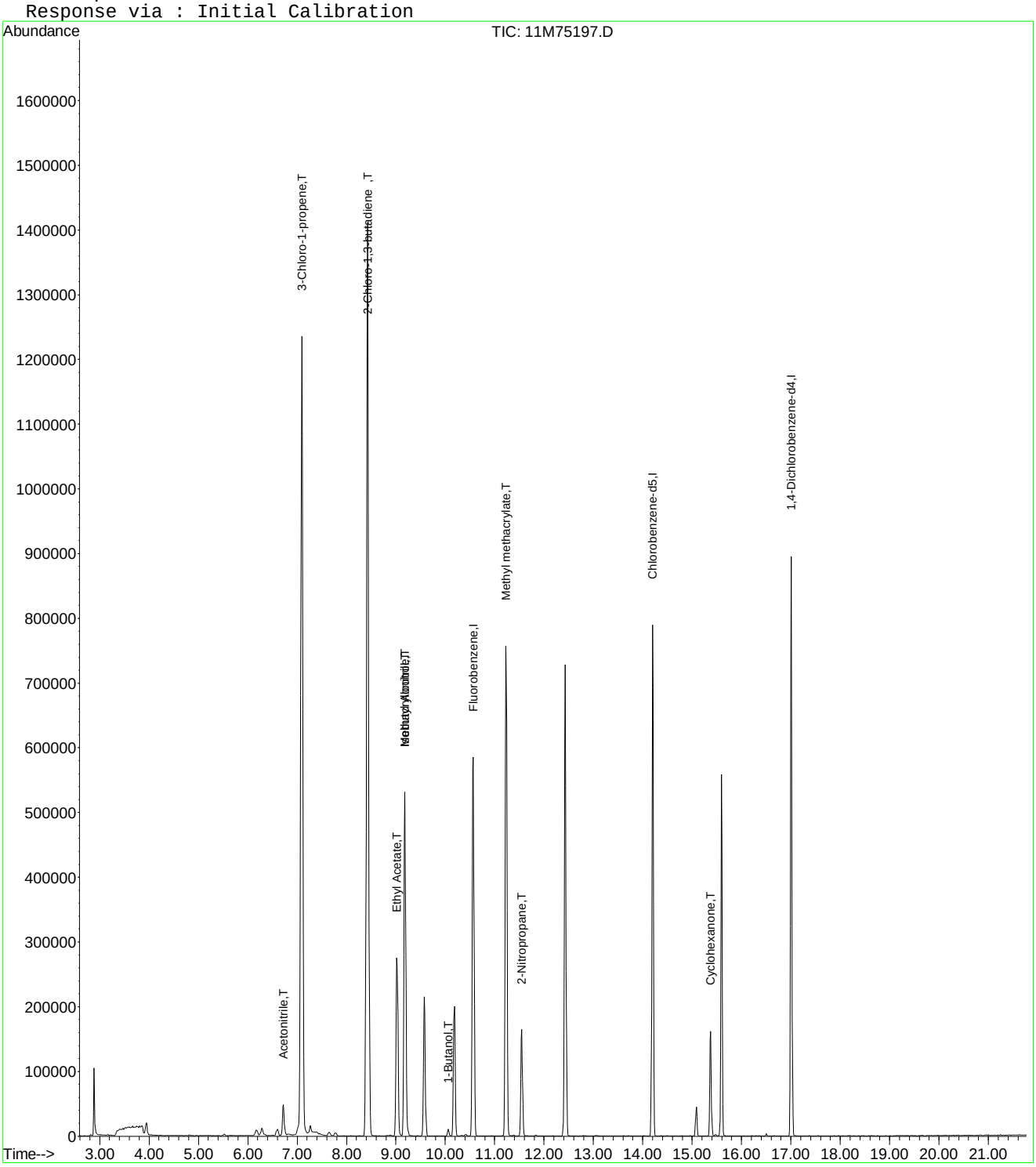
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	712986	25.00	ug/L		-0.05
13) Chlorobenzene-d5	14.20	117	535391	25.00	ug/L		-0.05
14) 1,4-Dichlorobenzene-d4	17.01	152	298601	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.72	41	64652	78.6100	ug/L		99
3) 3-Chloro-1-propene	7.09	41	1230802	75.6239	ug/L		90
4) 2-Chloro-1,3-butadiene	8.43	53	1344031	76.4964	ug/L		84
6) Methacrylonitrile	9.18	41	360237	72.7415	ug/L		88
7) Isobutyl Alcohol	9.18	43	29686	68.7611	ug/L		82
8) 1-Butanol	10.06	56	7105	73.9671	ug/L		84
9) Cyclohexanone	15.38	55	85144	232.4541	ug/L	#	88
10) 2-Nitropropane	11.55	43	153688	97.5701	ug/L		94
11) Ethyl Acetate	9.02	43	463879	72.3873	ug/L		94
12) Methyl methacrylate	11.23	41	481278	82.1993	ug/L		85

(#) = qualifier out of range (m) = manual integration
11M75197.D A9WTR.M Wed Jun 22 15:41:29 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75197.D Vial: 6
Acq On : 15 Jun 2011 19:31 Operator: FJB
Sample : WG367610-05 100ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75198.D Vial: 7
Acq On : 15 Jun 2011 20:02 Operator: FJB
Sample : WG367610-06 200ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 20:24:41 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

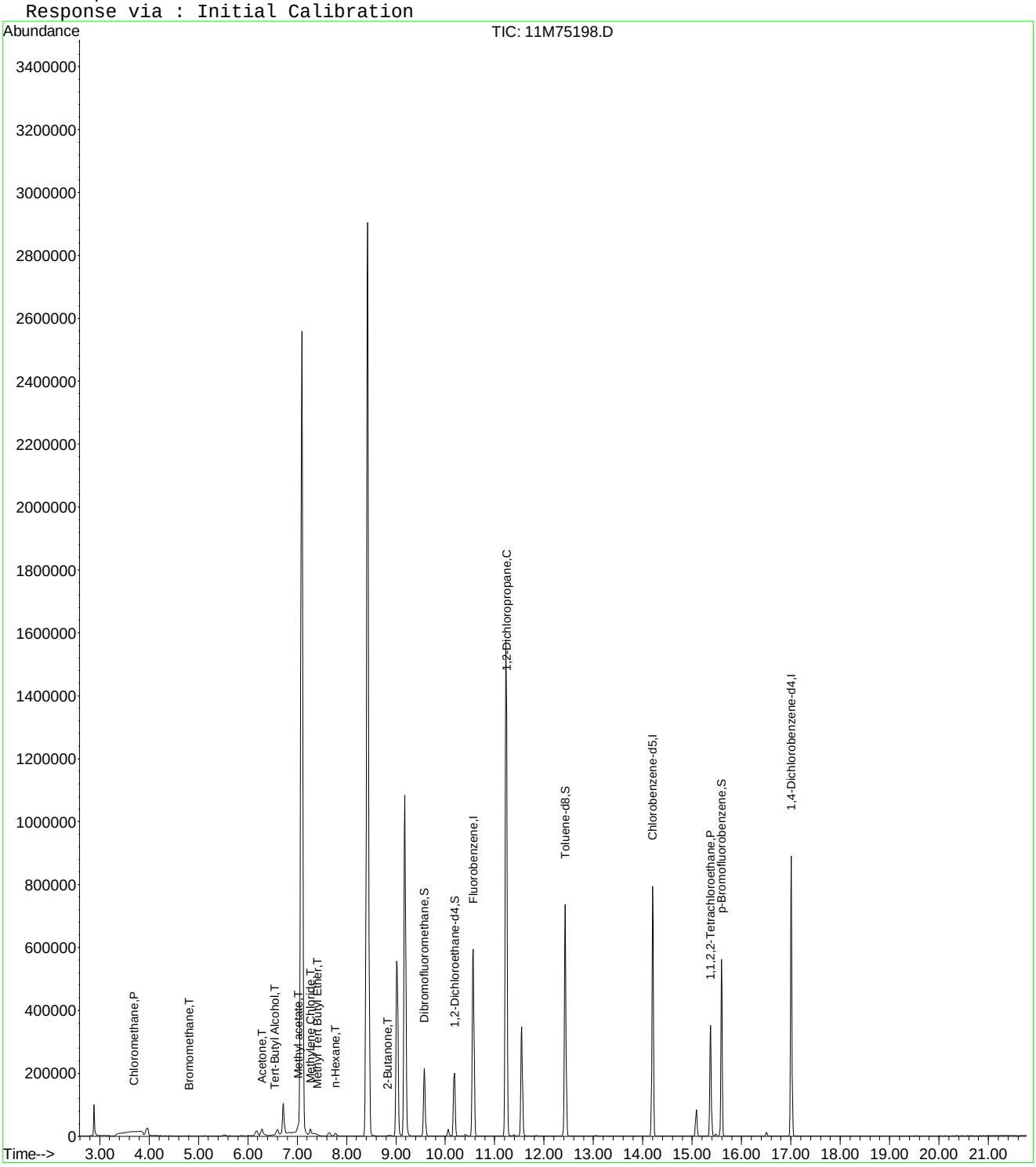
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	721863	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.20	117	545664	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	297442	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.57	111	172925	25.7548	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.00%			
43) 1,2-Dichloroethane-d4	10.18	65	174505	24.1078	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 96.44%			
58) Toluene-d8	12.43	98	631861	25.2380	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.96%			
80) p-Bromofluorobenzene	15.59	95	223598	23.7809	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 95.12%			
Target Compounds						Qvalue
3) Chloromethane	3.69	50	1958	0.1805	ug/L	93
6) Bromomethane	4.81	94	729	0.1467	ug/L #	37
13) Acetone	6.29	43	42799	29.3891	ug/L	98
15) Tert-Butyl Alcohol	6.55	59	496	1.0557	ug/L #	1
18) Methyl acetate	7.02	43	61015	14.2917	ug/L	92
19) Methylene Chloride	7.27	84	11619	1.6080	ug/L	100
22) Methyl Tert Butyl Ether	7.40	73	7008	0.3700	ug/L #	1
24) n-Hexane	7.78	57	7434	0.8783	ug/L #	78
29) 2-Butanone	8.83	43	3149	1.4813	ug/L #	77
49) 1,2-Dichloropropane	11.24	63	3056	0.4209	ug/L	91
79) 1,1,2,2-Tetrachloroethane	15.38	83	17952	3.1760	ug/L #	22

(#) = qualifier out of range (m) = manual integration
11M75198.D 8260WTR.M Wed Jun 15 20:24:41 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75198.D Vial: 7
Acq On : 15 Jun 2011 20:02 Operator: FJB
Sample : WG367610-06 200ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 20:24 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



11M75198.D 8260WTR.M Wed Jun 15 20:24:42 2011 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75198.D Vial: 7
Acq On : 15 Jun 2011 20:02 Operator: FJB
Sample : WG367610-06 200ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41:30 2011 Quant Results File: A9WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

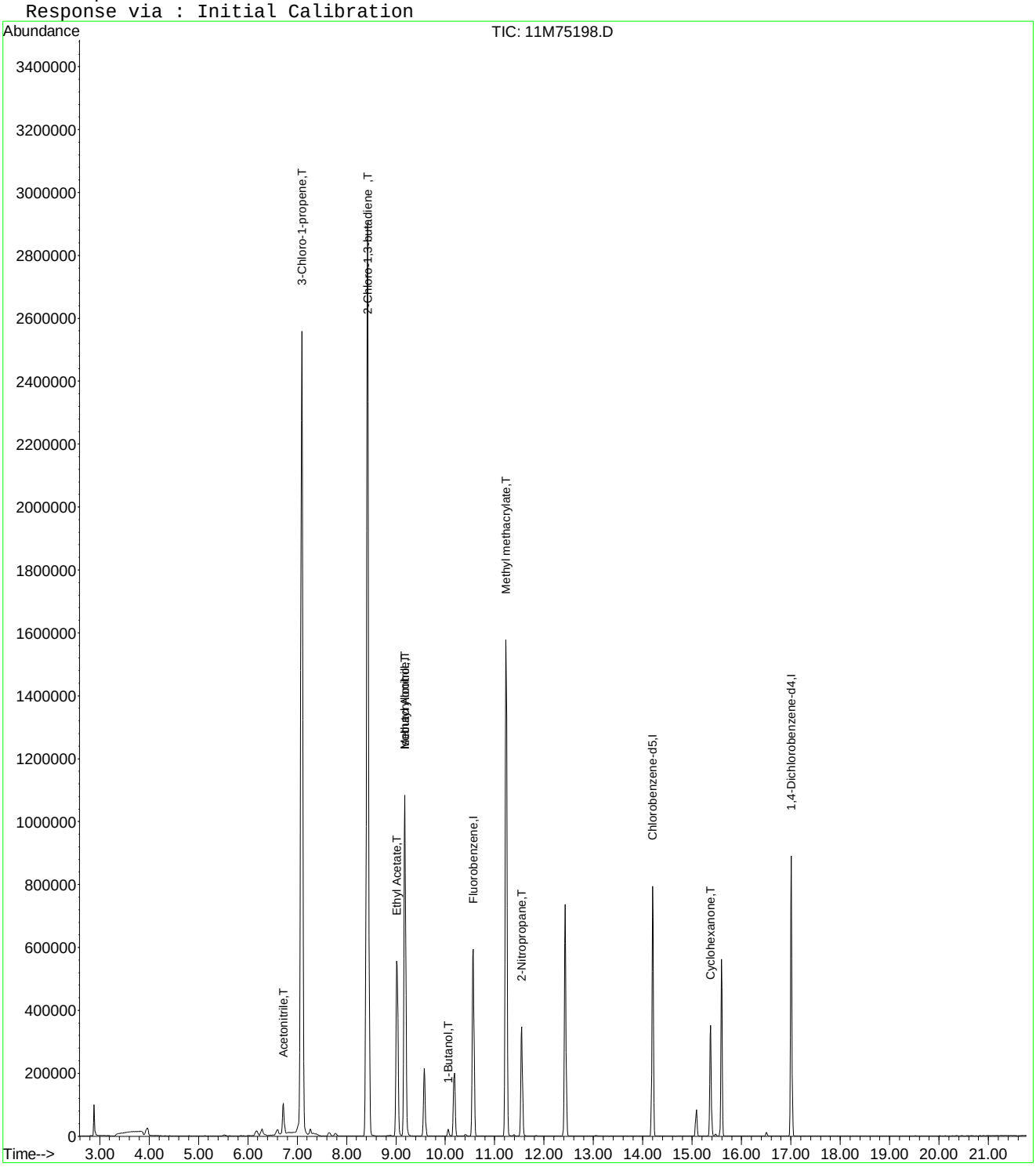
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	721863	25.00	ug/L	-0.05
13) Chlorobenzene-d5	14.20	117	545664	25.00	ug/L	-0.05
14) 1,4-Dichlorobenzene-d4	17.01	152	297442	25.00	ug/L	-0.05
Target Compounds						Qvalue
2) Acetonitrile	6.72	41	130864	157.1600	ug/L	99
3) 3-Chloro-1-propene	7.09	41	2563659	155.5813	ug/L	90
4) 2-Chloro-1,3-butadiene	8.43	53	2805025	157.6866	ug/L	83
6) Methacrylonitrile	9.18	41	724502	144.4973	ug/L	88
7) Isobutyl Alcohol	9.18	43	65029	148.7731	ug/L	90
8) 1-Butanol	10.06	56	16391	168.5411	ug/L	95
9) Cyclohexanone	15.38	55	183540	494.9257	ug/L	90
10) 2-Nitropropane	11.55	43	329020	206.3124	ug/L	96
11) Ethyl Acetate	9.02	43	938299	144.6190	ug/L	93
12) Methyl methacrylate	11.23	41	1005188	169.5687	ug/L	85

(#) = qualifier out of range (m) = manual integration
11M75198.D A9WTR.M Wed Jun 22 15:41:30 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75198.D Vial: 7
Acq On : 15 Jun 2011 20:02 Operator: FJB
Sample : WG367610-06 200ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75199.D Vial: 8
Acq On : 15 Jun 2011 20:33 Operator: FJB
Sample : WG367610-07 300ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 20:55:24 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

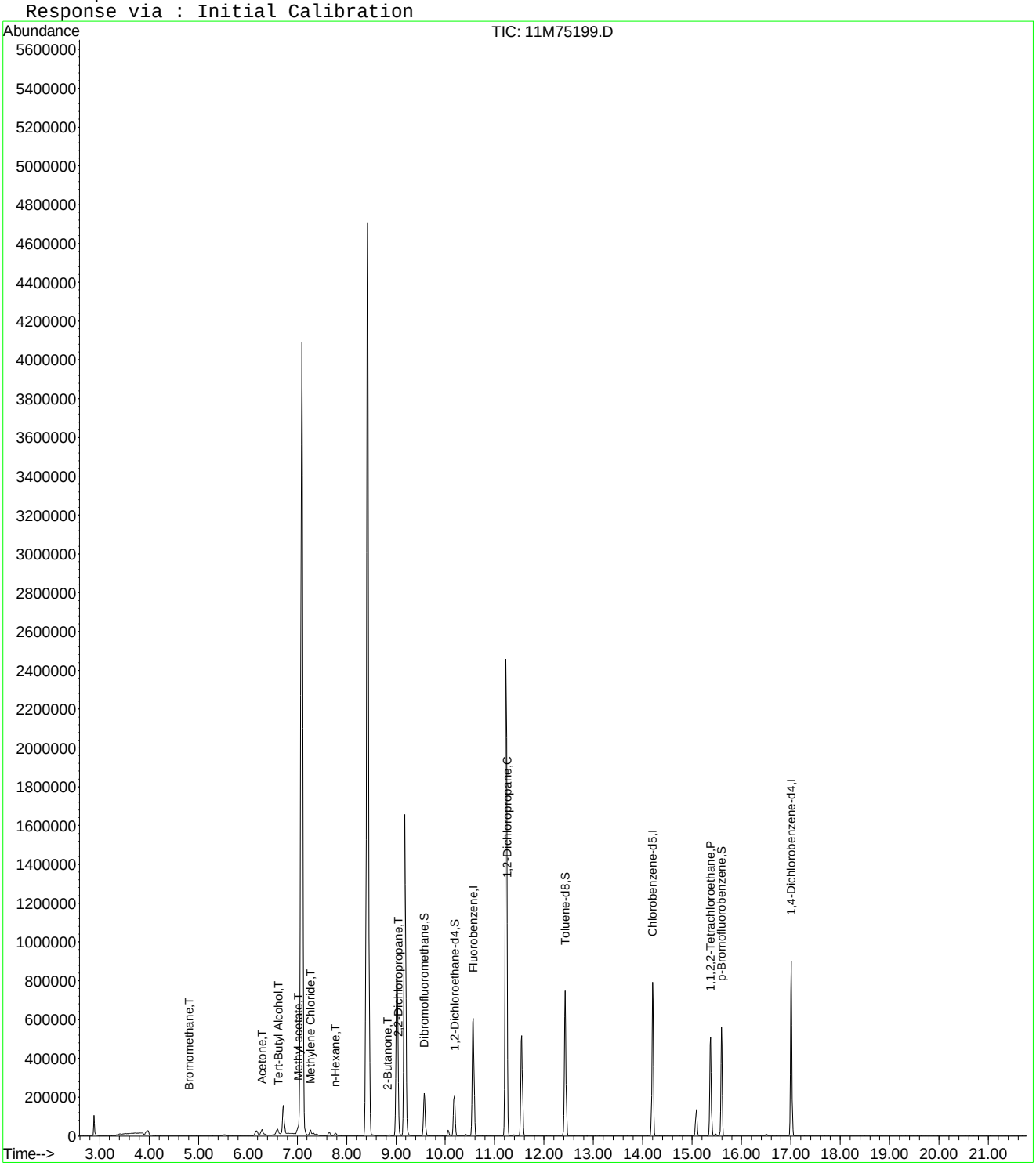
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.57	96	730835	25.00 ug/L	0.00
57) Chlorobenzene-d5	14.20	117	547295	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	304567	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.57	111	174936	25.7345 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.92%		
43) 1,2-Dichloroethane-d4	10.18	65	174683	23.8361 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 95.36%		
58) Toluene-d8	12.43	98	635839	25.3212 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.28%		
80) p-Bromofluorobenzene	15.59	95	222088	23.0677 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 92.28%		
Target Compounds					Qvalue
6) Bromomethane	4.81	94	721	0.1433 ug/L #	49
13) Acetone	6.29	43	59347	40.2519 ug/L	96
15) Tert-Butyl Alcohol	6.62	59	2618	5.5040 ug/L #	1
18) Methyl acetate	7.02	43	87190	20.1720 ug/L	96
19) Methylene Chloride	7.27	84	17691	2.4182 ug/L	94
24) n-Hexane	7.78	57	11047	1.2891 ug/L #	88
29) 2-Butanone	8.83	43	5232	2.4310 ug/L #	67
31) 2,2-Dichloropropane	9.05	77	1625	0.1351 ug/L #	43
49) 1,2-Dichloropropane	11.25	63	4741	0.6449 ug/L	84
79) 1,1,2,2-Tetrachloroethane	15.38	83	25448	4.3968 ug/L #	18

(#) = qualifier out of range (m) = manual integration
11M75199.D 8260WTR.M Wed Jun 15 20:55:25 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75199.D Vial: 8
Acq On : 15 Jun 2011 20:33 Operator: FJB
Sample : WG367610-07 300ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 20:55 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75199.D Vial: 8
Acq On : 15 Jun 2011 20:33 Operator: FJB
Sample : WG367610-07 300ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41:31 2011 Quant Results File: A9WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

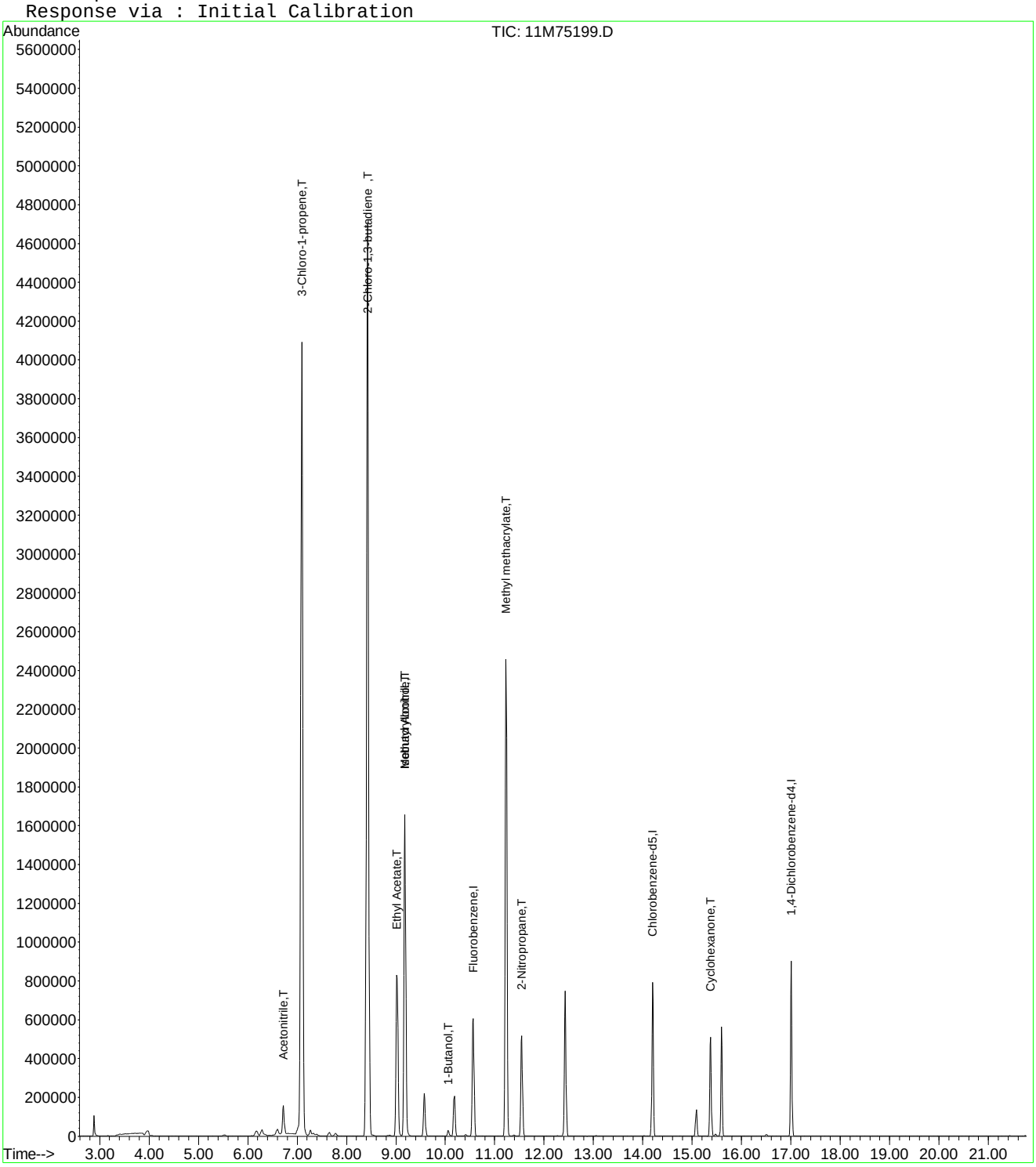
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	730835	25.00	ug/L		-0.05
13) Chlorobenzene-d5	14.20	117	547295	25.00	ug/L		-0.05
14) 1,4-Dichlorobenzene-d4	17.01	152	304567	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.72	41	193632	229.6859	ug/L		97
3) 3-Chloro-1-propene	7.09	41	4075236	244.2786	ug/L		89
4) 2-Chloro-1,3-butadiene	8.43	53	4498784	249.7979	ug/L		83
6) Methacrylonitrile	9.18	41	1108875	218.4430	ug/L		88
7) Isobutyl Alcohol	9.18	43	90632	204.8021	ug/L		82
8) 1-Butanol	10.06	56	23012	233.7170	ug/L		88
9) Cyclohexanone	15.38	55	271375	722.7941	ug/L	#	89
10) 2-Nitropropane	11.55	43	493964	305.9383	ug/L		95
11) Ethyl Acetate	9.02	43	1400137	213.1523	ug/L		93
12) Methyl methacrylate	11.23	41	1546632	257.7039	ug/L		85

(#) = qualifier out of range (m) = manual integration
11M75199.D A9WTR.M Wed Jun 22 15:41:31 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75199.D Vial: 8
Acq On : 15 Jun 2011 20:33 Operator: FJB
Sample : WG367610-07 300ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration



11M75199.D A9WTR.M Wed Jun 22 15:41:31 2011 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75200.D Vial: 9
Acq On : 15 Jun 2011 21:04 Operator: FJB
Sample : WG367610-08 400ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 21:26:11 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

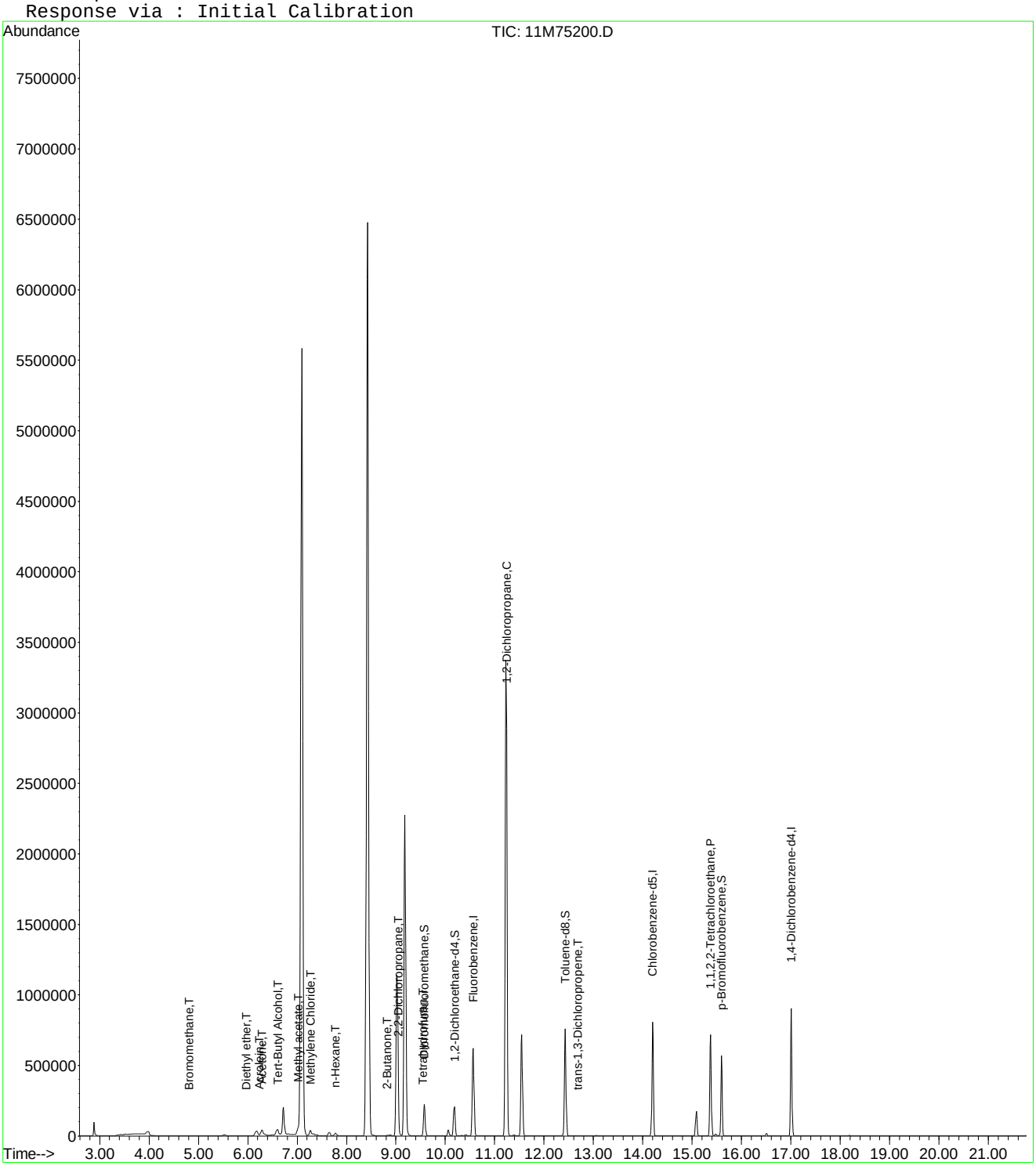
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.57	96	736720	25.00 ug/L	0.00
57) Chlorobenzene-d5	14.20	117	551313	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	300432	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.57	111	174125	25.4105 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.64%		
43) 1,2-Dichloroethane-d4	10.18	65	175409	23.7440 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 94.96%		
58) Toluene-d8	12.43	98	641930	25.3775 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.52%		
80) p-Bromofluorobenzene	15.59	95	224001	23.5866 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 94.36%		
Target Compounds					Qvalue
5) 1,3-Butadiene	3.96	54	186	Below Cal #	1
6) Bromomethane	4.81	94	841	0.1659 ug/L	90
9) Diethyl ether	5.97	59	1550	0.2723 ug/L #	57
11) Acrolein	6.23	56	198	0.2477 ug/L #	13
13) Acetone	6.29	43	75883	51.0563 ug/L	95
15) Tert-Butyl Alcohol	6.61	59	993	2.0710 ug/L #	1
18) Methyl acetate	7.02	43	112555	25.8323 ug/L	97
19) Methylene Chloride	7.27	84	22868	3.1009 ug/L	90
24) n-Hexane	7.78	57	15650	1.8117 ug/L #	96
29) 2-Butanone	8.82	43	7707	3.5524 ug/L #	76
31) 2,2-Dichloropropane	9.05	77	2356	0.1943 ug/L #	43
36) Tetrahydrofuran	9.54	42	591	0.4348 ug/L #	33
49) 1,2-Dichloropropane	11.24	63	6224	0.8399 ug/L	96
62) trans-1,3-Dichloropropene	12.69	75	1147	0.1206 ug/L #	51
79) 1,1,2,2-Tetrachloroethane	15.38	83	36685	6.4255 ug/L #	18

(#) = qualifier out of range (m) = manual integration
11M75200.D 8260WTR.M Wed Jun 15 21:26:12 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75200.D Vial: 9
Acq On : 15 Jun 2011 21:04 Operator: FJB
Sample : WG367610-08 400ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 21:26 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75200.D Vial: 9
Acq On : 15 Jun 2011 21:04 Operator: FJB
Sample : WG367610-08 400ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41:32 2011 Quant Results File: A9WTR.RES

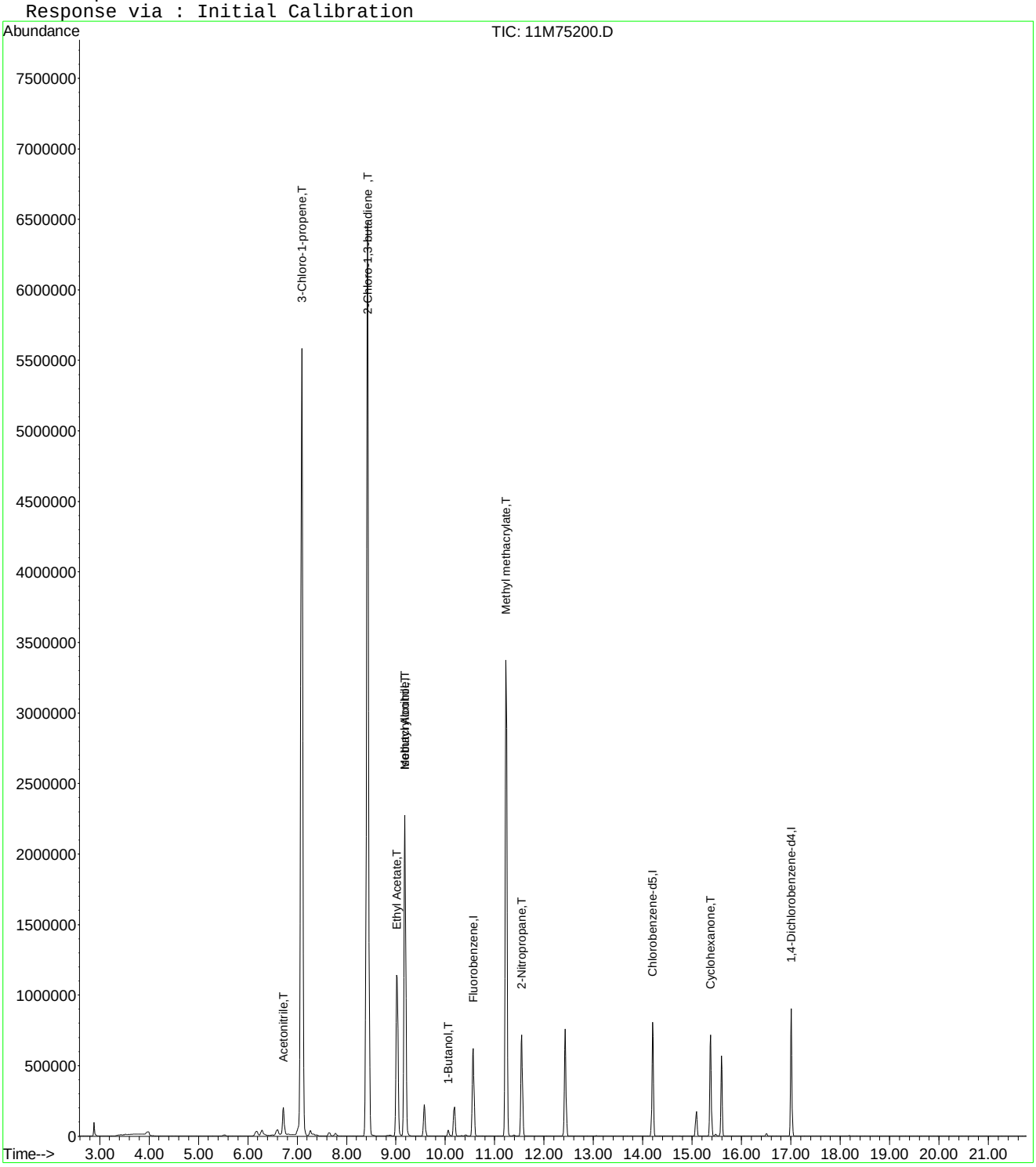
Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	736720	25.00	ug/L		-0.05
13) Chlorobenzene-d5	14.20	117	551313	25.00	ug/L		-0.05
14) 1,4-Dichlorobenzene-d4	17.01	152	300432	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.72	41	258005	303.6003	ug/L		97
3) 3-Chloro-1-propene	7.09	41	5608806	333.5186	ug/L		89
4) 2-Chloro-1,3-butadiene	8.43	53	6148111	338.6509	ug/L		84
6) Methacrylonitrile	9.18	41	1516661	296.3882	ug/L		87
7) Isobutyl Alcohol	9.18	43	130961	293.5700	ug/L		87
8) 1-Butanol	10.06	56	30994	312.2701	ug/L		90
9) Cyclohexanone	15.38	55	377028	996.1740	ug/L	#	90
10) 2-Nitropropane	11.55	43	680873	418.3324	ug/L		96
11) Ethyl Acetate	9.02	43	1909779	288.4161	ug/L		94
12) Methyl methacrylate	11.23	41	2158884	356.8454	ug/L		84

(#) = qualifier out of range (m) = manual integration
11M75200.D A9WTR.M Wed Jun 22 15:41:33 2011 Page 1

Data File : C:\MSDCHEM\1\DATA\061511\11M75200.D Vial: 9
Acq On : 15 Jun 2011 21:04 Operator: FJB
Sample : WG367610-08 400ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75201.D Vial: 10
Acq On : 15 Jun 2011 21:34 Operator: FJB
Sample : WG367610-09 500ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 21:56:58 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

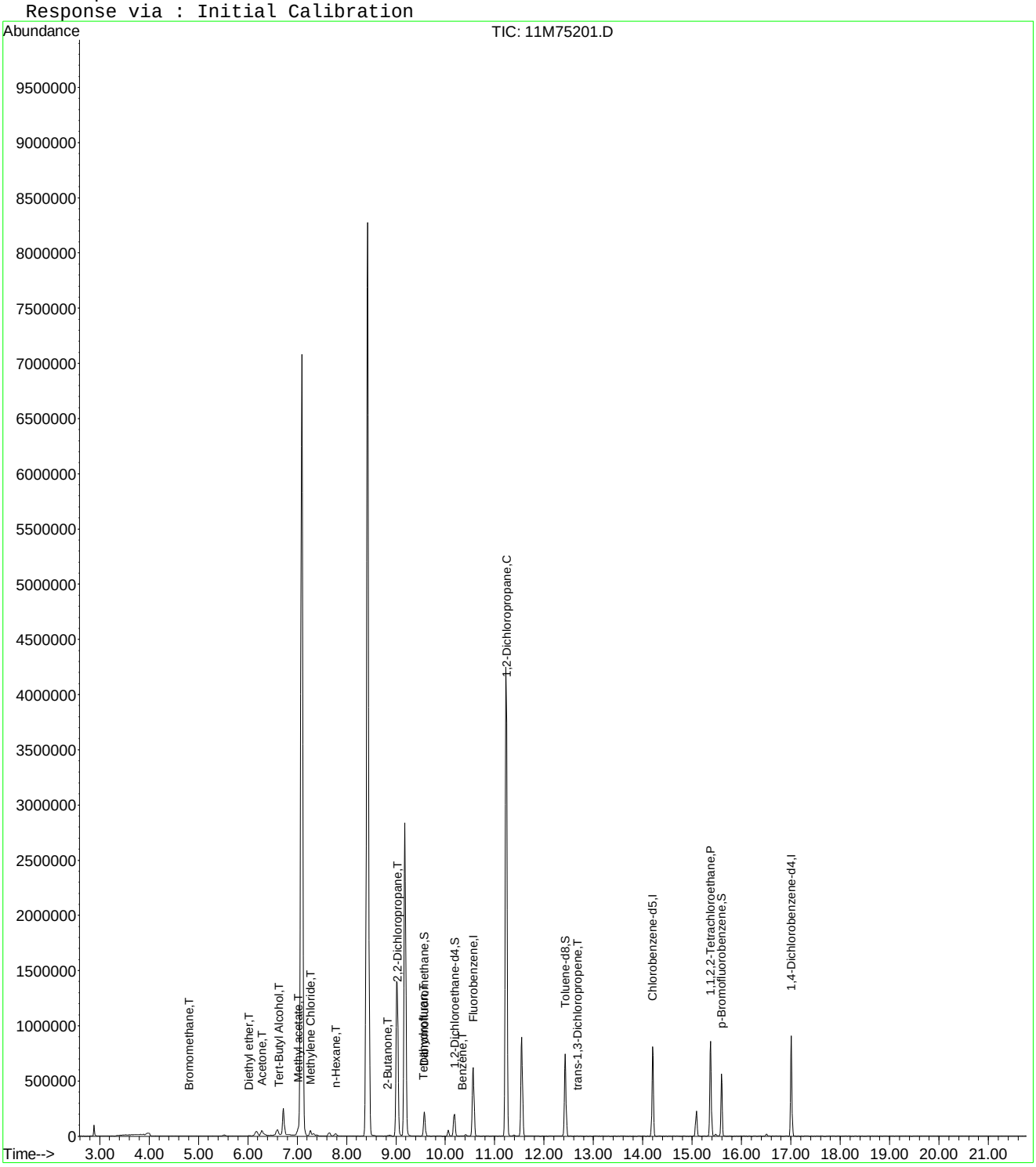
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	737927	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.20	117	560161	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	305654	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.57	111	173444	25.2698	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.08%			
43) 1,2-Dichloroethane-d4	10.18	65	169867	22.9562	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 91.84%			
58) Toluene-d8	12.43	98	643615	25.0422	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.16%			
80) p-Bromofluorobenzene	15.59	95	224911	23.2778	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 93.12%			
Target Compounds						Qvalue
6) Bromomethane	4.81	94	774	0.1524	ug/L	100
9) Diethyl ether	6.02	59	1583	0.2776	ug/L #	48
13) Acetone	6.29	43	88211	59.2539	ug/L	92
15) Tert-Butyl Alcohol	6.63	59	2409	5.0159	ug/L #	1
18) Methyl acetate	7.02	43	135763	31.1078	ug/L	98
19) Methylene Chloride	7.27	84	28680	3.8827	ug/L	91
24) n-Hexane	7.79	57	19330	2.2340	ug/L #	95
29) 2-Butanone	8.83	43	8696	4.0017	ug/L	86
31) 2,2-Dichloropropane	9.04	77	2304	0.1897	ug/L	82
36) Tetrahydrofuran	9.55	42	656	0.4819	ug/L #	33
46) Benzene	10.34	78	4136	0.1396	ug/L	87
49) 1,2-Dichloropropane	11.24	63	8595	1.1580	ug/L	96
62) trans-1,3-Dichloropropene	12.68	75	1259	0.1303	ug/L #	51
79) 1,1,2,2-Tetrachloroethane	15.38	83	44019	7.5784	ug/L #	18

(#) = qualifier out of range (m) = manual integration
11M75201.D 8260WTR.M Wed Jun 15 21:56:59 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75201.D Vial: 10
Acq On : 15 Jun 2011 21:34 Operator: FJB
Sample : WG367610-09 500ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 21:56 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75201.D Vial: 10
Acq On : 15 Jun 2011 21:34 Operator: FJB
Sample : WG367610-09 500ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41:33 2011 Quant Results File: A9WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

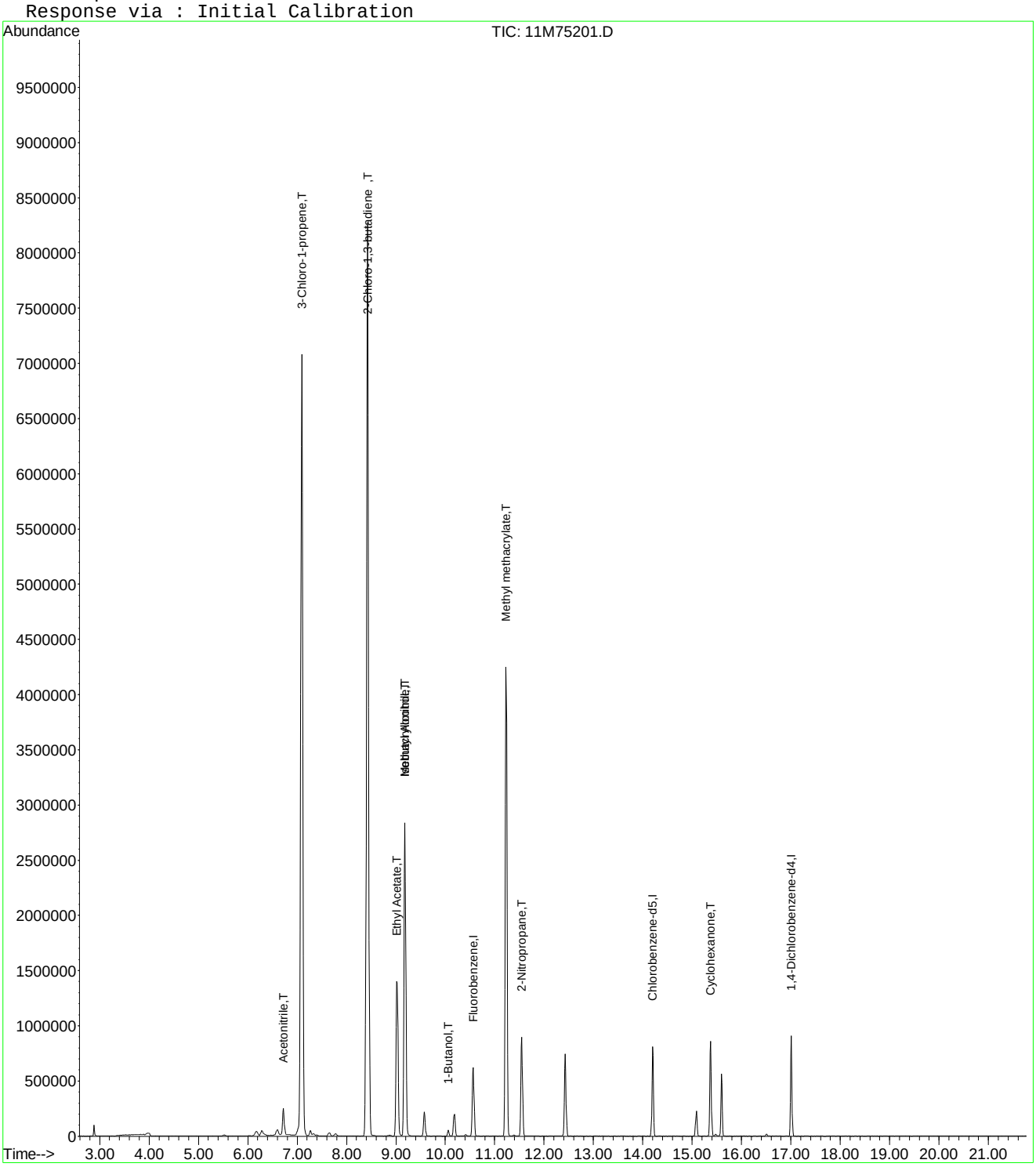
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	737927	25.00	ug/L		-0.05
13) Chlorobenzene-d5	14.20	117	560161	25.00	ug/L		-0.05
14) 1,4-Dichlorobenzene-d4	17.01	152	305654	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.72	41	320366	376.3653	ug/L		98
3) 3-Chloro-1-propene	7.09	41	7096985	421.3204	ug/L		89
4) 2-Chloro-1,3-butadiene	8.43	53	7803154	429.1111	ug/L		84
6) Methacrylonitrile	9.18	41	1891988	369.1305	ug/L		88
7) Isobutyl Alcohol	9.18	43	155897	348.8964	ug/L		84
8) 1-Butanol	10.06	56	36079	362.9078	ug/L	#	85
9) Cyclohexanone	15.38	55	452453	1193.5047	ug/L	#	89
10) 2-Nitropropane	11.55	43	859779	527.3892	ug/L		97
11) Ethyl Acetate	9.02	43	2371219	357.5173	ug/L		94
12) Methyl methacrylate	11.23	41	2723726	449.4727	ug/L		84

(#) = qualifier out of range (m) = manual integration
11M75201.D A9WTR.M Wed Jun 22 15:41:34 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75201.D Vial: 10
Acq On : 15 Jun 2011 21:34 Operator: FJB
Sample : WG367610-09 500ug/L STD A9FOO Inst : HPMS11
Misc : 1,1 STD45988 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:41 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:41:05 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75203.D Vial: 12
Acq On : 15 Jun 2011 22:36 Operator: FJB
Sample : WG367610-10 100ug/L ALT SRC A9FOO Inst : HPMS11
Misc : 1,1 STD45989 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 22:58:26 2011 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

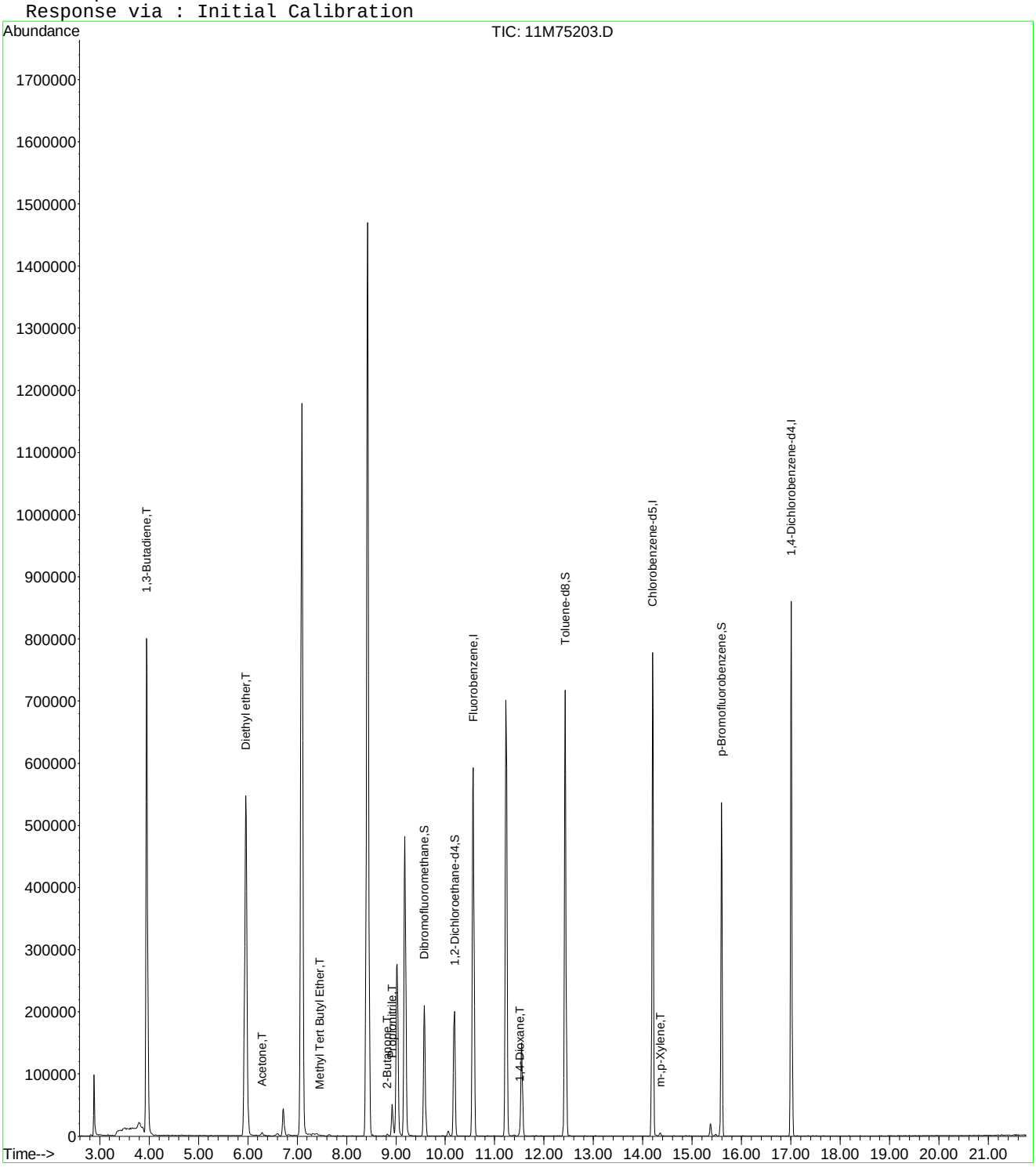
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	710406	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.20	117	534299	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.01	152	292131	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.57	111	167719	25.3823	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.52%			
43) 1,2-Dichloroethane-d4	10.18	65	169599	23.8079	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 95.24%			
58) Toluene-d8	12.43	98	616193	25.1357	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.56%			
80) p-Bromofluorobenzene	15.59	95	212427	23.0035	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 92.00%			
Target Compounds						Qvalue
5) 1,3-Butadiene	3.95	54	494969	94.9023	ug/L	93
9) Diethyl ether	5.96	59	581571	105.9356	ug/L	97
13) Acetone	6.29	43	9729	6.7884	ug/L	100
22) Methyl Tert Butyl Ether	7.45	73	3482	0.1868	ug/L #	53
29) 2-Butanone	8.82	43	5044	2.4110	ug/L	87
30) Propionitrile	8.92	54	62727	99.7547	ug/L	97
50) 1,4-Dioxane	11.51	88	6296	142.7658	ug/L	73
73) m-,p-Xylene	14.35	106	2583	0.1999	ug/L	93

(#) = qualifier out of range (m) = manual integration
11M75203.D 8260WTR.M Wed Jun 15 22:58:27 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\061511\11M75203.D Vial: 12
Acq On : 15 Jun 2011 22:36 Operator: FJB
Sample : WG367610-10 100ug/L ALT SRC A9FOO Inst : HPMS11
Misc : 1,1 STD45989 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 15 22:58 2011 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/05/11 HPMS11
Last Update : Mon Jun 13 08:21:32 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\061511\11M75203.D Vial: 12
Acq On : 15 Jun 2011 22:36 Operator: FJB
Sample : WG367610-10 100ug/L ALT SRC A9FOO Inst : HPMS11
Misc : 1,1 STD45989 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:54:02 2011 Quant Results File: A9WTR.RES

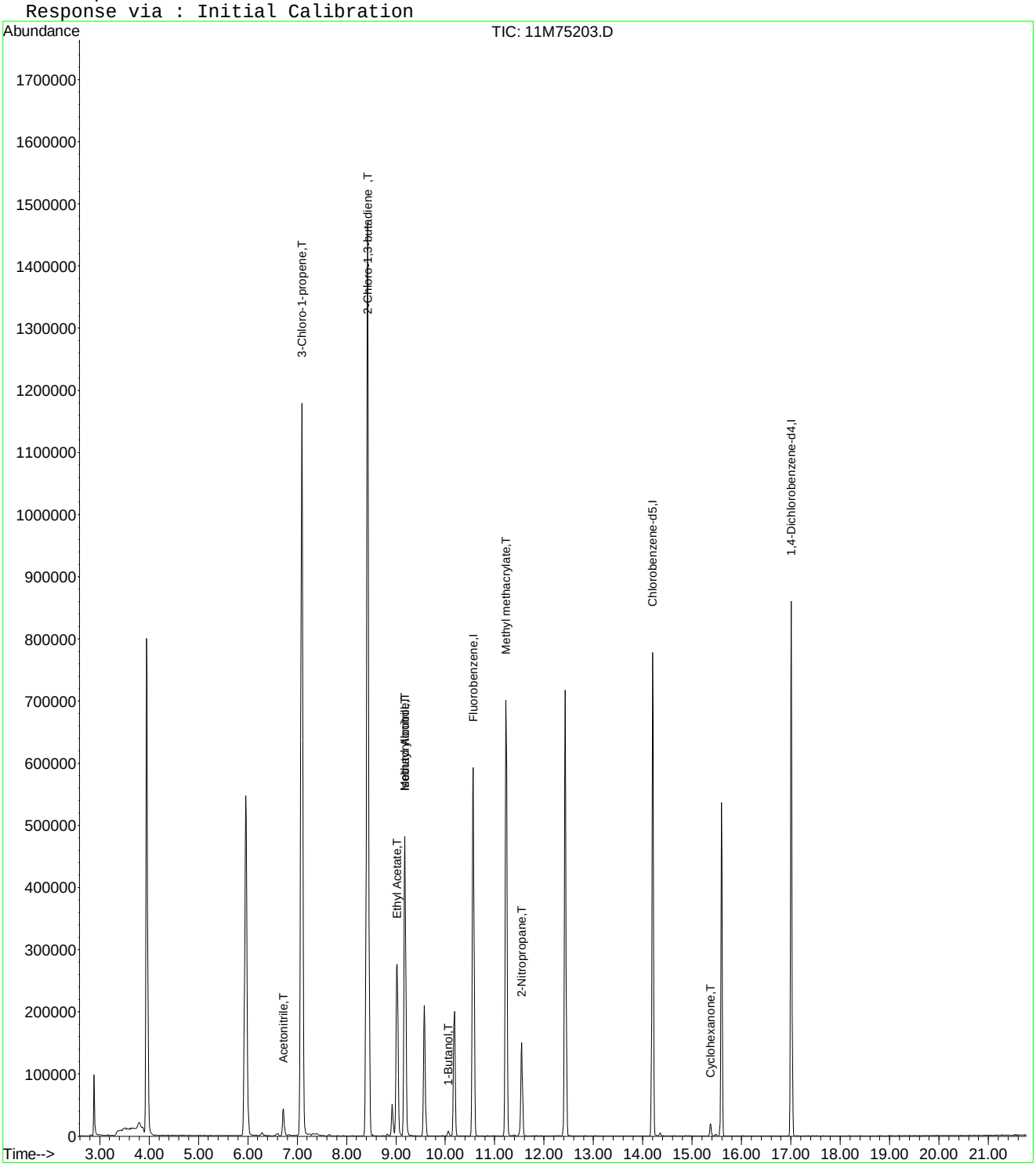
Quant Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:51:11 2011
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	710406	25.00	ug/L	0.00
12) Chlorobenzene-d5	14.20	117	534299	25.00	ug/L	0.00
13) 1,4-Dichlorobenzene-d4	17.01	152	292131	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.72	41	57689	93.3783	ug/L	97
3) 3-Chloro-1-propene	7.09	41	1175168	96.1944	ug/L	100
4) 2-Chloro-1,3-butadiene	8.43	53	1407878	104.8822	ug/L	100
5) Methacrylonitrile	9.18	41	326494	93.5133	ug/L	100
6) Isobutyl Alcohol	9.18	43	29059	96.6986	ug/L	93
7) 1-Butanol	10.06	56	6439	87.7972	ug/L	92
8) Cyclohexanone	15.38	55	11444	13.8195	ug/L	95
9) 2-Nitropropane	11.55	43	139504	94.9985	ug/L	100
10) Ethyl Acetate	9.03	43	463692	103.3904	ug/L	99
11) Methyl methacrylate	11.23	41	445181	95.2211	ug/L	100

(#) = qualifier out of range (m) = manual integration
11M75203.D A9WTR.M Wed Jun 22 15:54:03 2011 Page 1

Data File : C:\MSDCHEM\1\DATA\061511\11M75203.D Vial: 12
Acq On : 15 Jun 2011 22:36 Operator: FJB
Sample : WG367610-10 100ug/L ALT SRC A9FOO Inst : HPMS11
Misc : 1,1 STD45989 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 22 15:54 2011 Quant Results File: A9WTR.RES

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:51:11 2011
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\061511\11M75203.D Vial: 12
Acq On : 15 Jun 2011 22:36 Operator: FJB
Sample : WG367610-10 100ug/L ALT SRC A9FOO Inst : HPMS11
Misc : 1,1 STD45989 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\A9WTR.M (RTE Integrator)
Title : Appendix IX (SOP:OVL MSV01) Water 06/15/11 HPMS11
Last Update : Wed Jun 22 15:51:11 2011
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	100	0.00
2	T	Acetonitrile	100.0000	93.3783	6.6	89	0.00
3	T	3-Chloro-1-propene	100.0000	96.1944	3.8	95	0.00
4	T	2-Chloro-1,3-butadiene	100.0000	104.8822	-4.9	105	0.00
5	T	Methacrylonitrile	100.0000	93.5133	6.5	91	0.00
6	T	Isobutyl Alcohol	100.0000	96.6986	3.3	98	0.00
7	T	1-Butanol	100.0000	87.7972	12.2	91	0.00
8	T	Cyclohexanone	100.0000	13.8195	86.2#	13	0.00
9	T	2-Nitropropane	100.0000	94.9985	5.0	91	0.00
10	T	Ethyl Acetate	100.0000	103.3904	-3.4	100	0.01
11	T	Methyl methacrylate	100.0000	95.2211	4.8	92	0.00
12	I	Chlorobenzene-d5	25.0000	25.0000	0.0	100	0.00
13	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M75203.D A9WTR.M Wed Jun 22 15:54:06 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83330.D Vial: 2
Acq On : 3 May 2012 17:01 Operator: ADC
Sample : WG396851-02 0.3ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:10 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	603349	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	458535	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	228662	25.00	ug/L	0.01
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
5) 1,3-Butadiene	3.62	54	2147	0.3206	ug/L	88
13) Acetone	6.04	43	245	Below Cal #		45
14) 1,1-Dichloroethene	6.26	61	2850	0.3112	ug/L	92
19) Methylene Chloride	7.01	84	2172	0.3337	ug/L	84
22) Methyl Tert Butyl Ether	7.24	73	4165	0.2739	ug/L	87
23) trans-1,2-Dichloroethene	7.44	96	2143	0.3277	ug/L	75
27) 1,1-Dichloroethane	8.04	63	3474	0.3170	ug/L #	83
31) 2,2-Dichloropropane	8.78	77	3003	0.3391	ug/L #	56
32) cis-1,2-Dichloroethene	8.84	96	1978	0.2791	ug/L	95
33) Chloroform	9.05	83	3456	0.2983	ug/L	92
35) Bromochloromethane	9.26	130	852	0.1893	ug/L #	61
38) 1,1,1-Trichloroethane	9.55	97	3120	0.2871	ug/L #	78
40) 1,1-Dichloropropene	9.74	75	2539	0.2938	ug/L	98
41) Carbon Tetrachloride	9.88	117	2863	0.5677	ug/L #	84
45) 1,2-Dichloroethane	10.04	62	2374	0.2915	ug/L #	57
46) Benzene	10.07	78	8253	0.3269	ug/L	98
47) Trichloroethene	10.78	130	3634	0.4390	ug/L	96
49) 1,2-Dichloropropane	10.98	63	1728	0.2973	ug/L #	67
51) Bromodichloromethane	11.27	83	2291	0.2880	ug/L #	89
52) Dibromomethane	11.34	93	870	0.4493	ug/L	96
55) cis-1,3-Dichloropropene	11.86	75	2340	0.2554	ug/L	99
59) Toluene	12.26	91	8764	0.3178	ug/L	98
62) trans-1,3-Dichloropropene	12.42	75	1727	0.2336	ug/L #	49
63) 1,1,2-Trichloroethane	12.62	97	1049	0.2303	ug/L	97
65) 1,3-Dichloropropane	12.91	76	2278	0.2977	ug/L	74
66) Tetrachloroethene	13.04	164	1419	0.2511	ug/L	76
67) Dibromochloromethane	13.28	129	1202	0.4376	ug/L	85
68) 1,2-Dibromoethane	13.51	107	871	0.1846	ug/L	69
70) Chlorobenzene	13.99	112	5942	0.3237	ug/L	88
71) 1,1,1,2-Tetrachloroethane	14.01	131	1323	0.4387	ug/L	79
72) Ethylbenzene	14.01	106	2851	0.2862	ug/L	90
73) m-,p-Xylene	14.09	106	7915	0.6434	ug/L	95
74) o-Xylene	14.62	106	3949	0.3295	ug/L	85
75) Styrene	14.65	104	5406	0.2835	ug/L	98
76) Bromoform	15.12	173	237	0.4125	ug/L #	28
77) Isopropylbenzene	15.01	105	8925	0.3163	ug/L	99
79) 1,1,2,2-Tetrachloroethane	15.22	83	984	0.2417	ug/L	82
81) 1,2,3-Trichloropropane	15.39	110	198	0.1607	ug/L	95
83) n-Propylbenzene	15.49	91	9668	0.3250	ug/L	95
84) Bromobenzene	15.60	156	2047	0.2880	ug/L	94

(#) = qualifier out of range (m) = manual integration
11M83330.D 8260WTR.M Fri May 04 08:37:11 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83330.D Vial: 2
Acq On : 3 May 2012 17:01 Operator: ADC
Sample : WG396851-02 0.3ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:10 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

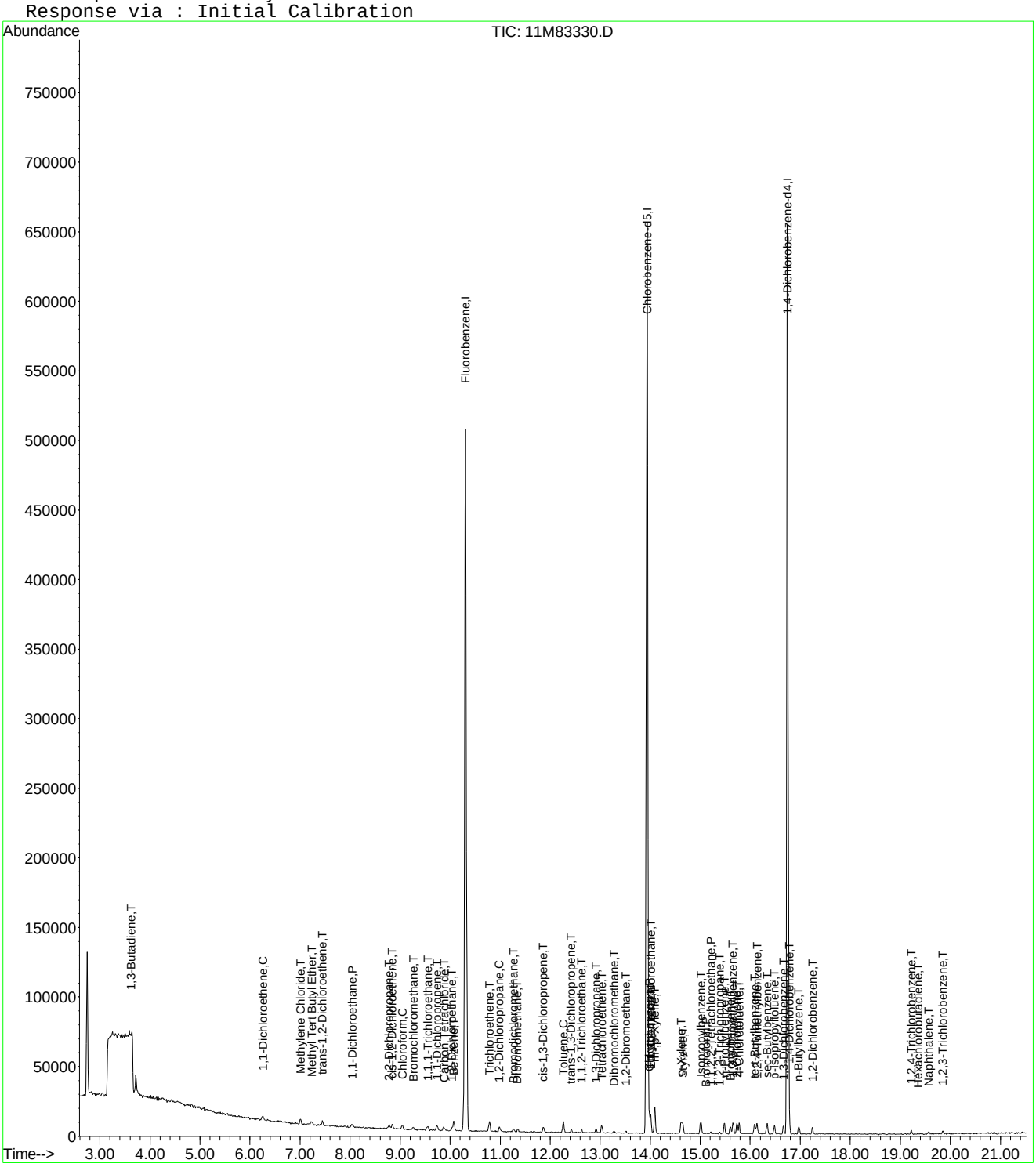
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	1,3,5-Trimethylbenzene	15.65	105	6558	0.2968	ug/L		95
86)	2-Chlorotoluene	15.74	91	6610	0.3304	ug/L		95
87)	4-Chlorotoluene	15.78	91	5834	0.3332	ug/L		93
89)	tert-Butylbenzene	16.09	134	1267	0.2635	ug/L		70
90)	1,2,4-Trimethylbenzene	16.14	105	7433	0.3233	ug/L		92
91)	sec-Butylbenzene	16.34	105	8643	0.3350	ug/L		96
92)	p-Isopropyltoluene	16.48	119	6527	0.2949	ug/L		92
93)	1,3-Dichlorobenzene	16.67	146	3911	0.2806	ug/L		99
94)	1,4-Dichlorobenzene	16.78	146	4300	0.3030	ug/L	#	1
95)	n-Butylbenzene	16.97	91	5178	0.3071	ug/L	#	91
96)	1,2-Dichlorobenzene	17.25	146	3542	0.2803	ug/L		98
98)	1,2,4-Trichlorobenzene	19.22	180	1737	0.2431	ug/L	#	66
99)	Hexachlorobutadiene	19.36	225	747	0.5063	ug/L	#	21
100)	Naphthalene	19.56	128	2836	0.4281	ug/L	#	72
101)	1,2,3-Trichlorobenzene	19.84	180	1338	0.2004	ug/L	#	76

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83330.D Vial: 2
Acq On : 3 May 2012 17:01 Operator: ADC
Sample : WG396851-02 0.3ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83331.D Vial: 3
Acq On : 3 May 2012 17:32 Operator: ADC
Sample : WG396851-03 0.4ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:12 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.31	96	549265	25.00 ug/L	0.00
57) Chlorobenzene-d5	13.94	117	422702	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	216998	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	3.05	85	2902	0.4094 ug/L #	68
3) Chloromethane	3.49	50	4642	0.3814 ug/L #	42
4) Vinyl Chloride	3.70	62	3675	0.3610 ug/L	99
6) Bromomethane	4.57	94	1529	0.3917 ug/L	97
7) Chloroethane	4.73	64	1468	0.3500 ug/L #	43
8) Trichlorofluoromethane	5.19	101	4591	0.3877 ug/L	96
10) Isoprene	5.75	67	3146	0.3414 ug/L	76
12) 1,1,2-Trichloro-1,2,2-Trif	5.97	101	1850	0.3013 ug/L	95
13) Acetone	6.05	43	195	Below Cal #	45
14) 1,1-Dichloroethene	6.26	61	2847	0.3415 ug/L	91
16) Dimethyl Sulfide	6.50	62	2704	0.3960 ug/L	88
17) Iodomethane	6.74	142	1360	0.5060 ug/L #	60
19) Methylene Chloride	7.01	84	2526	0.4263 ug/L	93
20) Carbon Disulfide	7.04	76	6446	0.3792 ug/L #	85
22) Methyl Tert Butyl Ether	7.23	73	5372	0.3880 ug/L #	68
23) trans-1,2-Dichloroethene	7.43	96	1970	0.3309 ug/L	77
24) n-Hexane	7.52	57	2394	0.3981 ug/L #	63
27) 1,1-Dichloroethane	8.04	63	4009	0.4019 ug/L #	64
31) 2,2-Dichloropropane	8.79	77	2974	0.3689 ug/L #	42
32) cis-1,2-Dichloroethene	8.84	96	2390	0.3705 ug/L	87
33) Chloroform	9.04	83	3988	0.3781 ug/L	85
35) Bromochloromethane	9.26	130	1405	0.3428 ug/L	94
38) 1,1,1-Trichloroethane	9.55	97	3518	0.3556 ug/L #	75
39) Cyclohexane	9.59	56	2851	0.3577 ug/L	93
40) 1,1-Dichloropropene	9.74	75	2732	0.3473 ug/L	85
41) Carbon Tetrachloride	9.86	117	2389	0.5471 ug/L #	76
45) 1,2-Dichloroethane	10.04	62	2697	0.3637 ug/L #	75
46) Benzene	10.07	78	9082	0.3951 ug/L	94
47) Trichloroethene	10.78	130	3274	0.4345 ug/L	96
48) Methylcyclohexane	10.86	83	2735	0.3467 ug/L	88
49) 1,2-Dichloropropane	10.98	63	1959	0.3702 ug/L	73
51) Bromodichloromethane	11.27	83	2321	0.3205 ug/L #	94
52) Dibromomethane	11.35	93	686	0.4195 ug/L #	14
55) cis-1,3-Dichloropropene	11.86	75	2909	0.3487 ug/L	93
56) Dimethyl Disulfide	12.12	79	638	1.0191 ug/L	83
59) Toluene	12.26	91	10107	0.3975 ug/L	89
60) Ethyl Methacrylate	12.36	69	1513	0.8605 ug/L	77
62) trans-1,3-Dichloropropene	12.43	75	2477	0.3634 ug/L #	64
63) 1,1,2-Trichloroethane	12.62	97	1468	0.3496 ug/L	96
65) 1,3-Dichloropropane	12.91	76	2607	0.3696 ug/L	85

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83331.D Vial: 3
Acq On : 3 May 2012 17:32 Operator: ADC
Sample : WG396851-03 0.4ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:12 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

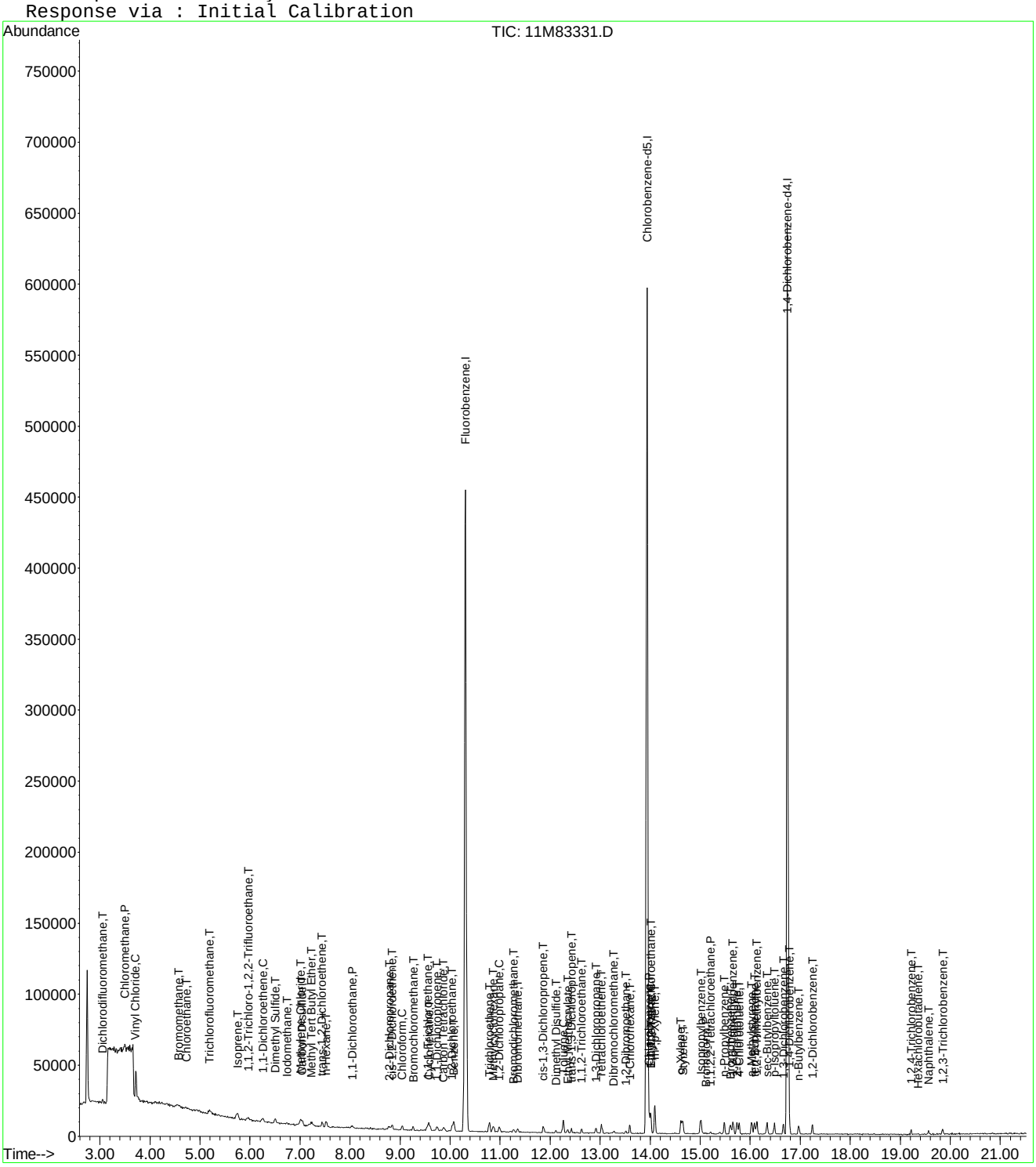
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
66)	Tetrachloroethene	13.03	164	1542	0.2960	ug/L		69
67)	Dibromochloromethane	13.27	129	1559	0.5165	ug/L		99
68)	1,2-Dibromoethane	13.51	107	1528	0.3514	ug/L		91
69)	1-Chlorohexane	13.60	91	2326	0.3191	ug/L		85
70)	Chlorobenzene	13.98	112	6136	0.3626	ug/L		98
71)	1,1,1,2-Tetrachloroethane	14.01	131	1421	0.4723	ug/L		81
72)	Ethylbenzene	14.01	106	3067	0.3340	ug/L		86
73)	m-,p-Xylene	14.09	106	8481	0.7478	ug/L		90
74)	o-Xylene	14.61	106	4007	0.3627	ug/L		98
75)	Styrene	14.65	104	6355	0.3615	ug/L		95
76)	Bromoform	15.12	173	560	0.5236	ug/L	#	28
77)	Isopropylbenzene	15.01	105	9010	0.3464	ug/L		96
79)	1,1,2,2-Tetrachloroethane	15.21	83	1419	0.3674	ug/L		83
83)	n-Propylbenzene	15.48	91	10456	0.3703	ug/L		90
84)	Bromobenzene	15.60	156	2604	0.3861	ug/L		64
85)	1,3,5-Trimethylbenzene	15.65	105	7524	0.3588	ug/L		99
86)	2-Chlorotoluene	15.74	91	7308	0.3849	ug/L		100
87)	4-Chlorotoluene	15.78	91	6058	0.3646	ug/L		98
88)	a-Methylstyrene	16.03	118	3825	0.3276	ug/L		91
89)	tert-Butylbenzene	16.09	134	1625	0.3561	ug/L		81
90)	1,2,4-Trimethylbenzene	16.13	105	7548	0.3460	ug/L		96
91)	sec-Butylbenzene	16.34	105	8328	0.3402	ug/L		100
92)	p-Isopropyltoluene	16.48	119	6955	0.3311	ug/L		87
93)	1,3-Dichlorobenzene	16.67	146	5234	0.3956	ug/L		85
94)	1,4-Dichlorobenzene	16.78	146	5094	0.3783	ug/L	#	13
95)	n-Butylbenzene	16.97	91	5025	0.3140	ug/L	#	93
96)	1,2-Dichlorobenzene	17.25	146	4607	0.3842	ug/L		95
98)	1,2,4-Trichlorobenzene	19.22	180	2398	0.3536	ug/L	#	60
99)	Hexachlorobutadiene	19.36	225	491	0.4257	ug/L	#	47
100)	Naphthalene	19.56	128	3723	0.4988	ug/L	#	72
101)	1,2,3-Trichlorobenzene	19.85	180	2196	0.3466	ug/L		80

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83331.D Vial: 3
Acq On : 3 May 2012 17:32 Operator: ADC
Sample : WG396851-03 0.4ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83332.D Vial: 4
Acq On : 3 May 2012 18:02 Operator: ADC
Sample : WG396851-04 1ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:13 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	534064	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	410761	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	209178	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.33	111	3612	0.5550	ug/L	0.01
Spiked Amount 25.000	Range 86 - 118		Recovery =	2.24%#		
43) 1,2-Dichloroethane-d4	9.93	65	3770	0.6054	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery =	2.44%#		
58) Toluene-d8	12.17	98	12642	0.5835	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	2.32%#		
80) p-Bromofluorobenzene	15.33	95	4012	0.5803	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	2.32%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.05	85	7319	1.0620	ug/L	93
3) Chloromethane	3.48	50	12577	1.0626	ug/L	96
4) Vinyl Chloride	3.70	62	14477	1.1317	ug/L	99
5) 1,3-Butadiene	3.75	54	8464	1.4280	ug/L	80
6) Bromomethane	4.57	94	4210	1.1092	ug/L	97
7) Chloroethane	4.71	64	4336	1.0631	ug/L	87
8) Trichlorofluoromethane	5.20	101	11279	0.9795	ug/L	92
9) Diethyl ether	5.71	59	19078	4.6934	ug/L	97
10) Isoprene	5.75	67	9229	1.0301	ug/L	91
11) Acrolein	5.93	56	207	0.7332	ug/L #	13
12) 1,1,2-Trichloro-1,2,2-Trif	5.95	101	6048	1.0129	ug/L	100
13) Acetone	6.04	43	1576	0.7690	ug/L #	45
14) 1,1-Dichloroethene	6.26	61	7901	0.9746	ug/L	96
15) Tert-Butyl Alcohol	6.36	59	1735	6.4423	ug/L #	59
16) Dimethyl Sulfide	6.50	62	6695	1.0083	ug/L	99
17) Iodomethane	6.74	142	5516	1.0109	ug/L	97
18) Methyl acetate	6.76	43	3606	1.0454	ug/L #	74
19) Methylene Chloride	7.01	84	5966	1.0354	ug/L	93
20) Carbon Disulfide	7.05	76	16752	1.0136	ug/L	98
21) Acrylonitrile	7.19	53	924	0.7852	ug/L	97
22) Methyl Tert Butyl Ether	7.23	73	13880	1.0311	ug/L	94
23) trans-1,2-Dichloroethene	7.44	96	5867	1.0136	ug/L	98
24) n-Hexane	7.52	57	5560	0.9508	ug/L #	76
25) Diisopropyl ether	7.86	45	80883	4.7711	ug/L	98
26) Vinyl Acetate	8.00	43	1526	3.0165	ug/L #	70
27) 1,1-Dichloroethane	8.04	63	9199	0.9484	ug/L #	91
28) Ethyl-Tert-Butyl ether	8.41	59	78234	4.7262	ug/L	100
29) 2-Butanone	8.57	43	1293	0.9408	ug/L #	49
30) Propionitrile	8.67	54	1733	4.2728	ug/L #	60
31) 2,2-Dichloropropane	8.79	77	7802	0.9952	ug/L	88
32) cis-1,2-Dichloroethene	8.85	96	6173	0.9842	ug/L	96
33) Chloroform	9.04	83	10622	1.0358	ug/L	100
34) 1-Bromopropane	9.17	122	859	0.7323	ug/L	85
35) Bromochloromethane	9.25	130	3819	0.9584	ug/L	95
36) Tetrahydrofuran	9.29	42	4411	4.9451	ug/L	93
38) 1,1,1-Trichloroethane	9.55	97	9481	0.9856	ug/L #	97
39) Cyclohexane	9.58	56	7789	1.0050	ug/L	98
40) 1,1-Dichloropropene	9.73	75	7631	0.9976	ug/L	100
41) Carbon Tetrachloride	9.86	117	7454	1.0454	ug/L	96
42) Tert-Amyl-Methyl ether	9.83	73	70273	4.6433	ug/L #	99

(#) = qualifier out of range (m) = manual integration
11M83332.D 8260WTR.M Fri May 04 08:37:14 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83332.D Vial: 4
Acq On : 3 May 2012 18:02 Operator: ADC
Sample : WG396851-04 1ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:13 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

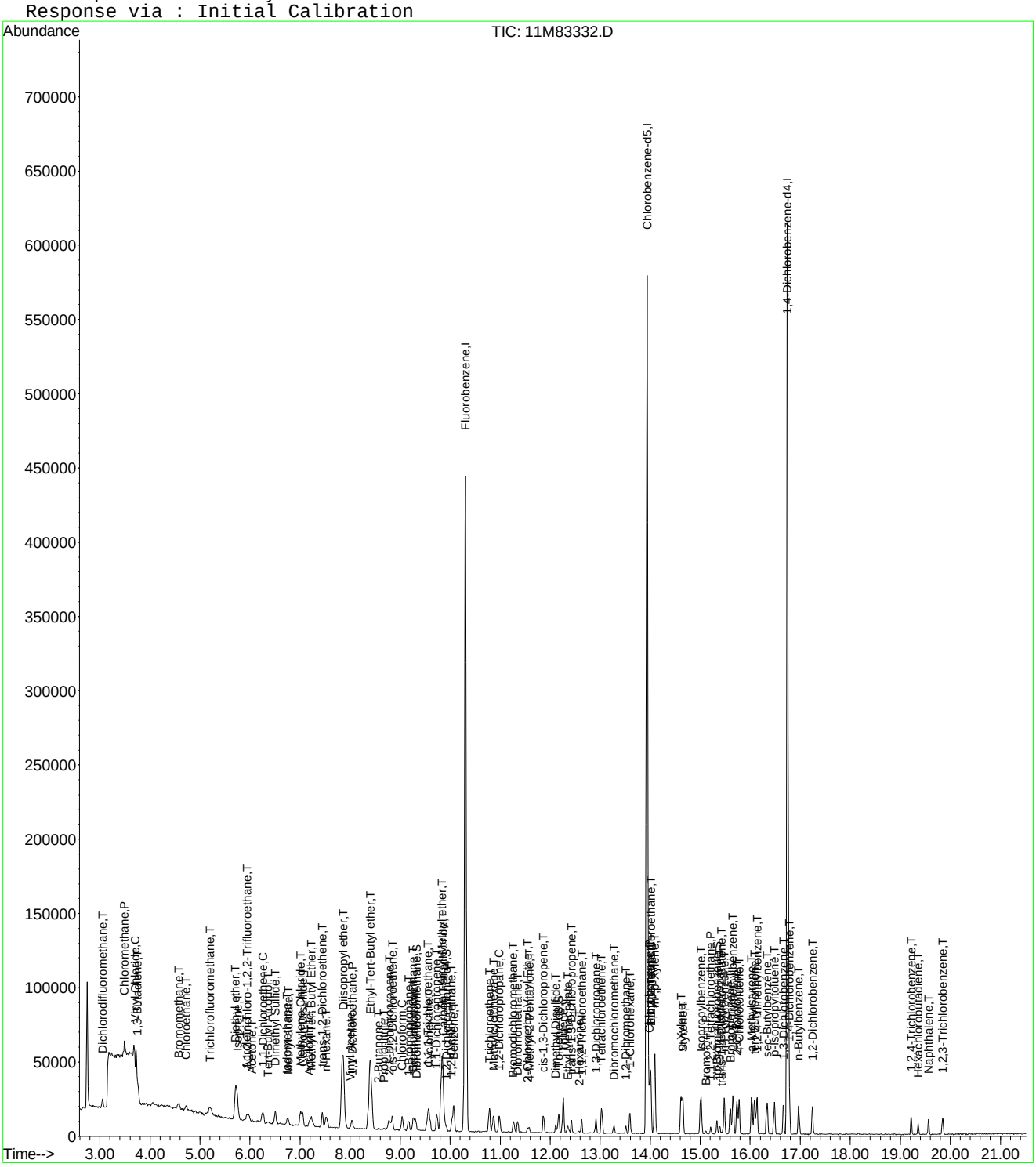
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45)	1,2-Dichloroethane	10.03	62	7319	1.0152 ug/L		94
46)	Benzene	10.07	78	22548	1.0090 ug/L		96
47)	Trichloroethene	10.78	130	7722	1.0539 ug/L		95
48)	Methylcyclohexane	10.87	83	7687	1.0021 ug/L		98
49)	1,2-Dichloropropane	10.98	63	5252	1.0209 ug/L		88
51)	Bromodichloromethane	11.26	83	6552	0.9304 ug/L	#	93
52)	Dibromomethane	11.35	93	2815	1.0407 ug/L		92
53)	2-Chloroethyl Vinyl Ether	11.55	63	1611	0.7341 ug/L	#	44
54)	4-Methyl-2-Pentanone	11.58	58	785	0.6531 ug/L	#	50
55)	cis-1,3-Dichloropropene	11.87	75	7574	0.9338 ug/L		94
56)	Dimethyl Disulfide	12.11	79	2068	1.3522 ug/L		99
59)	Toluene	12.26	91	23197	0.9389 ug/L		95
60)	Ethyl Methacrylate	12.36	69	3766	1.2956 ug/L		94
62)	trans-1,3-Dichloropropene	12.43	75	5796	0.8750 ug/L		92
63)	1,1,2-Trichloroethane	12.64	97	4310	1.0561 ug/L		95
64)	2-Hexanone	12.58	43	2106	1.0206 ug/L	#	75
65)	1,3-Dichloropropane	12.91	76	6701	0.9775 ug/L		95
66)	Tetrachloroethene	13.03	164	4982	0.9842 ug/L		93
67)	Dibromochloromethane	13.28	129	3954	0.9555 ug/L		97
68)	1,2-Dibromoethane	13.51	107	4250	1.0057 ug/L		97
69)	1-Chlorohexane	13.60	91	6867	0.9695 ug/L		99
70)	Chlorobenzene	13.99	112	15766	0.9587 ug/L		98
71)	1,1,1,2-Tetrachloroethane	14.01	131	4630	1.0287 ug/L		100
72)	Ethylbenzene	14.01	106	8536	0.9565 ug/L		96
73)	m-,p-Xylene	14.09	106	20303	1.8423 ug/L		98
74)	o-Xylene	14.62	106	9693	0.9029 ug/L		93
75)	Styrene	14.65	104	15602	0.9134 ug/L		96
76)	Bromoform	15.12	173	1782	0.9374 ug/L		95
77)	Isopropylbenzene	15.01	105	24398	0.9653 ug/L		99
79)	1,1,2,2-Tetrachloroethane	15.21	83	3395	0.9118 ug/L		90
81)	1,2,3-Trichloropropane	15.39	110	1050	0.9317 ug/L		62
82)	trans-1,4-Dichloro-2-Buten	15.43	53	187	1.7318 ug/L	#	1
83)	n-Propylbenzene	15.48	91	26870	0.9873 ug/L		99
84)	Bromobenzene	15.60	156	6390	0.9828 ug/L		66
85)	1,3,5-Trimethylbenzene	15.65	105	19712	0.9752 ug/L		97
86)	2-Chlorotoluene	15.74	91	18038	0.9855 ug/L		97
87)	4-Chlorotoluene	15.78	91	16095	1.0048 ug/L		99
88)	a-Methylstyrene	16.03	118	10366	0.9209 ug/L		97
89)	tert-Butylbenzene	16.09	134	4034	0.9171 ug/L		84
90)	1,2,4-Trimethylbenzene	16.14	105	18899	0.8987 ug/L		99
91)	sec-Butylbenzene	16.34	105	23274	0.9862 ug/L		98
92)	p-Isopropyltoluene	16.48	119	18989	0.9377 ug/L		97
93)	1,3-Dichlorobenzene	16.67	146	11949	0.9370 ug/L		100
94)	1,4-Dichlorobenzene	16.78	146	12277	0.9458 ug/L	#	68
95)	n-Butylbenzene	16.97	91	14655	0.9501 ug/L		96
96)	1,2-Dichlorobenzene	17.25	146	11011	0.9527 ug/L		98
98)	1,2,4-Trichlorobenzene	19.22	180	5969	0.9132 ug/L		99
99)	Hexachlorobutadiene	19.36	225	2297	1.1255 ug/L		96
100)	Naphthalene	19.56	128	11059	1.0294 ug/L	#	93
101)	1,2,3-Trichlorobenzene	19.84	180	5374	0.8798 ug/L		87

(#) = qualifier out of range (m) = manual integration
11M83332.D 8260WTR.M Fri May 04 08:37:14 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83332.D Vial: 4
Acq On : 3 May 2012 18:02 Operator: ADC
Sample : WG396851-04 1ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83333.D Vial: 5
Acq On : 3 May 2012 18:33 Operator: ADC
Sample : WG396851-05 2ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:14 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	518293	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	398843	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	209309	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	6316	1.0000	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	4.00%#		
43) 1,2-Dichloroethane-d4	9.93	65	5891	0.9748	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery =	3.88%#		
58) Toluene-d8	12.17	98	20839	0.9905	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	3.96%#		
80) p-Bromofluorobenzene	15.33	95	6864	0.9921	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	3.96%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.05	85	12736	1.9043	ug/L	100
3) Chloromethane	3.48	50	22761	1.9816	ug/L #	74
4) Vinyl Chloride	3.70	62	23042	1.7901	ug/L	98
5) 1,3-Butadiene	3.74	54	20696	3.5980	ug/L	81
6) Bromomethane	4.57	94	7327	1.9892	ug/L	100
7) Chloroethane	4.72	64	8046	2.0328	ug/L	86
8) Trichlorofluoromethane	5.19	101	21370	1.9123	ug/L	99
9) Diethyl ether	5.71	59	94149	23.8666	ug/L	100
10) Isoprene	5.75	67	16600	1.9092	ug/L	96
11) Acrolein	5.95	56	475	1.7336	ug/L	70
12) 1,1,2-Trichloro-1,2,2-Trif	5.96	101	11562	1.9953	ug/L	97
13) Acetone	6.03	43	2653	1.9616	ug/L #	45
14) 1,1-Dichloroethene	6.26	61	15337	1.9494	ug/L	100
15) Tert-Butyl Alcohol	6.37	59	10628	40.6643	ug/L #	91
16) Dimethyl Sulfide	6.50	62	12407	1.9254	ug/L	97
17) Iodomethane	6.75	142	12634	1.9142	ug/L	99
18) Methyl acetate	6.77	43	6740	2.0134	ug/L #	78
19) Methylene Chloride	7.00	84	11127	1.9899	ug/L	96
20) Carbon Disulfide	7.04	76	30703	1.9143	ug/L	99
21) Acrylonitrile	7.18	53	1998	1.7495	ug/L	99
22) Methyl Tert Butyl Ether	7.21	73	25713	1.9682	ug/L	99
23) trans-1,2-Dichloroethene	7.44	96	10652	1.8963	ug/L	99
24) n-Hexane	7.53	57	10701	1.8856	ug/L #	85
25) Diisopropyl ether	7.85	45	385743	23.4467	ug/L	99
26) Vinyl Acetate	8.01	43	2699	3.3660	ug/L #	70
27) 1,1-Dichloroethane	8.03	63	17889	1.9005	ug/L	98
28) Ethyl-Tert-Butyl ether	8.40	59	376774	23.4540	ug/L	99
29) 2-Butanone	8.57	43	2729	2.0461	ug/L #	63
30) Propionitrile	8.66	54	9921	25.2051	ug/L	94
31) 2,2-Dichloropropane	8.79	77	13514	1.7763	ug/L	96
32) cis-1,2-Dichloroethene	8.84	96	11960	1.9648	ug/L	96
33) Chloroform	9.04	83	19676	1.9772	ug/L	94
34) 1-Bromopropane	9.17	122	1966	1.7271	ug/L	97
35) Bromochloromethane	9.26	130	7581	1.9604	ug/L	96
36) Tetrahydrofuran	9.29	42	20833	24.0663	ug/L	97
38) 1,1,1-Trichloroethane	9.55	97	17496	1.8741	ug/L	97
39) Cyclohexane	9.57	56	14288	1.8996	ug/L	99
40) 1,1-Dichloropropene	9.74	75	13987	1.8842	ug/L	94
41) Carbon Tetrachloride	9.87	117	14081	1.7305	ug/L	98
42) Tert-Amyl-Methyl ether	9.83	73	342481	23.3182	ug/L	100

(#) = qualifier out of range (m) = manual integration
11M83333.D 8260WTR.M Fri May 04 08:37:15 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83333.D Vial: 5
Acq On : 3 May 2012 18:33 Operator: ADC
Sample : WG396851-05 2ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:14 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

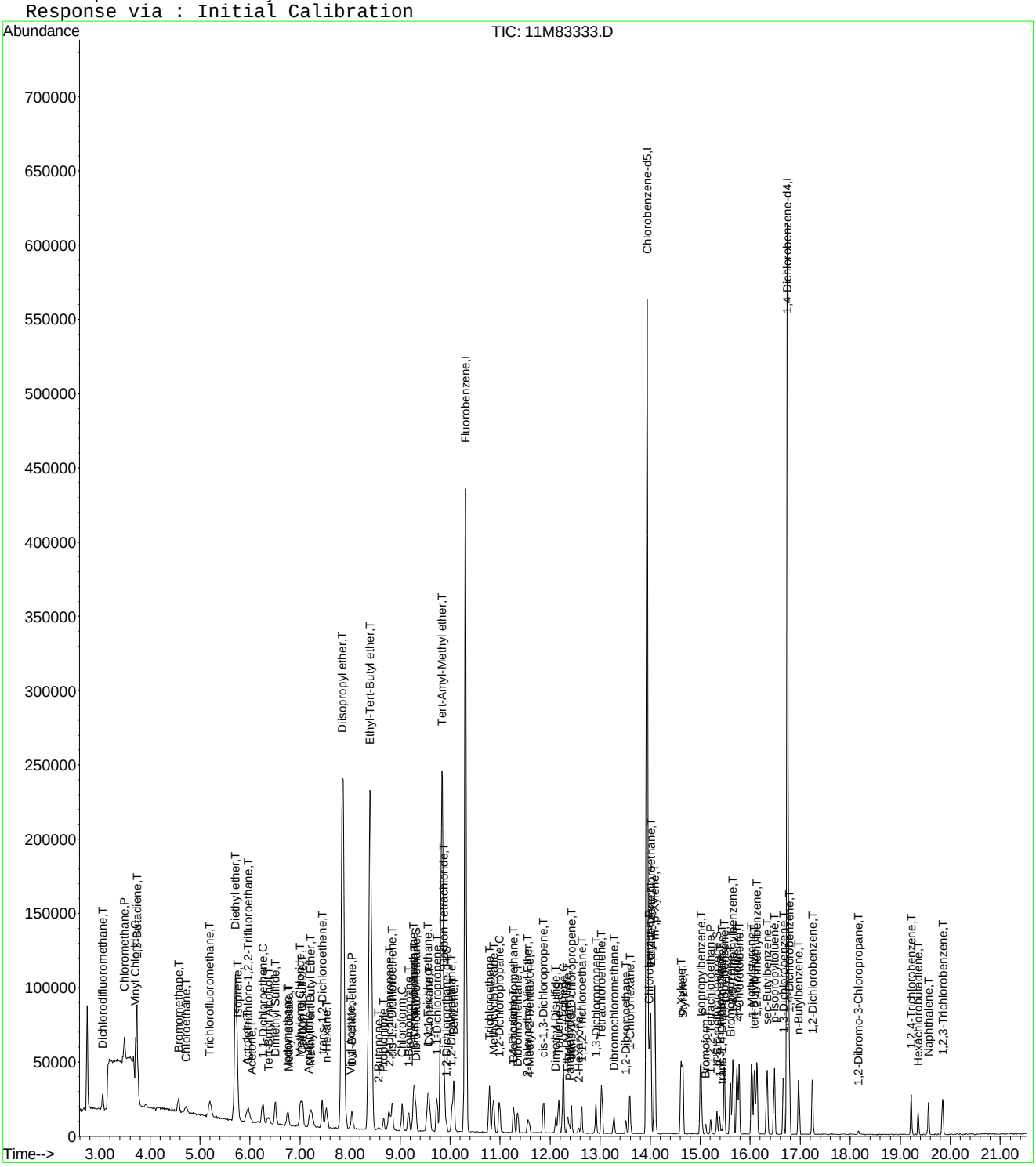
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45)	1,2-Dichloroethane	10.03	62	12958	1.8521 ug/L		99
46)	Benzene	10.07	78	40253	1.8560 ug/L		99
47)	Trichloroethene	10.78	130	13753	1.9341 ug/L		98
48)	Methylcyclohexane	10.87	83	14286	1.9190 ug/L		97
49)	1,2-Dichloropropane	10.99	63	9763	1.9554 ug/L		95
50)	1,4-Dioxane	11.26	88	1335	37.6086 ug/L		99
51)	Bromodichloromethane	11.27	83	12614	1.8458 ug/L		95
52)	Dibromomethane	11.35	93	6200	2.0741 ug/L		95
53)	2-Chloroethyl Vinyl Ether	11.55	63	3787	1.7781 ug/L		90
54)	4-Methyl-2-Pentanone	11.58	58	2177	1.8664 ug/L	#	75
55)	cis-1,3-Dichloropropene	11.87	75	14043	1.7840 ug/L		99
56)	Dimethyl Disulfide	12.11	79	4422	1.9238 ug/L		89
59)	Toluene	12.26	91	45395	1.8923 ug/L		100
60)	Ethyl Methacrylate	12.35	69	7157	1.9787 ug/L		92
61)	Paraldehyde	12.39	89	437	28.5992 ug/L	#	1
62)	trans-1,3-Dichloropropene	12.43	75	11482	1.7852 ug/L		95
63)	1,1,2-Trichloroethane	12.64	97	7697	1.9425 ug/L		98
64)	2-Hexanone	12.57	43	4032	2.0123 ug/L		81
65)	1,3-Dichloropropane	12.91	76	13466	2.0231 ug/L		100
66)	Tetrachloroethene	13.03	164	9904	2.0150 ug/L		97
67)	Dibromochloromethane	13.28	129	8395	1.7989 ug/L		97
68)	1,2-Dibromoethane	13.51	107	7945	1.9362 ug/L		100
69)	1-Chlorohexane	13.60	91	12357	1.7967 ug/L		97
70)	Chlorobenzene	13.98	112	29745	1.8627 ug/L		97
71)	1,1,1,2-Tetrachloroethane	14.01	131	9179	1.8508 ug/L		92
72)	Ethylbenzene	14.01	106	15594	1.7995 ug/L		97
73)	m-,p-Xylene	14.09	106	38442	3.5925 ug/L		100
74)	o-Xylene	14.62	106	18420	1.7671 ug/L		100
75)	Styrene	14.65	104	29854	1.8000 ug/L		97
76)	Bromoform	15.11	173	4229	1.7945 ug/L		88
77)	Isopropylbenzene	15.01	105	45389	1.8495 ug/L		99
79)	1,1,2,2-Tetrachloroethane	15.21	83	6972	1.8712 ug/L		96
81)	1,2,3-Trichloropropane	15.40	110	2120	1.8799 ug/L		75
82)	trans-1,4-Dichloro-2-Buten	15.44	53	1131	2.5856 ug/L	#	26
83)	n-Propylbenzene	15.48	91	51127	1.8773 ug/L		99
84)	Bromobenzene	15.60	156	12541	1.9275 ug/L		99
85)	1,3,5-Trimethylbenzene	15.65	105	37817	1.8698 ug/L		95
86)	2-Chlorotoluene	15.74	91	34649	1.8918 ug/L		98
87)	4-Chlorotoluene	15.78	91	29008	1.8098 ug/L		100
88)	a-Methylstyrene	16.03	118	20707	1.8384 ug/L		99
89)	tert-Butylbenzene	16.08	134	8477	1.9259 ug/L		92
90)	1,2,4-Trimethylbenzene	16.13	105	37557	1.7848 ug/L		99
91)	sec-Butylbenzene	16.34	105	42988	1.8204 ug/L		98
92)	p-Isopropyltoluene	16.48	119	34961	1.7254 ug/L		99
93)	1,3-Dichlorobenzene	16.67	146	22715	1.7801 ug/L		98
94)	1,4-Dichlorobenzene	16.78	146	24047	1.8514 ug/L		90
95)	n-Butylbenzene	16.97	91	27963	1.8117 ug/L		99
96)	1,2-Dichlorobenzene	17.25	146	21392	1.8497 ug/L		99
97)	1,2-Dibromo-3-Chloropropan	18.16	75	491	1.2705 ug/L		57
98)	1,2,4-Trichlorobenzene	19.22	180	11442	1.7494 ug/L		100
99)	Hexachlorobutadiene	19.36	225	4775	2.0752 ug/L		90
100)	Naphthalene	19.56	128	21734	1.7860 ug/L		99
101)	1,2,3-Trichlorobenzene	19.85	180	10899	1.7832 ug/L		98

(#) = qualifier out of range (m) = manual integration
11M83333.D 8260WTR.M Fri May 04 08:37:15 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83333.D Vial: 5
Acq On : 3 May 2012 18:33 Operator: ADC
Sample : WG396851-05 2ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83334.D Vial: 6
Acq On : 3 May 2012 19:04 Operator: ADC
Sample : WG396851-06 5ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:16 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	503454	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	391947	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	206722	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	14515	2.3660	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	9.48%#		
43) 1,2-Dichloroethane-d4	9.93	65	13685	2.3311	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery =	9.32%#		
58) Toluene-d8	12.17	98	49354	2.3872	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	9.56%#		
80) p-Bromofluorobenzene	15.33	95	16301	2.3857	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	9.56%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.05	85	30912	4.7582	ug/L	100
3) Chloromethane	3.48	50	51914	4.6530	ug/L	86
4) Vinyl Chloride	3.70	62	65691	5.1020	ug/L	98
5) 1,3-Butadiene	3.74	54	43618	7.8065	ug/L	96
6) Bromomethane	4.57	94	16076	4.4932	ug/L	97
7) Chloroethane	4.71	64	17043	4.4328	ug/L	97
8) Trichlorofluoromethane	5.19	101	50667	4.6675	ug/L	99
9) Diethyl ether	5.71	59	183634	47.9229	ug/L	99
10) Isoprene	5.75	67	38137	4.5155	ug/L	100
11) Acrolein	5.92	56	2491	9.3595	ug/L	96
12) 1,1,2-Trichloro-1,2,2-Trif	5.96	101	27572	4.8985	ug/L	97
13) Acetone	6.04	43	6057	5.7646	ug/L	91
14) 1,1-Dichloroethene	6.26	61	37740	4.9383	ug/L	97
15) Tert-Butyl Alcohol	6.36	59	21827	85.9748	ug/L	98
16) Dimethyl Sulfide	6.50	62	28334	4.5268	ug/L	99
17) Iodomethane	6.75	142	33186	4.5854	ug/L	97
18) Methyl acetate	6.76	43	16189	4.9785	ug/L #	89
19) Methylene Chloride	7.00	84	25640	4.7205	ug/L	97
20) Carbon Disulfide	7.05	76	71069	4.5616	ug/L	99
21) Acrylonitrile	7.19	53	5820	5.2465	ug/L	93
22) Methyl Tert Butyl Ether	7.23	73	59988	4.7272	ug/L	99
23) trans-1,2-Dichloroethene	7.44	96	26654	4.8850	ug/L	98
24) n-Hexane	7.53	57	25840	4.6875	ug/L	97
25) Diisopropyl ether	7.85	45	766207	47.9451	ug/L	99
26) Vinyl Acetate	8.01	43	10005	5.5472	ug/L #	89
27) 1,1-Dichloroethane	8.04	63	42703	4.6703	ug/L	98
28) Ethyl-Tert-Butyl ether	8.40	59	745333	47.7642	ug/L	99
29) 2-Butanone	8.57	43	6928	5.3475	ug/L	90
30) Propionitrile	8.66	54	18931	49.5134	ug/L	98
31) 2,2-Dichloropropane	8.79	77	34505	4.6689	ug/L	99
32) cis-1,2-Dichloroethene	8.84	96	27486	4.6486	ug/L	95
33) Chloroform	9.04	83	46323	4.7920	ug/L	99
34) 1-Bromopropane	9.17	122	5267	4.7633	ug/L	98
35) Bromochloromethane	9.26	130	18195	4.8439	ug/L	98
36) Tetrahydrofuran	9.28	42	42153	50.1305	ug/L	96
38) 1,1,1-Trichloroethane	9.54	97	40907	4.5109	ug/L	99
39) Cyclohexane	9.58	56	33695	4.6118	ug/L	99
40) 1,1-Dichloropropene	9.74	75	33975	4.7116	ug/L	99
41) Carbon Tetrachloride	9.87	117	37917	4.2273	ug/L	99
42) Tert-Amyl-Methyl ether	9.83	73	685005	48.0141	ug/L	100

(#) = qualifier out of range (m) = manual integration
11M83334.D 8260WTR.M Fri May 04 08:37:16 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83334.D Vial: 6
Acq On : 3 May 2012 19:04 Operator: ADC
Sample : WG396851-06 5ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:16 2012 Quant Results File: 8260WTR.RES

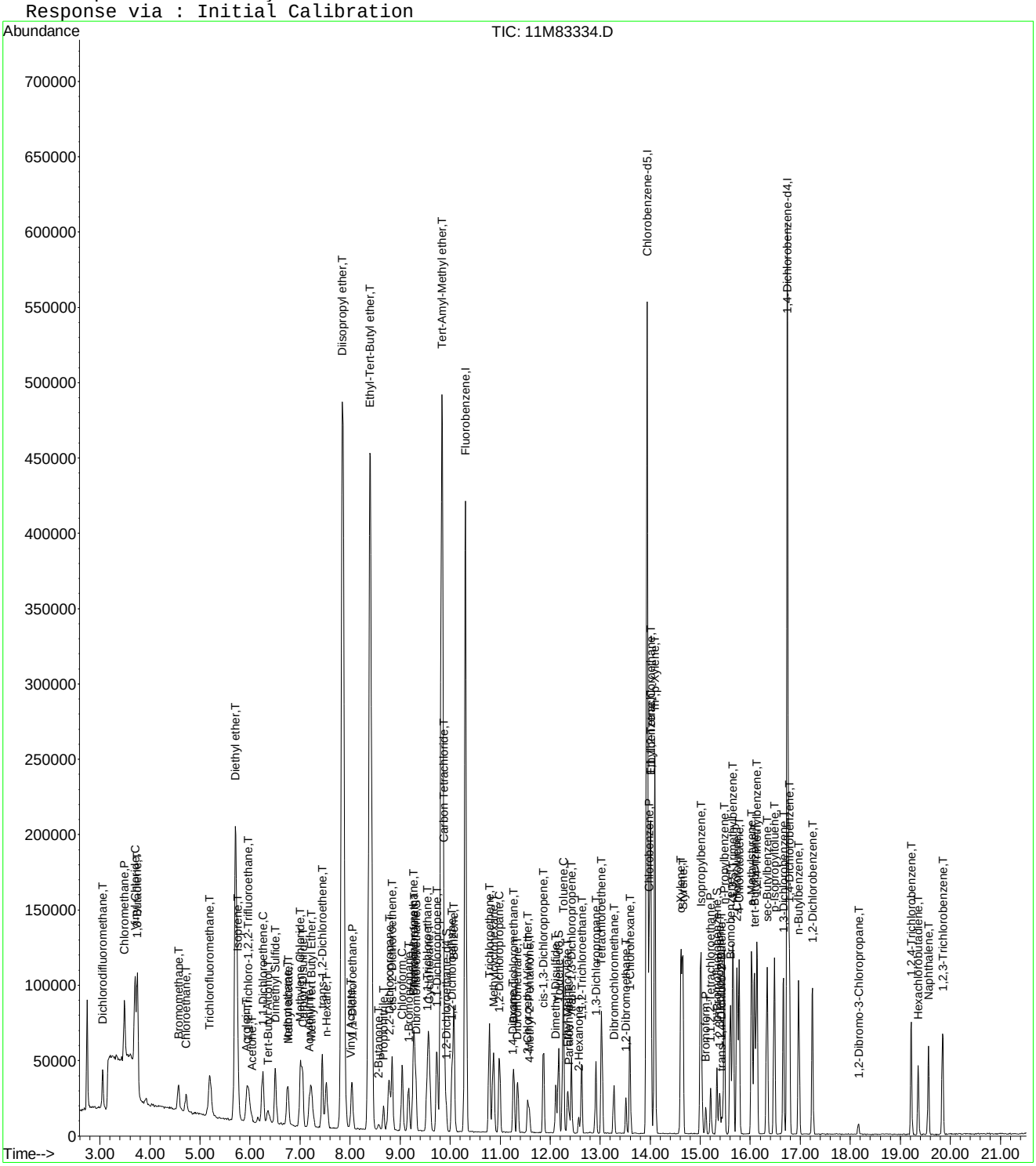
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.04	62	33533	4.9341	ug/L		96
46)	Benzene	10.07	78	96837	4.5966	ug/L		98
47)	Trichloroethene	10.78	130	31046	4.4947	ug/L		97
48)	Methylcyclohexane	10.87	83	33341	4.6106	ug/L		99
49)	1,2-Dichloropropane	10.98	63	22711	4.6829	ug/L		100
50)	1,4-Dioxane	11.25	88	3140	91.0648	ug/L		84
51)	Bromodichloromethane	11.27	83	31584	4.7579	ug/L		98
52)	Dibromomethane	11.34	93	14730	4.7453	ug/L		96
53)	2-Chloroethyl Vinyl Ether	11.55	63	9654	4.6665	ug/L		97
54)	4-Methyl-2-Pentanone	11.58	58	5319	4.6945	ug/L		99
55)	cis-1,3-Dichloropropene	11.87	75	35513	4.6444	ug/L		100
56)	Dimethyl Disulfide	12.11	79	11665	3.7092	ug/L		93
59)	Toluene	12.26	91	107843	4.5745	ug/L		99
60)	Ethyl Methacrylate	12.35	69	18430	4.2420	ug/L		98
61)	Paraldehyde	12.38	89	1447	42.6994	ug/L		24
62)	trans-1,3-Dichloropropene	12.43	75	28945	4.5794	ug/L		99
63)	1,1,2-Trichloroethane	12.64	97	18621	4.7820	ug/L		97
64)	2-Hexanone	12.57	43	9296	4.7211	ug/L		96
65)	1,3-Dichloropropane	12.91	76	31572	4.8268	ug/L		100
66)	Tetrachloroethene	13.03	164	23228	4.8091	ug/L		100
67)	Dibromochloromethane	13.28	129	21684	4.3211	ug/L		99
68)	1,2-Dibromoethane	13.51	107	19755	4.8990	ug/L		98
69)	1-Chlorohexane	13.60	91	31575	4.6717	ug/L		99
70)	Chlorobenzene	13.98	112	74173	4.7266	ug/L		98
71)	1,1,1,2-Tetrachloroethane	14.01	131	23517	4.4112	ug/L		96
72)	Ethylbenzene	14.01	106	40324	4.7352	ug/L		97
73)	m-,p-Xylene	14.09	106	95354	9.0678	ug/L		99
74)	o-Xylene	14.61	106	45918	4.4826	ug/L		96
75)	Styrene	14.65	104	74701	4.5831	ug/L		99
76)	Bromoform	15.11	173	11226	4.2392	ug/L		96
77)	Isopropylbenzene	15.01	105	112351	4.6587	ug/L		99
79)	1,1,2,2-Tetrachloroethane	15.21	83	18681	5.0766	ug/L		99
81)	1,2,3-Trichloropropane	15.39	110	5832	5.2362	ug/L		78
82)	trans-1,4-Dichloro-2-Buten	15.43	53	2927	4.2433	ug/L	#	21
83)	n-Propylbenzene	15.48	91	128083	4.7619	ug/L		99
84)	Bromobenzene	15.60	156	31269	4.8662	ug/L		97
85)	1,3,5-Trimethylbenzene	15.65	105	92830	4.6473	ug/L		98
86)	2-Chlorotoluene	15.74	91	84597	4.6767	ug/L		99
87)	4-Chlorotoluene	15.78	91	72125	4.5561	ug/L		98
88)	a-Methylstyrene	16.03	118	50520	4.5413	ug/L		99
89)	tert-Butylbenzene	16.09	134	19927	4.5838	ug/L		99
90)	1,2,4-Trimethylbenzene	16.13	105	94663	4.5550	ug/L		99
91)	sec-Butylbenzene	16.34	105	109377	4.6896	ug/L		98
92)	p-Isopropyltoluene	16.48	119	92965	4.6454	ug/L		99
93)	1,3-Dichlorobenzene	16.67	146	59294	4.7048	ug/L		96
94)	1,4-Dichlorobenzene	16.78	146	60800	4.7396	ug/L		97
95)	n-Butylbenzene	16.97	91	73650	4.8313	ug/L		99
96)	1,2-Dichlorobenzene	17.25	146	54364	4.7595	ug/L		96
97)	1,2-Dibromo-3-Chloropropan	18.17	75	2154	3.7703	ug/L		98
98)	1,2,4-Trichlorobenzene	19.22	180	29980	4.6411	ug/L		98
99)	Hexachlorobutadiene	19.36	225	10674	4.3886	ug/L		96
100)	Naphthalene	19.56	128	57065	4.3358	ug/L		99
101)	1,2,3-Trichlorobenzene	19.85	180	27923	4.6256	ug/L		97

(#) = qualifier out of range (m) = manual integration
11M83334.D 8260WTR.M Fri May 04 08:37:17 2012 Page 2

Data File : C:\MSDCHEM\1\DATA\050312\11M83334.D Vial: 6
Acq On : 3 May 2012 19:04 Operator: ADC
Sample : WG396851-06 5ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83335.D Vial: 7
Acq On : 3 May 2012 19:34 Operator: ADC
Sample : WG396851-07 20ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:18 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	504254	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	394623	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	217927	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	56858	9.2532	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 37.00%#			
43) 1,2-Dichloroethane-d4	9.93	65	53945	9.1746	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 36.68%#			
58) Toluene-d8	12.17	98	188061	9.0347	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 36.12%#			
80) p-Bromofluorobenzene	15.33	95	66677	9.2565	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 37.04%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.05	85	132635	20.3839	ug/L	99
3) Chloromethane	3.48	50	221719	19.8408	ug/L	100
4) Vinyl Chloride	3.70	62	275695	22.4469	ug/L	99
5) 1,3-Butadiene	3.73	54	128779	23.0114	ug/L	99
6) Bromomethane	4.56	94	65223	18.2007	ug/L	98
7) Chloroethane	4.71	64	74645	19.3842	ug/L	99
8) Trichlorofluoromethane	5.19	101	218630	20.1084	ug/L	100
9) Diethyl ether	5.71	59	306304	79.8092	ug/L	99
10) Isoprene	5.74	67	167911	19.8494	ug/L	99
11) Acrolein	5.94	56	10552	39.5846	ug/L	98
12) 1,1,2-Trichloro-1,2,2-Trif	5.96	101	116029	20.5813	ug/L	100
13) Acetone	6.03	43	19491	20.4115	ug/L	95
14) 1,1-Dichloroethene	6.26	61	156029	20.3841	ug/L	98
15) Tert-Butyl Alcohol	6.36	59	40914	160.9013	ug/L	98
16) Dimethyl Sulfide	6.50	62	121955	19.4531	ug/L	99
17) Iodomethane	6.74	142	163899	21.2474	ug/L	100
18) Methyl acetate	6.76	43	60073	18.4447	ug/L	100
19) Methylene Chloride	7.00	84	103618	19.0467	ug/L	100
20) Carbon Disulfide	7.04	76	302977	19.4157	ug/L	100
21) Acrylonitrile	7.18	53	22628	20.3657	ug/L	99
22) Methyl Tert Butyl Ether	7.22	73	249921	19.6631	ug/L	98
23) trans-1,2-Dichloroethene	7.44	96	110195	20.1638	ug/L	98
24) n-Hexane	7.53	57	109324	19.8002	ug/L	100
25) Diisopropyl ether	7.85	45	1276533	79.7519	ug/L	100
26) Vinyl Acetate	8.01	43	50946	17.6180	ug/L	99
27) 1,1-Dichloroethane	8.03	63	179901	19.6442	ug/L	99
28) Ethyl-Tert-Butyl ether	8.40	59	1249608	79.9533	ug/L	100
29) 2-Butanone	8.57	43	25982	20.0228	ug/L	99
30) Propionitrile	8.68	54	31316	81.7760	ug/L	99
31) 2,2-Dichloropropane	8.78	77	145801	19.6973	ug/L	100
32) cis-1,2-Dichloroethene	8.84	96	116663	19.6994	ug/L	98
33) Chloroform	9.04	83	187798	19.3966	ug/L	98
34) 1-Bromopropane	9.17	122	22540	20.3519	ug/L	97
35) Bromochloromethane	9.26	130	76485	20.3296	ug/L	99
36) Tetrahydrofuran	9.29	42	67948	80.6790	ug/L	99
38) 1,1,1-Trichloroethane	9.54	97	177976	19.5948	ug/L	99
39) Cyclohexane	9.57	56	143330	19.5864	ug/L	98
40) 1,1-Dichloropropene	9.73	75	145571	20.1555	ug/L	100
41) Carbon Tetrachloride	9.87	117	169303	17.7335	ug/L	100
42) Tert-Amyl-Methyl ether	9.83	73	1142423	79.9489	ug/L	100

(#) = qualifier out of range (m) = manual integration
11M83335.D 8260WTR.M Fri May 04 08:37:18 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050312\11M83335.D Vial: 7
Acq On : 3 May 2012 19:34 Operator: ADC
Sample : WG396851-07 20ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:18 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

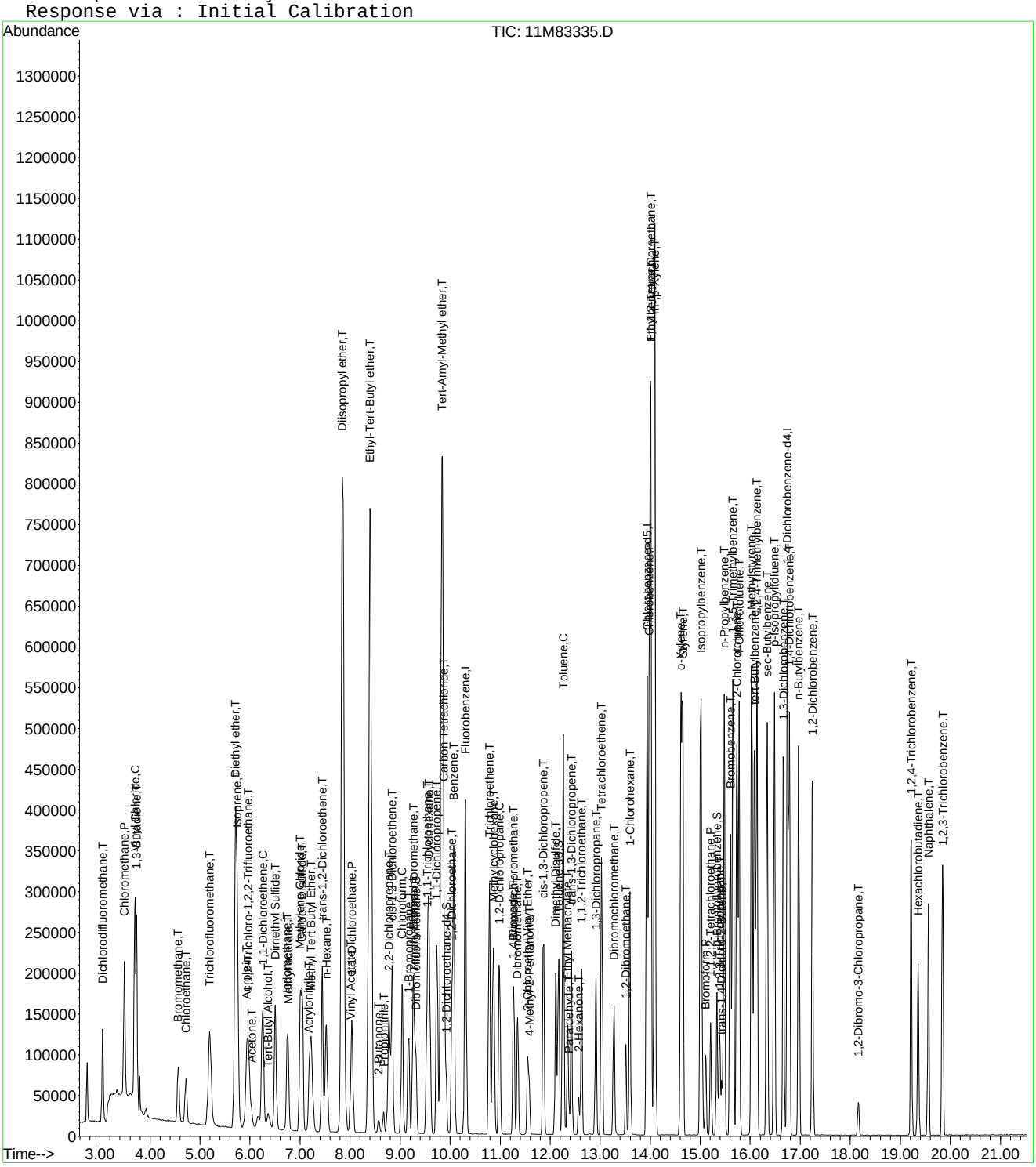
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.04	62	133505	19.6128 ug/L	99
46)	Benzene	10.07	78	407963	19.3343 ug/L	99
47)	Trichloroethene	10.78	130	131634	19.0272 ug/L	100
48)	Methylcyclohexane	10.87	83	145964	20.1530 ug/L	99
49)	1,2-Dichloropropane	10.99	63	95354	19.6303 ug/L	98
50)	1,4-Dioxane	11.26	88	5892	170.6059 ug/L	97
51)	Bromodichloromethane	11.27	83	135736	20.4153 ug/L	100
52)	Dibromomethane	11.34	93	61085	18.9356 ug/L	98
53)	2-Chloroethyl Vinyl Ether	11.55	63	41168	19.8682 ug/L	98
54)	4-Methyl-2-Pentanone	11.58	58	21756	19.1711 ug/L	96
55)	cis-1,3-Dichloropropene	11.87	75	154470	20.1695 ug/L	100
56)	Dimethyl Disulfide	12.11	79	72686	17.9282 ug/L	97
59)	Toluene	12.26	91	458914	19.3343 ug/L	100
60)	Ethyl Methacrylate	12.35	69	88109	17.9613 ug/L	97
61)	Paraldehyde	12.38	89	3747	74.2185 ug/L	62
62)	trans-1,3-Dichloropropene	12.43	75	135848	21.3469 ug/L	100
63)	1,1,2-Trichloroethane	12.62	97	79302	20.2271 ug/L	99
64)	2-Hexanone	12.57	43	39124	19.7350 ug/L	98
65)	1,3-Dichloropropane	12.91	76	132004	20.0443 ug/L	99
66)	Tetrachloroethene	13.03	164	97440	20.0369 ug/L	98
67)	Dibromochloromethane	13.28	129	103648	19.3127 ug/L	99
68)	1,2-Dibromoethane	13.51	107	82436	20.3045 ug/L	100
69)	1-Chlorohexane	13.60	91	139336	20.4757 ug/L	100
70)	Chlorobenzene	13.98	112	315279	19.9547 ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.01	131	113479	19.2985 ug/L	100
72)	Ethylbenzene	14.01	106	172803	20.1545 ug/L	99
73)	m-,p-Xylene	14.09	106	421771	39.8366 ug/L	99
74)	o-Xylene	14.61	106	199414	19.3350 ug/L	98
75)	Styrene	14.65	104	333044	20.2948 ug/L	99
76)	Bromoform	15.11	173	57953	19.4899 ug/L	99
77)	Isopropylbenzene	15.01	105	496481	20.4472 ug/L	99
79)	1,1,2,2-Tetrachloroethane	15.21	83	81431	20.9911 ug/L	99
81)	1,2,3-Trichloropropane	15.39	110	24224	20.6309 ug/L	96
82)	trans-1,4-Dichloro-2-Buten	15.43	53	19032	18.0972 ug/L	87
83)	n-Propylbenzene	15.48	91	561375	19.7979 ug/L	99
84)	Bromobenzene	15.60	156	133970	19.7769 ug/L	98
85)	1,3,5-Trimethylbenzene	15.65	105	411635	19.5479 ug/L	99
86)	2-Chlorotoluene	15.74	91	370972	19.4535 ug/L	100
87)	4-Chlorotoluene	15.78	91	321231	19.2486 ug/L	100
88)	a-Methylstyrene	16.03	118	235638	20.0929 ug/L	100
89)	tert-Butylbenzene	16.09	134	88664	19.3469 ug/L	99
90)	1,2,4-Trimethylbenzene	16.13	105	426954	19.4879 ug/L	100
91)	sec-Butylbenzene	16.34	105	486415	19.7831 ug/L	99
92)	p-Isopropyltoluene	16.48	119	420961	19.9535 ug/L	100
93)	1,3-Dichlorobenzene	16.67	146	256621	19.3153 ug/L	99
94)	1,4-Dichlorobenzene	16.78	146	259579	19.1948 ug/L	99
95)	n-Butylbenzene	16.97	91	342774	21.3294 ug/L	99
96)	1,2-Dichlorobenzene	17.25	146	239676	19.9045 ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.16	75	11643	17.0858 ug/L	100
98)	1,2,4-Trichlorobenzene	19.22	180	143256	21.0367 ug/L	99
99)	Hexachlorobutadiene	19.36	225	50825	18.9640 ug/L	97
100)	Naphthalene	19.56	128	277305	18.8934 ug/L	99
101)	1,2,3-Trichlorobenzene	19.85	180	125942	19.7902 ug/L	100

(#) = qualifier out of range (m) = manual integration
11M83335.D 8260WTR.M Fri May 04 08:37:18 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83335.D Vial: 7
Acq On : 3 May 2012 19:34 Operator: ADC
Sample : WG396851-07 20ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83336.D Vial: 8
Acq On : 3 May 2012 20:05 Operator: ADC
Sample : WG396851-08 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:19 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	480987	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	384086	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	223120	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	145401	24.8076	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 99.24%			
43) 1,2-Dichloroethane-d4	9.92	65	137797	24.5692	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 98.28%			
58) Toluene-d8	12.17	98	484290	23.9042	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 95.60%			
80) p-Bromofluorobenzene	15.33	95	176477	23.9294	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 95.72%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.05	85	318854	51.3733	ug/L	100
3) Chloromethane	3.48	50	563739	52.8872	ug/L	100
4) Vinyl Chloride	3.69	62	482108	45.0205	ug/L	100
5) 1,3-Butadiene	3.73	54	268855	50.3654	ug/L	100
6) Bromomethane	4.56	94	171174	50.0773	ug/L	100
7) Chloroethane	4.71	64	188407	51.2932	ug/L	100
8) Trichlorofluoromethane	5.19	101	531021	51.2031	ug/L	100
9) Diethyl ether	5.71	59	363507	99.2954	ug/L	100
10) Isoprene	5.74	67	422799	52.3984	ug/L	100
11) Acrolein	5.94	56	25506	100.3112	ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.95	101	280955	52.2467	ug/L	100
13) Acetone	6.04	43	44817	50.4094	ug/L	98
14) 1,1-Dichloroethene	6.25	61	376546	51.5728	ug/L	100
15) Tert-Butyl Alcohol	6.38	59	50544	208.3883	ug/L	100
16) Dimethyl Sulfide	6.50	62	301714	50.4547	ug/L	100
17) Iodomethane	6.74	142	401579	54.0338	ug/L	100
18) Methyl acetate	6.76	43	149397	48.0894	ug/L	100
19) Methylene Chloride	7.00	84	256318	49.3946	ug/L	100
20) Carbon Disulfide	7.04	76	752620	50.5634	ug/L	100
21) Acrylonitrile	7.18	53	57797	54.5350	ug/L	100
22) Methyl Tert Butyl Ether	7.22	73	607604	50.1170	ug/L	100
23) trans-1,2-Dichloroethene	7.44	96	268312	51.4716	ug/L	100
24) n-Hexane	7.52	57	271740	51.5970	ug/L	100
25) Diisopropyl ether	7.85	45	1501361	98.3355	ug/L	100
26) Vinyl Acetate	8.01	43	156564	51.0038	ug/L	100
27) 1,1-Dichloroethane	8.03	63	447578	51.2371	ug/L	100
28) Ethyl-Tert-Butyl ether	8.40	59	1460808	97.9878	ug/L	100
29) 2-Butanone	8.57	43	61992	50.0845	ug/L	100
30) Propionitrile	8.66	54	37445	102.5107	ug/L	100
31) 2,2-Dichloropropane	8.78	77	365024	51.6992	ug/L	100
32) cis-1,2-Dichloroethene	8.84	96	289632	51.2722	ug/L	100
33) Chloroform	9.04	83	459935	49.8019	ug/L	100
34) 1-Bromopropane	9.17	122	56406	53.3940	ug/L	100
35) Bromochloromethane	9.26	130	186215	51.8900	ug/L	100
36) Tetrahydrofuran	9.29	42	79210	98.6006	ug/L	100
38) 1,1,1-Trichloroethane	9.54	97	448385	51.7542	ug/L	100
39) Cyclohexane	9.57	56	360938	51.7091	ug/L	100
40) 1,1-Dichloropropene	9.73	75	358842	52.0881	ug/L	100
41) Carbon Tetrachloride	9.87	117	437910	47.5369	ug/L	100
42) Tert-Amyl-Methyl ether	9.83	73	1352091	99.1990	ug/L	100

(#) = qualifier out of range (m) = manual integration
11M83336.D 8260WTR.M Fri May 04 08:37:20 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83336.D Vial: 8
Acq On : 3 May 2012 20:05 Operator: ADC
Sample : WG396851-08 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:19 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

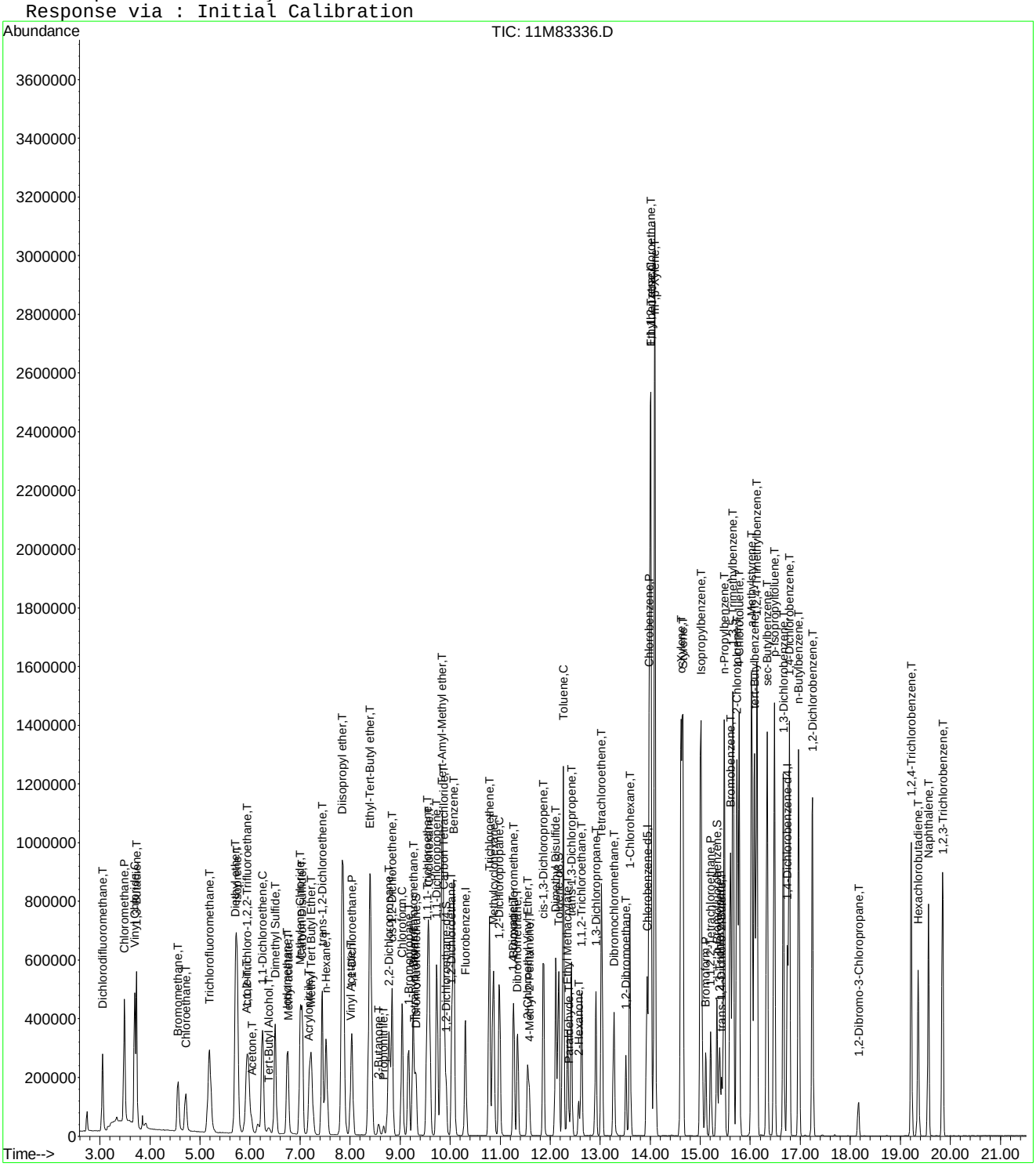
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.03	62	331634	51.0761 ug/L	100
46)	Benzene	10.07	78	1014283	50.3944 ug/L	100
47)	Trichloroethene	10.78	130	319371	48.3971 ug/L	100
48)	Methylcyclohexane	10.87	83	363222	52.5753 ug/L	100
49)	1,2-Dichloropropane	10.98	63	235571	50.8425 ug/L	100
50)	1,4-Dioxane	11.26	88	7073	214.7094 ug/L	100
51)	Bromodichloromethane	11.27	83	342196	53.9576 ug/L	100
52)	Dibromomethane	11.34	93	151823	48.9761 ug/L	100
53)	2-Chloroethyl Vinyl Ether	11.55	63	106821	54.0469 ug/L	100
54)	4-Methyl-2-Pentanone	11.58	58	56892	52.5575 ug/L	100
55)	cis-1,3-Dichloropropene	11.87	75	390095	53.3994 ug/L	100
56)	Dimethyl Disulfide	12.11	79	221567	51.4860 ug/L	100
59)	Toluene	12.26	91	1166067	50.4748 ug/L	100
60)	Ethyl Methacrylate	12.35	69	232413	47.6827 ug/L	100
61)	Paraldehyde	12.38	89	5647	102.5004 ug/L	100
62)	trans-1,3-Dichloropropene	12.43	75	355211	57.3484 ug/L	100
63)	1,1,2-Trichloroethane	12.62	97	194154	50.8804 ug/L	100
64)	2-Hexanone	12.57	43	97295	50.4241 ug/L	100
65)	1,3-Dichloropropane	12.91	76	325226	50.7390 ug/L	100
66)	Tetrachloroethene	13.03	164	244709	51.7009 ug/L	100
67)	Dibromochloromethane	13.28	129	274454	50.5581 ug/L	100
68)	1,2-Dibromoethane	13.51	107	203481	51.4935 ug/L	100
69)	1-Chlorohexane	13.60	91	350854	52.9732 ug/L	100
70)	Chlorobenzene	13.98	112	824217	53.5976 ug/L	100
71)	1,1,1,2-Tetrachloroethane	14.01	131	320949	50.5991 ug/L	100
72)	Ethylbenzene	14.01	106	460199	55.1468 ug/L	100
73)	m-,p-Xylene	14.09	106	1137041	110.3408 ug/L	100
74)	o-Xylene	14.62	106	516447	51.4479 ug/L	100
75)	Styrene	14.65	104	888031	55.5987 ug/L	100
76)	Bromoform	15.11	173	166003	52.0664 ug/L	100
77)	Isopropylbenzene	15.01	105	1304516	55.1993 ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.21	83	209817	52.8274 ug/L	100
81)	1,2,3-Trichloropropane	15.39	110	61181	50.8934 ug/L	100
82)	trans-1,4-Dichloro-2-Buten	15.43	53	53324	46.8112 ug/L	100
83)	n-Propylbenzene	15.48	91	1474159	50.7789 ug/L	100
84)	Bromobenzene	15.60	156	343197	49.4841 ug/L	100
85)	1,3,5-Trimethylbenzene	15.65	105	1089009	50.5117 ug/L	100
86)	2-Chlorotoluene	15.74	91	977532	50.0679 ug/L	100
87)	4-Chlorotoluene	15.78	91	860249	50.3477 ug/L	100
88)	a-Methylstyrene	16.03	118	648787	54.0345 ug/L	100
89)	tert-Butylbenzene	16.09	134	238570	50.8454 ug/L	100
90)	1,2,4-Trimethylbenzene	16.13	105	1180981	52.6503 ug/L	100
91)	sec-Butylbenzene	16.34	105	1308564	51.9822 ug/L	100
92)	p-Isopropyltoluene	16.48	119	1138543	52.7108 ug/L	100
93)	1,3-Dichlorobenzene	16.67	146	688661	50.6276 ug/L	100
94)	1,4-Dichlorobenzene	16.78	146	697020	50.3421 ug/L	100
95)	n-Butylbenzene	16.97	91	929872	56.5153 ug/L	100
96)	1,2-Dichlorobenzene	17.25	146	630711	51.1598 ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.17	75	32882	46.1734 ug/L	100
98)	1,2,4-Trichlorobenzene	19.22	180	388041	55.6565 ug/L	100
99)	Hexachlorobutadiene	19.36	225	129587	46.8627 ug/L	100
100)	Naphthalene	19.56	128	764777	49.3200 ug/L	100
101)	1,2,3-Trichlorobenzene	19.85	180	339025	52.0337 ug/L	100

(#) = qualifier out of range (m) = manual integration
11M83336.D 8260WTR.M Fri May 04 08:37:20 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83336.D Vial: 8
Acq On : 3 May 2012 20:05 Operator: ADC
Sample : WG396851-08 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83337.D Vial: 9
Acq On : 3 May 2012 20:35 Operator: ADC
Sample : WG396851-09 100ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:20 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	475952	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	379141	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	222659	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	289025	49.8337	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 199.32%#			
43) 1,2-Dichloroethane-d4	9.93	65	271598	48.9382	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 195.76%#			
58) Toluene-d8	12.17	98	986309	49.3185	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 197.28%#			
80) p-Bromofluorobenzene	15.33	95	361298	49.0915	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 196.36%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.05	85	613942	99.9640	ug/L	99
3) Chloromethane	3.48	50	1077547	102.1595	ug/L	99
4) Vinyl Chloride	3.69	62	826689	104.6089	ug/L	99
5) 1,3-Butadiene	3.73	54	277444	52.5243	ug/L	97
6) Bromomethane	4.55	94	356356	105.3555	ug/L	100
7) Chloroethane	4.70	64	363245	99.9385	ug/L	98
8) Trichlorofluoromethane	5.18	101	1065466	103.8232	ug/L	99
9) Diethyl ether	5.71	59	777466	214.6189	ug/L	100
10) Isoprene	5.74	67	876027	109.7165	ug/L	100
11) Acrolein	5.94	56	50907	202.3274	ug/L	97
12) 1,1,2-Trichloro-1,2,2-Trif	5.95	101	563837	105.9609	ug/L	99
13) Acetone	6.04	43	84705	97.0603	ug/L	98
14) 1,1-Dichloroethene	6.25	61	751332	103.9931	ug/L	100
15) Tert-Butyl Alcohol	6.38	59	104800	436.6518	ug/L	100
16) Dimethyl Sulfide	6.50	62	604358	102.1341	ug/L	99
17) Iodomethane	6.74	142	731406	99.1627	ug/L	100
18) Methyl acetate	6.76	43	305888	99.5039	ug/L	98
19) Methylene Chloride	7.00	84	511922	99.6953	ug/L	100
20) Carbon Disulfide	7.04	76	1519962	103.1961	ug/L	99
21) Acrylonitrile	7.19	53	112614	107.3822	ug/L	99
22) Methyl Tert Butyl Ether	7.22	73	1213756	101.1733	ug/L	100
23) trans-1,2-Dichloroethene	7.44	96	542125	105.0986	ug/L	100
24) n-Hexane	7.52	57	541585	103.9220	ug/L	99
25) Diisopropyl ether	7.86	45	3186065	210.8870	ug/L	99
26) Vinyl Acetate	8.01	43	313224	100.4704	ug/L	98
27) 1,1-Dichloroethane	8.03	63	899413	104.0508	ug/L	100
28) Ethyl-Tert-Butyl ether	8.40	59	3115064	211.1621	ug/L	100
29) 2-Butanone	8.57	43	121004	98.7956	ug/L	96
30) Propionitrile	8.68	54	75544	208.9997	ug/L	99
31) 2,2-Dichloropropane	8.78	77	762450	109.1300	ug/L	99
32) cis-1,2-Dichloroethene	8.84	96	584814	104.6221	ug/L	99
33) Chloroform	9.04	83	933051	102.0999	ug/L	99
34) 1-Bromopropane	9.17	122	112899	108.0010	ug/L	99
35) Bromochloromethane	9.26	130	376559	106.0407	ug/L	99
36) Tetrahydrofuran	9.29	42	165046	207.6227	ug/L	97
38) 1,1,1-Trichloroethane	9.54	97	925852	107.9956	ug/L	99
39) Cyclohexane	9.57	56	731391	105.8897	ug/L	100
40) 1,1-Dichloropropene	9.73	75	722828	106.0328	ug/L	100
41) Carbon Tetrachloride	9.86	117	934580	102.1537	ug/L	100
42) Tert-Amyl-Methyl ether	9.83	73	2891406	214.3782	ug/L	99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83337.D Vial: 9
Acq On : 3 May 2012 20:35 Operator: ADC
Sample : WG396851-09 100ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:20 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

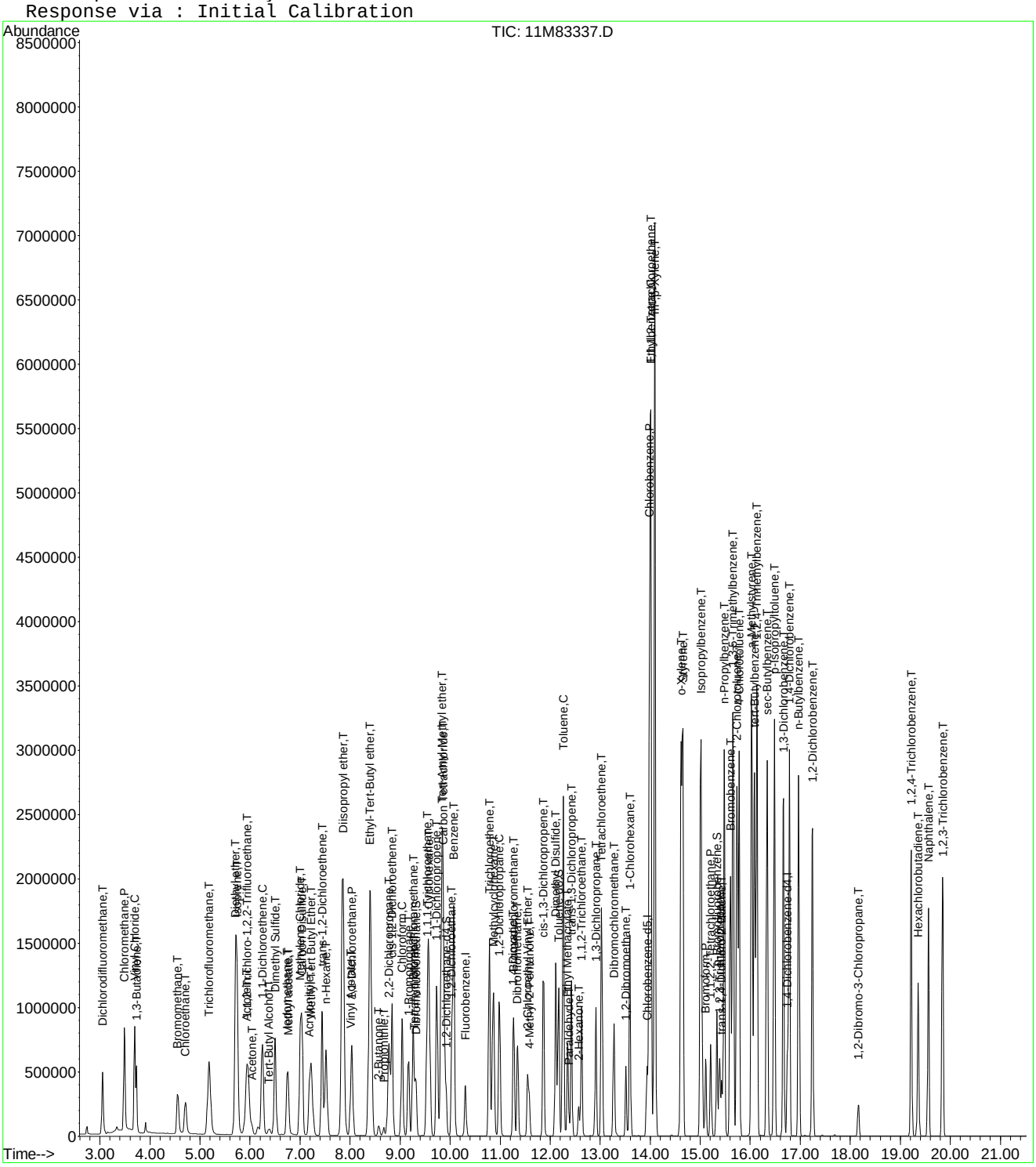
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45)	1,2-Dichloroethane	10.03	62	668513	104.0491	ug/L	99
46)	Benzene	10.07	78	2075430	104.2082	ug/L	100
47)	Trichloroethene	10.78	130	647324	99.1324	ug/L	100
48)	Methylcyclohexane	10.87	83	729508	106.7111	ug/L	99
49)	1,2-Dichloropropane	10.98	63	473243	103.2189	ug/L	98
50)	1,4-Dioxane	11.26	88	15350	470.8970	ug/L	97
51)	Bromodichloromethane	11.27	83	695861	110.8843	ug/L	100
52)	Dibromomethane	11.34	93	299567	97.4334	ug/L	98
53)	2-Chloroethyl Vinyl Ether	11.55	63	209350	107.0428	ug/L	98
54)	4-Methyl-2-Pentanone	11.58	58	110758	103.4019	ug/L	99
55)	cis-1,3-Dichloropropene	11.87	75	796754	110.2201	ug/L	100
56)	Dimethyl Disulfide	12.11	79	486425	102.2347	ug/L	99
59)	Toluene	12.26	91	2422169	106.2143	ug/L	100
60)	Ethyl Methacrylate	12.35	69	475262	98.1546	ug/L	99
61)	Paraldehyde	12.38	89	13471	215.6210	ug/L	78
62)	trans-1,3-Dichloropropene	12.43	75	729910	119.3800	ug/L	100
63)	1,1,2-Trichloroethane	12.62	97	389691	103.4551	ug/L	99
64)	2-Hexanone	12.57	43	193975	101.8406	ug/L	98
65)	1,3-Dichloropropane	12.91	76	653083	103.2174	ug/L	98
66)	Tetrachloroethene	13.03	164	504216	107.9176	ug/L	99
67)	Dibromochloromethane	13.28	129	572790	101.6235	ug/L	99
68)	1,2-Dibromoethane	13.51	107	406578	104.2317	ug/L	100
69)	1-Chlorohexane	13.60	91	722083	110.4447	ug/L	99
70)	Chlorobenzene	13.99	112	1804231	118.8567	ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.01	131	725623	100.8952	ug/L	99
72)	Ethylbenzene	14.01	106	1030673	125.1190	ug/L	97
73)	m-,p-Xylene	14.09	106	2522393	247.9707	ug/L	98
74)	o-Xylene	14.62	106	1097950	110.8031	ug/L	100
75)	Styrene	14.65	104	1954186	123.9453	ug/L	99
76)	Bromoform	15.11	173	350632	99.2511	ug/L	99
77)	Isopropylbenzene	15.01	105	2766231	118.5770	ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.21	83	417762	105.4012	ug/L	99
81)	1,2,3-Trichloropropane	15.39	110	121811	101.5382	ug/L	75
82)	trans-1,4-Dichloro-2-Buten	15.43	53	113682	98.2283	ug/L #	23
83)	n-Propylbenzene	15.48	91	3065069	105.7981	ug/L	100
84)	Bromobenzene	15.60	156	721041	104.1791	ug/L	98
85)	1,3,5-Trimethylbenzene	15.65	105	2316045	107.6480	ug/L	99
86)	2-Chlorotoluene	15.74	91	2048817	105.1551	ug/L	99
87)	4-Chlorotoluene	15.78	91	1819984	106.7385	ug/L	99
88)	a-Methylstyrene	16.03	118	1397503	116.6326	ug/L	100
89)	tert-Butylbenzene	16.09	134	510886	109.1084	ug/L	99
90)	1,2,4-Trimethylbenzene	16.13	105	2554897	114.1377	ug/L	99
91)	sec-Butylbenzene	16.34	105	2734986	108.8712	ug/L	99
92)	p-Isopropyltoluene	16.48	119	2428890	112.6824	ug/L	100
93)	1,3-Dichlorobenzene	16.67	146	1444483	106.4124	ug/L	100
94)	1,4-Dichlorobenzene	16.78	146	1463808	105.9421	ug/L	99
95)	n-Butylbenzene	16.97	91	1963774	119.6005	ug/L	100
96)	1,2-Dichlorobenzene	17.25	146	1319263	107.2329	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.16	75	73001	102.0549	ug/L	95
98)	1,2,4-Trichlorobenzene	19.22	180	859132	123.4799	ug/L	100
99)	Hexachlorobutadiene	19.36	225	269332	97.3363	ug/L	99
100)	Naphthalene	19.56	128	1680267	103.9854	ug/L	99
101)	1,2,3-Trichlorobenzene	19.85	180	759572	116.8207	ug/L	99

(#) = qualifier out of range (m) = manual integration
11M83337.D 8260WTR.M Fri May 04 08:37:21 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83337.D Vial: 9
Acq On : 3 May 2012 20:35 Operator: ADC
Sample : WG396851-09 100ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83338.D Vial: 10
Acq On : 3 May 2012 21:06 Operator: ADC
Sample : WG396851-10 200ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:22 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	507738	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	407952	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	240834	25.00	ug/L	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	636806	102.9244	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 411.68%#			
43) 1,2-Dichloroethane-d4	9.93	65	593828	100.3012	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 401.20%#			
58) Toluene-d8	12.17	98	2241381	104.1608	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 416.64%#			
80) p-Bromofluorobenzene	15.33	95	818664	102.8417	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 411.36%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.05	85	1294453	197.5723	ug/L	100
3) Chloromethane	3.50	50	2239815	199.0574	ug/L	99
4) Vinyl Chloride	3.69	62	1615332	Below Cal		99
5) 1,3-Butadiene	3.73	54	558404	99.0961	ug/L	98
6) Bromomethane	4.55	94	745022	206.4741	ug/L	100
7) Chloroethane	4.70	64	806049	207.8826	ug/L	99
8) Trichlorofluoromethane	5.17	101	2395450	218.8091	ug/L	100
9) Diethyl ether	5.72	59	11977	3.0993	ug/L #	49
10) Isoprene	5.73	67	1909743	224.2088	ug/L	100
11) Acrolein	5.94	56	114195	425.4492	ug/L	98
12) 1,1,2-Trichloro-1,2,2-Trif	5.95	101	1274910	224.5923	ug/L	99
13) Acetone	6.05	43	195342	210.8152	ug/L	99
14) 1,1-Dichloroethene	6.25	61	1724593	223.7601	ug/L	100
15) Tert-Butyl Alcohol	6.41	59	2252	8.7956	ug/L #	72
16) Dimethyl Sulfide	6.50	62	1427360	226.1172	ug/L	100
17) Iodomethane	6.74	142	1545241	196.0456	ug/L	99
18) Methyl acetate	6.77	43	703874	214.6329	ug/L	97
19) Methylene Chloride	7.00	84	1192308	217.6621	ug/L	98
20) Carbon Disulfide	7.03	76	3629186	230.9741	ug/L	100
21) Acrylonitrile	7.19	53	255978	228.8053	ug/L	99
22) Methyl Tert Butyl Ether	7.22	73	2744145	214.4198	ug/L	100
23) trans-1,2-Dichloroethene	7.43	96	1260397	229.0489	ug/L	99
24) n-Hexane	7.52	57	1231696	221.5480	ug/L	99
25) Diisopropyl ether	7.88	45	3184	0.1976	ug/L #	67
26) Vinyl Acetate	8.01	43	640489	190.2072	ug/L	99
27) 1,1-Dichloroethane	8.03	63	2056553	223.0229	ug/L	100
28) Ethyl-Tert-Butyl ether	8.42	59	4179	0.2655	ug/L	81
29) 2-Butanone	8.58	43	253505	194.0206	ug/L	98
31) 2,2-Dichloropropane	8.78	77	1715139	230.1207	ug/L	100
32) cis-1,2-Dichloroethene	8.84	96	1336710	224.1642	ug/L	98
33) Chloroform	9.04	83	2126281	218.1042	ug/L	99
34) 1-Bromopropane	9.17	122	250779	224.8807	ug/L	100
35) Bromochloromethane	9.26	130	849150	224.1545	ug/L	99
36) Tetrahydrofuran	9.31	42	1677	1.9775	ug/L #	64
38) 1,1,1-Trichloroethane	9.54	97	2179319	238.2917	ug/L	98
39) Cyclohexane	9.57	56	1703984	231.2561	ug/L	100
40) 1,1-Dichloropropene	9.73	75	1658024	227.9920	ug/L	100
41) Carbon Tetrachloride	9.87	117	1988503	203.4255	ug/L	100
42) Tert-Amyl-Methyl ether	9.84	73	6016	0.4181	ug/L #	99
45) 1,2-Dichloroethane	10.04	62	1535255	223.9920	ug/L	98

(#) = qualifier out of range (m) = manual integration
11M83338.D 8260WTR.M Fri May 04 08:37:23 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83338.D Vial: 10
Acq On : 3 May 2012 21:06 Operator: ADC
Sample : WG396851-10 200ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:22 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

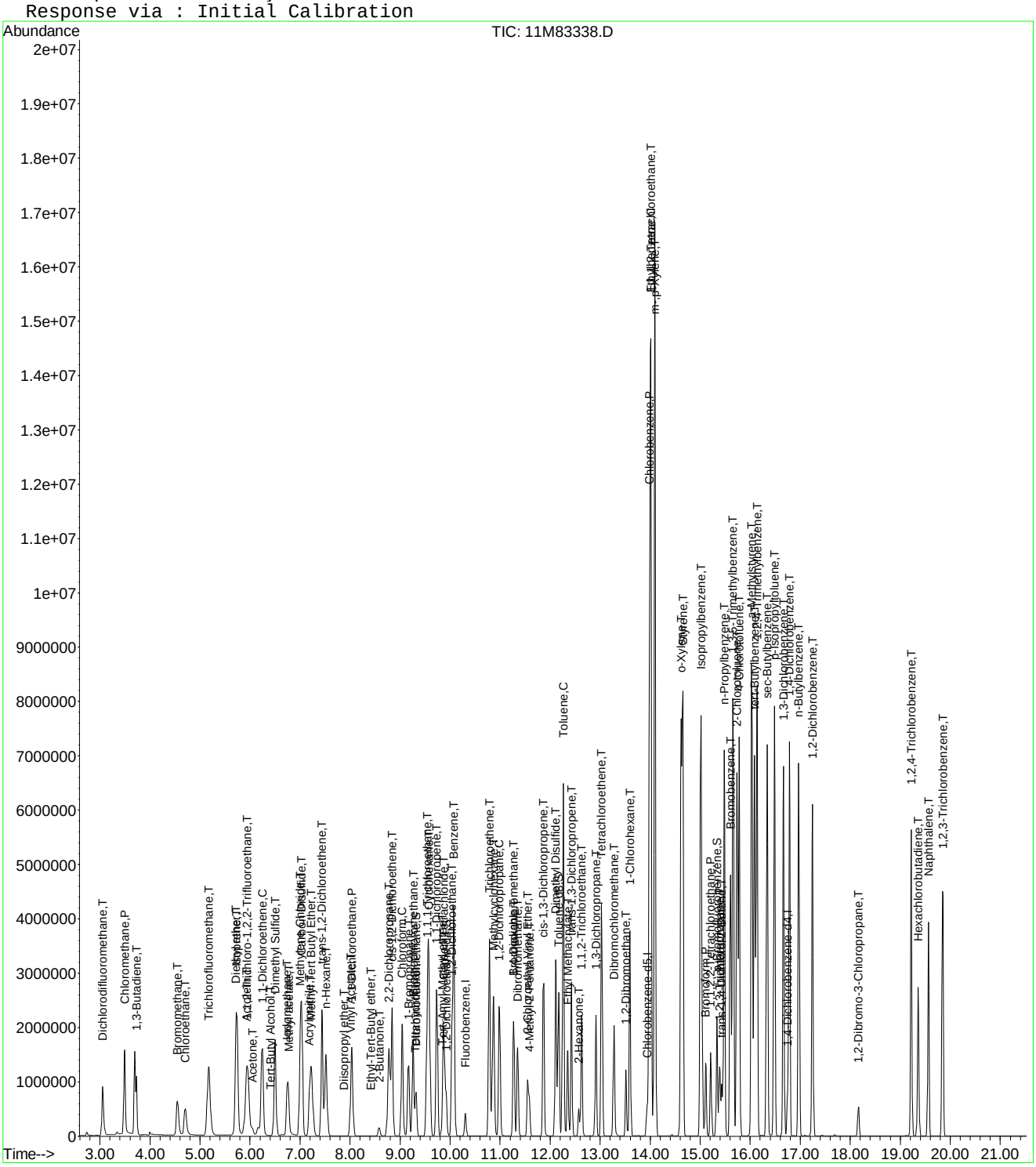
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46)	Benzene	10.07	78	4840631	227.8343 ug/L		100
47)	Trichloroethene	10.78	130	1509290	216.6657 ug/L		100
48)	Methylcyclohexane	10.87	83	1638455	224.6661 ug/L		99
49)	1,2-Dichloropropane	10.98	63	1084498	221.7315 ug/L		99
50)	1,4-Dioxane	11.27	88	2254	64.8179 ug/L	#	24
51)	Bromodichloromethane	11.27	83	1586759	237.0184 ug/L		100
52)	Dibromomethane	11.35	93	672467	204.7754 ug/L		98
53)	2-Chloroethyl Vinyl Ether	11.55	63	469127	224.8529 ug/L		98
54)	4-Methyl-2-Pentanone	11.58	58	234017	204.7973 ug/L		98
55)	cis-1,3-Dichloropropene	11.87	75	1842994	238.9923 ug/L		99
56)	Dimethyl Disulfide	12.11	79	1202862	199.0474 ug/L		98
59)	Toluene	12.26	91	5731359	233.5759 ug/L		98
60)	Ethyl Methacrylate	12.36	69	1080185	206.6852 ug/L		98
62)	trans-1,3-Dichloropropene	12.43	75	1693760	257.4577 ug/L		100
63)	1,1,2-Trichloroethane	12.62	97	874491	215.7638 ug/L		100
64)	2-Hexanone	12.57	43	408677	199.4100 ug/L		94
65)	1,3-Dichloropropane	12.91	76	1460267	214.4907 ug/L		99
66)	Tetrachloroethene	13.03	164	1197844	238.2691 ug/L		99
67)	Dibromochloromethane	13.28	129	1318531	199.2592 ug/L		99
68)	1,2-Dibromoethane	13.51	107	907115	216.1275 ug/L		99
69)	1-Chlorohexane	13.60	91	1705774	242.4773 ug/L		99
70)	Chlorobenzene	13.99	112	4591336	281.1010 ug/L		100
71)	1,1,1,2-Tetrachloroethane	14.01	131	1933357	199.6362 ug/L		99
72)	Ethylbenzene	14.01	106	2748752	310.1200 ug/L		88
73)	m-,p-Xylene	14.09	106	6483932	592.4036 ug/L		80
74)	o-Xylene	14.62	106	2786078	261.3089 ug/L		97
75)	Styrene	14.65	104	4922555	290.1660 ug/L		99
76)	Bromoform	15.11	173	802717	178.7971 ug/L		98
77)	Isopropylbenzene	15.01	105	6709825	267.3098 ug/L		98
79)	1,1,2,2-Tetrachloroethane	15.21	83	907844	211.7631 ug/L		99
81)	1,2,3-Trichloropropane	15.39	110	263765	203.2743 ug/L		75
82)	trans-1,4-Dichloro-2-Buten	15.43	53	261366	207.0344 ug/L	#	17
83)	n-Propylbenzene	15.48	91	7097016	226.4831 ug/L		97
84)	Bromobenzene	15.60	156	1699059	226.9611 ug/L		99
85)	1,3,5-Trimethylbenzene	15.65	105	5581330	239.8387 ug/L		100
86)	2-Chlorotoluene	15.74	91	4828379	229.1136 ug/L		100
87)	4-Chlorotoluene	15.78	91	4540425	246.1911 ug/L		100
88)	a-Methylstyrene	16.03	118	3566392	275.1812 ug/L		99
89)	tert-Butylbenzene	16.09	134	1253642	247.5312 ug/L		99
90)	1,2,4-Trimethylbenzene	16.14	105	6121138	252.8194 ug/L		98
91)	sec-Butylbenzene	16.34	105	6509371	239.5628 ug/L		98
92)	p-Isopropyltoluene	16.48	119	5894422	252.8203 ug/L		99
93)	1,3-Dichlorobenzene	16.67	146	3525117	240.0910 ug/L		99
94)	1,4-Dichlorobenzene	16.78	146	3582936	239.7431 ug/L		100
95)	n-Butylbenzene	16.97	91	4723299	265.9557 ug/L		100
96)	1,2-Dichlorobenzene	17.25	146	3153089	236.9493 ug/L		99
97)	1,2-Dibromo-3-Chloropropan	18.16	75	159706	205.8620 ug/L		96
98)	1,2,4-Trichlorobenzene	19.22	180	2049376	272.3206 ug/L		99
99)	Hexachlorobutadiene	19.36	225	621019	207.2219 ug/L		99
100)	Naphthalene	19.56	128	3712076	198.4803 ug/L		99
101)	1,2,3-Trichlorobenzene	19.85	180	1742378	247.7512 ug/L		99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83338.D Vial: 10
Acq On : 3 May 2012 21:06 Operator: ADC
Sample : WG396851-10 200ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83339.D Vial: 11
Acq On : 3 May 2012 21:37 Operator: ADC
Sample : WG396851-11 300ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:23 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.31	96	510742	25.00	ug/L		0.00
57) Chlorobenzene-d5	13.94	117	384633	25.00	ug/L		0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	199122	25.00	ug/L		0.01
System Monitoring Compounds							
37) Dibromofluoromethane	0.00	111	0	0.0000	ug/L		
Spiked Amount 25.000	Range 86 - 118		Recovery =	0.00%#			
43) 1,2-Dichloroethane-d4	9.93	65	792	0.1330	ug/L		0.01
Spiked Amount 25.000	Range 80 - 120		Recovery =	0.52%#			
58) Toluene-d8	12.18	98	1096	0.0540	ug/L		0.01
Spiked Amount 25.000	Range 88 - 110		Recovery =	0.20%#			
80) p-Bromofluorobenzene	15.33	95	1679	0.2551	ug/L		0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	1.04%#			
Target Compounds							Qvalue
3) Chloromethane	3.48	50	22076	1.9504	ug/L		85
4) Vinyl Chloride	3.69	62	1948	0.2528	ug/L	#	60
5) 1,3-Butadiene	3.73	54	784122	138.3343	ug/L		97
6) Bromomethane	4.54	94	23963	6.6020	ug/L		99
9) Diethyl ether	5.72	59	1265745	325.6074	ug/L		99
10) Isoprene	5.74	67	1049	0.1224	ug/L		95
11) Acrolein	5.93	56	161361	597.6367	ug/L		96
13) Acetone	6.04	43	268911	288.8197	ug/L		98
15) Tert-Butyl Alcohol	6.40	59	183546	712.6568	ug/L		97
17) Iodomethane	6.74	142	4745	0.9442	ug/L		88
18) Methyl acetate	6.76	43	341640	103.5638	ug/L		99
19) Methylene Chloride	7.01	84	1342	0.2435	ug/L		87
20) Carbon Disulfide	7.04	76	15879	1.0047	ug/L		93
21) Acrylonitrile	7.19	53	325426	289.1704	ug/L		92
22) Methyl Tert Butyl Ether	7.25	73	6173	0.4795	ug/L		88
23) trans-1,2-Dichloroethene	7.43	96	1833	0.3311	ug/L		91
24) n-Hexane	7.52	57	4635	0.8288	ug/L	#	77
25) Diisopropyl ether	7.86	45	5419661	334.2942	ug/L		98
26) Vinyl Acetate	8.01	43	1056178	310.1534	ug/L		98
28) Ethyl-Tert-Butyl ether	8.41	59	5348442	337.8609	ug/L		100
29) 2-Butanone	8.57	43	396559	301.7222	ug/L		98
30) Propionitrile	8.67	54	122723	316.3976	ug/L		100
32) cis-1,2-Dichloroethene	8.85	96	898	0.1497	ug/L	#	1
34) 1-Bromopropane	9.17	122	390914	348.4820	ug/L		100
35) Bromochloromethane	9.26	130	948	0.2488	ug/L	#	63
36) Tetrahydrofuran	9.29	42	259266	303.9324	ug/L		98
39) Cyclohexane	9.57	56	2100	0.2833	ug/L	#	90
40) 1,1-Dichloropropene	9.73	75	1388	0.1897	ug/L	#	37
42) Tert-Amyl-Methyl ether	9.83	73	4841658	334.5240	ug/L		99
45) 1,2-Dichloroethane	10.03	62	2103	0.3050	ug/L	#	74
46) Benzene	10.07	78	3071	0.1437	ug/L		82
47) Trichloroethene	10.78	130	1549	0.2211	ug/L		79
48) Methylcyclohexane	10.87	83	2644	0.3604	ug/L		78
50) 1,4-Dioxane	11.26	88	21410	612.0626	ug/L		94
52) Dibromomethane	11.35	93	1310	0.6227	ug/L		95
53) 2-Chloroethyl Vinyl Ether	11.55	63	739475	352.3462	ug/L		100
54) 4-Methyl-2-Pentanone	11.58	58	365593	318.0627	ug/L		98
55) cis-1,3-Dichloropropene	11.87	75	1775	0.2288	ug/L	#	66
56) Dimethyl Disulfide	12.11	79	816	1.0727	ug/L		54
59) Toluene	12.26	91	3406	0.1472	ug/L		97

(#) = qualifier out of range (m) = manual integration
11M83339.D 8260WTR.M Fri May 04 08:37:24 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050312\11M83339.D Vial: 11
Acq On : 3 May 2012 21:37 Operator: ADC
Sample : WG396851-11 300ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:23 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

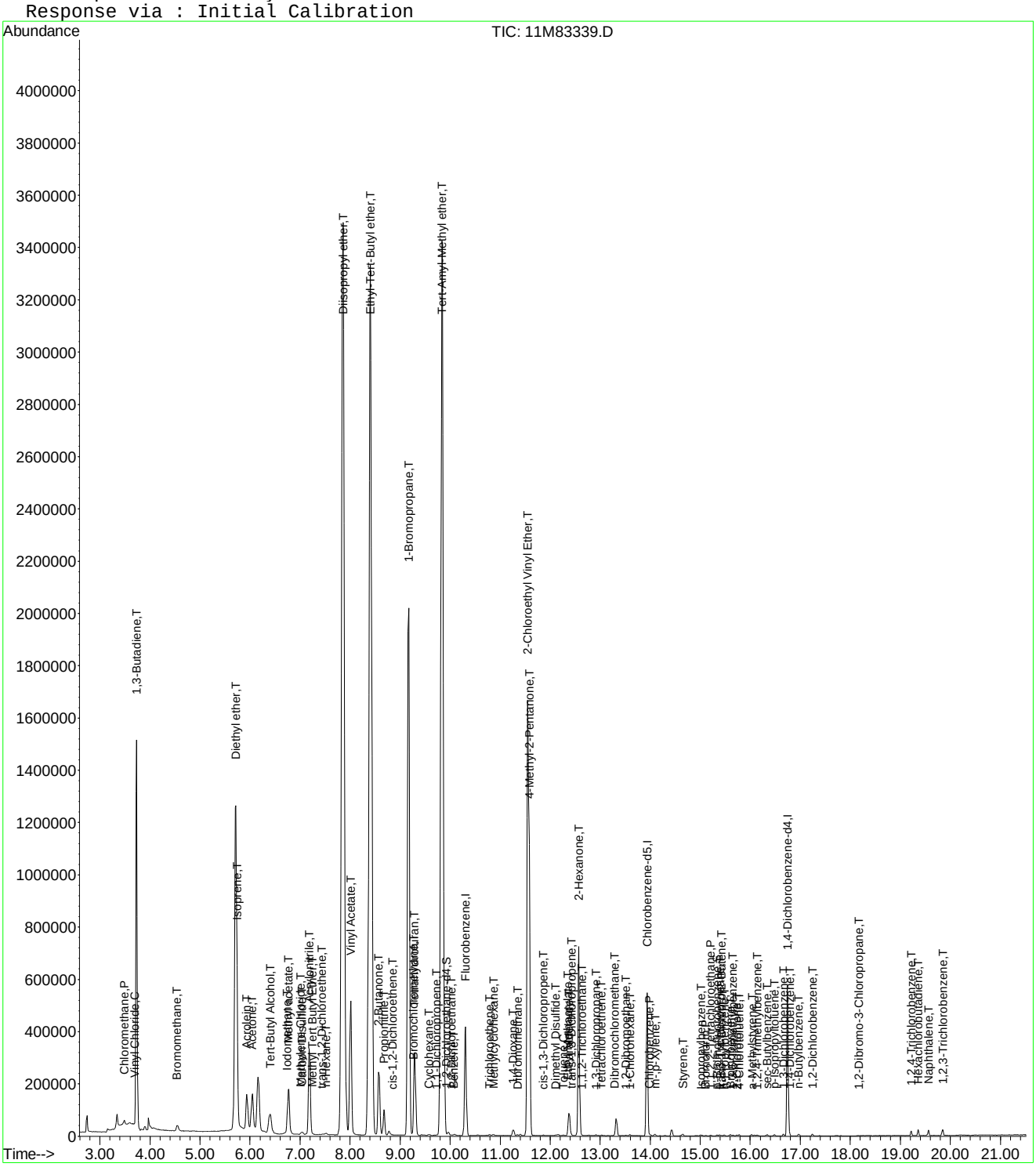
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
60)	Ethyl Methacrylate	12.36	69	2511	1.0901 ug/L	#	2
61)	Paraldehyde	12.38	89	19030	291.3615 ug/L		15
62)	trans-1,3-Dichloropropene	12.43	75	3069	0.4948 ug/L		99
63)	1,1,2-Trichloroethane	12.64	97	1432	0.3747 ug/L		100
64)	2-Hexanone	12.57	43	590330	305.5090 ug/L	#	32
65)	1,3-Dichloropropane	12.91	76	2393	0.3728 ug/L		70
66)	Tetrachloroethene	13.03	164	853	0.1800 ug/L		85
67)	Dibromochloromethane	13.29	129	1617	0.5547 ug/L		97
68)	1,2-Dibromoethane	13.51	107	1821	0.4602 ug/L		74
69)	1-Chlorohexane	13.60	91	1478	0.2228 ug/L		84
70)	Chlorobenzene	13.99	112	3122	0.2027 ug/L		86
73)	m-,p-Xylene	14.10	106	3136	0.3039 ug/L		96
75)	Styrene	14.65	104	4129	0.2581 ug/L		94
76)	Bromoform	15.11	173	1373	0.8319 ug/L		74
77)	Isopropylbenzene	15.01	105	4540	0.1918 ug/L		92
79)	1,1,2,2-Tetrachloroethane	15.21	83	2338	0.6596 ug/L		85
81)	1,2,3-Trichloropropane	15.40	110	213	0.1985 ug/L	#	15
82)	trans-1,4-Dichloro-2-Buten	15.43	53	476	2.0151 ug/L	#	79
83)	n-Propylbenzene	15.49	91	5780	0.2231 ug/L		98
84)	Bromobenzene	15.60	156	1846	0.2982 ug/L		94
85)	1,3,5-Trimethylbenzene	15.65	105	3652	0.1898 ug/L		90
86)	2-Chlorotoluene	15.74	91	2629	0.1509 ug/L	#	37
87)	4-Chlorotoluene	15.78	91	4411	0.2893 ug/L	#	70
88)	a-Methylstyrene	16.04	118	2004	0.1870 ug/L		91
90)	1,2,4-Trimethylbenzene	16.14	105	3577	0.1787 ug/L		91
91)	sec-Butylbenzene	16.34	105	6008	0.2674 ug/L		93
92)	p-Isopropyltoluene	16.48	119	5059	0.2624 ug/L		94
93)	1,3-Dichlorobenzene	16.67	146	4747	0.3910 ug/L		93
94)	1,4-Dichlorobenzene	16.79	146	5312	0.4299 ug/L	#	16
95)	n-Butylbenzene	16.97	91	7067	0.4813 ug/L	#	87
96)	1,2-Dichlorobenzene	17.25	146	4182	0.3801 ug/L		98
97)	1,2-Dibromo-3-Chloropropan	18.17	75	471	1.2765 ug/L		77
98)	1,2,4-Trichlorobenzene	19.22	180	7966	1.2803 ug/L		97
99)	Hexachlorobutadiene	19.36	225	5649	2.5212 ug/L		97
100)	Naphthalene	19.56	128	20915	1.8038 ug/L	#	98
101)	1,2,3-Trichlorobenzene	19.85	180	10057	1.7296 ug/L		91

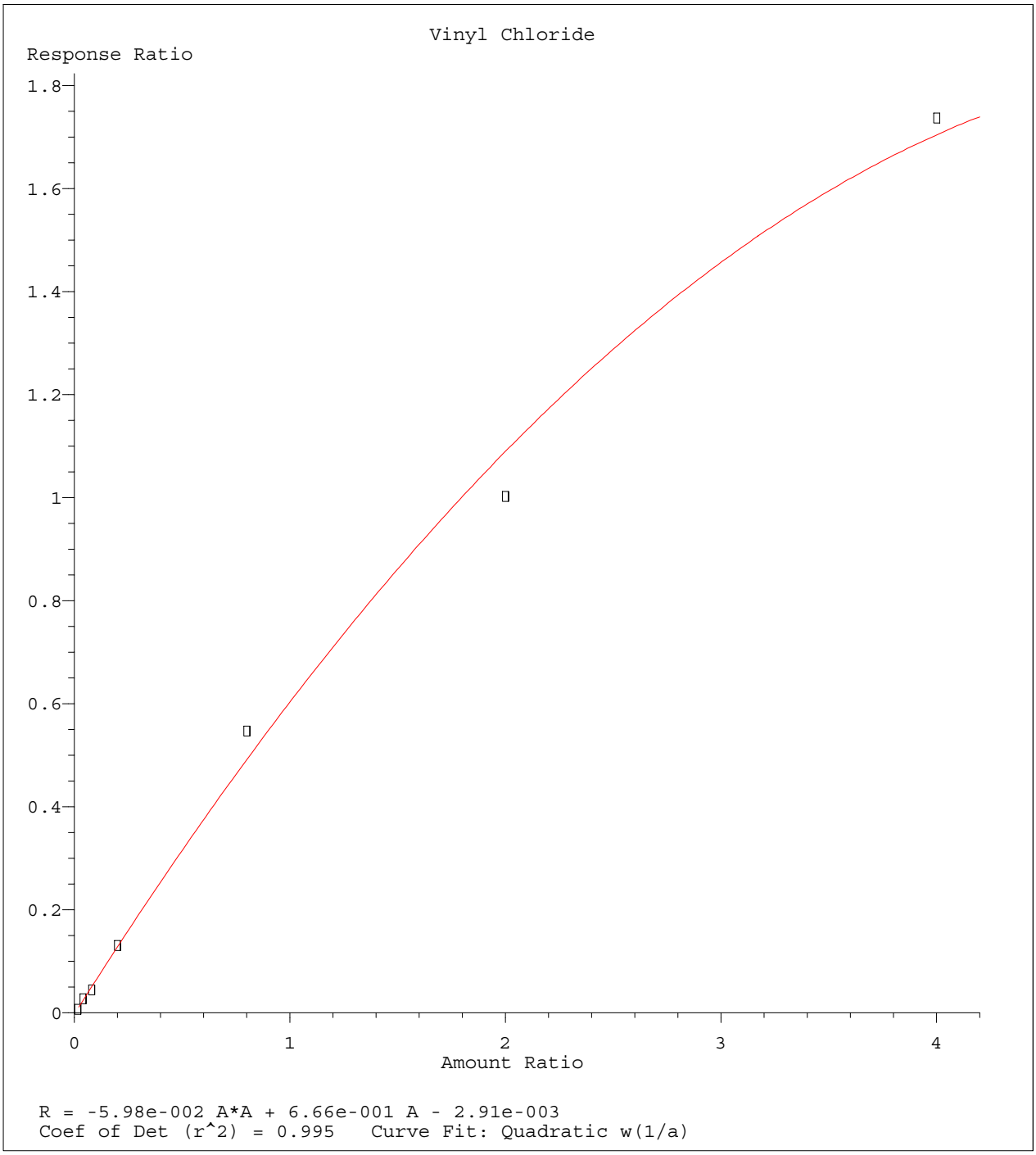
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

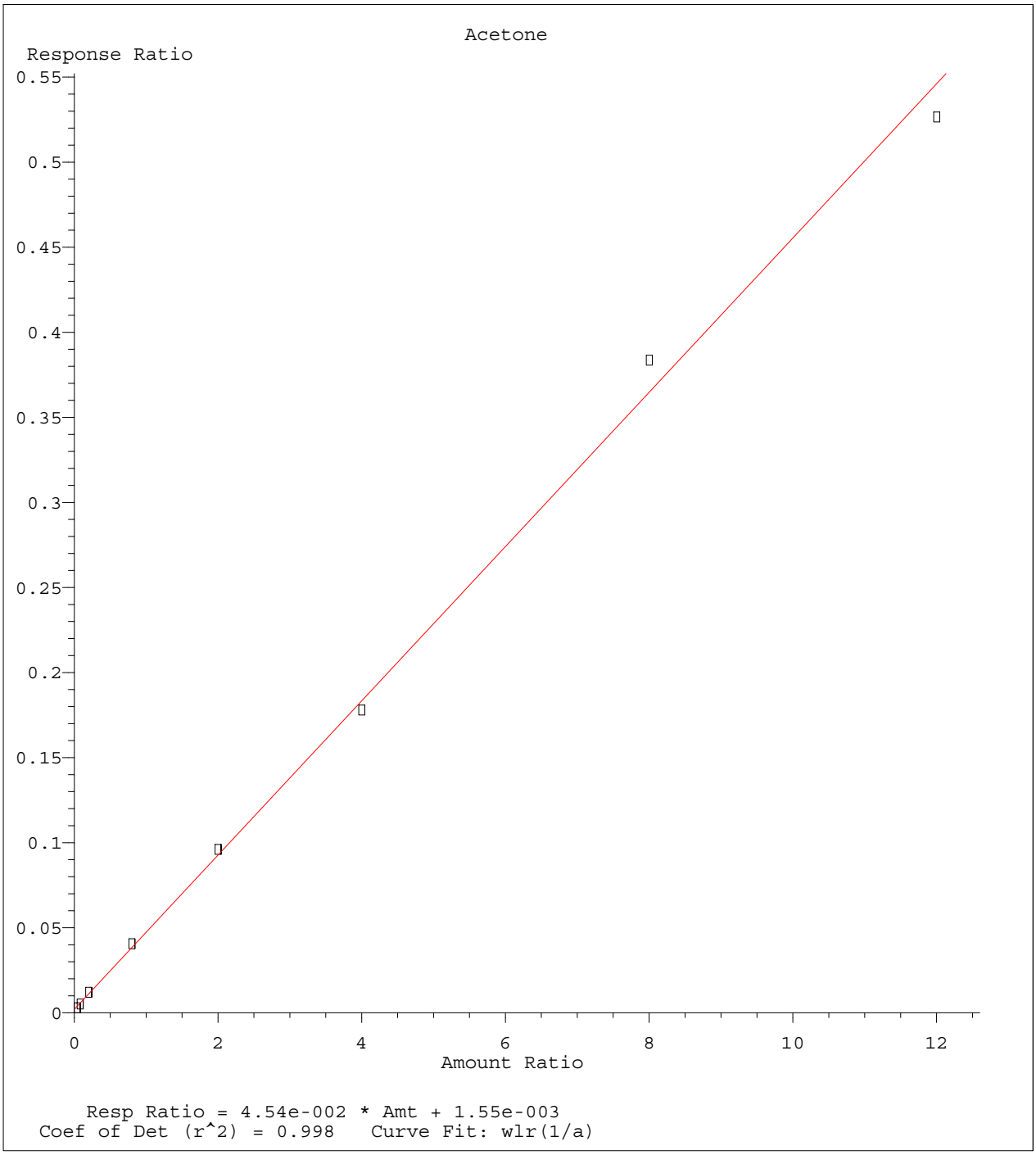
Data File : C:\MSDCHEM\1\DATA\050312\11M83339.D Vial: 11
Acq On : 3 May 2012 21:37 Operator: ADC
Sample : WG396851-11 300ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration

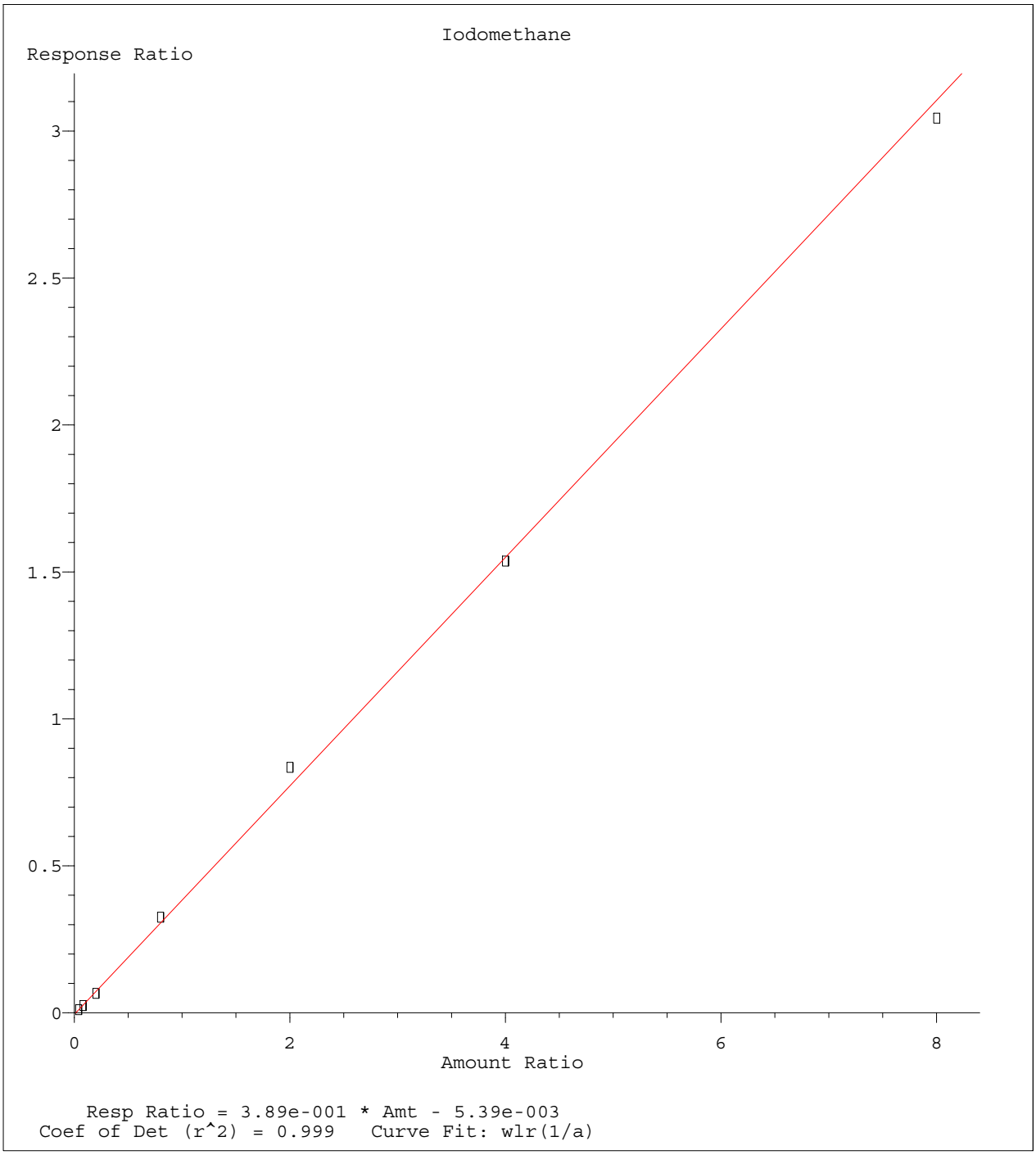




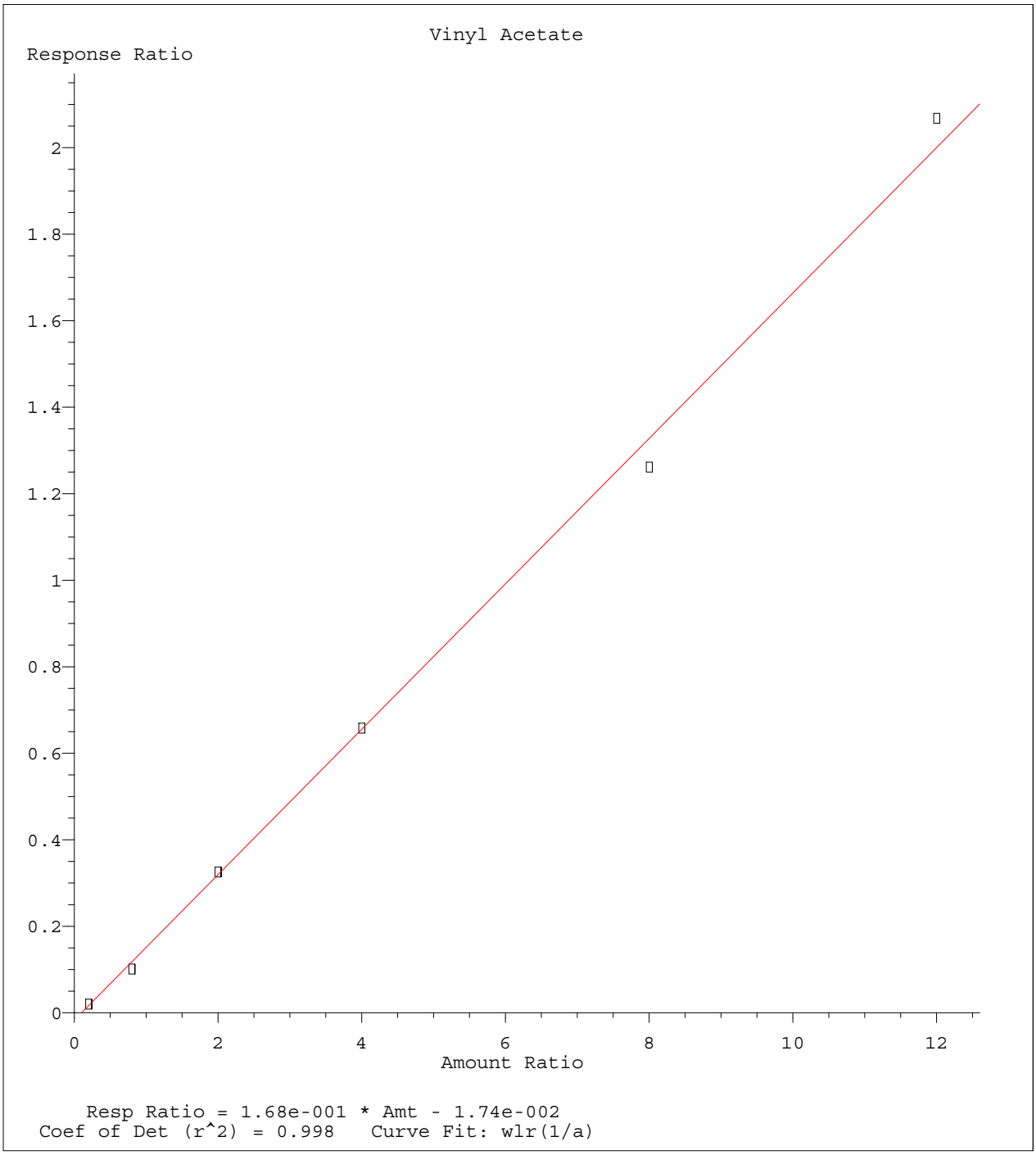
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



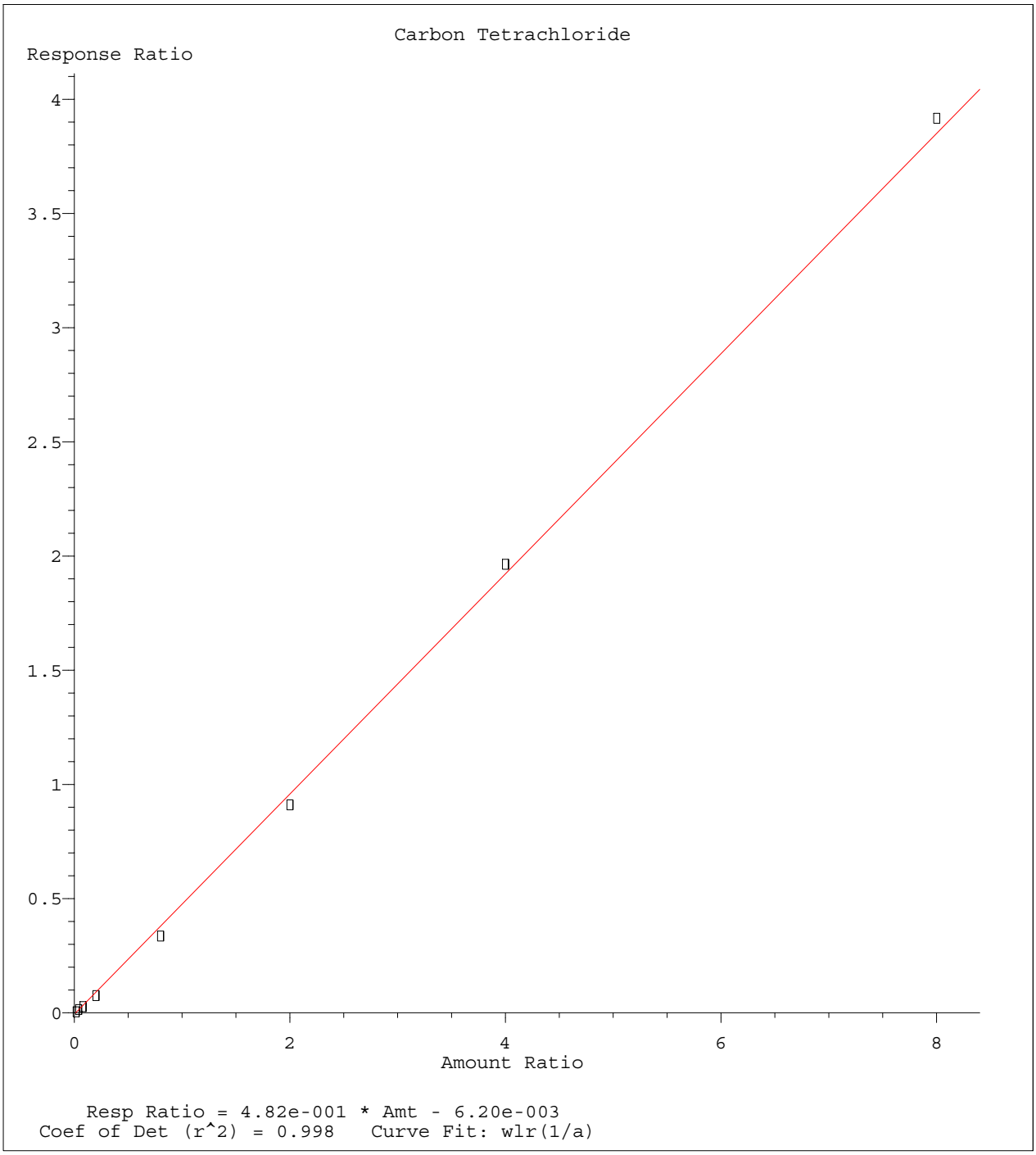
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



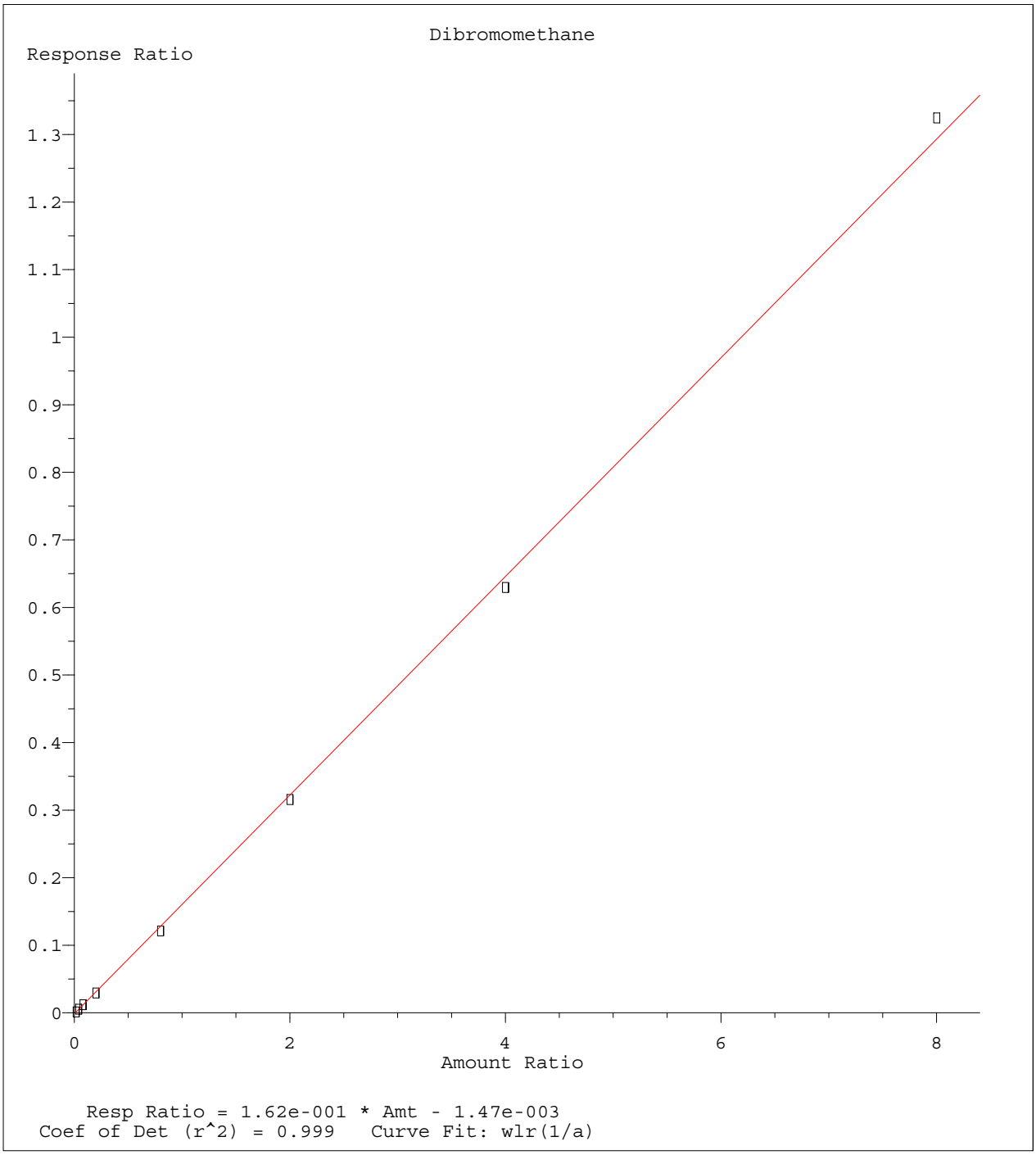
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



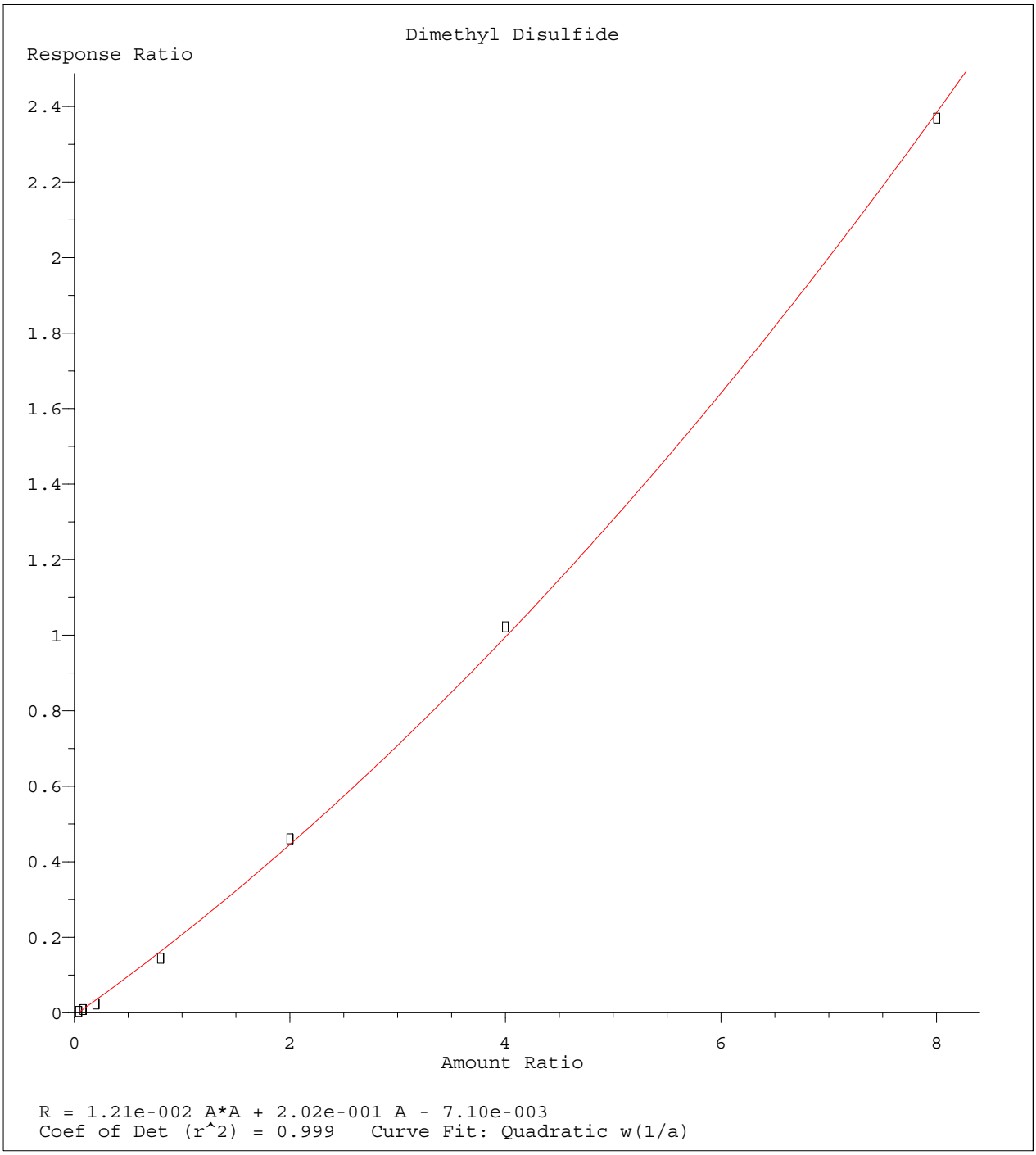
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



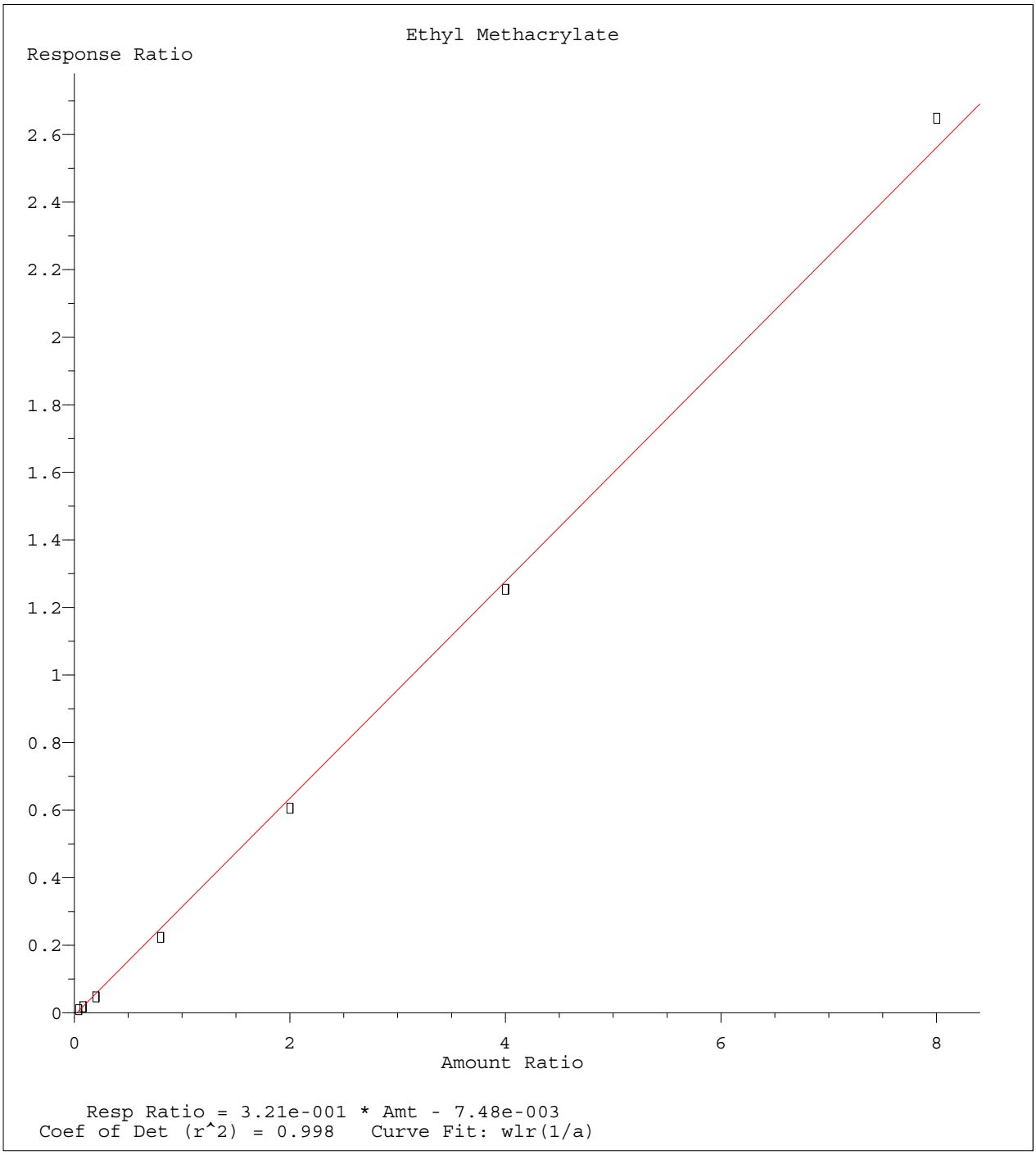
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



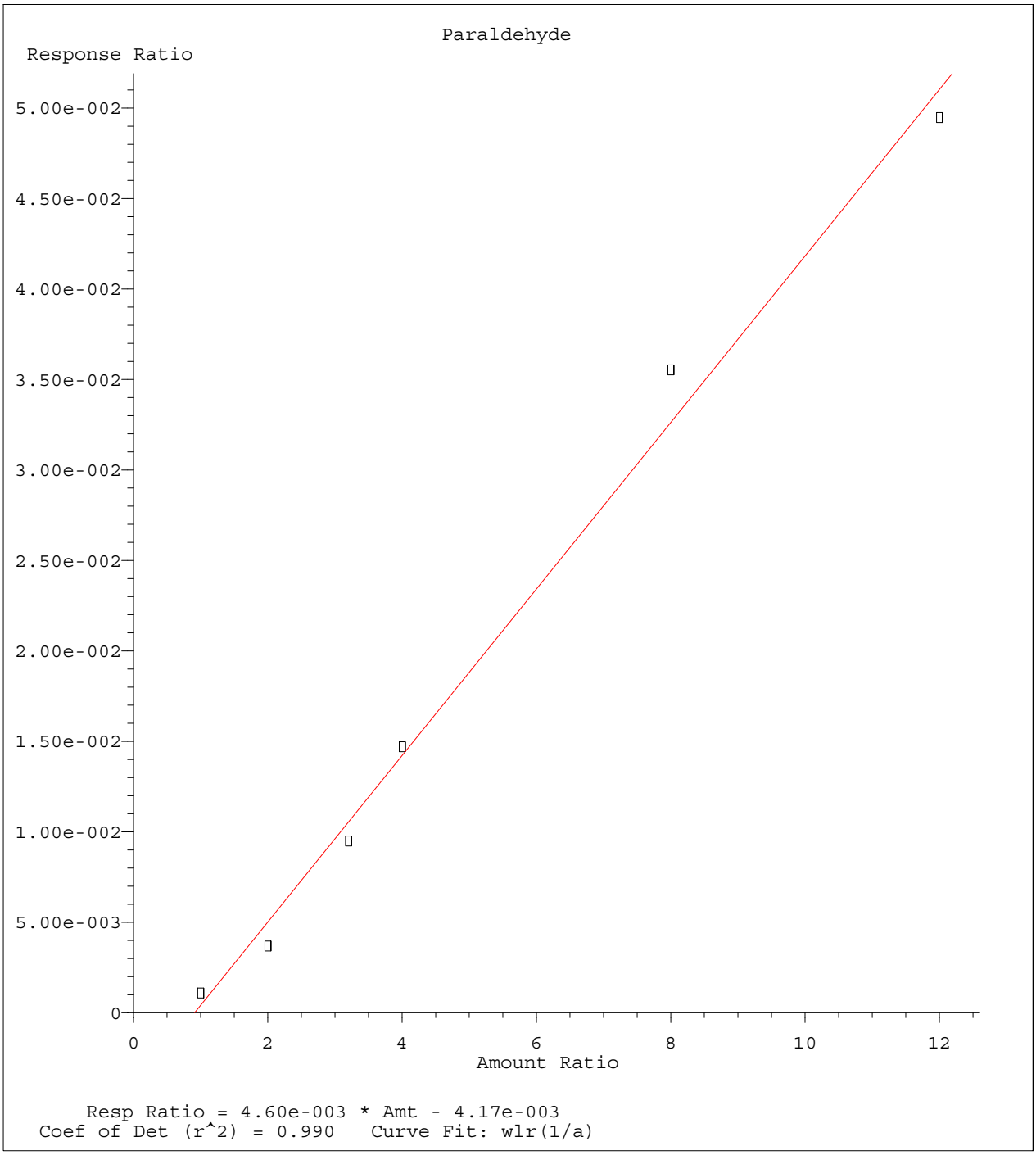
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



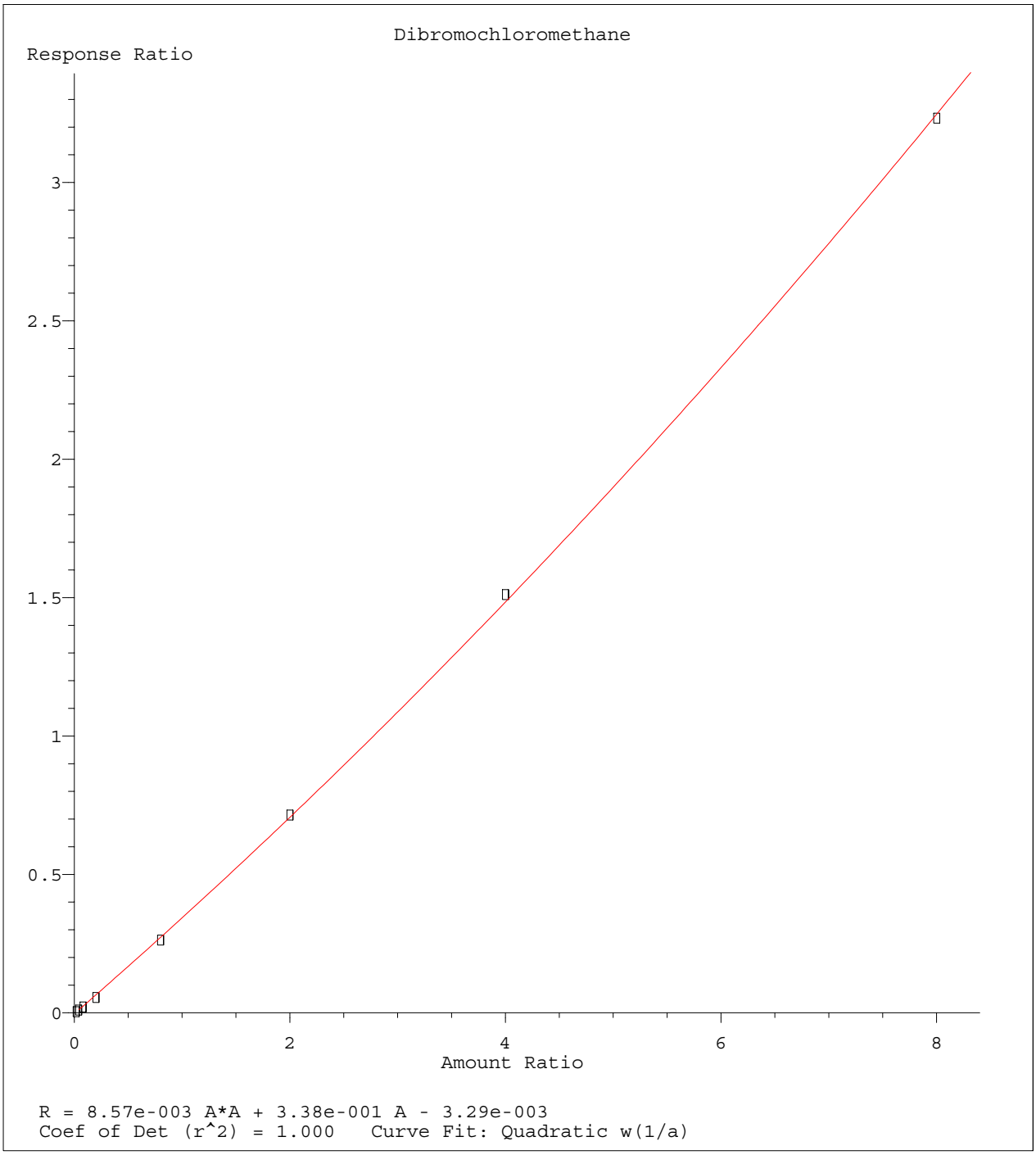
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



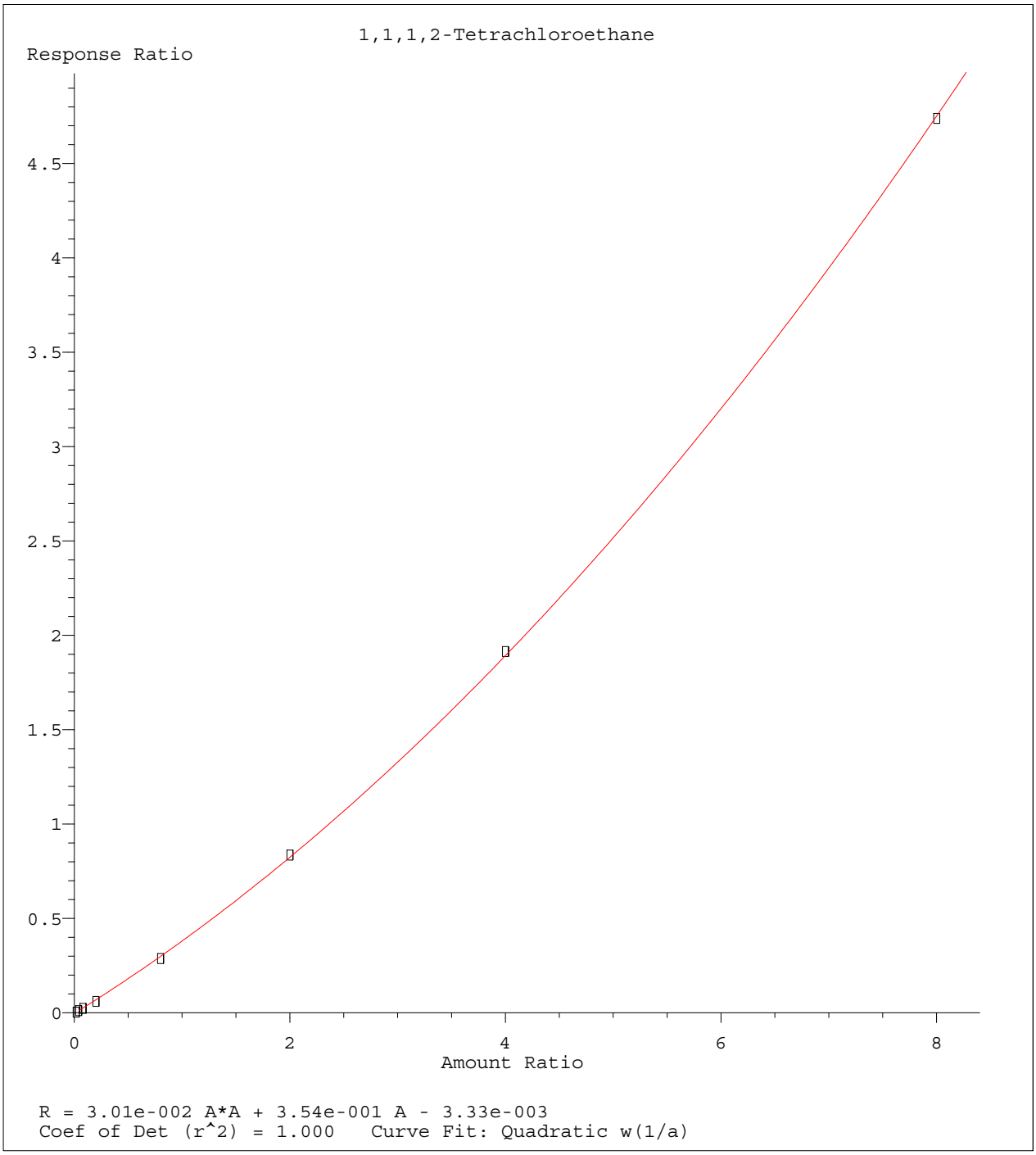
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



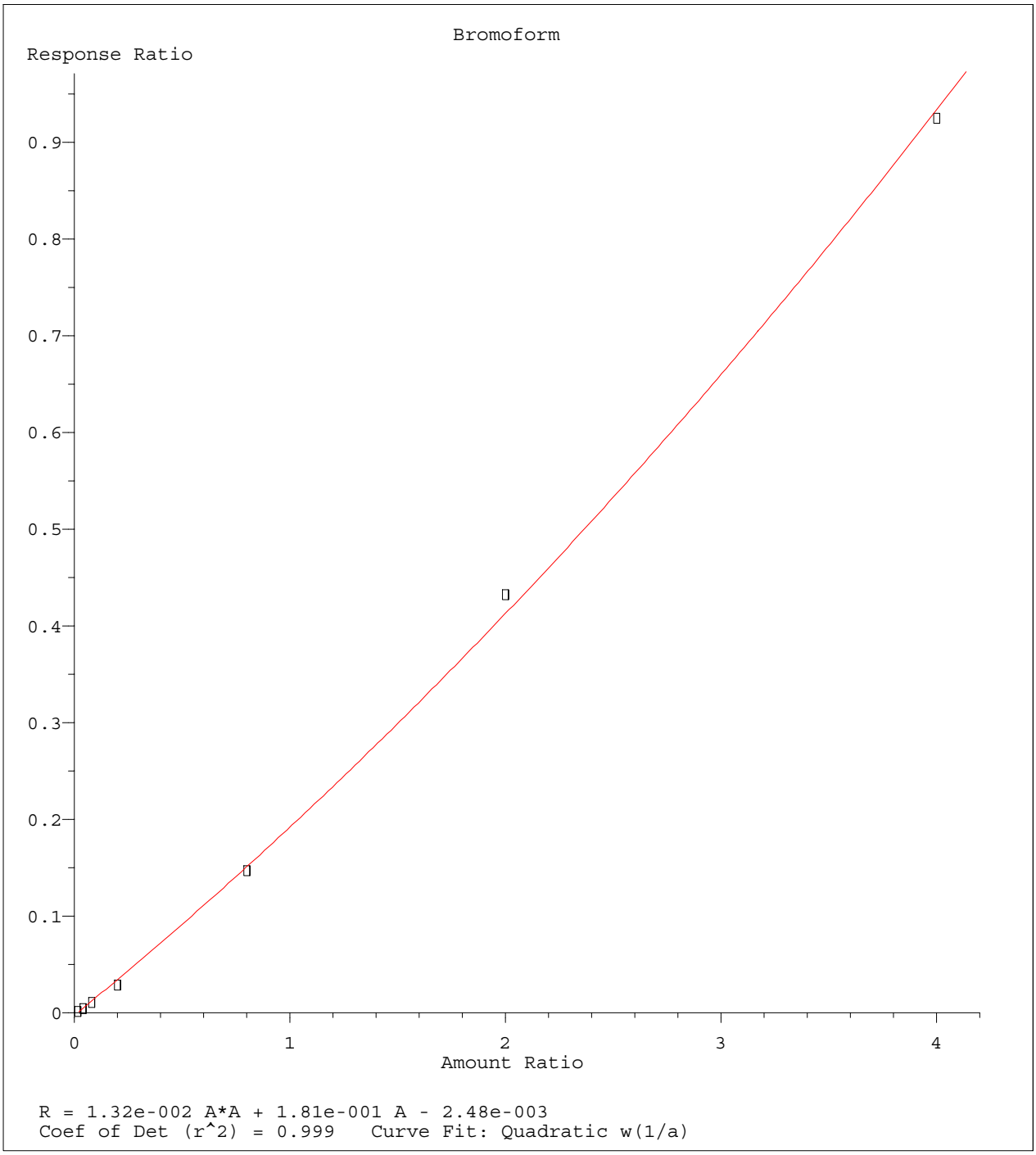
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



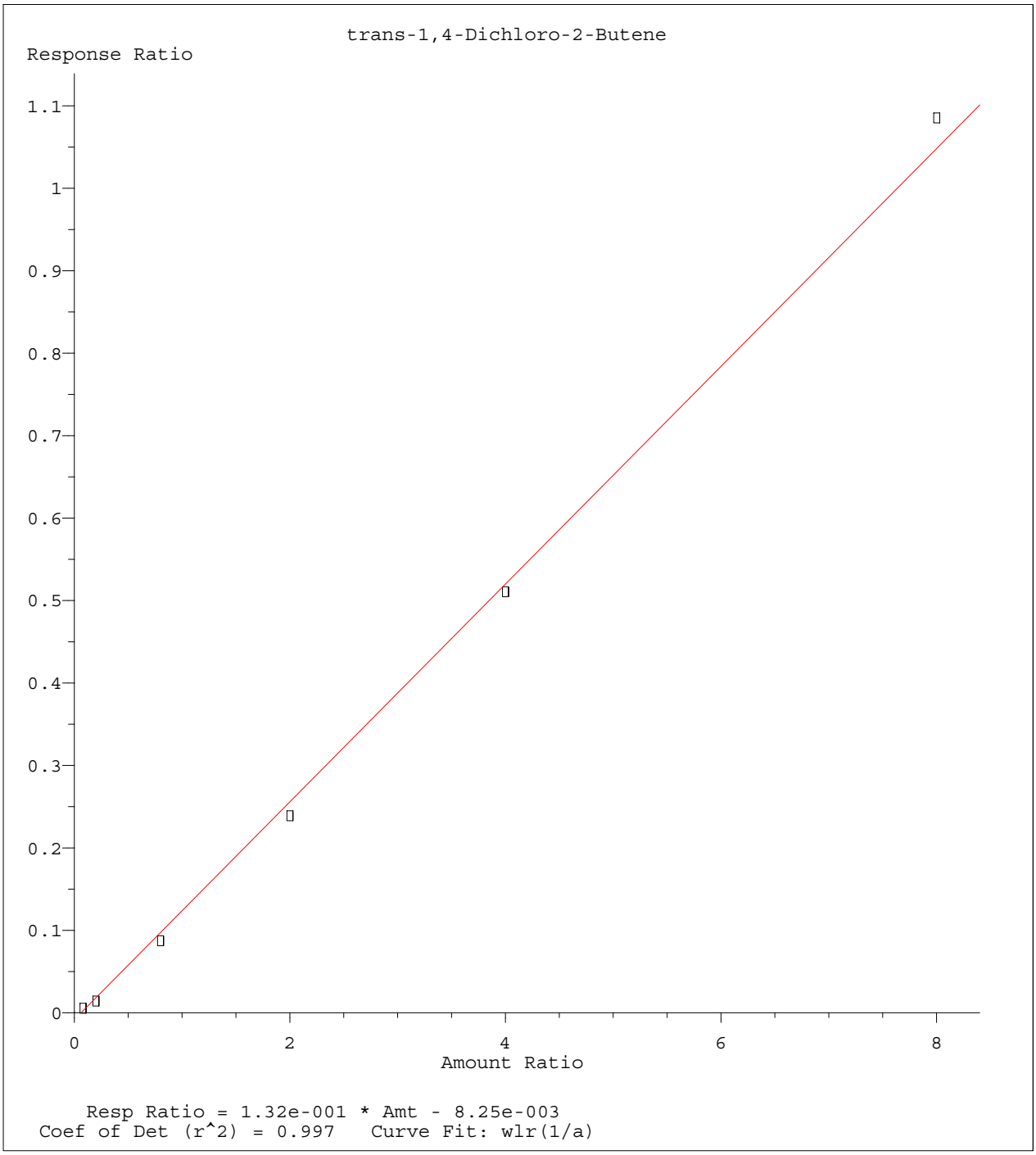
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



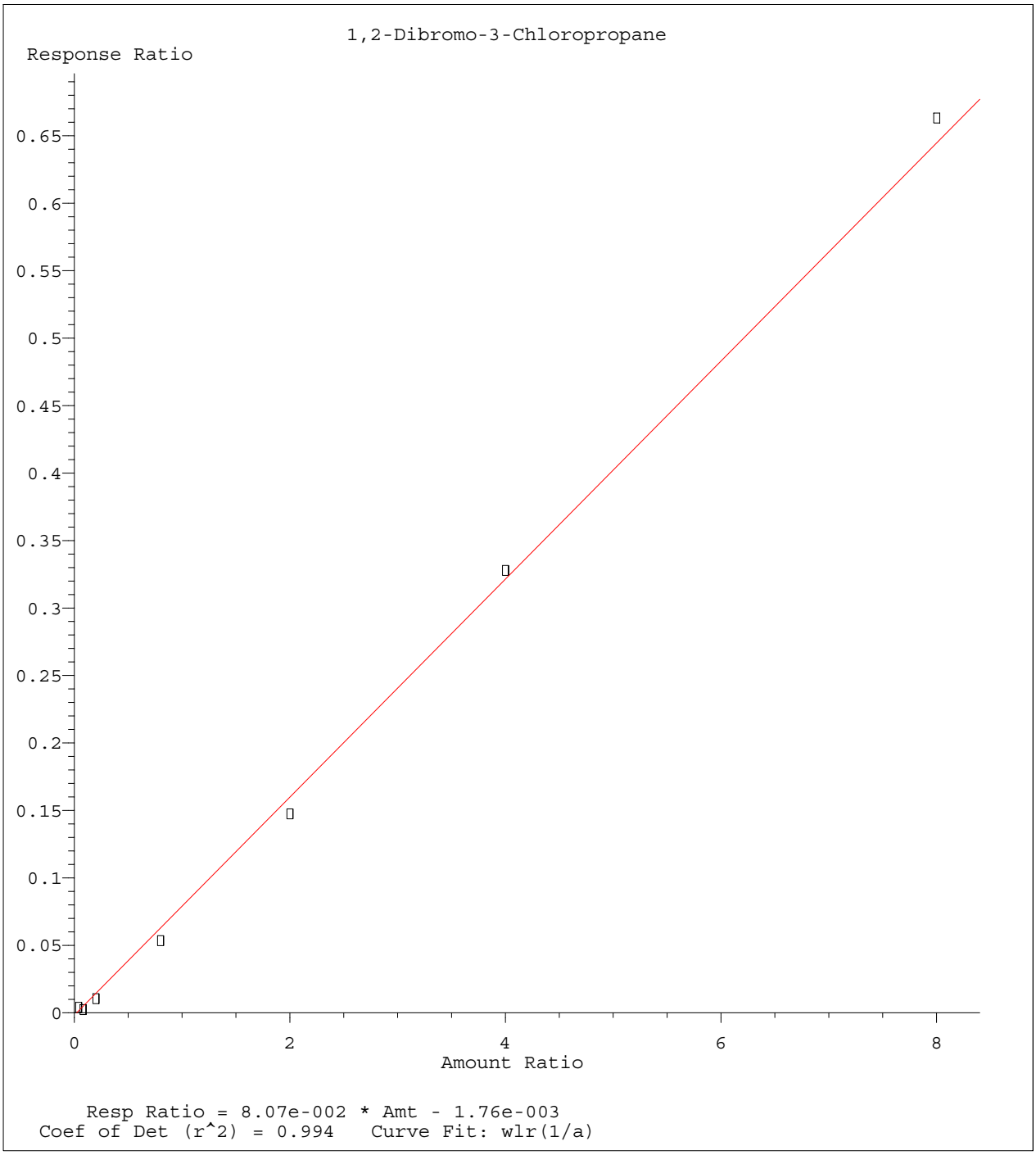
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



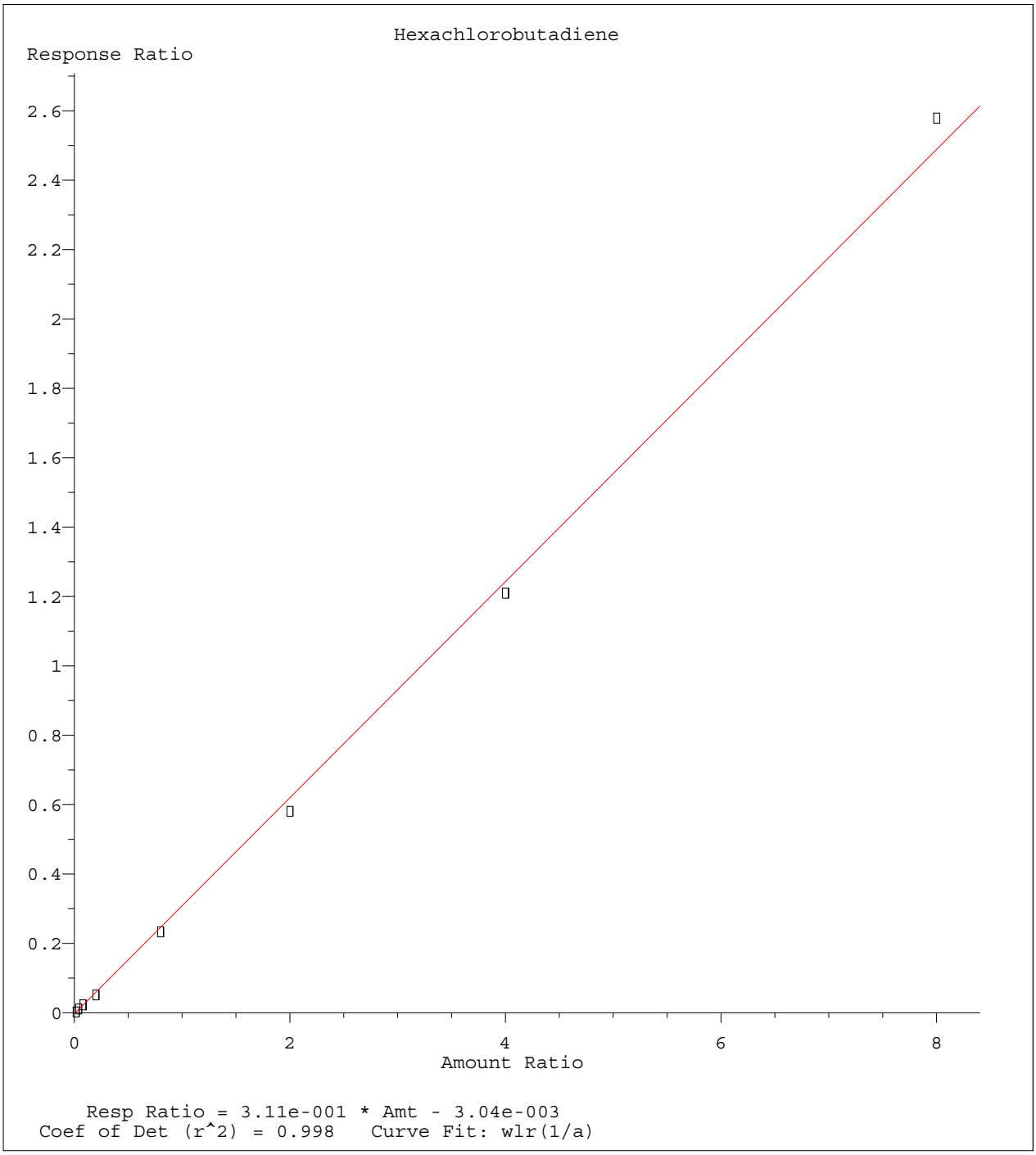
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



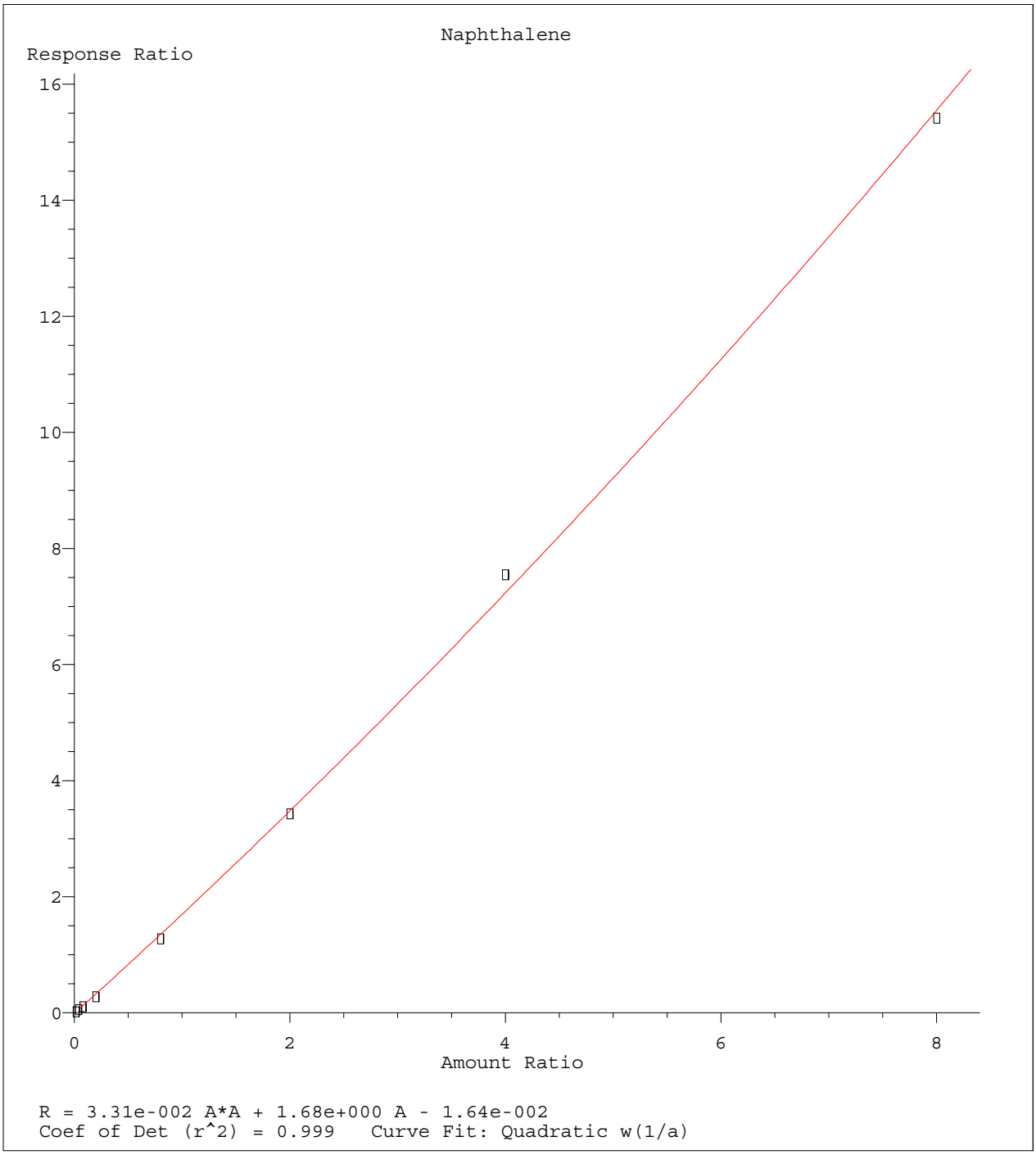
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Fri May 04 08:32:33 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83341.D Vial: 13
Acq On : 3 May 2012 22:38 Operator: ADC
Sample : WG396851-12 50ug/L ALT SRC 8260 Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:26 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.31	96	464031	25.00 ug/L	0.00
57) Chlorobenzene-d5	13.94	117	367547	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	215637	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.32	111	139439	24.6597 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 98.64%		
43) 1,2-Dichloroethane-d4	9.93	65	133290	24.6340 ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 98.52%		
58) Toluene-d8	12.17	98	461320	23.7951 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 95.20%		
80) p-Bromofluorobenzene	15.33	95	170237	23.8843 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 95.52%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.05	85	424943	70.9681 ug/L	100
3) Chloromethane	3.48	50	654238	63.6201 ug/L	98
4) Vinyl Chloride	3.69	62	479845	46.7987 ug/L	100
5) 1,3-Butadiene	3.73	54	150886	29.2988 ug/L	96
6) Bromomethane	4.56	94	185501	56.2517 ug/L	98
7) Chloroethane	4.71	64	190220	53.6791 ug/L	98
8) Trichlorofluoromethane	5.19	101	529498	52.9219 ug/L	99
9) Diethyl ether	5.71	59	320684	90.7988 ug/L	100
10) Isoprene	5.74	67	371823	47.7647 ug/L	100
11) Acrolein	5.93	56	44872	182.9232 ug/L	98
12) 1,1,2-Trichloro-1,2,2-Trif	5.96	101	276384	53.2747 ug/L	100
13) Acetone	6.04	43	46020	53.7090 ug/L	97
14) 1,1-Dichloroethene	6.25	61	386603	54.8850 ug/L	100
15) Tert-Butyl Alcohol	6.38	59	53898	230.3365 ug/L	100
16) Dimethyl Sulfide	6.50	62	293443	50.8647 ug/L	100
17) Iodomethane	6.74	142	376292	52.4914 ug/L	97
18) Methyl acetate	6.76	43	127385	42.5023 ug/L	98
19) Methylene Chloride	7.00	84	264382	52.8103 ug/L	98
20) Carbon Disulfide	7.04	76	770955	53.6878 ug/L	100
21) Acrylonitrile	7.18	53	55757	54.5325 ug/L	99
22) Methyl Tert Butyl Ether	7.22	73	621966	53.1762 ug/L	100
23) trans-1,2-Dichloroethene	7.44	96	268638	53.4172 ug/L	100
24) n-Hexane	7.52	57	251960	49.5894 ug/L	99
25) Diisopropyl ether	7.85	45	1470544	99.8365 ug/L	100
26) Vinyl Acetate	8.01	43	242467	80.3061 ug/L	99
27) 1,1-Dichloroethane	8.03	63	455841	54.0898 ug/L	100
28) Ethyl-Tert-Butyl ether	8.41	59	1377415	95.7701 ug/L	100
29) 2-Butanone	8.57	43	62141	52.0394 ug/L	99
30) Propionitrile	8.67	54	37051	105.1385 ug/L	98
31) 2,2-Dichloropropane	8.78	77	351954	51.6696 ug/L	100
32) cis-1,2-Dichloroethene	8.84	96	293819	53.9140 ug/L	99
33) Chloroform	9.04	83	478774	53.7362 ug/L	98
34) 1-Bromopropane	9.17	122	61392	60.2373 ug/L	98
35) Bromochloromethane	9.26	130	191946	55.4415 ug/L	100
36) Tetrahydrofuran	9.29	42	77137	99.5288 ug/L	98
38) 1,1,1-Trichloroethane	9.54	97	454912	54.4262 ug/L	100
39) Cyclohexane	9.57	56	350245	52.0107 ug/L	100
40) 1,1-Dichloropropene	9.73	75	359141	54.0364 ug/L	100
41) Carbon Tetrachloride	9.87	117	459251	51.6473 ug/L	100
42) Tert-Amyl-Methyl ether	9.83	73	1340142	101.9151 ug/L	100

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83341.D Vial: 13
Acq On : 3 May 2012 22:38 Operator: ADC
Sample : WG396851-12 50ug/L ALT SRC 8260 Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 08:37:26 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

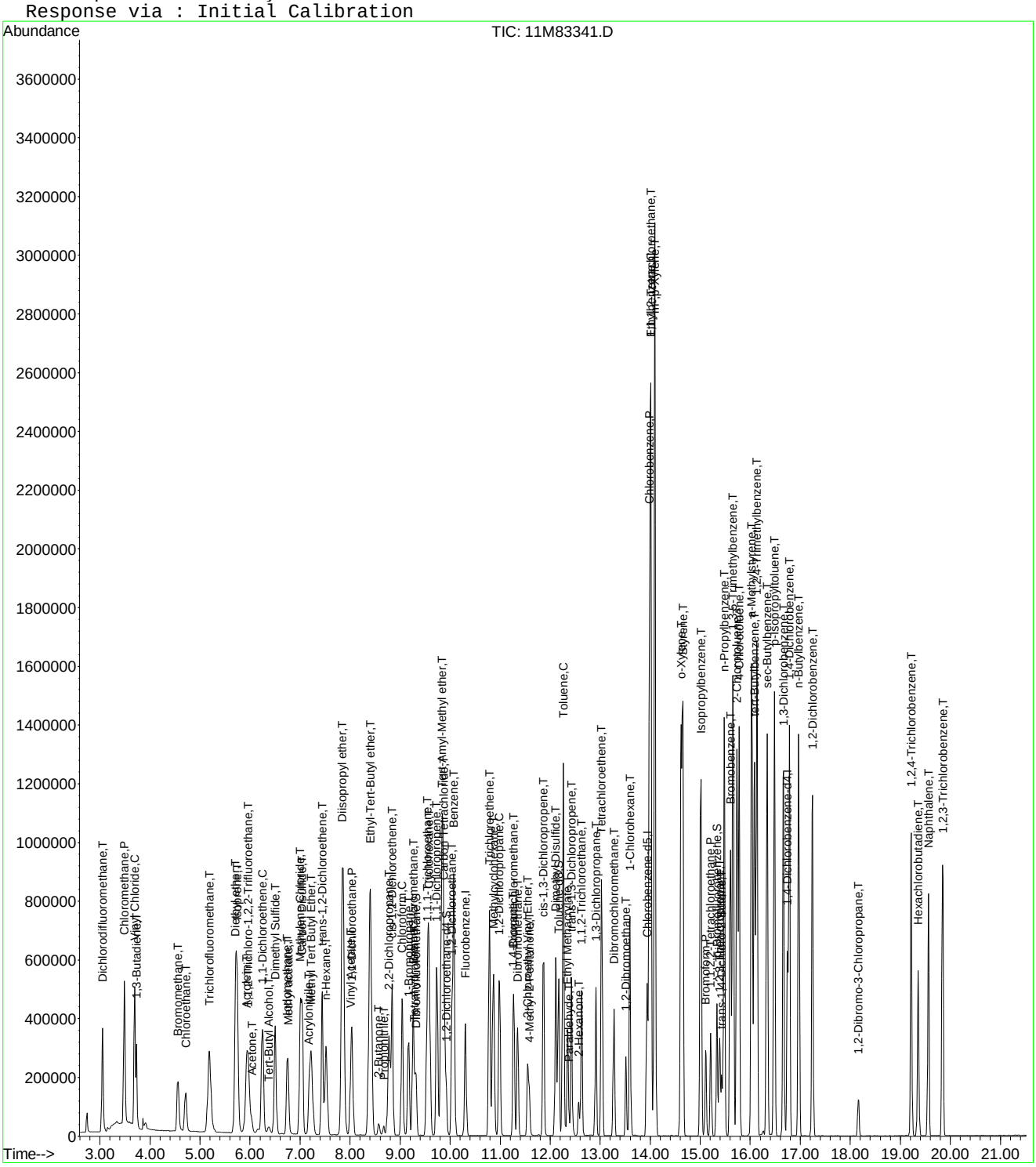
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	10.04	62	338853	54.0949	ug/L	99
46)	Benzene	10.07	78	1029190	53.0036	ug/L	100
47)	Trichloroethene	10.78	130	325583	51.1413	ug/L	100
48)	Methylcyclohexane	10.87	83	355525	53.3416	ug/L	100
49)	1,2-Dichloropropane	10.98	63	240710	53.8500	ug/L	99
50)	1,4-Dioxane	11.26	88	6957	218.9050	ug/L	94
51)	Bromodichloromethane	11.27	83	364429	59.5630	ug/L	100
52)	Dibromomethane	11.35	93	152949	51.1322	ug/L	98
53)	2-Chloroethyl Vinyl Ether	11.55	63	108395	56.8473	ug/L	98
54)	4-Methyl-2-Pentanone	11.58	58	54734	52.4115	ug/L	98
55)	cis-1,3-Dichloropropene	11.87	75	392429	55.6819	ug/L	99
56)	Dimethyl Disulfide	12.11	79	225308	53.9440	ug/L	99
59)	Toluene	12.26	91	1167329	52.8032	ug/L	100
60)	Ethyl Methacrylate	12.35	69	247454	52.9875	ug/L	98
61)	Paraldehyde	12.38	89	5188	99.3110	ug/L	94
62)	trans-1,3-Dichloropropene	12.43	75	319943	53.9787	ug/L	99
63)	1,1,2-Trichloroethane	12.62	97	196726	53.8742	ug/L	99
64)	2-Hexanone	12.57	43	93834	50.8186	ug/L	96
65)	1,3-Dichloropropane	12.91	76	333197	54.3217	ug/L	99
66)	Tetrachloroethene	13.03	164	248208	54.7999	ug/L	99
67)	Dibromochloromethane	13.28	129	281762	54.0413	ug/L	100
68)	1,2-Dibromoethane	13.51	107	204884	54.1816	ug/L	99
69)	1-Chlorohexane	13.60	91	346161	54.6165	ug/L	100
70)	Chlorobenzene	13.99	112	822105	55.8659	ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.01	131	331694	54.0830	ug/L	100
72)	Ethylbenzene	14.01	106	463604	58.0547	ug/L	98
73)	m-,p-Xylene	14.09	106	1130395	114.6319	ug/L	100
74)	o-Xylene	14.62	106	506555	52.7332	ug/L	99
75)	Styrene	14.65	104	902712	59.0611	ug/L	100
76)	Bromoform	15.11	173	174136	56.4256	ug/L	97
77)	Isopropylbenzene	15.01	105	1124539	49.7250	ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.21	83	206848	53.8871	ug/L	99
81)	1,2,3-Trichloropropane	15.39	110	68906	59.3085	ug/L	96
82)	trans-1,4-Dichloro-2-Buten	15.43	53	53926	48.9099	ug/L	87
83)	n-Propylbenzene	15.48	91	1469801	52.3857	ug/L	100
84)	Bromobenzene	15.60	156	350782	52.3329	ug/L	100
85)	1,3,5-Trimethylbenzene	15.65	105	1108828	53.2158	ug/L	99
86)	2-Chlorotoluene	15.74	91	976263	51.7381	ug/L	100
87)	4-Chlorotoluene	15.78	91	841294	50.9469	ug/L	99
88)	a-Methylstyrene	16.03	118	660241	56.8967	ug/L	99
89)	tert-Butylbenzene	16.09	134	233269	51.4408	ug/L	98
90)	1,2,4-Trimethylbenzene	16.13	105	1235760	57.0042	ug/L	99
91)	sec-Butylbenzene	16.34	105	1276260	52.4583	ug/L	99
92)	p-Isopropyltoluene	16.48	119	1151739	55.1721	ug/L	100
93)	1,3-Dichlorobenzene	16.67	146	682589	51.9226	ug/L	99
94)	1,4-Dichlorobenzene	16.78	146	695572	51.9809	ug/L	99
95)	n-Butylbenzene	16.97	91	962728	60.5427	ug/L	100
96)	1,2-Dichlorobenzene	17.25	146	631321	52.9863	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.16	75	36824	53.4168	ug/L	94
98)	1,2,4-Trichlorobenzene	19.22	180	404280	59.9978	ug/L	99
99)	Hexachlorobutadiene	19.36	225	129223	48.3450	ug/L	99
100)	Naphthalene	19.56	128	803646	53.4376	ug/L	99
101)	1,2,3-Trichlorobenzene	19.85	180	359414	57.0772	ug/L	100

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050312\11M83341.D Vial: 13
Acq On : 3 May 2012 22:38 Operator: ADC
Sample : WG396851-12 50ug/L ALT SRC 8260 Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 8:37 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\050312\11M83341.D Vial: 13
Acq On : 3 May 2012 22:38 Operator: ADC
Sample : WG396851-12 50ug/L ALT SRC 8260 Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	96	0.00
2	T	Dichlorodifluoromethane	50.0000	70.9681	-41.9#	133	0.00
3	P	Chloromethane	50.0000	63.6202	-27.2#	117	0.00
4	C	Vinyl Chloride	50.0000	46.7987	6.4	100	0.00
5	T	1,3-Butadiene	50.0000	29.2988	41.4#	56	0.00
6	T	Bromomethane	50.0000	56.2517	-12.5	108	0.00
7	T	Chloroethane	50.0000	53.6791	-7.4	101	0.00
8	T	Trichlorofluoromethane	50.0000	52.9219	-5.8	100	0.00
9	T	Diethyl ether	100.0000	90.7988	9.2	88	0.00
10	T	Isoprene	50.0000	47.7647	4.5	88	0.00
11	T	Acrolein	100.0000	182.9232	-82.9#	176	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	53.2747	-6.5	98	0.01
13	T	Acetone	50.0000	53.7090	-7.4	100	0.00
14	C	1,1-Dichloroethene	50.0000	54.8850	-9.8	103	0.00
15	T	Tert-Butyl Alcohol	200.0000	230.3365	-15.2	107	0.00
16	T	Dimethyl Sulfide	50.0000	50.8647	-1.7	97	0.00
17	T	Iodomethane	50.0000	52.4914	-5.0	94	0.00
18	T	Methyl acetate	50.0000	42.5023	15.0	85	0.00
19	T	Methylene Chloride	50.0000	52.8103	-5.6	103	0.00
20	T	Carbon Disulfide	50.0000	53.6878	-7.4	102	0.00
21	T	Acrylonitrile	50.0000	54.5325	-9.1	96	0.00
22	T	Methyl Tert Butyl Ether	50.0000	53.1762	-6.4	102	0.00
23	T	trans-1,2-Dichloroethene	50.0000	53.4172	-6.8	100	0.00
24	T	n-Hexane	50.0000	49.5894	0.8	93	0.00
25	T	Diisopropyl ether	100.0000	99.8365	0.2	98	0.00
26	T	Vinyl Acetate	50.0000	80.3061	-60.6#	155	0.00
27	P	1,1-Dichloroethane	50.0000	54.0898	-8.2	102	0.00
28	T	Ethyl-Tert-Butyl ether	100.0000	95.7701	4.2	94	0.01
29	T	2-Butanone	50.0000	52.0394	-4.1	100	0.00
30	T	Propionitrile	100.0000	105.1385	-5.1	99	0.01
31	T	2,2-Dichloropropane	50.0000	51.6696	-3.3	96	0.00
32	T	cis-1,2-Dichloroethene	50.0000	53.9140	-7.8	101	0.00
33	C	Chloroform	50.0000	53.7362	-7.5	104	0.00
34	T	1-Bromopropane	50.0000	60.2373	-20.5	109	0.00
35	T	Bromochloromethane	50.0000	55.4415	-10.9	103	0.00
36	T	Tetrahydrofuran	100.0000	99.5288	0.5	97	0.00
37	S	Dibromofluoromethane	25.0000	24.6597	1.4	96	0.00
38	T	1,1,1-Trichloroethane	50.0000	54.4262	-8.9	101	0.00
39	T	Cyclohexane	50.0000	52.0106	-4.0	97	0.00
40	T	1,1-Dichloropropene	50.0000	54.0364	-8.1	100	0.00
41	T	Carbon Tetrachloride	50.0000	51.6473	-3.3	105	0.00
42	T	Tert-Amyl-Methyl ether	100.0000	101.9151	-1.9	99	0.00
43	S	1,2-Dichloroethane-d4	25.0000	24.6340	1.5	97	0.01
44	T	Heptane	-1.0000	0.0000	0.0	93	0.00
45	T	1,2-Dichloroethane	50.0000	54.0949	-8.2	102	0.01
46	T	Benzene	50.0000	53.0036	-6.0	101	0.00
47	T	Trichloroethene	50.0000	51.1413	-2.3	102	0.00
48	T	Methylcyclohexane	50.0000	53.3416	-6.7	98	0.00
49	C	1,2-Dichloropropane	50.0000	53.8500	-7.7	102	0.00
50	T	1,4-Dioxane	200.0000	218.9050	-9.5	98	0.00
51	T	Bromodichloromethane	50.0000	59.5630	-19.1	106	0.00
52	T	Dibromomethane	50.0000	51.1322	-2.3	101	0.01
53	T	2-Chloroethyl Vinyl Ether	50.0000	56.8473	-13.7	101	0.00
54	T	4-Methyl-2-Pentanone	50.0000	52.4115	-4.8	96	0.00

(#) = Out of Range
11M83341.D 8260WTR.M Fri May 04 08:36:39 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050312\11M83341.D Vial: 13
Acq On : 3 May 2012 22:38 Operator: ADC
Sample : WG396851-12 50ug/L ALT SRC 8260 Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	50.0000	55.6819	-11.4	101	0.00
56	T	Dimethyl Disulfide	50.0000	53.9440	-7.9	102	0.00
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	96	0.00
58	S	Toluene-d8	25.0000	23.7951	4.8	95	0.00
59	C	Toluene	50.0000	52.8032	-5.6	100	0.00
60	T	Ethyl Methacrylate	50.0000	52.9875	-6.0	106	0.00
61	T	Paraldehyde	100.0000	99.3110	0.7	92	0.00
62	T	trans-1,3-Dichloropropene	50.0000	53.9787	-8.0	90	0.00
63	T	1,1,2-Trichloroethane	50.0000	53.8742	-7.7	101	0.00
64	T	2-Hexanone	50.0000	50.8186	-1.6	96	0.00
65	T	1,3-Dichloropropane	50.0000	54.3217	-8.6	102	0.00
66	T	Tetrachloroethene	50.0000	54.7998	-9.6	101	0.00
67	T	Dibromochloromethane	50.0000	54.0413	-8.1	103	0.00
68	T	1,2-Dibromoethane	50.0000	54.1816	-8.4	101	0.00
69	T	1-Chlorohexane	50.0000	54.6165	-9.2	99	0.00
70	P	Chlorobenzene	50.0000	55.8659	-11.7	100	0.01
71	T	1,1,1,2-Tetrachloroethane	50.0000	54.0830	-8.2	103	0.00
72	C	Ethylbenzene	50.0000	58.0547	-16.1	101	0.00
73	T	m-,p-Xylene	100.0000	114.6320	-14.6	99	0.00
74	T	o-Xylene	50.0000	52.7332	-5.5	98	0.00
75	T	Styrene	50.0000	59.0611	-18.1	102	0.00
76	P	Bromoform	50.0000	56.4256	-12.9	105	0.00
77	T	Isopropylbenzene	50.0000	49.7250	0.6	86	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	97	0.00
79	P	1,1,2,2-Tetrachloroethane	50.0000	53.8871	-7.8	99	0.00
80	S	p-Bromofluorobenzene	25.0000	23.8843	4.5	96	0.00
81	T	1,2,3-Trichloropropane	50.0000	59.3085	-18.6	113	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	48.9099	2.2	101	0.00
83	T	n-Propylbenzene	50.0000	52.3858	-4.8	100	0.00
84	T	Bromobenzene	50.0000	52.3329	-4.7	102	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	53.2158	-6.4	102	0.00
86	T	2-Chlorotoluene	50.0000	51.7381	-3.5	100	0.00
87	T	4-Chlorotoluene	50.0000	50.9469	-1.9	98	0.00
88	T	a-Methylstyrene	50.0000	56.8967	-13.8	102	0.00
89	T	tert-Butylbenzene	50.0000	51.4408	-2.9	98	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	57.0042	-14.0	105	0.00
91	T	sec-Butylbenzene	50.0000	52.4583	-4.9	98	0.00
92	T	p-Isopropyltoluene	50.0000	55.1721	-10.3	101	0.00
93	T	1,3-Dichlorobenzene	50.0000	51.9226	-3.8	99	0.00
94	T	1,4-Dichlorobenzene	50.0000	51.9809	-4.0	100	0.00
95	T	n-Butylbenzene	50.0000	60.5427	-21.1	104	0.00
96	T	1,2-Dichlorobenzene	50.0000	52.9864	-6.0	100	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	53.4168	-6.8	112	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	59.9978	-20.0	104	0.00
99	T	Hexachlorobutadiene	50.0000	48.3450	3.3	100	0.00
100	T	Naphthalene	50.0000	53.4376	-6.9	105	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	57.0772	-14.2	106	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M83341.D 8260WTR.M Fri May 04 08:36:39 2012 Page 2

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

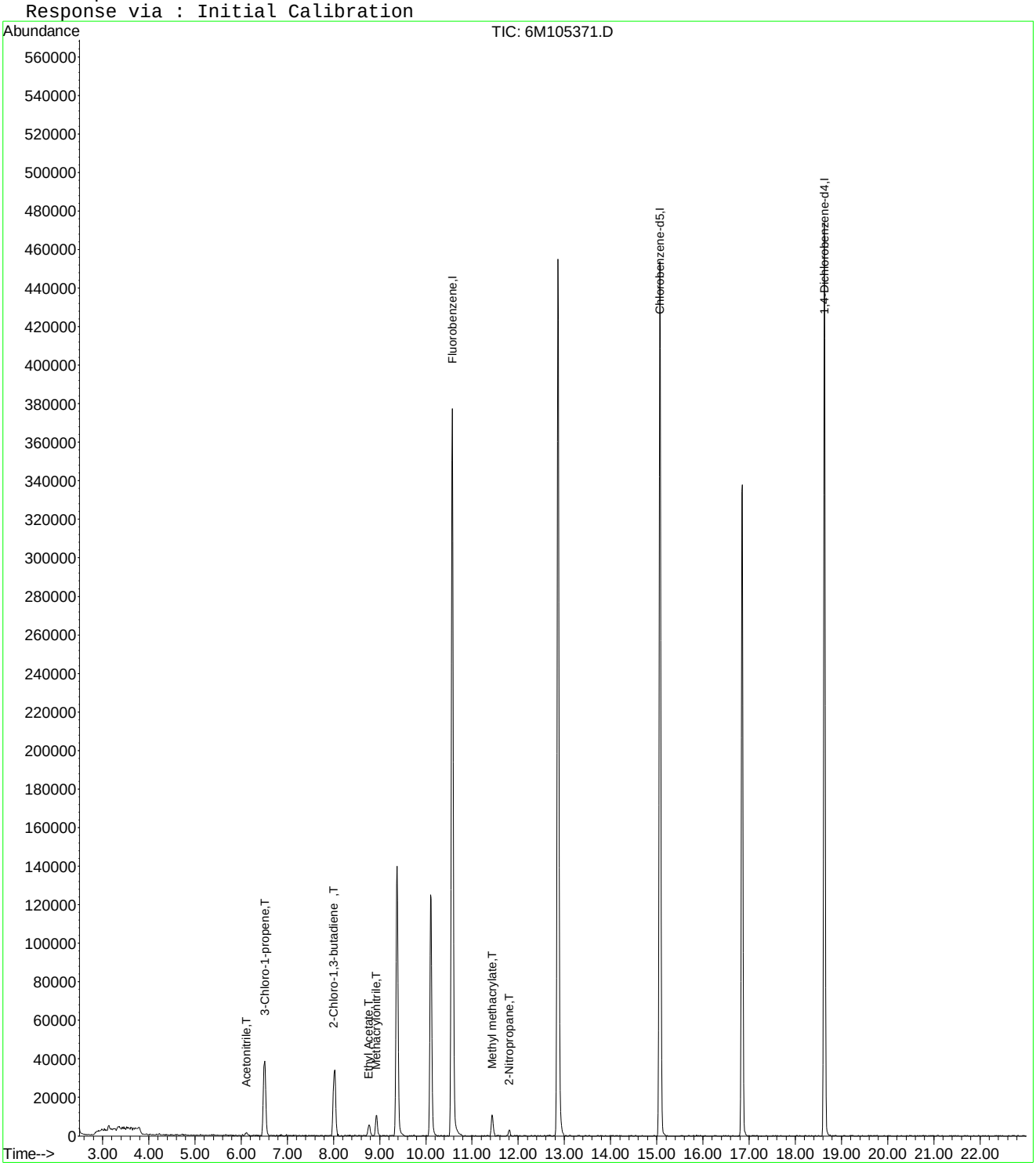
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	542118	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	382891	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	182930	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.11	41	1900	3.8474	ug/L	# 1
3) 3-Chloro-1-propene	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

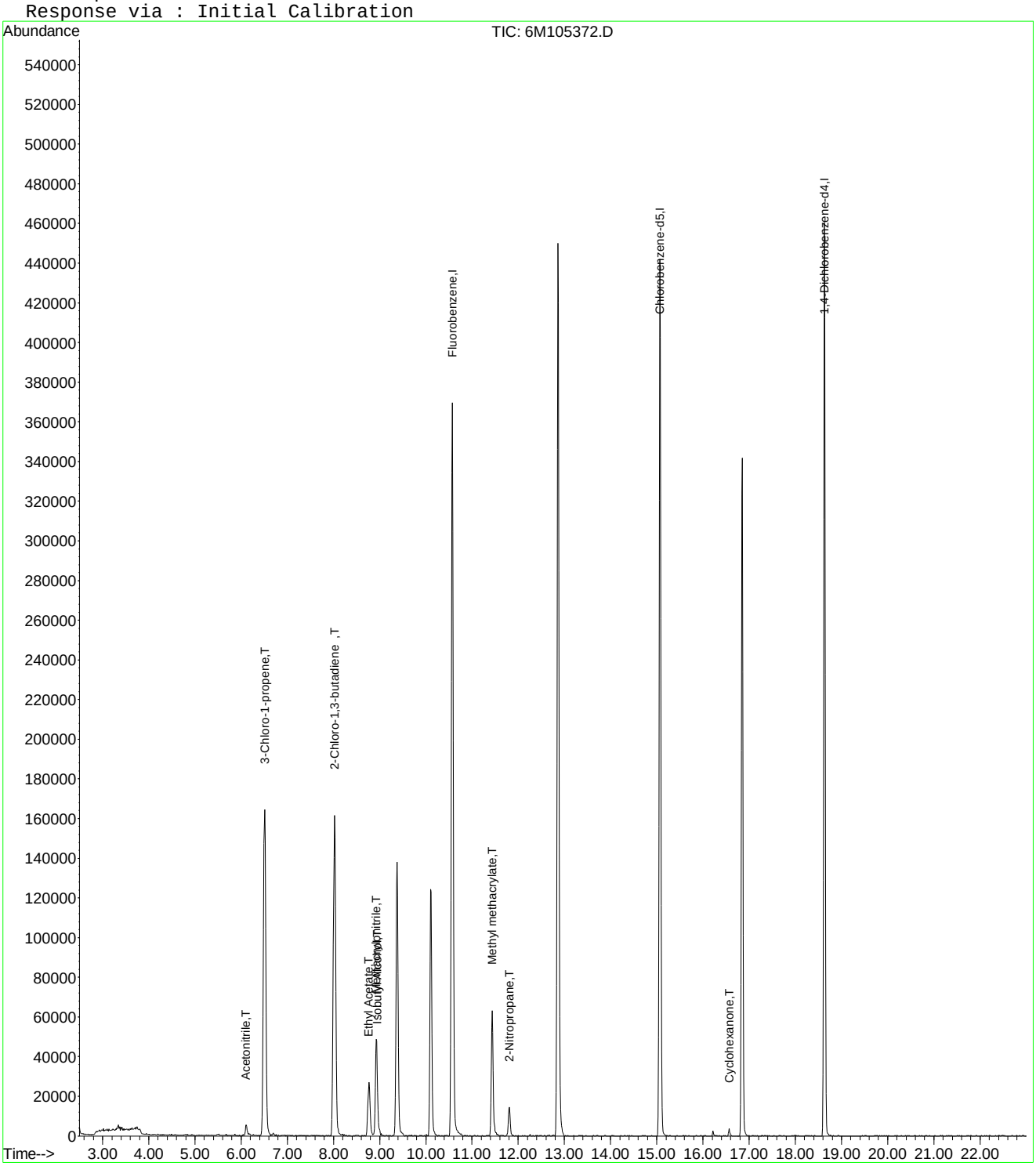
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	527412	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	368818	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	180470	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.10	41	8738	18.1873	ug/L		92
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

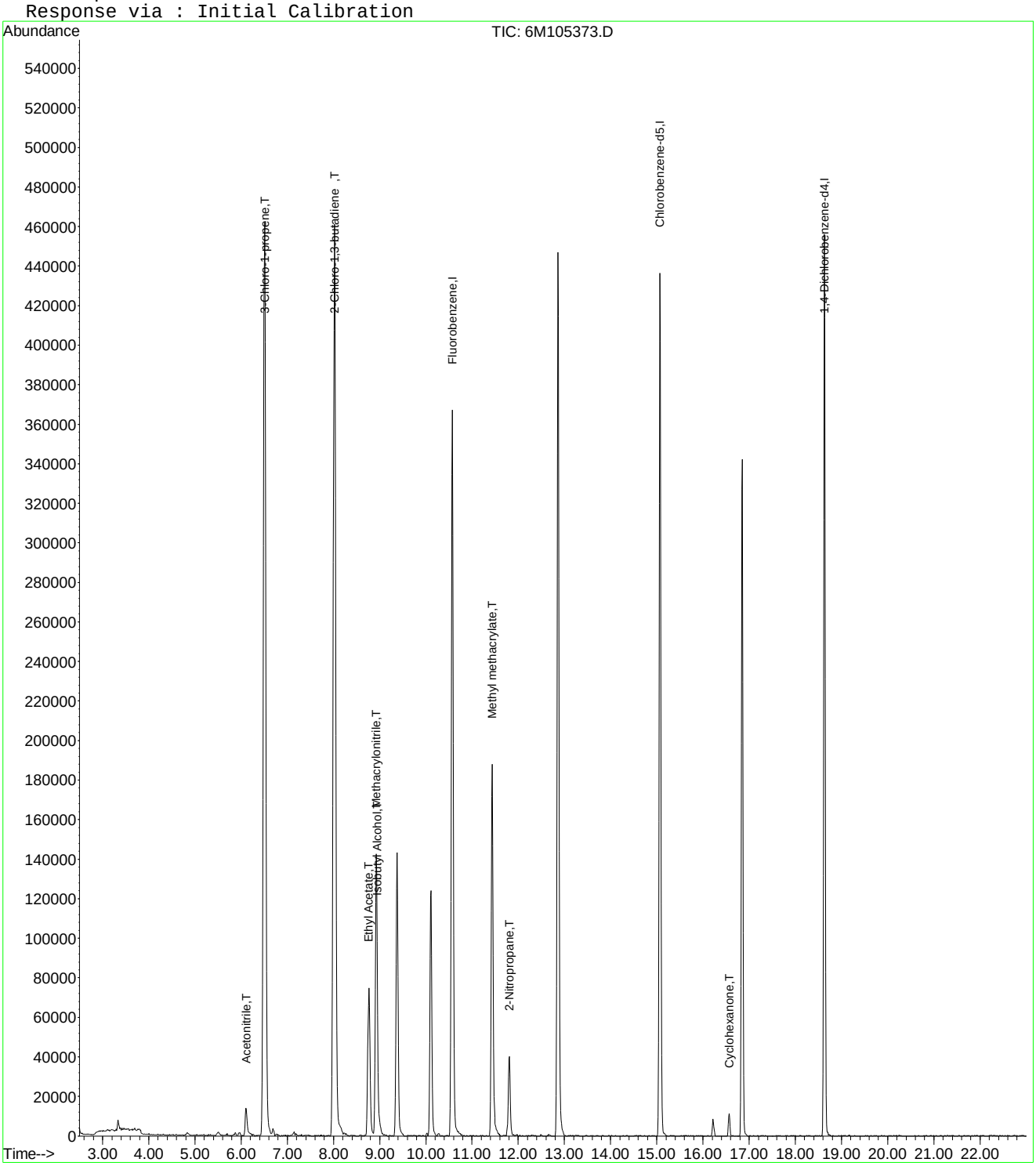
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	525930	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	367927	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	178601	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.11	41	24875	51.9208	ug/L		96
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

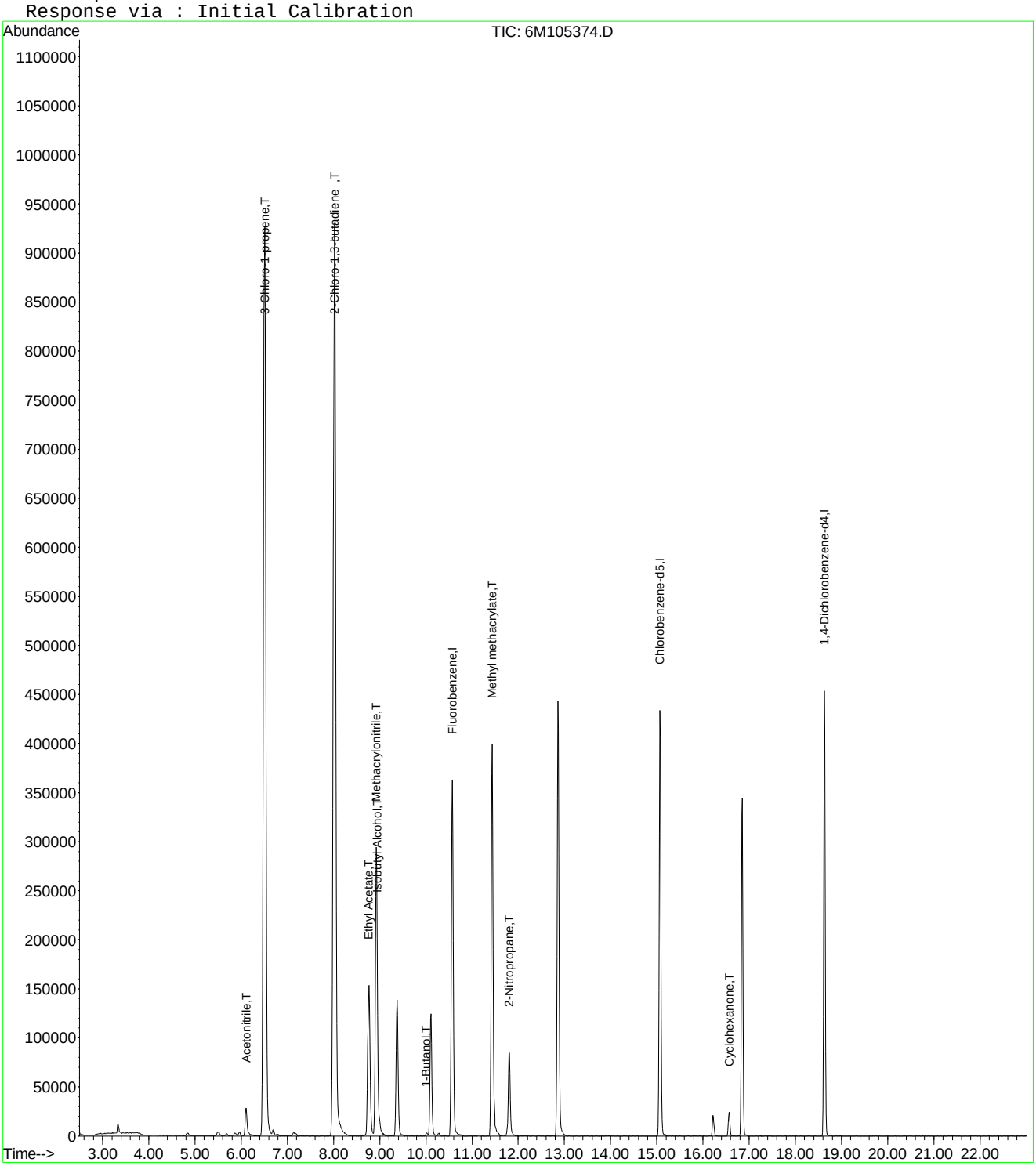
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	521985	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	364007	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	173837	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.11	41	49127	103.3162	ug/L		100
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

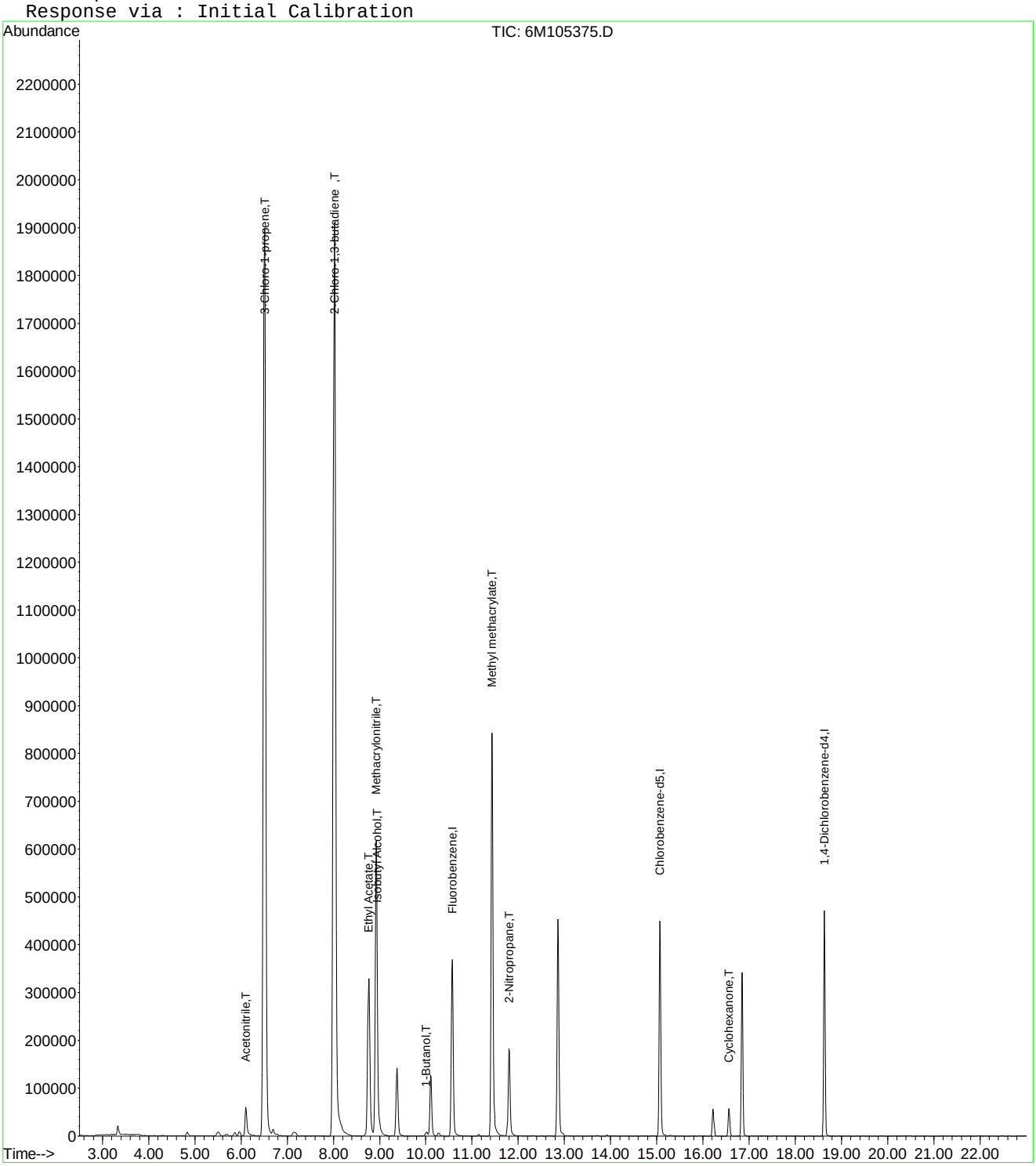
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	534922	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.07	117	371767	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	181349	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.10	41	104721	214.9064	ug/L		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

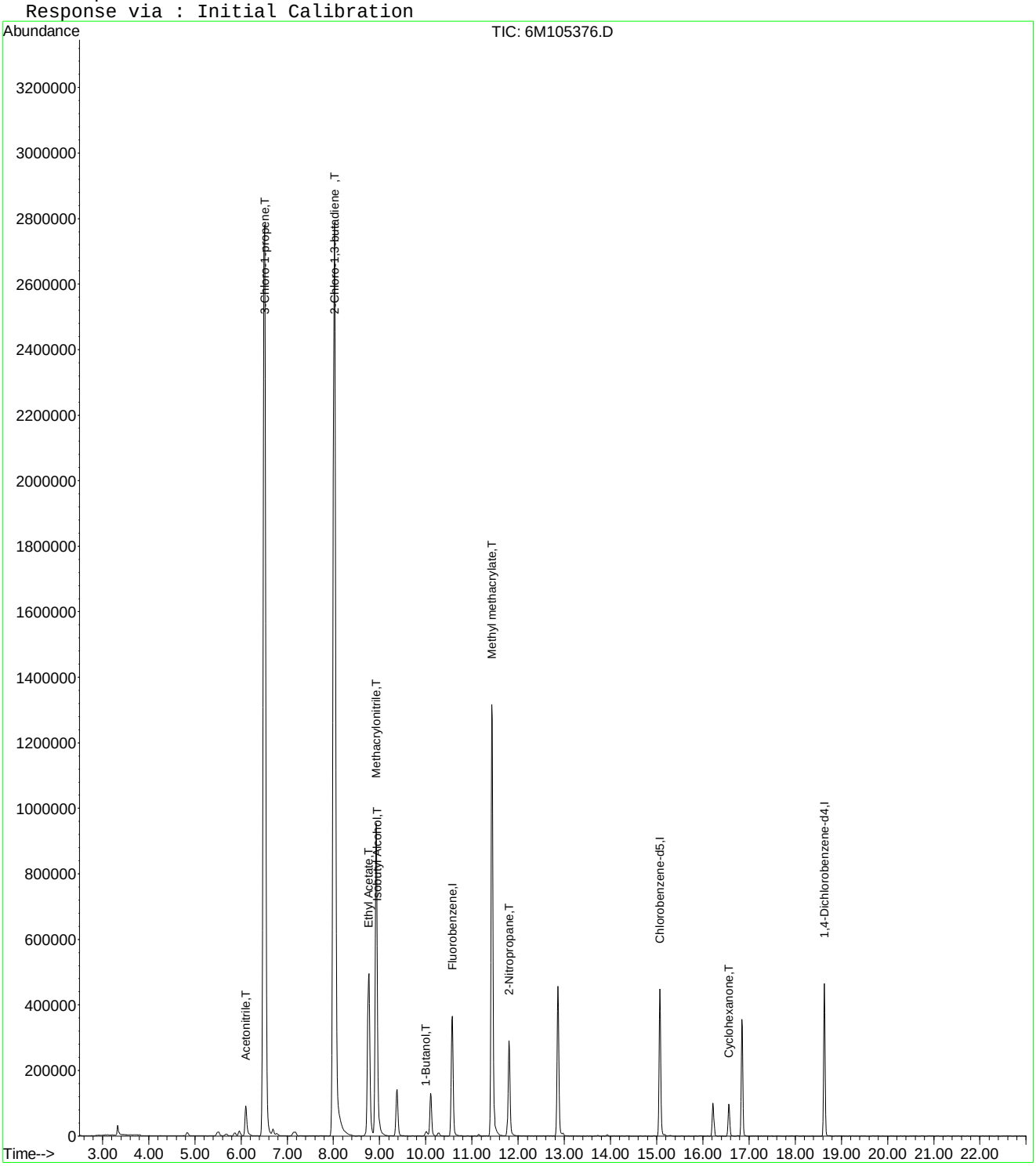
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	532868	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.07	117	367343	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	176868	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.10	41	156947	323.3252	ug/L	98
3) 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

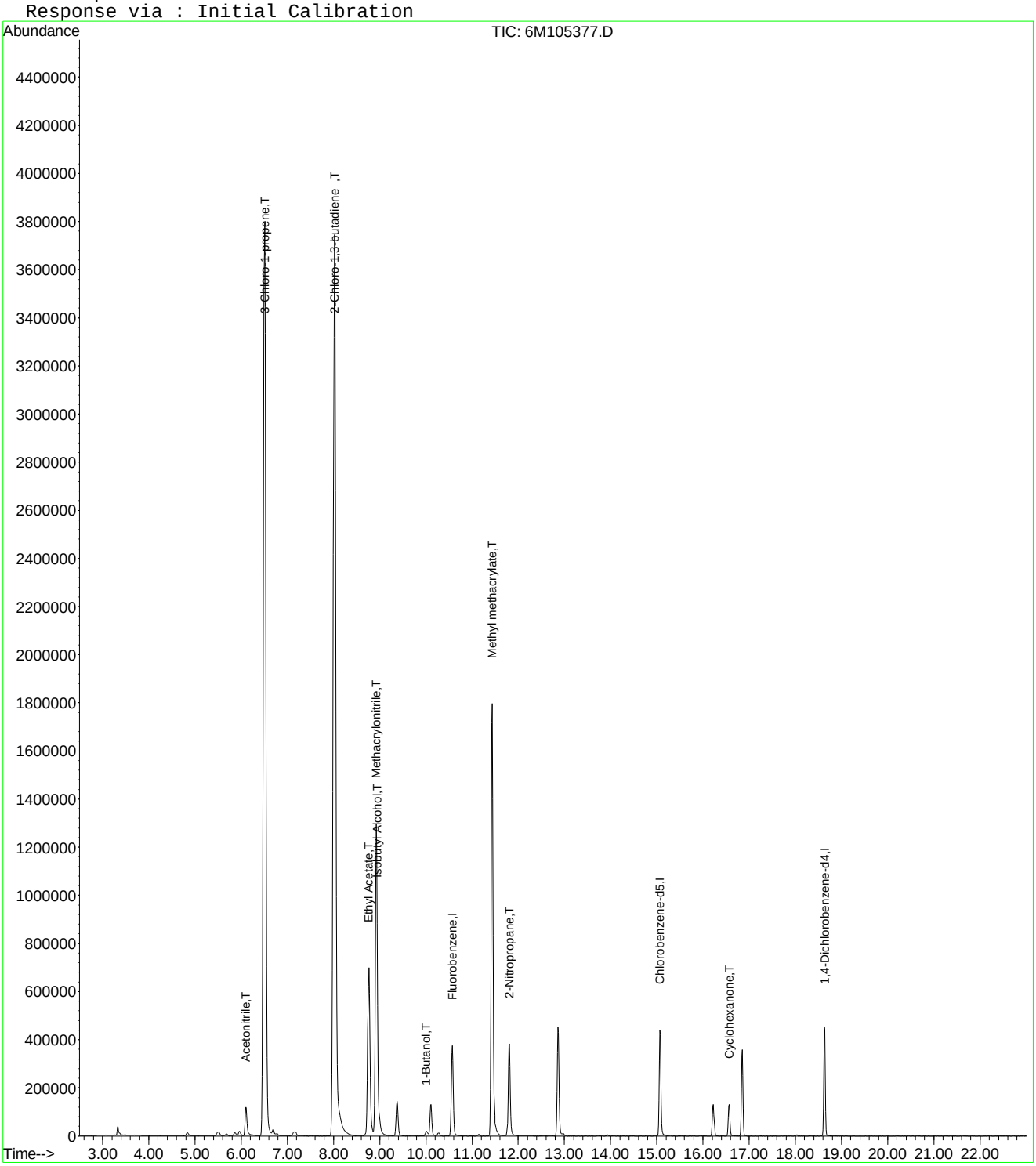
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	540011	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	371362	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.64	152	178768	25.00	ug/L		0.01
Target Compounds							Qvalue
2) Acetonitrile	6.10	41	215914	438.9189	ug/L		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

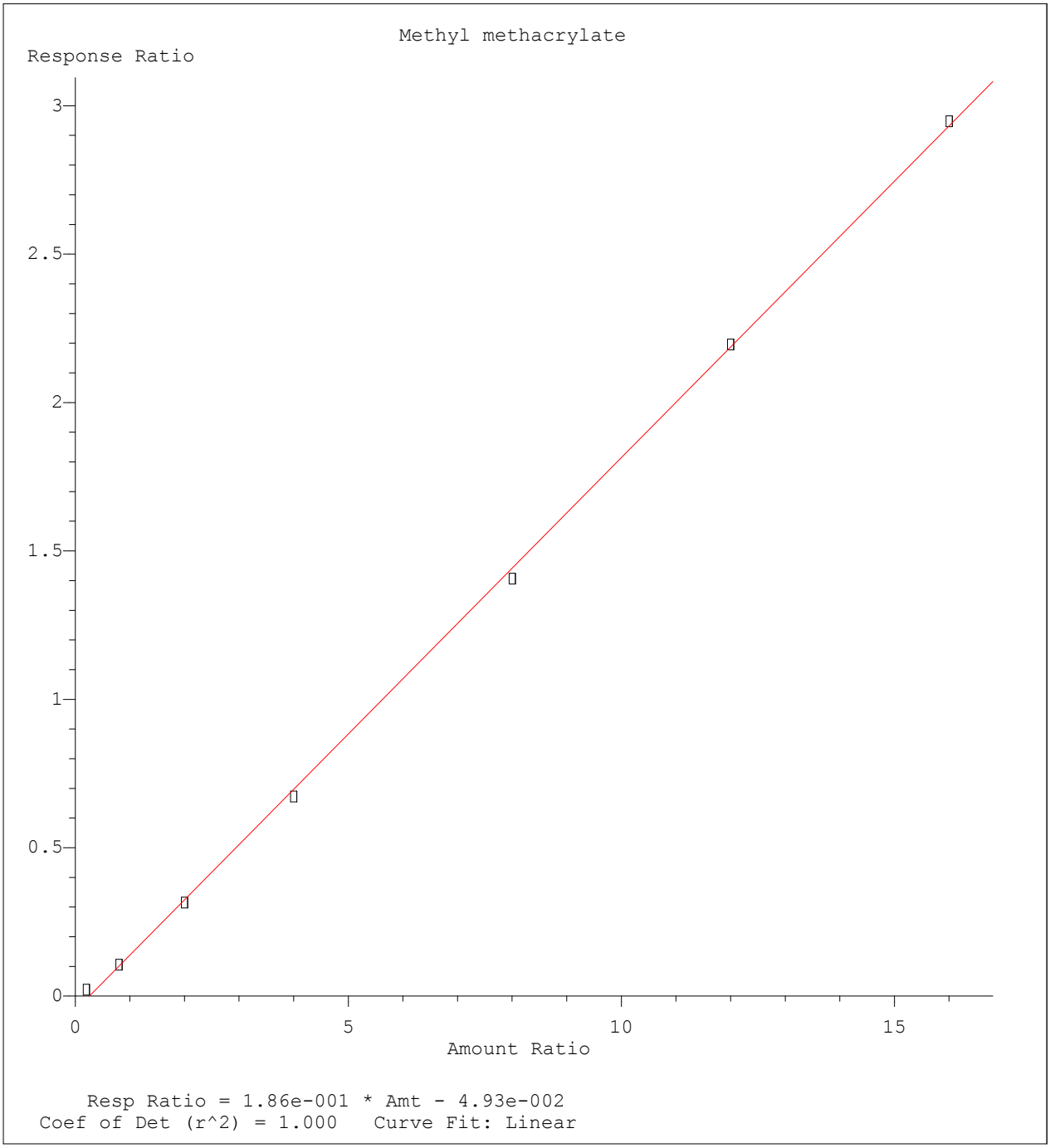
(#) = qualifier out of range (m) = manual integration
6M105377.D A9FOOWTR.M Thu Feb 02 15:12:01 2012 Page 1

Quantitation Report (Not Reviewed)

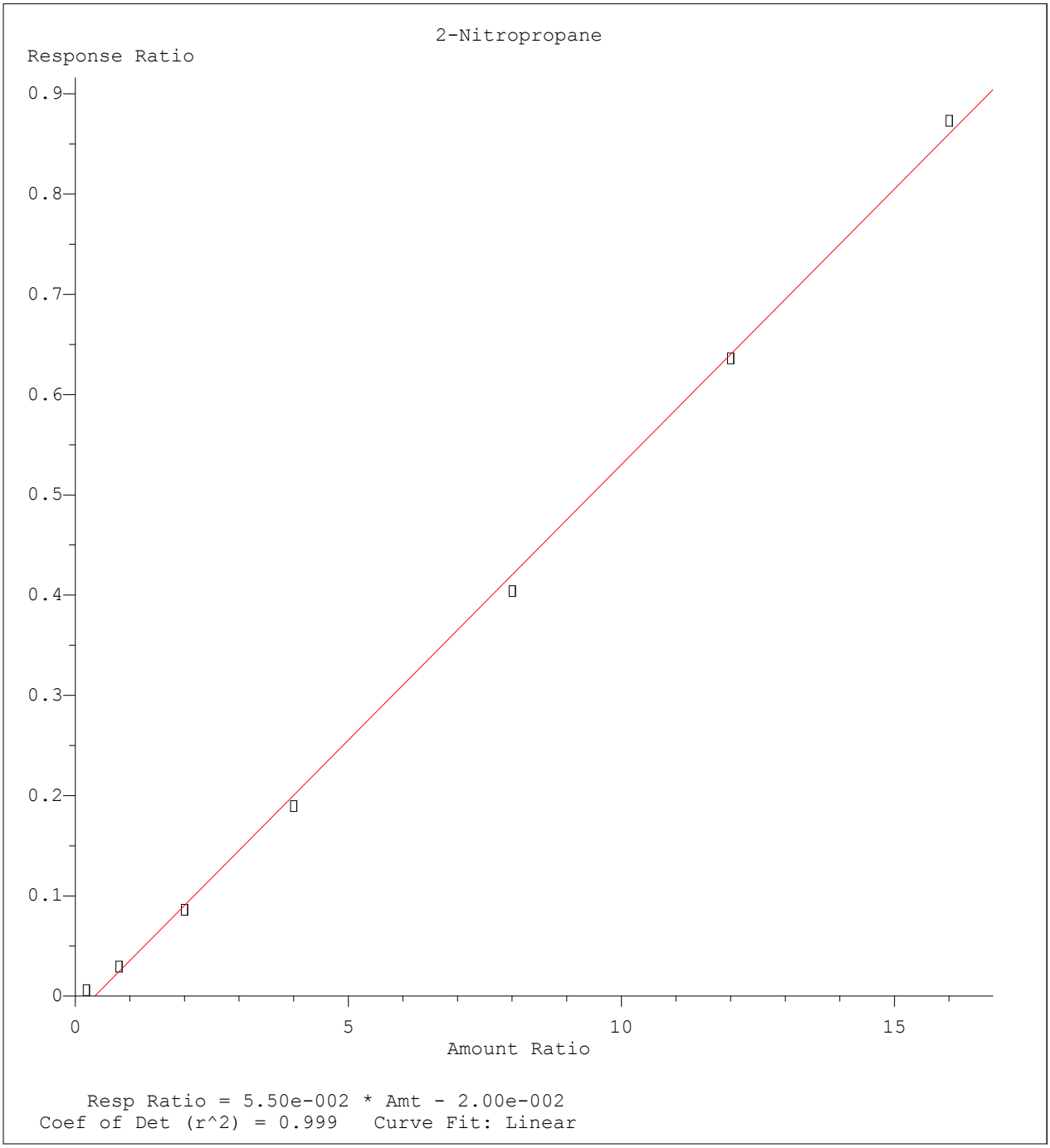
Data File : C:\MSDCHEM\2\DATA\012512\6M105377.D Vial: 11
Acq On : 25 Jan 2012 13:27 Operator: ADC
Sample : WG388587-07 400ug/L 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012 Quant Results File: A9FOOWTR.RES

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

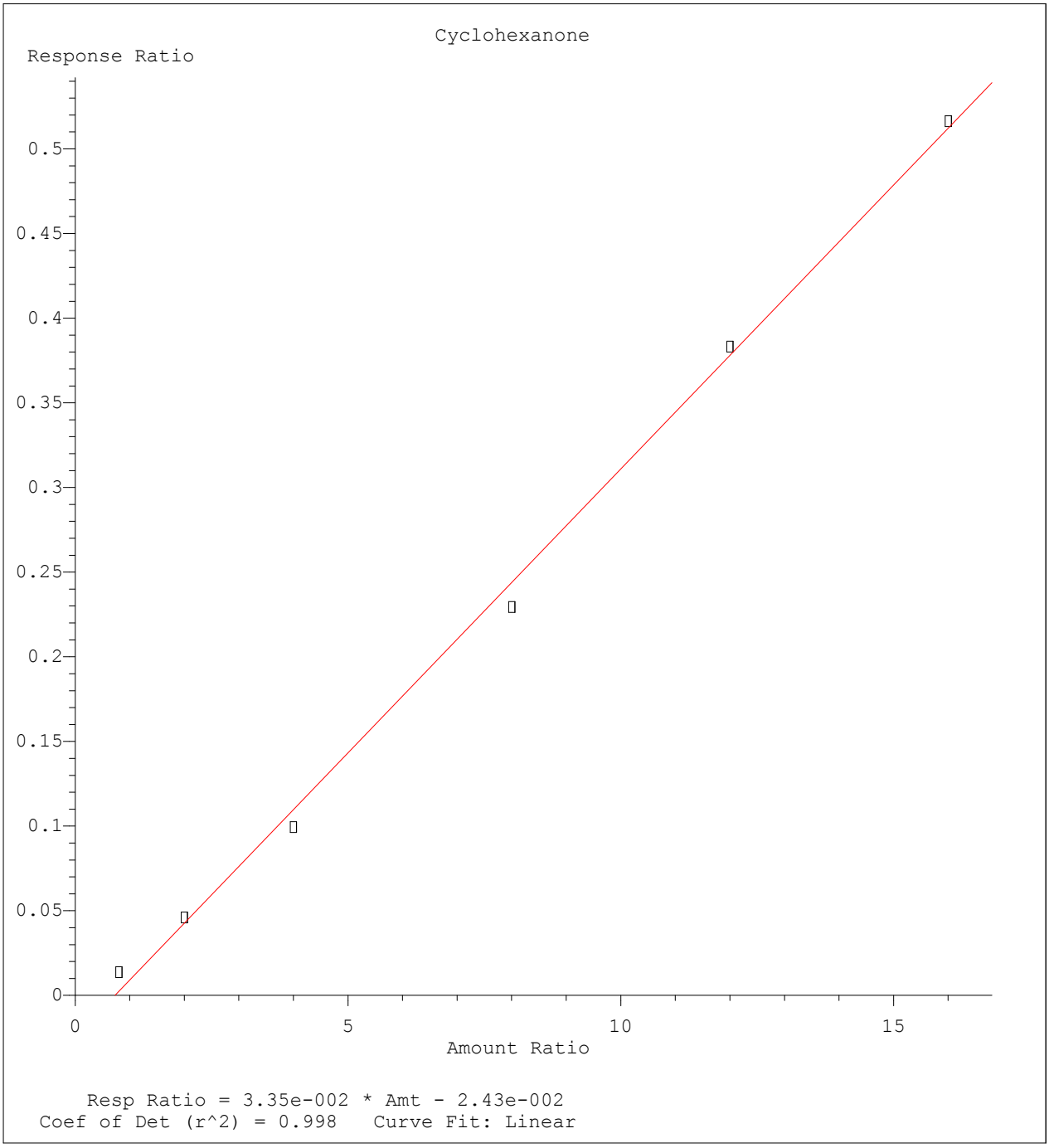




Method Name: C:\MSDCHEM\2\METHODS\A9FOOWTR.M
Calibration Table Last Updated: Thu Feb 02 09:44:46 2012



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

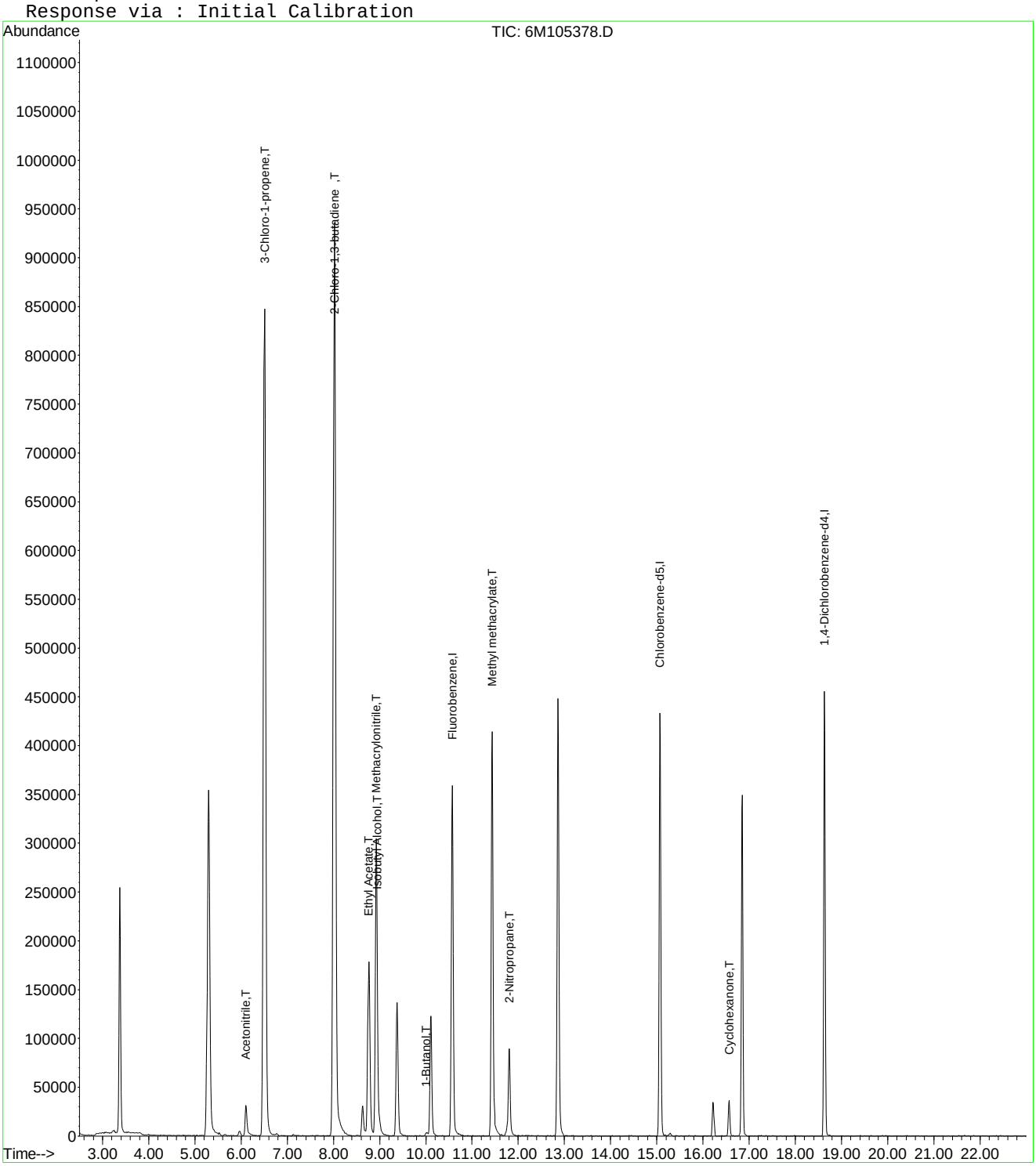
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.57	96	512896	25.00	ug/L		0.00
11) Chlorobenzene-d5	15.06	117	362669	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	178315	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.10	41	54059	115.7031	ug/L		98
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

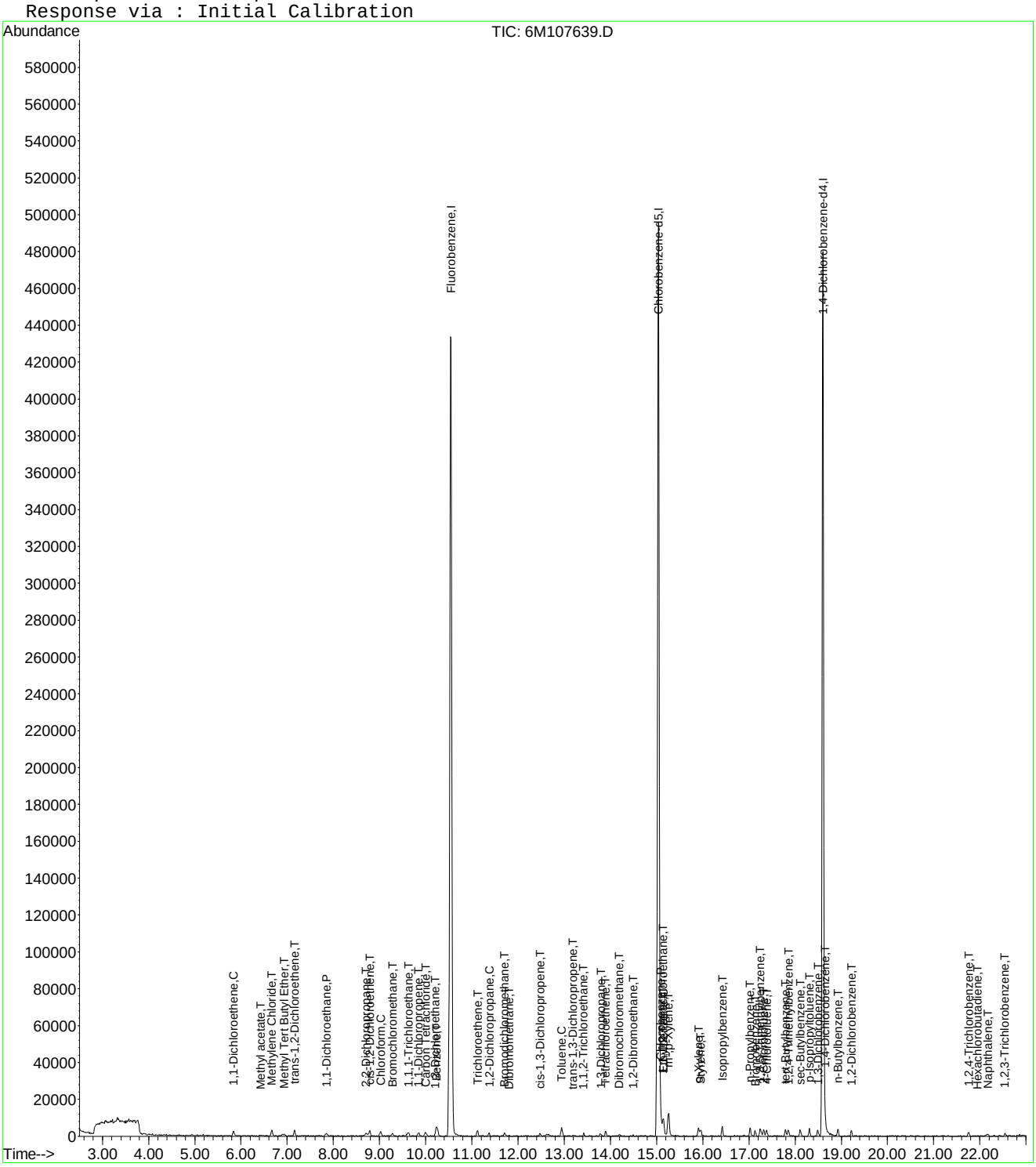
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
89)	tert-Butylbenzene	17.78	134	589	0.1564	ug/L #	1
90)	1,2,4-Trimethylbenzene	17.86	105	4759	0.2413	ug/L	89
91)	sec-Butylbenzene	18.11	105	5777	0.2725	ug/L #	83
92)	p-Isopropyltoluene	18.30	119	4803	0.2820	ug/L	82
93)	1,3-Dichlorobenzene	18.50	146	2837	0.2640	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



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

Quantitation Report (Not Reviewed)

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

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

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

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

Quantitation Report (Not Reviewed)

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

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

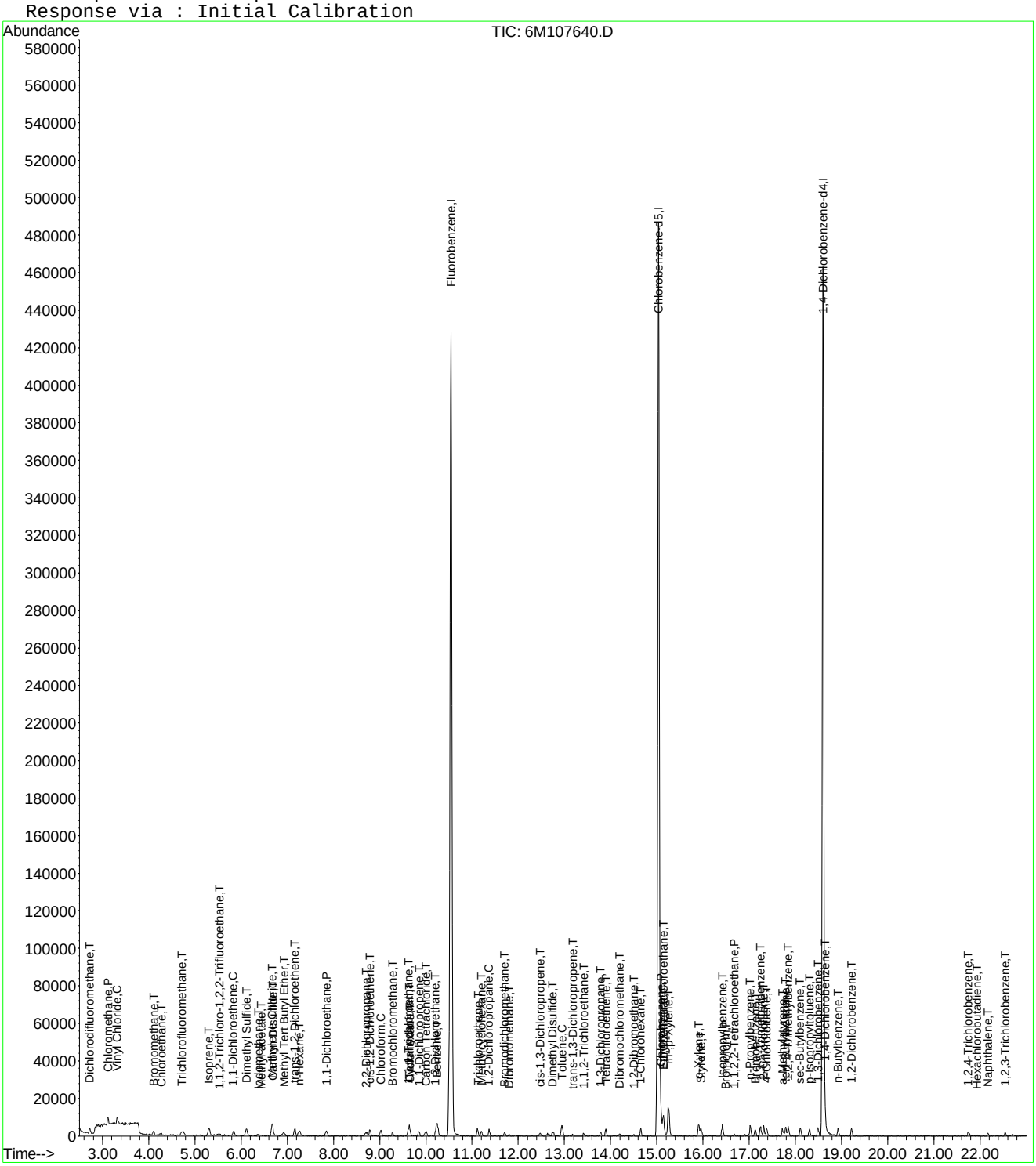
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
66)	Tetrachloroethene	13.90	166	1822	0.3024 ug/L		91
67)	Dibromochloromethane	14.20	129	1177	0.3807 ug/L		69
68)	1,2-Dibromoethane	14.50	107	467	0.3651 ug/L		82
69)	1-Chlorohexane	14.65	91	2262	0.3311 ug/L		94
70)	Chlorobenzene	15.10	112	5879	0.3587 ug/L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

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

Quantitation Report (Not Reviewed)

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

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



Quantitation Report (Not Reviewed)

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

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

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

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

Quantitation Report (Not Reviewed)

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

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

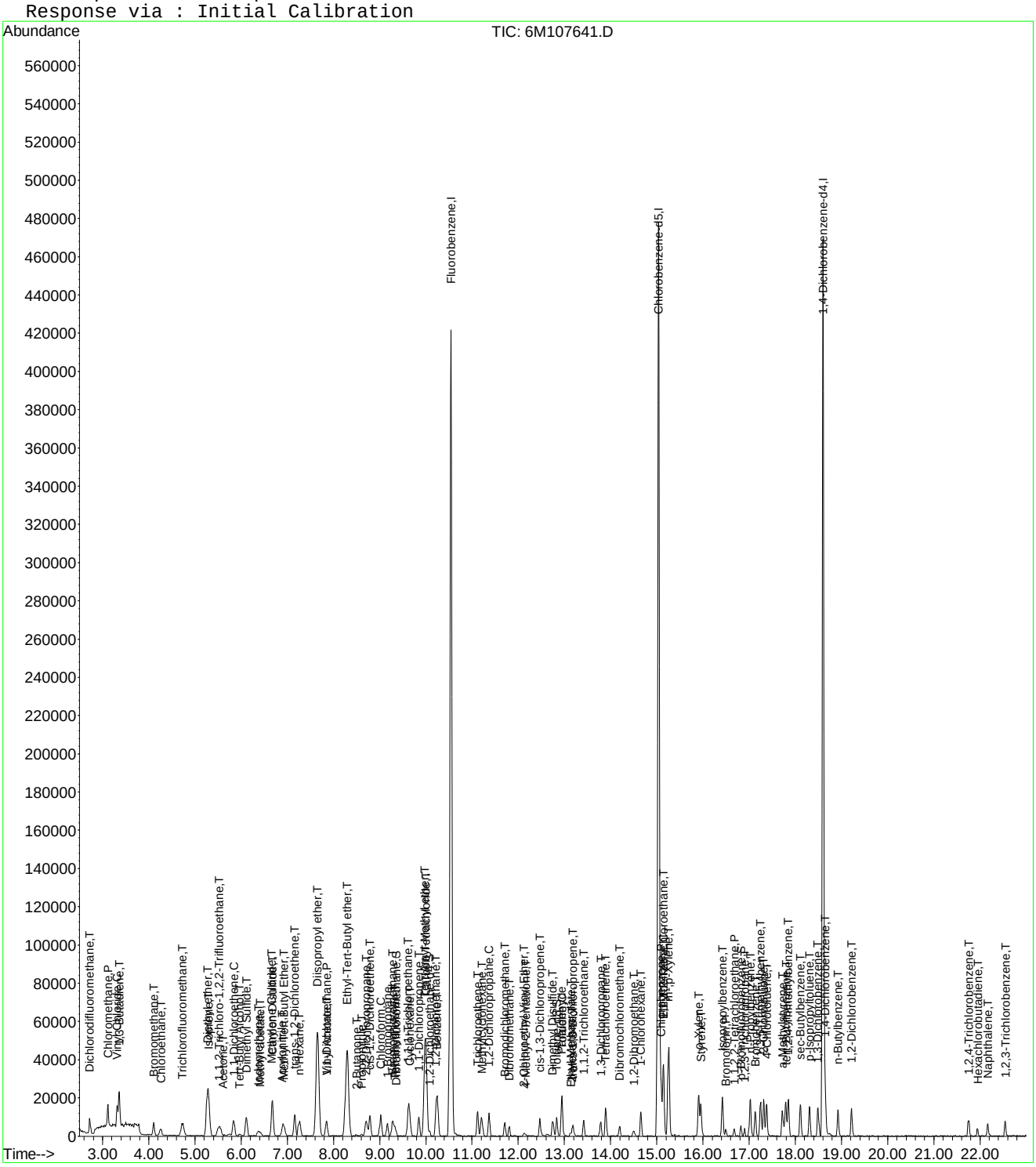
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46)	Benzene	10.24	78	27867	1.0841 ug/L		95
47)	Trichloroethene	11.12	130	6929	1.0747 ug/L		98
48)	Methylcyclohexane	11.21	83	7387	0.9934 ug/L		97
49)	1,2-Dichloropropane	11.37	63	6960	1.0487 ug/L		99
51)	Bromodichloromethane	11.72	83	8511	1.0676 ug/L		99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

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

Quantitation Report (Not Reviewed)

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

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



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

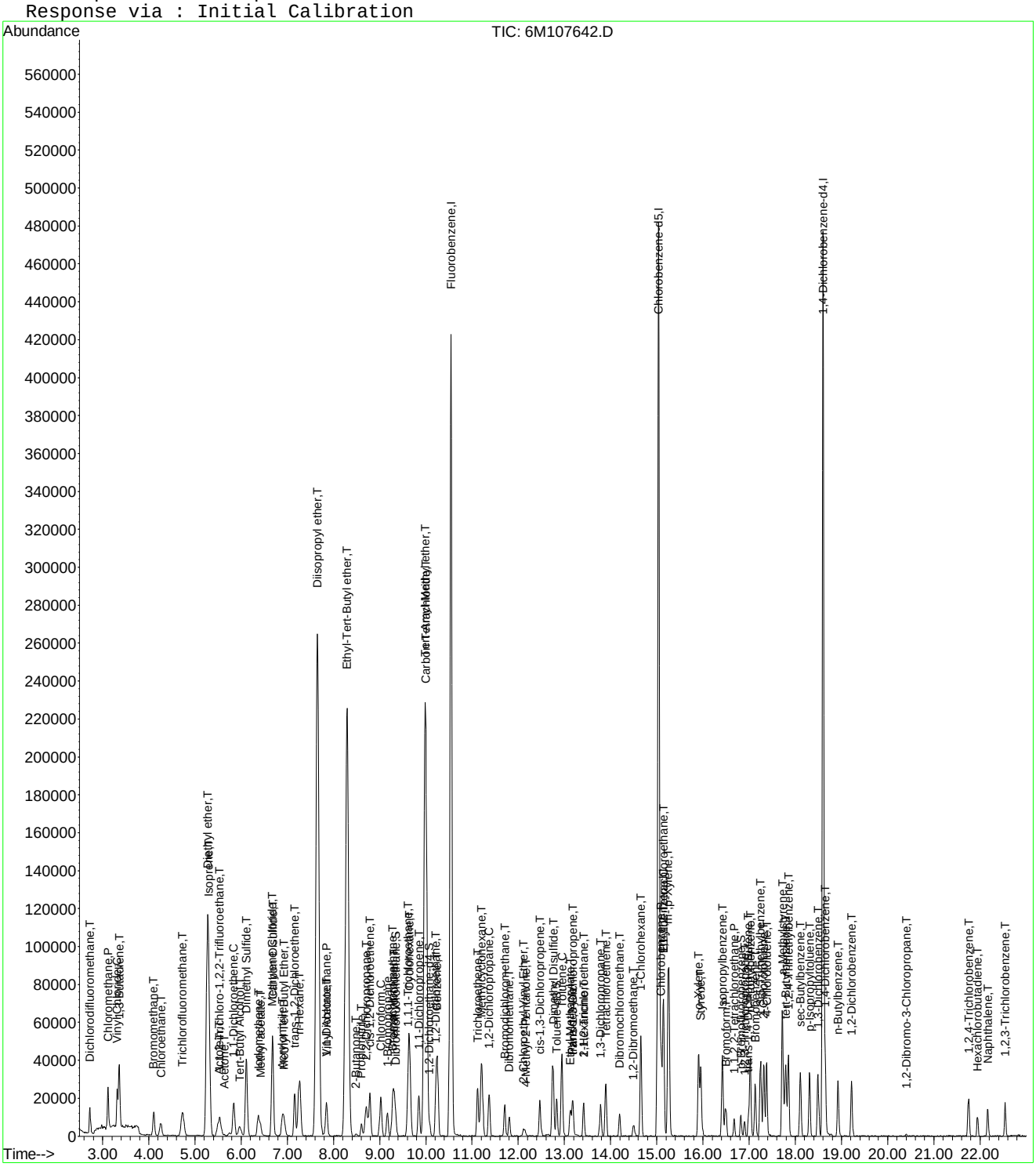
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.21	62	16880	2.0586	ug/L		92
46)	Benzene	10.24	78	53190	2.0667	ug/L		99
47)	Trichloroethene	11.12	130	13317	2.0629	ug/L		98
48)	Methylcyclohexane	11.20	83	28758	3.8629	ug/L		99
49)	1,2-Dichloropropane	11.37	63	13749	2.0691	ug/L		99
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

Quantitation Report (Not Reviewed)

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

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



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

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

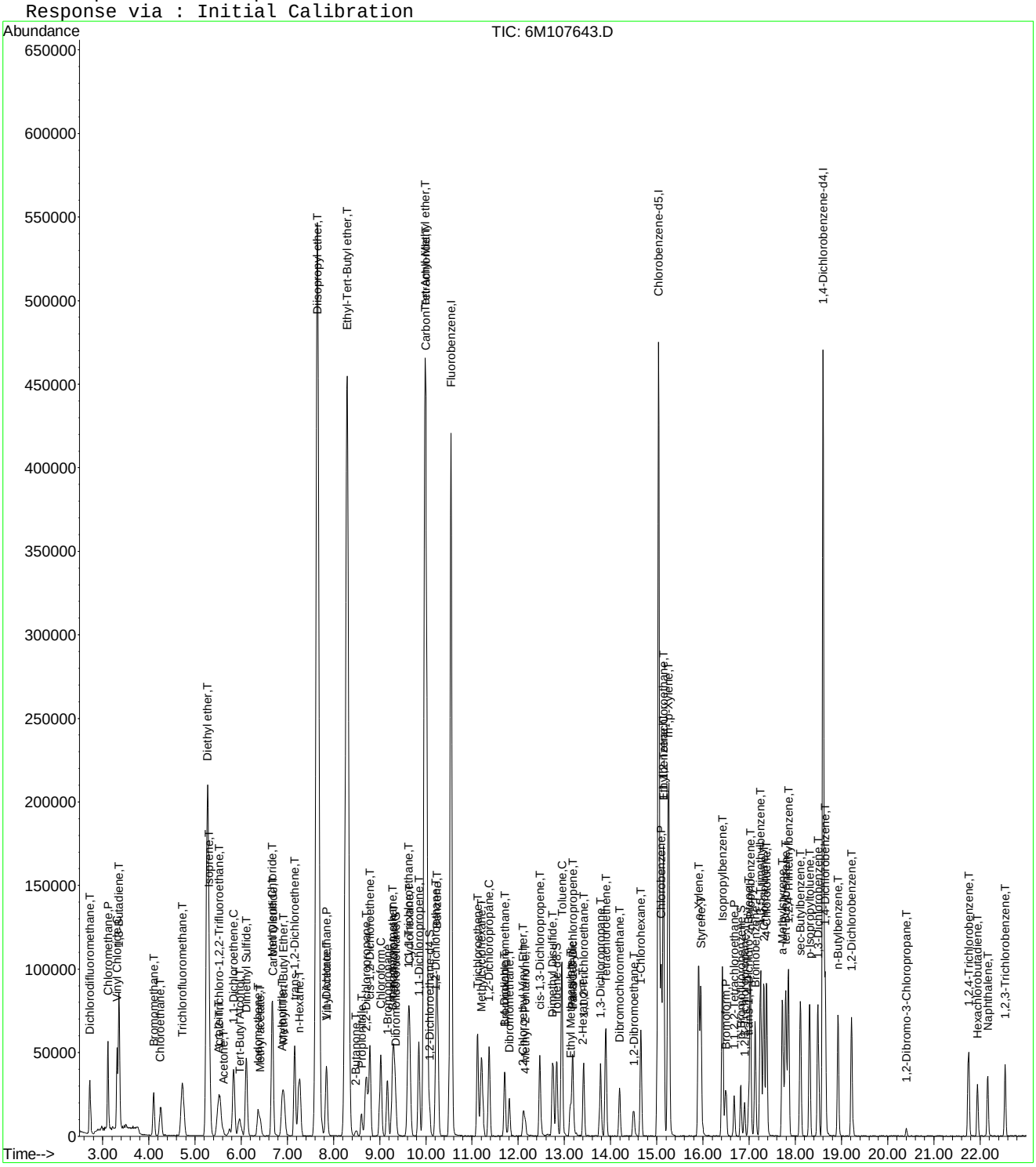
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	39847	4.9190	ug/L	98
46)	Benzene	10.24	78	121550	4.7805	ug/L	97
47)	Trichloroethene	11.12	130	29578	4.6379	ug/L	99
48)	Methylcyclohexane	11.20	83	35302	4.7998	ug/L	98
49)	1,2-Dichloropropane	11.37	63	31224	4.7565	ug/L	95
50)	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

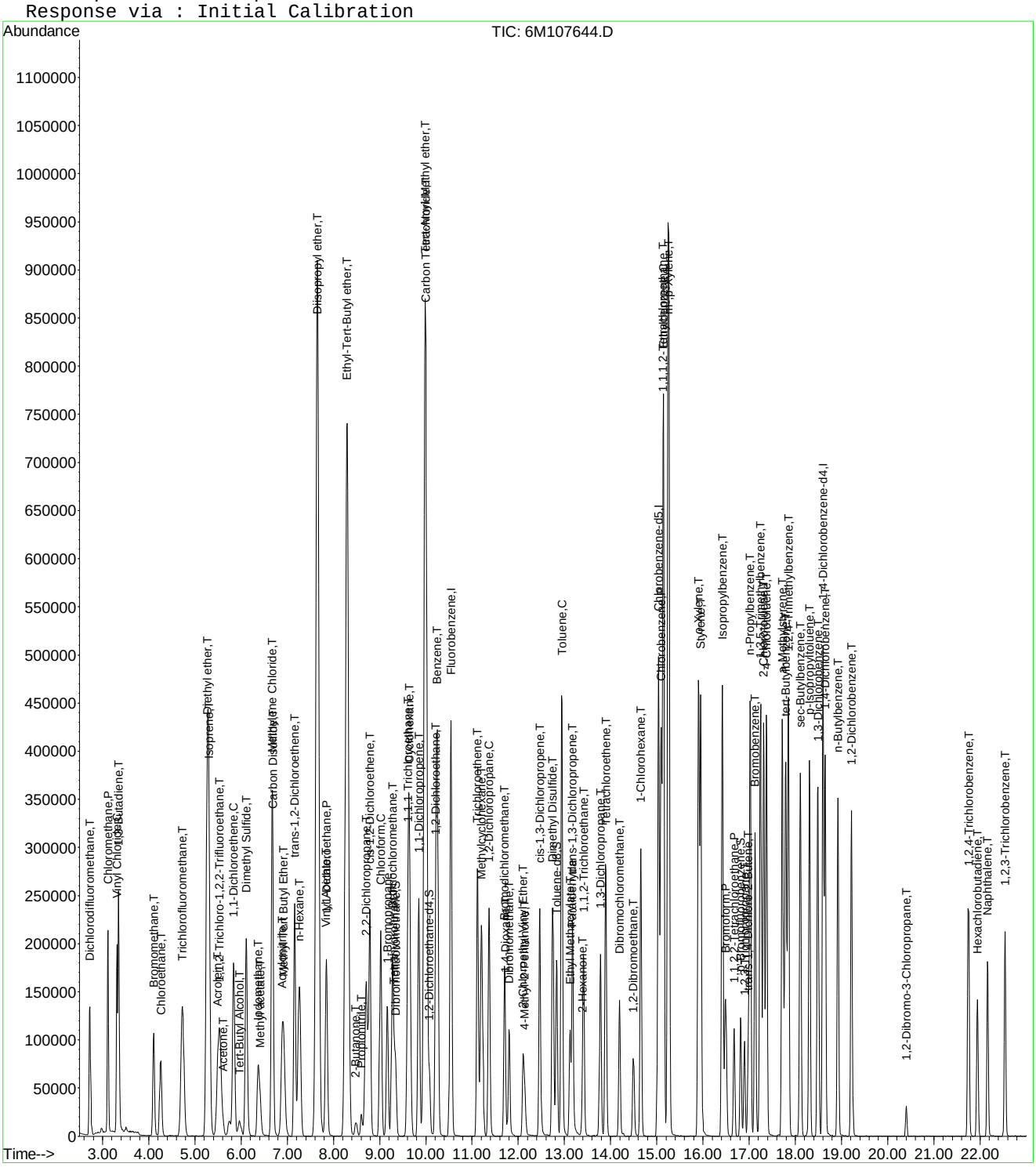
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	169343	20.2481 ug/L	99
46)	Benzene	10.24	78	529661	20.1764 ug/L	99
47)	Trichloroethene	11.11	130	136718	20.7638 ug/L	100
48)	Methylcyclohexane	11.20	83	155717	20.5066 ug/L	99
49)	1,2-Dichloropropane	11.37	63	137745	20.3236 ug/L	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

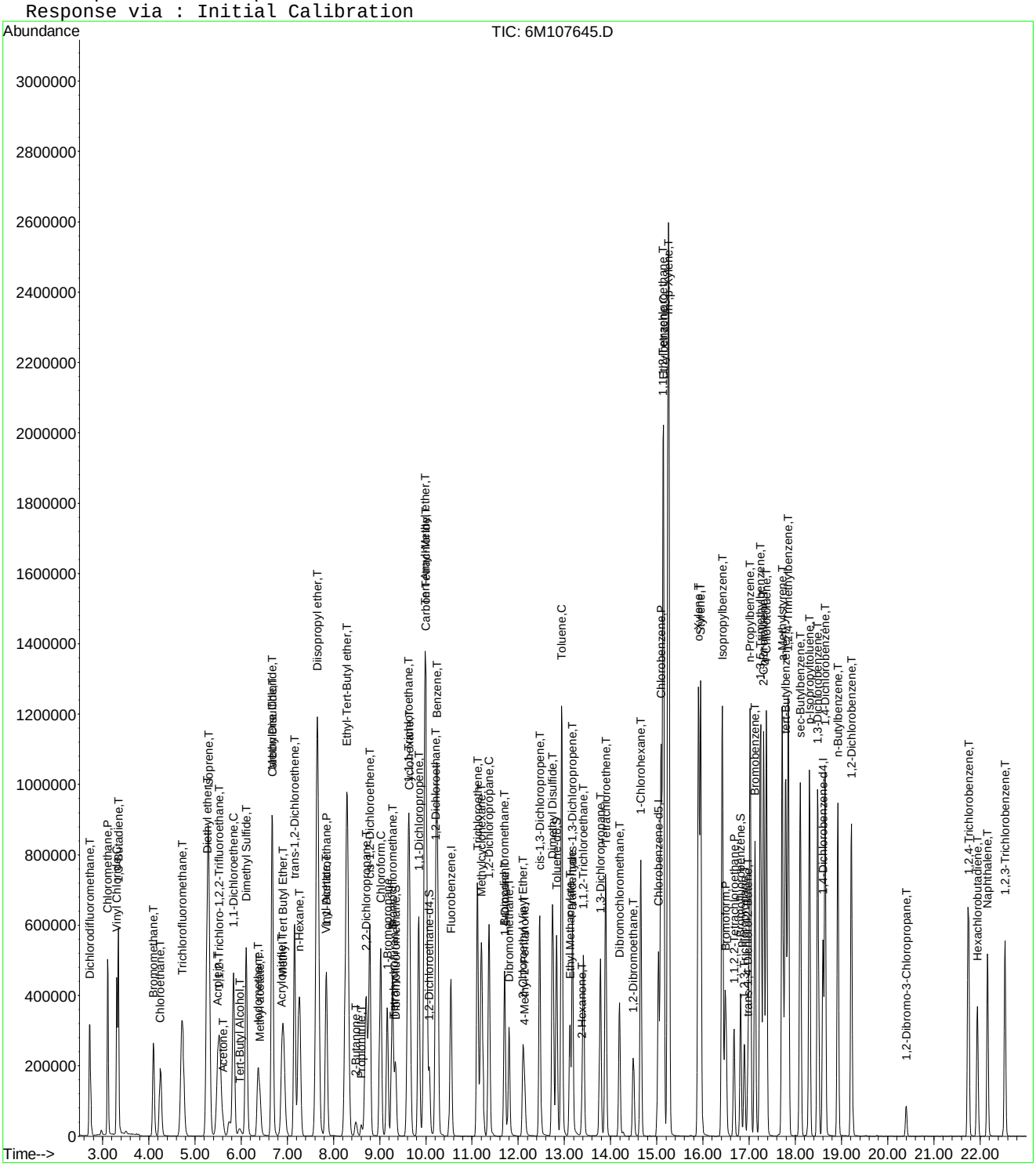
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	437086	50.1247 ug/L	100
46)	Benzene	10.25	78	1341106	48.9979 ug/L	100
47)	Trichloroethene	11.12	130	349281	50.8774 ug/L	100
48)	Methylcyclohexane	11.21	83	398780	50.3686 ug/L	100
49)	1,2-Dichloropropane	11.37	63	357464	50.5856 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

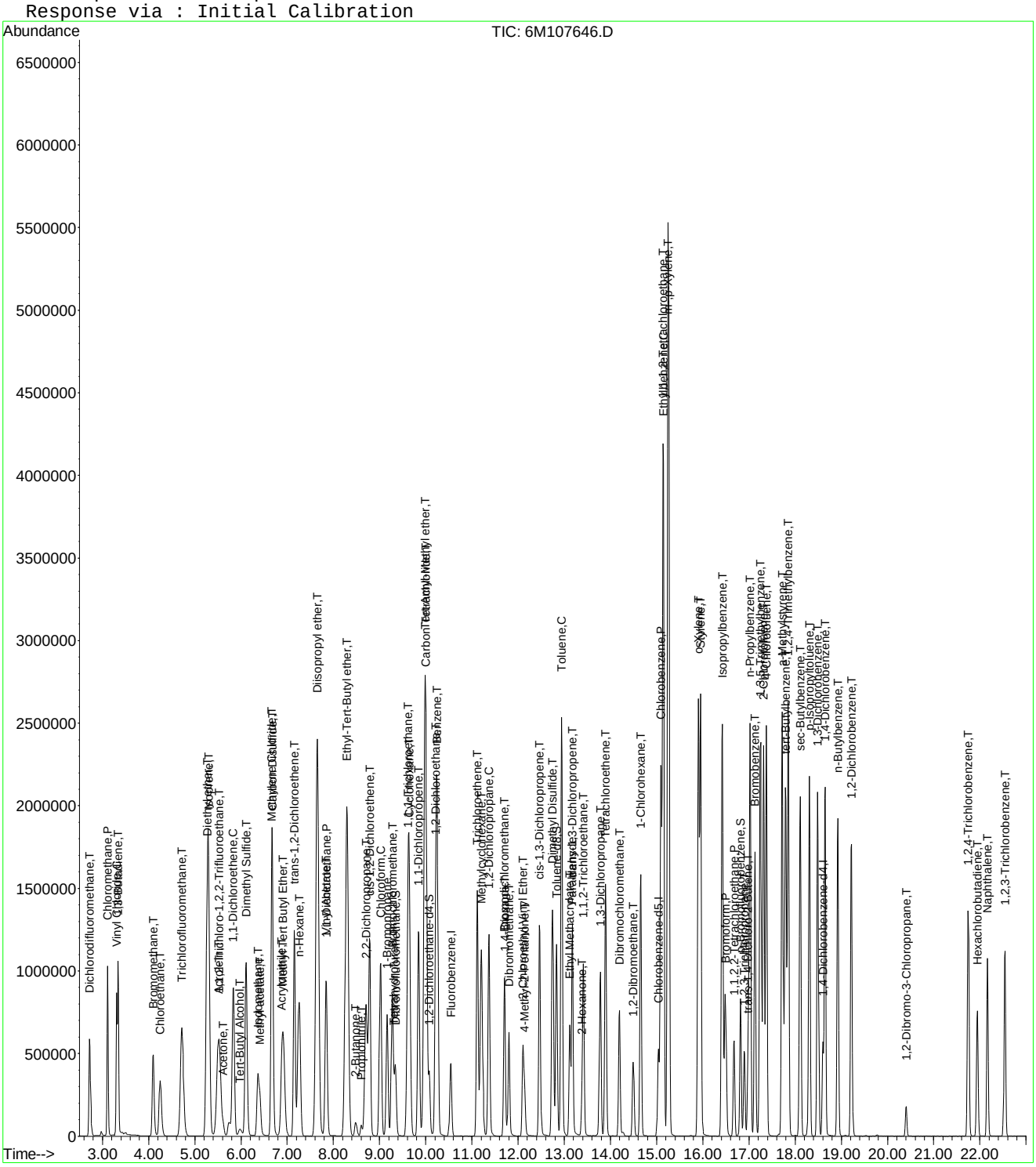
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.22	62	869687	99.8486	ug/L		99
46)	Benzene	10.25	78	2712885	99.2291	ug/L		100
47)	Trichloroethene	11.12	130	704332	102.7119	ug/L		100
48)	Methylcyclohexane	11.21	83	804930	101.7838	ug/L		100
49)	1,2-Dichloropropane	11.37	63	726078	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

Quantitation Report (Not Reviewed)

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

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

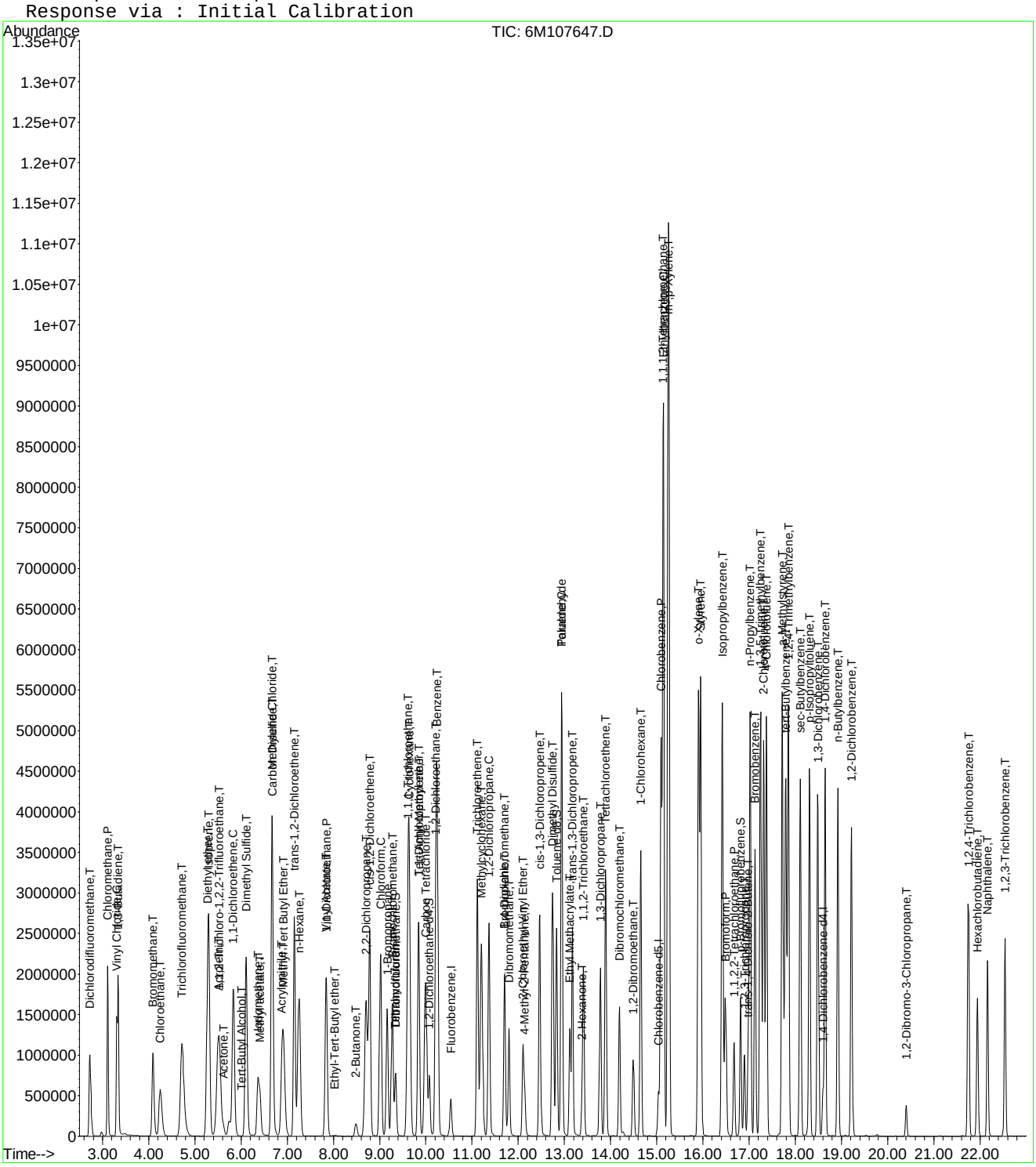
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47)	Trichloroethene	11.11	130	1494861	208.6910 ug/L		100
48)	Methylcyclohexane	11.21	83	1702262	206.0660 ug/L		99
49)	1,2-Dichloropropane	11.37	63	1554158	210.7866 ug/L		99
50)	1,4-Dioxane	11.71	88	1997	124.8880 ug/L	#	22
51)	Bromodichloromethane	11.71	83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

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

Quantitation Report (Not Reviewed)

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

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



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

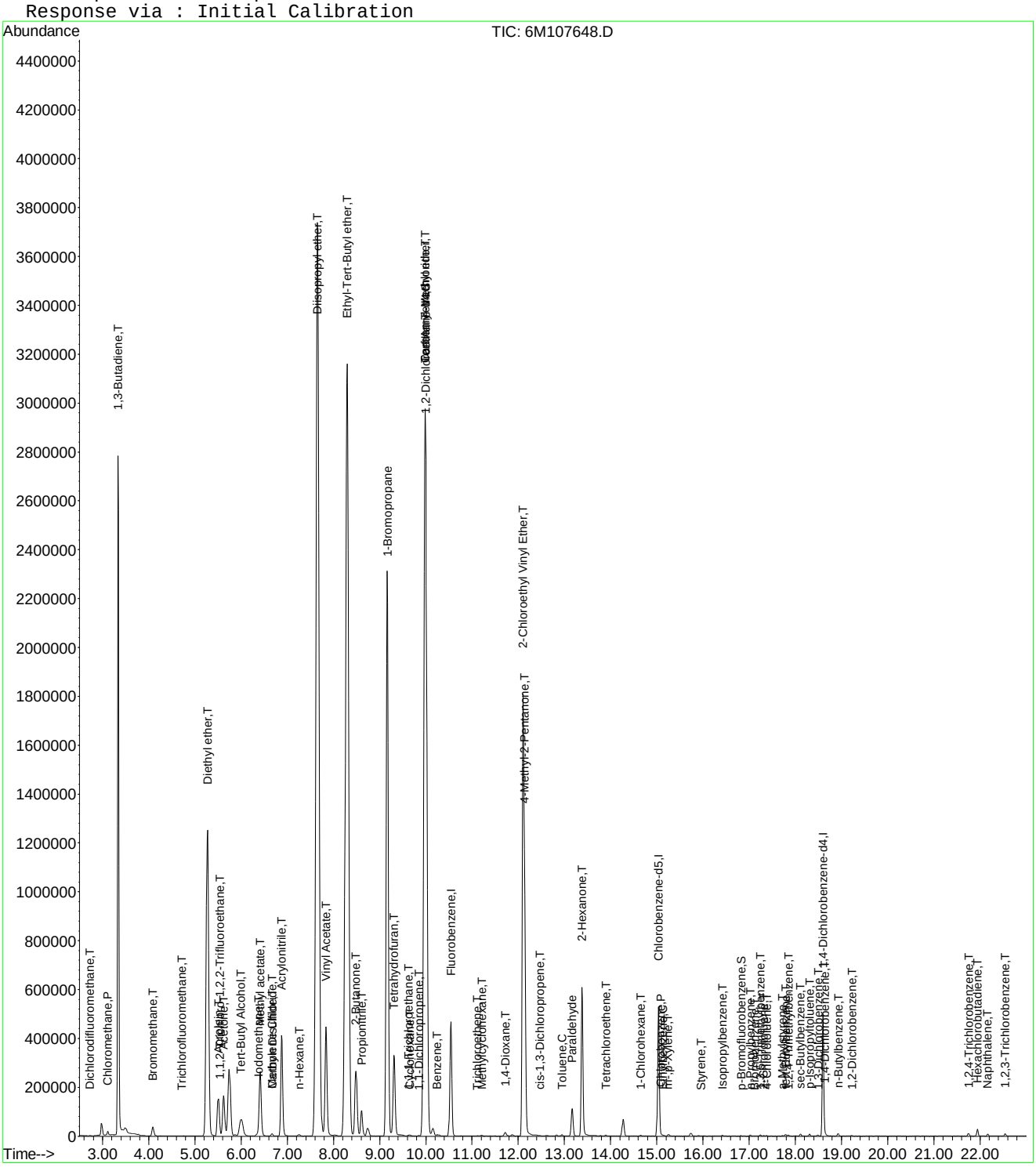
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
70)	Chlorobenzene	15.08	112	4245	0.2430 ug/L	#	12
72)	Ethylbenzene	15.14	106	1381	0.1532 ug/L		91
73)	m-,p-Xylene	15.25	106	3367	0.3056 ug/L		88
75)	Styrene	15.96	104	1741	0.3282 ug/L		78
77)	Isopropylbenzene	16.42	105	5543	0.2123 ug/L		98
83)	n-Propylbenzene	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

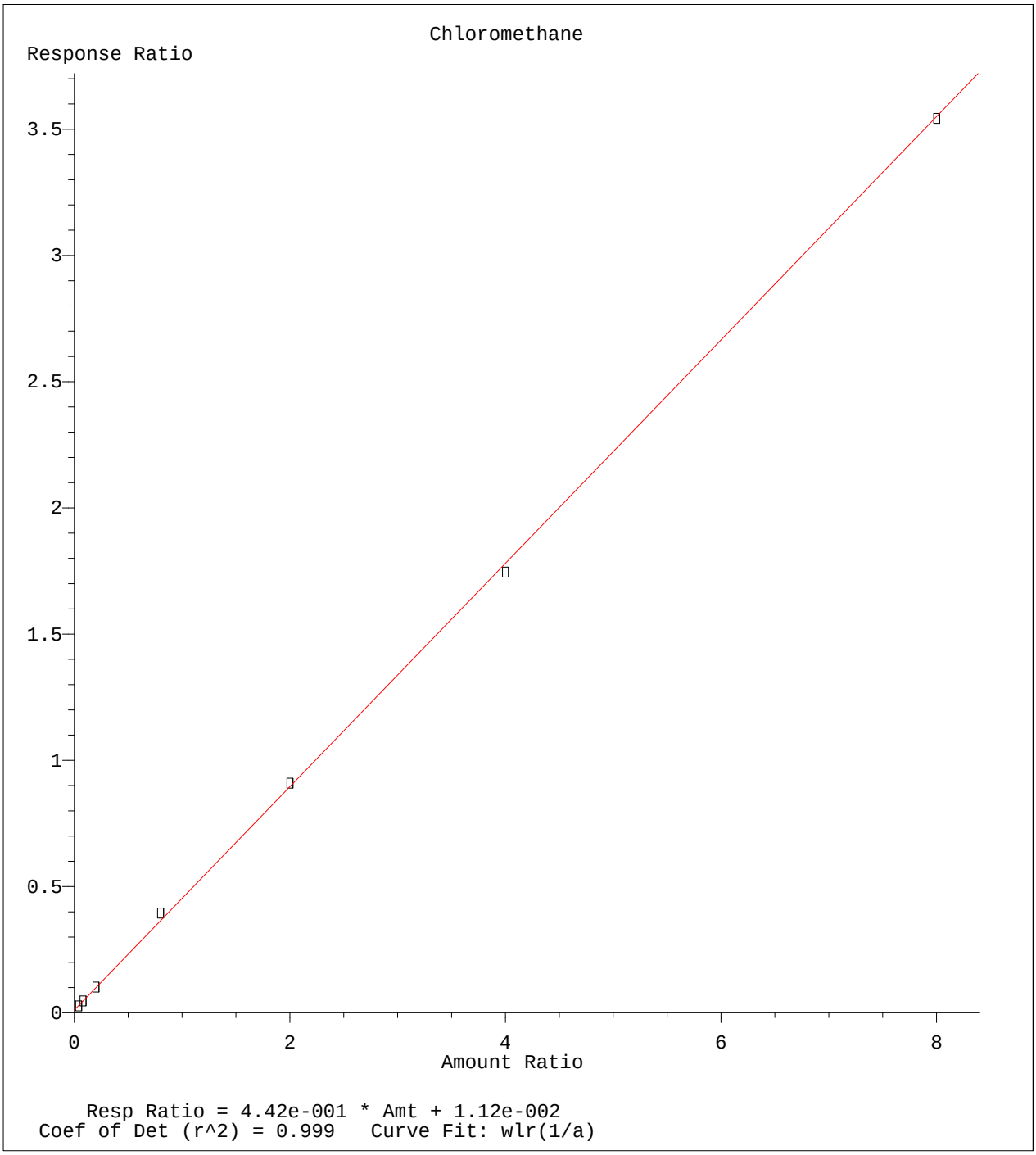
(#) = qualifier out of range (m) = manual integration
6M107648.D 8260WTR.M Wed Apr 25 15:23:04 2012 Page 2

Quantitation Report (Not Reviewed)

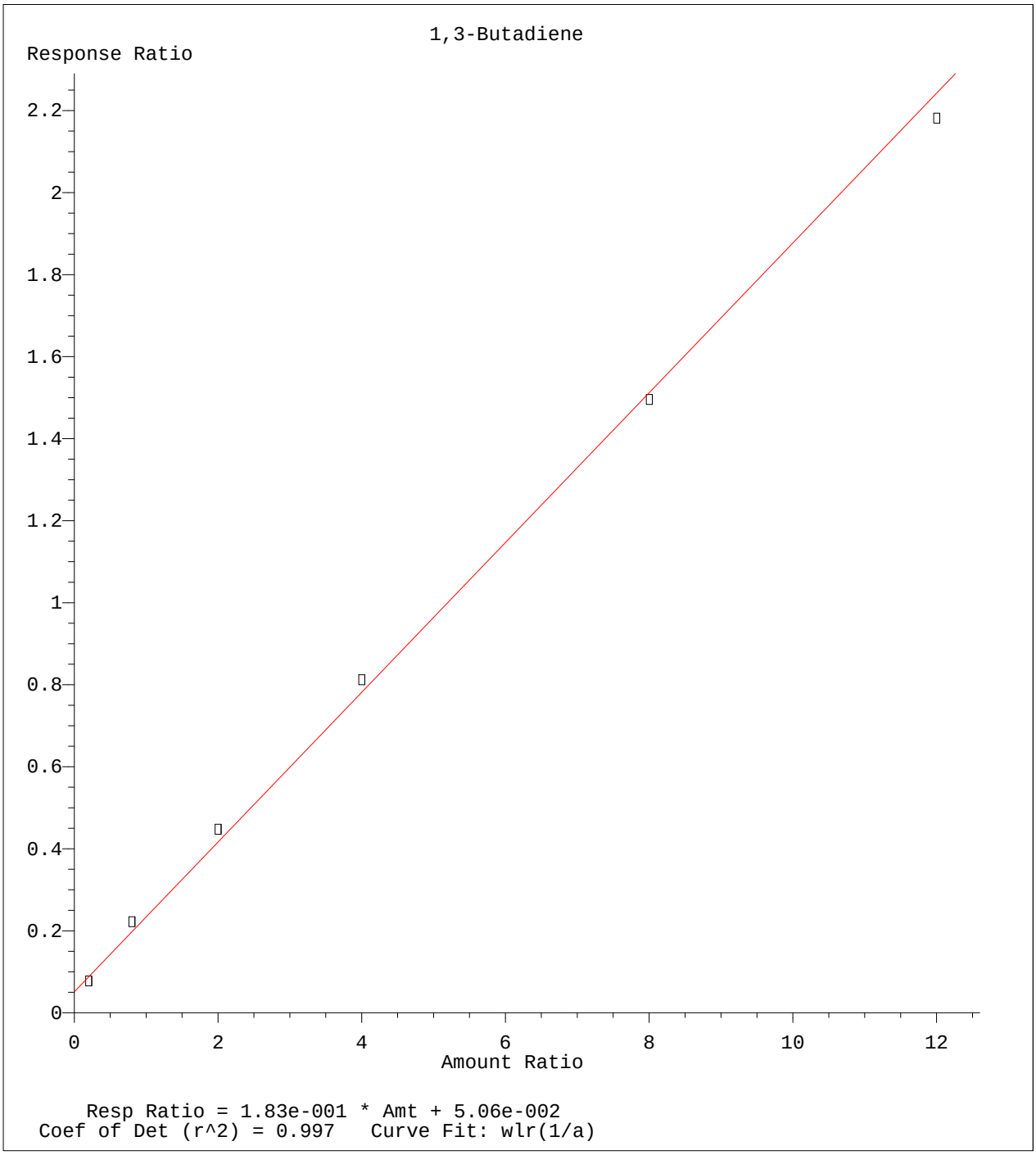
Data File : C:\MSDCHEM\1\DATA\042512\6M107648.D Vial: 12
Acq On : 25 Apr 2012 14:42 Operator: ADC
Sample : WG396001-11 300.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23 2012 Quant Results File: 8260WTR.RES

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

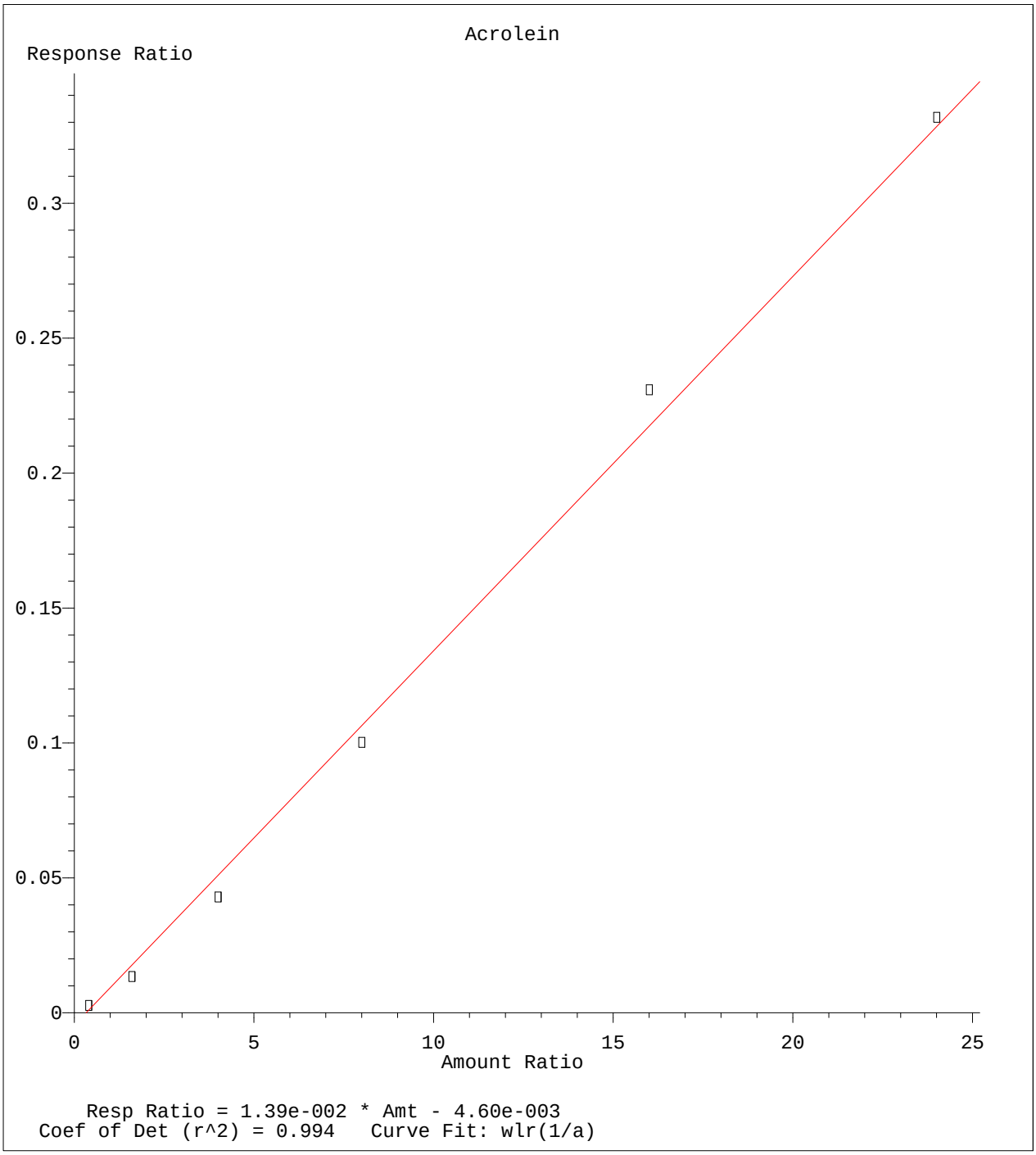




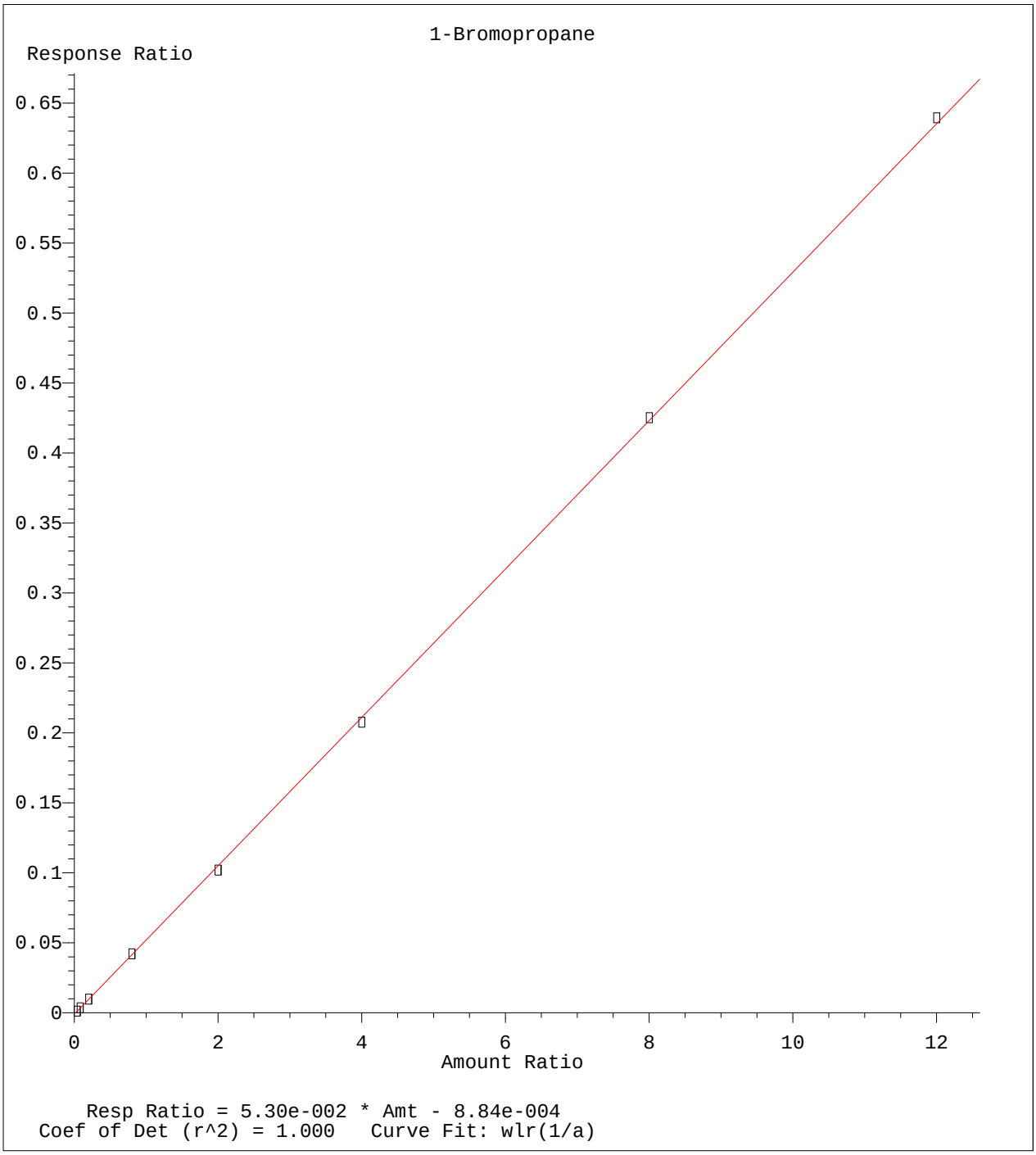
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



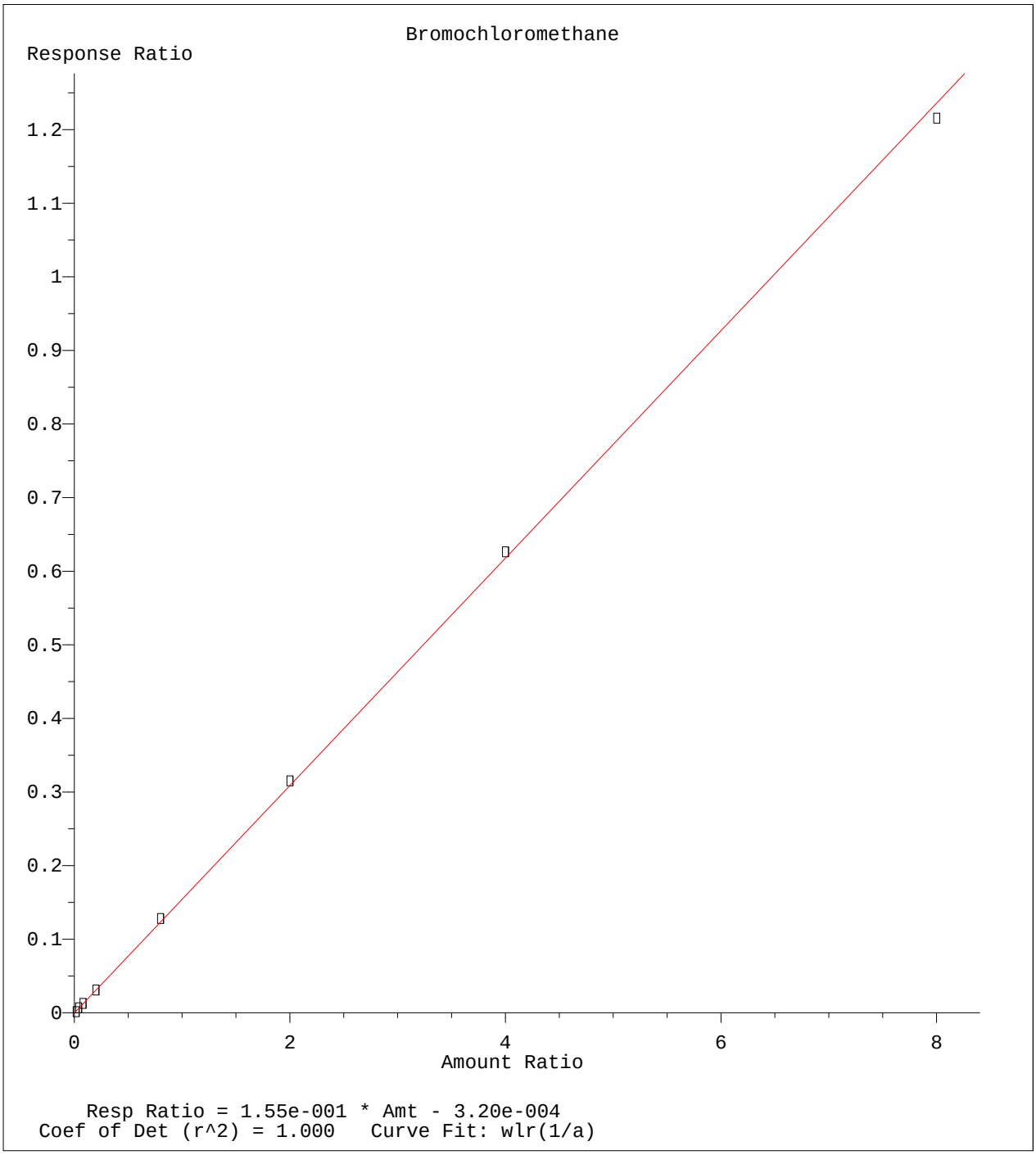
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



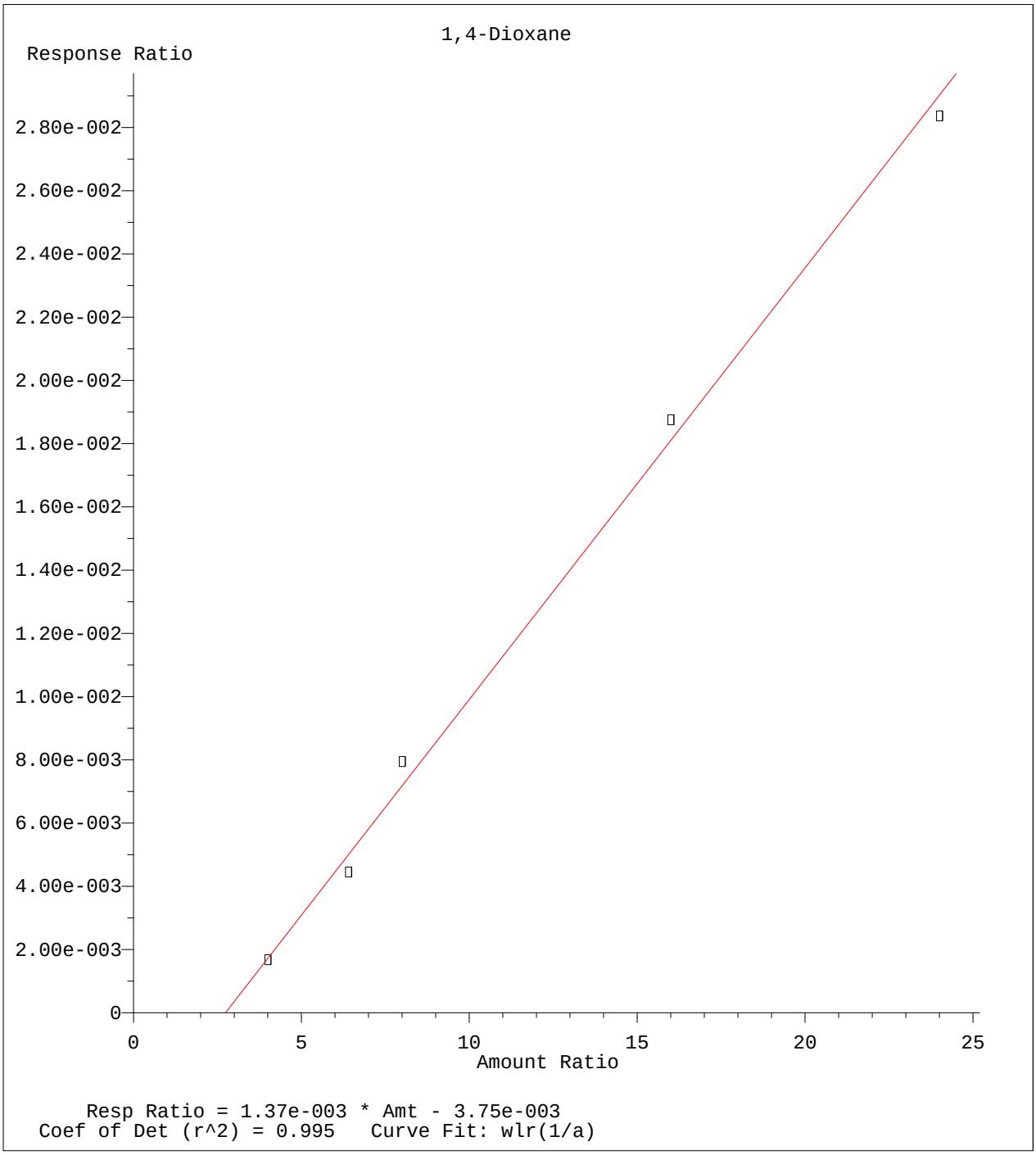
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



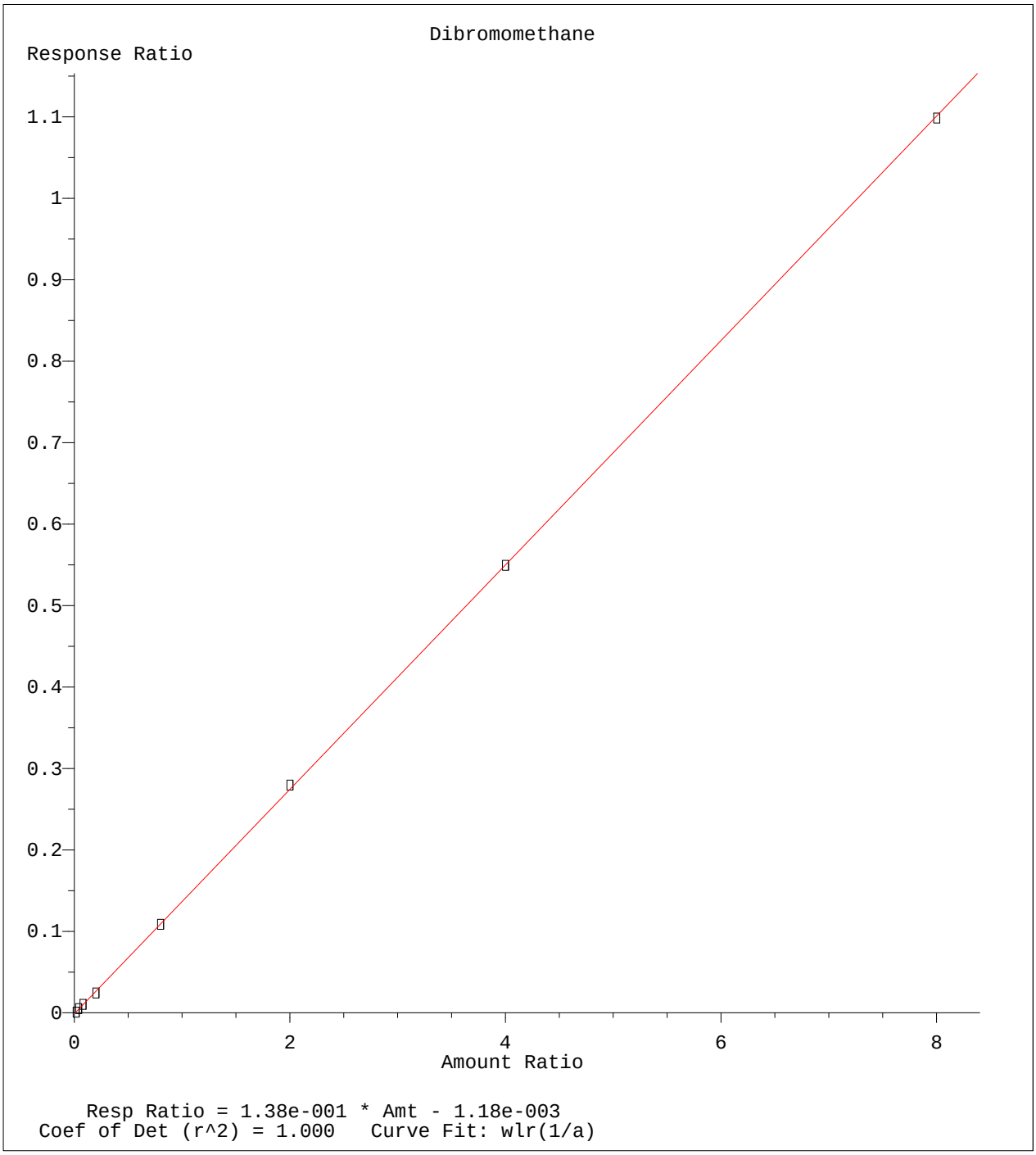
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



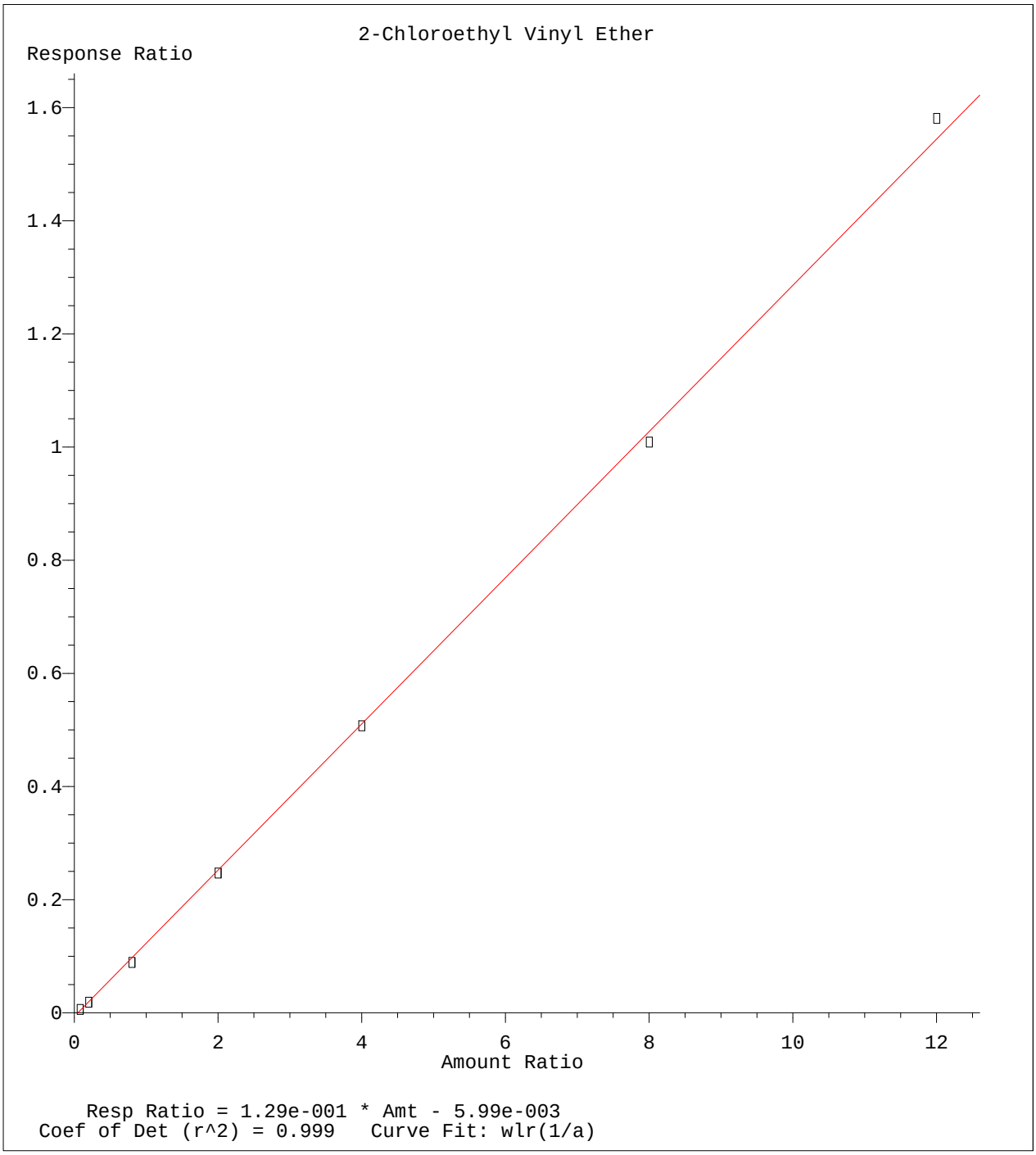
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



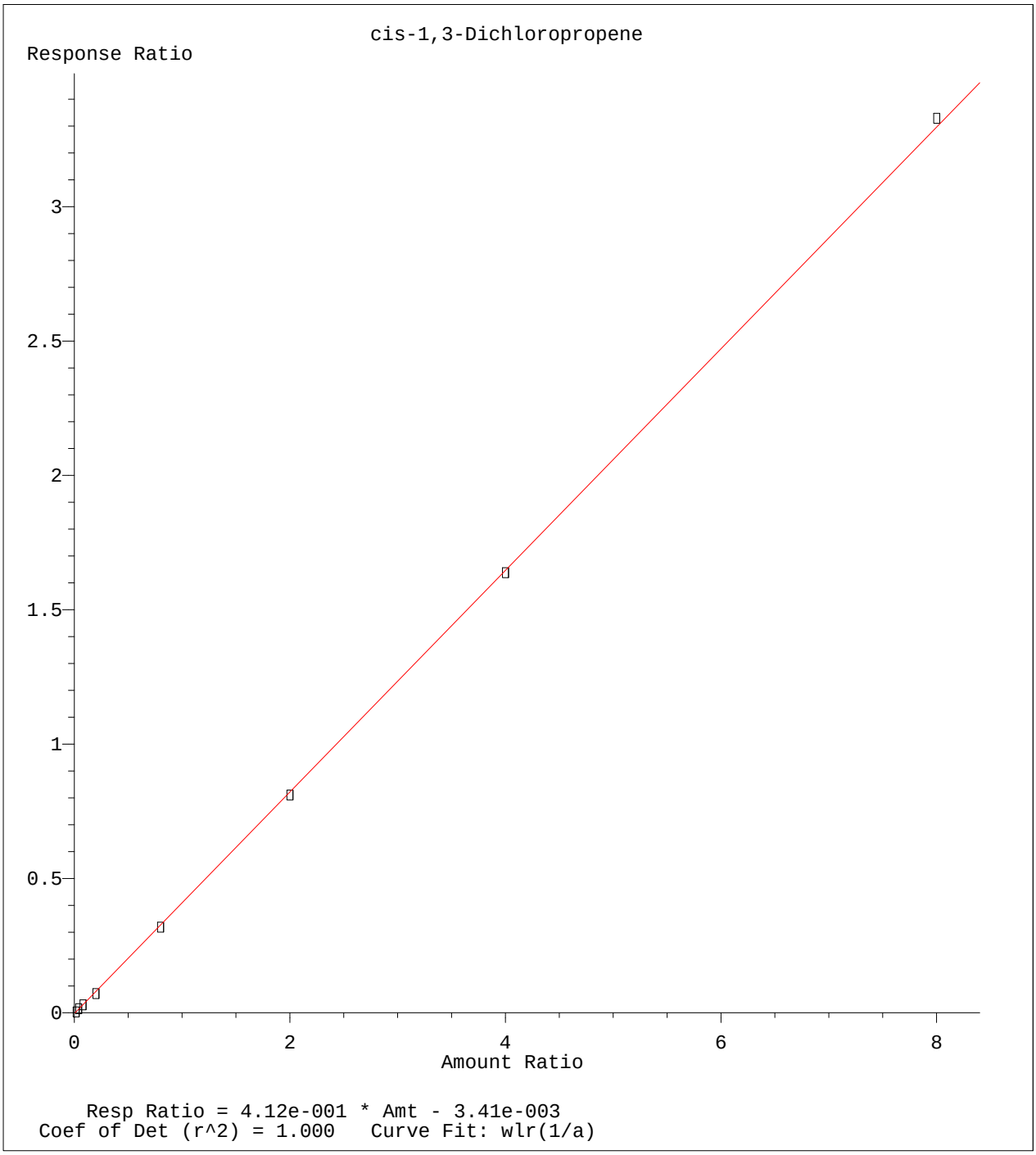
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



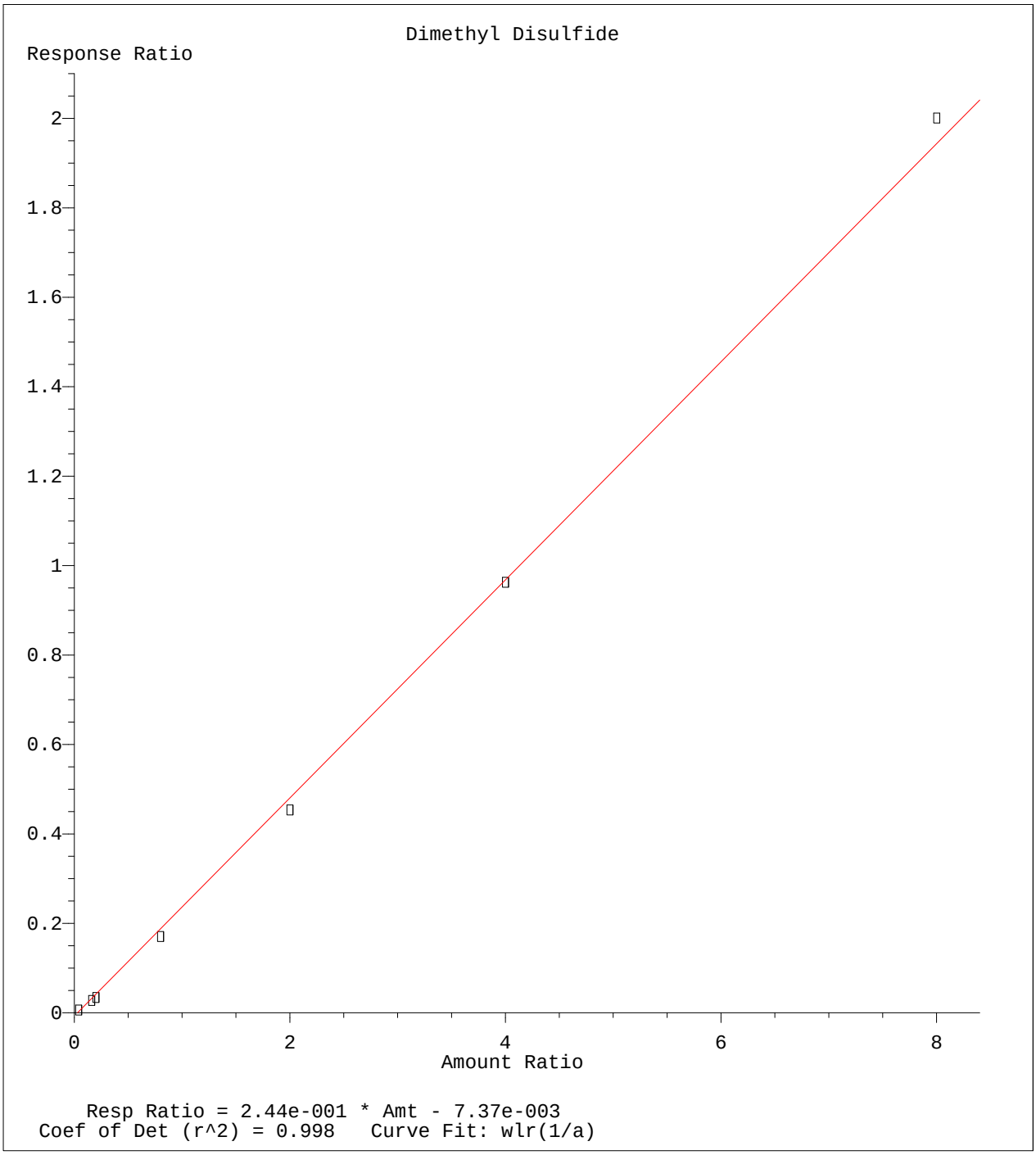
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



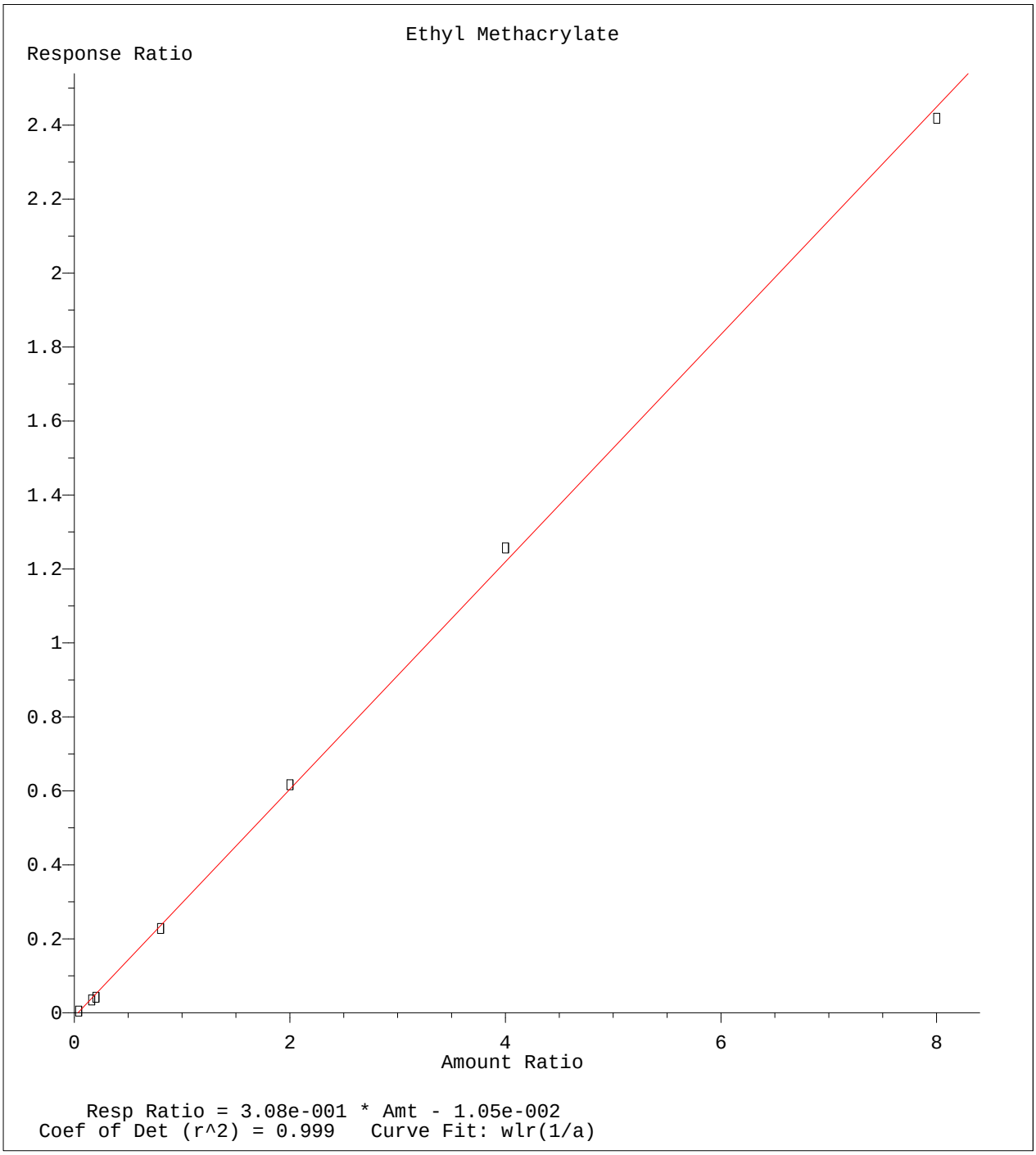
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



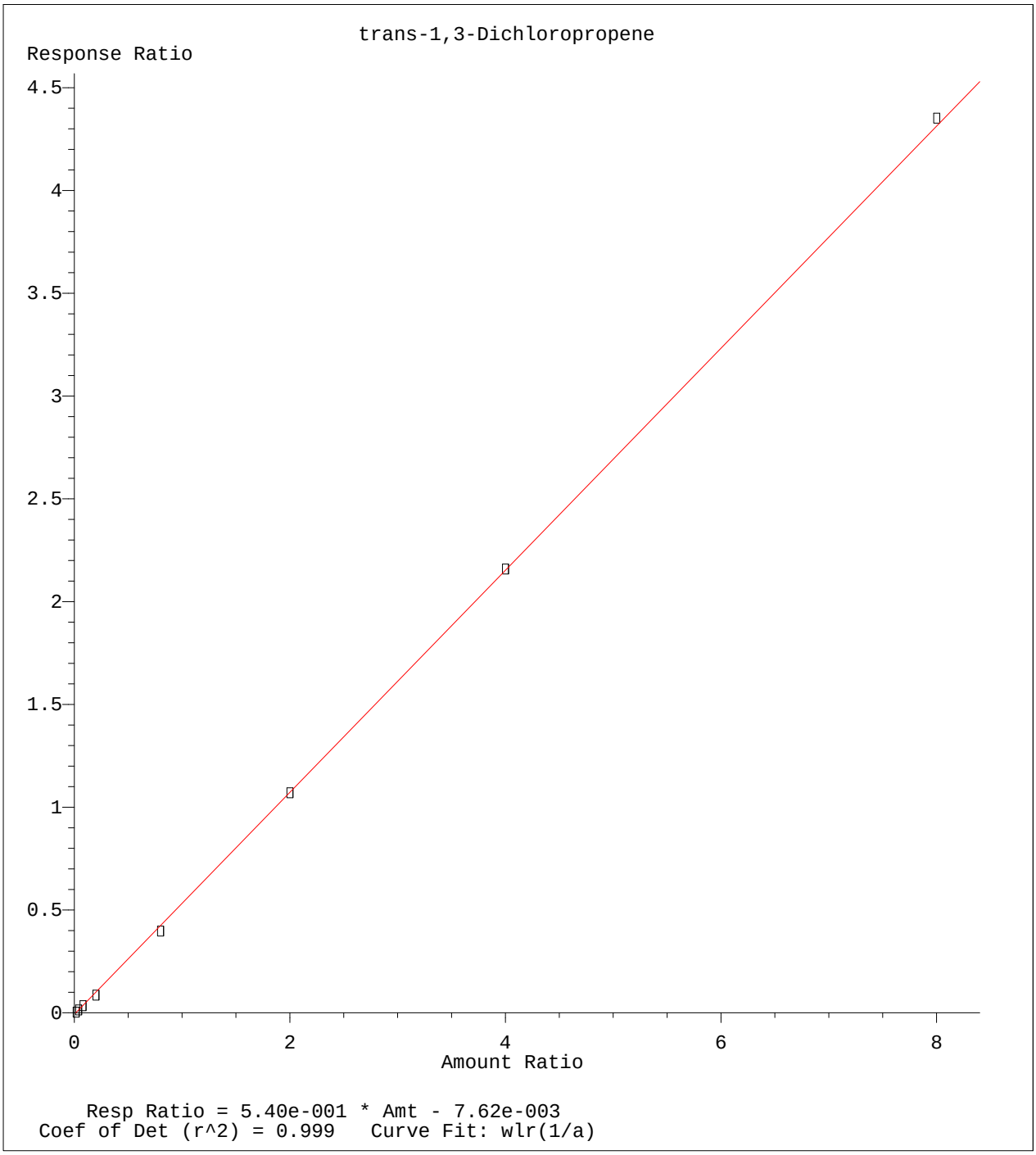
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



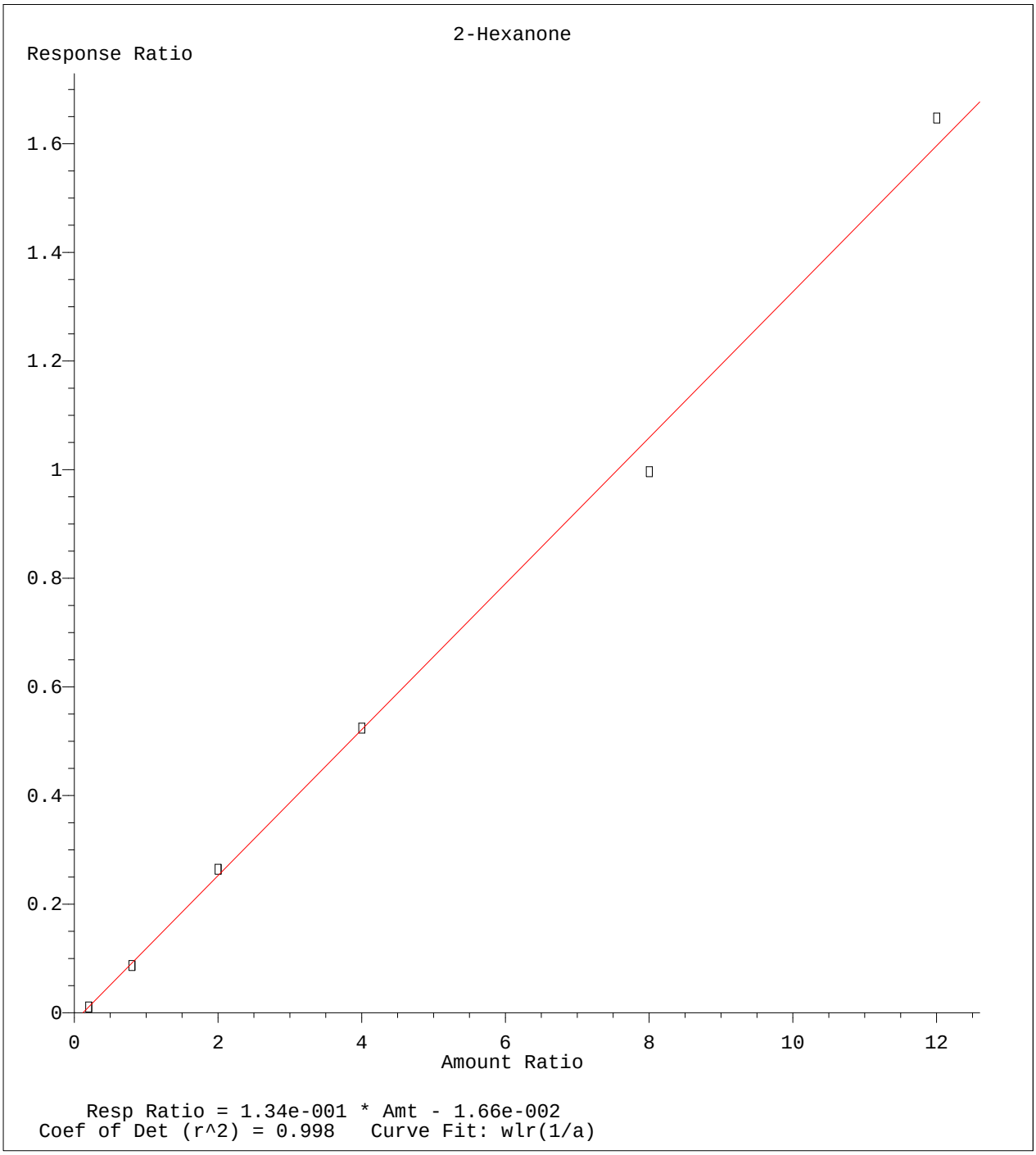
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



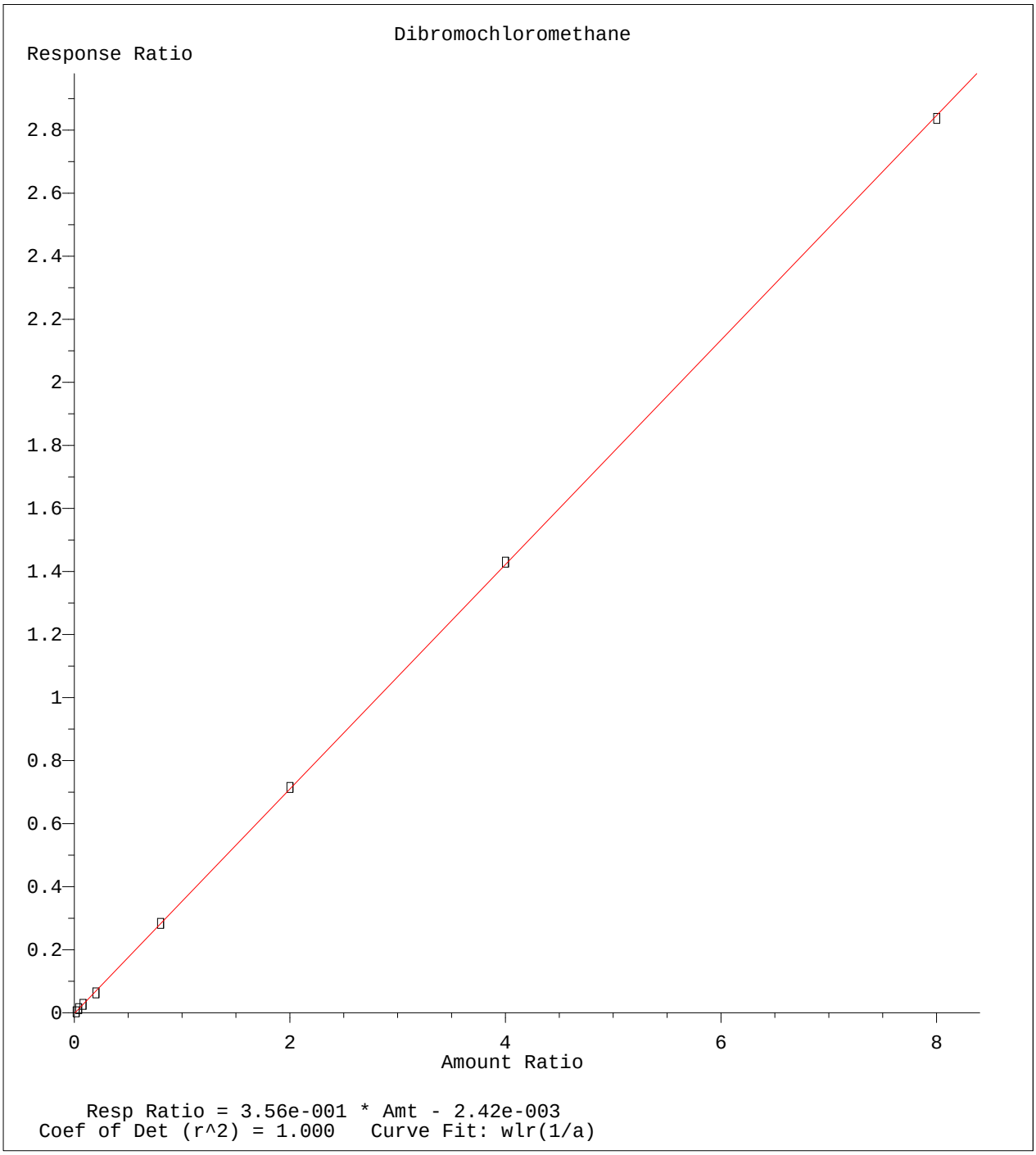
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



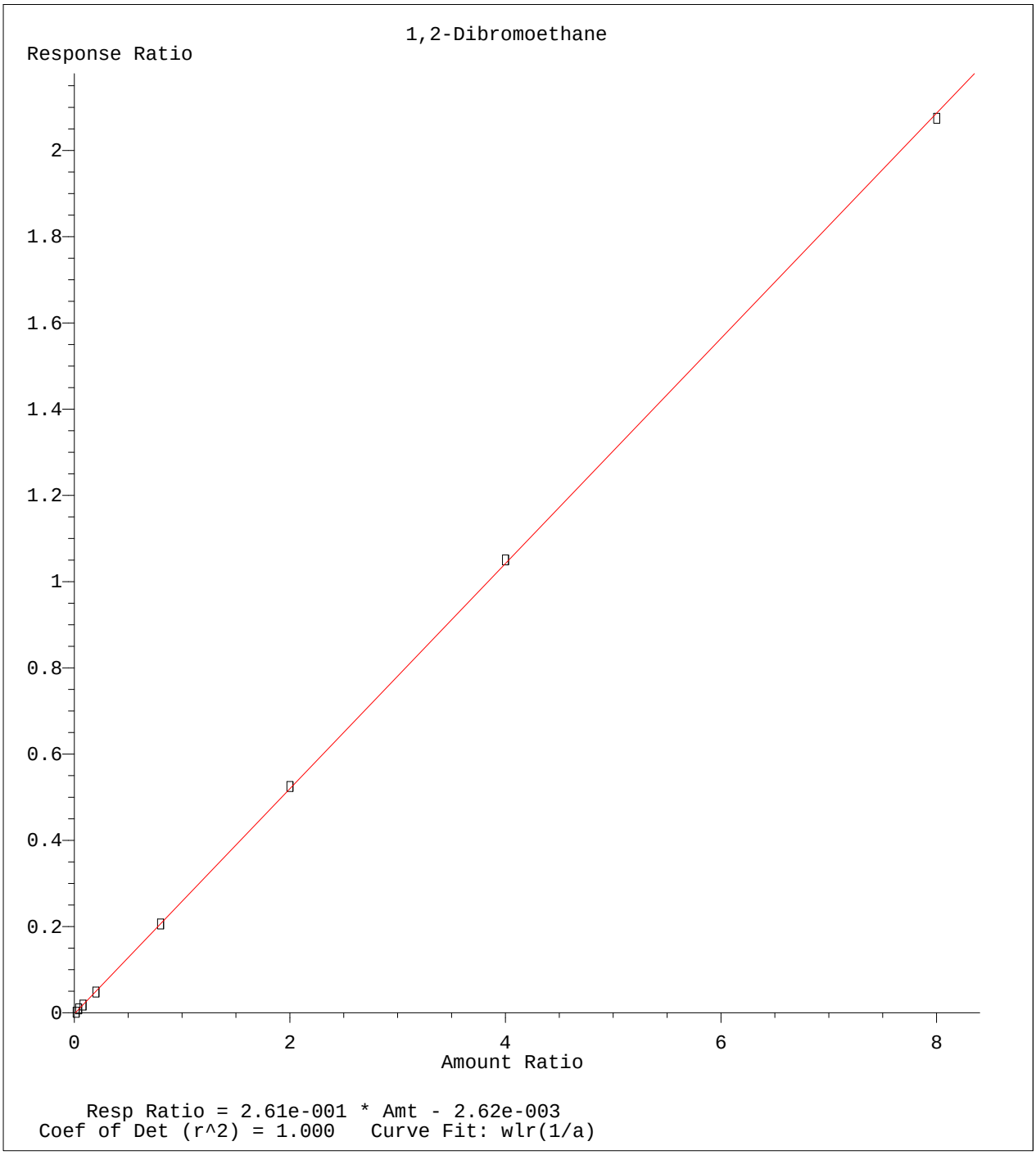
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



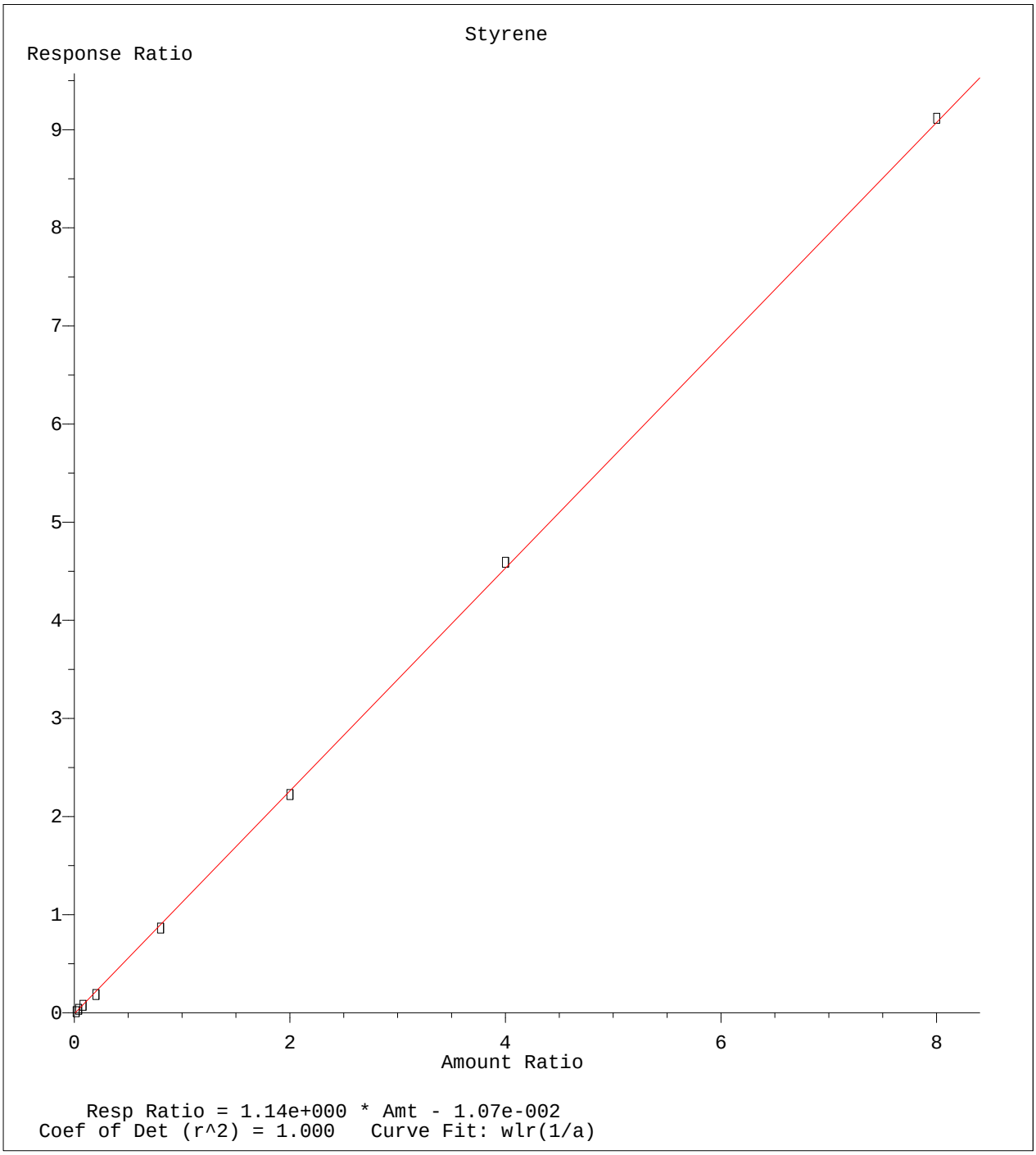
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



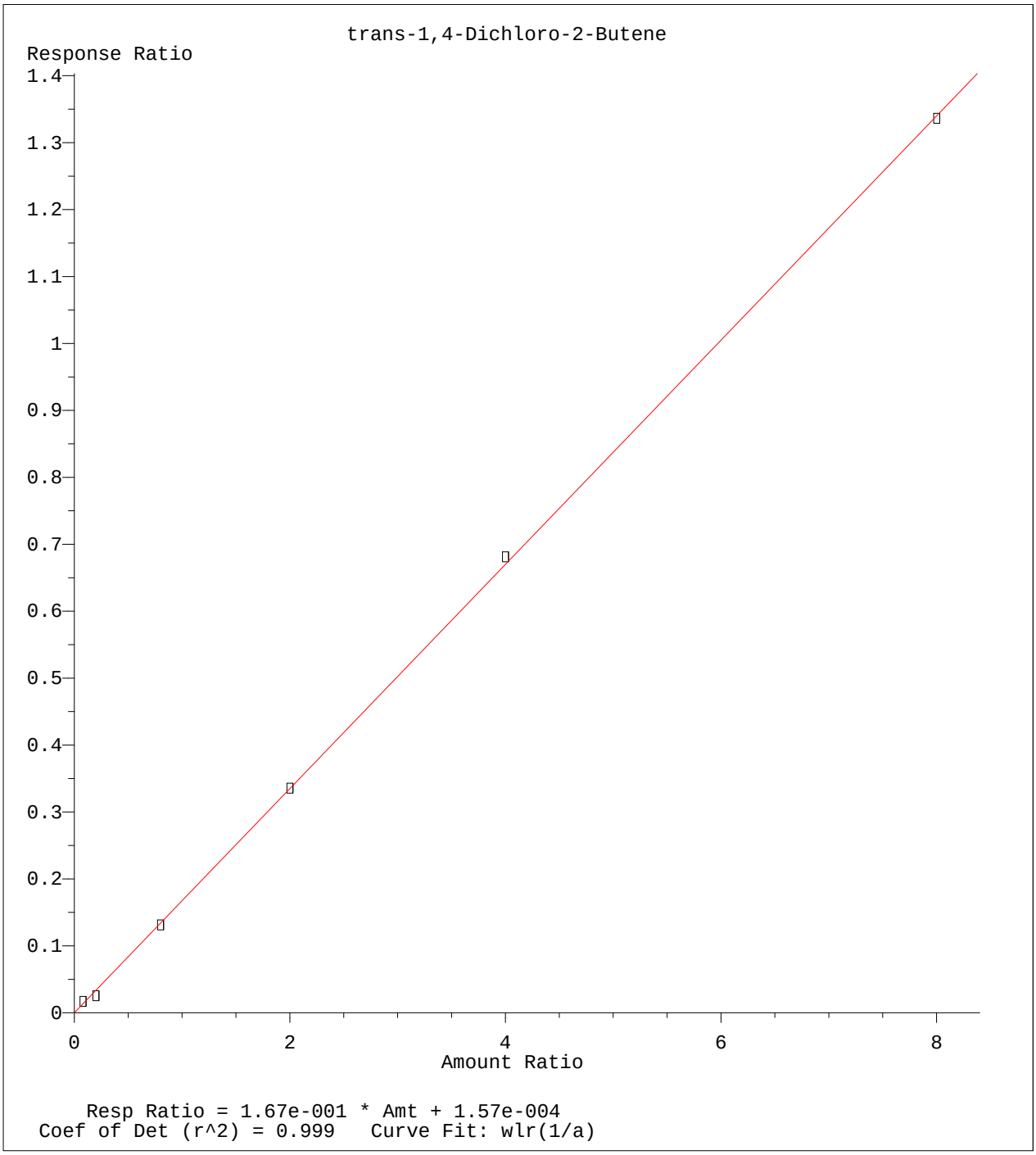
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



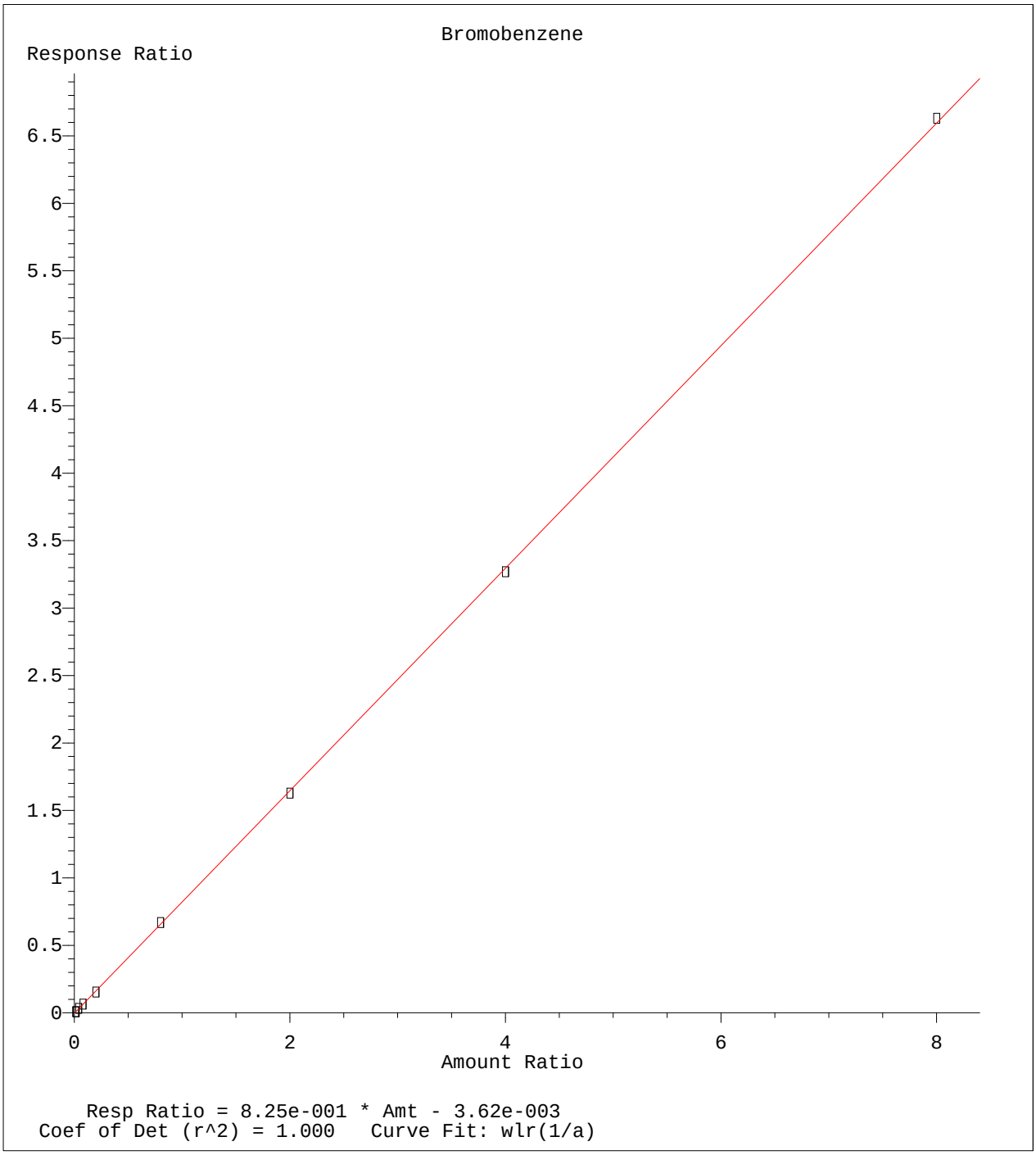
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



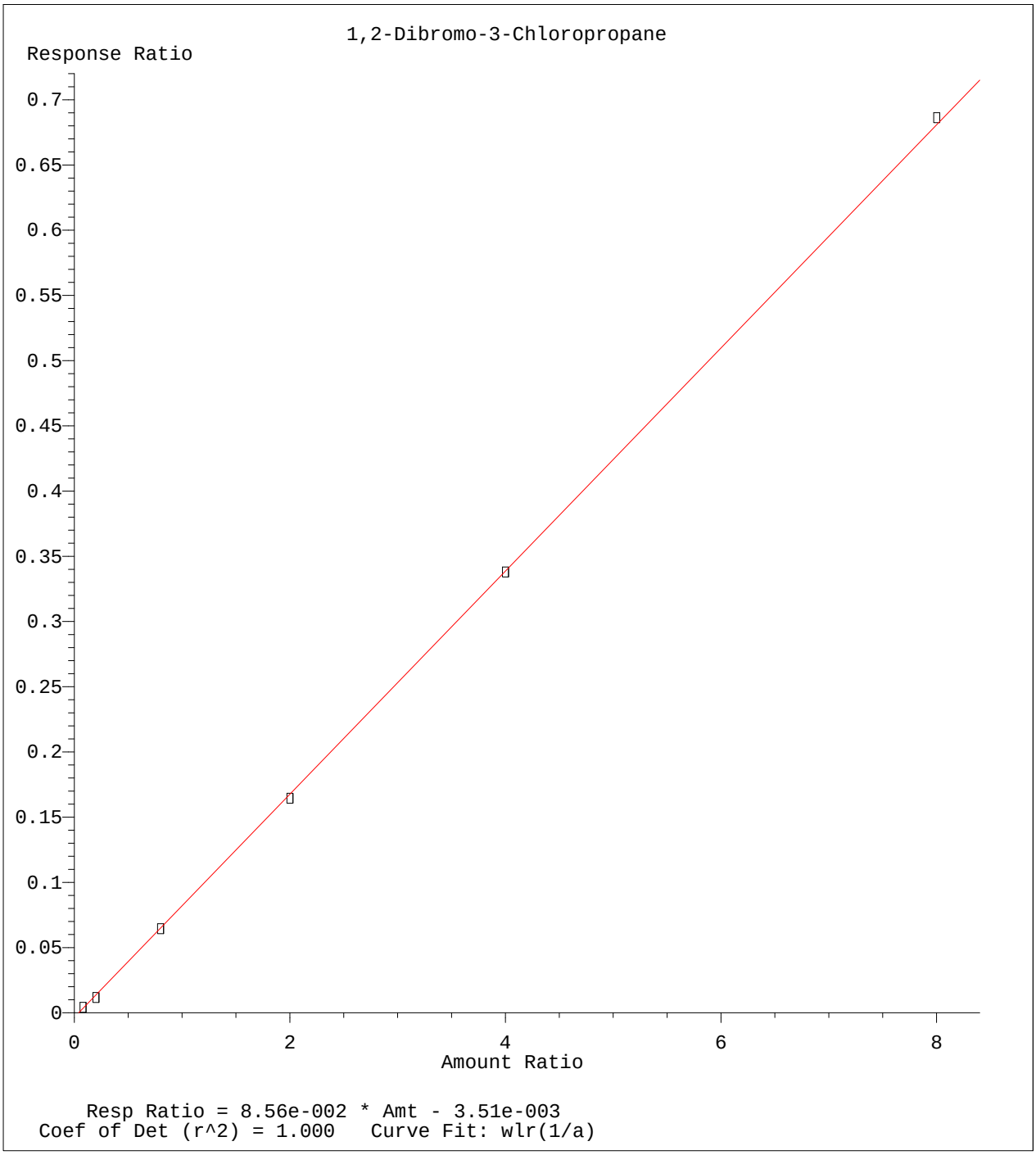
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



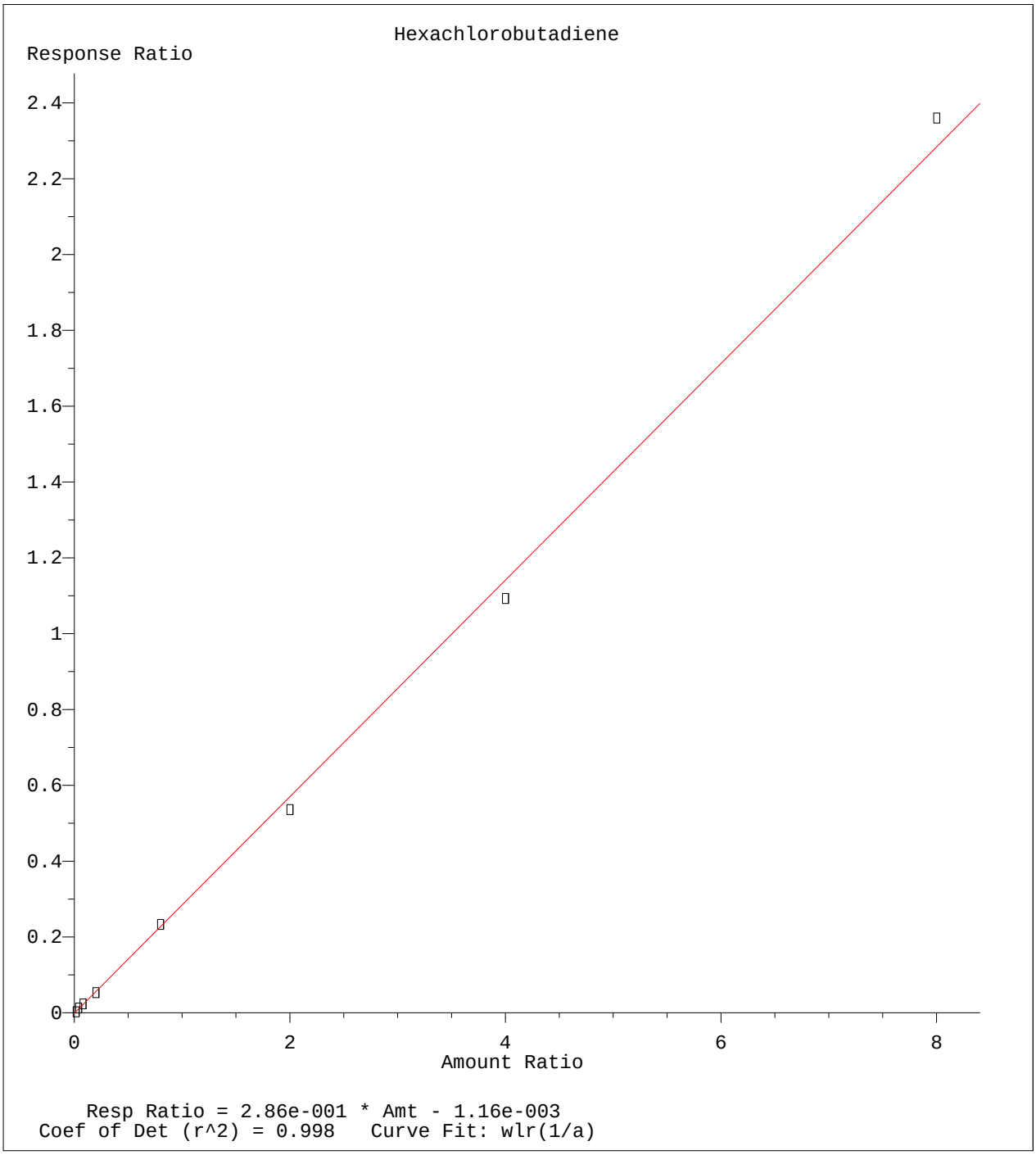
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



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



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



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

Quantitation Report (Not Reviewed)

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

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

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

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

Quantitation Report (Not Reviewed)

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

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

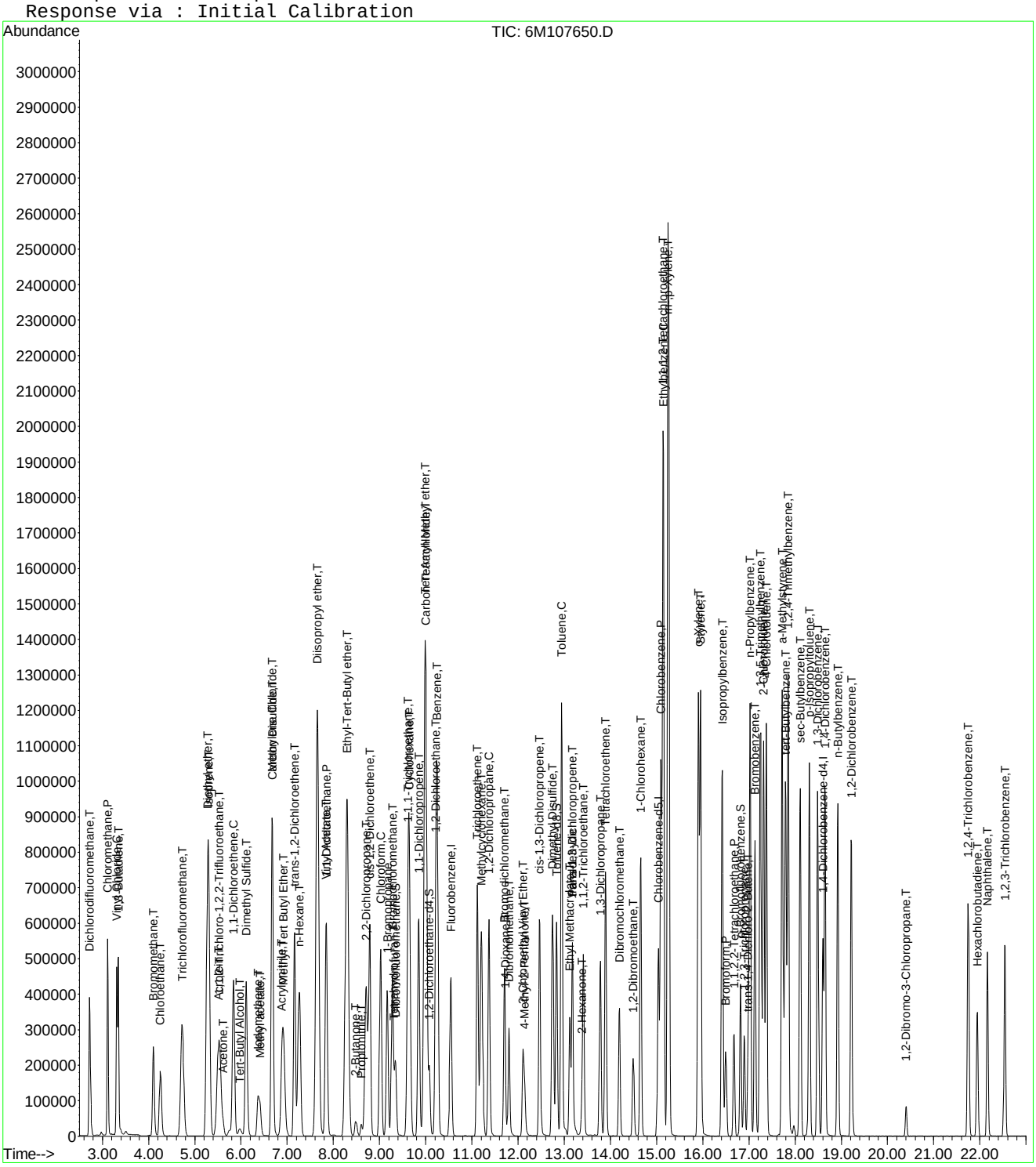
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.22	62	427893	48.4840 ug/L	99
46)	Benzene	10.25	78	1331878	48.0792 ug/L	100
47)	Trichloroethene	11.12	130	338809	48.7622 ug/L	100
48)	Methylcyclohexane	11.21	83	416357	51.9602 ug/L	99
49)	1,2-Dichloropropane	11.37	63	359097	50.2094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

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

Quantitation Report (Not Reviewed)

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

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



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\11M83348.D Vial: 2
Acq On : 4 May 2012 15:50 Operator: ADC
Sample : WG397041-02 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 16:35:45 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	817770	25.00	ug/L	0.00
57) Chlorobenzene-d5	13.94	117	627178	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	353376	25.00	ug/L	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	9.32	111	211755	21.2497	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 85.00%#			
43) 1,2-Dichloroethane-d4	9.93	65	192986	20.2386	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 80.96%			
58) Toluene-d8	12.17	98	727899	22.0028	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 88.00%			
80) p-Bromofluorobenzene	15.33	95	280485	24.0134	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 96.04%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.05	85	467519	44.3045	ug/L	98
3) Chloromethane	3.48	50	860460	47.4794	ug/L	99
4) Vinyl Chloride	3.70	62	873104	48.7178	ug/L	98
5) 1,3-Butadiene	3.73	54	387848	42.7345	ug/L	100
6) Bromomethane	4.56	94	275307	47.3721	ug/L	99
7) Chloroethane	4.72	64	300651	48.1424	ug/L	98
8) Trichlorofluoromethane	5.19	101	798057	45.2606	ug/L	100
9) Diethyl ether	5.71	59	607124	97.5429	ug/L	96
10) Isoprene	5.74	67	671745	48.9656	ug/L	97
11) Acrolein	5.94	56	42102	97.3894	ug/L	93
12) 1,1,2-Trichloro-1,2,2-Trif	5.96	101	427918	46.8042	ug/L	100
13) Acetone	6.04	43	86721	57.4894	ug/L	94
14) 1,1-Dichloroethene	6.25	61	626606	50.4776	ug/L	97
15) Tert-Butyl Alcohol	6.37	59	86299	209.2723	ug/L	98
16) Dimethyl Sulfide	6.50	62	512994	50.4569	ug/L	100
17) Iodomethane	6.75	142	609178	48.2478	ug/L	100
18) Methyl acetate	6.76	43	240338	45.5022	ug/L	99
19) Methylene Chloride	7.00	84	419243	47.5191	ug/L	96
20) Carbon Disulfide	7.04	76	1221257	48.2580	ug/L	99
21) Acrylonitrile	7.19	53	93081	51.6575	ug/L	98
22) Methyl Tert Butyl Ether	7.22	73	951473	46.1597	ug/L	98
23) trans-1,2-Dichloroethene	7.44	96	437436	49.3564	ug/L	95
24) n-Hexane	7.53	57	438736	48.9977	ug/L	97
25) Diisopropyl ether	7.86	45	2520175	97.0863	ug/L	98
26) Vinyl Acetate	8.01	43	241436	46.5020	ug/L	98
27) 1,1-Dichloroethane	8.04	63	748809	50.4184	ug/L	100
28) Ethyl-Tert-Butyl ether	8.41	59	2426242	95.7227	ug/L	98
29) 2-Butanone	8.57	43	95271	45.2721	ug/L	100
30) Propionitrile	8.68	54	61053	98.3070	ug/L	99
31) 2,2-Dichloropropane	8.78	77	590653	49.2036	ug/L	100
32) cis-1,2-Dichloroethene	8.84	96	473156	49.2654	ug/L	95
33) Chloroform	9.05	83	764018	48.6581	ug/L	97
34) 1-Bromopropane	9.17	122	88022	49.0073	ug/L	98
35) Bromochloromethane	9.26	130	290526	47.6164	ug/L	96
36) Tetrahydrofuran	9.29	42	124027	90.8067	ug/L	96
38) 1,1,1-Trichloroethane	9.55	97	728412	49.4508	ug/L	98
39) Cyclohexane	9.59	56	603489	50.8517	ug/L	95
40) 1,1-Dichloropropene	9.74	75	574993	49.0908	ug/L	98
41) Carbon Tetrachloride	9.87	117	711863	45.4652	ug/L	99
42) Tert-Amyl-Methyl ether	9.84	73	2104703	90.8227	ug/L	99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\11M83348.D Vial: 2
Acq On : 4 May 2012 15:50 Operator: ADC
Sample : WG397041-02 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 16:35:45 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

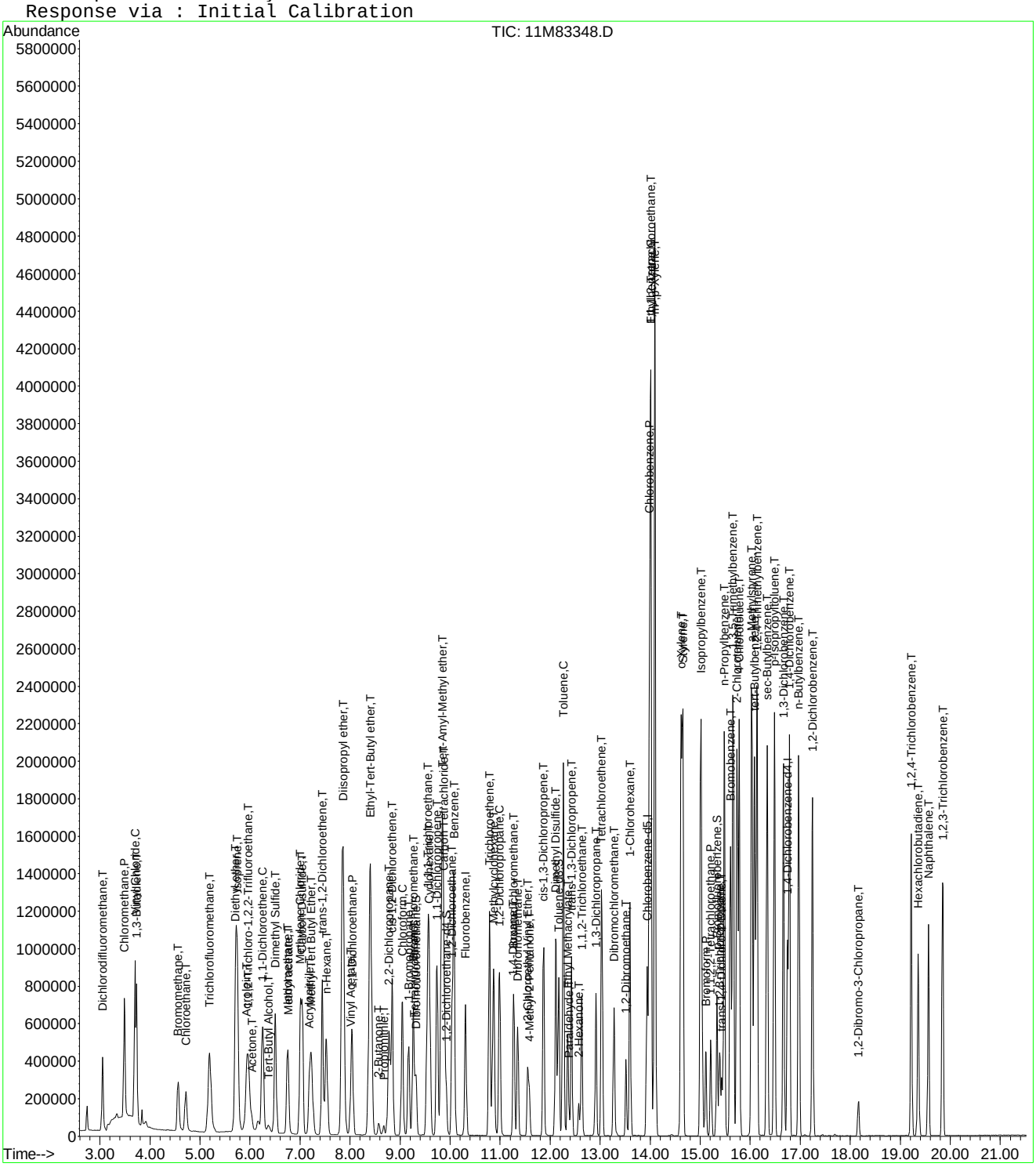
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.04	62	554249	50.2071	ug/L		98
46)	Benzene	10.08	78	1651329	48.2569	ug/L		100
47)	Trichloroethene	10.78	130	506384	45.1342	ug/L		98
48)	Methylcyclohexane	10.87	83	572422	48.7335	ug/L		97
49)	1,2-Dichloropropane	10.99	63	395201	50.1678	ug/L		100
50)	1,4-Dioxane	11.26	88	11775	210.2376	ug/L		94
51)	Bromodichloromethane	11.27	83	569895	52.8536	ug/L		98
52)	Dibromomethane	11.35	93	238473	45.2640	ug/L		98
53)	2-Chloroethyl Vinyl Ether	11.55	63	164050	48.8194	ug/L		98
54)	4-Methyl-2-Pentanone	11.58	58	85462	46.4364	ug/L		97
55)	cis-1,3-Dichloropropene	11.87	75	635185	51.1409	ug/L		99
56)	Dimethyl Disulfide	12.11	79	397504	53.9968	ug/L		99
59)	Toluene	12.26	91	1838913	48.7472	ug/L		100
60)	Ethyl Methacrylate	12.36	69	356629	44.8430	ug/L		99
61)	Paraldehyde	12.38	89	10078	109.9214	ug/L		86
62)	trans-1,3-Dichloropropene	12.43	75	565682	55.9300	ug/L		98
63)	1,1,2-Trichloroethane	12.64	97	303747	48.7476	ug/L		99
64)	2-Hexanone	12.57	43	140818	44.6934	ug/L	#	26
65)	1,3-Dichloropropane	12.91	76	508035	48.5387	ug/L		99
66)	Tetrachloroethene	13.03	164	386574	50.0171	ug/L		97
67)	Dibromochloromethane	13.28	129	441814	49.8783	ug/L		100
68)	1,2-Dibromoethane	13.51	107	310310	48.0908	ug/L		99
69)	1-Chlorohexane	13.60	91	554582	51.2783	ug/L		96
70)	Chlorobenzene	13.99	112	1324860	52.7608	ug/L		100
71)	1,1,1,2-Tetrachloroethane	14.01	131	523207	50.5258	ug/L		99
72)	Ethylbenzene	14.01	106	709448	52.0635	ug/L		97
73)	m-,p-Xylene	14.09	106	1742582	103.5597	ug/L		98
74)	o-Xylene	14.62	106	795586	48.5363	ug/L		97
75)	Styrene	14.65	104	1358495	52.0873	ug/L		97
76)	Bromoform	15.12	173	276501	52.9816	ug/L		99
77)	Isopropylbenzene	15.01	105	1998654	51.7916	ug/L		100
79)	1,1,2,2-Tetrachloroethane	15.21	83	312806	49.7273	ug/L		98
81)	1,2,3-Trichloropropane	15.39	110	88156	46.3018	ug/L		94
82)	trans-1,4-Dichloro-2-Buten	15.43	53	87140	48.2502	ug/L		92
83)	n-Propylbenzene	15.48	91	2287615	49.7535	ug/L		100
84)	Bromobenzene	15.60	156	561122	51.0835	ug/L		96
85)	1,3,5-Trimethylbenzene	15.65	105	1684260	49.3255	ug/L		99
86)	2-Chlorotoluene	15.74	91	1504920	48.6680	ug/L		99
87)	4-Chlorotoluene	15.78	91	1394041	51.5148	ug/L		99
88)	a-Methylstyrene	16.03	118	957430	50.3475	ug/L		98
89)	tert-Butylbenzene	16.09	134	364727	49.0801	ug/L		98
90)	1,2,4-Trimethylbenzene	16.14	105	1787739	50.3226	ug/L		100
91)	sec-Butylbenzene	16.34	105	1964593	49.2758	ug/L		99
92)	p-Isopropyltoluene	16.48	119	1730362	50.5811	ug/L		99
93)	1,3-Dichlorobenzene	16.67	146	1056961	49.0616	ug/L		98
94)	1,4-Dichlorobenzene	16.78	146	1071419	48.8593	ug/L		100
95)	n-Butylbenzene	16.97	91	1461369	56.0795	ug/L		99
96)	1,2-Dichlorobenzene	17.25	146	961269	49.2317	ug/L		99
97)	1,2-Dibromo-3-Chloropropan	18.16	75	53319	47.2605	ug/L		98
98)	1,2,4-Trichlorobenzene	19.22	180	642877	58.2194	ug/L		96
99)	Hexachlorobutadiene	19.36	225	247421	56.4441	ug/L		94
100)	Naphthalene	19.56	128	1093732	44.7141	ug/L		99
101)	1,2,3-Trichlorobenzene	19.85	180	557032	53.9802	ug/L		96

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\11M83348.D Vial: 2
Acq On : 4 May 2012 15:50 Operator: ADC
Sample : WG397041-02 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 16:35 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050412\11M83348.D Vial: 2
Acq On : 4 May 2012 15:50 Operator: ADC
Sample : WG397041-02 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.0000	1.0000	0.0	170#	0.00
2	T	Dichlorodifluoromethane	0.3226	0.2858	11.4	147	0.00
3	P	Chloromethane	0.5540	0.5261	5.0	153#	0.00
4	C	Vinyl Chloride	0.5604	0.5338	4.7	181#	0.01
5	T	1,3-Butadiene	0.2774	0.2371	14.5	144	0.00
6	T	Bromomethane	0.1777	0.1683	5.3	161#	0.00
7	T	Chloroethane	0.1909	0.1838	3.7	160#	0.00
8	T	Trichlorofluoromethane	0.5390	0.4879	9.5	150#	0.00
9	T	Diethyl ether	0.1903	0.1856	2.5	167#	0.00
10	T	Isoprene	0.4194	0.4107	2.1	159#	0.00
11	T	Acrolein	0.0132	0.0129	2.6	165#	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.2795	0.2616	6.4	152#	0.01
13	T	Acetone	0.0541	0.0530	2.0	188#	0.00
14	C	1,1-Dichloroethene	0.3795	0.3831	-1.0	166#	0.00
15	T	Tert-Butyl Alcohol	0.0126	0.0132	-4.6	171#	-0.01
16	T	Dimethyl Sulfide	0.3108	0.3136	-0.9	170#	0.00
17	T	Iodomethane	0.3544	0.3725	-5.1	152#	0.01
18	T	Methyl acetate	0.1615	0.1470	9.0	161#	0.00
19	T	Methylene Chloride	0.2697	0.2563	5.0	164#	0.00
20	T	Carbon Disulfide	0.7736	0.7467	3.5	162#	0.00
21	T	Acrylonitrile	0.0551	0.0569	-3.3	161#	0.01
22	T	Methyl Tert Butyl Ether	0.6301	0.5817	7.7	157#	0.00
23	T	trans-1,2-Dichloroethene	0.2709	0.2675	1.3	163#	0.00
24	T	n-Hexane	0.2737	0.2682	2.0	161#	0.01
25	T	Diisopropyl ether	0.7936	0.7704	2.9	168#	0.01
26	T	Vinyl Acetate	0.1472	0.1476	-0.3	154#	0.00
27	P	1,1-Dichloroethane	0.4540	0.4578	-0.8	167#	0.01
28	T	Ethyl-Tert-Butyl ether	0.7749	0.7417	4.3	166#	0.01
29	T	2-Butanone	0.0643	0.0583	9.5	154#	0.00
30	T	Propionitrile	0.0190	0.0187	1.7	163#	0.01
31	T	2,2-Dichloropropane	0.3670	0.3611	1.6	162#	0.00
32	T	cis-1,2-Dichloroethene	0.2936	0.2893	1.5	163#	0.00
33	C	Chloroform	0.4800	0.4671	2.7	166#	0.01
34	T	1-Bromopropane	0.0549	0.0538	2.0	156#	0.00
35	T	Bromochloromethane	0.1865	0.1776	4.8	156#	0.00
36	T	Tetrahydrofuran	0.0418	0.0379	9.2	157#	0.00
37	S	Dibromofluoromethane	0.3046	0.2589	15.0	146	0.00
38	T	1,1,1-Trichloroethane	0.4503	0.4454	1.1	162#	0.01
39	T	Cyclohexane	0.3628	0.3690	-1.7	167#	0.01
40	T	1,1-Dichloropropene	0.3581	0.3516	1.8	160#	0.01
41	T	Carbon Tetrachloride	0.3990	0.4353	-9.1	163#	0.00
42	T	Tert-Amyl-Methyl ether	0.7084	0.6434	9.2	156#	0.01
43	S	1,2-Dichloroethane-d4	0.2915	0.2360	19.0	140	0.01
44	T	Heptane	0.0000	0.0000	0.0	176#	0.01
45	T	1,2-Dichloroethane	0.3375	0.3389	-0.4	167#	0.01
46	T	Benzene	1.0461	1.0096	3.5	163#	0.01
47	T	Trichloroethene	0.3430	0.3096	9.7	159#	0.00
48	T	Methylcyclohexane	0.3591	0.3500	2.5	158#	0.00
49	C	1,2-Dichloropropane	0.2408	0.2416	-0.3	168#	0.01
50	T	1,4-Dioxane	0.0017	0.0018	-5.3	166#	0.00
51	T	Bromodichloromethane	0.3296	0.3484	-5.7	167#	0.00
52	T	Dibromomethane	0.1422	0.1458	-2.5	157#	0.01
53	T	2-Chloroethyl Vinyl Ether	0.1027	0.1003	2.4	154#	0.00
54	T	4-Methyl-2-Pentanone	0.0563	0.0522	7.1	150#	0.00

(#) = Out of Range
11M83348.D 8260WTR.M Fri May 04 16:47:13 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050412\11M83348.D Vial: 2
Acq On : 4 May 2012 15:50 Operator: ADC
Sample : WG397041-02 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	0.3797	0.3884	-2.3	163#	0.00
56	T	Dimethyl Disulfide	0.1831	0.2430	-32.8#	179#	0.00
57	I	Chlorobenzene-d5	1.0000	1.0000	0.0	163#	0.00
58	S	Toluene-d8	1.3187	1.1606	12.0	150#	0.00
59	C	Toluene	1.5037	1.4660	2.5	158#	0.00
60	T	Ethyl Methacrylate	0.2735	0.2843	-3.9	153#	0.01
61	T	Paraldehyde	0.0030	0.0040	-33.1#	178#	0.00
62	T	trans-1,3-Dichloropropene	0.4032	0.4510	-11.9	159#	0.00
63	T	1,1,2-Trichloroethane	0.2484	0.2422	2.5	156#	0.01
64	T	2-Hexanone	0.1256	0.1123	10.6	145	0.00
65	T	1,3-Dichloropropane	0.4172	0.4050	2.9	156#	0.00
66	T	Tetrachloroethene	0.3081	0.3082	-0.0	158#	0.00
67	T	Dibromochloromethane	0.3098	0.3522	-13.7	161#	0.00
68	T	1,2-Dibromoethane	0.2572	0.2474	3.8	153#	0.00
69	T	1-Chlorohexane	0.4311	0.4421	-2.6	158#	0.00
70	P	Chlorobenzene	1.0009	1.0562	-5.5	161#	0.01
71	T	1,1,1,2-Tetrachloroethane	0.3660	0.4171	-14.0	163#	0.00
72	C	Ethylbenzene	0.5432	0.5656	-4.1	154#	0.00
73	T	m-,p-Xylene	0.6707	0.6946	-3.6	153#	0.00
74	T	o-Xylene	0.6534	0.6343	2.9	154#	0.00
75	T	Styrene	1.0396	1.0830	-4.2	153#	0.00
76	P	Bromoform	0.1568	0.2204	-40.5#	167#	0.01
77	T	Isopropylbenzene	1.5382	1.5934	-3.6	153#	0.00
78	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	158#	0.01
79	P	1,1,2,2-Tetrachloroethane	0.4450	0.4426	0.5	149	0.00
80	S	p-Bromofluorobenzene	0.8263	0.7937	3.9	159#	0.00
81	T	1,2,3-Trichloropropane	0.1347	0.1247	7.4	144	0.00
82	T	trans-1,4-Dichloro-2-Butene	0.1051	0.1233	-17.4	163#	0.00
83	T	n-Propylbenzene	3.2528	3.2368	0.5	155#	0.00
84	T	Bromobenzene	0.7771	0.7939	-2.2	163#	0.00
85	T	1,3,5-Trimethylbenzene	2.4157	2.3831	1.3	155#	0.00
86	T	2-Chlorotoluene	2.1876	2.1294	2.7	154#	0.00
87	T	4-Chlorotoluene	1.9145	1.9725	-3.0	162#	0.00
88	T	a-Methylstyrene	1.3453	1.3547	-0.7	148	0.00
89	T	tert-Butylbenzene	0.5257	0.5161	1.8	153#	0.00
90	T	1,2,4-Trimethylbenzene	2.5133	2.5295	-0.6	151#	0.01
91	T	sec-Butylbenzene	2.8206	2.7797	1.4	150#	0.00
92	T	p-Isopropyltoluene	2.4202	2.4483	-1.2	152#	0.00
93	T	1,3-Dichlorobenzene	1.5241	1.4955	1.9	153#	0.00
94	T	1,4-Dichlorobenzene	1.5514	1.5160	2.3	154#	0.00
95	T	n-Butylbenzene	1.8436	2.0677	-12.2	157#	0.00
96	T	1,2-Dichlorobenzene	1.3814	1.3601	1.5	152#	0.00
97	T	1,2-Dibromo-3-Chloropropane	0.0695	0.0754	-8.5	162#	0.00
98	T	1,2,4-Trichlorobenzene	0.7812	0.9096	-16.4	166#	0.00
99	T	Hexachlorobutadiene	0.2707	0.3501	-29.3#	191#	0.00
100	T	Naphthalene	1.5237	1.5476	-1.6	143	0.00
101	T	1,2,3-Trichlorobenzene	0.7300	0.7882	-8.0	164#	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M83348.D 8260WTR.M Fri May 04 16:47:14 2012 Page 2

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050412\11M83348.D Vial: 2
Acq On : 4 May 2012 15:50 Operator: ADC
Sample : WG397041-02 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	170	0.00
2	T	Dichlorodifluoromethane	50.0000	44.3045	11.4	147	0.00
3	P	Chloromethane	50.0000	47.4794	5.0	153	0.00
4	C	Vinyl Chloride	50.0000	48.7178	2.6	181	0.01
5	T	1,3-Butadiene	50.0000	42.7345	14.5	144	0.00
6	T	Bromomethane	50.0000	47.3721	5.3	161	0.00
7	T	Chloroethane	50.0000	48.1424	3.7	160	0.00
8	T	Trichlorofluoromethane	50.0000	45.2606	9.5	150	0.00
9	T	Diethyl ether	100.0000	97.5429	2.5	167	0.00
10	T	Isoprene	50.0000	48.9656	2.1	159	0.00
11	T	Acrolein	100.0000	97.3894	2.6	165	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	46.8042	6.4	152	0.01
13	T	Acetone	50.0000	57.4894	-15.0	188	0.00
14	C	1,1-Dichloroethene	50.0000	50.4776	-1.0	166	0.00
15	T	Tert-Butyl Alcohol	200.0000	209.2723	-4.6	171	-0.01
16	T	Dimethyl Sulfide	50.0000	50.4569	-0.9	170	0.00
17	T	Iodomethane	50.0000	48.2478	3.5	152	0.01
18	T	Methyl acetate	50.0000	45.5022	9.0	161	0.00
19	T	Methylene Chloride	50.0000	47.5191	5.0	164	0.00
20	T	Carbon Disulfide	50.0000	48.2580	3.5	162	0.00
21	T	Acrylonitrile	50.0000	51.6575	-3.3	161	0.01
22	T	Methyl Tert Butyl Ether	50.0000	46.1597	7.7	157	0.00
23	T	trans-1,2-Dichloroethene	50.0000	49.3564	1.3	163	0.00
24	T	n-Hexane	50.0000	48.9977	2.0	161	0.01
25	T	Diisopropyl ether	100.0000	97.0863	2.9	168	0.01
26	T	Vinyl Acetate	50.0000	46.5020	7.0	154	0.00
27	P	1,1-Dichloroethane	50.0000	50.4184	-0.8	167	0.01
28	T	Ethyl-Tert-Butyl ether	100.0000	95.7228	4.3	166	0.01
29	T	2-Butanone	50.0000	45.2721	9.5	154	0.00
30	T	Propionitrile	100.0000	98.3071	1.7	163	0.01
31	T	2,2-Dichloropropane	50.0000	49.2036	1.6	162	0.00
32	T	cis-1,2-Dichloroethene	50.0000	49.2654	1.5	163	0.00
33	C	Chloroform	50.0000	48.6581	2.7	166	0.01
34	T	1-Bromopropane	50.0000	49.0073	2.0	156	0.00
35	T	Bromochloromethane	50.0000	47.6164	4.8	156	0.00
36	T	Tetrahydrofuran	100.0000	90.8067	9.2	157	0.00
37	S	Dibromofluoromethane	25.0000	21.2497	15.0	146	0.00
38	T	1,1,1-Trichloroethane	50.0000	49.4508	1.1	162	0.01
39	T	Cyclohexane	50.0000	50.8517	-1.7	167	0.01
40	T	1,1-Dichloropropene	50.0000	49.0908	1.8	160	0.01
41	T	Carbon Tetrachloride	50.0000	45.4652	9.1	163	0.00
42	T	Tert-Amyl-Methyl ether	100.0000	90.8227	9.2	156	0.01
43	S	1,2-Dichloroethane-d4	25.0000	20.2386	19.0	140	0.01
44	T	Heptane	-1.0000	0.0000	0.0	176	0.01
45	T	1,2-Dichloroethane	50.0000	50.2071	-0.4	167	0.01
46	T	Benzene	50.0000	48.2569	3.5	163	0.01
47	T	Trichloroethene	50.0000	45.1342	9.7	159	0.00
48	T	Methylcyclohexane	50.0000	48.7335	2.5	158	0.00
49	C	1,2-Dichloropropane	50.0000	50.1678	-0.3	168	0.01
50	T	1,4-Dioxane	200.0000	210.2376	-5.1	166	0.00
51	T	Bromodichloromethane	50.0000	52.8536	-5.7	167	0.00
52	T	Dibromomethane	50.0000	45.2640	9.5	157	0.01
53	T	2-Chloroethyl Vinyl Ether	50.0000	48.8194	2.4	154	0.00
54	T	4-Methyl-2-Pentanone	50.0000	46.4364	7.1	150	0.00

(#) = Out of Range
11M83348.D 8260WTR.M Fri May 04 16:47:12 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050412\11M83348.D Vial: 2
Acq On : 4 May 2012 15:50 Operator: ADC
Sample : WG397041-02 50ug/L STD 8260 Inst : HPMS11
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	50.0000	51.1409	-2.3	163	0.00
56	T	Dimethyl Disulfide	50.0000	53.9968	-8.0	179	0.00
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	163	0.00
58	S	Toluene-d8	25.0000	22.0028	12.0	150	0.00
59	C	Toluene	50.0000	48.7472	2.5	158	0.00
60	T	Ethyl Methacrylate	50.0000	44.8430	10.3	153	0.01
61	T	Paraldehyde	100.0000	109.9214	-9.9	178	0.00
62	T	trans-1,3-Dichloropropene	50.0000	55.9300	-11.9	159	0.00
63	T	1,1,2-Trichloroethane	50.0000	48.7476	2.5	156	0.01
64	T	2-Hexanone	50.0000	44.6934	10.6	145	0.00
65	T	1,3-Dichloropropane	50.0000	48.5387	2.9	156	0.00
66	T	Tetrachloroethene	50.0000	50.0171	-0.0	158	0.00
67	T	Dibromochloromethane	50.0000	49.8783	0.2	161	0.00
68	T	1,2-Dibromoethane	50.0000	48.0908	3.8	153	0.00
69	T	1-Chlorohexane	50.0000	51.2783	-2.6	158	0.00
70	P	Chlorobenzene	50.0000	52.7608	-5.5	161	0.01
71	T	1,1,1,2-Tetrachloroethane	50.0000	50.5258	-1.1	163	0.00
72	C	Ethylbenzene	50.0000	52.0635	-4.1	154	0.00
73	T	m-,p-Xylene	100.0000	103.5597	-3.6	153	0.00
74	T	o-Xylene	50.0000	48.5363	2.9	154	0.00
75	T	Styrene	50.0000	52.0873	-4.2	153	0.00
76	P	Bromoform	50.0000	52.9816	-6.0	167	0.01
77	T	Isopropylbenzene	50.0000	51.7916	-3.6	153	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	158	0.01
79	P	1,1,2,2-Tetrachloroethane	50.0000	49.7273	0.5	149	0.00
80	S	p-Bromofluorobenzene	25.0000	24.0134	3.9	159	0.00
81	T	1,2,3-Trichloropropane	50.0000	46.3018	7.4	144	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	48.2502	3.5	163	0.00
83	T	n-Propylbenzene	50.0000	49.7535	0.5	155	0.00
84	T	Bromobenzene	50.0000	51.0836	-2.2	163	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	49.3255	1.3	155	0.00
86	T	2-Chlorotoluene	50.0000	48.6680	2.7	154	0.00
87	T	4-Chlorotoluene	50.0000	51.5148	-3.0	162	0.00
88	T	a-Methylstyrene	50.0000	50.3475	-0.7	148	0.00
89	T	tert-Butylbenzene	50.0000	49.0801	1.8	153	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	50.3226	-0.6	151	0.01
91	T	sec-Butylbenzene	50.0000	49.2758	1.4	150	0.00
92	T	p-Isopropyltoluene	50.0000	50.5811	-1.2	152	0.00
93	T	1,3-Dichlorobenzene	50.0000	49.0616	1.9	153	0.00
94	T	1,4-Dichlorobenzene	50.0000	48.8593	2.3	154	0.00
95	T	n-Butylbenzene	50.0000	56.0795	-12.2	157	0.00
96	T	1,2-Dichlorobenzene	50.0000	49.2317	1.5	152	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	47.2605	5.5	162	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	58.2194	-16.4	166	0.00
99	T	Hexachlorobutadiene	50.0000	56.4441	-12.9	191	0.00
100	T	Naphthalene	50.0000	44.7141	10.6	143	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	53.9802	-8.0	164	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
11M83348.D 8260WTR.M Fri May 04 16:47:12 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050512\6M107887.D Vial: 3
Acq On : 5 May 2012 13:04 Operator: MES
Sample : WG397117-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 05 13:27:53 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	500004	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	340965	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	171904	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	140734	25.9949	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.96%			
43) 1,2-Dichloroethane-d4	10.08	65	133485	25.1229	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 100.48%			
58) Toluene-d8	12.83	98	478690	25.8318	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.32%			
80) p-Bromofluorobenzene	16.81	95	178142	26.4087	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 105.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.73	85	217866	33.2188	ug/L	98
3) Chloromethane	3.12	50	415942	46.3726	ug/L	99
4) Vinyl Chloride	3.31	62	342990	41.3486	ug/L	99
5) 1,3-Butadiene	3.34	54	244455	59.9809	ug/L	98
6) Bromomethane	4.11	94	201987	42.9727	ug/L	98
7) Chloroethane	4.25	64	213576	45.5088	ug/L	99
8) Trichlorofluoromethane	4.73	101	472841	44.3345	ug/L	99
9) Diethyl ether	5.27	59	396640	109.4526	ug/L	99
10) Isoprene	5.30	67	456673	50.3555	ug/L	97
11) Acrolein	5.51	56	18389	74.5231	ug/L	99
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	262131	45.9514	ug/L	99
13) Acetone	5.61	43	41071	43.3515	ug/L	100
14) 1,1-Dichloroethene	5.83	61	450585	49.1264	ug/L	98
15) Tert-Butyl Alcohol	5.97	59	32920	133.0993	ug/L	92
16) Dimethyl Sulfide	6.11	62	366952	50.3953	ug/L	97
17) Iodomethane	6.36	142	288850	55.0806	ug/L	100
18) Methyl acetate	6.41	43	174511	46.6742	ug/L	98
19) Methylene Chloride	6.67	84	272403	47.9489	ug/L	96
20) Carbon Disulfide	6.69	76	857717	51.6151	ug/L	100
21) Acrylonitrile	6.87	53	66487	52.0861	ug/L	98
22) Methyl Tert Butyl Ether	6.92	73	536400	44.8168	ug/L	98
23) trans-1,2-Dichloroethene	7.16	96	268612	48.4157	ug/L	98
24) n-Hexane	7.26	57	373897	58.7467	ug/L	99
25) Diisopropyl ether	7.65	45	2185315	108.1274	ug/L	99
26) Vinyl Acetate	7.83	43	245070	83.7608	ug/L	99
27) 1,1-Dichloroethane	7.84	63	547172	48.2721	ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	1687339	102.7320	ug/L	100
29) 2-Butanone	8.49	43	67885	51.2431	ug/L	96
30) Propionitrile	8.60	54	38379	101.2892	ug/L	99
31) 2,2-Dichloropropane	8.71	77	449332	52.4347	ug/L	98
32) cis-1,2-Dichloroethene	8.78	96	288915	49.8378	ug/L	98
33) Chloroform	9.02	83	494802	48.2980	ug/L	99
34) 1-Bromopropane	9.17	122	51601	49.0832	ug/L	97
35) Bromochloromethane	9.27	130	158085	51.1927	ug/L	100
36) Tetrahydrofuran	9.30	42	88545	101.6377	ug/L	95
38) 1,1,1-Trichloroethane	9.62	97	449890	50.2713	ug/L	97
39) Cyclohexane	9.64	56	482409	53.8086	ug/L	98
40) 1,1-Dichloropropene	9.85	75	387447	52.4801	ug/L	98
41) Tert-Amyl-Methyl ether	9.99	73	1224077	100.0979	ug/L	99
42) Carbon Tetrachloride	10.00	117	417839	52.7490	ug/L	100

(#) = qualifier out of range (m) = manual integration
6M107887.D 8260WTR.M Sat May 05 13:27:53 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050512\6M107887.D Vial: 3
Acq On : 5 May 2012 13:04 Operator: MES
Sample : WG397117-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 05 13:27:53 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

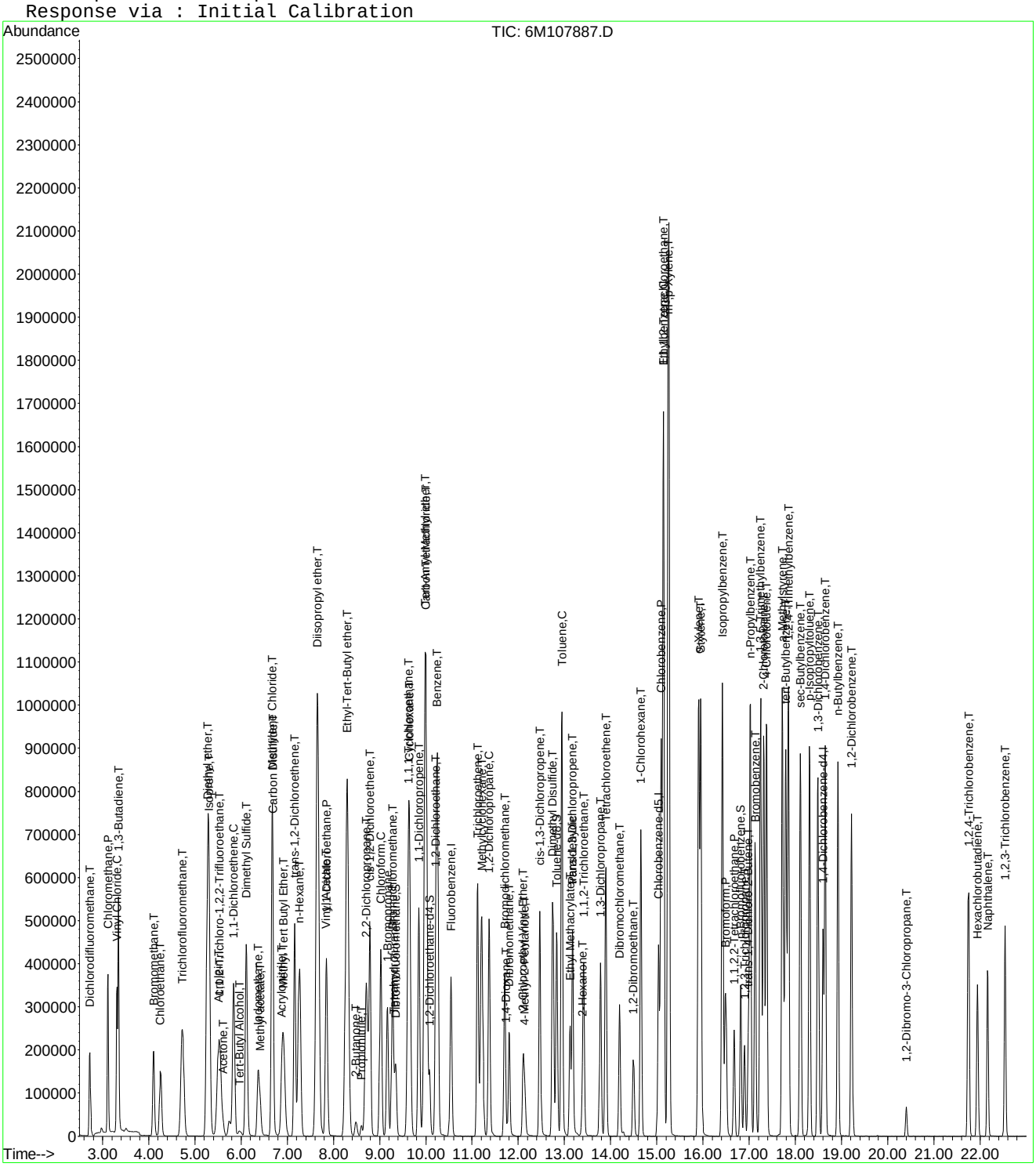
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	1,2-Dichloroethane	10.21	62	349895	49.7202	ug/L		97
46)	Benzene	10.24	78	1085272	49.1318	ug/L		100
47)	Trichloroethene	11.12	130	280483	50.6251	ug/L		98
48)	Methylcyclohexane	11.21	83	362505	56.7350	ug/L		100
49)	1,2-Dichloropropane	11.37	63	286829	50.2953	ug/L		99
50)	1,4-Dioxane	11.74	88	2329	153.5413	ug/L		84
51)	Bromodichloromethane	11.71	83	349535	51.0236	ug/L		99
52)	Dibromomethane	11.80	93	137622	50.1481	ug/L		99
53)	2-Chloroethyl Vinyl Ether	12.10	63	109635	43.5790	ug/L		99
54)	4-Methyl-2-Pentanone	12.13	58	50944	51.2304	ug/L		97
55)	cis-1,3-Dichloropropene	12.47	75	398763	48.5525	ug/L		99
56)	Dimethyl Disulfide	12.75	79	230597	48.0329	ug/L		98
59)	Toluene	12.95	91	1073823	47.9245	ug/L		100
60)	Ethyl Methacrylate	13.12	69	199280	48.3703	ug/L		99
61)	Paraldehyde	13.17	89	4742	78.8202	ug/L	#	16
62)	trans-1,3-Dichloropropene	13.17	75	338631	46.3247	ug/L		99
63)	1,1,2-Trichloroethane	13.42	97	170024	47.2442	ug/L		100
64)	2-Hexanone	13.39	43	82588	48.1366	ug/L		99
65)	1,3-Dichloropropane	13.78	76	305822	49.8295	ug/L		97
66)	Tetrachloroethene	13.90	166	265736	50.7814	ug/L		99
67)	Dibromochloromethane	14.20	129	228529	47.2233	ug/L		99
68)	1,2-Dibromoethane	14.49	107	167338	47.2320	ug/L		99
69)	1-Chlorohexane	14.66	91	320728	54.0547	ug/L		97
70)	Chlorobenzene	15.09	112	676035	47.4842	ug/L		99
71)	1,1,1,2-Tetrachloroethane	15.15	131	252558	49.2641	ug/L		100
72)	Ethylbenzene	15.15	106	364009	49.5681	ug/L		100
73)	m-,p-Xylene	15.26	106	906096	100.9325	ug/L		99
74)	o-Xylene	15.91	106	423131	49.4992	ug/L		99
75)	Styrene	15.95	104	713865	46.3290	ug/L		100
76)	Bromoform	16.49	173	130362	53.7720	ug/L		99
77)	Isopropylbenzene	16.42	105	1078842	50.7086	ug/L		99
79)	1,1,2,2-Tetrachloroethane	16.68	83	179779	49.4554	ug/L		98
81)	1,2,3-Trichloropropane	16.90	110	45274	48.3041	ug/L		94
82)	trans-1,4-Dichloro-2-Buten	16.98	53	57439	49.8493	ug/L		99
83)	n-Propylbenzene	17.02	91	1251024	49.5271	ug/L		100
84)	Bromobenzene	17.14	156	263803	46.6289	ug/L		100
85)	1,3,5-Trimethylbenzene	17.25	105	848490	49.2378	ug/L		99
86)	2-Chlorotoluene	17.31	91	771456	45.9977	ug/L		96
87)	4-Chlorotoluene	17.37	91	813809	48.2667	ug/L		97
88)	a-Methylstyrene	17.72	118	468363	52.9980	ug/L		98
89)	tert-Butylbenzene	17.79	134	167990	48.2688	ug/L		98
90)	1,2,4-Trimethylbenzene	17.85	105	893155	49.0231	ug/L		100
91)	sec-Butylbenzene	18.11	105	996673	50.8809	ug/L		99
92)	p-Isopropyltoluene	18.30	119	819901	52.1084	ug/L		99
93)	1,3-Dichlorobenzene	18.50	146	492633	49.6190	ug/L		100
94)	1,4-Dichlorobenzene	18.65	146	496829	47.7149	ug/L		98
95)	n-Butylbenzene	18.92	91	731871	53.3951	ug/L		99
96)	1,2-Dichlorobenzene	19.22	146	428610	47.7654	ug/L		98
97)	1,2-Dibromo-3-Chloropropan	20.40	75	24395	42.4949	ug/L		96
98)	1,2,4-Trichlorobenzene	21.75	180	251571	51.5078	ug/L		99
99)	Hexachlorobutadiene	21.95	225	100616	51.3400	ug/L		100
100)	Naphthalene	22.17	128	438909	47.1944	ug/L		99
101)	1,2,3-Trichlorobenzene	22.54	180	206509	48.6468	ug/L		97

(#) = qualifier out of range (m) = manual integration
6M107887.D 8260WTR.M Sat May 05 13:27:53 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050512\6M107887.D Vial: 3
Acq On : 5 May 2012 13:04 Operator: MES
Sample : WG397117-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 5 13:27 2012 Quant Results File: 8260WTR.RES

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



Continuing Calibration Area and RT check

Instrument: HPMS6
Initial cal date: 25 Apr 2012 13:04
CCV date: 5 May 2012 13:04
CCV Filename: 6M107887.D

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Amount	RT	Amount	RT	Amount	RT
InitCal	619560	10.54	408189	15.03	200465	18.60
CCV	500004	10.54	340965	15.03	171904	18.60

Data File : C:\MSDCHEM\1\DATA\050512\6M107887.D Vial: 3
Acq On : 5 May 2012 13:04 Operator: MES
Sample : WG397117-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.0000	1.0000	0.0	81	0.00
2	T	Dichlorodifluoromethane	0.3279	0.2179	33.6#	56	0.00
3	P	Chloromethane	0.5138	0.4159	19.0	74	0.00
4	C	Vinyl Chloride	0.4148	0.3430	17.3	77	0.00
5	T	1,3-Butadiene	0.2435	0.2445	-0.4	88	0.00
6	T	Bromomethane	0.2350	0.2020	14.1	75	0.00
7	T	Chloroethane	0.2347	0.2136	9.0	75	0.00
8	T	Trichlorofluoromethane	0.5333	0.4728	11.3	74	0.00
9	T	Diethyl ether	0.1812	0.1983	-9.5	89	0.00
10	T	Isoprene	0.4535	0.4567	-0.7	81	0.00
11	T	Acrolein	0.0111	0.0092	17.4	69	0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.2852	0.2621	8.1	77	0.00
13	T	Acetone	0.0474	0.0411	13.3	70	0.00
14	C	1,1-Dichloroethene	0.4586	0.4506	1.7	78	0.00
15	T	Tert-Butyl Alcohol	0.0124	0.0082	33.5#	54	-0.01
16	T	Dimethyl Sulfide	0.3641	0.3670	-0.8	82	0.00
17	T	Iodomethane	0.2622	0.2889	-10.2	79	0.00
18	T	Methyl acetate	0.1869	0.1745	6.6	74	0.00
19	T	Methylene Chloride	0.2841	0.2724	4.1	80	0.00
20	T	Carbon Disulfide	0.8309	0.8577	-3.2	84	0.00
21	T	Acrylonitrile	0.0638	0.0665	-4.2	79	0.00
22	T	Methyl Tert Butyl Ether	0.5984	0.5364	10.4	74	0.00
23	T	trans-1,2-Dichloroethene	0.2774	0.2686	3.2	77	0.00
24	T	n-Hexane	0.3182	0.3739	-17.5	95	0.00
25	T	Diisopropyl ether	1.0105	1.0926	-8.1	86	0.00
26	T	Vinyl Acetate	0.1463	0.2451	-67.5#	134	0.00
27	P	1,1-Dichloroethane	0.5667	0.5472	3.5	80	0.00
28	T	Ethyl-Tert-Butyl ether	0.8212	0.8437	-2.7	82	0.00
29	T	2-Butanone	0.0662	0.0679	-2.5	79	0.00
30	T	Propionitrile	0.0190	0.0192	-1.3	77	0.00
31	T	2,2-Dichloropropane	0.4285	0.4493	-4.9	87	0.00
32	T	cis-1,2-Dichloroethene	0.2899	0.2889	0.3	79	0.00
33	C	Chloroform	0.5122	0.4948	3.4	80	0.00
34		1-Bromopropane	0.0481	0.0516	-7.3	82	0.00
35	T	Bromochloromethane	0.1503	0.1581	-5.2	81	0.00
36	T	Tetrahydrofuran	0.0436	0.0443	-1.6	79	0.00
37	S	Dibromofluoromethane	0.2707	0.2815	-4.0	81	0.00
38	T	1,1,1-Trichloroethane	0.4475	0.4499	-0.5	80	0.00
39	T	Cyclohexane	0.4483	0.4824	-7.6	87	0.00
40	T	1,1-Dichloropropene	0.3691	0.3874	-5.0	82	0.00
41	T	Tert-Amyl-Methyl ether	0.6114	0.6120	-0.1	79	0.00
42	T	Carbon Tetrachloride	0.3961	0.4178	-5.5	83	0.00
43	S	1,2-Dichloroethane-d4	0.2657	0.2670	-0.5	78	0.00
44		Heptane	0.0000	0.0000	0.0	78	0.02
45	T	1,2-Dichloroethane	0.3519	0.3499	0.6	80	0.00
46	T	Benzene	1.1044	1.0853	1.7	81	0.00
47	T	Trichloroethene	0.2770	0.2805	-1.2	80	0.00
48	T	Methylcyclohexane	0.3195	0.3625	-13.5	91	0.00
49	C	1,2-Dichloropropane	0.2851	0.2868	-0.6	80	0.00
50	T	1,4-Dioxane	0.0009	0.0006	34.8#	47#	0.02
51	T	Bromodichloromethane	0.3425	0.3495	-2.0	80	0.00
52	T	Dibromomethane	0.1220	0.1376	-12.8	79	0.00
53	T	2-Chloroethyl Vinyl Ether	0.1124	0.1096	2.4	72	0.00
54	T	4-Methyl-2-Pentanone	0.0497	0.0509	-2.5	76	0.00

(#) = Out of Range
6M107887.D 8260WTR.M Sat May 05 13:32:42 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050512\6M107887.D Vial: 3
Acq On : 5 May 2012 13:04 Operator: MES
Sample : WG397117-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	0.3667	0.3988	-8.7	79	0.00
56	T	Dimethyl Disulfide	0.2035	0.2306	-13.3	82	0.00
57	I	Chlorobenzene-d5	1.0000	1.0000	0.0	84	0.00
58	S	Toluene-d8	1.3587	1.4039	-3.3	85	0.00
59	C	Toluene	1.6429	1.5747	4.2	80	0.00
60	T	Ethyl Methacrylate	0.2500	0.2922	-16.9	79	0.00
61		Paraldehyde	0.0044	0.0035	21.1#	62	0.00
62	T	trans-1,3-Dichloropropene	0.4381	0.4966	-13.3	78	0.00
63	T	1,1,2-Trichloroethane	0.2639	0.2493	5.5	77	0.00
64	T	2-Hexanone	0.1145	0.1211	-5.8	77	0.00
65	T	1,3-Dichloropropane	0.4500	0.4485	0.3	77	0.00
66	T	Tetrachloroethene	0.3837	0.3897	-1.6	84	0.00
67	T	Dibromochloromethane	0.3236	0.3351	-3.5	78	0.00
68	T	1,2-Dibromoethane	0.2260	0.2454	-8.6	78	0.00
69	T	1-Chlorohexane	0.4350	0.4703	-8.1	87	0.00
70	P	Chlorobenzene	1.0439	0.9914	5.0	80	0.00
71	T	1,1,1,2-Tetrachloroethane	0.3759	0.3704	1.5	79	0.00
72	C	Ethylbenzene	0.5384	0.5338	0.9	80	0.00
73	T	m-,p-Xylene	0.6582	0.6644	-0.9	81	0.00
74	T	o-Xylene	0.6268	0.6205	1.0	79	0.00
75	T	Styrene	0.9916	1.0468	-5.6	79	0.00
76	P	Bromoform	0.1778	0.1912	-7.5	80	0.00
77	T	Isopropylbenzene	1.5599	1.5820	-1.4	82	0.00
78	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	86	0.00
79	P	1,1,2,2-Tetrachloroethane	0.5287	0.5229	1.1	79	0.00
80	S	p-Bromofluorobenzene	0.9810	1.0363	-5.6	88	0.00
81	T	1,2,3-Trichloropropane	0.1363	0.1317	3.4	78	0.00
82	T	trans-1,4-Dichloro-2-Butene	0.1680	0.1671	0.6	85	0.00
83	T	n-Propylbenzene	3.6735	3.6387	0.9	84	0.00
84	T	Bromobenzene	0.7480	0.7673	-2.6	81	0.00
85	T	1,3,5-Trimethylbenzene	2.5061	2.4679	1.5	82	0.00
86	T	2-Chlorotoluene	2.4391	2.2439	8.0	80	0.00
87	T	4-Chlorotoluene	2.4520	2.3670	3.5	82	0.00
88	T	a-Methylstyrene	1.2852	1.3623	-6.0	84	0.00
89	T	tert-Butylbenzene	0.5061	0.4886	3.5	86	0.00
90	T	1,2,4-Trimethylbenzene	2.6496	2.5978	2.0	82	0.00
91	T	sec-Butylbenzene	2.8487	2.8989	-1.8	87	0.00
92	T	p-Isopropyltoluene	2.2883	2.3848	-4.2	88	0.00
93	T	1,3-Dichlorobenzene	1.4439	1.4329	0.8	83	0.00
94	T	1,4-Dichlorobenzene	1.5143	1.4451	4.6	83	0.00
95	T	n-Butylbenzene	1.9934	2.1287	-6.8	89	0.00
96	T	1,2-Dichlorobenzene	1.3050	1.2467	4.5	81	0.00
97	T	1,2-Dibromo-3-Chloropropane	0.0741	0.0710	4.2	74	0.00
98	T	1,2,4-Trichlorobenzene	0.7103	0.7317	-3.0	87	0.00
99	T	Hexachlorobutadiene	0.2700	0.2927	-8.4	94	0.00
100	T	Naphthalene	1.3525	1.2766	5.6	76	0.00
101	T	1,2,3-Trichlorobenzene	0.6174	0.6007	2.7	86	0.00

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

Data File : C:\MSDCHEM\1\DATA\050512\6M107887.D Vial: 3
Acq On : 5 May 2012 13:04 Operator: MES
Sample : WG397117-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	81	0.00
2	T	Dichlorodifluoromethane	50.0000	33.2188	33.6#	56	0.00
3	P	Chloromethane	50.0000	46.3726	7.3	74	0.00
4	C	Vinyl Chloride	50.0000	41.3486	17.3	77	0.00
5	T	1,3-Butadiene	50.0000	59.9809	-20.0	88	0.00
6	T	Bromomethane	50.0000	42.9727	14.1	75	0.00
7	T	Chloroethane	50.0000	45.5088	9.0	75	0.00
8	T	Trichlorofluoromethane	50.0000	44.3345	11.3	74	0.00
9	T	Diethyl ether	100.0000	109.4526	-9.5	89	0.00
10	T	Isoprene	50.0000	50.3555	-0.7	81	0.00
11	T	Acrolein	100.0000	74.5231	25.5#	69	0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	45.9514	8.1	77	0.00
13	T	Acetone	50.0000	43.3515	13.3	70	0.00
14	C	1,1-Dichloroethene	50.0000	49.1264	1.7	78	0.00
15	T	Tert-Butyl Alcohol	200.0000	133.0993	33.5#	54	-0.01
16	T	Dimethyl Sulfide	50.0000	50.3952	-0.8	82	0.00
17	T	Iodomethane	50.0000	55.0806	-10.2	79	0.00
18	T	Methyl acetate	50.0000	46.6742	6.7	74	0.00
19	T	Methylene Chloride	50.0000	47.9489	4.1	80	0.00
20	T	Carbon Disulfide	50.0000	51.6151	-3.2	84	0.00
21	T	Acrylonitrile	50.0000	52.0861	-4.2	79	0.00
22	T	Methyl Tert Butyl Ether	50.0000	44.8168	10.4	74	0.00
23	T	trans-1,2-Dichloroethene	50.0000	48.4157	3.2	77	0.00
24	T	n-Hexane	50.0000	58.7467	-17.5	95	0.00
25	T	Diisopropyl ether	100.0000	108.1274	-8.1	86	0.00
26	T	Vinyl Acetate	50.0000	83.7608	-67.5#	134	0.00
27	P	1,1-Dichloroethane	50.0000	48.2721	3.5	80	0.00
28	T	Ethyl-Tert-Butyl ether	100.0000	102.7320	-2.7	82	0.00
29	T	2-Butanone	50.0000	51.2431	-2.5	79	0.00
30	T	Propionitrile	100.0000	101.2892	-1.3	77	0.00
31	T	2,2-Dichloropropane	50.0000	52.4347	-4.9	87	0.00
32	T	cis-1,2-Dichloroethene	50.0000	49.8378	0.3	79	0.00
33	C	Chloroform	50.0000	48.2980	3.4	80	0.00
34		1-Bromopropane	50.0000	49.0832	1.8	82	0.00
35	T	Bromochloromethane	50.0000	51.1927	-2.4	81	0.00
36	T	Tetrahydrofuran	100.0000	101.6377	-1.6	79	0.00
37	S	Dibromofluoromethane	25.0000	25.9949	-4.0	81	0.00
38	T	1,1,1-Trichloroethane	50.0000	50.2713	-0.5	80	0.00
39	T	Cyclohexane	50.0000	53.8086	-7.6	87	0.00
40	T	1,1-Dichloropropene	50.0000	52.4801	-5.0	82	0.00
41	T	Tert-Amyl-Methyl ether	100.0000	100.0979	-0.1	79	0.00
42	T	Carbon Tetrachloride	50.0000	52.7490	-5.5	83	0.00
43	S	1,2-Dichloroethane-d4	25.0000	25.1229	-0.5	78	0.00
44		Heptane	-1.0000	0.0000	0.0	78	0.02
45	T	1,2-Dichloroethane	50.0000	49.7202	0.6	80	0.00
46	T	Benzene	50.0000	49.1318	1.7	81	0.00
47	T	Trichloroethene	50.0000	50.6251	-1.3	80	0.00
48	T	Methylcyclohexane	50.0000	56.7349	-13.5	91	0.00
49	C	1,2-Dichloropropane	50.0000	50.2953	-0.6	80	0.00
50	T	1,4-Dioxane	200.0000	153.5413	23.2#	47	0.02
51	T	Bromodichloromethane	50.0000	51.0236	-2.0	80	0.00
52	T	Dibromomethane	50.0000	50.1481	-0.3	79	0.00
53	T	2-Chloroethyl Vinyl Ether	50.0000	43.5790	12.8	72	0.00
54	T	4-Methyl-2-Pentanone	50.0000	51.2304	-2.5	76	0.00

(#) = Out of Range
6M107887.D 8260WTR.M Sat May 05 13:32:38 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050512\6M107887.D Vial: 3
Acq On : 5 May 2012 13:04 Operator: MES
Sample : WG397117-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

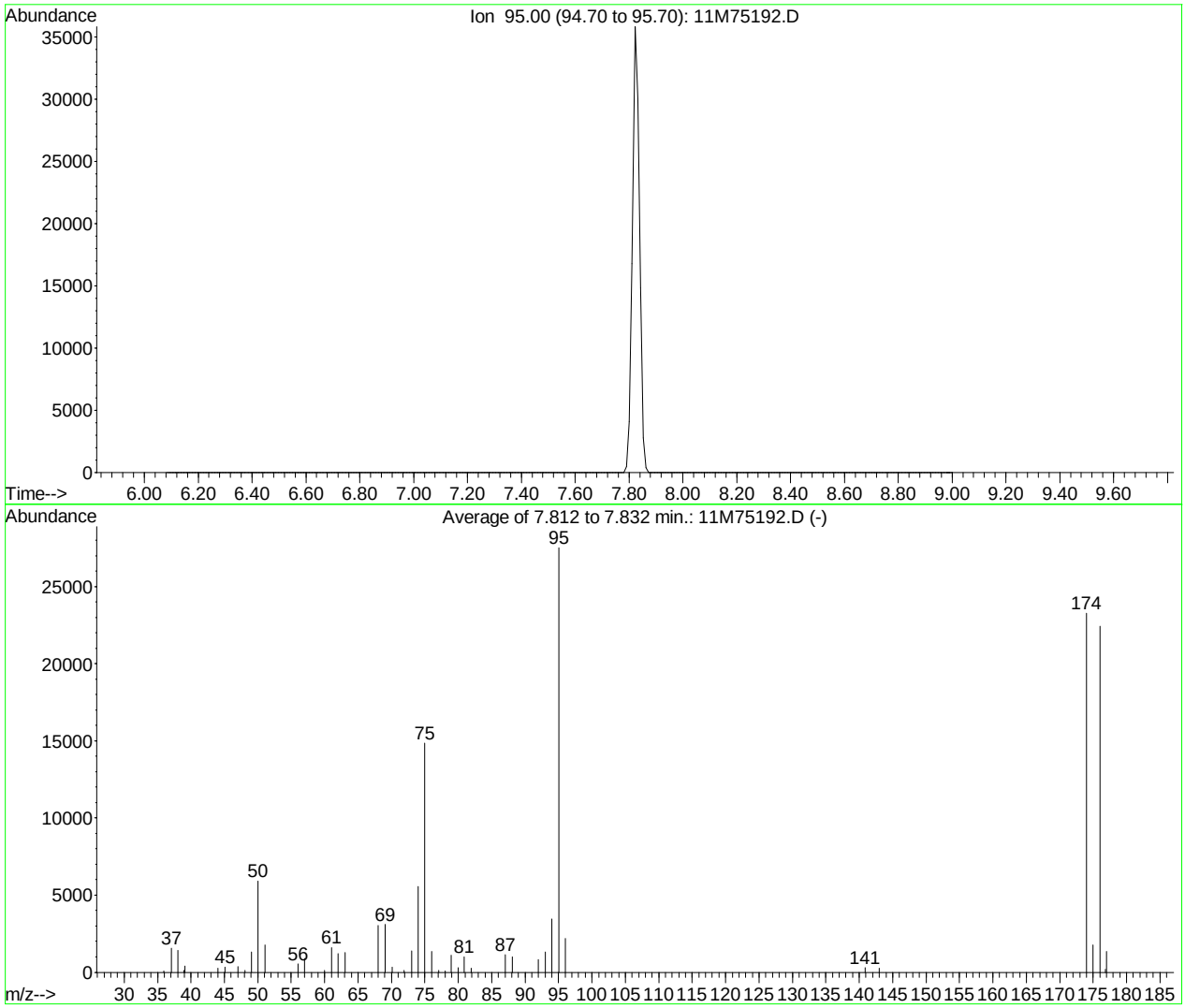
Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	50.0000	48.5525	2.9	79	0.00
56	T	Dimethyl Disulfide	50.0000	48.0329	3.9	82	0.00
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	84	0.00
58	S	Toluene-d8	25.0000	25.8318	-3.3	85	0.00
59	C	Toluene	50.0000	47.9245	4.2	80	0.00
60	T	Ethyl Methacrylate	50.0000	48.3703	3.3	79	0.00
61		Paraldehyde	100.0000	78.8202	21.2#	62	0.00
62	T	trans-1,3-Dichloropropene	50.0000	46.3247	7.4	78	0.00
63	T	1,1,2-Trichloroethane	50.0000	47.2441	5.5	77	0.00
64	T	2-Hexanone	50.0000	48.1366	3.7	77	0.00
65	T	1,3-Dichloropropane	50.0000	49.8295	0.3	77	0.00
66	T	Tetrachloroethene	50.0000	50.7814	-1.6	84	0.00
67	T	Dibromochloromethane	50.0000	47.2233	5.6	78	0.00
68	T	1,2-Dibromoethane	50.0000	47.2320	5.5	78	0.00
69	T	1-Chlorohexane	50.0000	54.0547	-8.1	87	0.00
70	P	Chlorobenzene	50.0000	47.4843	5.0	80	0.00
71	T	1,1,1,2-Tetrachloroethane	50.0000	49.2641	1.5	79	0.00
72	C	Ethylbenzene	50.0000	49.5681	0.9	80	0.00
73	T	m-,p-Xylene	100.0000	100.9325	-0.9	81	0.00
74	T	o-Xylene	50.0000	49.4992	1.0	79	0.00
75	T	Styrene	50.0000	46.3290	7.3	79	0.00
76	P	Bromoform	50.0000	53.7721	-7.5	80	0.00
77	T	Isopropylbenzene	50.0000	50.7086	-1.4	82	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	86	0.00
79	P	1,1,2,2-Tetrachloroethane	50.0000	49.4554	1.1	79	0.00
80	S	p-Bromofluorobenzene	25.0000	26.4087	-5.6	88	0.00
81	T	1,2,3-Trichloropropane	50.0000	48.3041	3.4	78	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	49.8493	0.3	85	0.00
83	T	n-Propylbenzene	50.0000	49.5271	0.9	84	0.00
84	T	Bromobenzene	50.0000	46.6289	6.7	81	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	49.2378	1.5	82	0.00
86	T	2-Chlorotoluene	50.0000	45.9977	8.0	80	0.00
87	T	4-Chlorotoluene	50.0000	48.2667	3.5	82	0.00
88	T	a-Methylstyrene	50.0000	52.9980	-6.0	84	0.00
89	T	tert-Butylbenzene	50.0000	48.2687	3.5	86	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	49.0230	2.0	82	0.00
91	T	sec-Butylbenzene	50.0000	50.8809	-1.8	87	0.00
92	T	p-Isopropyltoluene	50.0000	52.1084	-4.2	88	0.00
93	T	1,3-Dichlorobenzene	50.0000	49.6190	0.8	83	0.00
94	T	1,4-Dichlorobenzene	50.0000	47.7149	4.6	83	0.00
95	T	n-Butylbenzene	50.0000	53.3952	-6.8	89	0.00
96	T	1,2-Dichlorobenzene	50.0000	47.7654	4.5	81	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	42.4949	15.0	74	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	51.5078	-3.0	87	0.00
99	T	Hexachlorobutadiene	50.0000	51.3400	-2.7	94	0.00
100	T	Naphthalene	50.0000	47.1944	5.6	76	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	48.6468	2.7	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6M107887.D 8260WTR.M Sat May 05 13:32:38 2012 Page 2

2.1.1.5 Raw QC Data

Data File : C:\MSDCHEM\1\DATA\061511\11M75192.D Vial: 1
Acq On : 15 Jun 2011 17:01 Operator: FJB
Sample : WG367610-01 BFB 50ng A9FOO Inst : HPMS11
Misc : 1,1 STD45934 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\BFB.M (RTE Integrator)
Title : SOP: OVL MSV01

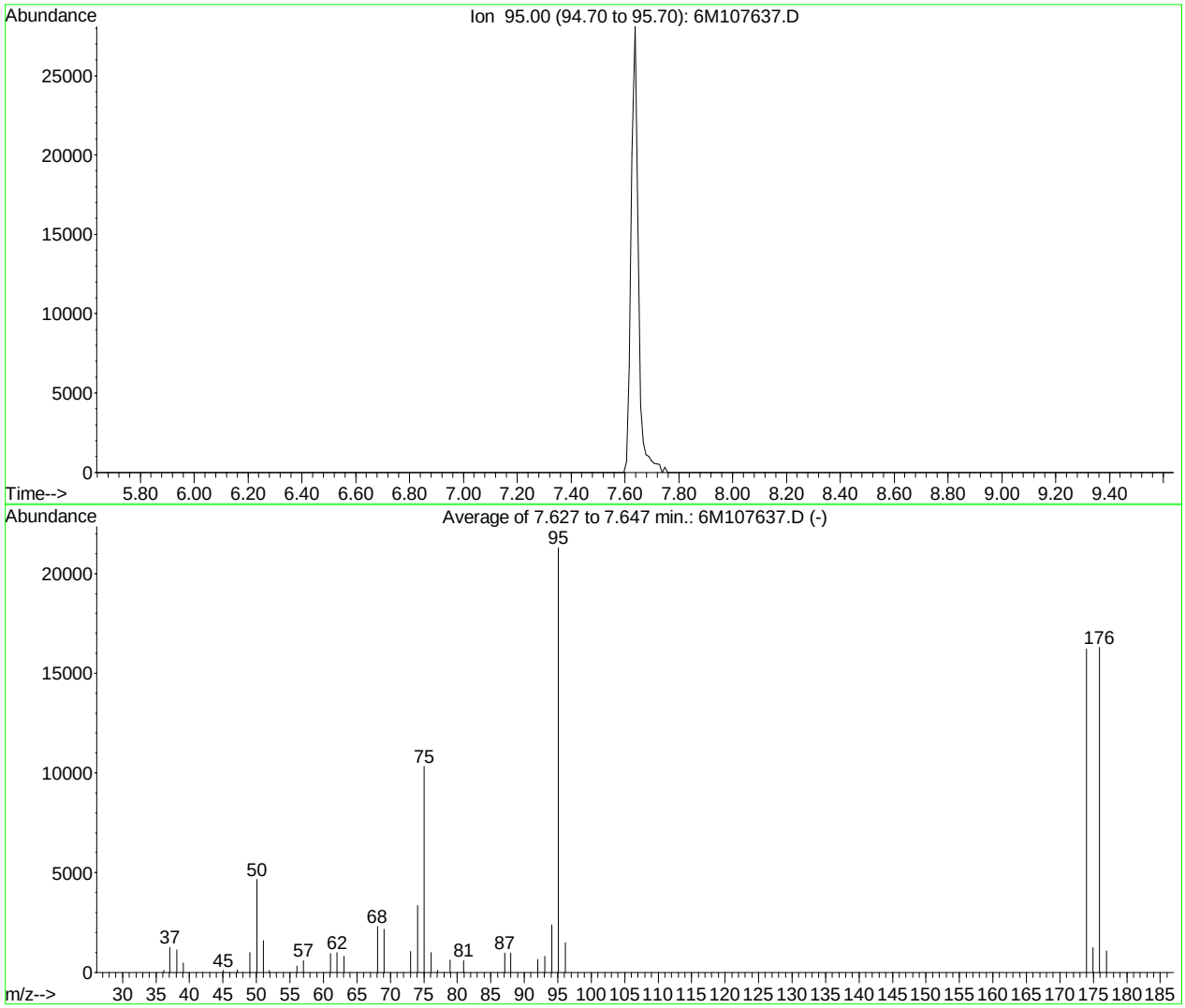


AutoFind: Scans 168, 169, 170; Background Corrected with Scan 163

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	5924	PASS
75	95	30	60	53.9	14838	PASS
95	95	100	100	100.0	27520	PASS
96	95	5	9	7.9	2181	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	84.5	23252	PASS
175	174	5	9	7.6	1760	PASS
176	174	95	101	96.4	22424	PASS
177	176	5	9	6.1	1357	PASS

11M75192.D BFB.M Wed Jun 15 17:30:04 2011

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

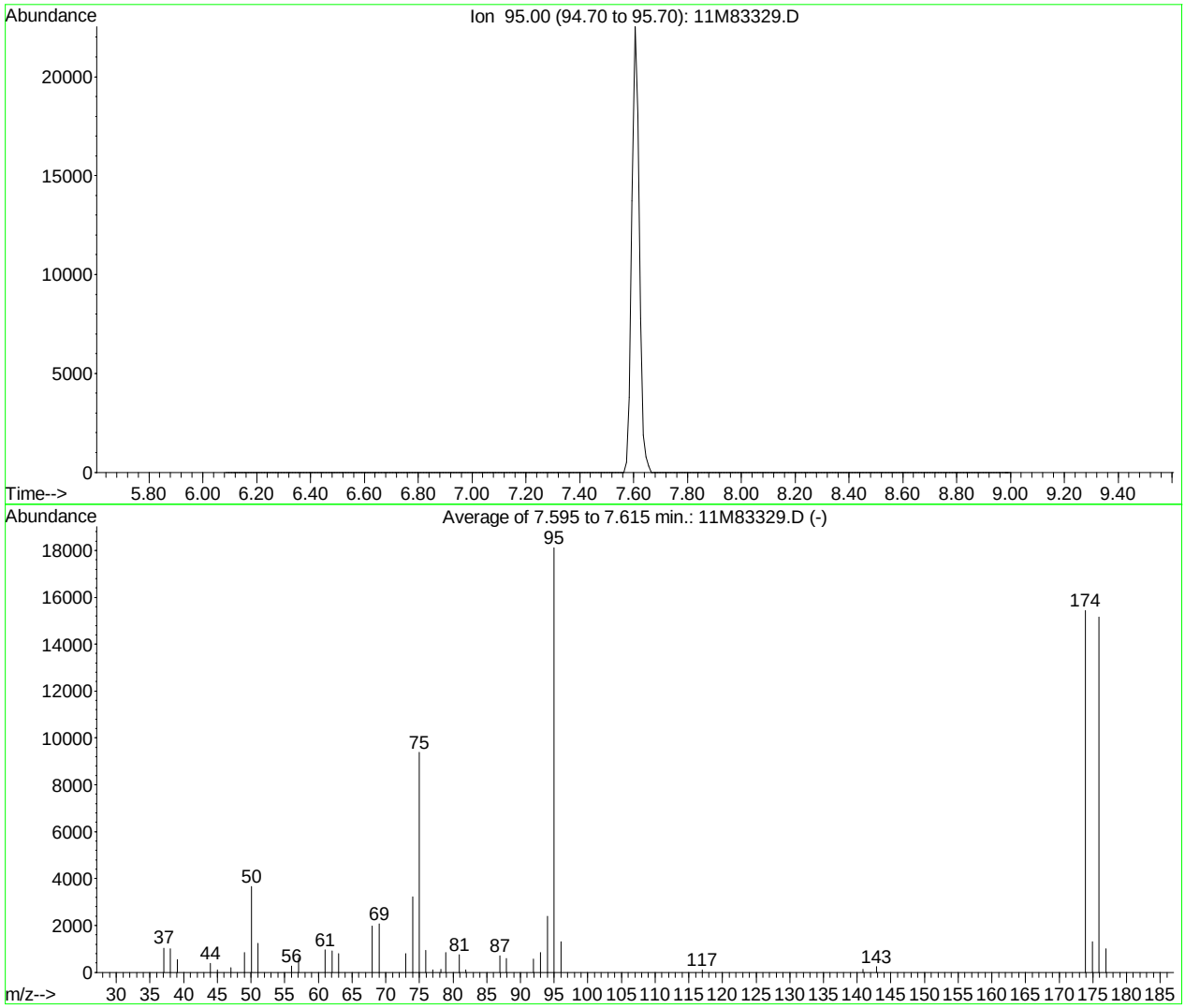


AutoFind: Scans 249, 250, 251; Background Corrected with Scan 244

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\050312\11M83329.D Vial: 3
Acq On : 3 May 2012 16:30 Operator: ADC
Sample : WG396851-01 BFB 50ng 8260 Inst : HPMS11
Misc : 1,1 STD51241 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11

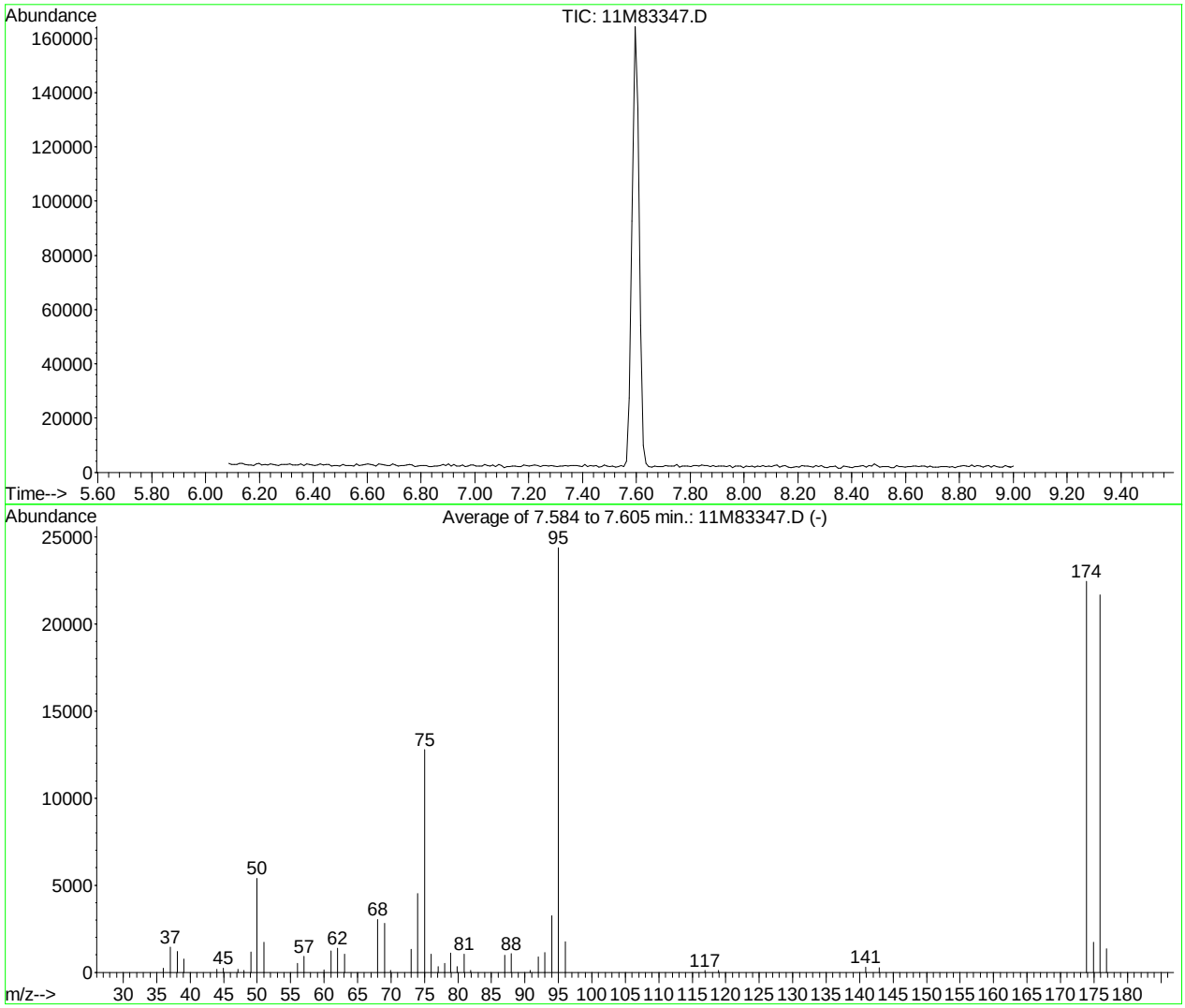


AutoFind: Scans 147, 148, 149; Background Corrected with Scan 142

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	3670	PASS
75	95	30	60	51.8	9391	PASS
95	95	100	100	100.0	18119	PASS
96	95	5	9	7.2	1313	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	85.2	15443	PASS
175	174	5	9	8.5	1311	PASS
176	174	95	101	98.2	15168	PASS
177	176	5	9	6.6	1006	PASS

11M83329.D 8260WTR.M Fri May 04 12:18:18 2012

Data File : C:\MSDCHEM\1\DATA\050412\11M83347.D Vial: 2
Acq On : 4 May 2012 15:25 Operator: ADC
Sample : WG397041-01 BFB 50ng 8260 Inst : HPMS11
Misc : 1,1 STD51241 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11



AutoFind: Scans 146, 147, 148; Background Corrected with Scan 141

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.1	5392	PASS
75	95	30	60	52.4	12789	PASS
95	95	100	100	100.0	24392	PASS
96	95	5	9	7.3	1770	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	92.0	22445	PASS
175	174	5	9	7.7	1731	PASS
176	174	95	101	96.6	21689	PASS
177	176	5	9	6.2	1349	PASS

11M83347.D 8260WTR.M Fri May 04 16:48:09 2012

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Data File : C:\MSDCHEM\1\DATA\050512\6M107885.D          Vial: 4
Acq On    :  5 May 2012  12:02                      Operator: MES
Sample    : WG397117-01 50ng BFB STD 8260           Inst    : HPMS6
Misc      : 1,1 STD51241                            Multiplr: 1.00
MS Integration Params: rteint.p
Method    : C:\MSDCHEM\1\METHODS\BFB.M (RTE Integrator)
Title     : SOP: OVL MSV01
```
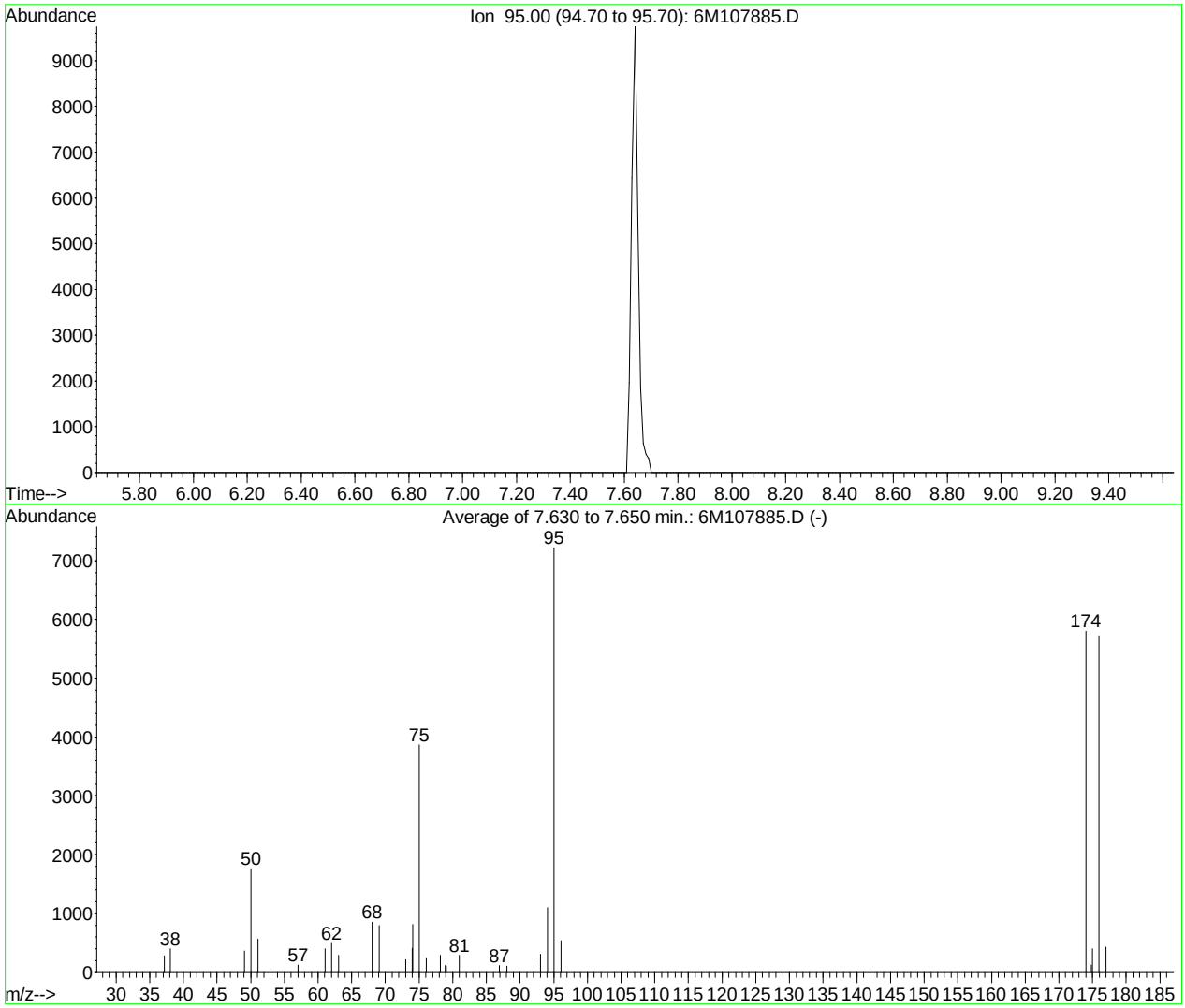



AutoFind: Scans 249, 250, 251; Background Corrected with Scan 245

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.4	1759	PASS
75	95	30	60	53.5	3866	PASS
95	95	100	100	100.0	7221	PASS
96	95	5	9	7.4	534	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	80.4	5805	PASS
175	174	5	9	6.9	398	PASS
176	174	95	101	98.4	5711	PASS
177	176	5	9	7.5	427	PASS

6M107885.D BFB.M Sat May 05 12:14:20 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\11M83350.D Vial: 4
Acq On : 4 May 2012 17:01 Operator: ADC
Sample : WG397043-01 VBLK 0504 8260 Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 10 11:21:28 2012 Quant Results File: 8260WTR.RES

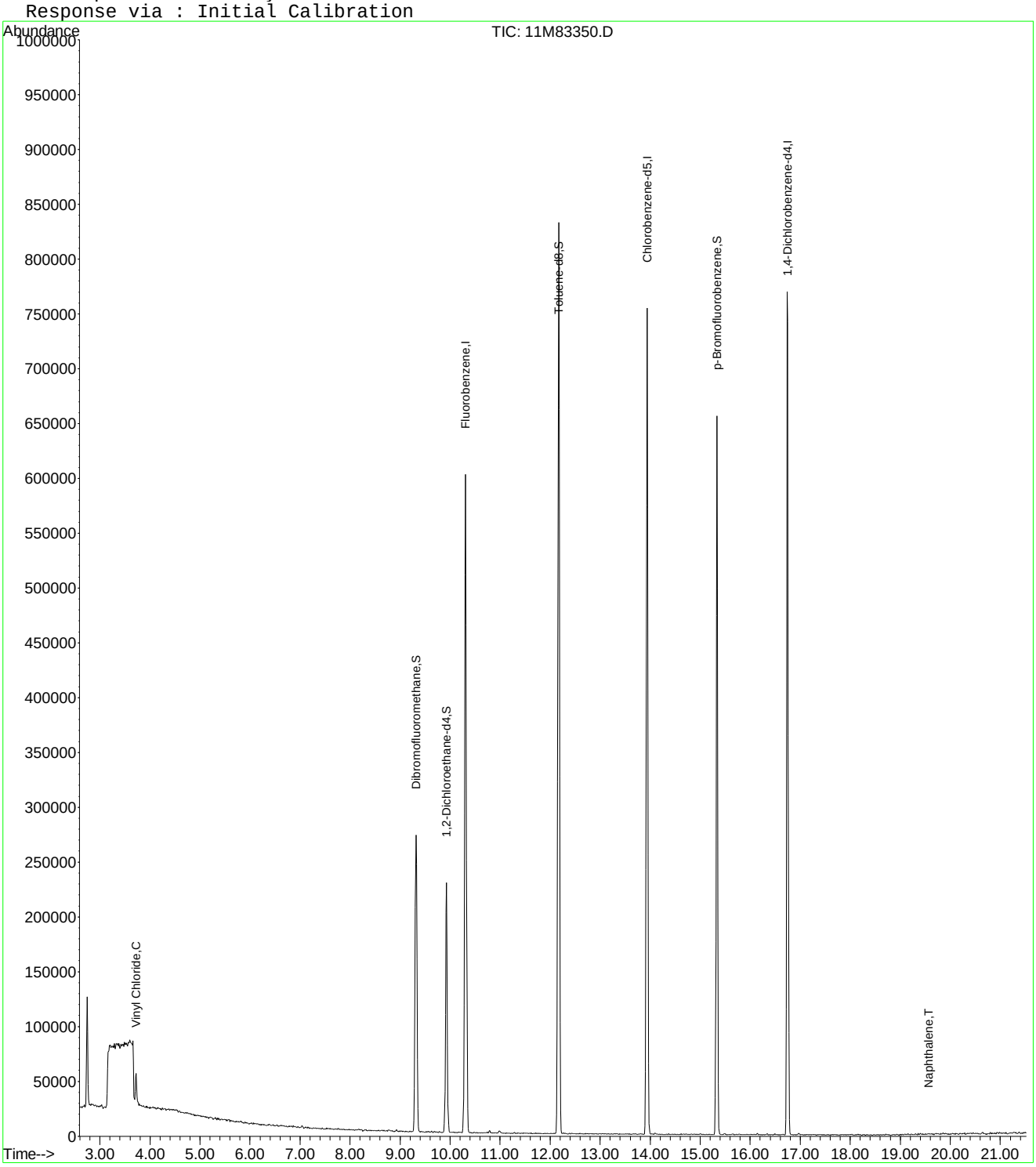
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

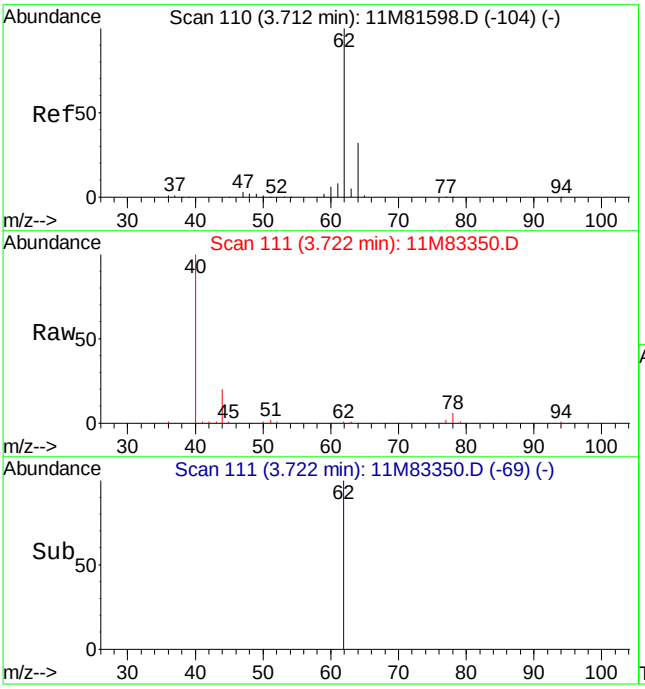
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.31	96	701420	25.00 ug/L	0.00
57) Chlorobenzene-d5	13.94	117	522556	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.75	152	267840	25.00 ug/L	0.01
System Monitoring Compounds					
37) Dibromofluoromethane	9.32	111	216428	25.3213 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.28%		
43) 1,2-Dichloroethane-d4	9.93	65	199014	24.3327 ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 97.32%		
58) Toluene-d8	12.17	98	729311	26.4592 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 105.84%		
80) p-Bromofluorobenzene	15.33	95	242224	27.3604 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 109.44%		
Target Compounds					Qvalue
4) Vinyl Chloride	3.72	62	443	0.1331 ug/L	# 41
13) Acetone	6.04	43	220	Below Cal	# 45
100) Naphthalene	19.56	128	872	0.2921 ug/L	# 72

(#) = qualifier out of range (m) = manual integration
11M83350.D 8260WTR.M Thu May 10 11:21:29 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050412\11M83350.D Vial: 4
Acq On : 4 May 2012 17:01 Operator: ADC
Sample : WG397043-01 VBLK 0504 8260 Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 10 11:21 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration

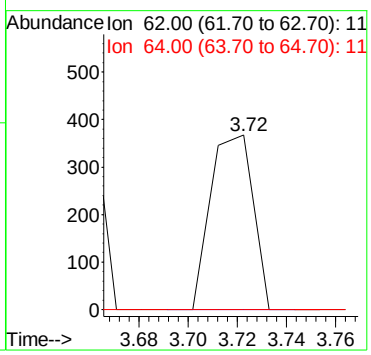


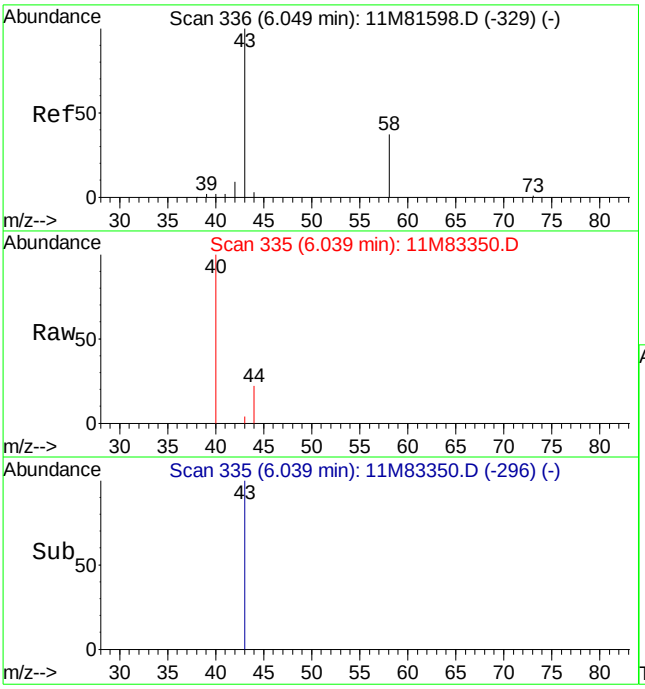


#4
Vinyl Chloride
Concen: 0.13 ug/L
RT: 3.72 min Scan# 111
Delta R.T. 0.03 min
Lab File: 11M83350.D
Acq: 4 May 2012 17:01

Tgt Ion: 62 Resp: 443

Ion	Ratio	Lower	Upper
62	100		
64	0.0	19.9	46.5#

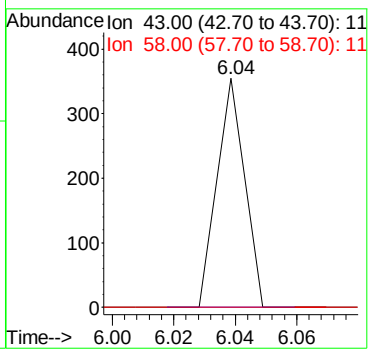


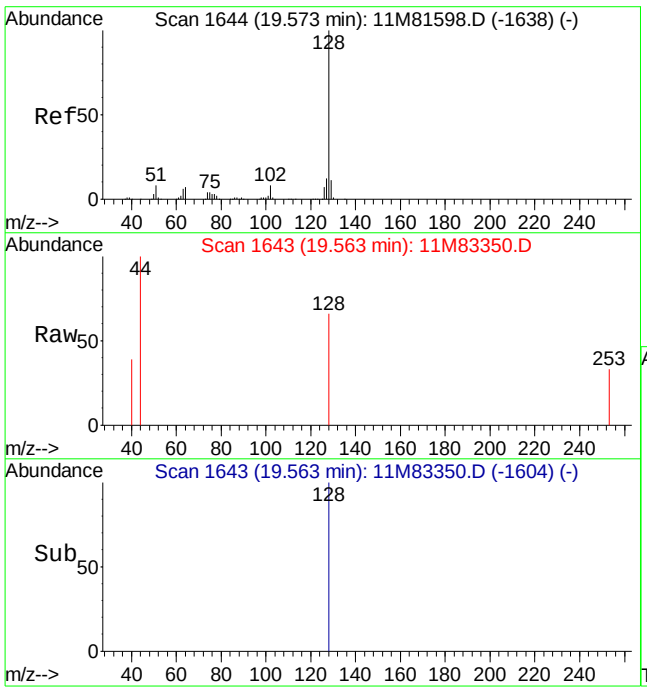


#13
Acetone
Concen: Below Cal
RT: 6.04 min Scan# 335
Delta R.T. 0.00 min
Lab File: 11M83350.D
Acq: 4 May 2012 17:01

Tgt Ion: 43 Resp: 220

Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.6	41.2#

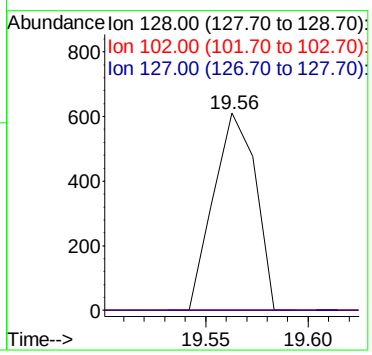




#100
Naphthalene
Concen: 0.29 ug/L
RT: 19.56 min Scan# 1643
Delta R.T. 0.00 min
Lab File: 11M83350.D
Acq: 4 May 2012 17:01

Tgt Ion:128 Resp: 872

Ion	Ratio	Lower	Upper
128	100		
102	0.0	7.2	8.8#
127	0.0	11.4	14.0#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050412\11M83350.D Vial: 4
Acq On : 4 May 2012 17:01 Operator: ADC
Sample : WG397043-01 VBLK 0504 8260 Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
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	3.205	53	61	63	rBV3	56410	263521	13.94%	2.757%
2	3.722	108	111	123	rVB	30433	73456	3.89%	0.769%
3	8.934	612	615	618	rVB2	2182	4360	0.23%	0.046%
4	9.316	645	652	660	rVB	270909	706773	37.40%	7.395%
5	9.688	686	688	695	rVB2	1103	2881	0.15%	0.030%
6	9.926	704	711	718	rVB	227887	535120	28.31%	5.599%
7	10.309	741	748	759	rVB	601043	1481414	78.39%	15.501%
8	10.784	792	794	801	rBV3	2660	6306	0.33%	0.066%
9	10.991	810	814	821	rVB4	2066	5761	0.30%	0.060%
10	11.281	841	842	844	rVB	1194	1038	0.05%	0.011%
11	12.066	917	918	921	rBV2	752	1042	0.06%	0.011%
12	12.170	921	928	935	rVB	831271	1889888	100.00%	19.775%
13	12.387	946	949	951	rVB	691	826	0.04%	0.009%
14	12.428	951	953	957	rBV2	892	1560	0.08%	0.016%
15	12.708	979	980	981	rBV	685	438	0.02%	0.005%
16	13.049	1011	1013	1015	rVB2	473	670	0.04%	0.007%
17	13.804	1081	1086	1089	rBV2	778	1518	0.08%	0.016%
18	13.938	1092	1099	1106	rBV	753501	1573427	83.26%	16.464%
19	14.093	1112	1114	1121	rVB3	1285	3478	0.18%	0.036%
20	14.196	1121	1124	1126	rBV	551	937	0.05%	0.010%
21	14.290	1130	1133	1135	rVB2	261	532	0.03%	0.006%
22	14.331	1135	1137	1139	rBV	475	641	0.03%	0.007%
23	14.362	1139	1140	1142	rBV	739	711	0.04%	0.007%
24	14.445	1146	1148	1150	rBV2	323	463	0.02%	0.005%
25	14.651	1167	1168	1172	rBV2	537	1048	0.06%	0.011%
26	14.838	1182	1186	1187	rVB2	518	942	0.05%	0.010%
27	14.879	1188	1190	1192	rBV2	316	528	0.03%	0.006%
28	15.003	1200	1202	1204	rVB2	822	1118	0.06%	0.012%
29	15.334	1226	1234	1243	rBV	655828	1304135	69.01%	13.646%
30	15.479	1244	1248	1254	rVV2	1010	2840	0.15%	0.030%
31	15.592	1254	1259	1261	rVV2	295	764	0.04%	0.008%
32	15.654	1261	1265	1267	rVB2	804	1770	0.09%	0.019%
33	15.727	1270	1272	1274	rVV2	527	692	0.04%	0.007%
34	15.778	1274	1277	1279	rVB3	645	1146	0.06%	0.012%
35	16.016	1299	1300	1302	rVB	371	380	0.02%	0.004%
36	16.078	1303	1306	1308	rVV	419	787	0.04%	0.008%
37	16.140	1309	1312	1316	rVB	1297	1711	0.09%	0.018%
38	16.264	1322	1324	1326	rBV2	521	910	0.05%	0.010%
39	16.337	1326	1331	1334	rVV	976	2042	0.11%	0.021%
40	16.492	1343	1346	1348	rBV	964	1487	0.08%	0.016%
41	16.544	1348	1351	1352	rVB	458	649	0.03%	0.007%
42	16.626	1357	1359	1361	rBV	508	633	0.03%	0.007%

43	16.657	1361	1362	1365	rVB	685	1000	0.05%	0.010%
44	16.740	1365	1370	1381	rBV	769182	1568600	83.00%	16.413%
45	16.895	1382	1385	1386	rVB	424	550	0.03%	0.006%
46	16.967	1388	1392	1397	rBV3	1501	2595	0.14%	0.027%
47	17.143	1406	1409	1412	rBV2	560	1769	0.09%	0.019%
48	17.195	1412	1414	1416	rVV2	447	728	0.04%	0.008%
49	17.340	1426	1428	1429	rBV	788	878	0.05%	0.009%
50	17.412	1432	1435	1437	rVB2	453	1036	0.05%	0.011%
51	17.640	1453	1457	1459	rBV	789	1813	0.10%	0.019%
52	17.671	1459	1460	1462	rBV	475	540	0.03%	0.006%
53	17.805	1470	1473	1475	rBV2	535	496	0.03%	0.005%
54	17.846	1476	1477	1479	rVB	283	299	0.02%	0.003%
55	17.898	1479	1482	1485	rBV2	332	733	0.04%	0.008%
56	18.032	1493	1495	1501	rVB2	725	961	0.05%	0.010%
57	18.157	1505	1507	1509	rBV	632	522	0.03%	0.005%
58	18.291	1514	1520	1521	rVB2	824	2743	0.15%	0.029%
59	18.343	1521	1525	1527	rBV	973	2256	0.12%	0.024%
60	18.415	1527	1532	1534	rVB2	647	1657	0.09%	0.017%
61	18.477	1534	1538	1540	rBV2	855	2221	0.12%	0.023%
62	18.570	1545	1547	1549	rVB	382	630	0.03%	0.007%
63	18.611	1549	1551	1553	rBV	637	835	0.04%	0.009%
64	18.663	1553	1556	1558	rVB2	345	627	0.03%	0.007%
65	18.715	1558	1561	1566	rBV2	1009	2674	0.14%	0.028%
66	18.880	1570	1577	1579	rBV2	930	2907	0.15%	0.030%
67	18.932	1579	1582	1586	rVB2	1004	2616	0.14%	0.027%
68	19.004	1586	1589	1591	rBV2	1186	1692	0.09%	0.018%
69	19.035	1591	1592	1594	rBV	627	735	0.04%	0.008%
70	19.097	1594	1598	1600	rBV2	819	1676	0.09%	0.018%
71	19.159	1600	1604	1608	rVB2	1186	3169	0.17%	0.033%
72	19.232	1608	1611	1616	rBV2	1049	3299	0.17%	0.035%
73	19.304	1616	1618	1620	rVB2	892	924	0.05%	0.010%
74	19.356	1622	1623	1626	rBV2	1348	1662	0.09%	0.017%
75	19.397	1626	1627	1631	rBV3	1069	1524	0.08%	0.016%
76	19.449	1631	1632	1635	rVB	1051	1106	0.06%	0.012%
77	19.501	1635	1637	1639	rVB2	973	1072	0.06%	0.011%
78	19.552	1639	1642	1644	rBV3	967	1916	0.10%	0.020%
79	19.718	1654	1658	1659	rBV3	1477	3508	0.19%	0.037%
80	19.811	1666	1667	1669	rBV2	1068	1027	0.05%	0.011%
81	19.852	1669	1671	1673	rVV2	1520	2049	0.11%	0.021%
82	19.904	1675	1676	1681	rVB	1291	2171	0.11%	0.023%
83	19.966	1681	1682	1683	rVB	1016	630	0.03%	0.007%
84	20.049	1687	1690	1691	rVB2	948	1389	0.07%	0.015%
85	20.111	1695	1696	1701	rBV2	1002	2256	0.12%	0.024%
86	20.193	1701	1704	1707	rBV2	915	1897	0.10%	0.020%
87	20.359	1715	1720	1722	rBV2	971	2077	0.11%	0.022%
88	20.452	1727	1729	1733	rBV3	1468	3226	0.17%	0.034%
89	20.504	1733	1734	1737	rBV2	608	946	0.05%	0.010%
90	20.648	1744	1748	1756	rVB3	2286	8148	0.43%	0.085%
91	20.741	1756	1757	1759	rBV	933	1596	0.08%	0.017%
92	20.793	1759	1762	1765	rVB3	1593	2440	0.13%	0.026%
93	20.834	1765	1766	1769	rBV2	1216	2000	0.11%	0.021%
94	20.928	1774	1775	1779	rVV3	1411	2970	0.16%	0.031%
95	20.990	1779	1781	1785	rVB2	1459	3324	0.18%	0.035%
96	21.196	1796	1801	1804	rBV2	1536	5049	0.27%	0.053%
97	21.258	1806	1807	1814	rVB2	1568	5099	0.27%	0.053%
98	21.372	1815	1818	1821	rVB3	1440	2386	0.13%	0.025%
99	21.434	1822	1824	1825	rBV	678	765	0.04%	0.008%
100	21.465	1825	1827	1828	rBV	1267	1283	0.07%	0.013%

Sum of corrected areas: 9557040

```
File       : C:\MSDCHEM\1\DATA\050412\11M83350.D
Operator   : ADC
Acquired   :  4 May 2012  17:01     using AcqMethod 8260WTR
Instrument :   HPMS11
Sample Name: WG397043-01 VBLK 0504 8260
Misc Info  : 1,1
Vial Number: 4
Quant File :8260WTR.RES (RTE Integrator)
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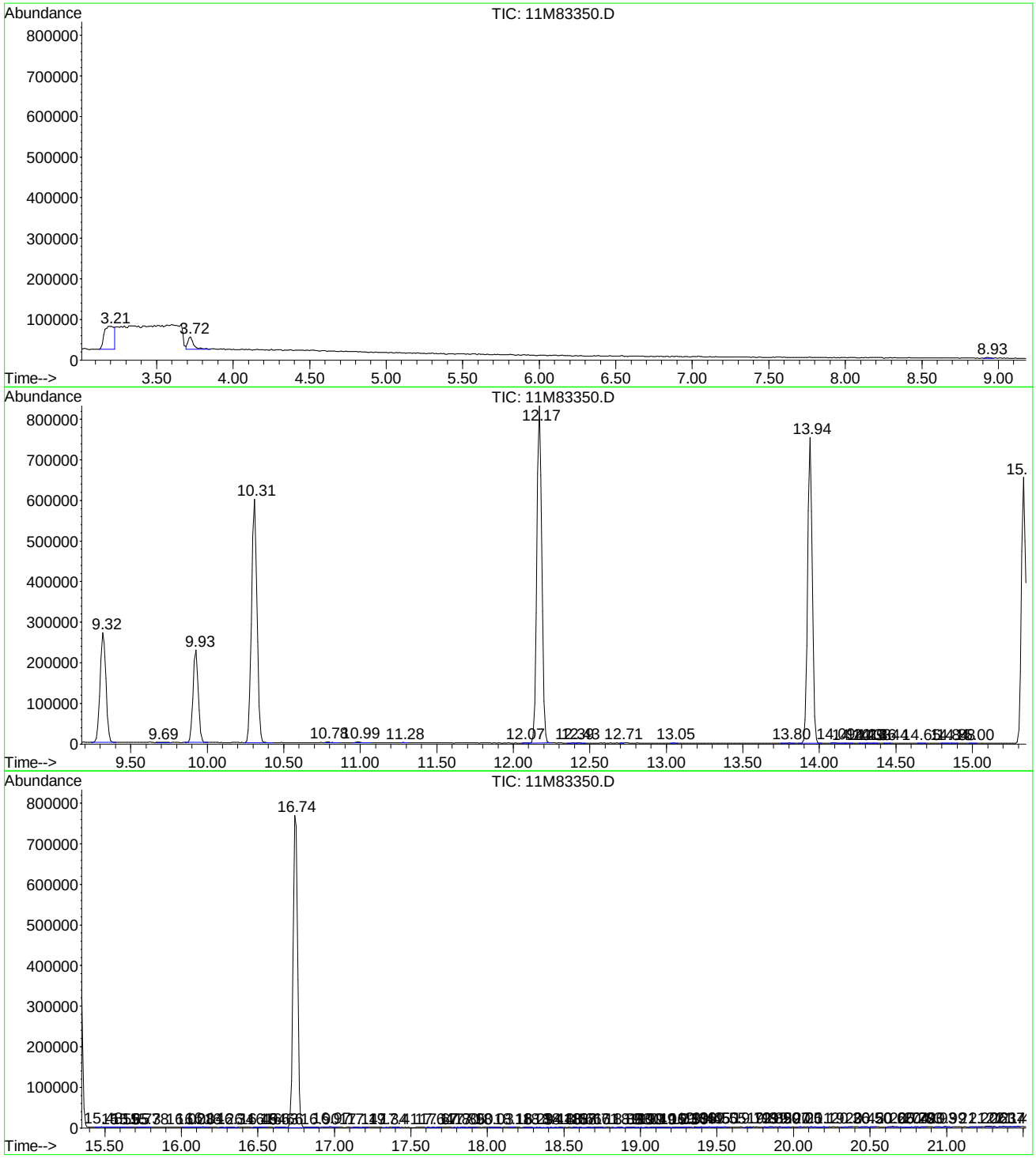


Data File : C:\MSDCHEM\1\DATA\050412\11M83350.D Vial: 4
Acq On : 4 May 2012 17:01 Operator: ADC
Sample : WG397043-01 VBLK 0504 8260 Inst : HPMS11
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

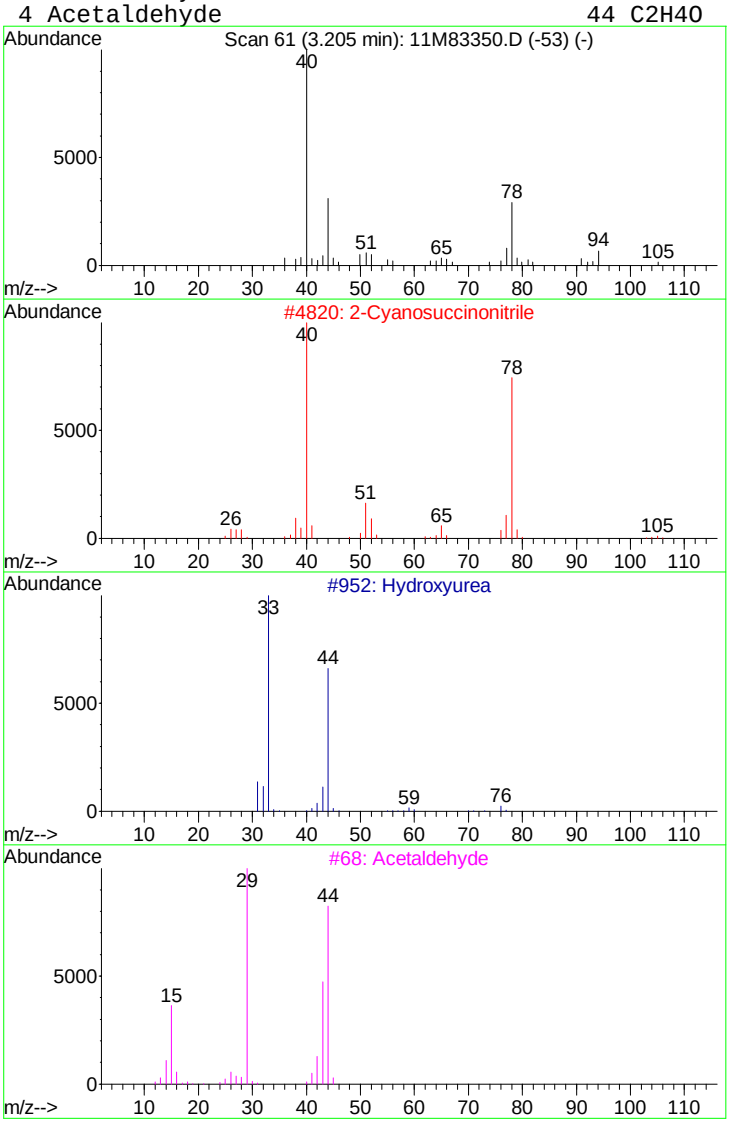
Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library : C:\DATABASE\NIST02.L

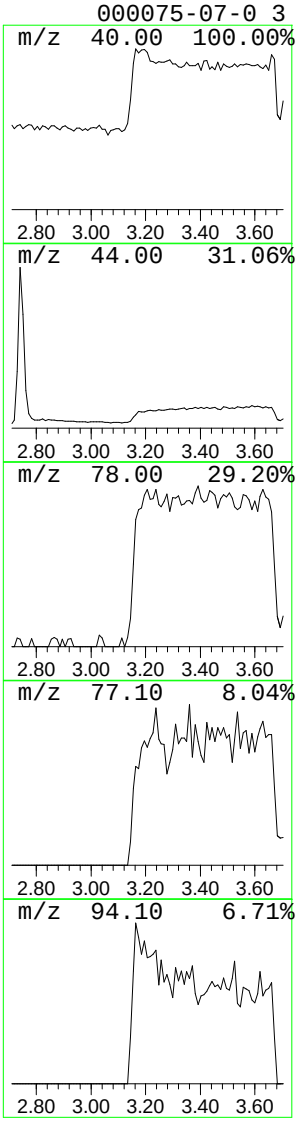
****

Peak Number 1 2-Cyanosuccinonitrile Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.21	4.45 ug/L	263521	Fluorobenzene	10.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyanosuccinonitrile	105	C5H3N3	039805-98-6	9
2	Hydroxyurea	76	CH4N2O2	000127-07-1	4
3	Acetaldehyde	44	C2H4O	000075-07-0	3
4	Acetaldehyde	44	C2H4O	000075-07-0	3





Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 4 May 2012 17:01
Data File: C:\MSDCHEM\1\DATA\050412\11M83350.D
Name: WG397043-01 VBLK 0504 8260
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Library Searched: C:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Cyanosuccinonit...	3.21	4.4	ug/L	263521	1	10.31	1481410	25.0

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050512\6M107889.D Vial: 4
Acq On : 5 May 2012 14:10 Operator: MES
Sample : WG397118-01 BLANK 05/05 8260 Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 11:33:19 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

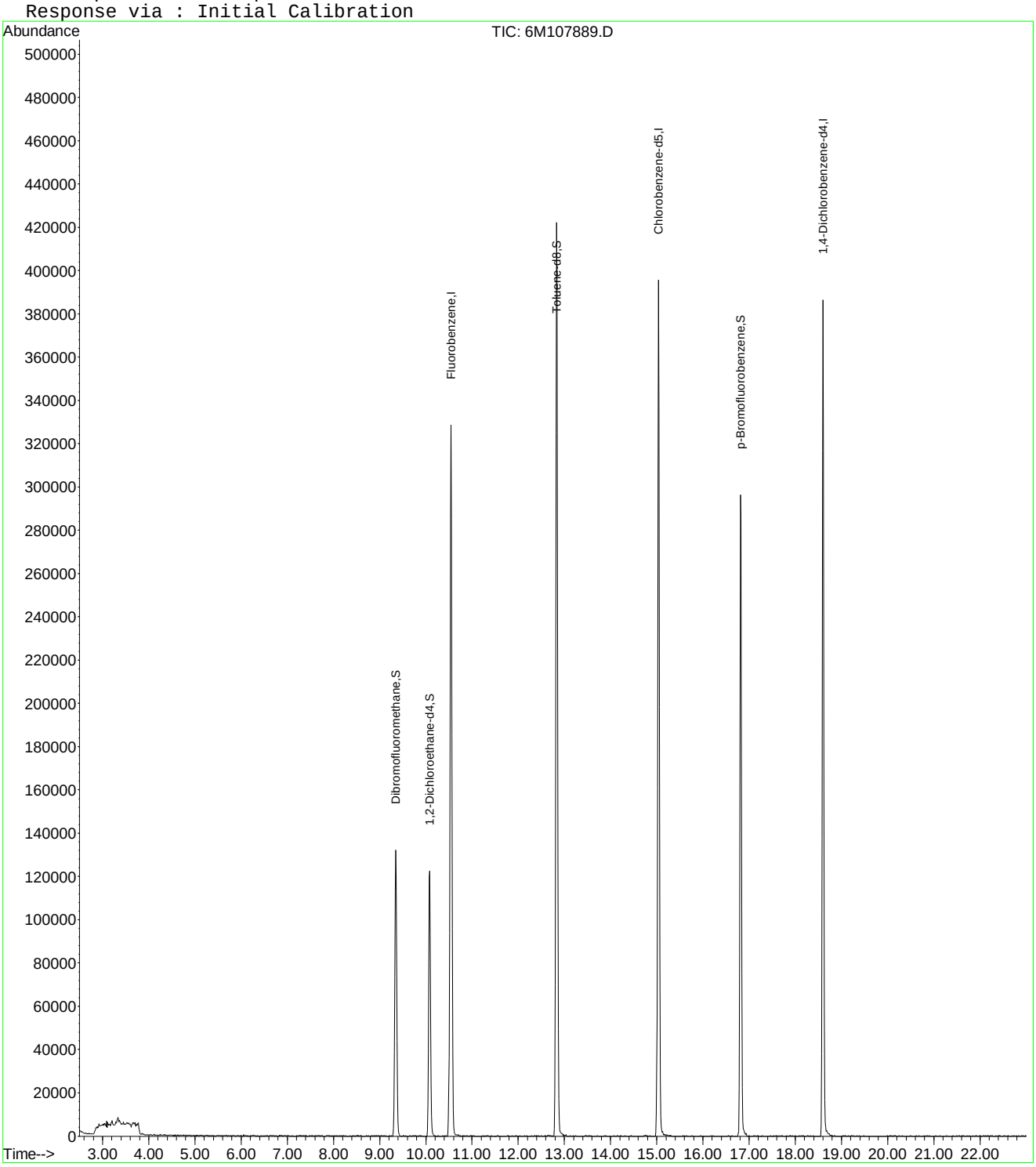
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	440027	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	309951	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	142989	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	128899	27.0541	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 108.20%			
43) 1,2-Dichloroethane-d4	10.08	65	124635	26.6546	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 106.60%			
58) Toluene-d8	12.83	98	425368	25.2512	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.00%			
80) p-Bromofluorobenzene	16.81	95	147729	26.3287	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 105.32%			
Target Compounds						Qvalue
3) Chloromethane	3.12	50	1205	Below Cal	#	40

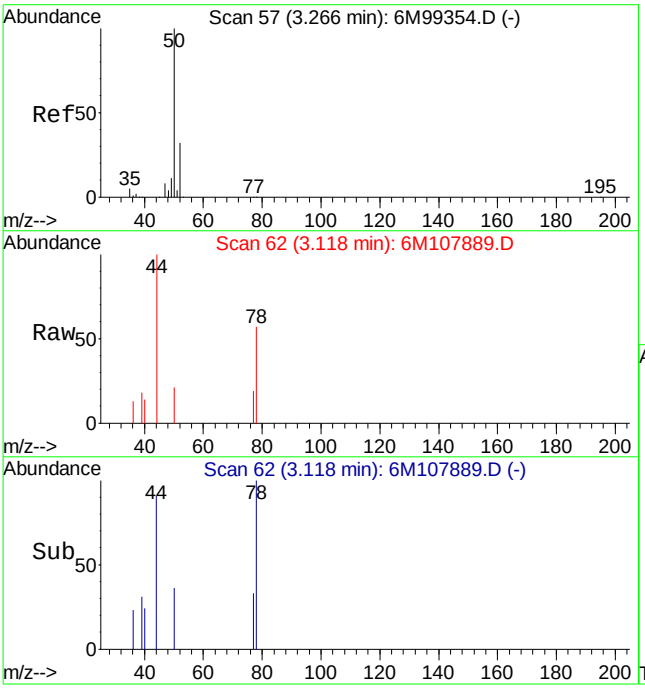
(#) = qualifier out of range (m) = manual integration
6M107889.D 8260WTR.M Mon May 07 11:33:20 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050512\6M107889.D Vial: 4
Acq On : 5 May 2012 14:10 Operator: MES
Sample : WG397118-01 BLANK 05/05 8260 Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 11:33 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

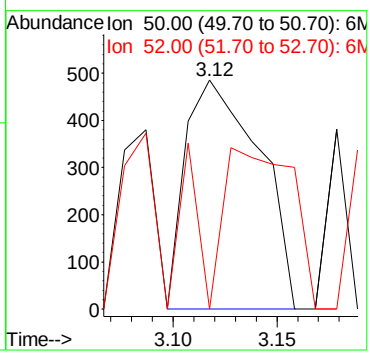




#3
Chloromethane
Concen: Below Cal
RT: 3.12 min Scan# 62
Delta R.T. 0.01 min
Lab File: 6M107889.D
Acq: 5 May 2012 14:10

Tgt Ion: 50 Resp: 1205

Ion	Ratio	Lower	Upper
50	100		
52	64.6	18.8	44.0#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050512\6M107889.D Vial: 4
Acq On : 5 May 2012 14:10 Operator: MES
Sample : WG397118-01 BLANK 05/05 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

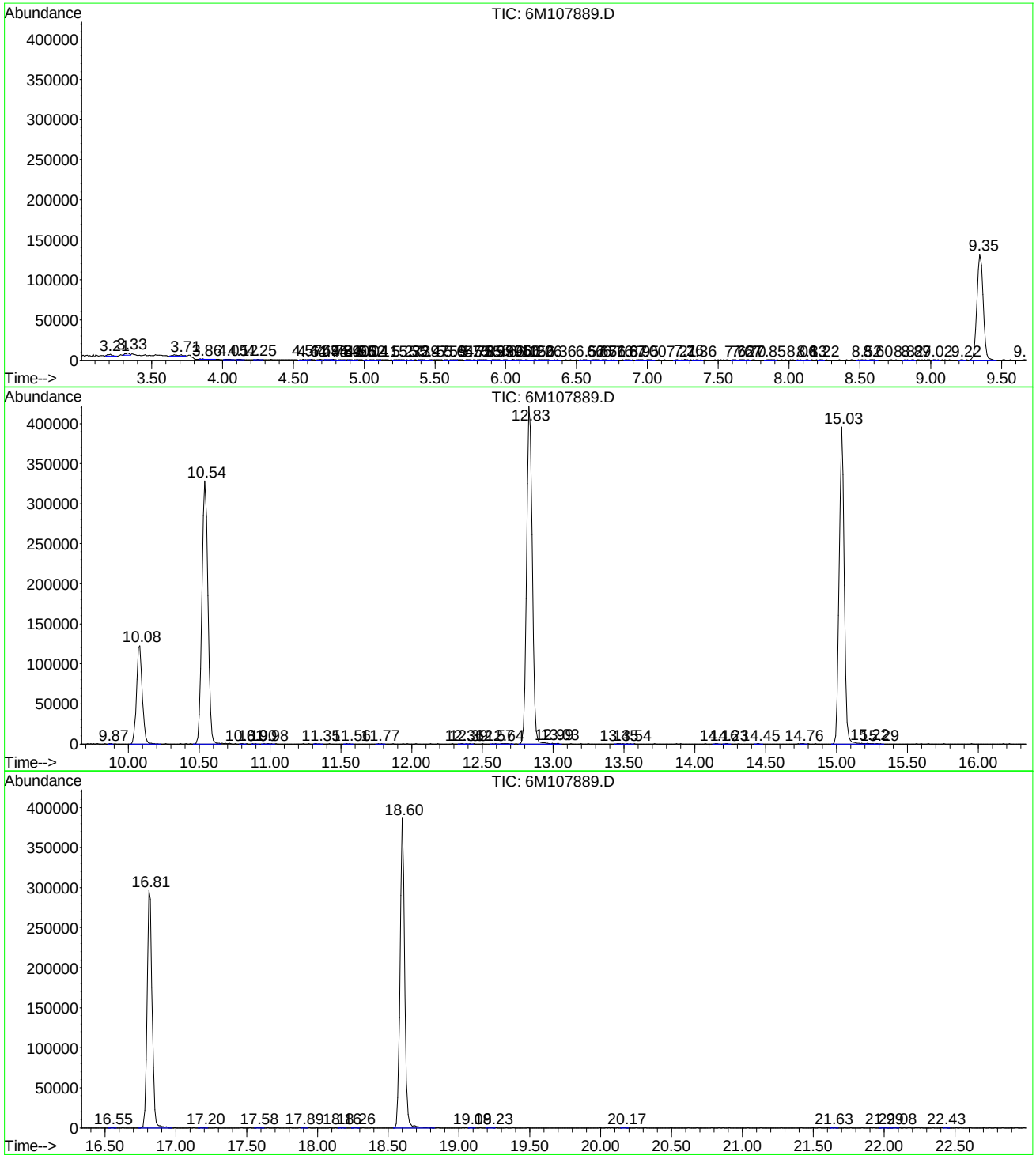
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.209	68	71	75	rVB3	2206	3459	0.30%	0.062%
2	3.332	80	83	85	rVV3	2382	4430	0.38%	0.080%
3	3.710	112	120	123	rBV3	1404	4406	0.38%	0.080%
4	3.863	132	135	143	rVB	676	1698	0.15%	0.031%
5	4.047	149	153	156	rVB	332	795	0.07%	0.014%
6	4.118	158	160	163	rVV	434	630	0.05%	0.011%
7	4.251	170	173	176	rBV	474	458	0.04%	0.008%
8	4.568	201	204	206	rBV	843	1332	0.11%	0.024%
9	4.608	206	208	209	rVV	509	773	0.07%	0.014%
10	4.690	213	216	218	rBV	605	1322	0.11%	0.024%
11	4.751	219	222	224	rVV	348	835	0.07%	0.015%
12	4.782	224	225	228	rVB	624	929	0.08%	0.017%
13	4.843	228	231	234	rBV	502	1480	0.13%	0.027%
14	4.904	235	237	239	rVB	517	803	0.07%	0.015%
15	4.945	239	241	242	rBV	372	623	0.05%	0.011%
16	5.017	246	248	249	rBB	483	494	0.04%	0.009%
17	5.037	249	250	254	rBB	528	1097	0.09%	0.020%
18	5.109	254	257	258	rBV	487	965	0.08%	0.017%
19	5.272	266	273	275	rBB	502	1846	0.16%	0.033%
20	5.323	275	278	280	rBB	366	622	0.05%	0.011%
21	5.395	283	285	290	rBB	363	1045	0.09%	0.019%
22	5.466	291	292	294	rBV	410	661	0.06%	0.012%
23	5.589	301	304	305	rBB	328	574	0.05%	0.010%
24	5.640	305	309	311	rBV	390	1239	0.11%	0.022%
25	5.752	316	320	321	rBB	344	802	0.07%	0.014%
26	5.783	321	323	324	rBB	412	448	0.04%	0.008%
27	5.854	324	330	333	rBB	382	1416	0.12%	0.026%
28	5.926	334	337	341	rBB	412	1254	0.11%	0.023%
29	5.987	342	343	346	rBB	421	664	0.06%	0.012%
30	6.048	347	349	351	rBB	776	686	0.06%	0.012%
31	6.099	351	354	356	rBB	358	807	0.07%	0.015%
32	6.150	357	359	361	rBB	354	409	0.04%	0.007%
33	6.201	362	364	366	rBB	371	429	0.04%	0.008%
34	6.263	366	370	376	rBB	453	1811	0.16%	0.033%
35	6.365	377	380	382	rBB	396	482	0.04%	0.009%
36	6.569	395	400	402	rBB	344	803	0.07%	0.015%
37	6.651	403	408	410	rBB	373	1228	0.11%	0.022%
38	6.712	410	414	416	rBB	400	854	0.07%	0.015%
39	6.763	416	419	421	rBB	428	504	0.04%	0.009%
40	6.865	426	429	431	rBB	534	924	0.08%	0.017%
41	6.947	434	437	440	rBB	345	1005	0.09%	0.018%
42	6.998	441	442	447	rBB	418	855	0.07%	0.015%

43	7.212	460	463	465	rBB	383	449	0.04%	0.008%
44	7.263	465	468	471	rBB	606	950	0.08%	0.017%
45	7.355	473	477	480	rBB	396	904	0.08%	0.016%
46	7.621	500	503	504	rBB	382	661	0.06%	0.012%
47	7.672	505	508	510	rBB	426	909	0.08%	0.016%
48	7.702	510	511	513	rBB	377	425	0.04%	0.008%
49	7.845	523	525	531	rBB	418	1301	0.11%	0.024%
50	8.060	545	546	550	rBB	356	419	0.04%	0.008%
51	8.131	551	553	555	rBB	334	406	0.03%	0.007%
52	8.223	560	562	564	rBB	325	568	0.05%	0.010%
53	8.519	587	591	594	rBB	459	909	0.08%	0.016%
54	8.601	595	599	601	rBB	351	804	0.07%	0.015%
55	8.816	618	620	623	rBB	347	407	0.04%	0.007%
56	8.867	624	625	627	rBB	369	419	0.04%	0.008%
57	9.020	639	640	644	rBB	327	572	0.05%	0.010%
58	9.224	657	660	662	rBB	408	467	0.04%	0.008%
59	9.347	665	672	683	rBB	132203	397895	34.28%	7.188%
60	9.663	700	703	705	rBB	331	404	0.03%	0.007%
61	9.867	722	723	725	rBB	352	407	0.04%	0.007%
62	10.082	737	744	758	rBB	122696	347741	29.96%	6.282%
63	10.541	781	789	800	rBV	328617	960438	82.75%	17.350%
64	10.807	813	815	817	rBB	384	429	0.04%	0.008%
65	10.899	821	824	826	rBB	352	414	0.04%	0.007%
66	10.980	828	832	837	rBB	358	795	0.07%	0.014%
67	11.348	864	868	870	rBB	330	593	0.05%	0.011%
68	11.562	885	889	891	rBB	332	403	0.03%	0.007%
69	11.767	907	909	913	rBB	413	452	0.04%	0.008%
70	12.359	964	967	969	rBB	367	427	0.04%	0.008%
71	12.390	969	970	974	rBB	362	431	0.04%	0.008%
72	12.573	986	988	992	rBB	349	409	0.04%	0.007%
73	12.645	993	995	1002	rBB	456	1670	0.14%	0.030%
74	12.829	1006	1013	1028	rBB	422277	1160605	100.00%	20.966%
75	12.992	1028	1029	1032	rBV	796	1072	0.09%	0.019%
76	13.033	1032	1033	1035	rVB	762	467	0.04%	0.008%
77	13.451	1072	1074	1080	rBB	332	780	0.07%	0.014%
78	13.543	1080	1083	1085	rBB	347	425	0.04%	0.008%
79	14.156	1140	1143	1145	rBB	379	440	0.04%	0.008%
80	14.228	1147	1150	1152	rBB	369	415	0.04%	0.007%
81	14.452	1169	1172	1174	rBB	367	434	0.04%	0.008%
82	14.759	1200	1202	1205	rBB	442	705	0.06%	0.013%
83	15.034	1222	1229	1246	rBV	395592	981554	84.57%	17.731%
84	15.218	1246	1247	1252	rVB	757	1358	0.12%	0.025%
85	15.290	1252	1254	1258	rBB	534	759	0.07%	0.014%
86	16.546	1375	1377	1380	rBB	367	415	0.04%	0.007%
87	16.811	1396	1403	1418	rBB	296411	726790	62.62%	13.129%
88	17.199	1437	1441	1443	rBB	349	419	0.04%	0.008%
89	17.577	1476	1478	1482	rBB	354	422	0.04%	0.008%
90	17.894	1508	1509	1512	rBB	338	404	0.03%	0.007%
91	18.159	1534	1535	1539	rBB	362	419	0.04%	0.008%
92	18.261	1543	1545	1548	rBB	355	418	0.04%	0.008%
93	18.598	1572	1578	1600	rBB	386451	882641	76.05%	15.945%
94	19.078	1624	1625	1628	rBB	364	419	0.04%	0.008%
95	19.231	1636	1640	1642	rBB	395	627	0.05%	0.011%
96	20.171	1729	1732	1734	rBB	375	629	0.05%	0.011%
97	21.631	1874	1875	1879	rBB	367	436	0.04%	0.008%
98	21.988	1908	1910	1914	rBB	344	404	0.03%	0.007%
99	22.080	1916	1919	1921	rBB	420	460	0.04%	0.008%
100	22.427	1952	1953	1956	rBB	349	408	0.04%	0.007%

Sum of corrected areas: 5535700

File : C:\MSDCHEM\1\DATA\050512\6M107889.D
Operator : MES
Acquired : 5 May 2012 14:10 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: WG397118-01 BLANK 05/05 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\11M83351.D Vial: 5
Acq On : 4 May 2012 17:32 Operator: ADC
Sample : WG397043-02 20ug/L LCS STD 8260 Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 17:53:45 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.31	96	689774	25.00 ug/L	0.00
57) Chlorobenzene-d5	13.94	117	528130	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	16.74	152	296163	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.32	111	214598	25.5311 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.12%		
43) 1,2-Dichloroethane-d4	9.93	65	202400	25.1645 ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 100.64%		
58) Toluene-d8	12.17	98	722163	25.9234 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.68%		
80) p-Bromofluorobenzene	15.33	95	252386	25.7820 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 103.12%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.05	85	236347	26.5536 ug/L	97
3) Chloromethane	3.48	50	387085	25.3224 ug/L	98
4) Vinyl Chloride	3.70	62	422584	25.4351 ug/L	99
5) 1,3-Butadiene	3.73	54	159082	20.7808 ug/L	95
6) Bromomethane	4.56	94	100676	20.5379 ug/L	100
7) Chloroethane	4.71	64	109058	20.7037 ug/L	99
8) Trichlorofluoromethane	5.19	101	291057	19.5699 ug/L	100
9) Diethyl ether	5.71	59	485223	92.4239 ug/L	96
10) Isoprene	5.74	67	217386	18.7863 ug/L	99
11) Acrolein	5.94	56	70338	192.8961 ug/L	98
12) 1,1,2-Trichloro-1,2,2-Trif	5.96	101	156804	20.3332 ug/L	100
13) Acetone	6.04	43	25530	19.5087 ug/L	79
14) 1,1-Dichloroethene	6.25	61	227105	21.6898 ug/L	98
15) Tert-Butyl Alcohol	6.36	59	84693	243.4881 ug/L	95
16) Dimethyl Sulfide	6.50	62	177361	20.6819 ug/L	99
17) Iodomethane	6.74	142	214592	20.3518 ug/L	99
18) Methyl acetate	6.76	43	75792	17.0121 ug/L	99
19) Methylene Chloride	7.00	84	153348	20.6065 ug/L	97
20) Carbon Disulfide	7.04	76	438706	20.5523 ug/L	99
21) Acrylonitrile	7.18	53	33017	21.7237 ug/L	98
22) Methyl Tert Butyl Ether	7.22	73	356437	20.5009 ug/L	99
23) trans-1,2-Dichloroethene	7.44	96	155059	20.7420 ug/L	97
24) n-Hexane	7.53	57	159746	21.1508 ug/L	98
25) Diisopropyl ether	7.85	45	2200131	100.4847 ug/L	99
26) Vinyl Acetate	8.01	43	167195	38.6422 ug/L	99
27) 1,1-Dichloroethane	8.03	63	266110	21.2424 ug/L	99
28) Ethyl-Tert-Butyl ether	8.40	59	2088628	97.6937 ug/L	98
29) 2-Butanone	8.57	43	37741	21.2622 ug/L	100
30) Propionitrile	8.66	54	55776	106.4754 ug/L	100
31) 2,2-Dichloropropane	8.78	77	239692	23.6724 ug/L	99
32) cis-1,2-Dichloroethene	8.84	96	171967	21.2279 ug/L	97
33) Chloroform	9.04	83	276785	20.8987 ug/L	98
34) 1-Bromopropane	9.17	122	34210	22.5812 ug/L	100
35) Bromochloromethane	9.26	130	108214	21.0271 ug/L	97
36) Tetrahydrofuran	9.29	42	111669	96.9301 ug/L	99
38) 1,1,1-Trichloroethane	9.54	97	252675	20.3368 ug/L	97
39) Cyclohexane	9.57	56	211022	21.0809 ug/L	96
40) 1,1-Dichloropropene	9.73	75	203967	20.6453 ug/L	99
41) Carbon Tetrachloride	9.87	117	257669	19.6941 ug/L	98
42) Tert-Amyl-Methyl ether	9.83	73	1970090	100.7892 ug/L	99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\050412\11M83351.D Vial: 5
Acq On : 4 May 2012 17:32 Operator: ADC
Sample : WG397043-02 20ug/L LCS STD 8260 Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 04 17:53:45 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

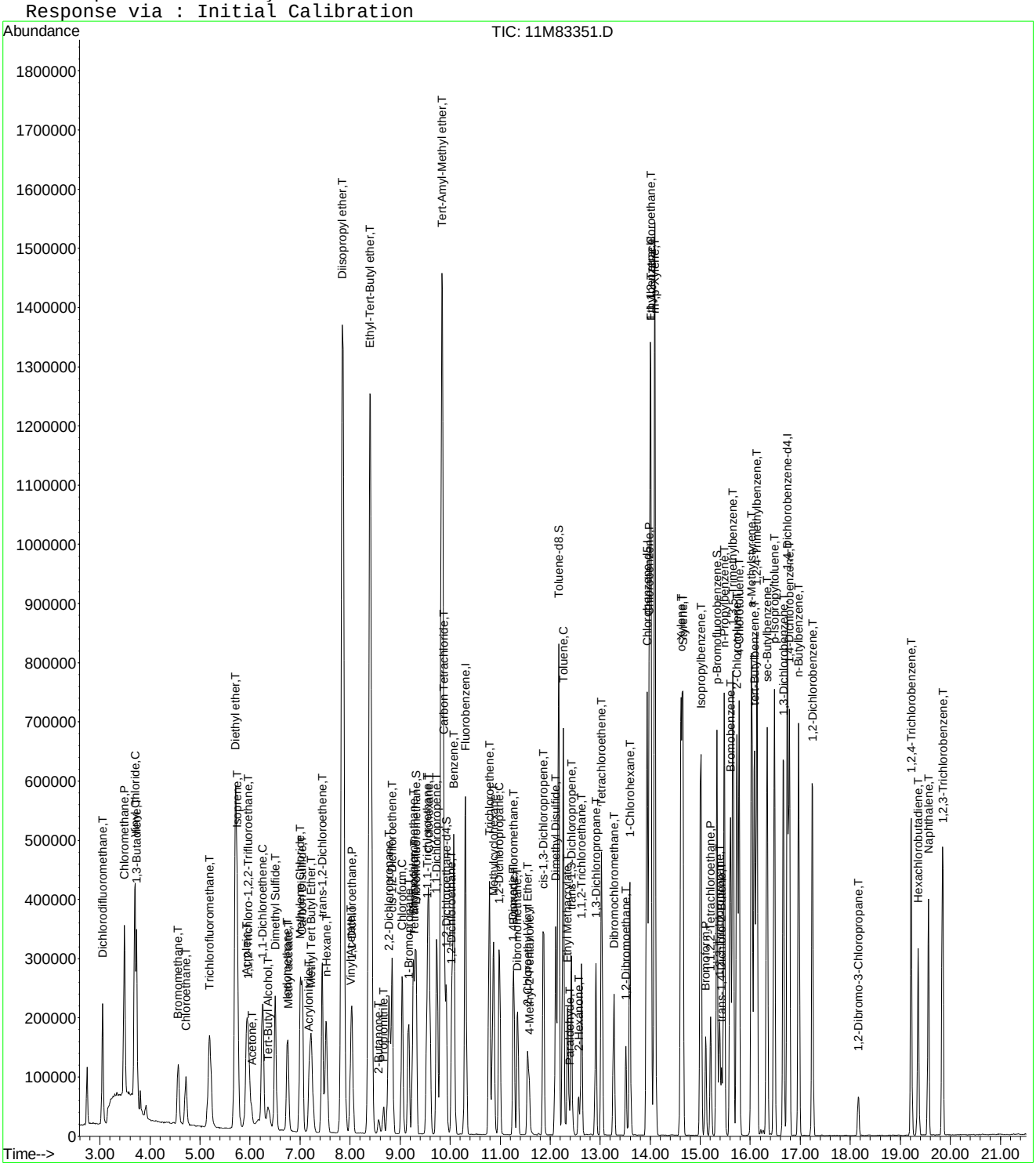
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	10.03	62	201515	21.6417	ug/L	99
46)	Benzene	10.07	78	583620	20.2200	ug/L	99
47)	Trichloroethene	10.78	130	178395	18.8509	ug/L	99
48)	Methylcyclohexane	10.87	83	210016	21.1977	ug/L	98
49)	1,2-Dichloropropane	10.98	63	143248	21.5586	ug/L	99
50)	1,4-Dioxane	11.26	88	8660	183.3124	ug/L	90
51)	Bromodichloromethane	11.27	83	211237	23.2260	ug/L	98
52)	Dibromomethane	11.34	93	89497	20.2652	ug/L	98
53)	2-Chloroethyl Vinyl Ether	11.55	63	62664	22.1085	ug/L	98
54)	4-Methyl-2-Pentanone	11.58	58	32211	20.7498	ug/L	99
55)	cis-1,3-Dichloropropene	11.87	75	230410	21.9935	ug/L	99
56)	Dimethyl Disulfide	12.11	79	127585	22.5293	ug/L	92
59)	Toluene	12.26	91	644167	20.2786	ug/L	100
60)	Ethyl Methacrylate	12.35	69	141597	21.4513	ug/L	99
61)	Paraldehyde	12.39	89	7560	100.3943	ug/L	53
62)	trans-1,3-Dichloropropene	12.43	75	182570	21.4364	ug/L	99
63)	1,1,2-Trichloroethane	12.62	97	113109	21.5570	ug/L	98
64)	2-Hexanone	12.57	43	52532	19.7997	ug/L	97
65)	1,3-Dichloropropane	12.91	76	189926	21.5491	ug/L	100
66)	Tetrachloroethene	13.03	164	140476	21.5843	ug/L	97
67)	Dibromochloromethane	13.28	129	153968	21.3665	ug/L	100
68)	1,2-Dibromoethane	13.51	107	112661	20.7343	ug/L	99
69)	1-Chlorohexane	13.60	91	195269	21.4413	ug/L	97
70)	Chlorobenzene	13.98	112	446080	21.0962	ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.01	131	172595	21.7329	ug/L	100
72)	Ethylbenzene	14.01	106	238027	20.7438	ug/L	97
73)	m-,p-Xylene	14.09	106	571044	40.3011	ug/L	99
74)	o-Xylene	14.62	106	267884	19.4078	ug/L	99
75)	Styrene	14.65	104	459815	20.9367	ug/L	99
76)	Bromoform	15.11	173	97962	24.2169	ug/L	100
77)	Isopropylbenzene	15.01	105	595163	18.3150	ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.21	83	118905	22.5541	ug/L	99
81)	1,2,3-Trichloropropane	15.39	110	37444	23.4658	ug/L	97
82)	trans-1,4-Dichloro-2-Buten	15.43	53	29762	20.5888	ug/L	95
83)	n-Propylbenzene	15.48	91	785205	20.3765	ug/L	99
84)	Bromobenzene	15.60	156	195447	21.2304	ug/L	97
85)	1,3,5-Trimethylbenzene	15.65	105	567585	19.8335	ug/L	99
86)	2-Chlorotoluene	15.74	91	516896	19.9453	ug/L	99
87)	4-Chlorotoluene	15.78	91	434401	19.1537	ug/L	100
88)	a-Methylstyrene	16.03	118	328887	20.6359	ug/L	99
89)	tert-Butylbenzene	16.09	134	121799	19.5563	ug/L	98
90)	1,2,4-Trimethylbenzene	16.13	105	611094	20.5245	ug/L	99
91)	sec-Butylbenzene	16.34	105	652526	19.5283	ug/L	99
92)	p-Isopropyltoluene	16.48	119	578824	20.1885	ug/L	99
93)	1,3-Dichlorobenzene	16.67	146	351326	19.4581	ug/L	99
94)	1,4-Dichlorobenzene	16.78	146	358269	19.4941	ug/L	100
95)	n-Butylbenzene	16.97	91	502920	23.0277	ug/L	98
96)	1,2-Dichlorobenzene	17.25	146	322632	19.7158	ug/L	98
97)	1,2-Dibromo-3-Chloropropan	18.16	75	19072	20.4825	ug/L	100
98)	1,2,4-Trichlorobenzene	19.22	180	219883	23.7595	ug/L	96
99)	Hexachlorobutadiene	19.36	225	77942	21.3681	ug/L	96
100)	Naphthalene	19.56	128	387941	19.4338	ug/L	99
101)	1,2,3-Trichlorobenzene	19.85	180	194415	22.4797	ug/L	97

(#) = qualifier out of range (m) = manual integration
11M83351.D 8260WTR.M Fri May 04 17:53:46 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\DATA\050412\11M83351.D Vial: 5
Acq On : 4 May 2012 17:32 Operator: ADC
Sample : WG397043-02 20ug/L LCS STD 8260 Inst : HPMS11
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 4 17:53 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 (SOP: OVL MSV01) Water 05/03/12 HPMS11
Last Update : Fri May 04 08:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050512\6M107890.D Vial: 5
Acq On : 5 May 2012 14:42 Operator: MES
Sample : WG397118-02 20ug/L LCS 8260 Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 05 15:05:42 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	452676	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	310631	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	154139	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	130018	26.5264 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 106.12%		
43) 1,2-Dichloroethane-d4	10.08	65	127617	26.5297 ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 106.12%		
58) Toluene-d8	12.83	98	435523	25.7974 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.20%		
80) p-Bromofluorobenzene	16.81	95	159542	26.3772 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 105.52%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.72	85	143182	24.1139 ug/L	99
3) Chloromethane	3.12	50	204998	24.9563 ug/L	99
4) Vinyl Chloride	3.31	62	159886	21.2900 ug/L	100
5) 1,3-Butadiene	3.35	54	121920	29.9343 ug/L	86
6) Bromomethane	4.11	94	76062	17.8740 ug/L	99
7) Chloroethane	4.26	64	82152	19.3351 ug/L	99
8) Trichlorofluoromethane	4.73	101	175972	18.2245 ug/L	99
9) Diethyl ether	5.26	59	336799	102.6564 ug/L	98
10) Isoprene	5.29	67	136154	16.5828 ug/L	97
11) Acrolein	5.50	56	32076	135.9073 ug/L	97
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	92390	17.8892 ug/L	98
13) Acetone	5.61	43	15554	18.1341 ug/L	94
14) 1,1-Dichloroethene	5.83	61	162507	19.5703 ug/L	99
15) Tert-Butyl Alcohol	5.97	59	26056	116.3616 ug/L	93
16) Dimethyl Sulfide	6.11	62	124785	18.9290 ug/L	98
17) Iodomethane	6.37	142	97308	20.4956 ug/L	99
18) Methyl acetate	6.42	43	58324	17.2301 ug/L	98
19) Methylene Chloride	6.67	84	98828	19.2147 ug/L	93
20) Carbon Disulfide	6.68	76	283227	18.8258 ug/L	100
21) Acrylonitrile	6.88	53	23331	20.1885 ug/L	100
22) Methyl Tert Butyl Ether	6.92	73	202564	18.6939 ug/L	99
23) trans-1,2-Dichloroethene	7.16	96	95104	18.9341 ug/L	98
24) n-Hexane	7.26	57	108943	18.9068 ug/L	98
25) Diisopropyl ether	7.65	45	1963187	107.2925 ug/L	98
26) Vinyl Acetate	7.84	43	132586	50.0535 ug/L	97
27) 1,1-Dichloroethane	7.85	63	200955	19.5820 ug/L	98
28) Ethyl-Tert-Butyl ether	8.30	59	1473645	99.1020 ug/L	100
29) 2-Butanone	8.49	43	24390	20.3357 ug/L	95
30) Propionitrile	8.60	54	32908	95.9305 ug/L	99
31) 2,2-Dichloropropane	8.71	77	151738	19.5583 ug/L	94
32) cis-1,2-Dichloroethene	8.79	96	106549	20.3013 ug/L	99
33) Chloroform	9.02	83	187727	20.2400 ug/L	99
34) 1-Bromopropane	9.17	122	19601	20.8359 ug/L	98
35) Bromochloromethane	9.28	130	60089	21.5231 ug/L	97
36) Tetrahydrofuran	9.31	42	79897	101.2995 ug/L	96
38) 1,1,1-Trichloroethane	9.62	97	159579	19.6959 ug/L	98
39) Cyclohexane	9.64	56	155547	19.1639 ug/L	99
40) 1,1-Dichloropropene	9.85	75	136078	20.3590 ug/L	97
41) Tert-Amyl-Methyl ether	9.99	73	1133338	102.3674 ug/L	99
42) Carbon Tetrachloride	10.00	117	146886	20.4820 ug/L	99

(#) = qualifier out of range (m) = manual integration
6M107890.D 8260WTR.M Sat May 05 15:05:43 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050512\6M107890.D Vial: 5
Acq On : 5 May 2012 14:42 Operator: MES
Sample : WG397118-02 20ug/L LCS 8260 Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 05 15:05:42 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

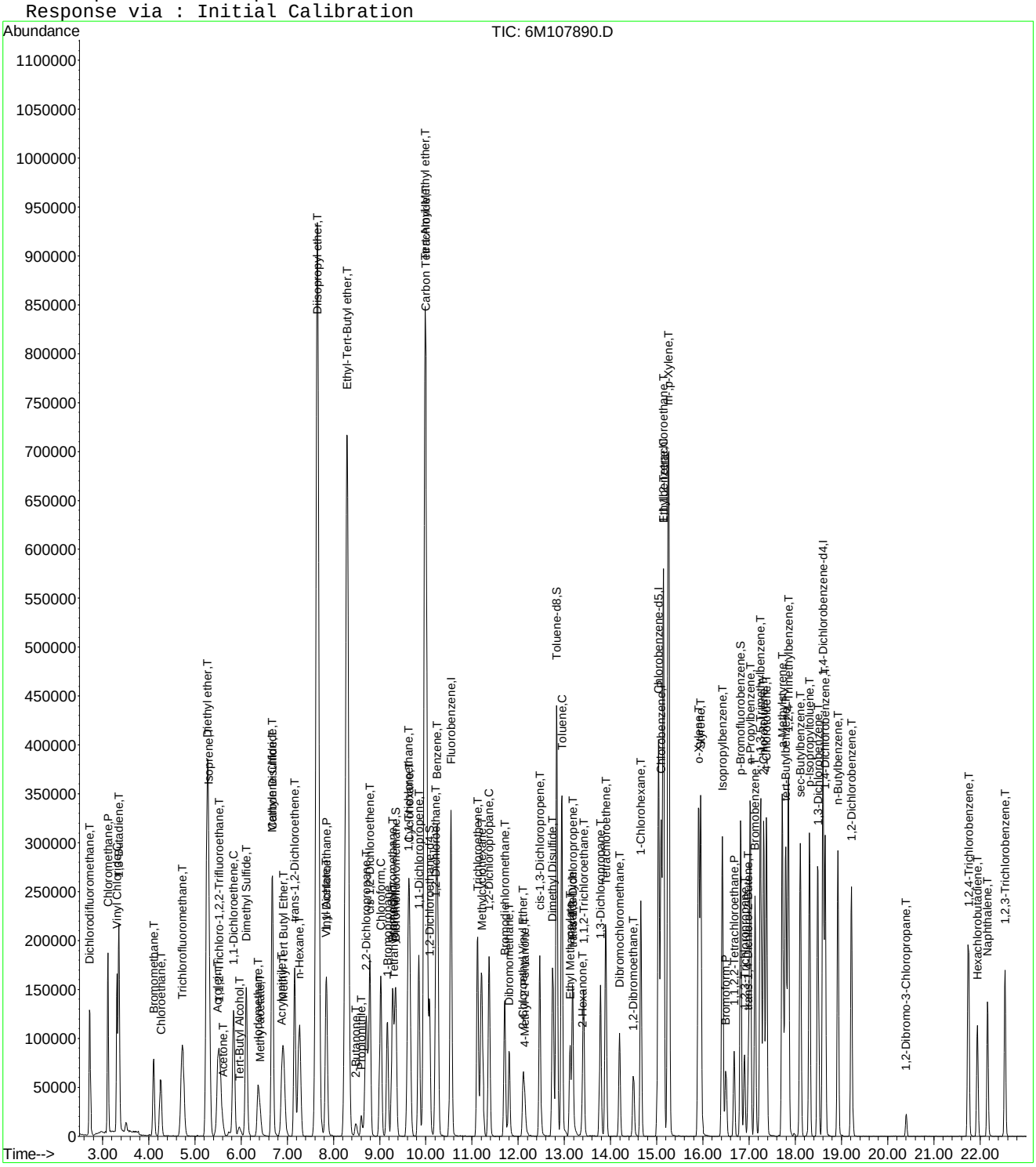
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	129579	20.3383 ug/L	98
46)	Benzene	10.25	78	389480	19.4758 ug/L	100
47)	Trichloroethene	11.12	130	98513	19.6399 ug/L	99
48)	Methylcyclohexane	11.22	83	118927	20.5591 ug/L	100
49)	1,2-Dichloropropane	11.37	63	105765	20.4848 ug/L	99
51)	Bromodichloromethane	11.72	83	130210	20.9947 ug/L	99
52)	Dibromomethane	11.80	93	50179	20.3242 ug/L	99
53)	2-Chloroethyl Vinyl Ether	12.10	63	38620	17.6641 ug/L	98
54)	4-Methyl-2-Pentanone	12.14	58	17852	19.8293 ug/L	93
55)	cis-1,3-Dichloropropene	12.47	75	139931	18.9456 ug/L	100
56)	Dimethyl Disulfide	12.75	79	68958	16.3712 ug/L	100
59)	Toluene	12.95	91	383782	18.8007 ug/L	100
60)	Ethyl Methacrylate	13.13	69	72479	19.8231 ug/L	98
61)	Paraldehyde	13.18	89	3231	58.9492 ug/L	77
62)	trans-1,3-Dichloropropene	13.19	75	108678	16.5473 ug/L	99
63)	1,1,2-Trichloroethane	13.42	97	65741	20.0511 ug/L	97
64)	2-Hexanone	13.39	43	26940	19.2129 ug/L	96
65)	1,3-Dichloropropane	13.78	76	114501	20.4782 ug/L	95
66)	Tetrachloroethene	13.90	166	92304	19.3615 ug/L	100
67)	Dibromochloromethane	14.20	129	80769	18.4242 ug/L	100
68)	1,2-Dibromoethane	14.49	107	61147	19.0949 ug/L	96
69)	1-Chlorohexane	14.66	91	108047	19.9882 ug/L	96
70)	Chlorobenzene	15.10	112	239160	18.4389 ug/L	100
71)	1,1,1,2-Tetrachloroethane	15.15	131	89870	19.2419 ug/L	99
72)	Ethylbenzene	15.15	106	126565	18.9177 ug/L	99
73)	m-,p-Xylene	15.26	106	305619	37.3682 ug/L	98
74)	o-Xylene	15.91	106	144724	18.5836 ug/L	99
75)	Styrene	15.95	104	244803	17.5864 ug/L	99
76)	Bromoform	16.50	173	43356	19.6300 ug/L	100
77)	Isopropylbenzene	16.42	105	319662	16.4922 ug/L	99
79)	1,1,2,2-Tetrachloroethane	16.68	83	63050	19.3434 ug/L	99
81)	1,2,3-Trichloropropane	16.90	110	19603	23.3255 ug/L	87
82)	trans-1,4-Dichloro-2-Buten	16.99	53	19577	18.9338 ug/L	96
83)	n-Propylbenzene	17.03	91	430135	18.9913 ug/L	100
84)	Bromobenzene	17.13	156	94326	18.6604 ug/L	99
85)	1,3,5-Trimethylbenzene	17.25	105	293158	18.9726 ug/L	98
86)	2-Chlorotoluene	17.31	91	267958	17.8182 ug/L	99
87)	4-Chlorotoluene	17.37	91	273697	18.1038 ug/L	100
88)	a-Methylstyrene	17.72	118	160242	20.2221 ug/L	98
89)	tert-Butylbenzene	17.79	134	57016	18.2706 ug/L	98
90)	1,2,4-Trimethylbenzene	17.85	105	319244	19.5420 ug/L	98
91)	sec-Butylbenzene	18.11	105	331507	18.8742 ug/L	100
92)	p-Isopropyltoluene	18.30	119	277366	19.6595 ug/L	99
93)	1,3-Dichlorobenzene	18.50	146	167843	18.8539 ug/L	99
94)	1,4-Dichlorobenzene	18.65	146	171760	18.3968 ug/L	98
95)	n-Butylbenzene	18.93	91	250968	20.4202 ug/L	100
96)	1,2-Dichlorobenzene	19.22	146	149317	18.5581 ug/L	98
97)	1,2-Dibromo-3-Chloropropan	20.40	75	8553	17.2403 ug/L	92
98)	1,2,4-Trichlorobenzene	21.75	180	86683	19.7934 ug/L	99
99)	Hexachlorobutadiene	21.95	225	33527	19.1431 ug/L	98
100)	Naphthalene	22.16	128	152408	18.2767 ug/L	100
101)	1,2,3-Trichlorobenzene	22.54	180	75952	19.9539 ug/L	95

(#) = qualifier out of range (m) = manual integration
6M107890.D 8260WTR.M Sat May 05 15:05:43 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050512\6M107890.D Vial: 5
Acq On : 5 May 2012 14:42 Operator: MES
Sample : WG397118-02 20ug/L LCS 8260 Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 5 15:05 2012 Quant Results File: 8260WTR.RES

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



2.1.2 RSK 175

2.1.2.1 Summary Data

Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Methane. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Samples: 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: 45807
Approved By: Franci Bolden

Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-27-042612 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG396527 **Analyst:** MDA **Run Date:** 04/30/2012 17:39
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 16G32114
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	430		5.00	1.00
Carbon Dioxide	124-38-9	163000		10000	2500

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-10-042612 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG396527 **Analyst:** MDA **Run Date:** 04/30/2012 18:07
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 16G32117
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	11.8		5.00	1.00
Carbon Dioxide	124-38-9	30600		10000	2500

Sample #: L12040928-05 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-31-042612 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG396527 **Analyst:** MDA **Run Date:** 04/30/2012 19:04
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** 16G32123
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	397		5.00	1.00
Carbon Dioxide	124-38-9	3280		10000	2500

Certificate of Analysis

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-27-042612-MS **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG396527 **Analyst:** MDA **Run Date:** 04/30/2012 17:48
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 16G32115
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	2150	E	5.00	1.00
Carbon Dioxide	124-38-9	202000		10000	2500

E	Semiquantitative result (out of calibration range)

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-27-042612-MSD **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG396527 **Analyst:** MDA **Run Date:** 04/30/2012 17:58
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 16G32116
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	1830	E	5.00	1.00
Carbon Dioxide	124-38-9	190000		10000	2500

E	Semiquantitative result (out of calibration range)

2.1.2.2 QC Summary Data

RSK-175 - Example Calculation for Methane

1.0 Linear Calibration Models

Option A - Average RF Method

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

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

Option B - Agilent Linear Regression Constant

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

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

2.0 Calculate the concentration in extract, Cx

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

3.0 Calculate the concentration in sample

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

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

RSK-175 - Example Calculation for Carbon Dioxide

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

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

Step 1 - Calculate the concentration in extract, Cx

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

Step 2 - Calculate the concentration in sample

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

Where:

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

Other Notes:

Temperature of headspace = 40 C = 313 K

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

Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID:

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

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

Comments: files 16G63290 and 16G32099 not used

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

Approved: May 01, 2012

Microbac

Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID:

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

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

Comments: files 16G63290 and 16G32099 not used

Comments

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

Approved: May 01, 2012

Page: 2

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154145

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

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154157

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

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154158

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG396526-09	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-10	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-11	15	mL	15	mL					5.47	mL	5.47	mL	40

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154066

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG396526-09	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-10	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-11	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040939-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396527-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396527-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12040681-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040898-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040928-08	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
WG396527-04	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
WG396527-05	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12040928-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040936-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040928-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040928-10	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12040898-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040898-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040898-08	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12040933-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040938-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040928-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040935-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396527-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12040898-10	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12040898-12	15	mL	15	mL					5.47	mL	5.47	mL	40

Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
01-MAY-2012

Secondary Reviewer:
01-MAY-2012

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

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: RSK175 **AAB#:** WG396527

Login Number: L12040928

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-27-042612	01	04/26/12							7		04/30/12	4.3	7	
MW-10-042612	03	04/26/12							7		04/30/12	4.3	7	
MW-31-042612	05	04/26/12							7		04/30/12	4.3	7	
MW-27-042612-MS	08	04/26/12							7		04/30/12	4.3	7	
MW-27-042612-MSD	10	04/26/12							7		04/30/12	4.3	7	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2397717
Report generated 05/02/2012 13:52

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396527
Blank File ID: 16G32103
Blank Sample ID: WG396527-01
Prep Date: 04/30/12 15:51
Instrument ID: HP16
Analyzed Date: 04/30/12 15:51
Method: RSK175
Analyst: MDA

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396527-02	16G32104	04/30/12 16:00	01
MW-27-042612	L12040928-01	16G32114	04/30/12 17:39	01
MW-27-042612-MS	L12040928-08	16G32115	04/30/12 17:48	01
MW-27-042612-MSD	L12040928-10	16G32116	04/30/12 17:58	01
MW-10-042612	L12040928-03	16G32117	04/30/12 18:07	01
MW-31-042612	L12040928-05	16G32123	04/30/12 19:04	01

Report Name: BLANK_SUMMARY
PDF File ID: 2397718
Report generated 05/02/2012 13:52

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 04/30/12 15:51 Sample ID: WG396527-01
Instrument ID: HP16 Run Date: 04/30/12 15:51 Prep Method: 5021
File ID: 16G32103 Analyst: MDA Method: RSK175
Workgroup (AAB#): WG396527 Matrix: Water Units: ug/L
Contract #: Cal ID: HP16-30-APR-12

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

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

Report Name:BLANK
PDF ID: 2397728
02-MAY-2012 13:52

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 **Run Date:** 04/30/2012 **Sample ID:** WG396527-02
Instrument ID: HP16 **Run Time:** 16:00 **Prep Method:** 5021
File ID: 16G32104 **Analyst:** MDA **Method:** RSK175
Workgroup (AAB#): WG396527 **Matrix:** Water **Units:** ug/L
QC Key: WATERLOO **Lot#:** STD45308 **Cal ID:** HP16 - 30-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Methane	116	107	91.9	56 - 140	
Carbon Dioxide	31300	24500	78.2	10 - 200	

LCS - Modified 03/06/2008
PDF File ID: 2397719
Report generated: 05/02/2012 13:52

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:HP16- 30-APR-12 Worknum:WG396527

Instrument ID:HP16 Contract #: Prep Method:5021

Parent ID:L12040928-01 File ID:16G32114 Dil:1 Method:RSK175

Sample ID:L12040928-08 MS File ID:16G32115 Dil:1 Matrix:Water

Sample ID:L12040928-10 MSD File ID:16G32116 Dil:1 Units:ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Methane	430	116	2150	1480	116	1830	1200	16.0	56 - 140	40	*
Carbon Dioxide	163000	31300	202000	125	31300	190000	89.1	5.77	10 - 200	40	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2397729

Report generated 05/02/2012 13:52

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

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

Mon Apr 30 15:18:58 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 Run Date: 04/30/2012 Sample ID: WG396526-08
Instrument ID: HP16 Run Time: 15:24 Method: RSK175
File ID: 16G32101 Analyst: MDA QC Key: WATERLOO
ICal Workgroup: WG396526 Cal ID: HP16 - 30-APR-12

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

* Exceeds %D Limit

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2397720
Report generated 05/02/2012 13:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 04/30/2012 Sample ID: WG396526-09

Instrument ID: HP16 Run Time: 15:41 Method: RSK175

File ID: 16G32102 Analyst: MDA QC Key: WATERLOO

Workgroup (AAB#): WG396527 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	218	ug/L	173000	4.40	20	
carbon dioxide		62700	66100	ug/L	6020	5.48	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2397721

Report generated 05/02/2012 13:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 04/30/2012 Sample ID: WG396526-10

Instrument ID: HP16 Run Time: 17:30 Method: RSK175

File ID: 16G32113 Analyst: MDA QC Key: WATERLOO

Workgroup (AAB#): WG396527 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	210	ug/L	167000	7.73	20	
carbon dioxide		62700	60300	ug/L	5500	3.71	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2397721

Report generated 05/02/2012 13:52

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 04/30/2012 Sample ID: WG396526-11

Instrument ID: HP16 Run Time: 19:23 Method: RSK175

File ID: 16G32125 Analyst: MDA QC Key: WATERLOO

Workgroup (AAB#): WG396527 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	210	ug/L	167000	7.72	20	
carbon dioxide		62700	53900	ug/L	4910	14.0	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2397721

Report generated 05/02/2012 13:52

2.1.2.3 Sample Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32114.D\FID1A.CH Vial: 10
Signal #2 : C:\MSDchem\1\DATA\043012\16G32114.D\TCD2B.CH
Acq On : 30 Apr 2012 17:39 Operator: MDA
Sample : L12040928-01 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 17:44:49 2012 Quant Results File: RSK2EXT.RES

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

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

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	45549550	251.196	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	1.21	5470	0.019	umol/
4) T	ethane	0.00	0	N.D.	umol/
5) T	propane	3.90	5136	0.012	umol/
7) T	carbon dioxide	0.20	197477143	34594.464	umol/

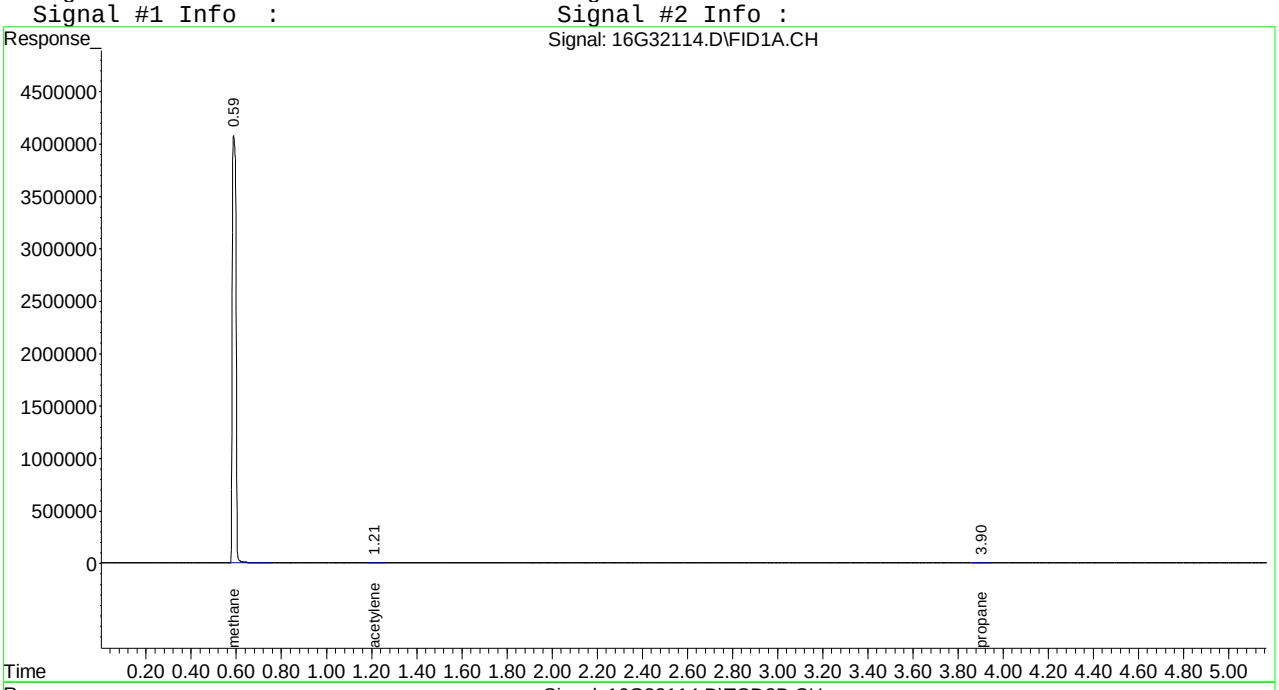
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32114.D RSK2EXT.M Mon Apr 30 17:44:49 2012 Page 1

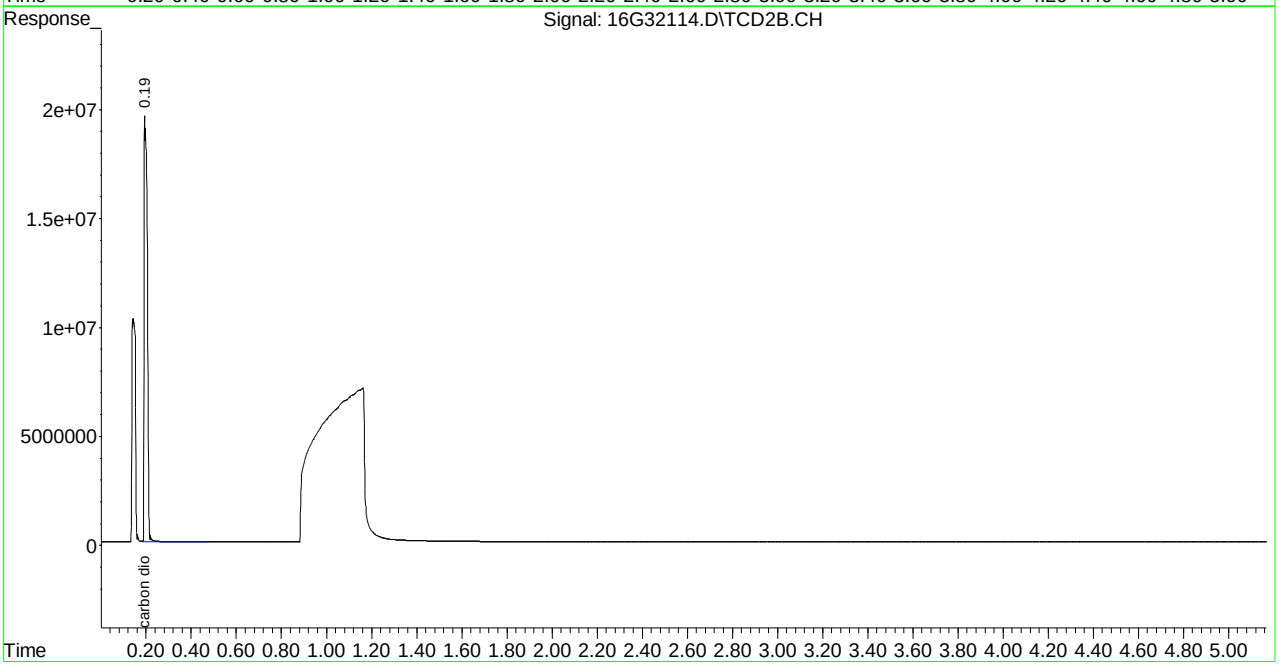
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32114.D\FID1A.CH Vial: 10
Signal #2 : C:\MSDchem\1\DATA\043012\16G32114.D\TCD2B.CH
Acq On : 30 Apr 2012 17:39 Operator: MDA
Sample : L12040928-01 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 17:44 2012 Quant Results File: RSK2EXT.RES

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

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





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32117.D\FID1A.CH Vial: 13
Signal #2 : C:\MSDchem\1\DATA\043012\16G32117.D\TCD2B.CH
Acq On : 30 Apr 2012 18:07 Operator: MDA
Sample : L12040928-03 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 18:12:58 2012 Quant Results File: RSK2EXT.RES

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

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

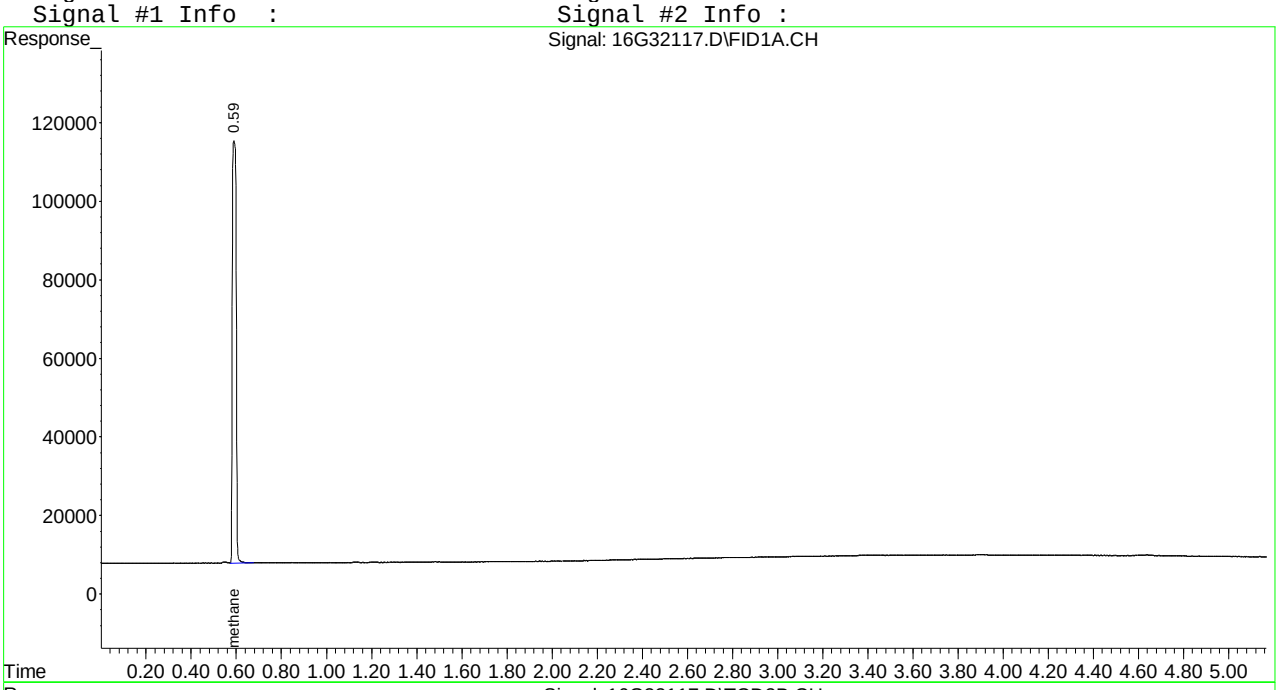
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	1246374	6.873	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	0.00	0	N.D.	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.20	37177120	6512.767	umol/

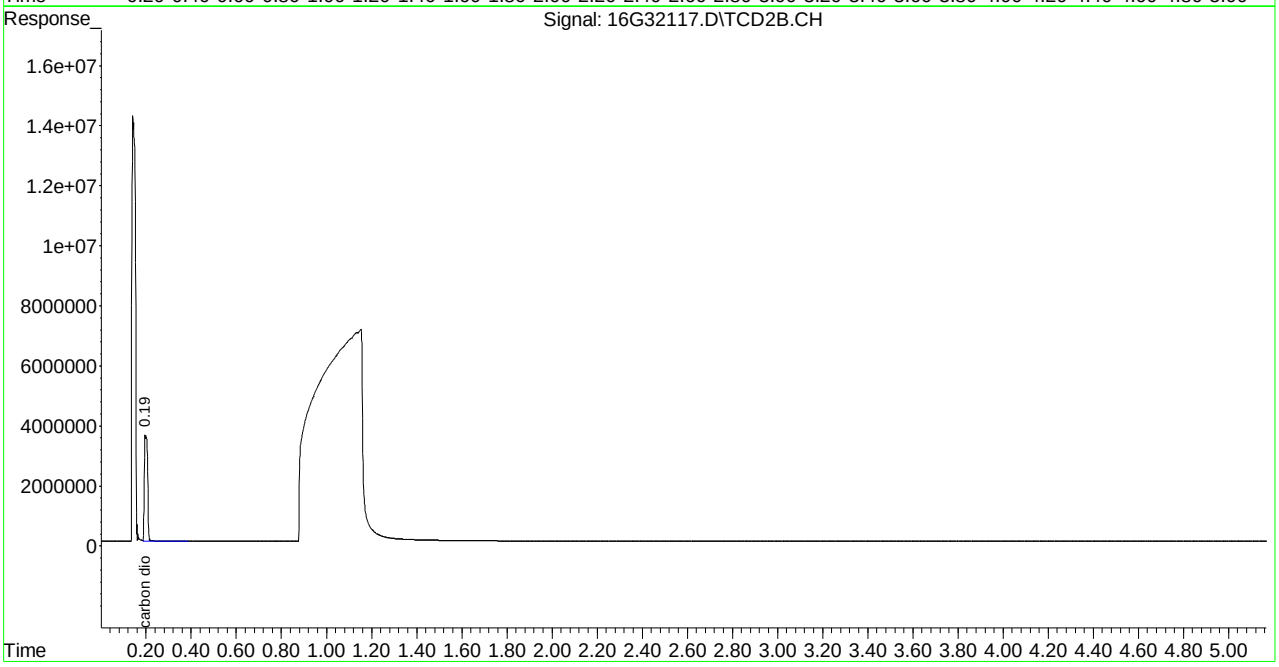
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32117.D RSK2EXT.M Mon Apr 30 18:12:58 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\043012\16G32117.D\FID1A.CH Vial: 13
Signal #2 : C:\MSDchem\1\DATA\043012\16G32117.D\TCD2B.CH
Acq On : 30 Apr 2012 18:07 Operator: MDA
Sample : L12040928-03 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 18:12 2012 Quant Results File: RSK2EXT.RES

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

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





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32123.D\FID1A.CH Vial: 19
Signal #2 : C:\MSDchem\1\DATA\043012\16G32123.D\TCD2B.CH
Acq On : 30 Apr 2012 19:04 Operator: MDA
Sample : L12040928-05 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 19:09:37 2012 Quant Results File: RSK2EXT.RES

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

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

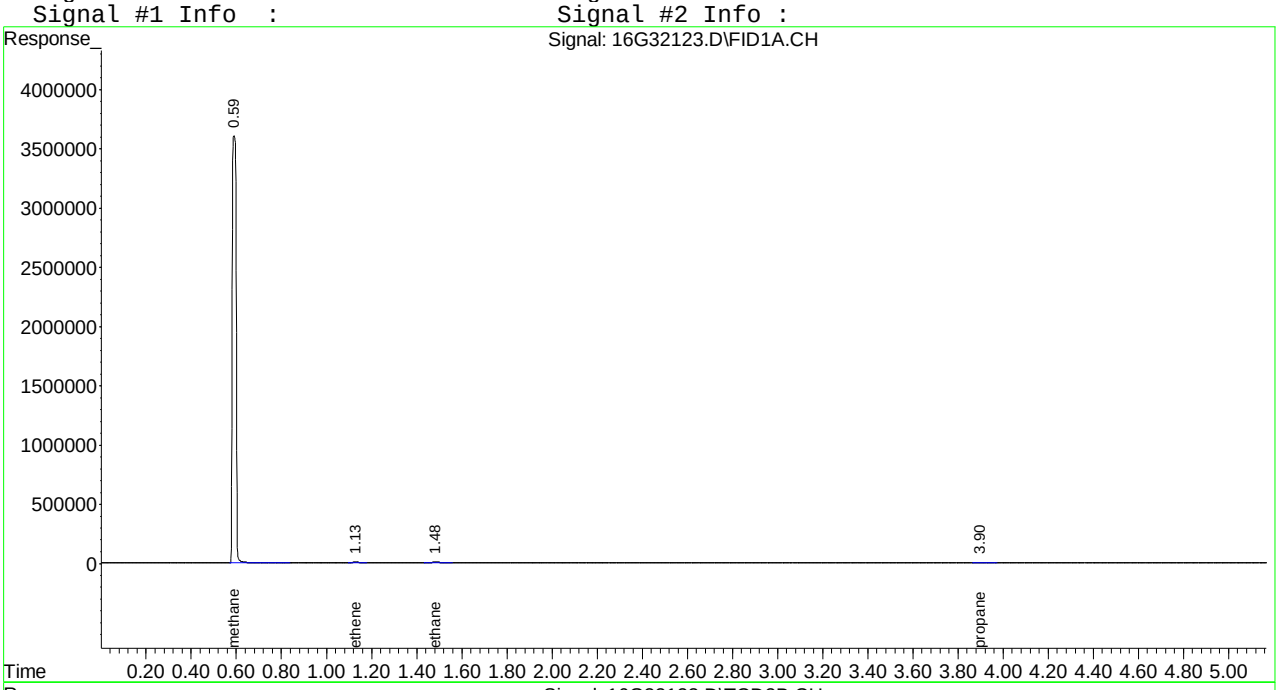
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	41986146	231.544	umol/
2) T	ethene	1.13	65583	0.221	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	1.48	70840	0.233	umol/
5) T	propane	3.90	10655	0.024	umol/
7) T	carbon dioxide	0.20	3988030	698.631	umol/

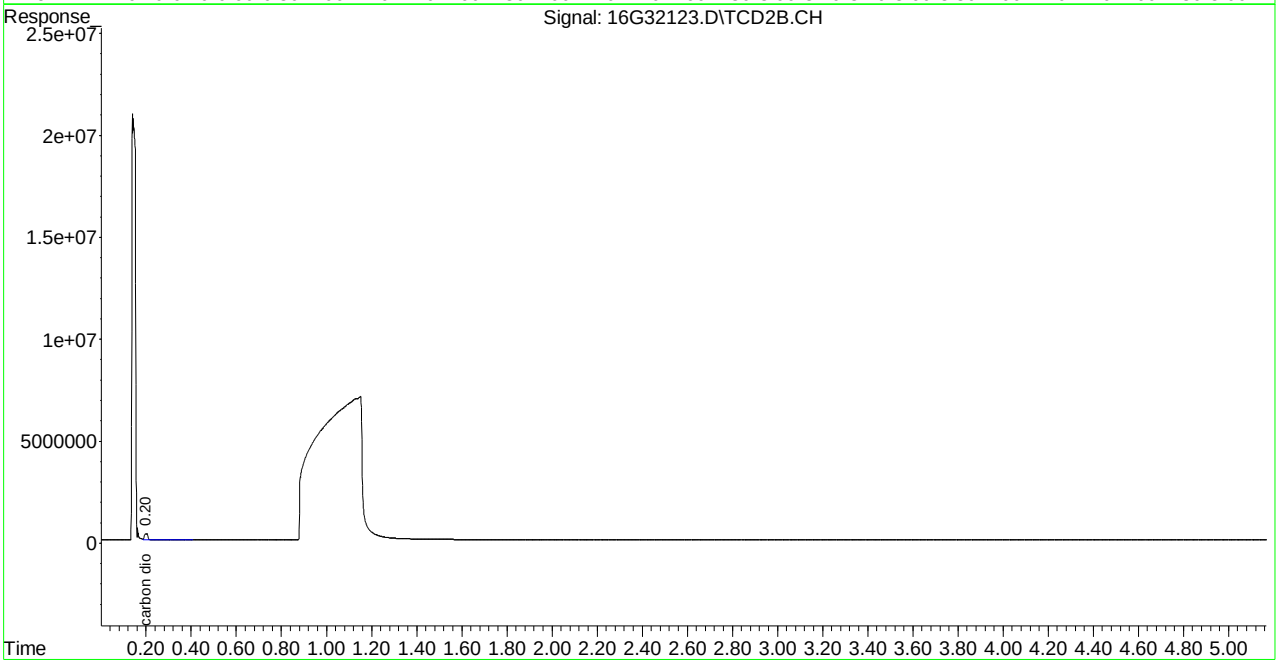
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32123.D RSK2EXT.M Mon Apr 30 19:09:37 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\043012\16G32123.D\FID1A.CH Vial: 19
Signal #2 : C:\MSDchem\1\DATA\043012\16G32123.D\TCD2B.CH
Acq On : 30 Apr 2012 19:04 Operator: MDA
Sample : L12040928-05 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 19:09 2012 Quant Results File: RSK2EXT.RES

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

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





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32115.D\FID1A.CH Vial: 11
Signal #2 : C:\MSDchem\1\DATA\043012\16G32115.D\TCD2B.CH
Acq On : 30 Apr 2012 17:48 Operator: MDA
Sample : L12040928-08 MS A RSK175EXT Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 17:53:54 2012 Quant Results File: RSK2EXT.RES

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

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

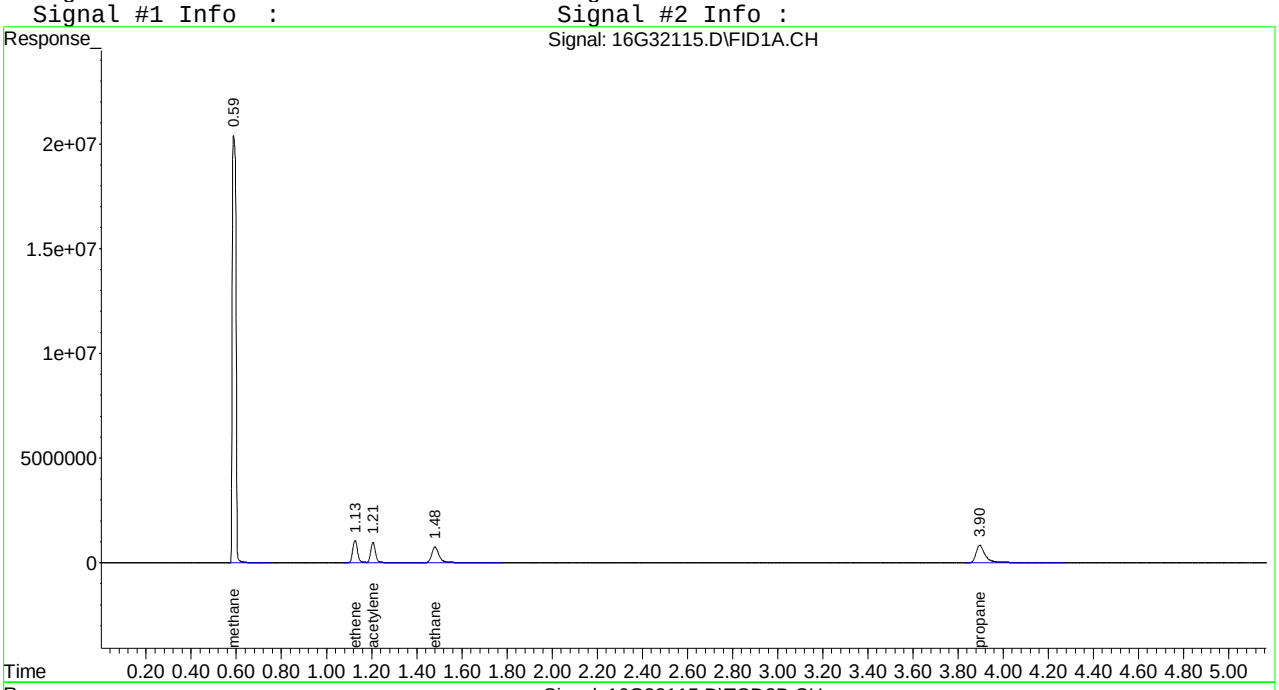
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	227477541	1254.489	umol/
2) T	ethene	1.13	15602209	52.637	umol/
3) T	acetylene	1.21	14177457	48.958	umol/
4) T	ethane	1.48	16624469	54.694	umol/
5) T	propane	3.90	23005886	52.420	umol/
7) T	carbon dioxide	0.19	245148089	42945.561	umol/

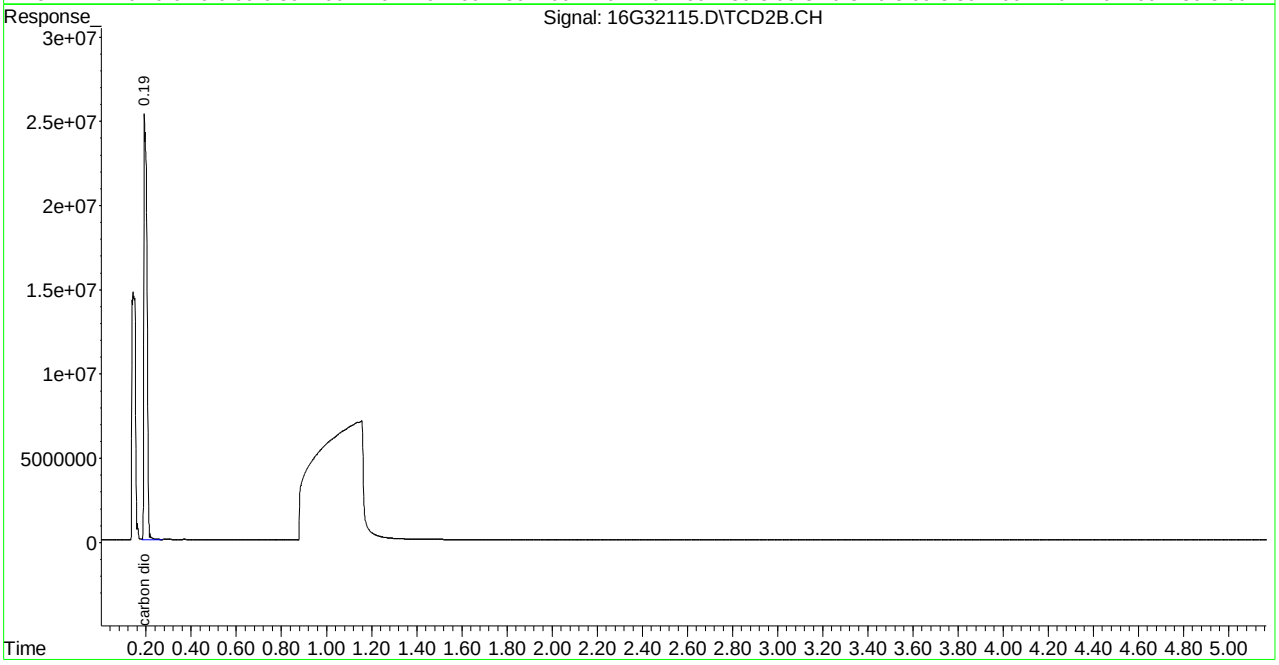
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32115.D RSK2EXT.M Mon Apr 30 17:53:54 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\043012\16G32115.D\FID1A.CH Vial: 11
Signal #2 : C:\MSDchem\1\DATA\043012\16G32115.D\TCD2B.CH
Acq On : 30 Apr 2012 17:48 Operator: MDA
Sample : L12040928-08 MS A RSK175EXT Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 17:53 2012 Quant Results File: RSK2EXT.RES

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

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





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32116.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDchem\1\DATA\043012\16G32116.D\TCD2B.CH
Acq On : 30 Apr 2012 17:58 Operator: MDA
Sample : L12040928-10 MSD A RSK175EXT Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 18:03:59 2012 Quant Results File: RSK2EXT.RES

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

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

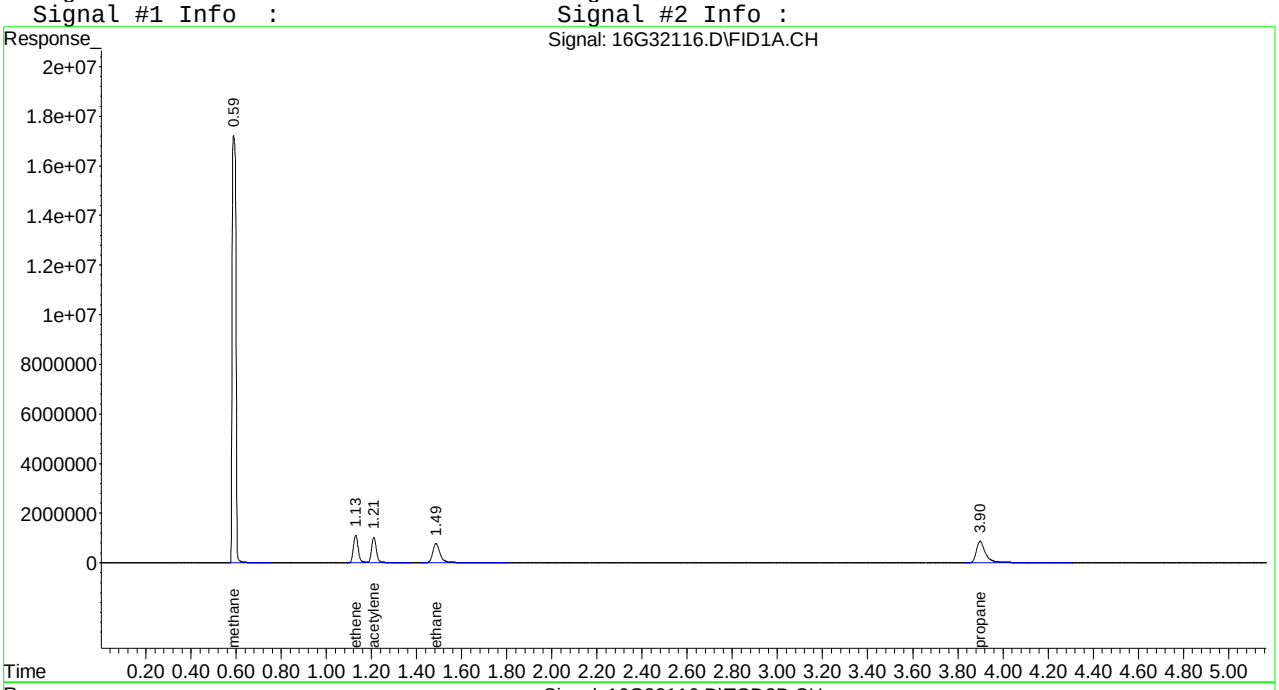
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	193834173	1068.953	umol/
2) T	ethene	1.13	16213875	54.701	umol/
3) T	acetylene	1.21	15114024	52.193	umol/
4) T	ethane	1.49	17214392	56.634	umol/
5) T	propane	3.90	23883622	54.420	umol/
7) T	carbon dioxide	0.19	231389006	40535.216	umol/

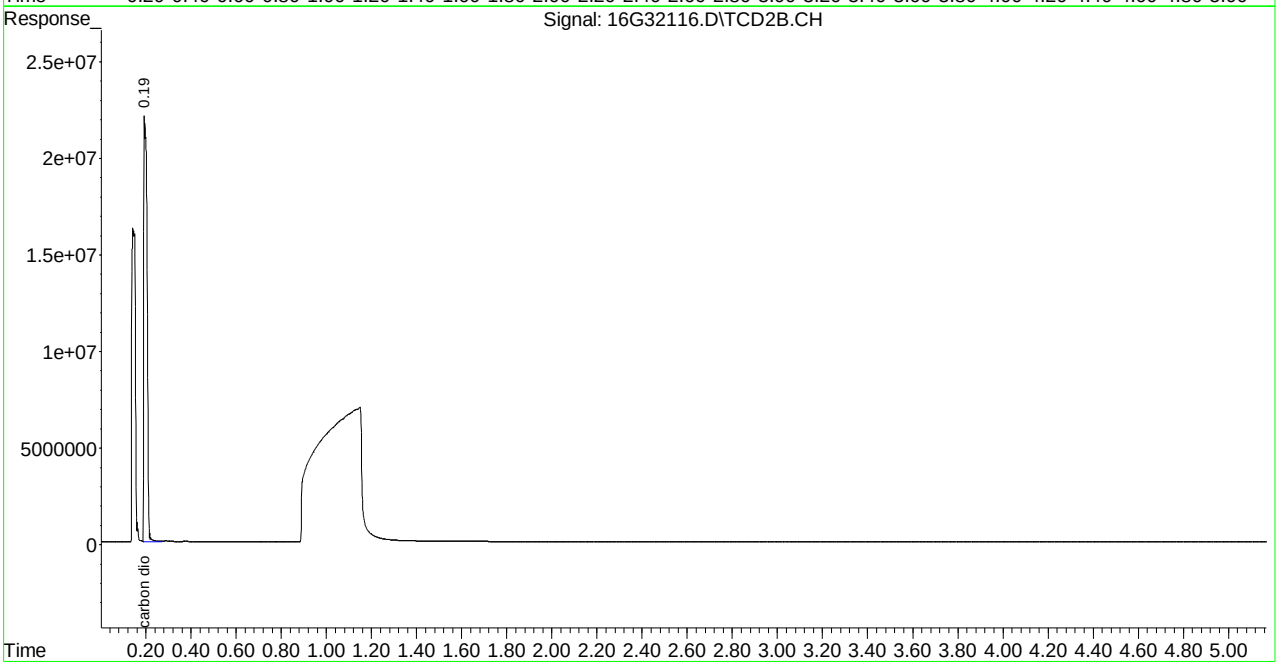
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32116.D RSK2EXT.M Mon Apr 30 18:03:59 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\043012\16G32116.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDchem\1\DATA\043012\16G32116.D\TCD2B.CH
Acq On : 30 Apr 2012 17:58 Operator: MDA
Sample : L12040928-10 MSD A RSK175EXT Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 18:03 2012 Quant Results File: RSK2EXT.RES

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

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





2.1.2.4 Standards Data

Quantitation Report (Not Reviewed)

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

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

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

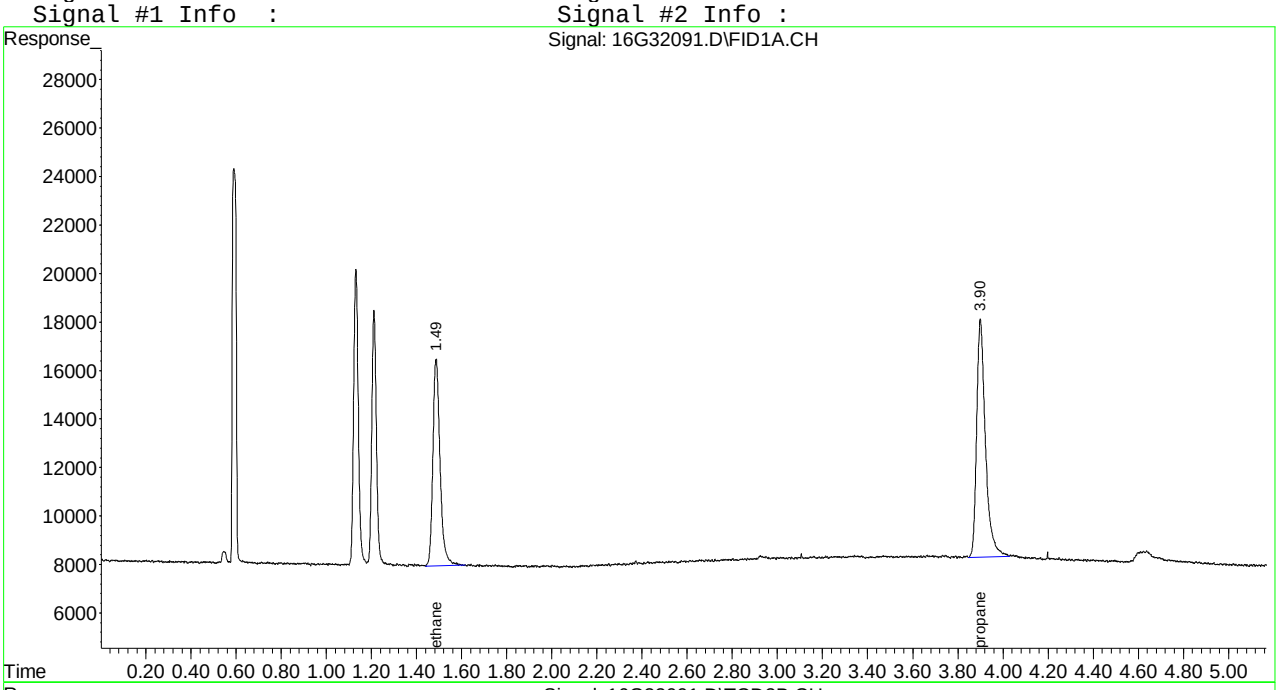
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.00	0	N.D.	umol/d
2) T	ethene	0.00	0	N.D.	umol/d
3) T	acetylene	0.00	0	N.D.	umol/d
4) T	ethane	1.49	188654	0.648	umol/
5) T	propane	3.90	265941	0.638	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/d

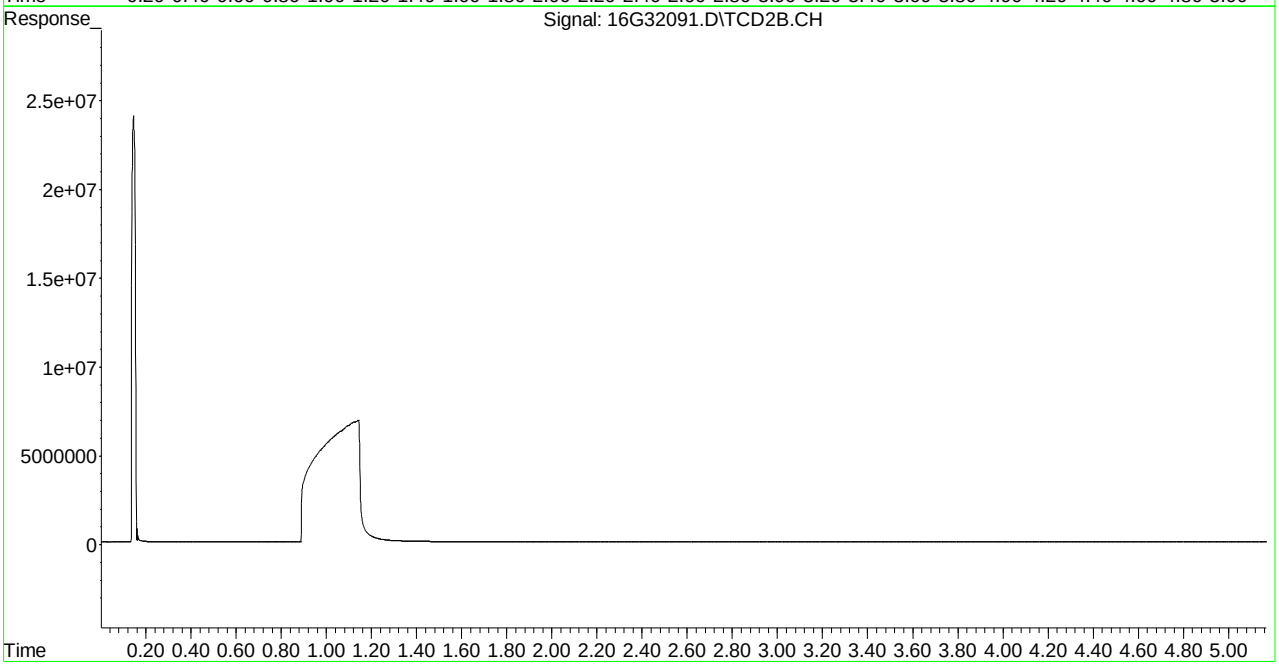
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32091.D RSK2EXT.M Mon Apr 30 14:45:33 2012 Page 1

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

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

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





Quantitation Report (Not Reviewed)

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

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

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

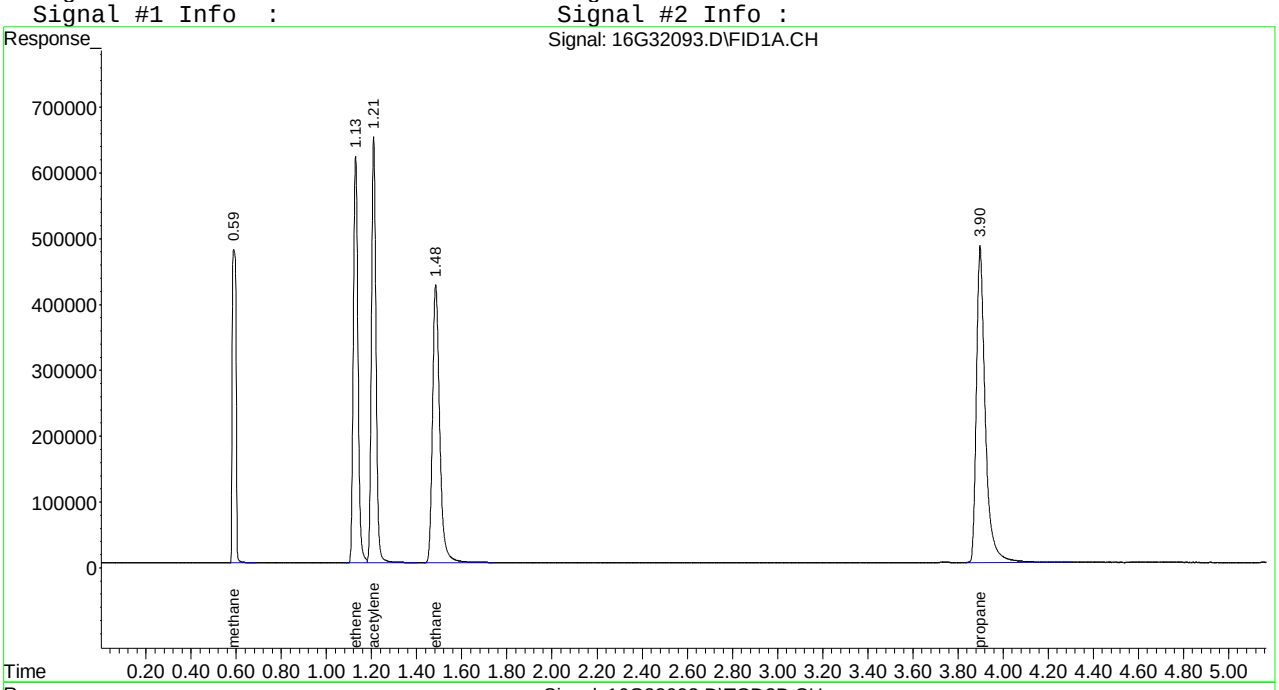
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	5543604	28.647	umol/
2) T	ethene	1.13	8839249	28.434	umol/
3) T	acetylene	1.21	9213469	29.702	umol/
4) T	ethane	1.48	9301672	29.165	umol/
5) T	propane	3.90	13193792	28.593	umol/
7) T	carbon dioxide	0.20	20541926	3441.116	umol/

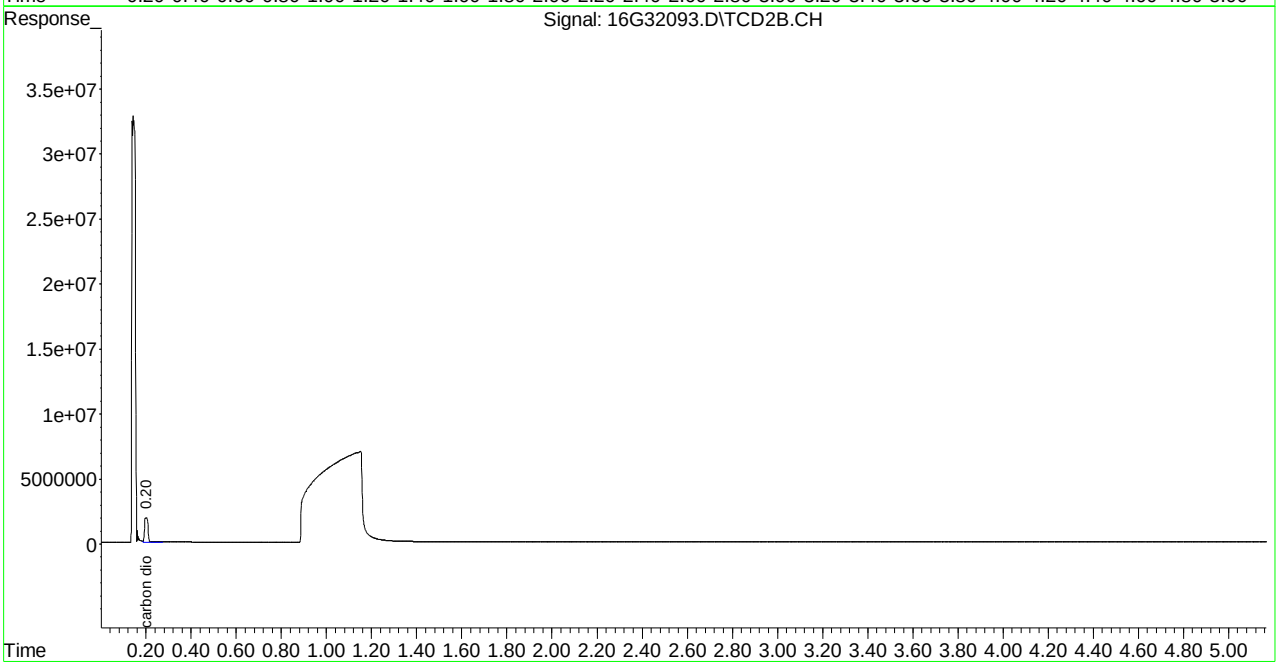
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32093.D RSK2EXT.M Mon Apr 30 14:04:00 2012 Page 1

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

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

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





Quantitation Report (Not Reviewed)

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

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

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

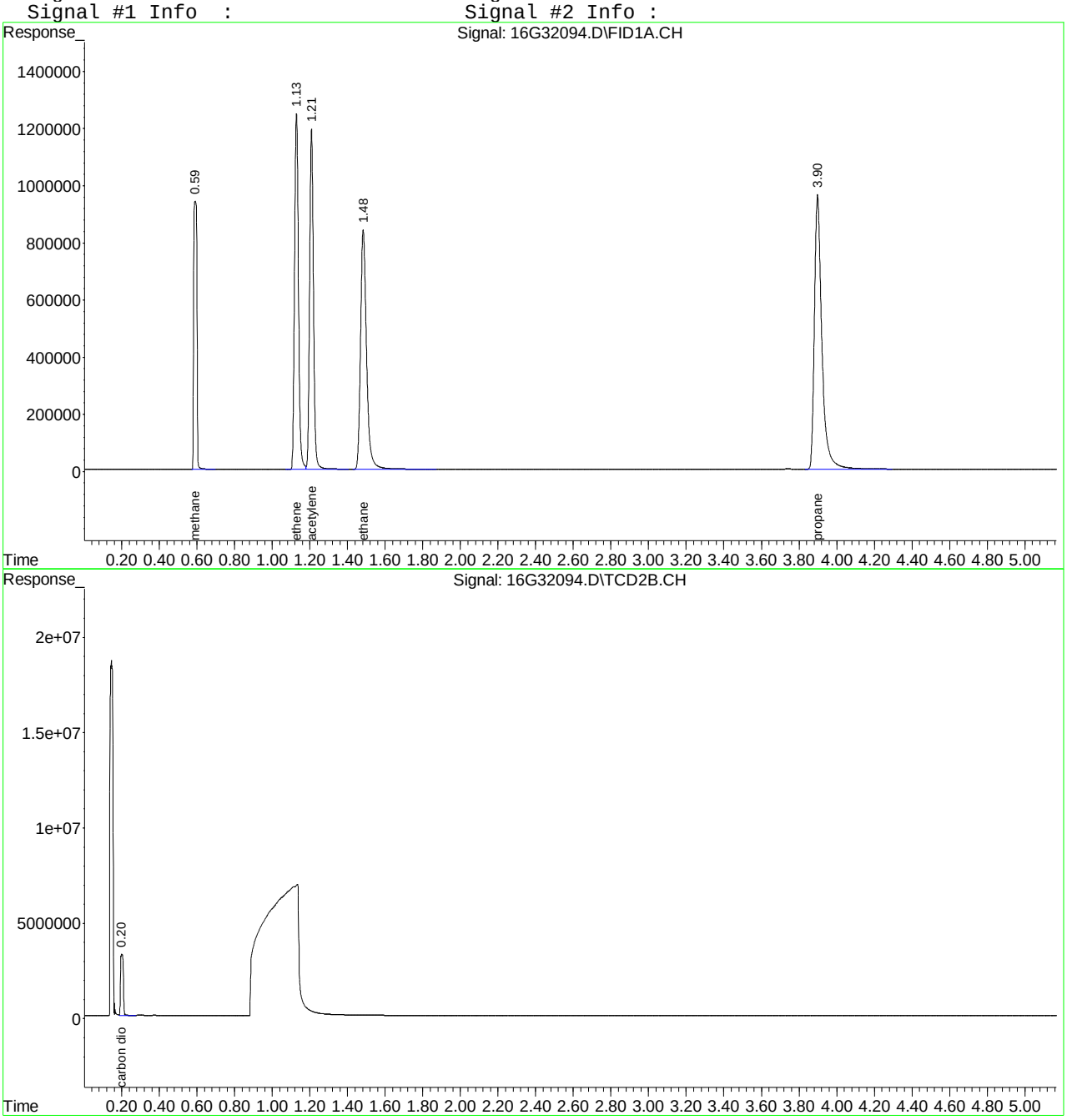
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	10967402	56.675	umol/
2) T	ethene	1.13	17874985	57.501	umol/
3) T	acetylene	1.21	17012722	54.845	umol/
4) T	ethane	1.48	18525237	58.085	umol/
5) T	propane	3.90	26527253	57.489	umol/
7) T	carbon dioxide	0.20	34639522	5802.700	umol/

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

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

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

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



Quantitation Report (Not Reviewed)

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

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

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

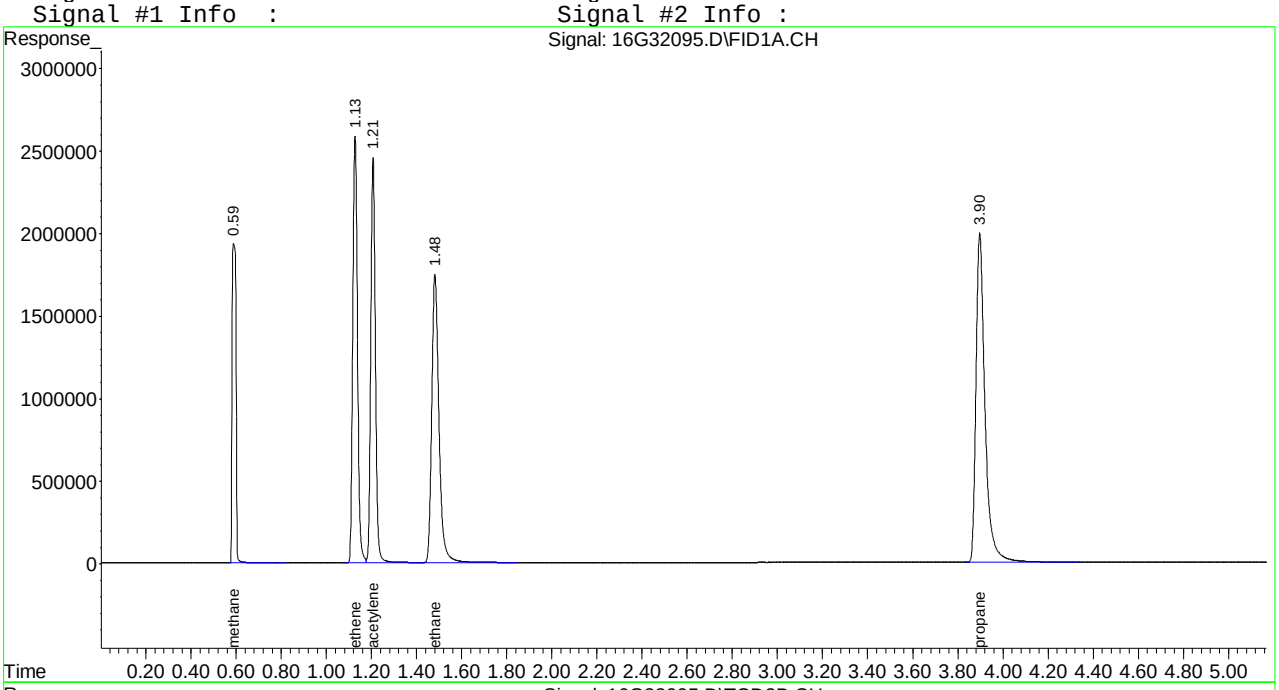
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22928576	118.486 umol/
2) T	ethene	1.13	37444591	120.453 umol/
3) T	acetylene	1.21	35336293	113.917 umol/
4) T	ethane	1.48	38718775	121.400 umol/
5) T	propane	3.90	55608118	120.511 umol/
7) T	carbon dioxide	0.20	73011522	12230.652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

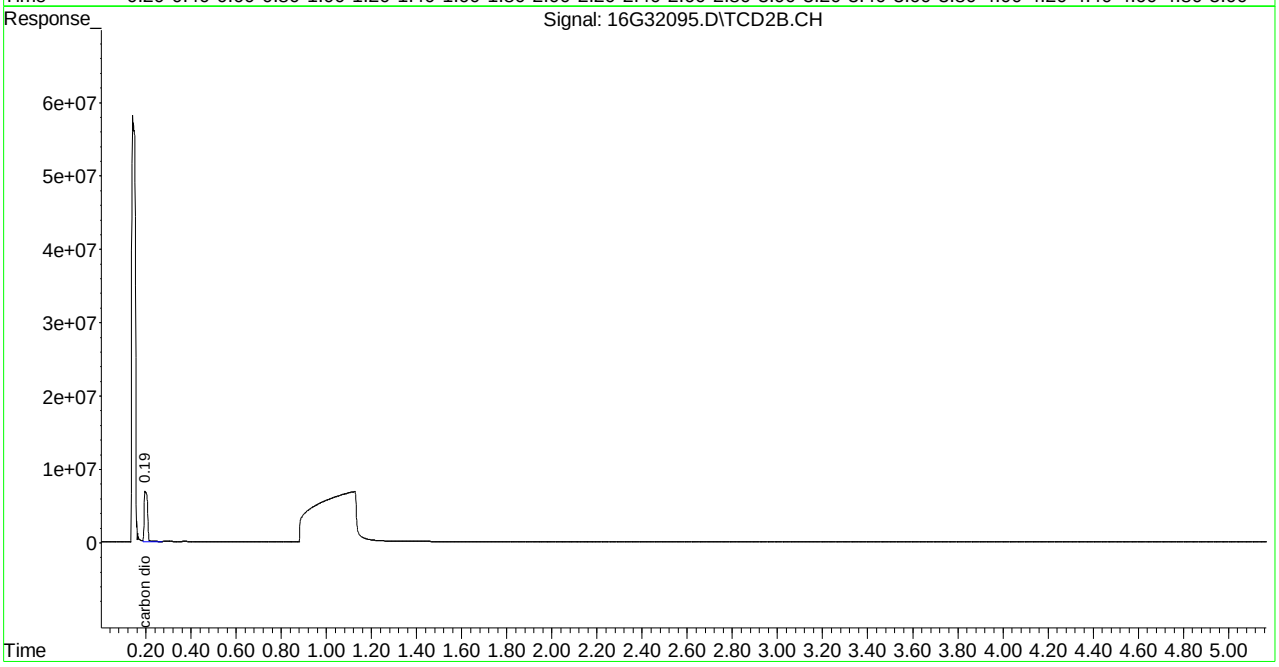
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32095.D RSK2EXT.M Mon Apr 30 14:22:09 2012 Page 1

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

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

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





Quantitation Report (Not Reviewed)

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

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

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

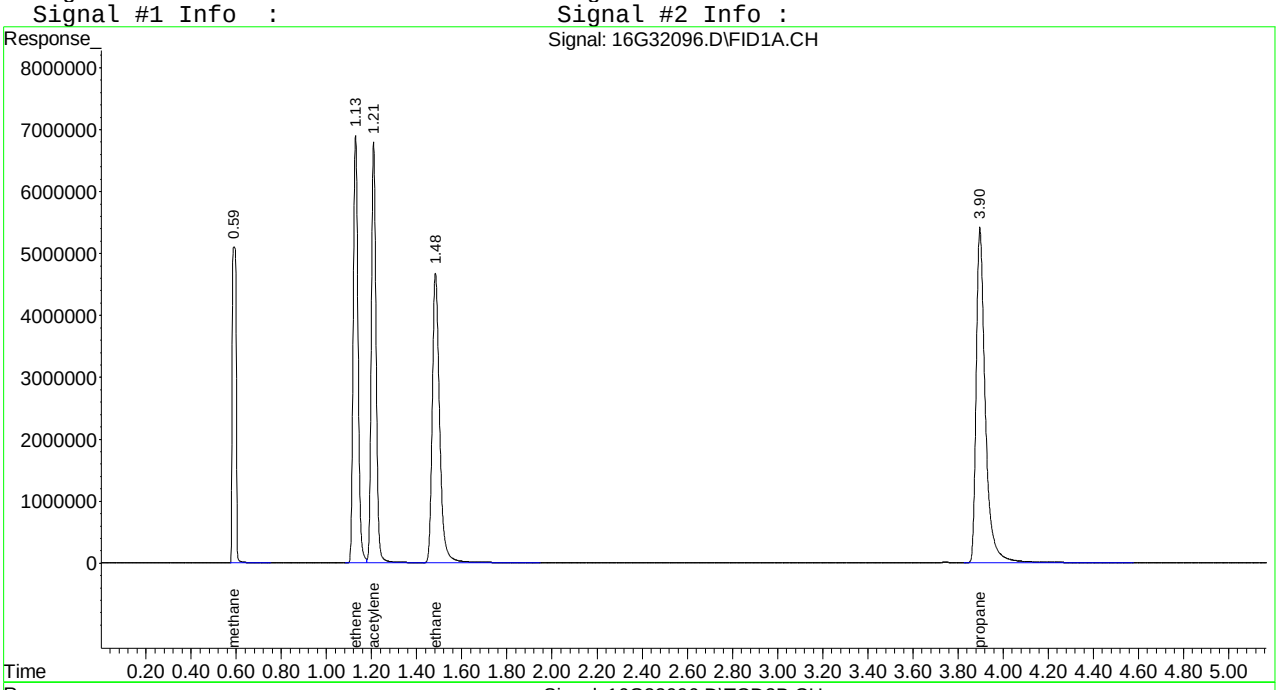
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	61151880	316.010	umol/
2) T	ethene	1.13	102124387	328.518	umol/
3) T	acetylene	1.21	100384614	323.619	umol/
4) T	ethane	1.48	105345556	330.304	umol/
5) T	propane	3.90	152068426	329.556	umol/
7) T	carbon dioxide	0.20	190381445	31892.078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

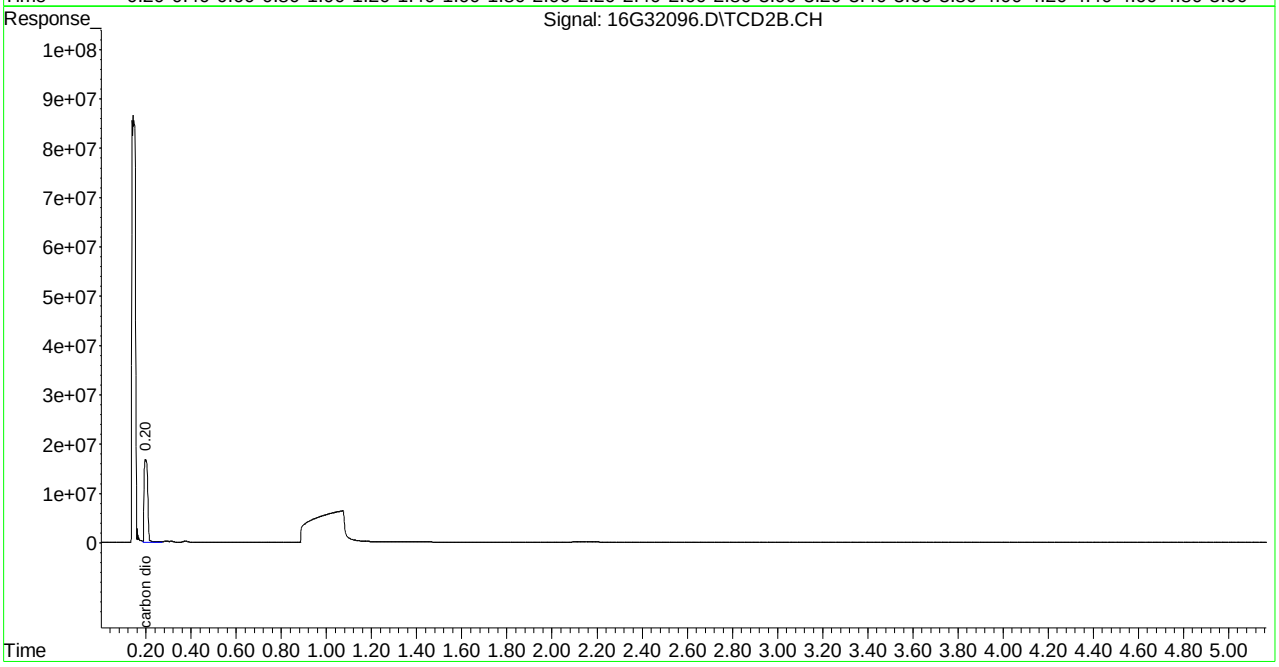
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32096.D RSK2EXT.M Mon Apr 30 14:31:51 2012 Page 1

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

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

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





Quantitation Report (Not Reviewed)

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

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

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

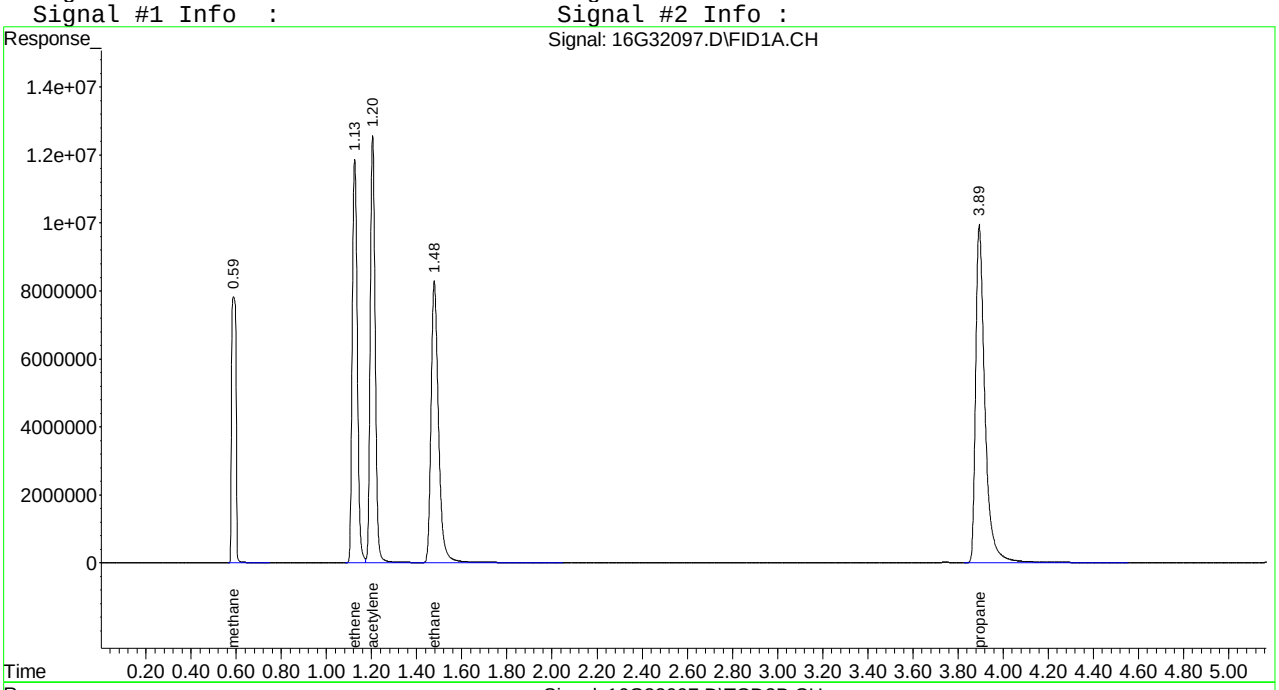
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	105407837	544.709 umol/
2) T	ethene	1.13	184568763	593.729 umol/
3) T	acetylene	1.20	194109593	625.769 umol/
4) T	ethane	1.48	190467929	597.199 umol/
5) T	propane	3.89	283665394	614.747 umol/
7) T	carbon dioxide	0.19	351812796	58934.531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

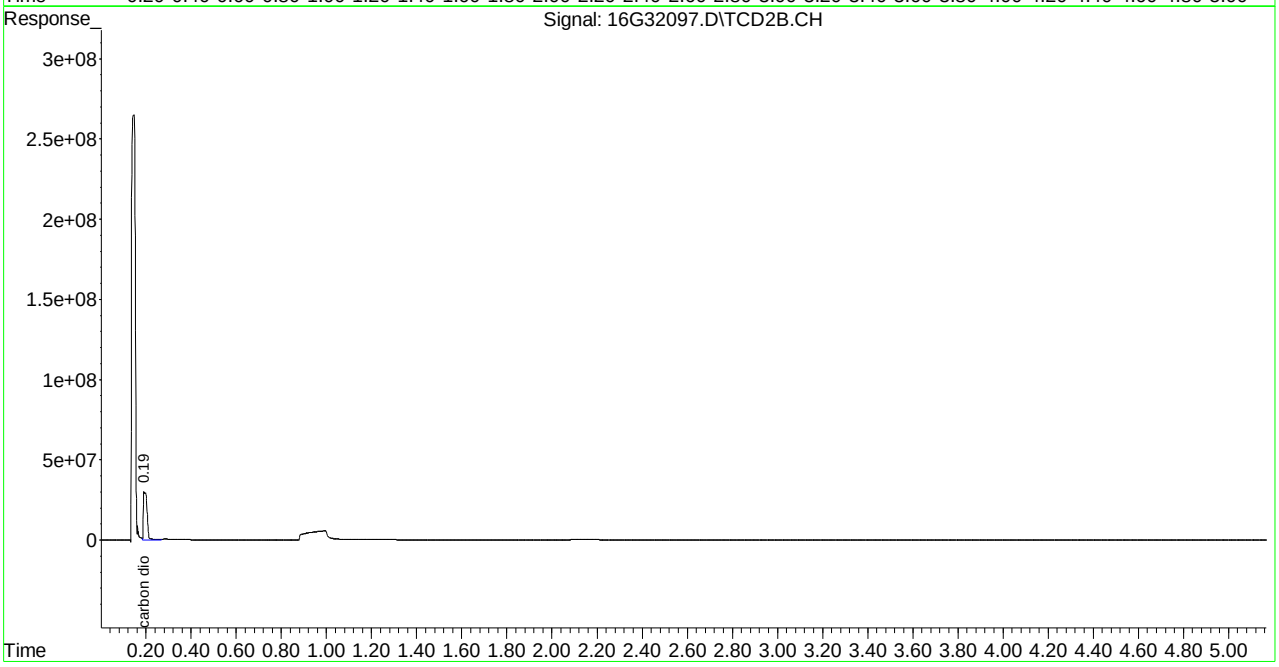
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32097.D RSK2EXT.M Mon Apr 30 14:40:49 2012 Page 1

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

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

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





Quantitation Report (Not Reviewed)

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

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

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

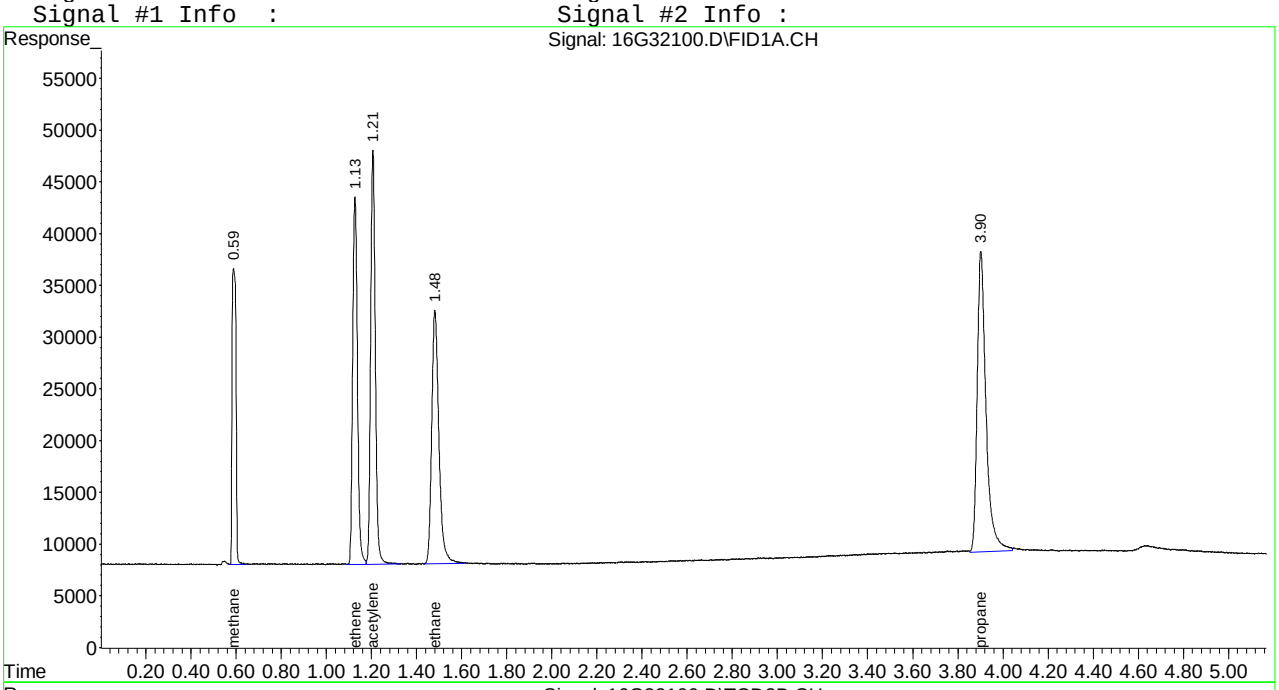
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	339694	1.927 umol/
2) T	ethene	1.13	518903	1.845 umol/
3) T	acetylene	1.21	583229	2.112 umol/
4) T	ethane	1.48	539701	1.855 umol/
5) T	propane	3.90	789587	1.895 umol/
7) T	carbon dioxide	0.20	13063496	2368.342 umol/

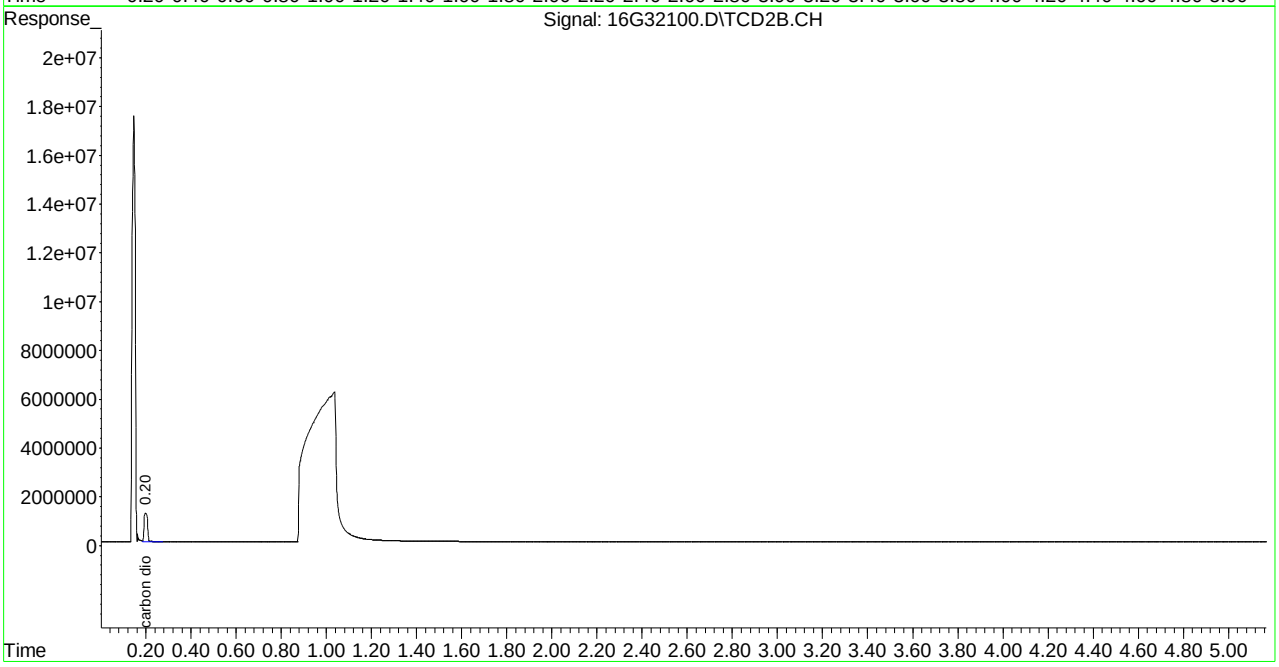
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32100.D RSK2EXT.M Mon Apr 30 15:09:45 2012 Page 1

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

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

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





Quantitation Report (Not Reviewed)

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

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

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

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

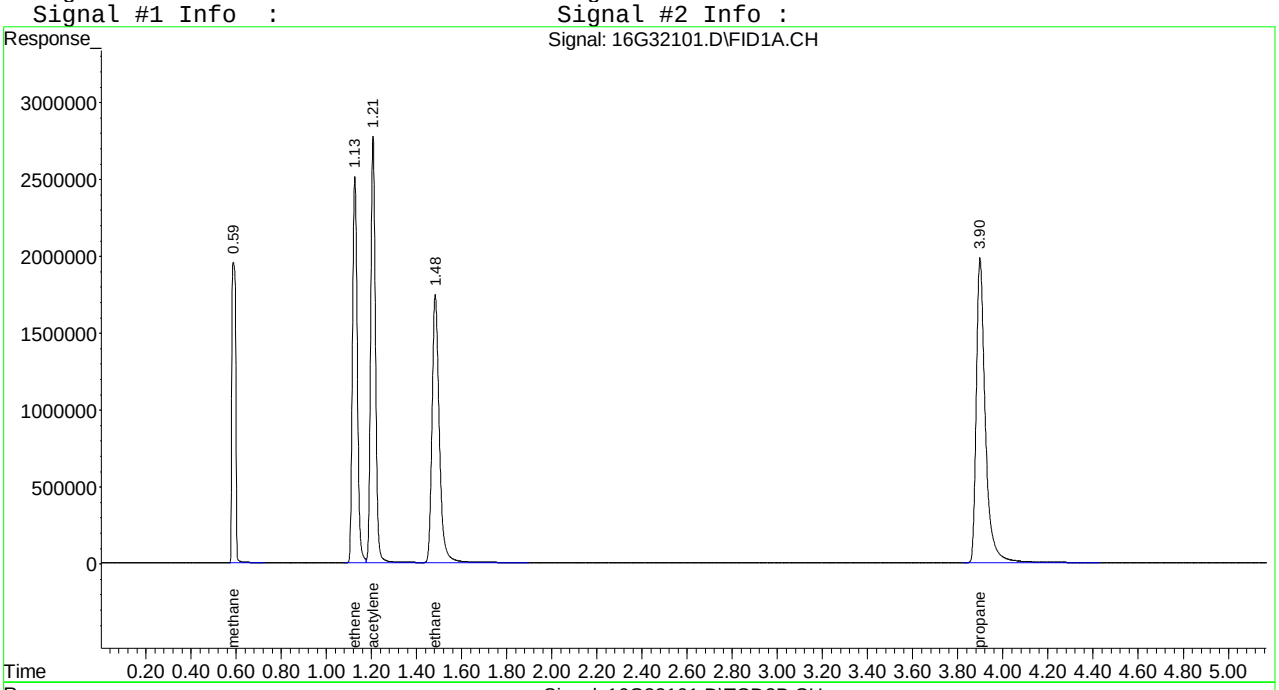
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32101.D RSK2EXT.M Mon Apr 30 15:29:41 2012 Page 1

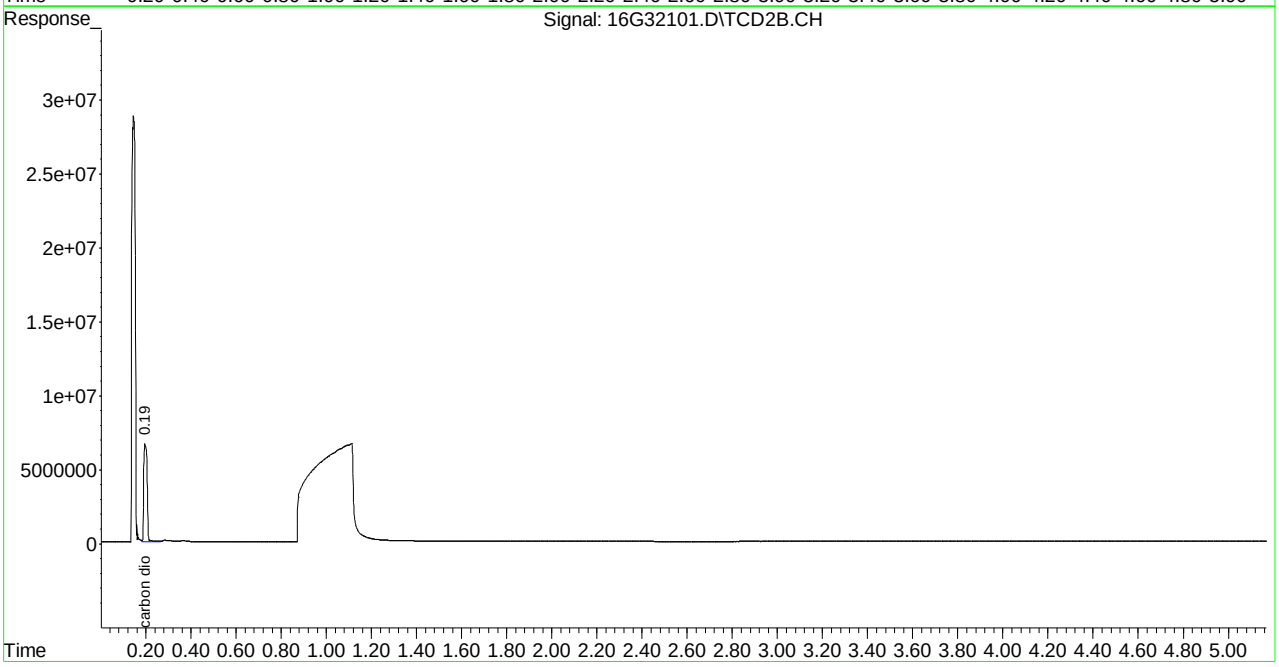
Quantitation Report (Not Reviewed)

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

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

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





Evaluate Continuing Calibration Report

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

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

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

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

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

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

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

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

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

Signal #2

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

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32102.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDchem\1\DATA\043012\16G32102.D\TCD2B.CH
Acq On : 30 Apr 2012 15:41 Operator: MDA
Sample : WG396526-09 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 30 15:46:47 2012 Quant Results File: RSK2EXT.RES

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

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

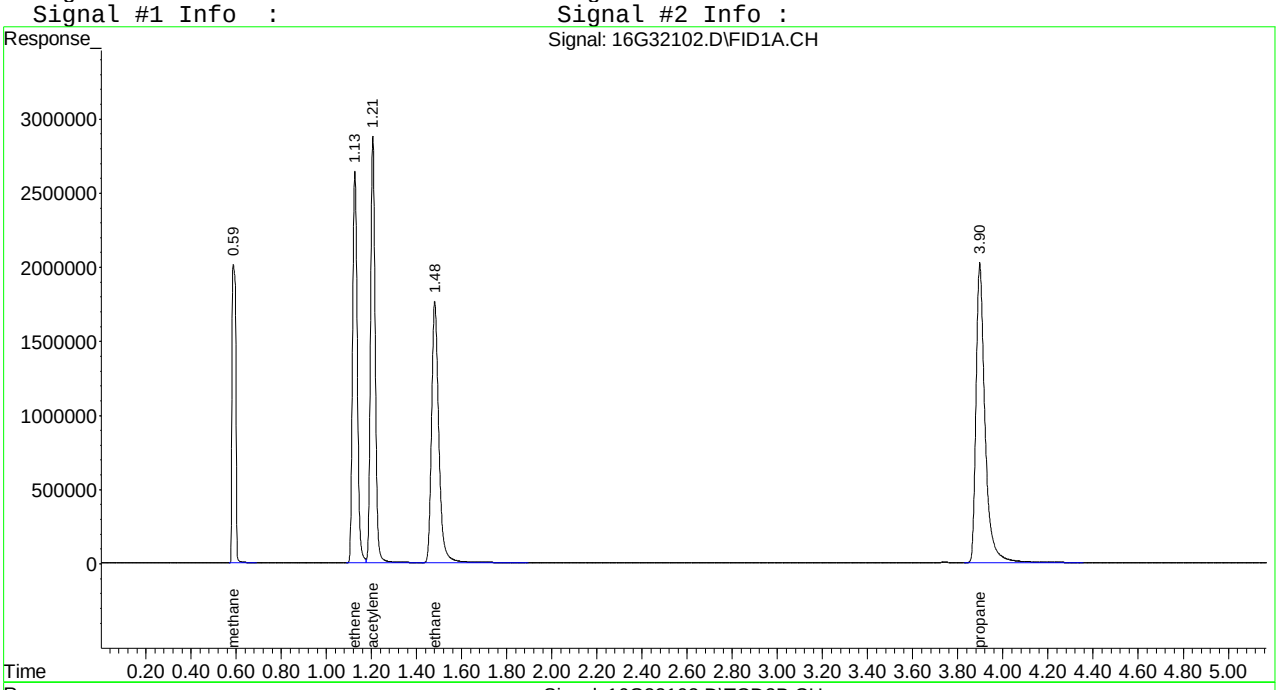
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	23055796	127.148 umol/
2) T	ethene	1.13	38355807	129.401 umol/
3) T	acetylene	1.21	41696228	143.988 umol/
4) T	ethane	1.48	39204655	128.981 umol/
5) T	propane	3.90	56158279	127.960 umol/
7) T	carbon dioxide	0.20	80277668	14063.212 umol/

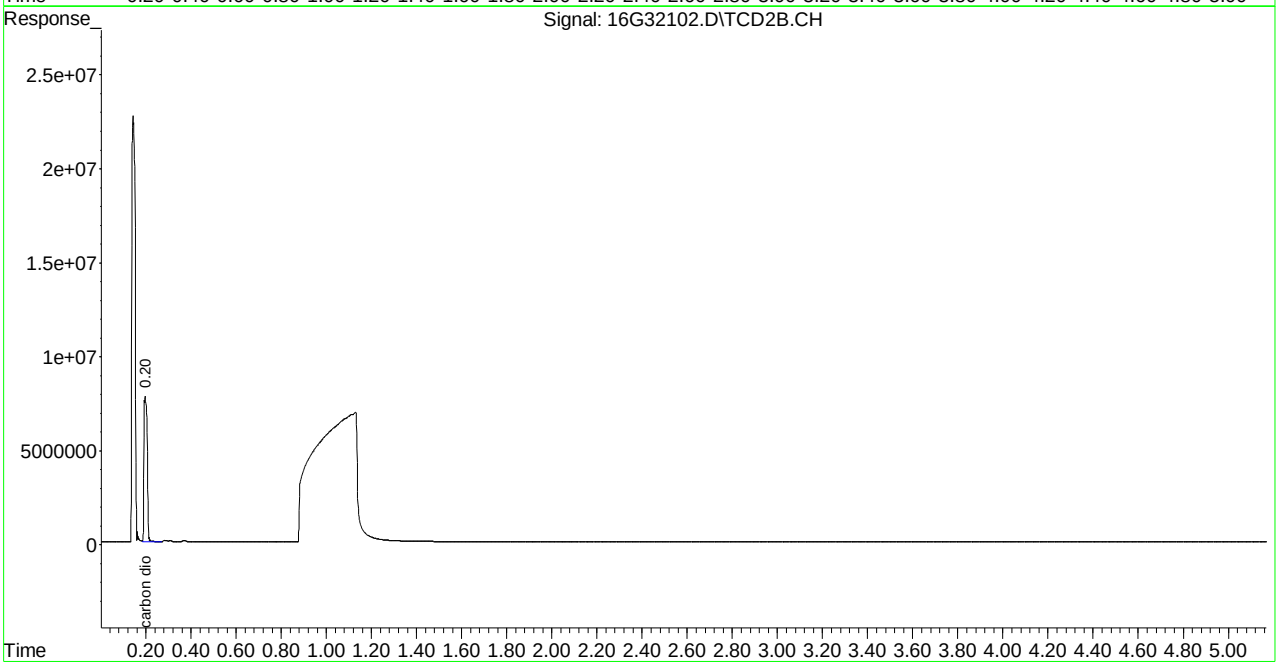
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32102.D RSK2EXT.M Mon Apr 30 15:46:47 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\043012\16G32102.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDchem\1\DATA\043012\16G32102.D\TCD2B.CH
Acq On : 30 Apr 2012 15:41 Operator: MDA
Sample : WG396526-09 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 30 15:46 2012 Quant Results File: RSK2EXT.RES

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

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





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32102.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32102.D\TCD2B.CH
Acq On : 30 Apr 2012 15:41 Operator: MDA
Sample : WG396526-09 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	methane	133.000	127.148	4.4	101	0.00
2	T	ethene	133.000	129.401	2.7	102	0.00
3	T	acetylene	133.000	143.988	-8.3	118	0.00
4	T	ethane	133.000	128.981	3.0	101	0.00
5	T	propane	133.000	127.960	3.8	101	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	14063.212	-5.5	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32102.D RSK2EXT.M Mon Apr 30 15:47:46 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32102.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32102.D\TCD2B.CH
Acq On : 30 Apr 2012 15:41 Operator: MDA
Sample : WG396526-09 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

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

Signal #2

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

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32113.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDchem\1\DATA\043012\16G32113.D\TCD2B.CH
Acq On : 30 Apr 2012 17:30 Operator: MDA
Sample : WG396526-10 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 30 17:35:26 2012 Quant Results File: RSK2EXT.RES

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

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

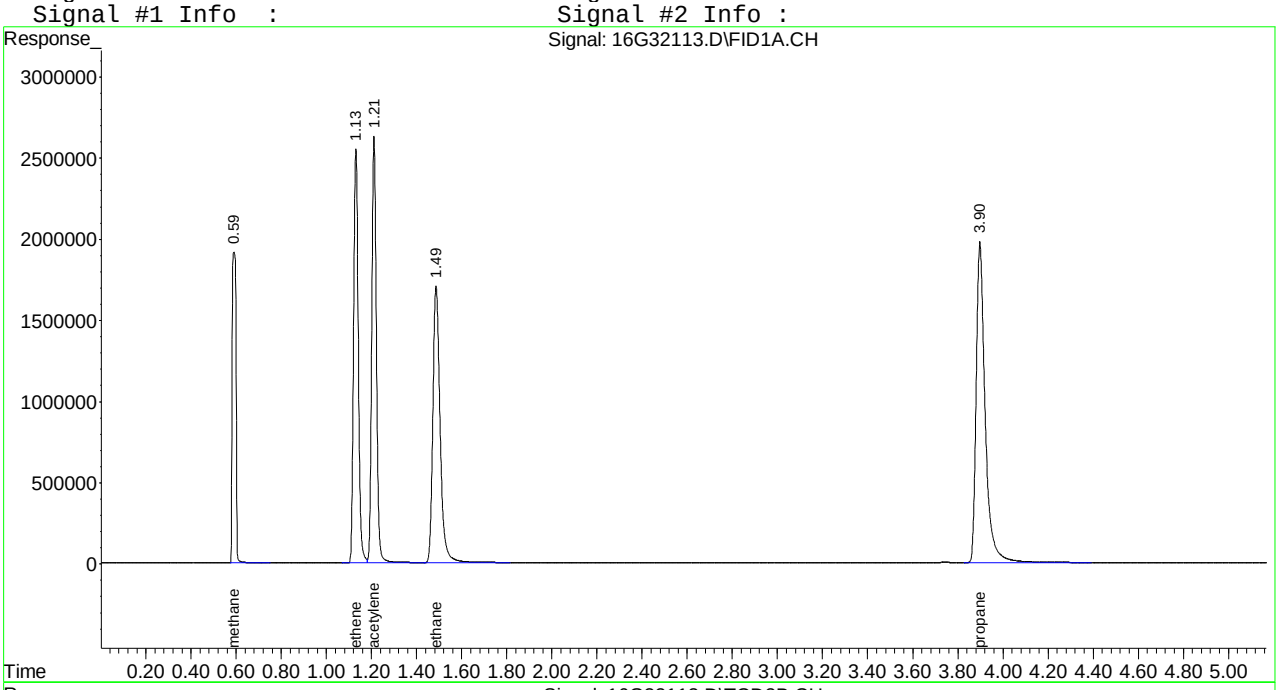
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22251900	122.714 umol/
2) T	ethene	1.13	36936709	124.614 umol/
3) T	acetylene	1.21	37970886	131.123 umol/
4) T	ethane	1.49	37900101	124.689 umol/
5) T	propane	3.90	54784464	124.830 umol/
7) T	carbon dioxide	0.20	73284672	12838.164 umol/

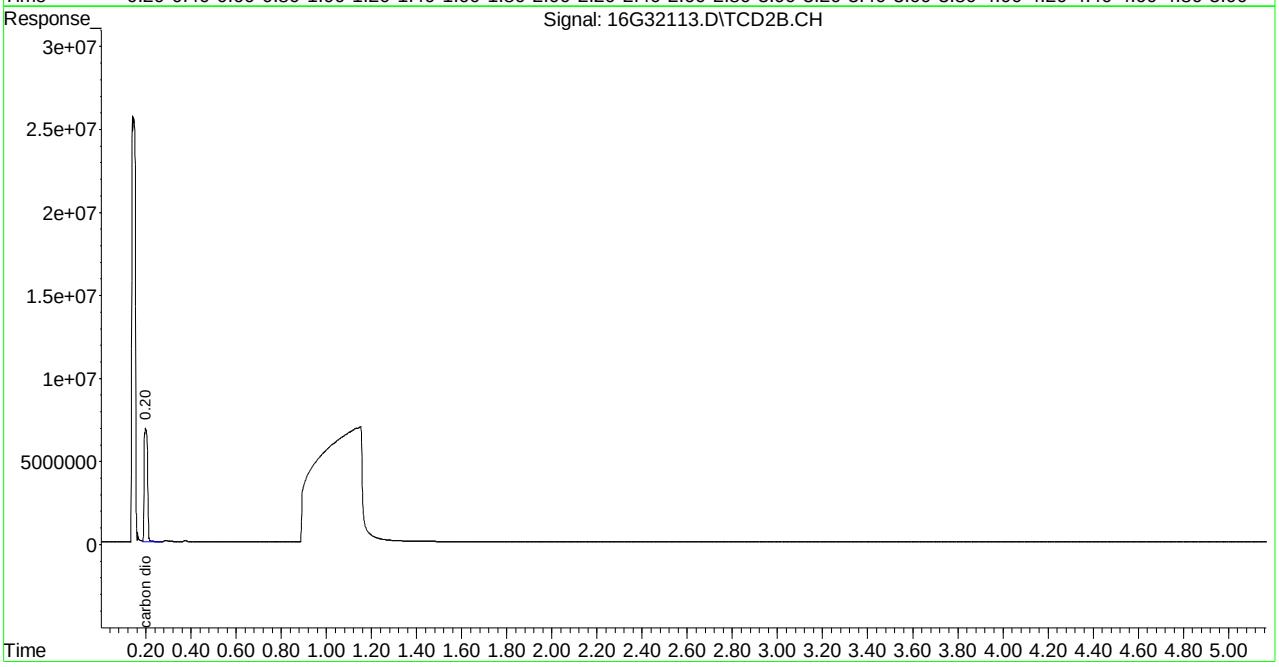
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32113.D RSK2EXT.M Mon Apr 30 17:35:26 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\043012\16G32113.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDchem\1\DATA\043012\16G32113.D\TCD2B.CH
Acq On : 30 Apr 2012 17:30 Operator: MDA
Sample : WG396526-10 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 30 17:35 2012 Quant Results File: RSK2EXT.RES

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

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





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32113.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32113.D\TCD2B.CH
Acq On : 30 Apr 2012 17:30 Operator: MDA
Sample : WG396526-10 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	methane	133.000	122.714	7.7	97	0.00
2	T	ethene	133.000	124.614	6.3	99	0.00
3	T	acetylene	133.000	131.123	1.4	107	0.00
4	T	ethane	133.000	124.689	6.2	98	0.00
5	T	propane	133.000	124.830	6.1	99	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	12838.164	3.7	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32113.D RSK2EXT.M Mon Apr 30 17:36:38 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32113.D\FID1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32113.D\TCD2B.CH
Acq On : 30 Apr 2012 17:30 Operator: MDA
Sample : WG396526-10 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

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

Signal #2

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

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32125.D\FID1A.CH Vial: 21
Signal #2 : C:\MSDchem\1\DATA\043012\16G32125.D\TCD2B.CH
Acq On : 30 Apr 2012 19:23 Operator: MDA
Sample : WG396526-11 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 30 19:28:29 2012 Quant Results File: RSK2EXT.RES

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

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

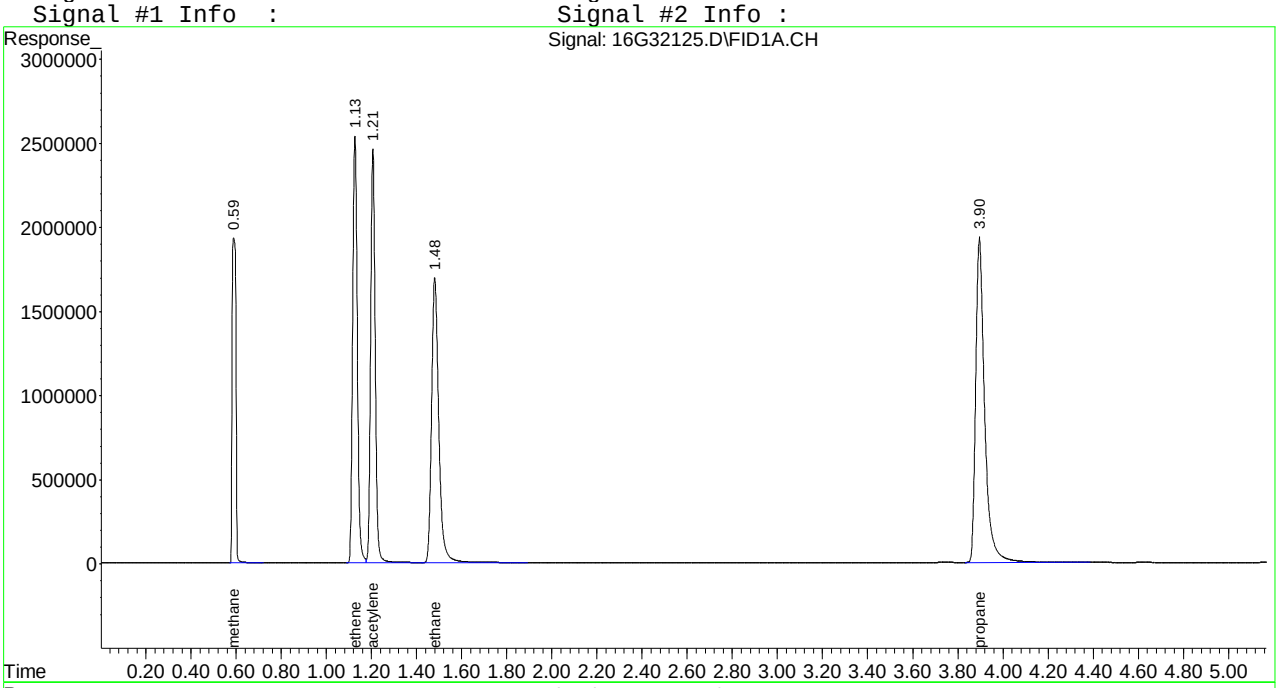
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22255845	122.736 umol/
2) T	ethene	1.13	36266324	122.352 umol/
3) T	acetylene	1.21	35097444	121.201 umol/
4) T	ethane	1.48	37456793	123.231 umol/
5) T	propane	3.90	53513242	121.933 umol/
7) T	carbon dioxide	0.20	65482991	11471.449 umol/

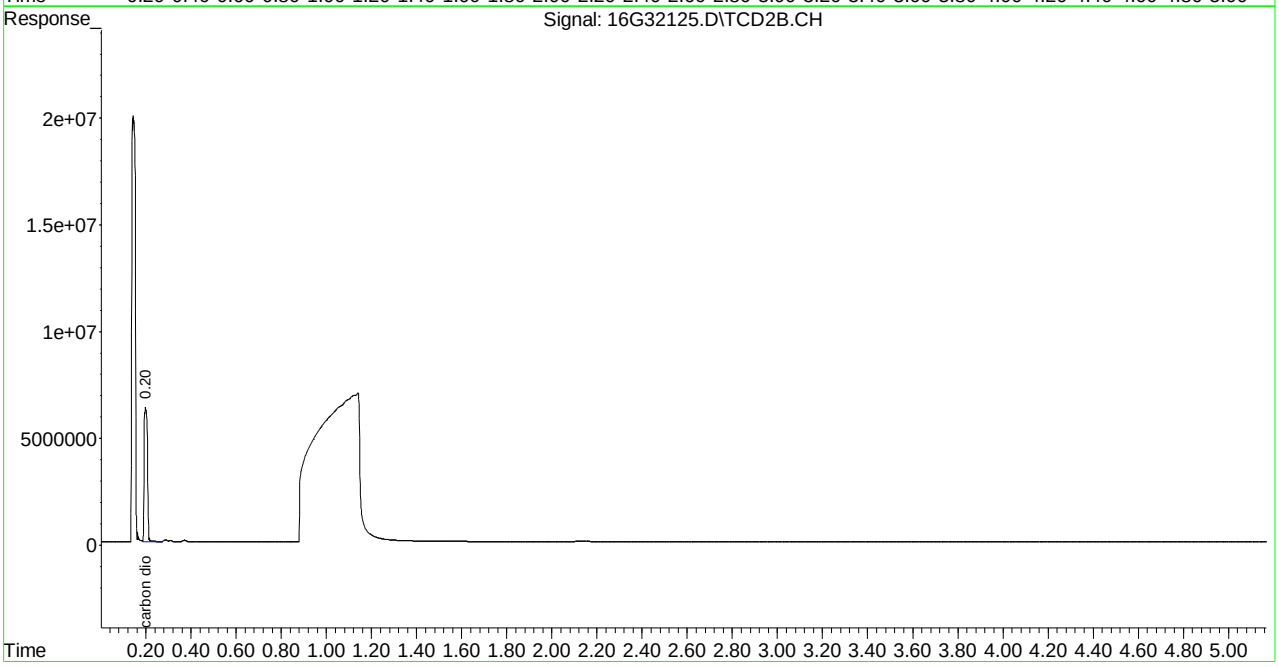
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32125.D RSK2EXT.M Mon Apr 30 19:28:29 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\043012\16G32125.D\FID1A.CH Vial: 21
Signal #2 : C:\MSDchem\1\DATA\043012\16G32125.D\TCD2B.CH
Acq On : 30 Apr 2012 19:23 Operator: MDA
Sample : WG396526-11 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 30 19:28 2012 Quant Results File: RSK2EXT.RES

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

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





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32125.D\FID1A.CH Vial: 21
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32125.D\TCD2B.CH
Acq On : 30 Apr 2012 19:23 Operator: MDA
Sample : WG396526-11 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	methane	133.000	122.736	7.7	97	0.00
2	T	ethene	133.000	122.352	8.0	97	0.00
3	T	acetylene	133.000	121.201	8.9	99	0.00
4	T	ethane	133.000	123.231	7.3	97	0.00
5	T	propane	133.000	121.933	8.3	96	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	11471.449	14.0	90	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32125.D RSK2EXT.M Tue May 01 07:55:08 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32125.D\FID1A.CH Vial: 21
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32125.D\TCD2B.CH
Acq On : 30 Apr 2012 19:23 Operator: MDA
Sample : WG396526-11 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

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

Signal #2

Microbac Laboratories Inc.
Daily Retention Time Window Determination

Login #: L12040928 **Run Date:** 04/30/2012 **Sample ID:** WG396526-11
Instrument: HP16 **Run Time:** 19:23 **Method:** RSK175
Workgroup (AAB#): WG396527 **File ID:** 16G32125

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: 2397722
Report generated 05/02/2012 13:52

2.1.2.5 Raw QC Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32103.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32103.D\TCD2B.CH
Acq On : 30 Apr 2012 15:51 Operator: MDA
Sample : WG396527-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 15:56:32 2012 Quant Results File: RSK2EXT.RES

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

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

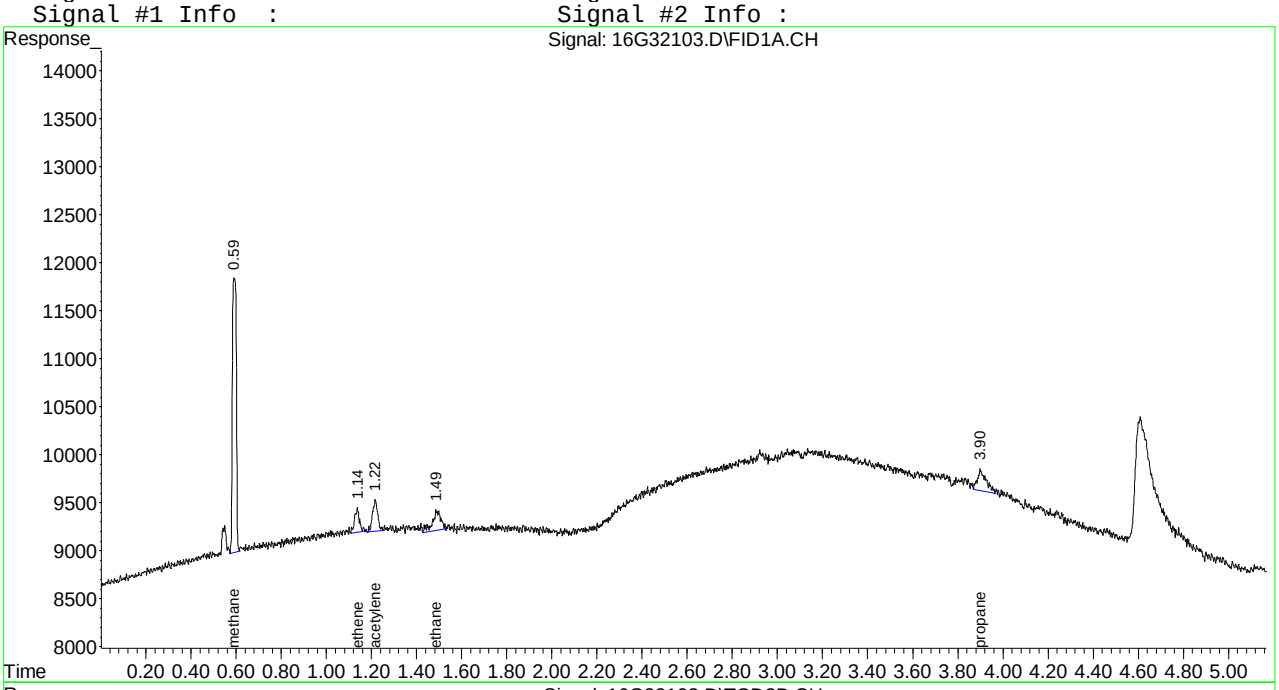
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	34261	0.189	umol/
2) T	ethene	1.14	3553	0.012	umol/
3) T	acetylene	1.22	5128	0.018	umol/
4) T	ethane	1.49	5299	0.017	umol/
5) T	propane	3.90	5899	0.013	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/

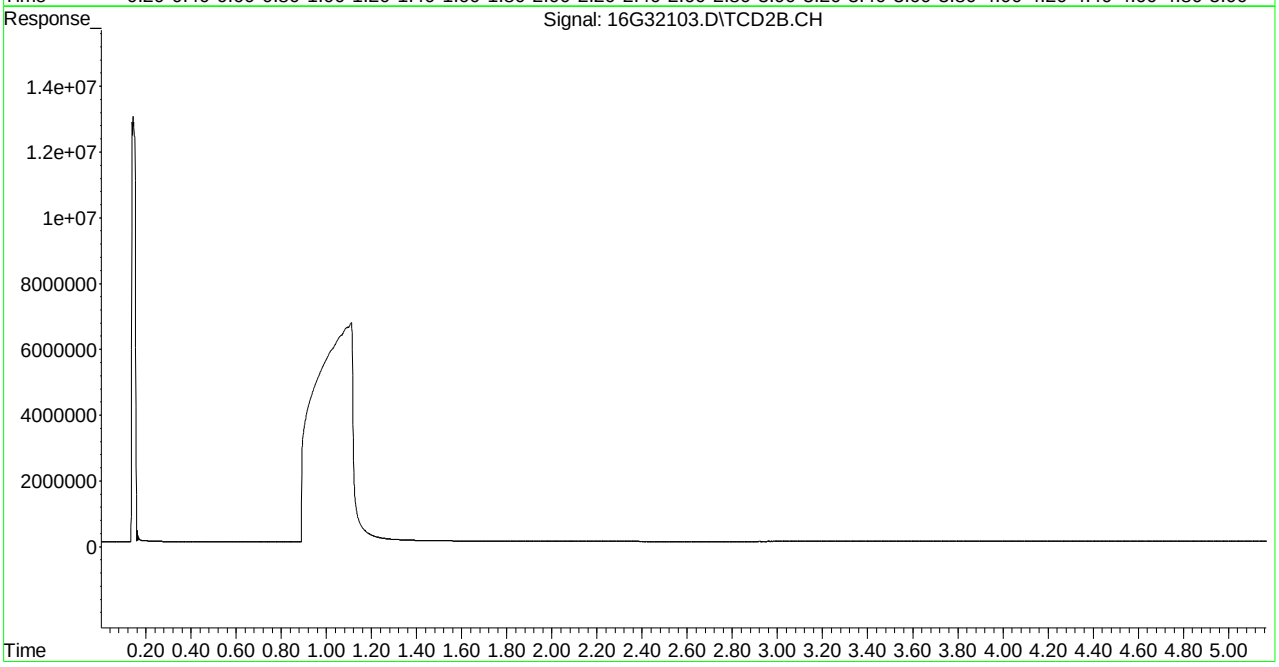
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32103.D RSK2EXT.M Mon Apr 30 16:05:05 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32103.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32103.D\TCD2B.CH
Acq On : 30 Apr 2012 15:51 Operator: MDA
Sample : WG396527-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 15:56 2012 Quant Results File: RSK2EXT.RES

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

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





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32104.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\043012\16G32104.D\TCD2B.CH
Acq On : 30 Apr 2012 16:00 Operator: MDA
Sample : WG396527-02 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 30 16:05:53 2012 Quant Results File: RSK2EXT.RES

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

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

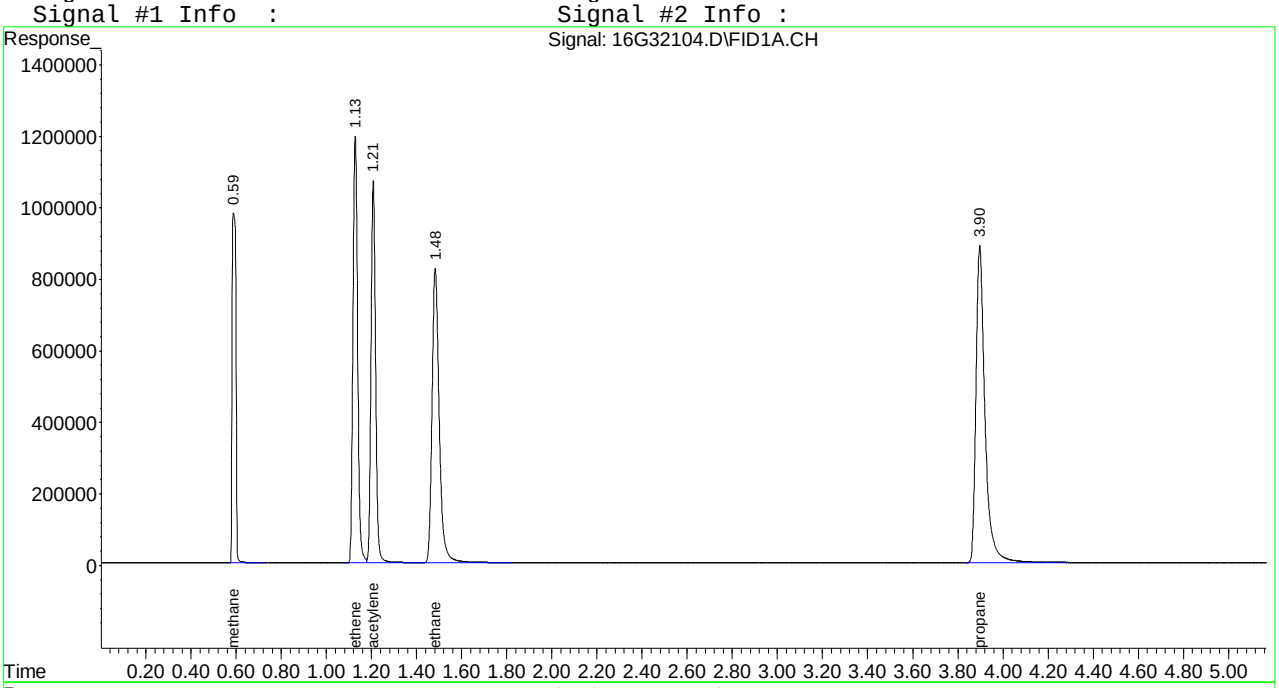
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	11334940	62.510 umol/
2) T	ethene	1.13	17081111	57.627 umol/
3) T	acetylene	1.21	15241364	52.632 umol/
4) T	ethane	1.48	18163658	59.757 umol/
5) T	propane	3.90	24644267	56.153 umol/
7) T	carbon dioxide	0.20	29772547	5215.618 umol/

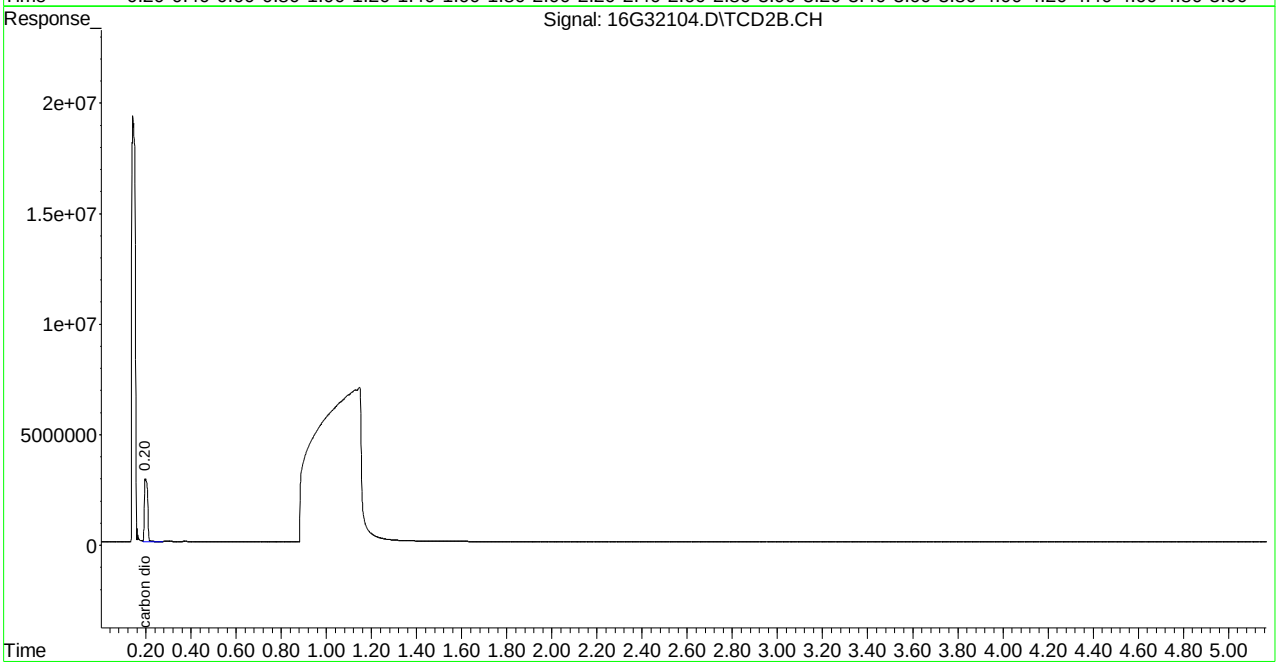
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32104.D RSK2EXT.M Mon Apr 30 16:05:53 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\043012\16G32104.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\043012\16G32104.D\TCD2B.CH
Acq On : 30 Apr 2012 16:00 Operator: MDA
Sample : WG396527-02 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 30 16:05 2012 Quant Results File: RSK2EXT.RES

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

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





2.2 Semivolatiles Data

2.2.1 Semivolatiles GC/MS Data (8270)

2.2.1.1 Summary Data

Login Number: L12040928
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, 2,4-Dinitrophenol. 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.

Matrix Spikes: Recoveries and RPDs out of range were observed for the following analytes:1,4-Dioxane, 3-Nitroaniline, Hexachlorocyclopentadiene. Please see the applicable QC report for a detailed presentation of the failures.

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: 46250
Approved By: Mike Cochran

Certificate of Analysis

Sample #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 17:45
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60760
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		4.09		0.000	0.000
unknown		5.65		0.000	0.000

Certificate of Analysis

Sample #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 17:45
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60760
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 #:	L12040928-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 17:45
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60760
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	91.3	10	123	
2-Fluorobiphenyl	79.0	43	116	
2-Fluorophenol	61.5	21	100	
Nitrobenzene-d5	76.8	35	114	
p-Terphenyl-d14	92.8	33	141	

Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-27-042612 **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/09/2012 17:45
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 4M60760
Sample Tag: 01 **Units:** ug/L

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	65.7	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-10-042612 **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/09/2012 18:20
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 4M60761
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	20.0	2.50
1,3,5-Trinitrobenzene	99-35-4		U	5.00	2.50
1,3-Dinitrobenzene	99-65-0		U	5.00	2.50
1,4-Dioxane	123-91-1		U	10.0	5.00
2,4,5-Trichlorophenol	95-95-4		U	5.00	2.50
2,4,6-Trichlorophenol	88-06-2		U	5.00	2.50
2,4-Dichlorophenol	120-83-2		U	5.00	2.50
2,4-Dimethylphenol	105-67-9		U	5.00	2.50
2,4-Dinitrophenol	51-28-5		U	25.0	12.5
2,4-Dinitrotoluene	121-14-2		U	5.00	2.50
2,6-Dinitrotoluene	606-20-2		U	5.00	2.50
2-Chloronaphthalene	91-58-7		U	5.00	2.50
2-Chlorophenol	95-57-8		U	5.00	2.50
2-Methylnaphthalene	91-57-6		U	5.00	2.50
2-Methylphenol	95-48-7		U	5.00	2.50
2-Nitroaniline	88-74-4		U	25.0	12.5
2-Nitrophenol	88-75-5		U	5.00	2.50
3-Nitroaniline	99-09-2		U	25.0	12.5
3,3'-Dichlorobenzidine	91-94-1		U	5.00	2.50
3-,4-Methylphenol	106-44-5		U	5.00	2.50
4-Bromophenyl-phenylether	101-55-3		U	5.00	2.50
4-Chloroaniline	106-47-8		U	5.00	2.50

Certificate of Analysis

Sample #:	L12040928-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-10-042612	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/09/2012 18:20
Collect Date:	04/26/2012 12:05	**Dilution:**	1	**File ID:**	4M60761
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
4-Nitrophenol	100-02-7		U	25.0	12.5
Acenaphthene	83-32-9		U	5.00	2.50
Acenaphthylene	208-96-8		U	5.00	2.50
Anthracene	120-12-7		U	5.00	2.50
Benzo(a)anthracene	56-55-3		U	5.00	2.50
Benzo(a)pyrene	50-32-8		U	5.00	2.50
Benzo(b)fluoranthene	205-99-2		U	5.00	2.50
Benzo(g,h,i)Perylene	191-24-2		U	5.00	2.50
Benzo(k)fluoranthene	207-08-9		U	5.00	2.50
Benzoic acid	65-85-0		U	20.0	10.0
Benzyl alcohol	100-51-6		U	5.00	2.50
Bis(2-Chloroethyl)ether	111-44-4		U	5.00	2.50
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.00	2.50
bis(2-Ethylhexyl)phthalate	117-81-7	3.32		5.00	2.50
Butylbenzylphthalate	85-68-7		U	5.00	2.50
Carbazole	86-74-8		U	20.0	2.50
Chrysene	218-01-9		U	5.00	2.50
Di-N-Butylphthalate	84-74-2		U	5.00	2.50
Di-n-octylphthalate	117-84-0		U	5.00	2.50
Dibenzo(a,h)Anthracene	53-70-3		U	5.00	2.50
Dibenzofuran	132-64-9		U	5.00	2.50
Diethylphthalate	84-66-2		U	5.00	2.50
Dimethylphthalate	131-11-3		U	5.00	2.50
Fluoranthene	206-44-0		U	5.00	2.50
Fluorene	86-73-7		U	5.00	2.50
Hexachlorobenzene	118-74-1		U	5.00	2.50
Hexachlorobutadiene	87-68-3		U	5.00	2.50
Hexachlorocyclopentadiene	77-47-4		U	5.00	2.50
Hexachloroethane	67-72-1		U	5.00	2.50
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.00	2.50
Isophorone	78-59-1		U	5.00	2.50
N-Nitrosodiphenylamine	86-30-6		U	5.00	2.50
Naphthalene	91-20-3		U	5.00	2.50

Certificate of Analysis

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-10-042612 **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/09/2012 18:20
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 4M60761
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrobenzene	98-95-3		U	5.00	2.50
Pentachlorophenol	87-86-5		U	25.0	12.5
Phenanthrene	85-01-8		U	5.00	2.50
Phenol	108-95-2		U	5.00	2.50
Pyrene	129-00-0		U	5.00	2.50

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	80.7	10	123	
2-Fluorobiphenyl	71.8	43	116	
2-Fluorophenol	63.1	21	100	
Nitrobenzene-d5	69.2	35	114	
p-Terphenyl-d14	97.3	33	141	
Phenol-d5	68.9	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-10-042612 **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/09/2012 18:20
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** 4M60761
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
unknown		4.25		0.000	0.000
unknown		6.00		0.000	0.000

Certificate of Analysis

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612-MS	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/10/2012 10:11
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60766
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4	36.0		20.0	2.50
1,3,5-Trinitrobenzene	99-35-4	53.9		5.00	2.50
1,3-Dinitrobenzene	99-65-0	48.0		5.00	2.50
1,4-Dioxane	123-91-1	26.9		10.0	5.00
2,4,5-Trichlorophenol	95-95-4	49.9		5.00	2.50
2,4,6-Trichlorophenol	88-06-2	45.4		5.00	2.50
2,4-Dichlorophenol	120-83-2	39.9		5.00	2.50
2,4-Dimethylphenol	105-67-9	38.0		5.00	2.50
2,4-Dinitrophenol	51-28-5	54.1		25.0	12.5
2,4-Dinitrotoluene	121-14-2	52.6		5.00	2.50
2,6-Dinitrotoluene	606-20-2	48.8		5.00	2.50
2-Chloronaphthalene	91-58-7	46.2		5.00	2.50
2-Chlorophenol	95-57-8	35.3		5.00	2.50
2-Methylnaphthalene	91-57-6	36.8		5.00	2.50
2-Methylphenol	95-48-7	37.2		5.00	2.50
2-Nitroaniline	88-74-4	45.2		25.0	12.5
2-Nitrophenol	88-75-5	37.8		5.00	2.50
3-Nitroaniline	99-09-2	65.8		25.0	12.5
3,3'-Dichlorobenzidine	91-94-1	55.2		5.00	2.50
3-,4-Methylphenol	106-44-5	42.9		5.00	2.50
4-Bromophenyl-phenylether	101-55-3	47.7		5.00	2.50
4-Chloroaniline	106-47-8	39.2		5.00	2.50
4-Nitrophenol	100-02-7	52.2		25.0	12.5
Acenaphthene	83-32-9	41.8		5.00	2.50
Acenaphthylene	208-96-8	43.5		5.00	2.50
Anthracene	120-12-7	43.4		5.00	2.50
Benzo(a)anthracene	56-55-3	47.9		5.00	2.50
Benzo(a)pyrene	50-32-8	50.0		5.00	2.50
Benzo(b)fluoranthene	205-99-2	51.5		5.00	2.50
Benzo(g,h,i)Perylene	191-24-2	51.6		5.00	2.50
Benzo(k)fluoranthene	207-08-9	47.7		5.00	2.50
Benzoic acid	65-85-0	25.1		20.0	10.0
Benzyl alcohol	100-51-6	38.6		5.00	2.50

Certificate of Analysis

Sample #:	L12040928-08	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612-MS	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/10/2012 10:11
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60766
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4	36.2		5.00	2.50
Bis(2-Chloroethoxy)Methane	111-91-1	42.9		5.00	2.50
bis(2-Ethylhexyl)phthalate	117-81-7	54.3		5.00	2.50
Butylbenzylphthalate	85-68-7	55.0		5.00	2.50
Carbazole	86-74-8	51.5		20.0	2.50
Chrysene	218-01-9	50.0		5.00	2.50
Di-N-Butylphthalate	84-74-2	50.5		5.00	2.50
Di-n-octylphthalate	117-84-0	53.1		5.00	2.50
Dibenzo(a,h)Anthracene	53-70-3	52.2		5.00	2.50
Dibenzofuran	132-64-9	44.1		5.00	2.50
Diethylphthalate	84-66-2	52.1		5.00	2.50
Dimethylphthalate	131-11-3	49.8		5.00	2.50
Fluoranthene	206-44-0	48.0		5.00	2.50
Fluorene	86-73-7	44.7		5.00	2.50
Hexachlorobenzene	118-74-1	46.4		5.00	2.50
Hexachlorobutadiene	87-68-3	29.3		5.00	2.50
Hexachlorocyclopentadiene	77-47-4	9.46		5.00	2.50
Hexachloroethane	67-72-1	21.9		5.00	2.50
Indeno(1,2,3-cd)pyrene	193-39-5	52.2		5.00	2.50
Isophorone	78-59-1	41.1		5.00	2.50
N-Nitrosodiphenylamine	86-30-6	82.4		5.00	2.50
Naphthalene	91-20-3	35.6		5.00	2.50
Nitrobenzene	98-95-3	39.6		5.00	2.50
Pentachlorophenol	87-86-5	57.1		25.0	12.5
Phenanthrene	85-01-8	48.1		5.00	2.50
Phenol	108-95-2	36.9		5.00	2.50
Pyrene	129-00-0	49.3		5.00	2.50

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	101	10	123	
2-Fluorobiphenyl	79.7	43	116	
2-Fluorophenol	69.4	21	100	
Nitrobenzene-d5	76.8	35	114	
p-Terphenyl-d14	104	33	141	

Certificate of Analysis

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-27-042612-MS **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/10/2012 10:11
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 4M60766
Sample Tag: 01 **Units:** ug/L

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	75.8	10	94	

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-27-042612-MSD **Prep Method:** 3520C **Prep Date:** 04/30/2012 10:30
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/19/2012 13:23
Workgroup #: WG396821 **Analyst:** CAA **Run Date:** 05/10/2012 10:46
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** 4M60767
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4	41.6		24.7	3.09
1,3,5-Trinitrobenzene	99-35-4	70.1		6.17	3.09
1,3-Dinitrobenzene	99-65-0	61.9		6.17	3.09
1,4-Dioxane	123-91-1	29.4		12.3	6.17
2,4,5-Trichlorophenol	95-95-4	64.2		6.17	3.09
2,4,6-Trichlorophenol	88-06-2	57.0		6.17	3.09
2,4-Dichlorophenol	120-83-2	46.7		6.17	3.09
2,4-Dimethylphenol	105-67-9	44.6		6.17	3.09
2,4-Dinitrophenol	51-28-5	69.9		30.9	15.4
2,4-Dinitrotoluene	121-14-2	67.6		6.17	3.09
2,6-Dinitrotoluene	606-20-2	63.7		6.17	3.09
2-Chloronaphthalene	91-58-7	53.6		6.17	3.09
2-Chlorophenol	95-57-8	38.2		6.17	3.09
2-Methylnaphthalene	91-57-6	41.3		6.17	3.09
2-Methylphenol	95-48-7	41.1		6.17	3.09
2-Nitroaniline	88-74-4	59.5		30.9	15.4
2-Nitrophenol	88-75-5	39.9		6.17	3.09
3-Nitroaniline	99-09-2	80.1		30.9	15.4
3,3'-Dichlorobenzidine	91-94-1	49.1		6.17	3.09
3-,4-Methylphenol	106-44-5	48.8		6.17	3.09
4-Bromophenyl-phenylether	101-55-3	51.9		6.17	3.09
4-Chloroaniline	106-47-8	46.4		6.17	3.09
4-Nitrophenol	100-02-7	63.4		30.9	15.4

Certificate of Analysis

Sample #:	L12040928-10	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612-MSD	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/10/2012 10:46
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60767
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Acenaphthene	83-32-9	51.3		6.17	3.09
Acenaphthylene	208-96-8	53.4		6.17	3.09
Anthracene	120-12-7	47.6		6.17	3.09
Benzo(a)anthracene	56-55-3	47.4		6.17	3.09
Benzo(a)pyrene	50-32-8	48.5		6.17	3.09
Benzo(b)fluoranthene	205-99-2	49.6		6.17	3.09
Benzo(g,h,i)Perylene	191-24-2	50.0		6.17	3.09
Benzo(k)fluoranthene	207-08-9	47.7		6.17	3.09
Benzoic acid	65-85-0	30.8		24.7	12.3
Benzyl alcohol	100-51-6	42.9		6.17	3.09
Bis(2-Chloroethyl)ether	111-44-4	39.2		6.17	3.09
Bis(2-Chloroethoxy)Methane	111-91-1	47.2		6.17	3.09
bis(2-Ethylhexyl)phthalate	117-81-7	53.0		6.17	3.09
Butylbenzylphthalate	85-68-7	56.3		6.17	3.09
Carbazole	86-74-8	64.9		24.7	3.09
Chrysene	218-01-9	49.3		6.17	3.09
Di-N-Butylphthalate	84-74-2	54.9		6.17	3.09
Di-n-octylphthalate	117-84-0	53.6		6.17	3.09
Dibenzo(a,h)Anthracene	53-70-3	50.5		6.17	3.09
Dibenzofuran	132-64-9	55.0		6.17	3.09
Diethylphthalate	84-66-2	66.7		6.17	3.09
Dimethylphthalate	131-11-3	64.5		6.17	3.09
Fluoranthene	206-44-0	49.2		6.17	3.09
Fluorene	86-73-7	54.6		6.17	3.09
Hexachlorobenzene	118-74-1	46.9		6.17	3.09
Hexachlorobutadiene	87-68-3	29.4		6.17	3.09
Hexachlorocyclopentadiene	77-47-4		U	6.17	3.09
Hexachloroethane	67-72-1	24.8		6.17	3.09
Indeno(1,2,3-cd)pyrene	193-39-5	50.6		6.17	3.09
Isophorone	78-59-1	45.9		6.17	3.09
N-Nitrosodiphenylamine	86-30-6	85.6		6.17	3.09
Naphthalene	91-20-3	39.5		6.17	3.09
Nitrobenzene	98-95-3	42.9		6.17	3.09

Certificate of Analysis

Sample #:	L12040928-10	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-27-042612-MSD	**Prep Method:**	3520C	**Prep Date:**	04/30/2012 10:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG396821	**Analyst:**	CAA	**Run Date:**	05/10/2012 10:46
Collect Date:	04/26/2012 10:37	**Dilution:**	1	**File ID:**	4M60767
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Pentachlorophenol	87-86-5	71.0		30.9	15.4
Phenanthrene	85-01-8	55.2		6.17	3.09
Phenol	108-95-2	40.3		6.17	3.09
Pyrene	129-00-0	51.5		6.17	3.09

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	102	10	123	
2-Fluorobiphenyl	74.1	43	116	
2-Fluorophenol	60.4	21	100	
Nitrobenzene-d5	69.2	35	114	
p-Terphenyl-d14	104	33	141	
Phenol-d5	67.0	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: WG396481
Analyst: CSH
Spike Analyst: CSH
Method: 3520C
Run Date: 04/30/2012 10:30
SOP: EXB01 Revison 16
Spike Witness: CAF
Surr Solution: STD50249

TIME ON: 14:45 OFF: 09:00 ON: 11:30 OFF: 07:00
Methylene Chloride Lot #: COA16058
1:1 H2SO4 Lot #: RGT17192
10N NaOH Lot #: RGT17288
Sodium Sulfate,Anhydrous,Granular (Lot #COA15998

	SAMPLE #	Type	Reference	Prod	pH	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12040898-01	SAMP		327-SPE-DIO	<2>12	880 mL	.5 mL			1 mL	Colored
2	L12040898-03	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Colored
3	L12040898-05	SAMP		327-SPE-DIO	<2>12	910 mL	.5 mL			1 mL	Colored
4	L12040898-08	SAMP		327-SPE-DIO	<2>12	910 mL	.5 mL			1 mL	Colored
5	L12040898-10	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Colored
6	L12040898-12	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Colored
7	L12040898-14	SAMP		327-SPE-DIO	<2>12	980 mL	.5 mL			1 mL	Transparent
8	L12040928-01	RS01		327-SPE-DIO	<2>12	980 mL	.5 mL			1 mL	Colored
9	L12040928-03	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Transparent
10	L12040928-08	MS01	L12040928-01	327-SPE-DIO	<2>12	1000 mL	.5 mL	1 mL	STD51286	1 mL	Colored
11	L12040928-10	SD01	L12040928-01	327-SPE-DIO	<2>12	810 mL	.5 mL	1 mL	STD51286	1 mL	Colored
12	L12040963-01	SAMP		327-SPE-DIO	<2>12	930 mL	.5 mL			1 mL	Colored
13	L12040963-03	SAMP		327-SPE-DIO	<2>12	920 mL	.5 mL			1 mL	Transparent
14	L12040963-07	SAMP		327-SPE-DIO	<2>12	910 mL	.5 mL			1 mL	Colored
15	WG396481-01	REF	L12040928-01	327-SPE-DIO	<2>12	980 mL	.5 mL			1 mL	Colored
16	WG396481-02	BLANK		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Transparent
17	WG396481-03	LCS		327-SPE-DIO	<2>12	1000 mL	.5 mL	1 mL	STD51286	1 mL	Colored
18	WG396481-04	MS	L12040928-01	327-SPE-DIO	<2>12	1000 mL	.5 mL	1 mL	STD51286	1 mL	Colored
19	WG396481-05	MSD	L12040928-01	327-SPE-DIO	<2>12	810 mL	.5 mL	1 mL	STD51286	1 mL	Colored

Analyst: Chris Hill

Reviewer: Cheryl A. Flowers

EXTRACT - Modified 01/23/2009
PDF ID: 2400029
Report generated: 05/02/2012 13:30

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			

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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.			

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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.			

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 050712
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41631 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG397014, WG397015, WG396821
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	4M60690	WG397151-01 50PPM DFTPP STD	1	1	STD50659	05/07/12 08:15
2	4M60691	WG397151-01 50PPM DFTPP STD	1	1	STD50659	05/07/12 08:31
3	4M60692	WG397151-02 50PPM Megamix STD	1	1	STD50886	05/07/12 08:51
4	4M60693	WG397166-01 50PPM TCL STD	1	1	STD51428	05/07/12 09:25
5	4M60694	WG396865-02 BLK 05/03	1	1		05/07/12 09:59
6	4M60695	WG396865-03 LCS 05/03	1	1		05/07/12 10:34
7	4M60696	WG396481-02 BLK 04/30	1	1		05/07/12 11:09
8	4M60697	WG396481-03 LCS 04/30	1	1		05/07/12 11:44
9	4M60698	L12040916-22	7	1	SOIL	05/07/12 12:19
10	4M60699	L12050086-01	10	1	SOIL	05/07/12 12:54
11	4M60700	L12050086-02	10	1	SOIL	05/07/12 13:28
12	4M60701	L12040852-01 RE	17	1		05/07/12 14:03
13	4M60702	L12040853-01 RE	17	1		05/07/12 14:38
14	4M60703	L12040898-01	1	1		05/07/12 15:13
15	4M60704	L12040898-03	1	1		05/07/12 15:48
16	4M60705	L12040898-05	1	1		05/07/12 16:23
17	4M60706	L12040898-08	1	1		05/07/12 16:57
18	4M60707	L12040898-10	1	1		05/07/12 17:31
19	4M60708	L12040898-12	1	1		05/07/12 18:05
20	4M60709	L12040898-14	1	1		05/07/12 18:40
21	4M60710	L12040963-01	1	1		05/07/12 19:15
22	4M60711	L12040963-03	1	1		05/07/12 19:49
23	4M60712	L12040963-07	1	1		05/07/12 20:23
24	4M60713	L12050068-01 2X	2	2		05/07/12 20:58
25	4M60714	L12050071-01 5X	2	5		05/07/12 21:32
26	4M60715	L12050072-01 5X	2	5		05/07/12 22:07

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X			
	WG397151-01 50PPM DFTPP STD - Tune failed.			
6				
	WG396865-03 LCS 05/03 - 2 analytes high.			

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 050712
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41631 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG397014, WG397015, WG396821
Internal STD: COA16051 Surrogate STD: NA
CCV STD: LCS STD:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8				
	WG396481-03 LCS 04/30 - 2 analytes high.			
18				
	L12040898-10 - SS TPH low.			
24	X	1	Analyzed too dilute	
	L12050068-01 2X			
25	X	1	Analyzed too dilute	
	L12050071-01 5X			
26	X	1	Analyzed too dilute	
	L12050072-01 5X			

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 050912
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41660 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG396821, WG397454, WG397264, WG397457
Internal STD: COA16051 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments: Instrument stopped in middle of run - syringe error.

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	4M60742	WG397449-01 50PPM DFTPP STD	1	1	STD50659	05/09/12 08:10
2	4M60743	WG397449-01 50PPM DFTPP STD	1	1	STD50659	05/09/12 08:25
3	4M60744	WG397449-01 50PPM DFTPP STD	1	1	STD50659	05/09/12 08:41
4	4M60745	WG397449-02 50PPM Megamix STD	1	1	STD50886	05/09/12 09:02
5	4M60746	WG397451-01 50PPM TCL STD	1	1	STD51428	05/09/12 09:37
6	4M60747	WG397474-01 50PPM Benzidine STD	1	1	STD51066	05/09/12 10:11
7	4M60748	WG396991-01 FBLK	17	1		05/09/12 10:47
8	4M60749	WG397267-01 BLK 05/08	1	1		05/09/12 11:22
9	4M60750	WG397267-02 LCS 05/08	1	1		05/09/12 11:56
10	4M60751	WG397267-03 LCS DUP 05/08	1	1		05/09/12 12:31
11	4M60752	WG397259-01 FBLK	17	1		05/09/12 13:05
12	4M60753	WG397290-01 BLK 05/08	7	1	SOIL	05/09/12 13:40
13	4M60754	WG397290-02 LCS 05/08	7	1	SOIL	05/09/12 14:15
14	4M60755	WG397290-03 LCS DUP 05/08	7	1	SOIL	05/09/12 14:49
15	4M60756	L12050109-02	17	1		05/09/12 15:25
16	4M60757	L12050109-04	17	1		05/09/12 16:00
17	4M60758	L12050109-06	17	1		05/09/12 16:35
18	4M60759	L12050169-01	17	1		05/09/12 17:09
19	4M60760	L12040928-01 REF	1	1		05/09/12 17:45
20	4M60761	L12040928-03	1	1		05/09/12 18:20

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X			
	WG397449-01 50PPM DFTPP STD - Tune failed.			
2	X			
	WG397449-01 50PPM DFTPP STD - Tune failed.			

Page: 1 Approved: 10-MAY-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 051012
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41678 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG397454, WG397457, WG396821, WG396866
Internal STD: COA16051 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments: No RE for L12040983, no hold time remaining.

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	4M60762	WG397588-01 50PPM DFTPP STD	1	1	STD50659	05/10/12 08:18
2	4M60763	WG397588-02 50PPM Megamix STD	1	1	STD50886	05/10/12 08:38
3	4M60764	WG397589-01 50PPM TCL STD	1	1	STD51428	05/10/12 09:12
4	4M60765	WG397590-01 50PPM Benzidine STD	1	1	STD51066	05/10/12 09:41
5	4M60766	L12040928-08 MS	1	1		05/10/12 10:11
6	4M60767	L12040928-10 MSD	1	1		05/10/12 10:46
7	4M60768	L12050214-01	7	1	SOIL	05/10/12 11:21
8	4M60769	L12040983-01	1	1		05/10/12 11:55
9	4M60770	L12040983-02	1	1		05/10/12 12:30
10	4M60771	L12040983-03	1	1		05/10/12 13:04
11	4M60772	L12040983-04	1	1		05/10/12 13:39
12	4M60773	L12040983-05	1	1		05/10/12 14:13
13	4M60774	L12040983-06 REF	1	1		05/10/12 14:48
14	4M60775	L12040983-07 MS	1	1		05/10/12 15:22
15	4M60776	L12040983-08 MSD	1	1		05/10/12 15:56
16	4M60777	L12040983-09	1	1		05/10/12 16:31
17	4M60778	L12040983-10	1	1		05/10/12 17:06
18	4M60779	L12040983-11	1	1		05/10/12 17:40
19	4M60780	L12040983-12	1	1		05/10/12 18:15
20	4M60781	L12040983-13	1	1		05/10/12 18:50
21	4M60782	L12040983-14	1	1		05/10/12 19:24
22	4M60783	L12040983-15	1	1		05/10/12 19:58
23	4M60784	L12050172-02	2	1		05/10/12 20:32
24	4M60785	L12050174-01	2	1		05/10/12 21:07
25	4M60786	L12050197-01	2	1		05/10/12 21:41
26	4M60787	L12050199-01	2	1		05/10/12 22:16
27	4M60788	L12050200-01	2	1		05/10/12 22:50
28	4M60789	L12050201-01	2	1		05/10/12 23:24
29	4M60790	L12050222-01	2	1		05/10/12 23:58
30	4M60791	L12050184-01 10X	2	10		05/11/12 00:33
31	4M60792	L12050184-02 10X	2	10		05/11/12 01:07

Comments

Page: 1 Approved: 11-MAY-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 051012
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41678 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG397454, WG397457, WG396821, WG396866
Internal STD: COA16051 Surrogate STD: NA
CCV STD: LCS STD:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
7				
	L12050214-01 - Istd 6 low - SMI.			
8				
	L12040983-01 - SS FBP low.			
10				
	L12040983-03 - SS FBP, 2FP, NBZ low.			
12				
	L12040983-05 - SS FBP low.			
13				
	L12040983-06 REF - bis(2-ethylhexyl)phthalate >RL.			
16				
	L12040983-09 -Bis(2-ethylhexyl)phthalate >MDL<RL			
20				
	L12040983-13 - SS FBP, 2FP, NBZ low.			
30				
	L12050184-01 10X - Sample was analyzed at a dilution due to extract appearance, viscosity and elevated final volume (8mL).			
31				
	L12050184-02 10X - Sample was analyzed at a dilutin due to extract appearance (bright pink), viscosity and elevated final volume (14mL).			

Page: 2 Approved: 11-MAY-12

Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
20-APR-2012

Secondary Reviewer:
20-APR-2012

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

Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
02-MAY-2012

Secondary Reviewer:
03-MAY-2012

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

Microbac Laboratories Inc.

Data Checklist

Date: 07-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46602
Analytical Workgroups: L12040916, 050086, 040852, 040853, 040898, 040963

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

Primary Reviewer:
08-MAY-2012

Secondary Reviewer:
08-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-08-2012 12:52:33

Microbac Laboratories Inc.

Data Checklist

Date: 09-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46663
Analytical Workgroups: L12050109, L12050169, L12040928

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

Primary Reviewer:
10-MAY-2012

Secondary Reviewer:
10-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-10-2012 13:21:28

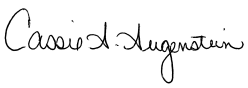
Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46690
Analytical Workgroups: L12040928, 0214, 0983, 0172, 0174, 0197, 0199, 0200, 0201, 0222, 01

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

Primary Reviewer:
11-MAY-2012



Secondary Reviewer:
11-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-11-2012 13:32:51

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C **AAB#:** WG396821

Login Number: L12040928

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-27-042612	01	04/26/12					04/30/12	4	7		05/09/12	9.3	40	
MW-10-042612	03	04/26/12					04/30/12	3.9	7		05/09/12	9.3	40	
MW-27-042612-MS	08	04/26/12					04/30/12	4	7		05/10/12	10	40	
MW-27-042612-MSD	10	04/26/12					04/30/12	4	7		05/10/12	10	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2410736
Report generated 05/11/2012 14:10

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12040928
Instrument Id: HPMS4
Workgroup (AAB#): WG396821

Method: 8270
CAL ID: HPMS4-19-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4	5	6
L12040928-01	1.00	01	91.3	79.0	61.5	76.8	92.8	65.7
L12040928-03	1.00	01	80.7	71.8	63.1	69.2	97.3	68.9
L12040928-08	1.00	01	101	79.7	69.4	76.8	104	75.8
L12040928-10	1.00	01	102	74.1	60.4	69.2	104	67.0
WG396481-02	1.00	01	95.1	69.2	68.8	71.8	115	70.3
WG396481-03	1.00	01	105	84.4	79.3	82.4	112	81.3

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: 2409460
Report generated: 05/11/2012 14:11

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396821
Blank File ID: 4M60696
Blank Sample ID: WG396481-02
Prep Date: 04/30/12 10:30
Instrument ID: HPMS4
Analyzed Date: 05/07/12 11:09
Method: 8270C
Analyst: CAA

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396481-03	4M60697	05/07/12 11:44	01
MW-27-042612	L12040928-01	4M60760	05/09/12 17:45	01
MW-10-042612	L12040928-03	4M60761	05/09/12 18:20	01
MW-27-042612-MS	L12040928-08	4M60766	05/10/12 10:11	01
MW-27-042612-MSD	L12040928-10	4M60767	05/10/12 10:46	01

Report Name: BLANK_SUMMARY
PDF File ID: 2410737
Report generated 05/11/2012 14:10

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040928 Prep Date:04/30/12 10:30 Sample ID:WG396481-02
Instrument ID:HPMS4 Run Date:05/07/12 11:09 Prep Method:3520C
File ID:4M60696 Analyst:CAA Method:8270C
Workgroup (AAB#):WG396821 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: 2410738
11-MAY-2012 14:10

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040928 Prep Date:04/30/12 10:30 Sample ID:WG396481-02
Instrument ID:HPMS4 Run Date:05/07/12 11:09 Prep Method:3520C
File ID:4M60696 Analyst:CAA Method:8270C
Workgroup (AAB#):WG396821 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	95.1	10	-	123	PASS
2-Fluorobiphenyl	69.2	43	-	116	PASS
2-Fluorophenol	68.8	21	-	100	PASS
Nitrobenzene-d5	71.8	35	-	114	PASS
p-Terphenyl-d14	115	33	-	141	PASS
Phenol-d5	70.3	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: 2410738
11-MAY-2012 14:10

Login Number: L12040928 Run Date: 05/07/2012 Sample ID: WG396481-03
Instrument ID: HPMS4 Run Time: 11:44 Prep Method: 3520C
File ID: 4M60697 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG396821 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51286 Cal ID: HPMS4-19-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,1'-Biphenyl	50.0	37.5	75.0	40 - 140	
1,3,5-Trinitrobenzene	50.0	54.1	108	10 - 120	
1,3-Dinitrobenzene	50.0	47.1	94.3	30 - 130	
1,4-Dioxane	50.0	34.8	69.5	50 - 150	
2,4,5-Trichlorophenol	50.0	50.5	101	35 - 120	
2,4,6-Trichlorophenol	50.0	46.7	93.5	30 - 120	
2,4-Dichlorophenol	50.0	42.7	85.3	20 - 110	
2,4-Dimethylphenol	50.0	40.5	81.0	20 - 120	
2,4-Dinitrophenol	50.0	53.4	107	20 - 140	
2,4-Dinitrotoluene	50.0	53.0	106	50 - 139	
2,6-Dinitrotoluene	50.0	49.1	98.1	50 - 120	
2-Chloronaphthalene	50.0	48.9	97.8	25 - 120	
2-Chlorophenol	50.0	38.9	77.8	25 - 110	
2-Methylnaphthalene	50.0	41.6	83.1	25 - 120	
2-Methylphenol	50.0	39.5	79.1	20 - 110	
2-Nitroaniline	50.0	47.0	94.0	45 - 115	
2-Nitrophenol	50.0	41.0	82.0	20 - 115	
3-Nitroaniline	50.0	66.4	133	40 - 120	*
3,3'-Dichlorobenzidine	50.0	77.4	155	30 - 140	*
3-,4-Methylphenol	50.0	44.3	88.6	20 - 110	
4-Bromophenyl-phenylether	50.0	50.7	101	40 - 115	
4-Chloroaniline	50.0	44.3	88.6	25 - 120	
4-Nitrophenol	50.0	43.6	87.2	10 - 132	
Acenaphthene	50.0	43.7	87.4	30 - 120	
Acenaphthylene	50.0	45.5	91.1	30 - 120	
Anthracene	50.0	46.0	92.0	55 - 130	
Benzo(a)anthracene	50.0	51.7	103	60 - 130	
Benzo(a)pyrene	50.0	54.8	110	55 - 135	
Benzo(b)fluoranthene	50.0	55.1	110	45 - 125	
Benzo(g,h,i)Perylene	50.0	48.2	96.3	45 - 140	
Benzo(k)fluoranthene	50.0	56.1	112	55 - 140	
Benzoic acid	50.0	17.7	35.4	10 - 100	
Benzyl alcohol	50.0	40.4	80.8	20 - 110	
Bis(2-Chloroethyl)ether	50.0	39.1	78.2	25 - 110	
Bis(2-Chloroethoxy)Methane	50.0	47.1	94.3	20 - 105	
bis(2-Ethylhexyl)phthalate	50.0	56.1	112	50 - 150	
Butylbenzylphthalate	50.0	58.1	116	55 - 150	
Carbazole	50.0	51.8	104	50 - 130	
Chrysene	50.0	53.4	107	55 - 130	
Di-N-Butylphthalate	50.0	53.6	107	55 - 118	
Di-n-octylphthalate	50.0	62.1	124	40 - 146	

LCS - Modified 03/06/2008
PDF File ID: 2410739
Report generated: 05/11/2012 14:10

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Run Date: 05/07/2012 Sample ID: WG396481-03
Instrument ID: HPMS4 Run Time: 11:44 Prep Method: 3520C
File ID: 4M60697 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG396821 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51286 Cal ID: HPMS4-19-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Dibenzo(a,h)Anthracene	50.0	50.6	101	45 - 125	
Dibenzofuran	50.0	45.6	91.2	35 - 115	
Diethylphthalate	50.0	52.5	105	45 - 120	
Dimethylphthalate	50.0	50.5	101	25 - 112	
Fluoranthene	50.0	50.9	102	50 - 137	
Fluorene	50.0	45.9	91.9	40 - 120	
Hexachlorobenzene	50.0	50.4	101	50 - 130	
Hexachlorobutadiene	50.0	37.8	75.7	24 - 105	
Hexachlorocyclopentadiene	50.0	35.2	70.4	20 - 143	
Hexachloroethane	50.0	27.0	54.0	25 - 95	
Indeno(1,2,3-cd)pyrene	50.0	50.1	100	50 - 135	
Isophorone	50.0	44.4	88.8	30 - 110	
N-Nitrosodiphenylamine	100	85.4	85.4	40 - 110	
Naphthalene	50.0	40.2	80.4	25 - 110	
Nitrobenzene	50.0	42.4	84.7	30 - 110	
Pentachlorophenol	50.0	58.7	117	40 - 140	
Phenanthrene	50.0	50.4	101	55 - 120	
Phenol	50.0	39.5	79.0	10 - 120	
Pyrene	50.0	53.5	107	55 - 130	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,6-Tribromophenol	105	10 - 123	PASS
2-Fluorobiphenyl	84.4	43 - 116	PASS
2-Fluorophenol	79.3	21 - 100	PASS
Nitrobenzene-d5	82.4	35 - 114	PASS
p-Terphenyl-d14	112	33 - 141	PASS
Phenol-d5	81.3	10 - 94	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2410739
Report generated: 05/11/2012 14:10

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:HPMS4- 19-APR-12 Worknum:WG396821

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

Parent ID:L12040928-01 File ID:4M60760 Dil:1 Method:8270C

Sample ID:L12040928-08 MS File ID:4M60766 Dil:1 Matrix:Water

Sample ID:L12040928-10 MSD File ID:4M60767 Dil:1 Units:ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
1,1'-Biphenyl	U	50.0	36.0	72	61.7	41.6	67.5	14.6	40 - 140	30	
1,3,5-Trinitrobenzene	U	50.0	53.9	108	61.7	70.1	114	26.1	10 - 120	30	
1,3-Dinitrobenzene	U	50.0	48.0	96	61.7	61.9	100	25.4	30 - 130	30	
1,4-Dioxane	U	50.0	26.9	53.8	61.7	29.4	47.7	8.94	50 - 150	30	*
2,4,5-Trichlorophenol	U	50.0	49.9	99.7	61.7	64.2	104	25.1	35 - 120	30	
2,4,6-Trichlorophenol	U	50.0	45.4	90.7	61.7	57.0	92.4	22.8	30 - 120	30	
2,4-Dichlorophenol	U	50.0	39.9	79.9	61.7	46.7	75.6	15.5	20 - 110	30	
2,4-Dimethylphenol	U	50.0	38.0	76.1	61.7	44.6	72.3	15.9	20 - 120	30	
2,4-Dinitrophenol	U	50.0	54.1	108	61.7	69.9	113	25.4	20 - 140	30	
2,4-Dinitrotoluene	U	50.0	52.6	105	61.7	67.6	109	24.9	50 - 139	30	
2,6-Dinitrotoluene	U	50.0	48.8	97.6	61.7	63.7	103	26.5	50 - 120	30	
2-Chloronaphthalene	U	50.0	46.2	92.5	61.7	53.6	86.9	14.8	25 - 120	30	
2-Chlorophenol	U	50.0	35.3	70.6	61.7	38.2	61.8	7.74	25 - 110	30	
2-Methylnaphthalene	U	50.0	36.8	73.6	61.7	41.3	66.9	11.5	25 - 120	30	
2-Methylphenol	U	50.0	37.2	74.3	61.7	41.1	66.5	9.94	20 - 110	30	
2-Nitroaniline	U	50.0	45.2	90.3	61.7	59.5	96.4	27.4	45 - 115	30	
2-Nitrophenol	U	50.0	37.8	75.6	61.7	39.9	64.7	5.51	20 - 115	30	
3-Nitroaniline	U	50.0	65.8	132	61.7	80.1	130	19.6	40 - 120	30	*
3,3'-Dichlorobenzidine	U	50.0	55.2	110	61.7	49.1	79.6	11.7	30 - 140	30	
3-,4-Methylphenol	U	50.0	42.9	85.7	61.7	48.8	79	12.9	20 - 110	30	
4-Bromophenyl-phenylether	U	50.0	47.7	95.3	61.7	51.9	84.1	8.57	40 - 115	30	
4-Chloroaniline	U	50.0	39.2	78.4	61.7	46.4	75.2	17.0	25 - 120	30	
4-Nitrophenol	U	50.0	52.2	104	61.7	63.4	103	19.4	10 - 132	30	
Acenaphthene	U	50.0	41.8	83.6	61.7	51.3	83.1	20.4	30 - 120	30	
Acenaphthylene	U	50.0	43.5	87.1	61.7	53.4	86.4	20.2	30 - 120	30	
Anthracene	U	50.0	43.4	86.7	61.7	47.6	77.1	9.34	55 - 130	30	
Benzo(a)anthracene	U	50.0	47.9	95.9	61.7	47.4	76.8	1.14	60 - 130	30	
Benzo(a)pyrene	U	50.0	50.0	100	61.7	48.5	78.6	3.08	55 - 135	30	
Benzo(b)fluoranthene	U	50.0	51.5	103	61.7	49.6	80.3	3.77	45 - 125	30	
Benzo(g,h,i)Perylene	U	50.0	51.6	103	61.7	50.0	81	3.15	45 - 140	30	
Benzo(k)fluoranthene	U	50.0	47.7	95.4	61.7	47.7	77.3	0.0397	55 - 140	30	
Benzoic acid	U	50.0	25.1	50.2	61.7	30.8	49.9	20.5	10 - 100	30	
Benzyl alcohol	U	50.0	38.6	77.3	61.7	42.9	69.5	10.5	20 - 110	30	
Bis(2-Chloroethyl)ether	U	50.0	36.2	72.5	61.7	39.2	63.5	7.82	25 - 110	30	
Bis(2-Chloroethoxy)Methane	U	50.0	42.9	85.7	61.7	47.2	76.5	9.73	20 - 105	30	
bis(2-Ethylhexyl)phthalate	U	50.0	54.3	109	61.7	53.0	85.9	2.40	50 - 150	30	
Butylbenzylphthalate	U	50.0	55.0	110	61.7	56.3	91.2	2.19	55 - 150	30	
Carbazole	U	50.0	51.5	103	61.7	64.9	105	22.9	50 - 130	30	
Chrysene	U	50.0	50.0	100	61.7	49.3	79.8	1.49	55 - 130	30	
Di-N-Butylphthalate	U	50.0	50.5	101	61.7	54.9	88.9	8.35	55 - 118	30	
Di-n-octylphthalate	U	50.0	53.1	106	61.7	53.6	86.8	0.901	40 - 146	30	

MS_MSD - Modified 03/06/2008

PDF File ID: 2410740

Report generated 05/11/2012 14:10

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:HPMS4 19-APR-12 Worknum:WG396821

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

Parent ID:L12040928-01 File ID:4M60760 Dil:1 Method:8270C

Sample ID:L12040928-08 MS File ID:4M60766 Dil:1 Matrix:Water

Sample ID:L12040928-10 MSD File ID:4M60767 Dil:1 Units:ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Dibenzo(a,h)Anthracene	U	50.0	52.2	104	61.7	50.5	81.8	3.40	45 - 125	30	
Dibenzofuran	U	50.0	44.1	88.3	61.7	55.0	89.1	21.9	35 - 115	30	
Diethylphthalate	U	50.0	52.1	104	61.7	66.7	108	24.6	45 - 120	30	
Dimethylphthalate	U	50.0	49.8	99.7	61.7	64.5	104	25.6	25 - 112	30	
Fluoranthene	U	50.0	48.0	95.9	61.7	49.2	79.7	2.54	50 - 137	30	
Fluorene	U	50.0	44.7	89.4	61.7	54.6	88.5	20.0	40 - 120	30	
Hexachlorobenzene	U	50.0	46.4	92.8	61.7	46.9	76	1.01	50 - 130	30	
Hexachlorobutadiene	U	50.0	29.3	58.6	61.7	29.4	47.6	0.427	24 - 105	30	
Hexachlorocyclopentadiene	U	50.0	9.46	18.9	61.7	0	0	200	20 - 143	30	*#
Hexachloroethane	U	50.0	21.9	43.8	61.7	24.8	40.2	12.5	25 - 95	30	
Indeno(1,2,3-cd)pyrene	U	50.0	52.2	104	61.7	50.6	81.9	3.14	50 - 135	30	
Isophorone	U	50.0	41.1	82.2	61.7	45.9	74.4	11.1	30 - 110	30	
N-Nitrosodiphenylamine	U	100	82.4	82.4	123	85.6	69.4	3.80	40 - 110	30	
Naphthalene	U	50.0	35.6	71.3	61.7	39.5	64	10.4	25 - 110	30	
Nitrobenzene	U	50.0	39.6	79.2	61.7	42.9	69.6	8.15	30 - 110	30	
Pentachlorophenol	U	50.0	57.1	114	61.7	71.0	115	21.7	40 - 140	30	
Phenanthrene	U	50.0	48.1	96.3	61.7	55.2	89.4	13.7	55 - 120	30	
Phenol	U	50.0	36.9	73.8	61.7	40.3	65.3	8.83	10 - 120	30	
Pyrene	U	50.0	49.3	98.6	61.7	51.5	83.4	4.36	55 - 130	30	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2410740

Report generated 05/11/2012 14:10

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040928
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: 2410746
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040928
Instrument: HPMS4
Analyst: CAA
Workgroup: WG396671

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

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

This check relates to the following samples:

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

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2410746
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040928
Instrument: HPMS4
Analyst: CAA
Workgroup: WG397151

Tune ID: WG397151-01
Run Date: 05/07/2012
Run Time: 08:31
File ID: 4M60691
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	36.1	70621	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	39.0	76298	PASS
70.0	69.0	0	2.00	0.223	170	PASS
127	198	40.0	60.0	48.9	95714	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	195733	PASS
199	198	5.00	9.00	6.82	13354	PASS
275	198	10.0	30.0	24.1	47210	PASS
365	198	1.00	100	2.92	5718	PASS
441	443	0.0100	100	77.7	29263	PASS
442	198	40.0	100	97.9	191666	PASS
443	442	17.0	23.0	19.7	37674	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397151-02	CCV	01	05/07/2012 08:51	
WG397166-01	CCV	01	05/07/2012 09:25	
WG396481-02	BLANK	01	05/07/2012 11:09	
WG396481-02	BLANK	01	05/07/2012 11:09	
WG396481-03	LCS	01	05/07/2012 11:44	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2410746
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040928
Instrument: HPMS4
Analyst: CAA
Workgroup: WG397449

Tune ID: WG397449-01
Run Date: 05/09/2012
Run Time: 08:41
File ID: 4M60744
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	36.4	74762	PASS
68.0	69.0	0	2.00	0.609	500	PASS
69.0	198	0	100	40.0	82144	PASS
70.0	69.0	0	2.00	0.236	194	PASS
127	198	40.0	60.0	50.4	103488	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	205162	PASS
199	198	5.00	9.00	6.91	14181	PASS
275	198	10.0	30.0	24.0	49336	PASS
365	198	1.00	100	2.80	5740	PASS
441	443	0.0100	100	82.3	29435	PASS
442	198	40.0	100	89.4	183421	PASS
443	442	17.0	23.0	19.5	35754	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397449-02	CCV	01	05/09/2012 09:02	
WG397451-01	CCV	01	05/09/2012 09:37	
L12040928-01	MW-27-042612	01	05/09/2012 17:45	
L12040928-03	MW-10-042612	01	05/09/2012 18:20	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2410746
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040928
Instrument: HPMS4
Analyst: CAA
Workgroup: WG397588

Tune ID: WG397588-01
Run Date: 05/10/2012
Run Time: 08:18
File ID: 4M60762
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	36.6	80808	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	39.3	86621	PASS
70.0	69.0	0	2.00	0.488	423	PASS
127	198	40.0	60.0	50.4	111269	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	220565	PASS
199	198	5.00	9.00	6.90	15230	PASS
275	198	10.0	30.0	23.3	51493	PASS
365	198	1.00	100	2.74	6033	PASS
441	443	0.0100	100	66.5	26706	PASS
442	198	40.0	100	91.9	202794	PASS
443	442	17.0	23.0	19.8	40141	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397588-02	CCV	01	05/10/2012 08:38	
WG397589-01	CCV	01	05/10/2012 09:12	
L12040928-08	MW-27-042612-MS	01	05/10/2012 10:11	
L12040928-10	MW-27-042612-MSD	01	05/10/2012 10:46	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2410746
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12040928
Analytical Method: 8270C
ICAL Workgroup: WG395394
Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
2,4,6-Trichlorophenol	CCC	0.3673	2.63		
2,4-Dichlorophenol	CCC	0.2857	5.98		
2-Nitrophenol	CCC	0.1988	2.83		
Acenaphthene	CCC	1.181	8.52		
Benzo[a]pyrene	CCC	1.055	1.74		
Di-n-Octyl Phthalate	CCC	1.292	1.30		
Fluoranthene	CCC	1.112	8.91		
Hexachlorobutadiene	CCC	0.1661	7.56		
Pentachlorophenol	CCC	0.1399	1.49		
Phenol	CCC	1.516	6.15		
2,4-Dinitrophenol	SPCC	0.1506	18.0	1.00000	
4-Nitrophenol	SPCC	0.2330	9.39		
Hexachlorocyclopentadiene	SPCC	0.2711	6.05		
n-Nitrosodipropylamine	SPCC	0.8546	11.1		
1,3-Dinitrobenzene		0.2427	2.31		
1,4-Dioxane		0.4985	3.57		
2,4,5-Trichlorophenol		0.3781	2.62		
2,4-Dimethylphenol		0.3413	13.6		
2,4-Dinitrotoluene		0.4023	3.16		
2,6-Dinitrotoluene		0.3161	2.33		
2-Chloronaphthalene		1.129	5.90		
2-Chlorophenol		1.357	4.28		
2-Methylnaphthalene		0.6882	8.15		
2-Methylphenol		1.045	5.05		
2-Nitroaniline		0.3238	2.12		
3,3'-Dichlorobenzidine		0.2427	18.9	0.99900	
3-Nitroaniline		0.2332	11.0		
4-Bromophenyl Phenyl Ether		0.2024	6.28		
4-Chloroaniline		0.3902	10.4		
Acenaphthylene		1.814	9.50		
Anthracene		1.088	8.21		
Benzo[a]anthracene		1.061	6.56		
Benzo[b]fluoranthene		1.157	4.65		
Benzo[ghi]perylene		0.9723	2.25		
Benzo[k]fluoranthene		1.072	4.72		
Benzoic Acid		0.2352	10.4		
Benzyl Alcohol		0.8788	2.67		
Butyl Benzyl Phthalate		0.5442	5.54		
Carbazole		0.9526	5.16		
Chrysene		0.9961	8.13		
Di-n-Butyl Phthalate		1.183	7.95		
Dibenz[ah]anthracene		0.9802	1.55		
Dibenzofuran		1.582	8.47		
Diethylphthalate		1.260	6.91		
Dimethylphthalate		1.266	7.30		

INT_CAL - Modified 03/06/2008
PDF File ID: 2410742
Report generated 05/11/2012 14:10

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12040928
Analytical Method: 8270C
ICAL Workgroup: WG395394
Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

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

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

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

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Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040928 **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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Report generated 05/11/2012 14:10

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040928 **Instrument ID:** HPMS4

Analytical Method: 8270C **Initial Calibration Date:** 19-APR-12 13:23

Column ID: F

Analyte	WG395394-02			WG395394-03			WG395394-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	50.0	302655.000	0.3692	3.00	15865.0000	0.3732	10.0	48642.0000	0.3812
2,4-Dichlorophenol	50.0	406146.000	0.2843	3.00	23297.0000	0.3097	10.0	68171.0000	0.3052
2-Nitrophenol	50.0	296019.000	0.2072	3.00	14686.0000	0.1953	10.0	44266.0000	0.1982
Acenaphthene	50.0	959014.000	1.170	3.00	54687.0000	1.286	10.0	164631.000	1.290
Benzo[a]pyrene	50.0	1420992.00	1.050	3.00	76197.0000	1.089	10.0	230518.000	1.068
Di-n-Octyl Phthalate	50.0	1737436.00	1.283	3.00	92158.0000	1.317	10.0	278406.000	1.290
Fluoranthene	50.0	1596911.00	1.089	3.00	93933.0000	1.257	10.0	276101.000	1.217
Hexachlorobutadiene	50.0	236674.000	0.1657	3.00	13857.0000	0.1842	10.0	39698.0000	0.1777
Pentachlorophenol	50.0	206843.000	0.1411	NA	NA	NA	10.0	31968.0000	0.1409
Phenol	50.0	548117.000	1.480	3.00	33658.0000	1.678	10.0	94119.0000	1.582
2,4-Dinitrophenol	50.0	130897.000	0.1597	NA	NA	NA	NA	NA	NA
4-Nitrophenol	50.0	186191.000	0.2271	NA	NA	NA	10.0	32506.0000	0.2547
Hexachlorocyclopentadiene	50.0	244269.000	0.2980	3.00	10305.0000	0.2424	10.0	34278.0000	0.2686
n-Nitrosodipropylamine	50.0	311009.000	0.8398	3.00	19190.0000	0.9568	10.0	56111.0000	0.9434
1,3-Dinitrobenzene	50.0	201353.000	0.2456	3.00	9788.00000	0.2302	10.0	31289.0000	0.2452
1,4-Dioxane	50.0	185033.000	0.4996	3.00	9565.00000	0.4769	10.0	31667.0000	0.5324
2,4,5-Trichlorophenol	50.0	308844.000	0.3768	3.00	16640.0000	0.3914	10.0	49310.0000	0.3864
2,4-Dimethylphenol	50.0	463322.000	0.3243	3.00	33490.0000	0.4453	10.0	81553.0000	0.3651
2,4-Dinitrotoluene	50.0	332745.000	0.4059	3.00	17015.0000	0.4002	10.0	53272.0000	0.4175
2,6-Dinitrotoluene	50.0	256989.000	0.3135	3.00	13905.0000	0.3271	10.0	41342.0000	0.3240
2-Chloronaphthalene	50.0	906729.000	1.106	3.00	52303.0000	1.230	10.0	153572.000	1.204
2-Chlorophenol	50.0	497875.000	1.344	3.00	29118.0000	1.452	10.0	83952.0000	1.412
2-Methylnaphthalene	50.0	967916.000	0.6775	3.00	57527.0000	0.7649	10.0	167733.000	0.7510
2-Methylphenol	50.0	380206.000	1.027	3.00	22411.0000	1.117	10.0	64478.0000	1.084
2-Nitroaniline	50.0	261334.000	0.3188	3.00	13815.0000	0.3250	10.0	42993.0000	0.3369
3,3'-Dichlorobenzidine	50.0	322552.000	0.2327	3.00	25330.0000	0.3536	10.0	53915.0000	0.2449
3-Nitroaniline	50.0	174456.000	0.2128	NA	NA	NA	10.0	29679.0000	0.2326
4-Bromophenyl Phenyl Ether	50.0	293263.000	0.2000	3.00	16506.0000	0.2208	10.0	49608.0000	0.2187
4-Chloroaniline	50.0	522329.000	0.3656	3.00	34347.0000	0.4567	10.0	88805.0000	0.3976
Acenaphthylene	50.0	1459231.00	1.780	3.00	86364.0000	2.031	10.0	253419.000	1.986
Anthracene	50.0	1564112.00	1.067	3.00	91274.0000	1.221	10.0	268336.000	1.183
Benzo[a]anthracene	50.0	1436678.00	1.036	3.00	83823.0000	1.170	10.0	248867.000	1.130
Benzo[b]fluoranthene	50.0	1510511.00	1.116	3.00	87582.0000	1.251	10.0	261129.000	1.210
Benzo[ghi]perylene	50.0	1336874.00	0.9874	3.00	70328.0000	1.005	10.0	213268.000	0.9878
Benzo[k]fluoranthene	50.0	1477424.00	1.091	3.00	80556.0000	1.151	10.0	242271.000	1.122
Benzoic Acid	50.0	336174.000	0.2353	NA	NA	NA	NA	NA	NA
Benzyl Alcohol	50.0	323130.000	0.8725	3.00	18359.0000	0.9154	10.0	52708.0000	0.8862
Butyl Benzyl Phthalate	50.0	736908.000	0.5316	3.00	42313.0000	0.5907	10.0	126613.000	0.5751
Carbazole	50.0	1383835.00	0.9437	3.00	80012.0000	1.071	10.0	214134.000	0.9439
Chrysene	50.0	1327816.00	0.9578	3.00	81007.0000	1.131	10.0	234491.000	1.065
Di-n-Butyl Phthalate	50.0	1699050.00	1.159	3.00	98435.0000	1.317	10.0	291024.000	1.283
Dibenz[ah]anthracene	50.0	1352159.00	0.9987	3.00	67905.0000	0.9703	10.0	213369.000	0.9883

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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040928
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: L12040928
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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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040928
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: L12040928
Analytical Method: 8270C
Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-08			WG395394-09		
	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	100	535987.000	0.3570	120	669686.000	0.3523
2,4-Dichlorophenol	100	715757.000	0.2655	120	900159.000	0.2624
2-Nitrophenol	100	514984.000	0.1910	120	659346.000	0.1922
Acenaphthene	100	1612771.00	1.074	120	1951899.00	1.027
Benzo[a]pyrene	100	2422076.00	1.044	120	2982535.00	1.043
Di-n-Octyl Phthalate	100	3002395.00	1.294	120	3682000.00	1.288
Fluoranthene	100	2684844.00	1.005	120	3249661.00	0.9809
Hexachlorobutadiene	100	411451.000	0.1526	120	507887.000	0.1481
Pentachlorophenol	100	367513.000	0.1376	120	458736.000	0.1385
Phenol	100	991961.000	1.432	120	1231425.00	1.391
2,4-Dinitrophenol	100	256771.000	0.1710	120	327279.000	0.1722
4-Nitrophenol	100	320939.000	0.2137	120	386132.000	0.2032
Hexachlorocyclopentadiene	100	403426.000	0.2687	120	490221.000	0.2579
n-Nitrosodipropylamine	100	522498.000	0.7543	120	624493.000	0.7052
1,3-Dinitrobenzene	100	365872.000	0.2437	120	463456.000	0.2438
1,4-Dioxane	100	348759.000	0.5035	120	439725.000	0.4965
2,4,5-Trichlorophenol	100	556900.000	0.3709	120	692553.000	0.3644
2,4-Dimethylphenol	100	831386.000	0.3084	120	1031288.00	0.3007
2,4-Dinitrotoluene	100	583421.000	0.3886	120	727634.000	0.3828
2,6-Dinitrotoluene	100	466415.000	0.3106	120	580776.000	0.3056
2-Chloronaphthalene	100	1597789.00	1.064	120	1980928.00	1.042
2-Chlorophenol	100	903123.000	1.304	120	1130760.00	1.277
2-Methylnaphthalene	100	1696852.00	0.6294	120	2083523.00	0.6074
2-Methylphenol	100	686225.000	0.9906	120	853772.000	0.9640
2-Nitroaniline	100	478820.000	0.3189	120	598982.000	0.3151
3,3'-Dichlorobenzidine	100	535244.000	0.2164	120	679065.000	0.2212
3-Nitroaniline	100	384870.000	0.2563	120	523691.000	0.2755
4-Bromophenyl Phenyl Ether	100	505367.000	0.1892	120	625697.000	0.1889
4-Chloroaniline	100	1131551.00	0.4197	120	1382212.00	0.4030
Acenaphthylene	100	2438377.00	1.624	120	2981097.00	1.568
Anthracene	100	2652184.00	0.9930	120	3213859.00	0.9701
Benzo[a]anthracene	100	2445804.00	0.9887	120	2986908.00	0.9731
Benzo[b]fluoranthene	100	2654859.00	1.144	120	3081081.00	1.078
Benzo[ghi]perylene	100	2198670.00	0.9474	120	2700031.00	0.9446
Benzo[k]fluoranthene	100	2404348.00	1.036	120	2836726.00	0.9924
Benzoic Acid	100	675656.000	0.2506	120	915551.000	0.2669
Benzyl Alcohol	100	594299.000	0.8579	120	747792.000	0.8444
Butyl Benzyl Phthalate	100	1272202.00	0.5143	120	1549387.00	0.5048
Carbazole	100	2461069.00	0.9215	120	3053064.00	0.9215
Chrysene	100	2259995.00	0.9136	120	2763239.00	0.9003
Di-n-Butyl Phthalate	100	2883140.00	1.080	120	3504116.00	1.058
Dibenz[ah]anthracene	100	2261465.00	0.9745	120	2804015.00	0.9810

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

INITIAL CALIBRATION DATA

Login Number: L12040928 **Instrument ID:** HPMS4

Analytical Method: 8270C **Initial Calibration Date:** 19-APR-12 13:23

Column ID: F

Analyte	WG395394-08			WG395394-09		
	CONC	RESP	RF	CONC	RESP	RF
Dibenzofuran	100	2178444.00	1.451	120	2633898.00	1.386
Diethylphthalate	100	1756256.00	1.170	120	2162475.00	1.138
Dimethylphthalate	100	1760527.00	1.173	120	2165968.00	1.140
Fluorene	100	1832624.00	1.221	120	2243623.00	1.180
Hexachlorobenzene	100	543444.000	0.2035	120	663561.000	0.2003
Hexachloroethane	100	384708.000	0.5553	120	480318.000	0.5424
Indeno[1,2,3-cd]pyrene	100	2721409.00	1.173	120	3353339.00	1.173
Isophorone	100	1546209.00	0.5735	120	1916721.00	0.5588
Naphthalene	100	2577401.00	0.9560	120	3171066.00	0.9245
Nitrobenzene	100	854248.000	0.3168	120	1069745.00	0.3119
Phenanthrene	100	2552198.00	0.9556	120	3120483.00	0.9419
Pyrene	100	2734557.00	1.105	120	3331157.00	1.085
Sym-Trinitrobenzene	100	450708.000	0.1688	120	571928.000	0.1726
bis(2-Chloroethoxy)methane	100	1134885.00	0.4209	120	1390586.00	0.4054
bis(2-Chloroethyl)ether	100	615863.000	0.8890	120	761552.000	0.8599
bis(2-Ethylhexyl)phthalate	100	1738038.00	0.7026	120	2123921.00	0.6920

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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040928
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
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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040928
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: 2410742
Report generated 05/11/2012 14:10

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 Run Date: 04/19/2012 Sample ID: WG395394-10
Instrument ID: HPMS4 Run Time: 13:58 Method: 8270C
File ID: 4M60447 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

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

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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 Run Date: 04/19/2012 Sample ID: WG395394-10
Instrument ID: HPMS4 Run Time: 13:58 Method: 8270C
File ID: 4M60447 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

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

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 Run Date: 04/19/2012 Sample ID: WG395394-11
Instrument ID: HPMS4 Run Time: 14:33 Method: 8270C
File ID: 4M60448 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

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

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 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
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Report generated 05/11/2012 14:10

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/07/2012 Sample ID: WG397151-02
Instrument ID: HPMS4 Run Time: 08:51 Method: 8270C
File ID: 4M60692 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
2,4,6-Trichlorophenol	CCC	50000	51800	ug/L	0.381	3.61	20	
2,4-Dichlorophenol	CCC	50000	51200	ug/L	0.293	2.50	20	
2-Nitrophenol	CCC	50000	53700	ug/L	0.214	7.39	20	
Acenaphthene	CCC	50000	49000	ug/L	1.16	1.96	20	
Benzo[a]pyrene	CCC	50000	52000	ug/L	1.10	4.02	20	
Di-n-Octyl Phthalate	CCC	50000	55100	ug/L	1.42	10.2	20	
Fluoranthene	CCC	50000	50200	ug/L	1.12	0.303	20	
Hexachlorobutadiene	CCC	50000	52200	ug/L	0.174	4.50	20	
n-Nitrosodiphenylamine	CCC	50000	49800	ug/L	0.645	0.393	20	
Pentachlorophenol	CCC	50000	52100	ug/L	0.146	4.20	20	
Phenol	CCC	50000	48400	ug/L	1.47	3.27	20	
1,4-Dichlorobenzene	CCC	50000	49700	ug/L	1.53	0.697	20	
4-Chloro-3-Methylphenol	CCC	50000	49200	ug/L	0.285	1.65	20	
2,4-Dinitrophenol	SPCC	50000	50600	ug/L	0.160	1.15	20	
4-Nitrophenol	SPCC	50000	41800	ug/L	0.195	16.4	20	
Hexachlorocyclopentadiene	SPCC	50000	56800	ug/L	0.308	13.5	20	
n-Nitrosodipropylamine	SPCC	50000	50300	ug/L	0.859	0.523	20	
Sym-Trinitrobenzene		50000	55000	ug/L	0.174	10.0	20	
1,3-Dinitrobenzene		50000	52000	ug/L	0.253	4.10	20	
1,4-Dioxane		50000	51200	ug/L	0.511	2.41	20	
2,4,5-Trichlorophenol		50000	53900	ug/L	0.407	7.72	20	
2,4-Dimethylphenol		50000	45500	ug/L	0.310	9.05	20	
2,4-Dinitrotoluene		50000	52800	ug/L	0.425	5.60	20	
2,6-Dinitrotoluene		50000	51300	ug/L	0.324	2.54	20	
2-Chloronaphthalene		50000	50500	ug/L	1.14	0.928	20	
2-Chlorophenol		50000	49200	ug/L	1.34	1.51	20	
2-Methylnaphthalene		50000	49600	ug/L	0.683	0.808	20	
2-Methylphenol		50000	47400	ug/L	0.992	5.12	20	
2-Nitroaniline		50000	47500	ug/L	0.307	5.07	20	
3-Nitroaniline		50000	51200	ug/L	0.239	2.38	20	
3,3'-Dichlorobenzidine		50000	51700	ug/L	0.230	3.36	20	
3-,4-Methylphenol		50000	47600	ug/L	1.29	4.77	20	
4-Bromophenyl Phenyl Ether		50000	51800	ug/L	0.210	3.67	20	
4-Chloroaniline		50000	49300	ug/L	0.385	1.31	20	
Acenaphthylene		50000	49400	ug/L	1.79	1.28	20	
Anthracene		50000	49400	ug/L	1.08	1.13	20	
Benzo[a]anthracene		50000	49900	ug/L	1.06	0.155	20	
Benzo[b]fluoranthene		50000	52500	ug/L	1.21	4.98	20	
Benzo[ghi]perylene		50000	47100	ug/L	0.916	5.76	20	
Benzo[k]fluoranthene		50000	53900	ug/L	1.15	7.71	20	
Benzoic Acid		50000	22600	ug/L	0.106	54.8	20	*
Benzyl Alcohol		50000	47700	ug/L	0.838	4.70	20	

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/07/2012 Sample ID: WG397151-02

Instrument ID: HPMS4 Run Time: 08:51 Method: 8270C

File ID: 4M60692 Analyst: CAA QC Key: WATERLOO

Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 19-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
bis(2-Chloroethyl)ether		50000	47200	ug/L	0.895	5.65	20	
bis(2-Chloroethoxy)methane		50000	50900	ug/L	0.476	1.82	20	
bis(2-Ethylhexyl)phthalate		50000	51200	ug/L	0.761	2.41	20	
Butyl Benzyl Phthalate		50000	51100	ug/L	0.556	2.16	20	
Carbazole		50000	50200	ug/L	0.957	0.492	20	
Chrysene		50000	49100	ug/L	0.979	1.74	20	
Di-n-Butyl Phthalate		50000	50800	ug/L	1.20	1.69	20	
Dibenz[ah]anthracene		50000	49800	ug/L	0.976	0.420	20	
Dibenzofuran		50000	49900	ug/L	1.58	0.218	20	
Diethylphthalate		50000	50800	ug/L	1.28	1.69	20	
Dimethylphthalate		50000	50600	ug/L	1.28	1.30	20	
Fluorene		50000	49700	ug/L	1.34	0.552	20	
Hexachlorobenzene		50000	53200	ug/L	0.235	6.40	20	
Hexachloroethane		50000	50500	ug/L	0.576	1.02	20	
Indeno[1,2,3-cd]pyrene		50000	49100	ug/L	1.15	1.77	20	
Isophorone		50000	50000	ug/L	0.615	0.0344	20	
Naphthalene		50000	48700	ug/L	1.03	2.63	20	
Nitrobenzene		50000	49700	ug/L	0.335	0.607	20	
Phenanthrene		50000	48400	ug/L	1.03	3.12	20	
Pyrene		50000	51200	ug/L	1.22	2.31	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2410747
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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/07/2012 Sample ID: WG397166-01
Instrument ID: HPMS4 Run Time: 09:25 Method: 8270C
File ID: 4M60693 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 01-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1'-Biphenyl		50000	49500	ug/L	1.63	1.00	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/09/2012 Sample ID: WG397449-02
Instrument ID: HPMS4 Run Time: 09:02 Method: 8270C
File ID: 4M60745 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
2,4,6-Trichlorophenol	CCC	50000	50900	ug/L	0.374	1.86	20	
2,4-Dichlorophenol	CCC	50000	50200	ug/L	0.287	0.462	20	
2-Nitrophenol	CCC	50000	50000	ug/L	0.199	0.0410	20	
Acenaphthene	CCC	50000	48300	ug/L	1.14	3.32	20	
Benzo[a]pyrene	CCC	50000	52100	ug/L	1.10	4.29	20	
Di-n-Octyl Phthalate	CCC	50000	56400	ug/L	1.46	12.8	20	
Fluoranthene	CCC	50000	50100	ug/L	1.11	0.180	20	
Hexachlorobutadiene	CCC	50000	51300	ug/L	0.171	2.62	20	
n-Nitrosodiphenylamine	CCC	50000	50300	ug/L	0.651	0.583	20	
Pentachlorophenol	CCC	50000	47400	ug/L	0.133	5.23	20	
Phenol	CCC	50000	49300	ug/L	1.50	1.33	20	
1,4-Dichlorobenzene	CCC	50000	49400	ug/L	1.52	1.12	20	
4-Chloro-3-Methylphenol	CCC	50000	49000	ug/L	0.284	1.90	20	
2,4-Dinitrophenol	SPCC	50000	36000	ug/L	0.107	28.0	20	*
4-Nitrophenol	SPCC	50000	41400	ug/L	0.193	17.2	20	
Hexachlorocyclopentadiene	SPCC	50000	50400	ug/L	0.273	0.755	20	
n-Nitrosodipropylamine	SPCC	50000	51600	ug/L	0.882	3.19	20	
Sym-Trinitrobenzene		50000	55700	ug/L	0.176	11.4	20	
1,3-Dinitrobenzene		50000	52400	ug/L	0.254	4.81	20	
1,4-Dioxane		50000	51300	ug/L	0.512	2.68	20	
2,4,5-Trichlorophenol		50000	51000	ug/L	0.386	2.09	20	
2,4-Dimethylphenol		50000	46500	ug/L	0.317	7.06	20	
2,4-Dinitrotoluene		50000	52500	ug/L	0.422	4.90	20	
2,6-Dinitrotoluene		50000	51000	ug/L	0.322	1.99	20	
2-Chloronaphthalene		50000	50500	ug/L	1.14	0.933	20	
2-Chlorophenol		50000	49700	ug/L	1.35	0.691	20	
2-Methylnaphthalene		50000	49300	ug/L	0.679	1.39	20	
2-Methylphenol		50000	48200	ug/L	1.01	3.64	20	
2-Nitroaniline		50000	49600	ug/L	0.321	0.892	20	
3-Nitroaniline		50000	57500	ug/L	0.268	15.0	20	
3,3'-Dichlorobenzidine		50000	57300	ug/L	0.254	14.6	20	
3-,4-Methylphenol		50000	48400	ug/L	1.32	3.20	20	
4-Bromophenyl Phenyl Ether		50000	51200	ug/L	0.207	2.31	20	
4-Chloroaniline		50000	54000	ug/L	0.421	7.97	20	
Acenaphthylene		50000	49300	ug/L	1.79	1.37	20	
Anthracene		50000	49200	ug/L	1.07	1.55	20	
Benzo[a]anthracene		50000	50100	ug/L	1.06	0.231	20	
Benzo[b]fluoranthene		50000	54200	ug/L	1.25	8.38	20	
Benzo[ghi]perylene		50000	47500	ug/L	0.923	5.04	20	
Benzo[k]fluoranthene		50000	51800	ug/L	1.11	3.55	20	
Benzoic Acid		50000	9720	ug/L	0.0457	80.6	20	*
Benzyl Alcohol		50000	48900	ug/L	0.859	2.29	20	

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Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/09/2012 Sample ID: WG397449-02

Instrument ID: HPMS4 Run Time: 09:02 Method: 8270C

File ID: 4M60745 Analyst: CAA QC Key: WATERLOO

Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 19-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
bis(2-Chloroethyl)ether		50000	48400	ug/L	0.918	3.24	20	
bis(2-Chloroethoxy)methane		50000	51800	ug/L	0.485	3.59	20	
bis(2-Ethylhexyl)phthalate		50000	52700	ug/L	0.782	5.33	20	
Butyl Benzyl Phthalate		50000	51600	ug/L	0.562	3.22	20	
Carbazole		50000	50900	ug/L	0.970	1.80	20	
Chrysene		50000	49800	ug/L	0.992	0.427	20	
Di-n-Butyl Phthalate		50000	51200	ug/L	1.21	2.47	20	
Dibenz[ah]anthracene		50000	50500	ug/L	0.991	1.08	20	
Dibenzofuran		50000	49700	ug/L	1.57	0.676	20	
Diethylphthalate		50000	51000	ug/L	1.29	2.07	20	
Dimethylphthalate		50000	50500	ug/L	1.28	0.966	20	
Fluorene		50000	49500	ug/L	1.33	1.07	20	
Hexachlorobenzene		50000	50900	ug/L	0.225	1.83	20	
Hexachloroethane		50000	51200	ug/L	0.584	2.41	20	
Indeno[1,2,3-cd]pyrene		50000	49700	ug/L	1.17	0.672	20	
Isophorone		50000	50500	ug/L	0.622	0.999	20	
Naphthalene		50000	48400	ug/L	1.03	3.19	20	
Nitrobenzene		50000	49900	ug/L	0.336	0.229	20	
Phenanthrene		50000	48300	ug/L	1.03	3.35	20	
Pyrene		50000	50700	ug/L	1.21	1.49	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2410747
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/09/2012 Sample ID: WG397451-01
Instrument ID: HPMS4 Run Time: 09:37 Method: 8270C
File ID: 4M60746 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 01-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1'-Biphenyl		50000	49800	ug/L	1.64	0.397	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2410747
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/10/2012 Sample ID: WG397588-02

Instrument ID: HPMS4 Run Time: 08:38 Method: 8270C

File ID: 4M60763 Analyst: CAA QC Key: WATERLOO

Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 19-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
2,4,6-Trichlorophenol	CCC	50000	52000	ug/L	0.382	3.91	20	
2,4-Dichlorophenol	CCC	50000	51600	ug/L	0.295	3.10	20	
2-Nitrophenol	CCC	50000	55600	ug/L	0.221	11.2	20	
Acenaphthene	CCC	50000	48300	ug/L	1.14	3.36	20	
Benzo[a]pyrene	CCC	50000	51200	ug/L	1.08	2.49	20	
Di-n-Octyl Phthalate	CCC	50000	52100	ug/L	1.35	4.19	20	
Fluoranthene	CCC	50000	49700	ug/L	1.10	0.622	20	
Hexachlorobutadiene	CCC	50000	52500	ug/L	0.174	4.98	20	
n-Nitrosodiphenylamine	CCC	50000	49500	ug/L	0.641	1.04	20	
Pentachlorophenol	CCC	50000	46900	ug/L	0.131	6.29	20	
Phenol	CCC	50000	49300	ug/L	1.50	1.36	20	
1,4-Dichlorobenzene	CCC	50000	49000	ug/L	1.51	1.90	20	
4-Chloro-3-Methylphenol	CCC	50000	49600	ug/L	0.288	0.739	20	
2,4-Dinitrophenol	SPCC	50000	40900	ug/L	0.125	18.2	20	
4-Nitrophenol	SPCC	50000	48600	ug/L	0.227	2.76	20	
Hexachlorocyclopentadiene	SPCC	50000	51900	ug/L	0.281	3.75	20	
n-Nitrosodipropylamine	SPCC	50000	49600	ug/L	0.848	0.740	20	
Sym-Trinitrobenzene		50000	55400	ug/L	0.175	10.8	20	
1,3-Dinitrobenzene		50000	53200	ug/L	0.258	6.33	20	
1,4-Dioxane		50000	50300	ug/L	0.502	0.636	20	
2,4,5-Trichlorophenol		50000	52100	ug/L	0.394	4.25	20	
2,4-Dimethylphenol		50000	47200	ug/L	0.322	5.61	20	
2,4-Dinitrotoluene		50000	52900	ug/L	0.425	5.76	20	
2,6-Dinitrotoluene		50000	52200	ug/L	0.330	4.45	20	
2-Chloronaphthalene		50000	51000	ug/L	1.15	2.05	20	
2-Chlorophenol		50000	49200	ug/L	1.34	1.59	20	
2-Methylnaphthalene		50000	49600	ug/L	0.682	0.873	20	
2-Methylphenol		50000	47300	ug/L	0.989	5.36	20	
2-Nitroaniline		50000	50800	ug/L	0.329	1.68	20	
3-Nitroaniline		50000	43900	ug/L	0.205	12.2	20	
3,3'-Dichlorobenzidine		50000	58300	ug/L	0.259	16.6	20	
3-,4-Methylphenol		50000	47900	ug/L	1.30	4.22	20	
4-Bromophenyl Phenyl Ether		50000	51100	ug/L	0.207	2.30	20	
4-Chloroaniline		50000	51300	ug/L	0.400	2.63	20	
Acenaphthylene		50000	49000	ug/L	1.78	1.92	20	
Anthracene		50000	48900	ug/L	1.06	2.22	20	
Benzo[a]anthracene		50000	50200	ug/L	1.07	0.388	20	
Benzo[b]fluoranthene		50000	53200	ug/L	1.23	6.35	20	
Benzo[ghi]perylene		50000	53200	ug/L	1.03	6.39	20	
Benzo[k]fluoranthene		50000	49200	ug/L	1.06	1.54	20	
Benzoic Acid		50000	18700	ug/L	0.0880	62.6	20	*
Benzyl Alcohol		50000	48900	ug/L	0.860	2.17	20	

CCV - Modified 03/05/2008

PDF File ID: 2410747

Report generated 05/11/2012 14:11

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/10/2012 Sample ID: WG397588-02
Instrument ID: HPMS4 Run Time: 08:38 Method: 8270C
File ID: 4M60763 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
bis(2-Chloroethyl)ether		50000	47500	ug/L	0.902	4.99	20	
bis(2-Chloroethoxy)methane		50000	51500	ug/L	0.481	2.93	20	
bis(2-Ethylhexyl)phthalate		50000	51000	ug/L	0.757	1.99	20	
Butyl Benzyl Phthalate		50000	50400	ug/L	0.549	0.805	20	
Carbazole		50000	50200	ug/L	0.957	0.499	20	
Chrysene		50000	49000	ug/L	0.977	1.95	20	
Di-n-Butyl Phthalate		50000	50800	ug/L	1.20	1.54	20	
Dibenz[ah]anthracene		50000	54200	ug/L	1.06	8.50	20	
Dibenzofuran		50000	49800	ug/L	1.58	0.326	20	
Diethylphthalate		50000	51200	ug/L	1.29	2.39	20	
Dimethylphthalate		50000	50900	ug/L	1.29	1.75	20	
Fluorene		50000	49700	ug/L	1.33	0.698	20	
Hexachlorobenzene		50000	52500	ug/L	0.232	5.07	20	
Hexachloroethane		50000	49700	ug/L	0.567	0.600	20	
Indeno[1,2,3-cd]pyrene		50000	53400	ug/L	1.26	6.85	20	
Isophorone		50000	50400	ug/L	0.620	0.786	20	
Naphthalene		50000	49300	ug/L	1.05	1.31	20	
Nitrobenzene		50000	51300	ug/L	0.346	2.65	20	
Phenanthrene		50000	48500	ug/L	1.03	2.97	20	
Pyrene		50000	49600	ug/L	1.19	0.850	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2410747
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/10/2012 Sample ID: WG397589-01
Instrument ID: HPMS4 Run Time: 09:12 Method: 8270C
File ID: 4M60764 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG396821 Cal ID: HPMS4 - 01-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1'-Biphenyl		50000	49500	ug/L	1.62	1.08	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2410747
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040928 CCV Number: WG397151-02

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

Workgroup (AAB#): WG396821 Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397151-02	NA	NA	311921	675755	1120310	1191269	1001902	1217020
Upper Limit	NA	NA	623842	1351510	2240620	2382538	2003804	2434040
Lower Limit	NA	NA	155961	337878	560155	595635	500951	608510
WG396481-02	1.00	01	279899	596835	956519	1058524	848799	1045643
WG396481-03	1.00	01	285791	619355	1020086	1079383	889001	1110516

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: 2410748
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040928
Instrument ID: HPMS4
Workgroup (AAB#): WG396821

CCV Number: WG397449-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397449-02	NA	NA	330224	714843	1195386	1271424	1100745	1284869
Upper Limit	NA	NA	660448	1429686	2390772	2542848	2201490	2569738
Lower Limit	NA	NA	165112	357422	597693	635712	550373	642435
L12040928-01	1.00	01	279615	592252	1005413	1042023	901535	1043309
L12040928-03	1.00	01	274809	587241	998428	1043403	906812	1043975

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: 2410748
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040928
Instrument ID: HPMS4
Workgroup (AAB#): WG396821

CCV Number: WG397588-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397588-02	NA	NA	347649	734669	1259887	1302370	1212512	1328147
Upper Limit	NA	NA	695298	1469338	2519774	2604740	2425024	2656294
Lower Limit	NA	NA	173825	367335	629944	651185	606256	664074
L12040928-08	1.00	01	310764	662408	1116600	1184449	1061629	1197782
L12040928-10	1.00	01	304739	639412	1057688	1153842	1002632	1148936

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: 2410748
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040928 CCV Number: WG397151-02

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

Workgroup (AAB#): WG396821 Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397151-02	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
WG396481-02	1.00	01	7.29	10.38	15.69	8.57	18.48	11.98
WG396481-03	1.00	01	7.29	10.38	15.69	8.57	18.48	11.99

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: 2410750
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040928 CCV Number: WG397449-02

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

Workgroup (AAB#): WG396821 Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397449-02	NA	NA	7.29	10.38	15.69	8.57	18.49	11.99
Upper Limit	NA	NA	7.79	10.88	16.19	9.07	18.99	12.49
Lower Limit	NA	NA	6.79	9.88	15.19	8.07	17.99	11.49
L12040928-01	1.00	01	7.29	10.38	15.69	8.57	18.49	11.99
L12040928-03	1.00	01	7.29	10.38	15.69	8.57	18.48	11.99

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: 2410750
Report generated 05/11/2012 14:11

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040928 CCV Number: WG397588-02

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

Workgroup (AAB#): WG396821 Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397588-02	NA	NA	7.23	10.33	15.61	8.51	18.34	11.92
Upper Limit	NA	NA	7.73	10.83	16.11	9.01	18.84	12.42
Lower Limit	NA	NA	6.73	9.83	15.11	8.01	17.84	11.42
L12040928-08	1.00	01	7.24	10.32	15.61	8.52	18.34	11.93
L12040928-10	1.00	01	7.24	10.32	15.61	8.52	18.34	11.93

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: 2410750
Report generated 05/11/2012 14:11

2.2.1.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60760.D Vial: 17
Acq On : 9 May 2012 17:45 Operator: CAA
Sample : L12040928-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 09:31:02 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 May 10 09:30:38 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	279615	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	1042023	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	592284	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1043309	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	1005413	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	901535	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.06	112	521058	61.4616	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 61.46%			
12) Phenol-d5	6.89	99	651846	65.6965	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 65.70%			
31) Nitrobenzene-d5	7.85	82	338542	38.4127	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 76.82%			
59) 2-Fluorobiphenyl	9.64	172	781707	39.5246	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 79.04%			
86) 2,4,6-Tribromophenol	11.21	330	241160	91.3068	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 91.31%			
117) p-Terphenyl-d14	14.03	244	859539	46.3841	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 92.76%			

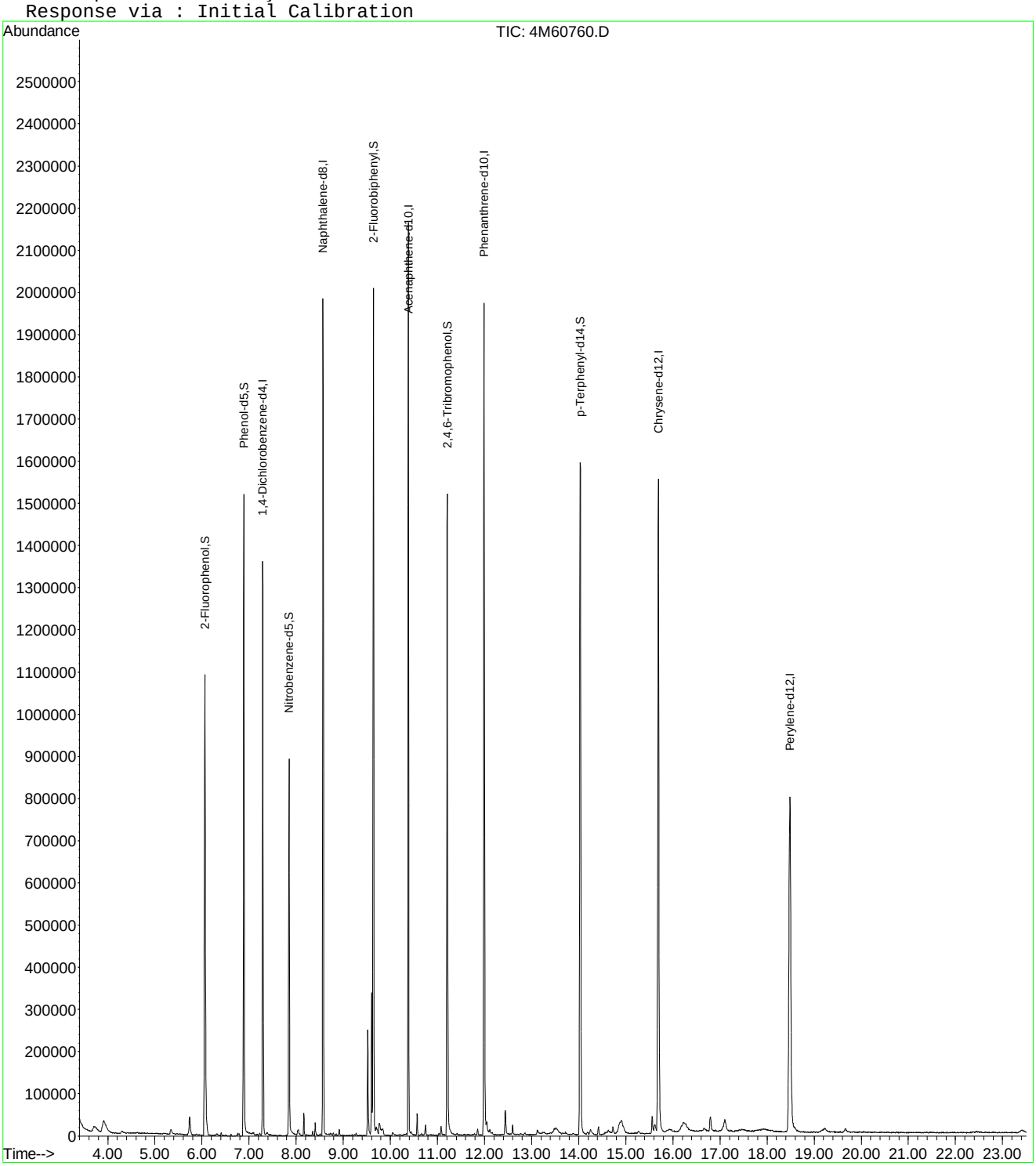
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60760.D MEGAMIX.M Thu May 10 11:18:52 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60760.D Vial: 17
Acq On : 9 May 2012 17:45 Operator: CAA
Sample : L12040928-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:31 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 May 10 09:30:38 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60760.D Vial: 17
Acq On : 9 May 2012 17:45 Operator: CAA
Sample : L12040928-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 11:25:12 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 : Thu May 10 11:24:26 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	279615	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	1042023	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	592252	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	1043309	40.00	ug/mL	0.00

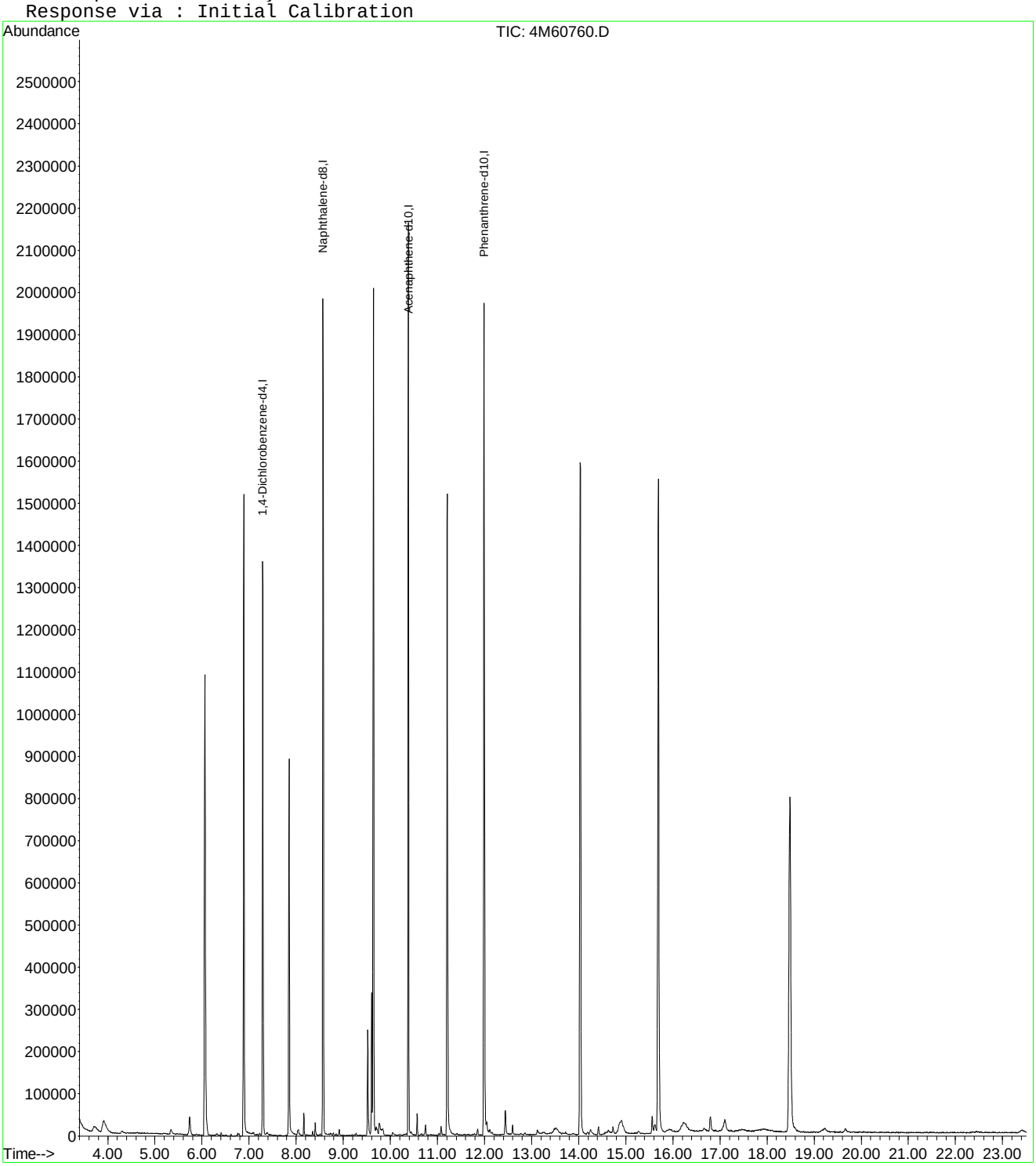
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60760.D TCL.M Thu May 10 11:25:12 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60760.D Vial: 17
Acq On : 9 May 2012 17:45 Operator: CAA
Sample : L12040928-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 11:25 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Thu May 10 11:24:26 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\050912\4M60760.D Vial: 17
Acq On : 9 May 2012 17:45 Operator: CAA
Sample : L12040928-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

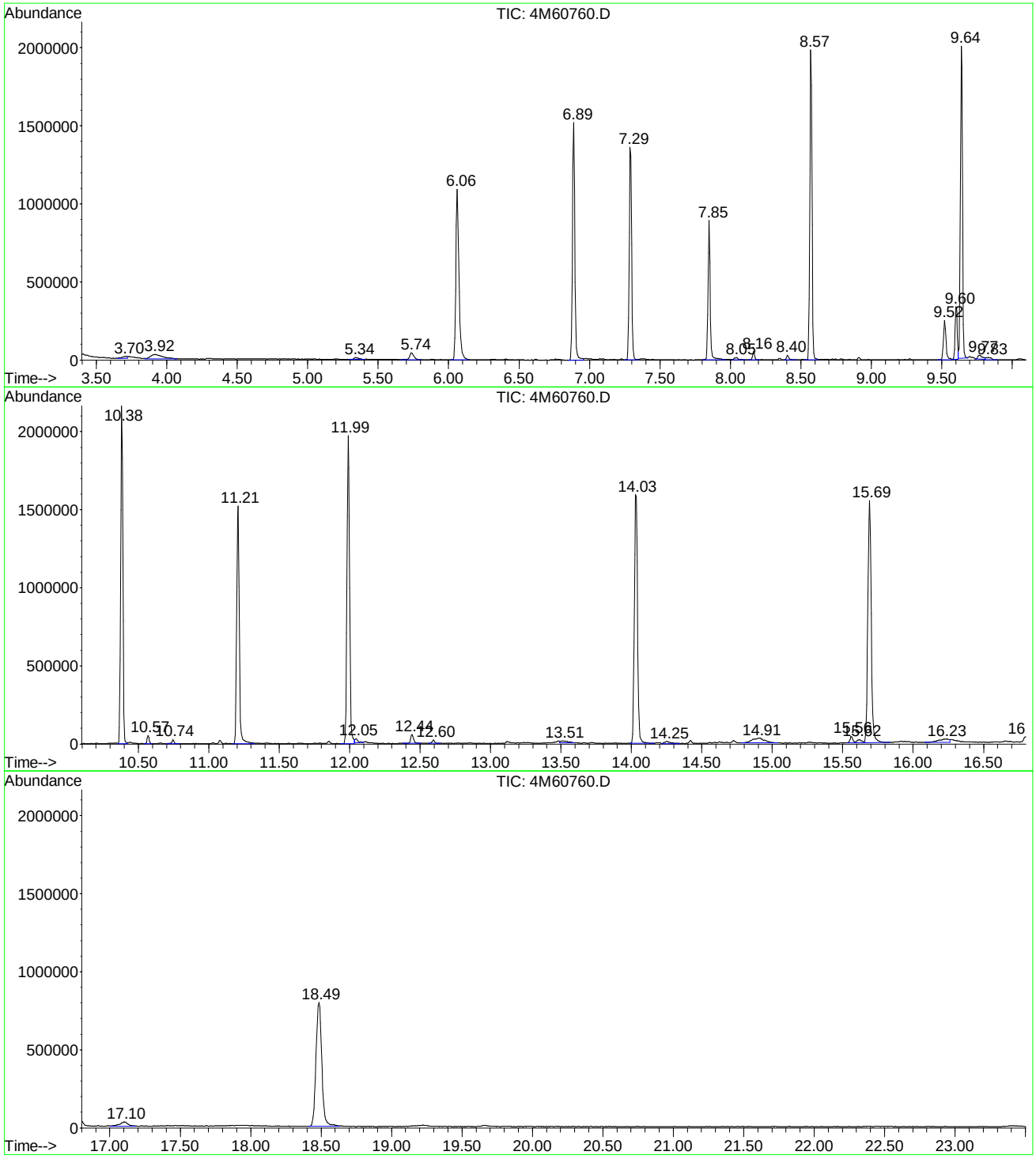
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.704	49	59	62	rBV5	12418	30256	1.17%	0.114%
2	3.917	85	99	127	rVB2	29565	158339	6.14%	0.599%
3	5.338	357	365	377	rBV4	11470	29831	1.16%	0.113%
4	5.739	426	440	451	rVB2	43997	92473	3.59%	0.350%
5	6.059	492	500	515	rBV	1092122	1694349	65.70%	6.405%
6	6.887	648	655	668	rBV	1521637	1750017	67.86%	6.616%
7	7.288	724	730	741	rBV	1361769	1578071	61.19%	5.966%
8	7.849	827	835	857	rBV	893473	994142	38.55%	3.758%
9	8.047	865	872	882	rVB5	13540	29893	1.16%	0.113%
10	8.164	888	894	901	rVB	53589	54058	2.10%	0.204%
11	8.405	935	939	950	rBV2	31493	36387	1.41%	0.138%
12	8.570	962	970	980	rBV	1985211	2120985	82.24%	8.018%
13	9.521	1139	1148	1158	rBV	251566	319330	12.38%	1.207%
14	9.601	1158	1163	1166	rBV	336017	354469	13.74%	1.340%
15	9.639	1166	1170	1178	rVB	1998019	2136506	82.84%	8.077%
16	9.767	1189	1194	1202	rBV3	24550	58771	2.28%	0.222%
17	9.831	1202	1206	1217	rVB4	15350	37410	1.45%	0.141%
18	10.381	1304	1309	1317	rBV	2164604	2305224	89.38%	8.715%
19	10.568	1339	1344	1349	rBV	52060	54515	2.11%	0.206%
20	10.744	1369	1377	1385	rVB2	25507	30803	1.19%	0.116%
21	11.209	1457	1464	1485	rBV	1521022	1944687	75.40%	7.352%
22	11.989	1600	1610	1618	rBV	1973331	2513754	97.47%	9.503%
23	12.048	1619	1621	1630	rVB3	25429	33506	1.30%	0.127%
24	12.443	1683	1695	1706	rBV3	57309	87849	3.41%	0.332%
25	12.598	1717	1724	1732	rVB	22689	28625	1.11%	0.108%
26	13.512	1891	1895	1910	rVB5	12718	41078	1.59%	0.155%
27	14.030	1985	1992	2016	rBV	1593435	2437762	94.52%	9.216%
28	14.254	2027	2034	2050	rBV5	12551	37913	1.47%	0.143%
29	14.911	2133	2157	2180	rBV	30743	197855	7.67%	0.748%
30	15.558	2273	2278	2283	rBV	40858	62190	2.41%	0.235%
31	15.622	2283	2290	2296	rVV5	20514	52230	2.03%	0.197%
32	15.691	2296	2303	2329	rVB	1549979	2579011	100.00%	9.750%
33	16.225	2377	2403	2410	rBV4	21968	121514	4.71%	0.459%
34	16.797	2502	2510	2524	rBV3	35269	74309	2.88%	0.281%
35	17.102	2549	2567	2582	rBV9	28085	110600	4.29%	0.418%
36	18.485	2812	2826	2853	rBV	793750	2262913	87.74%	8.555%

Sum of corrected areas: 26451625

File : I:\MSDCHEM\1\DATA\050912\4M60760.D
Operator : CAA
Acquired : 9 May 2012 17:45 using AcqMethod BNATEST
Instrument : HPMS4
Sample Name: L12040928-01 REF
Misc Info : 1,1
Vial Number: 17
Quant File :MEGAMIX.RES (RTE Integrator)



Data File : I:\MSDCHEM\1\DATA\050912\4M60760.D Vial: 17
Acq On : 9 May 2012 17:45 Operator: CAA
Sample : L12040928-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

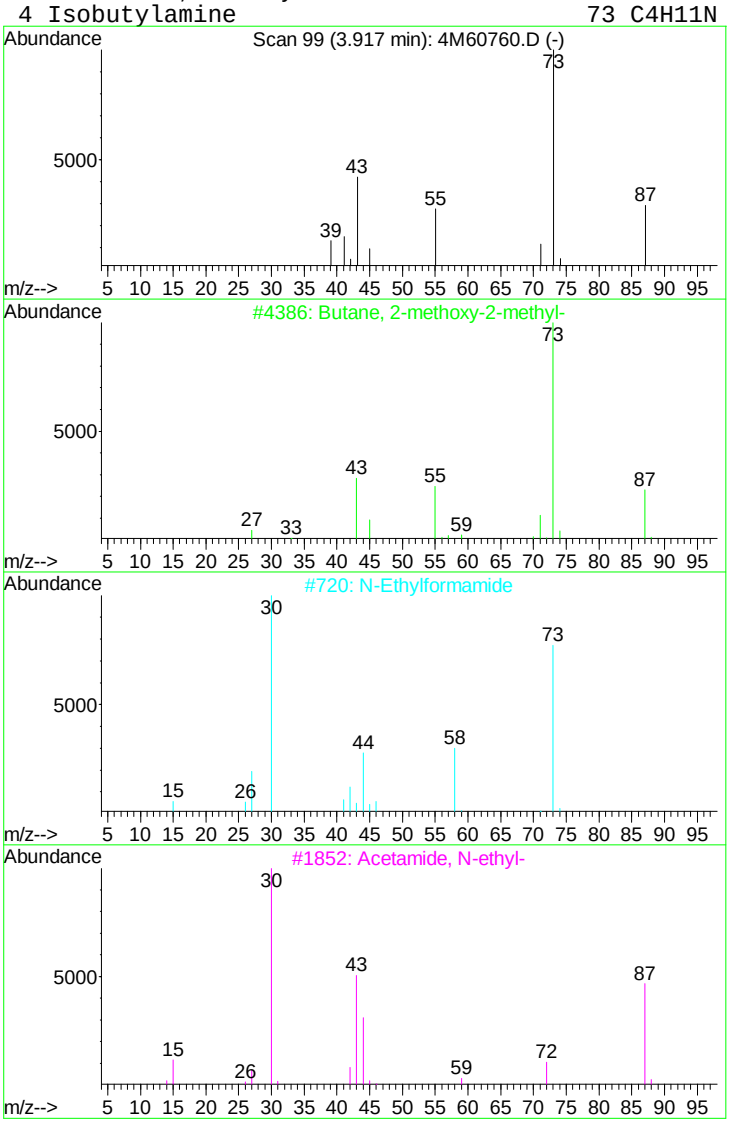
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

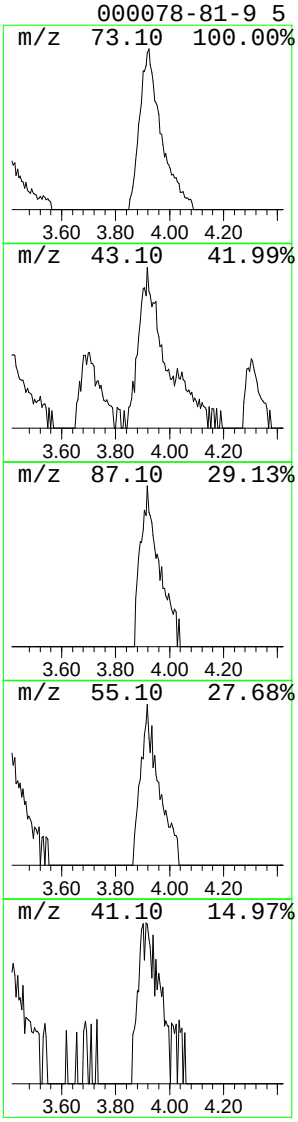
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.92	4.01 ug/ml	158339	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	83
2	N-Ethylformamide	73	C3H7NO	000627-45-2	5
3	Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5
4	Isobutylamine	73	C4H11N	000078-81-9	5





Data File : I:\MSDCHEM\1\DATA\050912\4M60760.D Vial: 17
Acq On : 9 May 2012 17:45 Operator: CAA
Sample : L12040928-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

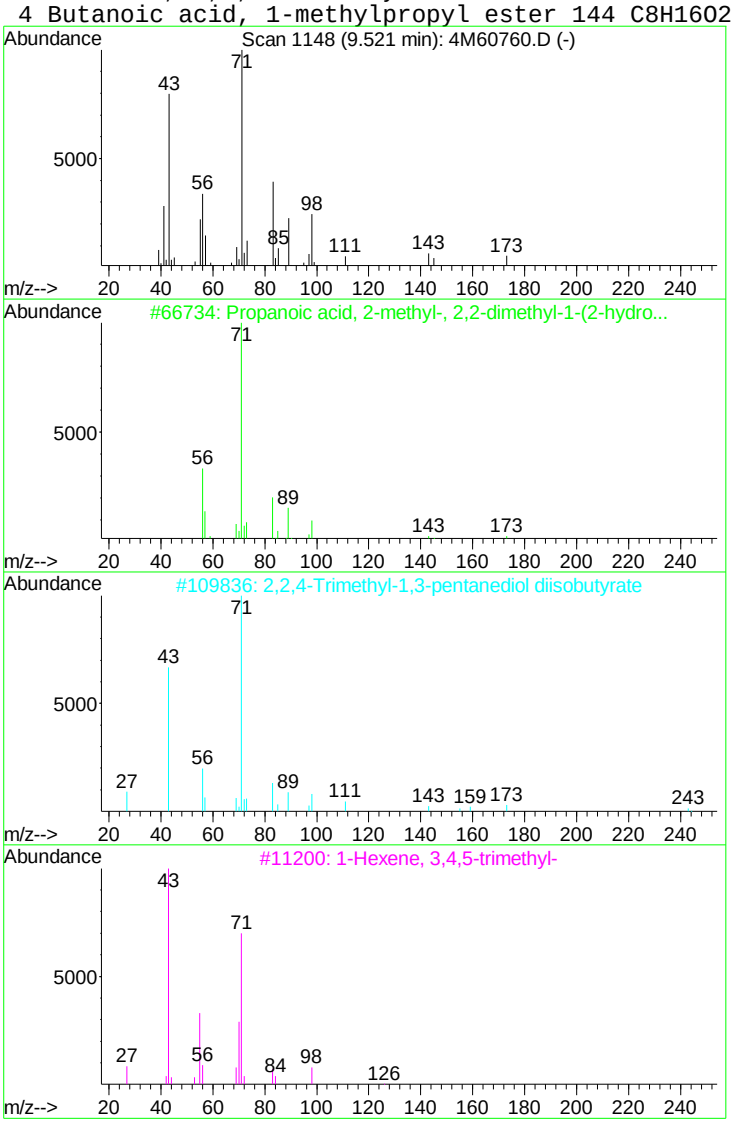
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

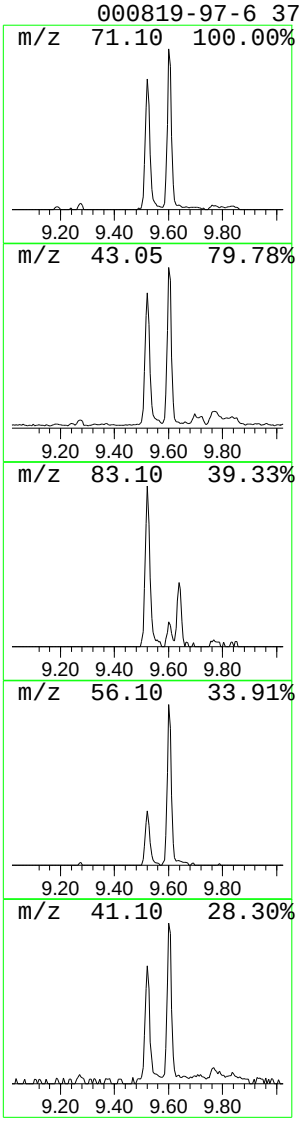
****

Peak Number 2 Propanoic acid, 2-methyl-, ... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.52	5.54 ug/ml	319330	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	50
2	2,2,4-Trimethyl-1,3-pentanediol ...	286	C16H30O4	006846-50-0	50
3	1-Hexene, 3,4,5-trimethyl-	126	C9H18	056728-10-0	37
4	Butanoic acid, 1-methylpropyl ester	144	C8H16O2	000819-97-6	37





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 9 May 2012 17:45
Data File: I:\MSDCHEM\1\DATA\050912\4M60760.D
Name: L12040928-01 REF
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	3.92	4.0	ug/ml	158339	1	7.29	1578070	40.0
Propanoic acid, 2...	9.52	5.5	ug/ml	319330	3	10.38	2305220	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60761.D Vial: 18
Acq On : 9 May 2012 18:20 Operator: CAA
Sample : L12040928-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 09:31:02 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 May 10 09:30:38 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

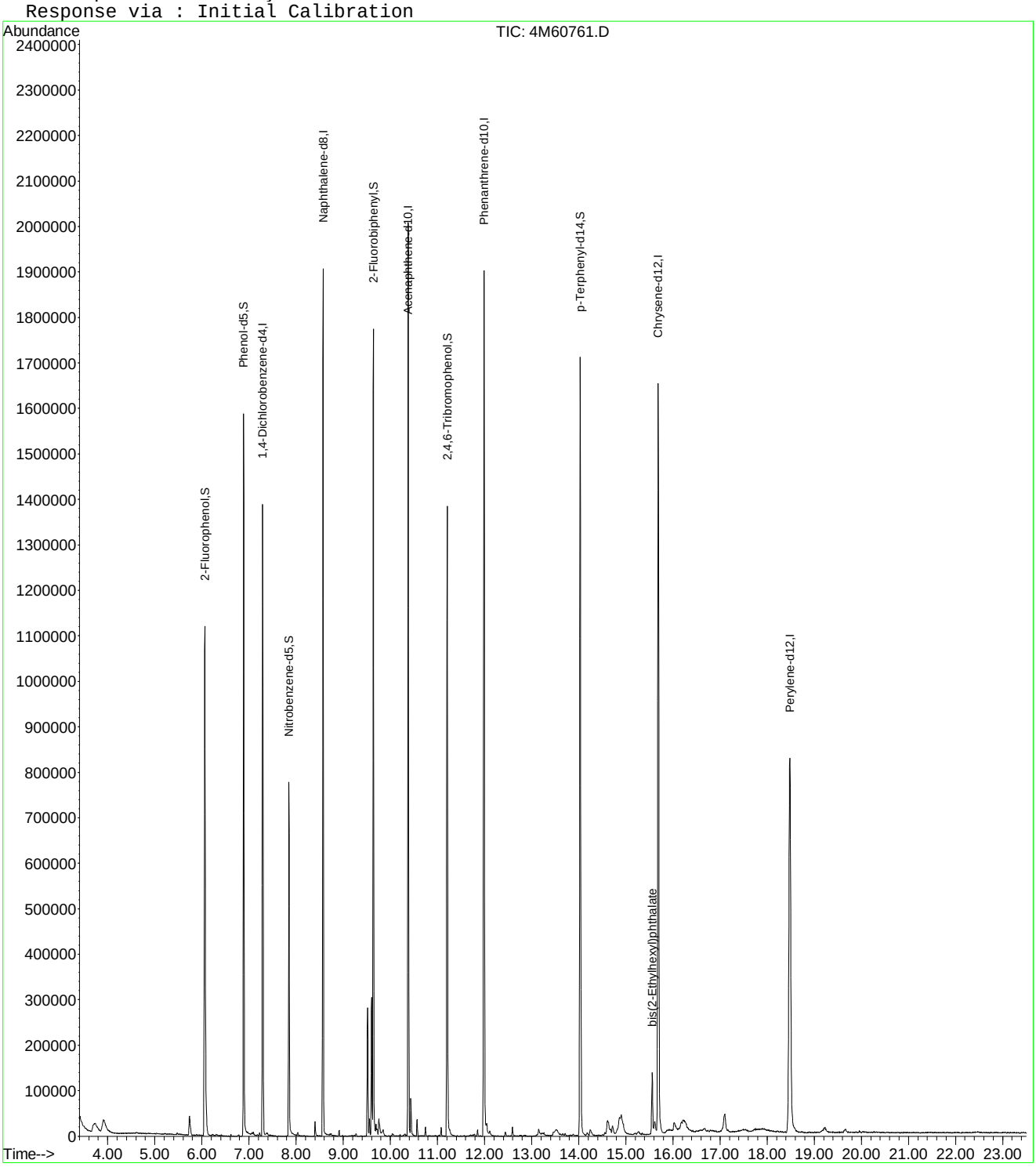
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	274809	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	1042028	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	587241	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1043975	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	998428	40.00	ug/ml	0.00
128) Perylene-d12	18.48	264	906812	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.06	112	526070	63.1380	ug/ml	0.01
Spiked Amount 100.000	Range 21 - 100		Recovery = 63.14%			
12) Phenol-d5	6.88	99	672361	68.9492	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 68.95%			
31) Nitrobenzene-d5	7.85	82	305074	34.6151	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 69.24%			
59) 2-Fluorobiphenyl	9.64	172	703865	35.8944	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 71.78%			
86) 2,4,6-Tribromophenol	11.21	330	211248	80.6685	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 80.67%			
117) p-Terphenyl-d14	14.03	244	895473	48.6613	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 97.32%			
Target Compounds						Qvalue
124) bis(2-Ethylhexyl)phthalate	15.56	149	61514	3.3186	ug/ml	98

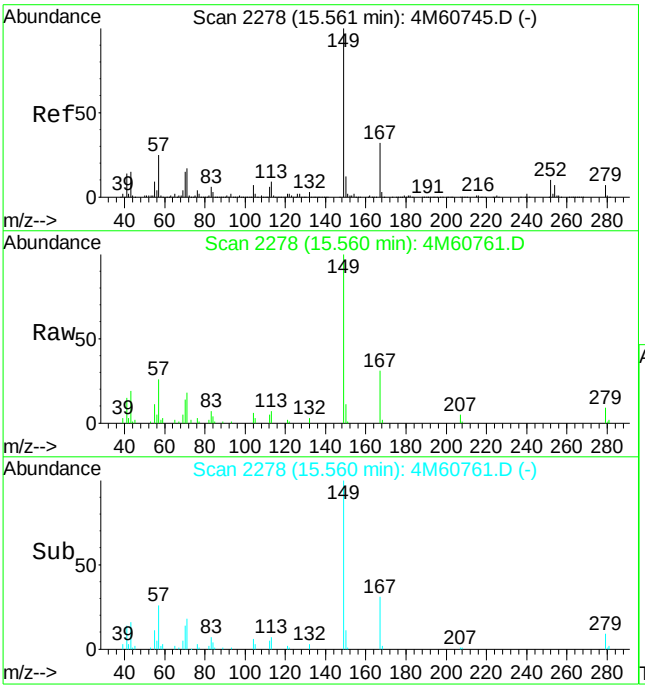
(#) = qualifier out of range (m) = manual integration
4M60761.D MEGAMIX.M Thu May 10 11:18:53 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60761.D Vial: 18
Acq On : 9 May 2012 18:20 Operator: CAA
Sample : L12040928-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:31 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 May 10 09:30:38 2012
Response via : Initial Calibration

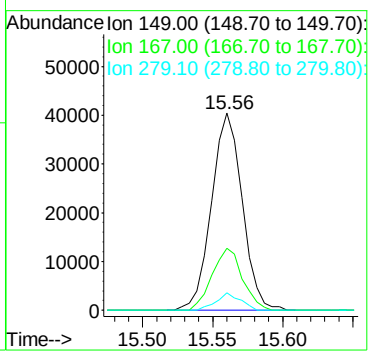




#124
bis(2-Ethylhexyl)phthalate
Concen: 3.32 ug/ml
RT: 15.56 min Scan# 2278
Delta R.T. -0.01 min
Lab File: 4M60761.D
Acq: 9 May 2012 18:20

Tgt Ion:149 Resp: 61514

Ion	Ratio	Lower	Upper
149	100		
167	31.0	25.4	38.0
279	6.9	6.2	9.2



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60761.D Vial: 18
Acq On : 9 May 2012 18:20 Operator: CAA
Sample : L12040928-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 11:25:15 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Thu May 10 11:24:26 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	274809	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	1043403	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	587241	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	1043975	40.00	ug/mL	0.00

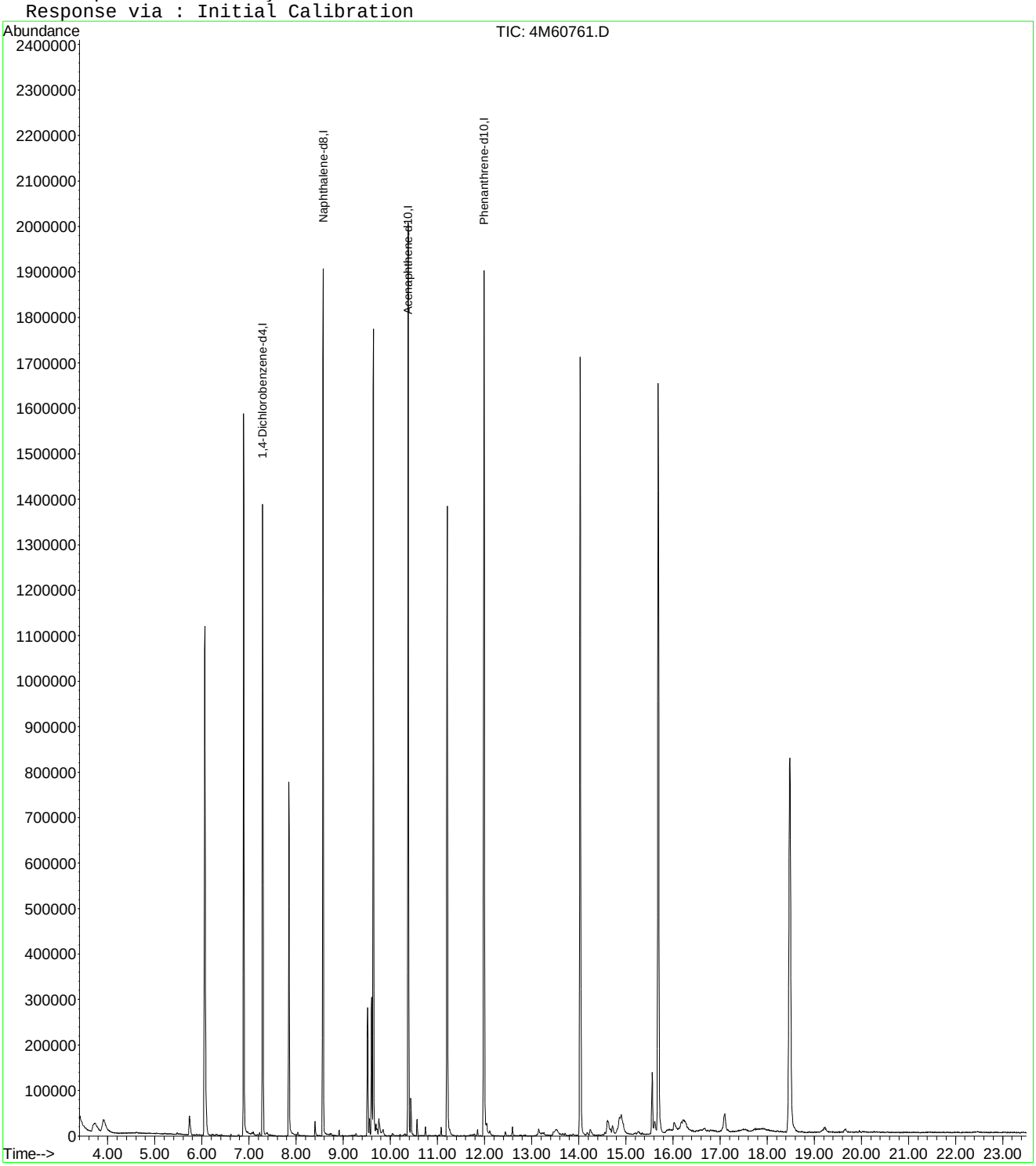
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60761.D TCL.M Thu May 10 11:25:15 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60761.D Vial: 18
Acq On : 9 May 2012 18:20 Operator: CAA
Sample : L12040928-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 11:25 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Thu May 10 11:24:26 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\050912\4M60761.D Vial: 18
Acq On : 9 May 2012 18:20 Operator: CAA
Sample : L12040928-03 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	3.733	47	64	84	rBV5	18679	116849	4.58%	0.443%
2	3.909	86	97	128	rVB3	28912	165380	6.48%	0.626%
3	5.736	433	439	449	rVB2	43056	85795	3.36%	0.325%
4	6.062	491	500	518	rBV	1119916	1743381	68.31%	6.603%
5	6.885	648	654	670	rBV	1588253	1822699	71.42%	6.903%
6	7.291	723	730	740	rBV	1388327	1555046	60.93%	5.889%
7	7.846	826	834	862	rBV	778211	896216	35.11%	3.394%
8	8.402	934	938	949	rBB	32432	34926	1.37%	0.132%
9	8.573	964	970	980	rBV	1907362	2058818	80.67%	7.797%
10	9.518	1138	1147	1152	rBV2	282987	342610	13.42%	1.298%
11	9.561	1152	1155	1158	rVV	38443	38126	1.49%	0.144%
12	9.604	1158	1163	1166	rVV	305514	332984	13.05%	1.261%
13	9.641	1166	1170	1178	rVV	1774296	1912856	74.95%	7.244%
14	9.700	1178	1181	1188	rVV4	26220	49444	1.94%	0.187%
15	9.759	1188	1192	1201	rVV4	38002	74369	2.91%	0.282%
16	9.849	1201	1209	1217	rVB5	13649	34903	1.37%	0.132%
17	10.378	1303	1308	1316	rBV	2008284	2283575	89.47%	8.648%
18	10.437	1316	1319	1336	rVB	83576	92953	3.64%	0.352%
19	10.565	1336	1343	1350	rBV	36833	39269	1.54%	0.149%
20	11.206	1454	1463	1484	rBV	1385718	1689077	66.18%	6.397%
21	11.992	1602	1610	1618	rBV	1903307	2499847	97.95%	9.467%
22	12.045	1618	1620	1629	rVV3	27841	49466	1.94%	0.187%
23	13.145	1810	1826	1834	rBV4	15766	41884	1.64%	0.159%
24	13.530	1878	1898	1911	rBV3	12881	75302	2.95%	0.285%
25	14.032	1983	1992	2012	rBV	1711648	2534460	99.30%	9.599%
26	14.246	2027	2032	2046	rBV4	12724	33938	1.33%	0.129%
27	14.615	2092	2101	2111	rBV5	28306	94766	3.71%	0.359%
28	14.716	2116	2120	2130	rVV5	17467	34819	1.36%	0.132%
29	14.871	2132	2149	2150	rVV	36848	99797	3.91%	0.378%
30	14.903	2151	2155	2178	rVB3	42427	158282	6.20%	0.599%
31	15.560	2266	2278	2283	rBV	136686	209747	8.22%	0.794%
32	15.614	2283	2288	2295	rVV2	27384	66314	2.60%	0.251%
33	15.688	2295	2302	2325	rVB	1648756	2552258	100.00%	9.666%
34	16.025	2358	2365	2380	rBV4	17869	62397	2.44%	0.236%
35	16.180	2384	2394	2397	rBV5	14975	34227	1.34%	0.130%
36	17.099	2552	2566	2583	rVB7	39102	137668	5.39%	0.521%
37	18.482	2811	2825	2854	rBV	824216	2305173	90.32%	8.730%
38	19.225	2954	2964	2979	rVB7	12016	44930	1.76%	0.170%

Sum of corrected areas: 26404551

```
File       : I:\MSDCHEM\1\DATA\050912\4M60761.D
Operator   : CAA
Acquired   :  9 May 2012  18:20     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12040928-03
Misc Info  : 1,1
Vial Number: 18
Quant File :MEGAMIX.RES (RTE Integrator)
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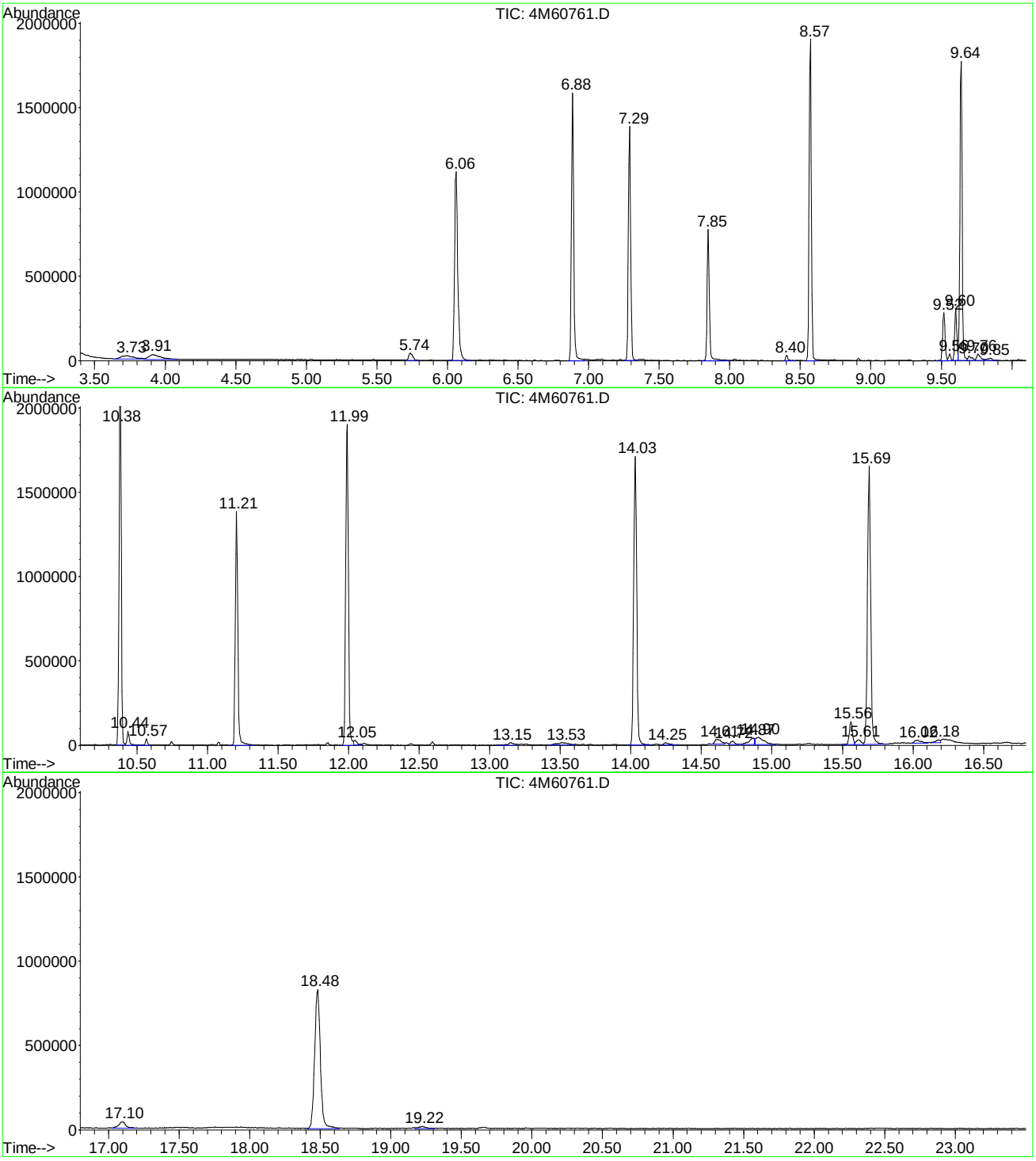


Data File : I:\MSDCHEM\1\DATA\050912\4M60761.D Vial: 18
Acq On : 9 May 2012 18:20 Operator: CAA
Sample : L12040928-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

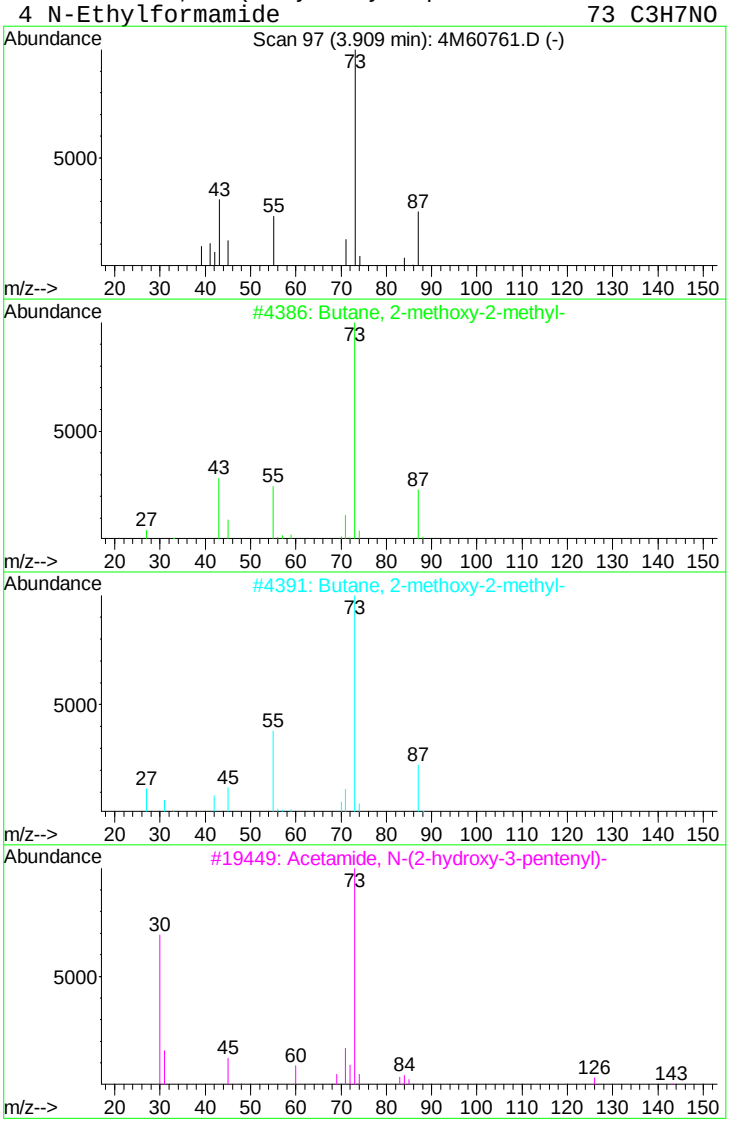
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

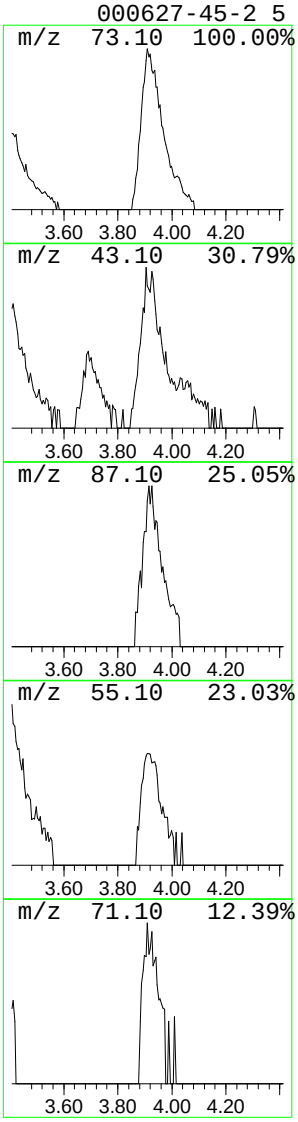
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.91	4.25 ug/ml	165380	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	72
2	Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	39
3	Acetamide, N-(2-hydroxy-3-penten...	143	C7H13NO2	093393-95-4	9
4	N-Ethylformamide	73	C3H7NO	000627-45-2	5





Data File : I:\MSDCHEM\1\DATA\050912\4M60761.D Vial: 18
Acq On : 9 May 2012 18:20 Operator: CAA
Sample : L12040928-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

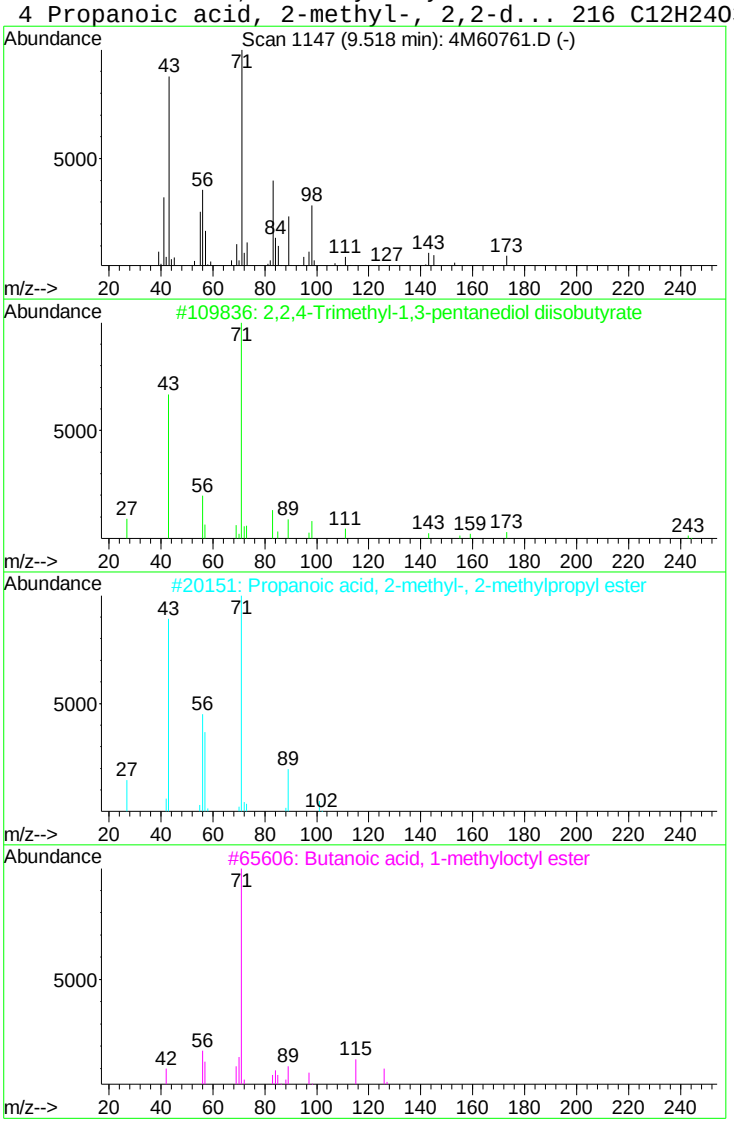
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

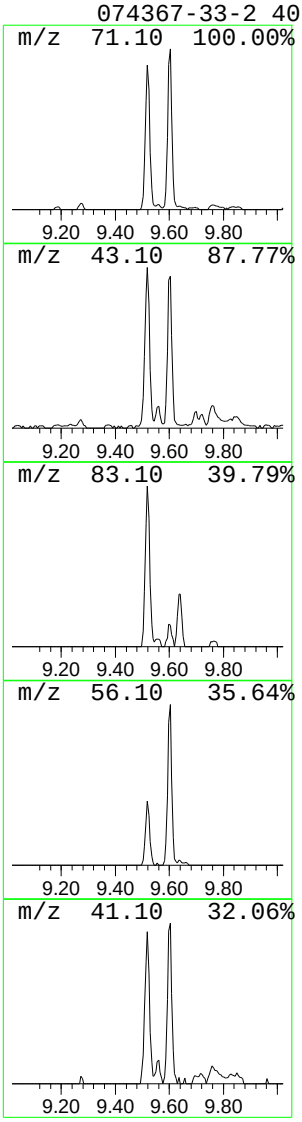
****

Peak Number 2 2,2,4-Trimethyl-1,3-pentane... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.52	6.00 ug/ml	342610	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	Propanoic acid, 2-methyl-, 2-met...	144	C8H16O2	000097-85-8	43
3	Butanoic acid, 1-methyloctyl ester	214	C13H26O2	069727-42-0	43
4	Propanoic acid, 2-methyl-, 2,2-d...	216	C12H24O3	074367-33-2	40





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 9 May 2012 18:20
Data File: I:\MSDCHEM\1\DATA\050912\4M60761.D
Name: L12040928-03
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...	3.91	4.3	ug/ml	165380	1	7.29	1555050	40.0
2,2,4-Trimethyl-1...	9.52	6.0	ug/ml	342610	3	10.38	2283580	40.0

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60766.D Vial: 5
Acq On : 10 May 2012 10:11 Operator: CAA
Sample : L12040928-08 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 08:14:57 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 : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	310764	40.00	ug/ml	0.00
30) Naphthalene-d8	8.52	136	1184449	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	662408	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.93	188	1197782	40.00	ug/ml	0.00
113) Chrysene-d12	15.61	240	1116600	40.00	ug/ml	0.00
128) Perylene-d12	18.34	264	1061629	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	653763	69.3854	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 69.39%			
12) Phenol-d5	6.84	99	835551	75.7705	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 75.77%			
31) Nitrobenzene-d5	7.79	82	384662	38.3975	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 76.80%			
59) 2-Fluorobiphenyl	9.59	172	881276	39.8419	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 79.68%			
86) 2,4,6-Tribromophenol	11.15	330	297613	100.7521	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 100.75%			
117) p-Terphenyl-d14	13.96	244	1072700	52.1229	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 104.24%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.21	88	104245	26.9150	ug/ml#	96
3) n-Nitrosodimethylamine	4.64	74	204845	35.7178	ug/ml	95
4) Pyridine	4.66	79	264384	26.0021	ug/ml	88
5) 2-Picoline	5.45	93	345980	31.2712	ug/ml	99
6) n-Nitrosomethylethylamine	5.56	88	161496	33.8383	ug/ml	91
7) Methyl Methanesulfonate	5.85	80	189117	34.9020	ug/ml	98
9) n-Nitrosodiethylamine	6.24	102	174831	34.1692	ug/ml	96
10) Ethyl Methanesulfonate	6.49	79	235911	33.2412	ug/ml	98
11) Aniline	6.93	93	492996	30.2531	ug/ml	90
13) Phenol	6.85	94	434457	36.8975	ug/ml	94
14) bis(2-Chloroethyl)ether	6.95	63	267207	36.2422	ug/ml#	38
15) Pentachloroethane	6.97	167	103822	26.1423	ug/ml	98
16) 2-Chlorophenol	7.06	128	372413	35.3193	ug/ml	98
17) 1,3-Dichlorobenzene	7.21	146	301346	25.6767	ug/ml	99
18) 1,4-Dichlorobenzene	7.25	146	317570	26.5304	ug/ml	100
19) Benzyl Alcohol	7.34	108	263857	38.6483	ug/ml	94
20) 1,2-Dichlorobenzene	7.44	146	312593	28.1199	ug/ml	100
21) 2-Methylphenol	7.43	107	301782	37.1684	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.48	45	469682	31.0291	ug/ml	93
23) 3-,4-Methylphenol	7.56	107	452339	42.8586	ug/ml	92
24) n-Nitrosopyrrolidine	7.62	100	191473	40.1837	ug/ml	96
25) n-Nitrosodipropylamine	7.62	70	273184	41.1481	ug/ml	95
26) Acetophenone	7.63	105	924678	70.8215	ug/ml	98
27) n-Nitrosomorpholine	7.62	56	212112	34.2463	ug/ml	94
28) o-Toluidine	7.67	106	503397	30.4973	ug/ml	99
29) Hexachloroethane	7.76	117	96994	21.8826	ug/ml	98
32) Nitrobenzene	7.81	77	395167	39.5775	ug/ml	98
33) n-Nitrosopiperidine	7.96	114	194936	36.4725	ug/ml	96
34) Isophorone	8.03	82	748853	41.0899	ug/ml	99
35) 2-Nitrophenol	8.13	139	222508	37.8044	ug/ml	96
36) 2,4-Dimethylphenol	8.10	122	384425	38.0370	ug/ml	96
37) 0,0,0-Triethyl Phosphoroth	8.20	198	193980	38.4447	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.20	93	593641	42.8613	ug/ml	99

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

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60766.D Vial: 5
Acq On : 10 May 2012 10:11 Operator: CAA
Sample : L12040928-08 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 08:14:57 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 : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.15	105	174703	25.0818	ug/ml	85
40)	2,4-Dichlorophenol	8.35	162	337965	39.9454	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.36	58	1107126	77.3992	ug/ml	99
42)	1,2,4-Trichlorobenzene	8.46	180	297350	30.9512	ug/ml	99
43)	Naphthalene	8.54	128	1117677	35.6305	ug/ml	99
44)	4-Chloroaniline	8.57	127	452583	39.1755	ug/ml	100
45)	2,6-Dichlorophenol	8.59	162	344761	39.4891	ug/ml	99
46)	Hexachloropropene	8.65	213	78061	14.4978	ug/ml	99
47)	Hexachlorobutadiene	8.68	225	144013	29.2805	ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.88	84	354633	42.1002	ug/ml	94
49)	p-Phenylenediamine	9.01	108	30395	41.7010	ug/ml	93
50)	4-Chloro-3-Methylphenol	9.01	107	390575	45.4916	ug/ml	100
51)	Safrole	9.10	162	291110	35.6510	ug/ml	99
52)	2-Methylnaphthalene	9.22	142	749901	36.7970	ug/ml	100
53)	1-Methylnaphthalene	9.34	142	672987	34.9284	ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.44	216	327718	37.7532	ug/ml	100
56)	Hexachlorocyclopentadiene	9.44	237	42493	9.4640	ug/ml	98
57)	2,4,6-Trichlorophenol	9.52	196	275986	45.3729	ug/ml	99
58)	2,4,5-Trichlorophenol	9.56	196	312181	49.8583	ug/ml	100
60)	Isosafrole	9.62	162	550912	65.8137	ug/ml	100
61)	2-Chloronaphthalene	9.73	162	865073	46.2488	ug/ml	99
62)	1-Chloronaphthalene	9.77	162	680571	38.4258	ug/ml	99
63)	2-Nitroaniline	9.83	65	242165	45.1673	ug/ml	99
64)	1,4-Naphthoquinone	9.90	158	398026	53.8863	ug/ml	99
65)	Dimethylphthalate	9.99	163	1044713	49.8487	ug/ml	100
66)	1,3-Dinitrobenzene	10.05	168	192839	47.9850	ug/ml	95
67)	2,6-Dinitrotoluene	10.09	165	255404	48.7853	ug/ml	98
68)	Acenaphthylene	10.18	152	1307831	43.5469	ug/ml	100
69)	3-Nitroaniline	10.24	138	253952	65.7638	ug/ml	98
70)	2,4-Dinitrophenol	10.35	184	143437	54.1494	ug/ml	60
71)	Acenaphthene	10.36	154	817753	41.8043	ug/ml	99
72)	4-Nitrophenol	10.35	65	201391	52.2005	ug/ml	98
73)	2,4-Dinitrotoluene	10.50	165	350360	52.5962	ug/ml	98
74)	Pentachlorobenzene	10.54	250	317576	40.6327	ug/ml	98
75)	Dibenzofuran	10.52	168	1156017	44.1351	ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	231738	47.9911	ug/ml	97
77)	1-Naphthylamine	10.59	143	340714	60.4837	ug/ml#	71
78)	2-Naphthylamine	10.66	143	423592	123.5355	ug/ml#	57
79)	Diethylphthalate	10.70	149	1086671	52.0628	ug/ml	100
80)	Thionazin	10.80	107	179193	51.5963	ug/ml	94
81)	Fluorene	10.88	166	994714	44.6835	ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.82	204	471482	45.0733	ug/ml	100
83)	4-Nitroaniline	10.89	138	262265	54.8666	ug/ml	96
84)	5-Nitro-o-Toluidine	10.88	152	295253	56.1779	ug/ml	96
85)	1,2-Diphenylhydrazine	10.99	77	931180	45.8721	ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	10.93	198	203866	54.6745	ug/ml	85
89)	n-Nitrosodiphenylamine	10.94	169	1597850	82.4467	ug/ml	99
90)	Sulfotepp	11.15	322	163369	47.1821	ug/ml	98
91)	Sym-Trinitrobenzene	11.23	75	255559	53.9380	ug/ml	98
92)	Diallate	11.27	86	687939	87.0410	ug/ml#	80
93)	Phenacetin	11.25	108	518617	51.0785	ug/ml	94
94)	Phorate	11.29	75	603035	47.8250	ug/ml#	100
95)	4-Bromophenyl Phenyl Ether	11.35	248	288893	47.6716	ug/ml	100
96)	Hexachlorobenzene	11.56	284	307501	46.4186	ug/ml	100

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

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60766.D Vial: 5
Acq On : 10 May 2012 10:11 Operator: CAA
Sample : L12040928-08 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 08:14:57 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 : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

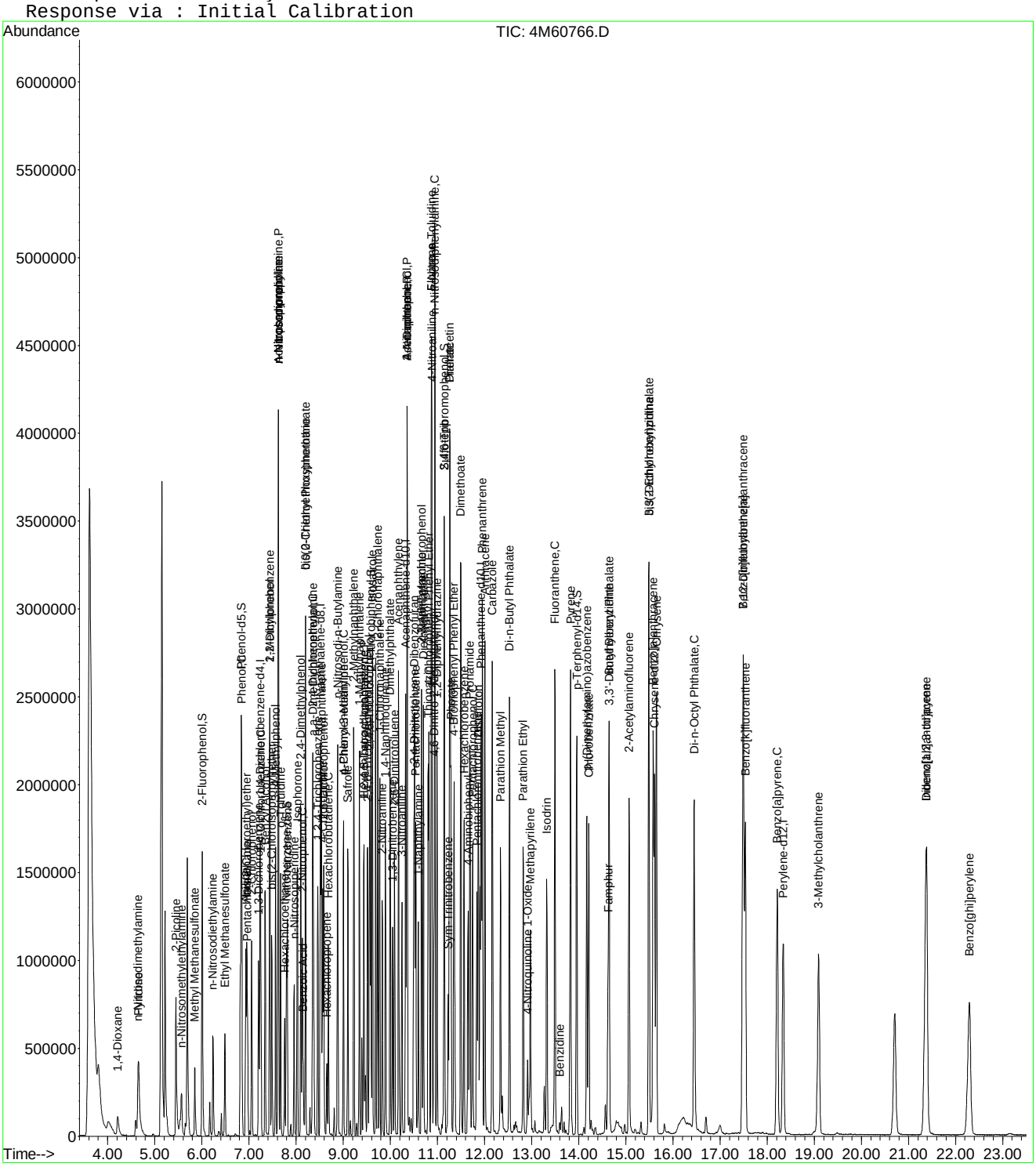
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.49	87	413061	63.2770	ug/ml	98
98)	4-Aminobiphenyl	11.65	169	643862	76.6127	ug/ml	100
99)	Pentachlorophenol	11.75	266	239290	57.1229	ug/ml	100
100)	Pronamide	11.69	173	473345	48.6124	ug/ml	99
101)	Pentachloronitrobenzene	11.84	237	111147	48.4111	ug/ml	96
102)	Disulfoton	11.87	88	534989	49.3649	ug/ml	98
103)	Phenanthrene	11.95	178	1529332	48.1370	ug/ml	100
104)	Anthracene	12.01	178	1412239	43.3521	ug/ml	100
105)	Carbazole	12.17	167	1470070	51.5378	ug/ml	100
106)	Parathion Methyl	12.34	109	376632	56.8070	ug/ml	99
107)	Di-n-Butyl Phthalate	12.53	149	1788922	50.4799	ug/ml	99
108)	Parathion Ethyl	12.82	97	222698	55.1705	ug/ml	96
109)	4-Nitroquinoline 1-Oxide	12.92	190	67093	23.0048	ug/ml	94
110)	Methapyrilene	12.97	58	405681	69.9482	ug/ml	90
111)	Isodrin	13.32	193	153447	44.9665	ug/ml	99
112)	Fluoranthene	13.49	202	1596965	47.9685	ug/ml	99
114)	Benzidine	13.60	184	44500	28.5934	ug/ml	100
115)	Pyrene	13.82	202	1645953	49.2839	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.17	225	345886	50.1616	ug/ml	97
119)	Chlorobenzilate	14.21	251	456338	50.2096	ug/ml	97
120)	Famphur	14.62	218	250685	633.1573	ug/ml#	27
121)	Butyl Benzyl Phthalate	14.64	149	836244	55.0492	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.65	212	131385	12.4499	ug/ml	96
123)	2-Acetylaminofluorene	15.07	181	685120	52.7211	ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.49	149	1125742	54.3052	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.49	252	342082	55.1881	ug/ml	100
126)	Benzo[a]anthracene	15.58	228	1420377	47.9494	ug/ml	100
127)	Chrysene	15.65	228	1390777	50.0168	ug/ml	100
129)	Di-n-Octyl Phthalate	16.45	149	1820462	53.0988	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.49	256	632346	45.9939	ug/ml	99
131)	Benzo[b]fluoranthene	17.49	252	1580489	51.4825	ug/ml	99
132)	Benzo[k]fluoranthene	17.54	252	1357897	47.7173	ug/ml	97
133)	Benzo[a]pyrene	18.22	252	1400915	50.0172	ug/ml	99
134)	3-Methylcholanthrene	19.09	268	708523	46.5912	ug/ml	98
135)	Indeno[1,2,3-cd]pyrene	21.38	276	1627908	52.1878	ug/ml	98
136)	Dibenz[ah]anthracene	21.38	278	1358811	52.2315	ug/ml	99
137)	Benzo[ghi]perylene	22.29	276	1332374	51.6333	ug/ml	99

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

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60766.D Vial: 5
Acq On : 10 May 2012 10:11 Operator: CAA
Sample : L12040928-08 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 8:14 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 May 11 08:14:43 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60766.D Vial: 5
Acq On : 10 May 2012 10:11 Operator: CAA
Sample : L12040928-08 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 09:00:19 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Fri May 11 09:00:11 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

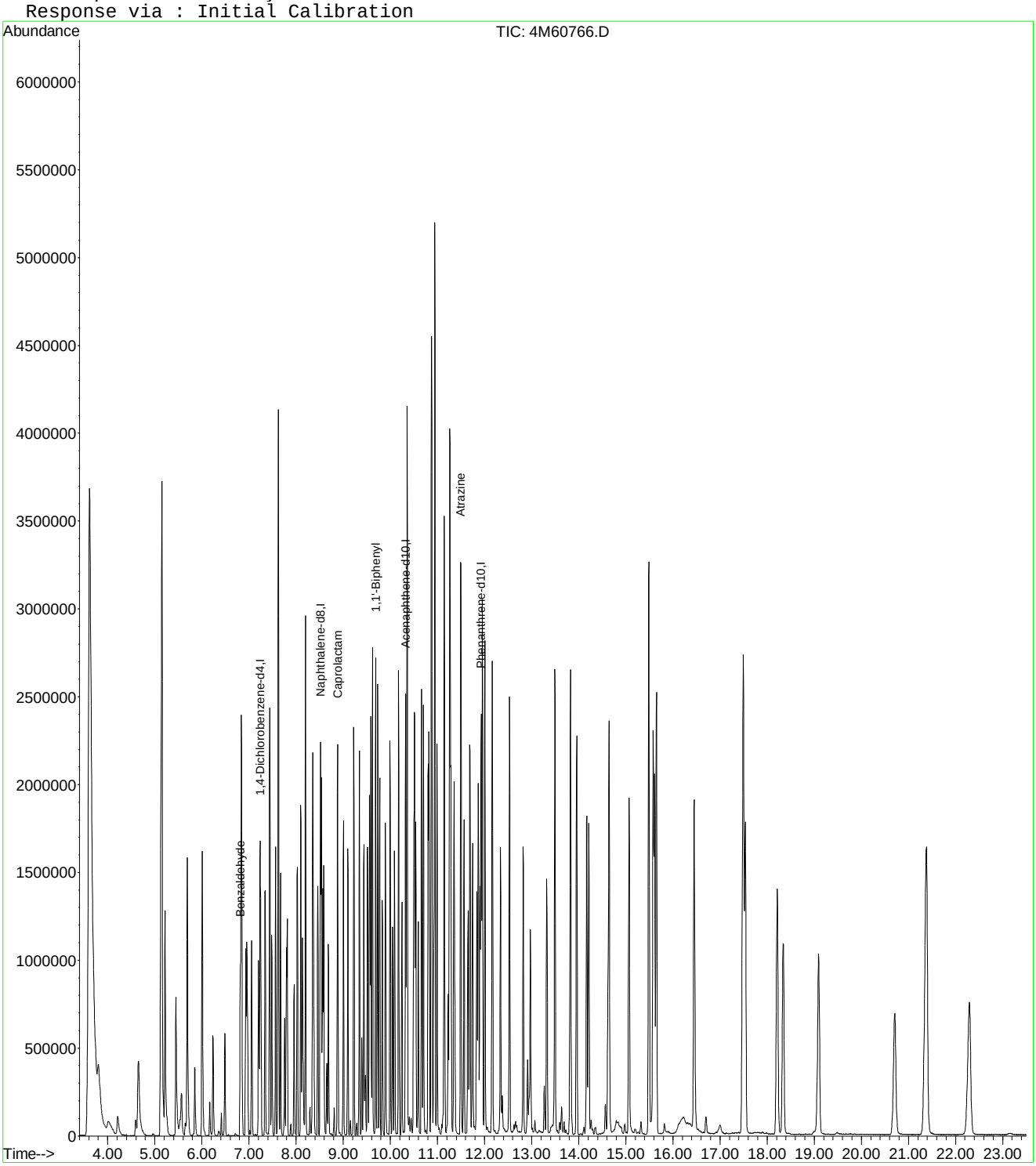
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	310764	40.00	ug/mL	0.00
3) Naphthalene-d8	8.52	136	1184449	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	662408	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.93	188	1197782	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.82	105	226354	27.3456	ug/L	98
4) Caprolactam	8.88	55	217521	56.2352	ug/L	90
6) 1,1'-Biphenyl	9.69	154	978115	35.9773	ug/L	99
8) Atrazine	11.50	200	280384	42.2907	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60766.D TCL.M Fri May 11 09:00:19 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60766.D Vial: 5
Acq On : 10 May 2012 10:11 Operator: CAA
Sample : L12040928-08 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 9:00 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 : Fri May 11 09:00:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60767.D Vial: 6
Acq On : 10 May 2012 10:46 Operator: CAA
Sample : L12040928-10 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 08:14:57 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 : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	304739	40.00	ug/ml	0.00
30) Naphthalene-d8	8.52	136	1153842	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	639412	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.93	188	1148936	40.00	ug/ml	0.00
113) Chrysene-d12	15.61	240	1057688	40.00	ug/ml	0.00
128) Perylene-d12	18.34	264	1002632	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.01	112	558179	60.4121	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 60.41%			
12) Phenol-d5	6.84	99	724002	66.9529	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 66.95%			
31) Nitrobenzene-d5	7.79	82	337793	34.6134	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 69.22%			
59) 2-Fluorobiphenyl	9.59	172	791334	37.0623	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 74.12%			
86) 2,4,6-Tribromophenol	11.15	330	291508	102.2345	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 102.23%			
117) p-Terphenyl-d14	13.96	244	1011444	51.8838	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 103.76%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.22	88	90552	23.8418	ug/ml#	96
3) n-Nitrosodimethylamine	4.64	74	177541	31.5690	ug/ml	96
4) Pyridine	4.66	79	231611	23.2293	ug/ml	89
5) 2-Picoline	5.45	93	299659	27.6200	ug/ml	99
6) n-Nitrosomethylethylamine	5.57	88	139521	29.8119	ug/ml	92
7) Methyl Methanesulfonate	5.85	80	166260	31.2904	ug/ml	98
9) n-Nitrosodiethylamine	6.24	102	149438	29.7838	ug/ml	97
10) Ethyl Methanesulfonate	6.49	79	207890	29.8720	ug/ml	99
11) Aniline	6.93	93	455205	28.4863	ug/ml	89
13) Phenol	6.85	94	376983	32.6493	ug/ml	94
14) bis(2-Chloroethyl)ether	6.95	63	229519	31.7459	ug/ml#	44
15) Pentachloroethane	6.97	167	92404	23.7272	ug/ml	96
16) 2-Chlorophenol	7.06	128	319624	30.9122	ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	266427	23.1502	ug/ml	100
18) 1,4-Dichlorobenzene	7.25	146	279968	23.8514	ug/ml	99
19) Benzyl Alcohol	7.34	108	232772	34.7692	ug/ml	94
20) 1,2-Dichlorobenzene	7.44	146	277465	25.4534	ug/ml	100
21) 2-Methylphenol	7.44	107	264785	33.2565	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.48	45	400054	26.9518	ug/ml	93
23) 3-,4-Methylphenol	7.56	107	408998	39.5182	ug/ml	92
24) n-Nitrosopyrrolidine	7.62	100	171381	36.6782	ug/ml	97
25) n-Nitrosodipropylamine	7.62	70	243899	37.4634	ug/ml	96
26) Acetophenone	7.63	105	810167	63.2779	ug/ml	98
27) n-Nitrosomorpholine	7.62	56	190513	31.3672	ug/ml	95
28) o-Toluidine	7.67	106	418370	25.8472	ug/ml	99
29) Hexachloroethane	7.75	117	87299	20.0847	ug/ml	100
32) Nitrobenzene	7.81	77	338300	34.7808	ug/ml	98
33) n-Nitrosopiperidine	7.96	114	173237	33.2724	ug/ml	97
34) Isophorone	8.03	82	660069	37.1790	ug/ml	99
35) 2-Nitrophenol	8.13	139	185530	32.3580	ug/ml	94
36) 2,4-Dimethylphenol	8.10	122	355796	36.1382	ug/ml	97
37) 0,0,0-Triethyl Phosphoroth	8.20	198	167933	34.1653	ug/ml	97
38) bis(2-Chloroethoxy)methane	8.20	93	516356	38.2702	ug/ml	99

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

Data File : I:\MSDCHEM\1\DATA\051012\4M60767.D Vial: 6
Acq On : 10 May 2012 10:46 Operator: CAA
Sample : L12040928-10 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 08:14:57 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 : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.15	105	169310	24.9524 ug/ml	97
40)	2,4-Dichlorophenol	8.35	162	311629	37.8096 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.36	58	1094191	78.5240 ug/ml	98
42)	1,2,4-Trichlorobenzene	8.46	180	257037	27.4647 ug/ml	99
43)	Naphthalene	8.54	128	978218	32.0119 ug/ml	99
44)	4-Chloroaniline	8.57	127	423285	37.6114 ug/ml	99
45)	2,6-Dichlorophenol	8.59	162	306958	36.0918 ug/ml	99
46)	Hexachloropropene	8.65	213	49409	9.4198 ug/ml	99
47)	Hexachlorobutadiene	8.69	225	114122	23.8186 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.88	84	339459	41.3678 ug/ml	94
49)	p-Phenylenediamine	9.00	108	31117	43.8240 ug/ml	100
50)	4-Chloro-3-Methylphenol	9.00	107	389151	46.5281 ug/ml	98
51)	Safrole	9.10	162	261124	32.8270 ug/ml	100
52)	2-Methylnaphthalene	9.22	142	663863	33.4392 ug/ml	100
53)	1-Methylnaphthalene	9.34	142	596937	31.8031 ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.44	216	272125	32.4763 ug/ml	100
56)	Hexachlorocyclopentadiene	9.45	237	8448	1.9492 ug/ml	93
57)	2,4,6-Trichlorophenol	9.52	196	271188	46.1875 ug/ml	100
58)	2,4,5-Trichlorophenol	9.56	196	314231	51.9906 ug/ml	100
60)	Isosafrole	9.62	162	485295	60.0599 ug/ml	100
61)	2-Chloronaphthalene	9.73	162	784269	43.4368 ug/ml	99
62)	1-Chloronaphthalene	9.77	162	613853	35.9053 ug/ml	99
63)	2-Nitroaniline	9.83	65	249422	48.1939 ug/ml	99
64)	1,4-Naphthoquinone	9.90	158	574549	80.5821 ug/ml	99
65)	Dimethylphthalate	9.99	163	1056396	52.2190 ug/ml	100
66)	1,3-Dinitrobenzene	10.05	168	194653	50.1783 ug/ml	95
67)	2,6-Dinitrotoluene	10.09	165	260816	51.6108 ug/ml	98
68)	Acenaphthylene	10.17	152	1252899	43.2182 ug/ml	99
69)	3-Nitroaniline	10.25	138	241795	64.8675 ug/ml	97
70)	2,4-Dinitrophenol	10.35	184	145679	56.6177 ug/ml	53
71)	Acenaphthene	10.36	154	784706	41.5576 ug/ml	99
72)	4-Nitrophenol	10.36	65	191226	51.3483 ug/ml	98
73)	2,4-Dinitrotoluene	10.50	165	351855	54.7203 ug/ml	98
74)	Pentachlorobenzene	10.54	250	262071	34.7370 ug/ml	99
75)	Dibenzofuran	10.52	168	1126208	44.5434 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	228151	48.9475 ug/ml	96
77)	1-Naphthylamine	10.59	143	35091	6.4534 ug/ml#	48
78)	2-Naphthylamine	10.66	143	272097	82.2077 ug/ml#	59
79)	Diethylphthalate	10.70	149	1088484	54.0252 ug/ml	99
80)	Thionazin	10.80	107	178173	53.1476 ug/ml	94
81)	Fluorene	10.87	166	950831	44.2484 ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.82	204	423397	41.9321 ug/ml	100
83)	4-Nitroaniline	10.88	138	261790	56.7369 ug/ml	96
84)	5-Nitro-o-Toluidine	10.88	152	289909	57.1450 ug/ml	96
85)	1,2-Diphenylhydrazine	10.99	77	909648	46.4230 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.93	198	205029	57.3241 ug/ml	97
89)	n-Nitrosodiphenylamine	10.94	169	1289528	69.3665 ug/ml	99
90)	Sulfotepp	11.15	322	149762	45.0912 ug/ml	96
91)	Sym-Trinitrobenzene	11.23	75	258113	56.7931 ug/ml	97
92)	Diallate	11.26	86	625561	82.5136 ug/ml	83
93)	Phenacetin	11.26	108	508082	52.1684 ug/ml	95
94)	Phorate	11.29	75	572551	47.3378 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.35	248	244548	42.0696 ug/ml	100
96)	Hexachlorobenzene	11.56	284	241335	37.9794 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60767.D MEGAMIX.M Fri May 11 08:24:17 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60767.D Vial: 6
Acq On : 10 May 2012 10:46 Operator: CAA
Sample : L12040928-10 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 08:14:57 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 : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

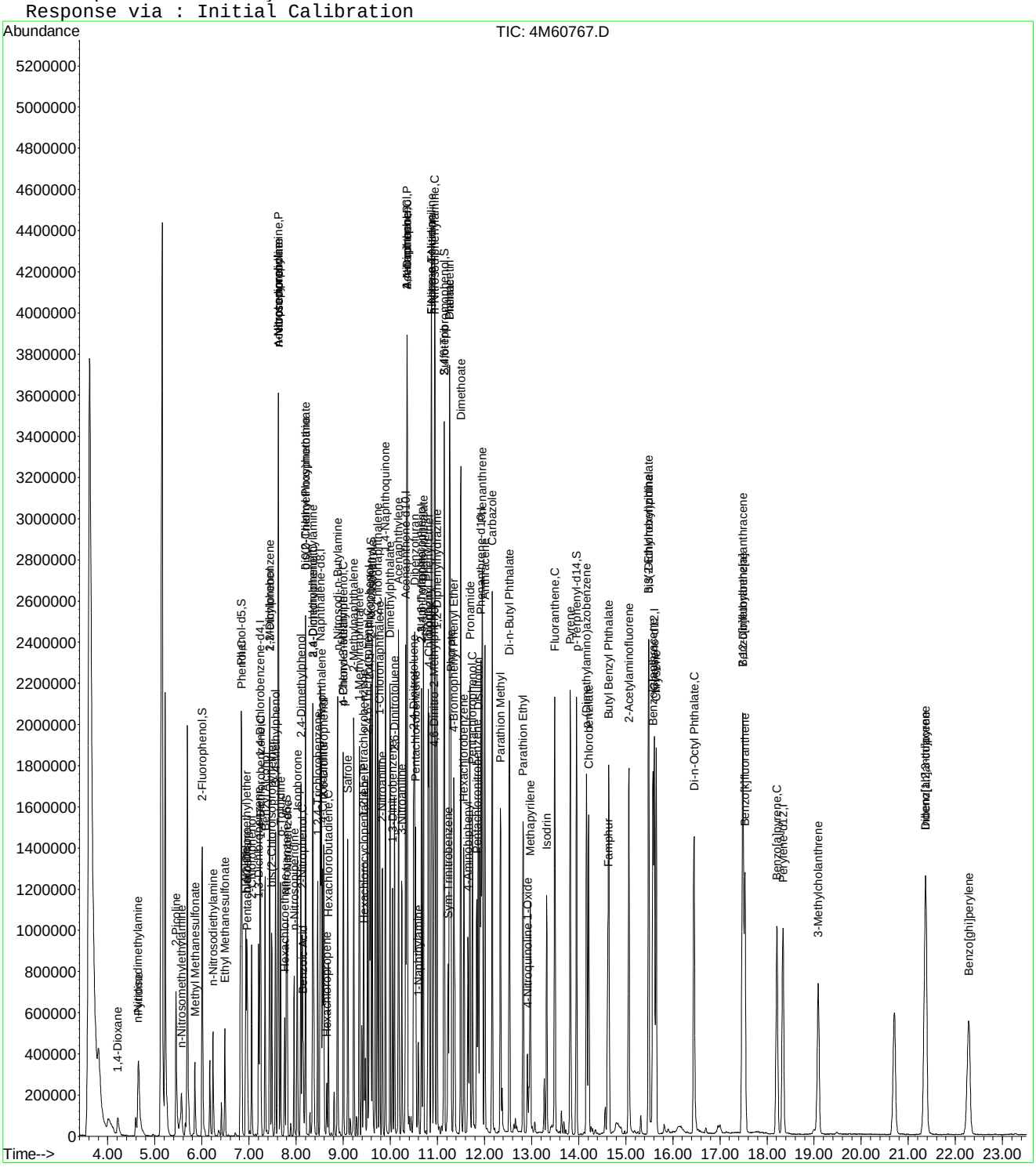
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.50	87	411875	66.5553	ug/ml	98
98)	4-Aminobiphenyl	11.65	169	489724	66.1822	ug/ml	100
99)	Pentachlorophenol	11.74	266	231210	57.5406	ug/ml	99
100)	Pronamide	11.69	173	468710	50.1828	ug/ml	99
101)	Pentachloronitrobenzene	11.84	237	88089	39.9991	ug/ml	99
102)	Disulfoton	11.87	88	484809	46.6365	ug/ml	98
103)	Phenanthrene	11.95	178	1362767	44.7178	ug/ml	100
104)	Anthracene	12.01	178	1204792	38.5563	ug/ml	100
105)	Carbazole	12.17	167	1437903	52.5532	ug/ml	100
106)	Parathion Methyl	12.34	109	372232	58.5303	ug/ml	99
107)	Di-n-Butyl Phthalate	12.53	149	1510986	44.4498	ug/ml	100
108)	Parathion Ethyl	12.82	97	204201	52.7389	ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.91	190	63059	22.5491	ug/ml	92
110)	Methapyrilene	12.97	58	399733	73.3023	ug/ml	88
111)	Isodrin	13.32	193	119772	36.5905	ug/ml	98
112)	Fluoranthene	13.49	202	1272668	39.8527	ug/ml	99
115)	Pyrene	13.82	202	1319134	41.6981	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.17	225	333988	51.1339	ug/ml	98
119)	Chlorobenzilate	14.21	251	397681	46.1929	ug/ml	96
120)	Famphur	14.62	218	337149	898.9700	ug/ml#	24
121)	Butyl Benzyl Phthalate	14.64	149	655838	45.5779	ug/ml	99
123)	2-Acetylaminofluorene	15.07	181	663038	53.8637	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.48	149	843279	42.9451	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.49	252	235946	39.7762	ug/ml	99
126)	Benzo[a]anthracene	15.58	228	1077486	38.4000	ug/ml	100
127)	Chrysene	15.65	228	1051350	39.9159	ug/ml	99
129)	Di-n-Octyl Phthalate	16.45	149	1405231	43.3992	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.49	256	468507	36.0822	ug/ml	99
131)	Benzo[b]fluoranthene	17.49	252	1164329	40.1583	ug/ml	99
132)	Benzo[k]fluoranthene	17.53	252	1038361	38.6356	ug/ml	97
133)	Benzo[a]pyrene	18.21	252	1039130	39.2834	ug/ml	99
134)	3-Methylcholanthrene	19.09	268	510422	35.5394	ug/ml	98
135)	Indeno[1,2,3-cd]pyrene	21.37	276	1206864	40.9665	ug/ml	99
136)	Dibenz[ah]anthracene	21.37	278	1004674	40.8912	ug/ml	99
137)	Benzo[ghi]perylene	22.29	276	987615	40.5250	ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60767.D MEGAMIX.M Fri May 11 08:24:17 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60767.D Vial: 6
Acq On : 10 May 2012 10:46 Operator: CAA
Sample : L12040928-10 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 8:14 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 May 11 08:14:43 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60767.D Vial: 6
Acq On : 10 May 2012 10:46 Operator: CAA
Sample : L12040928-10 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 09:00:22 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Fri May 11 09:00:11 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

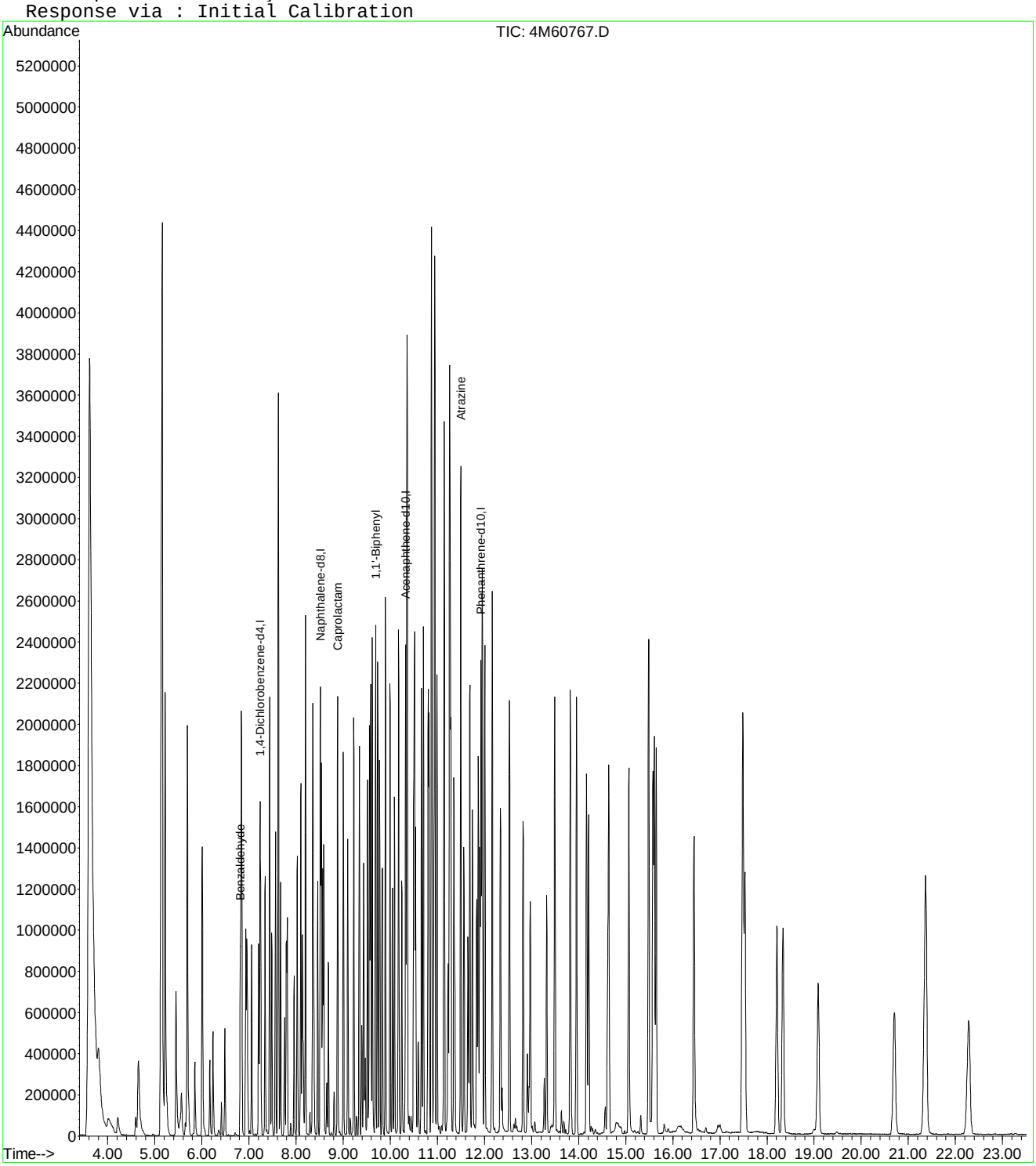
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	304739	40.00	ug/mL	0.00
3) Naphthalene-d8	8.52	136	1153842	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	639412	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.93	188	1148936	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.81	105	218769	26.9518	ug/L	98
4) Caprolactam	8.88	55	214872	57.0239	ug/L	91
6) 1,1'-Biphenyl	9.69	154	885051	33.7250	ug/L	99
8) Atrazine	11.50	200	273502	43.0065	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60767.D TCL.M Fri May 11 09:00:22 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60767.D Vial: 6
Acq On : 10 May 2012 10:46 Operator: CAA
Sample : L12040928-10 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 9:00 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 : Fri May 11 09:00:11 2012
Response via : Initial Calibration



2.2.1.4 Standards Data

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	296263	40.00 ug/ml	0.00
30) Naphthalene-d8	8.58	136	1142981	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.39	164	655776	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1173140	40.00 ug/ml	0.00
113) Chrysene-d12	15.70	240	1109018	40.00 ug/ml	0.00
128) Perylene-d12	18.49	264	1083134	40.00 ug/ml	0.00
System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	443615	49.9857 ug/ml	0.02
Spiked Amount 100.000	Range 21 - 100		Recovery = 49.99%		
12) Phenol-d5	6.88	99	512467	51.0378 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 51.04%		
31) Nitrobenzene-d5	7.85	82	474197	50.7286 ug/ml	0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 101.46%		
59) 2-Fluorobiphenyl	9.64	172	1079454	55.4126 ug/ml	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery = 110.82%		
86) 2,4,6-Tribromophenol	11.21	330	148910	57.2081 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 57.21%		
117) p-Terphenyl-d14	14.03	244	994996	52.9278 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 105.86%		
Target Compounds					Qvalue
2) 1,4-Dioxane	4.27	88	185033	51.6833 ug/ml#	92
3) n-Nitrosodimethylamine	4.70	74	263504	47.4424 ug/ml	99
4) Pyridine	4.72	79	466167	47.5330 ug/ml	98
5) 2-Picoline	5.50	93	511992	48.6122 ug/ml	100
6) n-Nitrosomethylethylamine	5.62	88	220837	47.4416 ug/ml	99
7) Methyl Methanesulfonate	5.90	80	248543	48.2213 ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	240287	50.0469 ug/ml	98
10) Ethyl Methanesulfonate	6.54	79	323582	48.8787 ug/ml	99
11) Aniline	6.98	93	793273m	58.6766 ug/ml	
13) Phenol	6.89	94	548117	51.6690 ug/ml	100
14) bis(2-Chloroethyl)ether	7.00	63	334727	52.9904 ug/ml#	1
15) Pentachloroethane	7.02	167	187038	54.0943 ug/ml	99
16) 2-Chlorophenol	7.11	128	497875	51.1341 ug/ml	100
17) 1,3-Dichlorobenzene	7.26	146	546516	52.0870 ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	561209	52.9415 ug/ml	99
19) Benzyl Alcohol	7.39	108	323130	51.4484 ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	521321	54.2387 ug/ml	99
21) 2-Methylphenol	7.49	107	380206	51.9649 ug/ml	100
22) bis(2-Chloroisopropyl)ethe	7.54	45	683034	50.3930 ug/ml	99
23) 3-,4-Methylphenol	7.62	107	494212	51.1333 ug/ml	100
24) n-Nitrosopyrrolidine	7.67	100	225885	55.1278 ug/ml	100
25) n-Nitrosodipropylamine	7.67	70	311009	59.5407 ug/ml	99
26) Acetophenone	7.68	105	610408	57.6225 ug/ml	99
27) n-Nitrosomorpholine	7.68	56	283563	56.4602 ug/ml	99
28) o-Toluidine	7.73	106	774939	53.5779 ug/ml	100
29) Hexachloroethane	7.81	117	207953	50.4010 ug/ml	99
32) Nitrobenzene	7.87	77	471369	51.3132 ug/ml	99
33) n-Nitrosopiperidine	8.01	114	252949	50.5594 ug/ml	98
34) Isophorone	8.08	82	857268	52.5914 ug/ml	99
35) 2-Nitrophenol	8.19	139	296019m	46.4787 ug/ml	
36) 2,4-Dimethylphenol	8.15	122	463322	52.6785 ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.25	198	241610	57.3154 ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	654041	56.2488 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60439.D MEGAMIX.M Fri Apr 20 08:18:56 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.20	105	336174	73.2728 ug/ml	98
40)	2,4-Dichlorophenol	8.41	162	406146	52.5201 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.41	58	352764	51.6751 ug/ml	99
42)	1,2,4-Trichlorobenzene	8.52	180	454080	53.5984 ug/ml	100
43)	Naphthalene	8.60	128	1478551	57.1286 ug/ml	100
44)	4-Chloroaniline	8.62	127	522329	52.6511 ug/ml	99
45)	2,6-Dichlorophenol	8.64	162	419189	53.0993 ug/ml	99
46)	Hexachloropropene	8.71	213	274106	51.7151 ug/ml	100
47)	Hexachlorobutadiene	8.74	225	236674	55.3981 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	394852	52.2669 ug/ml	98
49)	p-Phenylenediamine	9.06	108	32834	52.7401 ug/ml	98
50)	4-Chloro-3-Methylphenol	9.06	107	409911	53.7336 ug/ml	100
51)	Safrole	9.16	162	391403	54.0904 ug/ml	99
52)	2-Methylnaphthalene	9.29	142	967916	55.2571 ug/ml	100
53)	1-Methylnaphthalene	9.40	142	914409	54.9794 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	420466	54.1164 ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	244269	59.3737 ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	302655	52.9876 ug/ml	98
58)	2,4,5-Trichlorophenol	9.62	196	308844	53.9056 ug/ml	99
60)	Isosafrole	9.68	162	410694	52.1570 ug/ml	97
61)	2-Chloronaphthalene	9.79	162	906729	52.6084 ug/ml	99
62)	1-Chloronaphthalene	9.83	162	864129	53.6130 ug/ml	100
63)	2-Nitroaniline	9.89	65	261334	50.5913 ug/ml	98
64)	1,4-Naphthoquinone	9.95	158	378469	58.4376 ug/ml	99
65)	Dimethylphthalate	10.05	163	1022202	54.3128 ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	201353	50.3149 ug/ml	99
67)	2,6-Dinitrotoluene	10.15	165	256989	51.4076 ug/ml	100
68)	Acenaphthylene	10.24	152	1459231	55.8004 ug/ml	100
69)	3-Nitroaniline	10.31	138	174456	67.4649 ug/ml#	68
70)	2,4-Dinitrophenol	10.41	184	130897	51.1568 ug/ml	78
71)	Acenaphthene	10.42	154	959014	56.1434 ug/ml	99
72)	4-Nitrophenol	10.40	65	186191	50.9475 ug/ml	99
73)	2,4-Dinitrotoluene	10.56	165	332745	54.9652 ug/ml	98
74)	Pentachlorobenzene	10.60	250	385447	55.3704 ug/ml	99
75)	Dibenzofuran	10.57	168	1276287	57.1887 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	227393	59.5614 ug/ml	99
77)	1-Naphthylamine	10.65	143	73636	134.9308 ug/ml#	18
78)	2-Naphthylamine	10.72	143	24431	63.2418 ug/ml#	91
79)	Diethylphthalate	10.76	149	1020028	54.9216 ug/ml	100
80)	Thionazin	10.86	107	172379	55.2578 ug/ml	99
81)	Fluorene	10.94	166	1088180	55.7218 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	515271	56.5666 ug/ml	100
83)	4-Nitroaniline	10.95	138	223285	53.1737 ug/ml	96
84)	5-Nitro-o-Toluidine	10.94	152	233161	57.0574 ug/ml	94
85)	1,2-Diphenylhydrazine	11.05	77	983010	53.6394 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	184821	44.9291 ug/ml	97
89)	n-Nitrosodiphenylamine	11.01	169	929531	53.8800 ug/ml	99
90)	Sulfotepp	11.20	322	169813	53.6919 ug/ml	97
91)	Sym-Trinitrobenzene	11.28	75	245626	47.8546 ug/ml	98
92)	Diallate	11.33	86	380783	55.9524 ug/ml	99
93)	Phenacetin	11.32	108	503393	55.1920 ug/ml	99
94)	Phorate	11.35	75	609588	53.7949 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.42	248	293263	53.0441 ug/ml	99
96)	Hexachlorobenzene	11.63	284	321319	54.1592 ug/ml	98

(#) = qualifier out of range (m) = manual integration
4M60439.D MEGAMIX.M Fri Apr 20 08:18:56 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

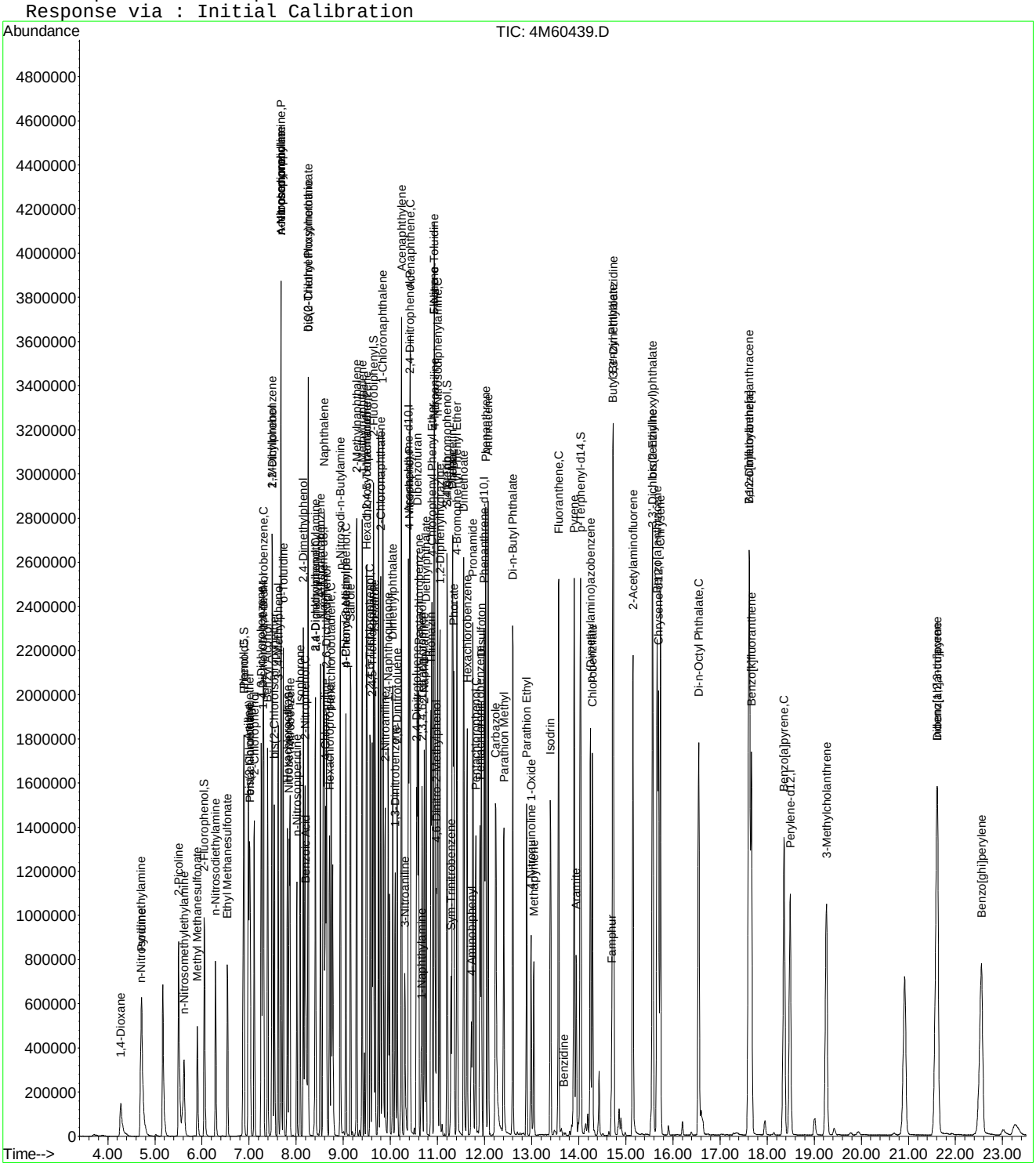
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	339058	61.7901	ug/ml	100
98)	4-Aminobiphenyl	11.72	169	362625	53.7158	ug/ml	100
99)	Pentachlorophenol	11.81	266	206843	60.4342	ug/ml	98
100)	Pronamide	11.75	173	474797	52.5004	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	112466	52.7533	ug/ml	98
102)	Disulfoton	11.94	88	525023	51.7079	ug/ml	99
103)	Phenanthrene	12.03	178	1519697	53.8500	ug/ml	100
104)	Anthracene	12.08	178	1564112	53.9305	ug/ml	100
105)	Carbazole	12.24	167	1383835	51.1066	ug/ml	100
106)	Parathion Methyl	12.41	109	332197	61.4956	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	1699050	53.3192	ug/ml	100
108)	Parathion Ethyl	12.89	97	202803	51.9363	ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.99	190	164563	87.9970	ug/ml	99
110)	Methapyrilene	13.05	58	313634	53.4102	ug/ml	99
111)	Isodrin	13.40	193	164002	52.0160	ug/ml	99
112)	Fluoranthene	13.58	202	1596911	54.0089	ug/ml	99
114)	Benzidine	13.69	184	13235	391.6902	ug/ml	100
115)	Pyrene	13.91	202	1618198	52.1353	ug/ml	100
116)	Aramite	13.94	185	96625	51.3784	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.25	225	344938	52.1731	ug/ml	96
119)	Chlorobenzilate	14.29	251	452662	52.1067	ug/ml	98
120)	Famphur	14.70	218	19662	24.2241	ug/ml#	52
121)	Butyl Benzyl Phthalate	14.72	149	736908	49.5460	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	265248	88.0533	ug/ml	97
123)	2-Acetylaminofluorene	15.15	181	672726	50.6242	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	1020072	51.9755	ug/ml	100
125)	3,3'-Dichlorobenzidine	15.58	252	322552	62.1461	ug/ml	99
126)	Benzo[a]anthracene	15.66	228	1436678	52.4916	ug/ml	100
127)	Chrysene	15.73	228	1327816	51.8780	ug/ml	99
129)	Di-n-Octyl Phthalate	16.55	149	1737436	49.8326	ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.62	256	693312	52.0347	ug/ml	99
131)	Benzo[b]fluoranthene	17.62	252	1510511	48.9916	ug/ml	99
132)	Benzo[k]fluoranthene	17.67	252	1477424	55.0736	ug/ml	96
133)	Benzo[a]pyrene	18.36	252	1420992	50.6605	ug/ml	100
134)	3-Methylcholanthrene	19.26	268	780637	51.2505	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.62	276	1616295	49.1334	ug/ml	99
136)	Dibenz[ah]anthracene	21.61	278	1352159	49.3321	ug/ml	100
137)	Benzo[ghi]perylene	22.55	276	1336874	49.0395	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: MEGAMIX.RES

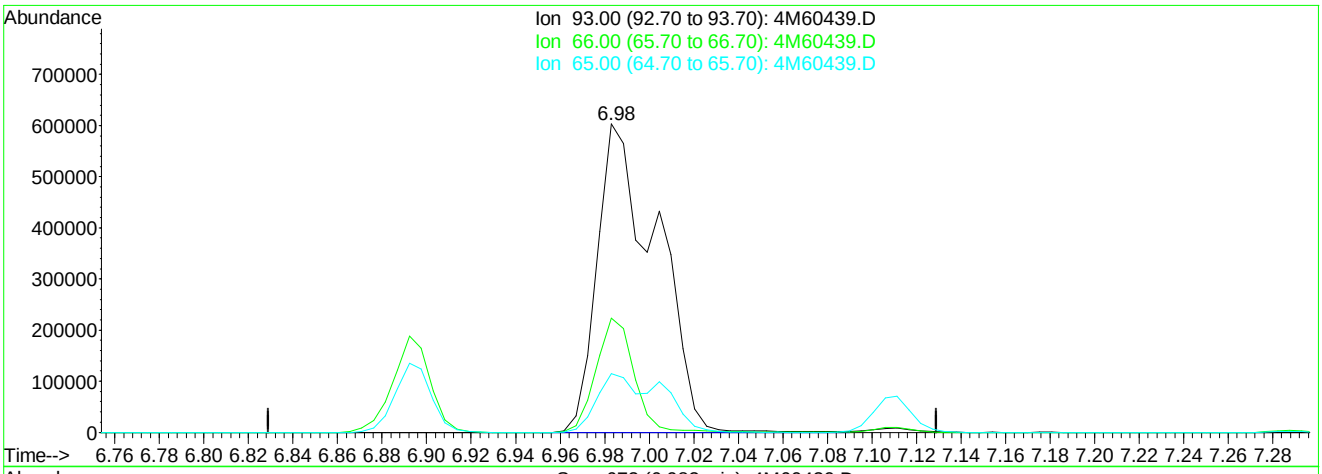
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

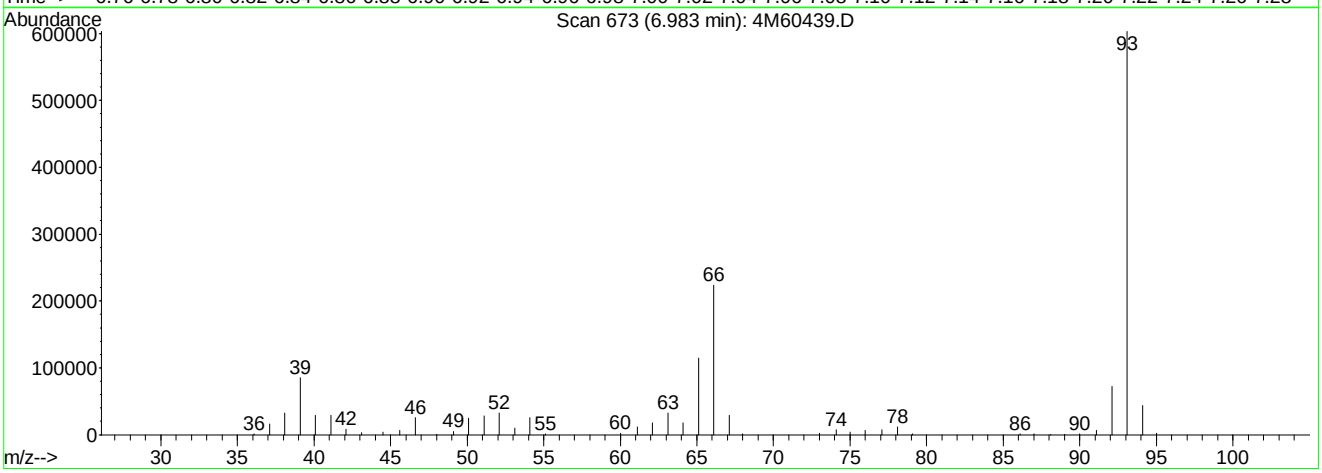


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(11) Aniline

6.98min 83.11ug/ml

response 1123623

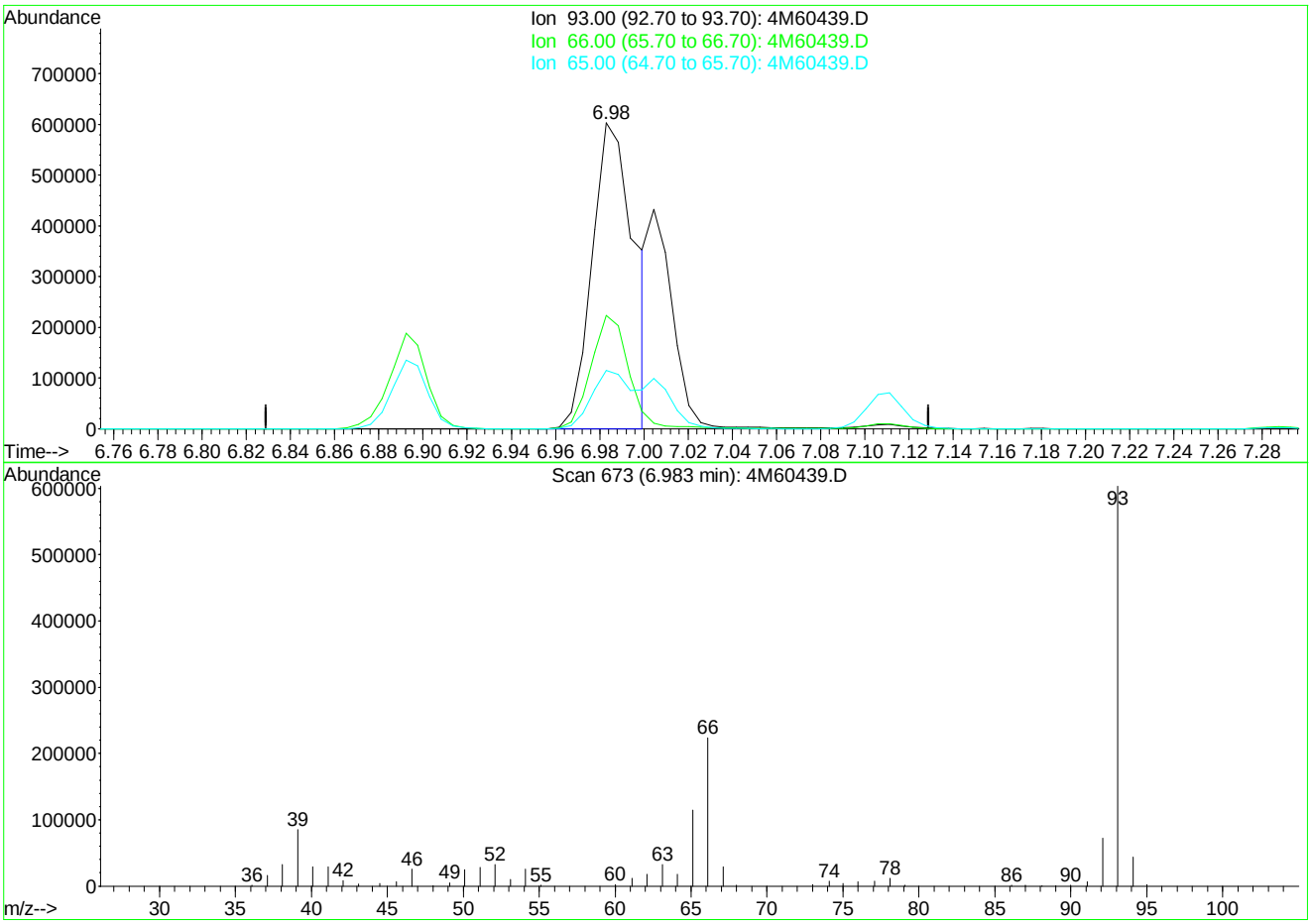
Ion	Exp%	Act%
93.00	100	100
66.00	42.70	23.58#
65.00	19.20	20.60
0.00	0.00	0.00

4M60439.D MEGAMIX.M Thu Apr 19 14:19:51 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration



TIC: 4M60439.D

(11) Aniline

6.98min 58.68ug/ml mint

response 793273

Ion	Exp%	Act%
93.00	100	100
66.00	42.70	33.40
65.00	19.20	29.18#
0.00	0.00	0.00

4M60439.D MEGAMIX.M Thu Apr 19 ; 2012

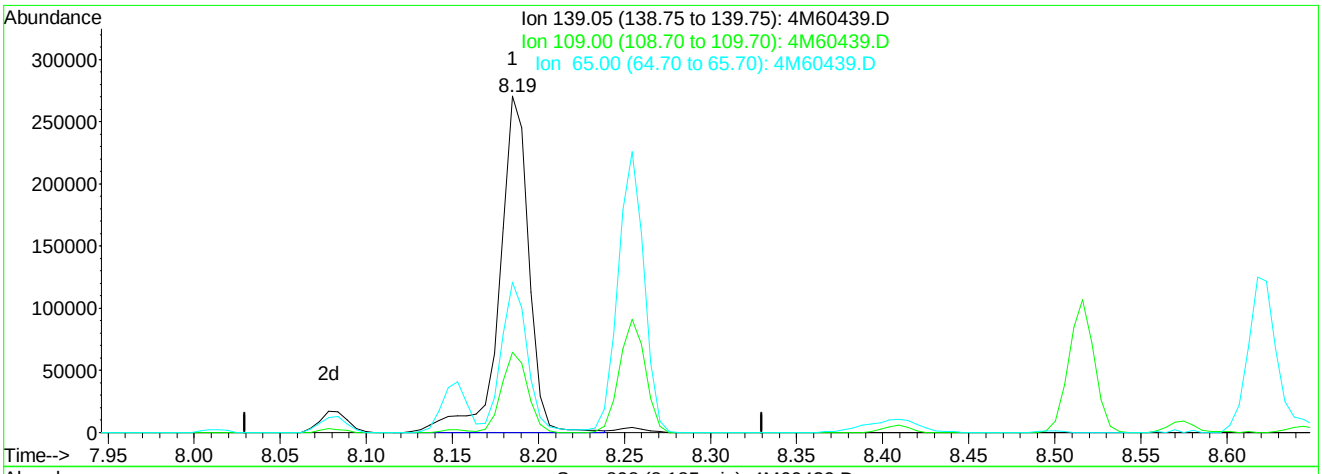
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

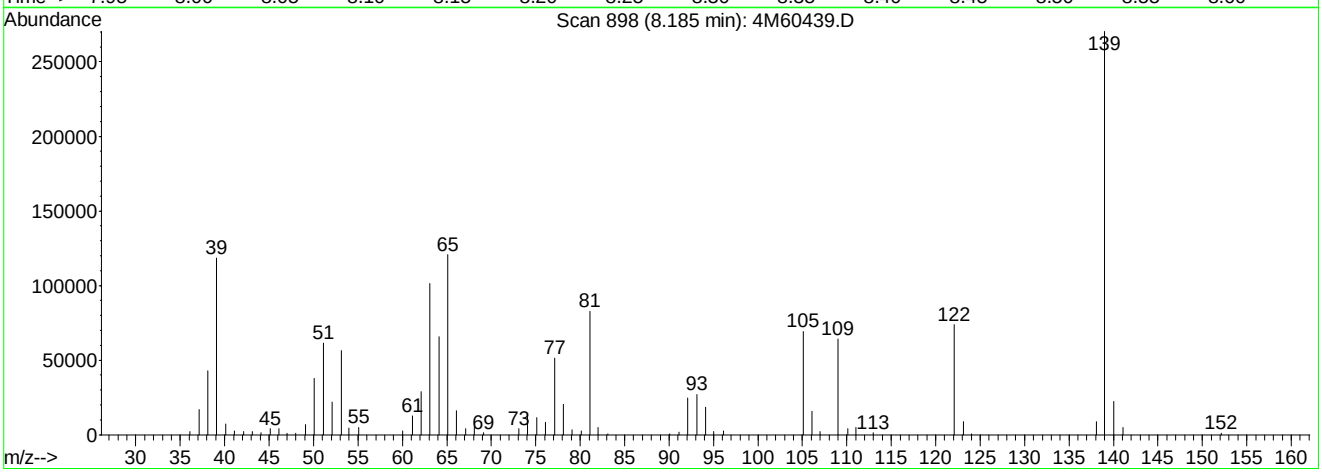
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(35) 2-Nitrophenol (C)

8.19min 50.19ug/ml

response 319686

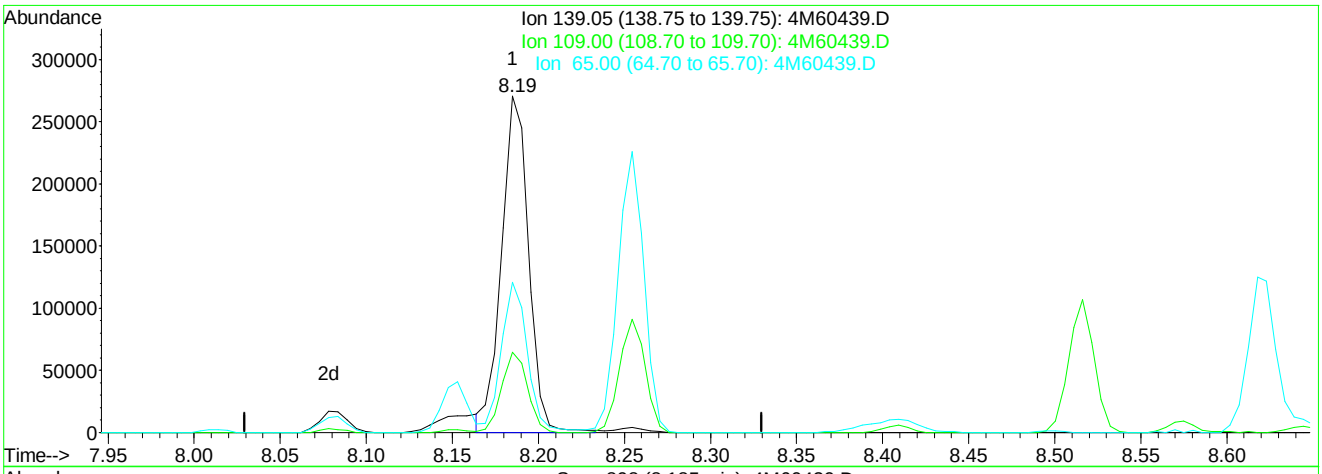
Ion	Exp%	Act%
139.05	100	100
109.00	16.10	21.09
65.00	37.90	40.29
0.00	0.00	0.00

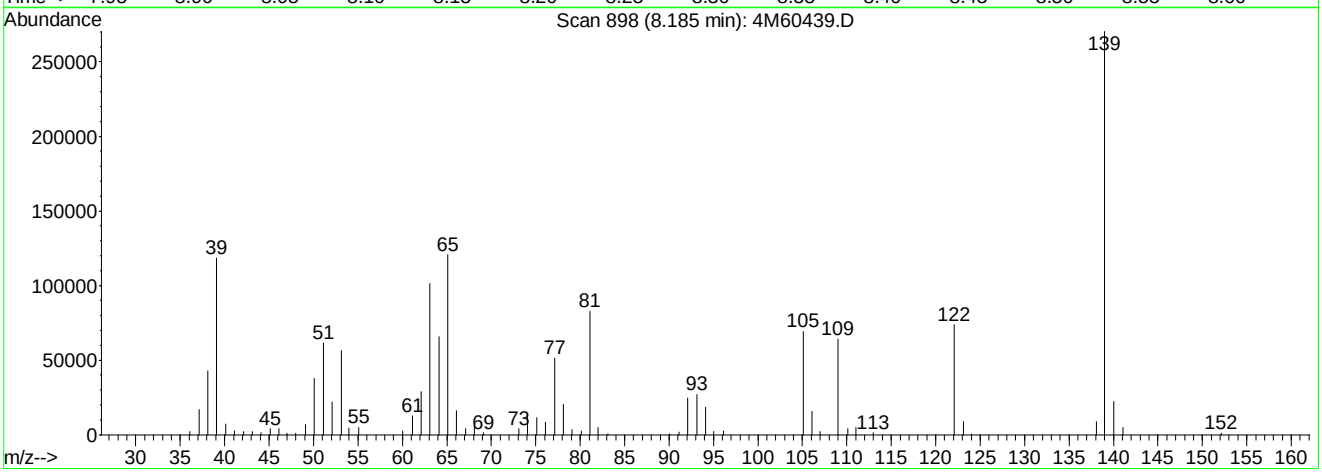
4M60439.D MEGAMIX.M Thu Apr 19 14:20:01 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(35) 2-Nitrophenol (C)

8.19min 46.48ug/ml mint

response 296019

Ion	Exp%	Act%
139.05	100	100
109.00	16.10	22.78#
65.00	37.90	43.51
0.00	0.00	0.00

4M60439.D MEGAMIX.M Thu Apr 19 3 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20:38 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	267420	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	1002832	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	566848	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	996557	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	955111	40.00	ug/ml	0.00
128) Perylene-d12	18.48	264	933139	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	25566	3.1943	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery =	3.19%#		
12) Phenol-d5	6.88	99	30625	3.3848	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery =	3.38%#		
31) Nitrobenzene-d5	7.84	82	27396	3.3468	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery =	6.70%#		
59) 2-Fluorobiphenyl	9.64	172	63455	3.7601	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery =	7.52%#		
86) 2,4,6-Tribromophenol	11.20	330	7756	3.4260	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery =	3.43%#		
117) p-Terphenyl-d14	14.03	244	59375	3.6668	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery =	7.34%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	4.28	88	9565	2.9573	ug/ml#	96
3) n-Nitrosodimethylamine	4.70	74	15443	3.0935	ug/ml	99
4) Pyridine	4.72	79	28330	3.2140	ug/ml	98
5) 2-Picoline	5.51	93	30545	3.2216	ug/ml	98
6) n-Nitrosomethylethylamine	5.62	88	12711	3.0354	ug/ml	96
7) Methyl Methanesulfonate	5.90	80	15638	3.3789	ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	13711	3.1676	ug/ml	91
10) Ethyl Methanesulfonate	6.54	79	19752	3.3165	ug/ml	99
11) Aniline	6.98	93	44787m	3.5962	ug/ml	
13) Phenol	6.89	94	33658	3.5179	ug/ml	98
14) bis(2-Chloroethyl)ether	7.01	63	21246	3.7316	ug/ml	93
15) Pentachloroethane	7.02	167	11139	3.5663	ug/ml	98
16) 2-Chlorophenol	7.11	128	29118	3.3159	ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	33383	3.5287	ug/ml	97
18) 1,4-Dichlorobenzene	7.30	146	33902	3.5447	ug/ml	93
19) Benzyl Alcohol	7.39	108	18359	3.2357	ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	31736	3.6527	ug/ml	99
21) 2-Methylphenol	7.48	107	22411	3.3934	ug/ml	96
22) bis(2-Chloroisopropyl)ethe	7.53	45	42714	3.5051	ug/ml	96
23) 3-,4-Methylphenol	7.61	107	29104	3.3376	ug/ml	98
24) n-Nitrosopyrrolidine	7.66	100	13086	3.5346	ug/ml	81
25) n-Nitrosodipropylamine	7.67	70	19190	4.0606	ug/ml	93
26) Acetophenone	7.68	105	38723	4.0393	ug/ml	99
27) n-Nitrosomorpholine	7.67	56	18655	4.1044	ug/ml	96
28) o-Toluidine	7.72	106	46596	3.5537	ug/ml	97
29) Hexachloroethane	7.81	117	11768	3.1652	ug/ml	97
32) Nitrobenzene	7.87	77	28033	3.4846	ug/ml	95
33) n-Nitrosopiperidine	8.01	114	14470	3.2997	ug/ml	96
34) Isophorone	8.08	82	51229	3.5834	ug/ml	98
35) 2-Nitrophenol	8.19	139	14686	2.7155	ug/ml	97
36) 2,4-Dimethylphenol	8.15	122	33490	4.3356	ug/ml	82
37) 0,0,0-Triethyl Phosphoroth	8.25	198	14464	3.8966	ug/ml	99
38) bis(2-Chloroethoxy)methane	8.25	93	39621	3.8831	ug/ml	97

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20:38 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.17	105	8942	2.1054	ug/ml#	1
40)	2,4-Dichlorophenol	8.40	162	23297	3.4366	ug/ml	98
41)	a,a-Dimethylphenethylamine	8.36	58	55768	9.3752	ug/ml#	90
42)	1,2,4-Trichlorobenzene	8.51	180	27461	3.6967	ug/ml	99
43)	Naphthalene	8.59	128	89968	3.9514	ug/ml	98
44)	4-Chloroaniline	8.62	127	34347	3.8389	ug/ml	97
45)	2,6-Dichlorophenol	8.64	162	23700	3.4202	ug/ml	99
46)	Hexachloropropene	8.71	213	13146	2.8310	ug/ml	99
47)	Hexachlorobutadiene	8.74	225	13857	3.6903	ug/ml	98
48)	n-Nitrosodi-n-Butylamine	8.93	84	23037	3.4699	ug/ml	97
49)	p-Phenylenediamine	9.05	108	1961	3.5847	ug/ml#	86
50)	4-Chloro-3-Methylphenol	9.05	107	23094	3.4473	ug/ml	100
51)	Safrole	9.15	162	22407	3.5239	ug/ml	99
52)	2-Methylnaphthalene	9.28	142	57527	3.7383	ug/ml	100
53)	1-Methylnaphthalene	9.40	142	54666	3.7433	ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	24923	3.7091	ug/ml	98
56)	Hexachlorocyclopentadiene	9.50	237	10305	2.8713	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	15865	3.2084	ug/ml	99
58)	2,4,5-Trichlorophenol	9.61	196	16640	3.3537	ug/ml	100
60)	Isosafrole	9.67	162	22170	3.2560	ug/ml	99
61)	2-Chloronaphthalene	9.79	162	52303	3.5118	ug/ml	100
62)	1-Chloronaphthalene	9.83	162	50840	3.6501	ug/ml	99
63)	2-Nitroaniline	9.88	65	13815	3.0889	ug/ml	97
64)	1,4-Naphthoquinone	9.95	158	20970	3.7456	ug/ml	99
65)	Dimethylphthalate	10.04	163	59595	3.6590	ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	9788	2.8306	ug/ml	95
67)	2,6-Dinitrotoluene	10.14	165	13905	3.2192	ug/ml	99
68)	Acenaphthylene	10.23	152	86364	3.8139	ug/ml	99
69)	3-Nitroaniline	10.30	138	13846	5.5954	ug/ml	97
70)	2,4-Dinitrophenol	10.40	184	1897	0.8479	ug/ml#	1
71)	Acenaphthene	10.41	154	54687	3.6907	ug/ml	97
72)	4-Nitrophenol	10.39	65	10863	3.4363	ug/ml	81
73)	2,4-Dinitrotoluene	10.55	165	17015	3.2414	ug/ml	95
74)	Pentachlorobenzene	10.60	250	21881	3.6269	ug/ml	99
75)	Dibenzofuran	10.57	168	75169	3.8854	ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	13262	4.0116	ug/ml	99
77)	1-Naphthylamine	10.65	143	47479	86.5695	ug/ml#	66
78)	2-Naphthylamine	10.71	143	39183	118.9922	ug/ml#	57
79)	Diethylphthalate	10.75	149	58814	3.6587	ug/ml	99
80)	Thionazin	10.85	107	9631	3.5646	ug/ml	94
81)	Fluorene	10.93	166	64601	3.8179	ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	29324	3.7112	ug/ml	98
83)	4-Nitroaniline	10.93	138	13701	3.7580	ug/ml	94
84)	5-Nitro-o-Toluidine	10.93	152	16758	4.6699	ug/ml	99
85)	1,2-Diphenylhydrazine	11.04	77	57128	3.6092	ug/ml	97
88)	4,6-Dinitro-2-Methylphenol	10.97	198	4516	1.2952	ug/ml#	24
89)	n-Nitrosodiphenylamine	11.00	169	53933	3.6688	ug/ml	98
90)	Sulfotepp	11.20	322	9525	3.5392	ug/ml	97
91)	Sym-Trinitrobenzene	11.27	75	9014	2.0672	ug/ml	95
92)	Diallate	11.32	86	22249	3.8474	ug/ml	99
93)	Phenacetin	11.30	108	25981	3.3474	ug/ml	96
94)	Phorate	11.34	75	33359	3.4677	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	16506	3.5090	ug/ml	99
96)	Hexachlorobenzene	11.63	284	18694	3.7029	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20:38 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

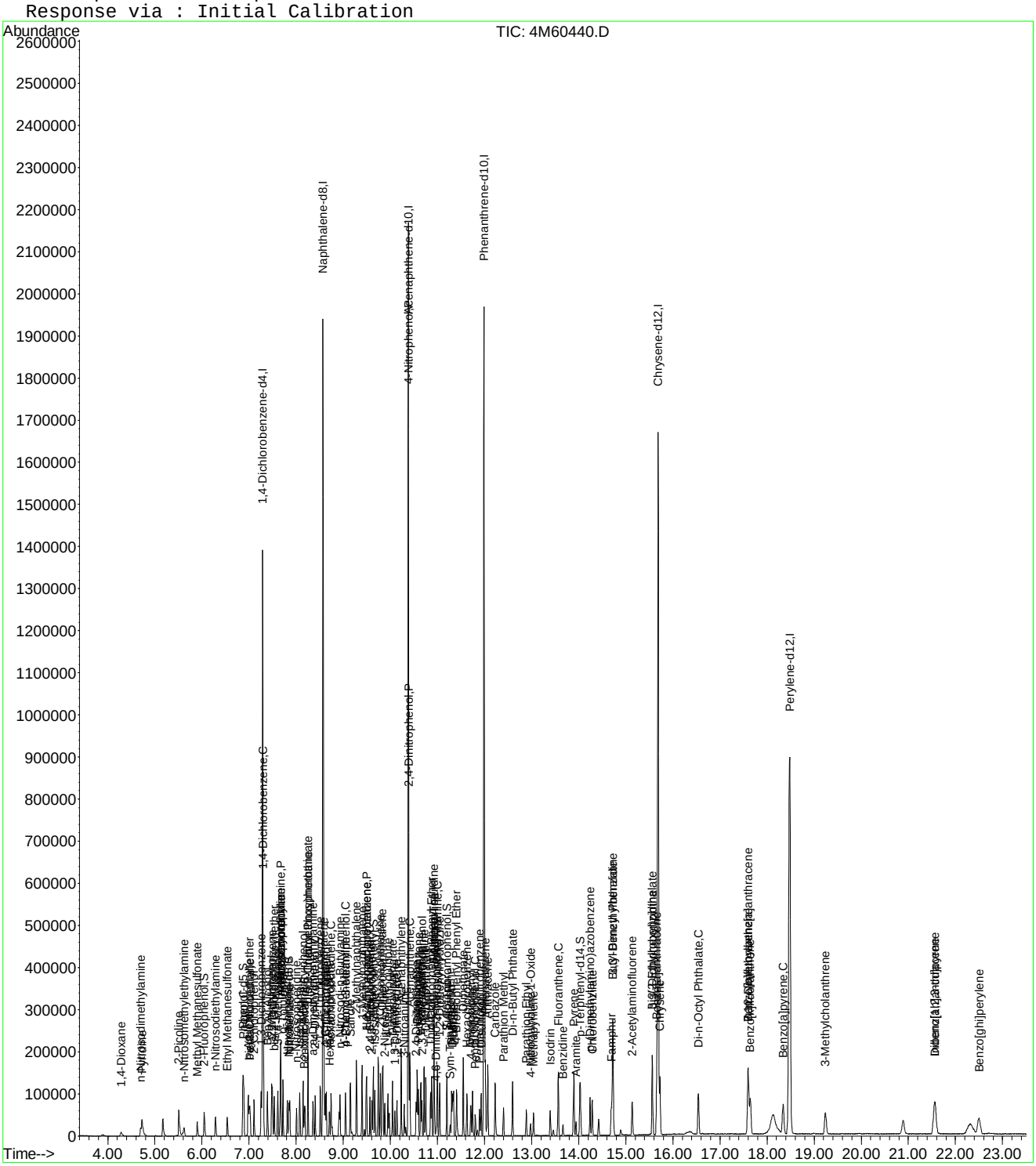
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	21420	4.5998	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	41614	7.2373	ug/ml	97
99)	Pentachlorophenol	11.80	266	8880	3.0117	ug/ml	98
100)	Pronamide	11.74	173	25508	3.3192	ug/ml	97
101)	Pentachloronitrobenzene	11.90	237	5928	3.2762	ug/ml	97
102)	Disulfoton	11.93	88	28465	3.3040	ug/ml	99
103)	Phenanthrene	12.02	178	90590	3.7776	ug/ml	99
104)	Anthracene	12.07	178	91274	3.7046	ug/ml	98
105)	Carbazole	12.22	167	80012	3.4770	ug/ml	99
106)	Parathion Methyl	12.40	109	17383	3.7794	ug/ml	98
107)	Di-n-Butyl Phthalate	12.59	149	98435	3.6392	ug/ml	99
108)	Parathion Ethyl	12.89	97	9681	2.9175	ug/ml	96
109)	4-Nitroquinoline 1-Oxide	12.98	190	3299	1.9642	ug/ml#	85
110)	Methapyrilene	13.04	58	24373	5.0309	ug/ml	99
111)	Isodrin	13.40	193	9498	3.5484	ug/ml	91
112)	Fluoranthene	13.57	202	93933	3.7393	ug/ml	99
114)	Benzidine	13.67	184	21581	507.2340	ug/ml	100
115)	Pyrene	13.90	202	96680	3.6213	ug/ml	97
116)	Aramite	13.94	185	4927	3.0431	ug/ml	98
118)	p-(Dimethylamino)azobenzen	14.24	225	17540	3.0800	ug/ml	96
119)	Chlorobenzilate	14.29	251	24175	3.2299	ug/ml	100
120)	Famphur	14.69	218	29261	86.4005	ug/ml#	22
121)	Butyl Benzyl Phthalate	14.71	149	42313	3.3153	ug/ml	97
122)	3,3'-Dimethylbenzidine	14.72	212	63234	24.2278	ug/ml#	91
123)	2-Acetylaminofluorene	15.14	181	30635	2.6744	ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.56	149	56427	3.3419	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.56	252	25330	5.5922	ug/ml	98
126)	Benzo[a]anthracene	15.65	228	83823	3.5545	ug/ml	99
127)	Chrysene	15.72	228	81007	3.6768	ug/ml	97
129)	Di-n-Octyl Phthalate	16.54	149	92158	3.0712	ug/ml	98
130)	7,12-Dimethylbenz[a]anthra	17.60	256	36761	3.1959	ug/ml	99
131)	Benzo[b]fluoranthene	17.59	252	87582	3.3057	ug/ml	98
132)	Benzo[k]fluoranthene	17.64	252	80556	3.4657	ug/ml	96
133)	Benzo[a]pyrene	18.34	252	76197	3.1529	ug/ml	96
134)	3-Methylcholanthrene	19.24	268	40955	3.1188	ug/ml	96
135)	Indeno[1,2,3-cd]pyrene	21.56	276	82885	2.9287	ug/ml	98
136)	Dibenz[ah]anthracene	21.56	278	67905	2.8804	ug/ml	98
137)	Benzo[ghi]perylene	22.50	276	70328	3.0021	ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60440.D MEGAMIX.M Fri Apr 20 08:18:57 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: MEGAMIX.RES

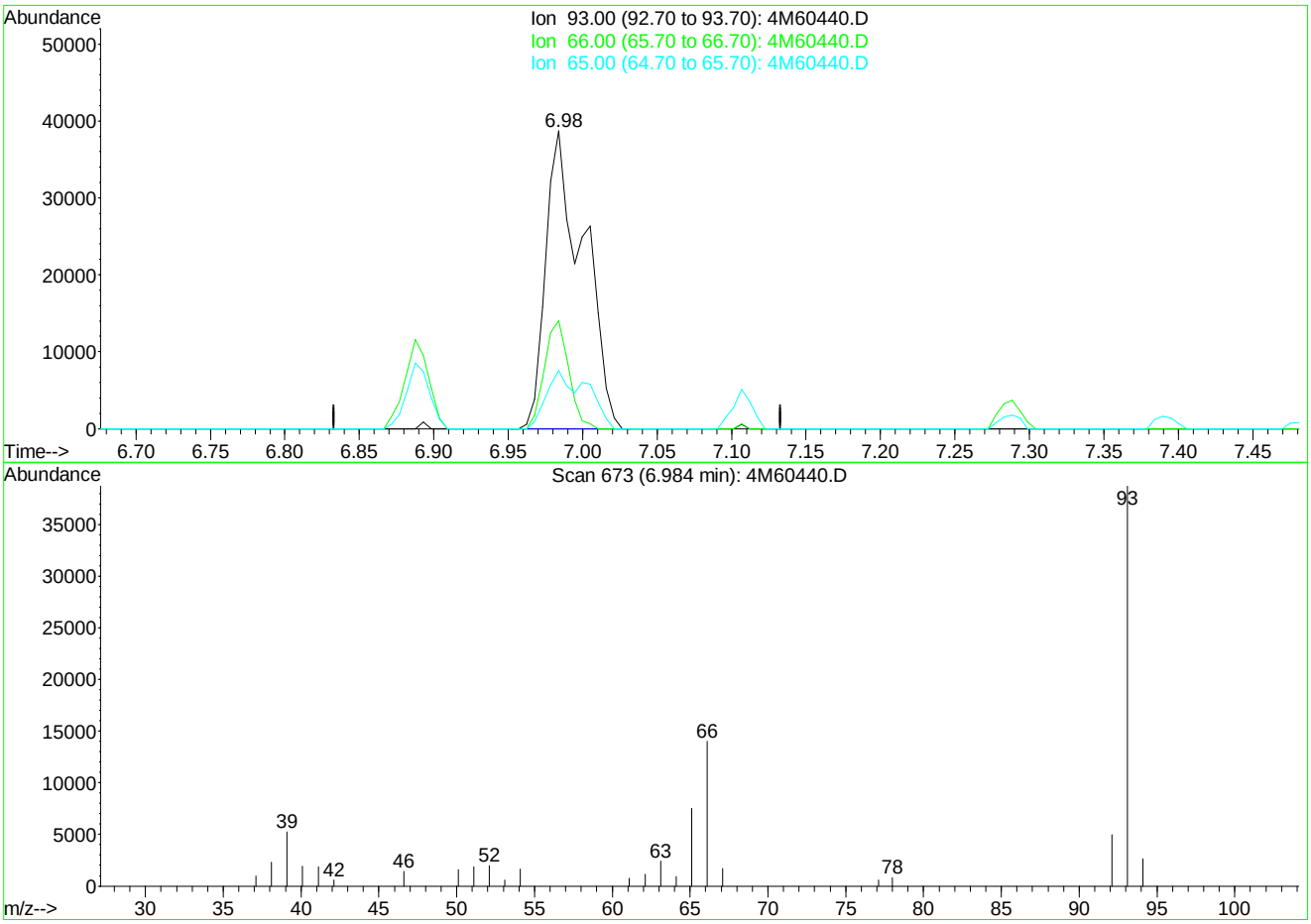
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Multiple Level Calibration



TIC: 4M60440.D

(11) Aniline

6.98min 5.47ug/ml

response 68174

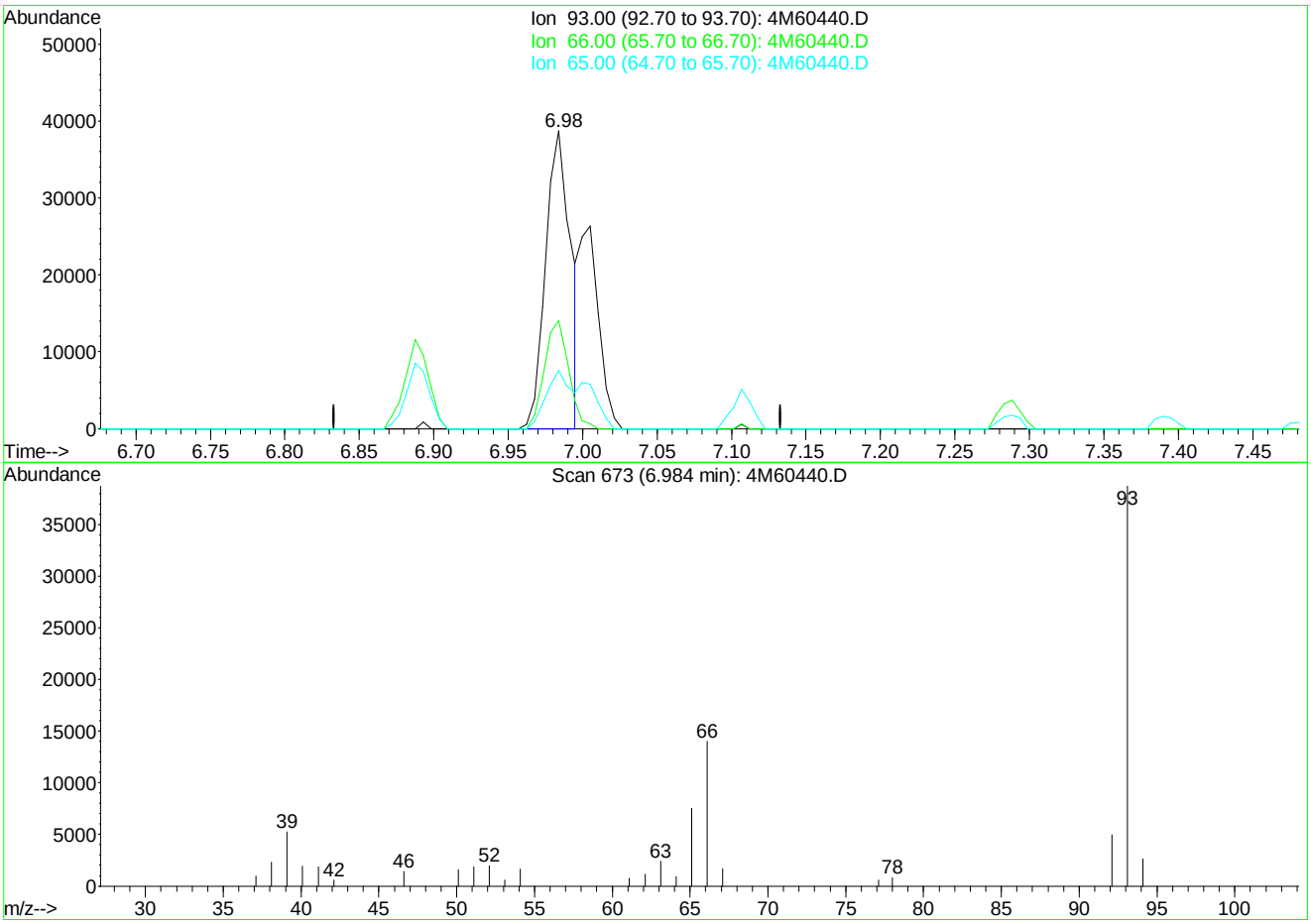
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.15
65.00	29.20	12.96#
0.00	0.00	0.00

4M60440.D MEGAMIX.M Thu Apr 19 14:20:45 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Multiple Level Calibration



TIC: 4M60440.D

(11) Aniline

6.98min 3.60ug/ml mint

response 44787

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	35.24
65.00	29.20	19.73
0.00	0.00	0.00

4M60440.D MEGAMIX.M Thu Apr 19 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

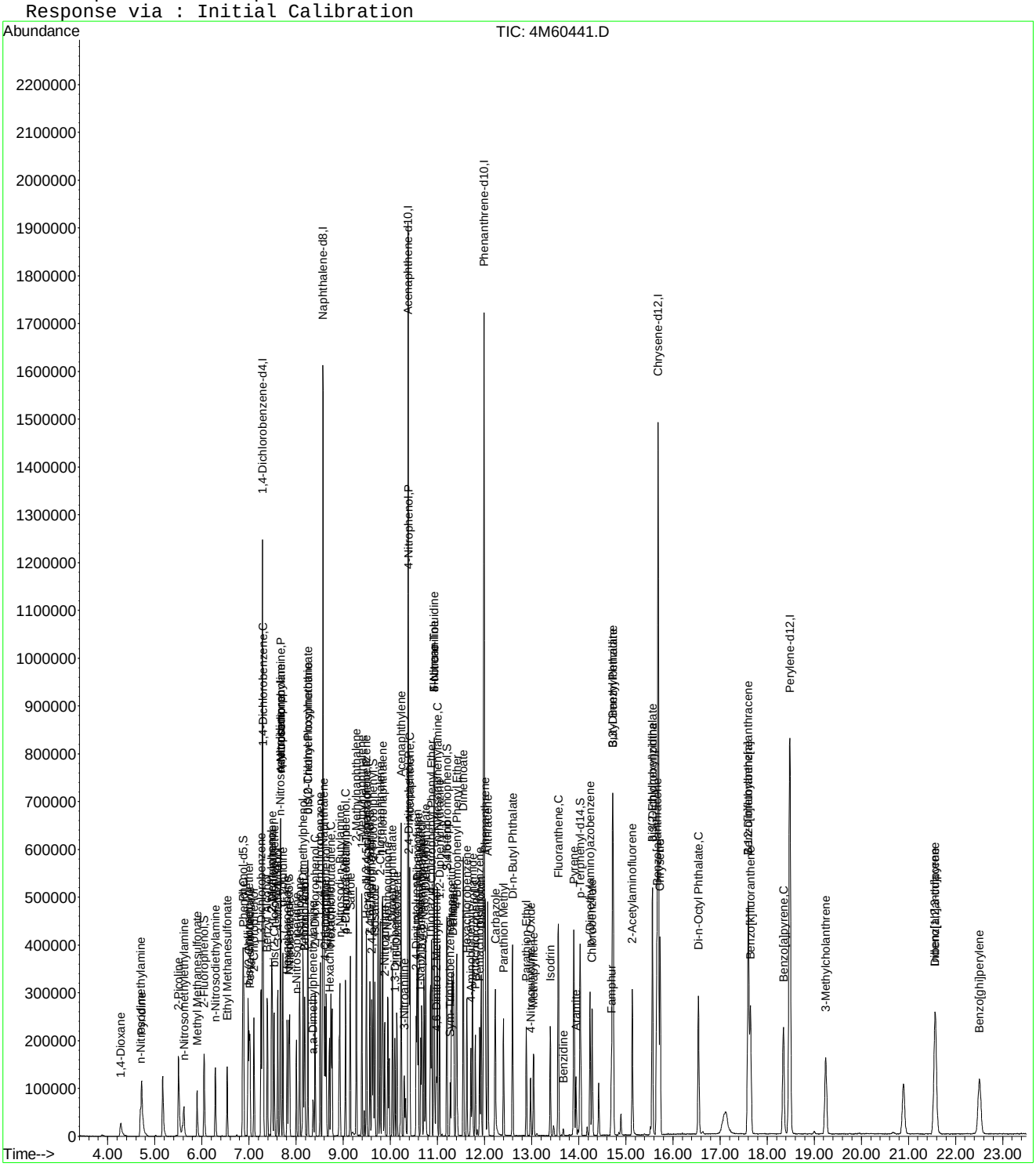
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	62939	14.8427	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	98626	18.8359	ug/ml	97
99)	Pentachlorophenol	11.81	266	31968	11.9067	ug/ml	98
100)	Pronamide	11.75	173	78302	11.1894	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	18446	11.1953	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

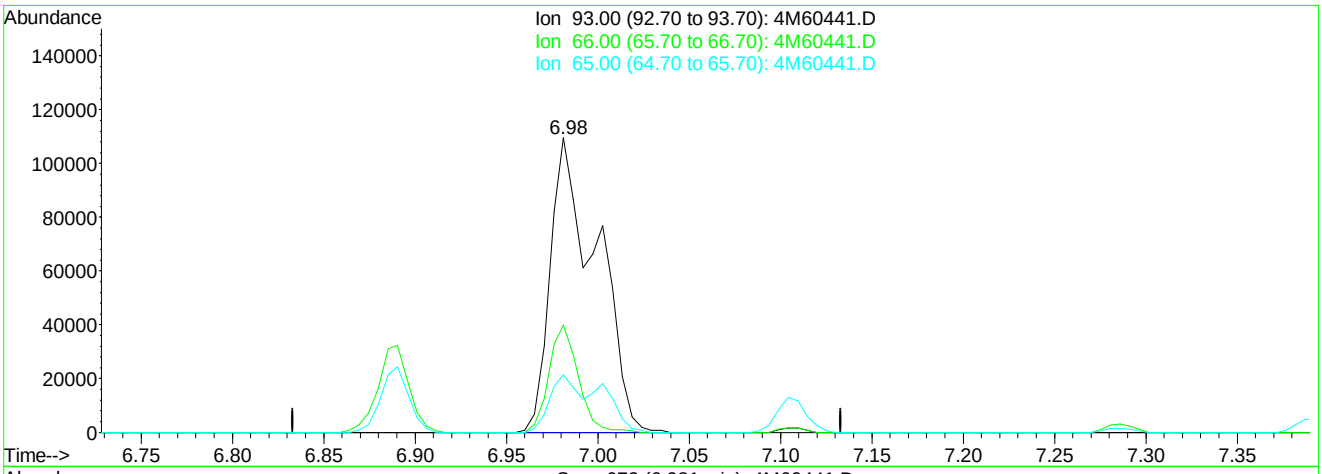


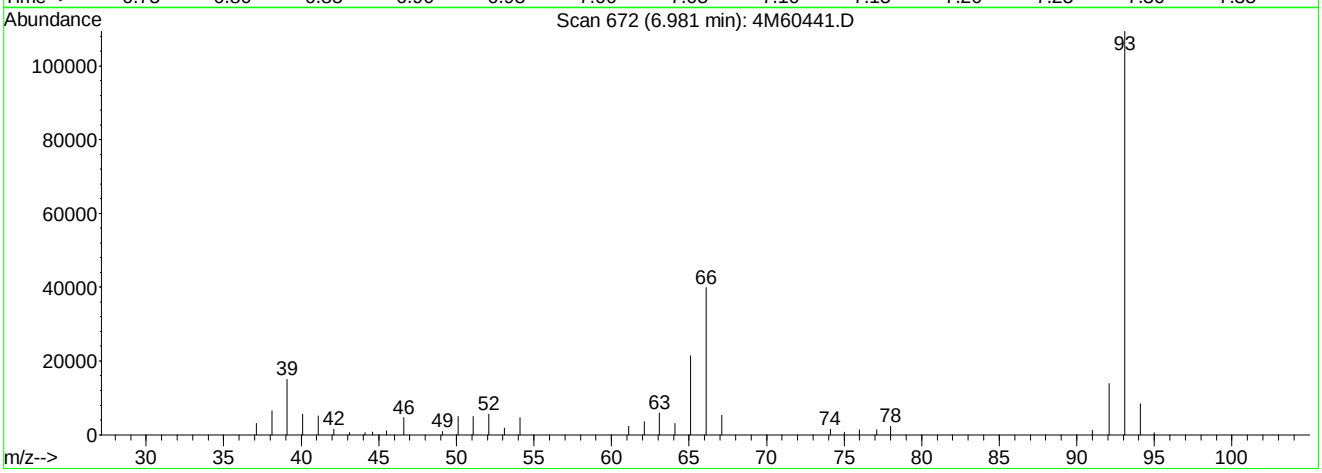
4M60441.D MEGAMIX.M Fri Apr 20 08:18:58 2012 Page 4

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

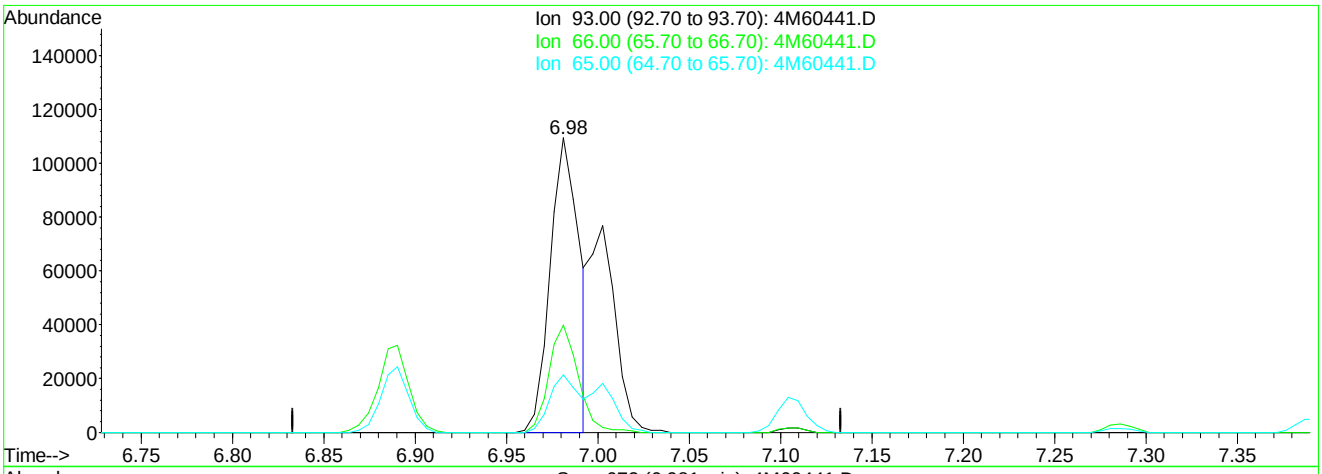
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.04
65.00	29.20	12.50#
0.00	0.00	0.00

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

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

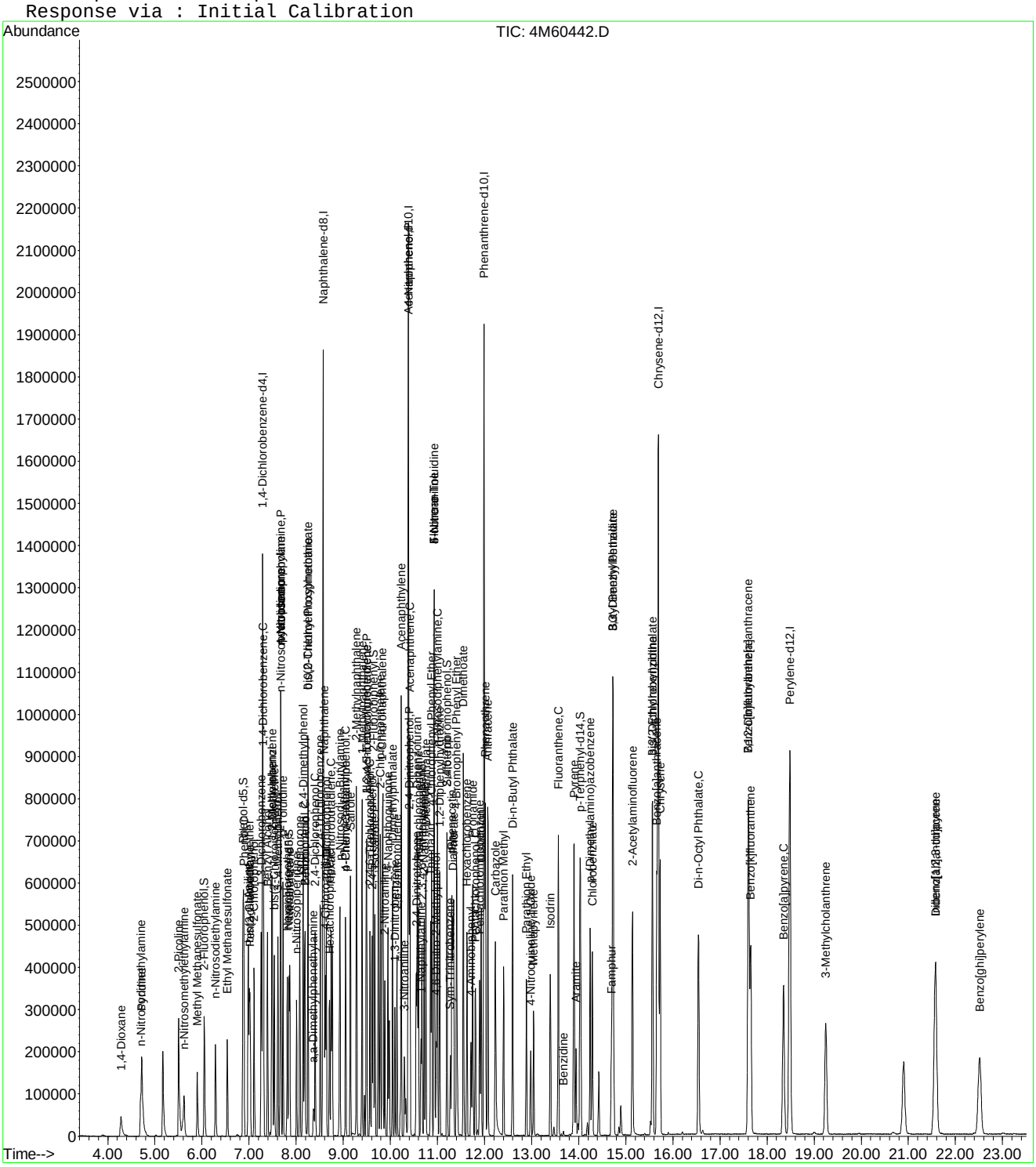
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
97)	Dimethoate	11.55	87	100546	21.7536 ug/ml	99
98)	4-Aminobiphenyl	11.71	169	125719	22.0160 ug/ml	99
99)	Pentachlorophenol	11.81	266	53277	18.1856 ug/ml	99
100)	Pronamide	11.75	173	123932	16.2463 ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	29537	16.4436 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

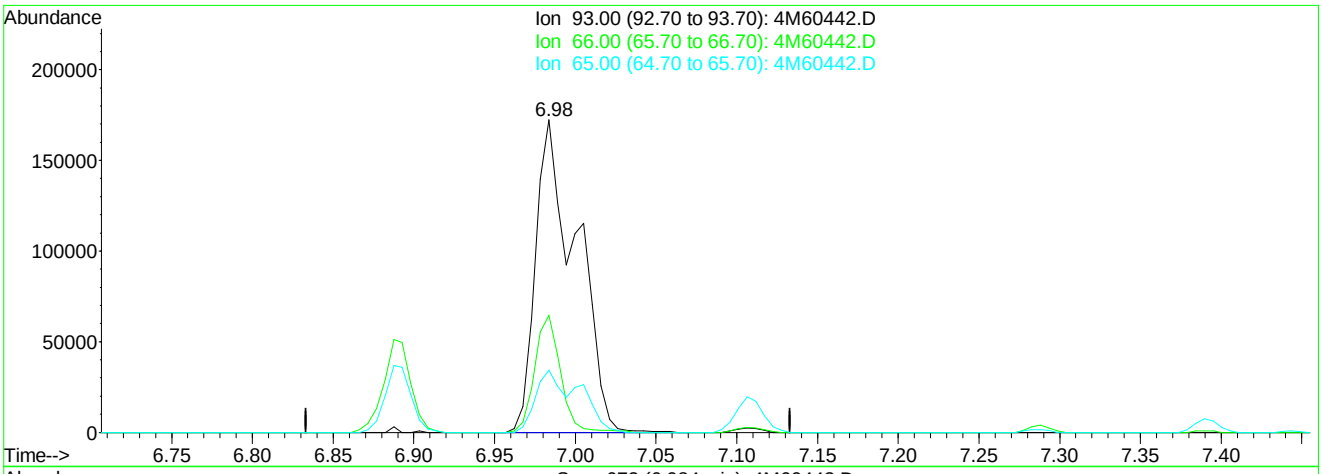
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



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

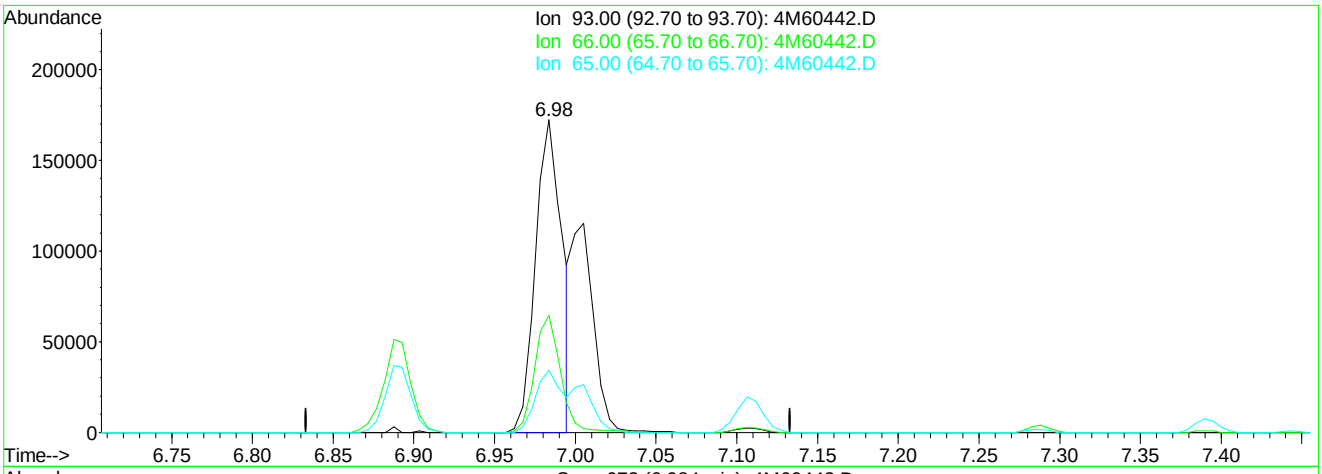
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.55
65.00	29.20	12.97#
0.00	0.00	0.00

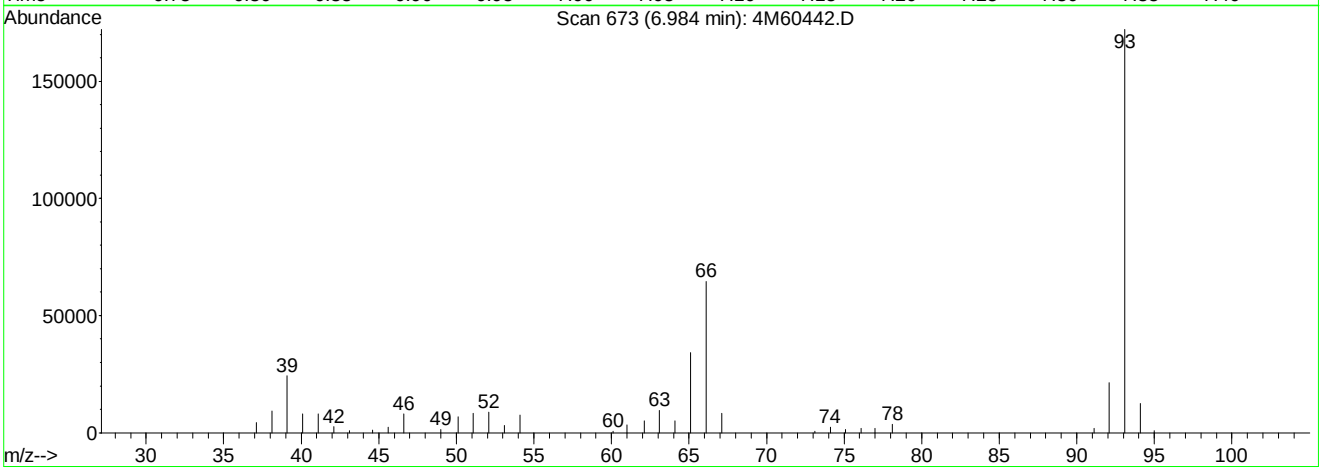
4M60442.D MEGAMIX.M Thu Apr 19 14:22:04 2012

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

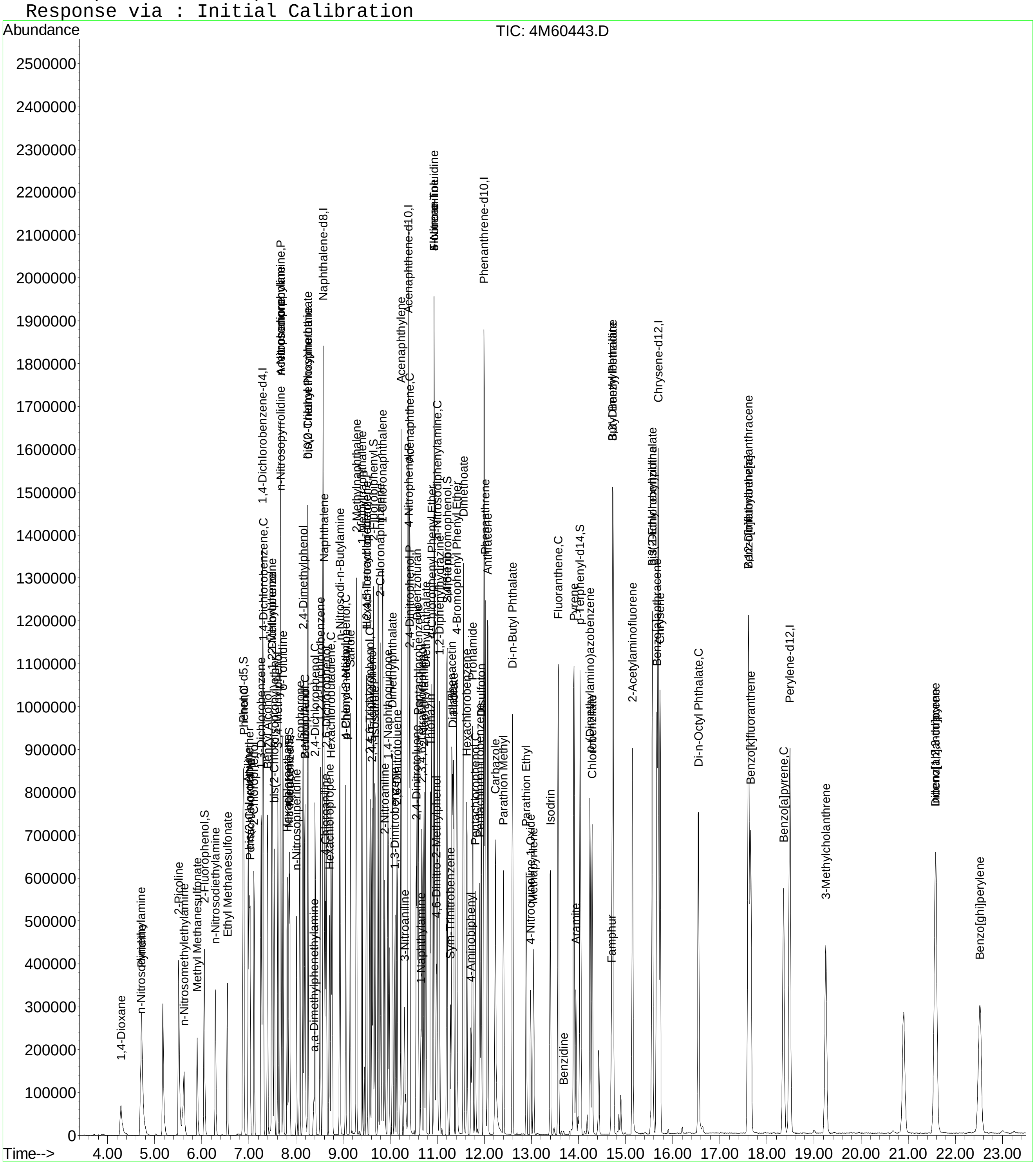
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	154209	33.4716	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	167715	29.4842	ug/ml	99
99)	Pentachlorophenol	11.81	266	85623	29.2700	ug/ml	99
100)	Pronamide	11.75	173	198719	26.1362	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	47519	26.5373	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

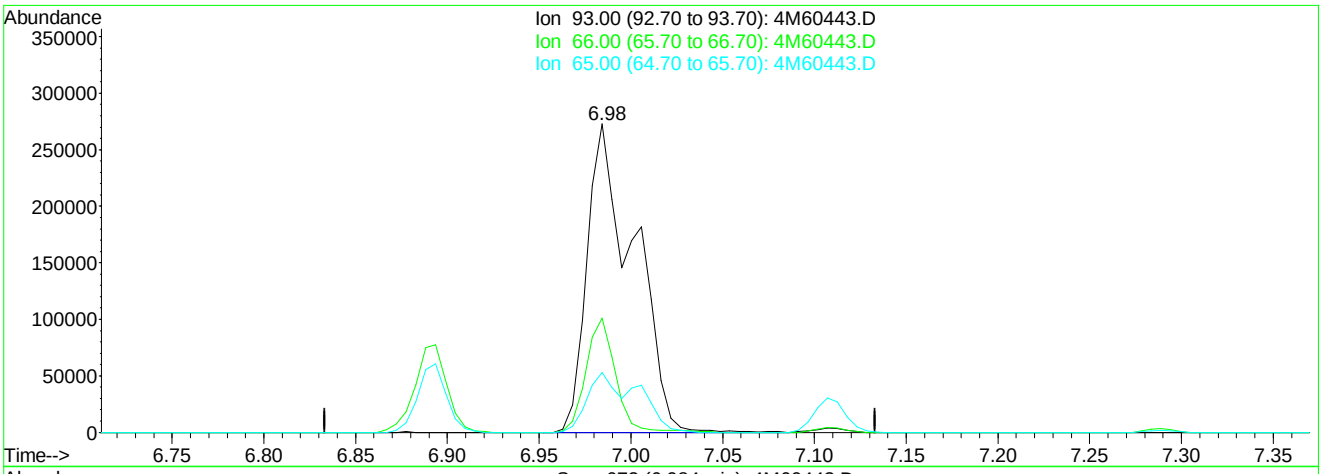


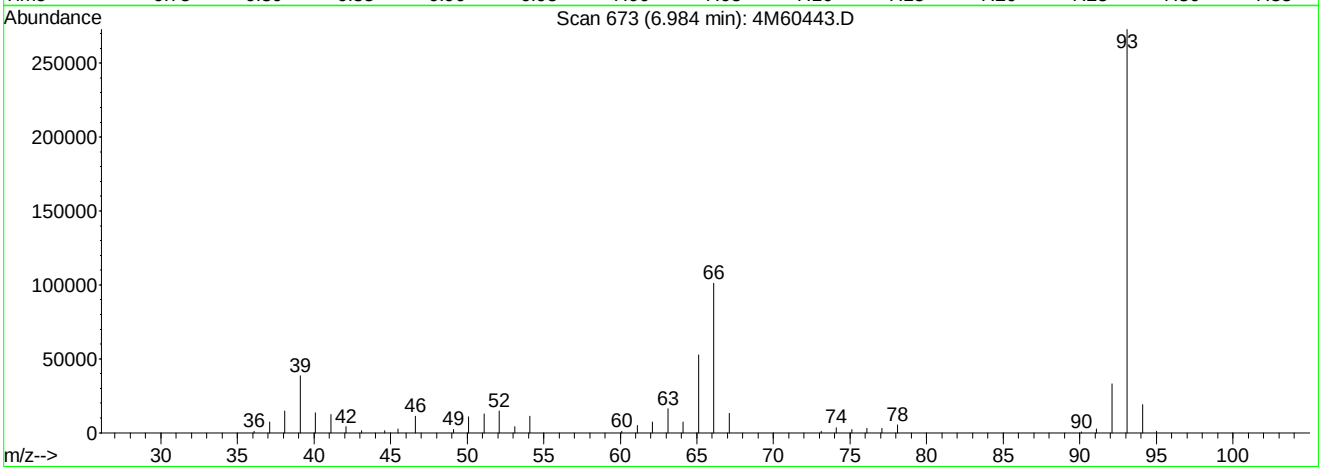
4M60443.D MEGAMIX.M Fri Apr 20 08:18:59 2012 Page 4

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D Vial: 6
Acq On : 19 Apr 2012 11:40 Operator: CAA
Sample : WG395394-06 25PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:22:30 2012
Response via : Multiple Level Calibration





TIC: 4M60443.D

(11) Aniline

6.98min 41.26ug/ml

response 484578

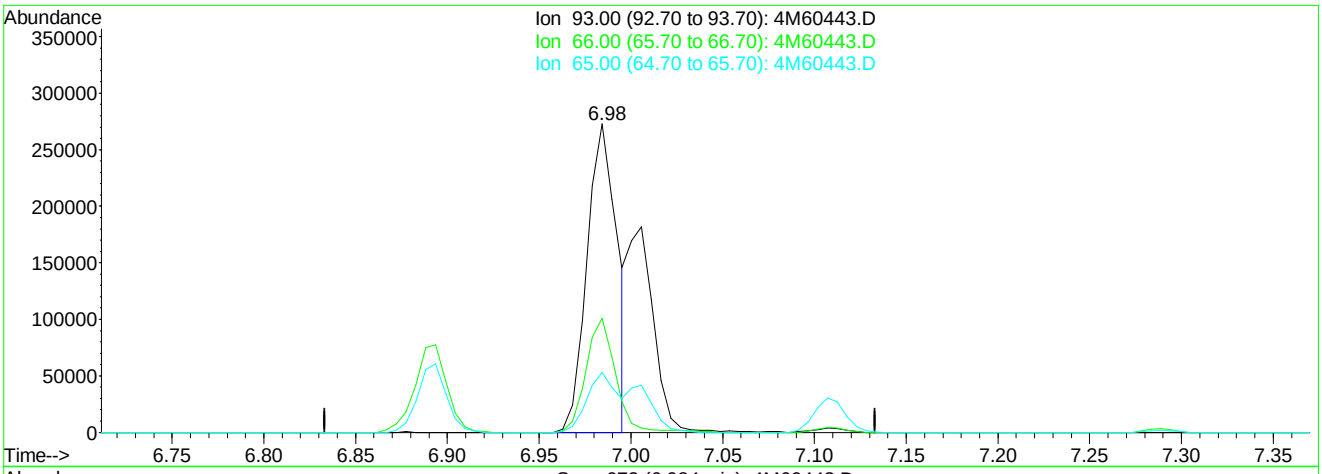
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.25
65.00	29.20	12.52#
0.00	0.00	0.00

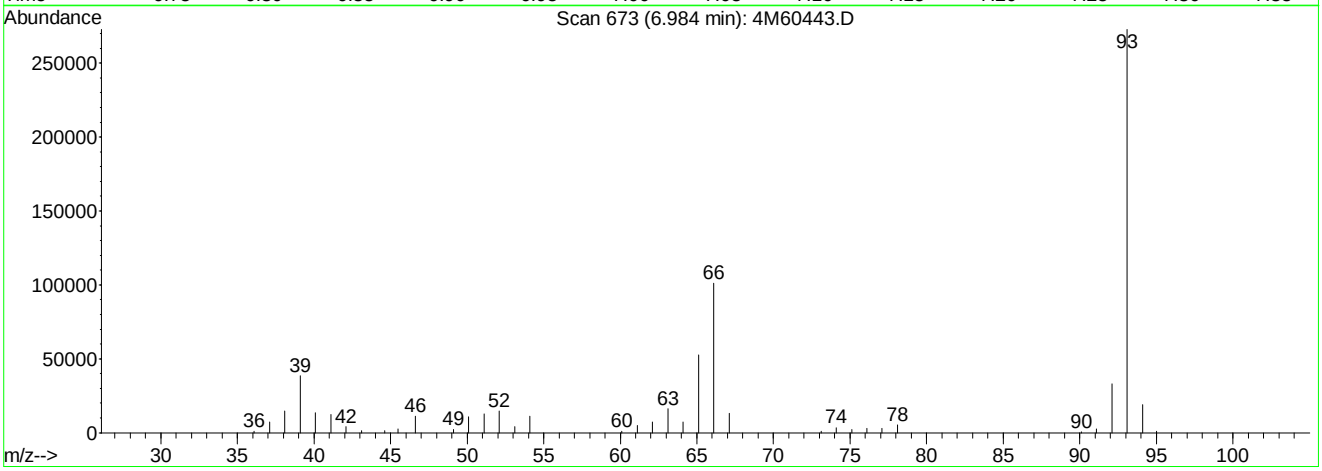
4M60443.D MEGAMIX.M Thu Apr 19 14:22:42 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D Vial: 6
Acq On : 19 Apr 2012 11:40 Operator: CAA
Sample : WG395394-06 25PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:22:30 2012
Response via : Multiple Level Calibration





TIC: 4M60443.D

(11) Aniline

6.98min 26.45ug/ml mint

response 310572

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	36.28
65.00	29.20	19.53
0.00	0.00	0.00

4M60443.D MEGAMIX.M Thu Apr 19 ; 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:13 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	270164	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	1058817	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.39	164	601708	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1071121	40.00	ug/ml	0.00
113) Chrysene-d12	15.70	240	1000898	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	956917	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	651614	80.6215	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 80.62%			
12) Phenol-d5	6.88	99	752005	82.3170	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 82.32%			
31) Nitrobenzene-d5	7.85	82	700987	81.1704	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 162.34%#			
59) 2-Fluorobiphenyl	9.64	172	1529924	85.4454	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 170.90%#			
86) 2,4,6-Tribromophenol	11.21	330	205907	85.5052	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 85.51%			
117) p-Terphenyl-d14	14.04	244	1400284	82.5257	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 165.06%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.28	88	257642	78.8478	ug/ml#	92
3) n-Nitrosodimethylamine	4.70	74	398328	79.0505	ug/ml	100
4) Pyridine	4.72	79	702917	79.0184	ug/ml	98
5) 2-Picoline	5.50	93	762562	79.6884	ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	335039	79.2579	ug/ml	99
7) Methyl Methanesulfonate	5.90	80	364051	77.9508	ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	356938	81.6560	ug/ml	99
10) Ethyl Methanesulfonate	6.55	79	484164	80.5222	ug/ml	99
11) Aniline	6.98	93	1181846m	93.7545	ug/ml	
13) Phenol	6.90	94	801301	82.9291	ug/ml	100
14) bis(2-Chloroethyl)ether	7.00	63	497418	86.4828	ug/ml	100
15) Pentachloroethane	7.02	167	273643	86.7763	ug/ml	99
16) 2-Chlorophenol	7.11	128	725693	81.8315	ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	799543	83.6879	ug/ml	99
18) 1,4-Dichlorobenzene	7.30	146	813532	84.2171	ug/ml	100
19) Benzyl Alcohol	7.39	108	480683	83.8309	ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	750912	85.5217	ug/ml	100
21) 2-Methylphenol	7.49	107	561625	84.1364	ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.54	45	1032624	83.9235	ug/ml	99
23) 3-,4-Methylphenol	7.62	107	733181	83.2134	ug/ml	100
24) n-Nitrosopyrrolidine	7.68	100	327343	87.5230	ug/ml	95
25) n-Nitrosodipropylamine	7.68	70	435156	91.0943	ug/ml	99
26) Acetophenone	7.68	105	860801	88.8129	ug/ml	100
27) n-Nitrosomorpholine	7.68	56	397862	86.5753	ug/ml	99
28) o-Toluidine	7.73	106	1155789	87.1781	ug/ml	100
29) Hexachloroethane	7.81	117	310495	82.7247	ug/ml	98
32) Nitrobenzene	7.87	77	698206	82.2707	ug/ml	99
33) n-Nitrosopiperidine	8.01	114	377476	81.5355	ug/ml	99
34) Isophorone	8.08	82	1254518	83.1403	ug/ml	100
35) 2-Nitrophenol	8.19	139	428368	75.2069	ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	674316	82.6362	ug/ml	100
37) 0,0,0-Triethyl Phosphoroth	8.26	198	341314	87.0588	ug/ml	100
38) bis(2-Chloroethoxy)methane	8.26	93	937865	87.0855	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:13 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.21	105	518434	113.7758 ug/ml#	75
40)	2,4-Dichlorophenol	8.41	162	591204	82.5988 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.43	58	961556	154.8459 ug/ml	98
42)	1,2,4-Trichlorobenzene	8.52	180	659109	84.0934 ug/ml	100
43)	Naphthalene	8.60	128	2143165	89.1050 ug/ml	98
44)	4-Chloroaniline	8.62	127	840914	88.5412 ug/ml	100
45)	2,6-Dichlorophenol	8.64	162	616497	84.2773 ug/ml	100
46)	Hexachloropropene	8.71	213	395486	80.8426 ug/ml	100
47)	Hexachlorobutadiene	8.74	225	335869	84.6848 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	585181	83.4905 ug/ml	98
49)	p-Phenylenediamine	9.06	108	49839	86.2185 ug/ml	93
50)	4-Chloro-3-Methylphenol	9.06	107	603833	85.3273 ug/ml	100
51)	Safrole	9.15	162	568977	84.7565 ug/ml	100
52)	2-Methylnaphthalene	9.28	142	1399298	86.1316 ug/ml	100
53)	1-Methylnaphthalene	9.40	142	1329751	86.2523 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	595962	83.6137 ug/ml	99
56)	Hexachlorocyclopentadiene	9.51	237	336327	87.8983 ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	439102	83.6396 ug/ml	99
58)	2,4,5-Trichlorophenol	9.62	196	450522	85.5336 ug/ml	99
60)	Isosafrole	9.68	162	602738	83.4485 ug/ml	99
61)	2-Chloronaphthalene	9.79	162	1316383	83.3430 ug/ml	100
62)	1-Chloronaphthalene	9.83	162	1231825	83.3956 ug/ml	99
63)	2-Nitroaniline	9.89	65	389293	81.9939 ug/ml	100
64)	1,4-Naphthoquinone	9.95	158	517634	87.1575 ug/ml	99
65)	Dimethylphthalate	10.06	163	1452767	84.0445 ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	300061	81.7587 ug/ml	100
67)	2,6-Dinitrotoluene	10.15	165	380371	82.9628 ug/ml	99
68)	Acenaphthylene	10.24	152	2059422	85.6892 ug/ml	99
69)	3-Nitroaniline	10.31	138	283165	101.9547 ug/ml	100
70)	2,4-Dinitrophenol	10.41	184	201666	84.5715 ug/ml	85
71)	Acenaphthene	10.42	154	1355981	86.2034 ug/ml	100
72)	4-Nitrophenol	10.41	65	267741	79.4179 ug/ml	99
73)	2,4-Dinitrotoluene	10.56	165	484503	86.9438 ug/ml	100
74)	Pentachlorobenzene	10.60	250	543917	84.9318 ug/ml	99
75)	Dibenzofuran	10.57	168	1809858	88.1523 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	315686	89.7842 ug/ml	99
77)	1-Naphthylamine	10.65	143	106768	170.5477 ug/ml#	89
78)	2-Naphthylamine	10.72	143	31352	93.0336 ug/ml	95
79)	Diethylphthalate	10.76	149	1465764	85.9268 ug/ml	99
80)	Thionazin	10.86	107	247858	86.4534 ug/ml	99
81)	Fluorene	10.93	166	1524152	84.8688 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	732168	87.2764 ug/ml	99
83)	4-Nitroaniline	10.95	138	344564	89.1086 ug/ml	98
84)	5-Nitro-o-Toluidine	10.94	152	359517	94.2582 ug/ml	99
85)	1,2-Diphenylhydrazine	11.05	77	1430564	85.2157 ug/ml	100
88)	4,6-Dinitro-2-Methylphenol	10.98	198	289337	77.2686 ug/ml	97
89)	n-Nitrosodiphenylamine	11.01	169	1335543	84.6041 ug/ml	99
90)	Sulfotepp	11.20	322	235004	81.2649 ug/ml	98
91)	Sym-Trinitrobenzene	11.29	75	374190	79.8745 ug/ml	99
92)	Diallate	11.33	86	544965	87.7632 ug/ml	99
93)	Phenacetin	11.32	108	721724	86.6007 ug/ml	100
94)	Phorate	11.35	75	880600	85.2698 ug/ml#	100
95)	4-Bromophenyl Phenyl Ether	11.41	248	414109	81.9579 ug/ml	99
96)	Hexachlorobenzene	11.63	284	454706	83.8308 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60444.D MEGAMIX.M Fri Apr 20 08:19:00 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:13 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

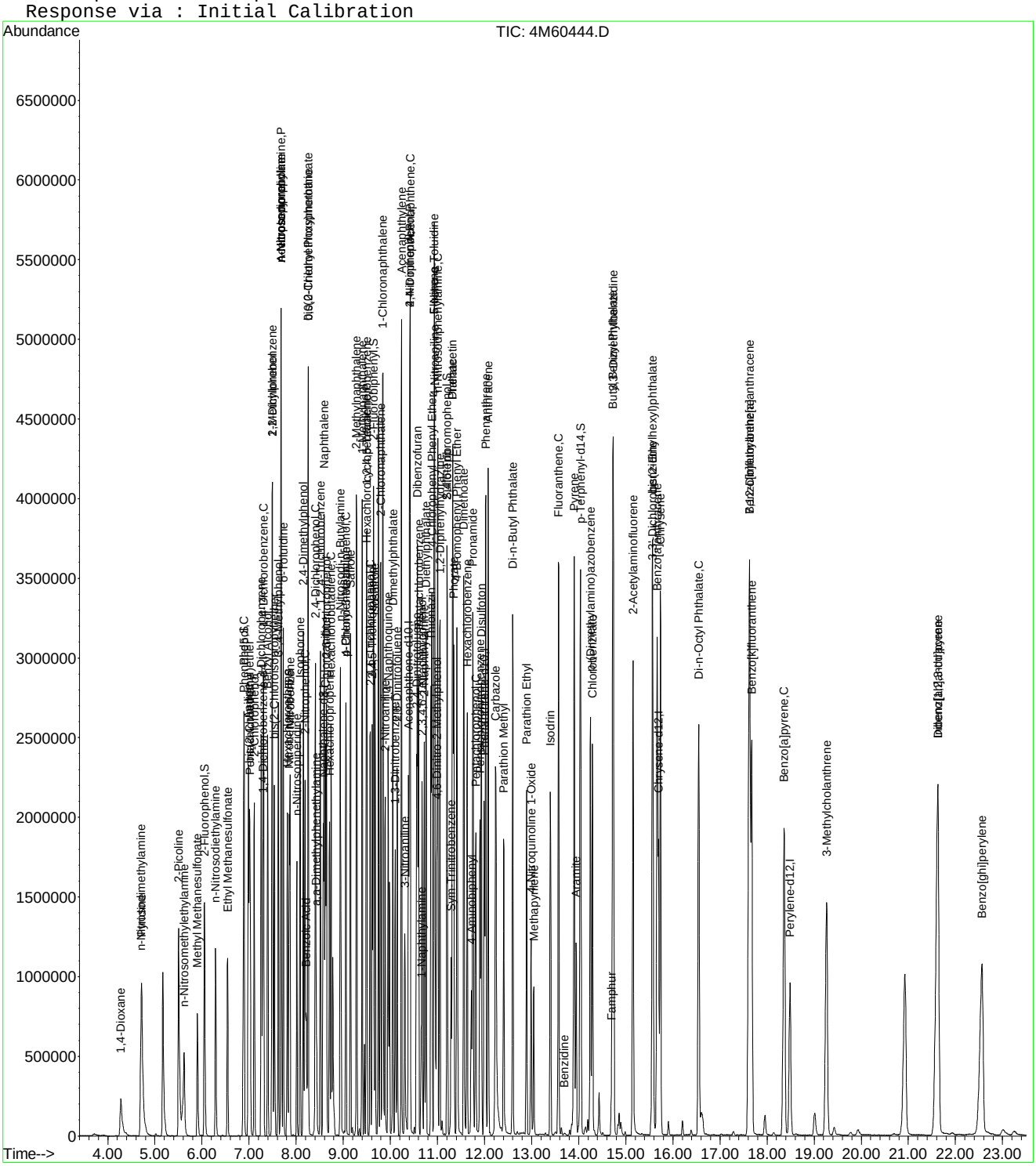
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	438351	87.6686	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	583198	94.6458	ug/ml	100
99)	Pentachlorophenol	11.81	266	297153	93.2093	ug/ml	100
100)	Pronamide	11.75	173	682115	82.6482	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	162254	83.4353	ug/ml	99
102)	Disulfoton	11.93	88	763049	82.5061	ug/ml	99
103)	Phenanthrene	12.03	178	2157063	83.7416	ug/ml	99
104)	Anthracene	12.08	178	2228606	84.2260	ug/ml	100
105)	Carbazole	12.24	167	2025195	81.9628	ug/ml	99
106)	Parathion Methyl	12.41	109	447959	90.6288	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	2430902	83.7002	ug/ml	99
108)	Parathion Ethyl	12.89	97	293192	82.2551	ug/ml	99
109)	4-Nitroquinoline 1-Oxide	12.99	190	223202	121.5060	ug/ml	98
110)	Methapyrilene	13.05	58	381546	73.9269	ug/ml	98
111)	Isodrin	13.40	193	234719	81.6215	ug/ml	99
112)	Fluoranthene	13.58	202	2265098	83.9667	ug/ml	99
114)	Benzidine	13.70	184	13667	256.8055	ug/ml	100
115)	Pyrene	13.90	202	2297635	82.1817	ug/ml	100
116)	Aramite	13.94	185	138283	81.4971	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.25	225	497250	83.3444	ug/ml	98
119)	Chlorobenzilate	14.29	251	649202	82.7656	ug/ml	99
120)	Famphur	14.69	218	3581	10.0901	ug/ml#	4
121)	Butyl Benzyl Phthalate	14.72	149	1058648	79.2528	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	292271	107.0859	ug/ml	97
123)	2-Acetylaminofluorene	15.16	181	966286	80.4830	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	1454801	82.2789	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.58	252	433623	91.6318	ug/ml	100
126)	Benzo[a]anthracene	15.67	228	2052367	83.0550	ug/ml	100
127)	Chrysene	15.73	228	1906476	82.5964	ug/ml	100
129)	Di-n-Octyl Phthalate	16.55	149	2511032	81.6537	ug/ml	100
130)	7,12-Dimethylbenz[a]anthra	17.63	256	985135	83.4888	ug/ml	99
131)	Benzo[b]fluoranthene	17.63	252	2178762	80.1704	ug/ml	99
132)	Benzo[k]fluoranthene	17.67	252	2073723	87.0583	ug/ml	99
133)	Benzo[a]pyrene	18.36	252	2027472	81.8288	ug/ml	99
134)	3-Methylcholanthrene	19.27	268	1108175	82.2952	ug/ml	100
135)	Indeno[1,2,3-cd]pyrene	21.63	276	2284765	78.8399	ug/ml	98
136)	Dibenz[ah]anthracene	21.63	278	1911785	79.1941	ug/ml	99
137)	Benzo[ghi]perylene	22.57	276	1882226	78.4731	ug/ml	98

(#) = qualifier out of range (m) = manual integration
4M60444.D MEGAMIX.M Fri Apr 20 08:19:00 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: MEGAMIX.RES

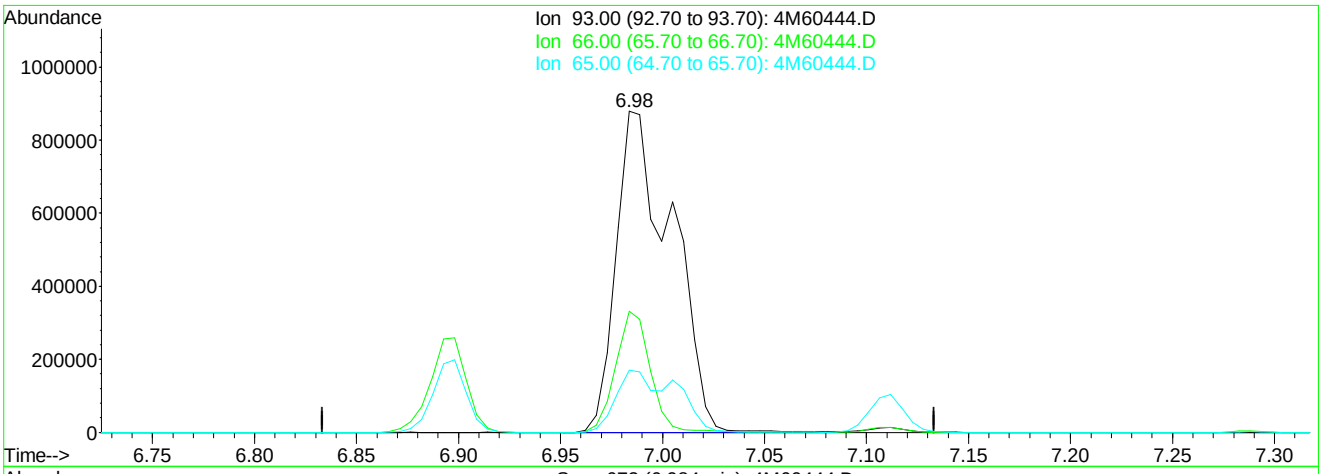
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

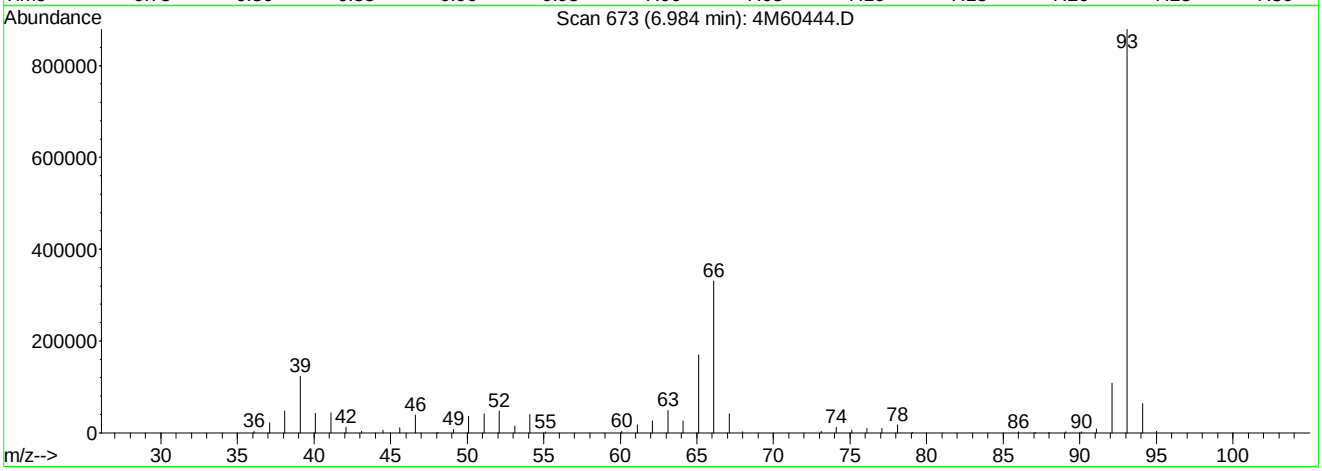


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Multiple Level Calibration





TIC: 4M60444.D

(11) Aniline

6.98min 132.60ug/ml

response 1671557

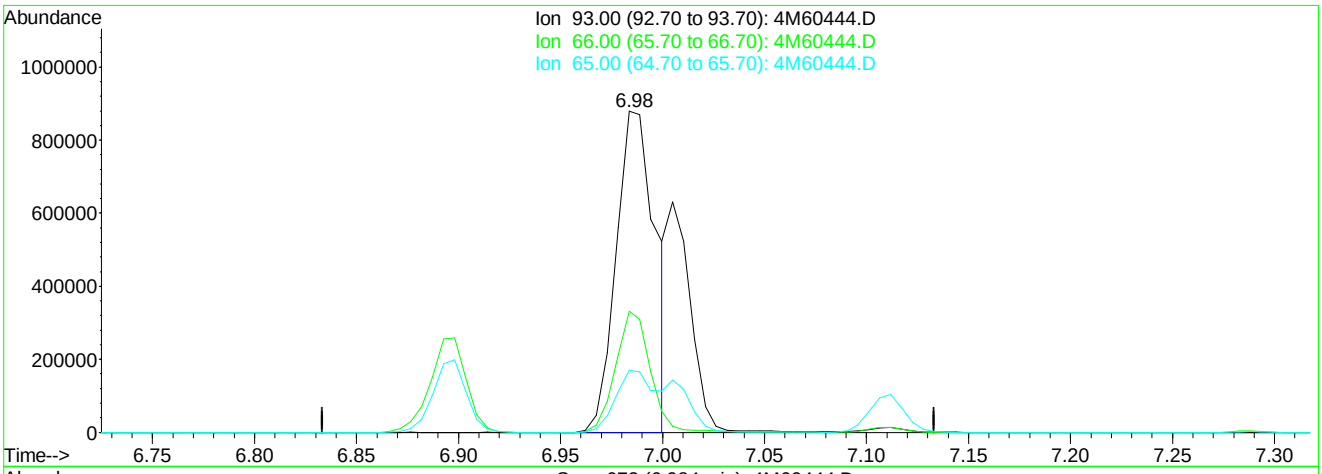
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.77
65.00	29.20	20.73
0.00	0.00	0.00

4M60444.D MEGAMIX.M Thu Apr 19 14:23:20 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Multiple Level Calibration



TIC: 4M60444.D

(11) Aniline

6.98min 93.75ug/ml mint

response 1181846

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	33.62
65.00	29.20	29.32
0.00	0.00	0.00

4M60444.D MEGAMIX.M Thu Apr 19 [illegible] 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:50 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	277093	40.00	ug/ml	0.00
30) Naphthalene-d8	8.58	136	1078447	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.39	164	600594	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1068325	40.00	ug/ml	0.00
113) Chrysene-d12	15.70	240	989532	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	928281	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.05	112	808410	97.6350	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 97.64%			
12) Phenol-d5	6.88	99	931008	99.2563	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 99.26%#			
31) Nitrobenzene-d5	7.85	82	869918	99.4444	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 198.88%#			
59) 2-Fluorobiphenyl	9.64	172	1852192	103.1326	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 206.26%#			
86) 2,4,6-Tribromophenol	11.21	330	252049	103.7522	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 103.75%			
117) p-Terphenyl-d14	14.04	244	1670972	99.7576	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 199.52%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.28	88	348759	104.6802	ug/ml#	98
3) n-Nitrosodimethylamine	4.70	74	499944	97.0836	ug/ml	100
4) Pyridine	4.72	79	880375	96.9922	ug/ml	99
5) 2-Picoline	5.50	93	952597	97.3185	ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	418420	96.7300	ug/ml	99
7) Methyl Methanesulfonate	5.90	80	448121	94.4502	ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	441347	98.2623	ug/ml	98
10) Ethyl Methanesulfonate	6.55	79	604359	98.0919	ug/ml	100
11) Aniline	6.98	93	1502899m	111.4042	ug/ml	
13) Phenol	6.90	94	991961	99.7934	ug/ml	100
14) bis(2-Chloroethyl)ether	7.01	63	615863	103.3093	ug/ml	99
15) Pentachloroethane	7.02	167	336576	102.9292	ug/ml	99
16) 2-Chlorophenol	7.11	128	903123	99.2327	ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	980717	99.8635	ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	997434	100.2398	ug/ml	100
19) Benzyl Alcohol	7.40	108	594299	100.4024	ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	918764	101.0157	ug/ml	99
21) 2-Methylphenol	7.49	107	686225	99.5164	ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.53	45	1273668	100.6058	ug/ml	99
23) 3-,4-Methylphenol	7.62	107	905262	99.5585	ug/ml	100
24) n-Nitrosopyrrolidine	7.68	100	400577	103.3389	ug/ml	92
25) n-Nitrosodipropylamine	7.68	70	522498	104.9775	ug/ml	99
26) Acetophenone	7.68	105	1037851	102.8813	ug/ml	99
27) n-Nitrosomorpholine	7.69	56	482861	99.9546	ug/ml	98
28) o-Toluidine	7.73	106	1417866	102.5014	ug/ml	99
29) Hexachloroethane	7.81	117	384708	99.7029	ug/ml	96
32) Nitrobenzene	7.87	77	854248	99.1471	ug/ml	100
33) n-Nitrosopiperidine	8.01	114	464532	98.8152	ug/ml	99
34) Isophorone	8.08	82	1546209	100.7548	ug/ml	100
35) 2-Nitrophenol	8.19	139	514984	93.0486	ug/ml	96
36) 2,4-Dimethylphenol	8.15	122	831386	100.0156	ug/ml	100
37) 0,0,0-Triethyl Phosphoroth	8.26	198	412901	102.5849	ug/ml	99
38) bis(2-Chloroethoxy)methane	8.26	93	1134885	103.0111	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:50 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.22	105	675656	132.0678 ug/ml#	79
40)	2,4-Dichlorophenol	8.41	162	715757	98.4931 ug/ml	100
41)	a,a-Dimethylphenethylamine	8.42	58	2329298m	277.3952 ug/ml	
42)	1,2,4-Trichlorobenzene	8.52	180	805702	100.8798 ug/ml	100
43)	Naphthalene	8.60	128	2577401	104.1802 ug/ml	97
44)	4-Chloroaniline	8.62	127	1131551	112.1001 ug/ml	97
45)	2,6-Dichlorophenol	8.65	162	757150	101.3496 ug/ml	100
46)	Hexachloropropene	8.71	213	480526	97.2421 ug/ml	100
47)	Hexachlorobutadiene	8.74	225	411451	101.6490 ug/ml	100
48)	n-Nitrosodi-n-Butylamine	8.94	84	730096	101.9649 ug/ml	98
49)	p-Phenylenediamine	9.06	108	69011	116.1156 ug/ml#	66
50)	4-Chloro-3-Methylphenol	9.06	107	739247	102.0278 ug/ml	98
51)	Safrole	9.15	162	691788	100.8683 ug/ml	100
52)	2-Methylnaphthalene	9.28	142	1696852	102.0818 ug/ml	100
53)	1-Methylnaphthalene	9.40	142	1602525	101.6631 ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	719693	100.9510 ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	403426	104.4331 ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	535987	101.9054 ug/ml	99
58)	2,4,5-Trichlorophenol	9.62	196	556900	105.1055 ug/ml	100
60)	Isosafrole	9.68	162	735707	101.7585 ug/ml	99
61)	2-Chloronaphthalene	9.79	162	1597789	101.2240 ug/ml	100
62)	1-Chloronaphthalene	9.83	162	1490493	101.3021 ug/ml	99
63)	2-Nitroaniline	9.89	65	478820	100.8695 ug/ml	100
64)	1,4-Naphthoquinone	9.95	158	566749	95.6915 ug/ml	99
65)	Dimethylphthalate	10.06	163	1760527	101.8244 ug/ml	99
66)	1,3-Dinitrobenzene	10.10	168	365872	99.8897 ug/ml	99
67)	2,6-Dinitrotoluene	10.15	165	466415	101.7222 ug/ml	99
68)	Acenaphthylene	10.24	152	2438377	101.2894 ug/ml	98
69)	3-Nitroaniline	10.31	138	384870	124.0693 ug/ml	99
70)	2,4-Dinitrophenol	10.41	184	256771	106.1183 ug/ml	74
71)	Acenaphthene	10.42	154	1612771	101.9313 ug/ml	100
72)	4-Nitrophenol	10.41	65	320939	95.7301 ug/ml	98
73)	2,4-Dinitrotoluene	10.56	165	583421	103.9974 ug/ml	100
74)	Pentachlorobenzene	10.60	250	653861	101.7974 ug/ml	99
75)	Dibenzofuran	10.57	168	2178444	105.3824 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.68	232	391859	110.4735 ug/ml	99
77)	1-Naphthylamine	10.65	143	204822	257.5666 ug/ml	94
78)	2-Naphthylamine	10.72	143	53289	152.3377 ug/ml	89
79)	Diethylphthalate	10.76	149	1756256	102.5694 ug/ml	99
80)	Thionazin	10.86	107	300709	104.5573 ug/ml	99
81)	Fluorene	10.93	166	1832624	101.8970 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	885933	104.8310 ug/ml	99
83)	4-Nitroaniline	10.95	138	432847	109.9973 ug/ml	98
84)	5-Nitro-o-Toluidine	10.94	152	465662	118.2046 ug/ml	98
85)	1,2-Diphenylhydrazine	11.05	77	1719707	102.3736 ug/ml	100
88)	4,6-Dinitro-2-Methylphenol	10.99	198	361668	97.7089 ug/ml	95
89)	n-Nitrosodiphenylamine	11.01	169	1620487	102.3203 ug/ml	99
90)	Sulfotepp	11.20	322	282824	98.1810 ug/ml	99
91)	Sym-Trinitrobenzene	11.29	75	450708	96.7069 ug/ml	99
92)	Diallate	11.33	86	651475	104.3468 ug/ml	97
93)	Phenacetin	11.32	108	873920	104.4740 ug/ml	99
94)	Phorate	11.35	75	1057354	102.4913 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	505367	100.3772 ug/ml	100
96)	Hexachlorobenzene	11.63	284	543444	100.1408 ug/ml	99

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

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

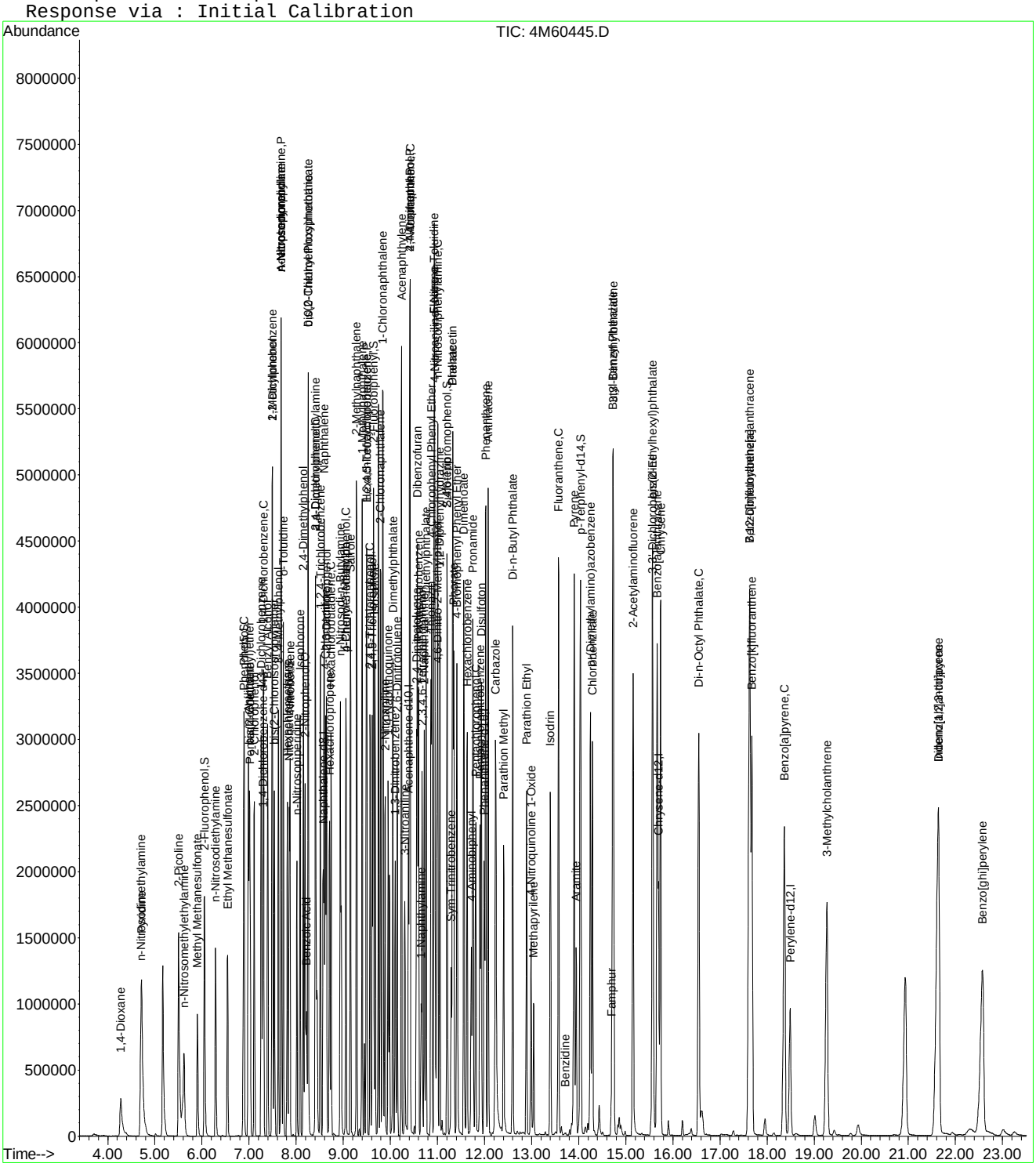
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	501935	100.9365	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	862423	134.3000	ug/ml	100
99)	Pentachlorophenol	11.81	266	367513	111.8825	ug/ml	99
100)	Pronamide	11.75	173	823842	100.0678	ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	193570	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

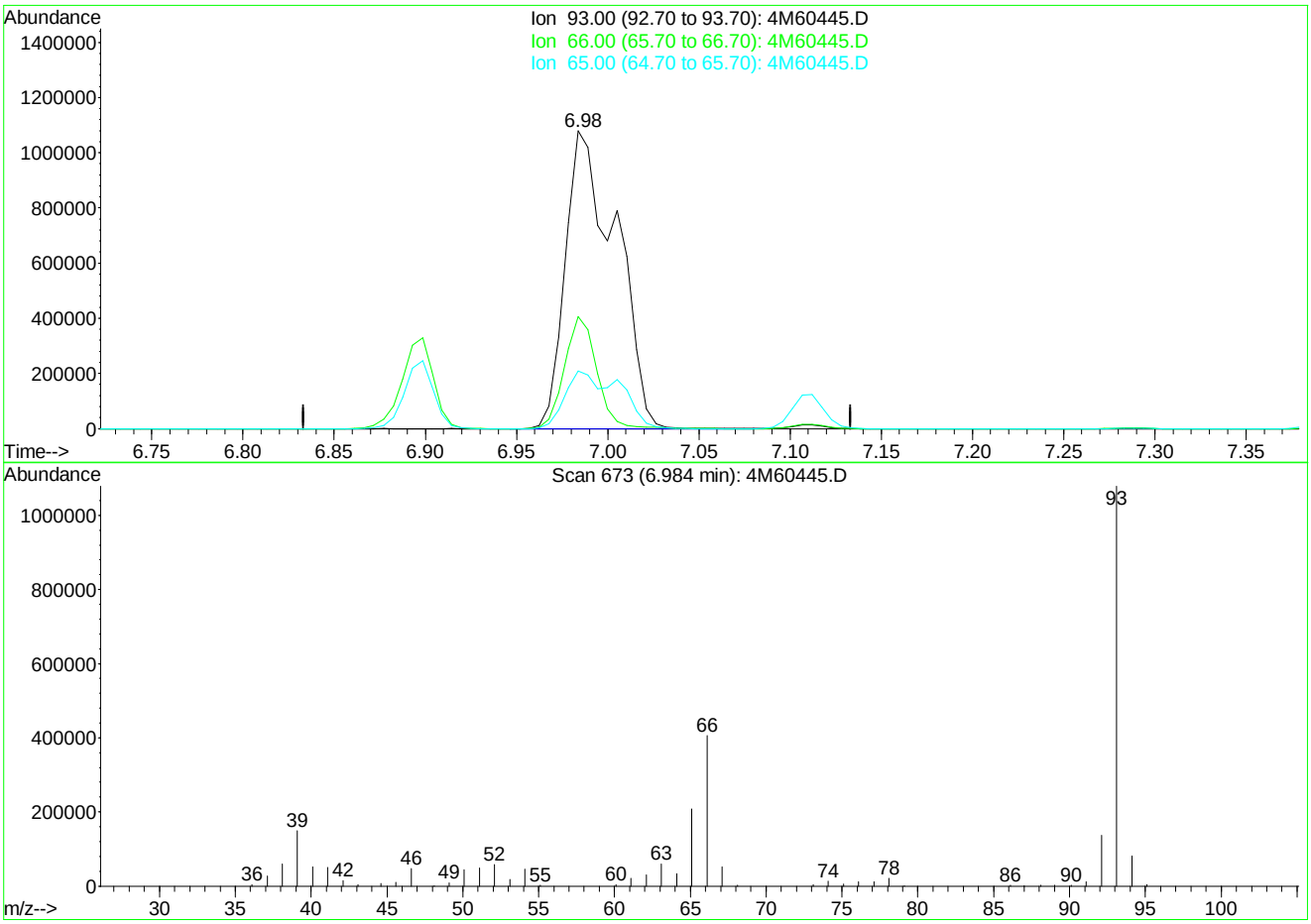


4M60445.D MEGAMIX.M Fri Apr 20 08:19:01 2012 Page 4

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

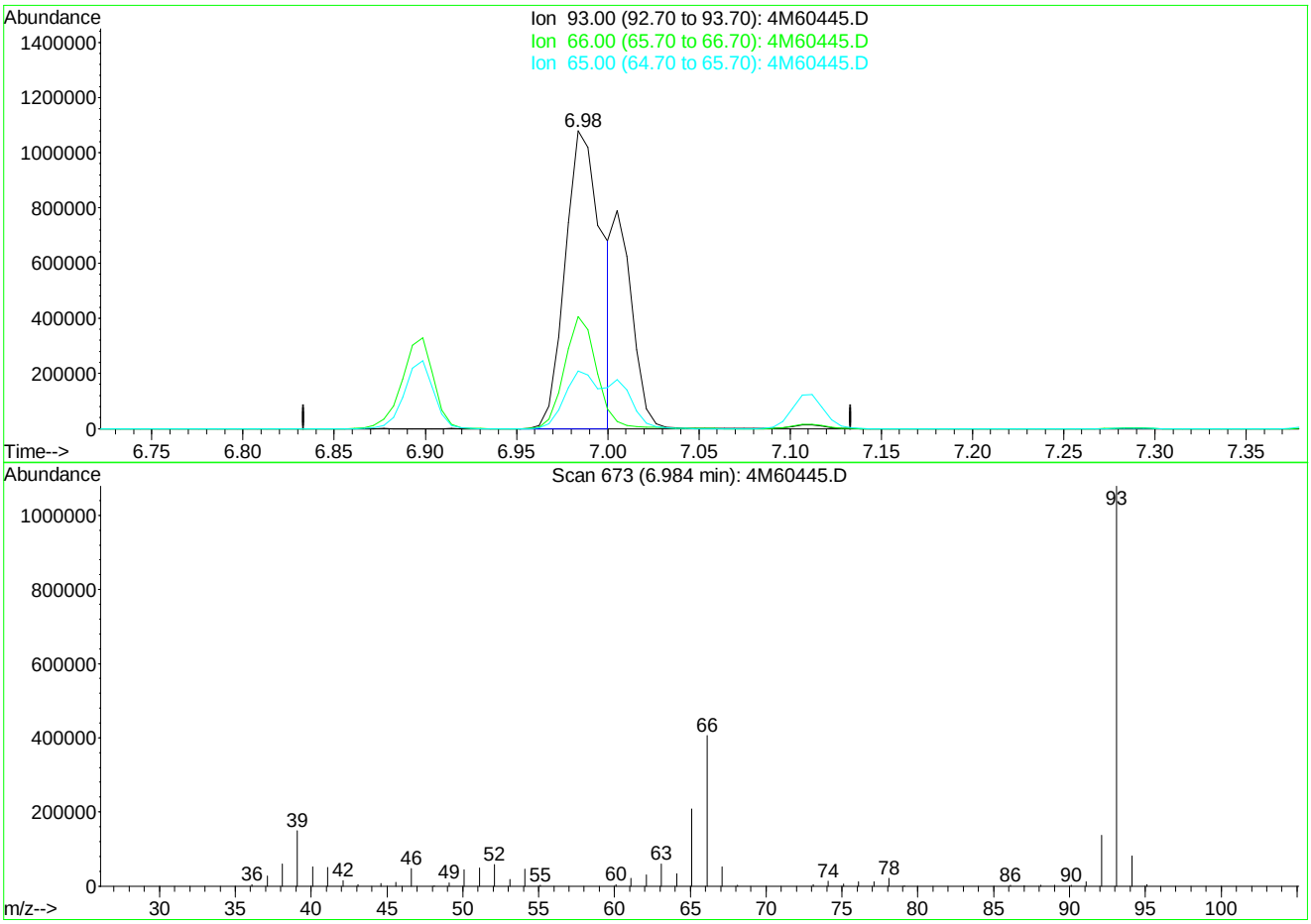
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.95
65.00	29.20	20.71
0.00	0.00	0.00

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

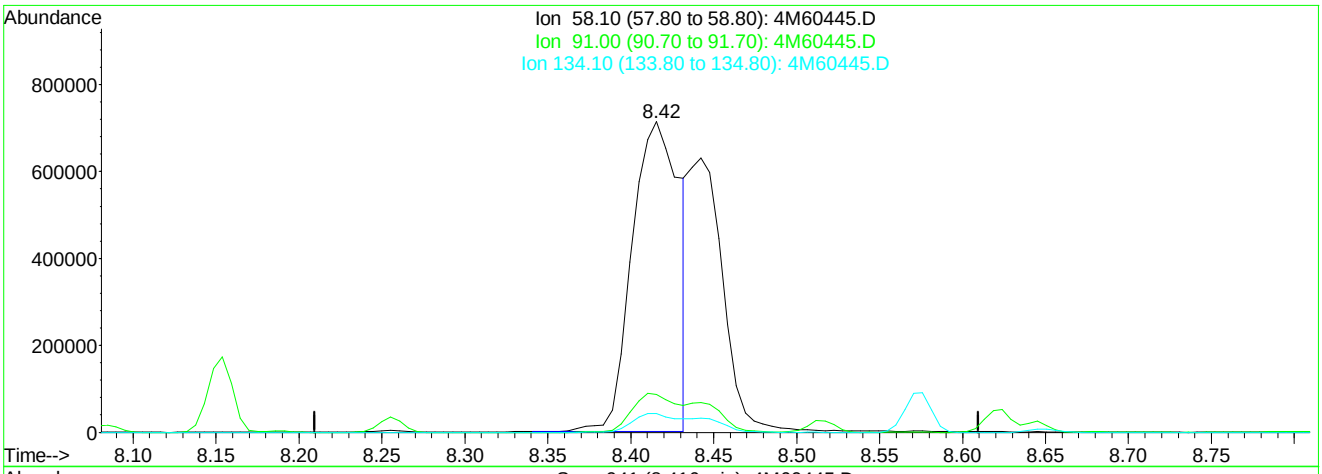
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

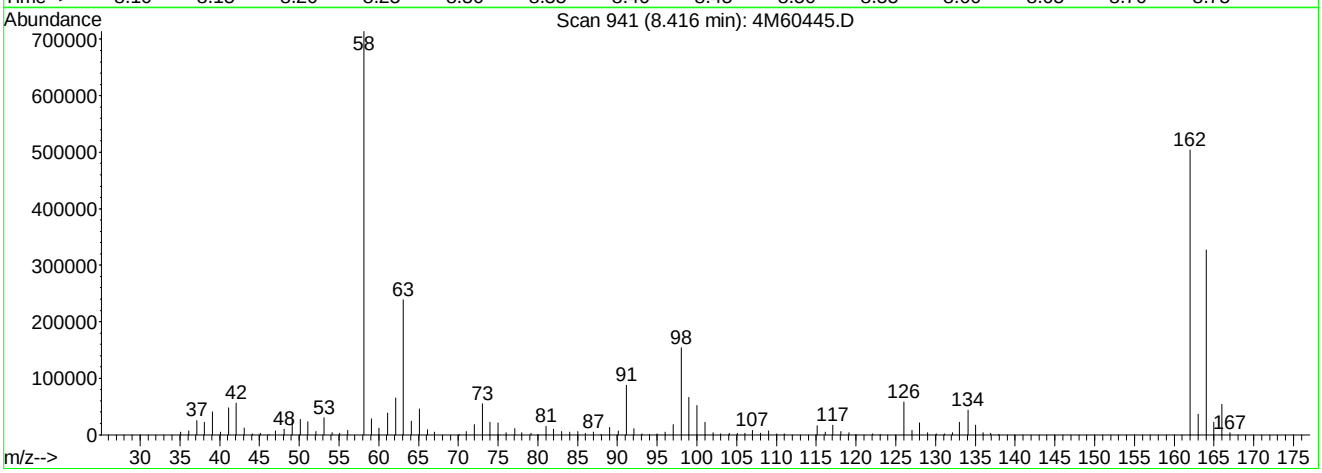
#3 - Improperly integrated isomers and/or coeluting compounds

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

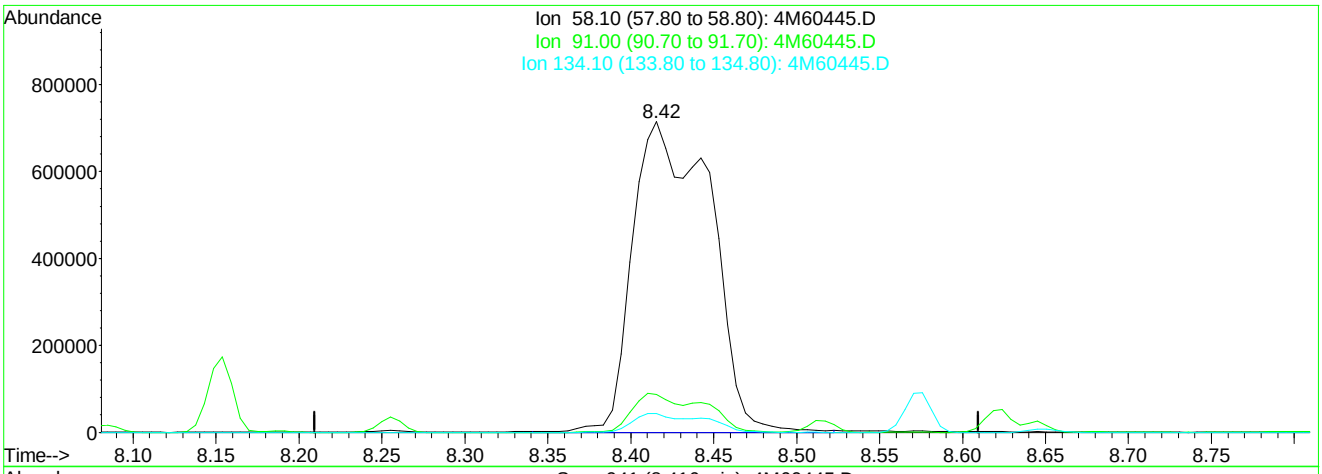
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.82
134.10	6.20	5.67
0.00	0.00	0.00

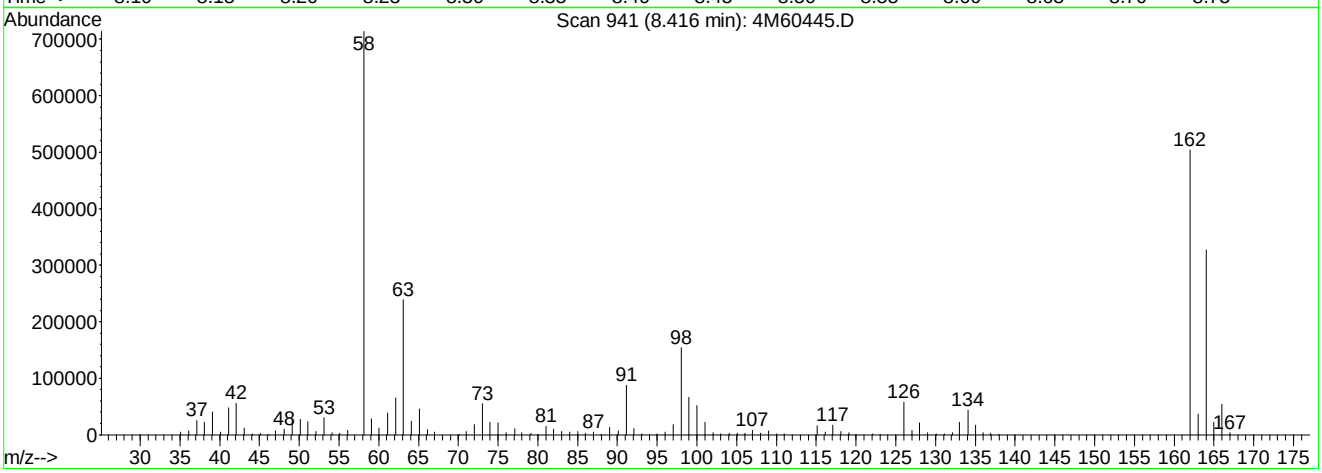
4M60445.D MEGAMIX.M Thu Apr 19 14:24:09 2012

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

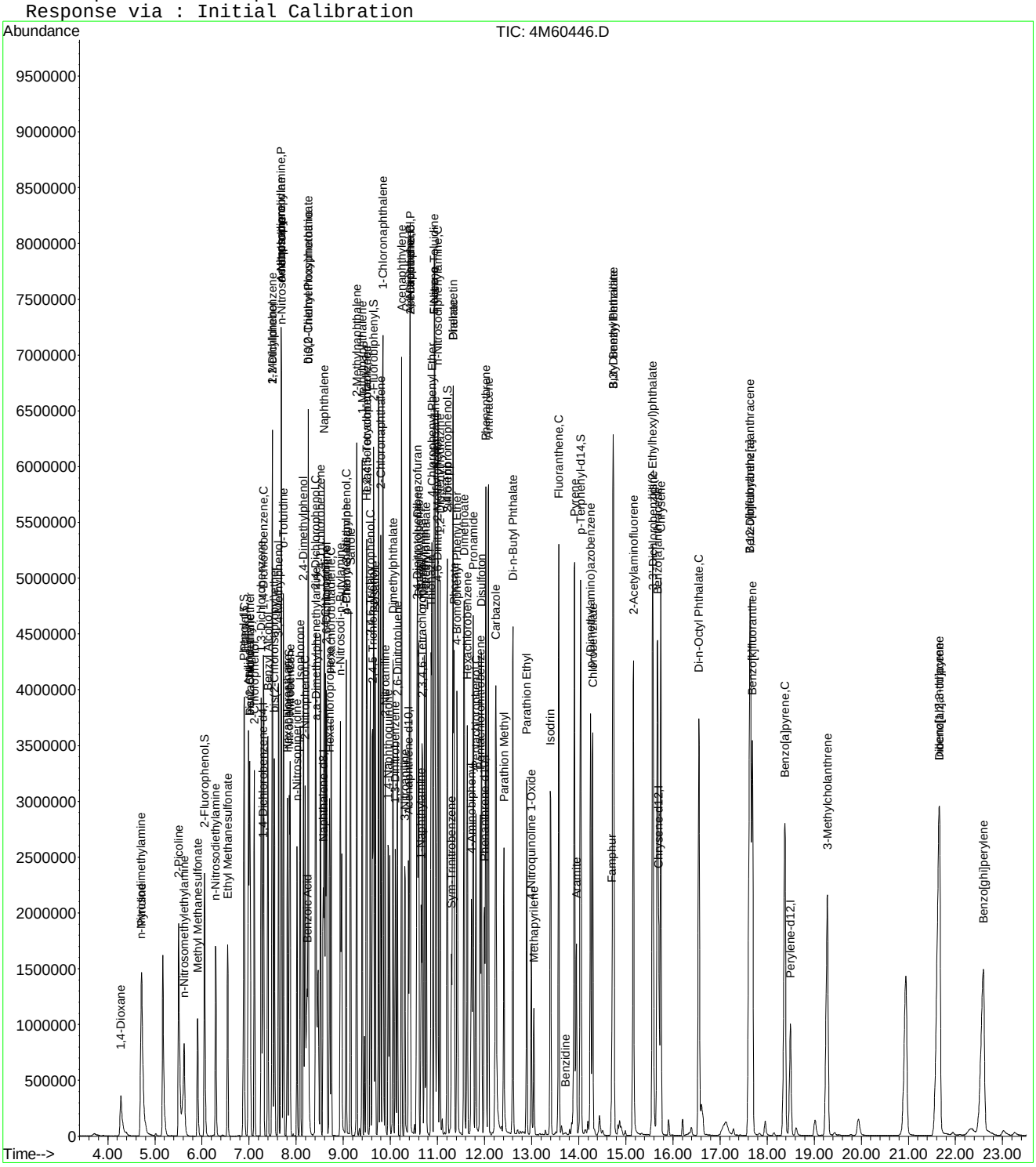
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.57	87	584529	113.1904	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	1329903	179.9601	ug/ml	99
99)	Pentachlorophenol	11.82	266	458736	128.2299	ug/ml	99
100)	Pronamide	11.76	173	1019977	119.6949	ug/ml	99
101)	Pentachloronitrobenzene	11.91	237	235684	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

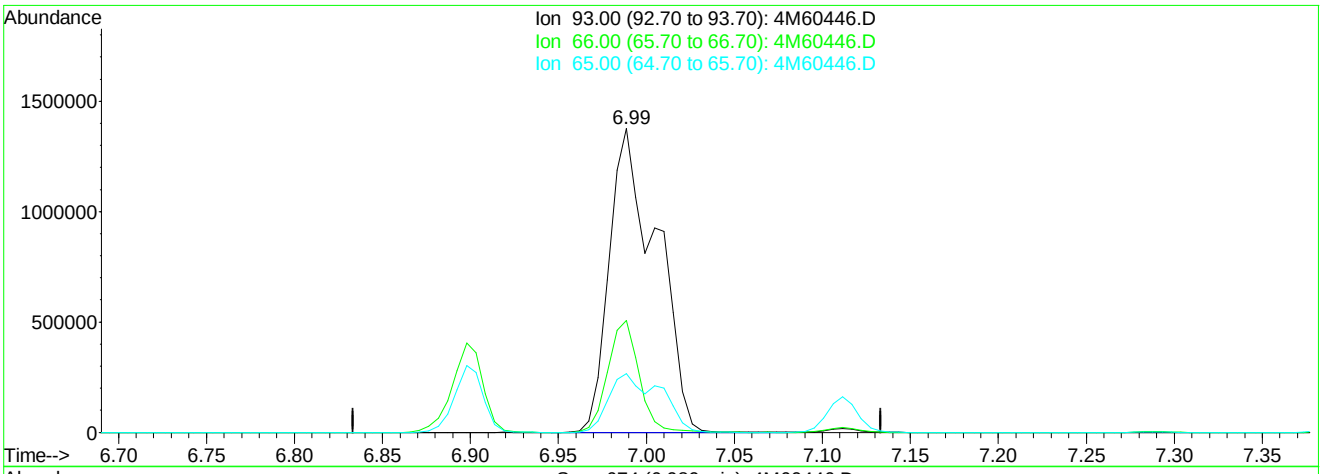
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

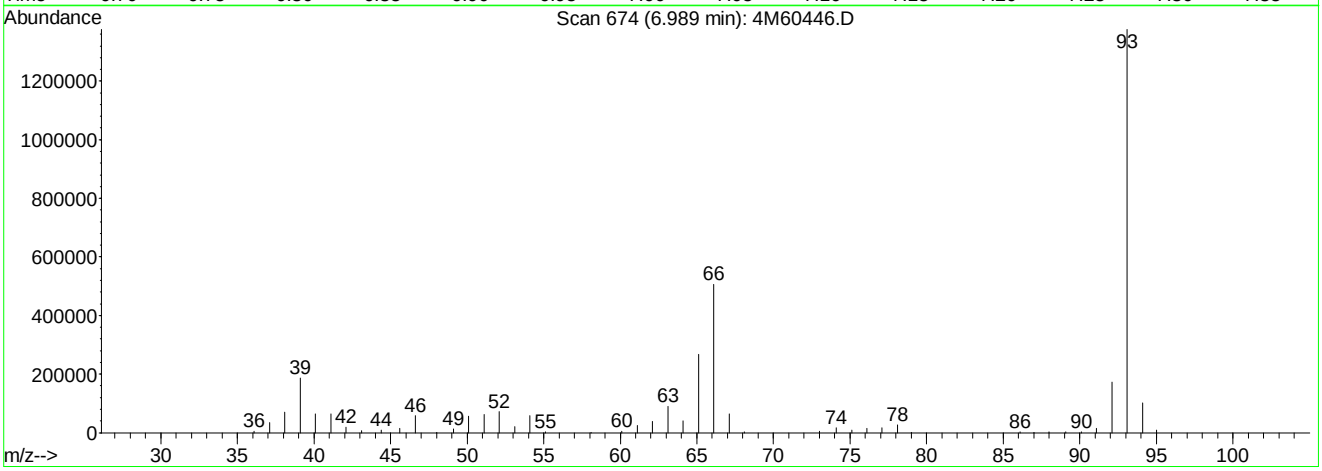


Quantitation Report (Qedit)

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

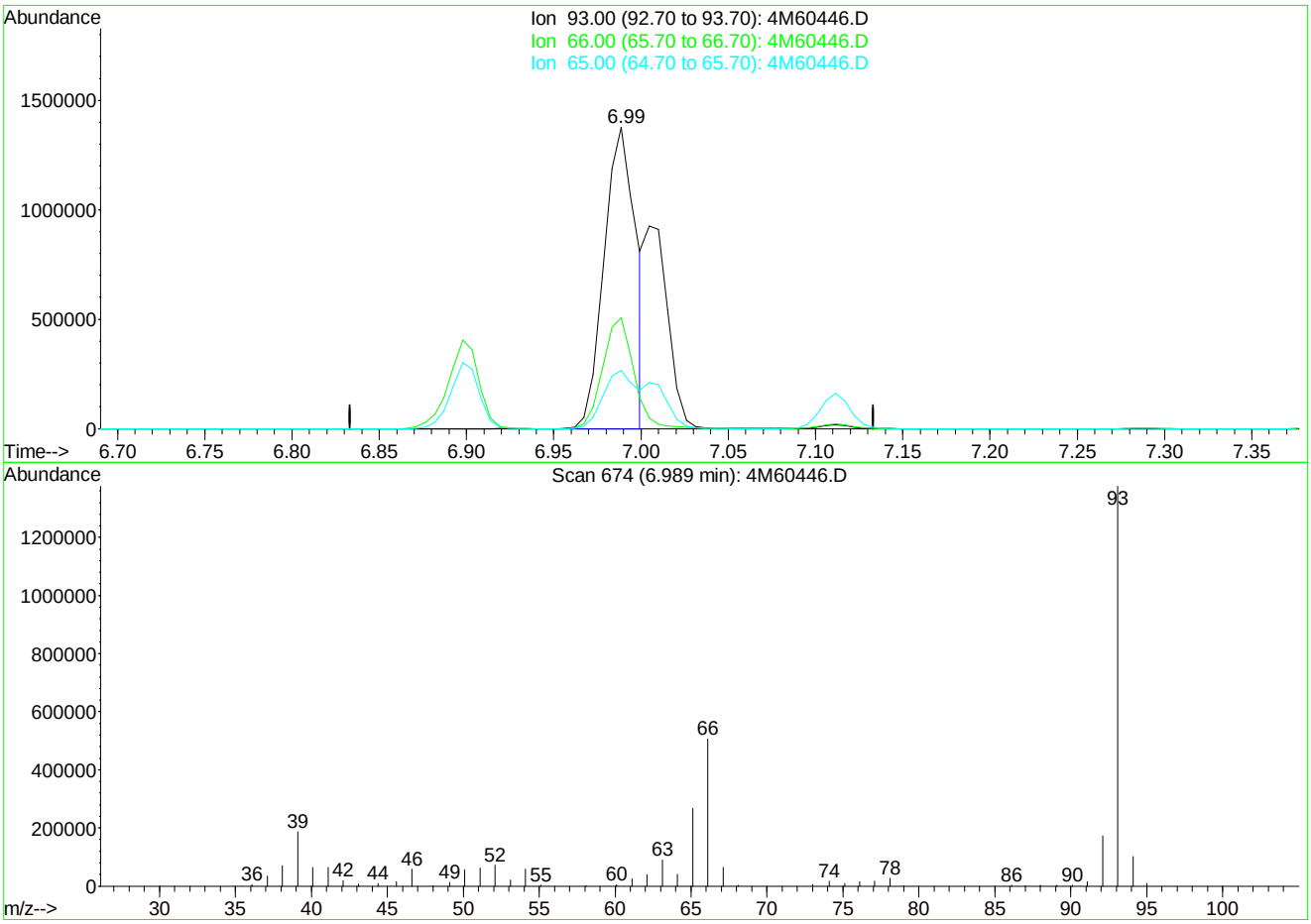
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	24.12
65.00	29.20	20.98
0.00	0.00	0.00

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

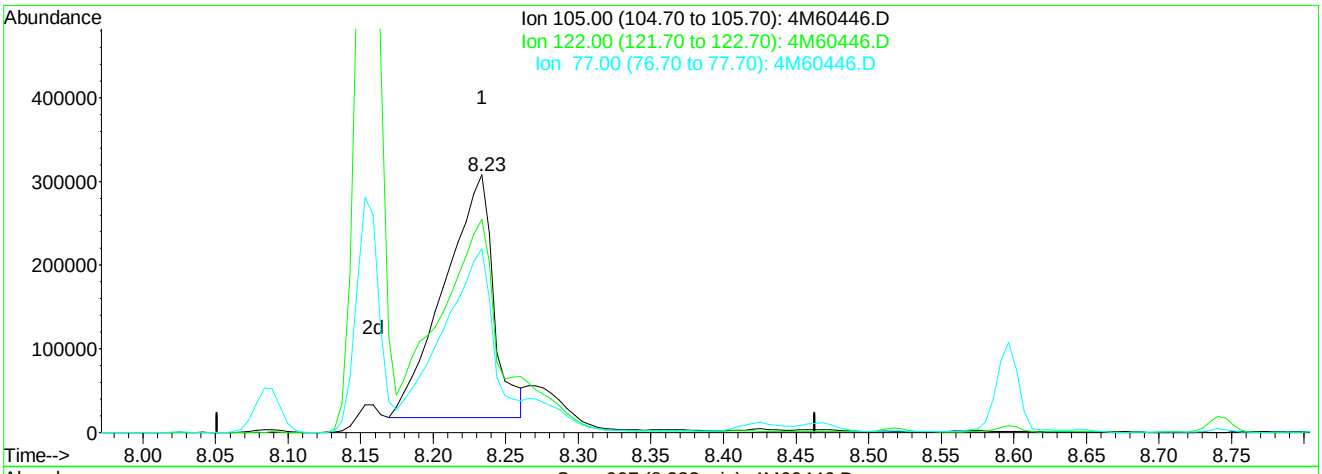
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

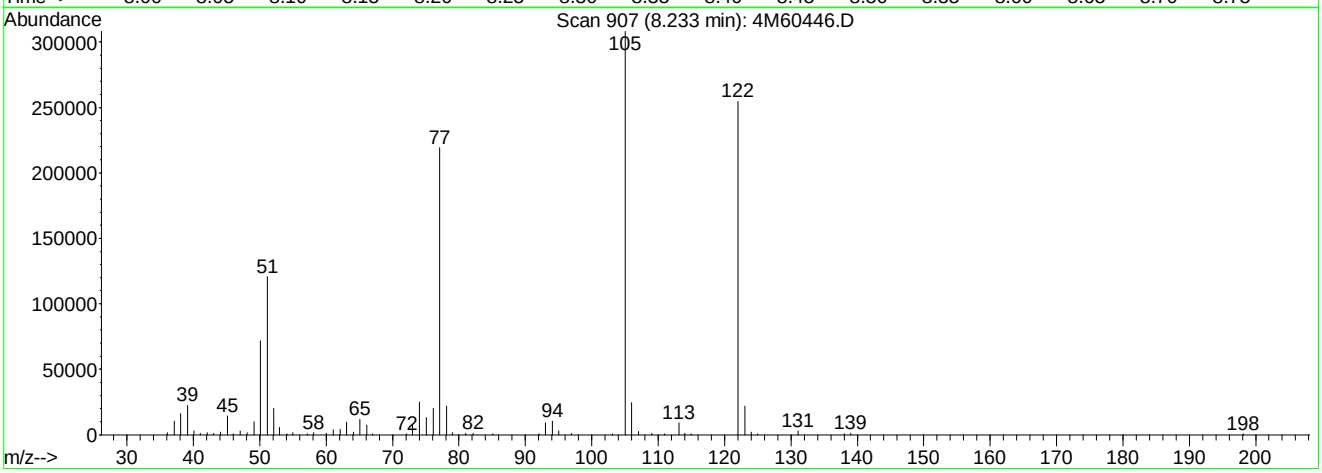
#3 - Improperly integrated isomers and/or coeluting compounds

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

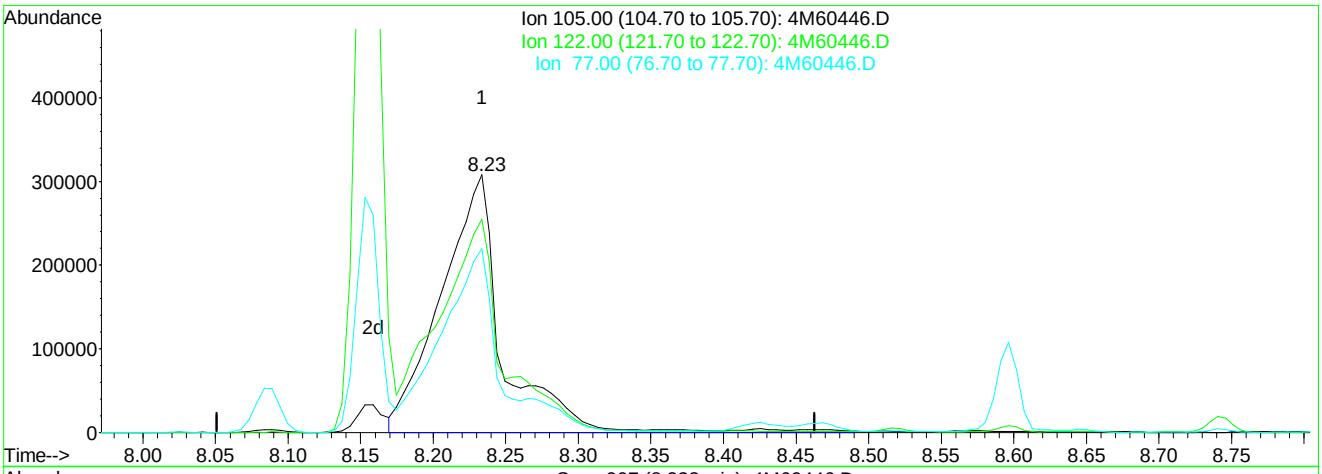
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	111.94
77.00	70.40	62.20
0.00	0.00	0.00

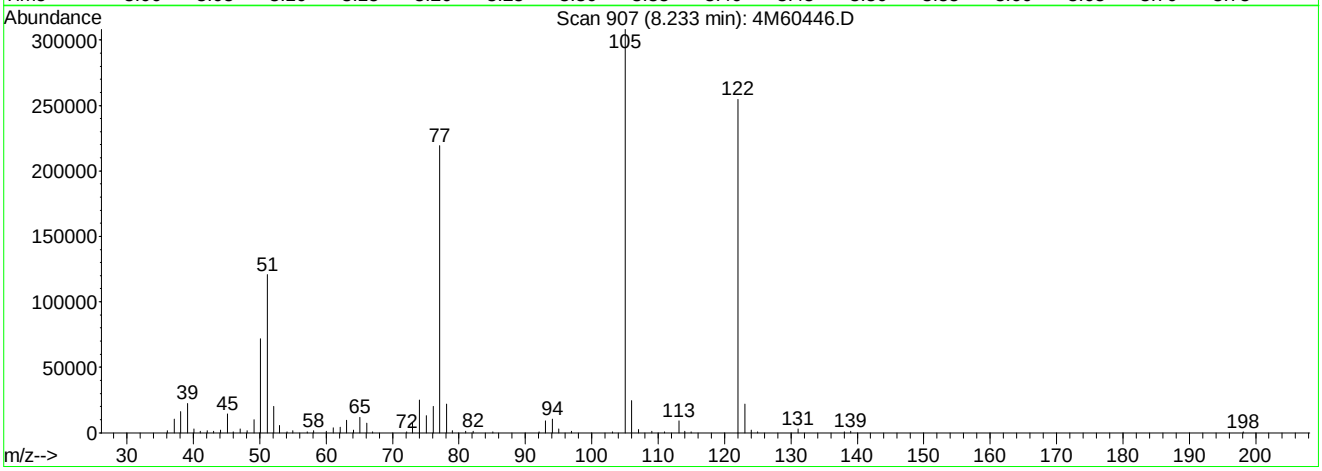
4M60446.D MEGAMIX.M Thu Apr 19 14:24:49 2012

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

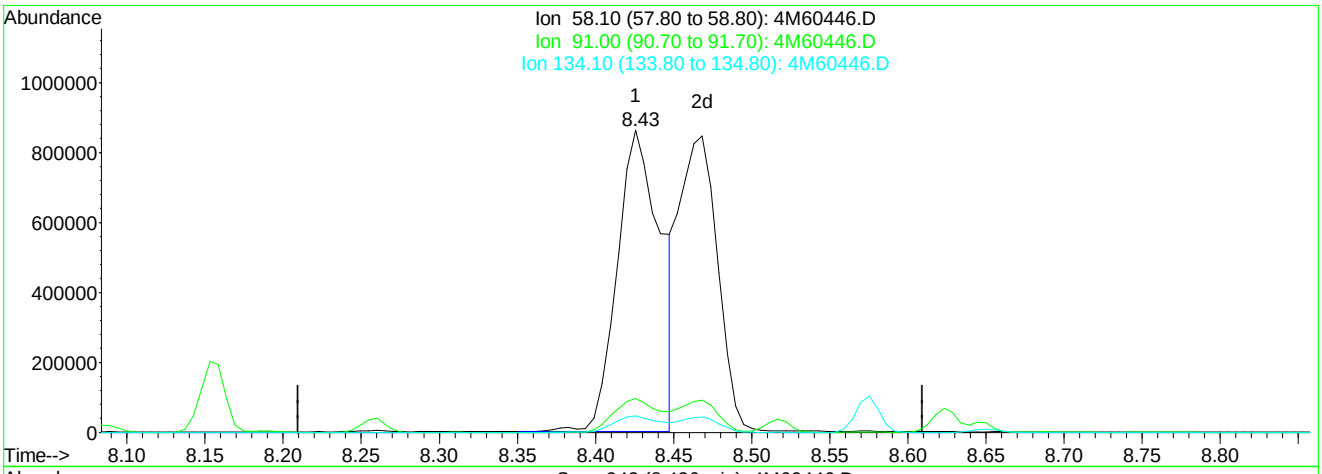
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

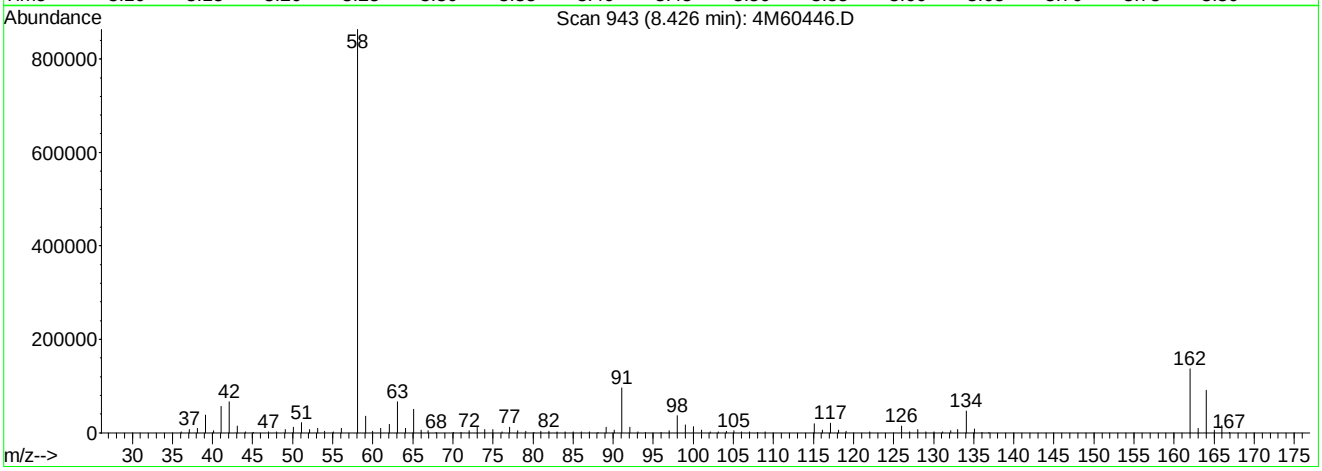
#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

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
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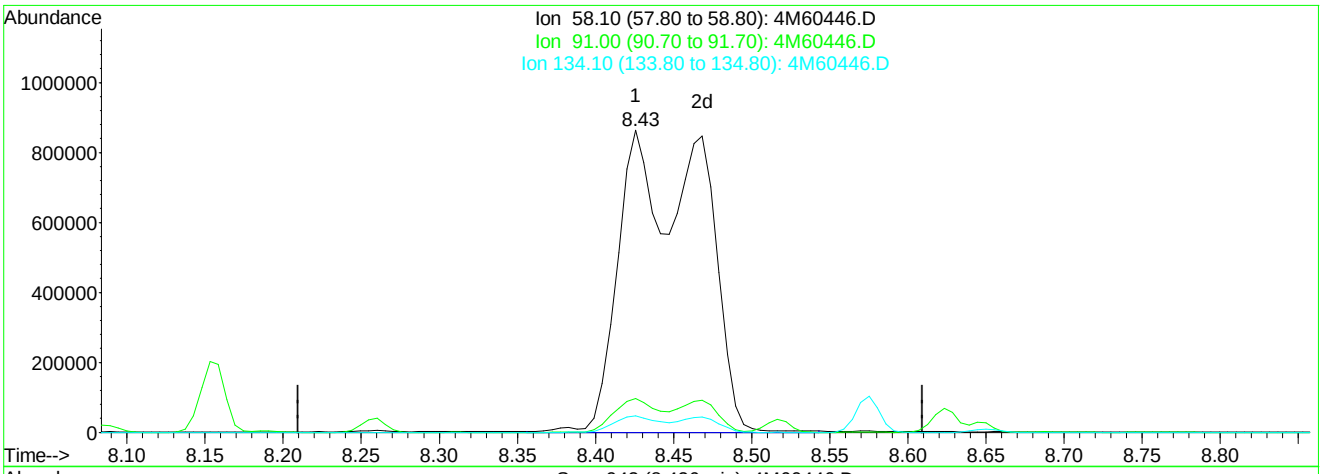
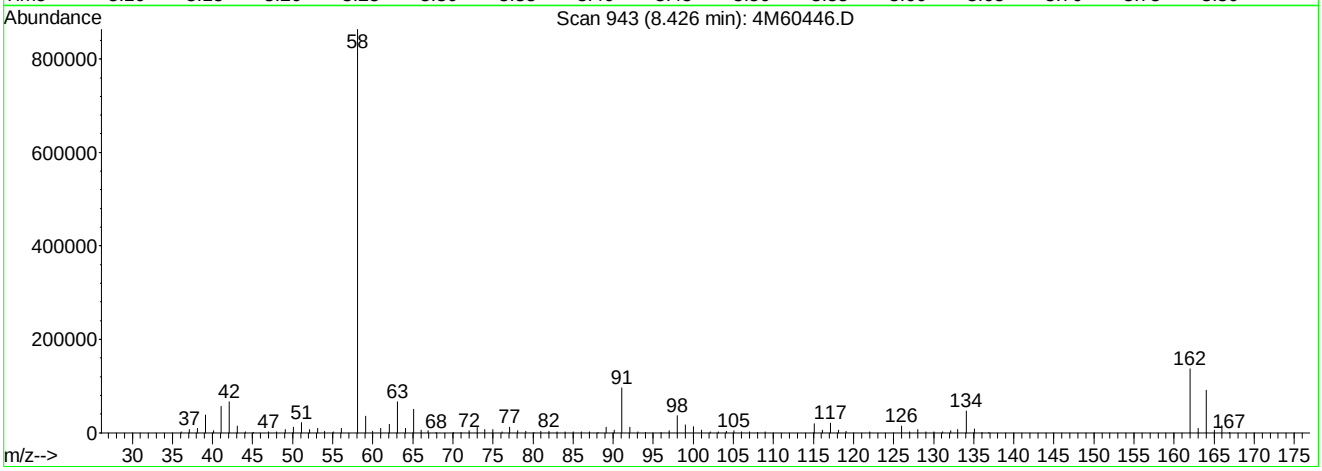




TIC: 4M60446.D

(41) a,a-Dimethylphenethylamine

8.43min 175.94ug/ml mint

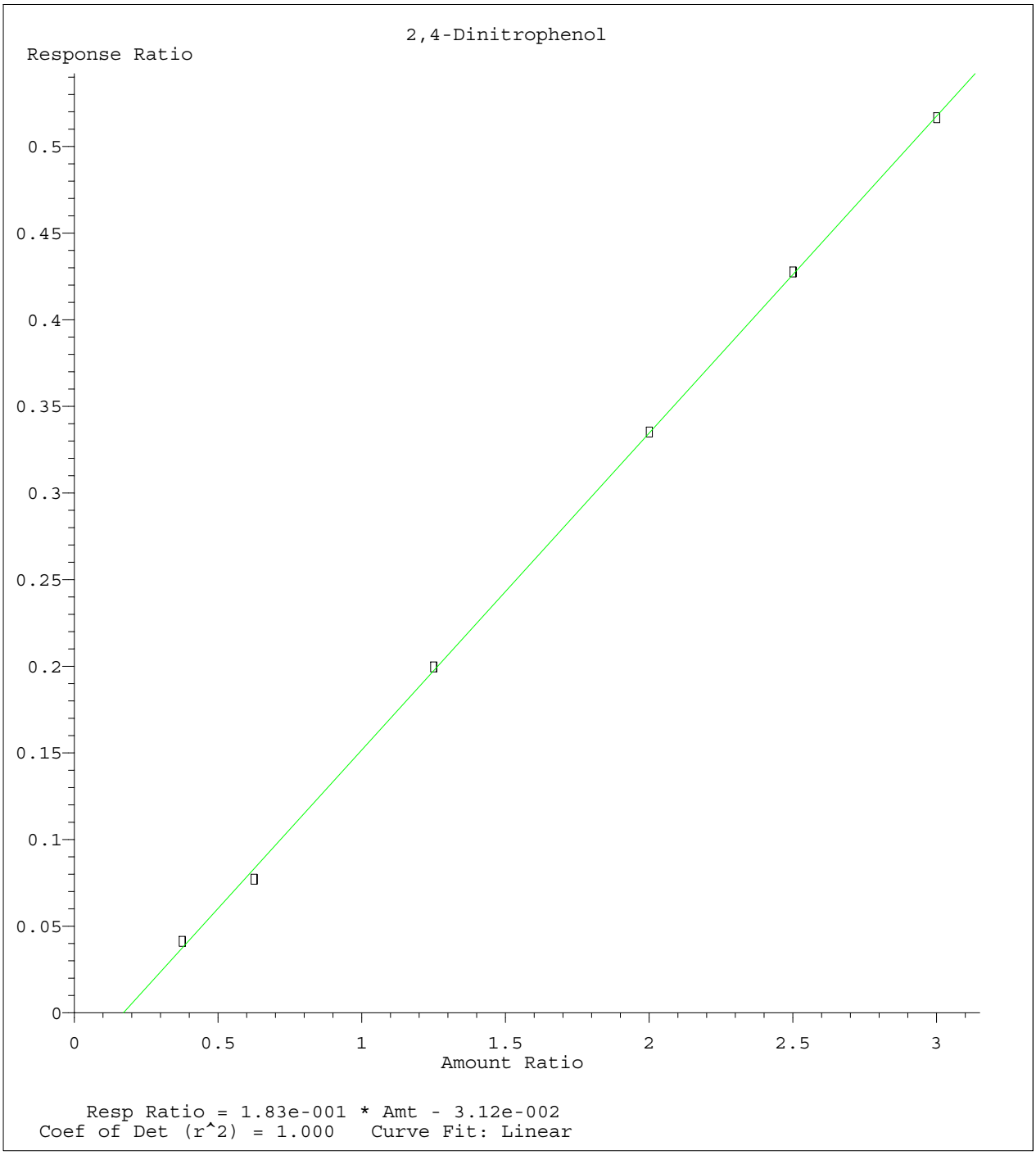
response 3126203

Ion	Exp%	Act%
58.10	100	100
91.00	12.60	6.25#
134.10	6.20	3.03#
0.00	0.00	0.00

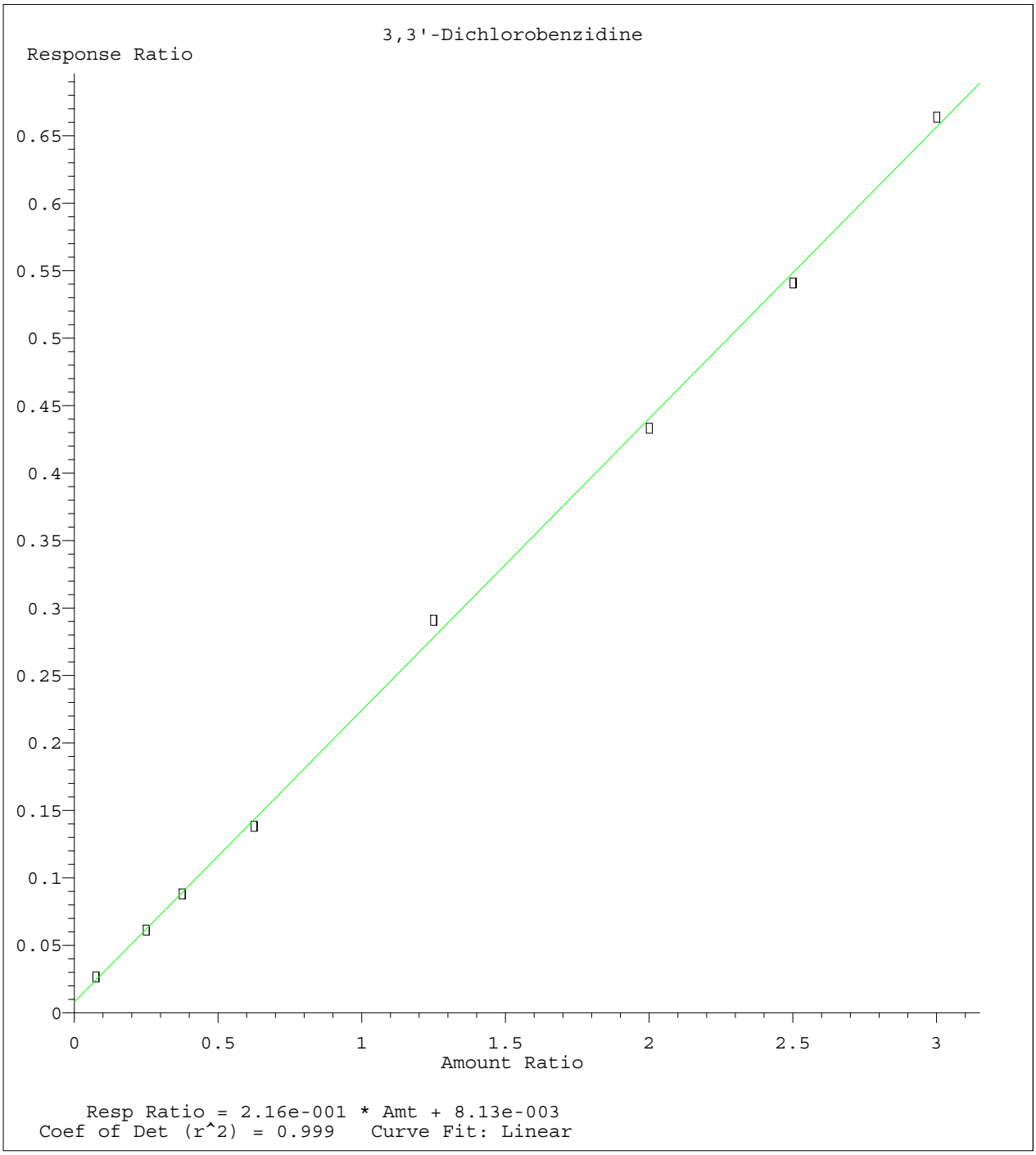
4M60446.D MEGAMIX.M Thu Apr 19 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak



Method Name: I:\MSDCHEM\1\METHODS\MEGAMIX.M
Calibration Table Last Updated: Fri Apr 20 08:27:42 2012



Method Name: I:\MSDCHEM\1\METHODS\MEGAMIX.M
Calibration Table Last Updated: Fri Apr 20 08:27:42 2012

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	256286	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	986779	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	526241	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	955907	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	888081	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	842099	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	0.00	112	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 21 - 100		Recovery =	0.00%#		
12) Phenol-d5	0.00	99	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 10 - 94		Recovery =	0.00%#		
31) Nitrobenzene-d5	7.81	82	39246	4.7024	ug/ml	-0.04
Spiked Amount 50.000	Range 35 - 114		Recovery =	9.40%#		
59) 2-Fluorobiphenyl	9.62	172	163	0.0093	ug/ml	-0.03
Spiked Amount 50.000	Range 43 - 116		Recovery =	0.02%#		
86) 2,4,6-Tribromophenol	0.00	330	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 10 - 123		Recovery =	0.00%#		
117) p-Terphenyl-d14	0.00	244	0	0.0000	ug/ml	
Spiked Amount 50.000	Range 33 - 141		Recovery =	0.00%#		
Target Compounds						Qvalue
3) n-Nitrosodimethylamine	4.70	74	276126	58.3812	ug/ml	99
4) Pyridine	4.72	79	488797	58.2919	ug/ml	96
5) 2-Picoline	5.50	93	472924	51.8312	ug/ml	100
6) n-Nitrosomethylethylamine	5.62	88	213170	54.1601	ug/ml	96
7) Methyl Methanesulfonate	5.90	80	251495	56.2801	ug/ml	97
9) n-Nitrosodiethylamine	6.29	102	220952	52.3624	ug/ml	96
10) Ethyl Methanesulfonate	6.54	79	323437	55.2616	ug/ml	99
11) Aniline	6.99	93	722468m	53.7589	ug/ml	
13) Phenol	6.89	94	534518	55.0450	ug/ml	96
14) bis(2-Chloroethyl)ether	7.00	63	328519	54.0297	ug/ml	95
15) Pentachloroethane	7.02	167	179705	54.8681	ug/ml	99
16) 2-Chlorophenol	7.11	128	484796	55.7509	ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	516293	53.3428	ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	536363	54.3336	ug/ml	99
19) Benzyl Alcohol	7.39	108	330847	58.7617	ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	497579	54.2754	ug/ml	99
21) 2-Methylphenol	7.48	107	365939	54.6506	ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.54	45	675914	54.1456	ug/ml	97
23) 3-,4-Methylphenol	7.62	107	470754	54.0846	ug/ml	99
24) n-Nitrosopyrrolidine	7.67	100	208831	53.1426	ug/ml	91
25) n-Nitrosodipropylamine	7.67	70	307584	56.1778	ug/ml	99
26) Acetophenone	7.68	105	592221	55.0002	ug/ml	100
27) n-Nitrosomorpholine	7.68	56	276958	52.9339	ug/ml	98
28) o-Toluidine	7.72	106	697310	51.2251	ug/ml	100
29) Hexachloroethane	7.82	117	199783	54.6536	ug/ml	96
32) Nitrobenzene	7.87	77	450915	54.2075	ug/ml	99
33) n-Nitrosopiperidine	8.01	114	225543	50.6524	ug/ml	96
34) Isophorone	8.08	82	800833	52.7444	ug/ml	99
35) 2-Nitrophenol	8.18	139	287863m	58.7056	ug/ml	
36) 2,4-Dimethylphenol	8.15	122	437384	51.9463	ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.25	198	205339	48.8480	ug/ml#	40
38) bis(2-Chloroethoxy)methane	8.25	93	654932	56.7589	ug/ml#	94
39) Benzoic Acid	8.21	105	346193	59.6587	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
40)	2,4-Dichlorophenol	8.41	162	379014	53.7708 ug/ml	100
41)	a,a-Dimethylphenethylamine	8.40	58	245419	20.5941 ug/ml	99
42)	1,2,4-Trichlorobenzene	8.52	180	417438	52.1552 ug/ml	100
43)	Naphthalene	8.60	128	1415927	54.1805 ug/ml	99
44)	4-Chloroaniline	8.62	127	470468	48.8813 ug/ml	99
45)	2,6-Dichlorophenol	8.64	162	401989	55.2675 ug/ml	99
46)	Hexachloropropene	8.71	213	247910	55.2660 ug/ml	99
47)	Hexachlorobutadiene	8.74	225	227254	55.4605 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	294849	42.0146 ug/ml#	86
49)	p-Phenylenediamine	9.05	108	30477	50.1895 ug/ml	97
50)	4-Chloro-3-Methylphenol	9.05	107	384557	53.7631 ug/ml	100
51)	Safrole	9.16	162	374856	55.1030 ug/ml	99
52)	2-Methylnaphthalene	9.28	142	922336	54.3242 ug/ml	99
53)	1-Methylnaphthalene	9.40	142	844148	52.5880 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	391219	56.7302 ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	197932	55.4902 ug/ml	100
57)	2,4,6-Trichlorophenol	9.57	196	279030	57.7433 ug/ml	99
58)	2,4,5-Trichlorophenol	9.62	196	290230	58.3464 ug/ml	100
60)	Isosafrole	9.67	162	386331	58.0944 ug/ml	99
61)	2-Chloronaphthalene	9.79	162	960412	64.6318 ug/ml	100
62)	1-Chloronaphthalene	9.83	162	808109	57.4329 ug/ml	100
63)	2-Nitroaniline	9.89	65	246949	57.9777 ug/ml	99
64)	1,4-Naphthoquinone	9.95	158	378234	64.4567 ug/ml	99
65)	Dimethylphthalate	10.05	163	920406	55.2812 ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	168742	52.8536 ug/ml	98
67)	2,6-Dinitrotoluene	10.14	165	239977	57.6995 ug/ml	99
68)	Acenaphthylene	10.24	152	1360420	57.0190 ug/ml	100
69)	3-Nitroaniline	10.30	138	121424	39.5804 ug/ml	100
70)	2,4-Dinitrophenol	10.41	184	169659	77.2850 ug/ml	47
71)	Acenaphthene	10.42	154	876985	56.4328 ug/ml	98
72)	4-Nitrophenol	10.40	65	179487	58.5610 ug/ml	96
73)	2,4-Dinitrotoluene	10.56	165	301594	56.9906 ug/ml	97
74)	Pentachlorobenzene	10.60	250	337611	54.3733 ug/ml	99
75)	Dibenzofuran	10.57	168	1179664	56.6917 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	214281	55.8583 ug/ml	99
77)	1-Naphthylamine	10.72	143	22712	5.0751 ug/ml	87
78)	2-Naphthylamine	10.72	143	24316	8.9264 ug/ml	87
79)	Diethylphthalate	10.76	149	931578	56.1811 ug/ml	100
80)	Thionazin	10.86	107	138070	50.0423 ug/ml	97
81)	Fluorene	10.94	166	984153	55.6484 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	450483	54.2093 ug/ml	99
83)	4-Nitroaniline	10.95	138	203824	53.6740 ug/ml	98
84)	5-Nitro-o-Toluidine	10.94	152	205250	49.1581 ug/ml	99
85)	1,2-Diphenylhydrazine	11.05	77	945859	58.6519 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	198538	66.7184 ug/ml#	54
89)	n-Nitrosodiphenylamine	11.00	169	854618	55.2550 ug/ml	99
90)	Sulfotepp	11.20	322	144797	52.3998 ug/ml	92
91)	Sym-Trinitrobenzene	11.28	75	251346	66.4719 ug/ml	98
92)	Diallate	11.33	86	357858	56.7344 ug/ml	93
93)	Phenacetin	11.31	108	474657	58.5779 ug/ml	99
94)	Phorate	11.35	75	562933	55.9411 ug/ml#	98
95)	4-Bromophenyl Phenyl Ether	11.42	248	257123	53.1649 ug/ml	99
96)	Hexachlorobenzene	11.63	284	274708	51.9612 ug/ml	97
97)	Dimethoate	11.56	87	306288	57.6192 ug/ml	96

(#) = qualifier out of range (m) = manual integration
4M60447.D MEGAMIX.M Fri Apr 20 08:39:54 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

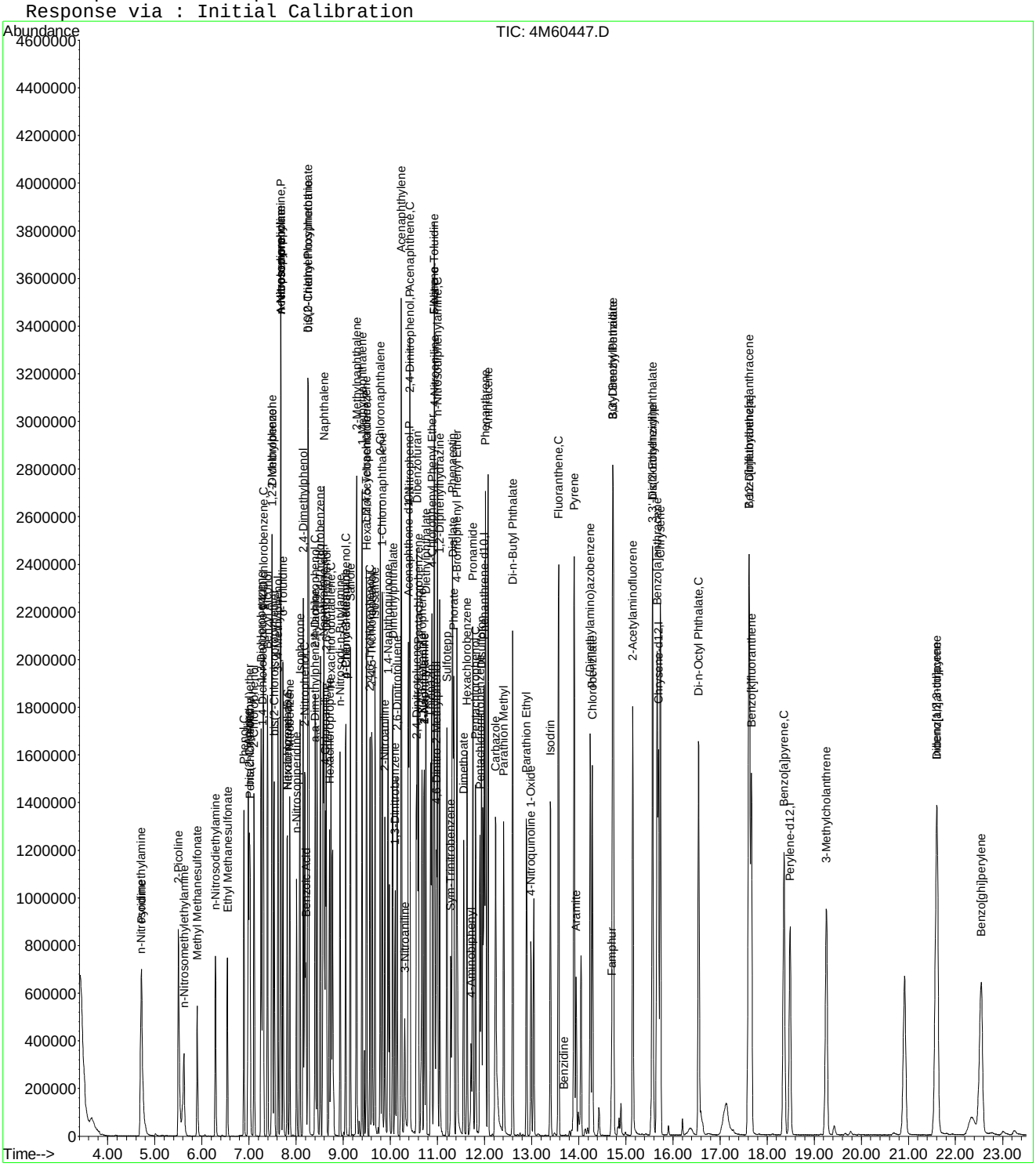
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
98)	4-Aminobiphenyl	11.72	169	299707	53.6701 ug/ml	100
99)	Pentachlorophenol	11.81	266	219981	65.8011 ug/ml	100
100)	Pronamide	11.75	173	435376	56.0268 ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	100661	54.9377 ug/ml	99
102)	Disulfoton	11.93	88	465671	53.8412 ug/ml	99
103)	Phenanthrene	12.02	178	1403448	55.3523 ug/ml	100
104)	Anthracene	12.08	178	1431854	55.0760 ug/ml	100
105)	Carbazole	12.23	167	1222576	53.7063 ug/ml	99
106)	Parathion Methyl	12.41	109	309666	58.5249 ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	1540149	54.4568 ug/ml	100
108)	Parathion Ethyl	12.89	97	176185	54.6918 ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.99	190	144361	61.3308 ug/ml	98
110)	Methapyrilene	13.05	58	407182	Below Cal	97
111)	Isodrin	13.40	193	153389	56.3232 ug/ml	98
112)	Fluoranthene	13.57	202	1432961	53.9334 ug/ml	99
114)	Benzidine	13.68	184	3158	2.5513 ug/ml	100
115)	Pyrene	13.91	202	1489985	56.0937 ug/ml	100
116)	Aramite	13.95	185	79710	52.9951 ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.25	225	308031	56.1665 ug/ml	95
119)	Chlorobenzilate	14.29	251	405945	56.1581 ug/ml	97
120)	Famphur	14.70	218	32734	103.9507 ug/ml#	65
121)	Butyl Benzyl Phthalate	14.72	149	707095	58.5249 ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	122499	14.5948 ug/ml#	90
123)	2-Acetylaminofluorene	15.15	181	590016	57.0856 ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	934893	56.7035 ug/ml	100
125)	3,3'-Dichlorobenzidine	15.58	252	256765	51.9984 ug/ml	99
126)	Benzo[a]anthracene	15.67	228	1277312	54.2153 ug/ml	100
127)	Chrysene	15.73	228	1248555	56.4561 ug/ml	99
129)	Di-n-Octyl Phthalate	16.54	149	1590286	58.4774 ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.62	256	644600	59.1079 ug/ml	99
131)	Benzo[b]fluoranthene	17.62	252	1328651	54.5618 ug/ml	98
132)	Benzo[k]fluoranthene	17.67	252	1162236	51.4888 ug/ml	95
133)	Benzo[a]pyrene	18.36	252	1248294	56.1868 ug/ml	99
134)	3-Methylcholanthrene	19.26	268	701245	58.1339 ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.60	276	1375274	55.5825 ug/ml	97
136)	Dibenz[ah]anthracene	21.60	278	1145050	55.4891 ug/ml	98
137)	Benzo[ghi]perylene	22.55	276	1116722	54.5580 ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012 Quant Results File: MEGAMIX.RES

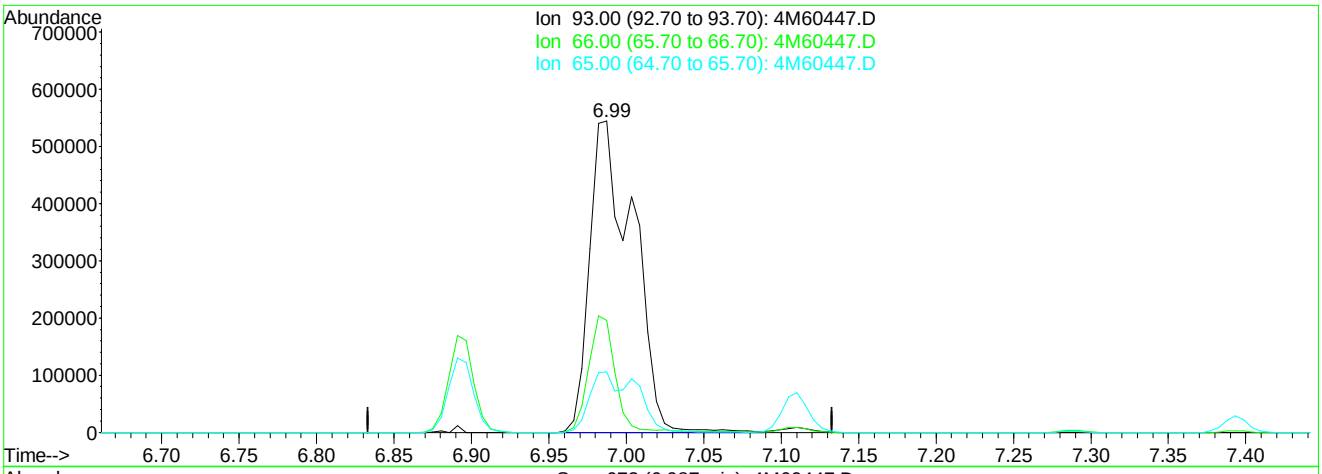
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri Apr 20 08:27:42 2012
Response via : Initial Calibration

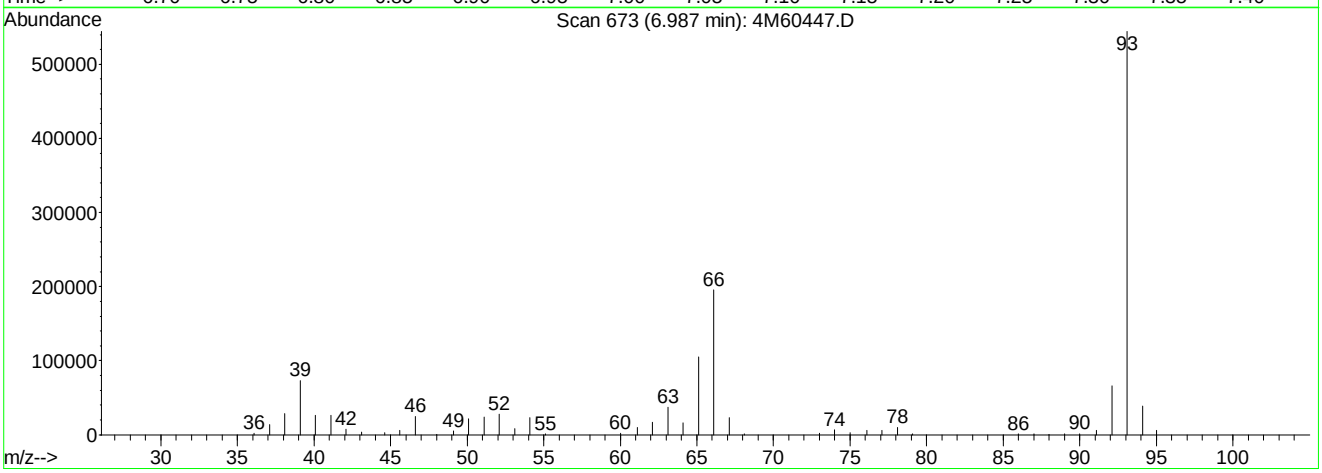


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Multiple Level Calibration





TIC: 4M60447.D

(11) Aniline

6.99min 79.16ug/ml

response 1063901

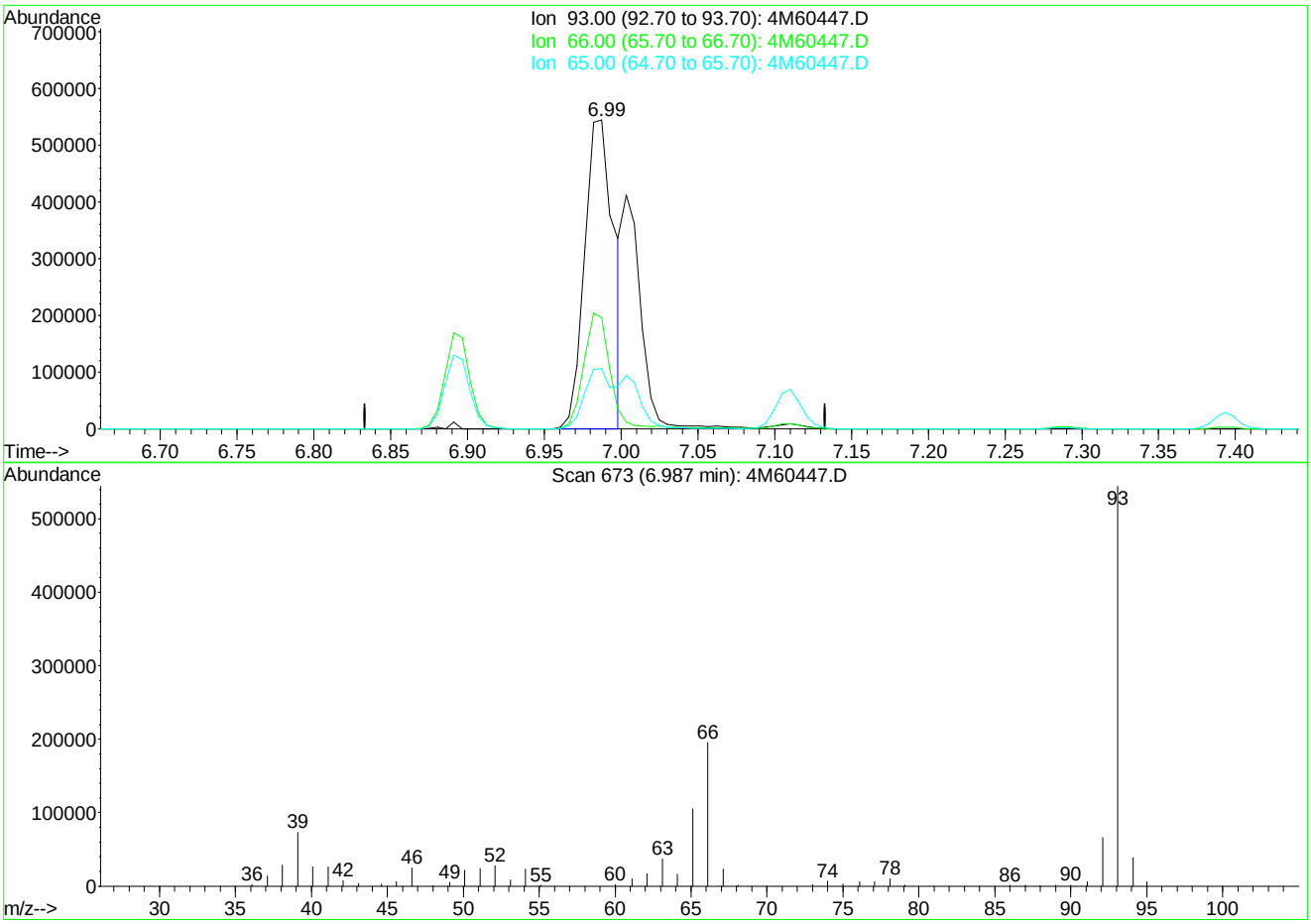
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.26
65.00	29.20	13.53#
0.00	0.00	0.00

4M60447.D MEGAMIX.M Thu Apr 19 14:28:17 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Multiple Level Calibration



TIC: 4M60447.D

(11) Aniline

6.99min 53.76ug/ml mint

response 722468

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	34.25
65.00	29.20	19.93
0.00	0.00	0.00

4M60447.D MEGAMIX.M Thu Apr 19) 2012

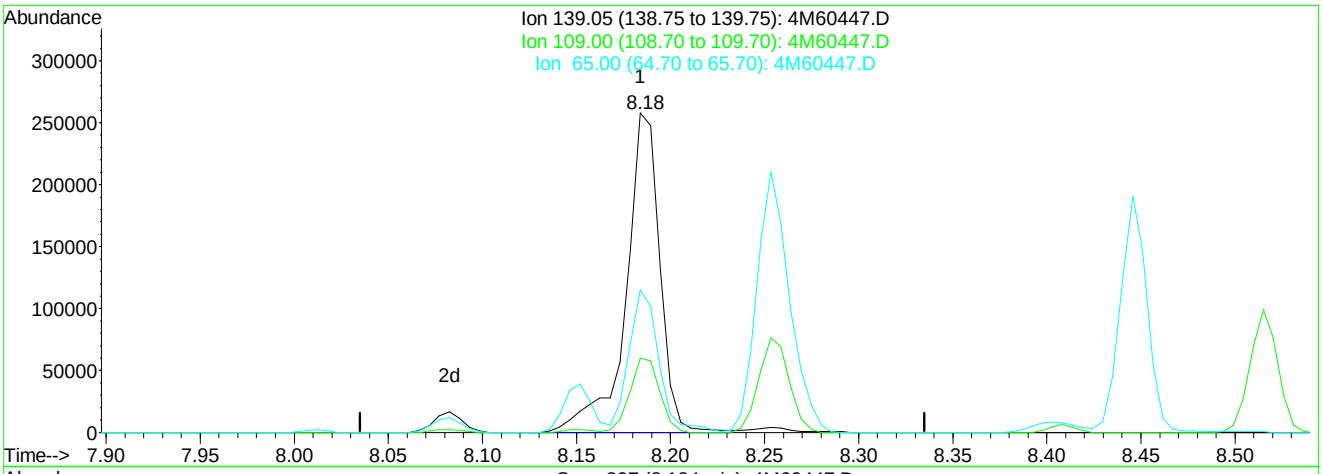
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

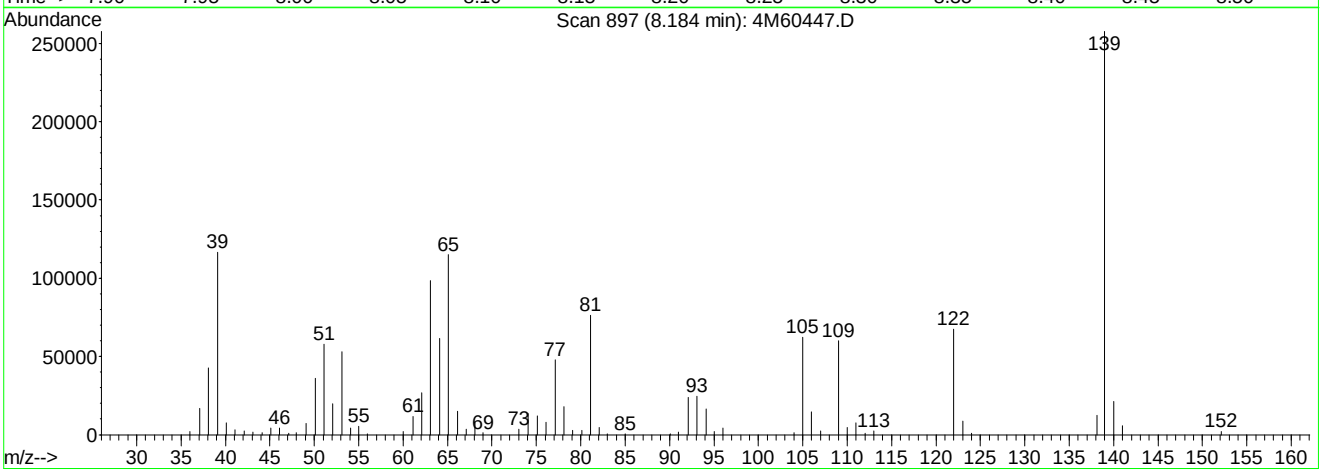
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Multiple Level Calibration





TIC: 4M60447.D

(35) 2-Nitrophenol (C)

8.18min 65.94ug/ml

response 323358

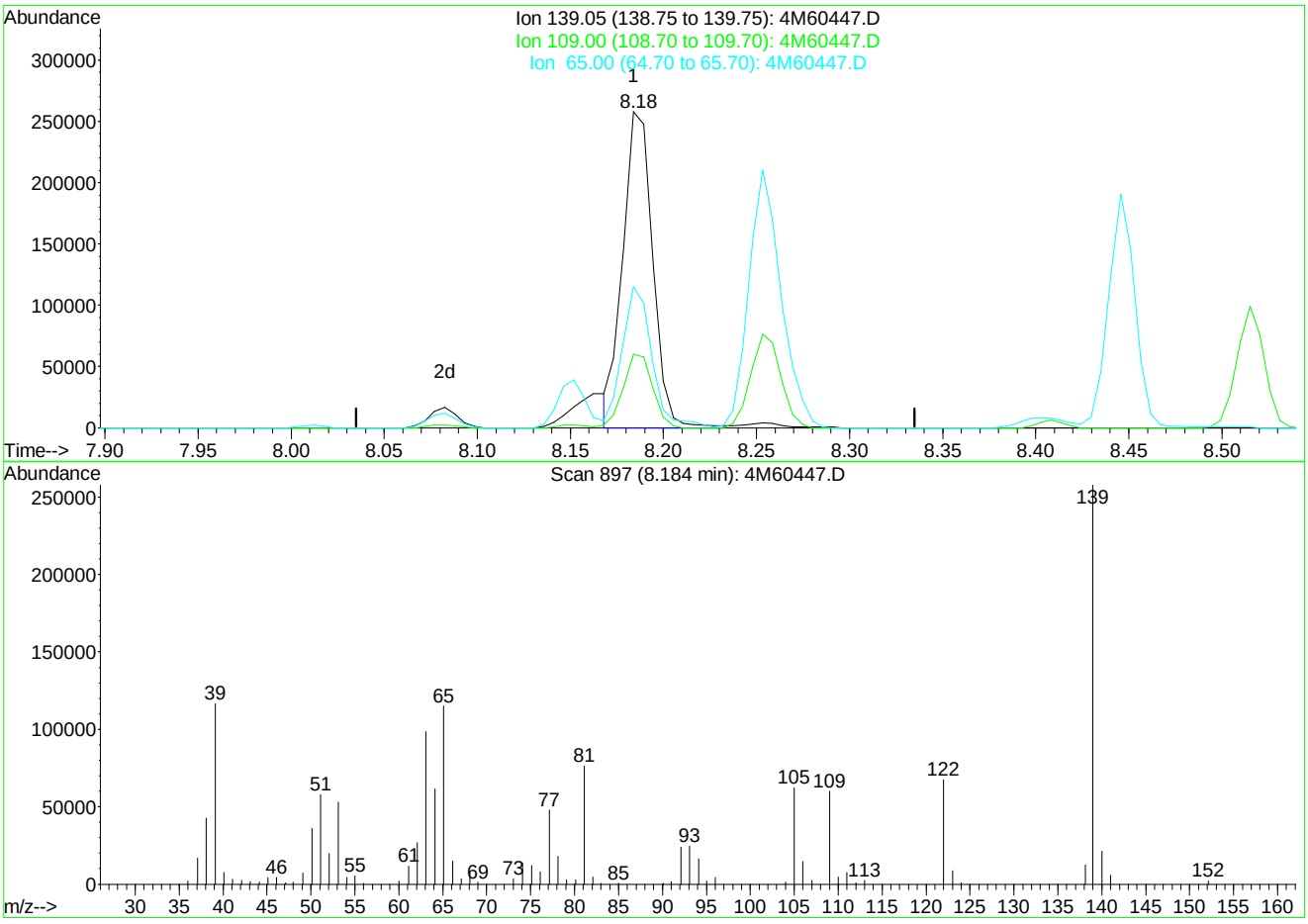
Ion	Exp%	Act%
139.05	100	100
109.00	22.80	20.32
65.00	43.50	39.41
0.00	0.00	0.00

4M60447.D MEGAMIX.M Thu Apr 19 14:28:25 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Multiple Level Calibration



TIC: 4M60447.D

(35) 2-Nitrophenol (C)

8.18min 58.71ug/ml mint

response 287863

Ion	Exp%	Act%
139.05	100	100
109.00	22.80	22.82
65.00	43.50	44.27
0.00	0.00	0.00

4M60447.D MEGAMIX.M Thu Apr 19 [illegible] 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

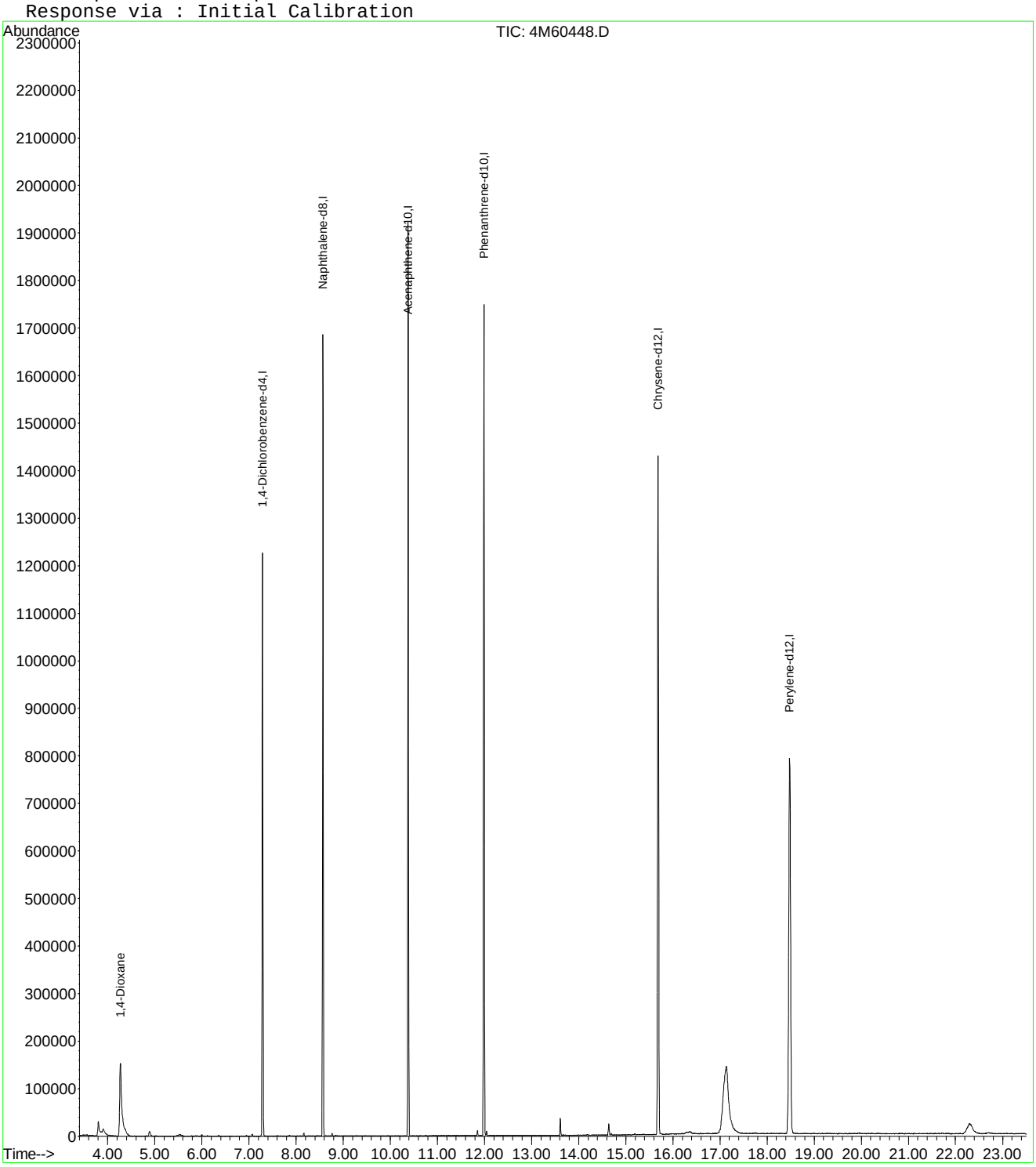
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	241408	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	908072	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	500473	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	872547	40.00	ug/ml	0.00
113) Chrysene-d12	15.68	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

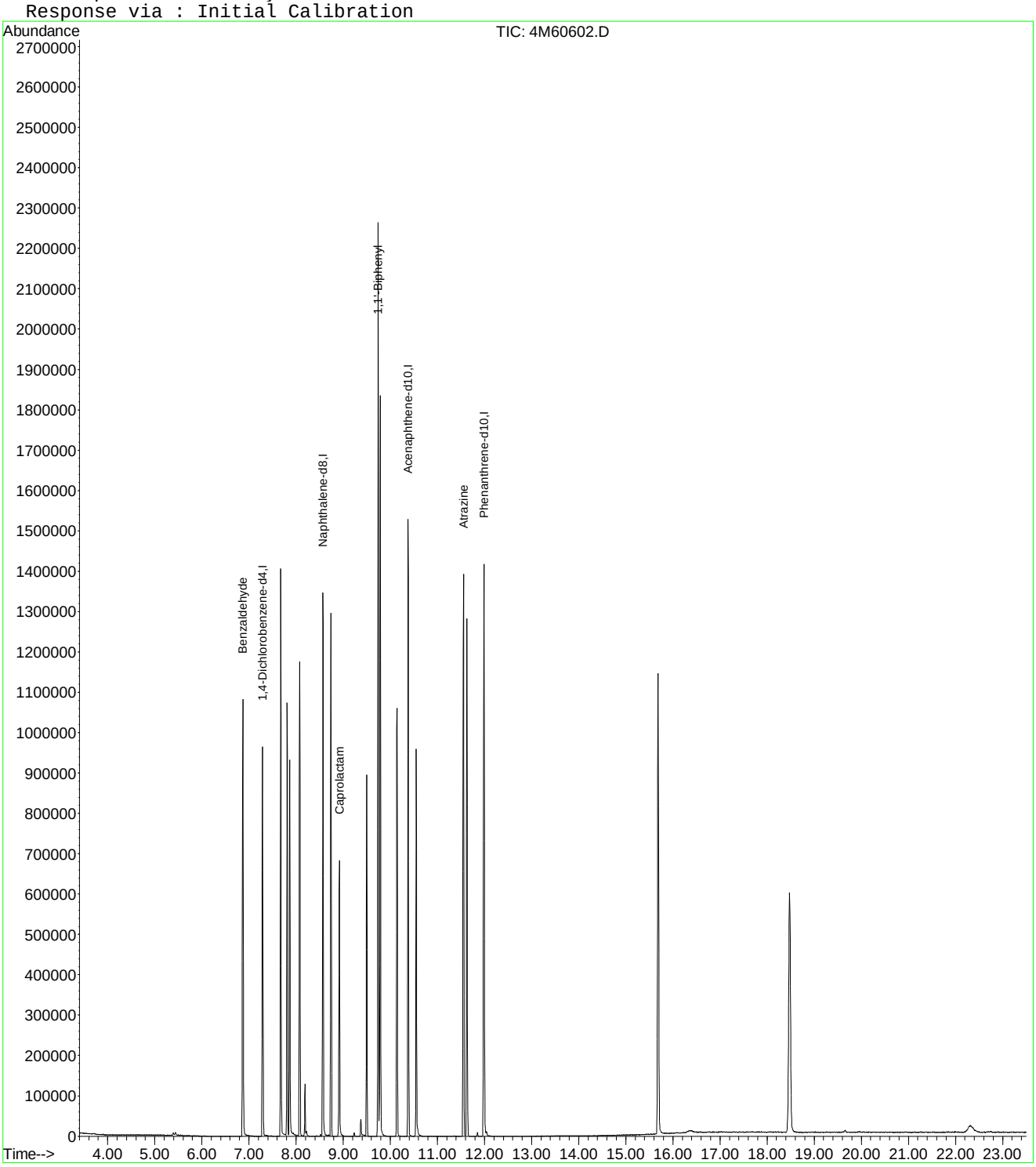
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	198785	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	762076	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425534	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	753240	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

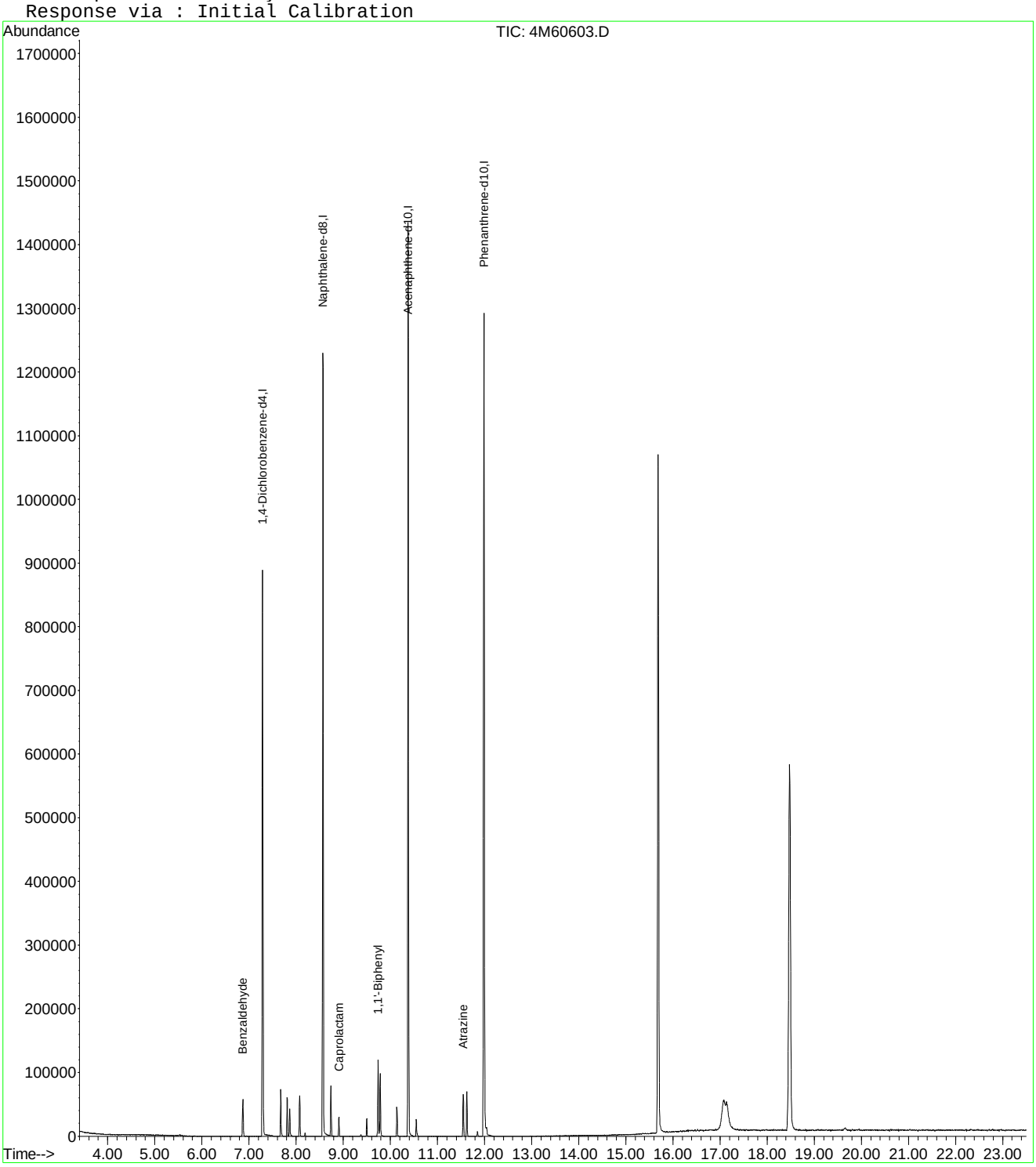
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	184318	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	711419	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	396131	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	705172	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

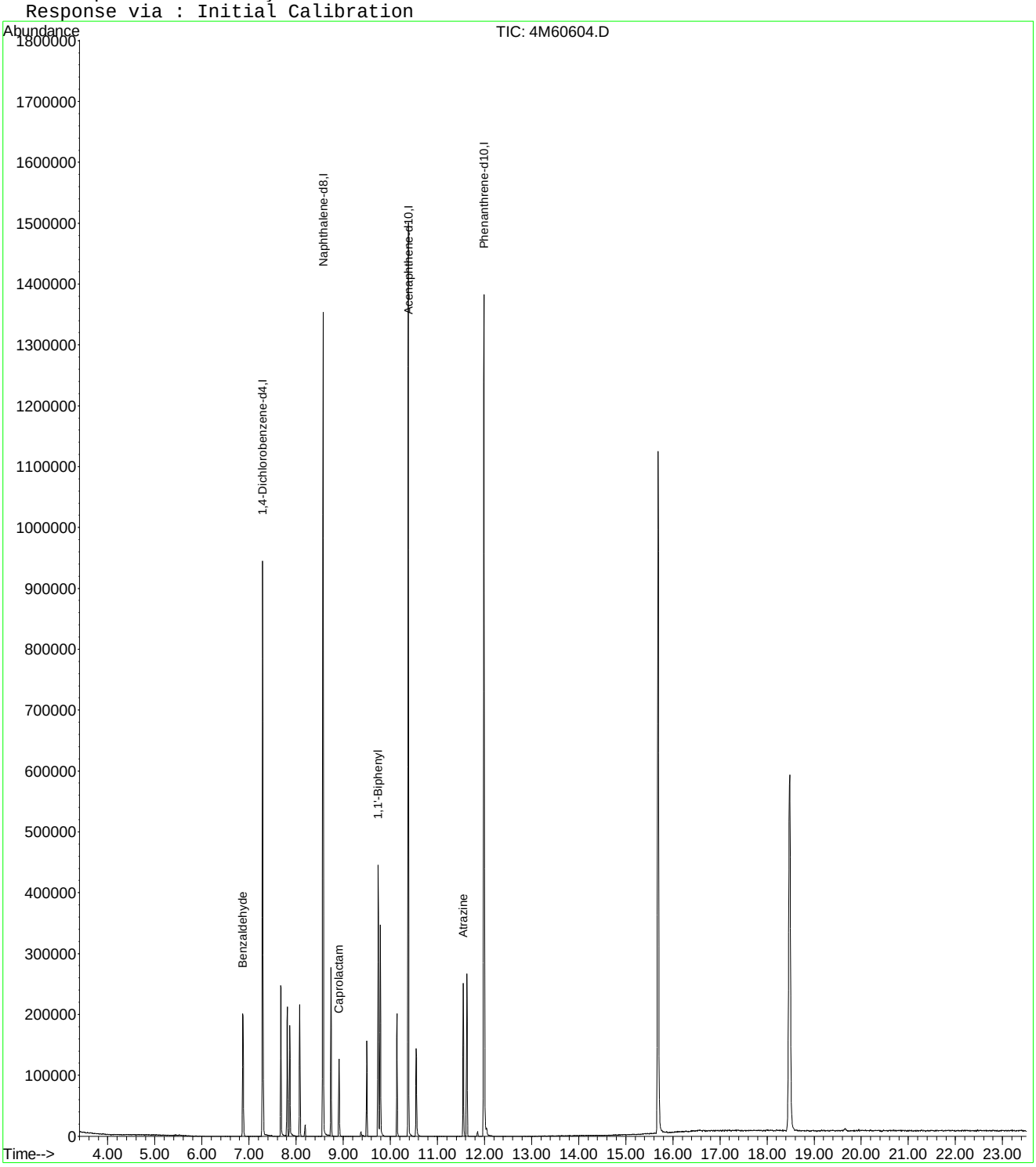
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191577	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	738266	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	412816	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	727410	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

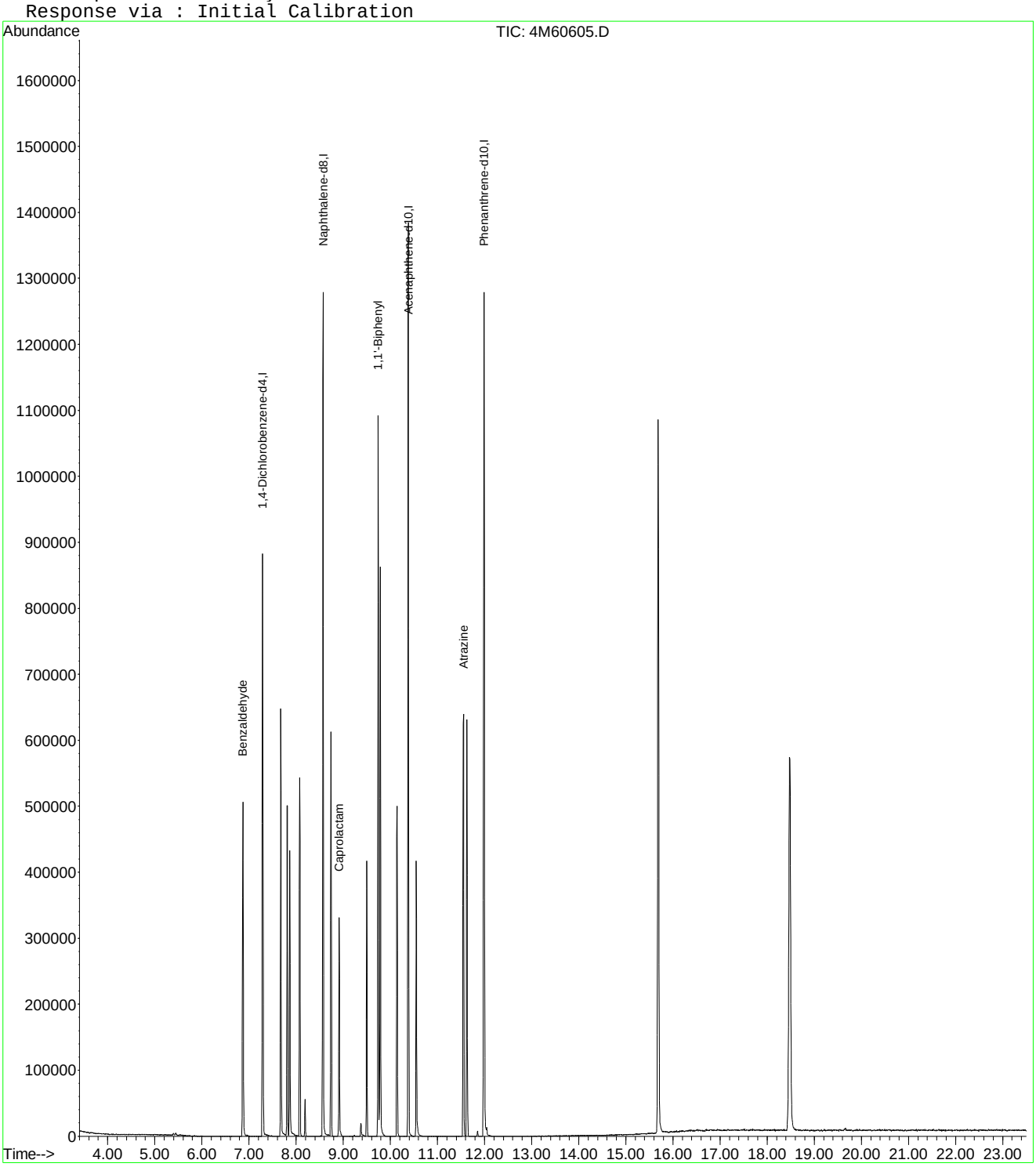
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	188543	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	712737	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	395022	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	719816	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

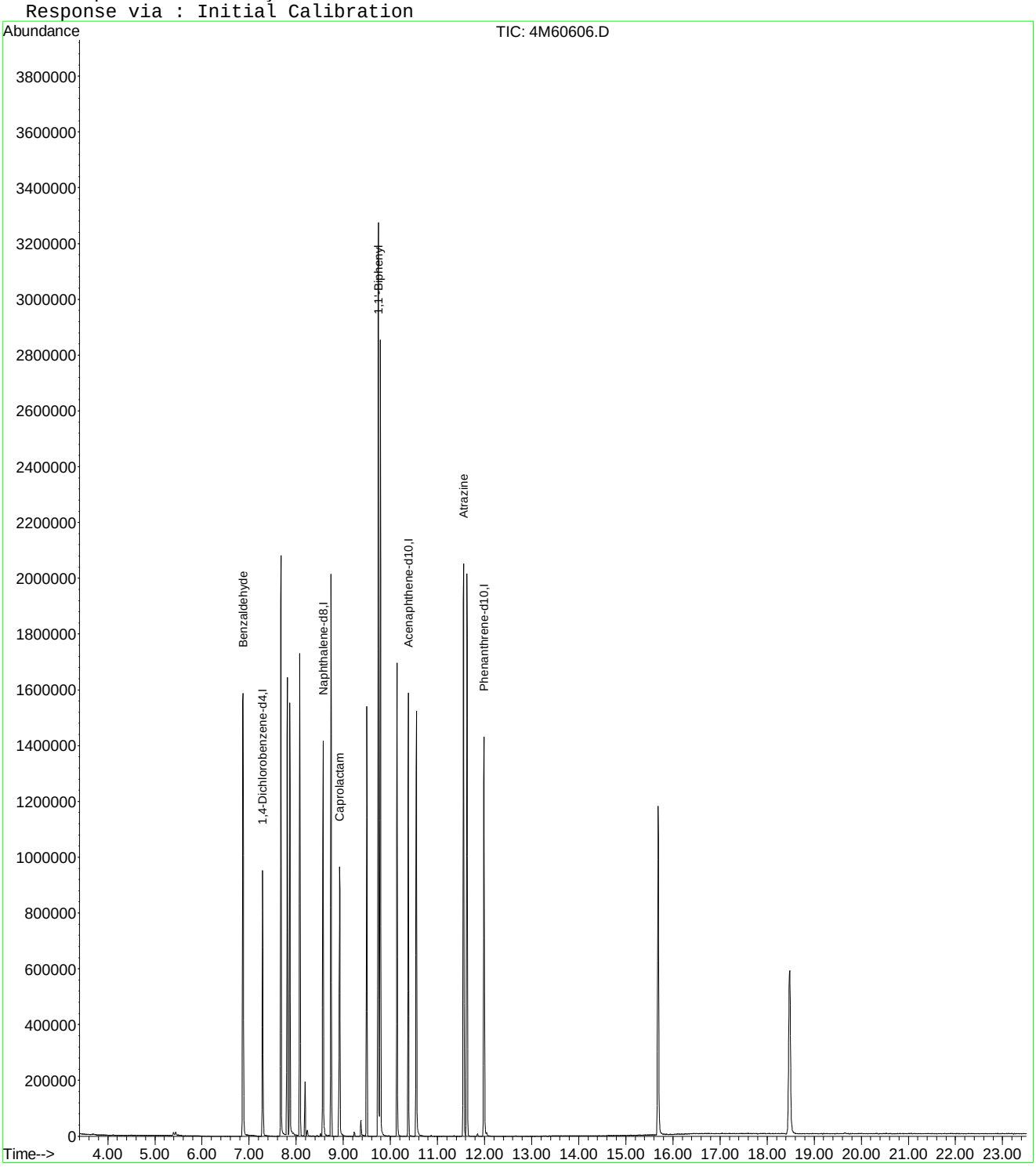
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	195973	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	750611	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425817	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	761381	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

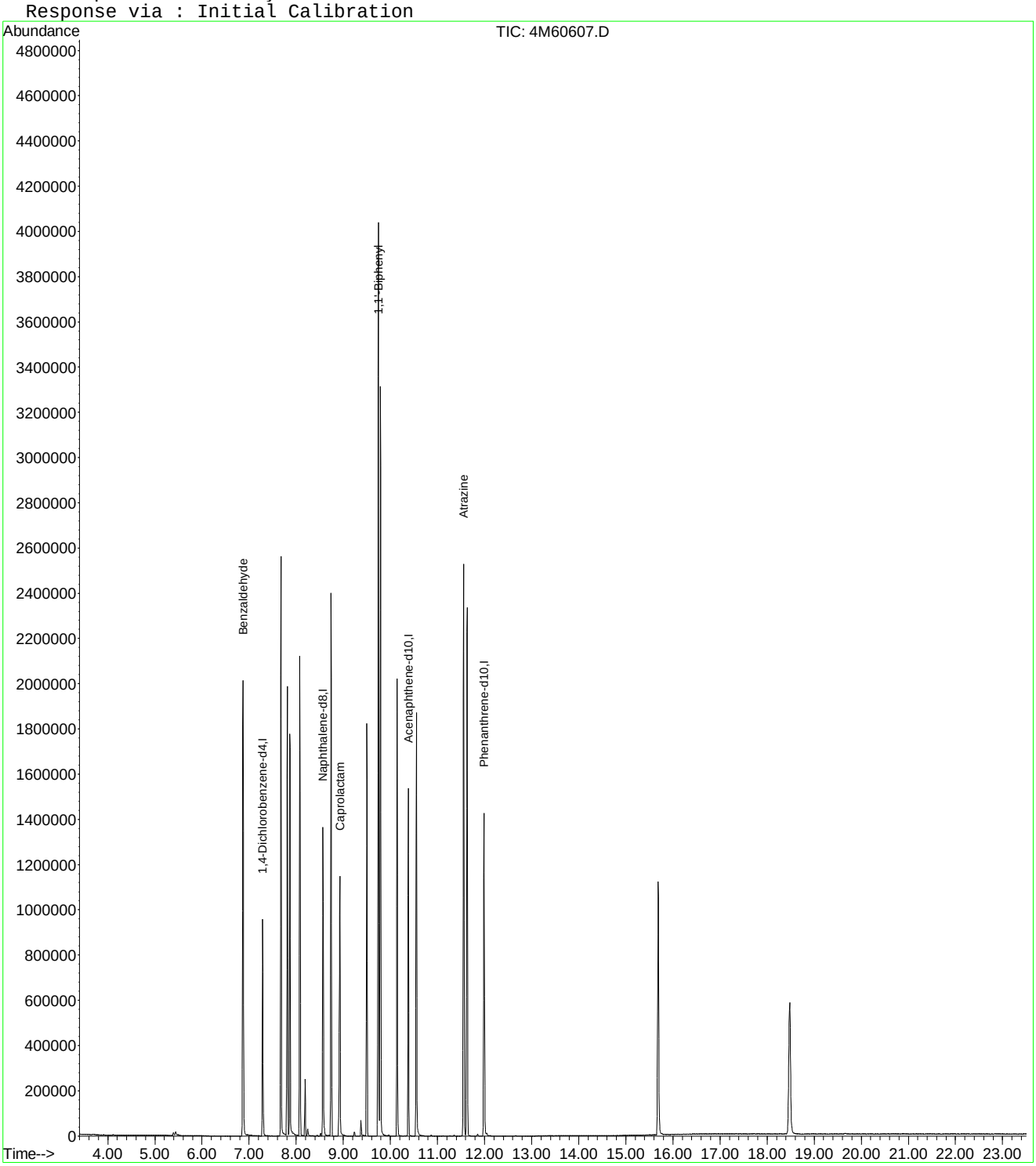
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191003	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	734165	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	416593	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	754784	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

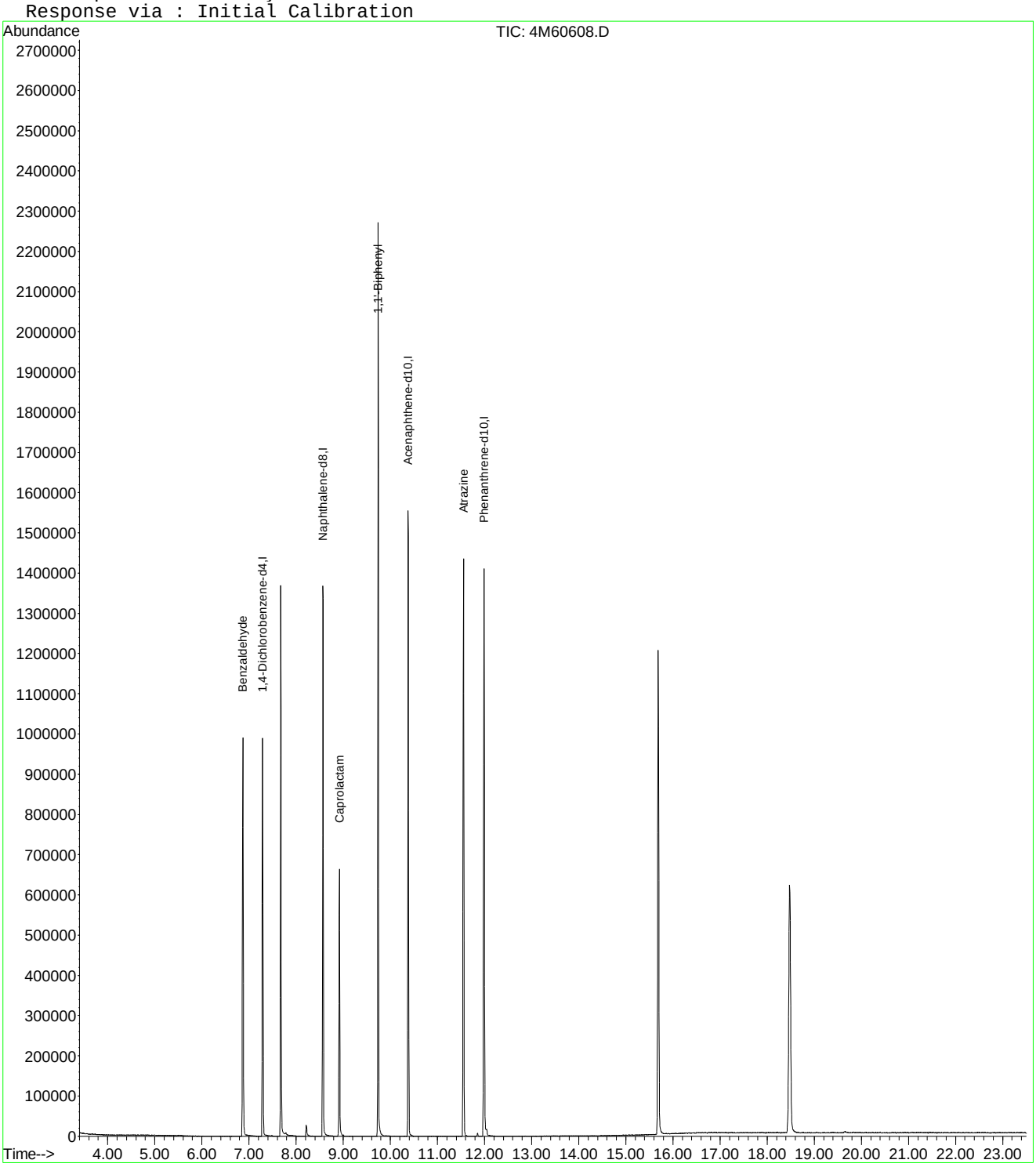
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	209920	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	790964	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	444492	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	786510	40.00	ug/mL	0.00
Target Compounds						Qvalue
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\050712\4M60692.D Vial: 2
Acq On : 7 May 2012 8:51 Operator: CAA
Sample : WG397151-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 09:14:38 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 : Fri May 04 15:10:08 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	311921	40.00 ug/ml	0.00
30) Naphthalene-d8	8.57	136	1191269	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.38	164	675755	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1217020	40.00 ug/ml	0.00
113) Chrysene-d12	15.69	240	1120310	40.00 ug/ml	0.00
128) Perylene-d12	18.48	264	1001902	40.00 ug/ml	0.00
System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	458170	48.4463 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 48.45%		
12) Phenol-d5	6.88	99	546493	49.3739 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 49.37%		
31) Nitrobenzene-d5	7.85	82	505476	50.1684 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 100.34%		
59) 2-Fluorobiphenyl	9.64	172	1124339	49.8267 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 99.66%		
86) 2,4,6-Tribromophenol	11.20	330	171088	56.7751 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 56.78%		
117) p-Terphenyl-d14	14.03	244	1071114	51.8735 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 103.74%		
Target Compounds					Qvalue
2) 1,4-Dioxane	4.29	88	199068	51.2067 ug/ml#	93
3) n-Nitrosodimethylamine	4.70	74	278122	48.3149 ug/ml	93
4) Pyridine	4.73	79	492555	48.2630 ug/ml	87
5) 2-Picoline	5.51	93	541148	48.7299 ug/ml	98
6) n-Nitrosomethylethylamine	5.62	88	231109	48.2448 ug/ml	90
7) Methyl Methanesulfonate	5.91	80	274328	50.4401 ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	244264	47.5621 ug/ml	93
10) Ethyl Methanesulfonate	6.54	79	347956	48.8471 ug/ml	99
11) Aniline	6.98	93	731214m	44.7051 ug/ml	
13) Phenol	6.90	94	571633	48.3674 ug/ml	100
14) bis(2-Chloroethyl)ether	7.01	63	349096	47.1734 ug/ml	96
15) Pentachloroethane	7.02	167	204400	51.2768 ug/ml	98
16) 2-Chlorophenol	7.11	128	521194	49.2462 ug/ml	98
17) 1,3-Dichlorobenzene	7.26	146	580572	49.2851 ug/ml	99
18) 1,4-Dichlorobenzene	7.30	146	596545	49.6516 ug/ml	99
19) Benzyl Alcohol	7.40	108	326539	47.6522 ug/ml	96
20) 1,2-Dichlorobenzene	7.50	146	555084	49.7485 ug/ml	99
21) 2-Methylphenol	7.49	107	386606	47.4389 ug/ml	97
22) bis(2-Chloroisopropyl)ethe	7.53	45	620521	40.8421 ug/ml	92
23) 3-,4-Methylphenol	7.62	107	504399	47.6139 ug/ml	98
24) n-Nitrosopyrrolidine	7.67	100	241191	50.4301 ug/ml	91
25) n-Nitrosodipropylamine	7.67	70	334930	50.2614 ug/ml	94
26) Acetophenone	7.68	105	632340	48.2516 ug/ml	98
27) n-Nitrosomorpholine	7.68	56	271702	43.7046 ug/ml	93
28) o-Toluidine	7.73	106	795236	47.9991 ug/ml	99
29) Hexachloroethane	7.81	117	224715	50.5094 ug/ml	99
32) Nitrobenzene	7.87	77	499056	49.6963 ug/ml	99
33) n-Nitrosopiperidine	8.01	114	260607	48.4804 ug/ml	93
34) Isophorone	8.08	82	916169	49.9828 ug/ml	99
35) 2-Nitrophenol	8.19	139	317866	53.6967 ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	462230	45.4736 ug/ml	96
37) 0,0,0-Triethyl Phosphoroth	8.26	198	255819	50.4102 ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	709152	50.9082 ug/ml	100

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60692.D Vial: 2
Acq On : 7 May 2012 8:51 Operator: CAA
Sample : WG397151-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 09:14:38 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 : Fri May 04 15:10:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.23	105	158431m	22.6155	ug/ml	
40)	2,4-Dichlorophenol	8.41	162	436103	51.2496	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.40	58	746307	51.8756	ug/ml	98
42)	1,2,4-Trichlorobenzene	8.51	180	494409	51.1684	ug/ml	99
43)	Naphthalene	8.59	128	1536030	48.6869	ug/ml	98
44)	4-Chloroaniline	8.62	127	573339	49.3440	ug/ml	97
45)	2,6-Dichlorophenol	8.65	162	446831	50.8873	ug/ml	99
46)	Hexachloropropene	8.70	213	307985	56.8726	ug/ml	99
47)	Hexachlorobutadiene	8.74	225	258462	52.2492	ug/ml	98
48)	n-Nitrosodi-n-Butylamine	8.93	84	423003	49.9292	ug/ml	92
49)	p-Phenylenediamine	9.06	108	34899	47.6063	ug/ml	94
50)	4-Chloro-3-Methylphenol	9.06	107	424633	49.1753	ug/ml	98
51)	Safrole	9.15	162	415035	50.5366	ug/ml	100
52)	2-Methylnaphthalene	9.28	142	1016554	49.5958	ug/ml	99
53)	1-Methylnaphthalene	9.40	142	962349	49.6605	ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	457103	51.6183	ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	260002	56.7639	ug/ml	100
57)	2,4,6-Trichlorophenol	9.57	196	321449	51.8034	ug/ml	100
58)	2,4,5-Trichlorophenol	9.62	196	344018	53.8578	ug/ml	99
60)	Isosafrole	9.68	162	433331	50.7446	ug/ml	99
61)	2-Chloronaphthalene	9.79	162	962932	50.4638	ug/ml	99
62)	1-Chloronaphthalene	9.83	162	913383	50.5521	ug/ml	99
63)	2-Nitroaniline	9.89	65	259616	47.4658	ug/ml	96
64)	1,4-Naphthoquinone	9.95	158	381293	50.6013	ug/ml	99
65)	Dimethylphthalate	10.05	163	1082848	50.6478	ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	213385	52.0488	ug/ml	99
67)	2,6-Dinitrotoluene	10.15	165	273818	51.2696	ug/ml	98
68)	Acenaphthylene	10.23	152	1512261	49.3593	ug/ml	100
69)	3-Nitroaniline	10.30	138	201666	51.1922	ug/ml	94
70)	2,4-Dinitrophenol	10.41	184	135269	50.5730	ug/ml	96
71)	Acenaphthene	10.41	154	978268	49.0222	ug/ml	99
72)	4-Nitrophenol	10.41	65	164531	41.8041	ug/ml	92
73)	2,4-Dinitrotoluene	10.55	165	358814	52.8014	ug/ml	98
74)	Pentachlorobenzene	10.60	250	418752	52.5196	ug/ml	99
75)	Dibenzofuran	10.57	168	1333105	49.8909	ug/ml	100
76)	2,3,4,6-Tetrachlorophenol	10.68	232	251503	51.0555	ug/ml	99
77)	1-Naphthylamine	10.65	143	145741	25.3610	ug/ml#	88
78)	2-Naphthylamine	10.72	143	51471	14.7144	ug/ml#	75
79)	Diethylphthalate	10.76	149	1082611	50.8439	ug/ml	100
80)	Thionazin	10.85	107	179243	50.5913	ug/ml	95
81)	Fluorene	10.93	166	1129227	49.7241	ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	550332	51.5721	ug/ml	99
83)	4-Nitroaniline	10.95	138	240314	49.2814	ug/ml	94
84)	5-Nitro-o-Toluidine	10.93	152	273163	50.9483	ug/ml	98
85)	1,2-Diphenylhydrazine	11.05	77	1045591	50.4909	ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	10.98	198	203878	53.8134	ug/ml	87
89)	n-Nitrosodiphenylamine	11.00	169	980719	49.8037	ug/ml	100
90)	Sulfotepp	11.20	322	195933	55.6924	ug/ml	95
91)	Sym-Trinitrobenzene	11.28	75	264876	55.0208	ug/ml	99
92)	Diallate	11.32	86	405824	50.5349	ug/ml	91
93)	Phenacetin	11.31	108	517567	50.1693	ug/ml	100
94)	Phorate	11.34	75	652292	50.9137	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	319158	51.8332	ug/ml	98
96)	Hexachlorobenzene	11.63	284	358096	53.2017	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60692.D Vial: 2
Acq On : 7 May 2012 8:51 Operator: CAA
Sample : WG397151-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 09:14:38 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 : Fri May 04 15:10:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

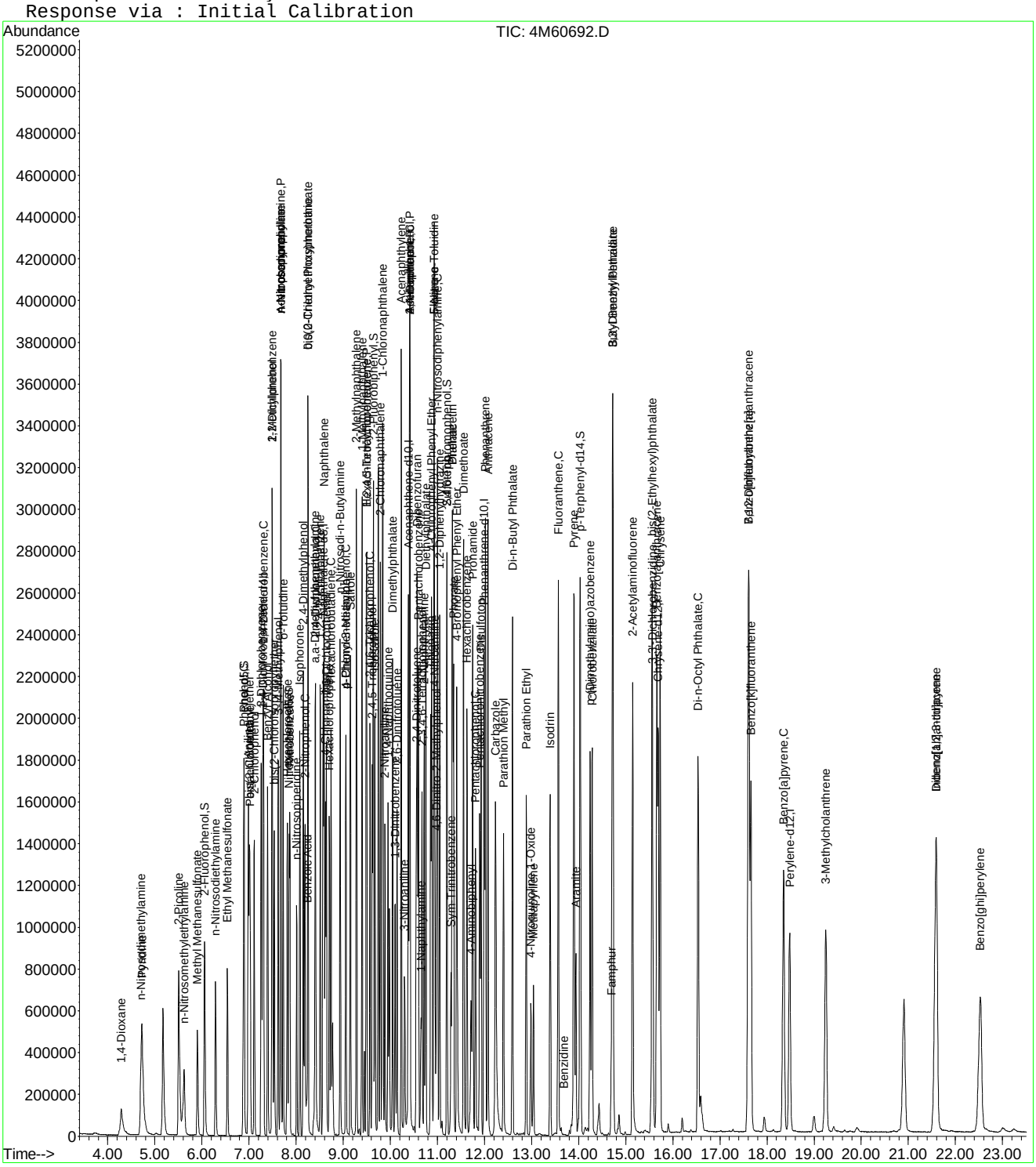
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	372776	54.4683	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	510337	65.4819	ug/ml	99
99)	Pentachlorophenol	11.81	266	221757	52.1007	ug/ml	100
100)	Pronamide	11.75	173	500766	50.6155	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	127135	54.4994	ug/ml	97
102)	Disulfoton	11.93	88	559073	50.7717	ug/ml	99
103)	Phenanthrene	12.02	178	1563687	48.4403	ug/ml	100
104)	Anthracene	12.08	178	1636195	49.4330	ug/ml	100
105)	Carbazole	12.24	167	1456247	50.2461	ug/ml	99
106)	Parathion Methyl	12.40	109	352984	52.3986	ug/ml	99
107)	Di-n-Butyl Phthalate	12.59	149	1830825	50.8457	ug/ml	100
108)	Parathion Ethyl	12.89	97	218409	53.2527	ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.98	190	113915	38.1678	ug/ml	95
110)	Methapyrilene	13.04	58	268057	37.0720	ug/ml	88
111)	Isodrin	13.39	193	177850	51.2938	ug/ml	99
112)	Fluoranthene	13.57	202	1696465	50.1517	ug/ml	99
114)	Benzidine	13.68	184	9409	6.0257	ug/ml	100
115)	Pyrene	13.90	202	1714088	51.1540	ug/ml	100
116)	Aramite	13.94	185	104105	54.8667	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.24	225	366403	52.9611	ug/ml	98
119)	Chlorobenzilate	14.29	251	490796	53.8221	ug/ml	100
120)	Famphur	14.69	218	42382	106.6901	ug/ml#	60
121)	Butyl Benzyl Phthalate	14.71	149	778534	51.0804	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	339499	32.0640	ug/ml#	94
123)	2-Acetylaminofluorene	15.15	181	664208	50.9426	ug/ml	97
124)	bis(2-Ethylhexyl)phthalate	15.56	149	1064995	51.2047	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.57	252	321992	51.6819	ug/ml	99
126)	Benzo[a]anthracene	15.66	228	1483733	49.9223	ug/ml	100
127)	Chrysene	15.73	228	1370710	49.1319	ug/ml	100
129)	Di-n-Octyl Phthalate	16.54	149	1782752	55.0987	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.61	256	713736	55.0086	ug/ml	99
131)	Benzo[b]fluoranthene	17.61	252	1520736	52.4892	ug/ml	99
132)	Benzo[k]fluoranthene	17.66	252	1446374	53.8563	ug/ml	99
133)	Benzo[a]pyrene	18.35	252	1374798	52.0109	ug/ml	98
134)	3-Methylcholanthrene	19.25	268	745183	51.9231	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.60	276	1445799	49.1128	ug/ml	97
136)	Dibenz[ah]anthracene	21.59	278	1222421	49.7900	ug/ml	98
137)	Benzo[ghi]perylene	22.53	276	1147500	47.1198	ug/ml	97

(#) = qualifier out of range (m) = manual integration
4M60692.D MEGAMIX.M Tue May 08 09:11:53 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60692.D Vial: 2
Acq On : 7 May 2012 8:51 Operator: CAA
Sample : WG397151-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:11 2012 Quant Results File: MEGAMIX.RES

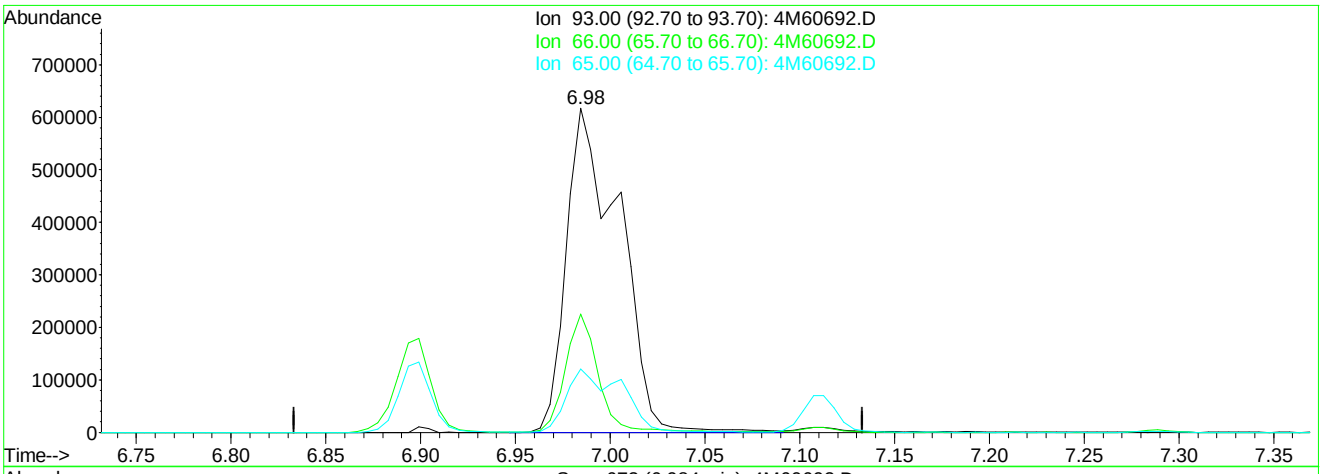
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 07 10:54:35 2012
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60692.D Vial: 2
Acq On : 7 May 2012 8:51 Operator: CAA
Sample : WG397151-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 9:14 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 07 10:54:35 2012
Response via : Multiple Level Calibration



TIC: 4M60692.D

(11) Aniline

6.98min 73.37ug/ml

response 1200113

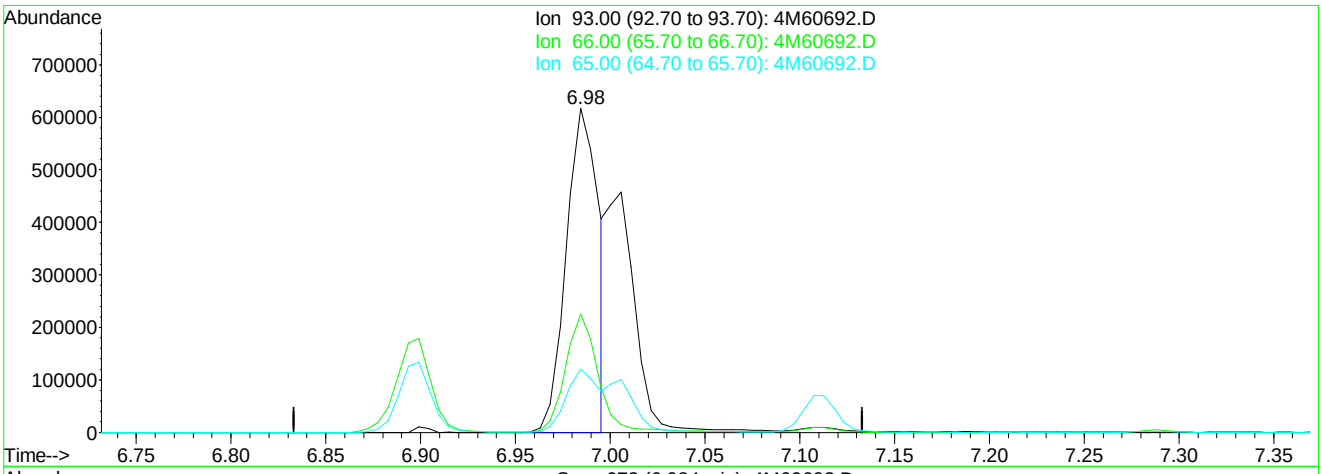
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	22.50
65.00	29.20	11.70#
0.00	0.00	0.00

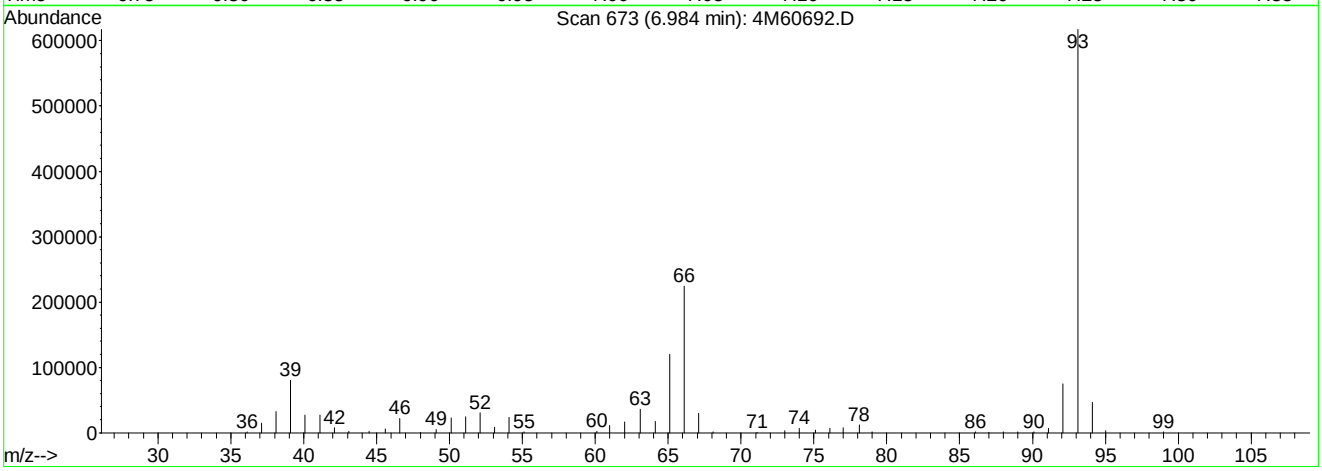
4M60692.D MEGAMIX.M Tue May 08 09:11:16 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60692.D Vial: 2
Acq On : 7 May 2012 8:51 Operator: CAA
Sample : WG397151-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:11 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 07 10:54:35 2012
Response via : Multiple Level Calibration





TIC: 4M60692.D

(11) Aniline

6.98min 44.71ug/ml mint

response 731214

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	36.93
65.00	29.20	19.21
0.00	0.00	0.00

4M60692.D MEGAMIX.M Tue May 08) 2012

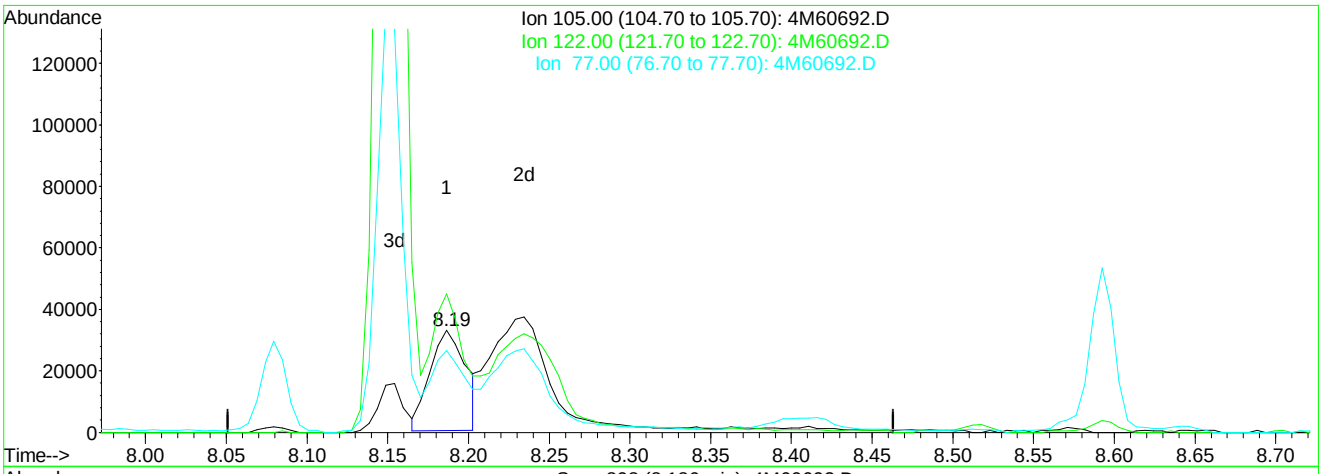
Analyst: 05/08/2012 10:44 Supervisor: 05/08/2012 12:53

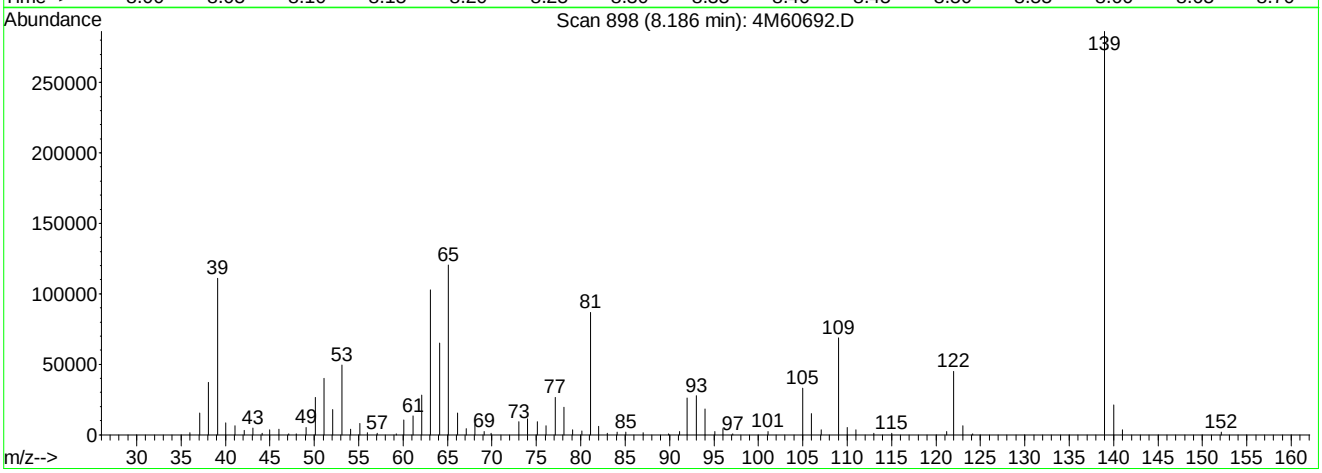
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60692.D Vial: 2
Acq On : 7 May 2012 8:51 Operator: CAA
Sample : WG397151-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:11 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 07 10:54:35 2012
Response via : Single Level Calibration





TIC: 4M60692.D

(39) Benzoic Acid

8.19min 7.15ug/ml

response 50101

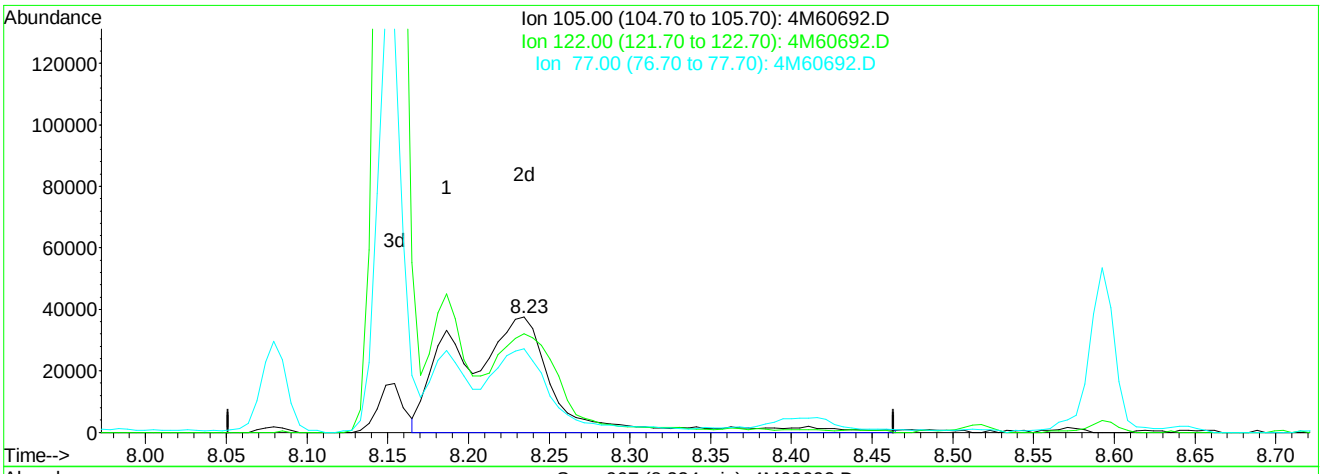
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	113.66
77.00	70.40	76.18
0.00	0.00	0.00

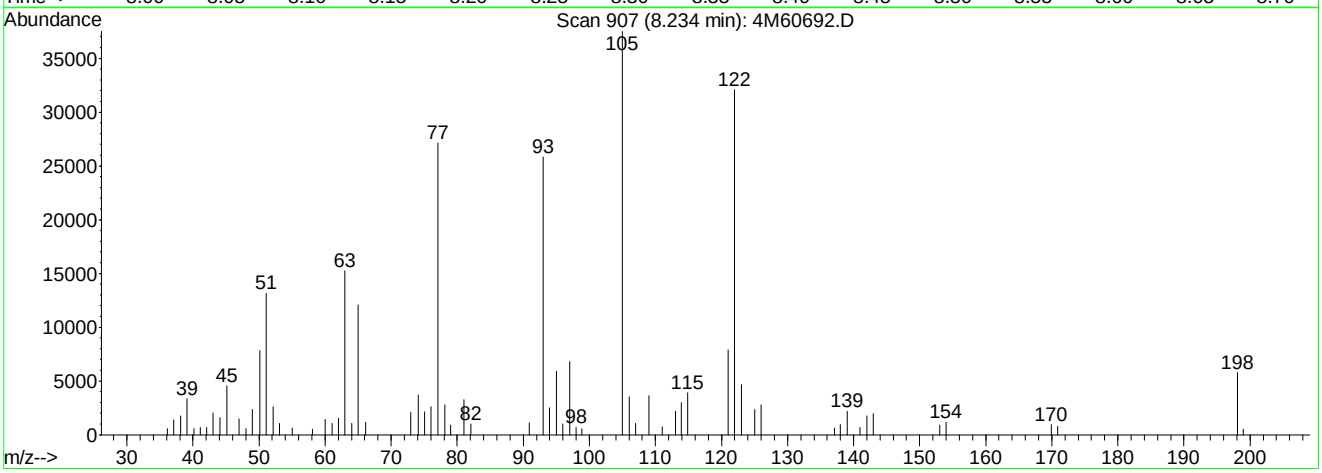
4M60692.D MEGAMIX.M Tue May 08 09:11:24 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60692.D Vial: 2
Acq On : 7 May 2012 8:51 Operator: CAA
Sample : WG397151-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:11 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 07 10:54:35 2012
Response via : Single Level Calibration





TIC: 4M60692.D

(39) Benzoic Acid

8.23min 22.62ug/ml mint

response 158431

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	35.94#
77.00	70.40	24.09#
0.00	0.00	0.00

4M60692.D MEGAMIX.M Tue May 08 [illegible] 2012

Analyst: 05/08/2012 10:44 Supervisor: 05/08/2012 12:53

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60693.D Vial: 3
Acq On : 7 May 2012 9:25 Operator: CAA
Sample : WG397166-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 09:51:47 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:54:56 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

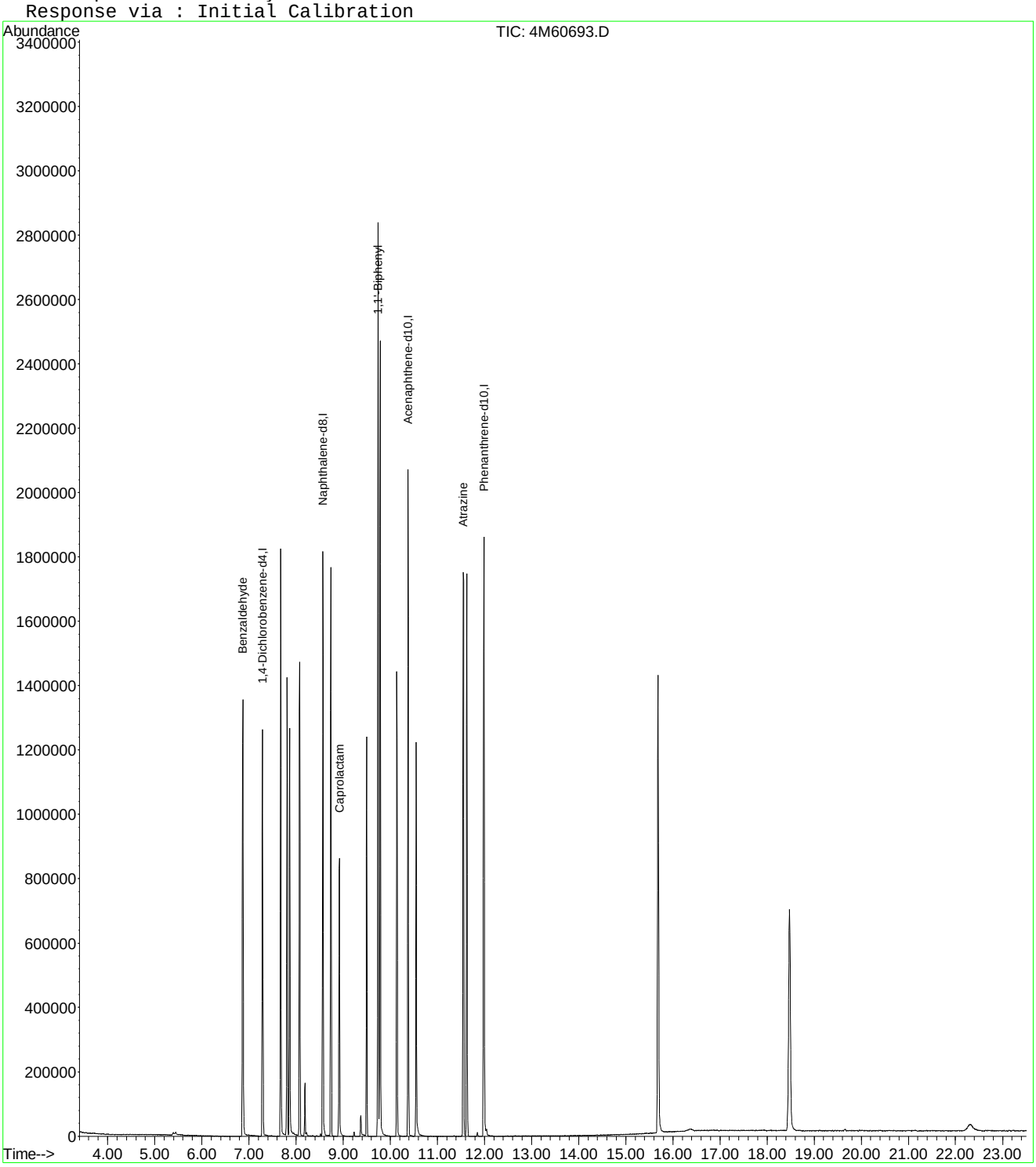
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	258195	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	986609	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	554540	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	982621	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.87	105	351597	51.1242	ug/L	98
4) Caprolactam	8.92	55	172040	53.3958	ug/L	100
6) 1,1'-Biphenyl	9.74	154	1126608	49.4999	ug/L	100
8) Atrazine	11.55	200	278572	51.2178	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60693.D TCL.M Tue May 08 09:50:39 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60693.D Vial: 3
Acq On : 7 May 2012 9:25 Operator: CAA
Sample : WG397166-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 9:51 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



4M60693.D TCL.M Tue May 08 09:50:39 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60745.D Vial: 2
Acq On : 9 May 2012 9:02 Operator: CAA
Sample : WG397449-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 09:32:36 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 08 09:11:55 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	330224	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	1271424	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	714843	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1284869	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	1195386	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	1100745	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.06	112	490289	48.9691	ug/ml	0.01
Spiked Amount 100.000	Range 21 - 100		Recovery = 48.97%			
12) Phenol-d5	6.89	99	590226	50.3695	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 50.37%			
31) Nitrobenzene-d5	7.85	82	549425	51.0926	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 102.18%			
59) 2-Fluorobiphenyl	9.64	172	1186093	49.6892	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 99.38%			
86) 2,4,6-Tribromophenol	11.21	330	167396	52.5124	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 52.51%			
117) p-Terphenyl-d14	14.03	244	1122440	50.9451	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 101.90%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.31	88	211300	51.3405	ug/ml#	95
3) n-Nitrosodimethylamine	4.72	74	301243	49.4309	ug/ml	93
4) Pyridine	4.74	79	534943	49.5112	ug/ml	88
5) 2-Picoline	5.51	93	587404	49.9635	ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	252538	49.7962	ug/ml	91
7) Methyl Methanesulfonate	5.91	80	290414	50.4382	ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	263627	48.4873	ug/ml	94
10) Ethyl Methanesulfonate	6.54	79	378308	50.1644	ug/ml	97
11) Aniline	6.99	93	827386m	47.7811	ug/ml	
13) Phenol	6.90	94	617299	49.3364	ug/ml	100
14) bis(2-Chloroethyl)ether	7.01	63	379042	48.3811	ug/ml	95
15) Pentachloroethane	7.02	167	216650	51.3375	ug/ml	98
16) 2-Chlorophenol	7.12	128	556349	49.6543	ug/ml	98
17) 1,3-Dichlorobenzene	7.26	146	618236	49.5735	ug/ml	99
18) 1,4-Dichlorobenzene	7.31	146	628866	49.4406	ug/ml	100
19) Benzyl Alcohol	7.40	108	354440	48.8569	ug/ml	96
20) 1,2-Dichlorobenzene	7.50	146	585121	49.5339	ug/ml	100
21) 2-Methylphenol	7.49	107	415700	48.1817	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.54	45	682059	42.4043	ug/ml	93
23) 3-,4-Methylphenol	7.62	107	542803	48.3992	ug/ml	98
24) n-Nitrosopyrrolidine	7.67	100	251974	49.7646	ug/ml	94
25) n-Nitrosodipropylamine	7.68	70	363991	51.5950	ug/ml	93
26) Acetophenone	7.68	105	680951	49.0809	ug/ml	98
27) n-Nitrosomorpholine	7.68	56	292965	44.5130	ug/ml	94
28) o-Toluidine	7.72	106	862338	49.1643	ug/ml	99
29) Hexachloroethane	7.82	117	241171	51.2037	ug/ml	100
32) Nitrobenzene	7.87	77	534662	49.8854	ug/ml	99
33) n-Nitrosopiperidine	8.01	114	281661	49.0938	ug/ml	93
34) Isophorone	8.08	82	987927	50.4997	ug/ml	99
35) 2-Nitrophenol	8.19	139	315769	49.9795	ug/ml	99
36) 2,4-Dimethylphenol	8.15	122	504147	46.4706	ug/ml	98
37) 0,0,0-Triethyl Phosphoroth	8.25	198	271535	50.1338	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	770035	51.7938	ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M60745.D MEGAMIX.M Thu May 10 09:29:34 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60745.D Vial: 2
Acq On : 9 May 2012 9:02 Operator: CAA
Sample : WG397449-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 09:32:36 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 08 09:11:55 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.24	105	72706m	9.7242	ug/ml	
40)	2,4-Dichlorophenol	8.41	162	456197	50.2311	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.40	58	1237306	80.5828	ug/ml	99
42)	1,2,4-Trichlorobenzene	8.52	180	522991	50.7142	ug/ml	99
43)	Naphthalene	8.60	128	1629945	48.4066	ug/ml	99
44)	4-Chloroaniline	8.62	127	669495	53.9871	ug/ml	99
45)	2,6-Dichlorophenol	8.64	162	470129	50.1652	ug/ml	99
46)	Hexachloropropene	8.71	213	316159	54.7014	ug/ml	99
47)	Hexachlorobutadiene	8.74	225	270906	51.3122	ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.93	84	462047	51.0995	ug/ml	93
49)	p-Phenylenediamine	9.06	108	38963	49.7993	ug/ml#	83
50)	4-Chloro-3-Methylphenol	9.06	107	452031	49.0480	ug/ml	98
51)	Safrole	9.15	162	443028	50.5442	ug/ml	100
52)	2-Methylnaphthalene	9.28	142	1078585	49.3047	ug/ml	100
53)	1-Methylnaphthalene	9.40	142	1014036	49.0288	ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	481039	51.3510	ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	244096	50.3773	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	334299	50.9283	ug/ml	100
58)	2,4,5-Trichlorophenol	9.62	196	344926	51.0472	ug/ml	99
60)	Isosafrole	9.67	162	460770	51.0074	ug/ml	99
61)	2-Chloronaphthalene	9.79	162	1018687	50.4665	ug/ml	99
62)	1-Chloronaphthalene	9.83	162	976345	51.0820	ug/ml	99
63)	2-Nitroaniline	9.89	65	286715	49.5539	ug/ml	99
64)	1,4-Naphthoquinone	9.95	158	401584	50.3800	ug/ml	99
65)	Dimethylphthalate	10.05	163	1141759	50.4831	ug/ml	99
66)	1,3-Dinitrobenzene	10.10	168	227268	52.4039	ug/ml	98
67)	2,6-Dinitrotoluene	10.14	165	288091	50.9925	ug/ml	98
68)	Acenaphthylene	10.24	152	1598315	49.3155	ug/ml	100
69)	3-Nitroaniline	10.30	138	239701	57.5201	ug/ml	99
70)	2,4-Dinitrophenol	10.41	184	95405	35.9931	ug/ml#	19
71)	Acenaphthene	10.42	154	1020447	48.3397	ug/ml	98
72)	4-Nitrophenol	10.41	65	172265	41.3758	ug/ml	95
73)	2,4-Dinitrotoluene	10.56	165	377057	52.4519	ug/ml	97
74)	Pentachlorobenzene	10.60	250	430661	51.0597	ug/ml	99
75)	Dibenzofuran	10.57	168	1403750	49.6621	ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	257921	49.4954	ug/ml	99
77)	1-Naphthylamine	10.65	143	263256	43.3053	ug/ml#	82
78)	2-Naphthylamine	10.72	143	80980	21.8845	ug/ml#	71
79)	Diethylphthalate	10.75	149	1149492	51.0330	ug/ml	99
80)	Thionazin	10.85	107	189323	50.5144	ug/ml	93
81)	Fluorene	10.93	166	1188369	49.4670	ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	579546	51.3401	ug/ml	99
83)	4-Nitroaniline	10.95	138	275581	53.4235	ug/ml	97
84)	5-Nitro-o-Toluidine	10.94	152	302366	53.3113	ug/ml	97
85)	1,2-Diphenylhydrazine	11.05	77	1127400	51.4645	ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	167780	41.9468	ug/ml	98
89)	n-Nitrosodiphenylamine	11.00	169	1045539	50.2917	ug/ml	100
90)	Sulfotepp	11.20	322	195711	52.6917	ug/ml	98
91)	Sym-Trinitrobenzene	11.29	75	282988	55.6789	ug/ml	98
92)	Diallate	11.32	86	438620	51.7346	ug/ml	90
93)	Phenacetin	11.31	108	570417	52.3724	ug/ml	98
94)	Phorate	11.35	75	703998	52.0478	ug/ml#	98
95)	4-Bromophenyl Phenyl Ether	11.41	248	332528	51.1528	ug/ml	99
96)	Hexachlorobenzene	11.63	284	361815	50.9156	ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60745.D MEGAMIX.M Thu May 10 09:29:34 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60745.D Vial: 2
Acq On : 9 May 2012 9:02 Operator: CAA
Sample : WG397449-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 09:32:36 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 08 09:11:55 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

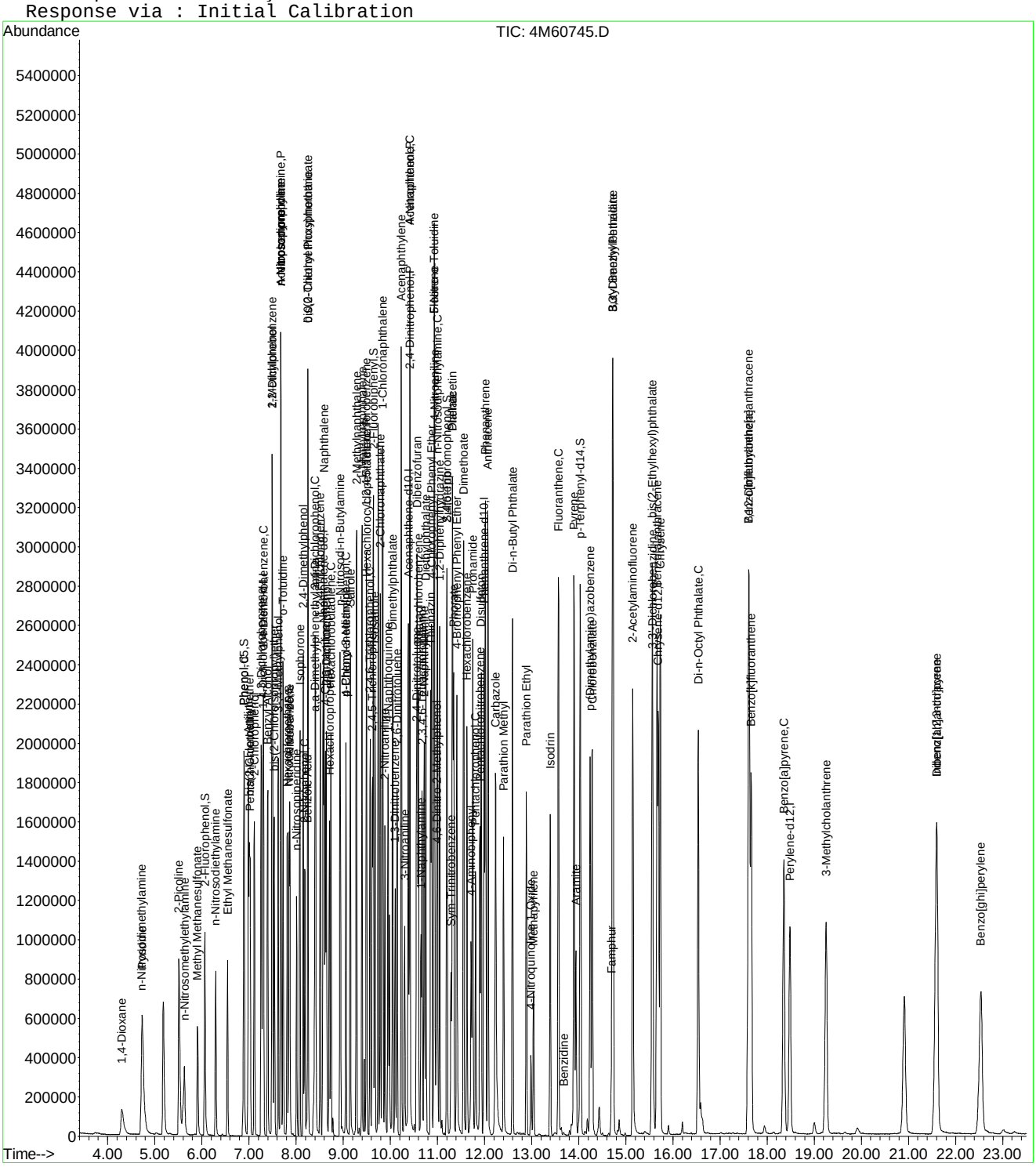
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	386148	53.2033	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	647868	73.6411	ug/ml	99
99)	Pentachlorophenol	11.81	266	212919	47.3826	ug/ml	99
100)	Pronamide	11.75	173	531611	50.8958	ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	132569	53.8279	ug/ml	98
102)	Disulfoton	11.93	88	601613	51.7499	ug/ml	99
103)	Phenanthrene	12.02	178	1646959	48.3258	ug/ml	100
104)	Anthracene	12.07	178	1720089	49.2234	ug/ml	100
105)	Carbazole	12.23	167	1557438	50.8999	ug/ml	100
106)	Parathion Methyl	12.40	109	362589	50.9822	ug/ml	99
107)	Di-n-Butyl Phthalate	12.60	149	1947675	51.2345	ug/ml	100
108)	Parathion Ethyl	12.89	97	236833	54.6956	ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.99	190	68489	21.9115	ug/ml	92
110)	Methapyrilene	13.04	58	267003	34.2692	ug/ml	88
111)	Isodrin	13.40	193	180928	49.4260	ug/ml	99
112)	Fluoranthene	13.57	202	1788836	50.0899	ug/ml	100
114)	Benzidine	13.68	184	25448	15.2738	ug/ml	100
115)	Pyrene	13.90	202	1814370	50.7461	ug/ml	100
116)	Aramite	13.94	185	111614	55.1298	ug/ml	98
118)	p-(Dimethylamino)azobenzen	14.25	225	386753	52.3916	ug/ml	98
119)	Chlorobenzilate	14.29	251	516105	53.0430	ug/ml	99
120)	Famphur	14.69	218	45253	106.7628	ug/ml#	60
121)	Butyl Benzyl Phthalate	14.72	149	839298	51.6088	ug/ml	98
122)	3,3'-Dimethylbenzidine	14.73	212	470820	41.6739	ug/ml#	94
123)	2-Acetylaminofluorene	15.15	181	723934	52.0363	ug/ml	97
124)	bis(2-Ethylhexyl)phthalate	15.56	149	1168721	52.6627	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.58	252	379812	57.2925	ug/ml	100
126)	Benzo[a]anthracene	15.66	228	1589285	50.1154	ug/ml	100
127)	Chrysene	15.73	228	1482060	49.7867	ug/ml	100
129)	Di-n-Octyl Phthalate	16.54	149	2004885	56.3999	ug/ml	98
130)	7,12-Dimethylbenz[a]anthra	17.62	256	772237	54.1729	ug/ml	99
131)	Benzo[b]fluoranthene	17.61	252	1724911	54.1903	ug/ml	99
132)	Benzo[k]fluoranthene	17.66	252	1527688	51.7761	ug/ml	97
133)	Benzo[a]pyrene	18.36	252	1514295	52.1440	ug/ml	99
134)	3-Methylcholanthrene	19.25	268	816027	51.7536	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.60	276	1606270	49.6642	ug/ml	98
136)	Dibenz[ah]anthracene	21.60	278	1363290	50.5415	ug/ml	99
137)	Benzo[ghi]perylene	22.54	276	1270358	47.4806	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60745.D Vial: 2
Acq On : 9 May 2012 9:02 Operator: CAA
Sample : WG397449-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:29 2012 Quant Results File: MEGAMIX.RES

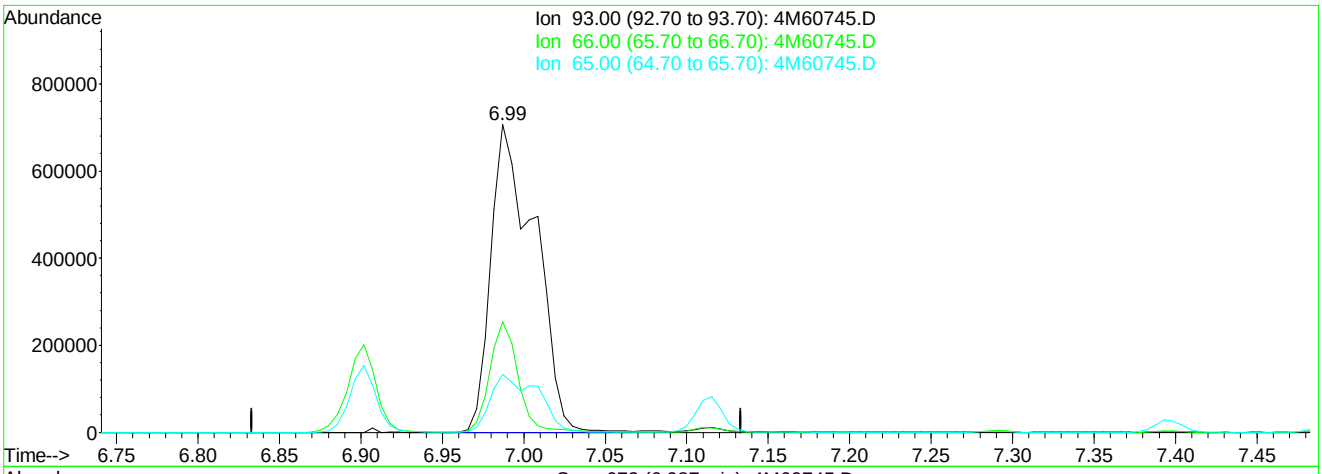
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu May 10 09:03:05 2012
Response via : Initial Calibration

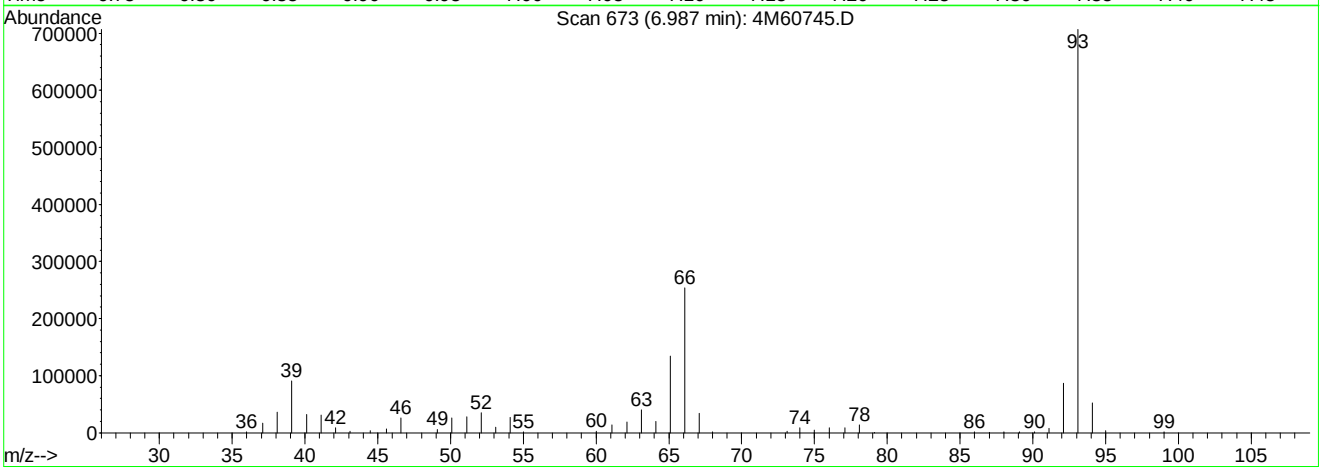


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050912\4M60745.D Vial: 2
Acq On : 9 May 2012 9:02 Operator: CAA
Sample : WG397449-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 9:32 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 : Thu May 10 09:03:05 2012
Response via : Multiple Level Calibration





TIC: 4M60745.D

(11) Aniline

6.99min 75.78ug/ml

response 1312184

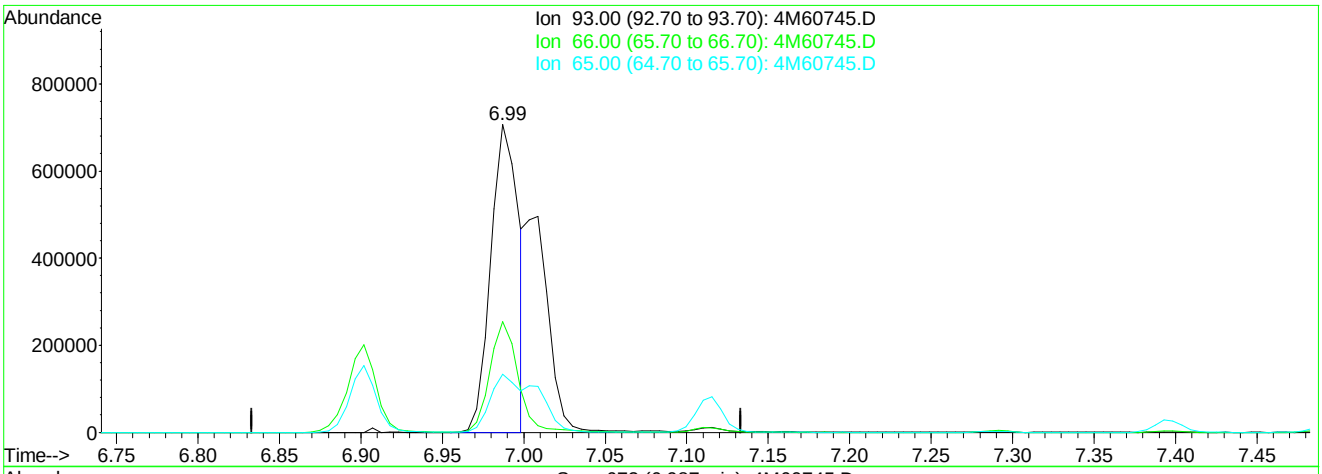
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	22.95
65.00	29.20	20.20
0.00	0.00	0.00

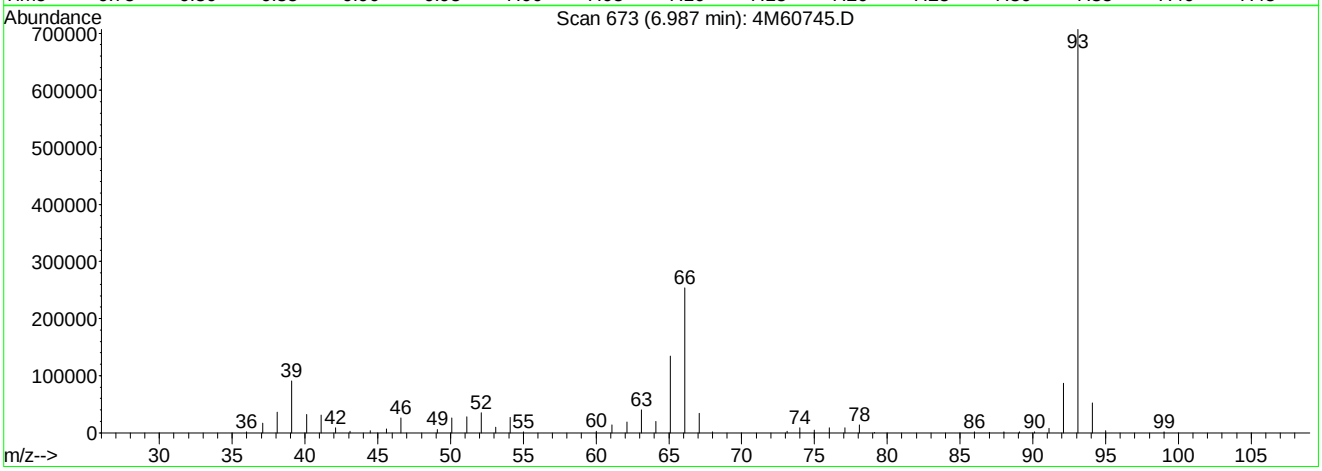
4M60745.D MEGAMIX.M Thu May 10 09:29:00 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050912\4M60745.D Vial: 2
Acq On : 9 May 2012 9:02 Operator: CAA
Sample : WG397449-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:29 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 May 10 09:03:05 2012
Response via : Multiple Level Calibration





TIC: 4M60745.D

(11) Aniline

6.99min 47.78ug/ml mint

response 827386

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	36.39
65.00	29.20	32.03
0.00	0.00	0.00

4M60745.D MEGAMIX.M Thu May 10 2012

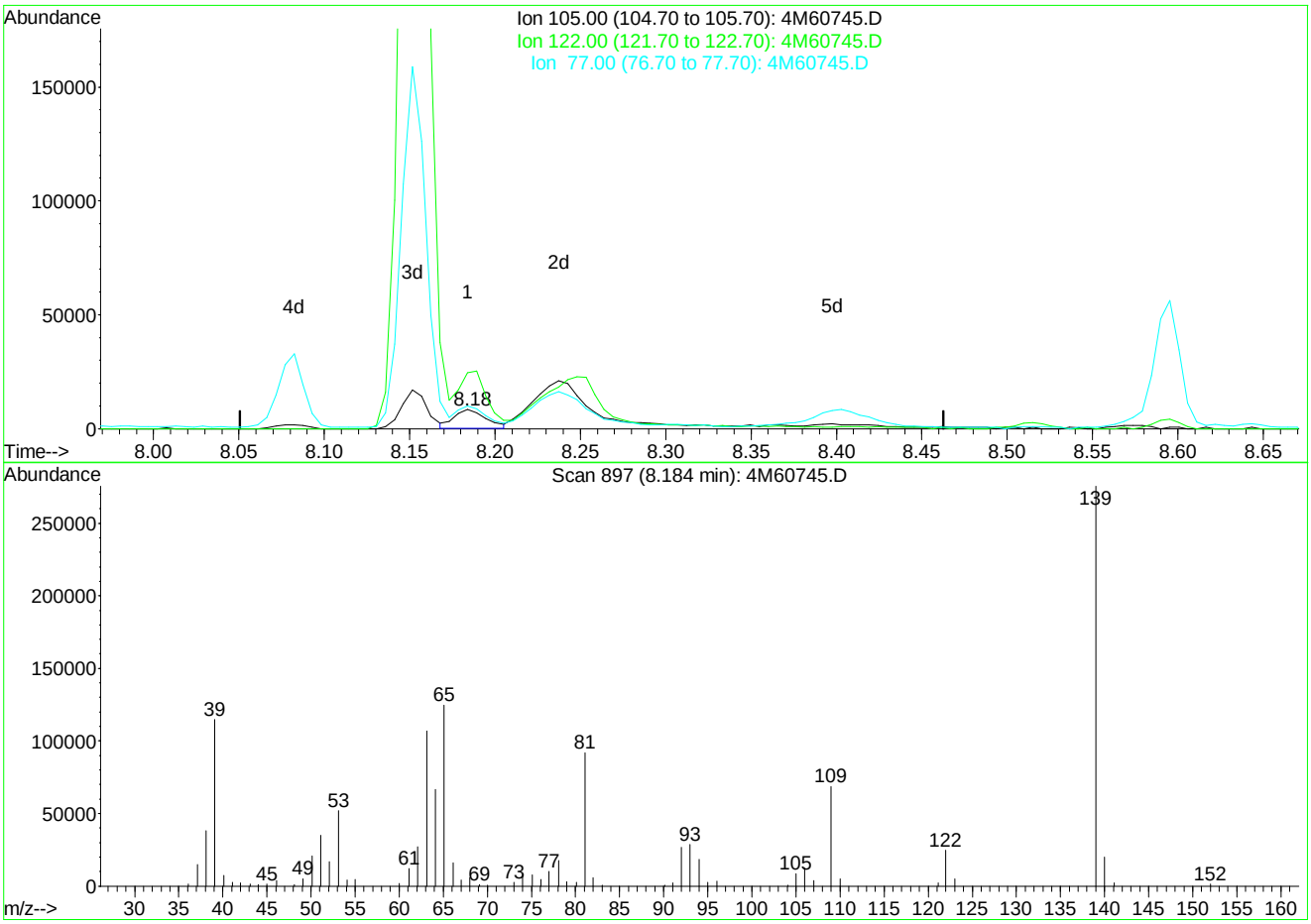
Analyst: 05/10/2012 11:54 Supervisor: 05/10/2012 13:25

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050912\4M60745.D Vial: 2
Acq On : 9 May 2012 9:02 Operator: CAA
Sample : WG397449-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:29 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 May 10 09:03:05 2012
Response via : Single Level Calibration



TIC: 4M60745.D

(39) Benzoic Acid

8.18min 1.40ug/ml

response 10449

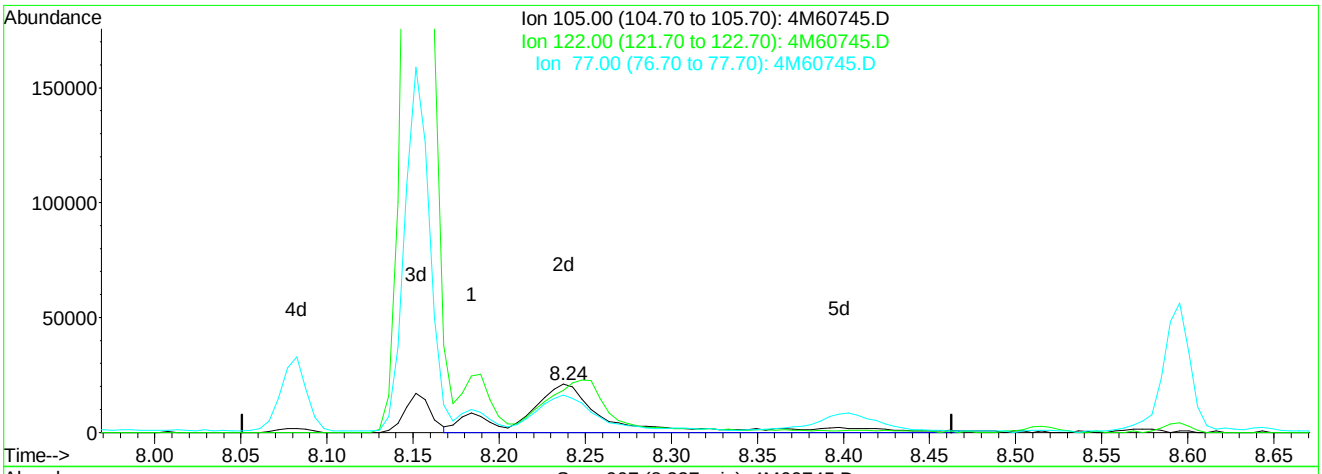
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	219.79#
77.00	70.40	74.59
0.00	0.00	0.00

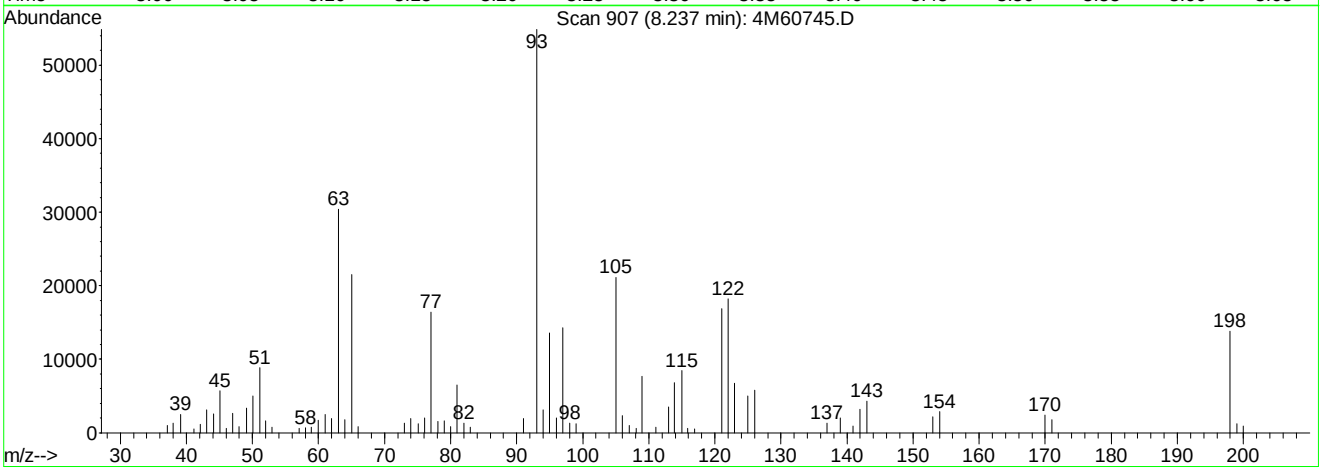
4M60745.D MEGAMIX.M Thu May 10 09:29:07 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050912\4M60745.D Vial: 2
Acq On : 9 May 2012 9:02 Operator: CAA
Sample : WG397449-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:29 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 May 10 09:03:05 2012
Response via : Single Level Calibration





TIC: 4M60745.D

(39) Benzoic Acid

8.24min 9.72ug/ml mint

response 72706

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	31.59#
77.00	70.40	10.72#
0.00	0.00	0.00

4M60745.D MEGAMIX.M Thu May 10 2012

Analyst: 05/10/2012 11:54 Supervisor: 05/10/2012 13:24

#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\050912\4M60746.D Vial: 3
Acq On : 9 May 2012 9:37 Operator: CAA
Sample : WG397451-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 09 10:00:26 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Tue May 08 09:50:41 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

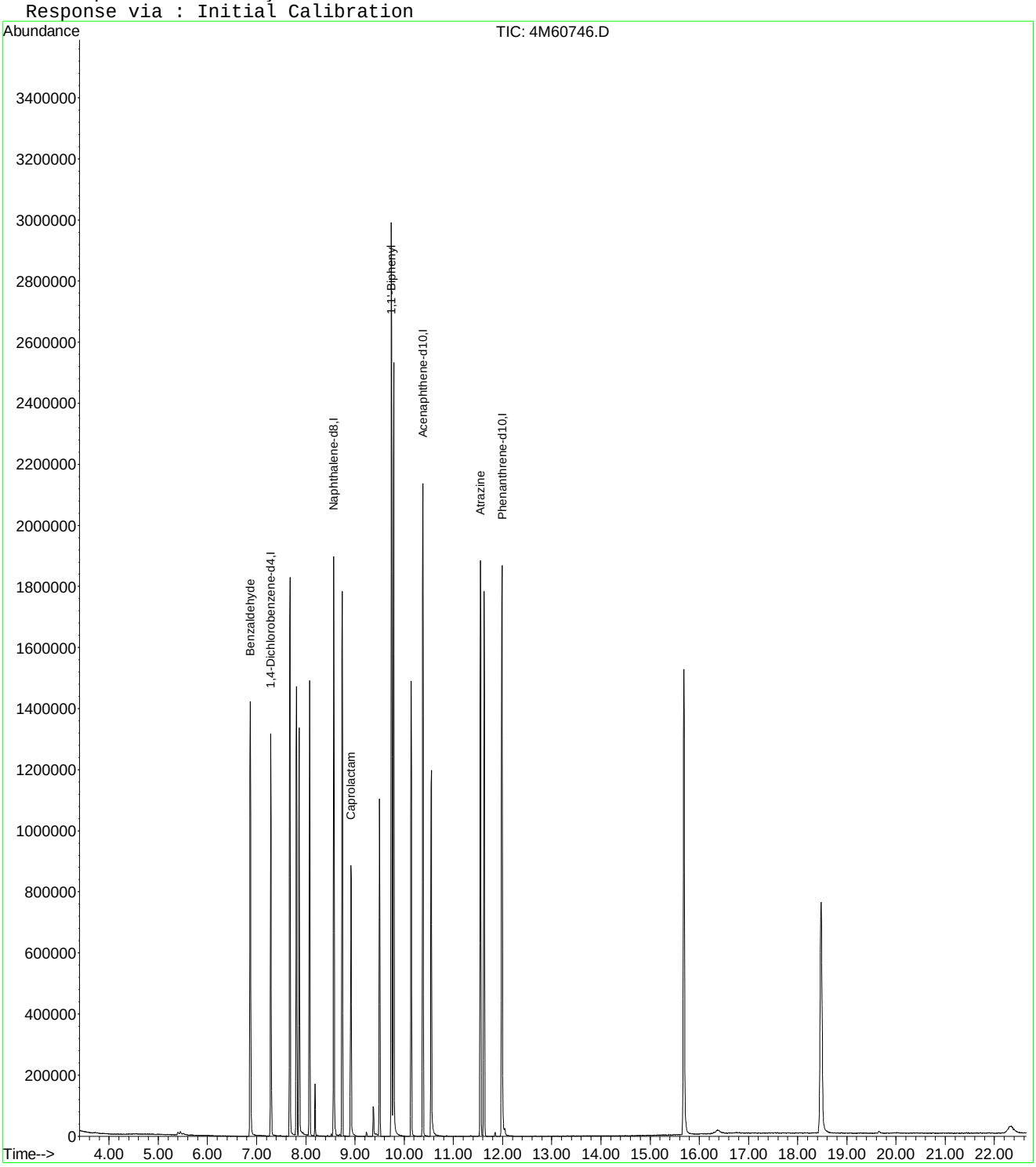
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	263448	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	1015072	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	567459	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	1016448	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.87	105	361330	51.4918	ug/L	99
4) Caprolactam	8.92	55	176828	53.3430	ug/L	100
6) 1,1'-Biphenyl	9.74	154	1159880	49.8016	ug/L	100
8) Atrazine	11.55	200	290847	51.6950	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60746.D TCL.M Thu May 10 11:24:24 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050912\4M60746.D Vial: 3
Acq On : 9 May 2012 9:37 Operator: CAA
Sample : WG397451-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 10:00 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Thu May 10 11:24:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60763.D Vial: 2
Acq On : 10 May 2012 8:38 Operator: CAA
Sample : WG397588-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 09:03:08 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 May 10 09:03:05 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	347649	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	1302370	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.33	164	734669	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1328147	40.00	ug/ml	0.00
113) Chrysene-d12	15.61	240	1259887	40.00	ug/ml	0.00
128) Perylene-d12	18.34	264	1212512	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	510957	48.4755	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 48.48%			
12) Phenol-d5	6.83	99	619344	50.2052	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 50.21%			
31) Nitrobenzene-d5	7.79	82	574742	52.1769	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 104.36%			
59) 2-Fluorobiphenyl	9.58	172	1228937	50.0947	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 100.18%			
86) 2,4,6-Tribromophenol	11.15	330	176511	53.8775	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 53.88%			
117) p-Terphenyl-d14	13.95	244	1175366	50.6162	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 101.24%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.21	88	218019	50.3180	ug/ml#	89
3) n-Nitrosodimethylamine	4.64	74	312607	48.7246	ug/ml	93
4) Pyridine	4.66	79	550256	48.3758	ug/ml	88
5) 2-Picoline	5.44	93	606174	48.9757	ug/ml	98
6) n-Nitrosomethylethylamine	5.56	88	262428	49.1527	ug/ml	90
7) Methyl Methanesulfonate	5.85	80	304645	50.2578	ug/ml	99
9) n-Nitrosodiethylamine	6.23	102	271778	47.4810	ug/ml	95
10) Ethyl Methanesulfonate	6.48	79	394200	49.6517	ug/ml	98
11) Aniline	6.93	93	817295m	44.8327	ug/ml	
13) Phenol	6.84	94	649668	49.3209	ug/ml	100
14) bis(2-Chloroethyl)ether	6.95	63	391805	47.5035	ug/ml	96
15) Pentachloroethane	6.97	167	222977	50.1884	ug/ml	99
16) 2-Chlorophenol	7.06	128	580398	49.2043	ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	647041	49.2828	ug/ml	100
18) 1,4-Dichlorobenzene	7.25	146	656816	49.0498	ug/ml	99
19) Benzyl Alcohol	7.34	108	373587	48.9151	ug/ml	96
20) 1,2-Dichlorobenzene	7.44	146	598543	48.1305	ug/ml	100
21) 2-Methylphenol	7.44	107	429810	47.3202	ug/ml	97
22) bis(2-Chloroisopropyl)ethe	7.48	45	690177	40.7583	ug/ml	93
23) 3-,4-Methylphenol	7.56	107	565459	47.8922	ug/ml	99
24) n-Nitrosopyrrolidine	7.62	100	268162	50.3071	ug/ml	92
25) n-Nitrosodipropylamine	7.62	70	368604	49.6300	ug/ml	95
26) Acetophenone	7.62	105	700153	47.9355	ug/ml	98
27) n-Nitrosomorpholine	7.62	56	302406	43.6444	ug/ml	94
28) o-Toluidine	7.67	106	877974	47.5469	ug/ml	100
29) Hexachloroethane	7.75	117	246440	49.6998	ug/ml	99
32) Nitrobenzene	7.81	77	563467	51.3238	ug/ml	99
33) n-Nitrosopiperidine	7.95	114	290389	49.4124	ug/ml	94
34) Isophorone	8.02	82	1009831	50.3929	ug/ml	99
35) 2-Nitrophenol	8.13	139	359968	55.6215	ug/ml	96
36) 2,4-Dimethylphenol	8.10	122	524441	47.1926	ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.20	198	280168	50.4986	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.20	93	783762	51.4645	ug/ml	100

(#) = qualifier out of range (m) = manual integration
4M60763.D MEGAMIX.M Fri May 11 08:14:41 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60763.D Vial: 2
Acq On : 10 May 2012 8:38 Operator: CAA
Sample : WG397588-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 09:03:08 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 May 10 09:03:05 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.14	105	143241m	18.7029 ug/ml	
40)	2,4-Dichlorophenol	8.35	162	479579	51.5509 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.35	58	548288	34.8602 ug/ml	97
42)	1,2,4-Trichlorobenzene	8.46	180	543572	51.4574 ug/ml	99
43)	Naphthalene	8.54	128	1702016	49.3460 ug/ml	98
44)	4-Chloroaniline	8.56	127	651861	51.3161 ug/ml	99
45)	2,6-Dichlorophenol	8.58	162	486128	50.6398 ug/ml	100
46)	Hexachloropropene	8.65	213	330827	55.8792 ug/ml	99
47)	Hexachlorobutadiene	8.69	225	283863	52.4888 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.88	84	469586	50.6993 ug/ml	93
49)	p-Phenylenediamine	9.00	108	39942	49.8375 ug/ml	86
50)	4-Chloro-3-Methylphenol	9.00	107	468533	49.6306 ug/ml	98
51)	Safrole	9.10	162	454312	50.6000 ug/ml	100
52)	2-Methylnaphthalene	9.23	142	1110633	49.5633 ug/ml	100
53)	1-Methylnaphthalene	9.34	142	1053440	49.7237 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.43	216	495735	51.4917 ug/ml	100
56)	Hexachlorocyclopentadiene	9.44	237	258320	51.8742 ug/ml	100
57)	2,4,6-Trichlorophenol	9.51	196	350495	51.9547 ug/ml	99
58)	2,4,5-Trichlorophenol	9.56	196	361978	52.1251 ug/ml	100
60)	Isosafrole	9.62	162	473801	51.0345 ug/ml	100
61)	2-Chloronaphthalene	9.73	162	1058545	51.0259 ug/ml	99
62)	1-Chloronaphthalene	9.77	162	1005536	51.1895 ug/ml	99
63)	2-Nitroaniline	9.83	65	302306	50.8386 ug/ml	99
64)	1,4-Naphthoquinone	9.89	158	411710	50.2564 ug/ml	98
65)	Dimethylphthalate	9.99	163	1182505	50.8738 ug/ml	100
66)	1,3-Dinitrobenzene	10.05	168	236968	53.1660 ug/ml	97
67)	2,6-Dinitrotoluene	10.09	165	303244	52.2261 ug/ml	99
68)	Acenaphthylene	10.18	152	1633533	49.0419 ug/ml	99
69)	3-Nitroaniline	10.25	138	188038	43.9050 ug/ml	98
70)	2,4-Dinitrophenol	10.35	184	114622	40.9226 ug/ml	55
71)	Acenaphthene	10.36	154	1048314	48.3196 ug/ml	98
72)	4-Nitrophenol	10.35	65	208034	48.6186 ug/ml	99
73)	2,4-Dinitrotoluene	10.50	165	390670	52.8790 ug/ml	97
74)	Pentachlorobenzene	10.54	250	452518	52.2033 ug/ml	99
75)	Dibenzofuran	10.51	168	1447761	49.8369 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.61	232	256243	47.8464 ug/ml	100
77)	1-Naphthylamine	10.59	143	98130	15.7067 ug/ml	93
78)	2-Naphthylamine	10.66	143	43682	11.4863 ug/ml#	82
79)	Diethylphthalate	10.70	149	1185067	51.1925 ug/ml	99
80)	Thionazin	10.80	107	193817	50.3180 ug/ml	93
81)	Fluorene	10.87	166	1225874	49.6511 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.82	204	599675	51.6897 ug/ml	99
83)	4-Nitroaniline	10.89	138	280117	52.8374 ug/ml	98
84)	5-Nitro-o-Toluidine	10.88	152	290632	49.8596 ug/ml	99
85)	1,2-Diphenylhydrazine	10.99	77	1153626	51.2405 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.92	198	184607	44.6498 ug/ml	98
89)	n-Nitrosodiphenylamine	10.94	169	1063315	49.4801 ug/ml	99
90)	Sulfotepp	11.14	322	205996	53.6535 ug/ml	97
91)	Sym-Trinitrobenzene	11.23	75	291038	55.3969 ug/ml	98
92)	Diallate	11.27	86	442085	50.4442 ug/ml	92
93)	Phenacetin	11.26	108	579282	51.4533 ug/ml	99
94)	Phorate	11.28	75	713144	51.0060 ug/ml#	98
95)	4-Bromophenyl Phenyl Ether	11.35	248	343709	51.1499 ug/ml	99
96)	Hexachlorobenzene	11.57	284	385907	52.5364 ug/ml	100

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60763.D Vial: 2
Acq On : 10 May 2012 8:38 Operator: CAA
Sample : WG397588-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 09:03:08 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 May 10 09:03:05 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

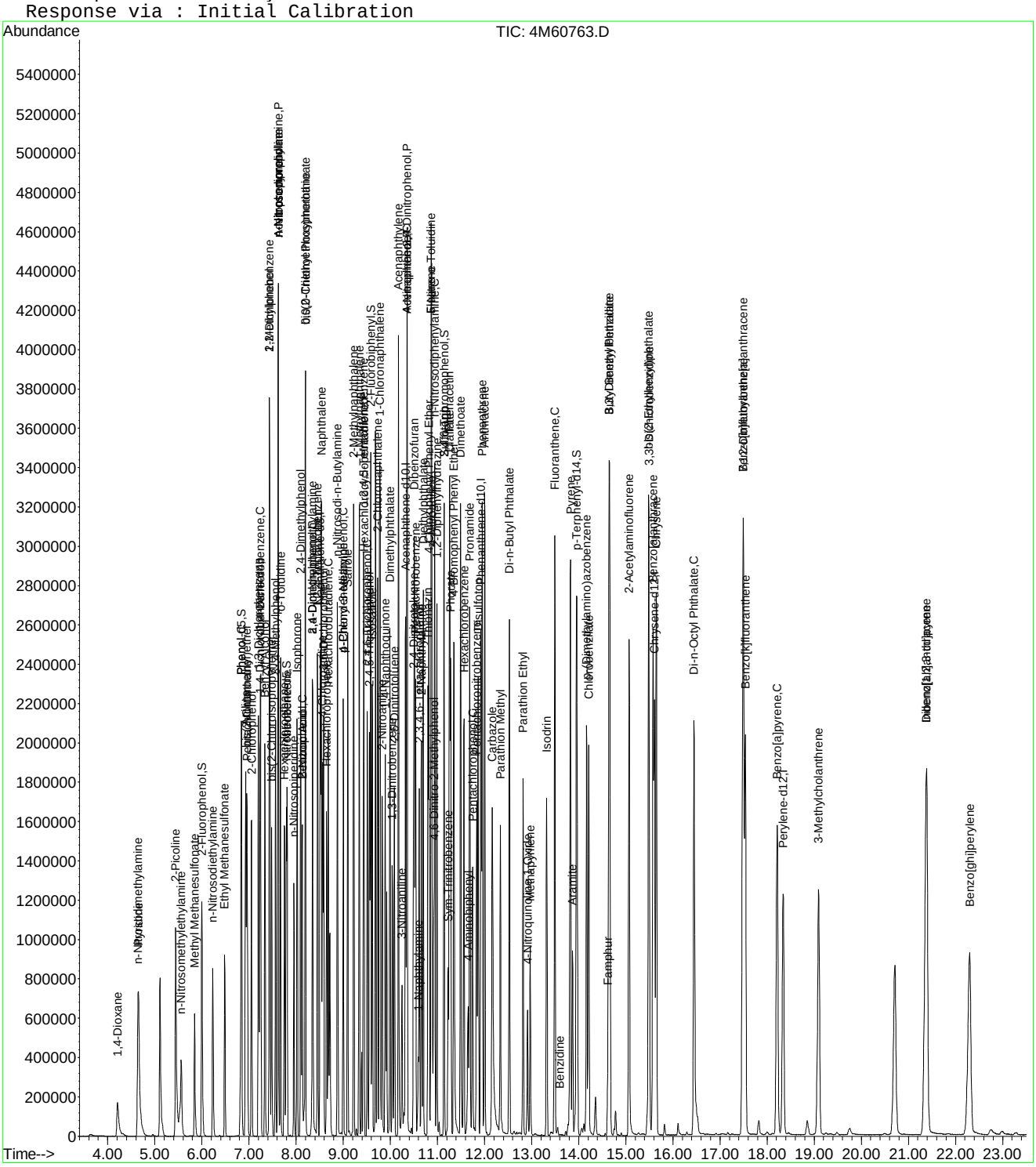
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.50	87	399002	53.1782	ug/ml	98
98)	4-Aminobiphenyl	11.65	169	494435	60.5035	ug/ml	99
99)	Pentachlorophenol	11.75	266	217642	46.8555	ug/ml	100
100)	Pronamide	11.69	173	542240	50.2218	ug/ml	99
101)	Pentachloronitrobenzene	11.83	237	139175	54.6688	ug/ml	97
102)	Disulfoton	11.86	88	614420	51.1294	ug/ml	99
103)	Phenanthrene	11.96	178	1709112	48.5154	ug/ml	100
104)	Anthracene	12.00	178	1766008	48.8907	ug/ml	100
105)	Carbazole	12.17	167	1589330	50.2497	ug/ml	99
106)	Parathion Methyl	12.34	109	376112	51.1604	ug/ml	99
107)	Di-n-Butyl Phthalate	12.53	149	1994963	50.7684	ug/ml	100
108)	Parathion Ethyl	12.82	97	238906	53.3764	ug/ml	99
109)	4-Nitroquinoline 1-Oxide	12.91	190	107422	33.0362	ug/ml	97
110)	Methapyrilene	12.97	58	345078	46.6001	ug/ml	87
111)	Isodrin	13.32	193	189383	50.0499	ug/ml	99
112)	Fluoranthene	13.49	202	1834289	49.6890	ug/ml	100
114)	Benzidine	13.60	184	8090	4.6070	ug/ml	100
115)	Pyrene	13.83	202	1868138	49.5749	ug/ml	100
116)	Aramite	13.87	185	113159	53.0314	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.17	225	406991	52.3105	ug/ml	98
119)	Chlorobenzilate	14.22	251	534453	52.1166	ug/ml	100
120)	Famphur	14.62	218	30215	67.6351	ug/ml	82
121)	Butyl Benzyl Phthalate	14.64	149	863910	50.4025	ug/ml	98
122)	3,3'-Dimethylbenzidine	14.65	212	440800	37.0192	ug/ml#	94
123)	2-Acetylaminofluorene	15.07	181	769701	52.4935	ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.49	149	1192722	50.9927	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.50	252	407093	58.2893	ug/ml	100
126)	Benzo[a]anthracene	15.58	228	1677671	50.1941	ug/ml	100
127)	Chrysene	15.65	228	1538079	49.0234	ug/ml	100
129)	Di-n-Octyl Phthalate	16.45	149	2039798	52.0927	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.50	256	816850	52.0205	ug/ml	100
131)	Benzo[b]fluoranthene	17.49	252	1864484	53.1758	ug/ml	99
132)	Benzo[k]fluoranthene	17.54	252	1600030	49.2293	ug/ml	97
133)	Benzo[a]pyrene	18.22	252	1639365	51.2472	ug/ml	99
134)	3-Methylcholanthrene	19.09	268	903014	51.9914	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.39	276	1903373	53.4257	ug/ml	98
136)	Dibenz[ah]anthracene	21.38	278	1611880	54.2492	ug/ml	98
137)	Benzo[ghi]perylene	22.30	276	1567778	53.1955	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051012\4M60763.D Vial: 2
Acq On : 10 May 2012 8:38 Operator: CAA
Sample : WG397588-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 8:14 2012 Quant Results File: MEGAMIX.RES

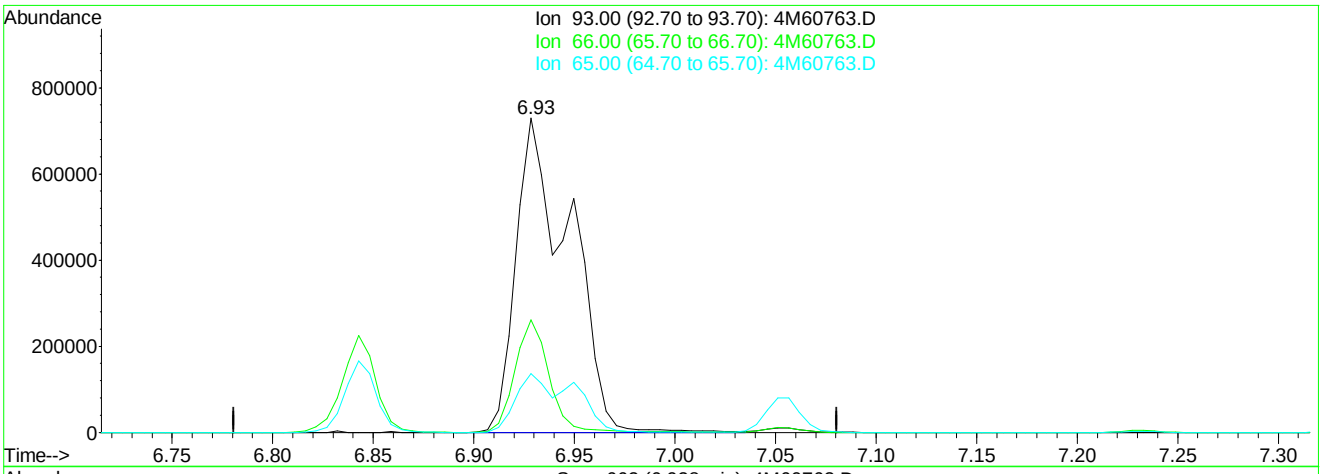
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu May 10 15:19:56 2012
Response via : Initial Calibration

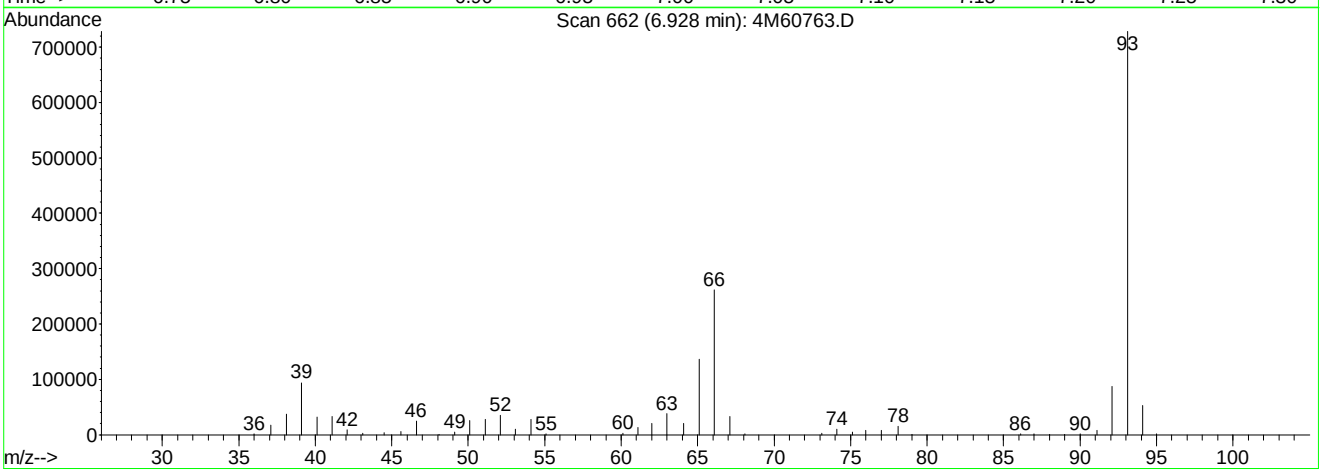


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051012\4M60763.D Vial: 2
Acq On : 10 May 2012 8:38 Operator: CAA
Sample : WG397588-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:03 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 May 10 15:19:56 2012
Response via : Multiple Level Calibration





TIC: 4M60763.D

(11) Aniline

6.93min 74.26ug/ml

response 1353821

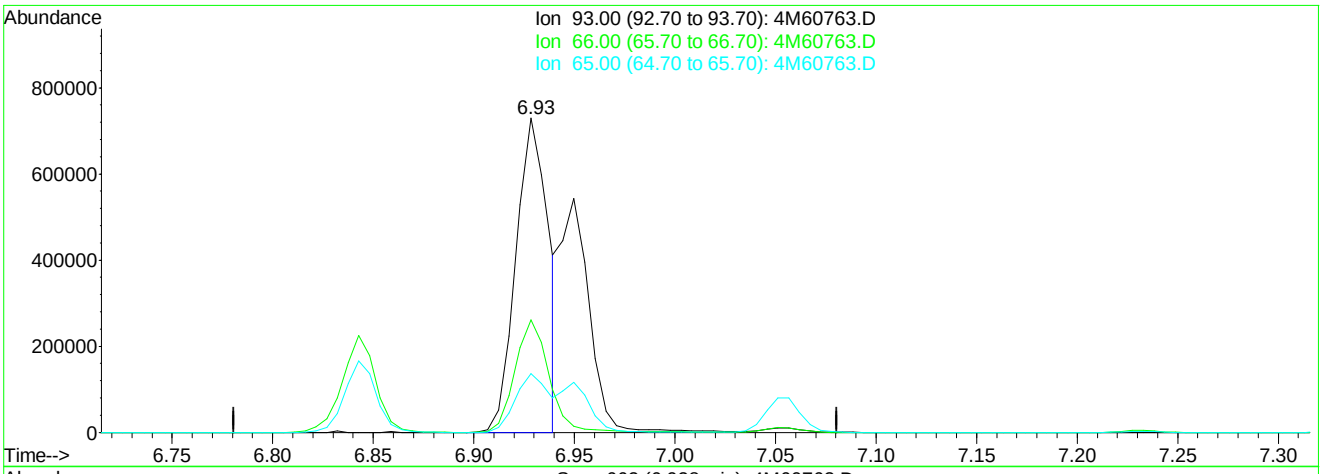
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	22.97
65.00	29.20	11.60#
0.00	0.00	0.00

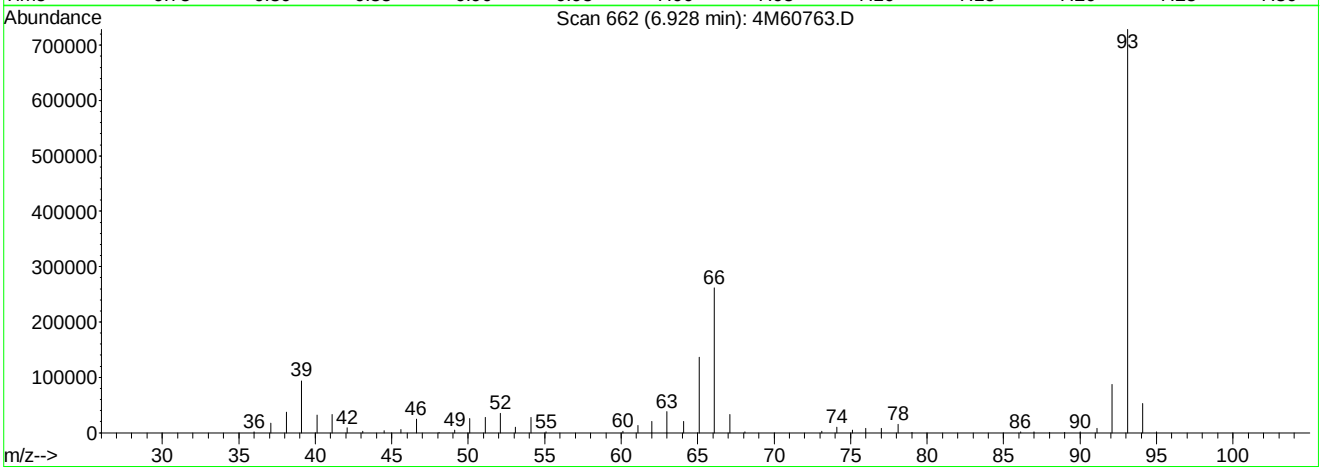
4M60763.D MEGAMIX.M Fri May 11 08:14:00 2012

Quantitation Report (Qedit)

```
Data File : I:\MSDCHEM\1\DATA\051012\4M60763.D          Vial: 2
Acq On    : 10 May 2012   8:38                      Operator: CAA
Sample    : WG397588-02 50PPM Megamix STD           Inst    : HPMS4
Misc      : 1,1 STD50886                            Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11  8:14 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 May 10 15:19:56 2012
Response via : Multiple Level Calibration
```





TIC: 4M60763.D

(11) Aniline

6.93min 44.83ug/ml mint

response 817295

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	38.05
65.00	29.20	19.22
0.00	0.00	0.00

4M60763.D MEGAMIX.M Fri May 11 ; 2012

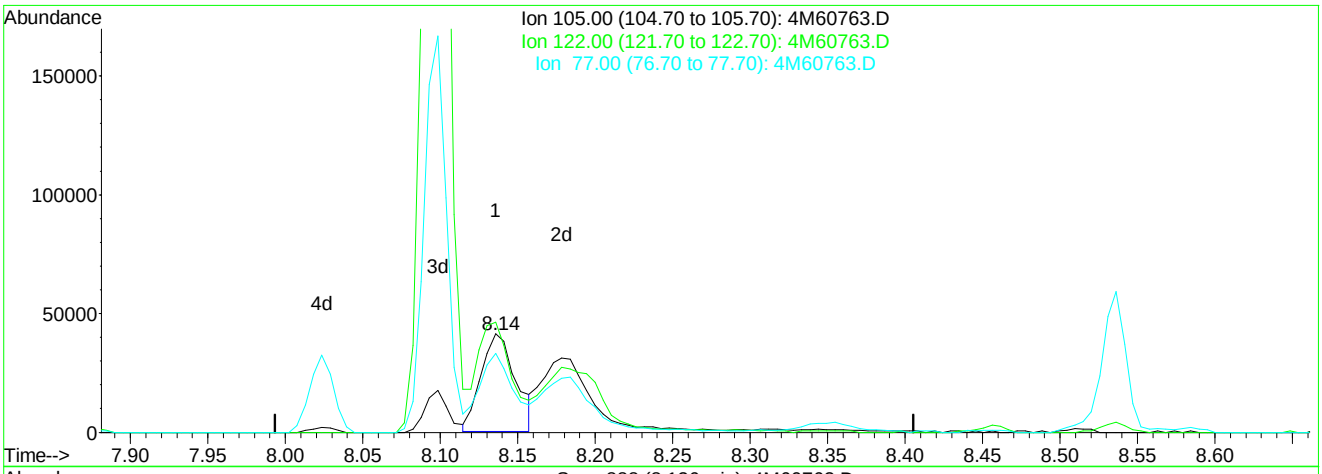
Analyst: 05/11/2012 10:43 Supervisor: 05/11/2012 13:34

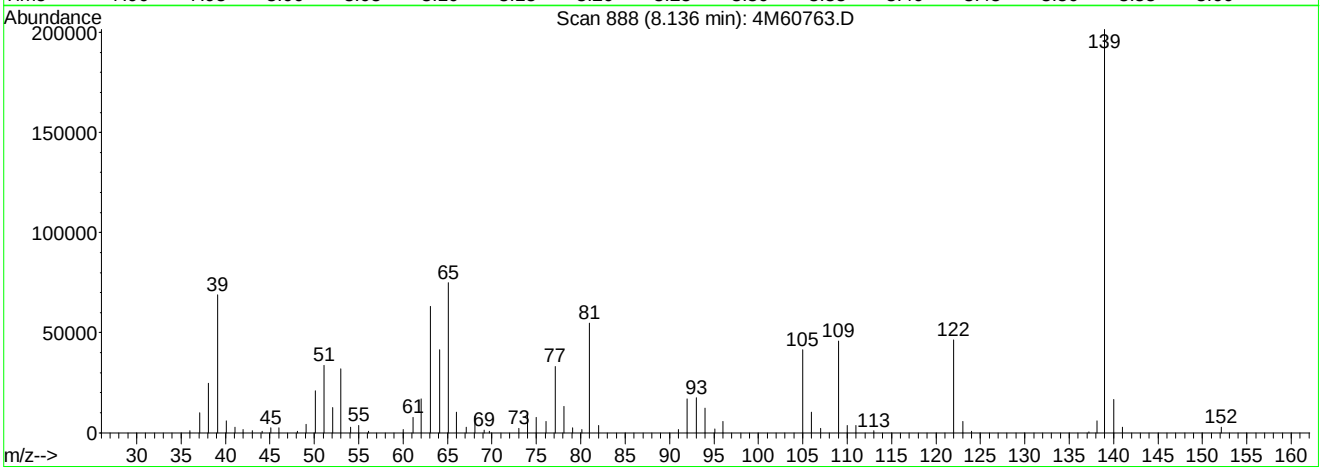
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051012\4M60763.D Vial: 2
Acq On : 10 May 2012 8:38 Operator: CAA
Sample : WG397588-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 8:14 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 May 10 15:19:56 2012
Response via : Single Level Calibration





TIC: 4M60763.D

(39) Benzoic Acid

8.14min 8.31ug/ml

response 63651

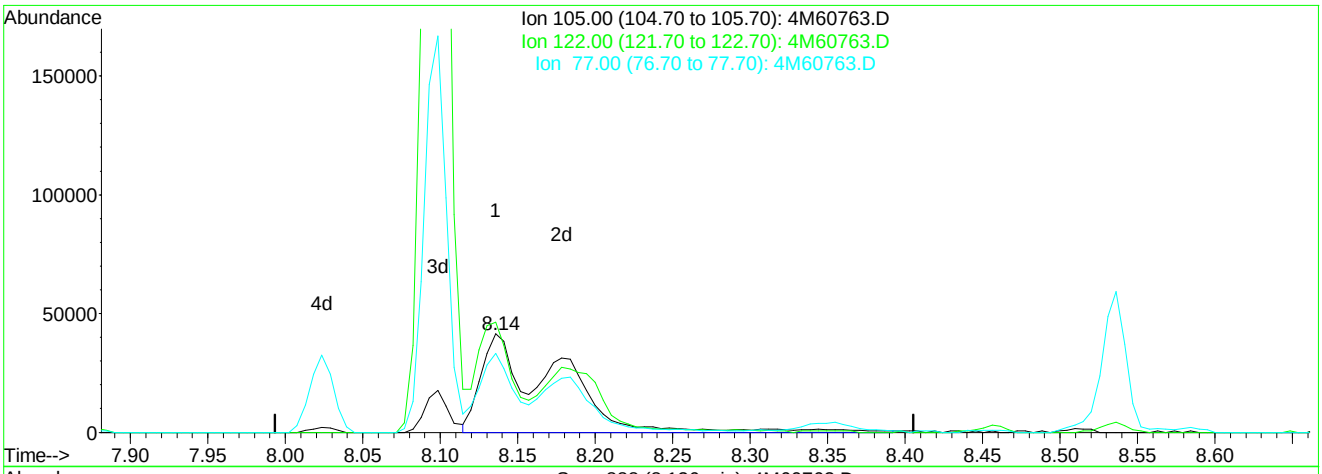
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	106.48
77.00	70.40	79.82
0.00	0.00	0.00

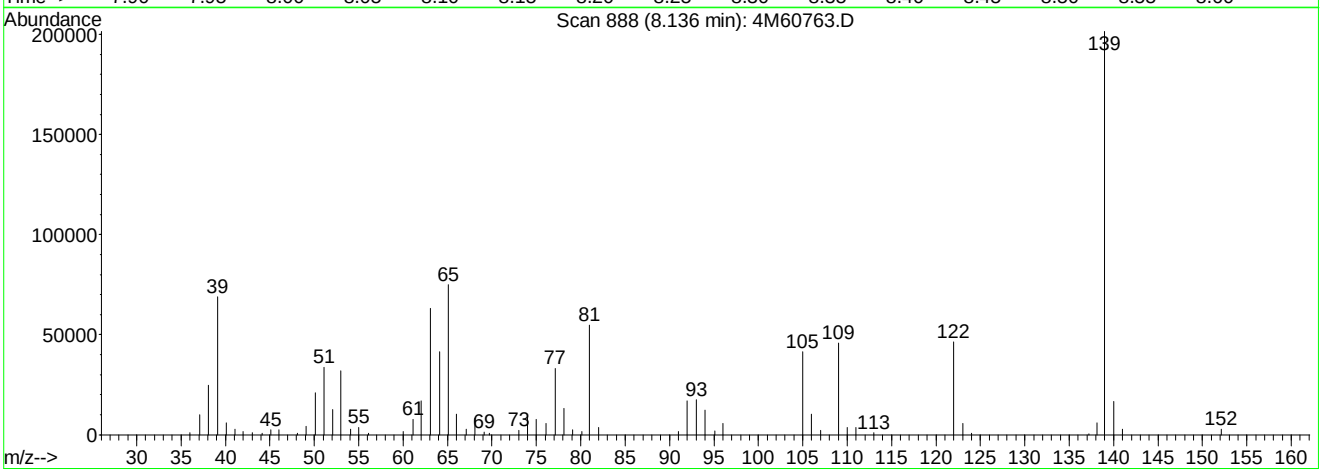
4M60763.D MEGAMIX.M Fri May 11 08:14:13 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051012\4M60763.D Vial: 2
Acq On : 10 May 2012 8:38 Operator: CAA
Sample : WG397588-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 8:14 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 May 10 15:19:56 2012
Response via : Single Level Calibration





TIC: 4M60763.D

(39) Benzoic Acid

8.14min 18.70ug/ml mint

response 143241

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	47.31#
77.00	70.40	35.47#
0.00	0.00	0.00

4M60763.D MEGAMIX.M Fri May 11 2012

Analyst: 05/11/2012 10:43 Supervisor: 05/11/2012 13:34

#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\051012\4M60764.D Vial: 3
Acq On : 10 May 2012 9:12 Operator: CAA
Sample : WG397589-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 09:31:56 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Thu May 10 09:31:54 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

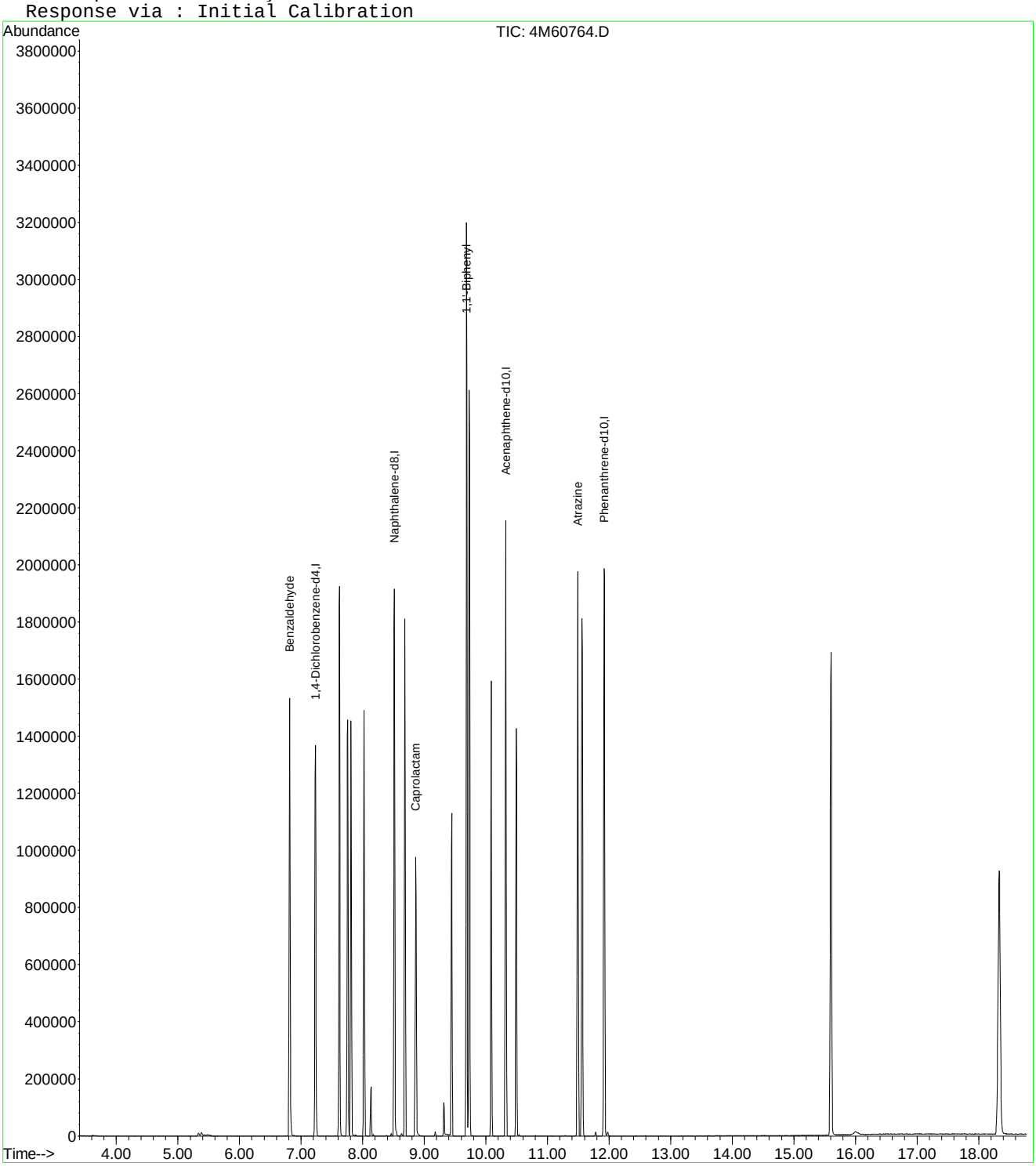
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	278718	40.00	ug/mL	0.00
3) Naphthalene-d8	8.52	136	1044555	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	582179	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1044220	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.81	105	383163	51.6117	ug/L	99
4) Caprolactam	8.86	55	187055	54.8354	ug/L	99
6) 1,1'-Biphenyl	9.69	154	1181830	49.4610	ug/L	99
8) Atrazine	11.50	200	294060	50.8760	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60764.D TCL.M Fri May 11 09:00:10 2012 Page 1

Quantitation Report (Not Reviewed)

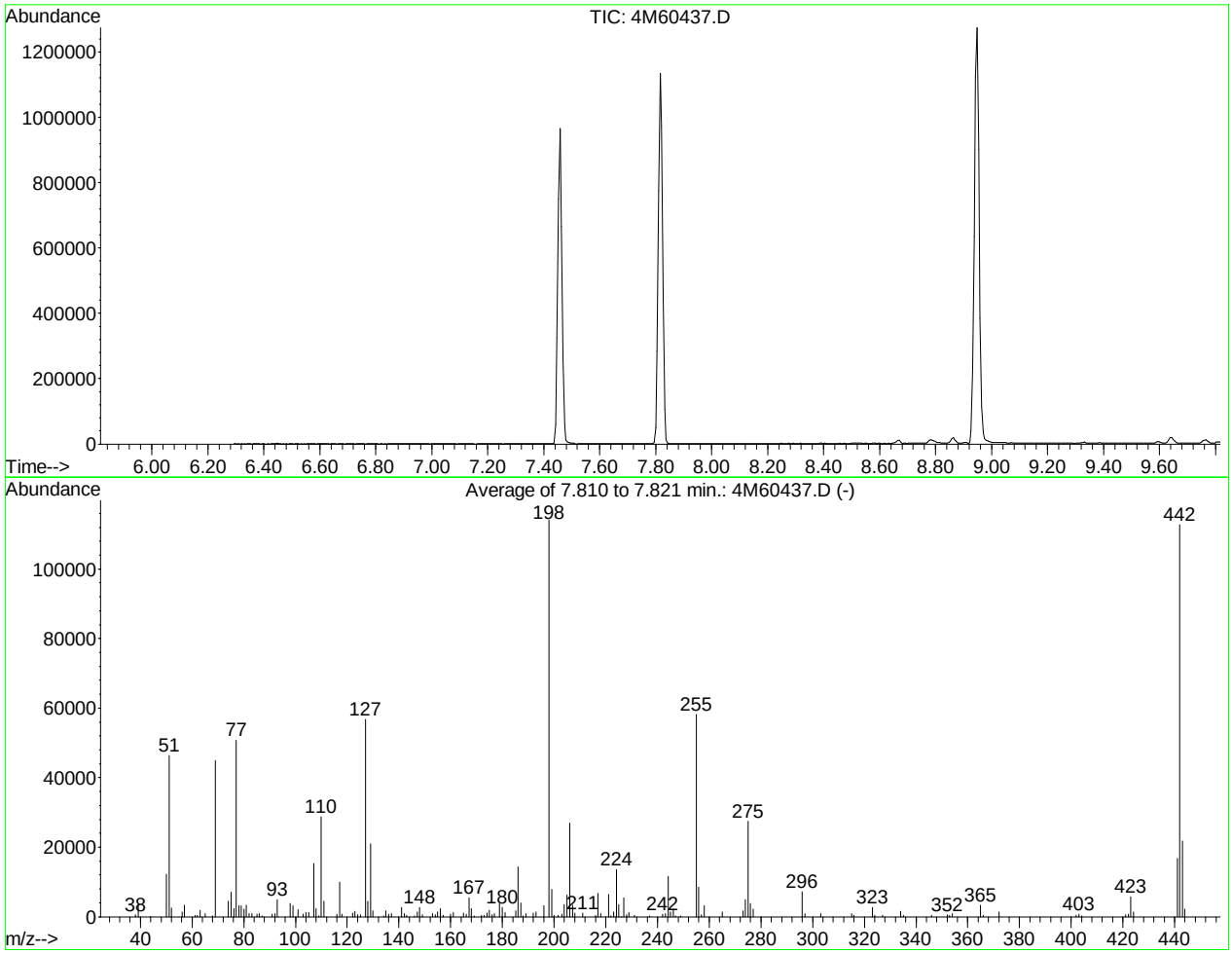
Data File : I:\MSDCHEM\1\DATA\051012\4M60764.D Vial: 3
Acq On : 10 May 2012 9:12 Operator: CAA
Sample : WG397589-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:31 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Fri May 11 09:00:03 2012
Response via : Initial Calibration



2.2.1.5 Raw QC Data

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



AutoFind: Scans 285, 286, 287; Background Corrected with Scan 279

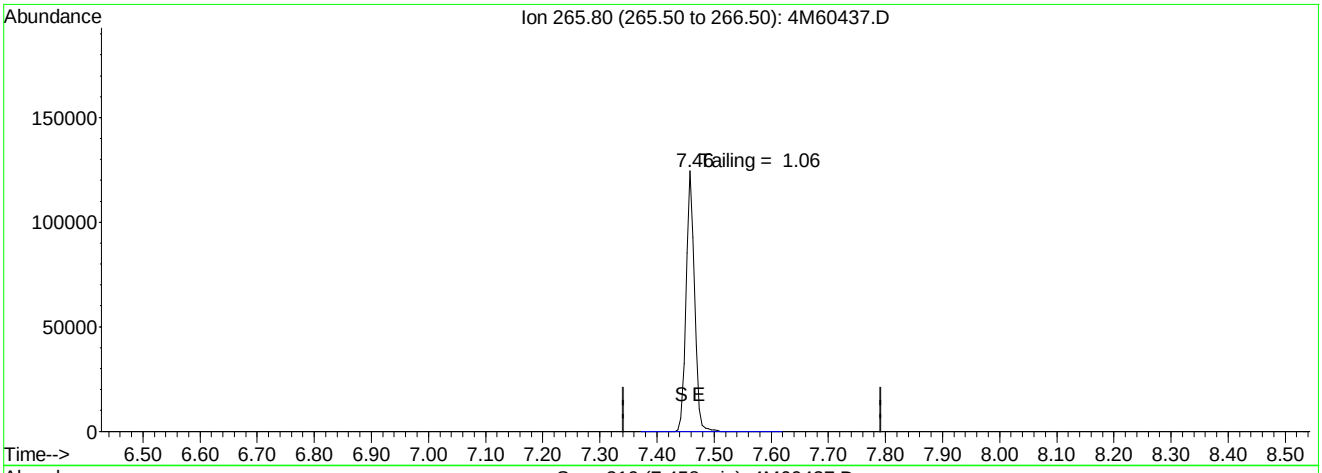
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.7	46389	PASS
68	69	0.00	2	0.7	296	PASS
69	198	0.00	100	39.4	44901	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.8	56768	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	114077	PASS
199	198	5	9	6.8	7794	PASS
275	198	10	30	24.0	27400	PASS
365	198	1	100	2.9	3319	PASS
441	443	0.01	100	76.9	16803	PASS
442	198	40	100	98.8	112693	PASS
443	442	17	23	19.4	21851	PASS

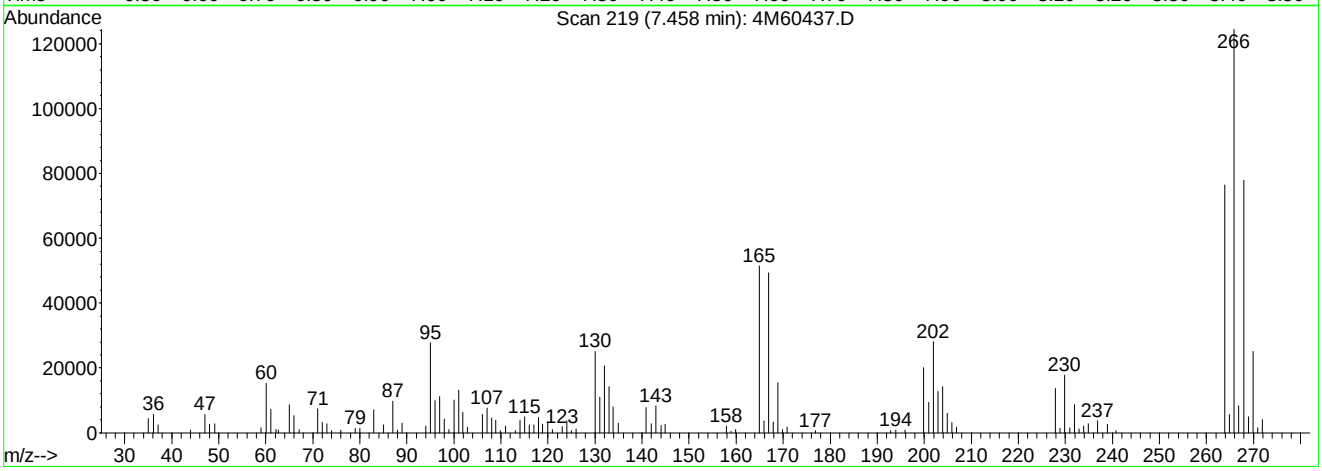
4M60437.D DFTPP.M Fri Apr 20 08:17:55 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60437.D

(1) Pentachlorophenol

7.46min 0.00ug/ml

response 128509

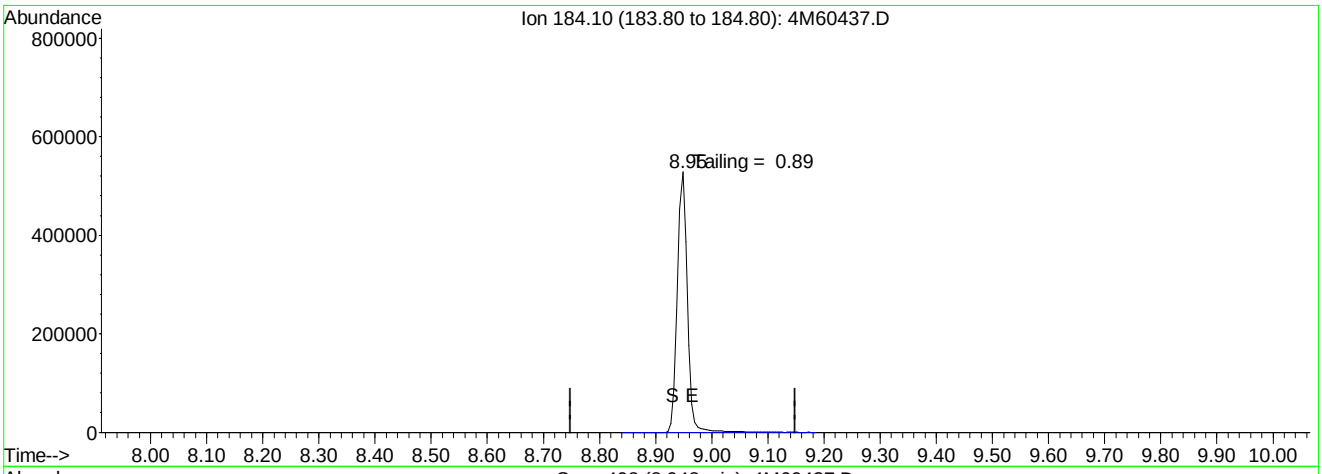
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

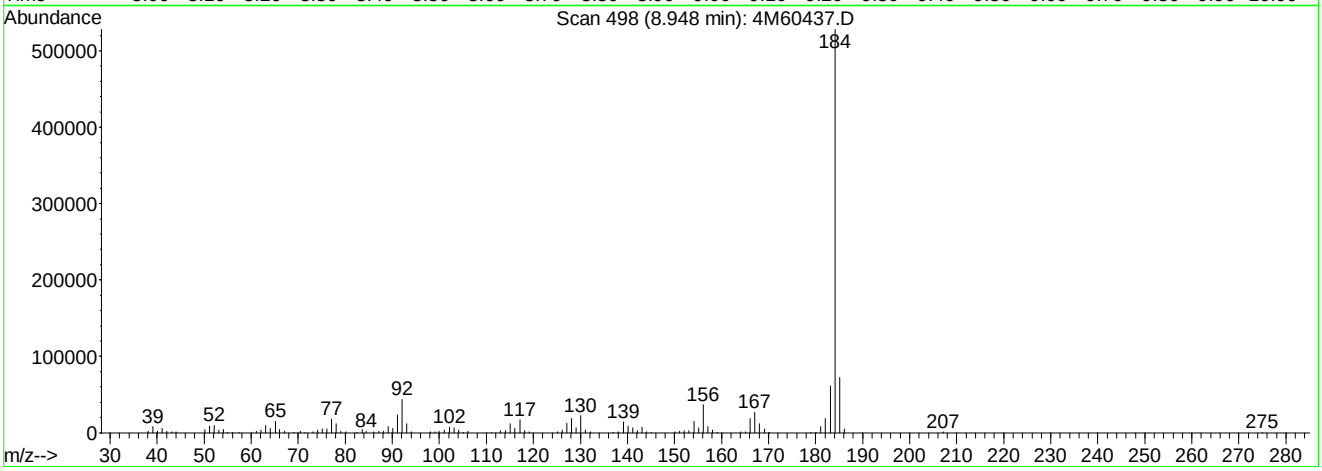
4M60437.D DFTPP.M Fri Apr 20 08:18:15 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60437.D

(2) Benzidine

8.95min 0.00ug/ml

response 651083

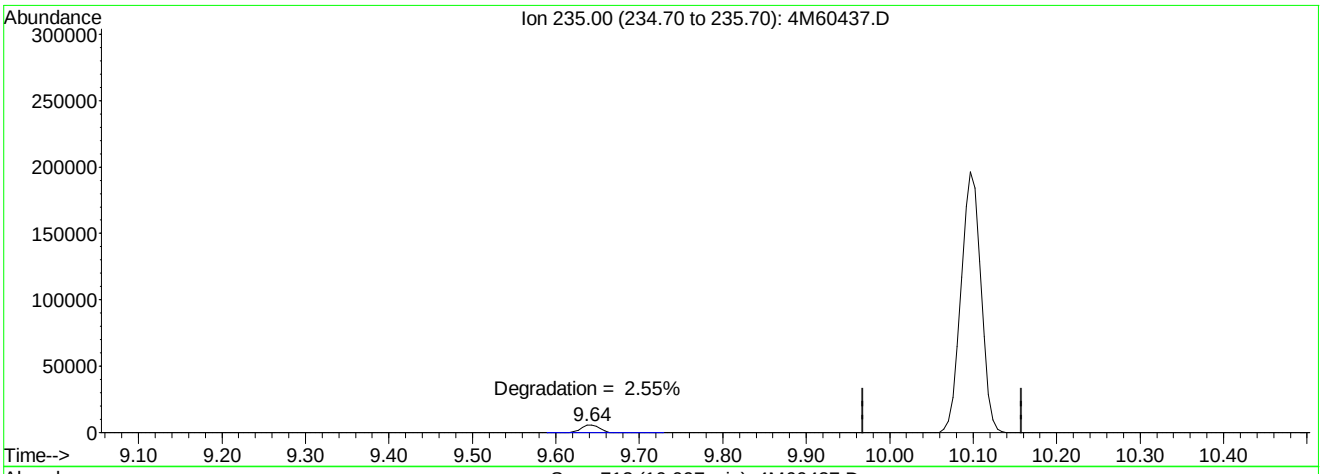
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

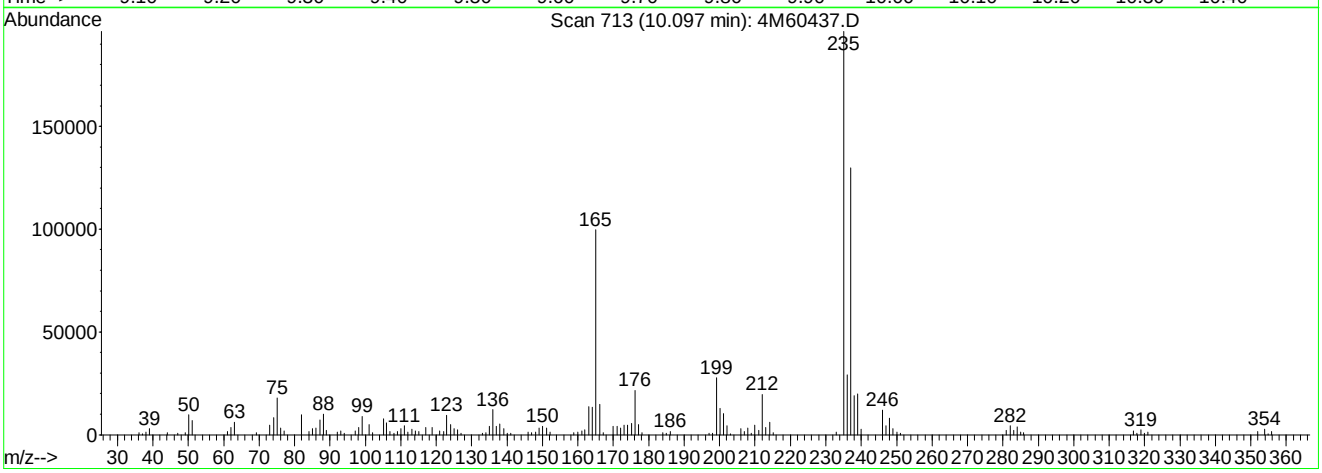
4M60437.D DFTPP.M Fri Apr 20 08:18:21 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60437.D

(3) DDT

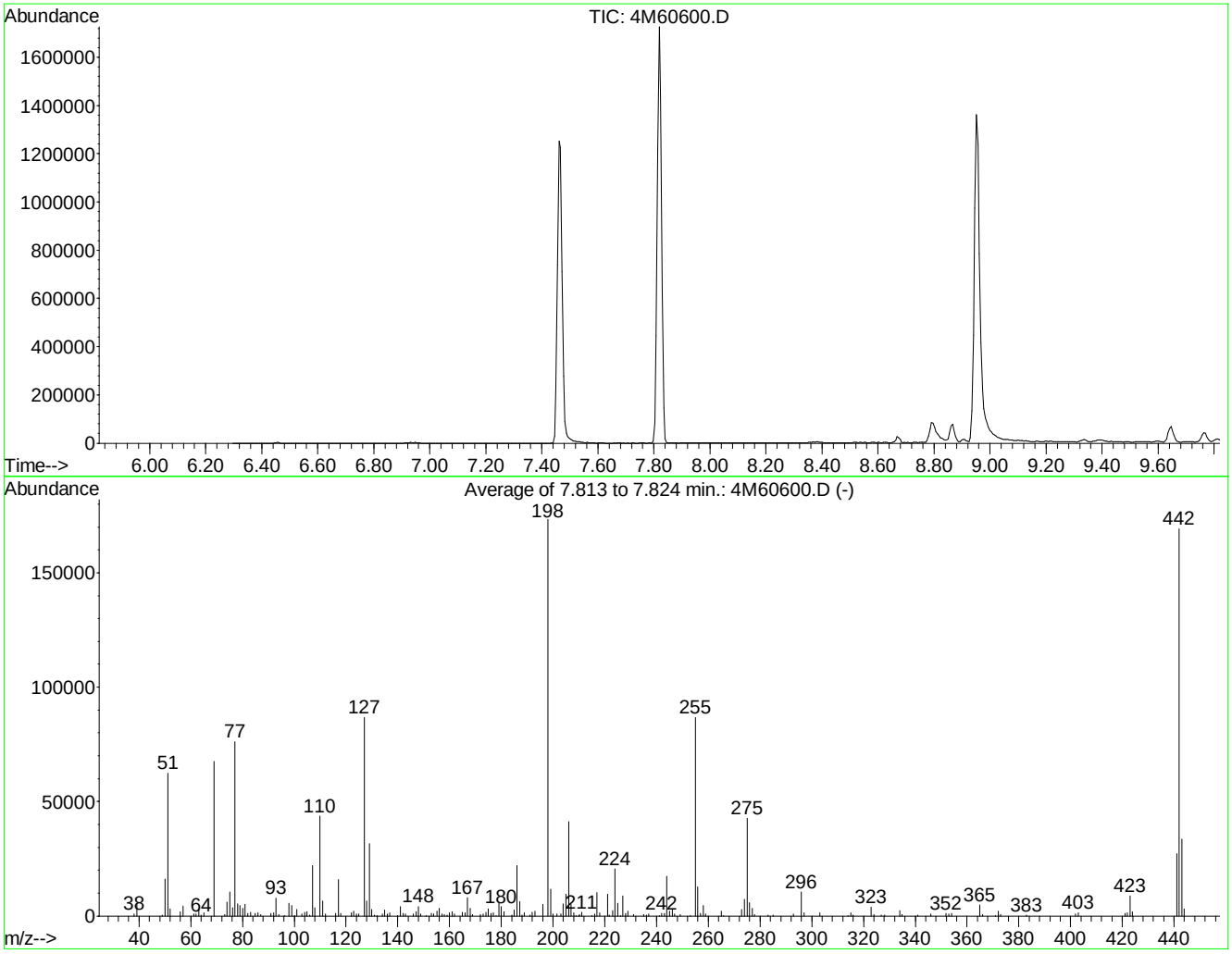
10.10min 0.00ug/ml

response 324289

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60437.D DFTPP.M Fri Apr 20 08:18:28 2012

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



AutoFind: Scans 285, 286, 287; Background Corrected with Scan 279

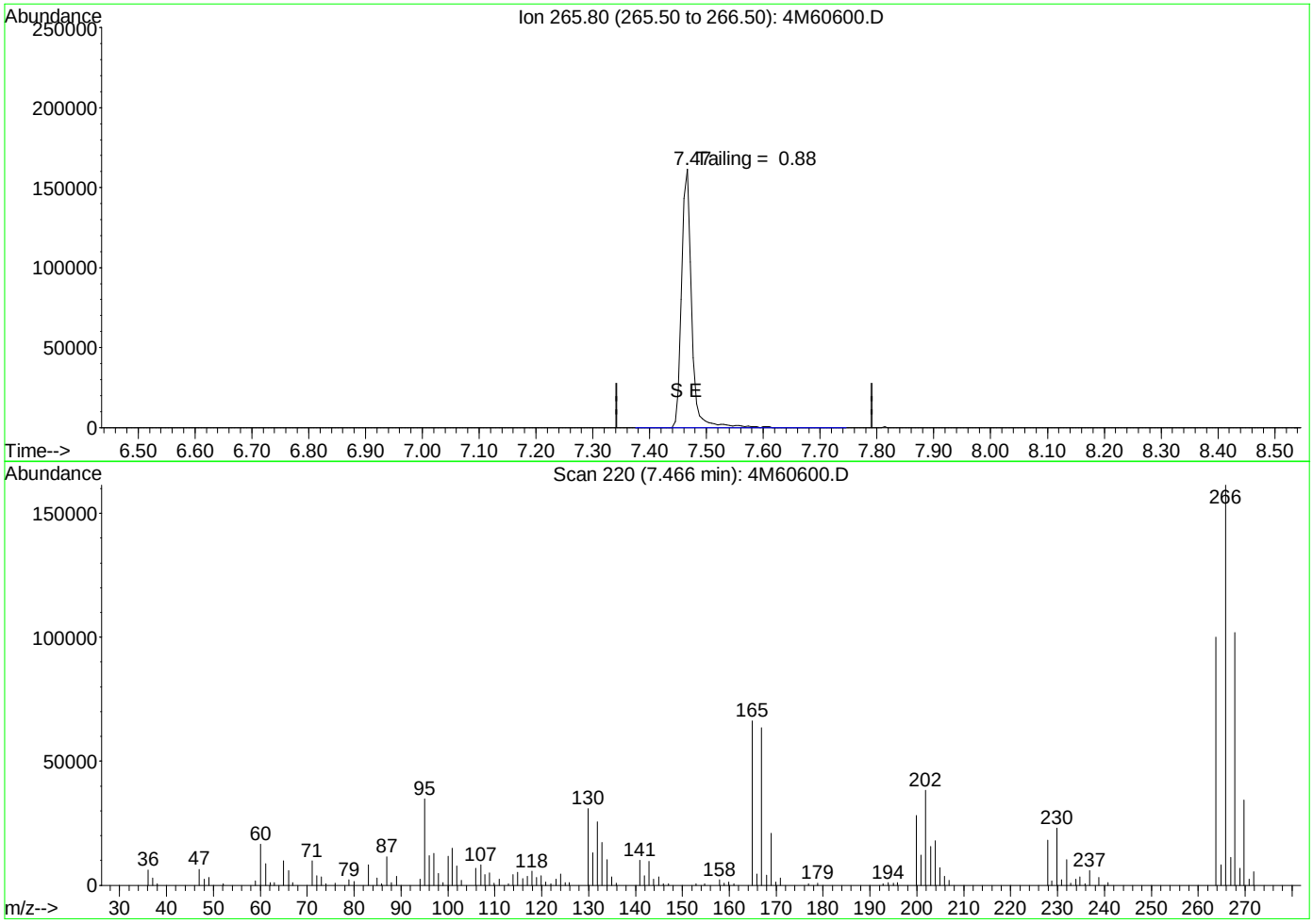
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.0	62456	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.0	67664	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.1	86805	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	173418	PASS
199	198	5	9	6.7	11620	PASS
275	198	10	30	24.6	42746	PASS
365	198	1	100	2.8	4791	PASS
441	443	0.01	100	80.8	27090	PASS
442	198	40	100	97.5	169160	PASS
443	442	17	23	19.8	33546	PASS

4M60600.D DFTPP.M Wed May 02 13:32:01 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration



TIC: 4M60600.D

(1) Pentachlorophenol

7.47min 0.00ug/ml

response 195050

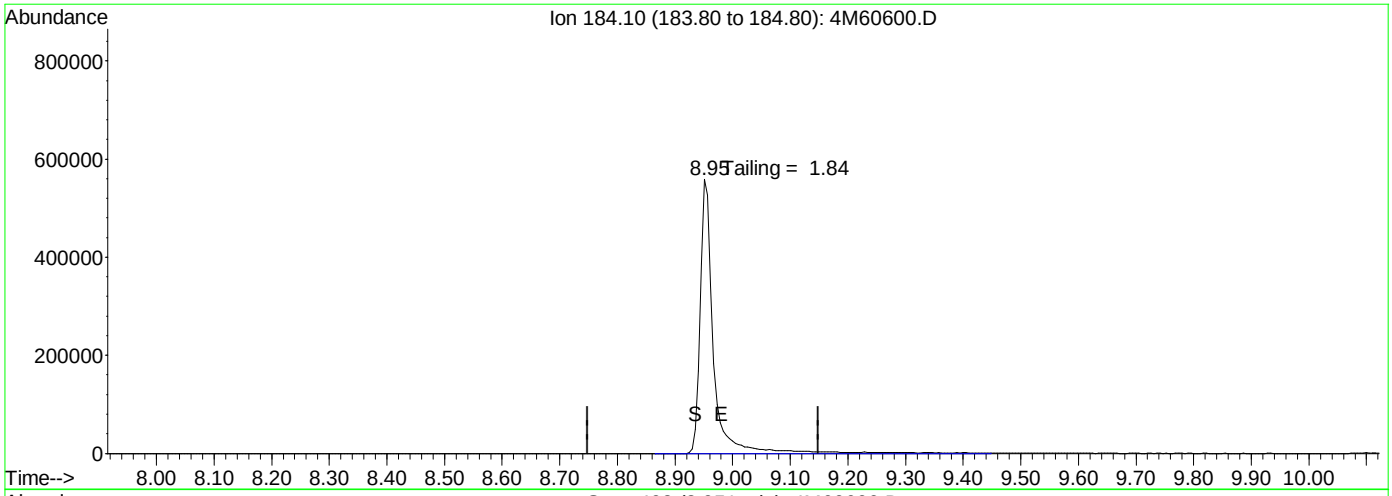
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

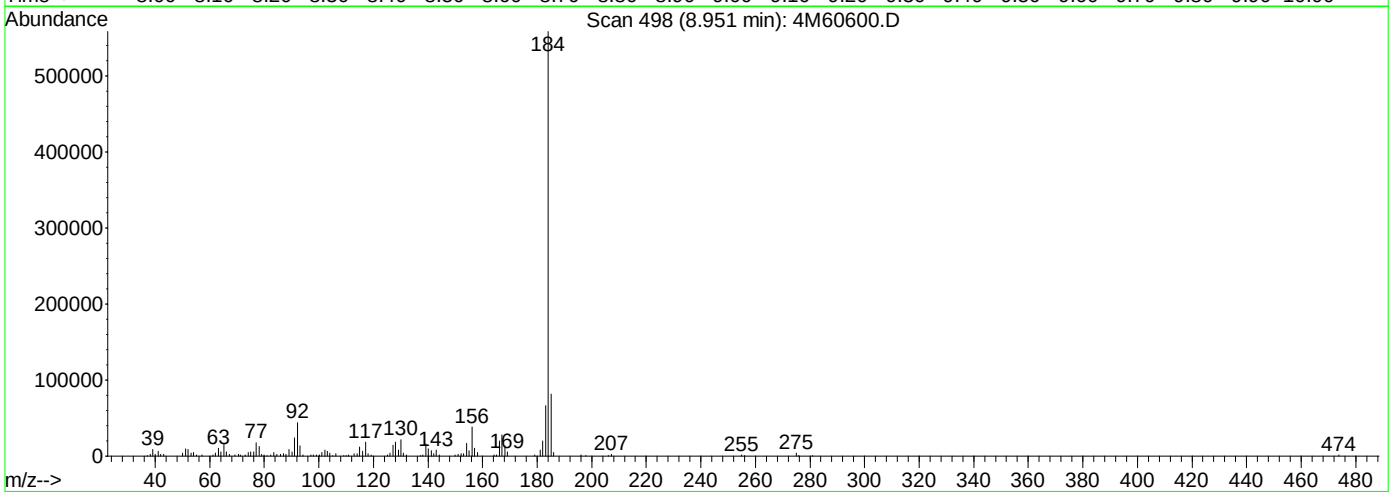
4M60600.D DFTPP.M Wed May 02 13:32:06 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60600.D

(2) Benzidine

8.95min 0.00ug/ml

response 874364

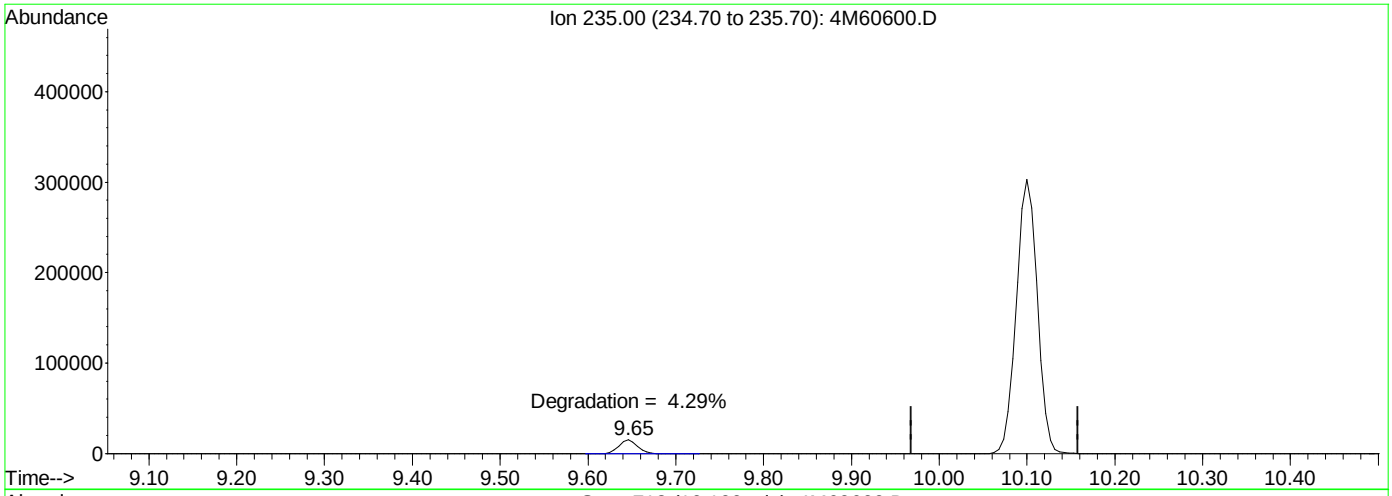
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

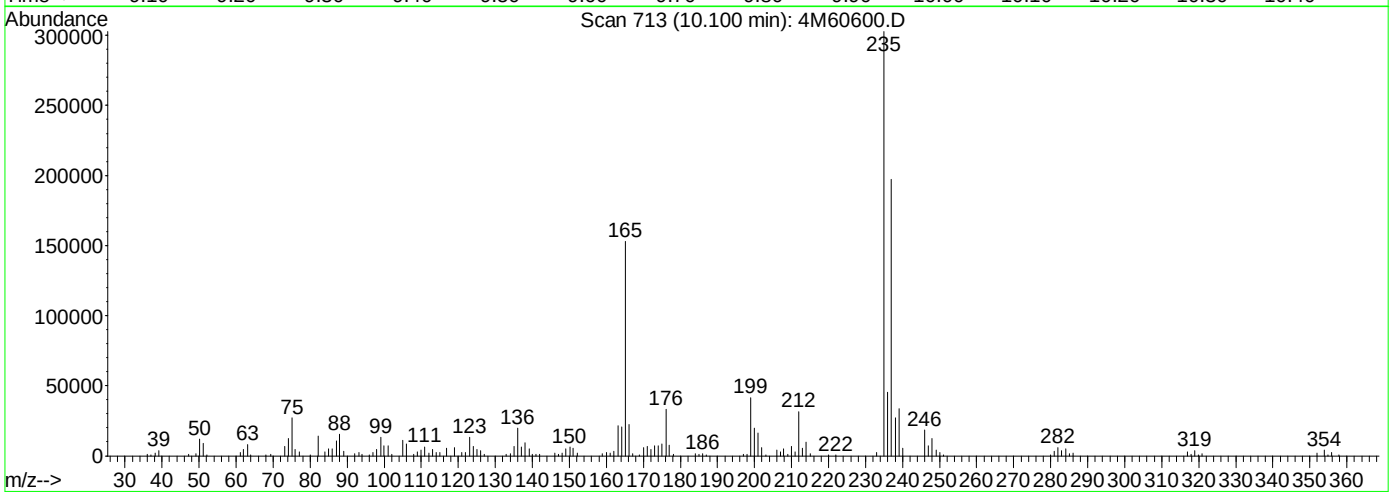
4M60600.D DFTPP.M Wed May 02 13:32:11 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60600.D

(3) DDT

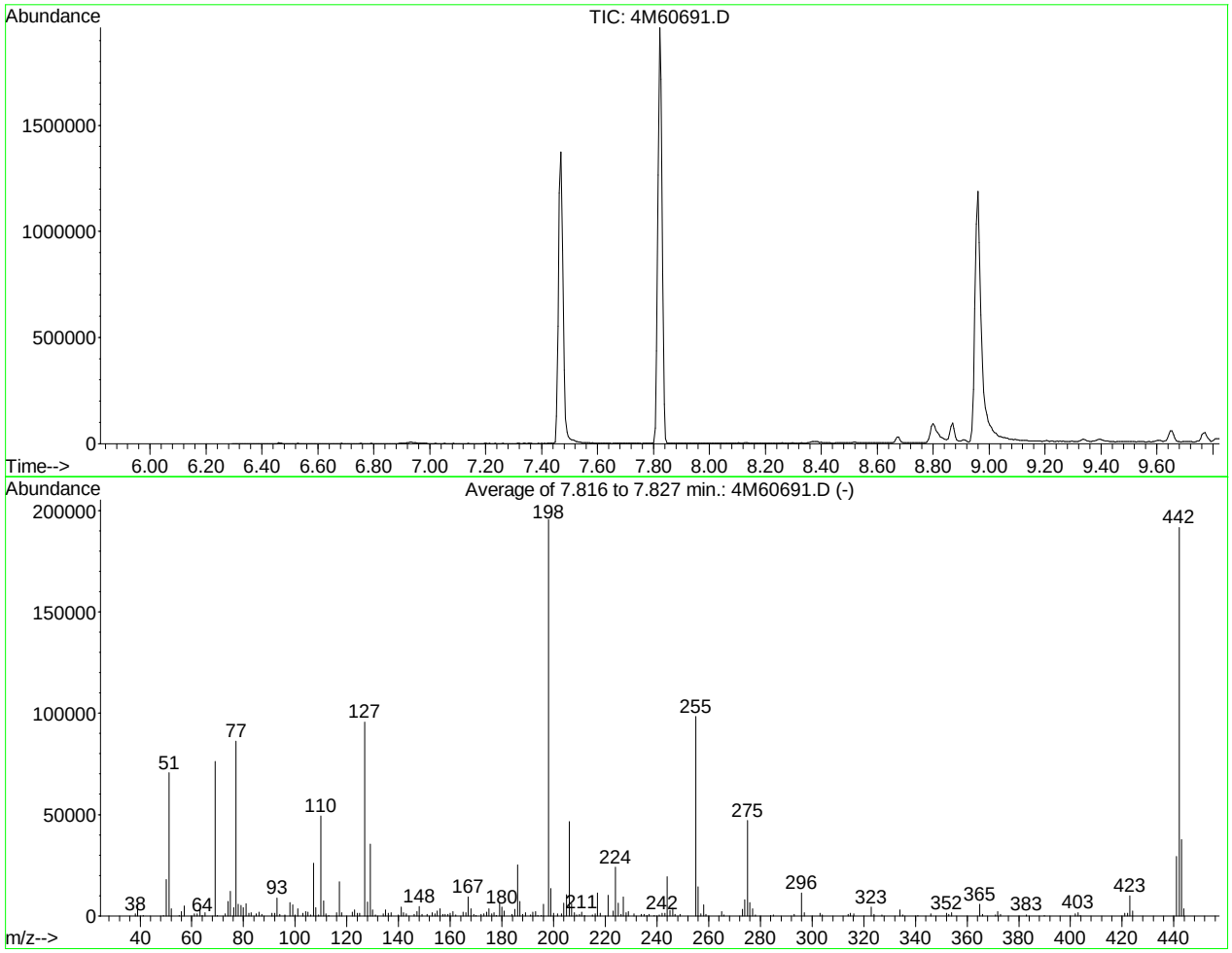
10.10min 0.00ug/ml

response 501767

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60600.D DFTPP.M Wed May 02 13:32:18 2012

Data File : I:\MSDCHEM\1\DATA\050712\4M60691.D Vial: 1
Acq On : 7 May 2012 8:31 Operator: CAA
Sample : WG397151-01 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 286, 287, 288; Background Corrected with Scan 280

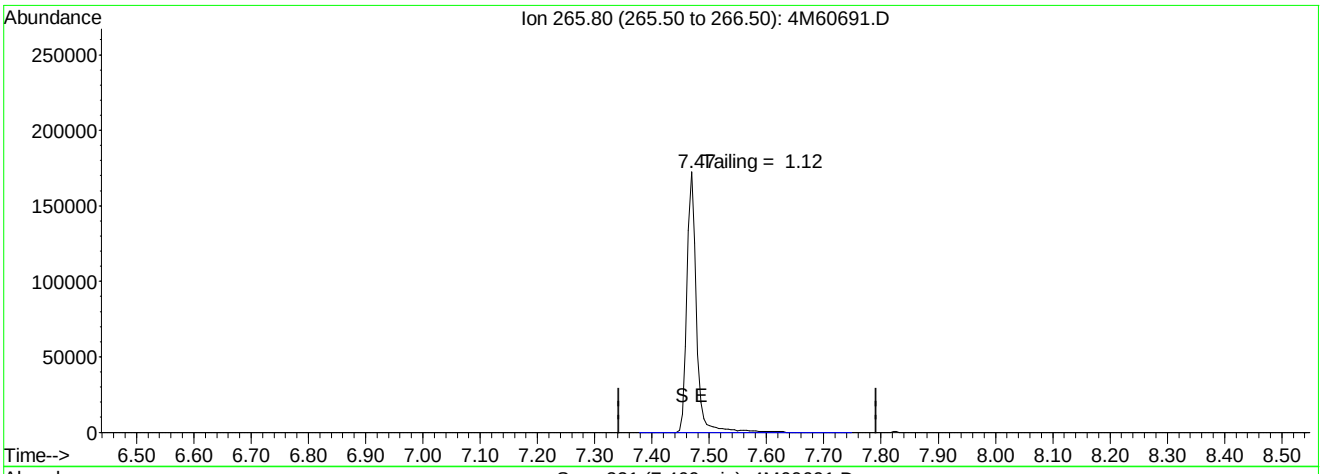
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.1	70621	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.0	76298	PASS
70	69	0.00	2	0.2	170	PASS
127	198	40	60	48.9	95714	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	195733	PASS
199	198	5	9	6.8	13354	PASS
275	198	10	30	24.1	47210	PASS
365	198	1	100	2.9	5718	PASS
441	443	0.01	100	77.7	29263	PASS
442	198	40	100	97.9	191666	PASS
443	442	17	23	19.7	37674	PASS

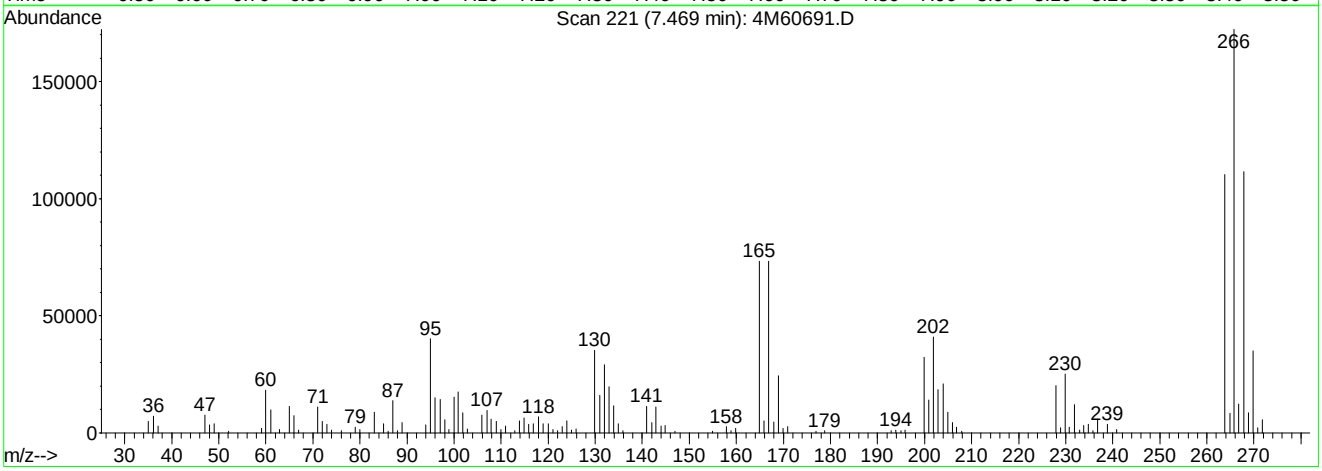
4M60691.D DFTPP.M Tue May 08 09:10:41 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60691.D Vial: 1
Acq On : 7 May 2012 8:31 Operator: CAA
Sample : WG397151-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:42 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: 4M60691.D

(1) Pentachlorophenol

7.47min 0.00ug/ml

response 196595

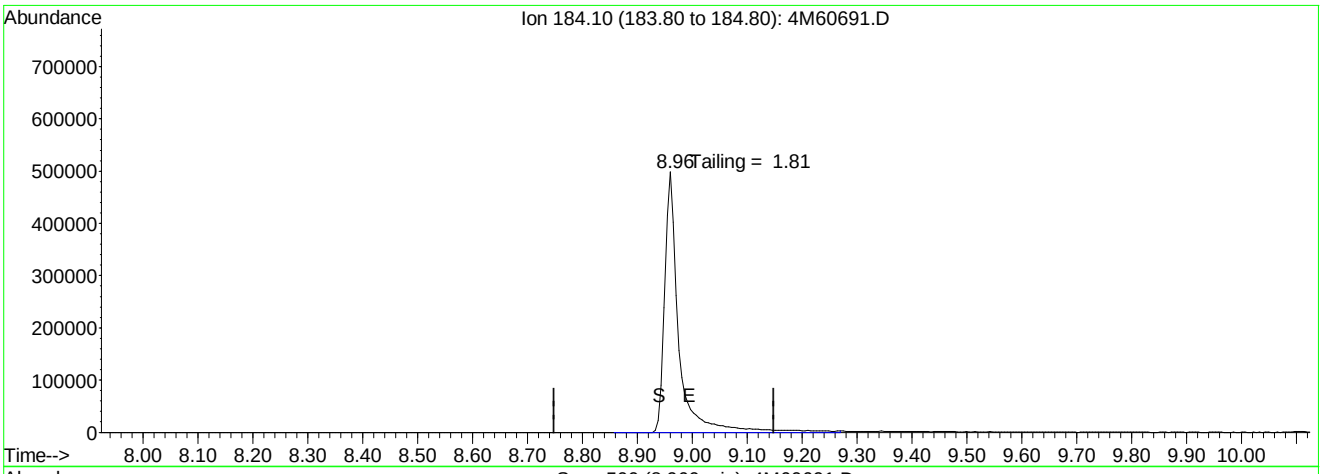
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

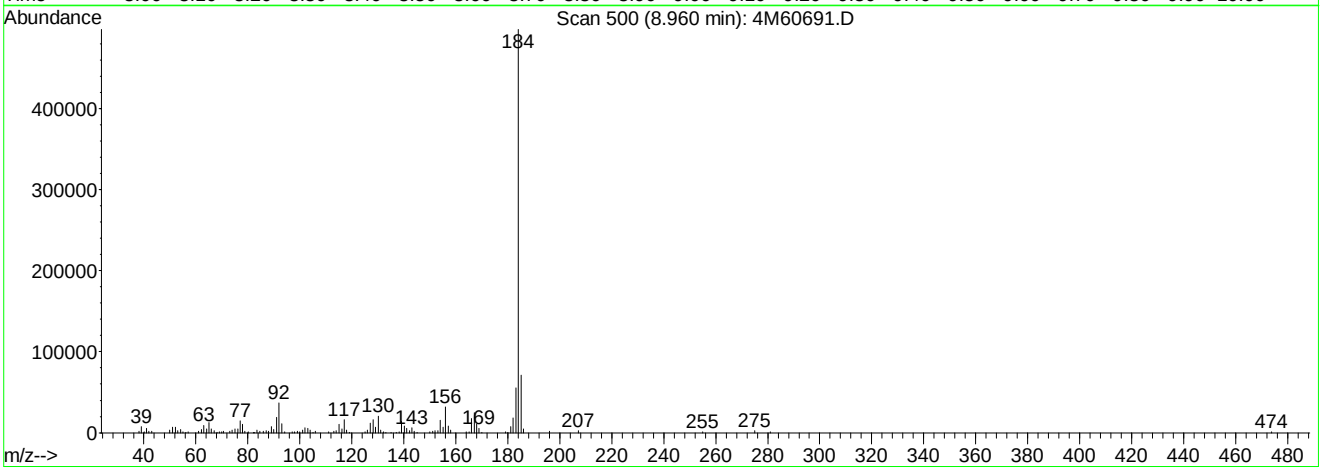
4M60691.D DFTPP.M Tue May 08 09:10:50 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60691.D Vial: 1
Acq On : 7 May 2012 8:31 Operator: CAA
Sample : WG397151-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:42 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: 4M60691.D

(2) Benzidine

8.96min 0.00ug/ml

response 864545

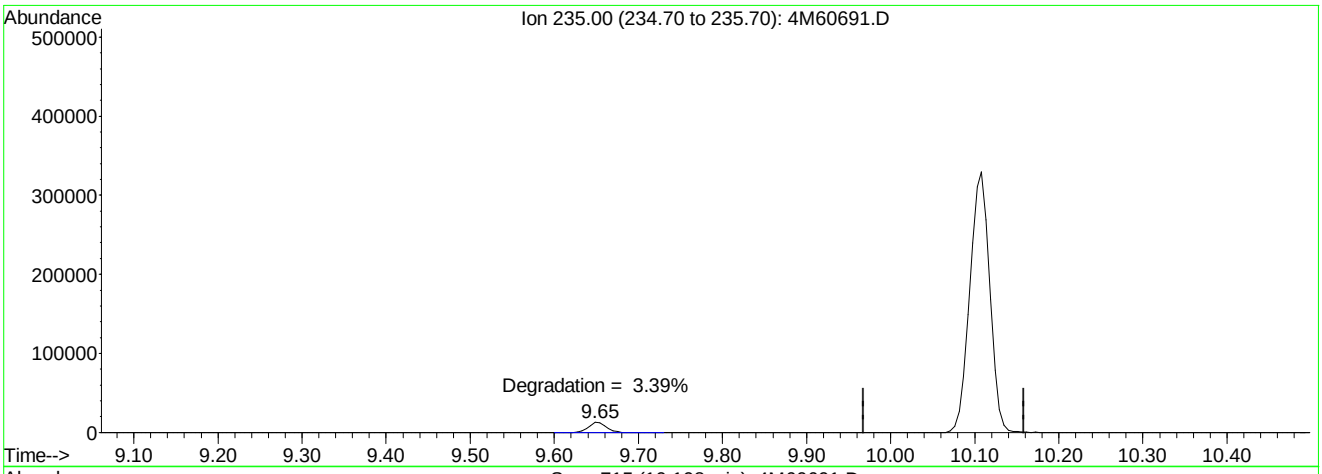
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

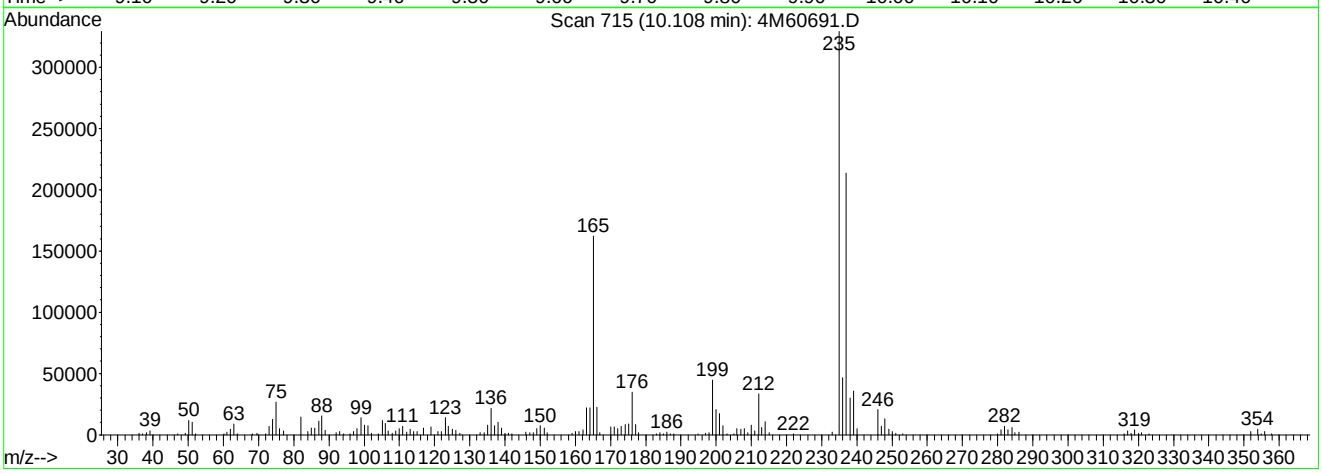
4M60691.D DFTPP.M Tue May 08 09:10:56 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60691.D Vial: 1
Acq On : 7 May 2012 8:31 Operator: CAA
Sample : WG397151-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:42 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: 4M60691.D

(3) DDT

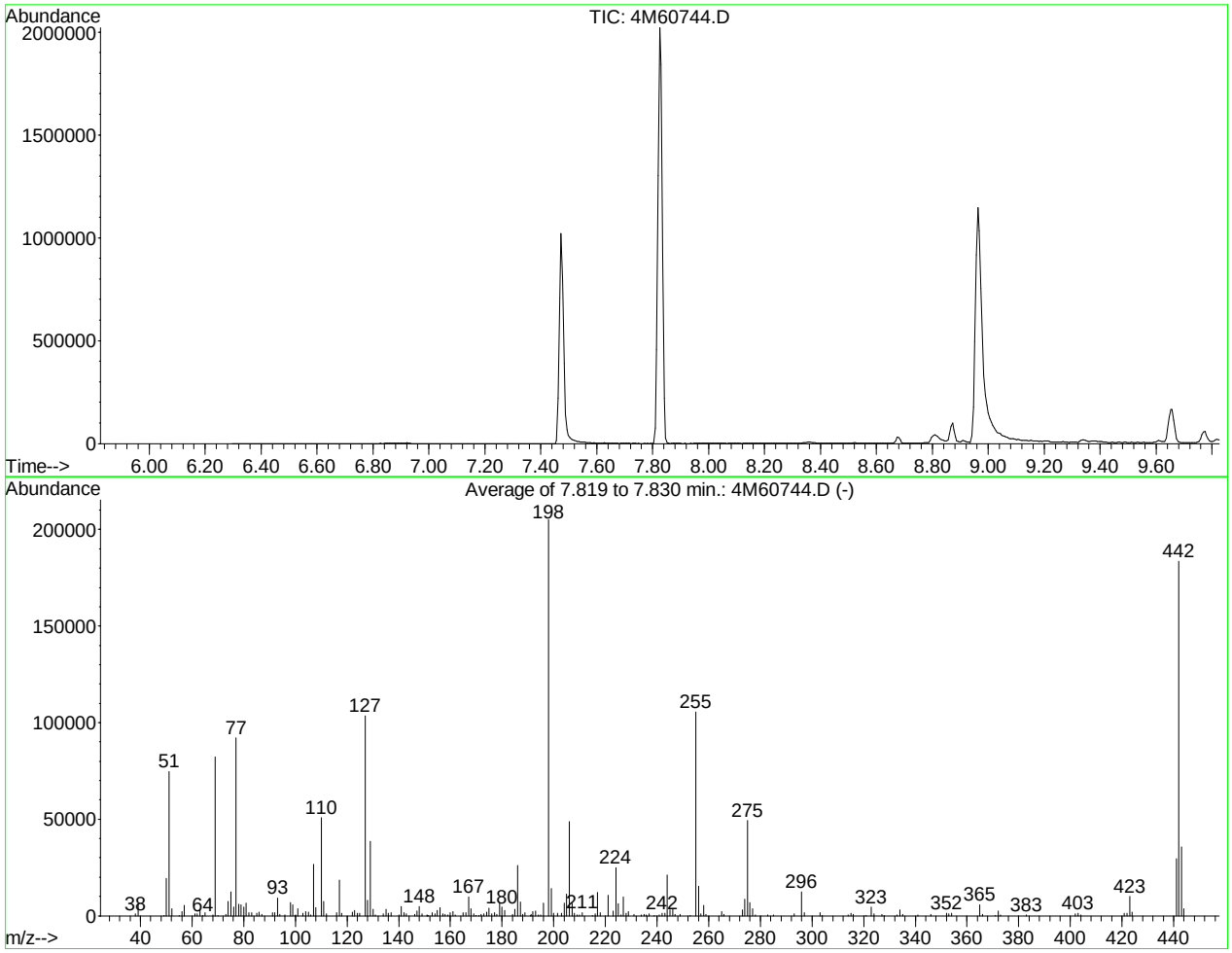
10.11min 0.00ug/ml

response 541584

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

4M60691.D DFTPP.M Tue May 08 09:11:02 2012

Data File : I:\MSDCHEM\1\DATA\050912\4M60744.D Vial: 1
Acq On : 9 May 2012 8:41 Operator: CAA
Sample : WG397449-01 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 286, 287, 288; Background Corrected with Scan 280

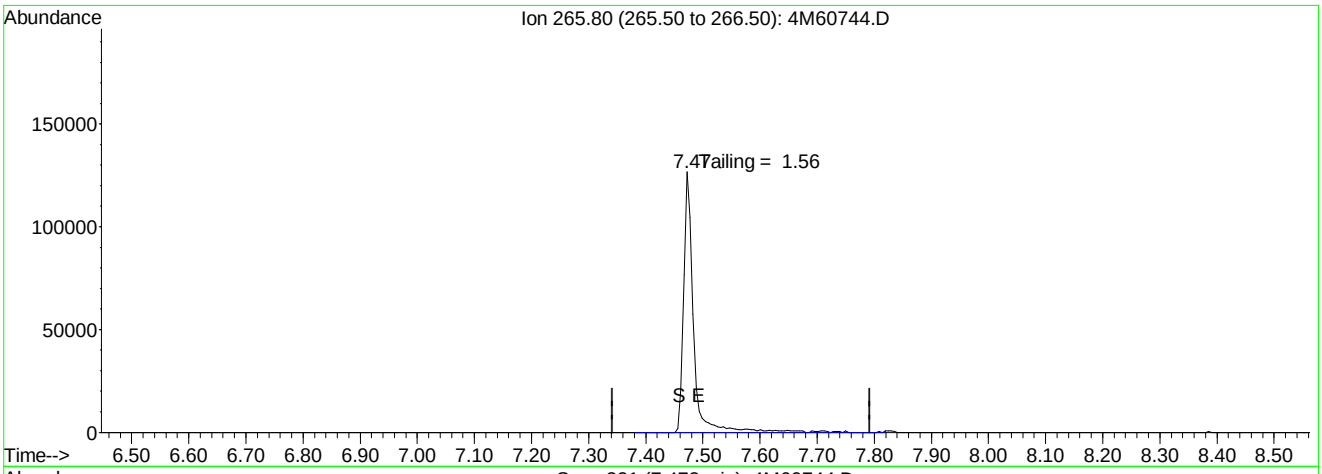
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.4	74762	PASS
68	69	0.00	2	0.6	500	PASS
69	198	0.00	100	40.0	82144	PASS
70	69	0.00	2	0.2	194	PASS
127	198	40	60	50.4	103488	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	205162	PASS
199	198	5	9	6.9	14181	PASS
275	198	10	30	24.0	49336	PASS
365	198	1	100	2.8	5740	PASS
441	443	0.01	100	82.3	29435	PASS
442	198	40	100	89.4	183421	PASS
443	442	17	23	19.5	35754	PASS

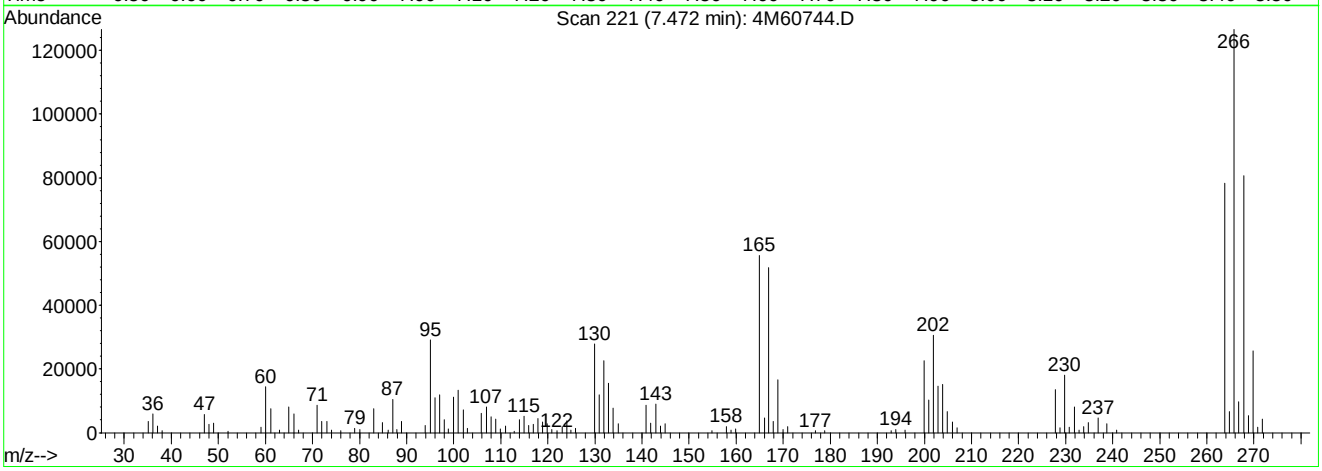
4M60744.D DFTPP.M Thu May 10 09:28:28 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050912\4M60744.D Vial: 1
Acq On : 9 May 2012 8:41 Operator: CAA
Sample : WG397449-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 8:55 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: 4M60744.D

(1) Pentachlorophenol

7.47min 0.00ug/ml

response 147637

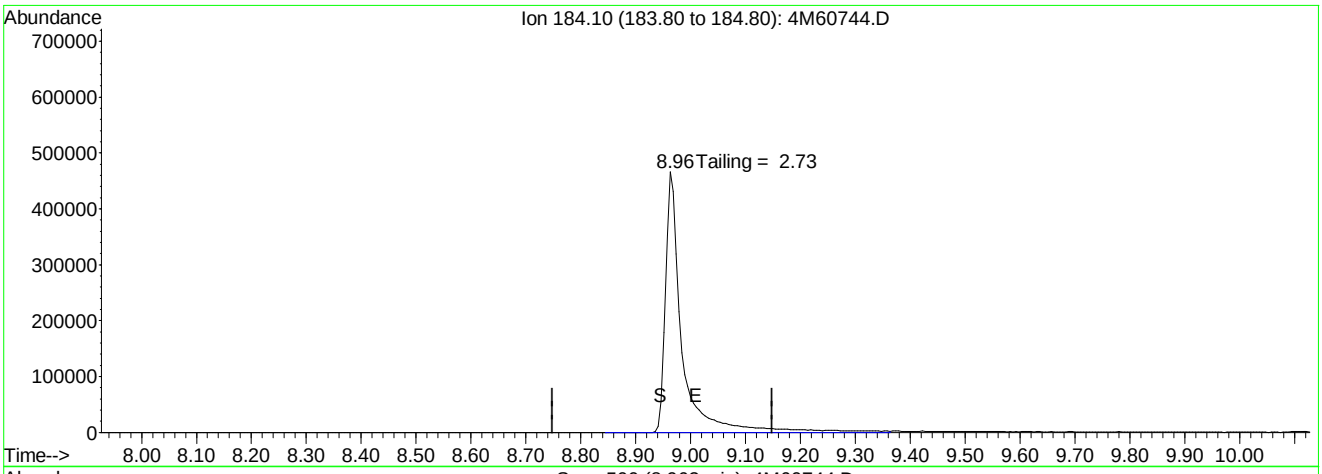
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

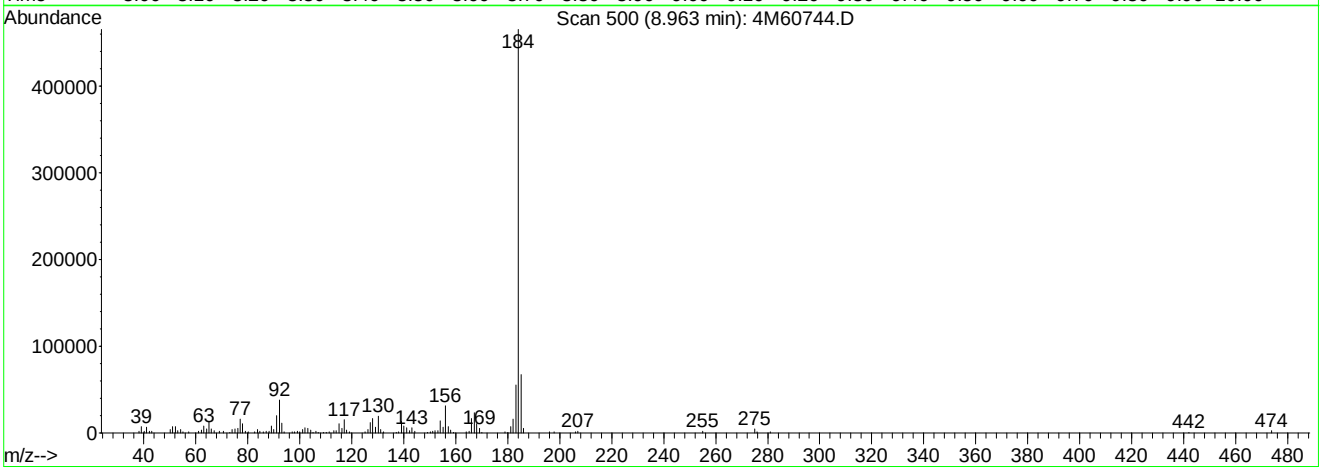
4M60744.D DFTPP.M Thu May 10 09:28:33 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050912\4M60744.D Vial: 1
Acq On : 9 May 2012 8:41 Operator: CAA
Sample : WG397449-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 8:55 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: 4M60744.D

(2) Benzidine

8.96min 0.00ug/ml

response 925584

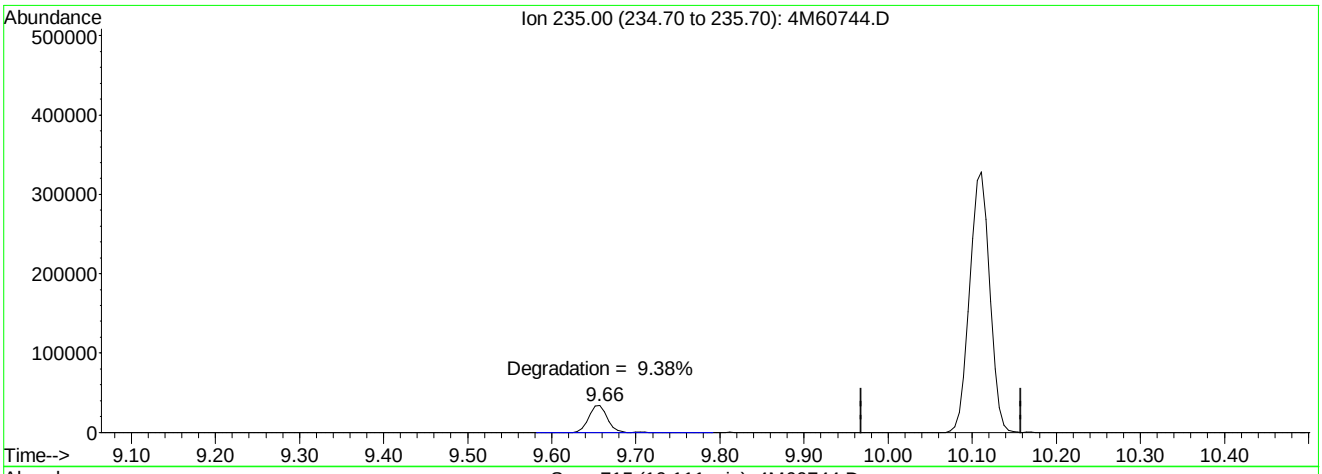
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

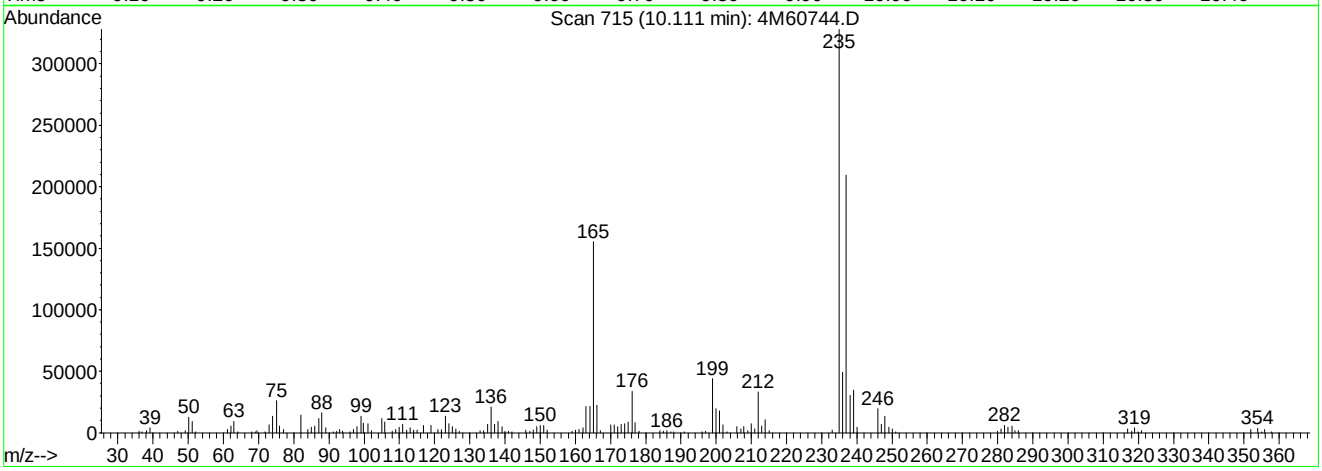
4M60744.D DFTPP.M Thu May 10 09:28:37 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050912\4M60744.D Vial: 1
Acq On : 9 May 2012 8:41 Operator: CAA
Sample : WG397449-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 9 8:55 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: 4M60744.D

(3) DDT

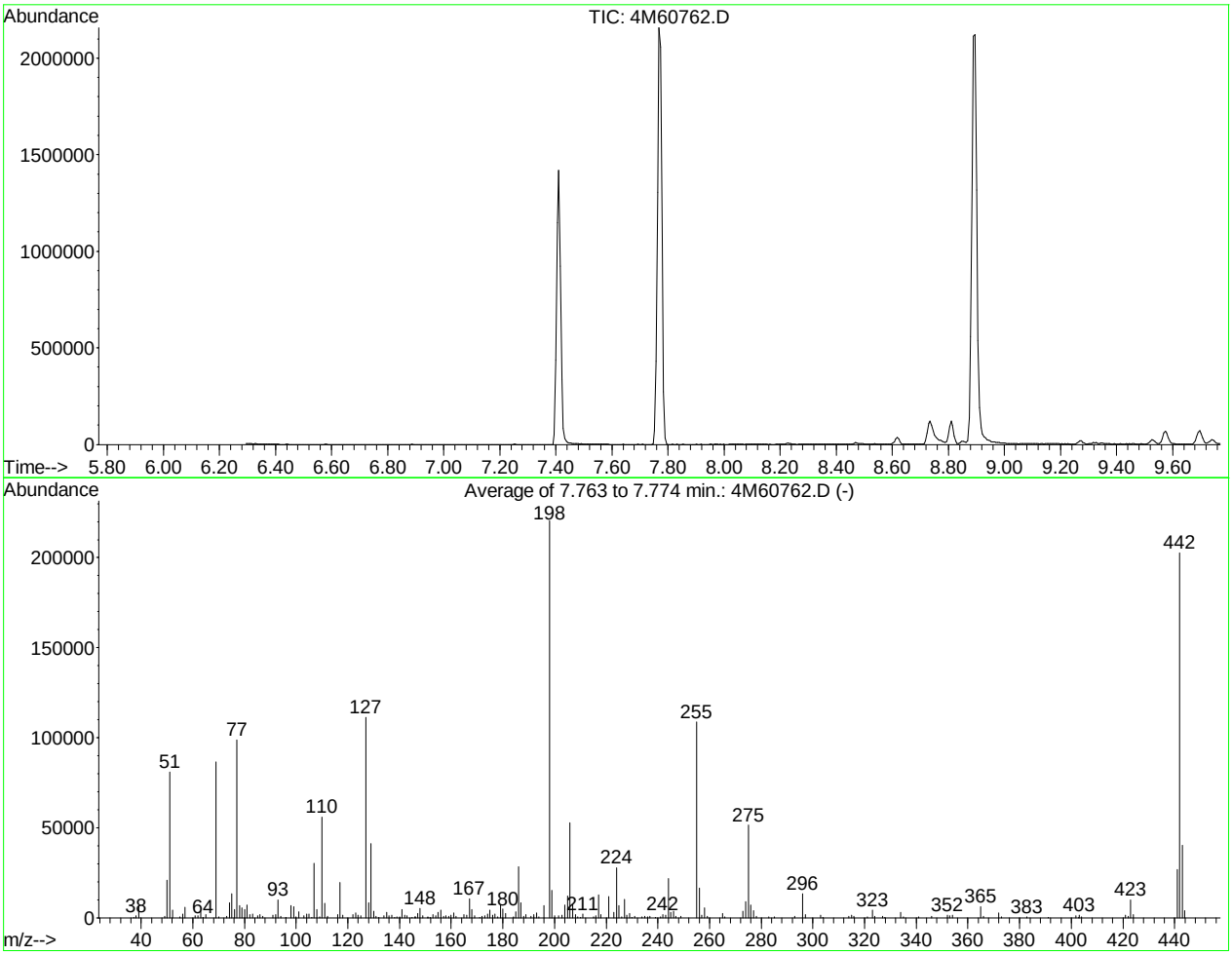
10.11min 0.00ug/ml

response 544982

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

4M60744.D DFTPP.M Thu May 10 09:28:43 2012

Data File : I:\MSDCHEM\1\DATA\051012\4M60762.D Vial: 1
Acq On : 10 May 2012 8:18 Operator: CAA
Sample : WG397588-01 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 276, 277, 278; Background Corrected with Scan 270

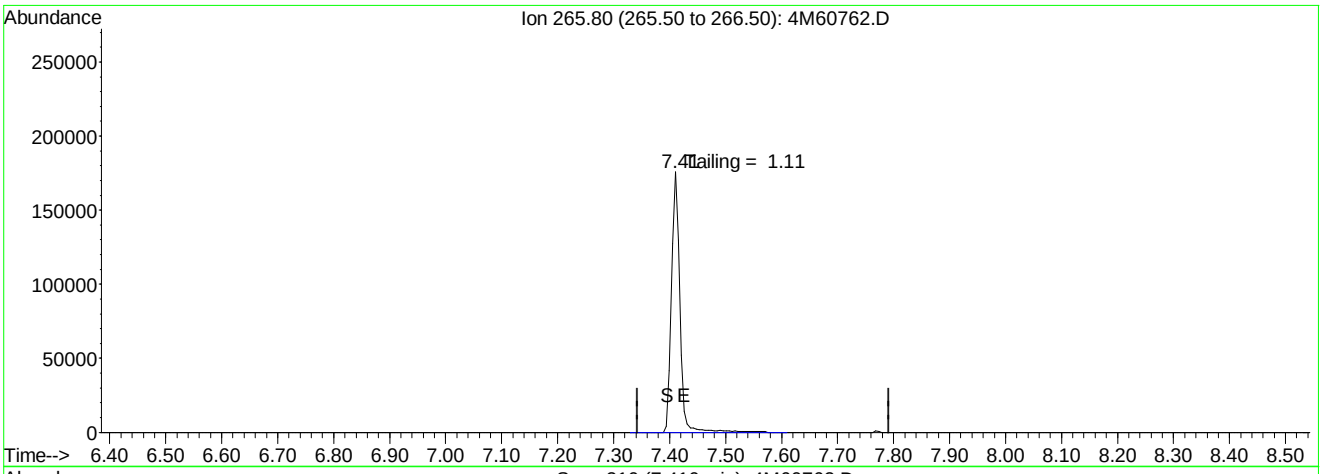
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.6	80808	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	86621	PASS
70	69	0.00	2	0.5	423	PASS
127	198	40	60	50.4	111269	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	220565	PASS
199	198	5	9	6.9	15230	PASS
275	198	10	30	23.3	51493	PASS
365	198	1	100	2.7	6033	PASS
441	443	0.01	100	66.5	26706	PASS
442	198	40	100	91.9	202794	PASS
443	442	17	23	19.8	40141	PASS

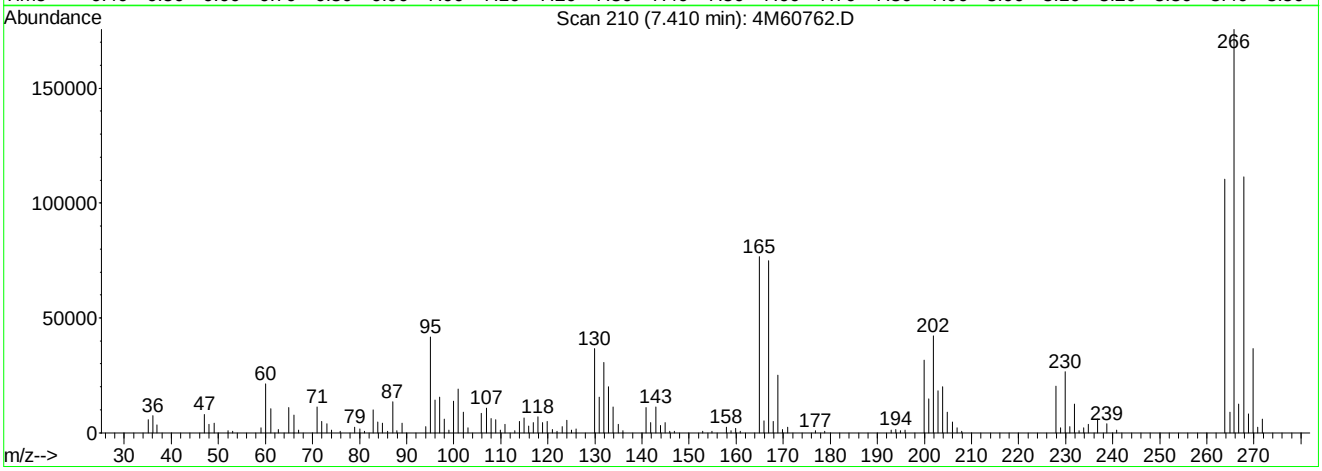
4M60762.D DFTPP.M Fri May 11 08:12:51 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051012\4M60762.D Vial: 1
Acq On : 10 May 2012 8:18 Operator: CAA
Sample : WG397588-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 8:31 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: 4M60762.D

(1) Pentachlorophenol

7.41min 0.00ug/ml

response 182018

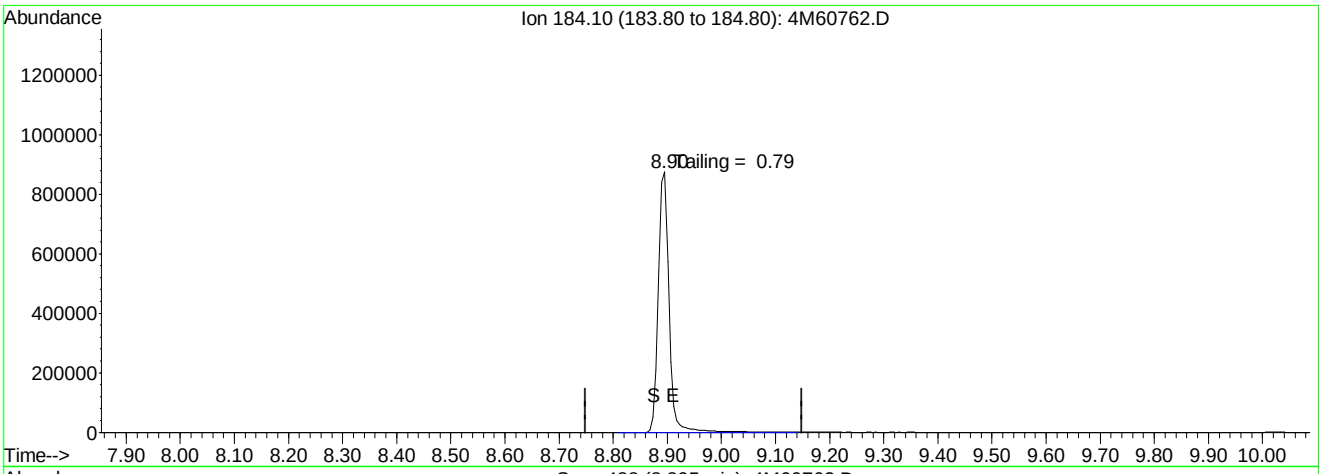
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

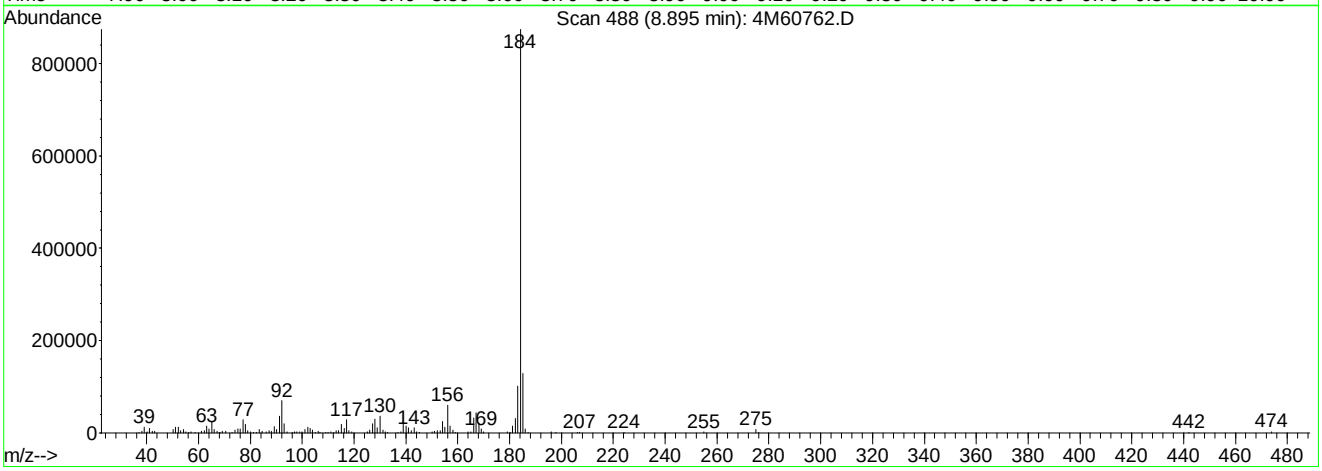
4M60762.D DFTPP.M Fri May 11 08:12:57 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051012\4M60762.D Vial: 1
Acq On : 10 May 2012 8:18 Operator: CAA
Sample : WG397588-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 8:31 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: 4M60762.D

(2) Benzidine

8.90min 0.00ug/ml

response 1168777

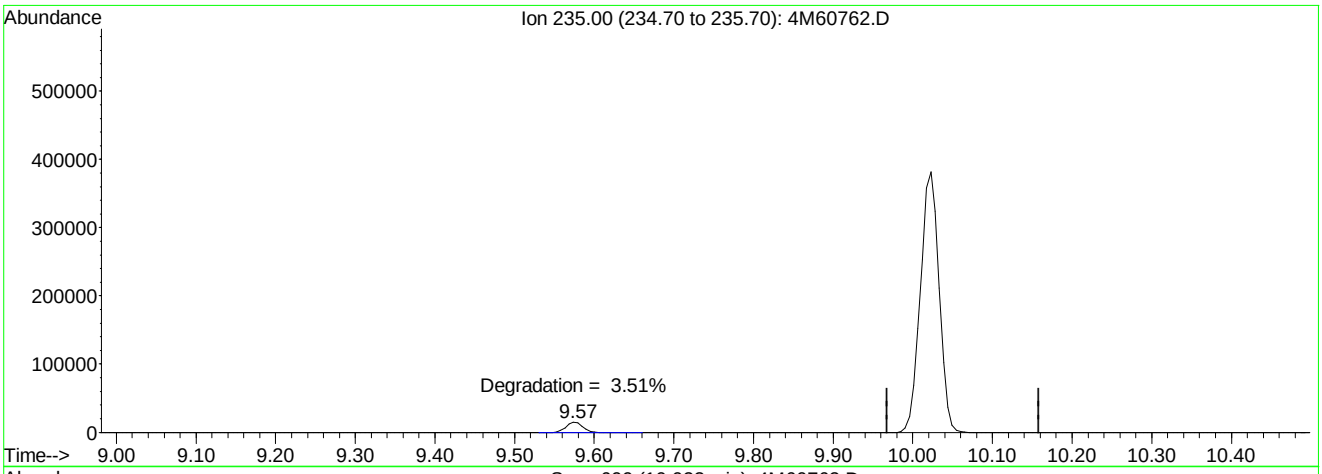
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

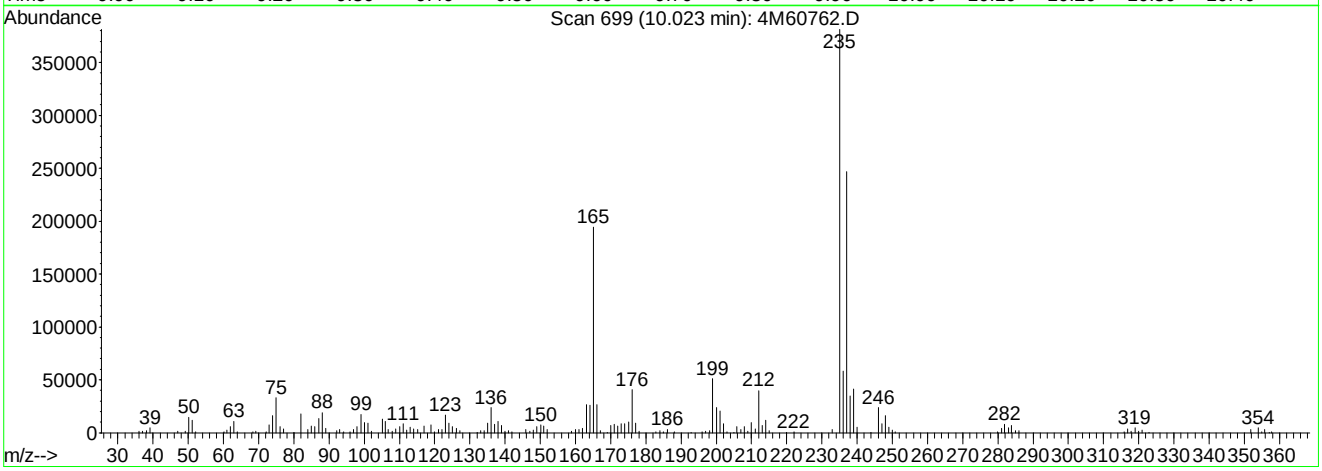
4M60762.D DFTPP.M Fri May 11 08:13:02 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051012\4M60762.D Vial: 1
Acq On : 10 May 2012 8:18 Operator: CAA
Sample : WG397588-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 8:31 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: 4M60762.D

(3) DDT

10.02min 0.00ug/ml

response 620333

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

4M60762.D DFTPP.M Fri May 11 08:13:09 2012

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 08 09:12:09 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 08 09:11:55 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	279899	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	1058524	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	596835	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.98	188	1045643	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	956519	40.00	ug/ml	0.00
128) Perylene-d12	18.48	264	848799	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.06	112	583760	68.7878	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 68.79%			
12) Phenol-d5	6.88	99	697811	70.2578	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 70.26%			
31) Nitrobenzene-d5	7.84	82	321309	35.8891	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 71.78%			
59) 2-Fluorobiphenyl	9.64	172	689161	34.5796	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 69.16%			
86) 2,4,6-Tribromophenol	11.21	330	253036	95.0727	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 95.07%			
117) p-Terphenyl-d14	14.03	244	1016680	57.6685	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 115.34%			

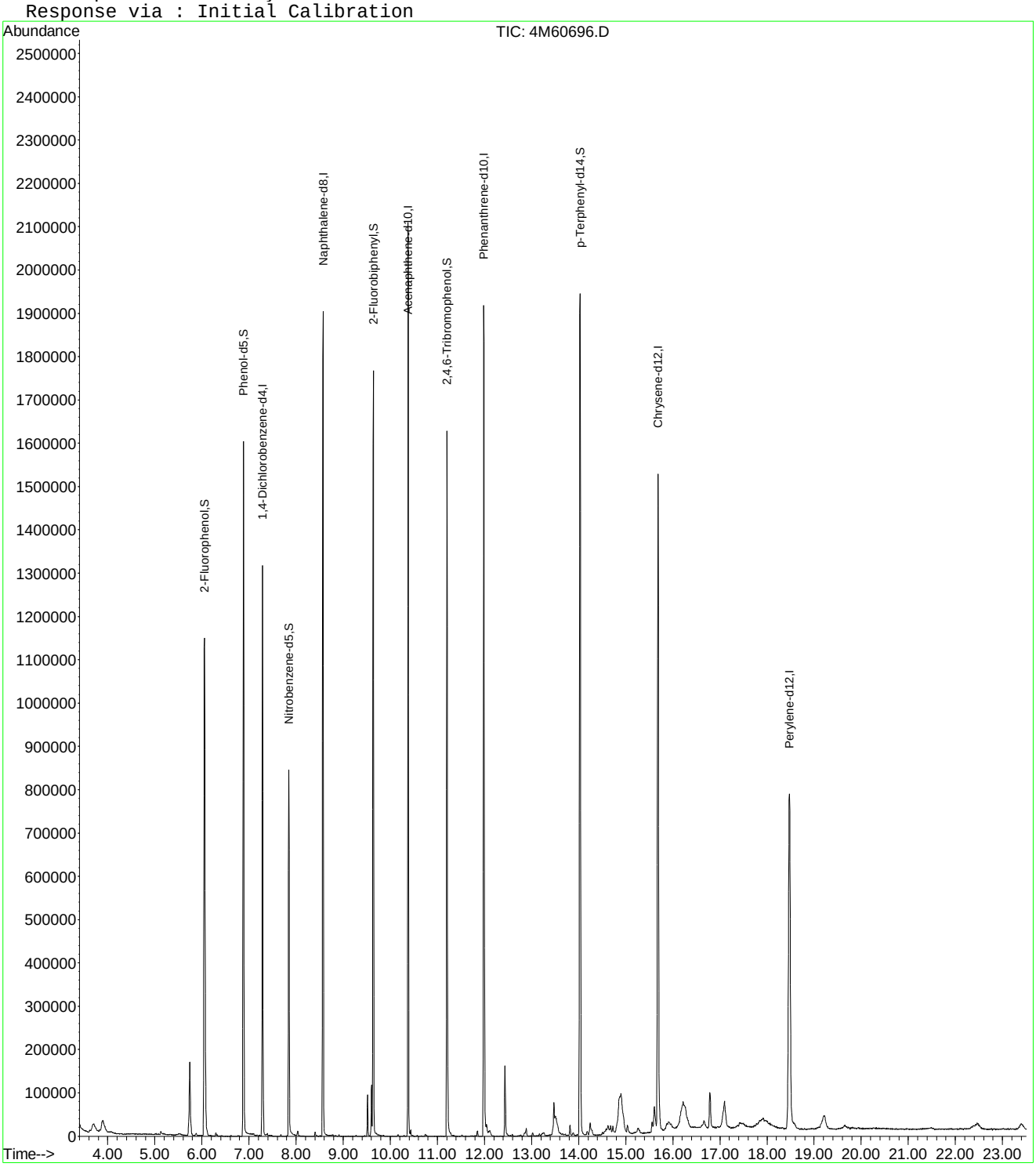
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60696.D MEGAMIX.M Tue May 08 09:23:42 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:12 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 08 09:11:55 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 08 09:51:05 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 : Tue May 08 09:50:41 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	279899	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	1058524	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	596835	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.98	188	1045643	40.00	ug/mL	0.00

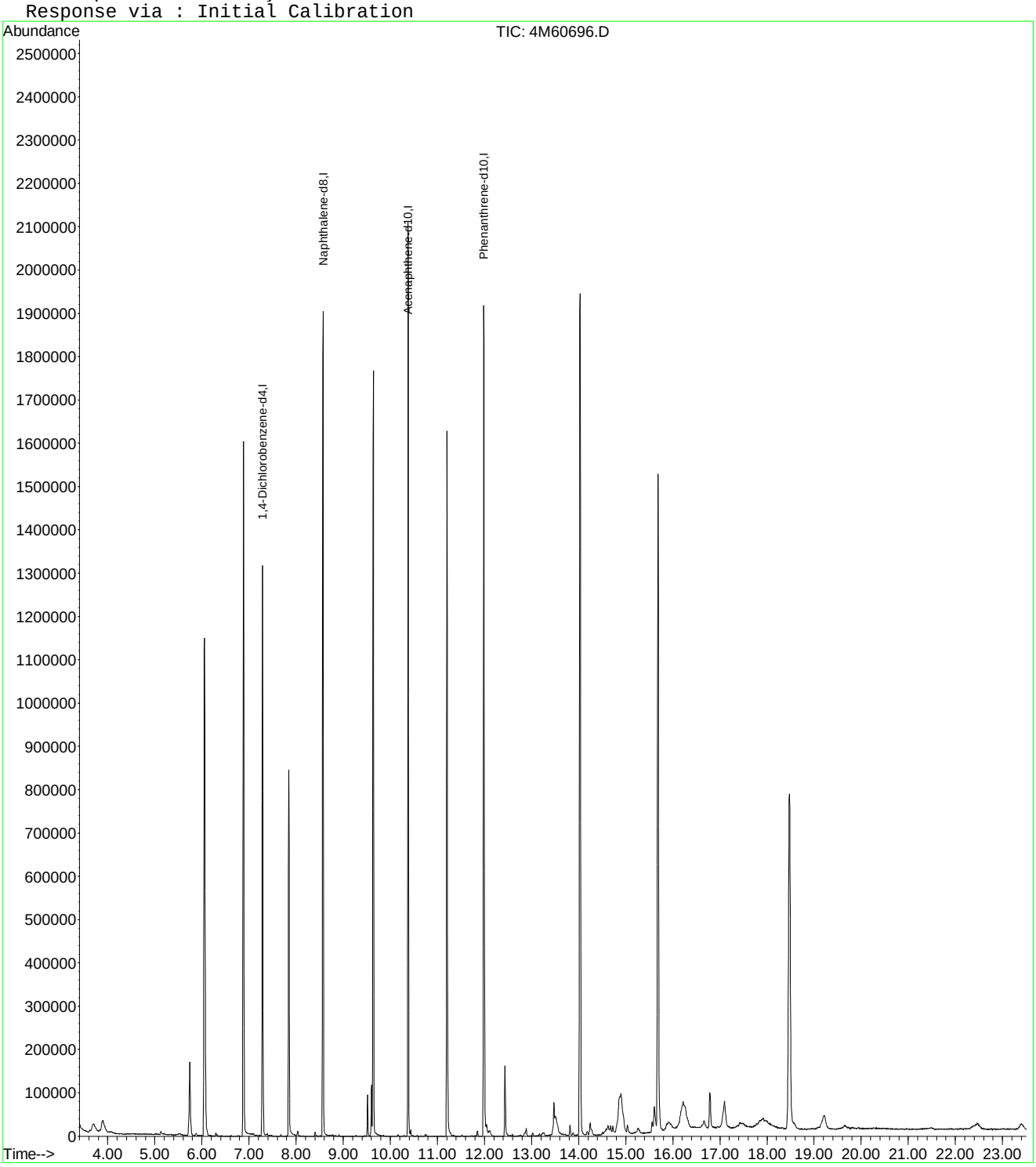
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60696.D TCL.M Tue May 08 09:51:05 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:51 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Tue May 08 09:50:41 2012
Response via : Initial Calibration



4M60696.D TCL.M Tue May 08 09:51:05 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 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	3.694	46	57	58	rBV4	15089	32298	1.12%	0.116%
2	3.892	86	94	114	rVB	27308	115853	4.03%	0.417%
3	5.745	430	441	452	rBB2	169535	316576	11.02%	1.140%
4	6.055	490	499	519	rBV	1149105	1878798	65.43%	6.765%
5	6.883	647	654	668	rBV	1604664	1888887	65.78%	6.801%
6	7.284	723	729	740	rBV	1316918	1582051	55.09%	5.697%
7	7.845	826	834	858	rBV	846026	947067	32.98%	3.410%
8	8.571	963	970	992	rBV	1904878	2075288	72.27%	7.473%
9	9.517	1141	1147	1154	rBB	96031	102610	3.57%	0.369%
10	9.602	1158	1163	1165	rBV	118391	124604	4.34%	0.449%
11	9.640	1165	1170	1188	rVB	1766394	1877658	65.39%	6.761%
12	10.377	1302	1308	1316	rBV	2109946	2297908	80.02%	8.274%
13	11.205	1456	1463	1488	rBV	1628852	1999584	69.63%	7.200%
14	11.985	1602	1609	1618	rBV	1918150	2484477	86.52%	8.946%
15	12.434	1688	1693	1709	rBV	162379	214625	7.47%	0.773%
16	13.475	1873	1888	1892	rBV2	76530	148475	5.17%	0.535%
17	13.507	1892	1894	1919	rVB2	43178	142497	4.96%	0.513%
18	13.817	1942	1952	1958	rBV	24405	33699	1.17%	0.121%
19	14.031	1984	1992	2011	rBV	1943691	2871637	100.00%	10.340%
20	14.245	2026	2032	2046	rVB2	28204	75551	2.63%	0.272%
21	14.581	2085	2095	2098	rBV4	13033	32992	1.15%	0.119%
22	14.870	2129	2149	2150	rBV	83297	233433	8.13%	0.841%
23	14.902	2152	2155	2176	rVV2	91441	306437	10.67%	1.103%
24	15.035	2176	2180	2194	rVB2	19526	39100	1.36%	0.141%
25	15.265	2214	2223	2235	rVB6	11691	35967	1.25%	0.130%
26	15.559	2271	2278	2282	rBV4	25216	45355	1.58%	0.163%
27	15.607	2282	2287	2295	rVV3	58953	142268	4.95%	0.512%
28	15.687	2295	2302	2322	rVB	1516534	2445500	85.16%	8.806%
29	16.216	2375	2401	2434	rBV	60358	485219	16.90%	1.747%
30	16.659	2478	2484	2500	rVB9	17578	53556	1.86%	0.193%
31	16.788	2500	2508	2520	rBV2	82939	165841	5.78%	0.597%
32	17.097	2547	2566	2584	rVB4	61241	243513	8.48%	0.877%
33	18.476	2807	2824	2856	rBV	774000	2166636	75.45%	7.802%
34	19.202	2945	2960	2963	rBV9	28969	98540	3.43%	0.355%
35	23.406	3728	3747	3761	rBV7	12780	67483	2.35%	0.243%

Sum of corrected areas: 27771983

```
File       : I:\MSDCHEM\1\DATA\050712\4M60696.D
Operator   : CAA
Acquired   :  7 May 2012  11:09     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: WG396481-02 BLK 04/30
Misc Info  : 1,1
Vial Number: 6
Quant File :MEGAMIX.RES (RTE Integrator)
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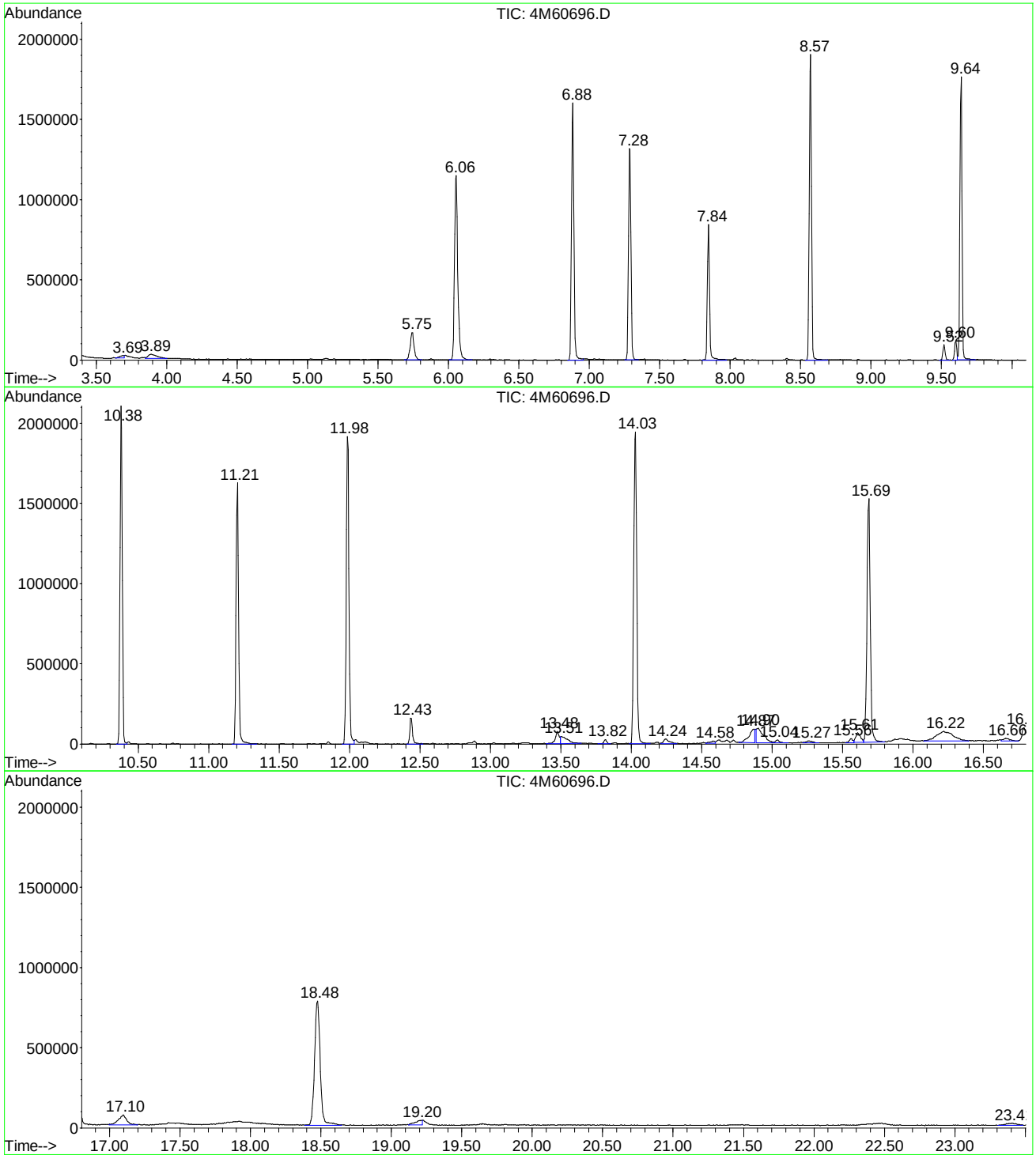


Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

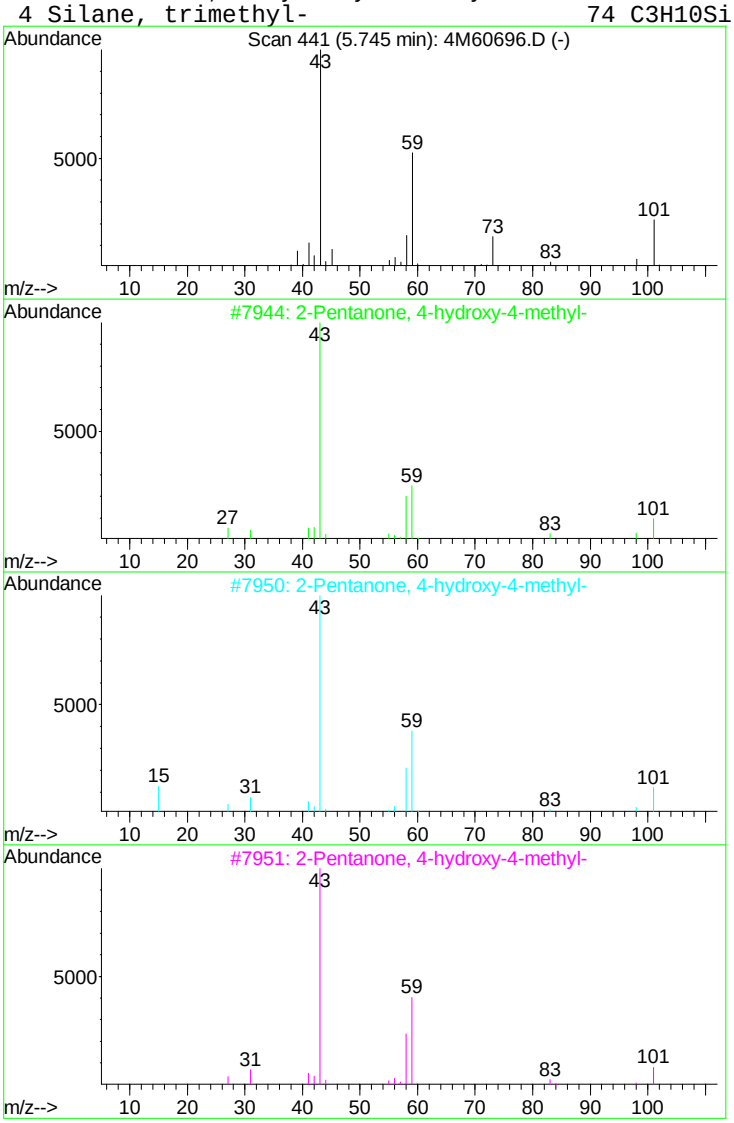
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

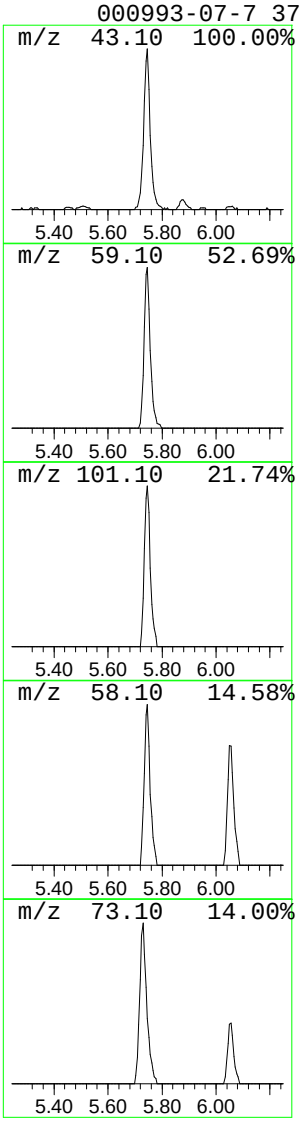
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.75	8.00 ug/ml	316576	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	59
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
4	Silane, trimethyl-	74	C3H10Si	000993-07-7	37





Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

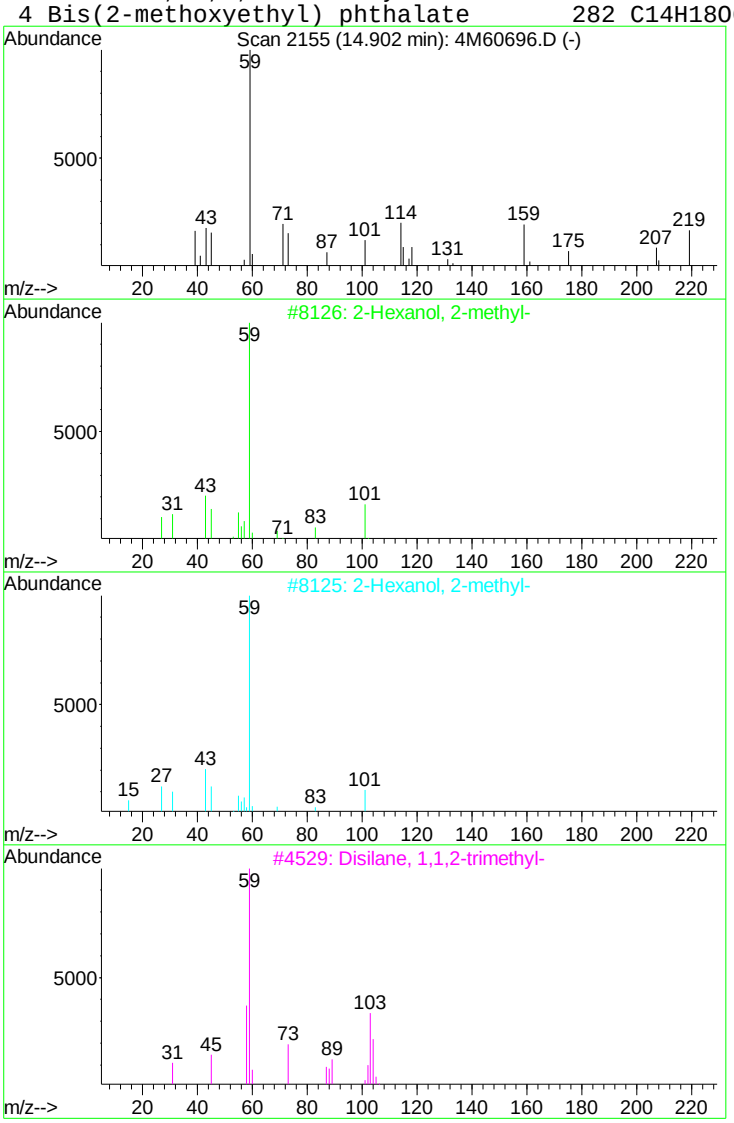
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

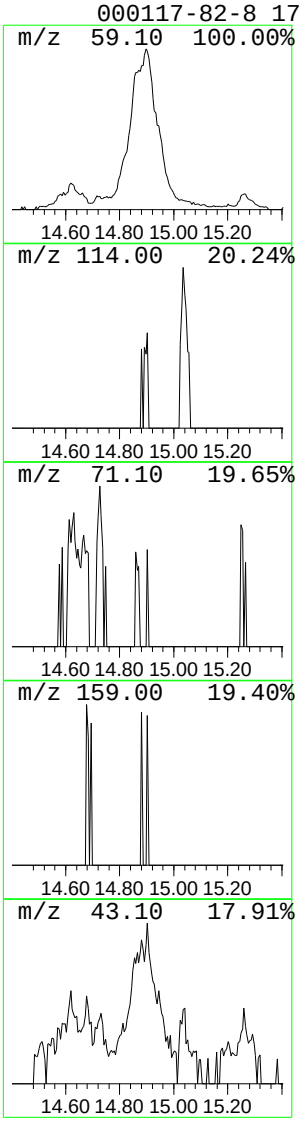
****

Peak Number 2 2-Hexanol, 2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.90	5.01 ug/ml	306437	Chrysene-d12	15.69

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Hexanol, 2-methyl-	116	C7H16O	000625-23-0	32
2	2-Hexanol, 2-methyl-	116	C7H16O	000625-23-0	23
3	Disilane, 1,1,2-trimethyl-	104	C3H12Si2	000814-74-4	23
4	Bis(2-methoxyethyl) phthalate	282	C14H18O6	000117-82-8	17





Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

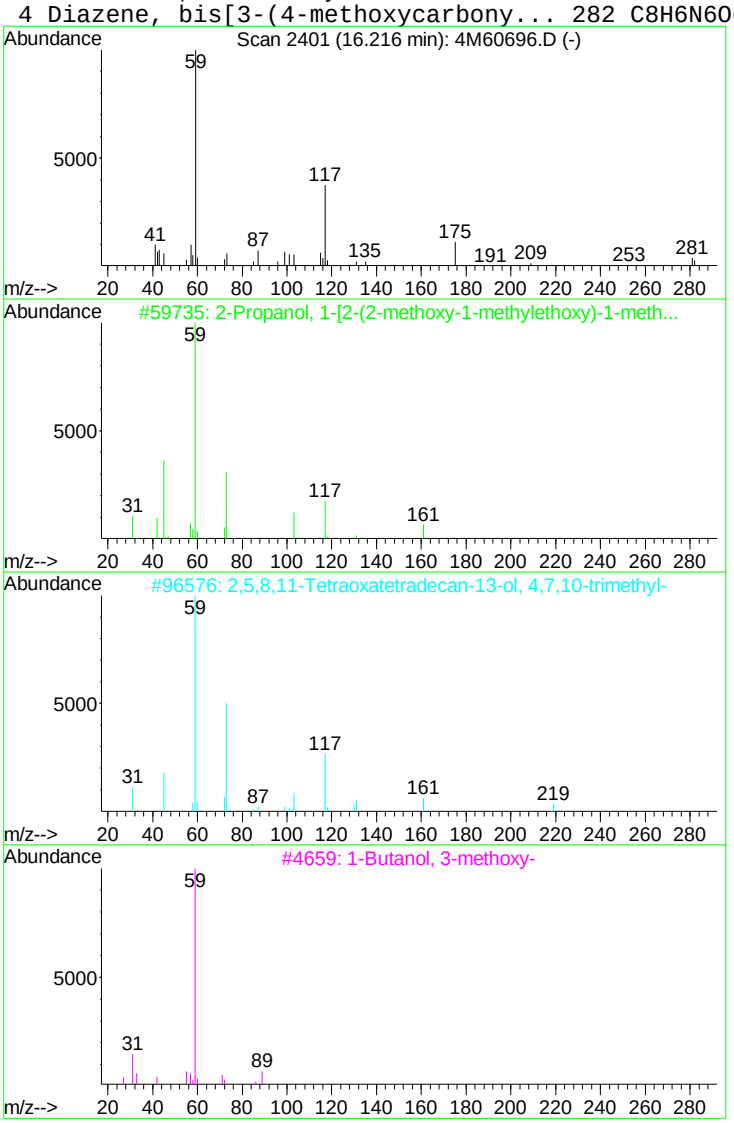
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

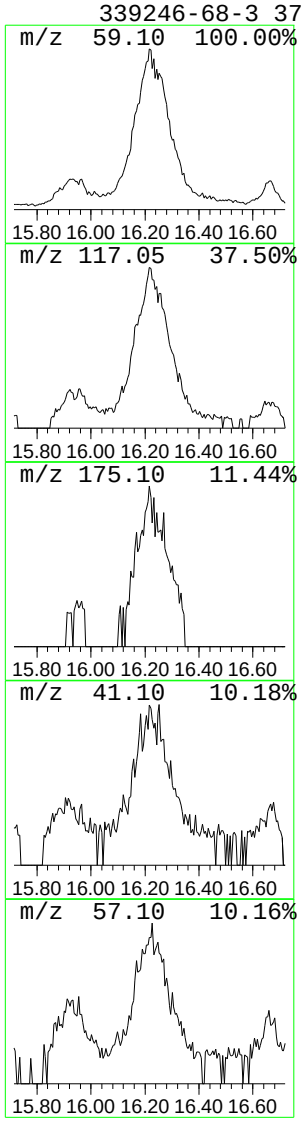
****

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.22	7.94 ug/ml	485219	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	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	38
3	1-Butanol, 3-methoxy-	104	C5H12O2	002517-43-3	37
4	Diazene, bis[3-(4-methoxycarbony...	282	C8H6N6O6	339246-68-3	37





Data File : I:\MSDCHEM\1\DATA\050712\4M60696.D Vial: 6
Acq On : 7 May 2012 11:09 Operator: CAA
Sample : WG396481-02 BLK 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

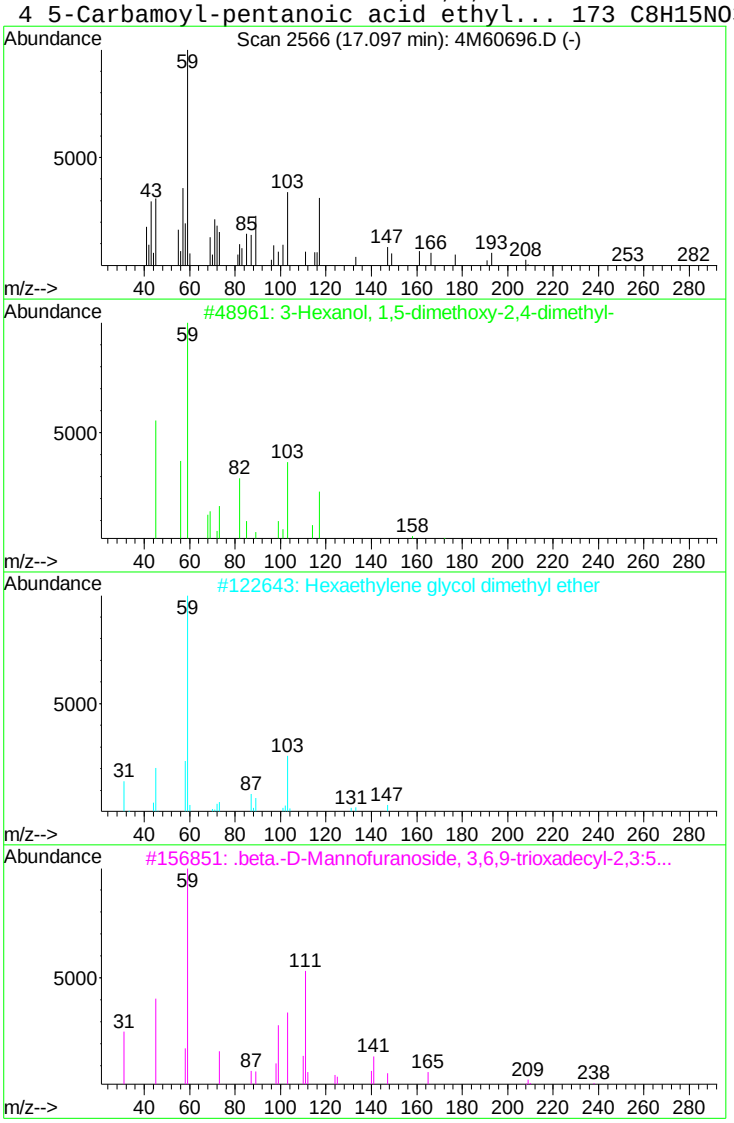
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

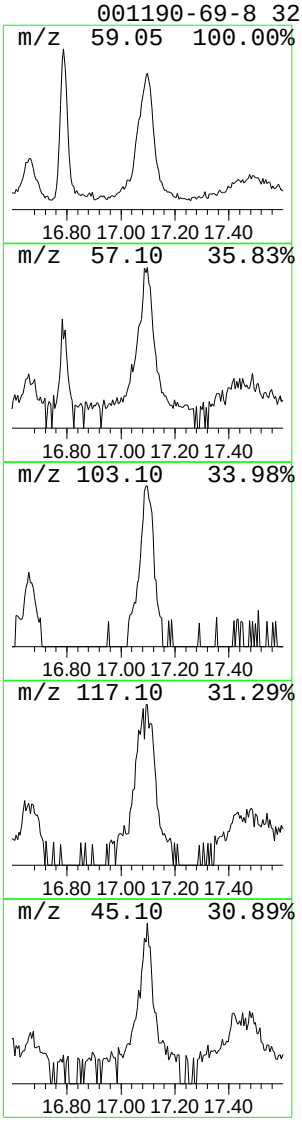
****

Peak Number 4 3-Hexanol, 1,5-dimethoxy-2,... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.10	4.50 ug/ml	243513	Perylene-d12	18.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	39
2	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	38
3	.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	38
4	5-Carbamoyl-pentanoic acid ethyl...	173	C8H15NO3	001190-69-8	32





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 7 May 2012 11:09
Data File: I:\MSDCHEM\1\DATA\050712\4M60696.D
Name: WG396481-02 BLK 04/30
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	5.75	8.0	ug/ml	316576	1	7.29	1582050	40.0
2-Hexanol, 2-methyl-	14.90	5.0	ug/ml	306437	5	15.69	2445500	40.0
2-Propanol, 1-[2-...	16.22	7.9	ug/ml	485219	5	15.69	2445500	40.0
3-Hexanol, 1,5-di...	17.10	4.5	ug/ml	243513	6	18.48	2166640	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60697.D Vial: 7
Acq On : 7 May 2012 11:44 Operator: CAA
Sample : WG396481-03 LCS 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 08 09:12:09 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 08 09:11:55 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	285791	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	1079383	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	619355	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1110516	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	1020086	40.00	ug/ml	0.00
128) Perylene-d12	18.48	264	889001	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.06	112	687466	79.3380	ug/ml	0.01
Spiked Amount 100.000	Range 21 - 100		Recovery = 79.34%			
12) Phenol-d5	6.89	99	824083	81.2606	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 81.26%			
31) Nitrobenzene-d5	7.85	82	376194	41.2075	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 82.42%			
59) 2-Fluorobiphenyl	9.64	172	873028	42.2126	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 84.42%			
86) 2,4,6-Tribromophenol	11.21	330	289950	104.9811	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 104.98%			
117) p-Terphenyl-d14	14.03	244	1055761	56.1535	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 112.30%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.28	88	123817	34.7617	ug/ml#	96
3) n-Nitrosodimethylamine	4.70	74	206622	39.1758	ug/ml	99
4) Pyridine	4.72	79	287019	30.6949	ug/ml	88
5) 2-Picoline	5.50	93	356924	35.0794	ug/ml	98
6) n-Nitrosomethylethylamine	5.62	88	162038	36.9187	ug/ml	87
7) Methyl Methanesulfonate	5.91	80	191419	38.4138	ug/ml	97
9) n-Nitrosodiethylamine	6.29	102	173499	36.8719	ug/ml	95
10) Ethyl Methanesulfonate	6.54	79	238401	36.5273	ug/ml	97
11) Aniline	6.98	93	498756	33.2810	ug/ml	89
13) Phenol	6.90	94	427889	39.5151	ug/ml	95
14) bis(2-Chloroethyl)ether	7.01	63	264990	39.0821	ug/ml#	39
15) Pentachloroethane	7.02	167	108970	29.8362	ug/ml	98
16) 2-Chlorophenol	7.11	128	377004	38.8790	ug/ml	98
17) 1,3-Dichlorobenzene	7.26	146	314166	29.1082	ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	333827	30.3254	ug/ml	100
19) Benzyl Alcohol	7.40	108	253798	40.4233	ug/ml	93
20) 1,2-Dichlorobenzene	7.50	146	328674	32.1501	ug/ml	99
21) 2-Methylphenol	7.49	107	295287	39.5464	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.53	45	472274	33.9267	ug/ml	92
23) 3-,4-Methylphenol	7.61	107	430218	44.3245	ug/ml	91
24) n-Nitrosopyrrolidine	7.67	100	181909	41.5125	ug/ml	99
25) n-Nitrosodipropylamine	7.67	70	274758	45.0015	ug/ml	94
26) Acetophenone	7.68	105	918766	76.5177	ug/ml	99
27) n-Nitrosomorpholine	7.68	56	207473	36.4244	ug/ml	94
28) o-Toluidine	7.72	106	520105	34.2629	ug/ml	99
29) Hexachloroethane	7.81	117	110038	26.9947	ug/ml	99
32) Nitrobenzene	7.87	77	385345	42.3505	ug/ml	98
33) n-Nitrosopiperidine	8.01	114	194892	40.0137	ug/ml	95
34) Isophorone	8.08	82	736991	44.3753	ug/ml	99
35) 2-Nitrophenol	8.19	139	219970	41.0111	ug/ml	97
36) 2,4-Dimethylphenol	8.15	122	372921	40.4905	ug/ml	97
37) 0,0,0-Triethyl Phosphoroth	8.25	198	201338	43.7871	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	594945	47.1367	ug/ml	100

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60697.D Vial: 7
Acq On : 7 May 2012 11:44 Operator: CAA
Sample : WG396481-03 LCS 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 08 09:12:09 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 08 09:11:55 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.19	105	112505m	17.7244 ug/ml	
40)	2,4-Dichlorophenol	8.41	162	329016	42.6729 ug/ml	100
41)	a,a-Dimethylphenethylamine	8.42	58	850684	65.2602 ug/ml	99
42)	1,2,4-Trichlorobenzene	8.51	180	321647	36.7392 ug/ml	99
43)	Naphthalene	8.59	128	1149576	40.2147 ug/ml	97
44)	4-Chloroaniline	8.62	127	466245	44.2865 ug/ml	99
45)	2,6-Dichlorophenol	8.64	162	338458	42.5407 ug/ml	98
46)	Hexachloropropene	8.70	213	134342	27.3791 ug/ml	99
47)	Hexachlorobutadiene	8.74	225	169545	37.8270 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.93	84	337139	43.9192 ug/ml	93
49)	p-Phenylenediamine	9.06	108	30551	45.9950 ug/ml#	84
50)	4-Chloro-3-Methylphenol	9.06	107	355507	45.4377 ug/ml	99
51)	Safrole	9.15	162	296042	39.7840 ug/ml	99
52)	2-Methylnaphthalene	9.28	142	772106	41.5744 ug/ml	99
53)	1-Methylnaphthalene	9.40	142	678222	38.6264 ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	332346	40.9477 ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	147857	35.2198 ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	265820	46.7394 ug/ml	98
58)	2,4,5-Trichlorophenol	9.62	196	295782	50.5229 ug/ml	99
60)	Isosafrole	9.68	162	552776	70.6267 ug/ml	99
61)	2-Chloronaphthalene	9.79	162	855646	48.9247 ug/ml	98
62)	1-Chloronaphthalene	9.83	162	678989	41.0014 ug/ml	99
63)	2-Nitroaniline	9.89	65	235719	47.0212 ug/ml	98
64)	1,4-Naphthoquinone	9.95	158	279434	40.4605 ug/ml	99
65)	Dimethylphthalate	10.05	163	989988	50.5211 ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	177092	47.1298 ug/ml	98
67)	2,6-Dinitrotoluene	10.14	165	240128	49.0558 ug/ml	98
68)	Acenaphthylene	10.23	152	1278403	45.5260 ug/ml	100
69)	3-Nitroaniline	10.30	138	239756	66.4034 ug/ml	99
70)	2,4-Dinitrophenol	10.40	184	132101	53.4389 ug/ml	68
71)	Acenaphthene	10.41	154	799690	43.7226 ug/ml	99
72)	4-Nitrophenol	10.41	65	157322	43.6124 ug/ml	97
73)	2,4-Dinitrotoluene	10.55	165	329815	52.9536 ug/ml	97
74)	Pentachlorobenzene	10.60	250	321429	43.9844 ug/ml	99
75)	Dibenzofuran	10.57	168	1116720	45.5985 ug/ml	100
76)	2,3,4,6-Tetrachlorophenol	10.72	232	218940	48.4925 ug/ml	97
77)	1-Naphthylamine	10.65	143	666671	126.5743 ug/ml#	65
78)	2-Naphthylamine	10.72	143	591537	184.5066 ug/ml#	57
79)	Diethylphthalate	10.76	149	1023646	52.4524 ug/ml	99
80)	Thionazin	10.86	107	169481	52.1920 ug/ml	95
81)	Fluorene	10.93	166	955934	45.9265 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	466300	47.6766 ug/ml	99
83)	4-Nitroaniline	10.94	138	248874	55.6844 ug/ml	98
84)	5-Nitro-o-Toluidine	10.94	152	273718	55.7007 ug/ml	96
85)	1,2-Diphenylhydrazine	11.05	77	899756	47.4051 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.99	198	198182	57.3267 ug/ml	86
89)	n-Nitrosodiphenylamine	11.00	169	1534254	85.3861 ug/ml	100
90)	Sulfotepp	11.20	322	162581	50.6443 ug/ml	99
91)	Sym-Trinitrobenzene	11.28	75	237762	54.1252 ug/ml	99
92)	Diallate	11.32	86	671857	91.6861 ug/ml#	80
93)	Phenacetin	11.31	108	465055	49.4025 ug/ml	93
94)	Phorate	11.34	75	598777	51.2189 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	285074	50.7379 ug/ml	99
96)	Hexachlorobenzene	11.63	284	309635	50.4137 ug/ml	100

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60697.D Vial: 7
Acq On : 7 May 2012 11:44 Operator: CAA
Sample : WG396481-03 LCS 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 08 09:12:09 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 08 09:11:55 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

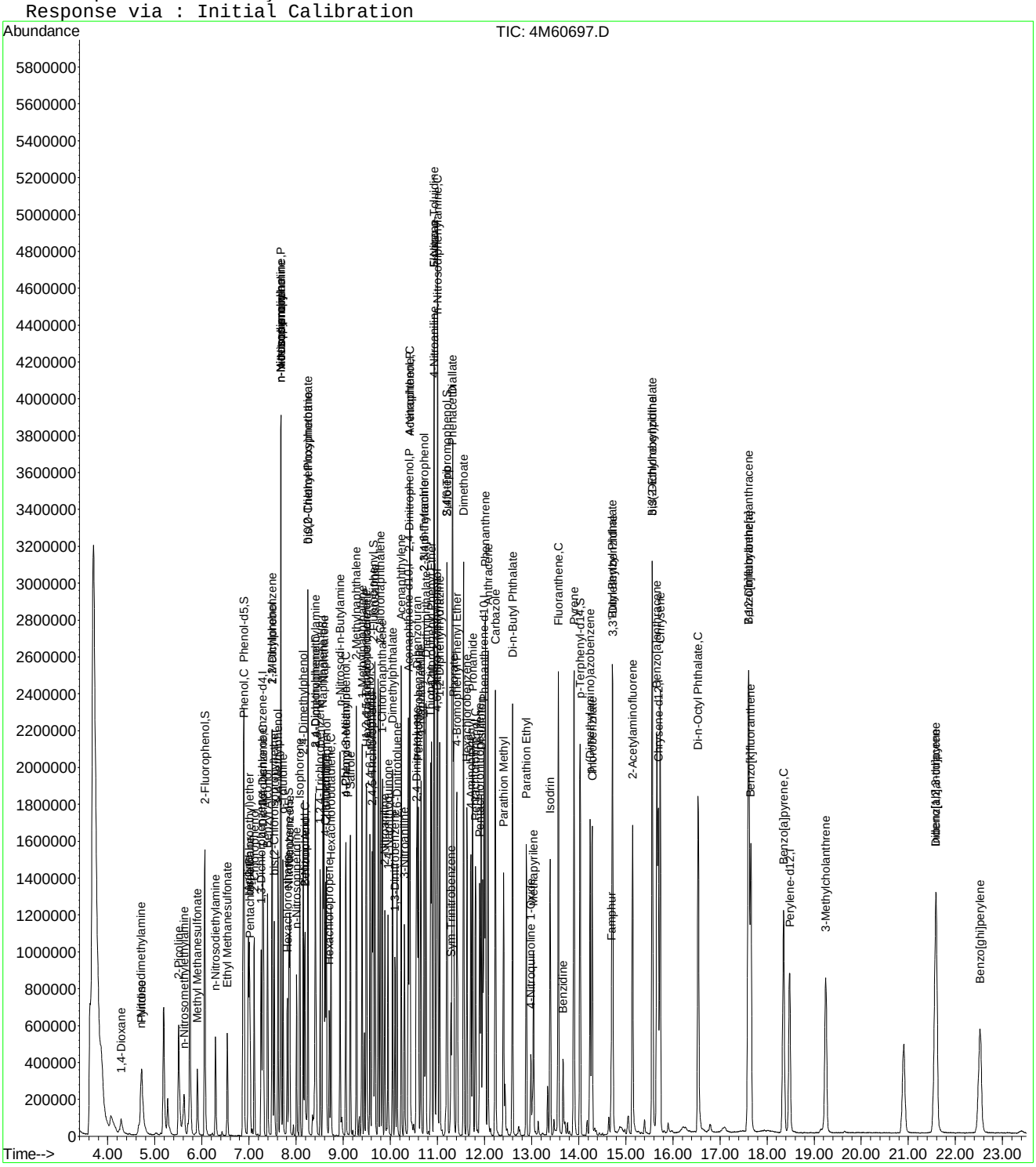
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	379401	62.5180	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	750163	87.8808	ug/ml	99
99)	Pentachlorophenol	11.81	266	227792	58.6513	ug/ml	99
100)	Pronamide	11.75	173	446702	49.4812	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	111398	52.3332	ug/ml	98
102)	Disulfoton	11.93	88	500911	49.8525	ug/ml	99
103)	Phenanthrene	12.02	178	1484293	50.3906	ug/ml	100
104)	Anthracene	12.08	178	1389557	46.0077	ug/ml	100
105)	Carbazole	12.23	167	1368840	51.7599	ug/ml	100
106)	Parathion Methyl	12.41	109	344588	56.0581	ug/ml	99
107)	Di-n-Butyl Phthalate	12.59	149	1760650	53.5862	ug/ml	100
108)	Parathion Ethyl	12.89	97	209404	55.9537	ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.98	190	78269	28.8403	ug/ml	93
110)	Methapyrilene	13.04	58	344203	60.5248	ug/ml	89
111)	Isodrin	13.39	193	158271	50.0248	ug/ml	99
112)	Fluoranthene	13.57	202	1572612	50.9490	ug/ml	99
114)	Benzidine	13.67	184	287511	202.2184	ug/ml	100
115)	Pyrene	13.90	202	1632320	53.4999	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.24	225	331499	52.6237	ug/ml	98
119)	Chlorobenzilate	14.29	251	436436	52.5632	ug/ml	97
120)	Famphur	14.69	218	120692	333.6742	ug/ml#	34
121)	Butyl Benzyl Phthalate	14.71	149	805990	58.0775	ug/ml	98
122)	3,3'-Dimethylbenzidine	14.73	212	428655	44.4620	ug/ml#	93
123)	2-Acetylaminofluorene	15.14	181	599891	50.5302	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.56	149	1062559	56.1069	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.57	252	435159	77.4373	ug/ml	99
126)	Benzo[a]anthracene	15.66	228	1398141	51.6644	ug/ml	100
127)	Chrysene	15.73	228	1356248	53.3898	ug/ml	99
129)	Di-n-Octyl Phthalate	16.54	149	1782057	62.0719	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.61	256	604667	52.5209	ug/ml	99
131)	Benzo[b]fluoranthene	17.61	252	1417164	55.1263	ug/ml	99
132)	Benzo[k]fluoranthene	17.66	252	1337780	56.1389	ug/ml	100
133)	Benzo[a]pyrene	18.35	252	1286240	54.8404	ug/ml	98
134)	3-Methylcholanthrene	19.24	268	629708	49.4493	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.58	276	1309302	50.1244	ug/ml	97
136)	Dibenz[ah]anthracene	21.59	278	1103271	50.6438	ug/ml	98
137)	Benzo[ghi]perylene	22.52	276	1040535	48.1538	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60697.D Vial: 7
Acq On : 7 May 2012 11:44 Operator: CAA
Sample : WG396481-03 LCS 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:15 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 08 09:11:55 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60697.D Vial: 7
Acq On : 7 May 2012 11:44 Operator: CAA
Sample : WG396481-03 LCS 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 08 09:51:09 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 : Tue May 08 09:50:41 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

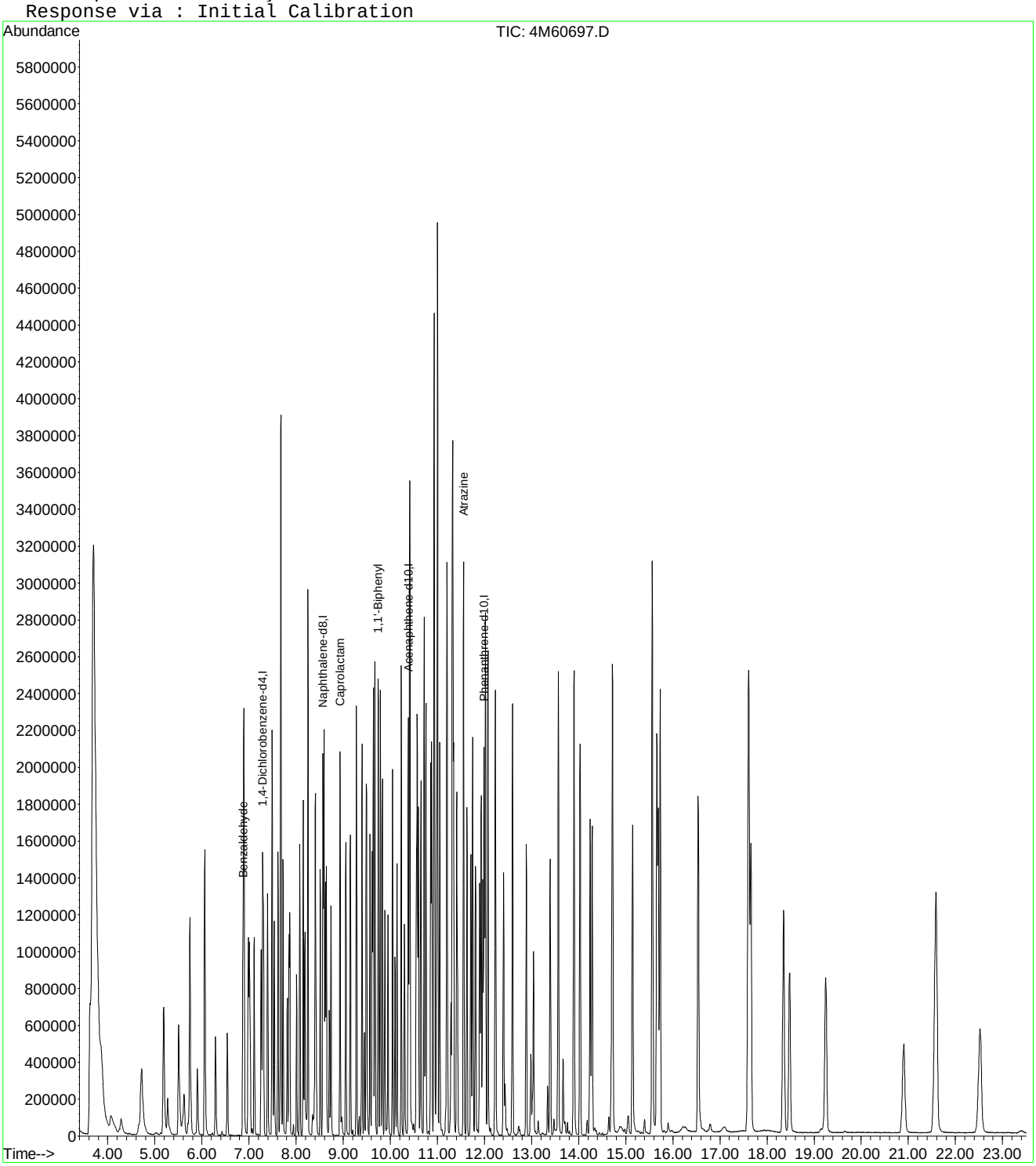
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	285791	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	1079383	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	619355	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	1110516	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.87	105	220694	28.9915	ug/L	98
4) Caprolactam	8.93	55	190795	54.1271	ug/L	90
6) 1,1'-Biphenyl	9.74	154	953194	37.4978	ug/L	99
8) Atrazine	11.56	200	260749	42.4196	ug/L	98

(#) = qualifier out of range (m) = manual integration
4M60697.D TCL.M Tue May 08 09:51:10 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050712\4M60697.D Vial: 7
Acq On : 7 May 2012 11:44 Operator: CAA
Sample : WG396481-03 LCS 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:51 2012 Quant Results File: TCL.RES

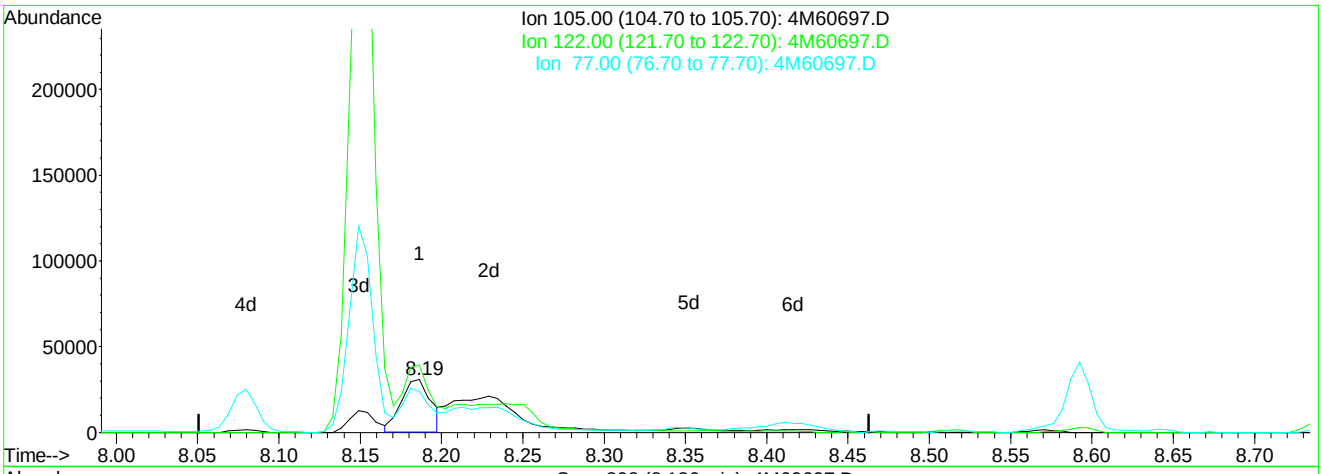
Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Tue May 08 09:50:41 2012
Response via : Initial Calibration

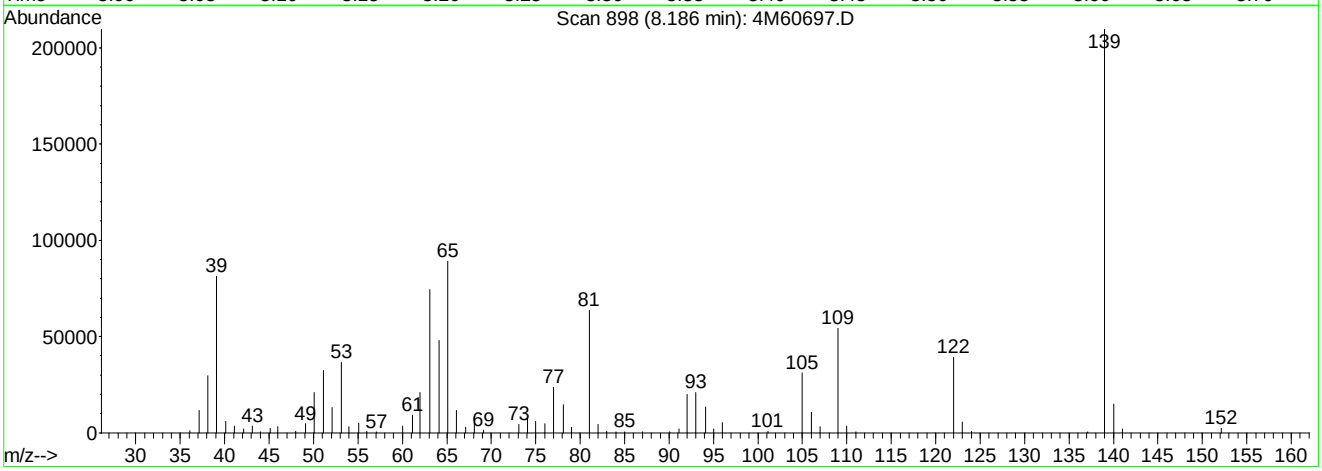


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60697.D Vial: 7
Acq On : 7 May 2012 11:44 Operator: CAA
Sample : WG396481-03 LCS 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:12 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 08 09:11:55 2012
Response via : Single Level Calibration





TIC: 4M60697.D

(39) Benzoic Acid

8.19min 6.12ug/ml

response 38832

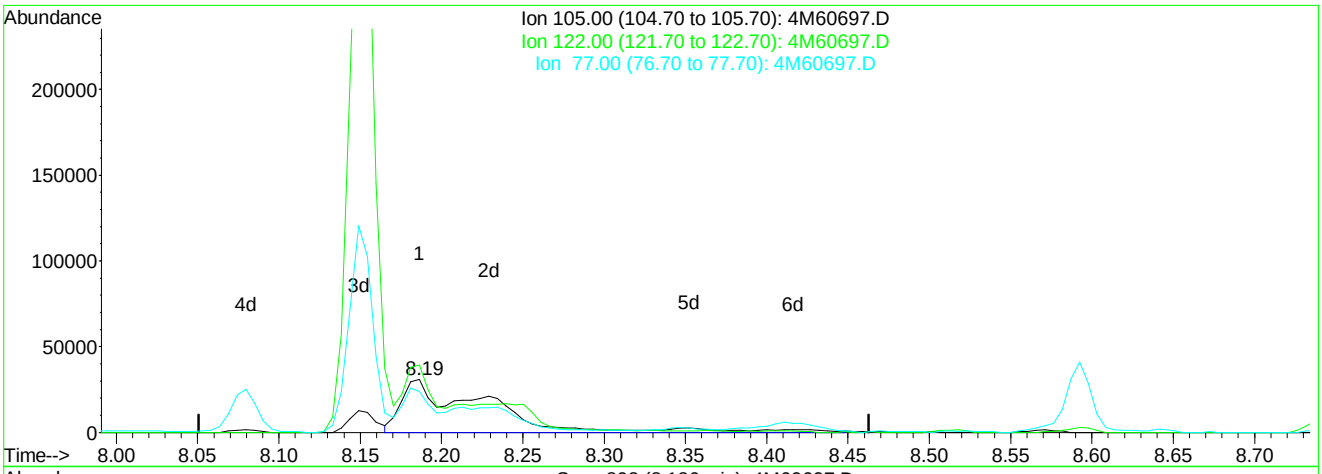
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	70.04
77.00	70.40	44.27
0.00	0.00	0.00

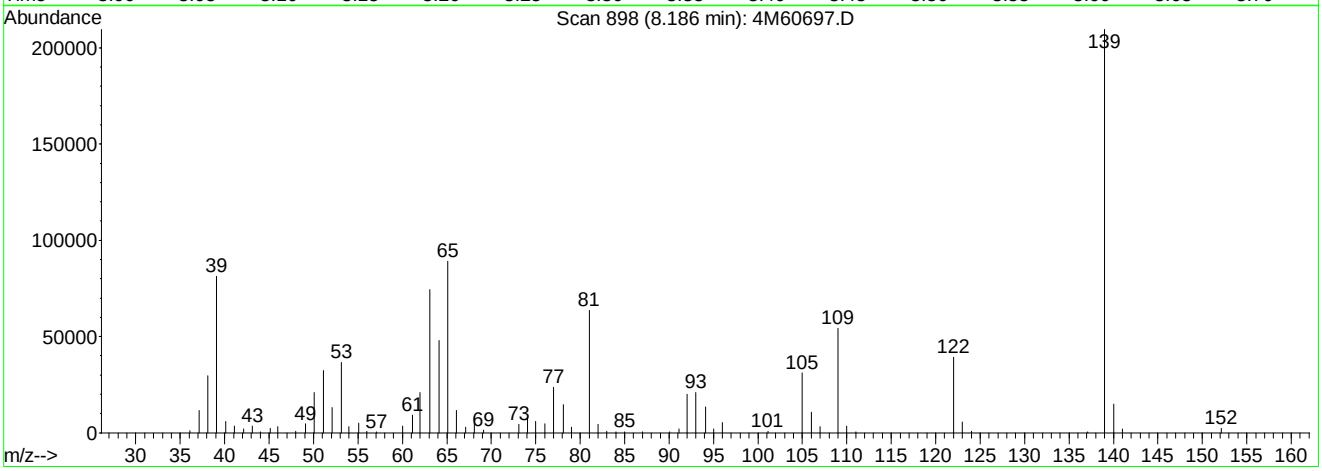
4M60697.D MEGAMIX.M Tue May 08 09:15:01 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050712\4M60697.D Vial: 7
Acq On : 7 May 2012 11:44 Operator: CAA
Sample : WG396481-03 LCS 04/30 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 8 9:15 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 08 09:11:55 2012
Response via : Single Level Calibration





TIC: 4M60697.D

(39) Benzoic Acid

8.19min 17.72ug/ml mint

response 112505

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	24.18#
77.00	70.40	15.28#
0.00	0.00	0.00

4M60697.D MEGAMIX.M Tue May 08 ; 2012

Analyst: 05/08/2012 10:44 Supervisor: 05/08/2012 12:53

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

2.2.2 Semivolatiles GC/MS Data (827-PAHL)

2.2.2.1 Summary Data

Login Number: L12040928
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3510C

Analysis SW-846 8270C

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: The MS/MSD pair exceeded % RPD criteria for 8 compounds, however the recoveries for both the MS and MSD are within specified limits.

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.

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: 45937
Approved By: Mike Cochran

2.2.2.2 QC Summary Data

Example 8270 Calculations

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

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

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

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

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

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

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

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

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

Dry weight correction:

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

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

4.0 Concentration from Linear Regression

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

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

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

m = slope from curve plot

b = intercept from curve plot

Step 2: Calculate y from Quantitation Report

y = 16790/784838 = 0.02139

Step 3: Solve for x

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

Step 4: Solve for analyte concentration Cx

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

Example Spreadsheet Calculation:

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

5.0 Concentration from Quadratic Regression

Step 1 - Retrieve Curve Data from Plot, y = Ax^2 + Bx + C
Where:
Ax^2 + Bx + (C - y) = 0
A, B, C = constants from the ICAL quadratic regression
y = Response ratio = Area of analyte/Area of internal standard (IS)
x = Amount ratio = Concentration of analyte/concentration of IS

Step 2: Calculate y from Quantitation Report

y = Ax/Ais

Step 3: Solve for x using the quadratic formula
Ax^2 + Bx + C - y = 0

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

Step 4: Solve for analyte concentration Cx

Cx = (Cis)(Amount ratio)

Example Spreadsheet Calculation:

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

Microbac Laboratories Inc.
Sample Extract Log

Workgroup: WG396861
Analyst: CAF
Spike Analyst: CAF
Method: 3510C
Run Date: 05/03/2012 09:30
SOP: EXA01 Revison 15
Spike Witness: CPD
Surr Solution: STD50786

Methylene Chloride Lot #: COA16058
Sodium Sulfate,Anhydrous,Granular (Lot # COA16124

	SAMPLE #	Type	Reference	pH	Prod	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12040891-08	SAMP		N	827-PAHL-SPE	1000 mL	.25 mL			1 mL	Transparent
2	L12040928-01	RS01		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
3	L12040928-03	SAMP		N	827-PAHL	910 mL	.25 mL			1 mL	Transparent
4	L12040928-08	MS01	L12040928-01	N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
5	L12040928-10	SD01	L12040928-01	N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
6	L12040963-01	SAMP		N	827-PAHL	940 mL	.25 mL			1 mL	Transparent
7	L12040963-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
8	L12040963-07	SAMP		N	827-PAHL	920 mL	.25 mL			1 mL	Colored
9	L12050011-01	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
10	L12050011-03	SAMP		N	827-PAHL	945 mL	.25 mL			1 mL	Transparent
11	L12050011-05	SAMP		N	827-PAHL	920 mL	.25 mL			1 mL	Transparent
12	L12050013-01	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
13	L12050013-02	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
14	L12050047-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Colored
15	L12050050-01	SAMP		N	827-PAHL	910 mL	.25 mL			1 mL	Colored
16	L12050050-03	SAMP		N	827-PAHL	930 mL	.25 mL			1 mL	Transparent
17	L12050050-05	SAMP		N	827-PAHL	900 mL	.25 mL			1 mL	Colored
18	L12050050-07	SAMP		N	827-PAHL	915 mL	.25 mL			1 mL	Transparent
19	WG396861-01	REF	L12040928-01	N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
20	WG396861-02	BLANK		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
21	WG396861-03	LCS		N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
22	WG396861-04	MS	L12040928-01	N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
23	WG396861-05	MSD	L12040928-01	N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent

L12040891-08	REEXT OUT OF HOLD

Analyst: Cheryl A. Flowers

Reviewer:

EXTRACT - Modified 10/22/2008
PDF ID: 2401695
Report generated: 05/03/2012 16:21

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS7 Dataset: 040412
Analyst1: CAA Analyst2: NA
Method: 8270L SOP: MSS03 Rev: 10

Maintenance Log ID: 41246 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG394108
Internal STD: STD50749 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	7M54726	WG394111-01 5PPM DFTPP STD	1	1	STD50659	04/04/12 08:53
2	7M54727	WG394111-02 1PPM PAHL STD	1	1	STD49560	04/04/12 09:10
3	7M54728	WG394111-02 1PPM PAHL STD	1	1	STD49560	04/04/12 09:39
4	7M54729	WG394111-03 10PPM PAHL STD	1	1	STD49560	04/04/12 10:35
5	7M54730	WG394111-04 5PPM PAHL STD	1	1	STD49560	04/04/12 11:03
6	7M54731	WG394111-05 2.5PPM PAHL STD	1	1	STD49560	04/04/12 11:30
7	7M54732	WG394111-06 0.5PPM PAHL STD	1	1	STD49560	04/04/12 11:58
8	7M54733	WG394111-07 0.1PPM PAHL STD	1	1	STD49560	04/04/12 12:26
9	7M54734	WG394111-08 0.05PPM PAHL STD	1	1	STD49560	04/04/12 12:53
10	7M54735	WG394111-09 1PPM PAHL Alt Src STD	1	1	STD49584	04/04/12 13:21
11	7M54736	WG393926-01 BLK 04/03	7	1	SOIL	04/04/12 13:49
12	7M54737	WG393926-02 LCS 04/03	7	1	SOIL	04/04/12 14:17
13	7M54738	WG393926-03 LCS DUP 04/03	7	1	SOIL	04/04/12 14:45
14	7M54739	L12040002-01 LOD	7	1	SOIL	04/04/12 15:12
15	7M54740	L12040004-01 LOQ	7	1	SOIL	04/04/12 15:40
16	7M54741	L12040039-04	7	1	SOIL	04/04/12 16:08
17	7M54742	L12040039-08	7	1	SOIL	04/04/12 16:36

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2	X			
	WG394111-02 1PPM PAHL STD - Pyrene fails high.			
3				
	WG394111-02 1PPM PAHL STD - Pyrene fails high, run ICAL.			
17	X	10	Over Calibration Range	#3, 4, 5
	L12040039-08 - SS NBZ high - SMI.			

Page: 1 Approved: 09-APR-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS7 Dataset: 050412
Analyst1: CAA Analyst2: NA
Method: 8270L SOP: MSS03 Rev: 19

Maintenance Log ID: 41607 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG396780, WG397013
Internal STD: STD51409 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	7M54883	WG397019-01 5PPM DFTPP STD	1	1	STD50659	05/04/12 09:16
2	7M54884	WG397019-02 1PPM PAHL STD	1	1	STD49560	05/04/12 09:33
3	7M54885	WG396861-02 BLK 05/03	1	1		05/04/12 10:01
4	7M54886	WG396861-03 LCS 05/03	1	1		05/04/12 10:28
5	7M54887	L12040891-08 RE	1	1		05/04/12 10:56
6	7M54888	L12040891-05 10X RE	7	10	SOIL	05/04/12 11:24
7	7M54889	L12040928-01 REF	1	1		05/04/12 11:51
8	7M54890	L12040928-03	1	1		05/04/12 12:19
9	7M54891	L12040928-08 MS	1	1		05/04/12 12:46
10	7M54892	L12040928-10 MSD	1	1		05/04/12 13:14
11	7M54893	L12040963-01	1	1		05/04/12 13:41
12	7M54894	L12040963-03	1	1		05/04/12 14:09
13	7M54895	L12040963-07	1	1		05/04/12 14:36
14	7M54896	L12050011-01	1	1		05/04/12 15:04
15	7M54897	L12050011-03	1	1		05/04/12 15:32
16	7M54898	L12050011-05	1	1		05/04/12 15:59
17	7M54899	L12050013-01	1	1		05/04/12 16:27
18	7M54900	L12050013-02	1	1		05/04/12 16:55
19	7M54901	L12050047-03	1	1		05/04/12 17:22
20	7M54902	L12050050-01	1	1		05/04/12 17:50
21	7M54903	L12050050-03	1	1		05/04/12 18:18
22	7M54904	L12050050-05	1	1		05/04/12 18:46
23	7M54905	L12050050-07	1	1		05/04/12 19:13

Comments

Seq.	Rerun	Dil.	Reason	Analytes
9				
	L12040928-08 MS - SS FBP low.			
19				
	L12050047-03 - SS FBP low, needs re-extracted.			

Page: 1 Approved: 07-MAY-12

Microbac Laboratories Inc.

Data Checklist

Date: 04-APR-2012
Analyst: CAA
Analyst: NA
Method: 8270L
Instrument: HPMS7
Curve Workgroup: NA
Runlog ID: 46039
Analytical Workgroups: L12040002, L12040004, L12040039

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

Primary Reviewer:
05-APR-2012

Secondary Reviewer:
09-APR-2012

CHECKLIST1 - Modified 03/05/2008
Generated: APR-09-2012 12:24:01

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270L
Instrument: HPMS7
Curve Workgroup: NA
Runlog ID: 46571
Analytical Workgroups: L12040891, 040928, 040963, 050011, 050013, 050047, 050050

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

Primary Reviewer:
07-MAY-2012

Secondary Reviewer:
07-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-07-2012 13:16:55

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C **AAB#:** WG397013

Login Number: L12040928

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-27-042612	01	04/26/12					05/03/12	7	7		05/04/12	1.1	40	
MW-10-042612	03	04/26/12					05/03/12	6.9	7		05/04/12	1.1	40	
MW-27-042612-MS	08	04/26/12					05/03/12	7	7		05/04/12	1.1	40	
MW-27-042612-MSD	10	04/26/12					05/03/12	7	7		05/04/12	1.2	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2403516
Report generated 05/07/2012 15:26

Login Number: L12040928
Instrument Id: HPMS7
Workgroup (AAB#): WG397013

Method: 8270L
CAL ID: HPMS7-04-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3
L12040928-01	1.00	01	63.4	67.2	63.7
L12040928-03	1.00	01	63.1	66.1	84.3
L12040928-08	1.00	01	39.4	43.8	74.3
L12040928-10	1.00	01	55.4	59.9	82.7
WG396861-02	1.00	01	70.9	73.5	89.0
WG396861-03	1.00	01	64.7	67.2	86.7

Surrogates	Surrogate Limits		
1 - 2-Fluorobiphenyl	43	-	116
2 - Nitrobenzene-d5	35	-	114
3 - p-Terphenyl-d14	33	-	141

Underline = Result out of surrogate limits

DL = surrogate diluted out
ND = surrogate not detected

SURROGATES - Modified 03/06/2008
PDF File ID: 2403528
Report generated: 05/07/2012 15:27

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Blank File ID: 7M54885
Prep Date: 05/03/12 09:30
Analyzed Date: 05/04/12 10:01
Analyst: CAA

Work Group: WG397013
Blank Sample ID: WG396861-02
Instrument ID: HPMS7
Method: 8270C

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396861-03	7M54886	05/04/12 10:28	01
MW-27-042612	L12040928-01	7M54889	05/04/12 11:51	01
MW-10-042612	L12040928-03	7M54890	05/04/12 12:19	01
MW-27-042612-MS	L12040928-08	7M54891	05/04/12 12:46	01
MW-27-042612-MSD	L12040928-10	7M54892	05/04/12 13:14	01

Report Name: BLANK_SUMMARY
PDF File ID: 2403517
Report generated 05/07/2012 15:26

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/03/12 09:30 Sample ID: WG396861-02
Instrument ID: HPMS7 Run Date: 05/04/12 10:01 Prep Method: 3510C
File ID: 7M54885 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397013 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS7-04-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
2-Methylnaphthalene	0.0250	0.0500	0.0250	1	U
Acenaphthene	0.0250	0.0500	0.0250	1	U
Acenaphthylene	0.0250	0.0500	0.0250	1	U
Anthracene	0.0250	0.0500	0.0250	1	U
Benzo(a)anthracene	0.0250	0.0500	0.0250	1	U
Benzo(a)pyrene	0.0250	0.0500	0.0250	1	U
Benzo(b)fluoranthene	0.0250	0.0500	0.0250	1	U
Benzo(g,h,i)perylene	0.0250	0.0500	0.0250	1	U
Benzo(k)fluoranthene	0.0250	0.0500	0.0250	1	U
Chrysene	0.0250	0.0500	0.0250	1	U
Dibenzo(a,h)anthracene	0.0250	0.0500	0.0250	1	U
Fluoranthene	0.0250	0.0500	0.0250	1	U
Fluorene	0.0250	0.0500	0.0250	1	U
Indeno(1,2,3-cd)pyrene	0.0250	0.0500	0.0250	1	U
Naphthalene	0.0250	0.0500	0.0250	1	U
Phenanthrene	0.0250	0.0500	0.0250	1	U
Pyrene	0.0250	0.0500	0.0250	1	U

Surrogates	% Recovery	Surrogate Limits			Qualifier
2-Fluorobiphenyl	70.9	43	-	116	PASS
Nitrobenzene-d5	73.5	35	-	114	PASS
p-Terphenyl-d14	89.0	33	-	141	PASS

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

Report Name:BLANK
PDF ID: 2403518
07-MAY-2012 15:26

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Run Date: 05/04/2012 Sample ID: WG396861-03
Instrument ID: HPMS7 Run Time: 10:28 Prep Method: 3510C
File ID: 7M54886 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397013 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD50386 Cal ID: HPMS7-04-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
2-Methylnaphthalene	1.00	0.771	77.1	30 - 105	
Acenaphthene	1.00	0.731	73.1	30 - 110	
Acenaphthylene	1.00	0.715	71.5	30 - 115	
Anthracene	1.00	0.787	78.7	30 - 130	
Benzo(a)anthracene	1.00	0.781	78.1	50 - 150	
Benzo(a)pyrene	1.00	0.877	87.7	50 - 140	
Benzo(b)fluoranthene	1.00	0.846	84.6	40 - 150	
Benzo(g,h,i)perylene	1.00	0.815	81.5	30 - 150	
Benzo(k)fluoranthene	1.00	0.862	86.2	40 - 150	
Chrysene	1.00	0.860	86.0	45 - 145	
Dibenzo(a,h)anthracene	1.00	0.775	77.5	25 - 155	
Fluoranthene	1.00	0.893	89.3	40 - 150	
Fluorene	1.00	0.696	69.6	30 - 120	
Indeno(1,2,3-cd)pyrene	1.00	0.837	83.7	35 - 150	
Naphthalene	1.00	0.699	69.9	30 - 100	
Phenanthrene	1.00	0.764	76.4	30 - 130	
Pyrene	1.00	0.840	84.0	50 - 150	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2-Fluorobiphenyl	64.7	43 - 116	PASS
Nitrobenzene-d5	67.2	35 - 114	PASS
p-Terphenyl-d14	86.7	33 - 141	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2403519
Report generated: 05/07/2012 15:26

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:HPMS7- 04-APR-12 Worknum:WG397013

Instrument ID:HPMS7 Contract #: Prep Method:3510C

Parent ID:L12040928-01 File ID:7M54889 Dil:1 Method:8270C

Sample ID:L12040928-08 MS File ID:7M54891 Dil:1 Matrix:Water

Sample ID:L12040928-10 MSD File ID:7M54892 Dil:1 Units:ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
2-Methylnaphthalene	U	1.00	0.498	49.8	1.00	0.696	69.6	33.2	30 - 105	30	#
Acenaphthene	U	1.00	0.420	42	1.00	0.641	64.1	41.7	30 - 110	30	#
Acenaphthylene	U	1.00	0.440	44	1.00	0.628	62.8	35.3	30 - 115	30	#
Anthracene	U	1.00	0.469	46.9	1.00	0.669	66.9	35.2	30 - 130	30	#
Benzo(a)anthracene	U	1.00	0.711	71.1	1.00	0.786	78.6	9.92	50 - 150	30	
Benzo(a)pyrene	U	1.00	0.711	71.1	1.00	0.815	81.5	13.7	50 - 140	30	
Benzo(b)fluoranthene	U	1.00	0.678	67.8	1.00	0.803	80.3	16.8	40 - 150	30	
Benzo(g,h,i)perylene	U	1.00	0.462	46.2	1.00	0.595	59.5	25.3	30 - 150	30	
Benzo(k)fluoranthene	U	1.00	0.697	69.7	1.00	0.845	84.5	19.3	40 - 150	30	
Chrysene	U	1.00	0.797	79.7	1.00	0.874	87.4	9.25	45 - 145	30	
Dibenzo(a,h)anthracene	U	1.00	0.378	37.8	1.00	0.515	51.5	30.6	25 - 155	30	#
Fluoranthene	U	1.00	0.769	76.9	1.00	0.853	85.3	10.3	40 - 150	30	
Fluorene	U	1.00	0.410	41	1.00	0.595	59.5	36.9	30 - 120	30	#
Indeno(1,2,3-cd)pyrene	U	1.00	0.530	53	1.00	0.665	66.5	22.5	35 - 150	30	
Naphthalene	U	1.00	0.464	46.4	1.00	0.634	63.4	31.0	30 - 100	30	#
Phenanthrene	U	1.00	0.456	45.6	1.00	0.655	65.5	35.9	30 - 130	30	#
Pyrene	U	1.00	0.793	79.3	1.00	0.859	85.9	8.03	50 - 150	30	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2403520

Report generated 05/07/2012 15:26

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040928
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: 2403524
Report generated 05/07/2012 15:27

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12040928
Instrument: HPMS7
Analyst: CAA
Workgroup: WG397019

Tune ID: WG397019-01
Run Date: 05/04/2012
Run Time: 09:16
File ID: 7M54883
Cal ID: HPMS7-04-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	45.8	127689	PASS
68.0	69.0	0	2.00	1.51	1929	PASS
69.0	198	0	100	46.0	128140	PASS
70.0	69.0	0	2.00	0.900	1153	PASS
127	198	40.0	60.0	58.7	163690	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	278826	PASS
199	198	5.00	9.00	6.72	18729	PASS
275	198	10.0	30.0	24.4	67989	PASS
365	198	1.00	100	2.81	7827	PASS
441	443	0.0100	100	80.9	31421	PASS
442	198	40.0	100	71.4	199200	PASS
443	442	17.0	23.0	19.5	38842	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397019-02	CCV	01	05/04/2012 09:33	
WG396861-02	BLANK	01	05/04/2012 10:01	
WG396861-03	LCS	01	05/04/2012 10:28	
L12040928-01	MW-27-042612	01	05/04/2012 11:51	
L12040928-03	MW-10-042612	01	05/04/2012 12:19	
L12040928-08	MW-27-042612-MS	01	05/04/2012 12:46	
L12040928-10	MW-27-042612-MSD	01	05/04/2012 13:14	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2403524
Report generated 05/07/2012 15:27

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12040928 **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: 2403521
Report generated 05/07/2012 15:26

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040928
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: 2403521
Report generated 05/07/2012 15:26

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040928
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: 2403521
Report generated 05/07/2012 15:26

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12040928
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: 2403521
Report generated 05/07/2012 15:26

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12040928 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: 2403523
Report generated 05/07/2012 15:27

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/04/2012 Sample ID: WG397019-02
Instrument ID: HPMS7 Run Time: 09:33 Method: 8270C
File ID: 7M54884 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397013 Cal ID: HPMS7 - 04-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Acenaphthene	CCC	1000	1000	ug/L	1.27	0.190	20	
Benzo[a]pyrene	CCC	1000	970	ug/L	1.25	3.04	20	
Fluoranthene	CCC	1000	981	ug/L	1.28	1.94	20	
2-Methylnaphthalene		1000	1030	ug/L	0.740	2.54	20	
Acenaphthylene		1000	967	ug/L	2.14	3.30	20	
Anthracene		1000	945	ug/L	1.18	5.53	20	
Benzo[a]anthracene		1000	939	ug/L	1.22	6.06	20	
Benzo[b]fluoranthene		1000	889	ug/L	1.23	11.2	20	
Benzo[ghi]perylene		1000	975	ug/L	1.21	2.49	20	
Benzo[k]fluoranthene		1000	962	ug/L	1.26	3.83	20	
Chrysene		1000	966	ug/L	1.25	3.45	20	
Dibenz[ah]anthracene		1000	1010	ug/L	1.20	0.840	20	
Fluorene		1000	925	ug/L	1.39	7.52	20	
Indeno[1,2,3-cd]pyrene		1000	1000	ug/L	1.41	0.390	20	
Naphthalene		1000	969	ug/L	1.15	3.13	20	
Phenanthrene		1000	898	ug/L	1.12	10.2	20	
Pyrene		1000	940	ug/L	1.51	6.03	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2403525
Report generated 05/07/2012 15:27

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12040928
Instrument ID: HPMS7
Workgroup (AAB#): WG397013

CCV Number: WG397019-02
CAL ID: HPMS7-04-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG397019-02	NA	NA	57510	90937	97284	90339	95286
Upper Limit	NA	NA	115020	181874	194568	180678	190572
Lower Limit	NA	NA	28755	45469	48642	45170	47643
L12040928-01	1.00	01	62170	106400	99987	104701	104932
L12040928-03	1.00	01	59962	96207	97312	92970	101897
L12040928-08	1.00	01	59027	94387	95998	90526	100296
L12040928-10	1.00	01	62491	97366	100433	93282	104463
WG396861-02	1.00	01	60234	93901	98769	92437	99121
WG396861-03	1.00	01	59985	95903	99929	93096	96353

IS-1 - Acenaphthene-d10
IS-2 - Chrysene-d12
IS-3 - Naphthalene-d8
IS-4 - Perylene-d12
IS-5 - Phenanthrene-d10

Underline = Response outside limits

INTERNAL_STD - Modified 03/06/2008
PDF File ID: 2403526
Report generated 05/07/2012 15:27

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12040928 CCV Number: WG397019-02

Instrument ID: HPMS7 CAL ID: HPMS7-04-APR-12

Workgroup (AAB#): WG397013 Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG397019-02	NA	NA	8.22	13.47	6.03	15.7	10.09
Upper Limit	NA	NA	8.72	13.97	6.53	16.2	10.59
Lower Limit	NA	NA	7.72	12.97	5.53	15.2	9.59
L12040928-01	1.00	01	8.22	13.47	6.02	15.7	10.08
L12040928-03	1.00	01	8.22	13.47	6.02	15.7	10.08
L12040928-08	1.00	01	8.22	13.47	6.03	15.7	10.09
L12040928-10	1.00	01	8.22	13.47	6.03	15.69	10.08
WG396861-02	1.00	01	8.22	13.47	6.02	15.7	10.09
WG396861-03	1.00	01	8.22	13.47	6.02	15.7	10.08

IS-1 - Acenaphthene-d10
IS-2 - Chrysene-d12
IS-3 - Naphthalene-d8
IS-4 - Perylene-d12
IS-5 - Phenanthrene-d10

Underline = Response outside limits

INTERNAL_STD_RT - Modified 03/06/2008
PDF File ID: 2403529
Report generated 05/07/2012 15:27

2.2.2.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54889.D Vial: 7
Acq On : 4 May 2012 11:51 am Operator: CAA
Sample : L12040928-01 REF Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:30 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

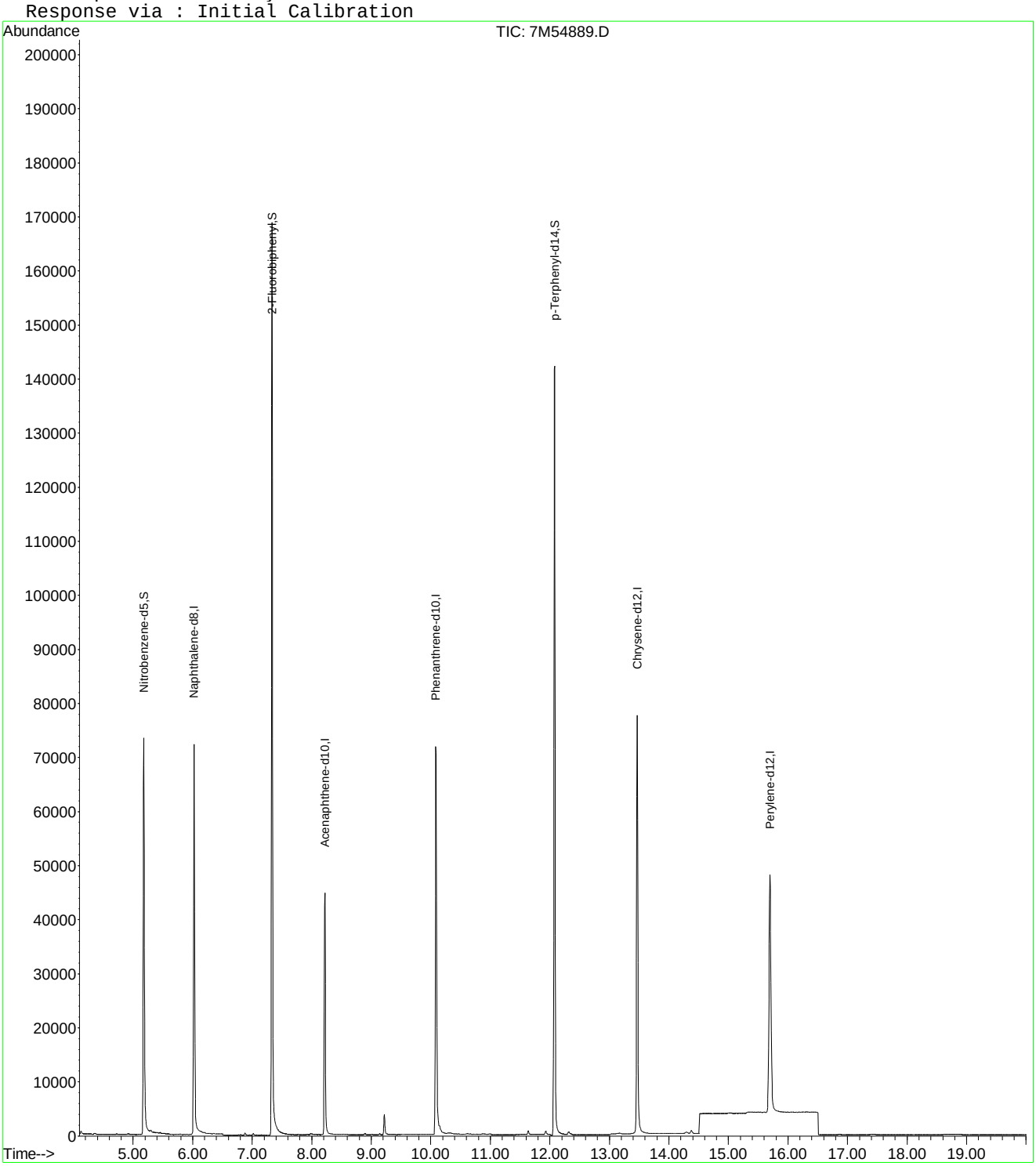
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	99987	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	62170	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	104932	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	106400	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	104701	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	70151	1.6799	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 67.20%			
7) 2-Fluorobiphenyl	7.33	172	162884	1.5841	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 63.20%			
17) p-Terphenyl-d14	12.08	244	157320	1.5937	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 63.60%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
7M54889.D SIMPAHL.M Mon May 07 08:55:25 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54889.D Vial: 7
Acq On : 4 May 2012 11:51 am Operator: CAA
Sample : L12040928-01 REF Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54890.D Vial: 8
Acq On : 4 May 2012 12:19 pm Operator: CAA
Sample : L12040928-03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:30 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	97312	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	59962	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	101897	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	96207	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	92970	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	67135	1.6519	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 66.00%			
7) 2-Fluorobiphenyl	7.33	172	156530	1.5783	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 63.20%			
17) p-Terphenyl-d14	12.08	244	188144	2.1079	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 84.40%			

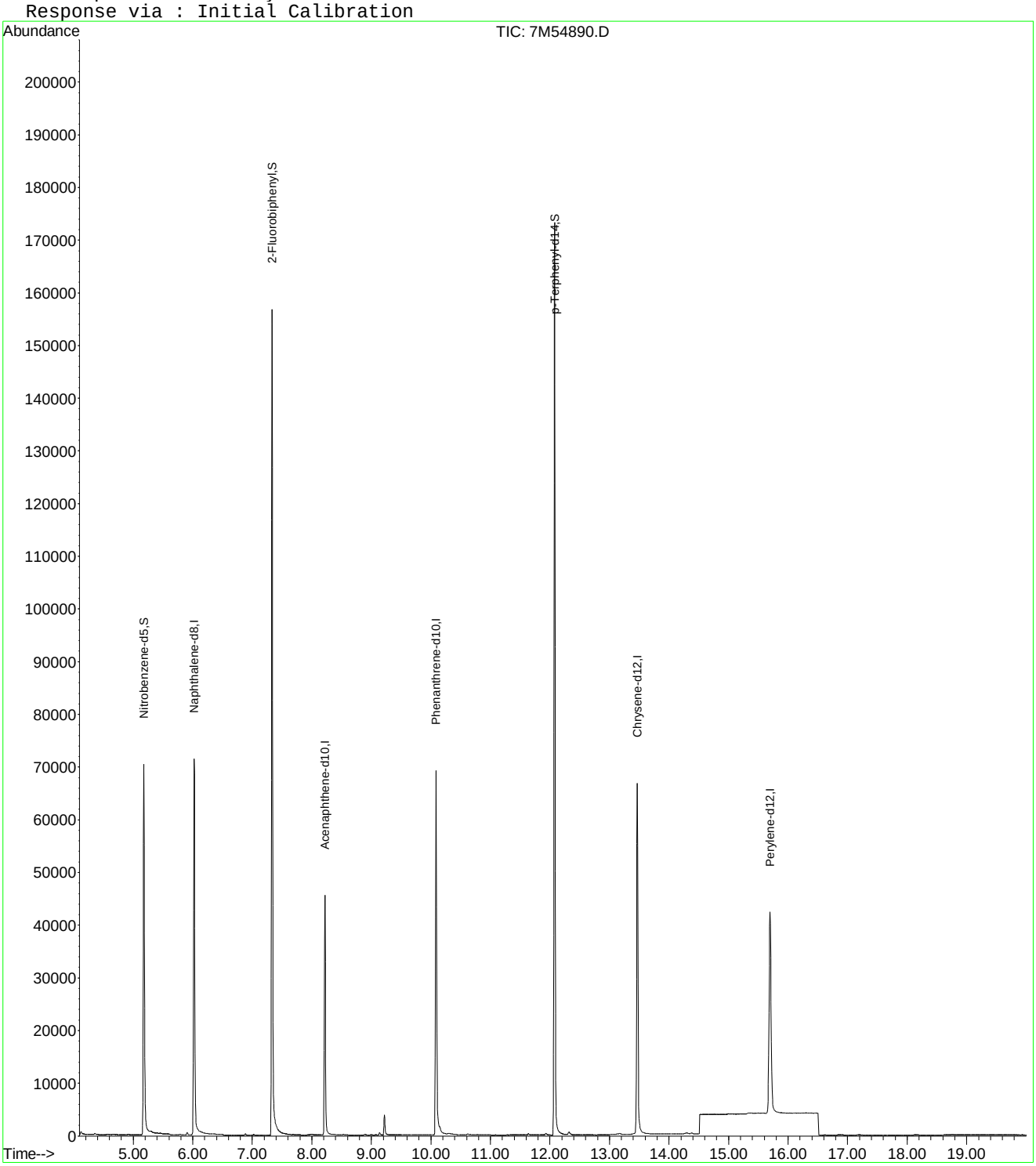
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54890.D SIMPAHL.M Mon May 07 08:55:25 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54890.D Vial: 8
Acq On : 4 May 2012 12:19 pm Operator: CAA
Sample : L12040928-03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54891.D Vial: 9
Acq On : 4 May 2012 12:46 pm Operator: CAA
Sample : L12040928-08 MS Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:30 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

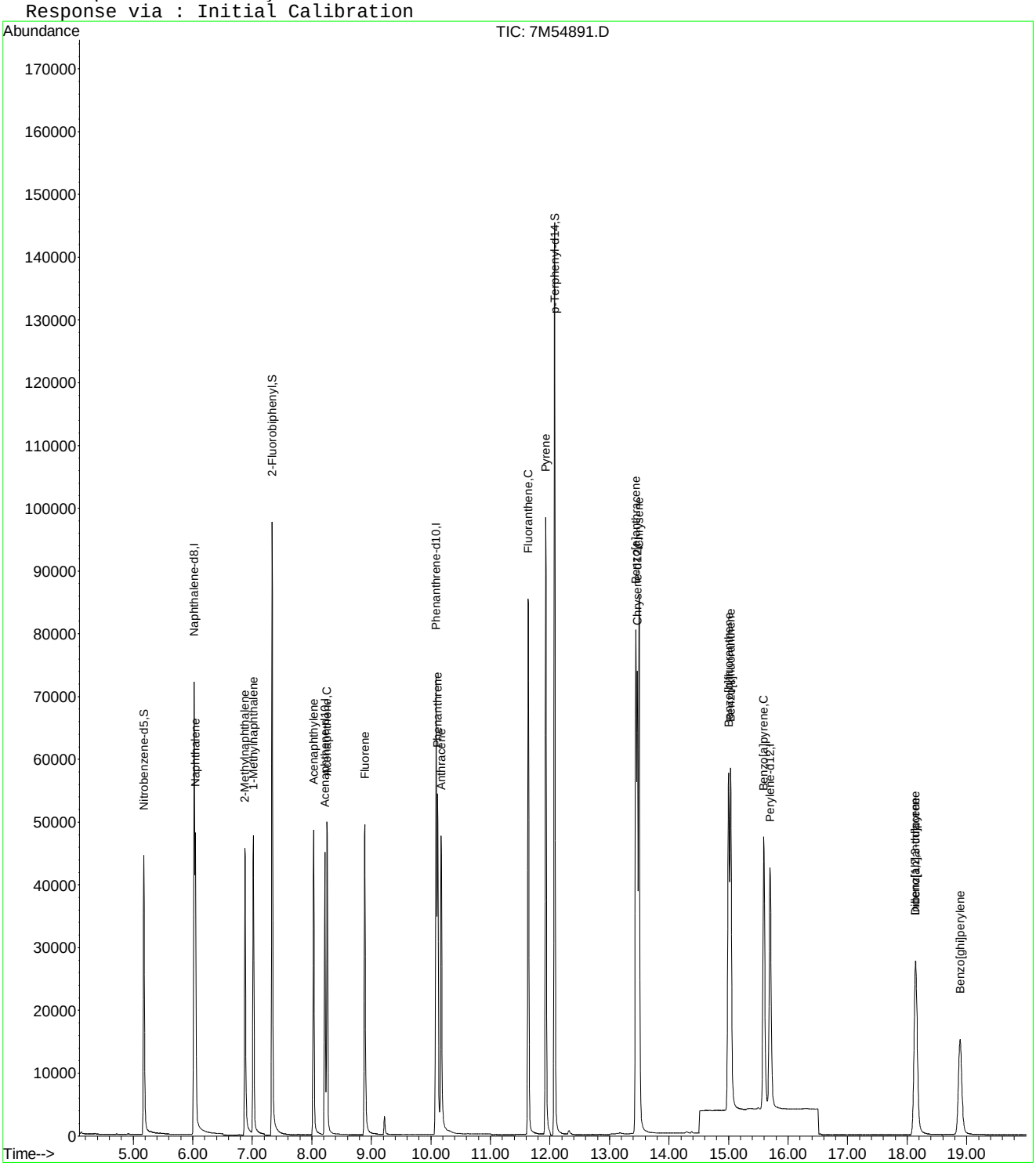
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	95998	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.22	164	59027	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	100296	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	94387	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	90526	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	43872	1.0943	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 43.60%			
7) 2-Fluorobiphenyl	7.33	172	96079	0.9841	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 39.20%#			
17) p-Terphenyl-d14	12.08	244	162713	1.8581	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 74.40%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	52736	0.4640	ug/ml	99
4) 2-Methylnaphthalene	6.88	142	34496	0.4981	ug/ml	100
5) 1-Methylnaphthalene	7.02	142	32633	0.4615	ug/ml	100
8) Acenaphthylene	8.03	152	57405	0.4399	ug/ml	95
9) Acenaphthene	8.26	154	31340	0.4197	ug/ml	99
10) Fluorene	8.89	166	36360	0.4098	ug/ml	100
12) Phenanthrene	10.11	178	56847	0.4557	ug/ml	99
13) Anthracene	10.17	178	58721	0.4686	ug/ml	98
14) Fluoranthene	11.63	202	100484	0.7688	ug/ml	100
16) Pyrene	11.93	202	120251	0.7927	ug/ml	98
18) Benzo[a]anthracene	13.44	228	87130	0.7115	ug/ml	98
19) Chrysene	13.50	228	97037	0.7966	ug/ml	100
21) Benzo[b]fluoranthene	15.00	252	84690	0.6782	ug/ml	99
22) Benzo[k]fluoranthene	15.04	252	82312	0.6966	ug/ml	99
23) Benzo[a]pyrene	15.59	252	82642	0.7108	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.14	276	67459	0.5301	ug/ml	100
25) Dibenz[ah]anthracene	18.14	278	40706	0.3780	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	51799	0.4616	ug/ml	99

(#) = qualifier out of range (m) = manual integration
7M54891.D SIMPAHL.M Mon May 07 08:49:12 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54891.D Vial: 9
Acq On : 4 May 2012 12:46 pm Operator: CAA
Sample : L12040928-08 MS Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54892.D Vial: 10
Acq On : 4 May 2012 1:14 pm Operator: CAA
Sample : L12040928-10 MSD Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:31 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

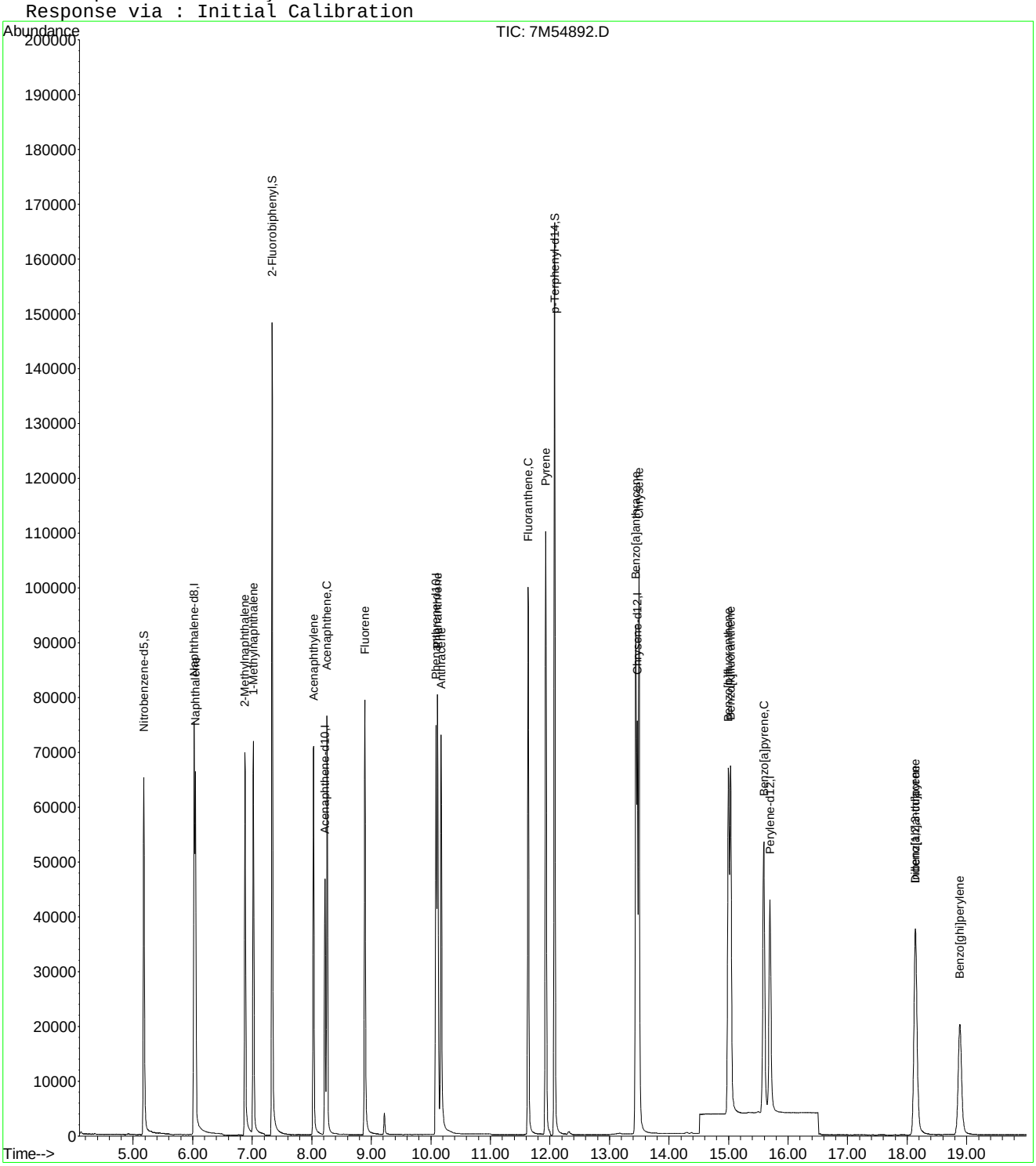
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	100433	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.22	164	62491	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	104463	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	97366	1.00	ug/ml	-0.01
20) Perylene-d12	15.69	264	93282	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	62803	1.4973	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 60.00%			
7) 2-Fluorobiphenyl	7.33	172	143250	1.3860	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 55.60%			
17) p-Terphenyl-d14	12.08	244	186805	2.0680	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 82.80%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	75408	0.6342	ug/ml	99
4) 2-Methylnaphthalene	6.88	142	50455	0.6964	ug/ml	100
5) 1-Methylnaphthalene	7.02	142	47827	0.6465	ug/ml	99
8) Acenaphthylene	8.03	152	86790	0.6282	ug/ml	94
9) Acenaphthene	8.26	154	50645	0.6407	ug/ml	92
10) Fluorene	8.89	166	55913	0.5953	ug/ml	100
12) Phenanthrene	10.11	178	85151	0.6553	ug/ml	99
13) Anthracene	10.17	178	87309	0.6689	ug/ml	99
14) Fluoranthene	11.63	202	116077	0.8527	ug/ml	100
16) Pyrene	11.93	202	134429	0.8590	ug/ml	99
18) Benzo[a]anthracene	13.44	228	99263	0.7858	ug/ml	99
19) Chrysene	13.50	228	109804	0.8738	ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	103286	0.8026	ug/ml	96
22) Benzo[k]fluoranthene	15.04	252	102951	0.8455	ug/ml	94
23) Benzo[a]pyrene	15.59	252	97691	0.8154	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.14	276	87152	0.6647	ug/ml	100
25) Dibenz[ah]anthracene	18.14	278	57127	0.5147	ug/ml	100
26) Benzo[ghi]perylene	18.88	276	68825	0.5952	ug/ml	99

(#) = qualifier out of range (m) = manual integration
7M54892.D SIMPAHL.M Mon May 07 08:49:13 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54892.D Vial: 10
Acq On : 4 May 2012 1:14 pm Operator: CAA
Sample : L12040928-10 MSD Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



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

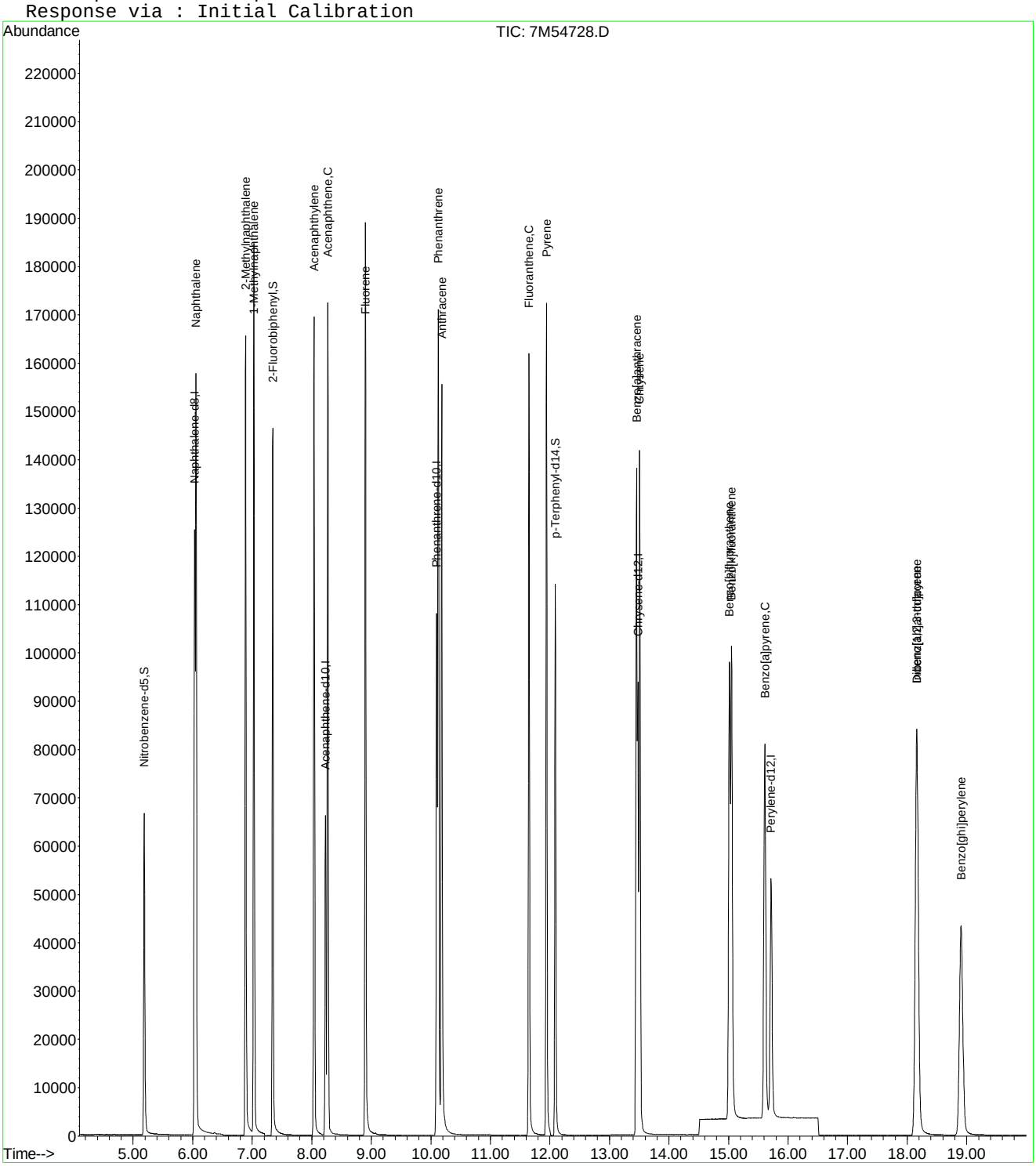
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	153463	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	85143	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	143225	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	118114	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	116508	1.00	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

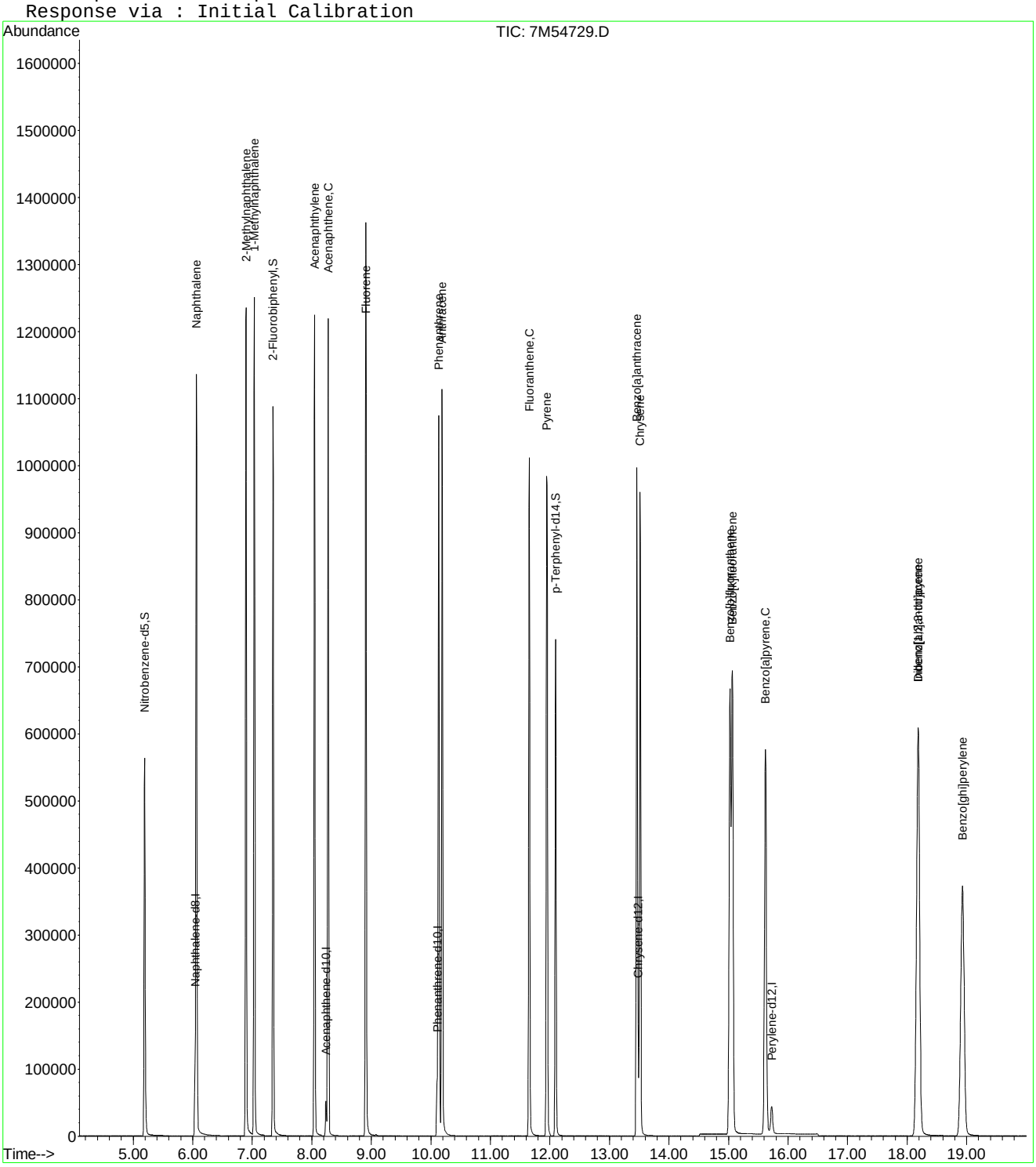
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.04	136	128908	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.24	164	64023	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	105133	1.00	ug/ml	0.00
15) Chrysene-d12	13.49	240	92409	1.00	ug/ml	0.00
20) Perylene-d12	15.73	264	91750	1.00	ug/ml	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
7M54729.D SIMPAHL.M Thu Apr 05 13:50:24 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54729.D Vial: 3
Acq On : 4 Apr 2012 10:35 am Operator: CAA
Sample : WG394111-03 10PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:56 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54730.D Vial: 4
Acq On : 4 Apr 2012 11:03 am Operator: CAA
Sample : WG394111-04 5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:08 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:04 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

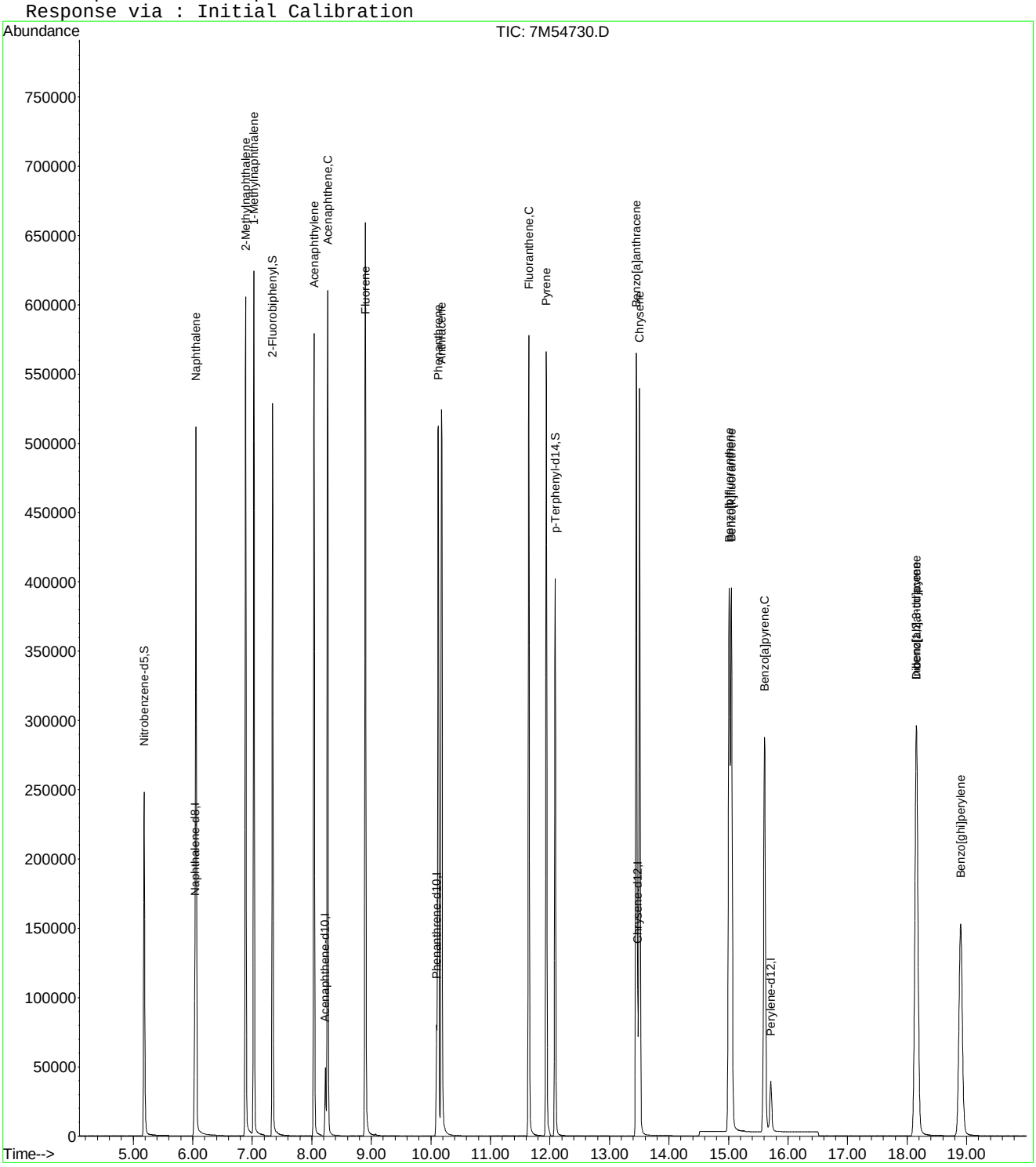
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	108655	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58819	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	97058	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	93620	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	84709	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	227669	5.6709	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 226.80%#			
7) 2-Fluorobiphenyl	7.34	172	476716	5.7218	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 228.80%#			
17) p-Terphenyl-d14	12.09	244	401697	5.1543	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 206.00%#			
Target Compounds						Qvalue
3) Naphthalene	6.06	128	598766	5.2004	ug/ml	99
4) 2-Methylnaphthalene	6.89	142	396960	5.6167	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	401769	5.7396	ug/ml	100
8) Acenaphthylene	8.04	152	644671	6.1053	ug/ml	99
9) Acenaphthene	8.27	154	356386	5.5560	ug/ml	100
10) Fluorene	8.90	166	440591	5.9040	ug/ml	100
12) Phenanthrene	10.13	178	578333	5.3513	ug/ml	100
13) Anthracene	10.18	178	603655	5.6342	ug/ml	99
14) Fluoranthene	11.64	202	627208	5.3565	ug/ml	99
16) Pyrene	11.94	202	697024	5.0790	ug/ml	100
18) Benzo[a]anthracene	13.45	228	597051	5.5085	ug/ml	98
19) Chrysene	13.51	228	566428	5.2679	ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	633809	6.1547	ug/ml	99
22) Benzo[k]fluoranthene	15.05	252	559677	5.8368	ug/ml	99
23) Benzo[a]pyrene	15.60	252	525392	5.3975	ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	591189	5.3721	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	503437	5.4570	ug/ml	100
26) Benzo[ghi]perylene	18.90	276	511152	5.2233	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54730.D SIMPAHL.M Thu Apr 05 13:50:25 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54730.D Vial: 4
Acq On : 4 Apr 2012 11:03 am Operator: CAA
Sample : WG394111-04 5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54731.D Vial: 5
Acq On : 4 Apr 2012 11:30 am Operator: CAA
Sample : WG394111-05 2.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:22 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:18 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

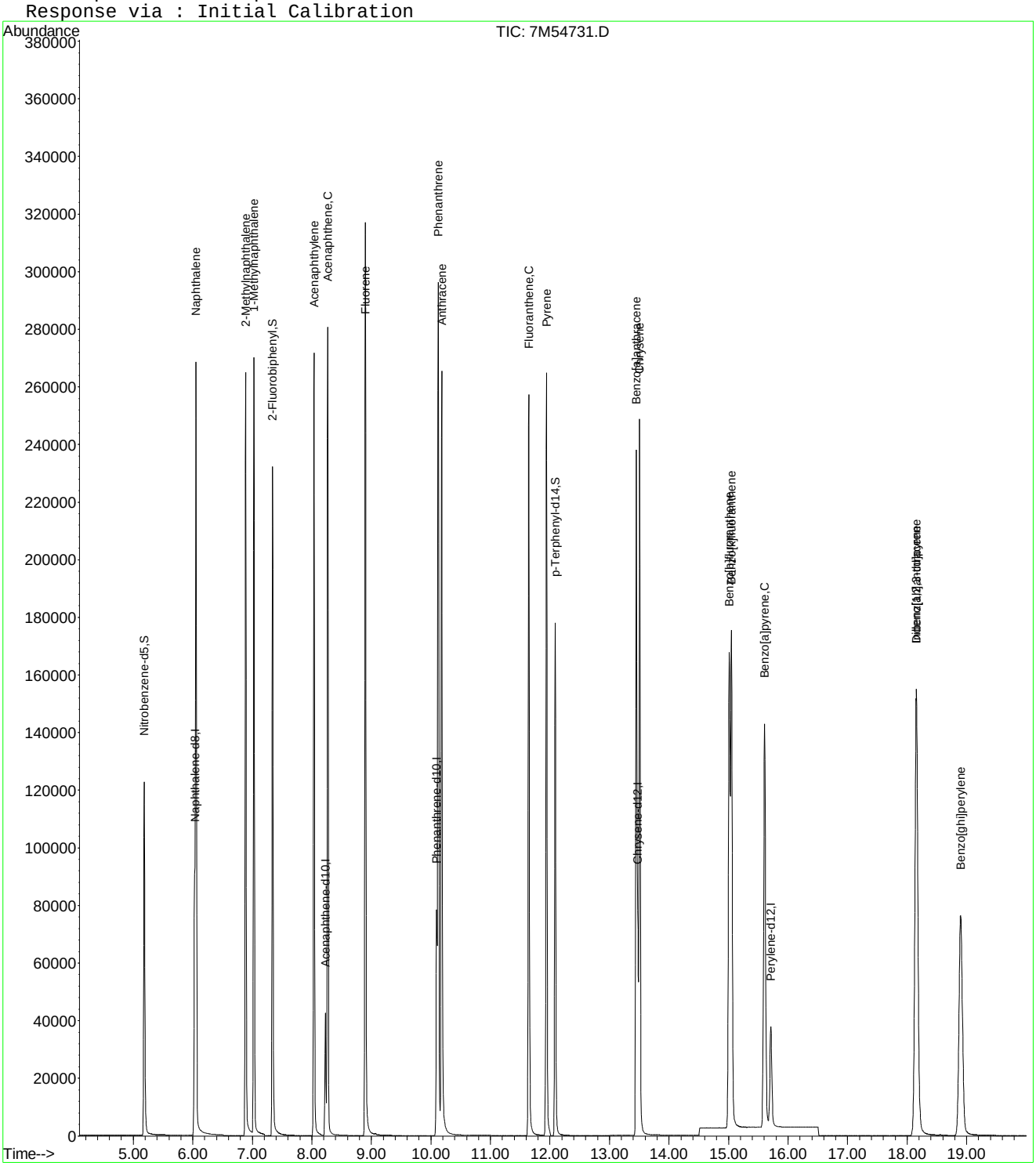
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	107923	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	51916	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	98158	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	84003	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	82066	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	112962	2.5073	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 100.40%			
7) 2-Fluorobiphenyl	7.34	172	212151	2.5509	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 102.00%			
17) p-Terphenyl-d14	12.09	244	187122	2.4047	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 96.00%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	307088	2.4019	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	175530	2.2161	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	176814	2.2516	ug/ml	100
8) Acenaphthylene	8.04	152	301490	2.8308	ug/ml	99
9) Acenaphthene	8.27	154	175018	2.7418	ug/ml	94
10) Fluorene	8.90	166	216247	2.8919	ug/ml	100
12) Phenanthrene	10.12	178	309124	2.5215	ug/ml	100
13) Anthracene	10.18	178	307296	2.5122	ug/ml	100
14) Fluoranthene	11.65	202	284981	2.1436	ug/ml	100
16) Pyrene	11.94	202	314739	2.3011	ug/ml	100
18) Benzo[a]anthracene	13.45	228	266063	2.4304	ug/ml	100
19) Chrysene	13.51	228	258320	2.3925	ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	285961	2.5037	ug/ml	96
22) Benzo[k]fluoranthene	15.05	252	257800	2.4437	ug/ml	96
23) Benzo[a]pyrene	15.60	252	260806	2.4638	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.16	276	302188	2.5265	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	256480	2.5534	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	255121	2.4055	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54731.D SIMPAHL.M Thu Apr 05 13:50:26 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54731.D Vial: 5
Acq On : 4 Apr 2012 11:30 am Operator: CAA
Sample : WG394111-05 2.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54732.D Vial: 6
Acq On : 4 Apr 2012 11:58 am Operator: CAA
Sample : WG394111-06 0.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:36 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:31 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

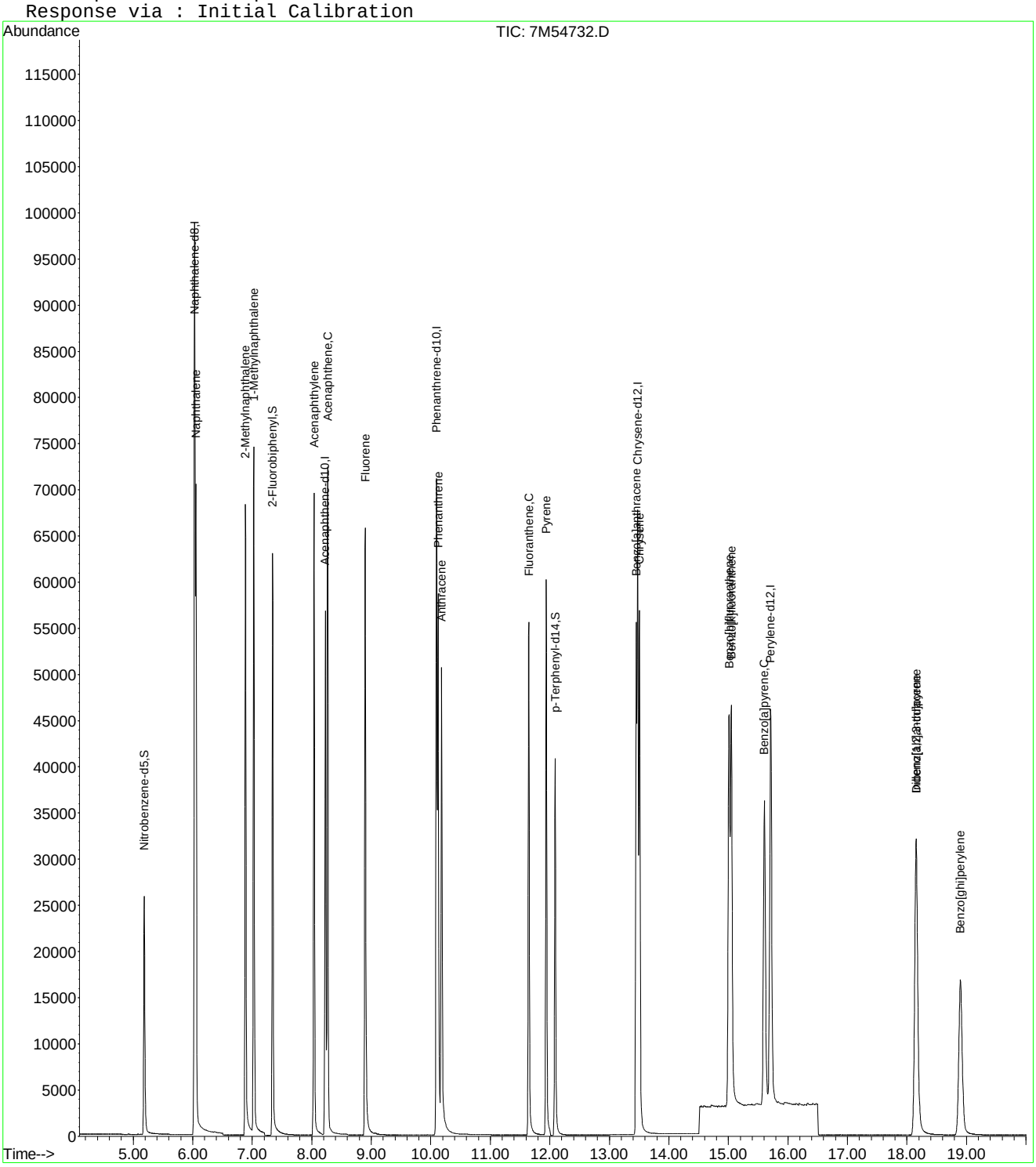
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	124416	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	72846	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	97007	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	93356	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	102269	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	25264	0.4849	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 19.20%#			
7) 2-Fluorobiphenyl	7.34	172	59769	0.5074	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 20.40%#			
17) p-Terphenyl-d14	12.09	244	43554	0.5033	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 20.00%#			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	75307	0.5106	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	48164	0.5252	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	49560	0.5450	ug/ml	100
8) Acenaphthylene	8.04	152	77288	0.5039	ug/ml	99
9) Acenaphthene	8.27	154	43592	0.4783	ug/ml	100
10) Fluorene	8.90	166	46685	0.4326	ug/ml	99
12) Phenanthrene	10.12	178	59636	0.4896	ug/ml	99
13) Anthracene	10.18	178	61358	0.5065	ug/ml	99
14) Fluoranthene	11.65	202	66304	0.5157	ug/ml	100
16) Pyrene	11.94	202	74252	0.4885	ug/ml	100
18) Benzo[a]anthracene	13.45	228	59958	0.4920	ug/ml	100
19) Chrysene	13.51	228	61514	0.5123	ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	68495	0.4786	ug/ml	100
22) Benzo[k]fluoranthene	15.05	252	66287	0.5040	ug/ml	99
23) Benzo[a]pyrene	15.60	252	65422	0.4974	ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	65450	0.4291	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	55466	0.4329	ug/ml	100
26) Benzo[ghi]perylene	18.90	276	56433	0.4188	ug/ml	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54732.D Vial: 6
Acq On : 4 Apr 2012 11:58 am Operator: CAA
Sample : WG394111-06 0.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54733.D Vial: 7
Acq On : 4 Apr 2012 12:26 pm Operator: CAA
Sample : WG394111-07 0.1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:49 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:45 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

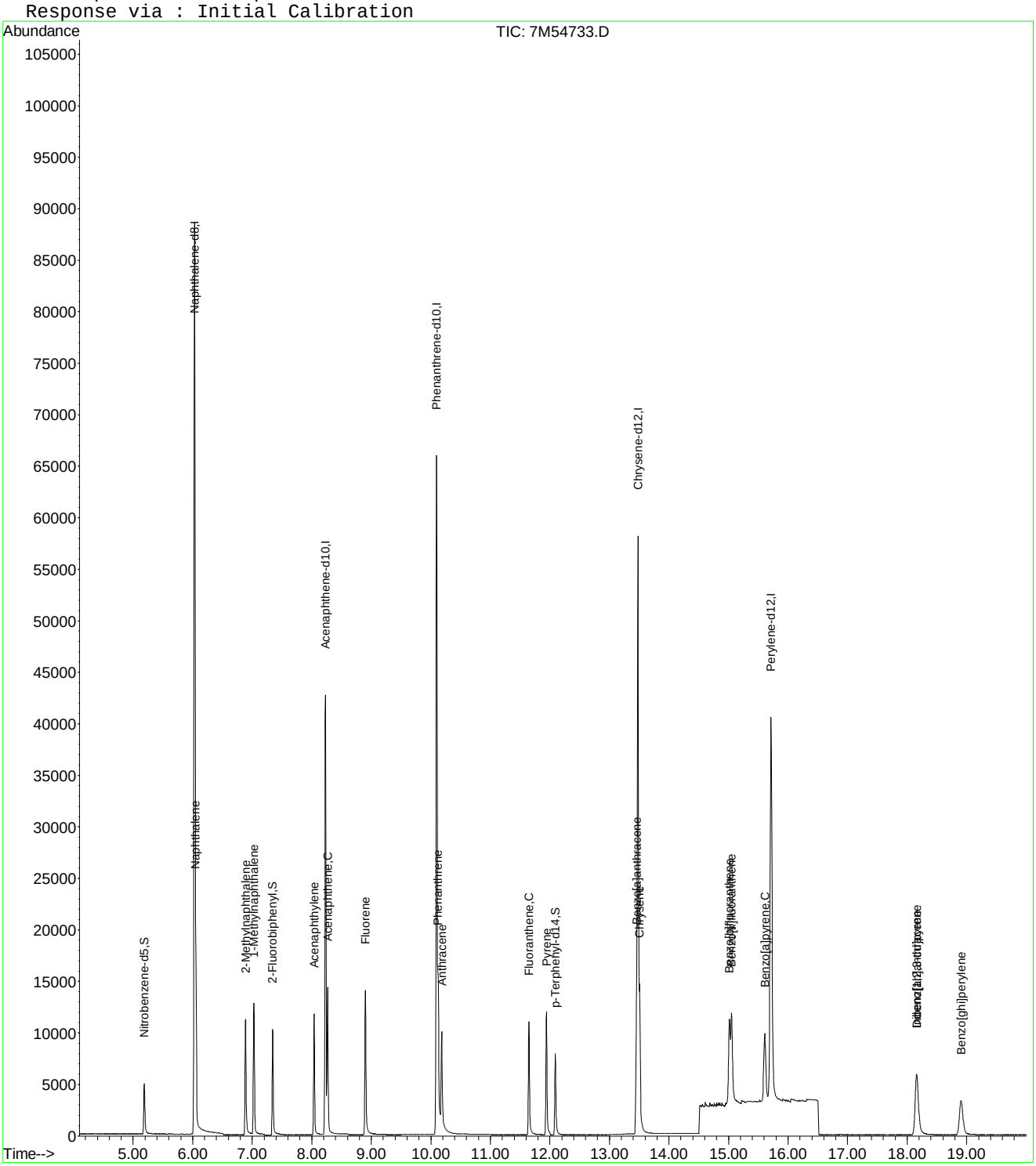
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	111904	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58154	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	92508	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	83643	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	89887	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	5189	0.1113	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery =	4.40%#		
7) 2-Fluorobiphenyl	7.35	172	10392	0.1100	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery =	4.40%#		
17) p-Terphenyl-d14	12.09	244	9041	0.1167	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery =	4.80%#		
Target Compounds						Qvalue
3) Naphthalene	6.05	128	15669	0.1186	ug/ml	99
4) 2-Methylnaphthalene	6.89	142	8513	0.1029	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	8710	0.1041	ug/ml	100
8) Acenaphthylene	8.04	152	14501	0.1174	ug/ml	93
9) Acenaphthene	8.27	154	8476	0.1173	ug/ml	99
10) Fluorene	8.90	166	10569	0.1243	ug/ml	100
12) Phenanthrene	10.13	178	13238	0.1141	ug/ml	99
13) Anthracene	10.18	178	12272	0.1062	ug/ml	99
14) Fluoranthene	11.64	202	13816	0.1127	ug/ml	99
16) Pyrene	11.94	202	15836	0.1165	ug/ml	96
18) Benzo[a]anthracene	13.45	228	12524	0.1149	ug/ml	99
19) Chrysene	13.51	228	12906	0.1199	ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	13954	0.1108	ug/ml#	80
22) Benzo[k]fluoranthene	15.05	252	14143	0.1224	ug/ml#	53
23) Benzo[a]pyrene	15.61	252	13356	0.1158	ug/ml	89
24) Indeno[1,2,3-cd]pyrene	18.16	276	13218	0.1025	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	11135	0.1026	ug/ml	100
26) Benzo[ghi]perylene	18.91	276	11654	0.1023	ug/ml	99

(#) = qualifier out of range (m) = manual integration
7M54733.D SIMPAHL.M Thu Apr 05 13:50:27 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54733.D Vial: 7
Acq On : 4 Apr 2012 12:26 pm Operator: CAA
Sample : WG394111-07 0.1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54734.D Vial: 8
Acq On : 4 Apr 2012 12:53 pm Operator: CAA
Sample : WG394111-08 0.05PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:58:18 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:13 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

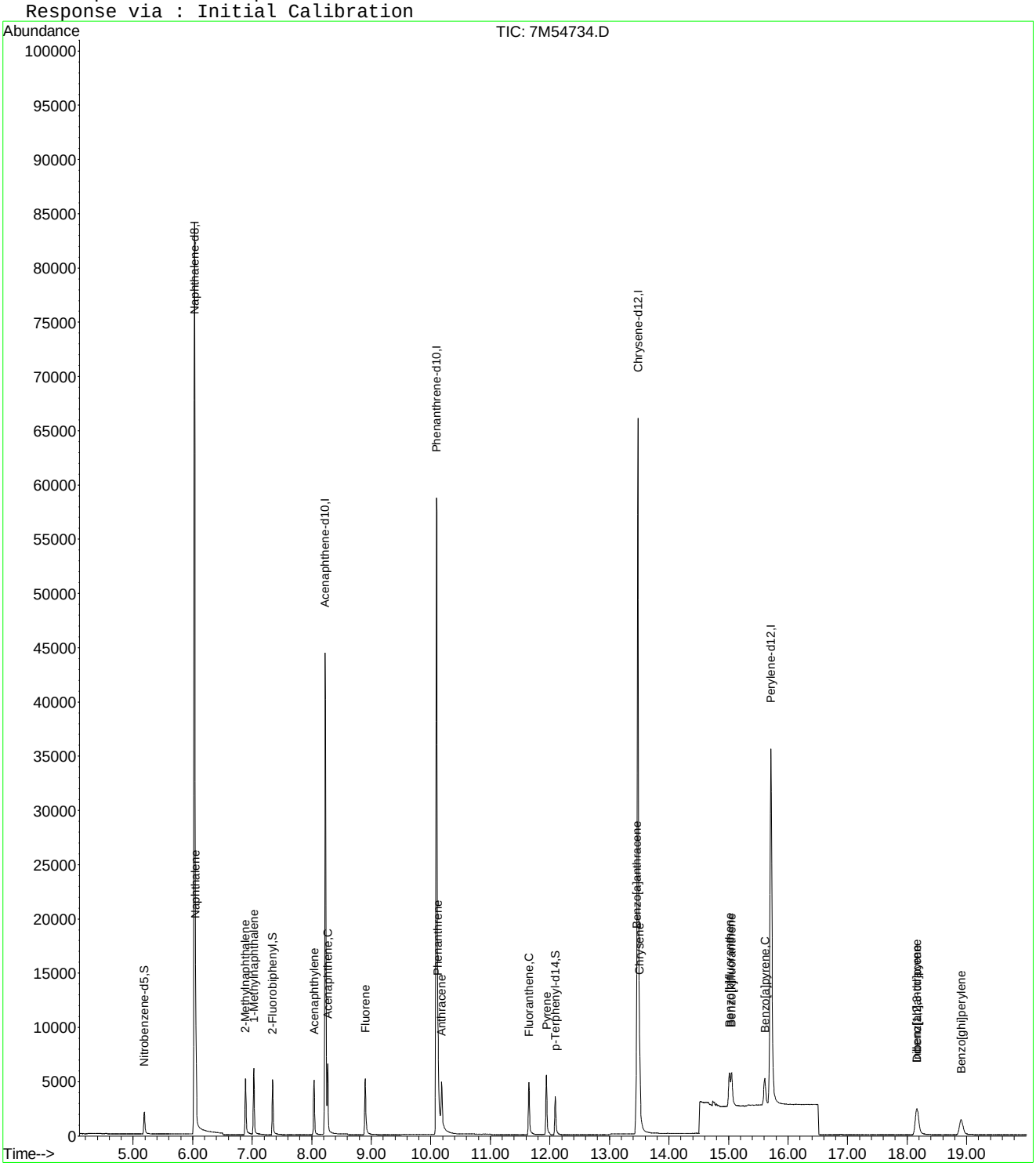
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	109028	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	59339	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	88697	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	96074	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	80216	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	2183	0.0475	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery =	2.00%#		
7) 2-Fluorobiphenyl	7.34	172	5179	0.0537	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery =	2.00%#		
17) p-Terphenyl-d14	12.09	244	4381	0.0489	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery =	2.00%#		
Target Compounds						Qvalue
3) Naphthalene	6.05	128	7045	0.0548	ug/ml	99
4) 2-Methylnaphthalene	6.89	142	4045	0.0513	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	4209	0.0527	ug/ml	98
8) Acenaphthylene	8.04	152	6622	0.0516	ug/ml	92
9) Acenaphthene	8.27	154	3814	0.0512	ug/ml	100
10) Fluorene	8.90	166	4039	0.0455	ug/ml	100
12) Phenanthrene	10.12	178	5467	0.0492	ug/ml	99
13) Anthracene	10.18	178	5552	0.0505	ug/ml	98
14) Fluoranthene	11.65	202	6400	0.0549	ug/ml	98
16) Pyrene	11.94	202	7890	0.0504	ug/ml	91
18) Benzo[a]anthracene	13.46	228	6304	0.0506	ug/ml	100
19) Chrysene	13.51	228	6585	0.0532	ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	5216	0.0465	ug/ml	96
22) Benzo[k]fluoranthene	15.05	252	5257	0.0502	ug/ml#	53
23) Benzo[a]pyrene	15.61	252	5055	0.0490	ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	5744	0.0508	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	4789	0.0501	ug/ml	100
26) Benzo[ghi]perylene	18.91	276	5026	0.0503	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54734.D SIMPAHL.M Thu Apr 05 13:50:28 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54734.D Vial: 8
Acq On : 4 Apr 2012 12:53 pm Operator: CAA
Sample : WG394111-08 0.05PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:58 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54735.D Vial: 9
Acq On : 4 Apr 2012 1:21 pm Operator: CAA
Sample : WG394111-09 1PPM PAHL Alt Src STD Inst : HPMS7
Misc : 1,1 STD49584 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 14:06:24 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 13:51:14 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

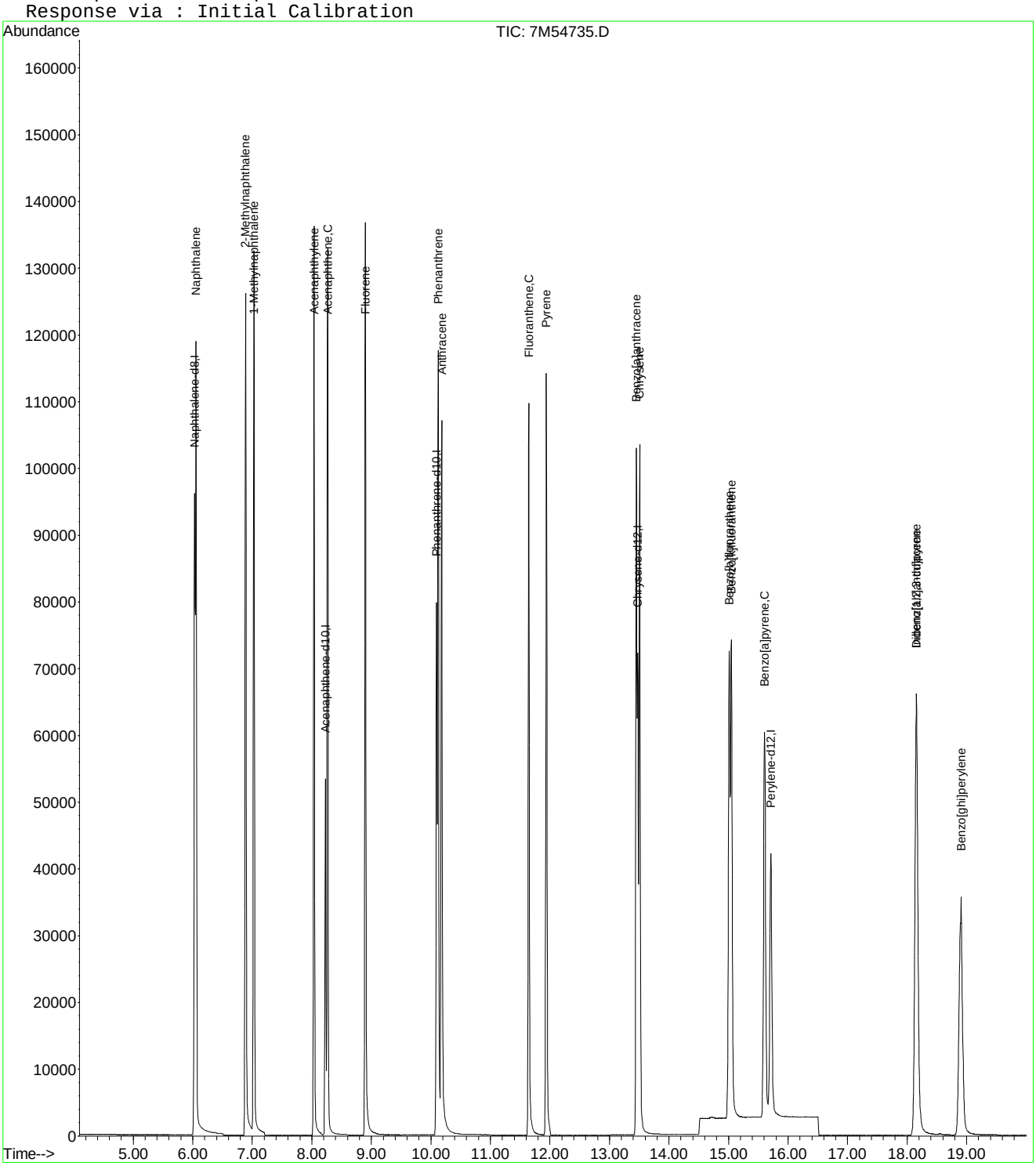
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	120214	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	64322	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	106999	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	92251	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	93409	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.20	82	39	0.0008	ug/ml	0.01
Spiked Amount 2.500	Range 35 - 114		Recovery =	0.00%#		
7) 2-Fluorobiphenyl	7.34	172	27	0.0003	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery =	0.00%#		
17) p-Terphenyl-d14	12.09	244	82	0.0010	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery =	0.00%#		
Target Compounds						Qvalue
3) Naphthalene	6.06	128	134414	0.9444	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	88598	1.0216	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	87630	0.9897	ug/ml	100
8) Acenaphthylene	8.04	152	150796	1.0604	ug/ml	99
9) Acenaphthene	8.27	154	80009	0.9833	ug/ml	100
10) Fluorene	8.90	166	94027	0.9726	ug/ml	100
12) Phenanthrene	10.12	178	124612	0.9362	ug/ml	100
13) Anthracene	10.18	178	131148	0.9810	ug/ml	100
14) Fluoranthene	11.65	202	123616	0.8865	ug/ml	100
16) Pyrene	11.94	202	139306	0.9395	ug/ml	99
18) Benzo[a]anthracene	13.45	228	110200	0.9207	ug/ml	99
19) Chrysene	13.51	228	111347	0.9352	ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	111147	0.8625	ug/ml	100
22) Benzo[k]fluoranthene	15.05	252	108157	0.8870	ug/ml	99
23) Benzo[a]pyrene	15.60	252	113304	0.9444	ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	130669	0.9952	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	108696	0.9781	ug/ml	100
26) Benzo[ghi]perylene	18.91	276	114195	0.9863	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54735.D SIMPAHL.M Thu Apr 05 14:06:31 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54735.D Vial: 9
Acq On : 4 Apr 2012 1:21 pm Operator: CAA
Sample : WG394111-09 1PPM PAHL Alt Src STD Inst : HPMS7
Misc : 1,1 STD49584 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 14:06 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 13:51:14 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54884.D Vial: 2
Acq On : 4 May 2012 9:33 am Operator: CAA
Sample : WG397019-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 04 09:53:37 2012 Quant Results File: SIMPAHL.RES

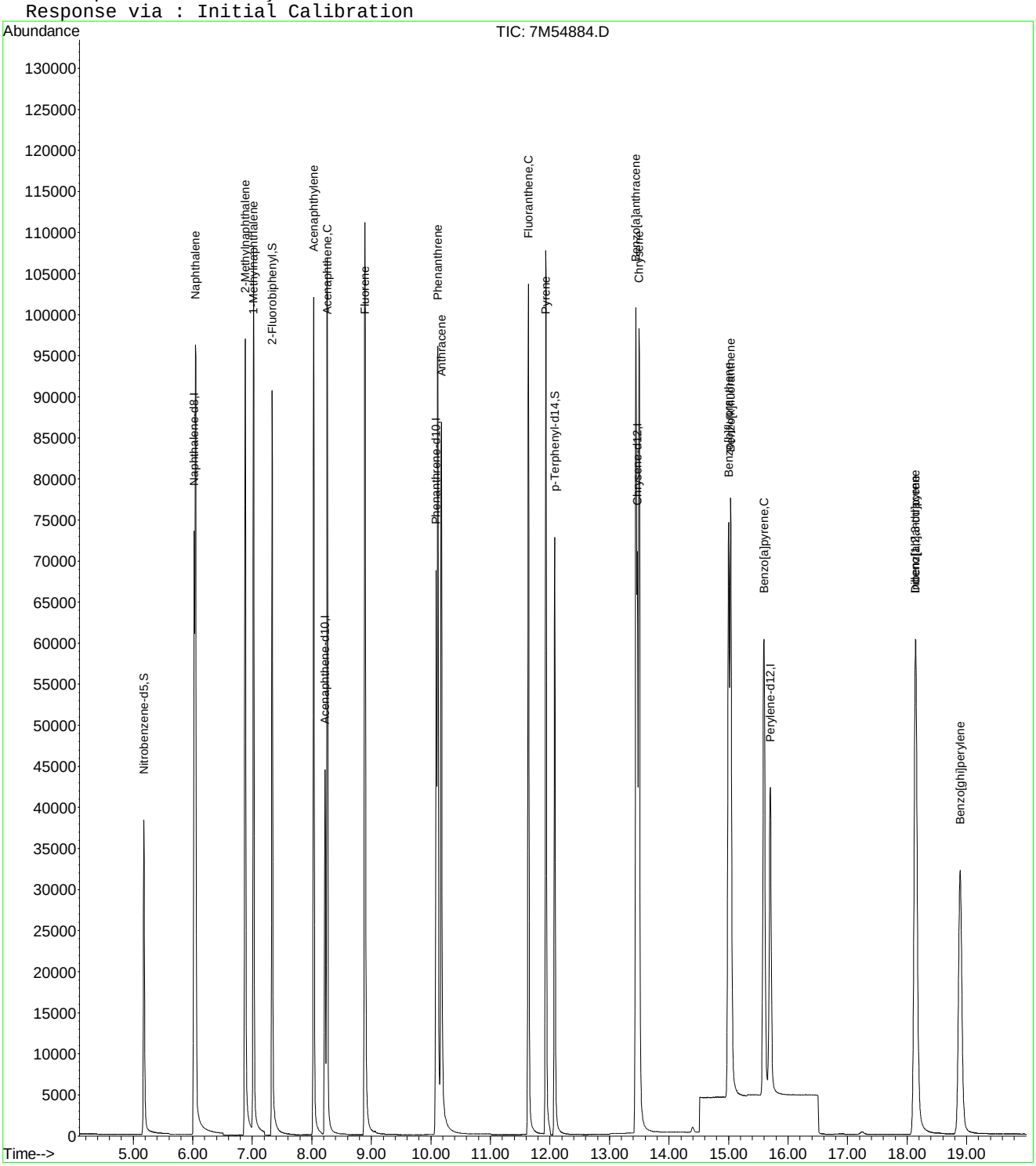
Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu May 03 09:35:04 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	97284	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.22	164	57510	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	95286	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	90937	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	90339	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	38224	0.9408	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 37.60%			
7) 2-Fluorobiphenyl	7.33	172	88845	0.9340	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 37.20%#			
17) p-Terphenyl-d14	12.08	244	78147	0.9263	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 37.20%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	111576	0.9687	ug/ml	100
4) 2-Methylnaphthalene	6.88	142	71968	1.0254	ug/ml	99
5) 1-Methylnaphthalene	7.02	142	73700	1.0285	ug/ml	100
8) Acenaphthylene	8.03	152	122961	0.9670	ug/ml	100
9) Acenaphthene	8.26	154	72886	1.0019	ug/ml	94
10) Fluorene	8.89	166	79944	0.9248	ug/ml	100
12) Phenanthrene	10.12	178	106412	0.8978	ug/ml	99
13) Anthracene	10.18	178	112468	0.9447	ug/ml	99
14) Fluoranthene	11.64	202	121771	0.9806	ug/ml	100
16) Pyrene	11.93	202	137346	0.9397	ug/ml	100
18) Benzo[a]anthracene	13.44	228	110842	0.9394	ug/ml	99
19) Chrysene	13.50	228	113309	0.9655	ug/ml	100
21) Benzo[b]fluoranthene	15.00	252	110724	0.8885	ug/ml	100
22) Benzo[k]fluoranthene	15.04	252	113401	0.9617	ug/ml	95
23) Benzo[a]pyrene	15.60	252	112499	0.9696	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.14	276	127479	1.0039	ug/ml	100
25) Dibenz[ah]anthracene	18.15	278	108383	1.0084	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	109193	0.9751	ug/ml	100

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

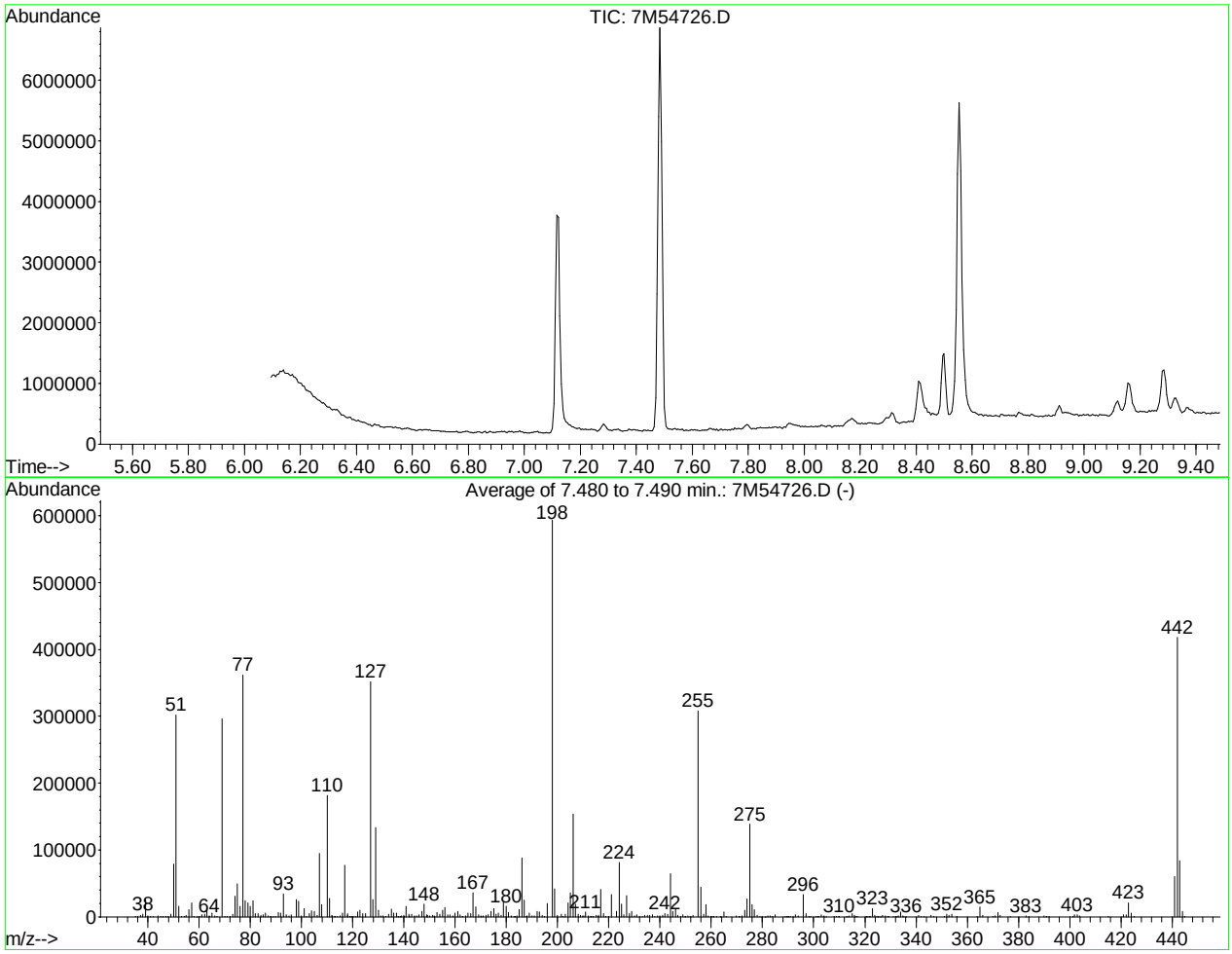
Data File : C:\MSDCHEM\1\DATA\050412\7M54884.D Vial: 2
Acq On : 4 May 2012 9:33 am Operator: CAA
Sample : WG397019-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 9:53 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu May 03 09:35:04 2012
Response via : Initial Calibration



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

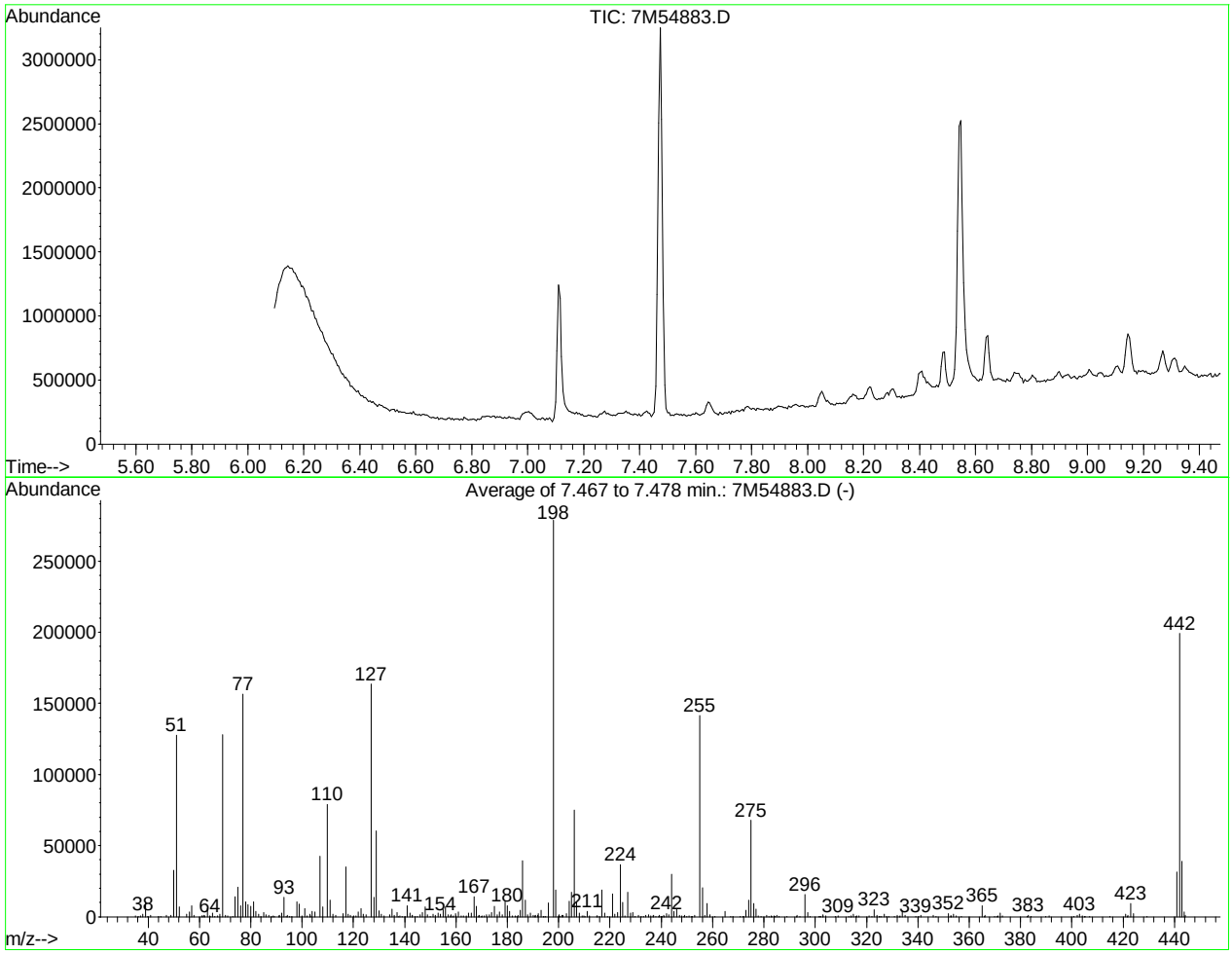


AutoFind: Scans 260, 261, 262; Background Corrected with Scan 254

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\050412\7M54883.D Vial: 1
Acq On : 4 May 2012 9:16 am Operator: CAA
Sample : WG397019-01 5PPM DFTPP STD Inst : HPMS7
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP



AutoFind: Scans 258, 259, 260; Background Corrected with Scan 250

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.8	127689	PASS
68	69	0.00	2	1.5	1929	PASS
69	198	0.00	100	46.0	128140	PASS
70	69	0.00	2	0.9	1153	PASS
127	198	40	60	58.7	163690	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	278826	PASS
199	198	5	9	6.7	18729	PASS
275	198	10	30	24.4	67989	PASS
365	198	1	100	2.8	7827	PASS
441	443	0.01	100	80.9	31421	PASS
442	198	40	100	71.4	199200	PASS
443	442	17	23	19.5	38842	PASS

7M54883.D DFTPP.M Mon May 07 08:45:51 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54885.D Vial: 3
Acq On : 4 May 2012 10:01 am Operator: CAA
Sample : WG396861-02 BLK 05/03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:28 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	98769	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	60234	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	99121	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	93901	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	92437	1.00	ug/ml	-0.02

System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	75826	1.8382	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 73.60%			
7) 2-Fluorobiphenyl	7.33	172	176488	1.7715	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 70.80%			
17) p-Terphenyl-d14	12.08	244	193768	2.2242	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 88.80%			

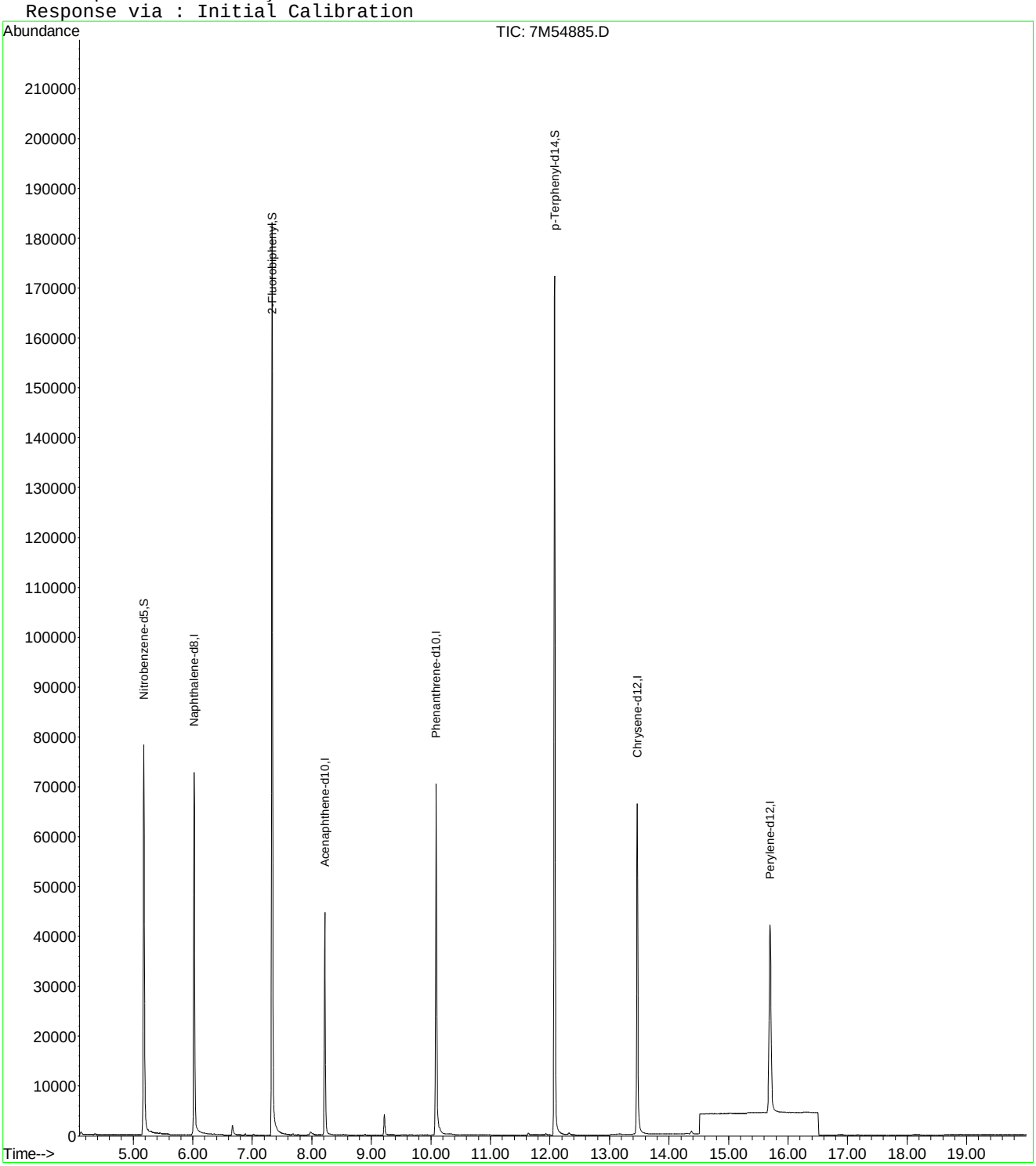
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration
7M54885.D SIMPAHL.M Mon May 07 08:55:21 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54885.D Vial: 3
Acq On : 4 May 2012 10:01 am Operator: CAA
Sample : WG396861-02 BLK 05/03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54886.D Vial: 4
Acq On : 4 May 2012 10:28 am Operator: CAA
Sample : WG396861-03 LCS 05/03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:29 2012 Quant Results File: SIMPAHL.RES

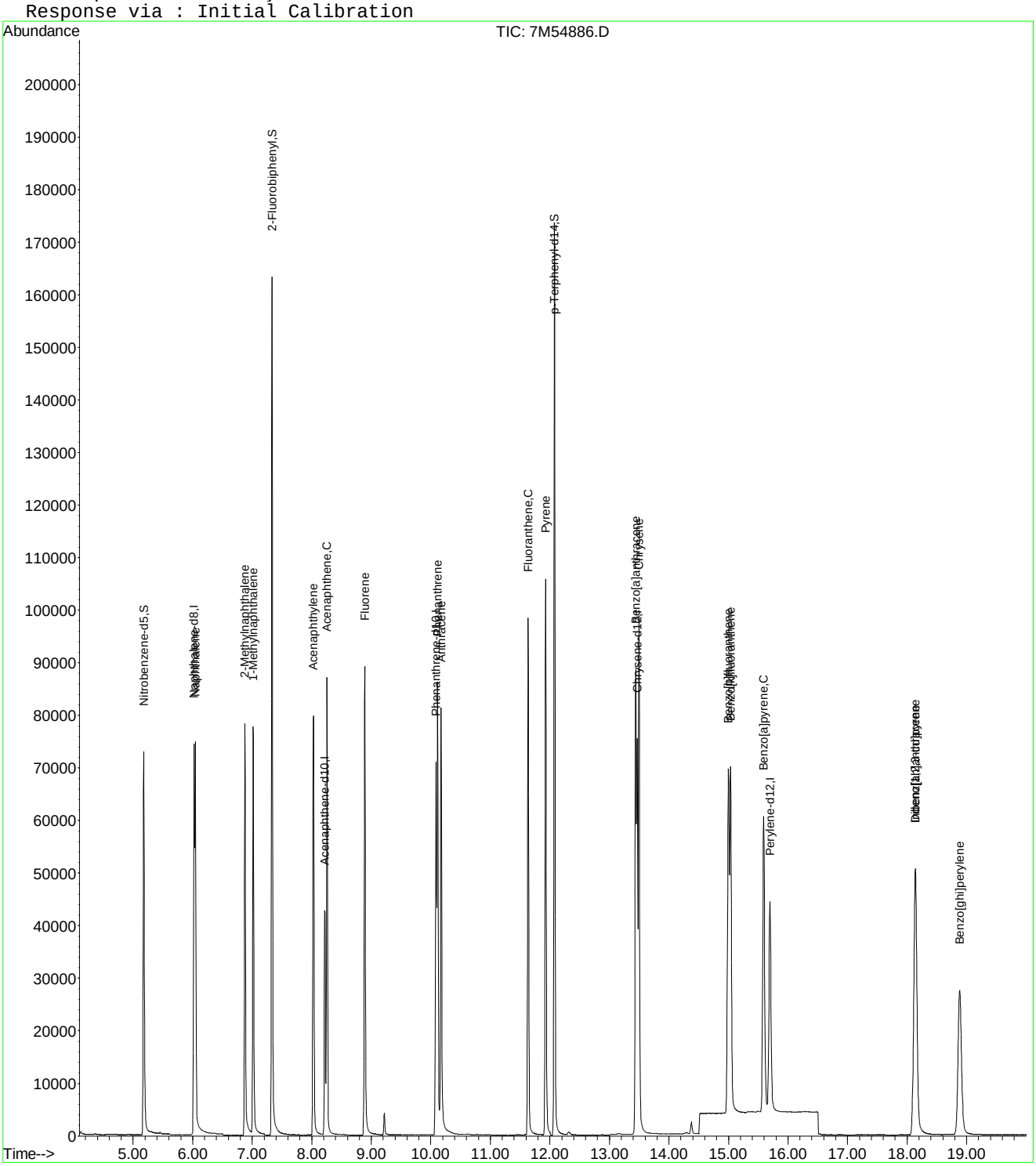
Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	99929	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	59985	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	96353	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	95903	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	93096	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	70128	1.6804	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 67.20%			
7) 2-Fluorobiphenyl	7.33	172	160374	1.6165	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 64.80%			
17) p-Terphenyl-d14	12.07	244	192938	2.1685	ug/ml	-0.02
Spiked Amount 2.500	Range 33 - 141		Recovery = 86.80%			
Target Compounds						Qvalue
3) Naphthalene	6.04	128	82754	0.6995	ug/ml	100
4) 2-Methylnaphthalene	6.88	142	55557	0.7706	ug/ml	100
5) 1-Methylnaphthalene	7.02	142	52491	0.7132	ug/ml	99
8) Acenaphthylene	8.03	152	94886	0.7155	ug/ml	95
9) Acenaphthene	8.26	154	55443	0.7307	ug/ml	93
10) Fluorene	8.89	166	62719	0.6956	ug/ml	100
12) Phenanthrene	10.11	178	91537	0.7637	ug/ml	99
13) Anthracene	10.17	178	94763	0.7871	ug/ml	99
14) Fluoranthene	11.63	202	112176	0.8934	ug/ml	99
16) Pyrene	11.93	202	129482	0.8400	ug/ml	99
18) Benzo[a]anthracene	13.44	228	97215	0.7813	ug/ml	99
19) Chrysene	13.50	228	106429	0.8599	ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	108590	0.8455	ug/ml	96
22) Benzo[k]fluoranthene	15.03	252	104777	0.8622	ug/ml	95
23) Benzo[a]pyrene	15.59	252	104894	0.8772	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.14	276	109561	0.8372	ug/ml	100
25) Dibenz[ah]anthracene	18.14	278	85860	0.7752	ug/ml	100
26) Benzo[ghi]perylene	18.88	276	94018	0.8147	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54886.D SIMPAHL.M Mon May 07 08:49:09 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\050412\7M54886.D Vial: 4
Acq On : 4 May 2012 10:28 am Operator: CAA
Sample : WG396861-03 LCS 05/03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



2.3 Metals Data

2.3.1 Metals I C P Data

2.3.1.1 Summary Data

Login Number: L12040928
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: WG396548 - All acceptance criteria were met.

Matrix Spikes: WG396548 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 08(MS) and 10(MSD) yielded noncompliant recoveries for five analytes. Sample 02 was chosen by the client for MS/MSD analysis. Samples 09(MS) and 11(MSD) yielded noncompliant recoveries for four analytes.

SAMPLES

Samples: WG396548 - Client samples 05 and 06 required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 45819
Approved By: Sheri Pfalzgraf

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: WG396511
Analyst: REK
Spike Analyst: REK
Method: 3005A
Run Date: 04/30/2012 08:42
Hotblock Start Temp: 95.1 @ 07:00
Hotblock End Temp: 95.1 @ 11:00

SOP: ME401 Revison 14
Spike Solution: STD51357
Spike Witness: VC
ICP;WG377974 Filter Lot COA15714
HNO3 Lot #: COA16033
Digestion Tubes Lot #: COA16053
HCL Lot #: COA16113

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG396511-04	BLANK	1	50 mL	50 mL		
2	WG396511-05	LCS	1	50 mL	50 mL	5 mL	
3	WG396511-01	REF	1	50 mL	50 mL		
4	L12040910-04	RS02	1	50 mL	50 mL		05/10/12
5	WG396511-06	MS	1	50 mL	50 mL	5 mL	
6	L12040910-05	MS02	1	50 mL	50 mL	5 mL	05/10/12
7	WG396511-07	MSD	1	50 mL	50 mL	5 mL	
8	L12040910-06	SD02	1	50 mL	50 mL	5 mL	05/10/12
9	L12040910-11	SAMP	1	50 mL	50 mL		05/10/12
10	L12040910-14	SAMP	1	50 mL	50 mL		05/10/12
11	L12040910-17	SAMP	1	50 mL	50 mL		05/10/12
12	L12040910-20	SAMP	1	50 mL	50 mL		05/10/12
13	L12040910-23	SAMP	1	50 mL	50 mL		05/10/12
14	L12040910-26	SAMP	1	50 mL	50 mL		05/10/12
15	L12040910-29	SAMP	1	50 mL	50 mL		05/10/12
16	L12040910-32	SAMP	1	50 mL	50 mL		05/10/12
17	WG396511-02	REF	1	50 mL	50 mL		
18	L12040928-01	RS01	1	50 mL	50 mL		05/11/12
19	WG396511-03	REF	1	50 mL	50 mL		
20	L12040928-02	RS02	1	50 mL	50 mL		05/11/12
21	L12040928-03	SAMP	1	50 mL	50 mL		05/11/12
22	L12040928-04	SAMP	1	50 mL	50 mL		05/11/12
23	L12040928-05	SAMP	1	50 mL	50 mL		05/11/12
24	L12040928-06	SAMP	1	50 mL	50 mL		05/11/12
25	WG396511-08	MS	1	50 mL	50 mL	5 mL	
26	L12040928-08	MS01	1	50 mL	50 mL	5 mL	05/11/12
27	WG396511-10	MS	1	50 mL	50 mL	5 mL	
28	L12040928-09	MS02	1	50 mL	50 mL	5 mL	05/11/12
29	WG396511-09	MSD	1	50 mL	50 mL	5 mL	
30	L12040928-10	SD01	1	50 mL	50 mL	5 mL	05/11/12
31	WG396511-11	MSD	1	50 mL	50 mL	5 mL	
32	L12040928-11	SD02	1	50 mL	50 mL	5 mL	05/11/12

L12040910-17	filtered digestate
L12040910-20	filtered digestate
L12040910-26	filtered digestate
L12040928-05	filtered digestate

HB_DIG - Modified 09/30/2009
PDF ID: 2396708
Report generated: 04/30/2012 11:26

Microbac Laboratories Inc.
Metals Digest Log

Workgroup:	WG396511	**SOP:**	ME401 Revison 14
Analyst:	REK	**Spike Solution:**	STD51357
Spike Analyst:	REK	**Spike Witness:**	VC
Method:	3005A	**ICP;WG377974 Filter Lot**	COA15714
Run Date:	04/30/2012 08:42	**HNO3 Lot #:**	COA16033
Hotblock Start Temp:	95.1 @ 07:00	**Digestion Tubes Lot #:**	COA16053
Hotblock End Temp:	95.1 @ 11:00	**HCL Lot #:**	COA16113

L12040928-06	filtered digestate

Analyst: _____

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 2396708
Report generated: 04/30/2012 11:26

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 050312H.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41589

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254
ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17106
CCV: STD51198 LLCCV: STD51199

Workgroups: 396791, 396546, 396548, 396935

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.050312.103113	WG396959-01	Calibration Point		1		05/03/12 10:31
2	P2.050312.103806	WG396959-02	Calibration Point		1		05/03/12 10:38
3	P2.050312.104501	WG396959-03	Calibration Point		1		05/03/12 10:45
4	P2.050312.105156	WG396959-04	Calibration Point		1		05/03/12 10:51
5	P2.050312.105757	WG396959-05	Calibration Point		1		05/03/12 10:57
6	P2.050312.110400	WG396959-06	Initial Calibration Verification		1		05/03/12 11:04
7	P2.050312.110959	WG396959-07	Initial Calib Blank		1		05/03/12 11:09
8	P2.050312.111652	WG396959-08	Low Level Initial Calibration V		1		05/03/12 11:16
9	P2.050312.112347	WG396959-09	Low Level Initial Calibration V		1		05/03/12 11:23
10	P2.050312.113042	WG396959-10	Interference Check		1		05/03/12 11:30
11	P2.050312.113638	WG396959-11	Interference Check		1		05/03/12 11:36
12	P2.050312.114235	WG396959-12	CCV		1		05/03/12 11:42
13	P2.050312.114836	WG396959-13	CCB		1		05/03/12 11:48
14	P2.050312.115529	WG396769-02	Method/Prep Blank	5/50	1		05/03/12 11:55
15	P2.050312.120224	WG396769-03	Laboratory Control S	5/50	1		05/03/12 12:02
16	P2.050312.120823	WG396758-01	Fluid Blank		1		05/03/12 12:08
17	P2.050312.121523	L12040781-02	GT120013	5/50	1		05/03/12 12:15
18	P2.050312.122223	L12040924-03	1204-01491-002	5/50	1		05/03/12 12:22
19	P2.050312.130052	WG396959-14	CCV		1		05/03/12 13:00
20	P2.050312.130653	WG396959-15	CCB		1		05/03/12 13:06
21	P2.050312.131346	WG396769-01	Reference Sample		1	L12040989-01	05/03/12 13:13
22	P2.050312.132049	WG396769-04	Matrix Spike	5/50	1	L12040989-01	05/03/12 13:20
23	P2.050312.132652	WG396769-05	Matrix Spike Duplica	5/50	1	L12040989-01	05/03/12 13:26
24	P2.050312.133252	WG396791-01	Post Digestion Spike		1	L12040989-01	05/03/12 13:32
25	P2.050312.133852	WG396791-02	Serial Dilution		5	L12040989-01	05/03/12 13:38
26	P2.050312.134547	WG396959-16	CCV		1		05/03/12 13:45
27	P2.050312.135149	WG396959-17	CCB		1		05/03/12 13:51
28	P2.050312.135842	WG396959-18	Low Level Continuing Calibra		1		05/03/12 13:58
29	P2.050312.140537	WG396959-19	LLCCV		1		05/03/12 14:05
30	P2.050312.141655	WG396959-20	Low Level Continuing Calibra		1		05/03/12 14:16
31	P2.050312.142350	L12040989-02	2041718-02 IN HOUSE QC	5/50	1		05/03/12 14:23
32	P2.050312.142949	L12050022-01	EXTERIOR TANK \#4/ SPEN	5/50	1		05/03/12 14:29
33	P2.050312.143549	L12040890-03	LF015CP043-120425	50/50	5		05/03/12 14:35
34	P2.050312.144246	WG396959-21	CCV		1		05/03/12 14:42

Page: 1 Approved: May 04, 2012

Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 050312H.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41589

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254
ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17106
CCV: STD51198 LLCCV: STD51199

Workgroups: 396791, 396546, 396548, 396935

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.050312.144847	WG396959-22	CCB		1		05/03/12 14:48
36	P2.050312.145540	WG396511-04	Method/Prep Blank	50/50	1		05/03/12 14:55
37	P2.050312.150236	WG396511-05	Laboratory Control S	50/50	1		05/03/12 15:02
38	P2.050312.150836	L12040910-20	MW4C2.272.14	50/50	1		05/03/12 15:08
39	P2.050312.151436	L12040910-23	MW5A.272.14	50/50	1		05/03/12 15:14
40	P2.050312.152133	L12040910-26	OW1A.272.14	50/50	1		05/03/12 15:21
41	P2.050312.152729	L12040910-29	OW2A.272.14	50/50	1		05/03/12 15:27
42	P2.050312.153422	L12040910-32	OW3A.272.14	50/50	1		05/03/12 15:34
43	P2.050312.154116	L12040928-03	MW-10-042612	50/50	1		05/03/12 15:41
44	P2.050312.154716	WG396548-03	Post Digestion Spike		1	L12040928-03	05/03/12 15:47
45	P2.050312.155315	WG396548-04	Serial Dilution		5	L12040928-03	05/03/12 15:53
46	P2.050312.160010	WG396959-23	CCV		1		05/03/12 16:00
47	P2.050312.160611	WG396959-24	CCB		1		05/03/12 16:06
48	P2.050312.161304	WG396511-02	Reference Sample		1	L12040928-01	05/03/12 16:13
49	P2.050312.161905	WG396511-03	Reference Sample		1	L12040928-02	05/03/12 16:19
50	P2.050312.162510	L12040928-04	MW-10-042612	50/50	1		05/03/12 16:25
51	P2.050312.163207	L12040928-05	MW-31-042612	50/50	1		05/03/12 16:32
52	P2.050312.163809	L12040928-06	MW-31-042612	50/50	1		05/03/12 16:38
53	P2.050312.164411	L12040928-05	MW-31-042612	50/50	10		05/03/12 16:44
54	P2.050312.165012	L12040928-06	MW-31-042612	50/50	10		05/03/12 16:50
55	P2.050312.165610	WG396959-25	CCV		1		05/03/12 16:56
56	P2.050312.170212	WG396959-26	CCB		1		05/03/12 17:02
57	P2.050312.170905	WG396511-08	Matrix Spike	50/50	1	L12040928-01	05/03/12 17:09
58	P2.050312.171506	WG396511-10	Matrix Spike	50/50	1	L12040928-02	05/03/12 17:15
59	P2.050312.172106	WG396511-09	Matrix Spike Duplica	50/50	1	L12040928-01	05/03/12 17:21
60	P2.050312.172708	WG396511-11	Matrix Spike Duplica	50/50	1	L12040928-02	05/03/12 17:27
61	P2.050312.173310	WG396959-27	CCV		1		05/03/12 17:33
62	P2.050312.173911	WG396959-28	CCB		1		05/03/12 17:39
63	P2.050312.174604	WG396959-29	Interference Check		1		05/03/12 17:46
64	P2.050312.175201	WG396959-30	Interference Check		1		05/03/12 17:52
65	P2.050312.175758	WG396959-31	CCV		1		05/03/12 17:57
66	P2.050312.180359	WG396959-32	CCB		1		05/03/12 18:03
67	P2.050312.181052	WG396869-02	Method/Prep Blank	50/50	1		05/03/12 18:10
68	P2.050312.181747	WG396869-03	Laboratory Control S	50/50	1		05/03/12 18:17

Page: 2 Approved: May 04, 2012

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 050312H.CSV

Analyst1: KHR Analyst2: N/A

Method: 6010 SOP: ME600E Rev: 12

Maintenance Log ID: 41589

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254

ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17106

CCV: STD51198 LLCCV: STD51199

Workgroups: 396791, 396546, 396548, 396935

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.050312.182346	L12050052-01	2012-0501-MW29-23	50/50	1		05/03/12 18:23
70	P2.050312.182946	L12050052-02	2012-0501-MW-8R	50/50	1		05/03/12 18:29
71	P2.050312.183545	L12050052-03	2012-0501-MW29-22	50/50	1		05/03/12 18:35
72	P2.050312.184145	L12050052-04	2012-0501-MW-9R	50/50	1		05/03/12 18:41
73	P2.050312.184746	L12050052-05	2012-0501-88MW-7	50/50	1		05/03/12 18:47
74	P2.050312.185346	L12050052-06	2012-0501-MW29-21	50/50	1		05/03/12 18:53
75	P2.050312.185945	WG396935-01	Post Digestion Spike		1	L12050052-06	05/03/12 18:59
76	P2.050312.190544	WG396935-02	Serial Dilution		5	L12050052-06	05/03/12 19:05
77	P2.050312.191141	WG396959-33	CCV		1		05/03/12 19:11
78	P2.050312.191742	WG396959-34	CCB		1		05/03/12 19:17
79	P2.050312.192435	L12050052-07	2012-0501-88MW-10	50/50	1		05/03/12 19:24
80	P2.050312.193130	L12050052-08	2012-0501-MW88-42	50/50	1		05/03/12 19:31
81	P2.050312.193728	L12050052-09	2012-0501-MW29-8	50/50	1		05/03/12 19:37
82	P2.050312.194327	L12050052-10	2012-0501-MW29-27	50/50	1		05/03/12 19:43
83	P2.050312.194926	L12050052-11	2012-0501-MW29-14	50/50	1		05/03/12 19:49
84	P2.050312.195524	L12050052-14	2012-0501-Z4-18	50/50	1		05/03/12 19:55
85	P2.050312.200128	L12050052-15	2012-0501-MW29-15	50/50	1		05/03/12 20:01
86	P2.050312.200727	L12050052-16	2012-0501-MW29-15-DUP		1	WG396869-01	05/03/12 20:07
87	P2.050312.201328	WG396959-35	CCV		1		05/03/12 20:13
88	P2.050312.201929	WG396959-36	CCB		1		05/03/12 20:19
89	P2.050312.202623	WG396869-04	Matrix Spike	50/50	1	L12050052-16	05/03/12 20:26
90	P2.050312.203224	WG396869-05	Matrix Spike Duplica	50/50	1	L12050052-16	05/03/12 20:32
91	P2.050312.203823	L12050052-17	2012-0501-MW88-31	50/50	1		05/03/12 20:38
92	P2.050312.204422	WG396959-37	CCV		1		05/03/12 20:44
93	P2.050312.205023	WG396959-38	CCB		1		05/03/12 20:50
94	P2.050312.205716	WG396959-39	Low Level Continuing Calibra		1		05/03/12 20:57

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Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 03-MAY-2012
Analyst: KHR
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 396959
Runlog ID: 46534
Analytical Workgroups: 396791, 396546, 396548, 396935

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	
Case Narrative	X
Client Forms	X
Level X	
Level 3	890, 052
Level 4	928, 989
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	KHR
Secondary Reviewer	SLP
Comments	

Primary Reviewer:
04-MAY-2012

Secondary Reviewer:
04-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-04-2012 11:17:55

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6010B AAB#: WG396548

Login Number: L12040928

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-27-042612	01	04/26/12					04/30/12	3.9	180		05/03/12	7.2	180	
MW-27-042612	02	04/26/12					04/30/12	3.9	180		05/03/12	7.2	180	
MW-10-042612	03	04/26/12					04/30/12	3.9	180		05/03/12	7.2	180	
MW-10-042612	04	04/26/12					04/30/12	3.9	180		05/03/12	7.2	180	
MW-31-042612	05	04/26/12					04/30/12	3.8	180		05/03/12	7.2	180	
MW-31-042612	05	04/26/12					04/30/12	3.8	180		05/03/12	7.2	180	
MW-31-042612	06	04/26/12					04/30/12	3.8	180		05/03/12	7.2	180	
MW-31-042612	06	04/26/12					04/30/12	3.8	180		05/03/12	7.2	180	
MW-27-042612-MS	08	04/26/12					04/30/12	3.9	180		05/03/12	7.3	180	
MW-27-042612-MS	09	04/26/12					04/30/12	3.9	180		05/03/12	7.3	180	
MW-27-042612-MSD	10	04/26/12					04/30/12	3.9	180		05/03/12	7.3	180	
MW-27-042612-MSD	11	04/26/12					04/30/12	3.9	180		05/03/12	7.3	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2401931
Report generated 05/04/2012 09:22

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396548
Blank File ID: P2.050312.145540
Blank Sample ID: WG396511-04
Prep Date: 04/30/12 08:42
Instrument ID: PE-ICP2
Analyzed Date: 05/03/12 14:55
Method: 6010B
Analyst: KHR

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396511-05	P2.050212.174148	05/02/12 17:41	01
LCS	WG396511-05	P2.050312.150236	05/03/12 15:02	02
MW-10-042612	L12040928-03	P2.050312.154116	05/03/12 15:41	01
MW-27-042612	L12040928-01	P2.050312.161304	05/03/12 16:13	01
MW-27-042612	L12040928-02	P2.050312.161905	05/03/12 16:19	01
MW-10-042612	L12040928-04	P2.050312.162510	05/03/12 16:25	01
MW-31-042612	L12040928-05	P2.050312.163207	05/03/12 16:32	01
MW-31-042612	L12040928-06	P2.050312.163809	05/03/12 16:38	01
MW-31-042612	L12040928-05	P2.050312.164411	05/03/12 16:44	DL01
MW-31-042612	L12040928-06	P2.050312.165012	05/03/12 16:50	DL01
MW-27-042612-MS	L12040928-08	P2.050312.170905	05/03/12 17:09	01
MW-27-042612-MS	L12040928-09	P2.050312.171506	05/03/12 17:15	01
MW-27-042612-MSD	L12040928-10	P2.050312.172106	05/03/12 17:21	01
MW-27-042612-MSD	L12040928-11	P2.050312.172708	05/03/12 17:27	01

Report Name: BLANK_SUMMARY
PDF File ID: 2401932
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 04/30/12 08:42 Sample ID: WG396511-04
Instrument ID: PE-ICP2 Run Date: 05/03/12 14:55 Prep Method: 3005A
File ID: P2.050312.145540 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG396548 Matrix: Water Units: mg/L
Contract #: Cal ID: PE-ICP-03-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Barium, Total	0.00250	0.0100	0.00250	1	U
Beryllium, Total	0.000500	0.00200	0.000500	1	U
Cadmium, Total	0.000250	0.000500	0.000250	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Chromium, Total	0.00250	0.00500	0.00250	1	U
Cobalt, Total	0.00250	0.0200	0.00250	1	U
Copper, Total	0.00500	0.0200	0.00500	1	U
Iron, Total	0.0250	0.100	0.0250	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Nickel, Total	0.00500	0.0400	0.00500	1	U
Potassium, Total	0.250	1.00	0.250	1	U
Silver, Total	0.00500	0.0100	0.00500	1	U
Sodium, Total	0.250	0.500	0.250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U
Zinc, Total	0.00500	0.0200	0.00500	1	U

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

Report Name:BLANK
PDF ID: 2401933
04-MAY-2012 09:23

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396511-05
Instrument ID: PE-ICP2 Run Time: 15:02 Prep Method: 3005A
File ID: P2.050312.150236 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG396548 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51357 Cal ID: PE-ICP-03-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	5.13	103	85 - 115	
Barium, Total	0.500	0.518	104	85 - 115	
Beryllium, Total	0.0250	0.0246	98.4	85 - 115	
Cadmium, Total	0.0250	0.0238	95.1	85 - 115	
Calcium, Total	5.00	5.02	100	85 - 115	
Chromium, Total	0.250	0.261	104	85 - 115	
Cobalt, Total	0.100	0.103	103	85 - 115	
Copper, Total	0.250	0.264	105	85 - 115	
Iron, Total	2.00	2.00	100	85 - 115	
Magnesium, Total	5.00	5.17	103	85 - 115	
Manganese, Total	0.250	0.260	104	85 - 115	
Nickel, Total	0.250	0.272	109	85 - 115	
Potassium, Total	25.0	25.8	103	85 - 115	
Silver, Total	0.200	0.202	101	85 - 115	
Sodium, Total	25.0	27.0	108	85 - 115	
Vanadium, Total	0.500	0.520	104	85 - 115	
Zinc, Total	0.500	0.514	103	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2401934
Report generated: 05/04/2012 09:23

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID: PE-ICP2- 03-MAY-12 Worknum:WG396548

Instrument ID:PE-ICP2 Contract #: Prep Method:3005A

Parent ID:L12040928-01 File ID:P2.050312.161304 Dil:1 Method:6010B

Sample ID:L12040928-08 MS File ID:P2.050312.170905 Dil:1 Matrix:Water

Sample ID:L12040928-10 MSD File ID:P2.050312.172106 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	U	5.00	4.99	99.9	5.00	5.07	101	1.63	85 - 115	20	
Barium, Total	0.221	0.500	0.707	97.1	0.500	0.726	101	2.63	85 - 115	20	
Beryllium, Total	U	0.0250	0.0231	92.5	0.0250	0.0230	92.1	0.466	85 - 115	20	
Cadmium, Total	0.000409	0.0250	0.0218	85.6	0.0250	0.0218	85.6	0.0485	85 - 115	20	
Calcium, Total	247	5.00	257	208	5.00	269	437	4.35	85 - 115	20	*
Chromium, Total	U	0.250	0.251	100	0.250	0.253	101	0.761	85 - 115	20	
Cobalt, Total	U	0.100	0.0948	94.8	0.100	0.0952	95.2	0.416	85 - 115	20	
Copper, Total	U	0.250	0.236	94.3	0.250	0.240	96.2	1.92	85 - 115	20	
Iron, Total	26.0	2.00	30.6	234	2.00	34.5	426	11.8	85 - 115	20	*
Magnesium, Total	41.4	5.00	47.7	127	5.00	47.9	129	0.278	85 - 115	20	*
Manganese, Total	4.14	0.250	4.57	172	0.250	5.37	494	16.2	85 - 115	20	*
Nickel, Total	U	0.250	0.244	97.7	0.250	0.247	98.6	0.943	85 - 115	20	
Potassium, Total	12.1	25.0	36.9	99.1	25.0	37.9	103	2.63	85 - 115	20	
Silver, Total	U	0.200	0.187	93.6	0.200	0.189	94.5	0.974	85 - 115	20	
Sodium, Total	84.5	25.0	113	115	25.0	126	166	10.7	85 - 115	20	*
Vanadium, Total	0.00731	0.500	0.493	97	0.500	0.499	98.3	1.26	85 - 115	20	
Zinc, Total	U	0.500	0.463	92.5	0.500	0.466	93.1	0.611	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2401935

Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:PE-ICP2- 03-MAY-12 Worknum:WG396548

Instrument ID:PE-ICP2 Contract #: Prep Method:3005A

Parent ID:L12040928-02 File ID:P2.050312.161905 Dil:1 Method:6010B

Sample ID:L12040928-09 MS File ID:P2.050312.171506 Dil:1 Matrix:Water

Sample ID:L12040928-11 MSD File ID:P2.050312.172708 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Dissolved	U	5.00	4.96	99.2	5.00	5.09	102	2.64	85 - 115	20	
Barium, Dissolved	0.249	0.500	0.716	93.4	0.500	0.736	97.4	2.75	85 - 115	20	
Beryllium, Dissolved	U	0.0250	0.0229	91.7	0.0250	0.0237	94.9	3.50	85 - 115	20	
Cadmium, Dissolved	U	0.0250	0.0215	86.1	0.0250	0.0225	89.8	4.27	85 - 115	20	
Calcium, Dissolved	273	5.00	266	-137	5.00	277	79.8	3.99	85 - 115	20	*
Chromium, Dissolved	U	0.250	0.242	96.9	0.250	0.255	102	5.30	85 - 115	20	
Cobalt, Dissolved	U	0.100	0.0936	93.6	0.100	0.0956	95.6	2.21	85 - 115	20	
Copper, Dissolved	U	0.250	0.237	94.6	0.250	0.245	98.2	3.67	85 - 115	20	
Iron, Dissolved	32.4	2.00	32.8	18.8	2.00	33.8	66.9	2.89	85 - 115	20	*
Magnesium, Dissolved	44.1	5.00	45.9	37	5.00	47.8	73.6	3.91	85 - 115	20	*
Manganese, Dissolved	5.52	0.250	5.52	-1.28	0.250	5.68	64	2.92	85 - 115	20	*
Nickel, Dissolved	U	0.250	0.247	98.6	0.250	0.248	99.3	0.617	85 - 115	20	
Potassium, Dissolved	13.5	25.0	38.1	98.6	25.0	39.3	103	2.89	85 - 115	20	
Silver, Dissolved	U	0.200	0.189	94.3	0.200	0.195	97.3	3.09	85 - 115	20	
Sodium, Dissolved	102	25.0	127	97.5	25.0	131	114	3.15	85 - 115	20	
Vanadium, Dissolved	U	0.500	0.494	98.9	0.500	0.503	101	1.66	85 - 115	20	
Zinc, Dissolved	U	0.500	0.450	89.9	0.500	0.470	93.9	4.36	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2401935

Report generated 05/04/2012 09:23

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12040928 **Worknum:** WG396548
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG396548-04 **File ID:** P2.050312.155315 **Dil:** 5 **Units:** mg/L
Sample: L12040928-03 **File ID:** P2.050312.154116 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	0.0792	F	ND	U		
Barium	0.0397	X	0.0327	F	17.50	
Beryllium	ND	U	ND	U		
Cadmium	0.000357	F	ND	U		
Calcium	73.7		73.6		0.12	
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	ND	U	ND	U		
Iron	0.266	X	0.270	F	1.49	
Magnesium	30.8		32.4		5.35	
Manganese	0.00997	F	ND	U		
Nickel	ND	U	ND	U		
Potassium	0.828	F	ND	U		
Silver	ND	U	ND	U		
Sodium	141		136		3.33	
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: 2401929
05/04/2012 09:22

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12040928 **Worknum:** WG396548
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG396548-03 **File ID:** P2.050312.154716 **Dil:** 1 **Units:** mg/L
Sample ID: L12040928-03 **File ID:** P2.050312.154116 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	5.09		0.0792	F	5	100.3	75 - 125	
BARIUM	0.534		0.0397		.5	99.6	75 - 125	
BERYLLIUM	0.0240		0	U	.025	95.9	75 - 125	
CADMIUM	0.0227		0.000357	F	.025	89.6	75 - 125	
CALCIUM	74.5		73.7		5	163.2	75 - 125	N
CHROMIUM	0.250		0	U	.25	100.1	75 - 125	
COBALT	0.0965		0	U	.1	96.5	75 - 125	
COPPER	0.245		0	U	.25	98.2	75 - 125	
IRON	2.15		0.266		2	95.6	75 - 125	
MAGNESIUM	32.8		30.8		5	102.1	75 - 125	
MANGANESE	0.259		0.00997	F	.25	99.9	75 - 125	
NICKEL	0.252		0	U	.25	100.9	75 - 125	
POTASSIUM	26.0		0.828	F	25	101.1	75 - 125	
SILVER	0.194		0	U	.2	96.8	75 - 125	
SODIUM	156		141		25	118.1	75 - 125	
VANADIUM	0.511		0	U	.5	102.3	75 - 125	
ZINC	0.482		0	U	.5	96.3	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2401930
Report generated: 05/04/2012 09:22

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12040928**	Workgroup (AAB#):	**WG396548**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG396959**	Initial Calibration Date:	**03-MAY-2012 10:57**

	WG396959-01		WG396959-02		WG396959-03		WG396959-04		WG396959-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	73.6	.1	636	.2	1280	10	62500	20	124000	.999988	
BARIUM	0	-193	.01	1590	.02	3150	1	151000	2	298000	.999985	
BERYLLIUM	0	-1740	.0005	659	.001	1240	.05	60600	.1	122000	.999998	
CADMIUM	0	71.2	.0005	30.5	.001	56.3	.05	2720	.1	5430	1	
CALCIUM	0	-70.6	NA	NA	.2	79.0	10	4270	20	8750	.999925	
CHROMIUM	0	171	.005	529	.01	1070	.5	50700	1	101000	.999995	
COBALT	0	-4.25	.002	81.8	.004	150	.1	7290	.4	14400	.999976	
COPPER	0	-579	.005	1120	.01	2330	.5	119000	1	238000	1	
IRON	0	34.6	.04	585	.08	1170	4	58300	8	116000	1	
MAGNESIUM	0	22.1	.1	333	.2	653	10	31800	20	63900	.999996	
MANGANESE	0	603	.005	4130	.01	7980	.5	400000	1	780000	.999929	
NICKEL	0	-178	.005	339	.01	672	.5	32000	1	63000	.999968	
POTASSIUM	0	-8.55	.5	1610	1	3040	50	137000	100	270000	1	
SILVER	0	-24.7	.004	1120	.008	2400	.4	120000	.8	240000	.999998	
SODIUM	0	1070	.5	8280	1	17100	50	823000	100	1610000	1	
VANADIUM	0	13500	.01	2360	.02	3770	1	183000	2	360000	.999968	
ZINC	0	1.95	.01	428	.02	853	1	41800	2	82100	.99996	

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: 2401938
Report generated: 04-MAY-2012 09:22

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-07
Instrument ID: PE-ICP2 Run Time: 11:09 Method: 6010B
File ID: P2.050312.110959 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG396548 Cal ID: PE-ICP2 - 03-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: 2401940
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-13

Instrument ID: PE-ICP2 Run Time: 11:48 Method: 6010B

File ID: P2.050312.114836 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2401943
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-22

Instrument ID: PE-ICP2 Run Time: 14:48 Method: 6010B

File ID: P2.050312.144847 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2401943
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-24

Instrument ID: PE-ICP2 Run Time: 16:06 Method: 6010B

File ID: P2.050312.160611 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2401943
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-26

Instrument ID: PE-ICP2 Run Time: 17:02 Method: 6010B

File ID: P2.050312.170212 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2401943
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-28

Instrument ID: PE-ICP2 Run Time: 17:39 Method: 6010B

File ID: P2.050312.173911 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2401943
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-32

Instrument ID: PE-ICP2 Run Time: 18:03 Method: 6010B

File ID: P2.050312.180359 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2401943
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-06
Instrument ID: PE-ICP2 Run Time: 11:04 Method: 6010B
File ID: P2.050312.110400 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	9.83	98.3	90 - 110	
Barium		1	1.01	101	90 - 110	
Beryllium		.05	0.0498	99.6	90 - 110	
Cadmium		.05	0.0495	99.0	90 - 110	
Calcium		10	10.4	104	90 - 110	
Chromium		.5	0.505	101	90 - 110	
Cobalt		.2	0.200	100	90 - 110	
Copper		.5	0.513	103	90 - 110	
Iron		4	3.93	98.2	90 - 110	
Magnesium		10	9.85	98.5	90 - 110	
Manganese		.5	0.507	101	90 - 110	
Nickel		.5	0.505	101	90 - 110	
Potassium		50	49.1	98.2	90 - 110	
Silver		.4	0.403	101	90 - 110	
Sodium		50	49.9	99.8	90 - 110	
Vanadium		1	1.01	101	90 - 110	
Zinc		1	1.02	102	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2401939
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-12
Instrument ID: PE-ICP2 Run Time: 11:42 Method: 6010B
File ID: P2.050312.114235 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.92	mg/L	99.2	90 - 110		
Barium		1.00	1.00	mg/L	100	90 - 110		
Beryllium		0.0500	0.0495	mg/L	98.9	90 - 110		
Cadmium		0.0500	0.0493	mg/L	98.5	90 - 110		
Calcium		10.0	10.3	mg/L	103	90 - 110		
Chromium		0.500	0.504	mg/L	101	90 - 110		
Cobalt		0.200	0.201	mg/L	101	90 - 110		
Copper		0.500	0.511	mg/L	102	90 - 110		
Iron		4.00	4.01	mg/L	100	90 - 110		
Magnesium		10.0	10.1	mg/L	101	90 - 110		
Manganese		0.500	0.506	mg/L	101	90 - 110		
Nickel		0.500	0.506	mg/L	101	90 - 110		
Potassium		50.0	49.8	mg/L	99.7	90 - 110		
Silver		0.400	0.401	mg/L	100	90 - 110		
Sodium		50.0	50.6	mg/L	101	90 - 110		
Vanadium		1.00	0.999	mg/L	99.9	90 - 110		
Zinc		1.00	1.02	mg/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2401942
Report generated 05/04/2012 09:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-21

Instrument ID: PE-ICP2 Run Time: 14:42 Method: 6010B

File ID: P2.050312.144246 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.79	mg/L	97.9	90 - 110		
Barium		1.00	0.982	mg/L	98.2	90 - 110		
Beryllium		0.0500	0.0481	mg/L	96.3	90 - 110		
Cadmium		0.0500	0.0470	mg/L	94.1	90 - 110		
Calcium		10.0	9.92	mg/L	99.2	90 - 110		
Chromium		0.500	0.492	mg/L	98.4	90 - 110		
Cobalt		0.200	0.194	mg/L	97.1	90 - 110		
Copper		0.500	0.511	mg/L	102	90 - 110		
Iron		4.00	3.88	mg/L	97.0	90 - 110		
Magnesium		10.0	9.88	mg/L	98.8	90 - 110		
Manganese		0.500	0.497	mg/L	99.5	90 - 110		
Nickel		0.500	0.494	mg/L	98.9	90 - 110		
Potassium		50.0	49.6	mg/L	99.2	90 - 110		
Silver		0.400	0.394	mg/L	98.5	90 - 110		
Sodium		50.0	49.5	mg/L	99.0	90 - 110		
Vanadium		1.00	0.982	mg/L	98.2	90 - 110		
Zinc		1.00	0.975	mg/L	97.5	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2401942

Report generated 05/04/2012 09:23

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-23
Instrument ID: PE-ICP2 Run Time: 16:00 Method: 6010B
File ID: P2.050312.160010 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.61	mg/L	96.1	90 - 110		
Barium		1.00	0.981	mg/L	98.1	90 - 110		
Beryllium		0.0500	0.0469	mg/L	93.8	90 - 110		
Cadmium		0.0500	0.0461	mg/L	92.2	90 - 110		
Calcium		10.0	9.79	mg/L	97.9	90 - 110		
Chromium		0.500	0.493	mg/L	98.5	90 - 110		
Cobalt		0.200	0.196	mg/L	97.8	90 - 110		
Copper		0.500	0.492	mg/L	98.4	90 - 110		
Iron		4.00	3.86	mg/L	96.4	90 - 110		
Magnesium		10.0	9.77	mg/L	97.7	90 - 110		
Manganese		0.500	0.496	mg/L	99.2	90 - 110		
Nickel		0.500	0.493	mg/L	98.6	90 - 110		
Potassium		50.0	48.5	mg/L	97.0	90 - 110		
Silver		0.400	0.382	mg/L	95.6	90 - 110		
Sodium		50.0	49.2	mg/L	98.4	90 - 110		
Vanadium		1.00	0.980	mg/L	98.0	90 - 110		
Zinc		1.00	0.977	mg/L	97.7	90 - 110		

* Exceeds LIMITS Criteria

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-25

Instrument ID: PE-ICP2 Run Time: 16:56 Method: 6010B

File ID: P2.050312.165610 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.93	mg/L	99.3	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0482	mg/L	96.4	90 - 110		
Cadmium		0.0500	0.0474	mg/L	94.7	90 - 110		
Calcium		10.0	10.0	mg/L	100	90 - 110		
Chromium		0.500	0.507	mg/L	101	90 - 110		
Cobalt		0.200	0.201	mg/L	101	90 - 110		
Copper		0.500	0.508	mg/L	102	90 - 110		
Iron		4.00	3.93	mg/L	98.1	90 - 110		
Magnesium		10.0	9.93	mg/L	99.3	90 - 110		
Manganese		0.500	0.511	mg/L	102	90 - 110		
Nickel		0.500	0.509	mg/L	102	90 - 110		
Potassium		50.0	50.4	mg/L	101	90 - 110		
Silver		0.400	0.394	mg/L	98.5	90 - 110		
Sodium		50.0	50.0	mg/L	99.9	90 - 110		
Vanadium		1.00	1.01	mg/L	101	90 - 110		
Zinc		1.00	1.00	mg/L	100	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-27

Instrument ID: PE-ICP2 Run Time: 17:33 Method: 6010B

File ID: P2.050312.173310 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.82	mg/L	98.2	90 - 110		
Barium		1.00	0.987	mg/L	98.7	90 - 110		
Beryllium		0.0500	0.0479	mg/L	95.8	90 - 110		
Cadmium		0.0500	0.0472	mg/L	94.5	90 - 110		
Calcium		10.0	9.97	mg/L	99.7	90 - 110		
Chromium		0.500	0.496	mg/L	99.2	90 - 110		
Cobalt		0.200	0.196	mg/L	98.2	90 - 110		
Copper		0.500	0.503	mg/L	101	90 - 110		
Iron		4.00	3.91	mg/L	97.7	90 - 110		
Magnesium		10.0	9.90	mg/L	99.0	90 - 110		
Manganese		0.500	0.500	mg/L	99.9	90 - 110		
Nickel		0.500	0.499	mg/L	99.7	90 - 110		
Potassium		50.0	49.6	mg/L	99.1	90 - 110		
Silver		0.400	0.391	mg/L	97.6	90 - 110		
Sodium		50.0	50.0	mg/L	99.9	90 - 110		
Vanadium		1.00	0.986	mg/L	98.6	90 - 110		
Zinc		1.00	0.983	mg/L	98.3	90 - 110		

* Exceeds LIMITS Criteria

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/03/2012 Sample ID: WG396959-31

Instrument ID: PE-ICP2 Run Time: 17:57 Method: 6010B

File ID: P2.050312.175758 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG396548 Cal ID: PE-ICP - 03-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.72	mg/L	97.2	90 - 110		
Barium		1.00	0.990	mg/L	99.0	90 - 110		
Beryllium		0.0500	0.0480	mg/L	96.1	90 - 110		
Cadmium		0.0500	0.0474	mg/L	94.9	90 - 110		
Calcium		10.0	10.0	mg/L	100	90 - 110		
Chromium		0.500	0.498	mg/L	99.5	90 - 110		
Cobalt		0.200	0.198	mg/L	99.2	90 - 110		
Copper		0.500	0.508	mg/L	102	90 - 110		
Iron		4.00	3.88	mg/L	97.0	90 - 110		
Magnesium		10.0	9.87	mg/L	98.7	90 - 110		
Manganese		0.500	0.500	mg/L	100	90 - 110		
Nickel		0.500	0.498	mg/L	99.5	90 - 110		
Potassium		50.0	49.1	mg/L	98.2	90 - 110		
Silver		0.400	0.393	mg/L	98.3	90 - 110		
Sodium		50.0	50.0	mg/L	100	90 - 110		
Vanadium		1.00	0.988	mg/L	98.8	90 - 110		
Zinc		1.00	0.983	mg/L	98.3	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040928 **Workgroup (AAB#):** WG396548
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG396959-10 **File ID:** P2.050312.113042 **Units:** mg/L
Sol. AB : WG396959-11 **File ID:** P2.050312.113638 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	260	104	250	249	99.6	
Barium	NS	0.000360	NS	0.250	0.254	102	
Beryllium	NS	-0.00155	NS	0.250	0.250	100	
Cadmium	NS	0	NS	0.500	0.426	85.2	
Calcium	250	267	107	250	265	106	
Chromium	NS	-0.00118	NS	0.250	0.255	102	
Cobalt	NS	-0.00220	NS	0.250	0.237	94.8	
Copper	NS	0.00250	NS	0.250	0.248	99.2	
Iron	100	98.1	98.1	100	93.4	93.4	
Magnesium	250	264	106	250	252	101	
Manganese	NS	-0.00171	NS	0.250	0.245	98.0	
Nickel	NS	-0.000690	NS	0.500	0.483	96.6	
Potassium	NS	-0.0724	NS	5.00	4.85	97.0	
Silver	NS	0.00122	NS	0.500	0.503	101	
Sodium	NS	-0.0158	NS	5.00	5.07	101	
Vanadium	NS	-0.00252	NS	0.250	0.247	98.8	
Zinc	NS	0.0000200	NS	0.500	0.472	94.4	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

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Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040928 **Workgroup (AAB#):** WG396548
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG396959-29 **File ID:** P2.050312.174604 **Units:** mg/L
Sol. AB : WG396959-30 **File ID:** P2.050312.175201 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	249	99.6	250	246	98.4	
Barium	NS	0.000440	NS	0.250	0.242	96.8	
Beryllium	NS	-0.000570	NS	0.250	0.236	94.4	
Cadmium	NS	-0.0000800	NS	0.500	0.402	80.4	
Calcium	250	254	102	250	248	99.2	
Chromium	NS	-0.00110	NS	0.250	0.244	97.6	
Cobalt	NS	-0.00228	NS	0.250	0.227	90.8	
Copper	NS	0.00263	NS	0.250	0.238	95.2	
Iron	100	91.3	91.3	100	89.9	89.9	
Magnesium	250	248	99.2	250	244	97.6	
Manganese	NS	-0.00213	NS	0.250	0.234	93.6	
Nickel	NS	-0.000820	NS	0.500	0.462	92.4	
Potassium	NS	-0.0810	NS	5.00	4.71	94.2	
Silver	NS	-0.00103	NS	0.500	0.479	95.8	
Sodium	NS	0.00593	NS	5.00	4.92	98.4	
Vanadium	NS	-0.00145	NS	0.250	0.235	94.0	
Zinc	NS	0.000680	NS	0.500	0.447	89.4	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040928 **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

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040928 **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

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040928 **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: L12040928 **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

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040928 **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

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12040928 **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
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Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12040928 **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: 2401936
Report generated: 05/04/2012 09:22

2.3.1.3 Raw Data

==========

Analysis Begun

Start Time: 5/3/2012 10:31:10 AM **Plasma On Time: 5/3/2012 7:42:27 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\THURSDAY1.sif
Batch ID:
Results Data Set: 050312H
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 4/30/2012 12:25:48 PM**
IEC File: CA227_LiBeMOD.iec **SMF File:**
Method Description: STANDARD

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 5/3/2012 10:31:13 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2001943.2	21007.11	1.05%		
YRADIAL	245477.0	3831.31	1.56%		
Ga 417.206	1206949.3	8481.11	0.70%		
GaRADIAL	74376.6	3043.87	4.09%		
Ag 328.068†	-24.7	117.23	474.60%	[0.00]	mg/L
Al 396.153†	73.6	13.28	18.05%	[0.00]	mg/L
As 188.979†	-24.8	6.55	26.42%	[0.00]	mg/L
Ba 233.527†	-193.4	11.50	5.95%	[0.00]	mg/L
Be 234.861†	-1740.9	43.92	2.52%	[0.00]	mg/L
B 249.677†	25.8	17.28	67.08%	[0.00]	mg/L
Ca 227.546†	-70.6	5.33	7.56%	[0.00]	mg/L
Cd 228.802†	71.2	4.85	6.81%	[0.00]	mg/L
Co 228.616†	-4.3	4.98	117.08%	[0.00]	mg/L
Cr 267.716†	170.8	5.70	3.34%	[0.00]	mg/L
Cu 327.393†	-579.4	75.31	13.00%	[0.00]	mg/L
Fe 239.562†	34.6	7.36	21.27%	[0.00]	mg/L
Mg 279.077†	22.1	5.20	23.51%	[0.00]	mg/L
Mn 257.610†	603.0	16.14	2.68%	[0.00]	mg/L
Mo 202.031†	80.2	13.45	16.78%	[0.00]	mg/L
Ni 231.604†	-178.0	10.81	6.08%	[0.00]	mg/L
Pb 220.353†	-86.7	4.20	4.84%	[0.00]	mg/L
Sb 206.836†	7.3	2.02	27.72%	[0.00]	mg/L
Se 196.026†	15.0	4.38	29.16%	[0.00]	mg/L
Si 251.611†	694.3	13.26	1.91%	[0.00]	mg/L
Sn 189.927†	21.0	9.95	47.39%	[0.00]	mg/L
Ti 334.940†	804.0	38.67	4.81%	[0.00]	mg/L
Tl 190.801†	-77.8	5.54	7.12%	[0.00]	mg/L
V 290.880†	13455.1	119.50	0.89%	[0.00]	mg/L
Zn 206.200†	2.0	7.00	358.38%	[0.00]	mg/L
K 766.490†	-8.6	33.91	396.47%	[0.00]	mg/L
Na 589.592†	1065.3	43.42	4.08%	[0.00]	mg/L
Sr 407.771†	-726.8	99.82	13.73%	[0.00]	mg/L
Li 670.784†	-73.0	76.91	105.33%	[0.00]	mg/L

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 5/3/2012 10:38:06 AM**

Approved: May 04, 2012

Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1982276.4	22358.53	1.13%		
YRADIAL	251024.7	1378.78	0.55%		
Ga 417.206	1203597.4	27390.09	2.28%		
GaRADIAL	75367.1	2061.75	2.74%		
Ag 328.068†	1123.8	118.42	10.54%	[0.0040]	mg/L
Al 396.153†	636.0	18.30	2.88%	[0.10]	mg/L
Ba 233.527†	1593.7	28.89	1.81%	[0.010]	mg/L
Be 234.861†	658.7	23.07	3.50%	[0.0005]	mg/L
Cd 228.802†	30.5	2.10	6.90%	[0.00050]	mg/L
Co 228.616†	81.8	3.89	4.75%	[0.0020]	mg/L
Cr 267.716†	528.9	8.87	1.68%	[0.0050]	mg/L
Cu 327.393†	1115.3	135.17	12.12%	[0.0050]	mg/L
Fe 239.562†	584.7	15.94	2.73%	[0.040]	mg/L
Mg 279.077†	333.1	5.32	1.60%	[0.10]	mg/L
Mn 257.610†	4133.0	55.25	1.34%	[0.0050]	mg/L
Mo 202.031†	367.5	7.00	1.91%	[0.010]	mg/L
Ni 231.604†	338.8	5.86	1.73%	[0.0050]	mg/L
Pb 220.353†	45.2	4.83	10.69%	[0.0050]	mg/L
Sb 206.836†	50.5	5.39	10.68%	[0.012]	mg/L
Si 251.611†	2014.0	76.92	3.82%	[0.050]	mg/L
Sn 189.927†	103.3	2.52	2.44%	[0.010]	mg/L
Ti 334.940†	9321.5	333.19	3.57%	[0.010]	mg/L
V 290.880†	2355.2	509.37	21.63%	[0.010]	mg/L
Zn 206.200†	428.5	14.27	3.33%	[0.010]	mg/L
K 766.490†	1609.9	19.01	1.18%	[0.50]	mg/L
Na 589.592†	8278.2	252.98	3.06%	[0.50]	mg/L
Sr 407.771†	23015.7	388.51	1.69%	[0.010]	mg/L
Li 670.784†	1436.8	44.57	3.10%	[0.010]	mg/L

==========

Sequence No.: 3 Autosampler Location: 3
Sample ID: S2 Date Collected: 5/3/2012 10:45:01 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	2012496.3	32777.22	1.63%		
YRADIAL	250173.3	9337.49	3.73%		
Ga 417.206	1216758.3	40297.24	3.31%		
GaRADIAL	75198.1	734.48	0.98%		
Ag 328.068†	2399.5	98.58	4.11%	[0.0080]	mg/L
Al 396.153†	1284.3	33.50	2.61%	[0.20]	mg/L
As 188.979†	23.4	4.20	17.92%	[0.0080]	mg/L
Ba 233.527†	3152.3	65.68	2.08%	[0.020]	mg/L
Be 234.861†	1239.0	15.78	1.27%	[0.0010]	mg/L
B 249.677†	749.7	40.09	5.35%	[0.010]	mg/L
Ca 227.546†	79.0	11.25	14.24%	[0.20]	mg/L
Cd 228.802†	56.3	8.98	15.95%	[0.0010]	mg/L
Co 228.616†	150.3	9.67	6.44%	[0.0040]	mg/L
Cr 267.716†	1070.4	24.81	2.32%	[0.010]	mg/L

Approved: May 04, 2012

Cu 327.393†	2326.1	95.73	4.12%	[0.010] mg/L
Fe 239.562†	1170.2	18.30	1.56%	[0.080] mg/L
Mg 279.077†	653.1	28.27	4.33%	[0.20] mg/L
Mn 257.610†	7981.4	162.36	2.03%	[0.010] mg/L
Mo 202.031†	715.4	6.77	0.95%	[0.020] mg/L
Ni 231.604†	672.3	5.55	0.83%	[0.010] mg/L
Pb 220.353†	98.7	6.64	6.73%	[0.010] mg/L
Sb 206.836†	94.8	1.64	1.73%	[0.024] mg/L
Se 196.026†	19.7	3.92	19.91%	[0.0080] mg/L
Si 251.611†	4073.7	162.36	3.99%	[0.10] mg/L
Sn 189.927†	202.9	8.70	4.29%	[0.020] mg/L
Ti 334.940†	18495.1	425.31	2.30%	[0.020] mg/L
Tl 190.801†	44.7	3.31	7.41%	[0.010] mg/L
V 290.880†	3766.0	390.35	10.37%	[0.020] mg/L
Zn 206.200†	852.9	15.57	1.83%	[0.020] mg/L
K 766.490†	3040.1	49.46	1.63%	[1.00] mg/L
Na 589.592†	17060.5	340.30	1.99%	[1.00] mg/L
Sr 407.771†	45580.5	1202.50	2.64%	[0.020] mg/L
Li 670.784†	2753.9	32.72	1.19%	[0.020] mg/L

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Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 5/3/2012 10:51:56 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	1980284.6	35036.69	1.77%	
YRADIAL	249973.4	3717.71	1.49%	
Ga 417.206	1190794.3	29472.50	2.48%	
GaRADIAL	74702.8	1006.35	1.35%	
Ag 328.068†	120423.1	3564.91	2.96%	[0.40] mg/L
Al 396.153†	62475.4	194.67	0.31%	[10.00] mg/L
As 188.979†	1041.5	35.56	3.41%	[0.40] mg/L
Ba 233.527†	150587.9	4286.96	2.85%	[1.00] mg/L
Be 234.861†	60638.6	1530.81	2.52%	[0.05] mg/L
B 249.677†	38835.7	1021.54	2.63%	[0.50] mg/L
Ca 227.546†	4271.3	142.59	3.34%	[10.00] mg/L
Cd 228.802†	2720.8	112.29	4.13%	[0.05] mg/L
Co 228.616†	7294.5	142.20	1.95%	[0.20] mg/L
Cr 267.716†	50721.6	1012.89	2.00%	[0.50] mg/L
Cu 327.393†	118900.7	3258.72	2.74%	[0.50] mg/L
Fe 239.562†	58292.7	216.31	0.37%	[4.00] mg/L
Mg 279.077†	31774.6	60.58	0.19%	[10.00] mg/L
Mn 257.610†	399842.5	12788.46	3.20%	[0.50] mg/L
Mo 202.031†	34625.0	864.53	2.50%	[1.00] mg/L
Ni 231.604†	32021.3	951.12	2.97%	[0.50] mg/L
Pb 220.353†	5284.4	95.34	1.80%	[0.50] mg/L
Sb 206.836†	4694.8	131.85	2.81%	[1.20] mg/L
Se 196.026†	650.4	14.55	2.24%	[0.40] mg/L
Si 251.611†	196527.0	4341.22	2.21%	[5.00] mg/L
Sn 189.927†	9838.3	166.21	1.69%	[1.00] mg/L
Ti 334.940†	920589.0	5146.94	0.56%	[1.00] mg/L
Tl 190.801†	1857.4	8.49	0.46%	[0.50] mg/L
V 290.880†	183105.9	4317.19	2.36%	[1.00] mg/L
Zn 206.200†	41834.6	1062.90	2.54%	[1.00] mg/L
K 766.490†	136530.4	882.44	0.65%	[50.00] mg/L
Na 589.592†	822723.9	18465.46	2.24%	[50.00] mg/L
Sr 407.771†	2151075.6	47408.60	2.20%	[1.00] mg/L
Li 670.784†	129022.9	372.00	0.29%	[1.00] mg/L

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Sequence No.: 5 **Autosampler Location: 5**

Approved: May 04, 2012

Sample ID: S4
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 5/3/2012 10:57:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	1934261.4	19442.51	1.01%		
YRADIAL	246197.1	627.20	0.25%		
Ga 417.206	1165137.2	22282.54	1.91%		
GaRADIAL	75171.6	810.64	1.08%		
Ag 328.068†	239961.5	6099.51	2.54%	[0.80]	mg/L
Al 396.153†	123687.3	346.67	0.28%	[20.00]	mg/L
As 188.979†	2103.8	52.12	2.48%	[0.80]	mg/L
Ba 233.527†	297702.2	1285.22	0.43%	[2.00]	mg/L
Be 234.861†	121732.9	2751.69	2.26%	[0.10]	mg/L
B 249.677†	79330.1	2044.51	2.58%	[1.00]	mg/L
Ca 227.546†	8753.0	259.94	2.97%	[20.00]	mg/L
Cd 228.802†	5433.6	208.96	3.85%	[0.10]	mg/L
Co 228.616†	14380.9	120.46	0.84%	[0.40]	mg/L
Cr 267.716†	100789.4	490.95	0.49%	[1.00]	mg/L
Cu 327.393†	237573.8	4600.53	1.94%	[1.00]	mg/L
Fe 239.562†	116451.6	19.73	0.02%	[8.00]	mg/L
Mg 279.077†	63910.6	139.89	0.22%	[20.00]	mg/L
Mn 257.610†	780395.5	3966.14	0.51%	[1.00]	mg/L
Mo 202.031†	69302.7	302.24	0.44%	[2.00]	mg/L
Ni 231.604†	62983.5	281.77	0.45%	[1.00]	mg/L
Pb 220.353†	10394.2	77.66	0.75%	[1.00]	mg/L
Sb 206.836†	9401.7	251.36	2.67%	[2.40]	mg/L
Se 196.026†	1311.2	34.65	2.64%	[0.80]	mg/L
Si 251.611†	388666.2	6890.05	1.77%	[10.00]	mg/L
Sn 189.927†	19392.3	126.74	0.65%	[2.00]	mg/L
Ti 334.940†	1838554.5	267.43	0.01%	[2.00]	mg/L
Tl 190.801†	3613.3	20.12	0.56%	[1.00]	mg/L
V 290.880†	360132.4	1414.68	0.39%	[2.00]	mg/L
Zn 206.200†	82142.5	423.81	0.52%	[2.00]	mg/L
K 766.490†	269958.3	737.41	0.27%	[100.00]	mg/L
Na 589.592†	1614240.3	17929.48	1.11%	[100.00]	mg/L
Sr 407.771†	4314885.6	87988.57	2.04%	[2.00]	mg/L
Li 670.784†	251371.5	804.17	0.32%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin, Calc Int	31.2	300100	0.00000	0.999998	
Al 396.153	4	Lin, Calc Int	99.0	6191	0.00000	0.999988	
As 188.979	3	Wt. Lin	2.5	2612	0.00000	0.999984	
Ba 233.527	4	Lin, Calc Int	304.1	149000	0.00000	0.999985	
Be 234.861	4	Lin, Calc Int	-5.9	1216000	0.00000	0.999998	
B 249.677	3	Lin, Calc Int	-170.8	79200	0.00000	0.999943	
Ca 227.546	3	Lin, Calc Int	-23.0	436.9	0.00000	0.999925	
Cd 228.802	4	Lin, Calc Int	2.1	54330	0.00000	1.000000	
Co 228.616	4	Lin, Calc Int	18.1	36000	0.00000	0.999976	
Cr 267.716	4	Lin, Calc Int	68.0	100800	0.00000	0.999995	
Cu 327.393	4	Lin, Calc Int	-24.1	237600	0.00000	1.000000	
Fe 239.562	4	Lin, Calc Int	10.9	14560	0.00000	1.000000	
Mg 279.077	4	Lin, Calc Int	-13.8	3193	0.00000	0.999996	
Mn 257.610	4	Lin, Calc Int	1329.2	782600	0.00000	0.999929	
Mo 202.031	4	Lin, Calc Int	10.3	34640	0.00000	1.000000	
Ni 231.604	4	Lin, Calc Int	86.7	63090	0.00000	0.999968	
Pb 220.353	4	Lin, Calc Int	7.1	10420	0.00000	0.999965	
Sb 206.836	4	Lin, Calc Int	0.6	3916	0.00000	1.000000	
Se 196.026	3	Wt. Lin	6.7	1620	0.00000	0.999978	
Si 251.611	4	Lin, Calc Int	353.8	38910	0.00000	0.999985	

Approved: May 04, 2012

Sn 189.927	4	Lin, Calc Int	22.5	9711	0.00000	0.999975
Ti 334.940	4	Lin, Calc Int	238.0	919400	0.00000	1.000000
Tl 190.801	3	Lin, Calc Int	13.1	3618	0.00000	0.999901
V 290.880	4	Lin, Calc Int	604.2	180300	0.00000	0.999968
Zn 206.200	4	Lin, Calc Int	110.5	41160	0.00000	0.999960
K 766.490	4	Non Lin, Calc Int	170.4	2757	-0.58896	1.000000
Na 589.592	4	Non Lin, Calc Int	64.9	16760	-6.23123	1.000000
Sr 407.771	4	Lin, Calc Int	419.0	2156000	0.00000	0.999999
Li 670.784	4	Lin, Calc Int	547.1	126000	0.00000	0.999920

Sequence No.: 6 **Autosampler Location: 11**
Sample ID: ICV 2nd Vendor **Date Collected: 5/3/2012 11:04:00 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICV 2nd Vendor

Analyte	Back Pressure	Flow
All	149.0 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	1966211.3						10406.69	0.53%
YRADIAL	249136.5						4846.11	1.95%
Ga 417.206	1164917.1						47565.23	4.08%
GaRADIAL	74325.3						1481.97	1.99%
Ag 328.068†	120056.9	0.403	mg/L	0.0166	0.403	mg/L	0.0166	4.12%
QC value within limits for Ag 328.068 Recovery = 100.86%								
Al 396.153†	61386.2	9.83	mg/L	0.024	9.83	mg/L	0.024	0.24%
QC value within limits for Al 396.153 Recovery = 98.30%								
As 188.979†	1054.7	0.398	mg/L	0.0158	0.398	mg/L	0.0158	3.98%
QC value within limits for As 188.979 Recovery = 99.47%								
Ba 233.527†	150052.2	1.01	mg/L	0.009	1.01	mg/L	0.009	0.94%
QC value within limits for Ba 233.527 Recovery = 100.53%								
Be 234.861†	61087.3	0.0498	mg/L	0.00200	0.0498	mg/L	0.00200	4.01%
QC value within limits for Be 234.861 Recovery = 99.58%								
B 249.677†	41088.6	0.517	mg/L	0.0215	0.517	mg/L	0.0215	4.15%
QC value within limits for B 249.677 Recovery = 103.41%								
Ca 227.546†	4317.8	10.4	mg/L	0.47	10.4	mg/L	0.47	4.50%
QC value within limits for Ca 227.546 Recovery = 103.95%								
Cd 228.802†	2766.6	0.0495	mg/L	0.00306	0.0495	mg/L	0.00306	6.18%
QC value within limits for Cd 228.802 Recovery = 98.99%								
Co 228.616†	7256.9	0.200	mg/L	0.0009	0.200	mg/L	0.0009	0.44%
QC value within limits for Co 228.616 Recovery = 100.16%								
Cr 267.716†	50961.2	0.505	mg/L	0.0041	0.505	mg/L	0.0041	0.80%
QC value within limits for Cr 267.716 Recovery = 101.02%								
Cu 327.393†	121460.0	0.513	mg/L	0.0194	0.513	mg/L	0.0194	3.79%
QC value within limits for Cu 327.393 Recovery = 102.57%								
Fe 239.562†	57210.0	3.93	mg/L	0.021	3.93	mg/L	0.021	0.53%
QC value within limits for Fe 239.562 Recovery = 98.21%								
Mg 279.077†	31385.5	9.85	mg/L	0.075	9.85	mg/L	0.075	0.77%
QC value within limits for Mg 279.077 Recovery = 98.51%								
Mn 257.610†	397405.5	0.507	mg/L	0.0063	0.507	mg/L	0.0063	1.25%
QC value within limits for Mn 257.610 Recovery = 101.34%								
Mo 202.031†	34830.3	1.01	mg/L	0.012	1.01	mg/L	0.012	1.15%
QC value within limits for Mo 202.031 Recovery = 100.60%								
Ni 231.604†	31944.2	0.505	mg/L	0.0069	0.505	mg/L	0.0069	1.37%
QC value within limits for Ni 231.604 Recovery = 100.92%								
Pb 220.353†	5284.9	0.508	mg/L	0.0022	0.508	mg/L	0.0022	0.43%
QC value within limits for Pb 220.353 Recovery = 101.55%								
Sb 206.836†	4724.0	1.20	mg/L	0.056	1.20	mg/L	0.056	4.63%
QC value within limits for Sb 206.836 Recovery = 100.41%								
Se 196.026†	663.9	0.407	mg/L	0.0160	0.407	mg/L	0.0160	3.94%
QC value within limits for Se 196.026 Recovery = 101.78%								
Si 251.611†	197515.3	5.06	mg/L	0.136	5.06	mg/L	0.136	2.69%
QC value within limits for Si 251.611 Recovery = 101.11%								
Sn 189.927†	9887.7	1.02	mg/L	0.004	1.02	mg/L	0.004	0.44%
QC value within limits for Sn 189.927 Recovery = 101.59%								

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Ti 334.940†          895346.3       0.975 mg/L        0.0062       0.975 mg/L        0.0062   0.64%
   QC value within limits for Ti 334.940  Recovery = 97.49%
Tl 190.801†           1867.1        0.527 mg/L        0.0026       0.527 mg/L        0.0026   0.50%
   QC value greater than the upper limit for Tl 190.801  Recovery = 105.32%
V 290.880†           182291.2        1.01 mg/L         0.006        1.01 mg/L         0.006   0.60%
   QC value within limits for V 290.880  Recovery = 100.65%
Zn 206.200†           41832.4        1.02 mg/L         0.003        1.02 mg/L         0.003   0.31%
   QC value within limits for Zn 206.200  Recovery = 101.85%
K 766.490†           134205.2        49.1 mg/L          0.26        49.1 mg/L          0.26   0.53%
   QC value within limits for K 766.490  Recovery = 98.17%
Na 589.592†          820735.2        49.9 mg/L          1.00        49.9 mg/L          1.00   2.00%
   QC value within limits for Na 589.592  Recovery = 99.75%
Sr 407.771†         2148275.7       0.996 mg/L        0.0106       0.996 mg/L        0.0106   1.07%
   QC value within limits for Sr 407.771  Recovery = 99.60%
Li 670.784†          126318.0       0.998 mg/L        0.0050       0.998 mg/L        0.0050   0.50%
   QC value within limits for Li 670.784  Recovery = 99.80%
QC Failed.  Continue with analysis.
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Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 5/3/2012 11:09:59 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	148.0 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	1978464.2						29694.81	1.50%
YRADIAL	243739.7						6176.88	2.53%
Ga 417.206	1203137.3						17737.53	1.47%
GaRADIAL	73385.6						1487.93	2.03%
Ag 328.068†	5.5	-0.00009	mg/L	0.000370	-0.00009	mg/L	0.000370	427.58%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-4.1	-0.0166	mg/L	0.00072	-0.0166	mg/L	0.00072	4.35%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	2.0	-0.00019	mg/L	0.000733	-0.00019	mg/L	0.000733	379.51%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	11.6	-0.00196	mg/L	0.000139	-0.00196	mg/L	0.000139	7.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	33.1	0.00003	mg/L	0.000034	0.00003	mg/L	0.000034	107.91%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	356.9	0.00666	mg/L	0.000706	0.00666	mg/L	0.000706	10.60%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	9.1	0.0722	mg/L	0.02791	0.0722	mg/L	0.02791	38.65%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.7	-0.00001	mg/L	0.000022	-0.00001	mg/L	0.000022	308.70%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	16.0	-0.00006	mg/L	0.000339	-0.00006	mg/L	0.000339	599.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	15.1	-0.00053	mg/L	0.000096	-0.00053	mg/L	0.000096	18.29%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	66.4	0.00038	mg/L	0.000330	0.00038	mg/L	0.000330	86.54%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	6.6	-0.00029	mg/L	0.000813	-0.00029	mg/L	0.000813	275.88%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	8.2	0.00692	mg/L	0.001845	0.00692	mg/L	0.001845	26.66%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	9.8	-0.00169	mg/L	0.000027	-0.00169	mg/L	0.000027	1.63%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	9.4	-0.00003	mg/L	0.000493	-0.00003	mg/L	0.000493	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-12.5	-0.00157	mg/L	0.000114	-0.00157	mg/L	0.000114	7.23%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-18.9	-0.00250	mg/L	0.000976	-0.00250	mg/L	0.000976	39.08%
QC value within limits for Pb 220.353 Recovery = Not calculated								

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Sb 206.836†	3.5	0.00076	mg/L	0.000900	0.00076	mg/L	0.000900	118.88%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.2	-0.00404	mg/L	0.002996	-0.00404	mg/L	0.002996	74.25%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	78.8	-0.00707	mg/L	0.000427	-0.00707	mg/L	0.000427	6.04%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	16.2	-0.00065	mg/L	0.000284	-0.00065	mg/L	0.000284	43.66%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-62.4	-0.00032	mg/L	0.000126	-0.00032	mg/L	0.000126	40.06%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	8.5	-0.00126	mg/L	0.001915	-0.00126	mg/L	0.001915	151.38%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	514.9	-0.00050	mg/L	0.001478	-0.00050	mg/L	0.001478	298.33%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	30.5	-0.00195	mg/L	0.000251	-0.00195	mg/L	0.000251	12.87%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	63.6	-0.0387	mg/L	0.04522	-0.0387	mg/L	0.04522	116.71%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	11.4	-0.00319	mg/L	0.008439	-0.00319	mg/L	0.008439	264.56%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	107.4	-0.00015	mg/L	0.000060	-0.00015	mg/L	0.000060	41.09%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	92.5	-0.00361	mg/L	0.000469	-0.00361	mg/L	0.000469	13.01%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 14**
Sample ID: LLICV **Date Collected: 5/3/2012 11:16:52 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLICV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2032757.0						36260.25	1.78%
YRADIAL	247491.5						9631.77	3.89%
Ga 417.206	1215549.4						20981.03	1.73%
GaRADIAL	74345.9						1172.82	1.58%
Ag 328.068†	1180.9	0.00386	mg/L	0.000379	0.00386	mg/L	0.000379	9.83%
Al 396.153†	644.1	0.0874	mg/L	0.00153	0.0874	mg/L	0.00153	1.75%
As 188.979†	7.8	0.00195	mg/L	0.000885	0.00195	mg/L	0.000885	45.48%
Ba 233.527†	1547.9	0.00835	mg/L	0.000080	0.00835	mg/L	0.000080	0.96%
Be 234.861†	617.9	0.00051	mg/L	0.000025	0.00051	mg/L	0.000025	4.86%
B 249.677†	467.9	0.00803	mg/L	0.000196	0.00803	mg/L	0.000196	2.45%
Ca 227.546†	43.7	0.157	mg/L	0.0225	0.157	mg/L	0.0225	14.40%
Cd 228.802†	28.3	0.00048	mg/L	0.000154	0.00048	mg/L	0.000154	32.28%
Co 228.616†	77.1	0.00163	mg/L	0.000091	0.00163	mg/L	0.000091	5.56%
Cr 267.716†	532.0	0.00460	mg/L	0.000224	0.00460	mg/L	0.000224	4.86%
Cu 327.393†	1277.7	0.00549	mg/L	0.000860	0.00549	mg/L	0.000860	15.66%
Fe 239.562†	592.1	0.0399	mg/L	0.00138	0.0399	mg/L	0.00138	3.45%
Mg 279.077†	344.2	0.112	mg/L	0.0069	0.112	mg/L	0.0069	6.16%
Mn 257.610†	4126.3	0.00358	mg/L	0.000086	0.00358	mg/L	0.000086	2.39%
Mo 202.031†	353.4	0.00991	mg/L	0.000383	0.00991	mg/L	0.000383	3.87%
Ni 231.604†	340.3	0.00402	mg/L	0.000041	0.00402	mg/L	0.000041	1.03%
Pb 220.353†	48.7	0.00400	mg/L	0.001769	0.00400	mg/L	0.001769	44.22%
Sb 206.836†	50.4	0.0127	mg/L	0.00144	0.0127	mg/L	0.00144	11.32%
Se 196.026†	5.3	-0.00089	mg/L	0.001991	-0.00089	mg/L	0.001991	224.33%
Si 251.611†	2055.3	0.0436	mg/L	0.00120	0.0436	mg/L	0.00120	2.75%
Sn 189.927†	110.3	0.00905	mg/L	0.000710	0.00905	mg/L	0.000710	7.85%
Ti 334.940†	9197.4	0.00977	mg/L	0.000316	0.00977	mg/L	0.000316	3.23%
Tl 190.801†	19.6	0.00192	mg/L	0.002494	0.00192	mg/L	0.002494	130.17%
V 290.880†	1900.3	0.00718	mg/L	0.001277	0.00718	mg/L	0.001277	17.79%
Zn 206.200†	495.9	0.00941	mg/L	0.000210	0.00941	mg/L	0.000210	2.23%
K 766.490†	1637.9	0.532	mg/L	0.0158	0.532	mg/L	0.0158	2.97%

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Na 589.592†	8374.1	0.496	mg/L	0.0152	0.496	mg/L	0.0152	3.07%
Sr 407.771†	23106.5	0.0105	mg/L	0.00028	0.0105	mg/L	0.00028	2.63%
Li 670.784†	1450.6	0.00717	mg/L	0.000122	0.00717	mg/L	0.000122	1.70%

Sequence No.: 9 **Autosampler Location: 15**
Sample ID: LLICV **Date Collected: 5/3/2012 11:23:47 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLICV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2050305.1						37127.09	1.81%
YRADIAL	249685.0						6003.95	2.40%
Ga 417.206	1246794.4						14371.16	1.15%
GaRADIAL	74740.2						1392.48	1.86%
Ag 328.068†	2341.9	0.00776	mg/L	0.000620	0.00776	mg/L	0.000620	7.99%
Al 396.153†	1286.5	0.190	mg/L	0.0057	0.190	mg/L	0.0057	2.97%
As 188.979†	22.5	0.00753	mg/L	0.002712	0.00753	mg/L	0.002712	36.01%
Ba 233.527†	3110.1	0.0188	mg/L	0.00032	0.0188	mg/L	0.00032	1.70%
Be 234.861†	1269.0	0.00104	mg/L	0.000031	0.00104	mg/L	0.000031	2.95%
B 249.677†	810.1	0.0123	mg/L	0.00025	0.0123	mg/L	0.00025	2.06%
Ca 227.546†	87.1	0.261	mg/L	0.0126	0.261	mg/L	0.0126	4.83%
Cd 228.802†	56.0	0.00096	mg/L	0.000045	0.00096	mg/L	0.000045	4.71%
Co 228.616†	151.0	0.00368	mg/L	0.000364	0.00368	mg/L	0.000364	9.90%
Cr 267.716†	1055.8	0.00980	mg/L	0.000324	0.00980	mg/L	0.000324	3.30%
Cu 327.393†	2340.2	0.00998	mg/L	0.000146	0.00998	mg/L	0.000146	1.47%
Fe 239.562†	1180.1	0.0803	mg/L	0.00147	0.0803	mg/L	0.00147	1.83%
Mg 279.077†	656.5	0.210	mg/L	0.0069	0.210	mg/L	0.0069	3.27%
Mn 257.610†	7895.4	0.00840	mg/L	0.000235	0.00840	mg/L	0.000235	2.79%
Mo 202.031†	699.9	0.0199	mg/L	0.00039	0.0199	mg/L	0.00039	1.96%
Ni 231.604†	672.0	0.00927	mg/L	0.000133	0.00927	mg/L	0.000133	1.43%
Pb 220.353†	107.3	0.00965	mg/L	0.000835	0.00965	mg/L	0.000835	8.65%
Sb 206.836†	95.7	0.0243	mg/L	0.00006	0.0243	mg/L	0.00006	0.26%
Se 196.026†	20.9	0.00878	mg/L	0.003169	0.00878	mg/L	0.003169	36.10%
Si 251.611†	4005.7	0.0936	mg/L	0.00157	0.0936	mg/L	0.00157	1.68%
Sn 189.927†	205.3	0.0188	mg/L	0.00092	0.0188	mg/L	0.00092	4.88%
Ti 334.940†	18316.7	0.0197	mg/L	0.00057	0.0197	mg/L	0.00057	2.90%
Tl 190.801†	42.4	0.00838	mg/L	0.001282	0.00838	mg/L	0.001282	15.29%
V 290.880†	3593.7	0.0166	mg/L	0.00201	0.0166	mg/L	0.00201	12.13%
Zn 206.200†	916.0	0.0197	mg/L	0.00043	0.0197	mg/L	0.00043	2.20%
K 766.490†	3048.0	1.04	mg/L	0.030	1.04	mg/L	0.030	2.91%
Na 589.592†	17114.3	1.02	mg/L	0.030	1.02	mg/L	0.030	2.91%
Sr 407.771†	45522.0	0.0209	mg/L	0.00037	0.0209	mg/L	0.00037	1.78%
Li 670.784†	2755.1	0.0175	mg/L	0.00051	0.0175	mg/L	0.00051	2.88%

Sequence No.: 10 **Autosampler Location: 12**
Sample ID: ICSA **Date Collected: 5/3/2012 11:30:42 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1812805.5						21983.50	1.21%
YRADIAL	235212.7						9100.16	3.87%

Approved: May 04, 2012

Kym H. Rhoden

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Ga 417.206          1125511.2                                                    20457.70   1.82%
GaRADIAL              72378.5                                                     1934.89   2.67%
Ag 328.068†          -12654.2     0.00122 mg/L      0.001626     0.00122 mg/L      0.001626 133.68%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†          1611670.4         260 mg/L          13.1         260 mg/L          13.1   5.04%
   QC value within limits for Al 396.153  Recovery = 104.13%
As 188.979†             -24.6    -0.00390 mg/L      0.002204    -0.00390 mg/L      0.002204  56.57%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             724.6     0.00036 mg/L      0.000270     0.00036 mg/L      0.000270  74.61%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†           24708.0    -0.00155 mg/L      0.001063    -0.00155 mg/L      0.001063  68.44%
   QC value less than the lower limit for Be 234.861  Recovery = Not calculated
B 249.677†             5197.3      0.0256 mg/L       0.00044      0.0256 mg/L       0.00044   1.70%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†          115678.0         267 mg/L           8.2         267 mg/L           8.2   3.07%
   QC value within limits for Ca 227.546  Recovery = 106.87%
Cd 228.802†               9.4     0.00000 mg/L      0.000028     0.00000 mg/L      0.000028 >999.9%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              28.3    -0.00220 mg/L      0.000170    -0.00220 mg/L      0.000170   7.74%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              97.2    -0.00118 mg/L      0.000169    -0.00118 mg/L      0.000169  14.32%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†           -1386.3     0.00250 mg/L      0.000354     0.00250 mg/L      0.000354  14.20%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†          1427627.2        98.1 mg/L          5.33        98.1 mg/L          5.33   5.43%
   QC value within limits for Fe 239.562  Recovery = 98.06%
Mg 279.077†           842154.3         264 mg/L          14.7         264 mg/L          14.7   5.58%
   QC value within limits for Mg 279.077  Recovery = 105.49%
Mn 257.610†           -2162.6    -0.00171 mg/L      0.000291    -0.00171 mg/L      0.000291  17.00%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -52.1     0.00301 mg/L      0.000591     0.00301 mg/L      0.000591  19.64%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†              43.0    -0.00069 mg/L      0.000704    -0.00069 mg/L      0.000704 102.39%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†             -415.1    -0.00394 mg/L      0.002577    -0.00394 mg/L      0.002577  65.47%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†             -19.9    -0.00164 mg/L      0.003224    -0.00164 mg/L      0.003224 196.32%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -48.3    -0.00789 mg/L      0.007024    -0.00789 mg/L      0.007024  89.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†            5762.9       0.139 mg/L        0.0012       0.139 mg/L        0.0012   0.86%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -328.9     -0.0362 mg/L       0.00080     -0.0362 mg/L       0.00080   2.21%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†           -35818.3     0.00050 mg/L      0.003277     0.00050 mg/L      0.003277 651.38%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -42.6    -0.00879 mg/L      0.004389    -0.00879 mg/L      0.004389  49.94%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†             4179.9    -0.00252 mg/L      0.003328    -0.00252 mg/L      0.003328 132.12%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             188.2     0.00002 mg/L      0.000417     0.00002 mg/L      0.000417 >999.9%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -29.2     -0.0724 mg/L       0.01389     -0.0724 mg/L       0.01389  19.19%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†            -200.0     -0.0158 mg/L       0.00131     -0.0158 mg/L       0.00131   8.27%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†            2422.7    -0.00490 mg/L      0.000174    -0.00490 mg/L      0.000174   3.54%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             229.7    -0.00252 mg/L      0.000245    -0.00252 mg/L      0.000245   9.73%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

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Sequence No.: 11                                  Autosampler Location: 13
Sample ID: ICSAB                                  Date Collected: 5/3/2012 11:36:38 AM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

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Nebulizer Parameters: ICSAB
Analyte                Back Pressure    Flow
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Approved: May 04, 2012

All 148.0 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	1818694.7						17542.45	0.96%
YRADIAL	243626.9						5226.21	2.15%
Ga 417.206	1135988.1						13935.17	1.23%
GaRADIAL	75155.8						1542.60	2.05%
Ag 328.068†	138449.9	0.503	mg/L	0.0088	0.503	mg/L	0.0088	1.75%
QC value within limits for Ag 328.068 Recovery = 100.62%								
Al 396.153†	1538724.3	249	mg/L	5.9	249	mg/L	5.9	2.37%
QC value within limits for Al 396.153 Recovery = 99.41%								
As 188.979†	618.5	0.242	mg/L	0.0024	0.242	mg/L	0.0024	1.01%
QC value within limits for As 188.979 Recovery = 96.84%								
Ba 233.527†	38456.0	0.254	mg/L	0.0012	0.254	mg/L	0.0012	0.47%
QC value within limits for Ba 233.527 Recovery = 101.46%								
Be 234.861†	329225.6	0.250	mg/L	0.0035	0.250	mg/L	0.0035	1.39%
QC value within limits for Be 234.861 Recovery = 99.93%								
B 249.677†	4237.9	0.00340	mg/L	0.002336	0.00340	mg/L	0.002336	68.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	114837.6	265	mg/L	6.1	265	mg/L	6.1	2.30%
QC value within limits for Ca 227.546 Recovery = 106.20%								
Cd 228.802†	23162.7	0.426	mg/L	0.0039	0.426	mg/L	0.0039	0.93%
QC value within limits for Cd 228.802 Recovery = 85.17%								
Co 228.616†	8654.3	0.237	mg/L	0.0031	0.237	mg/L	0.0031	1.29%
QC value within limits for Co 228.616 Recovery = 94.97%								
Cr 267.716†	25948.3	0.255	mg/L	0.0021	0.255	mg/L	0.0021	0.81%
QC value within limits for Cr 267.716 Recovery = 102.16%								
Cu 327.393†	57132.7	0.248	mg/L	0.0035	0.248	mg/L	0.0035	1.41%
QC value within limits for Cu 327.393 Recovery = 99.34%								
Fe 239.562†	1360511.2	93.4	mg/L	2.40	93.4	mg/L	2.40	2.57%
QC value within limits for Fe 239.562 Recovery = 93.45%								
Mg 279.077†	803482.9	252	mg/L	6.3	252	mg/L	6.3	2.51%
QC value within limits for Mg 279.077 Recovery = 100.64%								
Mn 257.610†	191182.8	0.245	mg/L	0.0017	0.245	mg/L	0.0017	0.71%
QC value within limits for Mn 257.610 Recovery = 98.12%								
Mo 202.031†	-51.2	0.00298	mg/L	0.000187	0.00298	mg/L	0.000187	6.26%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	30558.3	0.483	mg/L	0.0071	0.483	mg/L	0.0071	1.48%
QC value within limits for Ni 231.604 Recovery = 96.51%								
Pb 220.353†	4688.7	0.484	mg/L	0.0057	0.484	mg/L	0.0057	1.18%
QC value within limits for Pb 220.353 Recovery = 96.78%								
Sb 206.836†	1907.4	0.489	mg/L	0.0051	0.489	mg/L	0.0051	1.05%
QC value within limits for Sb 206.836 Recovery = 97.76%								
Se 196.026†	355.7	0.240	mg/L	0.0017	0.240	mg/L	0.0017	0.72%
QC value within limits for Se 196.026 Recovery = 96.19%								
Si 251.611†	-216.7	-0.0146	mg/L	0.00118	-0.0146	mg/L	0.00118	8.05%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-329.2	-0.0362	mg/L	0.00151	-0.0362	mg/L	0.00151	4.18%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-35974.1	-0.00003	mg/L	0.002808	-0.00003	mg/L	0.002808	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1746.1	0.486	mg/L	0.0030	0.486	mg/L	0.0030	0.61%
QC value within limits for Tl 190.801 Recovery = 97.10%								
V 290.880†	48907.0	0.247	mg/L	0.0030	0.247	mg/L	0.0030	1.22%
QC value within limits for V 290.880 Recovery = 98.61%								
Zn 206.200†	19521.5	0.472	mg/L	0.0048	0.472	mg/L	0.0048	1.02%
QC value within limits for Zn 206.200 Recovery = 94.46%								
K 766.490†	13542.8	4.85	mg/L	0.038	4.85	mg/L	0.038	0.78%
QC value within limits for K 766.490 Recovery = 97.01%								
Na 589.592†	84966.1	5.07	mg/L	0.050	5.07	mg/L	0.050	0.98%
QC value within limits for Na 589.592 Recovery = 101.48%								
Sr 407.771†	2289.2	-0.00492	mg/L	0.000193	-0.00492	mg/L	0.000193	3.92%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	288.8	-0.00205	mg/L	0.000453	-0.00205	mg/L	0.000453	22.11%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

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Sequence No.: 12 **Autosampler Location: 6**

Approved: May 04, 2012

Lynn H. Rhoden

Sample ID: CCV **Date Collected: 5/3/2012 11:42:35 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1981359.8						36709.77	1.85%
YRADIAL	244729.8						5961.95	2.44%
Ga 417.206	1176072.6						16389.01	1.39%
GaRADIAL	73524.2						1279.43	1.74%
Ag 328.068†	119385.5	0.401	mg/L	0.0066	0.401	mg/L	0.0066	1.64%
QC value within limits for Ag 328.068 Recovery = 100.30%								
Al 396.153†	61911.1	9.92	mg/L	0.036	9.92	mg/L	0.036	0.36%
QC value within limits for Al 396.153 Recovery = 99.16%								
As 188.979†	1051.4	0.397	mg/L	0.0018	0.397	mg/L	0.0018	0.45%
QC value within limits for As 188.979 Recovery = 99.16%								
Ba 233.527†	149858.3	1.00	mg/L	0.018	1.00	mg/L	0.018	1.83%
QC value within limits for Ba 233.527 Recovery = 100.39%								
Be 234.861†	60719.2	0.0495	mg/L	0.00079	0.0495	mg/L	0.00079	1.59%
QC value within limits for Be 234.861 Recovery = 98.93%								
B 249.677†	39928.1	0.502	mg/L	0.0076	0.502	mg/L	0.0076	1.51%
QC value within limits for B 249.677 Recovery = 100.48%								
Ca 227.546†	4290.4	10.3	mg/L	0.17	10.3	mg/L	0.17	1.66%
QC value within limits for Ca 227.546 Recovery = 103.36%								
Cd 228.802†	2753.8	0.0493	mg/L	0.00115	0.0493	mg/L	0.00115	2.34%
QC value within limits for Cd 228.802 Recovery = 98.54%								
Co 228.616†	7282.0	0.201	mg/L	0.0053	0.201	mg/L	0.0053	2.64%
QC value within limits for Co 228.616 Recovery = 100.50%								
Cr 267.716†	50873.3	0.504	mg/L	0.0087	0.504	mg/L	0.0087	1.72%
QC value within limits for Cr 267.716 Recovery = 100.84%								
Cu 327.393†	121060.3	0.511	mg/L	0.0085	0.511	mg/L	0.0085	1.65%
QC value within limits for Cu 327.393 Recovery = 102.23%								
Fe 239.562†	58444.2	4.01	mg/L	0.013	4.01	mg/L	0.013	0.32%
QC value within limits for Fe 239.562 Recovery = 100.33%								
Mg 279.077†	32091.9	10.1	mg/L	0.04	10.1	mg/L	0.04	0.38%
QC value within limits for Mg 279.077 Recovery = 100.72%								
Mn 257.610†	396674.9	0.506	mg/L	0.0110	0.506	mg/L	0.0110	2.18%
QC value within limits for Mn 257.610 Recovery = 101.15%								
Mo 202.031†	34646.3	1.00	mg/L	0.016	1.00	mg/L	0.016	1.62%
QC value within limits for Mo 202.031 Recovery = 100.07%								
Ni 231.604†	32037.3	0.506	mg/L	0.0104	0.506	mg/L	0.0104	2.05%
QC value within limits for Ni 231.604 Recovery = 101.21%								
Pb 220.353†	5281.8	0.507	mg/L	0.0123	0.507	mg/L	0.0123	2.42%
QC value within limits for Pb 220.353 Recovery = 101.49%								
Sb 206.836†	4692.1	1.20	mg/L	0.011	1.20	mg/L	0.011	0.96%
QC value within limits for Sb 206.836 Recovery = 99.73%								
Se 196.026†	662.2	0.406	mg/L	0.0022	0.406	mg/L	0.0022	0.54%
QC value within limits for Se 196.026 Recovery = 101.53%								
Si 251.611†	195969.8	5.02	mg/L	0.054	5.02	mg/L	0.054	1.08%
QC value within limits for Si 251.611 Recovery = 100.32%								
Sn 189.927†	9814.7	1.01	mg/L	0.026	1.01	mg/L	0.026	2.61%
QC value within limits for Sn 189.927 Recovery = 100.84%								
Ti 334.940†	897887.9	0.978	mg/L	0.0032	0.978	mg/L	0.0032	0.33%
QC value within limits for Ti 334.940 Recovery = 97.77%								
Tl 190.801†	1853.3	0.523	mg/L	0.0084	0.523	mg/L	0.0084	1.61%
QC value within limits for Tl 190.801 Recovery = 104.56%								
V 290.880†	180874.1	0.999	mg/L	0.0085	0.999	mg/L	0.0085	0.85%
QC value within limits for V 290.880 Recovery = 99.86%								
Zn 206.200†	41836.2	1.02	mg/L	0.015	1.02	mg/L	0.015	1.51%
QC value within limits for Zn 206.200 Recovery = 101.86%								
K 766.490†	136229.1	49.8	mg/L	0.03	49.8	mg/L	0.03	0.05%
QC value within limits for K 766.490 Recovery = 99.67%								
Na 589.592†	832191.0	50.6	mg/L	1.45	50.6	mg/L	1.45	2.87%
QC value within limits for Na 589.592 Recovery = 101.17%								

Approved: May 04, 2012

Sr 407.771† 2195786.7 1.02 mg/L 0.037 1.02 mg/L 0.037 3.67%
QC value within limits for Sr 407.771 Recovery = 101.81%
Li 670.784† 126196.1 0.997 mg/L 0.0040 0.997 mg/L 0.0040 0.40%
QC value within limits for Li 670.784 Recovery = 99.70%
All analyte(s) passed QC.

Sequence No.: 13 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 11:48:36 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	2005706.8						41794.37	2.08%
YRADIAL	244560.0						4155.12	1.70%
Ga 417.206	1195924.7						43287.62	3.62%
GaRADIAL	73710.3						1000.00	1.36%
Ag 328.068†	-0.9	-0.00011	mg/L	0.000391	-0.00011	mg/L	0.000391	355.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	3.4	-0.0154	mg/L	0.00191	-0.0154	mg/L	0.00191	12.39%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	3.2	0.00027	mg/L	0.002369	0.00027	mg/L	0.002369	882.50%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	8.8	-0.00198	mg/L	0.000059	-0.00198	mg/L	0.000059	3.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-8.5	0.00000	mg/L	0.000050	0.00000	mg/L	0.000050	>999.9%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	210.9	0.00482	mg/L	0.000543	0.00482	mg/L	0.000543	11.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	0.7	0.0535	mg/L	0.03401	0.0535	mg/L	0.03401	63.55%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	5.4	0.00006	mg/L	0.000241	0.00006	mg/L	0.000241	420.69%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	6.7	-0.00032	mg/L	0.000415	-0.00032	mg/L	0.000415	131.47%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	13.9	-0.00054	mg/L	0.000133	-0.00054	mg/L	0.000133	24.73%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	221.0	0.00103	mg/L	0.000248	0.00103	mg/L	0.000248	24.04%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	97.0	0.00592	mg/L	0.000803	0.00592	mg/L	0.000803	13.57%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	35.0	0.0153	mg/L	0.00164	0.0153	mg/L	0.00164	10.74%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-36.7	-0.00175	mg/L	0.000028	-0.00175	mg/L	0.000028	1.59%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.4	-0.00011	mg/L	0.000254	-0.00011	mg/L	0.000254	222.60%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	12.3	-0.00118	mg/L	0.000178	-0.00118	mg/L	0.000178	15.09%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-13.4	-0.00197	mg/L	0.000794	-0.00197	mg/L	0.000794	40.23%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.8	-0.00034	mg/L	0.000799	-0.00034	mg/L	0.000799	232.96%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.9	-0.00360	mg/L	0.001685	-0.00360	mg/L	0.001685	46.85%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	4.7	-0.00897	mg/L	0.000709	-0.00897	mg/L	0.000709	7.90%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	16.7	-0.00059	mg/L	0.000572	-0.00059	mg/L	0.000572	96.16%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-18.0	-0.00027	mg/L	0.000204	-0.00027	mg/L	0.000204	75.61%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-5.6	-0.00519	mg/L	0.001807	-0.00519	mg/L	0.001807	34.80%
QC value within limits for Tl 190.801 Recovery = Not calculated								

Approved: May 04, 2012

V 290.880†	108.0	-0.00275	mg/L	0.001823	-0.00275	mg/L	0.001823 66.20%
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	54.2	-0.00137	mg/L	0.000227	-0.00137	mg/L	0.000227 16.56%
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	16.5	-0.0559	mg/L	0.03033	-0.0559	mg/L	0.03033 54.29%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	60.0	-0.00029	mg/L	0.004323	-0.00029	mg/L	0.004323 >999.9%
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	39.7	-0.00018	mg/L	0.000041	-0.00018	mg/L	0.000041 23.07%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	51.9	-0.00393	mg/L	0.000865	-0.00393	mg/L	0.000865 22.02%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 14 **Autosampler Location: 16**
Sample ID: PBW 65 WG396769-02 **Date Collected: 5/3/2012 11:55:29 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 65 WG396769-02

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: PBW 65 WG396769-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2024656.4						7645.86	0.38%
YRADIAL	245586.2						855.01	0.35%
Ga 417.206	1168571.6						16688.27	1.43%
GaRADIAL	74598.2						2096.03	2.81%
Ag 328.068†	-132.4	-0.00055	mg/L	0.000163	-0.00055	mg/L	0.000163	29.77%
Al 396.153†	-8.4	-0.0174	mg/L	0.00073	-0.0174	mg/L	0.00073	4.20%
As 188.979†	-13.5	-0.00614	mg/L	0.003064	-0.00614	mg/L	0.003064	49.89%
Ba 233.527†	-50.2	-0.00238	mg/L	0.000086	-0.00238	mg/L	0.000086	3.63%
Be 234.861†	-508.4	-0.00041	mg/L	0.000017	-0.00041	mg/L	0.000017	4.20%
B 249.677†	27.2	0.00249	mg/L	0.000145	0.00249	mg/L	0.000145	5.85%
Ca 227.546†	-22.8	-0.00123	mg/L	0.006440	-0.00123	mg/L	0.006440	525.26%
Cd 228.802†	35.0	0.00063	mg/L	0.000157	0.00063	mg/L	0.000157	24.72%
Co 228.616†	-3.5	-0.00060	mg/L	0.000153	-0.00060	mg/L	0.000153	25.65%
Cr 267.716†	46.5	-0.00022	mg/L	0.000118	-0.00022	mg/L	0.000118	54.82%
Cu 327.393†	-21.6	0.00001	mg/L	0.000101	0.00001	mg/L	0.000101	942.83%
Fe 239.562†	48.5	0.00259	mg/L	0.000335	0.00259	mg/L	0.000335	12.96%
Mg 279.077†	32.3	0.0145	mg/L	0.00192	0.0145	mg/L	0.00192	13.25%
Mn 257.610†	132.9	-0.00153	mg/L	0.000004	-0.00153	mg/L	0.000004	0.26%
Mo 202.031†	35.3	0.00072	mg/L	0.000368	0.00072	mg/L	0.000368	51.13%
Ni 231.604†	-59.0	-0.00231	mg/L	0.000245	-0.00231	mg/L	0.000245	10.62%
Pb 220.353†	-6.4	-0.00129	mg/L	0.000455	-0.00129	mg/L	0.000455	35.19%
Sb 206.836†	4.4	0.00098	mg/L	0.000741	0.00098	mg/L	0.000741	75.23%
Se 196.026†	11.1	0.00271	mg/L	0.001850	0.00271	mg/L	0.001850	68.23%
Si 251.611†	-49.6	-0.0104	mg/L	0.00026	-0.0104	mg/L	0.00026	2.49%
Sn 189.927†	5.8	-0.00172	mg/L	0.001157	-0.00172	mg/L	0.001157	67.17%
Ti 334.940†	205.0	-0.00004	mg/L	0.000073	-0.00004	mg/L	0.000073	204.42%
Tl 190.801†	-10.6	-0.00656	mg/L	0.001171	-0.00656	mg/L	0.001171	17.85%
V 290.880†	116.3	-0.00271	mg/L	0.001456	-0.00271	mg/L	0.001456	53.82%
Zn 206.200†	22.7	-0.00213	mg/L	0.000281	-0.00213	mg/L	0.000281	13.18%
K 766.490†	-1.7	-0.0624	mg/L	0.04810	-0.0624	mg/L	0.04810	77.08%
Na 589.592†	-266.2	-0.0197	mg/L	0.00142	-0.0197	mg/L	0.00142	7.21%
Sr 407.771†	69.0	-0.00016	mg/L	0.000060	-0.00016	mg/L	0.000060	36.84%
Li 670.784†	4.0	-0.00431	mg/L	0.000223	-0.00431	mg/L	0.000223	5.17%

Sequence No.: 15 **Autosampler Location: 17**
Sample ID: LCSW 65 WG396769-03 **Date Collected: 5/3/2012 12:02:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 04, 2012

Nebulizer Parameters: LCSW 65 WG396769-03

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: LCSW 65 WG396769-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1986940.9						21416.07	1.08%
YRADIAL	244093.4						852.42	0.35%
Ga 417.206	1154120.3						18506.98	1.60%
GaRADIAL	72124.5						266.59	0.37%
Ag 328.068†	59396.4	0.200	mg/L	0.0050	0.200	mg/L	0.0050	2.50%
Al 396.153†	31369.5	5.02	mg/L	0.034	5.02	mg/L	0.034	0.68%
As 188.979†	496.3	0.186	mg/L	0.0008	0.186	mg/L	0.0008	0.44%
Ba 233.527†	75206.6	0.503	mg/L	0.0041	0.503	mg/L	0.0041	0.82%
Be 234.861†	28826.0	0.0235	mg/L	0.00069	0.0235	mg/L	0.00069	2.94%
B 249.677†	76297.1	0.964	mg/L	0.0300	0.964	mg/L	0.0300	3.11%
Ca 227.546†	1987.3	4.84	mg/L	0.101	4.84	mg/L	0.101	2.09%
Cd 228.802†	1374.2	0.0246	mg/L	0.00082	0.0246	mg/L	0.00082	3.32%
Co 228.616†	3605.7	0.0993	mg/L	0.00100	0.0993	mg/L	0.00100	1.01%
Cr 267.716†	25842.7	0.256	mg/L	0.0004	0.256	mg/L	0.0004	0.17%
Cu 327.393†	60714.2	0.256	mg/L	0.0060	0.256	mg/L	0.0060	2.33%
Fe 239.562†	29023.5	1.99	mg/L	0.006	1.99	mg/L	0.006	0.28%
Mg 279.077†	16030.0	5.03	mg/L	0.013	5.03	mg/L	0.013	0.27%
Mn 257.610†	197755.9	0.251	mg/L	0.0025	0.251	mg/L	0.0025	1.01%
Mo 202.031†	17748.6	0.512	mg/L	0.0022	0.512	mg/L	0.0022	0.43%
Ni 231.604†	16374.3	0.258	mg/L	0.0029	0.258	mg/L	0.0029	1.12%
Pb 220.353†	2486.9	0.239	mg/L	0.0041	0.239	mg/L	0.0041	1.70%
Sb 206.836†	2306.2	0.588	mg/L	0.0102	0.588	mg/L	0.0102	1.74%
Se 196.026†	311.0	0.189	mg/L	0.0039	0.189	mg/L	0.0039	2.09%
Si 251.611†	99177.8	2.53	mg/L	0.056	2.53	mg/L	0.056	2.22%
Sn 189.927†	-33.4	-0.00575	mg/L	0.000786	-0.00575	mg/L	0.000786	13.66%
Ti 334.940†	455475.3	0.496	mg/L	0.0002	0.496	mg/L	0.0002	0.04%
Tl 190.801†	865.9	0.243	mg/L	0.0008	0.243	mg/L	0.0008	0.34%
V 290.880†	91823.7	0.505	mg/L	0.0036	0.505	mg/L	0.0036	0.70%
Zn 206.200†	20070.8	0.487	mg/L	0.0032	0.487	mg/L	0.0032	0.66%
K 766.490†	68923.4	25.0	mg/L	0.07	25.0	mg/L	0.07	0.27%
Na 589.592†	425614.8	25.6	mg/L	0.85	25.6	mg/L	0.85	3.32%
Sr 407.771†	1085262.2	0.503	mg/L	0.0122	0.503	mg/L	0.0122	2.43%
Li 670.784†	65500.8	0.515	mg/L	0.0056	0.515	mg/L	0.0056	1.10%

Sequence No.: 16 **Autosampler Location: 18**
Sample ID: FBLK WG396758-01 **Date Collected: 5/3/2012 12:08:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG396758-01

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: FBLK WG396758-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1922730.5						29163.28	1.52%
YRADIAL	242214.9						2937.79	1.21%
Ga 417.206	1185721.5						9727.06	0.82%
GaRADIAL	73815.7						1522.91	2.06%
Ag 328.068†	-196.1	-0.00072	mg/L	0.000501	-0.00072	mg/L	0.000501	69.19%
Al 396.153†	598.7	0.0806	mg/L	0.00211	0.0806	mg/L	0.00211	2.62%
As 188.979†	-9.9	-0.00477	mg/L	0.000751	-0.00477	mg/L	0.000751	15.75%
Ba 233.527†	61.6	-0.00163	mg/L	0.000204	-0.00163	mg/L	0.000204	12.54%
Be 234.861†	-474.5	-0.00040	mg/L	0.000016	-0.00040	mg/L	0.000016	4.05%
B 249.677†	401.2	0.00718	mg/L	0.000510	0.00718	mg/L	0.000510	7.10%
Ca 227.546†	109.7	0.303	mg/L	0.0085	0.303	mg/L	0.0085	2.80%
Cd 228.802†	32.7	0.00059	mg/L	0.000233	0.00059	mg/L	0.000233	39.73%
Co 228.616†	6.0	-0.00035	mg/L	0.000301	-0.00035	mg/L	0.000301	86.97%
Cr 267.716†	91.0	0.00023	mg/L	0.000126	0.00023	mg/L	0.000126	54.77%

Approved: May 04, 2012

Cu 327.393†	266.7	0.00124	mg/L	0.000408	0.00124	mg/L	0.000408 32.95%
Fe 239.562†	992.4	0.0674	mg/L	0.00016	0.0674	mg/L	0.00016 0.24%
Mg 279.077†	233.6	0.0775	mg/L	0.00079	0.0775	mg/L	0.00079 1.02%
Mn 257.610†	2363.8	0.00132	mg/L	0.000056	0.00132	mg/L	0.000056 4.20%
Mo 202.031†	53.4	0.00125	mg/L	0.000128	0.00125	mg/L	0.000128 10.28%
Ni 231.604†	-69.6	-0.00247	mg/L	0.000448	-0.00247	mg/L	0.000448 18.13%
Pb 220.353†	-17.9	-0.00239	mg/L	0.001722	-0.00239	mg/L	0.001722 72.05%
Sb 206.836†	4.5	0.00099	mg/L	0.001419	0.00099	mg/L	0.001419 143.38%
Se 196.026†	21.4	0.00909	mg/L	0.000855	0.00909	mg/L	0.000855 9.40%
Si 251.611†	11772.3	0.293	mg/L	0.0044	0.293	mg/L	0.0044 1.48%
Sn 189.927†	6.8	-0.00161	mg/L	0.000638	-0.00161	mg/L	0.000638 39.51%
Ti 334.940†	5693.0	0.00598	mg/L	0.000186	0.00598	mg/L	0.000186 3.11%
Tl 190.801†	-27.2	-0.0111	mg/L	0.00309	-0.0111	mg/L	0.00309 27.86%
V 290.880†	877.3	0.00150	mg/L	0.000672	0.00150	mg/L	0.000672 44.73%
Zn 206.200†	218.5	0.00262	mg/L	0.000185	0.00262	mg/L	0.000185 7.03%
K 766.490†	437.3	-0.0594	mg/L	0.00455	-0.0594	mg/L	0.00455 7.65%
Na 589.592†	2467249.6	156	mg/L	2.4	156	mg/L	2.4 1.51%
Sr 407.771†	1406.9	0.00045	mg/L	0.000004	0.00045	mg/L	0.000004 0.92%
Li 670.784†	100.0	-0.00355	mg/L	0.000023	-0.00355	mg/L	0.000023 0.66%

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Sequence No.: 17 **Autosampler Location: 19**
Sample ID: L1204078102 **Date Collected: 5/3/2012 12:15:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204078102

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204078102

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1948636.7						25550.89	1.31%
YRADIAL	241044.7						599.40	0.25%
Ga 417.206	1210514.9						33308.42	2.75%
GaRADIAL	73049.5						2302.06	3.15%
Ag 328.068†	-173.2	-0.00052	mg/L	0.000251	-0.00052	mg/L	0.000251	48.47%
Al 396.153†	1099.1	0.161	mg/L	0.0006	0.161	mg/L	0.0006	0.38%
As 188.979†	-24.8	-0.0104	mg/L	0.00205	-0.0104	mg/L	0.00205	19.68%
Ba 233.527†	814.7	0.00342	mg/L	0.000105	0.00342	mg/L	0.000105	3.08%
Be 234.861†	-288.0	-0.00032	mg/L	0.000062	-0.00032	mg/L	0.000062	19.27%
B 249.677†	53974.8	0.683	mg/L	0.0076	0.683	mg/L	0.0076	1.12%
Ca 227.546†	546.3	1.31	mg/L	0.015	1.31	mg/L	0.015	1.17%
Cd 228.802†	989.7	0.0182	mg/L	0.00053	0.0182	mg/L	0.00053	2.90%
Co 228.616†	11.4	-0.00020	mg/L	0.000248	-0.00020	mg/L	0.000248	125.15%
Cr 267.716†	291.8	0.00223	mg/L	0.000154	0.00223	mg/L	0.000154	6.91%
Cu 327.393†	74503.4	0.314	mg/L	0.0036	0.314	mg/L	0.0036	1.16%
Fe 239.562†	6071.9	0.416	mg/L	0.0028	0.416	mg/L	0.0028	0.67%
Mg 279.077†	1253.4	0.397	mg/L	0.0007	0.397	mg/L	0.0007	0.18%
Mn 257.610†	10976.5	0.0123	mg/L	0.00017	0.0123	mg/L	0.00017	1.41%
Mo 202.031†	94.9	0.00247	mg/L	0.000112	0.00247	mg/L	0.000112	4.54%
Ni 231.604†	151.0	0.00103	mg/L	0.000102	0.00103	mg/L	0.000102	9.96%
Pb 220.353†	3.4	-0.00067	mg/L	0.001138	-0.00067	mg/L	0.001138	169.11%
Sb 206.836†	11.5	0.00278	mg/L	0.001312	0.00278	mg/L	0.001312	47.21%
Se 196.026†	29.4	0.0141	mg/L	0.00235	0.0141	mg/L	0.00235	16.63%
Si 251.611†	5490.7	0.132	mg/L	0.0048	0.132	mg/L	0.0048	3.63%
Sn 189.927†	4.0	-0.00190	mg/L	0.000494	-0.00190	mg/L	0.000494	25.95%
Ti 334.940†	2046.2	0.00216	mg/L	0.000063	0.00216	mg/L	0.000063	2.93%
Tl 190.801†	-40.9	-0.0149	mg/L	0.00253	-0.0149	mg/L	0.00253	16.96%
V 290.880†	941.5	0.00180	mg/L	0.001349	0.00180	mg/L	0.001349	75.11%
Zn 206.200†	827.1	0.0175	mg/L	0.00012	0.0175	mg/L	0.00012	0.69%
K 766.490†	1322.7	0.254	mg/L	0.0072	0.254	mg/L	0.0072	2.84%
Na 589.592†	2583600.5	164	mg/L	6.3	164	mg/L	6.3	3.83%
Sr 407.771†	8765.4	0.00384	mg/L	0.000047	0.00384	mg/L	0.000047	1.21%
Li 670.784†	145.3	-0.00319	mg/L	0.000044	-0.00319	mg/L	0.000044	1.37%

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Sequence No.: 18 **Autosampler Location: 20**

Approved: May 04, 2012

Sample ID: L1204092403 **Date Collected: 5/3/2012 12:22:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092403

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204092403

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2044227.4						2767.64	0.14%
YRADIAL	254285.3						6782.13	2.67%
Ga 417.206	1202544.3						32357.63	2.69%
GaRADIAL	75899.9						1843.32	2.43%
Ag 328.068†	49.9	0.00038	mg/L	0.000193	0.00038	mg/L	0.000193	51.01%
Al 396.153†	2476.4	0.384	mg/L	0.0140	0.384	mg/L	0.0140	3.65%
As 188.979†	-10.2	-0.00484	mg/L	0.000426	-0.00484	mg/L	0.000426	8.80%
Ba 233.527†	923.8	0.00414	mg/L	0.000268	0.00414	mg/L	0.000268	6.47%
Be 234.861†	57.3	-0.00011	mg/L	0.000132	-0.00011	mg/L	0.000132	123.53%
B 249.677†	17567.1	0.224	mg/L	0.0063	0.224	mg/L	0.0063	2.82%
Ca 227.546†	2179.3	5.06	mg/L	0.167	5.06	mg/L	0.167	3.30%
Cd 228.802†	55.4	0.00100	mg/L	0.000374	0.00100	mg/L	0.000374	37.26%
Co 228.616†	22.9	0.00012	mg/L	0.000308	0.00012	mg/L	0.000308	264.75%
Cr 267.716†	114.4	0.00048	mg/L	0.000131	0.00048	mg/L	0.000131	27.50%
Cu 327.393†	604.0	0.00271	mg/L	0.000511	0.00271	mg/L	0.000511	18.86%
Fe 239.562†	10594.8	0.727	mg/L	0.0313	0.727	mg/L	0.0313	4.30%
Mg 279.077†	5227.5	1.64	mg/L	0.055	1.64	mg/L	0.055	3.33%
Mn 257.610†	11748.1	0.0133	mg/L	0.00017	0.0133	mg/L	0.00017	1.30%
Mo 202.031†	219.4	0.00607	mg/L	0.000425	0.00607	mg/L	0.000425	7.00%
Ni 231.604†	16.6	-0.00111	mg/L	0.000977	-0.00111	mg/L	0.000977	88.02%
Pb 220.353†	-33.2	-0.00383	mg/L	0.001728	-0.00383	mg/L	0.001728	45.11%
Sb 206.836†	6.3	0.00150	mg/L	0.000812	0.00150	mg/L	0.000812	54.23%
Se 196.026†	14.8	0.00522	mg/L	0.001416	0.00522	mg/L	0.001416	27.11%
Si 251.611†	18966.9	0.478	mg/L	0.0094	0.478	mg/L	0.0094	1.96%
Sn 189.927†	-41.3	-0.00657	mg/L	0.000372	-0.00657	mg/L	0.000372	5.67%
Ti 334.940†	3137.6	0.00391	mg/L	0.000316	0.00391	mg/L	0.000316	8.08%
Tl 190.801†	-9.5	-0.00621	mg/L	0.001201	-0.00621	mg/L	0.001201	19.34%
V 290.880†	716.3	0.00046	mg/L	0.001155	0.00046	mg/L	0.001155	249.05%
Zn 206.200†	228.8	0.00287	mg/L	0.000071	0.00287	mg/L	0.000071	2.48%
K 766.490†	1327.8	0.411	mg/L	0.0242	0.411	mg/L	0.0242	5.89%
Na 589.592†	144787.4	8.66	mg/L	0.052	8.66	mg/L	0.052	0.60%
Sr 407.771†	64406.6	0.0296	mg/L	0.00019	0.0296	mg/L	0.00019	0.65%
Li 670.784†	209.5	-0.00268	mg/L	0.000258	-0.00268	mg/L	0.000258	9.62%

Sequence No.: 19 **Autosampler Location: 21**
Sample ID: L1204098901 WG396769-01 **Date Collected: 5/3/2012 12:28:22 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Plasma has been extinguished

Approved: May 04, 2012
Kim H. Rhoden

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Analysis Begun

Start Time: 5/3/2012 1:00:51 PM **Plasma On Time: 5/3/2012 12:32:51 PM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\THURSDAY1.sif
Batch ID:
Results Data Set: 050312H
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 1:00:52 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2033380.4						23493.97	1.16%
YRADIAL	253480.0						5006.65	1.98%
Ga 417.206	1208273.5						46108.51	3.82%
GaRADIAL	76077.8						1427.88	1.88%
Ag 328.068†	116133.1	0.390	mg/L	0.0206	0.390	mg/L	0.0206	5.27%
QC value within limits for Ag 328.068 Recovery = 97.56%								
Al 396.153†	59667.5	9.56	mg/L	0.051	9.56	mg/L	0.051	0.53%
QC value within limits for Al 396.153 Recovery = 95.56%								
As 188.979†	1008.0	0.380	mg/L	0.0105	0.380	mg/L	0.0105	2.76%
QC value within limits for As 188.979 Recovery = 95.05%								
Ba 233.527†	143661.2	0.962	mg/L	0.0072	0.962	mg/L	0.0072	0.74%
QC value within limits for Ba 233.527 Recovery = 96.23%								
Be 234.861†	58677.2	0.0478	mg/L	0.00220	0.0478	mg/L	0.00220	4.61%
QC value within limits for Be 234.861 Recovery = 95.62%								
B 249.677†	38691.9	0.487	mg/L	0.0274	0.487	mg/L	0.0274	5.62%
QC value within limits for B 249.677 Recovery = 97.39%								
Ca 227.546†	4053.3	9.77	mg/L	0.409	9.77	mg/L	0.409	4.19%
QC value within limits for Ca 227.546 Recovery = 97.74%								
Cd 228.802†	2617.3	0.0468	mg/L	0.00280	0.0468	mg/L	0.00280	5.98%
QC value within limits for Cd 228.802 Recovery = 93.61%								
Co 228.616†	6902.2	0.190	mg/L	0.0023	0.190	mg/L	0.0023	1.19%
QC value within limits for Co 228.616 Recovery = 95.24%								
Cr 267.716†	49209.6	0.488	mg/L	0.0072	0.488	mg/L	0.0072	1.48%
QC value within limits for Cr 267.716 Recovery = 97.54%								
Cu 327.393†	118663.8	0.501	mg/L	0.0271	0.501	mg/L	0.0271	5.41%
QC value within limits for Cu 327.393 Recovery = 100.20%								
Fe 239.562†	55737.4	3.83	mg/L	0.029	3.83	mg/L	0.029	0.77%
QC value within limits for Fe 239.562 Recovery = 95.68%								
Mg 279.077†	30566.9	9.59	mg/L	0.116	9.59	mg/L	0.116	1.21%
QC value within limits for Mg 279.077 Recovery = 95.93%								
Mn 257.610†	381461.7	0.486	mg/L	0.0032	0.486	mg/L	0.0032	0.65%
QC value within limits for Mn 257.610 Recovery = 97.26%								
Mo 202.031†	33172.9	0.958	mg/L	0.0099	0.958	mg/L	0.0099	1.03%
QC value within limits for Mo 202.031 Recovery = 95.81%								
Ni 231.604†	30705.1	0.485	mg/L	0.0043	0.485	mg/L	0.0043	0.88%
QC value within limits for Ni 231.604 Recovery = 96.99%								
Pb 220.353†	5009.6	0.481	mg/L	0.0056	0.481	mg/L	0.0056	1.17%
QC value within limits for Pb 220.353 Recovery = 96.26%								
Sb 206.836†	4472.0	1.14	mg/L	0.049	1.14	mg/L	0.049	4.31%
QC value within limits for Sb 206.836 Recovery = 95.05%								
Se 196.026†	639.4	0.392	mg/L	0.0172	0.392	mg/L	0.0172	4.39%
QC value within limits for Se 196.026 Recovery = 97.99%								
Si 251.611†	189829.2	4.86	mg/L	0.202	4.86	mg/L	0.202	4.15%

Approved: May 04, 2012

QC value within limits for Si 251.611 Recovery = 97.17%
Sn 189.927† 9308.3 0.956 mg/L 0.0092 0.956 mg/L 0.0092 0.96%
QC value within limits for Sn 189.927 Recovery = 95.62%
Ti 334.940† 861954.2 0.939 mg/L 0.0045 0.939 mg/L 0.0045 0.48%
QC value within limits for Ti 334.940 Recovery = 93.85%
Tl 190.801† 1751.7 0.494 mg/L 0.0035 0.494 mg/L 0.0035 0.71%
QC value within limits for Tl 190.801 Recovery = 98.84%
V 290.880† 175171.2 0.967 mg/L 0.0091 0.967 mg/L 0.0091 0.94%
QC value within limits for V 290.880 Recovery = 96.70%
Zn 206.200† 39587.2 0.964 mg/L 0.0005 0.964 mg/L 0.0005 0.05%
QC value within limits for Zn 206.200 Recovery = 96.38%
K 766.490† 130779.6 47.8 mg/L 0.60 47.8 mg/L 0.60 1.25%
QC value within limits for K 766.490 Recovery = 95.64%
Na 589.592† 804971.0 48.9 mg/L 0.64 48.9 mg/L 0.64 1.32%
QC value within limits for Na 589.592 Recovery = 97.80%
Sr 407.771† 2111698.8 0.979 mg/L 0.0145 0.979 mg/L 0.0145 1.49%
QC value within limits for Sr 407.771 Recovery = 97.91%
Li 670.784† 122480.4 0.968 mg/L 0.0079 0.968 mg/L 0.0079 0.82%
QC value within limits for Li 670.784 Recovery = 96.75%
All analyte(s) passed QC.

Sequence No.: 2 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 1:06:53 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2004059.5						21736.50	1.08%
YRADIAL	240934.9						2704.27	1.12%
Ga 417.206	1209869.6						21883.57	1.81%
GaRADIAL	72687.5						2738.34	3.77%
Ag 328.068†	-119.7	-0.00050	mg/L	0.000207	-0.00050	mg/L	0.000207	40.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-0.1	-0.0160	mg/L	0.00046	-0.0160	mg/L	0.00046	2.91%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.5	-0.00155	mg/L	0.001421	-0.00155	mg/L	0.001421	91.72%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	5.0	-0.00201	mg/L	0.000148	-0.00201	mg/L	0.000148	7.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-0.5	0.00000	mg/L	0.000012	0.00000	mg/L	0.000012	302.03%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	222.1	0.00496	mg/L	0.000493	0.00496	mg/L	0.000493	9.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	9.6	0.0736	mg/L	0.00961	0.0736	mg/L	0.00961	13.06%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.0	-0.00002	mg/L	0.000249	-0.00002	mg/L	0.000249	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	6.8	-0.00031	mg/L	0.000016	-0.00031	mg/L	0.000016	4.96%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	9.3	-0.00058	mg/L	0.000159	-0.00058	mg/L	0.000159	27.36%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	313.8	0.00142	mg/L	0.000415	0.00142	mg/L	0.000415	29.19%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	20.5	0.00066	mg/L	0.000110	0.00066	mg/L	0.000110	16.66%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	19.0	0.0103	mg/L	0.00315	0.0103	mg/L	0.00315	30.69%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	55.0	-0.00163	mg/L	0.000044	-0.00163	mg/L	0.000044	2.68%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	5.5	-0.00014	mg/L	0.000376	-0.00014	mg/L	0.000376	267.14%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-7.0	-0.00148	mg/L	0.000197	-0.00148	mg/L	0.000197	13.25%

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QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† -10.6 -0.00170 mg/L 0.000434 -0.00170 mg/L 0.000434 25.61%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 2.0 0.00037 mg/L 0.002554 0.00037 mg/L 0.002554 692.34%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 5.6 -0.00068 mg/L 0.001249 -0.00068 mg/L 0.001249 182.62%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 60.8 -0.00753 mg/L 0.000424 -0.00753 mg/L 0.000424 5.63%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† 38.9 0.00169 mg/L 0.001061 0.00169 mg/L 0.001061 62.84%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† 294.7 0.00007 mg/L 0.000112 0.00007 mg/L 0.000112 153.91%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -7.1 -0.00558 mg/L 0.001116 -0.00558 mg/L 0.001116 19.99%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 366.2 -0.00132 mg/L 0.001053 -0.00132 mg/L 0.001053 79.79%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 57.0 -0.00130 mg/L 0.000533 -0.00130 mg/L 0.000533 40.89%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 9.9 -0.0582 mg/L 0.00923 -0.0582 mg/L 0.00923 15.85%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 27.7 -0.00222 mg/L 0.004988 -0.00222 mg/L 0.004988 224.89%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 190.9 -0.00011 mg/L 0.000074 -0.00011 mg/L 0.000074 68.80%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 33.9 -0.00407 mg/L 0.000154 -0.00407 mg/L 0.000154 3.78%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 3 **Autosampler Location: 21**
Sample ID: L1204098901 WG396769-01 **Date Collected: 5/3/2012 1:13:46 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204098901 WG396769-01

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204098901 WG396769-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1894314.8						23664.02	1.25%
YRADIAL	244555.4						3123.88	1.28%
Ga 417.206	1178810.2						9409.57	0.80%
GaRADIAL	75197.9						2476.57	3.29%
Ag 328.068†	96.3	-0.00218	mg/L	0.000289	-0.00218	mg/L	0.000289	13.24%
Al 396.153†	602.8	0.0811	mg/L	0.00075	0.0811	mg/L	0.00075	0.93%
As 188.979†	-10.9	-0.00514	mg/L	0.002113	-0.00514	mg/L	0.002113	41.09%
Ba 233.527†	568.9	0.00178	mg/L	0.000205	0.00178	mg/L	0.000205	11.57%
Be 234.861†	-629.4	-0.00043	mg/L	0.000019	-0.00043	mg/L	0.000019	4.35%
B 249.677†	20260.1	0.258	mg/L	0.0052	0.258	mg/L	0.0052	2.01%
Ca 227.546†	504.0	2.58	mg/L	0.032	2.58	mg/L	0.032	1.22%
Cd 228.802†	32.0	0.00066	mg/L	0.000267	0.00066	mg/L	0.000267	40.28%
Co 228.616†	241.9	0.00600	mg/L	0.000223	0.00600	mg/L	0.000223	3.71%
Cr 267.716†	4288.2	0.0428	mg/L	0.00065	0.0428	mg/L	0.00065	1.52%
Cu 327.393†	7784281.3	32.8	mg/L	0.43	32.8	mg/L	0.43	1.32%
Fe 239.562†	1631.9	0.111	mg/L	0.0025	0.111	mg/L	0.0025	2.21%
Mg 279.077†	1789.2	0.565	mg/L	0.0096	0.565	mg/L	0.0096	1.70%
Mn 257.610†	678480.7	0.866	mg/L	0.0062	0.866	mg/L	0.0062	0.72%
Mo 202.031†	132.9	0.00373	mg/L	0.000139	0.00373	mg/L	0.000139	3.71%
Ni 231.604†	104078.3	1.65	mg/L	0.014	1.65	mg/L	0.014	0.83%
Pb 220.353†	372.4	0.00211	mg/L	0.000830	0.00211	mg/L	0.000830	39.36%
Sb 206.836†	3.7	0.00167	mg/L	0.000785	0.00167	mg/L	0.000785	46.98%
Se 196.026†	19.6	0.00834	mg/L	0.006182	0.00834	mg/L	0.006182	74.16%
Si 251.611†	19974.3	0.504	mg/L	0.0128	0.504	mg/L	0.0128	2.54%
Sn 189.927†	-2.7	-0.00260	mg/L	0.000449	-0.00260	mg/L	0.000449	17.28%
Ti 334.940†	5840.6	0.00626	mg/L	0.000592	0.00626	mg/L	0.000592	9.46%
Tl 190.801†	-28.1	-0.0122	mg/L	0.00227	-0.0122	mg/L	0.00227	18.62%

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V 290.880†	1381.1	0.00428	mg/L	0.002228	0.00428	mg/L	0.002228	52.10%
Zn 206.200†	942677.7	22.9	mg/L	0.13	22.9	mg/L	0.13	0.58%
K 766.490†	1426.1	0.281	mg/L	0.0103	0.281	mg/L	0.0103	3.66%
Na 589.592†	2733365.1	174	mg/L	8.5	174	mg/L	8.5	4.89%
Sr 407.771†	5021.8	0.00211	mg/L	0.000011	0.00211	mg/L	0.000011	0.53%
Li 670.784†	147.8	-0.00317	mg/L	0.000128	-0.00317	mg/L	0.000128	4.05%

Sequence No.: 4 **Autosampler Location: 22**
Sample ID: L1204098901S WG396769-04 **Date Collected: 5/3/2012 1:20:49 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204098901S WG396769-04

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204098901S WG396769-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1894050.6						16145.36	0.85%
YRADIAL	242744.0						4401.11	1.81%
Ga 417.206	1142480.7						30410.61	2.66%
GaRADIAL	72233.3						1438.01	1.99%
Ag 328.068†	58779.8	0.195	mg/L	0.0042	0.195	mg/L	0.0042	2.15%
Al 396.153†	31614.8	5.06	mg/L	0.009	5.06	mg/L	0.009	0.17%
As 188.979†	490.6	0.184	mg/L	0.0089	0.184	mg/L	0.0089	4.83%
Ba 233.527†	75002.3	0.501	mg/L	0.0056	0.501	mg/L	0.0056	1.11%
Be 234.861†	28365.3	0.0232	mg/L	0.00040	0.0232	mg/L	0.00040	1.70%
B 249.677†	95900.2	1.21	mg/L	0.022	1.21	mg/L	0.022	1.84%
Ca 227.546†	2569.7	7.49	mg/L	0.161	7.49	mg/L	0.161	2.14%
Cd 228.802†	1335.7	0.0240	mg/L	0.00113	0.0240	mg/L	0.00113	4.72%
Co 228.616†	3800.1	0.104	mg/L	0.0007	0.104	mg/L	0.0007	0.64%
Cr 267.716†	29689.2	0.295	mg/L	0.0017	0.295	mg/L	0.0017	0.57%
Cu 327.393†	8189989.1	34.5	mg/L	0.79	34.5	mg/L	0.79	2.29%
Fe 239.562†	29132.3	2.00	mg/L	0.009	2.00	mg/L	0.009	0.47%
Mg 279.077†	17557.8	5.51	mg/L	0.025	5.51	mg/L	0.025	0.45%
Mn 257.610†	855297.4	1.09	mg/L	0.006	1.09	mg/L	0.006	0.57%
Mo 202.031†	17581.4	0.508	mg/L	0.0053	0.508	mg/L	0.0053	1.05%
Ni 231.604†	116966.9	1.85	mg/L	0.029	1.85	mg/L	0.029	1.54%
Pb 220.353†	2842.3	0.238	mg/L	0.0024	0.238	mg/L	0.0024	1.00%
Sb 206.836†	2231.4	0.570	mg/L	0.0183	0.570	mg/L	0.0183	3.21%
Se 196.026†	319.1	0.194	mg/L	0.0051	0.194	mg/L	0.0051	2.61%
Si 251.611†	115504.9	2.95	mg/L	0.028	2.95	mg/L	0.028	0.94%
Sn 189.927†	-15.9	-0.00395	mg/L	0.000570	-0.00395	mg/L	0.000570	14.41%
Ti 334.940†	457096.5	0.498	mg/L	0.0010	0.498	mg/L	0.0010	0.20%
Tl 190.801†	829.1	0.232	mg/L	0.0031	0.232	mg/L	0.0031	1.32%
V 290.880†	92552.4	0.509	mg/L	0.0024	0.509	mg/L	0.0024	0.47%
Zn 206.200†	949648.1	23.1	mg/L	0.07	23.1	mg/L	0.07	0.28%
K 766.490†	69789.9	25.2	mg/L	0.07	25.2	mg/L	0.07	0.29%
Na 589.592†	3249312.0	210	mg/L	6.8	210	mg/L	6.8	3.25%
Sr 407.771†	1098732.5	0.509	mg/L	0.0132	0.509	mg/L	0.0132	2.60%
Li 670.784†	64052.7	0.504	mg/L	0.0007	0.504	mg/L	0.0007	0.13%

Sequence No.: 5 **Autosampler Location: 23**
Sample ID: L1204098901SD WG396769-05 **Date Collected: 5/3/2012 1:26:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204098901SD WG396769-05

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204098901SD WG396769-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: May 04, 2012

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	1948464.7						35419.82	1.82%
YRADIAL	246987.1						1863.16	0.75%
Ga 417.206	1172617.3						18880.38	1.61%
GaRADIAL	73699.9						465.86	0.63%
Ag 328.068†	57023.6	0.189	mg/L	0.0051	0.189	mg/L	0.0051	2.68%
Al 396.153†	30262.2	4.84	mg/L	0.029	4.84	mg/L	0.029	0.60%
As 188.979†	468.8	0.176	mg/L	0.0070	0.176	mg/L	0.0070	3.98%
Ba 233.527†	72353.9	0.484	mg/L	0.0071	0.484	mg/L	0.0071	1.47%
Be 234.861†	27536.0	0.0225	mg/L	0.00042	0.0225	mg/L	0.00042	1.85%
B 249.677†	93258.9	1.18	mg/L	0.027	1.18	mg/L	0.027	2.28%
Ca 227.546†	2475.3	7.21	mg/L	0.087	7.21	mg/L	0.087	1.21%
Cd 228.802†	1282.2	0.0230	mg/L	0.00061	0.0230	mg/L	0.00061	2.64%
Co 228.616†	3638.8	0.100	mg/L	0.0019	0.100	mg/L	0.0019	1.92%
Cr 267.716†	28516.5	0.283	mg/L	0.0039	0.283	mg/L	0.0039	1.37%
Cu 327.393†	7733210.9	32.5	mg/L	0.56	32.5	mg/L	0.56	1.73%
Fe 239.562†	27858.8	1.91	mg/L	0.008	1.91	mg/L	0.008	0.40%
Mg 279.077†	16652.0	5.23	mg/L	0.029	5.23	mg/L	0.029	0.56%
Mn 257.610†	810181.1	1.03	mg/L	0.009	1.03	mg/L	0.009	0.87%
Mo 202.031†	16909.7	0.488	mg/L	0.0056	0.488	mg/L	0.0056	1.15%
Ni 231.604†	111762.3	1.77	mg/L	0.034	1.77	mg/L	0.034	1.94%
Pb 220.353†	2716.4	0.228	mg/L	0.0049	0.228	mg/L	0.0049	2.14%
Sb 206.836†	2142.6	0.547	mg/L	0.0077	0.547	mg/L	0.0077	1.41%
Se 196.026†	309.5	0.188	mg/L	0.0027	0.188	mg/L	0.0027	1.44%
Si 251.611†	113843.5	2.91	mg/L	0.052	2.91	mg/L	0.052	1.78%
Sn 189.927†	-23.0	-0.00469	mg/L	0.000546	-0.00469	mg/L	0.000546	11.64%
Ti 334.940†	436373.0	0.475	mg/L	0.0003	0.475	mg/L	0.0003	0.07%
Tl 190.801†	800.8	0.224	mg/L	0.0022	0.224	mg/L	0.0022	1.00%
V 290.880†	88600.1	0.487	mg/L	0.0084	0.487	mg/L	0.0084	1.73%
Zn 206.200†	898327.1	21.8	mg/L	0.20	21.8	mg/L	0.20	0.93%
K 766.490†	66262.7	23.9	mg/L	0.11	23.9	mg/L	0.11	0.46%
Na 589.592†	3150283.1	203	mg/L	3.6	203	mg/L	3.6	1.79%
Sr 407.771†	1074088.5	0.498	mg/L	0.0082	0.498	mg/L	0.0082	1.64%
Li 670.784†	61058.7	0.480	mg/L	0.0004	0.480	mg/L	0.0004	0.08%

Sequence No.: 6 **Autosampler Location: 24**
Sample ID: L1204098901PS WG396791-01 **Date Collected: 5/3/2012 1:32:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204098901PS WG396791-01

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204098901PS WG396791-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1935378.7						25097.49	1.30%
YRADIAL	244973.4						3303.14	1.35%
Ga 417.206	1166816.3						20247.54	1.74%
GaRADIAL	72962.5						757.25	1.04%
Ag 328.068†	59450.5	0.198	mg/L	0.0050	0.198	mg/L	0.0050	2.53%
Al 396.153†	31941.9	5.11	mg/L	0.011	5.11	mg/L	0.011	0.22%
As 188.979†	496.4	0.187	mg/L	0.0019	0.187	mg/L	0.0019	1.00%
Ba 233.527†	75688.2	0.506	mg/L	0.0053	0.506	mg/L	0.0053	1.05%
Be 234.861†	28938.2	0.0236	mg/L	0.00081	0.0236	mg/L	0.00081	3.44%
B 249.677†	95281.0	1.20	mg/L	0.029	1.20	mg/L	0.029	2.41%
Ca 227.546†	2544.8	7.29	mg/L	0.072	7.29	mg/L	0.072	0.99%
Cd 228.802†	1346.1	0.0242	mg/L	0.00086	0.0242	mg/L	0.00086	3.54%
Co 228.616†	3803.9	0.105	mg/L	0.0018	0.105	mg/L	0.0018	1.73%
Cr 267.716†	29285.4	0.291	mg/L	0.0039	0.291	mg/L	0.0039	1.33%
Cu 327.393†	7219049.3	30.4	mg/L	0.59	30.4	mg/L	0.59	1.95%
Fe 239.562†	29938.7	2.06	mg/L	0.014	2.06	mg/L	0.014	0.68%
Mg 279.077†	17515.3	5.50	mg/L	0.041	5.50	mg/L	0.041	0.74%
Mn 257.610†	780049.1	0.996	mg/L	0.0138	0.996	mg/L	0.0138	1.38%
Mo 202.031†	17624.4	0.509	mg/L	0.0089	0.509	mg/L	0.0089	1.74%
Ni 231.604†	105809.1	1.68	mg/L	0.022	1.68	mg/L	0.022	1.30%
Pb 220.353†	2839.0	0.242	mg/L	0.0072	0.242	mg/L	0.0072	2.97%

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Sb 206.836†	2257.9	0.577	mg/L	0.0104	0.577	mg/L	0.0104 1.81%
Se 196.026†	324.3	0.197	mg/L	0.0033	0.197	mg/L	0.0033 1.66%
Si 251.611†	116500.7	2.98	mg/L	0.063	2.98	mg/L	0.063 2.10%
Sn 189.927†	-33.5	-0.00577	mg/L	0.000926	-0.00577	mg/L	0.000926 16.04%
Ti 334.940†	459847.8	0.501	mg/L	0.0051	0.501	mg/L	0.0051 1.02%
Tl 190.801†	851.6	0.238	mg/L	0.0017	0.238	mg/L	0.0017 0.69%
V 290.880†	92782.6	0.511	mg/L	0.0092	0.511	mg/L	0.0092 1.80%
Zn 206.200†	840436.2	20.4	mg/L	0.16	20.4	mg/L	0.16 0.77%
K 766.490†	69555.1	25.1	mg/L	0.10	25.1	mg/L	0.10 0.40%
Na 589.592†	2974238.9	191	mg/L	3.9	191	mg/L	3.9 2.02%
Sr 407.771†	1124802.4	0.521	mg/L	0.0126	0.521	mg/L	0.0126 2.42%
Li 670.784†	64187.2	0.505	mg/L	0.0030	0.505	mg/L	0.0030 0.60%

Sequence No.: 7 **Autosampler Location: 25**
Sample ID: L1204098901DL WG396791-02 **Date Collected: 5/3/2012 1:38:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204098901DL WG396791-02

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204098901DL WG396791-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2002723.1						16597.01	0.83%
YRADIAL	241664.9						2854.39	1.18%
Ga 417.206	1250850.3						15028.00	1.20%
GaRADIAL	73795.6						2154.46	2.92%
Ag 328.068†	-35.9	-0.00072	mg/L	0.000510	-0.00072	mg/L	0.000510	71.00%
Al 396.153†	123.6	0.00394	mg/L	0.000952	0.00394	mg/L	0.000952	24.16%
As 188.979†	-6.1	-0.00331	mg/L	0.002827	-0.00331	mg/L	0.002827	85.35%
Ba 233.527†	107.9	-0.00132	mg/L	0.000192	-0.00132	mg/L	0.000192	14.58%
Be 234.861†	-62.7	-0.00003	mg/L	0.000028	-0.00003	mg/L	0.000028	91.89%
B 249.677†	4782.8	0.0625	mg/L	0.00094	0.0625	mg/L	0.00094	1.51%
Ca 227.546†	83.8	0.517	mg/L	0.0091	0.517	mg/L	0.0091	1.76%
Cd 228.802†	2.1	0.00003	mg/L	0.000095	0.00003	mg/L	0.000095	286.73%
Co 228.616†	56.2	0.00102	mg/L	0.000199	0.00102	mg/L	0.000199	19.56%
Cr 267.716†	835.9	0.00780	mg/L	0.000028	0.00780	mg/L	0.000028	0.36%
Cu 327.393†	1593874.5	6.71	mg/L	0.043	6.71	mg/L	0.043	0.64%
Fe 239.562†	339.4	0.0226	mg/L	0.00052	0.0226	mg/L	0.00052	2.31%
Mg 279.077†	397.2	0.129	mg/L	0.0015	0.129	mg/L	0.0015	1.20%
Mn 257.610†	137446.7	0.174	mg/L	0.0036	0.174	mg/L	0.0036	2.08%
Mo 202.031†	32.3	0.00067	mg/L	0.000286	0.00067	mg/L	0.000286	42.51%
Ni 231.604†	20752.5	0.328	mg/L	0.0047	0.328	mg/L	0.0047	1.43%
Pb 220.353†	84.9	0.00072	mg/L	0.001102	0.00072	mg/L	0.001102	152.87%
Sb 206.836†	1.1	0.00031	mg/L	0.002174	0.00031	mg/L	0.002174	709.61%
Se 196.026†	4.3	-0.00141	mg/L	0.001093	-0.00141	mg/L	0.001093	77.54%
Si 251.611†	3987.2	0.0934	mg/L	0.00066	0.0934	mg/L	0.00066	0.71%
Sn 189.927†	8.5	-0.00144	mg/L	0.000611	-0.00144	mg/L	0.000611	42.42%
Ti 334.940†	1128.9	0.00100	mg/L	0.000123	0.00100	mg/L	0.000123	12.30%
Tl 190.801†	-6.2	-0.00551	mg/L	0.001163	-0.00551	mg/L	0.001163	21.11%
V 290.880†	533.3	-0.00040	mg/L	0.003052	-0.00040	mg/L	0.003052	764.03%
Zn 206.200†	193287.8	4.70	mg/L	0.013	4.70	mg/L	0.013	0.28%
K 766.490†	600.5	0.121	mg/L	0.0440	0.121	mg/L	0.0440	36.35%
Na 589.592†	579114.2	35.0	mg/L	0.84	35.0	mg/L	0.84	2.39%
Sr 407.771†	989.6	0.00026	mg/L	0.000022	0.00026	mg/L	0.000022	8.65%
Li 670.784†	197.5	-0.00277	mg/L	0.000524	-0.00277	mg/L	0.000524	18.88%

Sequence No.: 8 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 1:45:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Approved: May 04, 2012

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	2010114.6						28751.02	1.43%
YRADIAL	250561.3						3493.60	1.39%
Ga 417.206	1191199.6						24591.10	2.06%
GaRADIAL	76504.4						1466.64	1.92%
Ag 328.068†	117902.9	0.396	mg/L	0.0113	0.396	mg/L	0.0113	2.86%
QC value within limits for Ag 328.068 Recovery = 99.04%								
Al 396.153†	59941.6	9.60	mg/L	0.020	9.60	mg/L	0.020	0.21%
QC value within limits for Al 396.153 Recovery = 96.00%								
As 188.979†	1015.6	0.383	mg/L	0.0094	0.383	mg/L	0.0094	2.45%
QC value within limits for As 188.979 Recovery = 95.77%								
Ba 233.527†	146260.2	0.980	mg/L	0.0151	0.980	mg/L	0.0151	1.54%
QC value within limits for Ba 233.527 Recovery = 97.98%								
Be 234.861†	59561.0	0.0485	mg/L	0.00116	0.0485	mg/L	0.00116	2.39%
QC value within limits for Be 234.861 Recovery = 97.08%								
B 249.677†	39946.3	0.503	mg/L	0.0138	0.503	mg/L	0.0138	2.75%
QC value within limits for B 249.677 Recovery = 100.55%								
Ca 227.546†	4124.2	9.94	mg/L	0.243	9.94	mg/L	0.243	2.45%
QC value within limits for Ca 227.546 Recovery = 99.42%								
Cd 228.802†	2662.2	0.0476	mg/L	0.00165	0.0476	mg/L	0.00165	3.46%
QC value within limits for Cd 228.802 Recovery = 95.26%								
Co 228.616†	7033.3	0.194	mg/L	0.0029	0.194	mg/L	0.0029	1.51%
QC value within limits for Co 228.616 Recovery = 97.07%								
Cr 267.716†	49685.9	0.492	mg/L	0.0046	0.492	mg/L	0.0046	0.93%
QC value within limits for Cr 267.716 Recovery = 98.49%								
Cu 327.393†	134693.9	0.568	mg/L	0.0190	0.568	mg/L	0.0190	3.34%
QC value greater than the upper limit for Cu 327.393 Recovery = 113.69%								
Fe 239.562†	55870.9	3.84	mg/L	0.024	3.84	mg/L	0.024	0.63%
QC value within limits for Fe 239.562 Recovery = 95.91%								
Mg 279.077†	30862.0	9.69	mg/L	0.049	9.69	mg/L	0.049	0.50%
QC value within limits for Mg 279.077 Recovery = 96.86%								
Mn 257.610†	388774.5	0.496	mg/L	0.0085	0.496	mg/L	0.0085	1.71%
QC value within limits for Mn 257.610 Recovery = 99.13%								
Mo 202.031†	33571.0	0.970	mg/L	0.0112	0.970	mg/L	0.0112	1.15%
QC value within limits for Mo 202.031 Recovery = 96.96%								
Ni 231.604†	31201.1	0.493	mg/L	0.0095	0.493	mg/L	0.0095	1.93%
QC value within limits for Ni 231.604 Recovery = 98.57%								
Pb 220.353†	5103.8	0.490	mg/L	0.0069	0.490	mg/L	0.0069	1.41%
QC value within limits for Pb 220.353 Recovery = 98.05%								
Sb 206.836†	4542.2	1.16	mg/L	0.028	1.16	mg/L	0.028	2.40%
QC value within limits for Sb 206.836 Recovery = 96.54%								
Se 196.026†	646.1	0.396	mg/L	0.0076	0.396	mg/L	0.0076	1.92%
QC value within limits for Se 196.026 Recovery = 99.02%								
Si 251.611†	194362.3	4.98	mg/L	0.105	4.98	mg/L	0.105	2.12%
QC value within limits for Si 251.611 Recovery = 99.50%								
Sn 189.927†	9474.4	0.973	mg/L	0.0161	0.973	mg/L	0.0161	1.65%
QC value within limits for Sn 189.927 Recovery = 97.33%								
Ti 334.940†	863270.2	0.940	mg/L	0.0066	0.940	mg/L	0.0066	0.71%
QC value within limits for Ti 334.940 Recovery = 94.00%								
Tl 190.801†	1778.1	0.502	mg/L	0.0024	0.502	mg/L	0.0024	0.47%
QC value within limits for Tl 190.801 Recovery = 100.30%								
V 290.880†	177318.8	0.979	mg/L	0.0078	0.979	mg/L	0.0078	0.79%
QC value within limits for V 290.880 Recovery = 97.89%								
Zn 206.200†	41132.1	1.00	mg/L	0.020	1.00	mg/L	0.020	2.00%
QC value within limits for Zn 206.200 Recovery = 100.14%								
K 766.490†	132883.2	48.6	mg/L	0.09	48.6	mg/L	0.09	0.19%
QC value within limits for K 766.490 Recovery = 97.19%								
Na 589.592†	811508.4	49.3	mg/L	0.78	49.3	mg/L	0.78	1.58%
QC value within limits for Na 589.592 Recovery = 98.61%								
Sr 407.771†	2174918.8	1.01	mg/L	0.013	1.01	mg/L	0.013	1.26%
QC value within limits for Sr 407.771 Recovery = 100.84%								
Li 670.784†	122082.0	0.964	mg/L	0.0055	0.964	mg/L	0.0055	0.57%
QC value within limits for Li 670.784 Recovery = 96.44%								

QC Failed. Continue with analysis.

Approved: May 04, 2012

Sequence No.: 9 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 1:51:49 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	2033234.1						5769.20	0.28%
YRADIAL	250179.6						3337.95	1.33%
Ga 417.206	1226427.0						20175.62	1.65%
GaRADIAL	75773.9						1980.36	2.61%
Ag 328.068†	-84.0	-0.00039	mg/L	0.000087	-0.00039	mg/L	0.000087	22.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	3.5	-0.0154	mg/L	0.00210	-0.0154	mg/L	0.00210	13.65%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.7	-0.00125	mg/L	0.001137	-0.00125	mg/L	0.001137	90.59%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	15.0	-0.00194	mg/L	0.000073	-0.00194	mg/L	0.000073	3.75%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	42.4	0.00004	mg/L	0.000034	0.00004	mg/L	0.000034	85.99%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	275.7	0.00564	mg/L	0.000371	0.00564	mg/L	0.000371	6.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	4.7	0.0624	mg/L	0.02701	0.0624	mg/L	0.02701	43.27%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.1	-0.00001	mg/L	0.000124	-0.00001	mg/L	0.000124	864.37%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	11.6	-0.00018	mg/L	0.000209	-0.00018	mg/L	0.000209	116.28%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	16.0	-0.00052	mg/L	0.000031	-0.00052	mg/L	0.000031	6.03%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	7436.0	0.0314	mg/L	0.00215	0.0314	mg/L	0.00215	6.84%
QC value greater than the upper limit for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	13.3	0.00017	mg/L	0.000517	0.00017	mg/L	0.000517	304.32%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	11.8	0.00802	mg/L	0.001988	0.00802	mg/L	0.001988	24.78%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	30.5	-0.00166	mg/L	0.000013	-0.00166	mg/L	0.000013	0.79%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	2.8	-0.00022	mg/L	0.000072	-0.00022	mg/L	0.000072	33.15%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	2.0	-0.00134	mg/L	0.000311	-0.00134	mg/L	0.000311	23.18%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-6.2	-0.00131	mg/L	0.001437	-0.00131	mg/L	0.001437	110.02%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.6	0.00001	mg/L	0.000300	0.00001	mg/L	0.000300	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.5	-0.00198	mg/L	0.000633	-0.00198	mg/L	0.000633	31.92%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	12.0	-0.00878	mg/L	0.000412	-0.00878	mg/L	0.000412	4.69%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	21.2	-0.00014	mg/L	0.000330	-0.00014	mg/L	0.000330	242.14%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-45.9	-0.00030	mg/L	0.000046	-0.00030	mg/L	0.000046	15.40%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	6.3	-0.00190	mg/L	0.002229	-0.00190	mg/L	0.002229	117.60%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	185.6	-0.00232	mg/L	0.002507	-0.00232	mg/L	0.002507	108.01%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	681.0	0.0139	mg/L	0.00058	0.0139	mg/L	0.00058	4.19%
QC value greater than the upper limit for Zn 206.200 Recovery = Not calculated								
K 766.490†	16.4	-0.0559	mg/L	0.01618	-0.0559	mg/L	0.01618	28.96%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	135.8	0.00423	mg/L	0.003450	0.00423	mg/L	0.003450	81.60%

Approved: May 04, 2012

QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771†	146.8	-0.00013	mg/L	0.000086	-0.00013	mg/L	0.000086	67.68%

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	52.0	-0.00393	mg/L	0.000436	-0.00393	mg/L	0.000436	11.10%

QC value within limits for Li 670.784 Recovery = Not calculated

QC Failed. Continue with analysis.

Sequence No.: 10 **Autosampler Location: 26**
Sample ID: LLCCV **Date Collected: 5/3/2012 1:58:42 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2015870.6						8008.06	0.40%
YRADIAL	253666.2						6865.64	2.71%
Ga 417.206	1209746.2						24906.23	2.06%
GaRADIAL	76530.9						1241.99	1.62%
Ag 328.068†	1081.4	0.00353	mg/L	0.000050	0.00353	mg/L	0.000050	1.43%
Al 396.153†	611.3	0.0821	mg/L	0.00376	0.0821	mg/L	0.00376	4.58%
As 188.979†	10.3	0.00294	mg/L	0.002019	0.00294	mg/L	0.002019	68.70%
Ba 233.527†	1502.8	0.00805	mg/L	0.000130	0.00805	mg/L	0.000130	1.62%
Be 234.861†	586.3	0.00048	mg/L	0.000009	0.00048	mg/L	0.000009	1.78%
B 249.677†	487.8	0.00828	mg/L	0.000287	0.00828	mg/L	0.000287	3.47%
Ca 227.546†	47.0	0.164	mg/L	0.0164	0.164	mg/L	0.0164	10.00%
Cd 228.802†	29.7	0.00050	mg/L	0.000134	0.00050	mg/L	0.000134	26.90%
Co 228.616†	71.8	0.00149	mg/L	0.000132	0.00149	mg/L	0.000132	8.87%
Cr 267.716†	531.3	0.00460	mg/L	0.000071	0.00460	mg/L	0.000071	1.54%
Cu 327.393†	5078.5	0.0215	mg/L	0.00073	0.0215	mg/L	0.00073	3.39%
Fe 239.562†	561.3	0.0378	mg/L	0.00083	0.0378	mg/L	0.00083	2.19%
Mg 279.077†	313.8	0.103	mg/L	0.0027	0.103	mg/L	0.0027	2.62%
Mn 257.610†	4087.8	0.00353	mg/L	0.000020	0.00353	mg/L	0.000020	0.58%
Mo 202.031†	339.1	0.00950	mg/L	0.000131	0.00950	mg/L	0.000131	1.38%
Ni 231.604†	317.8	0.00366	mg/L	0.000288	0.00366	mg/L	0.000288	7.87%
Pb 220.353†	53.4	0.00444	mg/L	0.000760	0.00444	mg/L	0.000760	17.13%
Sb 206.836†	50.7	0.0128	mg/L	0.00110	0.0128	mg/L	0.00110	8.58%
Se 196.026†	10.3	0.00225	mg/L	0.000548	0.00225	mg/L	0.000548	24.36%
Si 251.611†	1964.3	0.0413	mg/L	0.00104	0.0413	mg/L	0.00104	2.52%
Sn 189.927†	108.7	0.00887	mg/L	0.000280	0.00887	mg/L	0.000280	3.16%
Ti 334.940†	8966.0	0.00952	mg/L	0.000264	0.00952	mg/L	0.000264	2.77%
Tl 190.801†	14.8	0.00060	mg/L	0.000489	0.00060	mg/L	0.000489	82.09%
V 290.880†	1925.8	0.00732	mg/L	0.001954	0.00732	mg/L	0.001954	26.70%
Zn 206.200†	943.4	0.0203	mg/L	0.00014	0.0203	mg/L	0.00014	0.67%
K 766.490†	1558.7	0.503	mg/L	0.0138	0.503	mg/L	0.0138	2.75%
Na 589.592†	8233.1	0.487	mg/L	0.0096	0.487	mg/L	0.0096	1.97%
Sr 407.771†	22484.2	0.0102	mg/L	0.00029	0.0102	mg/L	0.00029	2.81%
Li 670.784†	1384.5	0.00664	mg/L	0.000034	0.00664	mg/L	0.000034	0.51%

Sequence No.: 11 **Autosampler Location: 27**
Sample ID: LLCCV **Date Collected: 5/3/2012 2:05:37 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: LLCCV

	Mean Corrected	Calib.			Sample			

Approved: May 04, 2012

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	2051522.3						21576.74	1.05%
YRADIAL	251712.0						6407.05	2.55%
Ga 417.206	1244493.3						25718.68	2.07%
GaRADIAL	76145.7						670.55	0.88%
Ag 328.068†	2188.0	0.00725	mg/L	0.000103	0.00725	mg/L	0.000103	1.42%
Al 396.153†	1240.3	0.183	mg/L	0.0048	0.183	mg/L	0.0048	2.65%
As 188.979†	17.3	0.00557	mg/L	0.001399	0.00557	mg/L	0.001399	25.12%
Ba 233.527†	2984.9	0.0180	mg/L	0.00005	0.0180	mg/L	0.00005	0.28%
Be 234.861†	1194.6	0.00098	mg/L	0.000030	0.00098	mg/L	0.000030	3.11%
B 249.677†	798.3	0.0122	mg/L	0.00045	0.0122	mg/L	0.00045	3.71%
Ca 227.546†	79.9	0.244	mg/L	0.0372	0.244	mg/L	0.0372	15.24%
Cd 228.802†	45.7	0.00078	mg/L	0.000110	0.00078	mg/L	0.000110	13.97%
Co 228.616†	142.9	0.00345	mg/L	0.000351	0.00345	mg/L	0.000351	10.16%
Cr 267.716†	1023.8	0.00948	mg/L	0.000121	0.00948	mg/L	0.000121	1.28%
Cu 327.393†	4480.1	0.0190	mg/L	0.00053	0.0190	mg/L	0.00053	2.78%
Fe 239.562†	1149.8	0.0782	mg/L	0.00100	0.0782	mg/L	0.00100	1.28%
Mg 279.077†	643.9	0.206	mg/L	0.0056	0.206	mg/L	0.0056	2.74%
Mn 257.610†	7544.3	0.00795	mg/L	0.000176	0.00795	mg/L	0.000176	2.22%
Mo 202.031†	672.3	0.0191	mg/L	0.00004	0.0191	mg/L	0.00004	0.23%
Ni 231.604†	648.3	0.00890	mg/L	0.000266	0.00890	mg/L	0.000266	2.99%
Pb 220.353†	104.0	0.00931	mg/L	0.001298	0.00931	mg/L	0.001298	13.93%
Sb 206.836†	88.9	0.0225	mg/L	0.00042	0.0225	mg/L	0.00042	1.87%
Se 196.026†	15.0	0.00516	mg/L	0.002174	0.00516	mg/L	0.002174	42.10%
Si 251.611†	3830.8	0.0891	mg/L	0.00169	0.0891	mg/L	0.00169	1.90%
Sn 189.927†	196.0	0.0179	mg/L	0.00052	0.0179	mg/L	0.00052	2.92%
Ti 334.940†	17439.0	0.0187	mg/L	0.00025	0.0187	mg/L	0.00025	1.32%
Tl 190.801†	34.1	0.00606	mg/L	0.001387	0.00606	mg/L	0.001387	22.91%
V 290.880†	3420.0	0.0156	mg/L	0.00114	0.0156	mg/L	0.00114	7.30%
Zn 206.200†	1114.5	0.0245	mg/L	0.00042	0.0245	mg/L	0.00042	1.70%
K 766.490†	2976.2	1.02	mg/L	0.010	1.02	mg/L	0.010	0.95%
Na 589.592†	16383.1	0.974	mg/L	0.0205	0.974	mg/L	0.0205	2.10%
Sr 407.771†	44963.9	0.0207	mg/L	0.00042	0.0207	mg/L	0.00042	2.05%
Li 670.784†	2691.7	0.0170	mg/L	0.00012	0.0170	mg/L	0.00012	0.72%

User canceled analysis.

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Analysis Begun

Start Time: 5/3/2012 2:16:54 PM **Plasma On Time: 5/3/2012 12:32:51 PM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\THURSDAY1.sif
Batch ID:
Results Data Set: 050312H
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: 4/30/2012 12:25:48 PM**
IEC File: CA227_LiBeMOD.iec **SMF File:**
Method Description: STANDARD

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Sequence No.: 1 **Autosampler Location: 27**
Sample ID: LLCCV **Date Collected: 5/3/2012 2:16:55 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2048986.1						26331.82	1.29%
YRADIAL	249914.3						5515.90	2.21%

Approved: May 04, 2012

Ga 417.206	1239294.7					11360.48	0.92%
GaRADIAL	75577.6					2694.92	3.57%
Ag 328.068†	2249.7	0.00745	mg/L	0.000094	0.00745 mg/L	0.000094	1.26%
Al 396.153†	1287.8	0.191	mg/L	0.0068	0.191 mg/L	0.0068	3.54%
As 188.979†	17.8	0.00573	mg/L	0.001682	0.00573 mg/L	0.001682	29.36%
Ba 233.527†	3038.2	0.0184	mg/L	0.00003	0.0184 mg/L	0.00003	0.18%
Be 234.861†	1209.0	0.00099	mg/L	0.000021	0.00099 mg/L	0.000021	2.14%
B 249.677†	787.5	0.0120	mg/L	0.00007	0.0120 mg/L	0.00007	0.61%
Ca 227.546†	76.5	0.236	mg/L	0.0125	0.236 mg/L	0.0125	5.27%
Cd 228.802†	47.7	0.00082	mg/L	0.000214	0.00082 mg/L	0.000214	26.01%
Co 228.616†	148.7	0.00361	mg/L	0.000171	0.00361 mg/L	0.000171	4.72%
Cr 267.716†	1045.2	0.00970	mg/L	0.000253	0.00970 mg/L	0.000253	2.61%
Cu 327.393†	3618.9	0.0154	mg/L	0.00034	0.0154 mg/L	0.00034	2.19%
Fe 239.562†	1163.9	0.0792	mg/L	0.00173	0.0792 mg/L	0.00173	2.18%
Mg 279.077†	674.6	0.216	mg/L	0.0088	0.216 mg/L	0.0088	4.08%
Mn 257.610†	7813.9	0.00830	mg/L	0.000103	0.00830 mg/L	0.000103	1.25%
Mo 202.031†	691.2	0.0197	mg/L	0.00011	0.0197 mg/L	0.00011	0.57%
Ni 231.604†	663.7	0.00914	mg/L	0.000322	0.00914 mg/L	0.000322	3.53%
Pb 220.353†	100.3	0.00896	mg/L	0.000722	0.00896 mg/L	0.000722	8.06%
Sb 206.836†	93.4	0.0237	mg/L	0.00125	0.0237 mg/L	0.00125	5.26%
Se 196.026†	15.0	0.00514	mg/L	0.003017	0.00514 mg/L	0.003017	58.72%
Si 251.611†	3899.6	0.0909	mg/L	0.00156	0.0909 mg/L	0.00156	1.72%
Sn 189.927†	199.9	0.0183	mg/L	0.00032	0.0183 mg/L	0.00032	1.75%
Ti 334.940†	18091.7	0.0195	mg/L	0.00047	0.0195 mg/L	0.00047	2.40%
Tl 190.801†	33.7	0.00598	mg/L	0.001885	0.00598 mg/L	0.001885	31.54%
V 290.880†	3481.7	0.0159	mg/L	0.00064	0.0159 mg/L	0.00064	4.05%
Zn 206.200†	1059.0	0.0231	mg/L	0.00029	0.0231 mg/L	0.00029	1.27%
K 766.490†	3070.8	1.05	mg/L	0.031	1.05 mg/L	0.031	2.92%
Na 589.592†	16760.5	0.996	mg/L	0.0259	0.996 mg/L	0.0259	2.60%
Sr 407.771†	45871.1	0.0211	mg/L	0.00051	0.0211 mg/L	0.00051	2.41%
Li 670.784†	2768.5	0.0176	mg/L	0.00072	0.0176 mg/L	0.00072	4.10%

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Sequence No.: 2 **Autosampler Location: 28**
Sample ID: L1204098902 **Date Collected: 5/3/2012 2:23:50 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204098902

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204098902

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2007446.8						1538.14	0.08%
YRADIAL	245310.2						6006.03	2.45%
Ga 417.206	1169311.5						35909.13	3.07%
GaRADIAL	73813.7						1790.47	2.43%
Ag 328.068†	58633.9	0.197	mg/L	0.0078	0.197	mg/L	0.0078	3.98%
Al 396.153†	31119.6	4.98	mg/L	0.029	4.98	mg/L	0.029	0.58%
As 188.979†	478.1	0.180	mg/L	0.0047	0.180	mg/L	0.0047	2.63%
Ba 233.527†	73103.2	0.489	mg/L	0.0031	0.489	mg/L	0.0031	0.63%
Be 234.861†	28125.8	0.0229	mg/L	0.00075	0.0229	mg/L	0.00075	3.29%
B 249.677†	74732.4	0.944	mg/L	0.0393	0.944	mg/L	0.0393	4.16%
Ca 227.546†	1945.3	4.73	mg/L	0.143	4.73	mg/L	0.143	3.01%
Cd 228.802†	1312.6	0.0235	mg/L	0.00132	0.0235	mg/L	0.00132	5.64%
Co 228.616†	3503.6	0.0964	mg/L	0.00028	0.0964	mg/L	0.00028	0.29%
Cr 267.716†	25051.6	0.248	mg/L	0.0036	0.248	mg/L	0.0036	1.44%
Cu 327.393†	61846.5	0.261	mg/L	0.0093	0.261	mg/L	0.0093	3.55%
Fe 239.562†	28433.6	1.95	mg/L	0.029	1.95	mg/L	0.029	1.50%
Mg 279.077†	15951.5	5.01	mg/L	0.089	5.01	mg/L	0.089	1.77%
Mn 257.610†	193180.6	0.245	mg/L	0.0011	0.245	mg/L	0.0011	0.44%
Mo 202.031†	17090.4	0.493	mg/L	0.0009	0.493	mg/L	0.0009	0.18%
Ni 231.604†	15943.6	0.251	mg/L	0.0007	0.251	mg/L	0.0007	0.29%
Pb 220.353†	2434.9	0.234	mg/L	0.0012	0.234	mg/L	0.0012	0.51%
Sb 206.836†	2248.4	0.573	mg/L	0.0190	0.573	mg/L	0.0190	3.31%
Se 196.026†	302.5	0.183	mg/L	0.0058	0.183	mg/L	0.0058	3.17%
Si 251.611†	97316.3	2.49	mg/L	0.079	2.49	mg/L	0.079	3.18%

Approved: May 04, 2012

Kym H. Rhoden

Sn 189.927†	-18.9	-0.00426 mg/L	0.000288	-0.00426 mg/L	0.000288	6.77%
Ti 334.940†	445649.2	0.485 mg/L	0.0017	0.485 mg/L	0.0017	0.35%
Tl 190.801†	849.7	0.238 mg/L	0.0062	0.238 mg/L	0.0062	2.60%
V 290.880†	89829.4	0.494 mg/L	0.0087	0.494 mg/L	0.0087	1.76%
Zn 206.200†	19166.8	0.465 mg/L	0.0047	0.465 mg/L	0.0047	1.00%
K 766.490†	68871.2	25.0 mg/L	0.28	25.0 mg/L	0.28	1.11%
Na 589.592†	427203.8	25.7 mg/L	1.33	25.7 mg/L	1.33	5.18%
Sr 407.771†	1114193.0	0.517 mg/L	0.0237	0.517 mg/L	0.0237	4.58%
Li 670.784†	65330.0	0.514 mg/L	0.0016	0.514 mg/L	0.0016	0.31%

Sequence No.: 3 **Autosampler Location: 29**
Sample ID: L1205002201 **Date Collected: 5/3/2012 2:29:49 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205002201

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1205002201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1956150.0						31303.25	1.60%
YRADIAL	244260.9						1197.70	0.49%
Ga 417.206	1183587.9						43384.21	3.67%
GaRADIAL	73703.0						1480.54	2.01%
Ag 328.068†	-3679.2	-0.00012	mg/L	0.000381	-0.00012	mg/L	0.000381	316.67%
Al 396.153†	4842.3	0.769	mg/L	0.0256	0.769	mg/L	0.0256	3.33%
As 188.979†	-22.6	-0.00658	mg/L	0.000772	-0.00658	mg/L	0.000772	11.73%
Ba 233.527†	10925.9	0.0706	mg/L	0.00046	0.0706	mg/L	0.00046	0.66%
Be 234.861†	7495.2	0.00002	mg/L	0.000103	0.00002	mg/L	0.000103	604.02%
B 249.677†	11033.1	0.129	mg/L	0.0051	0.129	mg/L	0.0051	3.98%
Ca 227.546†	2101.4	5.54	mg/L	0.263	5.54	mg/L	0.263	4.75%
Cd 228.802†	57.7	0.00103	mg/L	0.000324	0.00103	mg/L	0.000324	31.53%
Co 228.616†	102.0	0.00157	mg/L	0.000168	0.00157	mg/L	0.000168	10.72%
Cr 267.716†	756.3	0.00777	mg/L	0.000209	0.00777	mg/L	0.000209	2.69%
Cu 327.393†	1049.8	0.00688	mg/L	0.000159	0.00688	mg/L	0.000159	2.32%
Fe 239.562†	404016.6	27.8	mg/L	0.03	27.8	mg/L	0.03	0.09%
Mg 279.077†	2385.7	0.737	mg/L	0.0097	0.737	mg/L	0.0097	1.32%
Mn 257.610†	305455.8	0.389	mg/L	0.0033	0.389	mg/L	0.0033	0.83%
Mo 202.031†	45.0	0.00244	mg/L	0.000519	0.00244	mg/L	0.000519	21.24%
Ni 231.604†	820.3	0.0116	mg/L	0.00029	0.0116	mg/L	0.00029	2.49%
Pb 220.353†	-8.7	-0.00399	mg/L	0.003057	-0.00399	mg/L	0.003057	76.53%
Sb 206.836†	1.0	0.00109	mg/L	0.001336	0.00109	mg/L	0.001336	123.06%
Se 196.026†	4.1	0.00661	mg/L	0.004085	0.00661	mg/L	0.004085	61.80%
Si 251.611†	97313.6	2.49	mg/L	0.068	2.49	mg/L	0.068	2.72%
Sn 189.927†	-42.4	-0.00668	mg/L	0.000668	-0.00668	mg/L	0.000668	9.99%
Ti 334.940†	5277.9	0.00621	mg/L	0.000226	0.00621	mg/L	0.000226	3.63%
Tl 190.801†	-16.0	-0.00834	mg/L	0.002288	-0.00834	mg/L	0.002288	27.44%
V 290.880†	1603.5	0.00114	mg/L	0.001441	0.00114	mg/L	0.001441	126.76%
Zn 206.200†	9683.6	0.232	mg/L	0.0021	0.232	mg/L	0.0021	0.88%
K 766.490†	1304.8	0.244	mg/L	0.0095	0.244	mg/L	0.0095	3.90%
Na 589.592†	2630329.0	167	mg/L	1.2	167	mg/L	1.2	0.73%
Sr 407.771†	130644.9	0.0603	mg/L	0.00097	0.0603	mg/L	0.00097	1.61%
Li 670.784†	463.7	-0.00066	mg/L	0.000282	-0.00066	mg/L	0.000282	42.66%

Sequence No.: 4 **Autosampler Location: 30**
Sample ID: L1204089003 0.2 **Date Collected: 5/3/2012 2:35:49 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204089003 0.2

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Approved: May 04, 2012

Mean Data: L1204089003 0.2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1955382.0						10749.13	0.55%
YRADIAL	248973.6						3875.14	1.56%
Ga 417.206	1268849.8						27715.49	2.18%
GaRADIAL	78039.7						1554.31	1.99%
Ag 328.068†	12.1	-0.00007	mg/L	0.000650	-0.00007	mg/L	0.000650	902.52%
Al 396.153†	-21.1	-0.0194	mg/L	0.00146	-0.0194	mg/L	0.00146	7.50%
As 188.979†	-0.9	-0.00129	mg/L	0.001534	-0.00129	mg/L	0.001534	118.54%
Ba 233.527†	3391.9	0.0207	mg/L	0.00028	0.0207	mg/L	0.00028	1.33%
Be 234.861†	108.2	0.00009	mg/L	0.000018	0.00009	mg/L	0.000018	20.51%
B 249.677†	4792.3	0.0626	mg/L	0.00083	0.0626	mg/L	0.00083	1.32%
Ca 227.546†	11201.9	25.7	mg/L	0.55	25.7	mg/L	0.55	2.15%
Cd 228.802†	-6.4	-0.00015	mg/L	0.000149	-0.00015	mg/L	0.000149	98.08%
Co 228.616†	19.6	0.00005	mg/L	0.000272	0.00005	mg/L	0.000272	596.41%
Cr 267.716†	48.5	-0.00019	mg/L	0.000097	-0.00019	mg/L	0.000097	51.74%
Cu 327.393†	680.1	0.00297	mg/L	0.000441	0.00297	mg/L	0.000441	14.86%
Fe 239.562†	1977.0	0.135	mg/L	0.0010	0.135	mg/L	0.0010	0.71%
Mg 279.077†	17749.6	5.56	mg/L	0.040	5.56	mg/L	0.040	0.71%
Mn 257.610†	186669.9	0.237	mg/L	0.0006	0.237	mg/L	0.0006	0.24%
Mo 202.031†	37.0	0.00083	mg/L	0.000236	0.00083	mg/L	0.000236	28.56%
Ni 231.604†	59.7	-0.00043	mg/L	0.000297	-0.00043	mg/L	0.000297	69.82%
Pb 220.353†	9.8	0.00031	mg/L	0.001431	0.00031	mg/L	0.001431	465.81%
Sb 206.836†	-0.9	-0.00037	mg/L	0.000800	-0.00037	mg/L	0.000800	217.98%
Se 196.026†	4.5	-0.00138	mg/L	0.002058	-0.00138	mg/L	0.002058	149.39%
Si 251.611†	70077.3	1.79	mg/L	0.045	1.79	mg/L	0.045	2.50%
Sn 189.927†	-172.2	-0.0200	mg/L	0.00104	-0.0200	mg/L	0.00104	5.20%
Ti 334.940†	-4698.0	-0.00152	mg/L	0.000232	-0.00152	mg/L	0.000232	15.29%
Tl 190.801†	-14.6	-0.00795	mg/L	0.003735	-0.00795	mg/L	0.003735	46.96%
V 290.880†	747.1	0.00063	mg/L	0.003155	0.00063	mg/L	0.003155	504.21%
Zn 206.200†	700.2	0.0143	mg/L	0.00017	0.0143	mg/L	0.00017	1.19%
K 766.490†	2009.0	0.655	mg/L	0.0111	0.655	mg/L	0.0111	1.70%
Na 589.592†	205142.1	12.3	mg/L	0.27	12.3	mg/L	0.27	2.19%
Sr 407.771†	420192.4	0.194	mg/L	0.0033	0.194	mg/L	0.0033	1.69%
Li 670.784†	1041.5	0.00392	mg/L	0.000239	0.00392	mg/L	0.000239	6.09%

Sequence No.: 5 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 2:42:46 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	1997097.3						7006.14	0.35%
YRADIAL	248783.7						1173.55	0.47%
Ga 417.206	1196073.6						38358.77	3.21%
GaRADIAL	76064.7						291.02	0.38%
Ag 328.068†	117283.6	0.394	mg/L	0.0151	0.394	mg/L	0.0151	3.84%
QC value within limits for Ag 328.068 Recovery = 98.53%								
Al 396.153†	61142.2	9.79	mg/L	0.034	9.79	mg/L	0.034	0.34%
QC value within limits for Al 396.153 Recovery = 97.93%								
As 188.979†	1009.9	0.381	mg/L	0.0147	0.381	mg/L	0.0147	3.85%
QC value within limits for As 188.979 Recovery = 95.21%								
Ba 233.527†	146552.3	0.982	mg/L	0.0023	0.982	mg/L	0.0023	0.23%
QC value within limits for Ba 233.527 Recovery = 98.18%								
Be 234.861†	59080.0	0.0481	mg/L	0.00155	0.0481	mg/L	0.00155	3.22%
QC value within limits for Be 234.861 Recovery = 96.28%								
B 249.677†	39546.9	0.498	mg/L	0.0192	0.498	mg/L	0.0192	3.86%
QC value within limits for B 249.677 Recovery = 99.54%								
Ca 227.546†	4112.8	9.92	mg/L	0.370	9.92	mg/L	0.370	3.73%
QC value within limits for Ca 227.546 Recovery = 99.18%								

Approved: May 04, 2012

Cd 228.802†	2629.4	0.0470 mg/L	0.00237	0.0470 mg/L	0.00237	5.05%
QC value within limits for Cd 228.802 Recovery = 94.07%						
Co 228.616†	7033.3	0.194 mg/L	0.0015	0.194 mg/L	0.0015	0.76%
QC value within limits for Co 228.616 Recovery = 97.05%						
Cr 267.716†	49649.0	0.492 mg/L	0.0039	0.492 mg/L	0.0039	0.80%
QC value within limits for Cr 267.716 Recovery = 98.41%						
Cu 327.393†	121043.8	0.511 mg/L	0.0185	0.511 mg/L	0.0185	3.61%
QC value within limits for Cu 327.393 Recovery = 102.21%						
Fe 239.562†	56486.8	3.88 mg/L	0.014	3.88 mg/L	0.014	0.36%
QC value within limits for Fe 239.562 Recovery = 96.96%						
Mg 279.077†	31490.5	9.88 mg/L	0.063	9.88 mg/L	0.063	0.63%
QC value within limits for Mg 279.077 Recovery = 98.83%						
Mn 257.610†	390080.7	0.497 mg/L	0.0025	0.497 mg/L	0.0025	0.51%
QC value within limits for Mn 257.610 Recovery = 99.46%						
Mo 202.031†	33792.7	0.976 mg/L	0.0042	0.976 mg/L	0.0042	0.43%
QC value within limits for Mo 202.031 Recovery = 97.60%						
Ni 231.604†	31303.0	0.494 mg/L	0.0033	0.494 mg/L	0.0033	0.66%
QC value within limits for Ni 231.604 Recovery = 98.89%						
Pb 220.353†	5112.7	0.491 mg/L	0.0011	0.491 mg/L	0.0011	0.22%
QC value within limits for Pb 220.353 Recovery = 98.24%						
Sb 206.836†	4493.5	1.15 mg/L	0.041	1.15 mg/L	0.041	3.55%
QC value within limits for Sb 206.836 Recovery = 95.51%						
Se 196.026†	641.6	0.393 mg/L	0.0164	0.393 mg/L	0.0164	4.16%
QC value within limits for Se 196.026 Recovery = 98.34%						
Si 251.611†	193420.6	4.95 mg/L	0.138	4.95 mg/L	0.138	2.79%
QC value within limits for Si 251.611 Recovery = 99.02%						
Sn 189.927†	9447.7	0.971 mg/L	0.0049	0.971 mg/L	0.0049	0.50%
QC value within limits for Sn 189.927 Recovery = 97.06%						
Ti 334.940†	879725.9	0.958 mg/L	0.0019	0.958 mg/L	0.0019	0.20%
QC value within limits for Ti 334.940 Recovery = 95.79%						
Tl 190.801†	1777.1	0.501 mg/L	0.0036	0.501 mg/L	0.0036	0.73%
QC value within limits for Tl 190.801 Recovery = 100.29%						
V 290.880†	177936.3	0.982 mg/L	0.0080	0.982 mg/L	0.0080	0.81%
QC value within limits for V 290.880 Recovery = 98.23%						
Zn 206.200†	40036.3	0.975 mg/L	0.0019	0.975 mg/L	0.0019	0.20%
QC value within limits for Zn 206.200 Recovery = 97.47%						
K 766.490†	135622.3	49.6 mg/L	0.40	49.6 mg/L	0.40	0.81%
QC value within limits for K 766.490 Recovery = 99.22%						
Na 589.592†	814972.5	49.5 mg/L	0.51	49.5 mg/L	0.51	1.03%
QC value within limits for Na 589.592 Recovery = 99.04%						
Sr 407.771†	2190469.1	1.02 mg/L	0.015	1.02 mg/L	0.015	1.43%
QC value within limits for Sr 407.771 Recovery = 101.56%						
Li 670.784†	125360.9	0.990 mg/L	0.0065	0.990 mg/L	0.0065	0.66%
QC value within limits for Li 670.784 Recovery = 99.04%						

All analyte(s) passed QC.

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Sequence No.: 6 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 2:48:47 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.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2029491.4						7439.10	0.37%
YRADIAL	249716.4						7355.98	2.95%
Ga 417.206	1253451.3						26551.62	2.12%
GaRADIAL	76135.8						762.56	1.00%
Ag 328.068†	-144.4	-0.00059	mg/L	0.000369	-0.00059	mg/L	0.000369	62.43%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-11.1	-0.0178	mg/L	0.00026	-0.0178	mg/L	0.00026	1.48%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.4	-0.00082	mg/L	0.002576	-0.00082	mg/L	0.002576	314.26%
QC value within limits for As 188.979 Recovery = Not calculated								

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Ba 233.527†	-3.9	-0.00207 mg/L	0.000050	-0.00207 mg/L	0.000050	2.43%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 234.861†	48.2	0.00004 mg/L	0.000029	0.00004 mg/L	0.000029	66.31%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	189.4	0.00455 mg/L	0.000375	0.00455 mg/L	0.000375	8.24%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	12.6	0.0804 mg/L	0.02091	0.0804 mg/L	0.02091	26.01%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	-2.8	-0.00009 mg/L	0.000359	-0.00009 mg/L	0.000359	404.27%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	-1.9	-0.00055 mg/L	0.000121	-0.00055 mg/L	0.000121	21.92%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	14.6	-0.00053 mg/L	0.000028	-0.00053 mg/L	0.000028	5.25%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	536.8	0.00236 mg/L	0.000347	0.00236 mg/L	0.000347	14.71%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	6.5	-0.00030 mg/L	0.000288	-0.00030 mg/L	0.000288	96.65%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	9.6	0.00734 mg/L	0.001672	0.00734 mg/L	0.001672	22.78%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-88.8	-0.00181 mg/L	0.000029	-0.00181 mg/L	0.000029	1.58%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.0	-0.00024 mg/L	0.000136	-0.00024 mg/L	0.000136	55.97%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	-10.4	-0.00154 mg/L	0.000174	-0.00154 mg/L	0.000174	11.29%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-2.5	-0.00093 mg/L	0.000988	-0.00093 mg/L	0.000988	106.81%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	2.6	0.00052 mg/L	0.000786	0.00052 mg/L	0.000786	150.97%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.5	-0.00014 mg/L	0.003503	-0.00014 mg/L	0.003503	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-63.7	-0.0107 mg/L	0.00043	-0.0107 mg/L	0.00043	4.05%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	9.4	-0.00135 mg/L	0.000423	-0.00135 mg/L	0.000423	31.31%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	2.0	-0.00024 mg/L	0.000035	-0.00024 mg/L	0.000035	14.13%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.1	-0.00332 mg/L	0.000416	-0.00332 mg/L	0.000416	12.54%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	65.5	-0.00299 mg/L	0.001745	-0.00299 mg/L	0.001745	58.40%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	73.2	-0.00091 mg/L	0.000176	-0.00091 mg/L	0.000176	19.32%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	-59.5	-0.0834 mg/L	0.02390	-0.0834 mg/L	0.02390	28.66%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	-240.3	-0.0182 mg/L	0.00338	-0.0182 mg/L	0.00338	18.56%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	104.2	-0.00015 mg/L	0.000071	-0.00015 mg/L	0.000071	47.97%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	7.0	-0.00429 mg/L	0.000749	-0.00429 mg/L	0.000749	17.47%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

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Sequence No.: 7 **Autosampler Location: 31**
Sample ID: PBW 3P WG396511-04 **Date Collected: 5/3/2012 2:55:40 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 3P WG396511-04

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: PBW 3P WG396511-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2019634.6						31900.39	1.58%
YRADIAL	255607.5						7996.96	3.13%

Approved: May 04, 2012

Ga 417.206	1259351.6					22050.45	1.75%
GaRADIAL	79201.5					746.63	0.94%
Ag 328.068†	-124.7	-0.00052	mg/L	0.000316	-0.00052 mg/L	0.000316	60.57%
Al 396.153†	-6.6	-0.0171	mg/L	0.00075	-0.0171 mg/L	0.00075	4.39%
As 188.979†	-0.5	-0.00117	mg/L	0.000436	-0.00117 mg/L	0.000436	37.16%
Ba 233.527†	10.3	-0.00197	mg/L	0.000147	-0.00197 mg/L	0.000147	7.46%
Be 234.861†	75.0	0.00007	mg/L	0.000004	0.00007 mg/L	0.000004	6.79%
B 249.677†	33.7	0.00259	mg/L	0.000177	0.00259 mg/L	0.000177	6.86%
Ca 227.546†	8.8	0.0718	mg/L	0.01104	0.0718 mg/L	0.01104	15.37%
Cd 228.802†	-1.3	-0.00006	mg/L	0.000207	-0.00006 mg/L	0.000207	348.62%
Co 228.616†	2.0	-0.00045	mg/L	0.000185	-0.00045 mg/L	0.000185	41.44%
Cr 267.716†	13.4	-0.00054	mg/L	0.000100	-0.00054 mg/L	0.000100	18.50%
Cu 327.393†	362.3	0.00163	mg/L	0.000131	0.00163 mg/L	0.000131	8.06%
Fe 239.562†	21.3	0.00072	mg/L	0.000827	0.00072 mg/L	0.000827	115.46%
Mg 279.077†	18.2	0.0100	mg/L	0.00277	0.0100 mg/L	0.00277	27.65%
Mn 257.610†	-39.6	-0.00175	mg/L	0.000015	-0.00175 mg/L	0.000015	0.86%
Mo 202.031†	5.2	-0.00015	mg/L	0.000111	-0.00015 mg/L	0.000111	75.61%
Ni 231.604†	-5.5	-0.00146	mg/L	0.000225	-0.00146 mg/L	0.000225	15.44%
Pb 220.353†	-5.9	-0.00125	mg/L	0.001063	-0.00125 mg/L	0.001063	84.93%
Sb 206.836†	1.7	0.00029	mg/L	0.000914	0.00029 mg/L	0.000914	316.50%
Se 196.026†	4.6	-0.00134	mg/L	0.003674	-0.00134 mg/L	0.003674	274.66%
Si 251.611†	1.5	-0.00905	mg/L	0.000439	-0.00905 mg/L	0.000439	4.85%
Sn 189.927†	6.9	-0.00160	mg/L	0.000884	-0.00160 mg/L	0.000884	55.21%
Ti 334.940†	28.2	-0.00022	mg/L	0.000113	-0.00022 mg/L	0.000113	51.88%
Tl 190.801†	-6.8	-0.00550	mg/L	0.000951	-0.00550 mg/L	0.000951	17.28%
V 290.880†	416.1	-0.00104	mg/L	0.001739	-0.00104 mg/L	0.001739	166.70%
Zn 206.200†	134.7	0.00058	mg/L	0.000078	0.00058 mg/L	0.000078	13.36%
K 766.490†	4.5	-0.0602	mg/L	0.00840	-0.0602 mg/L	0.00840	13.95%
Na 589.592†	-402.1	-0.0279	mg/L	0.00299	-0.0279 mg/L	0.00299	10.73%
Sr 407.771†	-14.8	-0.00020	mg/L	0.000066	-0.00020 mg/L	0.000066	32.38%
Li 670.784†	41.2	-0.00401	mg/L	0.000434	-0.00401 mg/L	0.000434	10.82%

Sequence No.: 8 **Autosampler Location: 32**
Sample ID: LCSW 3P WG396511-05 **Date Collected: 5/3/2012 3:02:36 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 3P WG396511-05

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: LCSW 3P WG396511-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1969462.4						18039.14	0.92%
YRADIAL	248325.4						3426.48	1.38%
Ga 417.206	1227062.3						47244.66	3.85%
GaRADIAL	75451.3						1540.59	2.04%
Ag 328.068†	59992.3	0.202	mg/L	0.0107	0.202	mg/L	0.0107	5.29%
Al 396.153†	32049.0	5.13	mg/L	0.030	5.13	mg/L	0.030	0.59%
As 188.979†	510.8	0.192	mg/L	0.0062	0.192	mg/L	0.0062	3.21%
Ba 233.527†	77457.8	0.518	mg/L	0.0043	0.518	mg/L	0.0043	0.83%
Be 234.861†	30192.4	0.0246	mg/L	0.00111	0.0246	mg/L	0.00111	4.52%
B 249.677†	80485.6	1.02	mg/L	0.053	1.02	mg/L	0.053	5.17%
Ca 227.546†	2061.3	5.02	mg/L	0.236	5.02	mg/L	0.236	4.70%
Cd 228.802†	1329.2	0.0238	mg/L	0.00165	0.0238	mg/L	0.00165	6.93%
Co 228.616†	3726.0	0.103	mg/L	0.0010	0.103	mg/L	0.0010	0.99%
Cr 267.716†	26337.3	0.261	mg/L	0.0047	0.261	mg/L	0.0047	1.80%
Cu 327.393†	62413.9	0.264	mg/L	0.0139	0.264	mg/L	0.0139	5.27%
Fe 239.562†	29150.9	2.00	mg/L	0.022	2.00	mg/L	0.022	1.08%
Mg 279.077†	16473.3	5.17	mg/L	0.011	5.17	mg/L	0.011	0.21%
Mn 257.610†	204390.0	0.260	mg/L	0.0024	0.260	mg/L	0.0024	0.93%
Mo 202.031†	17842.8	0.515	mg/L	0.0060	0.515	mg/L	0.0060	1.16%
Ni 231.604†	17268.1	0.272	mg/L	0.0023	0.272	mg/L	0.0023	0.85%
Pb 220.353†	2690.4	0.258	mg/L	0.0025	0.258	mg/L	0.0025	0.97%
Sb 206.836†	2302.5	0.587	mg/L	0.0268	0.587	mg/L	0.0268	4.57%
Se 196.026†	340.6	0.207	mg/L	0.0111	0.207	mg/L	0.0111	5.34%
Si 251.611†	101256.4	2.59	mg/L	0.114	2.59	mg/L	0.114	4.40%

Approved: May 04, 2012

Sn 189.927†	5486.1	0.563	mg/L	0.0044	0.563	mg/L	0.0044	0.77%
Ti 334.940†	464049.1	0.505	mg/L	0.0006	0.505	mg/L	0.0006	0.11%
Tl 190.801†	967.3	0.271	mg/L	0.0062	0.271	mg/L	0.0062	2.27%
V 290.880†	94526.4	0.520	mg/L	0.0142	0.520	mg/L	0.0142	2.72%
Zn 206.200†	21151.2	0.514	mg/L	0.0079	0.514	mg/L	0.0079	1.54%
K 766.490†	71031.3	25.8	mg/L	0.06	25.8	mg/L	0.06	0.24%
Na 589.592†	447996.3	27.0	mg/L	0.65	27.0	mg/L	0.65	2.39%
Sr 407.771†	1172148.4	0.543	mg/L	0.0113	0.543	mg/L	0.0113	2.08%
Li 670.784†	66939.8	0.527	mg/L	0.0051	0.527	mg/L	0.0051	0.96%

Sequence No.: 9 **Autosampler Location: 33**
Sample ID: L1204091020 **Date Collected: 5/3/2012 3:08:36 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204091020

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204091020

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2123461.4						23016.88	1.08%
YRADIAL	262345.1						3657.90	1.39%
Ga 417.206	1356624.5						36564.90	2.70%
GaRADIAL	79308.8						1316.99	1.66%
Ag 328.068†	-94.7	0.00011	mg/L	0.000147	0.00011	mg/L	0.000147	138.78%
Al 396.153†	3710.0	0.583	mg/L	0.0025	0.583	mg/L	0.0025	0.44%
As 188.979†	1.5	-0.00026	mg/L	0.000772	-0.00026	mg/L	0.000772	295.60%
Ba 233.527†	1655.0	0.00904	mg/L	0.000276	0.00904	mg/L	0.000276	3.05%
Be 234.861†	713.4	0.00033	mg/L	0.000014	0.00033	mg/L	0.000014	4.21%
B 249.677†	502.3	0.00796	mg/L	0.001055	0.00796	mg/L	0.001055	13.24%
Ca 227.546†	382.9	0.961	mg/L	0.0153	0.961	mg/L	0.0153	1.59%
Cd 228.802†	16.2	0.00026	mg/L	0.000223	0.00026	mg/L	0.000223	85.49%
Co 228.616†	45.9	0.00074	mg/L	0.000213	0.00074	mg/L	0.000213	28.94%
Cr 267.716†	405.0	0.00337	mg/L	0.000184	0.00337	mg/L	0.000184	5.45%
Cu 327.393†	686.0	0.00309	mg/L	0.000409	0.00309	mg/L	0.000409	13.21%
Fe 239.562†	17533.8	1.20	mg/L	0.002	1.20	mg/L	0.002	0.17%
Mg 279.077†	2725.9	0.857	mg/L	0.0092	0.857	mg/L	0.0092	1.07%
Mn 257.610†	24657.8	0.0298	mg/L	0.00064	0.0298	mg/L	0.00064	2.13%
Mo 202.031†	28.7	0.00060	mg/L	0.000362	0.00060	mg/L	0.000362	60.72%
Ni 231.604†	309.9	0.00354	mg/L	0.000390	0.00354	mg/L	0.000390	11.04%
Pb 220.353†	-13.7	-0.00202	mg/L	0.000553	-0.00202	mg/L	0.000553	27.36%
Sb 206.836†	-1.0	-0.00039	mg/L	0.000867	-0.00039	mg/L	0.000867	221.54%
Se 196.026†	0.1	-0.00372	mg/L	0.000964	-0.00372	mg/L	0.000964	25.91%
Si 251.611†	200332.1	5.14	mg/L	0.096	5.14	mg/L	0.096	1.87%
Sn 189.927†	-5.8	-0.00291	mg/L	0.000603	-0.00291	mg/L	0.000603	20.71%
Ti 334.940†	1806.3	0.00184	mg/L	0.000227	0.00184	mg/L	0.000227	12.28%
Tl 190.801†	18.7	0.00154	mg/L	0.000680	0.00154	mg/L	0.000680	44.02%
V 290.880†	379.3	-0.00146	mg/L	0.001624	-0.00146	mg/L	0.001624	111.19%
Zn 206.200†	949.9	0.0204	mg/L	0.00027	0.0204	mg/L	0.00027	1.33%
K 766.490†	1003.7	0.301	mg/L	0.0063	0.301	mg/L	0.0063	2.11%
Na 589.592†	21716.3	1.29	mg/L	0.015	1.29	mg/L	0.015	1.14%
Sr 407.771†	17625.8	0.00796	mg/L	0.000024	0.00796	mg/L	0.000024	0.30%
Li 670.784†	574.9	0.00022	mg/L	0.000375	0.00022	mg/L	0.000375	170.03%

Sequence No.: 10 **Autosampler Location: 34**
Sample ID: L1204091023 **Date Collected: 5/3/2012 3:14:36 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204091023

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Approved: May 04, 2012

Kym H. Rhoden

Mean Data: L1204091023

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2036392.4						17866.01	0.88%
YRADIAL	258399.6						9911.10	3.84%
Ga 417.206	1311526.8						47707.90	3.64%
GaRADIAL	80032.4						664.57	0.83%
Ag 328.068†	-73.9	-0.00033	mg/L	0.000440	-0.00033	mg/L	0.000440	131.91%
Al 396.153†	388.5	0.0468	mg/L	0.00176	0.0468	mg/L	0.00176	3.75%
As 188.979†	-1.0	-0.00134	mg/L	0.001611	-0.00134	mg/L	0.001611	120.57%
Ba 233.527†	879.7	0.00386	mg/L	0.000177	0.00386	mg/L	0.000177	4.58%
Be 234.861†	133.7	0.00010	mg/L	0.000036	0.00010	mg/L	0.000036	34.58%
B 249.677†	153.0	0.00407	mg/L	0.000396	0.00407	mg/L	0.000396	9.72%
Ca 227.546†	357.2	0.871	mg/L	0.0060	0.871	mg/L	0.0060	0.69%
Cd 228.802†	-4.3	-0.00011	mg/L	0.000100	-0.00011	mg/L	0.000100	89.47%
Co 228.616†	12.5	-0.00016	mg/L	0.000159	-0.00016	mg/L	0.000159	100.23%
Cr 267.716†	71.8	0.00004	mg/L	0.000191	0.00004	mg/L	0.000191	522.26%
Cu 327.393†	325.7	0.00148	mg/L	0.000099	0.00148	mg/L	0.000099	6.73%
Fe 239.562†	792.2	0.0537	mg/L	0.00109	0.0537	mg/L	0.00109	2.03%
Mg 279.077†	2639.4	0.831	mg/L	0.0263	0.831	mg/L	0.0263	3.17%
Mn 257.610†	5988.6	0.00595	mg/L	0.000085	0.00595	mg/L	0.000085	1.43%
Mo 202.031†	1.4	-0.00026	mg/L	0.000222	-0.00026	mg/L	0.000222	86.82%
Ni 231.604†	62.2	-0.00039	mg/L	0.000389	-0.00039	mg/L	0.000389	100.34%
Pb 220.353†	-9.6	-0.00160	mg/L	0.001293	-0.00160	mg/L	0.001293	80.79%
Sb 206.836†	1.7	0.00030	mg/L	0.001863	0.00030	mg/L	0.001863	628.11%
Se 196.026†	-2.1	-0.00541	mg/L	0.007013	-0.00541	mg/L	0.007013	129.62%
Si 251.611†	152422.8	3.91	mg/L	0.142	3.91	mg/L	0.142	3.64%
Sn 189.927†	-4.6	-0.00279	mg/L	0.000566	-0.00279	mg/L	0.000566	20.24%
Ti 334.940†	99.7	-0.00002	mg/L	0.000098	-0.00002	mg/L	0.000098	491.94%
Tl 190.801†	-0.8	-0.00385	mg/L	0.004000	-0.00385	mg/L	0.004000	103.85%
V 290.880†	153.1	-0.00253	mg/L	0.002488	-0.00253	mg/L	0.002488	98.30%
Zn 206.200†	216.2	0.00257	mg/L	0.000166	0.00257	mg/L	0.000166	6.47%
K 766.490†	822.1	0.235	mg/L	0.0060	0.235	mg/L	0.0060	2.55%
Na 589.592†	26983.8	1.61	mg/L	0.023	1.61	mg/L	0.023	1.41%
Sr 407.771†	15125.9	0.00680	mg/L	0.000194	0.00680	mg/L	0.000194	2.86%
Li 670.784†	377.5	-0.00135	mg/L	0.000065	-0.00135	mg/L	0.000065	4.84%

Sequence No.: 11 **Autosampler Location: 35**
Sample ID: L1204091026 **Date Collected: 5/3/2012 3:21:33 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204091026

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204091026

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2077451.7						6855.67	0.33%
YRADIAL	265223.1						4075.08	1.54%
Ga 417.206	1314003.8						33929.46	2.58%
GaRADIAL	79060.5						670.92	0.85%
Ag 328.068†	-248.8	-0.00012	mg/L	0.000060	-0.00012	mg/L	0.000060	50.05%
Al 396.153†	7041.7	1.12	mg/L	0.004	1.12	mg/L	0.004	0.40%
As 188.979†	-1.2	-0.00126	mg/L	0.001615	-0.00126	mg/L	0.001615	128.20%
Ba 233.527†	2316.9	0.0135	mg/L	0.00028	0.0135	mg/L	0.00028	2.11%
Be 234.861†	940.3	0.00037	mg/L	0.000044	0.00037	mg/L	0.000044	11.93%
B 249.677†	247.3	0.00446	mg/L	0.000170	0.00446	mg/L	0.000170	3.81%
Ca 227.546†	223.3	0.612	mg/L	0.0212	0.612	mg/L	0.0212	3.47%
Cd 228.802†	20.3	0.00034	mg/L	0.000306	0.00034	mg/L	0.000306	89.06%
Co 228.616†	65.9	0.00127	mg/L	0.000228	0.00127	mg/L	0.000228	17.92%
Cr 267.716†	543.7	0.00476	mg/L	0.000011	0.00476	mg/L	0.000011	0.23%
Cu 327.393†	662.2	0.00305	mg/L	0.000599	0.00305	mg/L	0.000599	19.63%
Fe 239.562†	26980.5	1.85	mg/L	0.013	1.85	mg/L	0.013	0.71%
Mg 279.077†	2528.9	0.795	mg/L	0.0166	0.795	mg/L	0.0166	2.09%
Mn 257.610†	45803.4	0.0569	mg/L	0.00054	0.0569	mg/L	0.00054	0.94%

Approved: May 04, 2012

Mo 202.031†	39.7	0.00095	mg/L	0.000475	0.00095	mg/L	0.000475 50.04%
Ni 231.604†	352.5	0.00421	mg/L	0.000660	0.00421	mg/L	0.000660 15.66%
Pb 220.353†	-22.1	-0.00280	mg/L	0.001750	-0.00280	mg/L	0.001750 62.40%
Sb 206.836†	-3.1	-0.00090	mg/L	0.001120	-0.00090	mg/L	0.001120 123.99%
Se 196.026†	-1.6	-0.00460	mg/L	0.000579	-0.00460	mg/L	0.000579 12.57%
Si 251.611†	226581.5	5.81	mg/L	0.095	5.81	mg/L	0.095 1.63%
Sn 189.927†	-2.8	-0.00261	mg/L	0.000318	-0.00261	mg/L	0.000318 12.21%
Ti 334.940†	2768.1	0.00284	mg/L	0.000056	0.00284	mg/L	0.000056 1.98%
Tl 190.801†	9.5	-0.00098	mg/L	0.001101	-0.00098	mg/L	0.001101 112.59%
V 290.880†	752.0	0.00051	mg/L	0.001173	0.00051	mg/L	0.001173 231.75%
Zn 206.200†	1141.6	0.0251	mg/L	0.00014	0.0251	mg/L	0.00014 0.54%
K 766.490†	803.5	0.228	mg/L	0.0056	0.228	mg/L	0.0056 2.47%
Na 589.592†	23455.8	1.40	mg/L	0.009	1.40	mg/L	0.009 0.66%
Sr 407.771†	10181.1	0.00452	mg/L	0.000106	0.00452	mg/L	0.000106 2.35%
Li 670.784†	591.7	0.00035	mg/L	0.000653	0.00035	mg/L	0.000653 184.82%

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Sequence No.: 12 **Autosampler Location: 36**
Sample ID: L1204091029 **Date Collected: 5/3/2012 3:27:29 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204091029

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204091029

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2025790.1						54233.53	2.68%
YRADIAL	254891.1						3471.79	1.36%
Ga 417.206	1287846.6						58549.95	4.55%
GaRADIAL	78965.4						3519.35	4.46%
Ag 328.068†	-113.8	-0.00048	mg/L	0.000093	-0.00048	mg/L	0.000093	19.20%
Al 396.153†	0.1	-0.0160	mg/L	0.00146	-0.0160	mg/L	0.00146	9.14%
As 188.979†	5.7	0.00120	mg/L	0.001881	0.00120	mg/L	0.001881	156.17%
Ba 233.527†	87.5	-0.00145	mg/L	0.000081	-0.00145	mg/L	0.000081	5.54%
Be 234.861†	62.2	0.00005	mg/L	0.000081	0.00005	mg/L	0.000081	147.34%
B 249.677†	88.8	0.00328	mg/L	0.000265	0.00328	mg/L	0.000265	8.08%
Ca 227.546†	11.8	0.0788	mg/L	0.01722	0.0788	mg/L	0.01722	21.85%
Cd 228.802†	-5.2	-0.00014	mg/L	0.000123	-0.00014	mg/L	0.000123	86.08%
Co 228.616†	0.3	-0.00049	mg/L	0.000003	-0.00049	mg/L	0.000003	0.69%
Cr 267.716†	13.9	-0.00054	mg/L	0.000109	-0.00054	mg/L	0.000109	20.22%
Cu 327.393†	185.7	0.00088	mg/L	0.000519	0.00088	mg/L	0.000519	58.74%
Fe 239.562†	69.0	0.00399	mg/L	0.000641	0.00399	mg/L	0.000641	16.05%
Mg 279.077†	15.5	0.00920	mg/L	0.004911	0.00920	mg/L	0.004911	53.41%
Mn 257.610†	530.2	-0.00102	mg/L	0.000034	-0.00102	mg/L	0.000034	3.35%
Mo 202.031†	1.9	-0.00024	mg/L	0.000196	-0.00024	mg/L	0.000196	80.87%
Ni 231.604†	-3.8	-0.00143	mg/L	0.000435	-0.00143	mg/L	0.000435	30.39%
Pb 220.353†	-3.1	-0.00098	mg/L	0.000585	-0.00098	mg/L	0.000585	59.74%
Sb 206.836†	2.7	0.00055	mg/L	0.000721	0.00055	mg/L	0.000721	131.10%
Se 196.026†	3.3	-0.00210	mg/L	0.001029	-0.00210	mg/L	0.001029	48.99%
Si 251.611†	32764.5	0.833	mg/L	0.0366	0.833	mg/L	0.0366	4.40%
Sn 189.927†	3.7	-0.00194	mg/L	0.000904	-0.00194	mg/L	0.000904	46.72%
Ti 334.940†	167.3	-0.00006	mg/L	0.000113	-0.00006	mg/L	0.000113	174.16%
Tl 190.801†	0.1	-0.00360	mg/L	0.001507	-0.00360	mg/L	0.001507	41.86%
V 290.880†	357.7	-0.00137	mg/L	0.000420	-0.00137	mg/L	0.000420	30.73%
Zn 206.200†	90.9	-0.00048	mg/L	0.000152	-0.00048	mg/L	0.000152	31.79%
K 766.490†	34.8	-0.0500	mg/L	0.01525	-0.0500	mg/L	0.01525	30.47%
Na 589.592†	14391.4	0.855	mg/L	0.0285	0.855	mg/L	0.0285	3.33%
Sr 407.771†	645.0	0.00010	mg/L	0.000051	0.00010	mg/L	0.000051	49.31%
Li 670.784†	110.7	-0.00346	mg/L	0.000297	-0.00346	mg/L	0.000297	8.57%

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Sequence No.: 13 **Autosampler Location: 37**
Sample ID: L1204091032 **Date Collected: 5/3/2012 3:34:22 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 04, 2012

Nebulizer Parameters: L1204091032

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204091032

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	2083753.4						25455.18	1.22%
YRADIAL	252361.3						6649.08	2.63%
Ga 417.206	1333196.7						40705.35	3.05%
GaRADIAL	78280.7						970.65	1.24%
Ag 328.068†	-89.1	-0.00041	mg/L	0.000233	-0.00041	mg/L	0.000233	57.34%
Al 396.153†	0.0	-0.0160	mg/L	0.00077	-0.0160	mg/L	0.00077	4.82%
As 188.979†	0.5	-0.00077	mg/L	0.001809	-0.00077	mg/L	0.001809	234.93%
Ba 233.527†	80.1	-0.00150	mg/L	0.000118	-0.00150	mg/L	0.000118	7.88%
Be 234.861†	127.8	0.00011	mg/L	0.000021	0.00011	mg/L	0.000021	18.87%
B 249.677†	70.8	0.00306	mg/L	0.000080	0.00306	mg/L	0.000080	2.63%
Ca 227.546†	14.3	0.0843	mg/L	0.01680	0.0843	mg/L	0.01680	19.93%
Cd 228.802†	-14.8	-0.00031	mg/L	0.000094	-0.00031	mg/L	0.000094	30.32%
Co 228.616†	-2.5	-0.00057	mg/L	0.000194	-0.00057	mg/L	0.000194	34.05%
Cr 267.716†	17.0	-0.00051	mg/L	0.000179	-0.00051	mg/L	0.000179	35.20%
Cu 327.393†	175.5	0.00084	mg/L	0.000453	0.00084	mg/L	0.000453	53.91%
Fe 239.562†	45.6	0.00239	mg/L	0.000141	0.00239	mg/L	0.000141	5.89%
Mg 279.077†	23.1	0.0116	mg/L	0.00189	0.0116	mg/L	0.00189	16.30%
Mn 257.610†	-125.8	-0.00186	mg/L	0.000008	-0.00186	mg/L	0.000008	0.44%
Mo 202.031†	6.9	-0.00010	mg/L	0.000166	-0.00010	mg/L	0.000166	164.18%
Ni 231.604†	-10.6	-0.00154	mg/L	0.000111	-0.00154	mg/L	0.000111	7.19%
Pb 220.353†	-3.0	-0.00097	mg/L	0.000947	-0.00097	mg/L	0.000947	97.23%
Sb 206.836†	2.5	0.00049	mg/L	0.000990	0.00049	mg/L	0.000990	201.55%
Se 196.026†	1.1	-0.00350	mg/L	0.002295	-0.00350	mg/L	0.002295	65.62%
Si 251.611†	30863.7	0.784	mg/L	0.0340	0.784	mg/L	0.0340	4.33%
Sn 189.927†	4.6	-0.00184	mg/L	0.000866	-0.00184	mg/L	0.000866	47.03%
Ti 334.940†	-27.6	-0.00028	mg/L	0.000056	-0.00028	mg/L	0.000056	20.23%
Tl 190.801†	4.1	-0.00250	mg/L	0.001066	-0.00250	mg/L	0.001066	42.58%
V 290.880†	15.9	-0.00326	mg/L	0.001175	-0.00326	mg/L	0.001175	36.01%
Zn 206.200†	86.3	-0.00059	mg/L	0.000207	-0.00059	mg/L	0.000207	34.91%
K 766.490†	23.0	-0.0543	mg/L	0.03042	-0.0543	mg/L	0.03042	56.00%
Na 589.592†	14308.5	0.850	mg/L	0.0248	0.850	mg/L	0.0248	2.91%
Sr 407.771†	506.4	0.00004	mg/L	0.000043	0.00004	mg/L	0.000043	111.00%
Li 670.784†	55.8	-0.00390	mg/L	0.000242	-0.00390	mg/L	0.000242	6.21%

Sequence No.: 14 **Autosampler Location: 38**
Sample ID: L1204092803 **Date Collected: 5/3/2012 3:41:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092803

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092803

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	1951451.9						11063.08	0.57%
YRADIAL	243200.1						5241.57	2.16%
Ga 417.206	1262690.0						48475.18	3.84%
GaRADIAL	76566.1						798.13	1.04%
Ag 328.068†	248.3	0.00074	mg/L	0.000184	0.00074	mg/L	0.000184	24.82%
Al 396.153†	590.2	0.0792	mg/L	0.00698	0.0792	mg/L	0.00698	8.81%
As 188.979†	-0.8	-0.00127	mg/L	0.001797	-0.00127	mg/L	0.001797	141.32%
Ba 233.527†	6214.3	0.0397	mg/L	0.00032	0.0397	mg/L	0.00032	0.80%
Be 234.861†	269.4	0.00017	mg/L	0.000019	0.00017	mg/L	0.000019	11.06%
B 249.677†	8290.6	0.107	mg/L	0.0035	0.107	mg/L	0.0035	3.30%
Ca 227.546†	32172.0	73.7	mg/L	2.40	73.7	mg/L	2.40	3.26%
Cd 228.802†	21.3	0.00036	mg/L	0.000390	0.00036	mg/L	0.000390	109.12%

Approved: May 04, 2012

Co 228.616†	19.7	0.00005	mg/L	0.000361	0.00005	mg/L	0.000361 687.28%
Cr 267.716†	163.1	0.00095	mg/L	0.000157	0.00095	mg/L	0.000157 16.45%
Cu 327.393†	294.8	0.00135	mg/L	0.000273	0.00135	mg/L	0.000273 20.13%
Fe 239.562†	3895.0	0.266	mg/L	0.0036	0.266	mg/L	0.0036 1.36%
Mg 279.077†	98233.5	30.8	mg/L	0.37	30.8	mg/L	0.37 1.21%
Mn 257.610†	9123.6	0.00997	mg/L	0.000062	0.00997	mg/L	0.000062 0.63%
Mo 202.031†	77.7	0.00196	mg/L	0.000207	0.00196	mg/L	0.000207 10.55%
Ni 231.604†	76.9	-0.00015	mg/L	0.000547	-0.00015	mg/L	0.000547 361.07%
Pb 220.353†	-13.8	-0.00143	mg/L	0.000508	-0.00143	mg/L	0.000508 35.43%
Sb 206.836†	-7.5	-0.00204	mg/L	0.000713	-0.00204	mg/L	0.000713 34.90%
Se 196.026†	7.4	0.00050	mg/L	0.001864	0.00050	mg/L	0.001864 369.26%
Si 251.611†	212426.5	5.45	mg/L	0.179	5.45	mg/L	0.179 3.29%
Sn 189.927†	-244.2	-0.0275	mg/L	0.00034	-0.0275	mg/L	0.00034 1.23%
Ti 334.940†	-10217.6	-0.00032	mg/L	0.001027	-0.00032	mg/L	0.001027 320.94%
Tl 190.801†	-23.6	-0.0103	mg/L	0.00390	-0.0103	mg/L	0.00390 37.99%
V 290.880†	1646.6	0.00494	mg/L	0.000683	0.00494	mg/L	0.000683 13.82%
Zn 206.200†	167.3	0.00138	mg/L	0.000215	0.00138	mg/L	0.000215 15.56%
K 766.490†	2842.5	0.828	mg/L	0.0279	0.828	mg/L	0.0279 3.37%
Na 589.592†	2239557.3	141	mg/L	0.8	141	mg/L	0.8 0.55%
Sr 407.771†	1214553.7	0.562	mg/L	0.0054	0.562	mg/L	0.0054 0.96%
Li 670.784†	1407.4	0.00683	mg/L	0.000418	0.00683	mg/L	0.000418 6.12%

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Sequence No.: 15 **Autosampler Location: 39**
Sample ID: L1204092803PS WG396548-03 **Date Collected: 5/3/2012 3:47:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092803PS WG396548-03

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092803PS WG396548-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1943430.1						32892.16	1.69%
YRADIAL	250778.8						1218.90	0.49%
Ga 417.206	1245523.4						12993.97	1.04%
GaRADIAL	76745.8						631.80	0.82%
Ag 328.068†	57587.2	0.194	mg/L	0.0032	0.194	mg/L	0.0032	1.63%
Al 396.153†	31804.1	5.09	mg/L	0.018	5.09	mg/L	0.018	0.35%
As 188.979†	502.9	0.189	mg/L	0.0038	0.189	mg/L	0.0038	2.00%
Ba 233.527†	79809.7	0.534	mg/L	0.0097	0.534	mg/L	0.0097	1.82%
Be 234.861†	29482.3	0.0240	mg/L	0.00037	0.0240	mg/L	0.00037	1.56%
B 249.677†	86301.2	1.09	mg/L	0.018	1.09	mg/L	0.018	1.69%
Ca 227.546†	32416.4	74.5	mg/L	1.84	74.5	mg/L	1.84	2.47%
Cd 228.802†	1272.1	0.0227	mg/L	0.00048	0.0227	mg/L	0.00048	2.13%
Co 228.616†	3507.5	0.0965	mg/L	0.00141	0.0965	mg/L	0.00141	1.46%
Cr 267.716†	25277.4	0.250	mg/L	0.0035	0.250	mg/L	0.0035	1.38%
Cu 327.393†	58093.4	0.245	mg/L	0.0043	0.245	mg/L	0.0043	1.77%
Fe 239.562†	31352.8	2.15	mg/L	0.012	2.15	mg/L	0.012	0.55%
Mg 279.077†	104678.7	32.8	mg/L	0.07	32.8	mg/L	0.07	0.22%
Mn 257.610†	203586.7	0.259	mg/L	0.0049	0.259	mg/L	0.0049	1.89%
Mo 202.031†	17321.4	0.500	mg/L	0.0078	0.500	mg/L	0.0078	1.57%
Ni 231.604†	16008.7	0.252	mg/L	0.0039	0.252	mg/L	0.0039	1.54%
Pb 220.353†	2582.2	0.248	mg/L	0.0029	0.248	mg/L	0.0029	1.15%
Sb 206.836†	2223.4	0.567	mg/L	0.0036	0.567	mg/L	0.0036	0.63%
Se 196.026†	326.5	0.198	mg/L	0.0058	0.198	mg/L	0.0058	2.91%
Si 251.611†	296474.4	7.60	mg/L	0.111	7.60	mg/L	0.111	1.46%
Sn 189.927†	-237.9	-0.0268	mg/L	0.00038	-0.0268	mg/L	0.00038	1.43%
Ti 334.940†	441967.2	0.492	mg/L	0.0013	0.492	mg/L	0.0013	0.26%
Tl 190.801†	860.1	0.241	mg/L	0.0014	0.241	mg/L	0.0014	0.60%
V 290.880†	93067.0	0.511	mg/L	0.0054	0.511	mg/L	0.0054	1.05%
Zn 206.200†	19839.3	0.482	mg/L	0.0108	0.482	mg/L	0.0108	2.23%
K 766.490†	71951.3	26.0	mg/L	0.13	26.0	mg/L	0.13	0.51%
Na 589.592†	2469722.1	156	mg/L	1.3	156	mg/L	1.3	0.85%
Sr 407.771†	2186985.7	1.01	mg/L	0.019	1.01	mg/L	0.019	1.92%
Li 670.784†	65853.2	0.518	mg/L	0.0044	0.518	mg/L	0.0044	0.85%

Approved: May 04, 2012

Sequence No.: 16 **Autosampler Location: 40**
Sample ID: L1204092803DL WG396548-04 **Date Collected: 5/3/2012 3:53:15 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092803DL WG396548-04

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092803DL WG396548-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1980261.8						32437.73	1.64%
YRADIAL	246172.0						4121.91	1.67%
Ga 417.206	1255039.1						11144.57	0.89%
GaRADIAL	77905.9						3200.78	4.11%
Ag 328.068†	148.6	0.00039	mg/L	0.000466	0.00039	mg/L	0.000466	119.28%
Al 396.153†	122.4	0.00376	mg/L	0.000892	0.00376	mg/L	0.000892	23.72%
As 188.979†	0.2	-0.00091	mg/L	0.000614	-0.00091	mg/L	0.000614	67.56%
Ba 233.527†	1278.9	0.00654	mg/L	0.000028	0.00654	mg/L	0.000028	0.43%
Be 234.861†	69.0	0.00005	mg/L	0.000030	0.00005	mg/L	0.000030	59.49%
B 249.677†	1999.8	0.0274	mg/L	0.00117	0.0274	mg/L	0.00117	4.26%
Ca 227.546†	6408.4	14.7	mg/L	0.10	14.7	mg/L	0.10	0.65%
Cd 228.802†	-2.1	-0.00008	mg/L	0.000094	-0.00008	mg/L	0.000094	123.79%
Co 228.616†	-4.9	-0.00063	mg/L	0.000199	-0.00063	mg/L	0.000199	31.41%
Cr 267.716†	55.3	-0.00013	mg/L	0.000090	-0.00013	mg/L	0.000090	71.68%
Cu 327.393†	280.2	0.00128	mg/L	0.000226	0.00128	mg/L	0.000226	17.65%
Fe 239.562†	799.3	0.0540	mg/L	0.00141	0.0540	mg/L	0.00141	2.61%
Mg 279.077†	20687.3	6.48	mg/L	0.092	6.48	mg/L	0.092	1.41%
Mn 257.610†	1839.1	0.00065	mg/L	0.000033	0.00065	mg/L	0.000033	5.04%
Mo 202.031†	26.1	0.00046	mg/L	0.000108	0.00046	mg/L	0.000108	23.52%
Ni 231.604†	-1.3	-0.00139	mg/L	0.000137	-0.00139	mg/L	0.000137	9.85%
Pb 220.353†	5.9	0.00000	mg/L	0.001160	0.00000	mg/L	0.001160	>999.9%
Sb 206.836†	2.1	0.00039	mg/L	0.002251	0.00039	mg/L	0.002251	576.93%
Se 196.026†	3.9	-0.00170	mg/L	0.001420	-0.00170	mg/L	0.001420	83.32%
Si 251.611†	44343.7	1.13	mg/L	0.011	1.13	mg/L	0.011	0.97%
Sn 189.927†	-121.7	-0.0149	mg/L	0.00118	-0.0149	mg/L	0.00118	7.95%
Ti 334.940†	-2381.9	-0.00064	mg/L	0.000242	-0.00064	mg/L	0.000242	37.69%
Tl 190.801†	-10.6	-0.00659	mg/L	0.002232	-0.00659	mg/L	0.002232	33.89%
V 290.880†	472.4	-0.00091	mg/L	0.000970	-0.00091	mg/L	0.000970	106.75%
Zn 206.200†	145.3	0.00084	mg/L	0.000265	0.00084	mg/L	0.000265	31.36%
K 766.490†	758.0	0.186	mg/L	0.0115	0.186	mg/L	0.0115	6.21%
Na 589.592†	452352.1	27.3	mg/L	0.48	27.3	mg/L	0.48	1.75%
Sr 407.771†	251376.4	0.116	mg/L	0.0023	0.116	mg/L	0.0023	1.95%
Li 670.784†	379.4	-0.00133	mg/L	0.000095	-0.00133	mg/L	0.000095	7.12%

Sequence No.: 17 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 4:00:10 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.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1980696.6						34849.95	1.76%
YRADIAL	247060.2						4857.72	1.97%
Ga 417.206	1213320.2						18285.90	1.51%
GaRADIAL	76226.2						1074.11	1.41%
Ag 328.068†	113727.4	0.382	mg/L	0.0150	0.382	mg/L	0.0150	3.92%

QC value within limits for Ag 328.068 Recovery = 95.56%

Approved: May 04, 2012

Kym H. Rhoden

Al 396.153†	59985.8	9.61 mg/L	0.012	9.61 mg/L	0.012	0.12%
QC value within limits for Al 396.153 Recovery = 96.07%						
As 188.979†	994.3	0.375 mg/L	0.0077	0.375 mg/L	0.0077	2.05%
QC value within limits for As 188.979 Recovery = 93.73%						
Ba 233.527†	146397.3	0.981 mg/L	0.0185	0.981 mg/L	0.0185	1.89%
QC value within limits for Ba 233.527 Recovery = 98.07%						
Be 234.861†	57584.8	0.0469 mg/L	0.00142	0.0469 mg/L	0.00142	3.03%
QC value within limits for Be 234.861 Recovery = 93.82%						
B 249.677†	38451.2	0.484 mg/L	0.0233	0.484 mg/L	0.0233	4.82%
QC value within limits for B 249.677 Recovery = 96.78%						
Ca 227.546†	4055.8	9.79 mg/L	0.232	9.79 mg/L	0.232	2.37%
QC value within limits for Ca 227.546 Recovery = 97.86%						
Cd 228.802†	2578.0	0.0461 mg/L	0.00140	0.0461 mg/L	0.00140	3.04%
QC value within limits for Cd 228.802 Recovery = 92.25%						
Co 228.616†	7084.8	0.196 mg/L	0.0037	0.196 mg/L	0.0037	1.89%
QC value within limits for Co 228.616 Recovery = 97.76%						
Cr 267.716†	49705.2	0.493 mg/L	0.0131	0.493 mg/L	0.0131	2.65%
QC value within limits for Cr 267.716 Recovery = 98.53%						
Cu 327.393†	116545.3	0.492 mg/L	0.0218	0.492 mg/L	0.0218	4.43%
QC value within limits for Cu 327.393 Recovery = 98.42%						
Fe 239.562†	56160.4	3.86 mg/L	0.022	3.86 mg/L	0.022	0.56%
QC value within limits for Fe 239.562 Recovery = 96.40%						
Mg 279.077†	31121.6	9.77 mg/L	0.037	9.77 mg/L	0.037	0.38%
QC value within limits for Mg 279.077 Recovery = 97.67%						
Mn 257.610†	388962.8	0.496 mg/L	0.0096	0.496 mg/L	0.0096	1.94%
QC value within limits for Mn 257.610 Recovery = 99.18%						
Mo 202.031†	33565.3	0.969 mg/L	0.0172	0.969 mg/L	0.0172	1.78%
QC value within limits for Mo 202.031 Recovery = 96.94%						
Ni 231.604†	31202.9	0.493 mg/L	0.0115	0.493 mg/L	0.0115	2.32%
QC value within limits for Ni 231.604 Recovery = 98.57%						
Pb 220.353†	5146.2	0.494 mg/L	0.0082	0.494 mg/L	0.0082	1.65%
QC value within limits for Pb 220.353 Recovery = 98.88%						
Sb 206.836†	4428.1	1.13 mg/L	0.023	1.13 mg/L	0.023	2.05%
QC value within limits for Sb 206.836 Recovery = 94.12%						
Se 196.026†	629.7	0.386 mg/L	0.0091	0.386 mg/L	0.0091	2.36%
QC value within limits for Se 196.026 Recovery = 96.50%						
Si 251.611†	188234.1	4.82 mg/L	0.155	4.82 mg/L	0.155	3.23%
QC value within limits for Si 251.611 Recovery = 96.35%						
Sn 189.927†	9527.4	0.979 mg/L	0.0174	0.979 mg/L	0.0174	1.78%
QC value within limits for Sn 189.927 Recovery = 97.88%						
Ti 334.940†	876754.1	0.955 mg/L	0.0042	0.955 mg/L	0.0042	0.44%
QC value within limits for Ti 334.940 Recovery = 95.46%						
Tl 190.801†	1784.3	0.503 mg/L	0.0075	0.503 mg/L	0.0075	1.49%
QC value within limits for Tl 190.801 Recovery = 100.68%						
V 290.880†	177577.2	0.980 mg/L	0.0226	0.980 mg/L	0.0226	2.30%
QC value within limits for V 290.880 Recovery = 98.03%						
Zn 206.200†	40131.0	0.977 mg/L	0.0162	0.977 mg/L	0.0162	1.65%
QC value within limits for Zn 206.200 Recovery = 97.70%						
K 766.490†	132658.9	48.5 mg/L	0.18	48.5 mg/L	0.18	0.37%
QC value within limits for K 766.490 Recovery = 97.03%						
Na 589.592†	810093.5	49.2 mg/L	0.31	49.2 mg/L	0.31	0.63%
QC value within limits for Na 589.592 Recovery = 98.43%						
Sr 407.771†	2203962.3	1.02 mg/L	0.013	1.02 mg/L	0.013	1.27%
QC value within limits for Sr 407.771 Recovery = 102.19%						
Li 670.784†	123082.7	0.972 mg/L	0.0127	0.972 mg/L	0.0127	1.31%
QC value within limits for Li 670.784 Recovery = 97.23%						

All analyte(s) passed QC.

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Sequence No.: 18 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 4:06:11 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

Approved: May 04, 2012

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2039833.2						42560.66	2.09%
YRADIAL	250776.1						2187.91	0.87%
Ga 417.206	1275769.6						14395.94	1.13%
GaRADIAL	76351.8						2641.18	3.46%
Ag 328.068†	-119.4	-0.00051	mg/L	0.000548	-0.00051	mg/L	0.000548	108.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-17.0	-0.0187	mg/L	0.00127	-0.0187	mg/L	0.00127	6.77%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	2.0	-0.00019	mg/L	0.002807	-0.00019	mg/L	0.002807	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	5.3	-0.00200	mg/L	0.000159	-0.00200	mg/L	0.000159	7.93%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	120.5	0.00010	mg/L	0.000029	0.00010	mg/L	0.000029	27.96%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	153.0	0.00409	mg/L	0.000243	0.00409	mg/L	0.000243	5.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	11.7	0.0785	mg/L	0.01975	0.0785	mg/L	0.01975	25.17%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-2.5	-0.00009	mg/L	0.000139	-0.00009	mg/L	0.000139	159.50%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-3.7	-0.00060	mg/L	0.000114	-0.00060	mg/L	0.000114	18.85%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	4.3	-0.00063	mg/L	0.000073	-0.00063	mg/L	0.000073	11.59%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	134.2	0.00067	mg/L	0.000134	0.00067	mg/L	0.000134	20.06%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	6.9	-0.00027	mg/L	0.000503	-0.00027	mg/L	0.000503	184.95%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	9.5	0.00731	mg/L	0.002129	0.00731	mg/L	0.002129	29.14%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-100.3	-0.00183	mg/L	0.000029	-0.00183	mg/L	0.000029	1.59%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.1	-0.00033	mg/L	0.000242	-0.00033	mg/L	0.000242	73.06%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-3.9	-0.00143	mg/L	0.000303	-0.00143	mg/L	0.000303	21.15%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.6	-0.00094	mg/L	0.001052	-0.00094	mg/L	0.001052	112.33%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.4	-0.00025	mg/L	0.000844	-0.00025	mg/L	0.000844	340.68%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.5	-0.00445	mg/L	0.000798	-0.00445	mg/L	0.000798	17.91%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-15.4	-0.00949	mg/L	0.000469	-0.00949	mg/L	0.000469	4.95%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	12.3	-0.00105	mg/L	0.000771	-0.00105	mg/L	0.000771	73.45%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-5.8	-0.00025	mg/L	0.000068	-0.00025	mg/L	0.000068	26.94%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.9	-0.00284	mg/L	0.001464	-0.00284	mg/L	0.001464	51.54%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	107.0	-0.00276	mg/L	0.001590	-0.00276	mg/L	0.001590	57.65%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	42.5	-0.00166	mg/L	0.000107	-0.00166	mg/L	0.000107	6.46%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	38.6	-0.0478	mg/L	0.00646	-0.0478	mg/L	0.00646	13.50%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	8.3	-0.00338	mg/L	0.004739	-0.00338	mg/L	0.004739	140.37%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	239.9	-0.00008	mg/L	0.000040	-0.00008	mg/L	0.000040	47.70%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	98.5	-0.00356	mg/L	0.000397	-0.00356	mg/L	0.000397	11.16%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

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Sequence No.: 19 **Autosampler Location: 41**
Sample ID: L1204092801 WG396511-02 **Date Collected: 5/3/2012 4:13:04 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 04, 2012

Kym H. Rhoden

Nebulizer Parameters: L1204092801 WG396511-02

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092801 WG396511-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1888088.4						15845.50	0.84%
YRADIAL	240473.1						4193.46	1.74%
Ga 417.206	1225732.5						58277.39	4.75%
GaRADIAL	76838.6						1891.18	2.46%
Ag 328.068†	-2069.1	0.00368	mg/L	0.000539	0.00368	mg/L	0.000539	14.65%
Al 396.153†	59.1	-0.00341	mg/L	0.010493	-0.00341	mg/L	0.010493	308.01%
As 188.979†	-5.0	-0.00002	mg/L	0.002251	-0.00002	mg/L	0.002251	>999.9%
Ba 233.527†	33368.5	0.221	mg/L	0.0008	0.221	mg/L	0.0008	0.36%
Be 234.861†	6952.1	0.00034	mg/L	0.000244	0.00034	mg/L	0.000244	70.71%
B 249.677†	9695.4	0.113	mg/L	0.0038	0.113	mg/L	0.0038	3.34%
Ca 227.546†	107591.2	247	mg/L	13.3	247	mg/L	13.3	5.37%
Cd 228.802†	26.2	0.00041	mg/L	0.000428	0.00041	mg/L	0.000428	104.69%
Co 228.616†	43.4	0.00004	mg/L	0.000411	0.00004	mg/L	0.000411	>999.9%
Cr 267.716†	105.2	0.00126	mg/L	0.000279	0.00126	mg/L	0.000279	22.21%
Cu 327.393†	-279.9	0.00107	mg/L	0.000323	0.00107	mg/L	0.000323	30.11%
Fe 239.562†	377922.2	26.0	mg/L	0.12	26.0	mg/L	0.12	0.46%
Mg 279.077†	132234.6	41.4	mg/L	0.40	41.4	mg/L	0.40	0.98%
Mn 257.610†	3238311.6	4.14	mg/L	0.030	4.14	mg/L	0.030	0.74%
Mo 202.031†	35.9	0.00288	mg/L	0.000155	0.00288	mg/L	0.000155	5.38%
Ni 231.604†	158.6	0.00114	mg/L	0.000564	0.00114	mg/L	0.000564	49.31%
Pb 220.353†	34.2	-0.00015	mg/L	0.000855	-0.00015	mg/L	0.000855	553.01%
Sb 206.836†	-4.0	-0.00021	mg/L	0.001203	-0.00021	mg/L	0.001203	580.51%
Se 196.026†	-9.7	-0.00357	mg/L	0.000545	-0.00357	mg/L	0.000545	15.28%
Si 251.611†	519898.1	13.4	mg/L	0.42	13.4	mg/L	0.42	3.12%
Sn 189.927†	-318.4	-0.0351	mg/L	0.00138	-0.0351	mg/L	0.00138	3.94%
Ti 334.940†	-36058.8	-0.00253	mg/L	0.004489	-0.00253	mg/L	0.004489	177.11%
Tl 190.801†	-32.4	-0.0171	mg/L	0.00166	-0.0171	mg/L	0.00166	9.67%
V 290.880†	2857.2	0.00731	mg/L	0.001373	0.00731	mg/L	0.001373	18.79%
Zn 206.200†	103.9	-0.00065	mg/L	0.000283	-0.00065	mg/L	0.000283	43.60%
K 766.490†	33801.4	12.1	mg/L	0.17	12.1	mg/L	0.17	1.37%
Na 589.592†	1371569.2	84.5	mg/L	0.34	84.5	mg/L	0.34	0.41%
Sr 407.771†	3329313.9	1.54	mg/L	0.009	1.54	mg/L	0.009	0.56%
Li 670.784†	1918.9	0.0109	mg/L	0.00035	0.0109	mg/L	0.00035	3.25%

Sequence No.: 20 **Autosampler Location: 42**
Sample ID: L1204092802 WG396511-03 **Date Collected: 5/3/2012 4:19:05 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092802 WG396511-03

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092802 WG396511-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1872685.4						27948.64	1.49%
YRADIAL	240799.5						4475.60	1.86%
Ga 417.206	1224773.1						29719.32	2.43%
GaRADIAL	76724.0						1586.12	2.07%
Ag 328.068†	-2739.9	0.00409	mg/L	0.000176	0.00409	mg/L	0.000176	4.30%
Al 396.153†	-98.7	-0.0281	mg/L	0.01104	-0.0281	mg/L	0.01104	39.33%
As 188.979†	-9.1	-0.00089	mg/L	0.001393	-0.00089	mg/L	0.001393	157.36%
Ba 233.527†	37500.1	0.249	mg/L	0.0057	0.249	mg/L	0.0057	2.27%
Be 234.861†	8471.6	0.00029	mg/L	0.000149	0.00029	mg/L	0.000149	51.90%
B 249.677†	10410.3	0.120	mg/L	0.0027	0.120	mg/L	0.0027	2.26%
Ca 227.546†	118837.5	273	mg/L	9.1	273	mg/L	9.1	3.35%
Cd 228.802†	17.5	0.00024	mg/L	0.000353	0.00024	mg/L	0.000353	144.48%

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Co 228.616†	25.6	-0.00062	mg/L	0.000408	-0.00062	mg/L	0.000408 65.33%
Cr 267.716†	86.0	0.00129	mg/L	0.000078	0.00129	mg/L	0.000078 6.03%
Cu 327.393†	-624.2	0.00016	mg/L	0.001084	0.00016	mg/L	0.001084 671.53%
Fe 239.562†	472265.5	32.4	mg/L	0.05	32.4	mg/L	0.05 0.17%
Mg 279.077†	140798.4	44.1	mg/L	0.67	44.1	mg/L	0.67 1.51%
Mn 257.610†	4320708.0	5.52	mg/L	0.048	5.52	mg/L	0.048 0.87%
Mo 202.031†	15.4	0.00290	mg/L	0.000346	0.00290	mg/L	0.000346 11.95%
Ni 231.604†	126.5	0.00064	mg/L	0.000307	0.00064	mg/L	0.000307 48.20%
Pb 220.353†	25.0	-0.00223	mg/L	0.001095	-0.00223	mg/L	0.001095 49.11%
Sb 206.836†	-2.0	0.00053	mg/L	0.000977	0.00053	mg/L	0.000977 184.36%
Se 196.026†	-9.0	-0.00163	mg/L	0.000792	-0.00163	mg/L	0.000792 48.63%
Si 251.611†	590045.9	15.2	mg/L	0.30	15.2	mg/L	0.30 2.00%
Sn 189.927†	-317.8	-0.0350	mg/L	0.00152	-0.0350	mg/L	0.00152 4.34%
Ti 334.940†	-41119.3	-0.00418	mg/L	0.003623	-0.00418	mg/L	0.003623 86.71%
Tl 190.801†	-43.4	-0.0217	mg/L	0.00258	-0.0217	mg/L	0.00258 11.92%
V 290.880†	2477.1	0.00411	mg/L	0.001636	0.00411	mg/L	0.001636 39.84%
Zn 206.200†	80.9	-0.00133	mg/L	0.000357	-0.00133	mg/L	0.000357 26.80%
K 766.490†	37541.8	13.5	mg/L	0.30	13.5	mg/L	0.30 2.21%
Na 589.592†	1651437.7	102	mg/L	0.6	102	mg/L	0.6 0.55%
Sr 407.771†	3840697.1	1.78	mg/L	0.062	1.78	mg/L	0.062 3.51%
Li 670.784†	2742.2	0.0174	mg/L	0.00051	0.0174	mg/L	0.00051 2.93%

Sequence No.: 21 **Autosampler Location: 43**
Sample ID: L1204092804 **Date Collected: 5/3/2012 4:25:10 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092804

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092804

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1860341.0						24262.88	1.30%
YRADIAL	233963.5						4754.80	2.03%
Ga 417.206	1263817.6						15206.37	1.20%
GaRADIAL	76199.7						3273.85	4.30%
Ag 328.068†	357.1	0.00102	mg/L	0.000374	0.00102	mg/L	0.000374	36.67%
Al 396.153†	-29.0	-0.0208	mg/L	0.00057	-0.0208	mg/L	0.00057	2.76%
As 188.979†	-2.6	-0.00198	mg/L	0.003031	-0.00198	mg/L	0.003031	152.92%
Ba 233.527†	6485.7	0.0415	mg/L	0.00057	0.0415	mg/L	0.00057	1.36%
Be 234.861†	144.7	0.00011	mg/L	0.000009	0.00011	mg/L	0.000009	8.20%
B 249.677†	8252.3	0.106	mg/L	0.0030	0.106	mg/L	0.0030	2.82%
Ca 227.546†	29968.3	68.6	mg/L	1.62	68.6	mg/L	1.62	2.36%
Cd 228.802†	-9.0	-0.00020	mg/L	0.000126	-0.00020	mg/L	0.000126	63.05%
Co 228.616†	-13.7	-0.00086	mg/L	0.000059	-0.00086	mg/L	0.000059	6.80%
Cr 267.716†	154.2	0.00086	mg/L	0.000176	0.00086	mg/L	0.000176	20.46%
Cu 327.393†	165.1	0.00079	mg/L	0.000105	0.00079	mg/L	0.000105	13.32%
Fe 239.562†	1236.3	0.0835	mg/L	0.00199	0.0835	mg/L	0.00199	2.39%
Mg 279.077†	102396.6	32.1	mg/L	0.04	32.1	mg/L	0.04	0.12%
Mn 257.610†	6187.4	0.00621	mg/L	0.000487	0.00621	mg/L	0.000487	7.84%
Mo 202.031†	77.4	0.00194	mg/L	0.000127	0.00194	mg/L	0.000127	6.53%
Ni 231.604†	22.3	-0.00102	mg/L	0.000406	-0.00102	mg/L	0.000406	39.99%
Pb 220.353†	20.2	0.00179	mg/L	0.000636	0.00179	mg/L	0.000636	35.47%
Sb 206.836†	0.3	-0.00007	mg/L	0.000593	-0.00007	mg/L	0.000593	836.35%
Se 196.026†	9.9	0.00197	mg/L	0.007406	0.00197	mg/L	0.007406	375.14%
Si 251.611†	207211.8	5.32	mg/L	0.112	5.32	mg/L	0.112	2.11%
Sn 189.927†	-249.7	-0.0280	mg/L	0.00155	-0.0280	mg/L	0.00155	5.54%
Ti 334.940†	-12404.9	-0.00346	mg/L	0.000567	-0.00346	mg/L	0.000567	16.39%
Tl 190.801†	-34.0	-0.0132	mg/L	0.00091	-0.0132	mg/L	0.00091	6.89%
V 290.880†	1518.8	0.00422	mg/L	0.003421	0.00422	mg/L	0.003421	81.01%
Zn 206.200†	152.6	0.00103	mg/L	0.000339	0.00103	mg/L	0.000339	32.90%
K 766.490†	2369.1	0.664	mg/L	0.0173	0.664	mg/L	0.0173	2.61%
Na 589.592†	2137195.7	134	mg/L	2.8	134	mg/L	2.8	2.05%
Sr 407.771†	1228068.7	0.568	mg/L	0.0084	0.568	mg/L	0.0084	1.49%
Li 670.784†	1579.3	0.00819	mg/L	0.000434	0.00819	mg/L	0.000434	5.30%

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Sequence No.: 22 **Autosampler Location: 44**
Sample ID: L1204092805 **Date Collected: 5/3/2012 4:32:07 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092805

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1204092805

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1799530.0						9694.45	0.54%
YRADIAL	241181.1						3141.14	1.30%
Ga 417.206	1161887.8						49907.53	4.30%
GaRADIAL	74142.4						737.23	0.99%
Ag 328.068†	-6083.8	0.00185	mg/L	0.000534	0.00185	mg/L	0.000534	28.80%
Al 396.153†	333347.0	53.8	mg/L	0.24	53.8	mg/L	0.24	0.44%
As 188.979†	122.6	0.0503	mg/L	0.00679	0.0503	mg/L	0.00679	13.50%
Ba 233.527†	55494.4	0.369	mg/L	0.0009	0.369	mg/L	0.0009	0.25%
Be 234.861†	15188.7	0.00154	mg/L	0.000483	0.00154	mg/L	0.000483	31.25%
B 249.677†	38256.6	0.460	mg/L	0.0171	0.460	mg/L	0.0171	3.71%
Ca 227.546†	24582.5	57.6	mg/L	2.66	57.6	mg/L	2.66	4.61%
Cd 228.802†	7357.5	0.135	mg/L	0.0061	0.135	mg/L	0.0061	4.50%
Co 228.616†	936.6	0.0216	mg/L	0.00039	0.0216	mg/L	0.00039	1.78%
Cr 267.716†	66012.7	0.655	mg/L	0.0032	0.655	mg/L	0.0032	0.48%
Cu 327.393†	88732.6	0.380	mg/L	0.0124	0.380	mg/L	0.0124	3.27%
Fe 239.562†	721289.7	49.5	mg/L	0.25	49.5	mg/L	0.25	0.51%
Mg 279.077†	88028.1	27.6	mg/L	0.17	27.6	mg/L	0.17	0.63%
Mn 257.610†	378226.9	0.484	mg/L	0.0030	0.484	mg/L	0.0030	0.62%
Mo 202.031†	3612.1	0.107	mg/L	0.0006	0.107	mg/L	0.0006	0.59%
Ni 231.604†	6639.5	0.104	mg/L	0.0005	0.104	mg/L	0.0005	0.44%
Pb 220.353†	7345.4	0.709	mg/L	0.0032	0.709	mg/L	0.0032	0.45%
Sb 206.836†	75.0	0.0158	mg/L	0.00204	0.0158	mg/L	0.00204	12.89%
Se 196.026†	-11.1	0.00339	mg/L	0.004290	0.00339	mg/L	0.004290	126.45%
Si 251.611†	3261122.7	83.8	mg/L	2.45	83.8	mg/L	2.45	2.93%
Sn 189.927†	1715.9	0.174	mg/L	0.0010	0.174	mg/L	0.0010	0.55%
Ti 334.940†	1154003.0	1.26	mg/L	0.004	1.26	mg/L	0.004	0.32%
Tl 190.801†	-97.8	-0.0138	mg/L	0.00359	-0.0138	mg/L	0.00359	25.96%
V 290.880†	52623.7	0.280	mg/L	0.0046	0.280	mg/L	0.0046	1.66%
Zn 206.200†	316858.3	7.70	mg/L	0.041	7.70	mg/L	0.041	0.53%
K 766.490†	79067.8	28.8	mg/L	0.23	28.8	mg/L	0.23	0.81%
Na 589.592†	Saturated2							
Sr 407.771†	2402722.8	1.11	mg/L	0.019	1.11	mg/L	0.019	1.73%
Li 670.784†	11741.3	0.0888	mg/L	0.00056	0.0888	mg/L	0.00056	0.63%

Sequence No.: 23 **Autosampler Location: 45**
Sample ID: L1204092806 **Date Collected: 5/3/2012 4:38:09 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092806

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092806

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1804720.6						31429.15	1.74%
YRADIAL	247623.8						2310.99	0.93%
Ga 417.206	1178632.1						23071.61	1.96%
GaRADIAL	75507.5						1383.22	1.83%
Ag 328.068†	-4721.9	0.00147	mg/L	0.000883	0.00147	mg/L	0.000883	60.14%
Al 396.153†	270605.3	43.7	mg/L	1.01	43.7	mg/L	1.01	2.30%

Approved: May 04, 2012

Kym H. Rhoden

As 188.979†	112.6	0.0454	mg/L	0.00257	0.0454	mg/L	0.00257 5.66%
Ba 233.527†	47404.1	0.315	mg/L	0.0087	0.315	mg/L	0.0087 2.76%
Be 234.861†	12277.1	0.00161	mg/L	0.000282	0.00161	mg/L	0.000282 17.46%
B 249.677†	35234.9	0.427	mg/L	0.0102	0.427	mg/L	0.0102 2.38%
Ca 227.546†	20712.8	48.4	mg/L	1.09	48.4	mg/L	1.09 2.25%
Cd 228.802†	5567.3	0.102	mg/L	0.0018	0.102	mg/L	0.0018 1.76%
Co 228.616†	767.7	0.0175	mg/L	0.00054	0.0175	mg/L	0.00054 3.07%
Cr 267.716†	59148.5	0.587	mg/L	0.0120	0.587	mg/L	0.0120 2.04%
Cu 327.393†	67197.6	0.288	mg/L	0.0069	0.288	mg/L	0.0069 2.41%
Fe 239.562†	559684.6	38.4	mg/L	0.63	38.4	mg/L	0.63 1.64%
Mg 279.077†	74777.5	23.4	mg/L	0.03	23.4	mg/L	0.03 0.11%
Mn 257.610†	304375.6	0.389	mg/L	0.0099	0.389	mg/L	0.0099 2.54%
Mo 202.031†	3490.8	0.103	mg/L	0.0021	0.103	mg/L	0.0021 2.05%
Ni 231.604†	5654.2	0.0882	mg/L	0.00129	0.0882	mg/L	0.00129 1.46%
Pb 220.353†	5683.4	0.549	mg/L	0.0122	0.549	mg/L	0.0122 2.23%
Sb 206.836†	69.4	0.0145	mg/L	0.00199	0.0145	mg/L	0.00199 13.73%
Se 196.026†	-1.7	0.00598	mg/L	0.004415	0.00598	mg/L	0.004415 73.76%
Si 251.611†	2768390.3	71.1	mg/L	0.90	71.1	mg/L	0.90 1.27%
Sn 189.927†	1501.6	0.152	mg/L	0.0043	0.152	mg/L	0.0043 2.84%
Ti 334.940†	1036827.7	1.13	mg/L	0.004	1.13	mg/L	0.004 0.38%
Tl 190.801†	-97.1	-0.0154	mg/L	0.00470	-0.0154	mg/L	0.00470 30.49%
V 290.880†	47276.3	0.252	mg/L	0.0077	0.252	mg/L	0.0077 3.06%
Zn 206.200†	244833.9	5.95	mg/L	0.122	5.95	mg/L	0.122 2.04%
K 766.490†	70691.4	25.7	mg/L	0.21	25.7	mg/L	0.21 0.81%
Na 589.592†	Saturated2						
Sr 407.771†	2010592.0	0.931	mg/L	0.0149	0.931	mg/L	0.0149 1.60%
Li 670.784†	9625.3	0.0720	mg/L	0.00090	0.0720	mg/L	0.00090 1.25%

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Sequence No.: 24 **Autosampler Location: 46**
Sample ID: L1204092805 0.1 **Date Collected: 5/3/2012 4:44:11 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092805 0.1

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092805 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1965248.2						21758.81	1.11%
YRADIAL	249358.7						5151.49	2.07%
Ga 417.206	1292045.5						47414.46	3.67%
GaRADIAL	77803.2						1326.55	1.71%
Ag 328.068†	-689.1	-0.00005	mg/L	0.000231	-0.00005	mg/L	0.000231	427.48%
Al 396.153†	33581.2	5.41	mg/L	0.124	5.41	mg/L	0.124	2.29%
As 188.979†	13.2	0.00452	mg/L	0.003374	0.00452	mg/L	0.003374	74.66%
Ba 233.527†	5835.3	0.0370	mg/L	0.00093	0.0370	mg/L	0.00093	2.50%
Be 234.861†	1824.6	0.00035	mg/L	0.000063	0.00035	mg/L	0.000063	17.78%
B 249.677†	4016.7	0.0502	mg/L	0.00175	0.0502	mg/L	0.00175	3.48%
Ca 227.546†	2308.0	5.47	mg/L	0.228	5.47	mg/L	0.228	4.17%
Cd 228.802†	717.9	0.0132	mg/L	0.00073	0.0132	mg/L	0.00073	5.55%
Co 228.616†	116.7	0.00233	mg/L	0.000437	0.00233	mg/L	0.000437	18.77%
Cr 267.716†	7001.2	0.0689	mg/L	0.00196	0.0689	mg/L	0.00196	2.85%
Cu 327.393†	8796.6	0.0378	mg/L	0.00248	0.0378	mg/L	0.00248	6.57%
Fe 239.562†	75783.2	5.20	mg/L	0.086	5.20	mg/L	0.086	1.64%
Mg 279.077†	9239.6	2.90	mg/L	0.031	2.90	mg/L	0.031	1.09%
Mn 257.610†	39711.9	0.0492	mg/L	0.00068	0.0492	mg/L	0.00068	1.37%
Mo 202.031†	399.7	0.0115	mg/L	0.00020	0.0115	mg/L	0.00020	1.69%
Ni 231.604†	757.8	0.0106	mg/L	0.00072	0.0106	mg/L	0.00072	6.74%
Pb 220.353†	803.3	0.0768	mg/L	0.00254	0.0768	mg/L	0.00254	3.30%
Sb 206.836†	4.2	0.00059	mg/L	0.001272	0.00059	mg/L	0.001272	216.88%
Se 196.026†	-3.4	-0.00474	mg/L	0.001655	-0.00474	mg/L	0.001655	34.87%
Si 251.611†	322074.3	8.27	mg/L	0.162	8.27	mg/L	0.162	1.96%
Sn 189.927†	165.9	0.0148	mg/L	0.00056	0.0148	mg/L	0.00056	3.78%
Ti 334.940†	124190.2	0.136	mg/L	0.0030	0.136	mg/L	0.0030	2.19%
Tl 190.801†	0.5	-0.00167	mg/L	0.002912	-0.00167	mg/L	0.002912	173.95%
V 290.880†	6952.5	0.0343	mg/L	0.00253	0.0343	mg/L	0.00253	7.37%

Approved: May 04, 2012

Zn 206.200†	33085.2	0.802	mg/L	0.0119	0.802	mg/L	0.0119 1.48%
K 766.490†	7928.0	2.63	mg/L	0.090	2.63	mg/L	0.090 3.41%
Na 589.592†	2893936.4	185	mg/L	2.0	185	mg/L	2.0 1.06%
Sr 407.771†	249543.7	0.115	mg/L	0.0004	0.115	mg/L	0.0004 0.32%
Li 670.784†	1346.3	0.00634	mg/L	0.000892	0.00634	mg/L	0.000892 14.07%

Sequence No.: 25 **Autosampler Location: 47**
Sample ID: L1204092806 0.1 **Date Collected: 5/3/2012 4:50:12 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092806 0.1

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092806 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1961940.5						21762.62	1.11%
YRADIAL	244782.6						1910.63	0.78%
Ga 417.206	1277402.6						20468.58	1.60%
GaRADIAL	76120.9						890.92	1.17%
Ag 328.068†	-509.8	0.00014	mg/L	0.000428	0.00014	mg/L	0.000428	299.25%
Al 396.153†	28246.4	4.55	mg/L	0.058	4.55	mg/L	0.058	1.29%
As 188.979†	12.7	0.00427	mg/L	0.003207	0.00427	mg/L	0.003207	75.10%
Ba 233.527†	5111.9	0.0322	mg/L	0.00017	0.0322	mg/L	0.00017	0.54%
Be 234.861†	1504.9	0.00029	mg/L	0.000037	0.00029	mg/L	0.000037	12.89%
B 249.677†	3585.4	0.0452	mg/L	0.00096	0.0452	mg/L	0.00096	2.12%
Ca 227.546†	1994.7	4.73	mg/L	0.107	4.73	mg/L	0.107	2.27%
Cd 228.802†	560.3	0.0103	mg/L	0.00035	0.0103	mg/L	0.00035	3.44%
Co 228.616†	94.4	0.00176	mg/L	0.000384	0.00176	mg/L	0.000384	21.82%
Cr 267.716†	6244.4	0.0614	mg/L	0.00039	0.0614	mg/L	0.00039	0.64%
Cu 327.393†	6784.1	0.0292	mg/L	0.00099	0.0292	mg/L	0.00099	3.40%
Fe 239.562†	62737.9	4.31	mg/L	0.047	4.31	mg/L	0.047	1.09%
Mg 279.077†	8119.3	2.55	mg/L	0.020	2.55	mg/L	0.020	0.79%
Mn 257.610†	31990.3	0.0393	mg/L	0.00062	0.0393	mg/L	0.00062	1.58%
Mo 202.031†	376.0	0.0108	mg/L	0.00044	0.0108	mg/L	0.00044	4.04%
Ni 231.604†	654.5	0.00900	mg/L	0.000214	0.00900	mg/L	0.000214	2.38%
Pb 220.353†	620.2	0.0592	mg/L	0.00090	0.0592	mg/L	0.00090	1.51%
Sb 206.836†	6.2	0.00114	mg/L	0.001172	0.00114	mg/L	0.001172	103.19%
Se 196.026†	-1.1	-0.00354	mg/L	0.004494	-0.00354	mg/L	0.004494	126.82%
Si 251.611†	277243.9	7.12	mg/L	0.128	7.12	mg/L	0.128	1.80%
Sn 189.927†	141.7	0.0123	mg/L	0.00088	0.0123	mg/L	0.00088	7.13%
Ti 334.940†	110141.9	0.120	mg/L	0.0009	0.120	mg/L	0.0009	0.77%
Tl 190.801†	-7.6	-0.00413	mg/L	0.001690	-0.00413	mg/L	0.001690	40.96%
V 290.880†	6254.5	0.0306	mg/L	0.00157	0.0306	mg/L	0.00157	5.14%
Zn 206.200†	26029.0	0.630	mg/L	0.0116	0.630	mg/L	0.0116	1.84%
K 766.490†	7139.1	2.35	mg/L	0.031	2.35	mg/L	0.031	1.31%
Na 589.592†	2764187.2	176	mg/L	0.2	176	mg/L	0.2	0.13%
Sr 407.771†	219188.0	0.101	mg/L	0.0005	0.101	mg/L	0.0005	0.48%
Li 670.784†	1114.2	0.00450	mg/L	0.000438	0.00450	mg/L	0.000438	9.72%

Sequence No.: 26 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 4:56:10 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

Approved: May 04, 2012

Y 371.029	1942306.9				23215.51	1.20%
YRADIAL	250203.0				4113.28	1.64%
Ga 417.206	1195942.5				51372.06	4.30%
GaRADIAL	76344.0				1162.11	1.52%
Ag 328.068†	117272.0	0.394 mg/L	0.0199	0.394 mg/L	0.0199	5.04%
QC value within limits for Ag 328.068 Recovery = 98.54%						
Al 396.153†	61983.5	9.93 mg/L	0.030	9.93 mg/L	0.030	0.30%
QC value within limits for Al 396.153 Recovery = 99.27%						
As 188.979†	1021.1	0.385 mg/L	0.0142	0.385 mg/L	0.0142	3.70%
QC value within limits for As 188.979 Recovery = 96.26%						
Ba 233.527†	150891.1	1.01 mg/L	0.013	1.01 mg/L	0.013	1.28%
QC value within limits for Ba 233.527 Recovery = 101.09%						
Be 234.861†	59158.4	0.0482 mg/L	0.00210	0.0482 mg/L	0.00210	4.36%
QC value within limits for Be 234.861 Recovery = 96.40%						
B 249.677†	39347.9	0.495 mg/L	0.0246	0.495 mg/L	0.0246	4.97%
QC value within limits for B 249.677 Recovery = 99.03%						
Ca 227.546†	4156.5	10.0 mg/L	0.45	10.0 mg/L	0.45	4.49%
QC value within limits for Ca 227.546 Recovery = 100.30%						
Cd 228.802†	2646.5	0.0474 mg/L	0.00271	0.0474 mg/L	0.00271	5.73%
QC value within limits for Cd 228.802 Recovery = 94.70%						
Co 228.616†	7294.7	0.201 mg/L	0.0008	0.201 mg/L	0.0008	0.41%
QC value within limits for Co 228.616 Recovery = 100.67%						
Cr 267.716†	51182.0	0.507 mg/L	0.0090	0.507 mg/L	0.0090	1.77%
QC value within limits for Cr 267.716 Recovery = 101.46%						
Cu 327.393†	120320.7	0.508 mg/L	0.0271	0.508 mg/L	0.0271	5.33%
QC value within limits for Cu 327.393 Recovery = 101.61%						
Fe 239.562†	57174.0	3.93 mg/L	0.025	3.93 mg/L	0.025	0.64%
QC value within limits for Fe 239.562 Recovery = 98.14%						
Mg 279.077†	31639.1	9.93 mg/L	0.085	9.93 mg/L	0.085	0.86%
QC value within limits for Mg 279.077 Recovery = 99.30%						
Mn 257.610†	400829.7	0.511 mg/L	0.0053	0.511 mg/L	0.0053	1.04%
QC value within limits for Mn 257.610 Recovery = 102.21%						
Mo 202.031†	34531.5	0.997 mg/L	0.0128	0.997 mg/L	0.0128	1.29%
QC value within limits for Mo 202.031 Recovery = 99.74%						
Ni 231.604†	32213.3	0.509 mg/L	0.0041	0.509 mg/L	0.0041	0.81%
QC value within limits for Ni 231.604 Recovery = 101.77%						
Pb 220.353†	5291.0	0.508 mg/L	0.0043	0.508 mg/L	0.0043	0.85%
QC value within limits for Pb 220.353 Recovery = 101.67%						
Sb 206.836†	4543.6	1.16 mg/L	0.050	1.16 mg/L	0.050	4.28%
QC value within limits for Sb 206.836 Recovery = 96.57%						
Se 196.026†	641.8	0.393 mg/L	0.0183	0.393 mg/L	0.0183	4.66%
QC value within limits for Se 196.026 Recovery = 98.37%						
Si 251.611†	195412.2	5.00 mg/L	0.223	5.00 mg/L	0.223	4.45%
QC value within limits for Si 251.611 Recovery = 100.04%						
Sn 189.927†	9929.1	1.02 mg/L	0.004	1.02 mg/L	0.004	0.40%
QC value within limits for Sn 189.927 Recovery = 102.01%						
Ti 334.940†	900207.1	0.980 mg/L	0.0003	0.980 mg/L	0.0003	0.03%
QC value within limits for Ti 334.940 Recovery = 98.02%						
Tl 190.801†	1838.9	0.519 mg/L	0.0081	0.519 mg/L	0.0081	1.57%
QC value within limits for Tl 190.801 Recovery = 103.77%						
V 290.880†	183262.5	1.01 mg/L	0.027	1.01 mg/L	0.027	2.63%
QC value within limits for V 290.880 Recovery = 101.19%						
Zn 206.200†	41225.2	1.00 mg/L	0.010	1.00 mg/L	0.010	0.95%
QC value within limits for Zn 206.200 Recovery = 100.37%						
K 766.490†	137732.5	50.4 mg/L	0.64	50.4 mg/L	0.64	1.26%
QC value within limits for K 766.490 Recovery = 100.79%						
Na 589.592†	822311.4	50.0 mg/L	1.53	50.0 mg/L	1.53	3.06%
QC value within limits for Na 589.592 Recovery = 99.95%						
Sr 407.771†	2213466.6	1.03 mg/L	0.030	1.03 mg/L	0.030	2.93%
QC value within limits for Sr 407.771 Recovery = 102.63%						
Li 670.784†	127727.7	1.01 mg/L	0.011	1.01 mg/L	0.011	1.12%
QC value within limits for Li 670.784 Recovery = 100.92%						

All analyte(s) passed QC.

Sequence No.: 27 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 5:02:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 04, 2012

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	2001789.6						19743.73	0.99%
YRADIAL	243786.0						3469.56	1.42%
Ga 417.206	1237990.6						19480.55	1.57%
GaRADIAL	74777.3						2027.49	2.71%
Ag 328.068†	15.5	-0.00005	mg/L	0.000331	-0.00005	mg/L	0.000331	622.17%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-0.7	-0.0161	mg/L	0.00106	-0.0161	mg/L	0.00106	6.58%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.3	-0.00087	mg/L	0.000873	-0.00087	mg/L	0.000873	100.12%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-17.5	-0.00216	mg/L	0.000098	-0.00216	mg/L	0.000098	4.53%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	24.3	0.00002	mg/L	0.000006	0.00002	mg/L	0.000006	25.31%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	173.7	0.00435	mg/L	0.000320	0.00435	mg/L	0.000320	7.35%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.2	0.0563	mg/L	0.01345	0.0563	mg/L	0.01345	23.89%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	2.8	0.00002	mg/L	0.000178	0.00002	mg/L	0.000178	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	4.8	-0.00037	mg/L	0.000187	-0.00037	mg/L	0.000187	50.71%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	27.4	-0.00040	mg/L	0.000013	-0.00040	mg/L	0.000013	3.21%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	151.8	0.00074	mg/L	0.000233	0.00074	mg/L	0.000233	31.46%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	16.4	0.00038	mg/L	0.000367	0.00038	mg/L	0.000367	95.91%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	6.7	0.00644	mg/L	0.002520	0.00644	mg/L	0.002520	39.14%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-45.4	-0.00176	mg/L	0.000012	-0.00176	mg/L	0.000012	0.68%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	7.7	-0.00008	mg/L	0.000197	-0.00008	mg/L	0.000197	258.81%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-22.6	-0.00173	mg/L	0.000415	-0.00173	mg/L	0.000415	23.97%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.3	-0.00065	mg/L	0.000801	-0.00065	mg/L	0.000801	122.98%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.1	0.00014	mg/L	0.000230	0.00014	mg/L	0.000230	164.73%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.9	-0.00535	mg/L	0.001949	-0.00535	mg/L	0.001949	36.44%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	859.8	0.0130	mg/L	0.00115	0.0130	mg/L	0.00115	8.81%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	8.9	-0.00140	mg/L	0.001112	-0.00140	mg/L	0.001112	79.20%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-2.4	-0.00025	mg/L	0.000087	-0.00025	mg/L	0.000087	34.45%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.1	-0.00276	mg/L	0.000545	-0.00276	mg/L	0.000545	19.75%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	503.5	-0.00056	mg/L	0.001600	-0.00056	mg/L	0.001600	286.67%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	69.5	-0.00100	mg/L	0.000151	-0.00100	mg/L	0.000151	15.13%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	10.2	-0.0581	mg/L	0.01949	-0.0581	mg/L	0.01949	33.53%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	309.8	0.0146	mg/L	0.00358	0.0146	mg/L	0.00358	24.49%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	108.1	-0.00015	mg/L	0.000006	-0.00015	mg/L	0.000006	4.07%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	51.8	-0.00393	mg/L	0.000801	-0.00393	mg/L	0.000801	20.38%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: May 04, 2012

Sequence No.: 28 **Autosampler Location: 48**
Sample ID: L1204092808S WG396511-08 **Date Collected: 5/3/2012 5:09:05 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092808S WG396511-08

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092808S WG396511-08

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1862890.4						17492.35	0.94%
YRADIAL	242169.9						460.54	0.19%
Ga 417.206	1240086.8						17077.30	1.38%
GaRADIAL	77568.4						650.53	0.84%
Ag 328.068†	52152.3	0.187	mg/L	0.0049	0.187	mg/L	0.0049	2.62%
Al 396.153†	31198.4	4.99	mg/L	0.012	4.99	mg/L	0.012	0.25%
As 188.979†	474.0	0.181	mg/L	0.0027	0.181	mg/L	0.0027	1.52%
Ba 233.527†	105697.7	0.707	mg/L	0.0037	0.707	mg/L	0.0037	0.52%
Be 234.861†	35650.1	0.0231	mg/L	0.00055	0.0231	mg/L	0.00055	2.37%
B 249.677†	84776.8	1.06	mg/L	0.019	1.06	mg/L	0.019	1.84%
Ca 227.546†	112014.6	257	mg/L	6.8	257	mg/L	6.8	2.64%
Cd 228.802†	1222.8	0.0218	mg/L	0.00092	0.0218	mg/L	0.00092	4.24%
Co 228.616†	3472.0	0.0948	mg/L	0.00099	0.0948	mg/L	0.00099	1.05%
Cr 267.716†	25237.8	0.251	mg/L	0.0005	0.251	mg/L	0.0005	0.22%
Cu 327.393†	55271.9	0.236	mg/L	0.0045	0.236	mg/L	0.0045	1.89%
Fe 239.562†	446035.6	30.6	mg/L	0.10	30.6	mg/L	0.10	0.31%
Mg 279.077†	152432.6	47.7	mg/L	0.05	47.7	mg/L	0.05	0.10%
Mn 257.610†	3574783.1	4.57	mg/L	0.015	4.57	mg/L	0.015	0.34%
Mo 202.031†	17172.1	0.498	mg/L	0.0038	0.498	mg/L	0.0038	0.77%
Ni 231.604†	15508.8	0.244	mg/L	0.0021	0.244	mg/L	0.0021	0.85%
Pb 220.353†	2544.4	0.241	mg/L	0.0037	0.241	mg/L	0.0037	1.52%
Sb 206.836†	2103.8	0.538	mg/L	0.0122	0.538	mg/L	0.0122	2.27%
Se 196.026†	296.4	0.187	mg/L	0.0065	0.187	mg/L	0.0065	3.50%
Si 251.611†	614746.2	15.8	mg/L	0.30	15.8	mg/L	0.30	1.88%
Sn 189.927†	4908.2	0.503	mg/L	0.0032	0.503	mg/L	0.0032	0.65%
Ti 334.940†	408037.9	0.482	mg/L	0.0050	0.482	mg/L	0.0050	1.03%
Tl 190.801†	833.6	0.229	mg/L	0.0014	0.229	mg/L	0.0014	0.60%
V 290.880†	90532.8	0.493	mg/L	0.0058	0.493	mg/L	0.0058	1.18%
Zn 206.200†	19082.2	0.463	mg/L	0.0014	0.463	mg/L	0.0014	0.31%
K 766.490†	101433.5	36.9	mg/L	0.29	36.9	mg/L	0.29	0.79%
Na 589.592†	1817798.4	113	mg/L	2.9	113	mg/L	2.9	2.57%
Sr 407.771†	4531384.2	2.10	mg/L	0.047	2.10	mg/L	0.047	2.22%
Li 670.784†	65197.9	0.513	mg/L	0.0048	0.513	mg/L	0.0048	0.94%

Sequence No.: 29 **Autosampler Location: 49**
Sample ID: L1204092809S WG396511-10 **Date Collected: 5/3/2012 5:15:06 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092809S WG396511-10

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092809S WG396511-10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1873774.8						14624.00	0.78%
YRADIAL	238421.7						2412.64	1.01%
Ga 417.206	1245094.8						43772.27	3.52%
GaRADIAL	75403.3						812.57	1.08%
Ag 328.068†	52337.2	0.189	mg/L	0.0063	0.189	mg/L	0.0063	3.35%
Al 396.153†	30990.4	4.96	mg/L	0.013	4.96	mg/L	0.013	0.26%

Approved: May 04, 2012

As 188.979†	469.0	0.180	mg/L	0.0075	0.180	mg/L	0.0075	4.16%
Ba 233.527†	107090.6	0.716	mg/L	0.0034	0.716	mg/L	0.0034	0.48%
Be 234.861†	35876.5	0.0229	mg/L	0.00095	0.0229	mg/L	0.00095	4.13%
B 249.677†	85171.1	1.06	mg/L	0.032	1.06	mg/L	0.032	3.00%
Ca 227.546†	115769.9	266	mg/L	9.9	266	mg/L	9.9	3.71%
Cd 228.802†	1206.8	0.0215	mg/L	0.00128	0.0215	mg/L	0.00128	5.96%
Co 228.616†	3429.0	0.0936	mg/L	0.00077	0.0936	mg/L	0.00077	0.82%
Cr 267.716†	24364.6	0.242	mg/L	0.0016	0.242	mg/L	0.0016	0.65%
Cu 327.393†	55386.0	0.237	mg/L	0.0067	0.237	mg/L	0.0067	2.82%
Fe 239.562†	477755.7	32.8	mg/L	0.16	32.8	mg/L	0.16	0.47%
Mg 279.077†	146670.6	45.9	mg/L	0.34	45.9	mg/L	0.34	0.73%
Mn 257.610†	4317998.9	5.52	mg/L	0.006	5.52	mg/L	0.006	0.11%
Mo 202.031†	16798.6	0.488	mg/L	0.0027	0.488	mg/L	0.0027	0.56%
Ni 231.604†	15655.4	0.247	mg/L	0.0024	0.247	mg/L	0.0024	0.96%
Pb 220.353†	2530.3	0.239	mg/L	0.0013	0.239	mg/L	0.0013	0.55%
Sb 206.836†	2102.1	0.537	mg/L	0.0208	0.537	mg/L	0.0208	3.87%
Se 196.026†	295.3	0.187	mg/L	0.0099	0.187	mg/L	0.0099	5.28%
Si 251.611†	648287.1	16.6	mg/L	0.35	16.6	mg/L	0.35	2.11%
Sn 189.927†	4854.6	0.498	mg/L	0.0059	0.498	mg/L	0.0059	1.19%
Ti 334.940†	407463.6	0.483	mg/L	0.0050	0.483	mg/L	0.0050	1.04%
Tl 190.801†	817.2	0.224	mg/L	0.0031	0.224	mg/L	0.0031	1.38%
V 290.880†	90944.0	0.494	mg/L	0.0063	0.494	mg/L	0.0063	1.28%
Zn 206.200†	18544.5	0.450	mg/L	0.0043	0.450	mg/L	0.0043	0.96%
K 766.490†	104789.9	38.1	mg/L	0.12	38.1	mg/L	0.12	0.31%
Na 589.592†	2025140.0	127	mg/L	2.6	127	mg/L	2.6	2.02%
Sr 407.771†	4730845.4	2.19	mg/L	0.054	2.19	mg/L	0.054	2.45%
Li 670.784†	67083.0	0.528	mg/L	0.0039	0.528	mg/L	0.0039	0.74%

Sequence No.: 30 **Autosampler Location: 50**
Sample ID: L1204092810SD WG396511-09 **Date Collected: 5/3/2012 5:21:06 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092810SD WG396511-09

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092810SD WG396511-09

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1864516.8						14290.55	0.77%
YRADIAL	240667.1						3757.61	1.56%
Ga 417.206	1245964.6						30880.05	2.48%
GaRADIAL	76879.6						339.98	0.44%
Ag 328.068†	52222.9	0.189	mg/L	0.0056	0.189	mg/L	0.0056	2.99%
Al 396.153†	31703.7	5.07	mg/L	0.004	5.07	mg/L	0.004	0.08%
As 188.979†	474.7	0.182	mg/L	0.0037	0.182	mg/L	0.0037	2.01%
Ba 233.527†	108517.2	0.726	mg/L	0.0071	0.726	mg/L	0.0071	0.99%
Be 234.861†	36461.1	0.0230	mg/L	0.00054	0.0230	mg/L	0.00054	2.34%
B 249.677†	86204.5	1.07	mg/L	0.031	1.07	mg/L	0.031	2.92%
Ca 227.546†	116968.2	269	mg/L	7.9	269	mg/L	7.9	2.95%
Cd 228.802†	1223.8	0.0218	mg/L	0.00108	0.0218	mg/L	0.00108	4.95%
Co 228.616†	3490.3	0.0952	mg/L	0.00064	0.0952	mg/L	0.00064	0.67%
Cr 267.716†	25417.6	0.253	mg/L	0.0009	0.253	mg/L	0.0009	0.35%
Cu 327.393†	56280.3	0.240	mg/L	0.0063	0.240	mg/L	0.0063	2.60%
Fe 239.562†	501928.5	34.5	mg/L	0.12	34.5	mg/L	0.12	0.34%
Mg 279.077†	152863.3	47.9	mg/L	0.09	47.9	mg/L	0.09	0.19%
Mn 257.610†	4204940.5	5.37	mg/L	0.058	5.37	mg/L	0.058	1.08%
Mo 202.031†	17300.2	0.502	mg/L	0.0026	0.502	mg/L	0.0026	0.52%
Ni 231.604†	15654.9	0.247	mg/L	0.0008	0.247	mg/L	0.0008	0.32%
Pb 220.353†	2541.0	0.240	mg/L	0.0020	0.240	mg/L	0.0020	0.85%
Sb 206.836†	2105.2	0.538	mg/L	0.0162	0.538	mg/L	0.0162	3.01%
Se 196.026†	307.4	0.195	mg/L	0.0037	0.195	mg/L	0.0037	1.90%
Si 251.611†	643974.0	16.5	mg/L	0.40	16.5	mg/L	0.40	2.44%
Sn 189.927†	5022.1	0.515	mg/L	0.0031	0.515	mg/L	0.0031	0.61%
Ti 334.940†	413010.8	0.489	mg/L	0.0031	0.489	mg/L	0.0031	0.63%
Tl 190.801†	844.8	0.231	mg/L	0.0046	0.231	mg/L	0.0046	1.97%
V 290.880†	91767.1	0.499	mg/L	0.0059	0.499	mg/L	0.0059	1.18%

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Zn 206.200†	19201.3	0.466	mg/L	0.0008	0.466	mg/L	0.0008	0.17%
K 766.490†	104135.9	37.9	mg/L	0.24	37.9	mg/L	0.24	0.63%
Na 589.592†	2014141.6	126	mg/L	2.0	126	mg/L	2.0	1.61%
Sr 407.771†	4667032.5	2.16	mg/L	0.069	2.16	mg/L	0.069	3.20%
Li 670.784†	66969.5	0.527	mg/L	0.0015	0.527	mg/L	0.0015	0.29%

Sequence No.: 31 **Autosampler Location: 51**
Sample ID: L1204092811SD WG396511-11 **Date Collected: 5/3/2012 5:27:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092811SD WG396511-11

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092811SD WG396511-11

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1860080.2						25939.78	1.39%
YRADIAL	238871.0						4255.95	1.78%
Ga 417.206	1220839.1						42794.76	3.51%
GaRADIAL	76034.7						597.46	0.79%
Ag 328.068†	53991.3	0.195	mg/L	0.0058	0.195	mg/L	0.0058	3.00%
Al 396.153†	31820.6	5.09	mg/L	0.032	5.09	mg/L	0.032	0.64%
As 188.979†	485.4	0.186	mg/L	0.0080	0.186	mg/L	0.0080	4.31%
Ba 233.527†	110068.0	0.736	mg/L	0.0003	0.736	mg/L	0.0003	0.05%
Be 234.861†	37102.8	0.0237	mg/L	0.00053	0.0237	mg/L	0.00053	2.24%
B 249.677†	88388.4	1.10	mg/L	0.024	1.10	mg/L	0.024	2.16%
Ca 227.546†	120488.5	277	mg/L	6.7	277	mg/L	6.7	2.43%
Cd 228.802†	1259.3	0.0225	mg/L	0.00132	0.0225	mg/L	0.00132	5.86%
Co 228.616†	3504.8	0.0956	mg/L	0.00110	0.0956	mg/L	0.00110	1.15%
Cr 267.716†	25690.4	0.255	mg/L	0.0045	0.255	mg/L	0.0045	1.78%
Cu 327.393†	57468.0	0.245	mg/L	0.0050	0.245	mg/L	0.0050	2.05%
Fe 239.562†	491755.8	33.8	mg/L	0.21	33.8	mg/L	0.21	0.63%
Mg 279.077†	152526.8	47.8	mg/L	0.51	47.8	mg/L	0.51	1.07%
Mn 257.610†	4445737.3	5.68	mg/L	0.029	5.68	mg/L	0.029	0.51%
Mo 202.031†	17452.9	0.507	mg/L	0.0065	0.507	mg/L	0.0065	1.29%
Ni 231.604†	15751.8	0.248	mg/L	0.0029	0.248	mg/L	0.0029	1.18%
Pb 220.353†	2582.6	0.244	mg/L	0.0017	0.244	mg/L	0.0017	0.70%
Sb 206.836†	2184.7	0.558	mg/L	0.0216	0.558	mg/L	0.0216	3.88%
Se 196.026†	314.9	0.199	mg/L	0.0013	0.199	mg/L	0.0013	0.63%
Si 251.611†	676265.7	17.4	mg/L	0.29	17.4	mg/L	0.29	1.66%
Sn 189.927†	5040.0	0.517	mg/L	0.0072	0.517	mg/L	0.0072	1.40%
Ti 334.940†	416011.1	0.494	mg/L	0.0043	0.494	mg/L	0.0043	0.86%
Tl 190.801†	823.4	0.225	mg/L	0.0023	0.225	mg/L	0.0023	1.02%
V 290.880†	92474.3	0.503	mg/L	0.0068	0.503	mg/L	0.0068	1.35%
Zn 206.200†	19364.2	0.470	mg/L	0.0081	0.470	mg/L	0.0081	1.72%
K 766.490†	107831.0	39.3	mg/L	0.23	39.3	mg/L	0.23	0.59%
Na 589.592†	2086532.2	131	mg/L	3.3	131	mg/L	3.3	2.49%
Sr 407.771†	4873599.3	2.25	mg/L	0.097	2.25	mg/L	0.097	4.29%
Li 670.784†	68431.8	0.539	mg/L	0.0048	0.539	mg/L	0.0048	0.90%

Sequence No.: 32 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 5:33:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: May 04, 2012

Y 371.029	1993017.9				17657.16	0.89%
YRADIAL	247972.0				2945.10	1.19%
Ga 417.206	1206537.3				42534.83	3.53%
GaRADIAL	75860.6				758.00	1.00%
Ag 328.068†	116203.1	0.391 mg/L	0.0166	0.391 mg/L	0.0166	4.24%
QC value within limits for Ag 328.068 Recovery = 97.63%						
Al 396.153†	61330.0	9.82 mg/L	0.004	9.82 mg/L	0.004	0.04%
QC value within limits for Al 396.153 Recovery = 98.23%						
As 188.979†	1020.4	0.385 mg/L	0.0137	0.385 mg/L	0.0137	3.57%
QC value within limits for As 188.979 Recovery = 96.22%						
Ba 233.527†	147278.8	0.987 mg/L	0.0085	0.987 mg/L	0.0085	0.86%
QC value within limits for Ba 233.527 Recovery = 98.66%						
Be 234.861†	58806.9	0.0479 mg/L	0.00187	0.0479 mg/L	0.00187	3.90%
QC value within limits for Be 234.861 Recovery = 95.82%						
B 249.677†	39578.4	0.498 mg/L	0.0216	0.498 mg/L	0.0216	4.33%
QC value within limits for B 249.677 Recovery = 99.62%						
Ca 227.546†	4132.8	9.97 mg/L	0.362	9.97 mg/L	0.362	3.63%
QC value within limits for Ca 227.546 Recovery = 99.68%						
Cd 228.802†	2641.6	0.0472 mg/L	0.00261	0.0472 mg/L	0.00261	5.52%
QC value within limits for Cd 228.802 Recovery = 94.50%						
Co 228.616†	7113.6	0.196 mg/L	0.0014	0.196 mg/L	0.0014	0.73%
QC value within limits for Co 228.616 Recovery = 98.16%						
Cr 267.716†	50063.6	0.496 mg/L	0.0089	0.496 mg/L	0.0089	1.80%
QC value within limits for Cr 267.716 Recovery = 99.24%						
Cu 327.393†	119032.7	0.503 mg/L	0.0211	0.503 mg/L	0.0211	4.19%
QC value within limits for Cu 327.393 Recovery = 100.52%						
Fe 239.562†	56937.7	3.91 mg/L	0.029	3.91 mg/L	0.029	0.74%
QC value within limits for Fe 239.562 Recovery = 97.74%						
Mg 279.077†	31542.0	9.90 mg/L	0.075	9.90 mg/L	0.075	0.76%
QC value within limits for Mg 279.077 Recovery = 98.99%						
Mn 257.610†	391823.1	0.500 mg/L	0.0045	0.500 mg/L	0.0045	0.89%
QC value within limits for Mn 257.610 Recovery = 99.91%						
Mo 202.031†	33896.2	0.979 mg/L	0.0116	0.979 mg/L	0.0116	1.19%
QC value within limits for Mo 202.031 Recovery = 97.90%						
Ni 231.604†	31571.7	0.499 mg/L	0.0048	0.499 mg/L	0.0048	0.97%
QC value within limits for Ni 231.604 Recovery = 99.74%						
Pb 220.353†	5153.1	0.495 mg/L	0.0043	0.495 mg/L	0.0043	0.87%
QC value within limits for Pb 220.353 Recovery = 99.02%						
Sb 206.836†	4515.7	1.15 mg/L	0.047	1.15 mg/L	0.047	4.06%
QC value within limits for Sb 206.836 Recovery = 95.98%						
Se 196.026†	638.9	0.392 mg/L	0.0151	0.392 mg/L	0.0151	3.85%
QC value within limits for Se 196.026 Recovery = 97.92%						
Si 251.611†	191733.6	4.91 mg/L	0.178	4.91 mg/L	0.178	3.63%
QC value within limits for Si 251.611 Recovery = 98.15%						
Sn 189.927†	9612.2	0.988 mg/L	0.0064	0.988 mg/L	0.0064	0.65%
QC value within limits for Sn 189.927 Recovery = 98.75%						
Ti 334.940†	886576.2	0.965 mg/L	0.0015	0.965 mg/L	0.0015	0.16%
QC value within limits for Ti 334.940 Recovery = 96.53%						
Tl 190.801†	1802.7	0.509 mg/L	0.0099	0.509 mg/L	0.0099	1.95%
QC value within limits for Tl 190.801 Recovery = 101.73%						
V 290.880†	178529.0	0.986 mg/L	0.0221	0.986 mg/L	0.0221	2.24%
QC value within limits for V 290.880 Recovery = 98.56%						
Zn 206.200†	40384.5	0.983 mg/L	0.0102	0.983 mg/L	0.0102	1.04%
QC value within limits for Zn 206.200 Recovery = 98.32%						
K 766.490†	135508.8	49.6 mg/L	0.22	49.6 mg/L	0.22	0.45%
QC value within limits for K 766.490 Recovery = 99.14%						
Na 589.592†	822055.0	50.0 mg/L	1.95	50.0 mg/L	1.95	3.90%
QC value within limits for Na 589.592 Recovery = 99.92%						
Sr 407.771†	2209006.1	1.02 mg/L	0.048	1.02 mg/L	0.048	4.66%
QC value within limits for Sr 407.771 Recovery = 102.42%						
Li 670.784†	124589.7	0.984 mg/L	0.0155	0.984 mg/L	0.0155	1.58%
QC value within limits for Li 670.784 Recovery = 98.43%						

All analyte(s) passed QC.

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Sequence No.: 33 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 5:39:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 04, 2012

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	2029197.9						42760.86	2.11%
YRADIAL	248415.5						2626.73	1.06%
Ga 417.206	1251513.9						49373.09	3.95%
GaRADIAL	75522.4						2492.40	3.30%
Ag 328.068†	-76.6	-0.00036	mg/L	0.000125	-0.00036	mg/L	0.000125	34.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.8	-0.0155	mg/L	0.00180	-0.0155	mg/L	0.00180	11.62%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	3.3	0.00027	mg/L	0.001329	0.00027	mg/L	0.001329	488.89%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.7	-0.00203	mg/L	0.000108	-0.00203	mg/L	0.000108	5.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	40.8	0.00004	mg/L	0.000042	0.00004	mg/L	0.000042	110.91%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	279.7	0.00569	mg/L	0.000669	0.00569	mg/L	0.000669	11.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	10.0	0.0744	mg/L	0.00561	0.0744	mg/L	0.00561	7.54%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-3.6	-0.00011	mg/L	0.000167	-0.00011	mg/L	0.000167	152.14%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.1	-0.00041	mg/L	0.000248	-0.00041	mg/L	0.000248	59.82%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	17.1	-0.00050	mg/L	0.000014	-0.00050	mg/L	0.000014	2.78%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	188.9	0.00090	mg/L	0.000276	0.00090	mg/L	0.000276	30.71%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	25.8	0.00102	mg/L	0.000403	0.00102	mg/L	0.000403	39.38%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	16.7	0.00956	mg/L	0.001503	0.00956	mg/L	0.001503	15.73%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	27.4	-0.00166	mg/L	0.000023	-0.00166	mg/L	0.000023	1.39%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.1	-0.00012	mg/L	0.000364	-0.00012	mg/L	0.000364	296.87%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-12.8	-0.00158	mg/L	0.000260	-0.00158	mg/L	0.000260	16.51%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	2.8	-0.00042	mg/L	0.000803	-0.00042	mg/L	0.000803	192.05%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.8	0.00007	mg/L	0.001072	0.00007	mg/L	0.001072	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.3	-0.00272	mg/L	0.002769	-0.00272	mg/L	0.002769	101.99%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	318.1	-0.00092	mg/L	0.000911	-0.00092	mg/L	0.000911	99.42%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	8.9	-0.00140	mg/L	0.000493	-0.00140	mg/L	0.000493	35.11%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	117.2	-0.00012	mg/L	0.000189	-0.00012	mg/L	0.000189	157.56%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	5.1	-0.00223	mg/L	0.002783	-0.00223	mg/L	0.002783	124.96%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	480.0	-0.00069	mg/L	0.002681	-0.00069	mg/L	0.002681	388.90%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	79.0	-0.00077	mg/L	0.000232	-0.00077	mg/L	0.000232	30.13%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	4.6	-0.0602	mg/L	0.01770	-0.0602	mg/L	0.01770	29.42%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	349.4	0.0170	mg/L	0.00428	0.0170	mg/L	0.00428	25.23%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	297.2	-0.00006	mg/L	0.000040	-0.00006	mg/L	0.000040	68.97%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	87.6	-0.00365	mg/L	0.000417	-0.00365	mg/L	0.000417	11.42%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: May 04, 2012

Kym H. Rhoden

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Sequence No.: 34 **Autosampler Location:** 12
Sample ID: ICSA **Date Collected:** 5/3/2012 5:46:04 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1806477.6						16905.89	0.94%
YRADIAL	244301.9						3245.55	1.33%
Ga 417.206	1147872.1						45445.31	3.96%
GaRADIAL	75577.7						1573.29	2.08%
Ag 328.068†	-12430.2	-0.00103	mg/L	0.001140	-0.00103	mg/L	0.001140	110.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1540380.4	249	mg/L	6.0	249	mg/L	6.0	2.40%
QC value within limits for Al 396.153 Recovery = 99.52%								
As 188.979†	-13.7	-0.00027	mg/L	0.000726	-0.00027	mg/L	0.000726	264.46%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	711.5	0.00044	mg/L	0.000264	0.00044	mg/L	0.000264	59.53%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	24074.4	-0.00057	mg/L	0.000524	-0.00057	mg/L	0.000524	92.06%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	5280.5	0.0296	mg/L	0.00248	0.0296	mg/L	0.00248	8.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	110031.2	254	mg/L	10.3	254	mg/L	10.3	4.04%
QC value within limits for Ca 227.546 Recovery = 101.63%								
Cd 228.802†	5.4	-0.00008	mg/L	0.000306	-0.00008	mg/L	0.000306	373.36%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	19.1	-0.00228	mg/L	0.000293	-0.00228	mg/L	0.000293	12.85%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	107.0	-0.00110	mg/L	0.000459	-0.00110	mg/L	0.000459	41.72%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1220.1	0.00263	mg/L	0.000219	0.00263	mg/L	0.000219	8.33%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1329382.2	91.3	mg/L	1.96	91.3	mg/L	1.96	2.14%
QC value within limits for Fe 239.562 Recovery = 91.31%								
Mg 279.077†	792686.4	248	mg/L	5.1	248	mg/L	5.1	2.03%
QC value within limits for Mg 279.077 Recovery = 99.29%								
Mn 257.610†	-2343.9	-0.00213	mg/L	0.000543	-0.00213	mg/L	0.000543	25.48%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-66.2	0.00227	mg/L	0.000186	0.00227	mg/L	0.000186	8.17%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	34.8	-0.00082	mg/L	0.000571	-0.00082	mg/L	0.000571	69.90%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-371.9	-0.00121	mg/L	0.004322	-0.00121	mg/L	0.004322	358.02%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-27.8	-0.00389	mg/L	0.002823	-0.00389	mg/L	0.002823	72.59%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-43.2	-0.00664	mg/L	0.007750	-0.00664	mg/L	0.007750	116.80%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	6027.5	0.146	mg/L	0.0066	0.146	mg/L	0.0066	4.53%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-326.1	-0.0359	mg/L	0.00168	-0.0359	mg/L	0.00168	4.67%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-36368.5	-0.00203	mg/L	0.003064	-0.00203	mg/L	0.003064	150.63%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-47.0	-0.0103	mg/L	0.00321	-0.0103	mg/L	0.00321	31.07%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	4108.3	-0.00145	mg/L	0.002400	-0.00145	mg/L	0.002400	165.79%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	209.9	0.00068	mg/L	0.000251	0.00068	mg/L	0.000251	36.92%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-52.8	-0.0810	mg/L	0.02932	-0.0810	mg/L	0.02932	36.21%
QC value within limits for K 766.490 Recovery = Not calculated								

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Na 589.592† 164.3 0.00593 mg/L 0.011676 0.00593 mg/L 0.011676 196.77%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 2537.7 -0.00456 mg/L 0.000283 -0.00456 mg/L 0.000283 6.20%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 255.4 -0.00232 mg/L 0.000555 -0.00232 mg/L 0.000555 23.98%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 35 **Autosampler Location: 13**
Sample ID: ICSAB **Date Collected: 5/3/2012 5:52:01 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

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	1853174.1						12398.41	0.67%
YRADIAL	248005.5						3353.51	1.35%
Ga 417.206	1177524.9						31343.58	2.66%
GaRADIAL	76412.2						833.74	1.09%
Ag 328.068†	131668.5	0.479	mg/L	0.0115	0.479	mg/L	0.0115	2.40%
QC value within limits for Ag 328.068 Recovery = 95.79%								
Al 396.153†	1522846.7	246	mg/L	2.5	246	mg/L	2.5	1.00%
QC value within limits for Al 396.153 Recovery = 98.39%								
As 188.979†	580.8	0.227	mg/L	0.0059	0.227	mg/L	0.0059	2.61%
QC value within limits for As 188.979 Recovery = 90.94%								
Ba 233.527†	36656.8	0.242	mg/L	0.0010	0.242	mg/L	0.0010	0.43%
QC value within limits for Ba 233.527 Recovery = 96.66%								
Be 234.861†	310907.5	0.236	mg/L	0.0044	0.236	mg/L	0.0044	1.87%
QC value within limits for Be 234.861 Recovery = 94.22%								
B 249.677†	4071.8	0.00347	mg/L	0.005174	0.00347	mg/L	0.005174	148.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	107199.8	248	mg/L	6.1	248	mg/L	6.1	2.48%
QC value within limits for Ca 227.546 Recovery = 99.16%								
Cd 228.802†	21860.7	0.402	mg/L	0.0105	0.402	mg/L	0.0105	2.61%
QC value within limits for Cd 228.802 Recovery = 80.38%								
Co 228.616†	8277.8	0.227	mg/L	0.0013	0.227	mg/L	0.0013	0.57%
QC value within limits for Co 228.616 Recovery = 90.82%								
Cr 267.716†	24801.3	0.244	mg/L	0.0025	0.244	mg/L	0.0025	1.02%
QC value within limits for Cr 267.716 Recovery = 97.58%								
Cu 327.393†	54740.7	0.238	mg/L	0.0039	0.238	mg/L	0.0039	1.62%
QC value within limits for Cu 327.393 Recovery = 95.19%								
Fe 239.562†	1309247.1	89.9	mg/L	1.20	89.9	mg/L	1.20	1.33%
QC value within limits for Fe 239.562 Recovery = 89.93%								
Mg 279.077†	779217.3	244	mg/L	3.0	244	mg/L	3.0	1.22%
QC value within limits for Mg 279.077 Recovery = 97.61%								
Mn 257.610†	182584.4	0.234	mg/L	0.0007	0.234	mg/L	0.0007	0.29%
QC value within limits for Mn 257.610 Recovery = 93.69%								
Mo 202.031†	-79.5	0.00198	mg/L	0.000118	0.00198	mg/L	0.000118	5.95%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	29232.3	0.462	mg/L	0.0022	0.462	mg/L	0.0022	0.47%
QC value within limits for Ni 231.604 Recovery = 92.31%								
Pb 220.353†	4508.2	0.466	mg/L	0.0023	0.466	mg/L	0.0023	0.50%
QC value within limits for Pb 220.353 Recovery = 93.27%								
Sb 206.836†	1792.6	0.459	mg/L	0.0137	0.459	mg/L	0.0137	2.97%
QC value within limits for Sb 206.836 Recovery = 91.88%								
Se 196.026†	342.7	0.231	mg/L	0.0039	0.231	mg/L	0.0039	1.69%
QC value within limits for Se 196.026 Recovery = 92.57%								
Si 251.611†	-44.5	-0.0102	mg/L	0.00016	-0.0102	mg/L	0.00016	1.59%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-322.7	-0.0355	mg/L	0.00085	-0.0355	mg/L	0.00085	2.40%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-35377.3	-0.00200	mg/L	0.002895	-0.00200	mg/L	0.002895	144.70%
QC value within limits for Ti 334.940 Recovery = Not calculated								

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Tl 190.801† 1658.5 0.461 mg/L 0.0041 0.461 mg/L 0.0041 0.89%
QC value within limits for Tl 190.801 Recovery = 92.24%
V 290.880† 46760.7 0.235 mg/L 0.0036 0.235 mg/L 0.0036 1.52%
QC value within limits for V 290.880 Recovery = 94.15%
Zn 206.200† 18472.5 0.447 mg/L 0.0037 0.447 mg/L 0.0037 0.83%
QC value within limits for Zn 206.200 Recovery = 89.36%
K 766.490† 13159.9 4.71 mg/L 0.048 4.71 mg/L 0.048 1.02%
QC value within limits for K 766.490 Recovery = 94.23%
Na 589.592† 82435.9 4.92 mg/L 0.009 4.92 mg/L 0.009 0.17%
QC value within limits for Na 589.592 Recovery = 98.45%
Sr 407.771† 2144.2 -0.00460 mg/L 0.000140 -0.00460 mg/L 0.000140 3.04%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 280.2 -0.00212 mg/L 0.000511 -0.00212 mg/L 0.000511 24.11%
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: 6**
Sample ID: CCV **Date Collected: 5/3/2012 5:57:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1973701.1						1539.93	0.08%
YRADIAL	244196.3						3047.59	1.25%
Ga 417.206	1195787.3						39106.31	3.27%
GaRADIAL	74522.7						1061.31	1.42%
Ag 328.068†	116970.9	0.393	mg/L	0.0119	0.393	mg/L	0.0119	3.04%
QC value within limits for Ag 328.068 Recovery = 98.27%								
Al 396.153†	60717.1	9.72	mg/L	0.029	9.72	mg/L	0.029	0.30%
QC value within limits for Al 396.153 Recovery = 97.24%								
As 188.979†	1023.4	0.386	mg/L	0.0101	0.386	mg/L	0.0101	2.61%
QC value within limits for As 188.979 Recovery = 96.51%								
Ba 233.527†	147765.8	0.990	mg/L	0.0062	0.990	mg/L	0.0062	0.63%
QC value within limits for Ba 233.527 Recovery = 98.99%								
Be 234.861†	58951.1	0.0480	mg/L	0.00123	0.0480	mg/L	0.00123	2.55%
QC value within limits for Be 234.861 Recovery = 96.06%								
B 249.677†	39043.4	0.491	mg/L	0.0116	0.491	mg/L	0.0116	2.37%
QC value within limits for B 249.677 Recovery = 98.26%								
Ca 227.546†	4155.1	10.0	mg/L	0.36	10.0	mg/L	0.36	3.56%
QC value within limits for Ca 227.546 Recovery = 100.17%								
Cd 228.802†	2651.9	0.0474	mg/L	0.00241	0.0474	mg/L	0.00241	5.07%
QC value within limits for Cd 228.802 Recovery = 94.88%								
Co 228.616†	7187.4	0.198	mg/L	0.0010	0.198	mg/L	0.0010	0.52%
QC value within limits for Co 228.616 Recovery = 99.19%								
Cr 267.716†	50205.0	0.498	mg/L	0.0023	0.498	mg/L	0.0023	0.46%
QC value within limits for Cr 267.716 Recovery = 99.52%								
Cu 327.393†	120299.8	0.508	mg/L	0.0146	0.508	mg/L	0.0146	2.88%
QC value within limits for Cu 327.393 Recovery = 101.58%								
Fe 239.562†	56528.3	3.88	mg/L	0.032	3.88	mg/L	0.032	0.82%
QC value within limits for Fe 239.562 Recovery = 97.04%								
Mg 279.077†	31450.3	9.87	mg/L	0.085	9.87	mg/L	0.085	0.86%
QC value within limits for Mg 279.077 Recovery = 98.70%								
Mn 257.610†	392391.5	0.500	mg/L	0.0053	0.500	mg/L	0.0053	1.05%
QC value within limits for Mn 257.610 Recovery = 100.06%								
Mo 202.031†	33840.0	0.977	mg/L	0.0071	0.977	mg/L	0.0071	0.73%
QC value within limits for Mo 202.031 Recovery = 97.74%								
Ni 231.604†	31500.8	0.498	mg/L	0.0038	0.498	mg/L	0.0038	0.77%
QC value within limits for Ni 231.604 Recovery = 99.51%								
Pb 220.353†	5208.3	0.500	mg/L	0.0025	0.500	mg/L	0.0025	0.51%
QC value within limits for Pb 220.353 Recovery = 100.08%								
Sb 206.836†	4539.2	1.16	mg/L	0.041	1.16	mg/L	0.041	3.56%
QC value within limits for Sb 206.836 Recovery = 96.48%								

Approved: May 04, 2012

Se 196.026†	643.3	0.394 mg/L	0.0148	0.394 mg/L	0.0148	3.76%
QC value within limits for Se 196.026 Recovery = 98.60%						
Si 251.611†	192931.7	4.94 mg/L	0.115	4.94 mg/L	0.115	2.33%
QC value within limits for Si 251.611 Recovery = 98.77%						
Sn 189.927†	9653.1	0.992 mg/L	0.0041	0.992 mg/L	0.0041	0.41%
QC value within limits for Sn 189.927 Recovery = 99.17%						
Ti 334.940†	878654.7	0.957 mg/L	0.0073	0.957 mg/L	0.0073	0.76%
QC value within limits for Ti 334.940 Recovery = 95.67%						
Tl 190.801†	1824.6	0.515 mg/L	0.0048	0.515 mg/L	0.0048	0.93%
QC value within limits for Tl 190.801 Recovery = 102.91%						
V 290.880†	178943.7	0.988 mg/L	0.0040	0.988 mg/L	0.0040	0.40%
QC value within limits for V 290.880 Recovery = 98.79%						
Zn 206.200†	40389.1	0.983 mg/L	0.0107	0.983 mg/L	0.0107	1.09%
QC value within limits for Zn 206.200 Recovery = 98.33%						
K 766.490†	134271.0	49.1 mg/L	0.48	49.1 mg/L	0.48	0.98%
QC value within limits for K 766.490 Recovery = 98.22%						
Na 589.592†	822733.0	50.0 mg/L	1.23	50.0 mg/L	1.23	2.46%
QC value within limits for Na 589.592 Recovery = 100.00%						
Sr 407.771†	2199759.9	1.02 mg/L	0.023	1.02 mg/L	0.023	2.25%
QC value within limits for Sr 407.771 Recovery = 101.99%						
Li 670.784†	124284.1	0.982 mg/L	0.0043	0.982 mg/L	0.0043	0.44%
QC value within limits for Li 670.784 Recovery = 98.19%						

All analyte(s) passed QC.

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Sequence No.: 37 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 6:03:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2040372.1						7342.24	0.36%
YRADIAL	249203.9						5496.14	2.21%
Ga 417.206	1281654.0						27211.58	2.12%
GaRADIAL	76016.5						1525.38	2.01%
Ag 328.068†	-129.2	-0.00054	mg/L	0.000442	-0.00054	mg/L	0.000442	82.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	3.1	-0.0155	mg/L	0.00115	-0.0155	mg/L	0.00115	7.45%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	4.8	0.00085	mg/L	0.002895	0.00085	mg/L	0.002895	340.47%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	13.3	-0.00195	mg/L	0.000129	-0.00195	mg/L	0.000129	6.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	132.1	0.00011	mg/L	0.000032	0.00011	mg/L	0.000032	28.43%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	176.2	0.00439	mg/L	0.000269	0.00439	mg/L	0.000269	6.13%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	3.0	0.0587	mg/L	0.01160	0.0587	mg/L	0.01160	19.76%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-8.0	-0.00019	mg/L	0.000176	-0.00019	mg/L	0.000176	91.32%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-6.0	-0.00067	mg/L	0.000161	-0.00067	mg/L	0.000161	24.13%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	4.8	-0.00063	mg/L	0.000077	-0.00063	mg/L	0.000077	12.20%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	271.7	0.00125	mg/L	0.000132	0.00125	mg/L	0.000132	10.58%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	91.5	0.00554	mg/L	0.000894	0.00554	mg/L	0.000894	16.15%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	31.8	0.0143	mg/L	0.00193	0.0143	mg/L	0.00193	13.50%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-9.1	-0.00171	mg/L	0.000018	-0.00171	mg/L	0.000018	1.05%
QC value within limits for Mn 257.610 Recovery = Not calculated								

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Mo 202.031†	2.7	-0.00022	mg/L	0.000099	-0.00022	mg/L	0.000099 45.38%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	-0.5	-0.00138	mg/L	0.000303	-0.00138	mg/L	0.000303 21.92%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	3.0	-0.00039	mg/L	0.001000	-0.00039	mg/L	0.001000 253.74%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	-0.6	-0.00029	mg/L	0.001235	-0.00029	mg/L	0.001235 431.21%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	4.0	-0.00167	mg/L	0.003907	-0.00167	mg/L	0.003907 234.40%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	84.0	-0.00693	mg/L	0.000745	-0.00693	mg/L	0.000745 10.75%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	10.8	-0.00121	mg/L	0.000807	-0.00121	mg/L	0.000807 66.79%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	37.4	-0.00021	mg/L	0.000045	-0.00021	mg/L	0.000045 21.61%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	3.0	-0.00280	mg/L	0.001143	-0.00280	mg/L	0.001143 40.83%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	311.0	-0.00163	mg/L	0.002281	-0.00163	mg/L	0.002281 140.18%
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	78.2	-0.00079	mg/L	0.000111	-0.00079	mg/L	0.000111 14.09%
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	5.0	-0.0600	mg/L	0.01363	-0.0600	mg/L	0.01363 22.71%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	193.2	0.00765	mg/L	0.009611	0.00765	mg/L	0.009611 125.57%
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	226.3	-0.00009	mg/L	0.000026	-0.00009	mg/L	0.000026 28.37%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	26.3	-0.00413	mg/L	0.000341	-0.00413	mg/L	0.000341 8.26%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 38 **Autosampler Location: 52**
Sample ID: PBW 6B WG396869-02 **Date Collected: 5/3/2012 6:10:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 6B WG396869-02

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: PBW 6B WG396869-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2024688.4						15645.48	0.77%
YRADIAL	247218.4						5135.87	2.08%
Ga 417.206	1317876.6						10639.33	0.81%
GaRADIAL	76981.4						1720.74	2.24%
Ag 328.068†	-123.6	-0.00051	mg/L	0.000177	-0.00051	mg/L	0.000177	34.52%
Al 396.153†	105.4	0.00103	mg/L	0.017595	0.00103	mg/L	0.017595	>999.9%
As 188.979†	0.8	-0.00066	mg/L	0.001803	-0.00066	mg/L	0.001803	272.39%
Ba 233.527†	-5.3	-0.00208	mg/L	0.000091	-0.00208	mg/L	0.000091	4.40%
Be 234.861†	105.8	0.00009	mg/L	0.000029	0.00009	mg/L	0.000029	32.89%
B 249.677†	26.3	0.00249	mg/L	0.000257	0.00249	mg/L	0.000257	10.30%
Ca 227.546†	10.9	0.0768	mg/L	0.01008	0.0768	mg/L	0.01008	13.13%
Cd 228.802†	-10.0	-0.00022	mg/L	0.000075	-0.00022	mg/L	0.000075	33.72%
Co 228.616†	-6.9	-0.00069	mg/L	0.000144	-0.00069	mg/L	0.000144	20.89%
Cr 267.716†	17.1	-0.00051	mg/L	0.000068	-0.00051	mg/L	0.000068	13.42%
Cu 327.393†	143.8	0.00071	mg/L	0.000461	0.00071	mg/L	0.000461	65.03%
Fe 239.562†	158.5	0.0101	mg/L	0.00660	0.0101	mg/L	0.00660	65.09%
Mg 279.077†	72.8	0.0271	mg/L	0.01592	0.0271	mg/L	0.01592	58.67%
Mn 257.610†	-62.3	-0.00178	mg/L	0.000007	-0.00178	mg/L	0.000007	0.40%
Mo 202.031†	9.2	-0.00003	mg/L	0.000047	-0.00003	mg/L	0.000047	144.87%
Ni 231.604†	-10.4	-0.00154	mg/L	0.000072	-0.00154	mg/L	0.000072	4.67%
Pb 220.353†	4.8	-0.00022	mg/L	0.000893	-0.00022	mg/L	0.000893	406.17%
Sb 206.836†	3.8	0.00083	mg/L	0.000603	0.00083	mg/L	0.000603	72.57%
Se 196.026†	-5.0	-0.00722	mg/L	0.001477	-0.00722	mg/L	0.001477	20.47%
Si 251.611†	68.1	-0.00734	mg/L	0.000523	-0.00734	mg/L	0.000523	7.12%

Approved: May 04, 2012

Sn 189.927†	0.8	-0.00223	mg/L	0.000575	-0.00223	mg/L	0.000575 25.77%
Ti 334.940†	-45.5	-0.00030	mg/L	0.000053	-0.00030	mg/L	0.000053 18.04%
Tl 190.801†	-1.9	-0.00416	mg/L	0.001552	-0.00416	mg/L	0.001552 37.32%
V 290.880†	460.5	-0.00080	mg/L	0.000580	-0.00080	mg/L	0.000580 72.55%
Zn 206.200†	86.3	-0.00059	mg/L	0.000182	-0.00059	mg/L	0.000182 30.73%
K 766.490†	4.5	-0.0602	mg/L	0.01577	-0.0602	mg/L	0.01577 26.20%
Na 589.592†	-241.4	-0.0183	mg/L	0.00407	-0.0183	mg/L	0.00407 22.29%
Sr 407.771†	152.3	-0.00013	mg/L	0.000087	-0.00013	mg/L	0.000087 69.67%
Li 670.784†	103.5	-0.00352	mg/L	0.000206	-0.00352	mg/L	0.000206 5.84%

Sequence No.: 39 **Autosampler Location: 53**
Sample ID: LCSW 6B WG396869-03 **Date Collected: 5/3/2012 6:17:47 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 6B WG396869-03

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: LCSW 6B WG396869-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2062628.1						8577.36	0.42%
YRADIAL	255403.5						3048.36	1.19%
Ga 417.206	1308857.7						33602.97	2.57%
GaRADIAL	77743.0						1712.77	2.20%
Ag 328.068†	54323.7	0.183	mg/L	0.0054	0.183	mg/L	0.0054	2.96%
Al 396.153†	29870.8	4.78	mg/L	0.003	4.78	mg/L	0.003	0.07%
As 188.979†	470.7	0.177	mg/L	0.0059	0.177	mg/L	0.0059	3.34%
Ba 233.527†	71737.5	0.480	mg/L	0.0020	0.480	mg/L	0.0020	0.41%
Be 234.861†	27517.2	0.0224	mg/L	0.00057	0.0224	mg/L	0.00057	2.53%
B 249.677†	72444.0	0.915	mg/L	0.0264	0.915	mg/L	0.0264	2.89%
Ca 227.546†	1890.9	4.61	mg/L	0.112	4.61	mg/L	0.112	2.43%
Cd 228.802†	1215.6	0.0217	mg/L	0.00103	0.0217	mg/L	0.00103	4.73%
Co 228.616†	3476.5	0.0957	mg/L	0.00093	0.0957	mg/L	0.00093	0.98%
Cr 267.716†	24208.9	0.240	mg/L	0.0022	0.240	mg/L	0.0022	0.93%
Cu 327.393†	55870.9	0.236	mg/L	0.0055	0.236	mg/L	0.0055	2.31%
Fe 239.562†	27234.9	1.87	mg/L	0.003	1.87	mg/L	0.003	0.16%
Mg 279.077†	15376.5	4.83	mg/L	0.022	4.83	mg/L	0.022	0.46%
Mn 257.610†	188339.4	0.239	mg/L	0.0020	0.239	mg/L	0.0020	0.84%
Mo 202.031†	16497.2	0.476	mg/L	0.0026	0.476	mg/L	0.0026	0.54%
Ni 231.604†	15996.6	0.252	mg/L	0.0029	0.252	mg/L	0.0029	1.14%
Pb 220.353†	2496.9	0.240	mg/L	0.0029	0.240	mg/L	0.0029	1.20%
Sb 206.836†	2084.9	0.532	mg/L	0.0169	0.532	mg/L	0.0169	3.18%
Se 196.026†	303.1	0.184	mg/L	0.0061	0.184	mg/L	0.0061	3.29%
Si 251.611†	91613.5	2.34	mg/L	0.041	2.34	mg/L	0.041	1.75%
Sn 189.927†	5108.5	0.524	mg/L	0.0049	0.524	mg/L	0.0049	0.94%
Ti 334.940†	432005.3	0.470	mg/L	0.0039	0.470	mg/L	0.0039	0.83%
Tl 190.801†	898.5	0.252	mg/L	0.0034	0.252	mg/L	0.0034	1.37%
V 290.880†	86531.7	0.476	mg/L	0.0030	0.476	mg/L	0.0030	0.64%
Zn 206.200†	19687.7	0.478	mg/L	0.0028	0.478	mg/L	0.0028	0.59%
K 766.490†	66860.0	24.3	mg/L	0.32	24.3	mg/L	0.32	1.34%
Na 589.592†	412304.9	24.8	mg/L	0.43	24.8	mg/L	0.43	1.75%
Sr 407.771†	1068117.1	0.495	mg/L	0.0046	0.495	mg/L	0.0046	0.92%
Li 670.784†	63189.9	0.497	mg/L	0.0032	0.497	mg/L	0.0032	0.64%

Sequence No.: 40 **Autosampler Location: 54**
Sample ID: L1205005201 **Date Collected: 5/3/2012 6:23:46 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005201

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Approved: May 04, 2012

Kym H. Rhoden

Mean Data: L1205005201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2033306.4						28872.71	1.42%
YRADIAL	251067.2						4000.41	1.59%
Ga 417.206	1326755.0						20069.29	1.51%
GaRADIAL	79310.5						1273.82	1.61%
Ag 328.068†	-132.4	0.00225	mg/L	0.000358	0.00225	mg/L	0.000358	15.89%
Al 396.153†	1072.6	0.158	mg/L	0.0051	0.158	mg/L	0.0051	3.22%
As 188.979†	-7.0	-0.00292	mg/L	0.004053	-0.00292	mg/L	0.004053	139.02%
Ba 233.527†	6578.9	0.0419	mg/L	0.00050	0.0419	mg/L	0.00050	1.20%
Be 234.861†	2023.1	0.00018	mg/L	0.000121	0.00018	mg/L	0.000121	67.07%
B 249.677†	8269.1	0.104	mg/L	0.0008	0.104	mg/L	0.0008	0.76%
Ca 227.546†	54366.7	125	mg/L	0.9	125	mg/L	0.9	0.73%
Cd 228.802†	15.1	0.00024	mg/L	0.000227	0.00024	mg/L	0.000227	93.68%
Co 228.616†	16.2	-0.00020	mg/L	0.000200	-0.00020	mg/L	0.000200	100.18%
Cr 267.716†	131.0	0.00085	mg/L	0.000282	0.00085	mg/L	0.000282	33.06%
Cu 327.393†	26.4	0.00077	mg/L	0.000532	0.00077	mg/L	0.000532	69.39%
Fe 239.562†	98448.3	6.76	mg/L	0.162	6.76	mg/L	0.162	2.39%
Mg 279.077†	41098.1	12.9	mg/L	0.33	12.9	mg/L	0.33	2.54%
Mn 257.610†	153206.3	0.194	mg/L	0.0047	0.194	mg/L	0.0047	2.43%
Mo 202.031†	95.6	0.00283	mg/L	0.000362	0.00283	mg/L	0.000362	12.79%
Ni 231.604†	113.0	0.00042	mg/L	0.000481	0.00042	mg/L	0.000481	114.19%
Pb 220.353†	3.2	-0.00006	mg/L	0.000897	-0.00006	mg/L	0.000897	>999.9%
Sb 206.836†	-2.1	-0.00044	mg/L	0.000893	-0.00044	mg/L	0.000893	200.92%
Se 196.026†	0.8	-0.00172	mg/L	0.001007	-0.00172	mg/L	0.001007	58.65%
Si 251.611†	518702.7	13.3	mg/L	0.20	13.3	mg/L	0.20	1.49%
Sn 189.927†	-273.2	-0.0304	mg/L	0.00070	-0.0304	mg/L	0.00070	2.31%
Ti 334.940†	-16116.6	0.00088	mg/L	0.001658	0.00088	mg/L	0.001658	187.68%
Tl 190.801†	-24.9	-0.0109	mg/L	0.00228	-0.0109	mg/L	0.00228	20.87%
V 290.880†	789.6	-0.00038	mg/L	0.000628	-0.00038	mg/L	0.000628	166.82%
Zn 206.200†	1597.9	0.0360	mg/L	0.00045	0.0360	mg/L	0.00045	1.26%
K 766.490†	7937.4	2.80	mg/L	0.047	2.80	mg/L	0.047	1.67%
Na 589.592†	320977.4	19.3	mg/L	0.07	19.3	mg/L	0.07	0.34%
Sr 407.771†	1863244.0	0.861	mg/L	0.0016	0.861	mg/L	0.0016	0.19%
Li 670.784†	736.8	0.00150	mg/L	0.000621	0.00150	mg/L	0.000621	41.26%

Sequence No.: 41 **Autosampler Location: 55**
Sample ID: L1205005202 **Date Collected: 5/3/2012 6:29:46 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005202

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005202

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2066996.3						21644.34	1.05%
YRADIAL	254723.1						1464.22	0.57%
Ga 417.206	1291110.4						22104.17	1.71%
GaRADIAL	78164.3						1085.00	1.39%
Ag 328.068†	-637.9	0.00025	mg/L	0.000279	0.00025	mg/L	0.000279	109.63%
Al 396.153†	241.3	0.0236	mg/L	0.00787	0.0236	mg/L	0.00787	33.27%
As 188.979†	4.4	0.00133	mg/L	0.001287	0.00133	mg/L	0.001287	96.53%
Ba 233.527†	4400.3	0.0273	mg/L	0.00014	0.0273	mg/L	0.00014	0.51%
Be 234.861†	2149.4	0.00051	mg/L	0.000055	0.00051	mg/L	0.000055	10.67%
B 249.677†	1805.1	0.0225	mg/L	0.00041	0.0225	mg/L	0.00041	1.83%
Ca 227.546†	5492.6	12.8	mg/L	0.27	12.8	mg/L	0.27	2.12%
Cd 228.802†	17.6	0.00027	mg/L	0.000275	0.00027	mg/L	0.000275	101.42%
Co 228.616†	23.6	0.00000	mg/L	0.000221	0.00000	mg/L	0.000221	>999.9%
Cr 267.716†	25.3	-0.00023	mg/L	0.000141	-0.00023	mg/L	0.000141	60.62%
Cu 327.393†	41.5	0.00075	mg/L	0.000326	0.00075	mg/L	0.000326	43.42%
Fe 239.562†	82409.6	5.66	mg/L	0.015	5.66	mg/L	0.015	0.26%
Mg 279.077†	4842.1	1.52	mg/L	0.017	1.52	mg/L	0.017	1.14%
Mn 257.610†	29456.7	0.0361	mg/L	0.00072	0.0361	mg/L	0.00072	1.99%

Approved: May 04, 2012

Mo 202.031†	21.3	0.00060	mg/L	0.000149	0.00060	mg/L	0.000149 24.70%
Ni 231.604†	58.5	-0.00045	mg/L	0.000432	-0.00045	mg/L	0.000432 96.54%
Pb 220.353†	-7.1	-0.00176	mg/L	0.001442	-0.00176	mg/L	0.001442 81.69%
Sb 206.836†	-1.6	-0.00033	mg/L	0.000681	-0.00033	mg/L	0.000681 203.73%
Se 196.026†	1.8	-0.00136	mg/L	0.000847	-0.00136	mg/L	0.000847 62.12%
Si 251.611†	405220.1	10.4	mg/L	0.12	10.4	mg/L	0.12 1.16%
Sn 189.927†	-111.7	-0.0138	mg/L	0.00028	-0.0138	mg/L	0.00028 1.99%
Ti 334.940†	-1196.2	0.00033	mg/L	0.000056	0.00033	mg/L	0.000056 16.88%
Tl 190.801†	10.3	-0.00082	mg/L	0.002442	-0.00082	mg/L	0.002442 297.63%
V 290.880†	511.6	-0.00145	mg/L	0.001275	-0.00145	mg/L	0.001275 88.01%
Zn 206.200†	125.8	0.00026	mg/L	0.000107	0.00026	mg/L	0.000107 41.15%
K 766.490†	2927.1	0.993	mg/L	0.0198	0.993	mg/L	0.0198 2.00%
Na 589.592†	115984.9	6.93	mg/L	0.014	6.93	mg/L	0.014 0.20%
Sr 407.771†	192324.1	0.0887	mg/L	0.00068	0.0887	mg/L	0.00068 0.76%
Li 670.784†	509.9	-0.00030	mg/L	0.000618	-0.00030	mg/L	0.000618 209.38%

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Sequence No.: 42 **Autosampler Location: 56**
Sample ID: L1205005203 **Date Collected: 5/3/2012 6:35:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005203

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005203

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1976235.6						33738.34	1.71%
YRADIAL	243202.0						4448.62	1.83%
Ga 417.206	1301421.0						30149.91	2.32%
GaRADIAL	76900.1						1214.61	1.58%
Ag 328.068†	-470.6	0.00271	mg/L	0.000542	0.00271	mg/L	0.000542	19.99%
Al 396.153†	85.8	-0.00098	mg/L	0.002409	-0.00098	mg/L	0.002409	245.98%
As 188.979†	-11.5	-0.00426	mg/L	0.001035	-0.00426	mg/L	0.001035	24.26%
Ba 233.527†	7579.6	0.0486	mg/L	0.00101	0.0486	mg/L	0.00101	2.08%
Be 234.861†	2858.8	0.00008	mg/L	0.000115	0.00008	mg/L	0.000115	145.01%
B 249.677†	2418.4	0.0283	mg/L	0.00108	0.0283	mg/L	0.00108	3.84%
Ca 227.546†	62796.5	144	mg/L	6.1	144	mg/L	6.1	4.26%
Cd 228.802†	22.1	0.00037	mg/L	0.000219	0.00037	mg/L	0.000219	58.78%
Co 228.616†	5.1	-0.00059	mg/L	0.000165	-0.00059	mg/L	0.000165	27.75%
Cr 267.716†	99.7	0.00067	mg/L	0.000063	0.00067	mg/L	0.000063	9.38%
Cu 327.393†	-226.7	-0.00001	mg/L	0.000541	-0.00001	mg/L	0.000541	>999.9%
Fe 239.562†	150024.4	10.3	mg/L	0.06	10.3	mg/L	0.06	0.62%
Mg 279.077†	28094.3	8.80	mg/L	0.179	8.80	mg/L	0.179	2.03%
Mn 257.610†	175033.1	0.222	mg/L	0.0049	0.222	mg/L	0.0049	2.21%
Mo 202.031†	47.3	0.00162	mg/L	0.000450	0.00162	mg/L	0.000450	27.74%
Ni 231.604†	59.8	-0.00042	mg/L	0.000644	-0.00042	mg/L	0.000644	152.86%
Pb 220.353†	4.7	-0.00010	mg/L	0.000653	-0.00010	mg/L	0.000653	651.60%
Sb 206.836†	-3.4	-0.00063	mg/L	0.000527	-0.00063	mg/L	0.000527	83.04%
Se 196.026†	-0.6	-0.00150	mg/L	0.004476	-0.00150	mg/L	0.004476	297.76%
Si 251.611†	686572.7	17.6	mg/L	0.40	17.6	mg/L	0.40	2.26%
Sn 189.927†	-286.0	-0.0318	mg/L	0.00032	-0.0318	mg/L	0.00032	1.02%
Ti 334.940†	-21288.2	-0.00185	mg/L	0.001778	-0.00185	mg/L	0.001778	96.24%
Tl 190.801†	-26.2	-0.0114	mg/L	0.00259	-0.0114	mg/L	0.00259	22.79%
V 290.880†	1272.5	0.00185	mg/L	0.002606	0.00185	mg/L	0.002606	140.99%
Zn 206.200†	115.6	-0.00007	mg/L	0.000280	-0.00007	mg/L	0.000280	404.33%
K 766.490†	6715.4	2.36	mg/L	0.061	2.36	mg/L	0.061	2.59%
Na 589.592†	220323.4	13.2	mg/L	0.13	13.2	mg/L	0.13	0.95%
Sr 407.771†	1754089.1	0.810	mg/L	0.0074	0.810	mg/L	0.0074	0.91%
Li 670.784†	1094.3	0.00434	mg/L	0.000370	0.00434	mg/L	0.000370	8.51%

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Sequence No.: 43 **Autosampler Location: 57**
Sample ID: L1205005204 **Date Collected: 5/3/2012 6:41:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 04, 2012

Kym H. Rhoden

Nebulizer Parameters: L1205005204

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005204

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2018133.2						13186.66	0.65%
YRADIAL	255764.3						2285.12	0.89%
Ga 417.206	1297555.3						34170.73	2.63%
GaRADIAL	79907.4						1306.74	1.64%
Ag 328.068†	-167.3	0.00054	mg/L	0.000386	0.00054	mg/L	0.000386	71.14%
Al 396.153†	-46.8	-0.0233	mg/L	0.01337	-0.0233	mg/L	0.01337	57.32%
As 188.979†	-5.7	-0.00285	mg/L	0.001012	-0.00285	mg/L	0.001012	35.53%
Ba 233.527†	4879.6	0.0306	mg/L	0.00033	0.0306	mg/L	0.00033	1.08%
Be 234.861†	1036.3	0.00023	mg/L	0.000031	0.00023	mg/L	0.000031	13.56%
B 249.677†	1875.0	0.0246	mg/L	0.00081	0.0246	mg/L	0.00081	3.28%
Ca 227.546†	16790.6	38.5	mg/L	1.51	38.5	mg/L	1.51	3.92%
Cd 228.802†	19.5	0.00033	mg/L	0.000290	0.00033	mg/L	0.000290	88.32%
Co 228.616†	3.7	-0.00046	mg/L	0.000263	-0.00046	mg/L	0.000263	56.65%
Cr 267.716†	56.5	-0.00002	mg/L	0.000085	-0.00002	mg/L	0.000085	501.85%
Cu 327.393†	22.5	0.00043	mg/L	0.000475	0.00043	mg/L	0.000475	111.03%
Fe 239.562†	41070.8	2.82	mg/L	0.028	2.82	mg/L	0.028	0.99%
Mg 279.077†	11445.9	3.59	mg/L	0.035	3.59	mg/L	0.035	0.97%
Mn 257.610†	31629.9	0.0388	mg/L	0.00022	0.0388	mg/L	0.00022	0.56%
Mo 202.031†	60.5	0.00160	mg/L	0.000393	0.00160	mg/L	0.000393	24.58%
Ni 231.604†	23.9	-0.00099	mg/L	0.000539	-0.00099	mg/L	0.000539	54.31%
Pb 220.353†	5.2	-0.00015	mg/L	0.001079	-0.00015	mg/L	0.001079	735.59%
Sb 206.836†	-1.1	-0.00032	mg/L	0.001919	-0.00032	mg/L	0.001919	593.55%
Se 196.026†	0.3	-0.00312	mg/L	0.001163	-0.00312	mg/L	0.001163	37.28%
Si 251.611†	593286.6	15.2	mg/L	0.34	15.2	mg/L	0.34	2.24%
Sn 189.927†	-207.0	-0.0236	mg/L	0.00008	-0.0236	mg/L	0.00008	0.32%
Ti 334.940†	-5928.6	-0.00094	mg/L	0.000661	-0.00094	mg/L	0.000661	70.66%
Tl 190.801†	-8.6	-0.00612	mg/L	0.003193	-0.00612	mg/L	0.003193	52.15%
V 290.880†	999.2	0.00165	mg/L	0.001592	0.00165	mg/L	0.001592	96.42%
Zn 206.200†	70.6	-0.00102	mg/L	0.000138	-0.00102	mg/L	0.000138	13.44%
K 766.490†	4363.3	1.51	mg/L	0.016	1.51	mg/L	0.016	1.03%
Na 589.592†	165740.1	9.92	mg/L	0.014	9.92	mg/L	0.014	0.14%
Sr 407.771†	478222.0	0.221	mg/L	0.0028	0.221	mg/L	0.0028	1.26%
Li 670.784†	1283.1	0.00584	mg/L	0.000162	0.00584	mg/L	0.000162	2.77%

Sequence No.: 44 **Autosampler Location: 58**
Sample ID: L1205005205 **Date Collected: 5/3/2012 6:47:46 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005205

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005205

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2037630.4						29025.68	1.42%
YRADIAL	253589.6						3955.85	1.56%
Ga 417.206	1318399.5						23895.01	1.81%
GaRADIAL	78125.6						1098.54	1.41%
Ag 328.068†	138.3	0.00059	mg/L	0.000119	0.00059	mg/L	0.000119	20.29%
Al 396.153†	755.7	0.106	mg/L	0.0052	0.106	mg/L	0.0052	4.88%
As 188.979†	-4.0	-0.00243	mg/L	0.002191	-0.00243	mg/L	0.002191	90.02%
Ba 233.527†	4426.5	0.0277	mg/L	0.00019	0.0277	mg/L	0.00019	0.69%
Be 234.861†	476.7	0.00026	mg/L	0.000083	0.00026	mg/L	0.000083	31.53%
B 249.677†	1578.5	0.0218	mg/L	0.00058	0.0218	mg/L	0.00058	2.67%
Ca 227.546†	14062.3	32.3	mg/L	0.84	32.3	mg/L	0.84	2.61%
Cd 228.802†	20.4	0.00035	mg/L	0.000195	0.00035	mg/L	0.000195	56.20%

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Co 228.616†	9.7	-0.00025	mg/L	0.000179	-0.00025	mg/L	0.000179 72.02%
Cr 267.716†	115.0	0.00048	mg/L	0.000125	0.00048	mg/L	0.000125 25.85%
Cu 327.393†	111.6	0.00062	mg/L	0.000556	0.00062	mg/L	0.000556 89.72%
Fe 239.562†	8848.8	0.607	mg/L	0.0099	0.607	mg/L	0.0099 1.63%
Mg 279.077†	11368.8	3.56	mg/L	0.070	3.56	mg/L	0.070 1.97%
Mn 257.610†	22277.4	0.0268	mg/L	0.00062	0.0268	mg/L	0.00062 2.33%
Mo 202.031†	62.1	0.00153	mg/L	0.000165	0.00153	mg/L	0.000165 10.77%
Ni 231.604†	71.2	-0.00024	mg/L	0.000418	-0.00024	mg/L	0.000418 170.93%
Pb 220.353†	-7.2	-0.00116	mg/L	0.000220	-0.00116	mg/L	0.000220 18.94%
Sb 206.836†	-3.2	-0.00095	mg/L	0.000487	-0.00095	mg/L	0.000487 51.34%
Se 196.026†	2.9	-0.00222	mg/L	0.001282	-0.00222	mg/L	0.001282 57.84%
Si 251.611†	478108.0	12.3	mg/L	0.23	12.3	mg/L	0.23 1.87%
Sn 189.927†	-184.7	-0.0213	mg/L	0.00028	-0.0213	mg/L	0.00028 1.31%
Ti 334.940†	-2261.3	0.00212	mg/L	0.000738	0.00212	mg/L	0.000738 34.85%
Tl 190.801†	-4.0	-0.00478	mg/L	0.002954	-0.00478	mg/L	0.002954 61.84%
V 290.880†	820.8	0.00101	mg/L	0.000541	0.00101	mg/L	0.000541 53.43%
Zn 206.200†	81.1	-0.00072	mg/L	0.000272	-0.00072	mg/L	0.000272 37.73%
K 766.490†	4446.7	1.54	mg/L	0.064	1.54	mg/L	0.064 4.16%
Na 589.592†	169056.4	10.1	mg/L	0.03	10.1	mg/L	0.03 0.32%
Sr 407.771†	412897.8	0.191	mg/L	0.0006	0.191	mg/L	0.0006 0.33%
Li 670.784†	924.5	0.00299	mg/L	0.000483	0.00299	mg/L	0.000483 16.13%

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Sequence No.: 45 **Autosampler Location: 59**
Sample ID: L1205005206 **Date Collected: 5/3/2012 6:53:46 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005206

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005206

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1994277.0						1590.41	0.08%
YRADIAL	252016.0						3008.87	1.19%
Ga 417.206	1315665.6						41379.51	3.15%
GaRADIAL	78679.4						1861.90	2.37%
Ag 328.068†	-1158.3	0.00048	mg/L	0.000268	0.00048	mg/L	0.000268	55.85%
Al 396.153†	1390.6	0.210	mg/L	0.0216	0.210	mg/L	0.0216	10.32%
As 188.979†	-3.0	-0.00099	mg/L	0.000725	-0.00099	mg/L	0.000725	73.45%
Ba 233.527†	6731.8	0.0429	mg/L	0.00068	0.0429	mg/L	0.00068	1.59%
Be 234.861†	3421.4	0.00056	mg/L	0.000052	0.00056	mg/L	0.000052	9.32%
B 249.677†	2054.5	0.0237	mg/L	0.00125	0.0237	mg/L	0.00125	5.27%
Ca 227.546†	17778.9	41.0	mg/L	1.92	41.0	mg/L	1.92	4.69%
Cd 228.802†	23.1	0.00038	mg/L	0.000322	0.00038	mg/L	0.000322	85.03%
Co 228.616†	31.3	0.00010	mg/L	0.000282	0.00010	mg/L	0.000282	297.04%
Cr 267.716†	136.1	0.00102	mg/L	0.000096	0.00102	mg/L	0.000096	9.43%
Cu 327.393†	-108.7	0.00050	mg/L	0.000310	0.00050	mg/L	0.000310	61.58%
Fe 239.562†	148687.7	10.2	mg/L	0.03	10.2	mg/L	0.03	0.28%
Mg 279.077†	12801.1	4.01	mg/L	0.081	4.01	mg/L	0.081	2.01%
Mn 257.610†	132827.2	0.168	mg/L	0.0023	0.168	mg/L	0.0023	1.34%
Mo 202.031†	34.7	0.00124	mg/L	0.000428	0.00124	mg/L	0.000428	34.40%
Ni 231.604†	113.8	0.00043	mg/L	0.000290	0.00043	mg/L	0.000290	67.23%
Pb 220.353†	11.4	-0.00021	mg/L	0.001031	-0.00021	mg/L	0.001031	491.72%
Sb 206.836†	-2.0	-0.00027	mg/L	0.000465	-0.00027	mg/L	0.000465	169.18%
Se 196.026†	3.2	0.00085	mg/L	0.004902	0.00085	mg/L	0.004902	576.15%
Si 251.611†	662643.2	17.0	mg/L	0.48	17.0	mg/L	0.48	2.82%
Sn 189.927†	-206.6	-0.0236	mg/L	0.00110	-0.0236	mg/L	0.00110	4.68%
Ti 334.940†	-3325.9	0.00223	mg/L	0.000347	0.00223	mg/L	0.000347	15.53%
Tl 190.801†	-16.8	-0.00847	mg/L	0.001716	-0.00847	mg/L	0.001716	20.25%
V 290.880†	1716.4	0.00445	mg/L	0.001847	0.00445	mg/L	0.001847	41.51%
Zn 206.200†	506.4	0.00943	mg/L	0.000232	0.00943	mg/L	0.000232	2.46%
K 766.490†	8716.0	3.08	mg/L	0.161	3.08	mg/L	0.161	5.23%
Na 589.592†	404435.9	24.3	mg/L	0.14	24.3	mg/L	0.14	0.56%
Sr 407.771†	773457.0	0.358	mg/L	0.0046	0.358	mg/L	0.0046	1.28%
Li 670.784†	1099.2	0.00438	mg/L	0.000233	0.00438	mg/L	0.000233	5.32%

Approved: May 04, 2012

Lynn H. Rhoden

Sequence No.: 46 **Autosampler Location: 60**
Sample ID: L1205005206PS WG396935-01 **Date Collected: 5/3/2012 6:59:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005206PS WG396935-01

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1205005206PS WG396935-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2017141.0						15731.04	0.78%
YRADIAL	253371.8						7732.29	3.05%
Ga 417.206	1280238.4						35383.79	2.76%
GaRADIAL	77563.9						1638.16	2.11%
Ag 328.068†	54641.0	0.188	mg/L	0.0043	0.188	mg/L	0.0043	2.27%
Al 396.153†	31589.5	5.05	mg/L	0.030	5.05	mg/L	0.030	0.60%
As 188.979†	470.7	0.178	mg/L	0.0040	0.178	mg/L	0.0040	2.27%
Ba 233.527†	78132.7	0.522	mg/L	0.0053	0.522	mg/L	0.0053	1.02%
Be 234.861†	30896.6	0.0232	mg/L	0.00046	0.0232	mg/L	0.00046	2.00%
B 249.677†	77657.1	0.977	mg/L	0.0205	0.977	mg/L	0.0205	2.10%
Ca 227.546†	18175.9	42.1	mg/L	0.59	42.1	mg/L	0.59	1.40%
Cd 228.802†	1249.5	0.0224	mg/L	0.00115	0.0224	mg/L	0.00115	5.13%
Co 228.616†	3537.8	0.0971	mg/L	0.00058	0.0971	mg/L	0.00058	0.59%
Cr 267.716†	24587.0	0.244	mg/L	0.0017	0.244	mg/L	0.0017	0.70%
Cu 327.393†	57906.7	0.245	mg/L	0.0033	0.245	mg/L	0.0033	1.33%
Fe 239.562†	157166.7	10.8	mg/L	0.13	10.8	mg/L	0.13	1.24%
Mg 279.077†	26618.6	8.34	mg/L	0.145	8.34	mg/L	0.145	1.74%
Mn 257.610†	306657.4	0.391	mg/L	0.0057	0.391	mg/L	0.0057	1.47%
Mo 202.031†	16761.6	0.484	mg/L	0.0055	0.484	mg/L	0.0055	1.13%
Ni 231.604†	16216.5	0.255	mg/L	0.0025	0.255	mg/L	0.0025	0.98%
Pb 220.353†	2545.4	0.244	mg/L	0.0004	0.244	mg/L	0.0004	0.16%
Sb 206.836†	2168.9	0.553	mg/L	0.0145	0.553	mg/L	0.0145	2.62%
Se 196.026†	311.4	0.191	mg/L	0.0080	0.191	mg/L	0.0080	4.17%
Si 251.611†	702858.7	18.0	mg/L	0.29	18.0	mg/L	0.29	1.62%
Sn 189.927†	-198.8	-0.0228	mg/L	0.00000	-0.0228	mg/L	0.00000	0.02%
Ti 334.940†	436620.7	0.481	mg/L	0.0015	0.481	mg/L	0.0015	0.31%
Tl 190.801†	878.2	0.246	mg/L	0.0025	0.246	mg/L	0.0025	1.03%
V 290.880†	89890.5	0.493	mg/L	0.0040	0.493	mg/L	0.0040	0.80%
Zn 206.200†	19964.6	0.485	mg/L	0.0051	0.485	mg/L	0.0051	1.05%
K 766.490†	75085.6	27.3	mg/L	0.18	27.3	mg/L	0.18	0.67%
Na 589.592†	771978.7	46.9	mg/L	0.67	46.9	mg/L	0.67	1.44%
Sr 407.771†	1755377.6	0.813	mg/L	0.0221	0.813	mg/L	0.0221	2.72%
Li 670.784†	64172.8	0.505	mg/L	0.0053	0.505	mg/L	0.0053	1.05%

Sequence No.: 47 **Autosampler Location: 61**
Sample ID: L1205005206DL WG396935-02 **Date Collected: 5/3/2012 7:05:44 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005206DL WG396935-02

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005206DL WG396935-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2132848.3						18657.17	0.87%
YRADIAL	262280.1						973.45	0.37%
Ga 417.206	1357591.5						46000.56	3.39%
GaRADIAL	79396.1						611.71	0.77%
Ag 328.068†	-182.3	0.00015	mg/L	0.000215	0.00015	mg/L	0.000215	140.77%
Al 396.153†	282.1	0.0298	mg/L	0.00420	0.0298	mg/L	0.00420	14.11%

Approved: May 04, 2012

As 188.979†	3.9	0.00075 mg/L	0.000146	0.00075 mg/L	0.000146	19.43%
Ba 233.527†	1427.5	0.00749 mg/L	0.000157	0.00749 mg/L	0.000157	2.10%
Be 234.861†	882.7	0.00029 mg/L	0.000040	0.00029 mg/L	0.000040	13.81%
B 249.677†	747.7	0.0107 mg/L	0.00080	0.0107 mg/L	0.00080	7.48%
Ca 227.546†	3391.5	7.86 mg/L	0.270	7.86 mg/L	0.270	3.43%
Cd 228.802†	11.5	0.00017 mg/L	0.000218	0.00017 mg/L	0.000218	130.84%
Co 228.616†	19.7	-0.00001 mg/L	0.000297	-0.00001 mg/L	0.000297	>999.9%
Cr 267.716†	18.8	-0.00042 mg/L	0.000023	-0.00042 mg/L	0.000023	5.40%
Cu 327.393†	71.3	0.00057 mg/L	0.000129	0.00057 mg/L	0.000129	22.61%
Fe 239.562†	29067.0	2.00 mg/L	0.050	2.00 mg/L	0.050	2.50%
Mg 279.077†	2486.3	0.782 mg/L	0.0170	0.782 mg/L	0.0170	2.17%
Mn 257.610†	24960.5	0.0302 mg/L	0.00115	0.0302 mg/L	0.00115	3.79%
Mo 202.031†	23.3	0.00048 mg/L	0.000161	0.00048 mg/L	0.000161	33.68%
Ni 231.604†	62.8	-0.00038 mg/L	0.000521	-0.00038 mg/L	0.000521	137.68%
Pb 220.353†	-6.0	-0.00138 mg/L	0.000811	-0.00138 mg/L	0.000811	58.69%
Sb 206.836†	-3.2	-0.00090 mg/L	0.000582	-0.00090 mg/L	0.000582	64.90%
Se 196.026†	4.7	-0.00064 mg/L	0.001972	-0.00064 mg/L	0.001972	309.19%
Si 251.611†	135708.5	3.48 mg/L	0.036	3.48 mg/L	0.036	1.05%
Sn 189.927†	-74.6	-0.0100 mg/L	0.00113	-0.0100 mg/L	0.00113	11.31%
Ti 334.940†	-712.4	0.00014 mg/L	0.000207	0.00014 mg/L	0.000207	149.23%
Tl 190.801†	9.0	-0.00119 mg/L	0.002830	-0.00119 mg/L	0.002830	238.51%
V 290.880†	392.6	-0.00151 mg/L	0.001437	-0.00151 mg/L	0.001437	95.16%
Zn 206.200†	256.9	0.00352 mg/L	0.000311	0.00352 mg/L	0.000311	8.85%
K 766.490†	1843.6	0.602 mg/L	0.0196	0.602 mg/L	0.0196	3.26%
Na 589.592†	79062.5	4.72 mg/L	0.008	4.72 mg/L	0.008	0.17%
Sr 407.771†	148182.5	0.0684 mg/L	0.00037	0.0684 mg/L	0.00037	0.54%
Li 670.784†	308.9	-0.00189 mg/L	0.000484	-0.00189 mg/L	0.000484	25.59%

Sequence No.: 48 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 7:11:41 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1975289.2						11872.47	0.60%
YRADIAL	249007.3						3006.32	1.21%
Ga 417.206	1183552.5						41261.26	3.49%
GaRADIAL	76088.2						362.94	0.48%
Ag 328.068†	118944.5	0.400	mg/L	0.0216	0.400	mg/L	0.0216	5.41%
QC value within limits for Ag 328.068 Recovery = 99.92%								
Al 396.153†	61621.6	9.87	mg/L	0.017	9.87	mg/L	0.017	0.18%
QC value within limits for Al 396.153 Recovery = 98.69%								
As 188.979†	1042.2	0.393	mg/L	0.0158	0.393	mg/L	0.0158	4.03%
QC value within limits for As 188.979 Recovery = 98.28%								
Ba 233.527†	149311.2	1.00	mg/L	0.010	1.00	mg/L	0.010	0.97%
QC value within limits for Ba 233.527 Recovery = 100.03%								
Be 234.861†	60358.9	0.0492	mg/L	0.00264	0.0492	mg/L	0.00264	5.37%
QC value within limits for Be 234.861 Recovery = 98.38%								
B 249.677†	40124.7	0.505	mg/L	0.0299	0.505	mg/L	0.0299	5.93%
QC value within limits for B 249.677 Recovery = 100.99%								
Ca 227.546†	4192.2	10.1	mg/L	0.39	10.1	mg/L	0.39	3.89%
QC value within limits for Ca 227.546 Recovery = 101.08%								
Cd 228.802†	2695.3	0.0482	mg/L	0.00254	0.0482	mg/L	0.00254	5.26%
QC value within limits for Cd 228.802 Recovery = 96.41%								
Co 228.616†	7224.8	0.199	mg/L	0.0009	0.199	mg/L	0.0009	0.44%
QC value within limits for Co 228.616 Recovery = 99.71%								
Cr 267.716†	50762.4	0.503	mg/L	0.0089	0.503	mg/L	0.0089	1.77%
QC value within limits for Cr 267.716 Recovery = 100.62%								
Cu 327.393†	121469.8	0.513	mg/L	0.0287	0.513	mg/L	0.0287	5.61%
QC value within limits for Cu 327.393 Recovery = 102.57%								
Fe 239.562†	57032.5	3.92	mg/L	0.022	3.92	mg/L	0.022	0.55%
QC value within limits for Fe 239.562 Recovery = 97.90%								

Approved: May 04, 2012

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Mg 279.077†            31677.1        9.94 mg/L         0.092        9.94 mg/L         0.092   0.93%
   QC value within limits for Mg 279.077  Recovery = 99.42%
Mn 257.610†           396752.1       0.506 mg/L        0.0041       0.506 mg/L        0.0041   0.80%
   QC value within limits for Mn 257.610  Recovery = 101.17%
Mo 202.031†            34352.1       0.992 mg/L        0.0124       0.992 mg/L        0.0124   1.25%
   QC value within limits for Mo 202.031  Recovery = 99.22%
Ni 231.604†            31908.3       0.504 mg/L        0.0042       0.504 mg/L        0.0042   0.82%
   QC value within limits for Ni 231.604  Recovery = 100.81%
Pb 220.353†             5230.7       0.503 mg/L        0.0020       0.503 mg/L        0.0020   0.40%
   QC value within limits for Pb 220.353  Recovery = 100.51%
Sb 206.836†             4613.3        1.18 mg/L         0.049        1.18 mg/L         0.049   4.15%
   QC value within limits for Sb 206.836  Recovery = 98.06%
Se 196.026†              656.0       0.402 mg/L        0.0166       0.402 mg/L        0.0166   4.12%
   QC value within limits for Se 196.026  Recovery = 100.56%
Si 251.611†           195750.1        5.01 mg/L         0.237        5.01 mg/L         0.237   4.73%
   QC value within limits for Si 251.611  Recovery = 100.21%
Sn 189.927†             9776.5        1.00 mg/L         0.004        1.00 mg/L         0.004   0.41%
   QC value within limits for Sn 189.927  Recovery = 100.44%
Ti 334.940†           892171.6       0.971 mg/L        0.0048       0.971 mg/L        0.0048   0.49%
   QC value within limits for Ti 334.940  Recovery = 97.14%
Tl 190.801†             1823.2       0.514 mg/L        0.0053       0.514 mg/L        0.0053   1.03%
   QC value within limits for Tl 190.801  Recovery = 102.88%
V 290.880†            180495.2       0.997 mg/L        0.0217       0.997 mg/L        0.0217   2.18%
   QC value within limits for V 290.880  Recovery = 99.65%
Zn 206.200†            41165.0        1.00 mg/L         0.012        1.00 mg/L         0.012   1.24%
   QC value within limits for Zn 206.200  Recovery = 100.22%
K 766.490†            136109.3        49.8 mg/L          0.06        49.8 mg/L          0.06   0.13%
   QC value within limits for K 766.490  Recovery = 99.58%
Na 589.592†           811958.5        49.3 mg/L          0.16        49.3 mg/L          0.16   0.32%
   QC value within limits for Na 589.592  Recovery = 98.67%
Sr 407.771†          2170855.7        1.01 mg/L         0.007        1.01 mg/L         0.007   0.74%
   QC value within limits for Sr 407.771  Recovery = 100.65%
Li 670.784†            126437.7       0.999 mg/L        0.0057       0.999 mg/L        0.0057   0.57%
   QC value within limits for Li 670.784  Recovery = 99.89%
All analyte(s) passed QC.

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Sequence No.: 49                                  Autosampler Location: 1
Sample ID: CCB                                    Date Collected: 5/3/2012 7:17:42 PM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

------------------------------------------------------------------------------------------------
Nebulizer Parameters: CCB
Analyte                Back Pressure    Flow
All                   148.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------------
Mean Data: CCB
                  Mean Corrected          Calib.                          Sample
Analyte              Intensity     Conc. Units      Std.Dev.     Conc. Units      Std.Dev.   RSD
Y 371.029          2031996.2                                                    18954.02   0.93%
YRADIAL             244048.2                                                     2404.73   0.99%
Ga 417.206         1226304.5                                                    17328.40   1.41%
GaRADIAL             74716.1                                                     1980.59   2.65%
Ag 328.068†            -66.7    -0.00033 mg/L      0.000248    -0.00033 mg/L      0.000248  75.19%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†             16.7     -0.0133 mg/L       0.00144     -0.0133 mg/L       0.00144  10.85%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†            -2.0    -0.00176 mg/L      0.001358    -0.00176 mg/L      0.001358  77.32%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             3.9    -0.00201 mg/L      0.000088    -0.00201 mg/L      0.000088   4.38%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†            19.6     0.00002 mg/L      0.000012     0.00002 mg/L      0.000012  61.22%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†            223.8     0.00499 mg/L      0.000488     0.00499 mg/L      0.000488   9.79%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†             9.2      0.0727 mg/L       0.00886      0.0727 mg/L       0.00886  12.18%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Cd 228.802†            -3.9    -0.00010 mg/L      0.000068    -0.00010 mg/L      0.000068  65.68%
   QC value within limits for Cd 228.802  Recovery = Not calculated
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Co 228.616†	0.7	-0.00048 mg/L	0.000026	-0.00048 mg/L	0.000026	5.47%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	13.9	-0.00054 mg/L	0.000031	-0.00054 mg/L	0.000031	5.69%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	155.1	0.00075 mg/L	0.000723	0.00075 mg/L	0.000723	95.85%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	43.5	0.00224 mg/L	0.000198	0.00224 mg/L	0.000198	8.83%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	31.3	0.0141 mg/L	0.00232	0.0141 mg/L	0.00232	16.45%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-23.0	-0.00173 mg/L	0.000035	-0.00173 mg/L	0.000035	2.02%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.1	-0.00021 mg/L	0.000152	-0.00021 mg/L	0.000152	72.42%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	1.4	-0.00135 mg/L	0.000344	-0.00135 mg/L	0.000344	25.50%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	3.4	-0.00036 mg/L	0.001795	-0.00036 mg/L	0.001795	499.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-0.3	-0.00023 mg/L	0.000751	-0.00023 mg/L	0.000751	326.66%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.1	-0.00286 mg/L	0.001303	-0.00286 mg/L	0.001303	45.49%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	226.7	-0.00326 mg/L	0.000344	-0.00326 mg/L	0.000344	10.54%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	8.2	-0.00147 mg/L	0.000239	-0.00147 mg/L	0.000239	16.27%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	50.4	-0.00019 mg/L	0.000022	-0.00019 mg/L	0.000022	11.60%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	4.1	-0.00249 mg/L	0.001353	-0.00249 mg/L	0.001353	54.43%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	226.8	-0.00209 mg/L	0.002571	-0.00209 mg/L	0.002571	122.83%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	42.6	-0.00165 mg/L	0.000133	-0.00165 mg/L	0.000133	8.07%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	-0.2	-0.0619 mg/L	0.01593	-0.0619 mg/L	0.01593	25.74%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	160.6	0.00571 mg/L	0.005395	0.00571 mg/L	0.005395	94.44%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	354.1	-0.00003 mg/L	0.000057	-0.00003 mg/L	0.000057	181.21%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	81.2	-0.00370 mg/L	0.000218	-0.00370 mg/L	0.000218	5.89%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 50 **Autosampler Location: 62**
Sample ID: L1205005207 **Date Collected: 5/3/2012 7:24:35 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005207

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005207

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2047774.2						13596.10	0.66%
YRADIAL	247520.1						4367.52	1.76%
Ga 417.206	1324327.6						21245.24	1.60%
GaRADIAL	77587.8						1915.73	2.47%
Ag 328.068†	-103.6	-0.00041	mg/L	0.000214	-0.00041	mg/L	0.000214	51.97%
Al 396.153†	3405.7	0.534	mg/L	0.0066	0.534	mg/L	0.0066	1.23%
As 188.979†	-0.6	-0.00118	mg/L	0.002602	-0.00118	mg/L	0.002602	220.25%
Ba 233.527†	21433.5	0.142	mg/L	0.0021	0.142	mg/L	0.0021	1.50%
Be 234.861†	849.8	0.00068	mg/L	0.000009	0.00068	mg/L	0.000009	1.27%
B 249.677†	2399.2	0.0324	mg/L	0.00054	0.0324	mg/L	0.00054	1.66%
Ca 227.546†	2053.6	4.75	mg/L	0.085	4.75	mg/L	0.085	1.80%
Cd 228.802†	-1.9	-0.00007	mg/L	0.000185	-0.00007	mg/L	0.000185	265.94%

Approved: May 04, 2012

Kyn H. Rhoden

Co 228.616†	15.4	-0.00014	mg/L	0.000101	-0.00014	mg/L	0.000101 70.19%
Cr 267.716†	66.8	-0.00002	mg/L	0.000047	-0.00002	mg/L	0.000047 254.78%
Cu 327.393†	91.0	0.00050	mg/L	0.000105	0.00050	mg/L	0.000105 20.76%
Fe 239.562†	1933.1	0.132	mg/L	0.0004	0.132	mg/L	0.0004 0.31%
Mg 279.077†	6597.6	2.07	mg/L	0.029	2.07	mg/L	0.029 1.42%
Mn 257.610†	33942.7	0.0417	mg/L	0.00080	0.0417	mg/L	0.00080 1.91%
Mo 202.031†	11.5	0.00005	mg/L	0.000073	0.00005	mg/L	0.000073 152.56%
Ni 231.604†	2.5	-0.00133	mg/L	0.000027	-0.00133	mg/L	0.000027 2.03%
Pb 220.353†	4.2	-0.00019	mg/L	0.001514	-0.00019	mg/L	0.001514 800.01%
Sb 206.836†	-0.6	-0.00030	mg/L	0.000343	-0.00030	mg/L	0.000343 116.37%
Se 196.026†	6.4	-0.00018	mg/L	0.003193	-0.00018	mg/L	0.003193 >999.9%
Si 251.611†	196721.0	5.05	mg/L	0.064	5.05	mg/L	0.064 1.26%
Sn 189.927†	-47.9	-0.00725	mg/L	0.000484	-0.00725	mg/L	0.000484 6.68%
Ti 334.940†	7652.2	0.00878	mg/L	0.001080	0.00878	mg/L	0.001080 12.31%
Tl 190.801†	-5.2	-0.00501	mg/L	0.001947	-0.00501	mg/L	0.001947 38.86%
V 290.880†	279.8	-0.00188	mg/L	0.001808	-0.00188	mg/L	0.001808 96.23%
Zn 206.200†	206.6	0.00233	mg/L	0.000059	0.00233	mg/L	0.000059 2.54%
K 766.490†	3964.5	1.37	mg/L	0.018	1.37	mg/L	0.018 1.35%
Na 589.592†	163685.7	9.80	mg/L	0.288	9.80	mg/L	0.288 2.94%
Sr 407.771†	130746.1	0.0603	mg/L	0.00143	0.0603	mg/L	0.00143 2.38%
Li 670.784†	405.9	-0.00112	mg/L	0.000170	-0.00112	mg/L	0.000170 15.17%

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Sequence No.: 51 **Autosampler Location: 63**
Sample ID: L1205005208 **Date Collected: 5/3/2012 7:31:30 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005208

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005208

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2055850.5						36175.76	1.76%
YRADIAL	253545.3						6338.67	2.50%
Ga 417.206	1295233.9						15598.80	1.20%
GaRADIAL	78435.8						1830.49	2.33%
Ag 328.068†	-131.0	0.00040	mg/L	0.000104	0.00040	mg/L	0.000104	25.89%
Al 396.153†	1333.5	0.200	mg/L	0.0116	0.200	mg/L	0.0116	5.83%
As 188.979†	-6.1	-0.00306	mg/L	0.002499	-0.00306	mg/L	0.002499	81.75%
Ba 233.527†	6449.1	0.0412	mg/L	0.00023	0.0412	mg/L	0.00023	0.56%
Be 234.861†	839.7	0.00020	mg/L	0.000087	0.00020	mg/L	0.000087	42.53%
B 249.677†	1509.1	0.0202	mg/L	0.00339	0.0202	mg/L	0.00339	16.76%
Ca 227.546†	11781.8	27.1	mg/L	0.83	27.1	mg/L	0.83	3.07%
Cd 228.802†	19.3	0.00033	mg/L	0.000139	0.00033	mg/L	0.000139	42.49%
Co 228.616†	9.8	-0.00032	mg/L	0.000284	-0.00032	mg/L	0.000284	88.88%
Cr 267.716†	67.2	0.00006	mg/L	0.000098	0.00006	mg/L	0.000098	153.44%
Cu 327.393†	152.3	0.00094	mg/L	0.000523	0.00094	mg/L	0.000523	55.55%
Fe 239.562†	32500.9	2.23	mg/L	0.068	2.23	mg/L	0.068	3.06%
Mg 279.077†	10761.3	3.37	mg/L	0.116	3.37	mg/L	0.116	3.45%
Mn 257.610†	52953.1	0.0660	mg/L	0.00084	0.0660	mg/L	0.00084	1.28%
Mo 202.031†	64.0	0.00167	mg/L	0.000270	0.00167	mg/L	0.000270	16.16%
Ni 231.604†	63.3	-0.00037	mg/L	0.000451	-0.00037	mg/L	0.000451	122.40%
Pb 220.353†	11.1	0.00040	mg/L	0.002362	0.00040	mg/L	0.002362	590.59%
Sb 206.836†	-3.7	-0.00100	mg/L	0.001211	-0.00100	mg/L	0.001211	121.44%
Se 196.026†	3.5	-0.00136	mg/L	0.003346	-0.00136	mg/L	0.003346	245.34%
Si 251.611†	429484.0	11.0	mg/L	0.10	11.0	mg/L	0.10	0.93%
Sn 189.927†	-164.1	-0.0192	mg/L	0.00065	-0.0192	mg/L	0.00065	3.38%
Ti 334.940†	8828.8	0.0134	mg/L	0.00812	0.0134	mg/L	0.00812	60.59%
Tl 190.801†	-7.4	-0.00561	mg/L	0.002908	-0.00561	mg/L	0.002908	51.78%
V 290.880†	609.0	-0.00041	mg/L	0.002191	-0.00041	mg/L	0.002191	527.98%
Zn 206.200†	404.0	0.00709	mg/L	0.000336	0.00709	mg/L	0.000336	4.74%
K 766.490†	4418.5	1.53	mg/L	0.085	1.53	mg/L	0.085	5.55%
Na 589.592†	178388.4	10.7	mg/L	0.06	10.7	mg/L	0.06	0.53%
Sr 407.771†	390266.6	0.180	mg/L	0.0004	0.180	mg/L	0.0004	0.22%
Li 670.784†	713.9	0.00132	mg/L	0.001428	0.00132	mg/L	0.001428	107.94%

Approved: May 04, 2012

Sequence No.: 52 **Autosampler Location: 64**
Sample ID: L1205005209 **Date Collected: 5/3/2012 7:37:28 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005209

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005209

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2070727.9						28802.65	1.39%
YRADIAL	257456.3						2051.66	0.80%
Ga 417.206	1347761.2						41403.94	3.07%
GaRADIAL	80164.1						584.82	0.73%
Ag 328.068†	-880.5	0.00065	mg/L	0.000359	0.00065	mg/L	0.000359	55.34%
Al 396.153†	13687.1	2.20	mg/L	0.042	2.20	mg/L	0.042	1.91%
As 188.979†	8.1	0.00301	mg/L	0.001831	0.00301	mg/L	0.001831	60.94%
Ba 233.527†	7997.9	0.0514	mg/L	0.00108	0.0514	mg/L	0.00108	2.09%
Be 234.861†	3194.3	0.00077	mg/L	0.000263	0.00077	mg/L	0.000263	34.16%
B 249.677†	1475.3	0.0172	mg/L	0.00121	0.0172	mg/L	0.00121	7.02%
Ca 227.546†	12875.6	29.7	mg/L	1.04	29.7	mg/L	1.04	3.51%
Cd 228.802†	17.5	0.00026	mg/L	0.000148	0.00026	mg/L	0.000148	57.37%
Co 228.616†	40.9	0.00036	mg/L	0.000227	0.00036	mg/L	0.000227	63.40%
Cr 267.716†	485.1	0.00439	mg/L	0.000062	0.00439	mg/L	0.000062	1.42%
Cu 327.393†	172.3	0.00156	mg/L	0.000234	0.00156	mg/L	0.000234	15.05%
Fe 239.562†	122105.8	8.39	mg/L	0.095	8.39	mg/L	0.095	1.13%
Mg 279.077†	6948.4	2.18	mg/L	0.039	2.18	mg/L	0.039	1.78%
Mn 257.610†	63835.6	0.0801	mg/L	0.00187	0.0801	mg/L	0.00187	2.34%
Mo 202.031†	36.9	0.00120	mg/L	0.000226	0.00120	mg/L	0.000226	18.82%
Ni 231.604†	219.4	0.00211	mg/L	0.000437	0.00211	mg/L	0.000437	20.76%
Pb 220.353†	19.9	0.00105	mg/L	0.001722	0.00105	mg/L	0.001722	163.41%
Sb 206.836†	-4.9	-0.00111	mg/L	0.001200	-0.00111	mg/L	0.001200	107.78%
Se 196.026†	1.1	-0.00097	mg/L	0.004519	-0.00097	mg/L	0.004519	465.72%
Si 251.611†	630180.2	16.2	mg/L	0.46	16.2	mg/L	0.46	2.82%
Sn 189.927†	-172.8	-0.0201	mg/L	0.00168	-0.0201	mg/L	0.00168	8.37%
Ti 334.940†	17706.9	0.0234	mg/L	0.00019	0.0234	mg/L	0.00019	0.80%
Tl 190.801†	-11.4	-0.00654	mg/L	0.002442	-0.00654	mg/L	0.002442	37.36%
V 290.880†	1935.4	0.00600	mg/L	0.000921	0.00600	mg/L	0.000921	15.35%
Zn 206.200†	1098.5	0.0239	mg/L	0.00039	0.0239	mg/L	0.00039	1.65%
K 766.490†	5199.4	1.81	mg/L	0.061	1.81	mg/L	0.061	3.35%
Na 589.592†	256042.9	15.4	mg/L	0.05	15.4	mg/L	0.05	0.34%
Sr 407.771†	364215.5	0.168	mg/L	0.0014	0.168	mg/L	0.0014	0.82%
Li 670.784†	586.0	0.00031	mg/L	0.000147	0.00031	mg/L	0.000147	47.74%

Sequence No.: 53 **Autosampler Location: 65**
Sample ID: L1205005210 **Date Collected: 5/3/2012 7:43:27 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005210

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1205005210

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2063217.9						16262.06	0.79%
YRADIAL	253241.2						3330.50	1.32%
Ga 417.206	1292375.8						37739.73	2.92%
GaRADIAL	79603.8						1462.86	1.84%
Ag 328.068†	-208.8	0.00093	mg/L	0.000348	0.00093	mg/L	0.000348	37.39%
Al 396.153†	1321.0	0.198	mg/L	0.0087	0.198	mg/L	0.0087	4.41%

Approved: May 04, 2012

As 188.979†	-8.9	-0.00396	mg/L	0.001781	-0.00396	mg/L	0.001781 45.01%
Ba 233.527†	4428.4	0.0276	mg/L	0.00017	0.0276	mg/L	0.00017 0.61%
Be 234.861†	1467.3	0.00030	mg/L	0.000032	0.00030	mg/L	0.000032 10.70%
B 249.677†	2679.0	0.0342	mg/L	0.00091	0.0342	mg/L	0.00091 2.66%
Ca 227.546†	29888.8	68.6	mg/L	2.32	68.6	mg/L	2.32 3.39%
Cd 228.802†	15.5	0.00026	mg/L	0.000163	0.00026	mg/L	0.000163 62.91%
Co 228.616†	8.5	-0.00037	mg/L	0.000338	-0.00037	mg/L	0.000338 91.49%
Cr 267.716†	91.9	0.00037	mg/L	0.000216	0.00037	mg/L	0.000216 57.54%
Cu 327.393†	5.0	0.00047	mg/L	0.000514	0.00047	mg/L	0.000514 109.31%
Fe 239.562†	60304.5	4.14	mg/L	0.060	4.14	mg/L	0.060 1.45%
Mg 279.077†	20500.1	6.42	mg/L	0.052	6.42	mg/L	0.052 0.81%
Mn 257.610†	71762.1	0.0901	mg/L	0.00063	0.0901	mg/L	0.00063 0.70%
Mo 202.031†	89.8	0.00252	mg/L	0.000146	0.00252	mg/L	0.000146 5.80%
Ni 231.604†	46.7	-0.00063	mg/L	0.000253	-0.00063	mg/L	0.000253 40.17%
Pb 220.353†	5.8	0.00004	mg/L	0.002141	0.00004	mg/L	0.002141 >999.9%
Sb 206.836†	-4.3	-0.00110	mg/L	0.001433	-0.00110	mg/L	0.001433 130.50%
Se 196.026†	4.0	-0.00049	mg/L	0.003199	-0.00049	mg/L	0.003199 657.36%
Si 251.611†	411177.6	10.6	mg/L	0.24	10.6	mg/L	0.24 2.28%
Sn 189.927†	-230.3	-0.0260	mg/L	0.00064	-0.0260	mg/L	0.00064 2.45%
Ti 334.940†	-4204.9	0.00544	mg/L	0.000819	0.00544	mg/L	0.000819 15.07%
Tl 190.801†	-18.5	-0.00888	mg/L	0.000502	-0.00888	mg/L	0.000502 5.65%
V 290.880†	409.0	-0.00190	mg/L	0.000721	-0.00190	mg/L	0.000721 37.88%
Zn 206.200†	2607.6	0.0606	mg/L	0.00046	0.0606	mg/L	0.00046 0.75%
K 766.490†	5141.3	1.79	mg/L	0.018	1.79	mg/L	0.018 1.02%
Na 589.592†	196268.5	11.8	mg/L	0.02	11.8	mg/L	0.02 0.15%
Sr 407.771†	978893.0	0.452	mg/L	0.0039	0.452	mg/L	0.0039 0.85%
Li 670.784†	545.7	-0.00001	mg/L	0.000511	-0.00001	mg/L	0.000511 >999.9%

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Sequence No.: 54 **Autosampler Location: 66**
Sample ID: L1205005211 **Date Collected: 5/3/2012 7:49:26 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005211

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1205005211

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2058551.8						42724.61	2.08%
YRADIAL	252103.6						6808.96	2.70%
Ga 417.206	1266244.8						63254.25	5.00%
GaRADIAL	76250.1						2318.47	3.04%
Ag 328.068†	-102.7	0.00013	mg/L	0.000354	0.00013	mg/L	0.000354	266.97%
Al 396.153†	12037.8	1.93	mg/L	0.029	1.93	mg/L	0.029	1.50%
As 188.979†	0.6	-0.00063	mg/L	0.000927	-0.00063	mg/L	0.000927	147.83%
Ba 233.527†	11405.3	0.0745	mg/L	0.00181	0.0745	mg/L	0.00181	2.43%
Be 234.861†	765.4	0.00034	mg/L	0.000064	0.00034	mg/L	0.000064	18.70%
B 249.677†	3946.7	0.0514	mg/L	0.00337	0.0514	mg/L	0.00337	6.56%
Ca 227.546†	7870.7	18.1	mg/L	1.04	18.1	mg/L	1.04	5.72%
Cd 228.802†	75.1	0.00134	mg/L	0.000379	0.00134	mg/L	0.000379	28.25%
Co 228.616†	22.6	-0.00001	mg/L	0.000093	-0.00001	mg/L	0.000093	676.25%
Cr 267.716†	270.0	0.00201	mg/L	0.000213	0.00201	mg/L	0.000213	10.56%
Cu 327.393†	9.6	0.00029	mg/L	0.000408	0.00029	mg/L	0.000408	138.82%
Fe 239.562†	19150.9	1.31	mg/L	0.015	1.31	mg/L	0.015	1.12%
Mg 279.077†	5693.3	1.79	mg/L	0.021	1.79	mg/L	0.021	1.19%
Mn 257.610†	11165.7	0.0126	mg/L	0.00039	0.0126	mg/L	0.00039	3.08%
Mo 202.031†	48.8	0.00118	mg/L	0.000198	0.00118	mg/L	0.000198	16.74%
Ni 231.604†	106.9	0.00032	mg/L	0.000509	0.00032	mg/L	0.000509	158.52%
Pb 220.353†	10.4	0.00066	mg/L	0.000083	0.00066	mg/L	0.000083	12.61%
Sb 206.836†	-2.9	-0.00086	mg/L	0.001119	-0.00086	mg/L	0.001119	129.66%
Se 196.026†	7.9	0.00113	mg/L	0.001849	0.00113	mg/L	0.001849	163.72%
Si 251.611†	185085.7	4.75	mg/L	0.194	4.75	mg/L	0.194	4.08%
Sn 189.927†	-134.0	-0.0161	mg/L	0.00069	-0.0161	mg/L	0.00069	4.30%
Ti 334.940†	34698.2	0.0402	mg/L	0.00629	0.0402	mg/L	0.00629	15.66%
Tl 190.801†	0.2	-0.00308	mg/L	0.001657	-0.00308	mg/L	0.001657	53.75%
V 290.880†	1128.7	0.00265	mg/L	0.002064	0.00265	mg/L	0.002064	77.84%

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Zn 206.200†	430.1	0.00776	mg/L	0.000254	0.00776	mg/L	0.000254	3.27%
K 766.490†	4162.1	1.44	mg/L	0.028	1.44	mg/L	0.028	1.95%
Na 589.592†	123424.1	7.38	mg/L	0.050	7.38	mg/L	0.050	0.67%
Sr 407.771†	84992.6	0.0388	mg/L	0.00043	0.0388	mg/L	0.00043	1.10%
Li 670.784†	298.2	-0.00198	mg/L	0.000531	-0.00198	mg/L	0.000531	26.88%

Sequence No.: 55 **Autosampler Location: 67**
Sample ID: L1205005214 **Date Collected: 5/3/2012 7:55:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005214

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1205005214

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1893716.6						27742.45	1.46%
YRADIAL	238034.3						1484.23	0.62%
Ga 417.206	1233511.3						6017.97	0.49%
GaRADIAL	76159.0						1010.27	1.33%
Ag 328.068†	-564.3	0.00435	mg/L	0.000508	0.00435	mg/L	0.000508	11.69%
Al 396.153†	-114.4	-0.0329	mg/L	0.00118	-0.0329	mg/L	0.00118	3.59%
As 188.979†	5.9	0.00292	mg/L	0.002942	0.00292	mg/L	0.002942	100.72%
Ba 233.527†	25479.5	0.169	mg/L	0.0023	0.169	mg/L	0.0023	1.35%
Be 234.861†	4034.3	-0.00002	mg/L	0.000118	-0.00002	mg/L	0.000118	717.41%
B 249.677†	4648.3	0.0543	mg/L	0.00220	0.0543	mg/L	0.00220	4.05%
Ca 227.546†	126622.8	290	mg/L	3.0	290	mg/L	3.0	1.02%
Cd 228.802†	27.0	0.00042	mg/L	0.000085	0.00042	mg/L	0.000085	20.12%
Co 228.616†	22.8	-0.00022	mg/L	0.000227	-0.00022	mg/L	0.000227	105.02%
Cr 267.716†	356.7	0.00338	mg/L	0.000180	0.00338	mg/L	0.000180	5.32%
Cu 327.393†	-474.3	-0.00067	mg/L	0.000646	-0.00067	mg/L	0.000646	96.10%
Fe 239.562†	219784.8	15.1	mg/L	0.02	15.1	mg/L	0.02	0.10%
Mg 279.077†	91845.7	28.8	mg/L	0.72	28.8	mg/L	0.72	2.52%
Mn 257.610†	218661.1	0.278	mg/L	0.0044	0.278	mg/L	0.0044	1.60%
Mo 202.031†	97.4	0.00331	mg/L	0.000381	0.00331	mg/L	0.000381	11.48%
Ni 231.604†	614.4	0.00837	mg/L	0.000249	0.00837	mg/L	0.000249	2.98%
Pb 220.353†	16.6	0.00176	mg/L	0.002610	0.00176	mg/L	0.002610	148.37%
Sb 206.836†	2.7	0.00108	mg/L	0.000896	0.00108	mg/L	0.000896	83.11%
Se 196.026†	-1.5	-0.00066	mg/L	0.002794	-0.00066	mg/L	0.002794	420.30%
Si 251.611†	886057.7	22.8	mg/L	0.13	22.8	mg/L	0.13	0.56%
Sn 189.927†	-344.3	-0.0378	mg/L	0.00067	-0.0378	mg/L	0.00067	1.78%
Ti 334.940†	-41383.5	-0.00179	mg/L	0.003040	-0.00179	mg/L	0.003040	169.53%
Tl 190.801†	-48.5	-0.0178	mg/L	0.00104	-0.0178	mg/L	0.00104	5.80%
V 290.880†	1738.5	0.00315	mg/L	0.001906	0.00315	mg/L	0.001906	60.52%
Zn 206.200†	100.3	-0.00051	mg/L	0.000225	-0.00051	mg/L	0.000225	44.27%
K 766.490†	22484.0	8.06	mg/L	0.136	8.06	mg/L	0.136	1.69%
Na 589.592†	732091.0	44.4	mg/L	0.32	44.4	mg/L	0.32	0.72%
Sr 407.771†	3611767.2	1.67	mg/L	0.039	1.67	mg/L	0.039	2.31%
Li 670.784†	3551.3	0.0238	mg/L	0.00075	0.0238	mg/L	0.00075	3.16%

Sequence No.: 56 **Autosampler Location: 68**
Sample ID: L1205005215 **Date Collected: 5/3/2012 8:01:28 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005215

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1205005215

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

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Y 371.029	2059411.2				12471.85	0.61%
YRADIAL	250651.9				7853.90	3.13%
Ga 417.206	1284983.1				17169.01	1.34%
GaRADIAL	77239.3				2617.49	3.39%
Ag 328.068†	-935.0	0.00053 mg/L	0.000229	0.00053 mg/L	0.000229	42.94%
Al 396.153†	11.0	-0.0132 mg/L	0.00533	-0.0132 mg/L	0.00533	40.27%
As 188.979†	-0.5	-0.00023 mg/L	0.000352	-0.00023 mg/L	0.000352	152.49%
Ba 233.527†	5806.0	0.0367 mg/L	0.00014	0.0367 mg/L	0.00014	0.37%
Be 234.861†	2769.2	0.00038 mg/L	0.000096	0.00038 mg/L	0.000096	25.13%
B 249.677†	1402.1	0.0162 mg/L	0.00021	0.0162 mg/L	0.00021	1.32%
Ca 227.546†	10309.8	23.9 mg/L	0.63	23.9 mg/L	0.63	2.63%
Cd 228.802†	9.9	0.00013 mg/L	0.000291	0.00013 mg/L	0.000291	222.97%
Co 228.616†	8.0	-0.00051 mg/L	0.000370	-0.00051 mg/L	0.000370	72.91%
Cr 267.716†	92.6	0.00054 mg/L	0.000067	0.00054 mg/L	0.000067	12.49%
Cu 327.393†	-135.6	0.00025 mg/L	0.000132	0.00025 mg/L	0.000132	53.25%
Fe 239.562†	124467.3	8.55 mg/L	0.011	8.55 mg/L	0.011	0.13%
Mg 279.077†	4877.2	1.53 mg/L	0.078	1.53 mg/L	0.078	5.10%
Mn 257.610†	62887.1	0.0789 mg/L	0.00116	0.0789 mg/L	0.00116	1.47%
Mo 202.031†	24.6	0.00085 mg/L	0.000273	0.00085 mg/L	0.000273	32.17%
Ni 231.604†	50.6	-0.00057 mg/L	0.000369	-0.00057 mg/L	0.000369	64.66%
Pb 220.353†	-0.2	-0.00130 mg/L	0.002863	-0.00130 mg/L	0.002863	219.95%
Sb 206.836†	-0.9	-0.00006 mg/L	0.001191	-0.00006 mg/L	0.001191	>999.9%
Se 196.026†	1.6	-0.00064 mg/L	0.000622	-0.00064 mg/L	0.000622	96.62%
Si 251.611†	482837.7	12.4 mg/L	0.18	12.4 mg/L	0.18	1.45%
Sn 189.927†	-164.4	-0.0192 mg/L	0.00057	-0.0192 mg/L	0.00057	2.97%
Ti 334.940†	-3715.8	-0.00075 mg/L	0.000354	-0.00075 mg/L	0.000354	46.99%
Tl 190.801†	-10.5	-0.00666 mg/L	0.004099	-0.00666 mg/L	0.004099	61.54%
V 290.880†	882.6	0.00015 mg/L	0.001523	0.00015 mg/L	0.001523	998.99%
Zn 206.200†	546.5	0.0104 mg/L	0.00016	0.0104 mg/L	0.00016	1.53%
K 766.490†	2824.0	0.954 mg/L	0.0722	0.954 mg/L	0.0722	7.56%
Na 589.592†	139207.9	8.33 mg/L	0.043	8.33 mg/L	0.043	0.52%
Sr 407.771†	291346.5	0.134 mg/L	0.0006	0.134 mg/L	0.0006	0.42%
Li 670.784†	784.5	0.00188 mg/L	0.000155	0.00188 mg/L	0.000155	8.23%

Sequence No.: 57 **Autosampler Location: 69**
Sample ID: L1205005216 WG396869-01 **Date Collected: 5/3/2012 8:07:27 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005216 WG396869-01

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1205005216 WG396869-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2075865.2						40780.10	1.96%
YRADIAL	249434.4						3620.89	1.45%
Ga 417.206	1296585.4						21543.23	1.66%
GaRADIAL	77111.8						1443.57	1.87%
Ag 328.068†	-697.8	0.00024	mg/L	0.000380	0.00024	mg/L	0.000380	157.57%
Al 396.153†	27.2	-0.0109	mg/L	0.00663	-0.0109	mg/L	0.00663	60.85%
As 188.979†	-8.4	-0.00352	mg/L	0.000592	-0.00352	mg/L	0.000592	16.81%
Ba 233.527†	4746.4	0.0297	mg/L	0.00017	0.0297	mg/L	0.00017	0.57%
Be 234.861†	1916.9	0.00023	mg/L	0.000048	0.00023	mg/L	0.000048	20.95%
B 249.677†	1188.1	0.0145	mg/L	0.00091	0.0145	mg/L	0.00091	6.27%
Ca 227.546†	9306.0	21.5	mg/L	0.53	21.5	mg/L	0.53	2.45%
Cd 228.802†	20.4	0.00034	mg/L	0.000061	0.00034	mg/L	0.000061	17.73%
Co 228.616†	9.3	-0.00041	mg/L	0.000360	-0.00041	mg/L	0.000360	88.73%
Cr 267.716†	70.3	0.00023	mg/L	0.000072	0.00023	mg/L	0.000072	31.21%
Cu 327.393†	68.1	0.00090	mg/L	0.000159	0.00090	mg/L	0.000159	17.62%
Fe 239.562†	88868.3	6.10	mg/L	0.013	6.10	mg/L	0.013	0.21%
Mg 279.077†	4561.9	1.43	mg/L	0.043	1.43	mg/L	0.043	2.99%
Mn 257.610†	59093.9	0.0740	mg/L	0.00122	0.0740	mg/L	0.00122	1.65%
Mo 202.031†	20.7	0.00062	mg/L	0.000098	0.00062	mg/L	0.000098	15.95%
Ni 231.604†	47.4	-0.00062	mg/L	0.000538	-0.00062	mg/L	0.000538	86.72%
Pb 220.353†	8.0	-0.00032	mg/L	0.001224	-0.00032	mg/L	0.001224	381.80%
Sb 206.836†	-2.1	-0.00045	mg/L	0.000297	-0.00045	mg/L	0.000297	65.41%

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Se 196.026†	2.1	-0.00104	mg/L	0.002101	-0.00104	mg/L	0.002101 201.68%
Si 251.611†	472415.3	12.1	mg/L	0.08	12.1	mg/L	0.08 0.69%
Sn 189.927†	-151.5	-0.0179	mg/L	0.00109	-0.0179	mg/L	0.00109 6.07%
Ti 334.940†	-3196.0	-0.00053	mg/L	0.000251	-0.00053	mg/L	0.000251 47.09%
Tl 190.801†	-6.3	-0.00549	mg/L	0.003108	-0.00549	mg/L	0.003108 56.62%
V 290.880†	643.0	-0.00079	mg/L	0.001485	-0.00079	mg/L	0.001485 188.77%
Zn 206.200†	1293.1	0.0286	mg/L	0.00005	0.0286	mg/L	0.00005 0.18%
K 766.490†	2868.7	0.971	mg/L	0.0278	0.971	mg/L	0.0278 2.87%
Na 589.592†	140199.7	8.38	mg/L	0.021	8.38	mg/L	0.021 0.25%
Sr 407.771†	267645.0	0.123	mg/L	0.0009	0.123	mg/L	0.0009 0.71%
Li 670.784†	806.6	0.00206	mg/L	0.000463	0.00206	mg/L	0.000463 22.48%

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Sequence No.: 58 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 8:13:28 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	2013677.4						22887.27	1.14%
YRADIAL	250954.8						5307.91	2.12%
Ga 417.206	1207539.7						14060.47	1.16%
GaRADIAL	77340.7						1407.38	1.82%
Ag 328.068†	113888.9	0.383	mg/L	0.0084	0.383	mg/L	0.0084	2.18%
QC value within limits for Ag 328.068 Recovery = 95.67%								
Al 396.153†	58680.1	9.40	mg/L	0.008	9.40	mg/L	0.008	0.08%
QC value within limits for Al 396.153 Recovery = 93.97%								
As 188.979†	1002.7	0.378	mg/L	0.0053	0.378	mg/L	0.0053	1.41%
QC value within limits for As 188.979 Recovery = 94.56%								
Ba 233.527†	143409.5	0.961	mg/L	0.0030	0.961	mg/L	0.0030	0.31%
QC value within limits for Ba 233.527 Recovery = 96.07%								
Be 234.861†	57845.3	0.0471	mg/L	0.00099	0.0471	mg/L	0.00099	2.11%
QC value within limits for Be 234.861 Recovery = 94.28%								
B 249.677†	38293.6	0.482	mg/L	0.0108	0.482	mg/L	0.0108	2.25%
QC value within limits for B 249.677 Recovery = 96.39%								
Ca 227.546†	4036.8	9.73	mg/L	0.195	9.73	mg/L	0.195	2.00%
QC value within limits for Ca 227.546 Recovery = 97.32%								
Cd 228.802†	2581.9	0.0462	mg/L	0.00125	0.0462	mg/L	0.00125	2.70%
QC value within limits for Cd 228.802 Recovery = 92.34%								
Co 228.616†	6951.9	0.192	mg/L	0.0019	0.192	mg/L	0.0019	0.97%
QC value within limits for Co 228.616 Recovery = 95.94%								
Cr 267.716†	48543.6	0.481	mg/L	0.0024	0.481	mg/L	0.0024	0.49%
QC value within limits for Cr 267.716 Recovery = 96.22%								
Cu 327.393†	116153.0	0.490	mg/L	0.0108	0.490	mg/L	0.0108	2.19%
QC value within limits for Cu 327.393 Recovery = 98.09%								
Fe 239.562†	54655.2	3.75	mg/L	0.020	3.75	mg/L	0.020	0.54%
QC value within limits for Fe 239.562 Recovery = 93.82%								
Mg 279.077†	30545.2	9.59	mg/L	0.043	9.59	mg/L	0.043	0.44%
QC value within limits for Mg 279.077 Recovery = 95.86%								
Mn 257.610†	381142.8	0.486	mg/L	0.0024	0.486	mg/L	0.0024	0.50%
QC value within limits for Mn 257.610 Recovery = 97.18%								
Mo 202.031†	33002.0	0.953	mg/L	0.0028	0.953	mg/L	0.0028	0.29%
QC value within limits for Mo 202.031 Recovery = 95.32%								
Ni 231.604†	30557.8	0.483	mg/L	0.0038	0.483	mg/L	0.0038	0.80%
QC value within limits for Ni 231.604 Recovery = 96.53%								
Pb 220.353†	5028.1	0.483	mg/L	0.0043	0.483	mg/L	0.0043	0.90%
QC value within limits for Pb 220.353 Recovery = 96.61%								
Sb 206.836†	4412.1	1.13	mg/L	0.020	1.13	mg/L	0.020	1.81%
QC value within limits for Sb 206.836 Recovery = 93.78%								
Se 196.026†	628.7	0.385	mg/L	0.0046	0.385	mg/L	0.0046	1.19%
QC value within limits for Se 196.026 Recovery = 96.34%								
Si 251.611†	188248.0	4.82	mg/L	0.082	4.82	mg/L	0.082	1.70%
QC value within limits for Si 251.611 Recovery = 96.36%								

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Sn 189.927†	9411.4	0.967 mg/L	0.0084	0.967 mg/L	0.0084	0.87%
QC value within limits for Sn 189.927 Recovery = 96.68%						
Ti 334.940†	853394.4	0.929 mg/L	0.0034	0.929 mg/L	0.0034	0.36%
QC value within limits for Ti 334.940 Recovery = 92.92%						
Tl 190.801†	1748.3	0.493 mg/L	0.0020	0.493 mg/L	0.0020	0.41%
QC value within limits for Tl 190.801 Recovery = 98.62%						
V 290.880†	172900.0	0.954 mg/L	0.0076	0.954 mg/L	0.0076	0.80%
QC value within limits for V 290.880 Recovery = 95.44%						
Zn 206.200†	39360.6	0.958 mg/L	0.0019	0.958 mg/L	0.0019	0.20%
QC value within limits for Zn 206.200 Recovery = 95.82%						
K 766.490†	130562.3	47.7 mg/L	0.35	47.7 mg/L	0.35	0.74%
QC value within limits for K 766.490 Recovery = 95.48%						
Na 589.592†	793801.6	48.2 mg/L	0.31	48.2 mg/L	0.31	0.65%
QC value within limits for Na 589.592 Recovery = 96.42%						
Sr 407.771†	2140480.5	0.992 mg/L	0.0058	0.992 mg/L	0.0058	0.59%
QC value within limits for Sr 407.771 Recovery = 99.24%						
Li 670.784†	119023.2	0.940 mg/L	0.0068	0.940 mg/L	0.0068	0.72%
QC value within limits for Li 670.784 Recovery = 94.01%						

All analyte(s) passed QC.

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Sequence No.: 59 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 8:19:29 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	2040834.1						16904.32	0.83%
YRADIAL	250553.5						3726.13	1.49%
Ga 417.206	1231608.4						13937.54	1.13%
GaRADIAL	76939.1						1098.29	1.43%
Ag 328.068†	-144.0	-0.00059	mg/L	0.000184	-0.00059	mg/L	0.000184	31.36%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	14.4	-0.0137	mg/L	0.00118	-0.0137	mg/L	0.00118	8.64%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.5	-0.00117	mg/L	0.001027	-0.00117	mg/L	0.001027	87.95%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.2	-0.00205	mg/L	0.000147	-0.00205	mg/L	0.000147	7.19%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	37.8	0.00004	mg/L	0.000017	0.00004	mg/L	0.000017	48.72%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	147.6	0.00402	mg/L	0.000283	0.00402	mg/L	0.000283	7.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	14.2	0.0842	mg/L	0.01526	0.0842	mg/L	0.01526	18.13%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-1.6	-0.00007	mg/L	0.000128	-0.00007	mg/L	0.000128	196.64%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	4.5	-0.00038	mg/L	0.000040	-0.00038	mg/L	0.000040	10.74%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	12.3	-0.00055	mg/L	0.000079	-0.00055	mg/L	0.000079	14.27%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	86.8	0.00047	mg/L	0.000424	0.00047	mg/L	0.000424	90.92%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	38.9	0.00192	mg/L	0.000646	0.00192	mg/L	0.000646	33.60%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	13.9	0.00868	mg/L	0.003889	0.00868	mg/L	0.003889	44.82%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-23.7	-0.00173	mg/L	0.000026	-0.00173	mg/L	0.000026	1.51%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	10.1	-0.00001	mg/L	0.000406	-0.00001	mg/L	0.000406	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	4.5	-0.00130	mg/L	0.000196	-0.00130	mg/L	0.000196	15.03%
QC value within limits for Ni 231.604 Recovery = Not calculated								

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Pb 220.353† 5.1 -0.00020 mg/L 0.002215 -0.00020 mg/L 0.002215 >999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 3.6 0.00076 mg/L 0.001113 0.00076 mg/L 0.001113 145.66%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 3.9 -0.00176 mg/L 0.002400 -0.00176 mg/L 0.002400 136.42%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 271.0 -0.00213 mg/L 0.000635 -0.00213 mg/L 0.000635 29.83%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† 10.9 -0.00119 mg/L 0.000534 -0.00119 mg/L 0.000534 44.89%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† 36.4 -0.00021 mg/L 0.000026 -0.00021 mg/L 0.000026 12.82%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -0.7 -0.00383 mg/L 0.000723 -0.00383 mg/L 0.000723 18.87%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 114.3 -0.00272 mg/L 0.001326 -0.00272 mg/L 0.001326 48.82%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 43.5 -0.00163 mg/L 0.000129 -0.00163 mg/L 0.000129 7.92%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 72.5 -0.0355 mg/L 0.01049 -0.0355 mg/L 0.01049 29.53%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 73.3 0.00050 mg/L 0.002850 0.00050 mg/L 0.002850 567.11%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 289.5 -0.00006 mg/L 0.000081 -0.00006 mg/L 0.000081 130.77%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 111.8 -0.00345 mg/L 0.000543 -0.00345 mg/L 0.000543 15.71%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60 **Autosampler Location: 70**
Sample ID: L1205005216S WG396869-04 **Date Collected: 5/3/2012 8:26:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005216S WG396869-04

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1205005216S WG396869-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1985758.0						18467.61	0.93%
YRADIAL	248069.4						4760.11	1.92%
Ga 417.206	1254489.9						20053.17	1.60%
GaRADIAL	76241.9						1542.29	2.02%
Ag 328.068†	55219.7	0.188	mg/L	0.0038	0.188	mg/L	0.0038	2.02%
Al 396.153†	30466.1	4.87	mg/L	0.036	4.87	mg/L	0.036	0.74%
As 188.979†	483.2	0.182	mg/L	0.0022	0.182	mg/L	0.0022	1.20%
Ba 233.527†	78216.2	0.523	mg/L	0.0063	0.523	mg/L	0.0063	1.21%
Be 234.861†	30373.3	0.0234	mg/L	0.00044	0.0234	mg/L	0.00044	1.89%
B 249.677†	77411.6	0.975	mg/L	0.0213	0.975	mg/L	0.0213	2.18%
Ca 227.546†	12375.2	28.8	mg/L	0.65	28.8	mg/L	0.65	2.26%
Cd 228.802†	1266.2	0.0226	mg/L	0.00080	0.0226	mg/L	0.00080	3.53%
Co 228.616†	3536.9	0.0972	mg/L	0.00093	0.0972	mg/L	0.00093	0.96%
Cr 267.716†	24971.4	0.247	mg/L	0.0022	0.247	mg/L	0.0022	0.89%
Cu 327.393†	57842.8	0.245	mg/L	0.0055	0.245	mg/L	0.0055	2.24%
Fe 239.562†	120059.0	8.25	mg/L	0.051	8.25	mg/L	0.051	0.62%
Mg 279.077†	20332.6	6.38	mg/L	0.037	6.38	mg/L	0.037	0.59%
Mn 257.610†	256330.6	0.326	mg/L	0.0039	0.326	mg/L	0.0039	1.20%
Mo 202.031†	16957.8	0.490	mg/L	0.0056	0.490	mg/L	0.0056	1.13%
Ni 231.604†	16255.1	0.256	mg/L	0.0023	0.256	mg/L	0.0023	0.92%
Pb 220.353†	2568.6	0.246	mg/L	0.0023	0.246	mg/L	0.0023	0.92%
Sb 206.836†	2159.6	0.551	mg/L	0.0100	0.551	mg/L	0.0100	1.82%
Se 196.026†	305.6	0.187	mg/L	0.0027	0.187	mg/L	0.0027	1.44%
Si 251.611†	597476.1	15.3	mg/L	0.10	15.3	mg/L	0.10	0.66%
Sn 189.927†	5324.3	0.546	mg/L	0.0054	0.546	mg/L	0.0054	0.98%
Ti 334.940†	438827.9	0.481	mg/L	0.0013	0.481	mg/L	0.0013	0.27%
Tl 190.801†	902.0	0.253	mg/L	0.0031	0.253	mg/L	0.0031	1.21%
V 290.880†	89777.1	0.493	mg/L	0.0112	0.493	mg/L	0.0112	2.28%

Approved: May 04, 2012

Zn 206.200†	21025.9	0.510	mg/L	0.0038	0.510	mg/L	0.0038	0.74%
K 766.490†	70169.5	25.5	mg/L	0.08	25.5	mg/L	0.08	0.30%
Na 589.592†	559189.8	33.8	mg/L	0.99	33.8	mg/L	0.99	2.92%
Sr 407.771†	1355239.4	0.628	mg/L	0.0183	0.628	mg/L	0.0183	2.91%
Li 670.784†	63967.7	0.503	mg/L	0.0034	0.503	mg/L	0.0034	0.68%

Sequence No.: 61 **Autosampler Location: 71**
Sample ID: L1205005216SD WG396869-05 **Date Collected: 5/3/2012 8:32:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005216SD WG396869-05

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205005216SD WG396869-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2017143.4						27328.07	1.35%
YRADIAL	252269.9						694.52	0.28%
Ga 417.206	1282356.9						16241.50	1.27%
GaRADIAL	77450.6						206.80	0.27%
Ag 328.068†	53406.4	0.182	mg/L	0.0029	0.182	mg/L	0.0029	1.59%
Al 396.153†	29847.4	4.77	mg/L	0.013	4.77	mg/L	0.013	0.27%
As 188.979†	467.6	0.176	mg/L	0.0030	0.176	mg/L	0.0030	1.70%
Ba 233.527†	76486.8	0.511	mg/L	0.0087	0.511	mg/L	0.0087	1.71%
Be 234.861†	29381.7	0.0226	mg/L	0.00019	0.0226	mg/L	0.00019	0.86%
B 249.677†	75203.4	0.947	mg/L	0.0115	0.947	mg/L	0.0115	1.21%
Ca 227.546†	11892.2	27.6	mg/L	0.45	27.6	mg/L	0.45	1.64%
Cd 228.802†	1224.8	0.0219	mg/L	0.00058	0.0219	mg/L	0.00058	2.65%
Co 228.616†	3467.1	0.0953	mg/L	0.00169	0.0953	mg/L	0.00169	1.77%
Cr 267.716†	24436.0	0.242	mg/L	0.0046	0.242	mg/L	0.0046	1.88%
Cu 327.393†	55368.4	0.234	mg/L	0.0033	0.234	mg/L	0.0033	1.43%
Fe 239.562†	116301.8	7.99	mg/L	0.053	7.99	mg/L	0.053	0.67%
Mg 279.077†	19856.5	6.23	mg/L	0.052	6.23	mg/L	0.052	0.84%
Mn 257.610†	249239.7	0.317	mg/L	0.0064	0.317	mg/L	0.0064	2.02%
Mo 202.031†	16534.5	0.478	mg/L	0.0071	0.478	mg/L	0.0071	1.48%
Ni 231.604†	15926.8	0.251	mg/L	0.0038	0.251	mg/L	0.0038	1.51%
Pb 220.353†	2513.7	0.241	mg/L	0.0031	0.241	mg/L	0.0031	1.30%
Sb 206.836†	2101.9	0.536	mg/L	0.0050	0.536	mg/L	0.0050	0.93%
Se 196.026†	300.2	0.184	mg/L	0.0035	0.184	mg/L	0.0035	1.89%
Si 251.611†	575085.2	14.8	mg/L	0.14	14.8	mg/L	0.14	0.98%
Sn 189.927†	5119.2	0.525	mg/L	0.0082	0.525	mg/L	0.0082	1.57%
Ti 334.940†	429732.1	0.471	mg/L	0.0031	0.471	mg/L	0.0031	0.66%
Tl 190.801†	873.8	0.245	mg/L	0.0026	0.245	mg/L	0.0026	1.07%
V 290.880†	87287.2	0.479	mg/L	0.0030	0.479	mg/L	0.0030	0.63%
Zn 206.200†	20687.7	0.502	mg/L	0.0080	0.502	mg/L	0.0080	1.60%
K 766.490†	69442.0	25.2	mg/L	0.10	25.2	mg/L	0.10	0.40%
Na 589.592†	552922.2	33.4	mg/L	0.97	33.4	mg/L	0.97	2.92%
Sr 407.771†	1338730.2	0.620	mg/L	0.0211	0.620	mg/L	0.0211	3.41%
Li 670.784†	63146.8	0.497	mg/L	0.0016	0.497	mg/L	0.0016	0.33%

Sequence No.: 62 **Autosampler Location: 72**
Sample ID: L1205005217 **Date Collected: 5/3/2012 8:38:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205005217

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

Mean Data: L1205005217

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: May 04, 2012

Y 371.029	1932789.7				19362.70	1.00%
YRADIAL	249446.5				4256.35	1.71%
Ga 417.206	1311058.6				28211.87	2.15%
GaRADIAL	76836.8				981.26	1.28%
Ag 328.068†	-2489.2	0.00294 mg/L	0.000865	0.00294 mg/L	0.000865	29.42%
Al 396.153†	11857.4	1.90 mg/L	0.006	1.90 mg/L	0.006	0.31%
As 188.979†	19.3	0.00927 mg/L	0.000241	0.00927 mg/L	0.000241	2.60%
Ba 233.527†	22290.4	0.147 mg/L	0.0026	0.147 mg/L	0.0026	1.76%
Be 234.861†	7054.1	0.00002 mg/L	0.000081	0.00002 mg/L	0.000081	441.76%
B 249.677†	3198.7	0.0313 mg/L	0.00206	0.0313 mg/L	0.00206	6.58%
Ca 227.546†	74607.8	171 mg/L	7.4	171 mg/L	7.4	4.31%
Cd 228.802†	24.4	0.00033 mg/L	0.000294	0.00033 mg/L	0.000294	89.75%
Co 228.616†	15.8	-0.00076 mg/L	0.000139	-0.00076 mg/L	0.000139	18.24%
Cr 267.716†	265.0	0.00281 mg/L	0.000091	0.00281 mg/L	0.000091	3.22%
Cu 327.393†	-149.9	0.00166 mg/L	0.000697	0.00166 mg/L	0.000697	41.92%
Fe 239.562†	380719.5	26.2 mg/L	0.12	26.2 mg/L	0.12	0.45%
Mg 279.077†	59461.0	18.6 mg/L	0.14	18.6 mg/L	0.14	0.74%
Mn 257.610†	359024.1	0.458 mg/L	0.0077	0.458 mg/L	0.0077	1.69%
Mo 202.031†	63.1	0.00291 mg/L	0.000313	0.00291 mg/L	0.000313	10.78%
Ni 231.604†	274.2	0.00298 mg/L	0.000895	0.00298 mg/L	0.000895	30.09%
Pb 220.353†	48.1	0.00308 mg/L	0.003193	0.00308 mg/L	0.003193	103.83%
Sb 206.836†	-7.1	-0.00100 mg/L	0.000532	-0.00100 mg/L	0.000532	53.07%
Se 196.026†	-8.0	-0.00142 mg/L	0.001033	-0.00142 mg/L	0.001033	72.62%
Si 251.611†	822746.3	21.1 mg/L	0.66	21.1 mg/L	0.66	3.12%
Sn 189.927†	-295.7	-0.0328 mg/L	0.00155	-0.0328 mg/L	0.00155	4.72%
Ti 334.940†	-12380.8	0.0119 mg/L	0.00198	0.0119 mg/L	0.00198	16.65%
Tl 190.801†	-26.0	-0.0113 mg/L	0.00260	-0.0113 mg/L	0.00260	22.89%
V 290.880†	2444.0	0.00558 mg/L	0.003411	0.00558 mg/L	0.003411	61.12%
Zn 206.200†	619.2	0.0119 mg/L	0.00033	0.0119 mg/L	0.00033	2.76%
K 766.490†	10124.1	3.58 mg/L	0.025	3.58 mg/L	0.025	0.69%
Na 589.592†	533728.0	32.2 mg/L	0.53	32.2 mg/L	0.53	1.64%
Sr 407.771†	2239999.9	1.04 mg/L	0.024	1.04 mg/L	0.024	2.33%
Li 670.784†	2270.4	0.0137 mg/L	0.00058	0.0137 mg/L	0.00058	4.23%

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Sequence No.: 63 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/3/2012 8:44:22 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	1996073.2						38047.71	1.91%
YRADIAL	251456.6						7594.91	3.02%
Ga 417.206	1213393.1						45000.42	3.71%
GaRADIAL	76917.1						2077.35	2.70%
Ag 328.068†	116276.1	0.391	mg/L	0.0211	0.391	mg/L	0.0211	5.39%
QC value within limits for Ag 328.068 Recovery = 97.69%								
Al 396.153†	60868.0	9.75	mg/L	0.022	9.75	mg/L	0.022	0.22%
QC value within limits for Al 396.153 Recovery = 97.48%								
As 188.979†	1006.3	0.379	mg/L	0.0132	0.379	mg/L	0.0132	3.48%
QC value within limits for As 188.979 Recovery = 94.87%								
Ba 233.527†	147944.3	0.991	mg/L	0.0362	0.991	mg/L	0.0362	3.66%
QC value within limits for Ba 233.527 Recovery = 99.11%								
Be 234.861†	58717.6	0.0478	mg/L	0.00237	0.0478	mg/L	0.00237	4.96%
QC value within limits for Be 234.861 Recovery = 95.67%								
B 249.677†	39306.0	0.495	mg/L	0.0267	0.495	mg/L	0.0267	5.41%
QC value within limits for B 249.677 Recovery = 98.93%								
Ca 227.546†	4089.1	9.87	mg/L	0.437	9.87	mg/L	0.437	4.43%
QC value within limits for Ca 227.546 Recovery = 98.67%								
Cd 228.802†	2637.8	0.0472	mg/L	0.00234	0.0472	mg/L	0.00234	4.96%
QC value within limits for Cd 228.802 Recovery = 94.42%								
Co 228.616†	7164.3	0.198	mg/L	0.0042	0.198	mg/L	0.0042	2.13%
QC value within limits for Co 228.616 Recovery = 98.86%								

Approved: May 04, 2012

Cr 267.716†	50163.5	0.497 mg/L	0.0162	0.497 mg/L	0.0162	3.27%
QC value within limits for Cr 267.716 Recovery = 99.44%						
Cu 327.393†	118726.8	0.501 mg/L	0.0296	0.501 mg/L	0.0296	5.91%
QC value within limits for Cu 327.393 Recovery = 100.26%						
Fe 239.562†	56822.5	3.90 mg/L	0.010	3.90 mg/L	0.010	0.26%
QC value within limits for Fe 239.562 Recovery = 97.54%						
Mg 279.077†	31457.3	9.87 mg/L	0.095	9.87 mg/L	0.095	0.96%
QC value within limits for Mg 279.077 Recovery = 98.73%						
Mn 257.610†	393263.7	0.501 mg/L	0.0188	0.501 mg/L	0.0188	3.74%
QC value within limits for Mn 257.610 Recovery = 100.28%						
Mo 202.031†	33960.5	0.981 mg/L	0.0342	0.981 mg/L	0.0342	3.49%
QC value within limits for Mo 202.031 Recovery = 98.09%						
Ni 231.604†	31499.7	0.498 mg/L	0.0167	0.498 mg/L	0.0167	3.35%
QC value within limits for Ni 231.604 Recovery = 99.51%						
Pb 220.353†	5195.2	0.499 mg/L	0.0095	0.499 mg/L	0.0095	1.90%
QC value within limits for Pb 220.353 Recovery = 99.83%						
Sb 206.836†	4499.8	1.15 mg/L	0.046	1.15 mg/L	0.046	4.05%
QC value within limits for Sb 206.836 Recovery = 95.64%						
Se 196.026†	637.0	0.391 mg/L	0.0157	0.391 mg/L	0.0157	4.02%
QC value within limits for Se 196.026 Recovery = 97.63%						
Si 251.611†	192811.0	4.94 mg/L	0.253	4.94 mg/L	0.253	5.12%
QC value within limits for Si 251.611 Recovery = 98.70%						
Sn 189.927†	9714.9	0.998 mg/L	0.0196	0.998 mg/L	0.0196	1.96%
QC value within limits for Sn 189.927 Recovery = 99.81%						
Ti 334.940†	886880.8	0.966 mg/L	0.0044	0.966 mg/L	0.0044	0.46%
QC value within limits for Ti 334.940 Recovery = 96.56%						
Tl 190.801†	1805.7	0.509 mg/L	0.0127	0.509 mg/L	0.0127	2.49%
QC value within limits for Tl 190.801 Recovery = 101.89%						
V 290.880†	179140.1	0.989 mg/L	0.0437	0.989 mg/L	0.0437	4.42%
QC value within limits for V 290.880 Recovery = 98.90%						
Zn 206.200†	40675.8	0.990 mg/L	0.0265	0.990 mg/L	0.0265	2.67%
QC value within limits for Zn 206.200 Recovery = 99.03%						
K 766.490†	134991.0	49.4 mg/L	0.36	49.4 mg/L	0.36	0.73%
QC value within limits for K 766.490 Recovery = 98.76%						
Na 589.592†	807253.1	49.0 mg/L	1.38	49.0 mg/L	1.38	2.82%
QC value within limits for Na 589.592 Recovery = 98.08%						
Sr 407.771†	2164435.7	1.00 mg/L	0.028	1.00 mg/L	0.028	2.77%
QC value within limits for Sr 407.771 Recovery = 100.35%						
Li 670.784†	124472.5	0.983 mg/L	0.0073	0.983 mg/L	0.0073	0.74%
QC value within limits for Li 670.784 Recovery = 98.34%						

All analyte(s) passed QC.

==========

Sequence No.: 64 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/3/2012 8:50:23 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	1961876.8						15600.95	0.80%
YRADIAL	239713.9						962.74	0.40%
Ga 417.206	1229294.0						33267.26	2.71%
GaRADIAL	73953.8						1634.29	2.21%
Ag 328.068†	-54.6	-0.00028	mg/L	0.000206	-0.00028	mg/L	0.000206	72.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	12.3	-0.0140	mg/L	0.00158	-0.0140	mg/L	0.00158	11.33%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-5.7	-0.00315	mg/L	0.001274	-0.00315	mg/L	0.001274	40.40%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.4	-0.00202	mg/L	0.000079	-0.00202	mg/L	0.000079	3.92%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	8.2	0.00001	mg/L	0.000034	0.00001	mg/L	0.000034	322.04%
QC value within limits for Be 234.861 Recovery = Not calculated								

Approved: May 04, 2012

Kym H. Rhoden

B 249.677†	198.7	0.00467 mg/L	0.000414	0.00467 mg/L	0.000414	8.86%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	13.4	0.0821 mg/L	0.01108	0.0821 mg/L	0.01108	13.49%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	-0.1	-0.00003 mg/L	0.000249	-0.00003 mg/L	0.000249	910.19%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	-1.4	-0.00054 mg/L	0.000202	-0.00054 mg/L	0.000202	37.46%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	19.9	-0.00048 mg/L	0.000075	-0.00048 mg/L	0.000075	15.80%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	233.0	0.00108 mg/L	0.000115	0.00108 mg/L	0.000115	10.63%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	55.8	0.00309 mg/L	0.000496	0.00309 mg/L	0.000496	16.07%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	29.8	0.0137 mg/L	0.00182	0.0137 mg/L	0.00182	13.27%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	0.8	-0.00170 mg/L	0.000013	-0.00170 mg/L	0.000013	0.75%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.3	-0.00012 mg/L	0.000332	-0.00012 mg/L	0.000332	284.77%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	-16.4	-0.00163 mg/L	0.000153	-0.00163 mg/L	0.000153	9.36%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	2.0	-0.00049 mg/L	0.000962	-0.00049 mg/L	0.000962	198.32%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.1	0.00013 mg/L	0.001213	0.00013 mg/L	0.001213	931.62%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.8	-0.00243 mg/L	0.002149	-0.00243 mg/L	0.002149	88.50%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	268.1	-0.00220 mg/L	0.001197	-0.00220 mg/L	0.001197	54.39%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.0	-0.00170 mg/L	0.000561	-0.00170 mg/L	0.000561	32.94%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	103.3	-0.00013 mg/L	0.000134	-0.00013 mg/L	0.000134	99.97%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.0	-0.00364 mg/L	0.000422	-0.00364 mg/L	0.000422	11.61%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	688.6	0.00047 mg/L	0.003965	0.00047 mg/L	0.003965	847.73%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	47.2	-0.00154 mg/L	0.000202	-0.00154 mg/L	0.000202	13.11%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	76.6	-0.0340 mg/L	0.02046	-0.0340 mg/L	0.02046	60.12%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	121.8	0.00339 mg/L	0.003094	0.00339 mg/L	0.003094	91.17%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	377.8	-0.00002 mg/L	0.000028	-0.00002 mg/L	0.000028	132.41%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	40.5	-0.00402 mg/L	0.000481	-0.00402 mg/L	0.000481	11.97%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

==========

Sequence No.: 65 **Autosampler Location: 73**
Sample ID: LLCCV **Date Collected: 5/3/2012 8:57:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	147.0 kPa	0.50 L/min

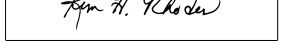
Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2023114.0						42816.22	2.12%
YRADIAL	250158.5						2858.28	1.14%
Ga 417.206	1277178.7						19505.89	1.53%
GaRADIAL	76131.4						2717.16	3.57%
Ag 328.068†	2260.6	0.00749	mg/L	0.000171	0.00749	mg/L	0.000171	2.28%
Al 396.153†	1256.7	0.186	mg/L	0.0049	0.186	mg/L	0.0049	2.62%

Approved: May 04, 2012

As 188.979†	23.0	0.00774 mg/L	0.001105	0.00774 mg/L	0.001105	14.27%
Ba 233.527†	3104.1	0.0188 mg/L	0.00035	0.0188 mg/L	0.00035	1.89%
Be 234.861†	1264.7	0.00104 mg/L	0.000027	0.00104 mg/L	0.000027	2.56%
B 249.677†	813.4	0.0124 mg/L	0.00005	0.0124 mg/L	0.00005	0.44%
Ca 227.546†	81.0	0.247 mg/L	0.0123	0.247 mg/L	0.0123	5.00%
Cd 228.802†	39.1	0.00065 mg/L	0.000268	0.00065 mg/L	0.000268	41.14%
Co 228.616†	145.8	0.00353 mg/L	0.000136	0.00353 mg/L	0.000136	3.86%
Cr 267.716†	1069.2	0.00993 mg/L	0.000269	0.00993 mg/L	0.000269	2.71%
Cu 327.393†	2363.3	0.0101 mg/L	0.00047	0.0101 mg/L	0.00047	4.68%
Fe 239.562†	1152.6	0.0784 mg/L	0.00162	0.0784 mg/L	0.00162	2.06%
Mg 279.077†	660.2	0.211 mg/L	0.0040	0.211 mg/L	0.0040	1.90%
Mn 257.610†	7990.9	0.00852 mg/L	0.000336	0.00852 mg/L	0.000336	3.95%
Mo 202.031†	705.0	0.0201 mg/L	0.00045	0.0201 mg/L	0.00045	2.24%
Ni 231.604†	675.3	0.00932 mg/L	0.000113	0.00932 mg/L	0.000113	1.21%
Pb 220.353†	106.6	0.00957 mg/L	0.001115	0.00957 mg/L	0.001115	11.65%
Sb 206.836†	90.8	0.0230 mg/L	0.00072	0.0230 mg/L	0.00072	3.12%
Se 196.026†	14.6	0.00489 mg/L	0.004376	0.00489 mg/L	0.004376	89.53%
Si 251.611†	4062.6	0.0951 mg/L	0.00169	0.0951 mg/L	0.00169	1.78%
Sn 189.927†	203.6	0.0186 mg/L	0.00037	0.0186 mg/L	0.00037	1.98%
Ti 334.940†	18303.2	0.0197 mg/L	0.00063	0.0197 mg/L	0.00063	3.19%
Tl 190.801†	37.3	0.00696 mg/L	0.000608	0.00696 mg/L	0.000608	8.75%
V 290.880†	3703.0	0.0172 mg/L	0.00161	0.0172 mg/L	0.00161	9.41%
Zn 206.200†	940.2	0.0203 mg/L	0.00085	0.0203 mg/L	0.00085	4.19%
K 766.490†	3022.5	1.03 mg/L	0.023	1.03 mg/L	0.023	2.23%
Na 589.592†	16675.8	0.991 mg/L	0.0296	0.991 mg/L	0.0296	2.98%
Sr 407.771†	45496.7	0.0209 mg/L	0.00024	0.0209 mg/L	0.00024	1.14%
Li 670.784†	2695.3	0.0170 mg/L	0.00119	0.0170 mg/L	0.00119	6.97%

Approved: May 04, 2012



2.3.2 Metals ICP-MS Data

2.3.2.1 Summary Data

Login Number: L12040928
Department: Metals
Analyst: Sheri Pfalzgraf

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: WG396659 - All acceptance criteria were met.

Matrix Spikes: WG396659 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 08(MS) and 10(MSD) met all acceptance criteria. Sample 02 was chosen by the client for MS/MSD analysis. Samples 09(MS) and 11(MSD) met all acceptance criteria.

SAMPLES

Samples: WG396659 - Client samples 05 and 06 required dilution analyses in order to obtain results for lead within the linear range.

Narrative ID: 45750
Approved By: Sheri Pfalzgraf

2.3.2.2 QC Summary Data

Example 6020 Calculations
Perkin Elmer NexION 300X

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	100
Vi = Initial volume	40
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/L)	0.25

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	200
Vi = Initial volume	0.5
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/kg)	40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	40
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	50

50 ug/kg = 0.050 mg/kg

Perkin Elmer NexION ICP/MS

STANDARDS KEY

QC Std 1 - ICV
QC Std 2 - ICB
QC Std 3 - LLICV
QC Std 4 - ICSA
QC Std 5 - ICSAB
QC Std 6 - CCV
QC Std 7 - CCB
QC Std 8 - LLCCV

Calibration Solutions

Analyte	Stock Conc. (mg/L)	S1 (mg/L)	S2 (mg/L)	S3 (mg/L)	S4 (mg/L)
Al	10	0	0.00005	0.05	0.1
Sb	10	0	0.00005	0.05	0.1
As	10	0	0.00005	0.05	0.1
Ba	10	0	0.00005	0.05	0.1
Be	10	0	0.00005	0.05	0.1
Ca	1000	0	0.005	5	10
Cd	10	0	0.0005	0.05	0.1
Cr	10	0	0.0005	0.05	0.1
Co	10	0	0.0005	0.05	0.1
Cu	10	0	0.0005	0.05	0.1
Fe	1000	0	0.005	5	10
Pb	10	0	0.00005	0.05	0.1
Mg	1000	0	0.005	5	10
Mn	10	0	0.00005	0.05	0.1
Ni	10	0	0.00005	0.05	0.1
K	1000	0	0.005	5	10
Se	10	0	0.00005	0.05	0.1
Ag	10	0	0.00005	0.05	0.1
Na	1000	0	0.005	5	10
Tl	10	0	0.00005	0.05	0.1
V	10	0	0.00005	0.05	0.1
U	1000	0	0.00005	0.05	0.1
Zn	10	0	0.00005	0.05	0.1

Microbac Laboratories Inc.
Microwave Digestion Log

Workgroup: WG396616
Analyst: VC
Spike Analyst: VC
Run Date: 05/01/2012 08:15
Method: 3015
Balance: BAL016
Instrument: MW-2

SOP: ME407 Revison 12
Spike Solution: STD49281
Spike Witness: ERP
HNO3 Lot #: COA16033
MS WG# 392559 Lot #: COA16041
Digestion Tubes Lot #: COA16074

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG396616-03	BLANK	1	40 mL	100 mL	207.957 g	207.946 g		
2	WG396616-04	LCS	1	40 mL	100 mL	207.098 g	207.088 g	.25 mL	
3	WG396616-01	REF	1	40 mL	100 mL	206.678 g	206.665 g		
4	L12040928-01	RS01	1	40 mL	100 mL	206.678 g	206.665 g		05/11/12
5	WG396616-02	REF	1	40 mL	100 mL	206.618 g	206.596 g		
6	L12040928-02	RS02	1	40 mL	100 mL	206.618 g	206.596 g		05/11/12
7	L12040928-03	SAMP	1	40 mL	100 mL	207.028 g	207.024 g		05/11/12
8	L12040928-04	SAMP	1	40 mL	100 mL	206.764 g	206.761 g		05/11/12
9	L12040928-05	SAMP	1	40 mL	100 mL	207.332 g	207.318 g		05/11/12
10	L12040928-06	SAMP	1	40 mL	100 mL	208.035 g	208.025 g		05/11/12
11	WG396616-05	MS	1	40 mL	100 mL	210.033 g	210.025 g	.25 mL	
12	L12040928-08	MS01	1	40 mL	100 mL	210.033 g	210.025 g	.25 mL	05/11/12
13	WG396616-07	MS	1	40 mL	100 mL	207 g	206.987 g	.25 mL	
14	L12040928-09	MS02	1	40 mL	100 mL	207 g	206.987 g	.25 mL	05/11/12
15	WG396616-06	MSD	1	40 mL	100 mL	208.683 g	208.67 g	.25 mL	
16	L12040928-10	SD01	1	40 mL	100 mL	208.683 g	208.67 g	.25 mL	05/11/12
17	WG396616-08	MSD	1	40 mL	100 mL	207.843 g	207.833 g	.25 mL	
18	L12040928-11	SD02	1	40 mL	100 mL	207.843 g	207.833 g	.25 mL	05/11/12
19	L12040963-01	SAMP	1	40 mL	100 mL	208.03 g	208.008 g		05/14/12
20	L12040963-02	SAMP	1	40 mL	100 mL	207.297 g	207.282 g		05/14/12
21	L12040963-03	SAMP	1	40 mL	100 mL	207.614 g	207.596 g		05/14/12
22	L12040963-04	SAMP	1	40 mL	100 mL	207.982 g	207.976 g		05/14/12
23	L12040963-07	SAMP	1	40 mL	100 mL	207.758 g	207.741 g		05/14/12
24	L12040963-08	SAMP	1	40 mL	100 mL	206.81 g	206.796 g		05/14/12

L12040928-05	filtered digestate
L12040928-06	filtered digestate

Analyst: Vicki Collins

Reviewer: Erin Potter

MW_DIG - Modified 09/30/2009
PDF ID: 2397799
Report generated: 05/01/2012 09:14

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050112A.REP
Analyst1: SLP Analyst2: N/A
Method: 6020 SOP: N/A Rev:
Maintenance Log ID: 41552

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD50968

Workgroups: 396655, 395946, 396659, 396696

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.050112.095929	Blank	Blank		1		05/01/12 09:59
2	NI.050112.100217	WG396694-01	Calibration Point		1		05/01/12 10:02
3	NI.050112.100504	WG396694-02	Calibration Point		1		05/01/12 10:05
4	NI.050112.100751	WG396694-03	Calibration Point		1		05/01/12 10:07
5	NI.050112.101038	WG396694-04	Calibration Point		1		05/01/12 10:10
6	NI.050112.101328	WG396694-05	Initial Calibration Verification		1		05/01/12 10:13
7	NI.050112.101617	WG396694-06	Initial Calib Blank		1		05/01/12 10:16
8	NI.050112.101906	WG396694-07	Low Level Initial Calibration V		1		05/01/12 10:19
9	NI.050112.102153	WG396694-08	Interference Check		1		05/01/12 10:21
10	NI.050112.102441	WG396694-09	Interference Check		1		05/01/12 10:24
11	NI.050112.102730	WG396694-10	CCV		1		05/01/12 10:27
12	NI.050112.103018	WG396694-11	CCB		1		05/01/12 10:30
13	NI.050112.103307	WG396592-02	Method/Prep Blank	.5/200	1		05/01/12 10:33
14	NI.050112.103554	WG396592-03	Laboratory Control S	.5/200	1		05/01/12 10:35
15	NI.050112.103842	WG396592-01	Reference Sample		5	L12040931-01	05/01/12 10:38
16	NI.050112.104129	WG396592-04	Matrix Spike	.515/200	5	L12040931-01	05/01/12 10:41
17	NI.050112.104416	WG396592-05	Matrix Spike Duplica	.502/200	5	L12040931-01	05/01/12 10:44
18	NI.050112.104703	L12040931-04	TP5-120425	.527/200	5		05/01/12 10:47
19	NI.050112.104951	WG396655-02	Serial Dilution		25	L12040931-04	05/01/12 10:49
20	NI.050112.105238	WG396655-01	Post Digestion Spike		5	L12040931-04	05/01/12 10:52
21	NI.050112.105525	L12040931-05	TP1-120426	.503/200	5		05/01/12 10:55
22	NI.050112.105812	L12040931-06	SS1-120426	.53/200	5		05/01/12 10:58
23	NI.050112.110102	WG396694-12	CCV		1		05/01/12 11:01
24	NI.050112.110349	WG396694-13	CCB		1		05/01/12 11:03
25	NI.050112.110638	L12040931-07	SS3-120426	.524/200	5		05/01/12 11:06
26	NI.050112.110925	L12040931-08	SS4-120426	.518/200	5		05/01/12 11:09
27	NI.050112.111213	L12040931-09	DUP-01-120425	.532/200	5		05/01/12 11:12
28	NI.050112.111501	L12040686-06	LTL-G-MWL5B-DIS-DUP	40/100	1		05/01/12 11:15
29	NI.050112.111751	WG396694-14	CCV		1		05/01/12 11:17
30	NI.050112.112038	WG396694-15	CCB		1		05/01/12 11:20
31	NI.050112.112500	WG396616-03	Method/Prep Blank	40/100	1		05/01/12 11:25
32	NI.050112.112748	WG396616-04	Laboratory Control S	40/100	1		05/01/12 11:27
33	NI.050112.113035	WG396616-01	Reference Sample		1	L12040928-01	05/01/12 11:30
34	NI.050112.113322	WG396616-02	Reference Sample		1	L12040928-02	05/01/12 11:33

Page: 1 Approved: May 01, 2012

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050112A.REP
Analyst1: SLP Analyst2: N/A
Method: 6020 SOP: N/A Rev:
Maintenance Log ID: 41552

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD50968

Workgroups: 396655, 395946, 396659, 396696

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.050112.113609	L12040928-03	MW-10-042612	40/100	1		05/01/12 11:36
36	NI.050112.113857	WG396659-02	Serial Dilution		5	L12040928-03	05/01/12 11:38
37	NI.050112.114145	WG396659-01	Post Digestion Spike		1	L12040928-03	05/01/12 11:41
38	NI.050112.114432	L12040928-04	MW-10-042612	40/100	1		05/01/12 11:44
39	NI.050112.114721	WG396694-16	CCV		1		05/01/12 11:47
40	NI.050112.115008	WG396694-17	CCB		1		05/01/12 11:50
41	NI.050112.115257	L12040928-05	MW-31-042612	40/100	1		05/01/12 11:52
42	NI.050112.115545	L12040928-06	MW-31-042612	40/100	1		05/01/12 11:55
43	NI.050112.115832	WG396616-05	Matrix Spike	40/100	1	L12040928-01	05/01/12 11:58
44	NI.050112.120119	WG396616-07	Matrix Spike	40/100	1	L12040928-02	05/01/12 12:01
45	NI.050112.120407	WG396616-06	Matrix Spike Duplica	40/100	1	L12040928-01	05/01/12 12:04
46	NI.050112.120655	WG396616-08	Matrix Spike Duplica	40/100	1	L12040928-02	05/01/12 12:06
47	NI.050112.120942	L12040963-01	MW-20-042712	40/100	1		05/01/12 12:09
48	NI.050112.121229	L12040963-02	MW-20-042712	40/100	1		05/01/12 12:12
49	NI.050112.121517	L12040963-03	MW-14-042712	40/100	1		05/01/12 12:15
50	NI.050112.121804	L12040963-04	MW-14-042712	40/100	1		05/01/12 12:18
51	NI.050112.122053	WG396694-18	CCV		1		05/01/12 12:20
52	NI.050112.122340	WG396694-19	CCB		1		05/01/12 12:23
53	NI.050112.122629	L12040963-07	MW-19-042712	40/100	1		05/01/12 12:26
54	NI.050112.122916	L12040963-08	MW-19-042712	40/100	1		05/01/12 12:29
55	NI.050112.123205	WG396694-20	Interference Check		1		05/01/12 12:32
56	NI.050112.123452	WG396694-21	Interference Check		1		05/01/12 12:34
57	NI.050112.123742	WG396694-22	CCV		1		05/01/12 12:37
58	NI.050112.124029	WG396694-23	CCB		1		05/01/12 12:40
59	NI.050112.125415	WG396596-02	Method/Prep Blank	40/100	1		05/01/12 12:54
60	NI.050112.125702	WG396596-03	Laboratory Control S	40/100	1		05/01/12 12:57
61	NI.050112.125949	WG396634-01	Fluid Blank		1		05/01/12 12:59
62	NI.050112.130236	WG396596-01	Reference Sample		1	L12040910-04	05/01/12 13:02
63	NI.050112.130524	WG396596-04	Matrix Spike	40/100	1	L12040910-04	05/01/12 13:05
64	NI.050112.130811	WG396596-05	Matrix Spike Duplica	40/100	1	L12040910-04	05/01/12 13:08
65	NI.050112.131058	L12040910-11	MW2D.272.14	40/100	1		05/01/12 13:10
66	NI.050112.131345	WG396696-02	Serial Dilution		5	L12040910-11	05/01/12 13:13
67	NI.050112.131633	WG396696-01	Post Digestion Spike		1	L12040910-11	05/01/12 13:16
68	NI.050112.131921	L12040910-14	MW4A.272.14	40/100	1		05/01/12 13:19

Page: 2 Approved: May 01, 2012

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050112A.REP

Analyst1: SLP Analyst2: N/A

Method: 6020 SOP: N/A Rev:

Maintenance Log ID: 41552

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984

ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150

CCV: STD51215 LLCCV: STD50968

Workgroups: 396655, 395946, 396659, 396696

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.050112.132211	WG396694-24	CCV		1		05/01/12 13:22
70	NI.050112.132458	WG396694-25	CCB		1		05/01/12 13:24
71	NI.050112.132748	L12040910-17	MW4C.272.14	40/100	1		05/01/12 13:27
72	NI.050112.133035	L12040910-20	MW4C2.272.14	40/100	1		05/01/12 13:30
73	NI.050112.133322	L12040910-23	MW5A.272.14	40/100	1		05/01/12 13:33
74	NI.050112.133609	L12040910-26	OW1A.272.14	40/100	1		05/01/12 13:36
75	NI.050112.133857	L12040910-29	OW2A.272.14	40/100	1		05/01/12 13:38
76	NI.050112.134145	L12040910-32	OW3A.272.14	40/100	1		05/01/12 13:41
77	NI.050112.134432	L12040951-02	60500-SSP0233	40/100	1		05/01/12 13:44
78	NI.050112.134719	L12040968-02	MW-3	40/100	1		05/01/12 13:47
79	NI.050112.135007	L12040968-04	MW-2		1		05/01/12 13:50
80	NI.050112.135254	L12040968-06	MW-1	40/100	1		05/01/12 13:52
81	NI.050112.135544	WG396694-26	CCV		1		05/01/12 13:55
82	NI.050112.135831	WG396694-27	CCB		1		05/01/12 13:58
83	NI.050112.140121	L12040968-08	MW-8	40/100	1		05/01/12 14:01
84	NI.050112.140409	L12040968-10	MW-7	40/100	1		05/01/12 14:04
85	NI.050112.140656	L12040968-12	MW-9	40/100	1		05/01/12 14:06
86	NI.050112.140943	L12040968-14	MW-10	40/100	1		05/01/12 14:09
87	NI.050112.141232	WG396694-28	CCV		1		05/01/12 14:12
88	NI.050112.141519	WG396694-29	CCB		1		05/01/12 14:15
89	NI.050112.141808	WG396694-30	Low Level Continuing Calibra		1		05/01/12 14:18
90	NI.050112.144723	L12040928-05	MW-31-042612		50		05/01/12 14:47
91	NI.050112.145010	L12040928-06	MW-31-042612		50		05/01/12 14:50
92	NI.050112.145257	L12040968-04	MW-2		2		05/01/12 14:52
93	NI.050112.145800	L12040928-05	MW-31-042612	40/100	50		05/01/12 14:58
94	NI.050112.150137	L12040928-06	MW-31-042612	40/100	50		05/01/12 15:01
95	NI.050112.150425	L12040968-04	MW-2	40/100	2		05/01/12 15:04
96	NI.050112.150714	WG396694-31	Interference Check		1		05/01/12 15:07
97	NI.050112.151002	WG396694-32	Interference Check		1		05/01/12 15:10
98	NI.050112.151252	WG396694-33	CCV		1		05/01/12 15:12
99	NI.050112.151539	WG396694-34	CCB		1		05/01/12 15:15
100	NI.050112.151829	WG396694-35	Low Level Continuing Calibra		1		05/01/12 15:18

Comments

Page: 3 Approved: May 01, 2012

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050112A.REP
Analyst1: SLP Analyst2: N/A
Method: 6020 SOP: N/A Rev:
Maintenance Log ID: 41552

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD50968

Workgroups: 396655, 395946, 396659, 396696

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time

Seq.	Rerun	Dil.	Reason	Analytes
90			Due to autosampler malfunction, sample was not analyzed. This sample was reanalyzed later in the analytical sequence.	
91			Due to autosampler malfunction, sample was not analyzed. This sample was reanalyzed later in the analytical sequence.	
92			Due to autosampler malfunction, sample was not analyzed. This sample was reanalyzed later in the analytical sequence.	

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Maren Berry

Microbac Laboratories Inc.

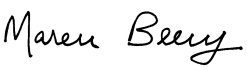
Data Checklist

Date: 01-MAY-2012
Analyst: SLP
Analyst: NA
Method: 6020
Instrument: ICP-MS2
Curve Workgroup: 396694
Runlog ID: 46485
Analytical Workgroups: 396655, 395946, 396659, 396696

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0931, 0686, 0928, 0963, 0951, 0968
Client Forms	
Level X	
Level 3	
Level 4	0931, 0928, 0963, 0951, 0968
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	SLP
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
01-MAY-2012

Secondary Reviewer:
01-MAY-2012



CHECKLIST1 - Modified 03/05/2008
Generated: MAY-01-2012 18:15:20

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6020 AAB#: WG396659

Login Number: L12040928

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-27-042612	01	04/26/12					05/01/12	4.9	180		05/01/12	5	180	
MW-27-042612	02	04/26/12					05/01/12	4.9	180		05/01/12	5	180	
MW-10-042612	03	04/26/12					05/01/12	4.8	180		05/01/12	5	180	
MW-10-042612	04	04/26/12					05/01/12	4.8	180		05/01/12	5	180	
MW-31-042612	05	04/26/12					05/01/12	4.8	180		05/01/12	5	180	
MW-31-042612	05	04/26/12					05/01/12	4.8	180		05/01/12	5.1	180	
MW-31-042612	06	04/26/12					05/01/12	4.8	180		05/01/12	5	180	
MW-31-042612	06	04/26/12					05/01/12	4.8	180		05/01/12	5.1	180	
MW-27-042612-MS	08	04/26/12					05/01/12	4.9	180		05/01/12	5.1	180	
MW-27-042612-MS	09	04/26/12					05/01/12	4.9	180		05/01/12	5.1	180	
MW-27-042612-MSD	10	04/26/12					05/01/12	4.9	180		05/01/12	5.1	180	
MW-27-042612-MSD	11	04/26/12					05/01/12	4.9	180		05/01/12	5.1	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2398539
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396659
Blank File ID: NI.050112.112500
Blank Sample ID: WG396616-03
Prep Date: 05/01/12 08:15
Instrument ID: ICP-MS2
Analyzed Date: 05/01/12 11:25
Method: 6020
Analyst: SLP

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396616-04	NI.050112.112748	05/01/12 11:27	01
MW-27-042612	L12040928-01	NI.050112.113035	05/01/12 11:30	01
MW-27-042612	L12040928-02	NI.050112.113322	05/01/12 11:33	01
MW-10-042612	L12040928-03	NI.050112.113609	05/01/12 11:36	01
MW-10-042612	L12040928-04	NI.050112.114432	05/01/12 11:44	01
MW-31-042612	L12040928-05	NI.050112.115257	05/01/12 11:52	01
MW-31-042612	L12040928-06	NI.050112.115545	05/01/12 11:55	01
MW-27-042612-MS	L12040928-08	NI.050112.115832	05/01/12 11:58	01
MW-27-042612-MS	L12040928-09	NI.050112.120119	05/01/12 12:01	01
MW-27-042612-MSD	L12040928-10	NI.050112.120407	05/01/12 12:04	01
MW-27-042612-MSD	L12040928-11	NI.050112.120655	05/01/12 12:06	01
MW-31-042612	L12040928-05	NI.050112.145800	05/01/12 14:58	DL01
MW-31-042612	L12040928-06	NI.050112.150137	05/01/12 15:01	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2398540
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12040928 Prep Date:05/01/12 08:15 Sample ID:WG396616-03
Instrument ID:ICP-MS2 Run Date:05/01/12 11:25 Prep Method:3015
File ID:NI.050112.112500 Analyst:SLP Method:6020
Workgroup (AAB#):WG396659 Matrix:Water Units:mg/L
Contract #: Cal ID:ICP-MS-01-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Arsenic, Total	0.000500	0.00100	0.000500	1	U
Lead, Total	0.000500	0.00100	0.000500	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U

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

Report Name:BLANK
PDF ID: 2398541
01-MAY-2012 13:33

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 **Run Date:** 05/01/2012 **Sample ID:** WG396616-04
Instrument ID: ICP-MS2 **Run Time:** 11:27 **Prep Method:** 3015
File ID: NI.050112.112748 **Analyst:** SLP **Method:** 6020
Workgroup (AAB#): WG396659 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD49281 **Cal ID:** ICP-MS-01-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0661	106	80 - 120	
Arsenic, Total	0.0625	0.0655	105	80 - 120	
Lead, Total	0.0625	0.0653	104	80 - 120	
Selenium, Total	0.0625	0.0645	103	80 - 120	
Thallium, Total	0.0625	0.0651	104	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 2398542
Report generated: 05/01/2012 13:33

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:ICP-MS2- 01-MAY-12 Worknum:WG396659

Instrument ID:ICP-MS2 Contract #: Prep Method:3015

Parent ID:L12040928-01 File ID:NI.050112.113035 Dil:1 Method:6020

Sample ID:L12040928-08 MS File ID:NI.050112.115832 Dil:1 Matrix:Water

Sample ID:L12040928-10 MSD File ID:NI.050112.120407 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Total	U	0.0625	0.0663	106	0.0625	0.0670	107	0.951	80 - 120	20	
Arsenic, Total	0.00457	0.0625	0.0716	107	0.0625	0.0716	107	0.0901	80 - 120	20	
Lead, Total	U	0.0625	0.0662	106	0.0625	0.0672	108	1.55	80 - 120	20	
Selenium, Total	0.00433	0.0625	0.0716	108	0.0625	0.0714	107	0.285	80 - 120	20	
Thallium, Total	U	0.0625	0.0673	108	0.0625	0.0689	110	2.44	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2398543

Report generated 05/01/2012 13:33

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:ICP-MS2- 01-MAY-12 Worknum:WG396659

Instrument ID:ICP-MS2 Contract #: Prep Method:3015

Parent ID:L12040928-02 File ID:NI.050112.113322 Dil:1 Method:6020

Sample ID:L12040928-09 MS File ID:NI.050112.120119 Dil:1 Matrix:Water

Sample ID:L12040928-11 MSD File ID:NI.050112.120655 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Dissolved	U	0.0625	0.0666	107	0.0625	0.0652	104	2.09	80 - 120	20	
Arsenic, Dissolved	0.00352	0.0625	0.0697	106	0.0625	0.0693	105	0.633	80 - 120	20	
Lead, Dissolved	U	0.0625	0.0656	105	0.0625	0.0641	103	2.32	80 - 120	20	
Selenium, Dissolved	0.00419	0.0625	0.0695	104	0.0625	0.0705	106	1.45	80 - 120	20	
Thallium, Dissolved	U	0.0625	0.0673	108	0.0625	0.0659	105	2.12	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2398543

Report generated 05/01/2012 13:33

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12040928 **Worknum:** WG396659
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG396659-02 **File ID:** NI.050112.113857 **Dil:** 5 **Units:** ug/L
Sample: L12040928-03 **File ID:** NI.050112.113609 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	0.531	X	ND	U		
Lead	ND	U	ND	U		
Selenium	2.66	X	2.92	X	9.62	
Thallium	0.0537	F	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 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: 2398536
05/01/2012 13:33

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12040928 **Worknum:** WG396659
Instrument ID: ICP-MS2 **Method:** 6020
Post Spike ID: WG396659-01 **File ID:** NI.050112.114145 **Dil:** 1 **Units:** ug/L
Sample ID: L12040928-03 **File ID:** NI.050112.113609 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	54.3		0	U	50	108.6	75 - 125	
ARSENIC	54.8		0.531		50	108.6	75 - 125	
LEAD	53.0		0	U	50	106.1	75 - 125	
SELENIUM	55.3		2.66		50	105.4	75 - 125	
THALLIUM	53.6		0.0537	F	50	107.2	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: 2398537
Report generated: 05/01/2012 13:33

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12040928**	Workgroup (AAB#):	**WG396659**
Analytical Method:	**6020**	Instrument ID:	**ICP-MS2**
ICAL Worknum:	**WG396694**	Initial Calibration Date:	**01-MAY-2012 10:10**

	WG396694-01		WG396694-02		WG396694-03		WG396694-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	28.7	.4	548	50	509000	100	997000	.999995	
ARSENIC	0	-191	.4	-122	50	54400	100	107000	.999871	
LEAD	0	1760	.4	4480	50	2620000	100	5300000	.99967	
SELENIUM	0	24.5	.4	27.6	50	5370	100	10500	.999913	
THALLIUM	0	11.3	.4	858	50	843000	100	1650000	.999948	

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: 2398546
Report generated: 01-MAY-2012 13:33

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-06
Instrument ID: ICP-MS2 Run Time: 10:16 Method: 6020
File ID: NI.050112.101617 Analyst: SLP Units: ug/L
Workgroup (AAB#): WG396659 Cal ID: ICP-MS2 - 01-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.2	.4	.2	U
LEAD	.2	.4	.2	U
ANTIMONY	.2	.4	.2	U
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U

ICB - Modified 07/14/2009
PDF File ID: 2398548
Report generated 05/01/2012 13:33

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-11

Instrument ID: ICP-MS2 Run Time: 10:30 Method: 6020

File ID: NI.050112.103018 Analyst: SLP Units: ug/L

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2398551
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-15

Instrument ID: ICP-MS2 Run Time: 11:20 Method: 6020

File ID: NI.050112.112038 Analyst: SLP Units: ug/L

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2398551
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-17

Instrument ID: ICP-MS2 Run Time: 11:50 Method: 6020

File ID: NI.050112.115008 Analyst: SLP Units: ug/L

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2398551
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-19

Instrument ID: ICP-MS2 Run Time: 12:23 Method: 6020

File ID: NI.050112.122340 Analyst: SLP Units: ug/L

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2398551
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-23

Instrument ID: ICP-MS2 Run Time: 12:40 Method: 6020

File ID: NI.050112.124029 Analyst: SLP Units: ug/L

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2398551
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-29

Instrument ID: ICP-MS2 Run Time: 14:15 Method: 6020

File ID: NI.050112.141519 Analyst: SLP Units: ug/L

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2398551
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-34

Instrument ID: ICP-MS2 Run Time: 15:15 Method: 6020

File ID: NI.050112.151539 Analyst: SLP Units: ug/L

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2398551
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-05
Instrument ID: ICP-MS2 Run Time: 10:13 Method: 6020
File ID: NI.050112.101328 Analyst: SLP Units: ug/L
Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	50.2	100	90 - 110	
Arsenic		50	50.2	100	90 - 110	
Lead		50	49.0	98.1	90 - 110	
Selenium		50	50.3	101	90 - 110	
Thallium		50	49.1	98.3	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2398547
Report generated 05/01/2012 13:33

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-10

Instrument ID: ICP-MS2 Run Time: 10:27 Method: 6020

File ID: NI.050112.102730 Analyst: SLP QC Key: WATERLOO

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.1	ug/L	102	90 - 110		
Arsenic		50.0	50.3	ug/L	101	90 - 110		
Lead		50.0	48.9	ug/L	97.9	90 - 110		
Selenium		50.0	49.9	ug/L	99.8	90 - 110		
Thallium		50.0	49.3	ug/L	98.7	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2398550

Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-14

Instrument ID: ICP-MS2 Run Time: 11:17 Method: 6020

File ID: NI.050112.111751 Analyst: SLP QC Key: WATERLOO

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	52.5	ug/L	105	90 - 110		
Arsenic		50.0	50.8	ug/L	102	90 - 110		
Lead		50.0	49.8	ug/L	99.6	90 - 110		
Selenium		50.0	50.4	ug/L	101	90 - 110		
Thallium		50.0	50.2	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2398550

Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-16

Instrument ID: ICP-MS2 Run Time: 11:47 Method: 6020

File ID: NI.050112.114721 Analyst: SLP QC Key: WATERLOO

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.0	ug/L	102	90 - 110		
Arsenic		50.0	49.8	ug/L	99.6	90 - 110		
Lead		50.0	50.3	ug/L	101	90 - 110		
Selenium		50.0	49.8	ug/L	99.6	90 - 110		
Thallium		50.0	50.9	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2398550

Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-18

Instrument ID: ICP-MS2 Run Time: 12:20 Method: 6020

File ID: NI.050112.122053 Analyst: SLP QC Key: WATERLOO

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.2	ug/L	102	90 - 110		
Arsenic		50.0	50.3	ug/L	101	90 - 110		
Lead		50.0	50.4	ug/L	101	90 - 110		
Selenium		50.0	50.6	ug/L	101	90 - 110		
Thallium		50.0	51.0	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2398550

Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-22

Instrument ID: ICP-MS2 Run Time: 12:37 Method: 6020

File ID: NI.050112.123742 Analyst: SLP QC Key: WATERLOO

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.0	ug/L	102	90 - 110		
Arsenic		50.0	49.8	ug/L	99.6	90 - 110		
Lead		50.0	50.1	ug/L	100	90 - 110		
Selenium		50.0	50.2	ug/L	100	90 - 110		
Thallium		50.0	50.8	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2398550

Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-28

Instrument ID: ICP-MS2 Run Time: 14:12 Method: 6020

File ID: NI.050112.141232 Analyst: SLP QC Key: WATERLOO

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.1	ug/L	102	90 - 110		
Arsenic		50.0	50.3	ug/L	101	90 - 110		
Lead		50.0	50.3	ug/L	101	90 - 110		
Selenium		50.0	51.0	ug/L	102	90 - 110		
Thallium		50.0	51.5	ug/L	103	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2398550

Report generated 05/01/2012 15:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/01/2012 Sample ID: WG396694-33

Instrument ID: ICP-MS2 Run Time: 15:12 Method: 6020

File ID: NI.050112.151252 Analyst: SLP QC Key: WATERLOO

Workgroup (AAB#): WG396659 Cal ID: ICP-MS - 01-MAY-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	50.4	ug/L	101	90 - 110		
Selenium		50.0	51.0	ug/L	102	90 - 110		
Thallium		50.0	51.4	ug/L	103	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2398550

Report generated 05/01/2012 15:31

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040928 **Workgroup (AAB#):** WG396659
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG396694-08 **File ID:** NI.050112.102153 **Units:** ug/L
Sol. AB : WG396694-09 **File ID:** NI.050112.102441 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0504	NS	100	107	107	
Arsenic	NS	0.0126	NS	100	103	103	
Lead	NS	0.0197	NS	100	106	106	
Selenium	NS	-0.0208	NS	100	101	101	
Thallium	NS	0.0187	NS	100	103	103	

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: 2398549
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040928 **Workgroup (AAB#):** WG396659
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG396694-20 **File ID:** NI.050112.123205 **Units:** ug/L
Sol. AB : WG396694-21 **File ID:** NI.050112.123452 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0482	NS	100	106	106	
Arsenic	NS	0.0250	NS	100	103	103	
Lead	NS	0.0166	NS	100	109	109	
Selenium	NS	0.0404	NS	100	102	102	
Thallium	NS	0.0225	NS	100	104	104	

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: 2398549
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12040928 **Workgroup (AAB#):** WG396659
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG396694-31 **File ID:** NI.050112.150714 **Units:** ug/L
Sol. AB : WG396694-32 **File ID:** NI.050112.151002 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0436	NS	100	103	103	
Arsenic	NS	0.0294	NS	100	101	101	
Lead	NS	0.0195	NS	100	107	107	
Selenium	NS	0.0488	NS	100	102	102	
Thallium	NS	0.0219	NS	100	103	103	

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: 2398549
Report generated 05/01/2012 15:31

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12040928 **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: 2398544
Report generated: 05/01/2012 13:33

2.3.2.3 Raw Data

MassCal File Name

Mass Calibration File Name Default.tun
MassCal File Path C:\NexION Data\MassCal\Default.tun
Peak Search Window: 1.00

Sample Information

Sample Date/Time: Tuesday, May 01, 2012 09:34:17

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	1331	2020	0.723
Mg	23.985	24.025	4716	2019	0.721
In	114.904	114.925	22875	2023	0.682
U	238.050	238.025	47466	2035	0.671

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	4.837
5.575	6.734
5.625	1.541
5.675	2.590
5.725	1.764
5.775	2.909
5.825	3.663
5.875	1.949
5.925	3.835
5.975	2.040
6.025	2.436
6.075	3.431
6.125	2.448
6.175	2.176
6.225	3.004
6.275	3.961
6.325	34.401
6.375	223.607
6.425	29.881
6.475	24.623
6.525	6.576
6.575	2.482
6.625	2.207
6.675	2.481
6.725	2.689
6.775	1.872
6.825	1.462
6.875	1.497

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Page 1

Approved: May 01, 2012
Sheri L. Babgrad

6.925	1.443
6.975	3.469
7.025	1.898
7.075	2.390
7.125	1.474
7.175	2.726
7.225	2.383
7.275	4.194
7.325	38.932
7.375	
7.425	
7.475	136.931
7.525	
7.575	223.607
7.625	223.607
7.675	223.607
7.725	136.931
7.775	223.607
7.825	91.287
7.875	136.931
7.925	136.931
7.975	136.931
8.025	223.607
8.075	
8.125	
8.175	
8.225	
8.275	136.931
8.325	223.607
8.375	223.607
8.425	149.071
8.475	28.287
22.525	2.603
22.575	2.407
22.625	1.649
22.675	0.966
22.725	1.122
22.775	1.478
22.825	1.034
22.875	0.509
22.925	1.142
22.975	0.645
23.025	1.265
23.075	0.868
23.125	1.126
23.175	1.822
23.225	2.050

Approved: May 01, 2012

23.275	2.059
23.325	3.587
23.375	34.233
23.425	136.931
23.475	13.734
23.525	4.313
23.575	3.645
23.625	2.134
23.675	1.953
23.725	1.610
23.775	1.683
23.825	0.788
23.875	1.360
23.925	0.513
23.975	1.084
24.025	1.521
24.075	1.013
24.125	0.735
24.175	0.796
24.225	2.889
24.275	2.082
24.325	9.342
24.375	
24.425	136.931
24.475	50.855
24.525	21.483
24.575	1.668
24.625	3.961
24.675	2.089
24.725	1.480
24.775	1.230
24.825	0.857
24.875	1.851
24.925	2.045
24.975	1.685
25.025	2.120
25.075	2.142
25.125	1.874
25.175	2.655
25.225	2.219
25.275	3.222
25.325	14.068
25.375	39.123
25.425	223.607
25.475	45.799
113.525	7.315
113.575	6.403

Approved: May 01, 2012

113.625	6.278
113.675	3.617
113.725	1.778
113.775	3.023
113.825	1.111
113.875	1.947
113.925	3.324
113.975	2.913
114.025	2.651
114.075	2.311
114.125	4.034
114.175	5.674
114.225	1.470
114.275	20.410
114.325	63.888
114.375	20.494
114.425	20.674
114.475	3.105
114.525	5.037
114.575	2.551
114.625	2.715
114.675	1.859
114.725	0.927
114.775	1.413
114.825	0.568
114.875	0.697
114.925	0.875
114.975	0.955
115.025	1.093
115.075	2.094
115.125	1.596
115.175	2.441
115.225	2.849
115.275	11.809
115.325	136.931
115.375	223.607
115.425	26.146
115.475	16.574
115.525	12.925
115.575	5.103
115.625	3.438
115.675	3.351
115.725	3.032
115.775	4.388
115.825	1.338
115.875	4.091
115.925	1.457

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115.975	6.389
116.025	3.544
116.075	5.622
116.125	3.519
116.175	2.848
116.225	17.130
116.275	33.333
116.325	
116.375	136.931
116.425	223.607
116.475	63.738
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	
237.275	
237.325	
237.375	149.071
237.425	
237.475	93.541
237.525	40.000
237.575	16.481
237.625	9.155
237.675	1.333
237.725	4.031
237.775	3.294
237.825	1.486
237.875	0.992
237.925	1.695
237.975	1.687
238.025	0.961
238.075	1.188
238.125	1.828
238.175	1.374
238.225	1.305
238.275	2.941

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238.325	1.096
238.375	3.045
238.425	4.343
238.475	13.524
238.525	37.611
238.575	136.931
238.625	
238.675	
238.725	
238.775	
238.825	
238.875	223.607
238.925	
238.975	
239.025	
239.075	
239.125	
239.175	223.607
239.225	
239.275	
239.325	
239.375	
239.425	
239.475	

Approved: May 01, 2012

Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Tuesday, May 01, 2012 09:37:53
Sample Description:
Method File: C:\NexION Data\Method\Daily Performance.mth
Dataset File: C:\NexION Data\DataSet\042012\Daily Performance Check.864
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	4750.3	4750.345	67.119	1.4	Standard
	Mg	24.0	201100.0	201099.959	2247.802	1.1	Standard
	In	114.9	85338.7	85338.676	922.951	1.1	Standard
	U	238.1	68475.7	68475.662	625.664	0.9	Standard
⌈	CeO	155.9	1589.1	0.015	0.000	1.7	Standard
| >	Ce	139.9	105312.2	105312.170	1321.923	1.3	Standard
⌊	Ce++	70.0	1312.3	0.012	0.000	2.0	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

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SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 5/1/2012 9:37:50 AM
End Time: 5/1/2012 9:40:11 AM

Daily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 4750.34
Obtained Intensity (Mg 23.985): 201099.96
Obtained Intensity (In 114.904): 85338.68
Obtained Intensity (U 238.05): 68475.66
Obtained Intensity (Bkgd 220): 0.07
Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=1589.08 / 105312.17)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.012 (=1312.26 / 105312.17)

Report Date/Time: Tuesday, May 01, 2012 09:40:11
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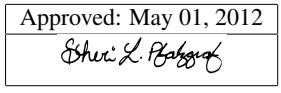

SmartTune Wizard - Details

```
Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 5/1/2012 9:37:50 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): 4750.34
                Obtained Intensity (Mg 23.985): 201099.96
                Obtained Intensity (In 114.904): 85338.68
                Obtained Intensity (U 238.05): 68475.66
                Obtained Intensity (Bkgd 220): 0.07
                Obtained Formula (CeO 155.9 / Ce 139.905): 0.015 (=1589.08 / 105312.17)
                Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.012 (=1312.26 / 105312.17)
[Passed]  Optimum value(s): N/A

End Time: 5/1/2012 9:40:11 AM
```


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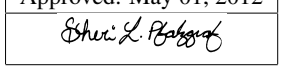

Method 6020 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, May 01, 2012 09:59:29
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	21640.1	2.9				ug/L		Standard
|	**Be**	9	16.0	43.3				ug/L		Standard
|	**Al**	27	19980.8	17.9				ug/L		Standard
⌊>	**Sc**	45	408994.4	2.8				ug/L		Standard
⌈	**Ti**	47	102.0	7.1				ug/L		Standard
|	**V**	51	5721.9	3.7				ug/L		Standard
|	**Cr**	52	18416.5	3.9				ug/L		Standard
|	**Cr**	53	404.7	3.0				ug/L		Standard
|	**Mn**	55	4297.6	3.5				ug/L		Standard
|	**Co**	59	123.0	14.1				ug/L		Standard
|	**Ni**	60	89.7	15.6				ug/L		Standard
|	**Cu**	65	148.3	4.4				ug/L		Standard
|	**Zn**	66	842.0	6.1				ug/L		Standard
| >	**Ge**	72	293466.0	1.8				ug/L		Standard
|	**As**	75	-207.3	25.5				ug/L		Standard
|	**Se**	82	19.2	39.8				ug/L		Standard
⌊	**Se-1**	77	80.0	13.2				ug/L		Standard
	Ga	71	234804.9	1.1				mg/L		Standard
⌈	**Rb**	85	12.7	32.9				ug/L		Standard
| >	**Y**	89	262487.2	1.6				ug/L		Standard
⌊	**Rh**	103	4.0	50.0				ug/L		Standard
⌈	**Mo**	98	9.6	26.8				ug/L		Standard
|	**Ag**	107	38.7	13.3				ug/L		Standard
|	**Cd**	111	525.0	4.2				mg/L		Standard
|	**Cd**	114	1502.9	6.0				ug/L		Standard
| >	**In**	115	917693.2	2.7				ug/L		Standard
|	**Sn**	118	5012.8	2.2				ug/L		Standard
|	**Sb**	123	28.8	23.4				ug/L		Standard
⌊	**Ba**	135	68.0	11.8				ug/L		Standard
⌈	**Ce**	140	58.0	12.4				ug/L		Standard
⌊>	**Tb**	159	1008623.6	4.1				ug/L		Standard
⌈	**Ho**	165	12.0	44.1				ug/L		Standard
|	**Tl**	203	9.0	29.4				ug/L		Standard
|	**Tl**	205	28.7	33.0				ug/L		Standard
|	**Pb**	206	458.0	3.1				ug/L		Standard
|	**Pb**	207	380.0	1.2				ug/L		Standard
|	**Pb**	208	1773.0	1.3				ug/L		Standard
|	**U**	238	42.0	160.9				ug/L		Standard
⌊>	**Bi**	209	569761.4	1.4				ug/L		Standard
⌈	**Na**	23	89.3	12.7				mg/L		Standard
|	**Mg**	24	158.3	26.6				mg/L		Standard

Sample ID: Blank
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	K	39	532.0	8.8	mg/L	Standard
	Ca	43	142.0	6.5	mg/L	Standard
	Fe	54	890.5	6.4	mg/L	Standard
	Fe	57	3397.7	10.1	mg/L	Standard
>	**Sc-1**	45	408994.4	2.8	mg/L	Standard
	Cl	35	45742.0	2.8	ug/L	Standard
	Kr	83	46.9	13.5	ug/L	Standard
	Br	81	11317.9	3.3	ug/L	Standard
	P	31	55334.4	5.1	ug/L	Standard
	S	34	546407.3	3.1	ug/L	Standard
	Sr	88	205.3	8.8	ug/L	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89			
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207
Pb	208
U	238
> Bi	209
Na	23
Mg	24
K	39
Ca	43
Fe	54
Fe	57
> Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34
Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank
Report Date/Time: Tuesday, May 01, 2012 10:01:56
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Method 6020 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, May 01, 2012 10:02:17
Number of Replicates: 3
Autosampler Position: 1
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	22063.4	0.0				ug/L	21640	Standard
|	**Be**	9	10.7	19.5				ug/L	16	Standard
|	**Al**	27	18077.4	2.1				ug/L	19981	Standard
⌊>	**Sc**	45	419346.0	1.4				ug/L	408994	Standard
⌈	**Ti**	47	110.7	18.5				ug/L	102	Standard
|	**V**	51	5645.2	0.6				ug/L	5722	Standard
|	**Cr**	52	18299.4	1.0				ug/L	18417	Standard
|	**Cr**	53	388.7	13.4				ug/L	405	Standard
|	**Mn**	55	4384.3	2.4				ug/L	4298	Standard
|	**Co**	59	127.7	5.5				ug/L	123	Standard
|	**Ni**	60	65.3	21.4				ug/L	90	Standard
|	**Cu**	65	146.7	6.9				ug/L	148	Standard
|	**Zn**	66	820.0	1.6				ug/L	842	Standard
\>	**Ge**	72	299229.7	0.9				ug/L	293466	Standard
|	**As**	75	-190.6	13.4				ug/L	-207	Standard
|	**Se**	82	24.5	11.8				ug/L	19	Standard
⌊	**Se-1**	77	70.3	8.2				ug/L	80	Standard
	Ga	71	238615.0	0.7				mg/L	234805	Standard
⌈	**Rb**	85	20.0	36.1				ug/L	13	Standard
\>	**Y**	89	271066.7	0.8				ug/L	262487	Standard
⌊	**Rh**	103	4.7	24.7				ug/L	4	Standard
⌈	**Mo**	98	12.9	42.4				ug/L	10	Standard
|	**Ag**	107	43.7	18.4				ug/L	39	Standard
|	**Cd**	111	500.7	3.3				mg/L	525	Standard
|	**Cd**	114	1506.3	5.8				ug/L	1503	Standard
\>	**In**	115	928316.7	0.8				ug/L	917693	Standard
|	**Sn**	118	4937.5	1.6				ug/L	5013	Standard
|	**Sb**	123	28.7	3.9				ug/L	29	Standard
⌊	**Ba**	135	58.0	14.1				ug/L	68	Standard
⌈	**Ce**	140	58.7	25.1				ug/L	58	Standard
⌊>	**Tb**	159	1032263.3	1.2				ug/L	1008624	Standard
⌈	**Ho**	165	9.3	44.6				ug/L	12	Standard
|	**Tl**	203	11.3	43.5				ug/L	9	Standard
|	**Tl**	205	33.3	19.3				ug/L	29	Standard
|	**Pb**	206	458.7	5.0				ug/L	458	Standard
|	**Pb**	207	383.0	4.7				ug/L	380	Standard
|	**Pb**	208	1762.7	3.6				ug/L	1773	Standard
|	**U**	238	6.0	66.7				ug/L	42	Standard
⌊>	**Bi**	209	576775.8	0.2				ug/L	569761	Standard
⌈	**Na**	23	84.7	27.4				mg/L	89	Standard
|	**Mg**	24	130.7	6.4				mg/L	158	Standard

Sample ID: Standard 1
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	K	39	547.3	8.1	mg/L	532	Standard
	Ca	43	155.3	9.0	mg/L	142	Standard
	Fe	54	864.2	2.6	mg/L	890	Standard
	Fe	57	3356.4	2.7	mg/L	3398	Standard
>	**Sc-1**	45	419346.0	1.4	mg/L	408994	Standard
	Cl	35	46419.3	0.9	ug/L	45742	Standard
	Kr	83	41.3	9.0	ug/L	47	Standard
	Br	81	11477.7	2.6	ug/L	11318	Standard
	P	31	56968.3	2.2	ug/L	55334	Standard
	S	34	557380.1	1.3	ug/L	546407	Standard
	Sr	88	220.7	9.7	ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89			
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: Standard 1
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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: Tuesday, May 01, 2012 10:04:44
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Method 6020 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, May 01, 2012 10:05:04
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	21940.2	0.1				ug/L	21640	Standard
|	**Be**	9	184.3	6.6				ug/L	16	Standard
|	**Al**	27	17853.8	1.6				ug/L	19981	Standard
⌊>	**Sc**	45	410042.4	1.4				ug/L	408994	Standard
⌈	**Ti**	47	358.7	21.7				ug/L	102	Standard
|	**V**	51	6695.0	1.1				ug/L	5722	Standard
|	**Cr**	52	19059.0	0.6				ug/L	18417	Standard
|	**Cr**	53	475.3	1.5				ug/L	405	Standard
|	**Mn**	55	4422.6	2.4				ug/L	4298	Standard
|	**Co**	59	884.0	3.5				ug/L	123	Standard
|	**Ni**	60	225.7	5.3				ug/L	90	Standard
|	**Cu**	65	296.0	2.3				ug/L	148	Standard
|	**Zn**	66	1301.7	1.8				ug/L	842	Standard
| >	**Ge**	72	298658.5	2.0				ug/L	293466	Standard
|	**As**	75	-121.9	19.6				ug/L	-207	Standard
|	**Se**	82	27.6	22.9				ug/L	19	Standard
⌊	**Se-1**	77	95.0	9.2				ug/L	80	Standard
	Ga	71	237783.8	1.9				mg/L	234805	Standard
⌈	**Rb**	85	22.0	24.1				ug/L	13	Standard
| >	**Y**	89	271011.7	0.5				ug/L	262487	Standard
⌊	**Rh**	103	1.3	86.6				ug/L	4	Standard
⌈	**Mo**	98	391.9	2.7				ug/L	10	Standard
|	**Ag**	107	401.3	2.7				ug/L	39	Standard
|	**Cd**	111	721.8	2.2				mg/L	525	Standard
|	**Cd**	114	2089.2	2.7				ug/L	1503	Standard
| >	**In**	115	921824.6	0.6				ug/L	917693	Standard
|	**Sn**	118	4460.7	3.0				ug/L	5013	Standard
|	**Sb**	123	547.6	4.9				ug/L	29	Standard
⌊	**Ba**	135	314.3	5.1				ug/L	68	Standard
⌈	**Ce**	140	60.7	15.6				ug/L	58	Standard
⌊>	**Tb**	159	1006929.2	1.2				ug/L	1008624	Standard
⌈	**Ho**	165	9.3	24.7				ug/L	12	Standard
|	**Tl**	203	857.7	3.4				ug/L	9	Standard
|	**Tl**	205	2120.1	4.9				ug/L	29	Standard
|	**Pb**	206	1178.4	2.7				ug/L	458	Standard
|	**Pb**	207	982.4	1.3				ug/L	380	Standard
|	**Pb**	208	4483.6	1.8				ug/L	1773	Standard
|	**U**	238	2430.2	4.7				ug/L	42	Standard
⌊>	**Bi**	209	584175.8	0.5				ug/L	569761	Standard
⌈	**Na**	23	100.0	23.6				mg/L	89	Standard
|	**Mg**	24	1516.4	0.5				mg/L	158	Standard

Sample ID: Standard 2
Report Date/Time: Tuesday, May 01, 2012 10:07:31
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	K	39	609.3	2.5	mg/L	532	Standard
	Ca	43	141.3	11.9	mg/L	142	Standard
	Fe	54	937.2	4.2	mg/L	890	Standard
	Fe	57	3966.5	5.0	mg/L	3398	Standard
>	**Sc-1**	45	410042.4	1.4	mg/L	408994	Standard
	Cl	35	45980.7	0.5	ug/L	45742	Standard
	Kr	83	41.1	10.8	ug/L	47	Standard
	Br	81	11427.6	0.6	ug/L	11318	Standard
	P	31	54802.3	1.3	ug/L	55334	Standard
	S	34	539030.1	0.3	ug/L	546407	Standard
	Sr	88	218.7	7.4	ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89			
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: Standard 3
Sample Date/Time: Tuesday, May 01, 2012 10:07:51
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	22237.6	0.1	**50.0000**	14.058	28.1	ug/L	21640	Standard
|	**Be**	9	176380.9	1.7	**50.0000**	0.599	1.2	ug/L	16	Standard
|	**Al**	27	1101334.9	1.4	**50.0000**	0.376	0.8	ug/L	19981	Standard
⌊>	**Sc**	45	401822.1	0.8				ug/L	408994	Standard
⌈	**Ti**	47	182081.8	2.0	**100.0000**	2.264	2.3	ug/L	102	Standard
|	**V**	51	1031984.2	0.9	**50.0000**	0.331	0.7	ug/L	5722	Standard
|	**Cr**	52	853129.7	1.3	**50.0000**	0.244	0.5	ug/L	18417	Standard
|	**Cr**	53	95895.9	0.7	**50.0000**	0.331	0.7	ug/L	405	Standard
|	**Mn**	55	1070444.2	1.0	**50.0000**	0.216	0.4	ug/L	4298	Standard
|	**Co**	59	743429.2	2.0	**50.0000**	0.613	1.2	ug/L	123	Standard
|	**Ni**	60	152236.0	0.6	**50.0000**	0.719	1.4	ug/L	90	Standard
|	**Cu**	65	134363.5	0.5	**50.0000**	0.178	0.4	ug/L	148	Standard
|	**Zn**	66	60734.8	0.5	**50.0000**	0.709	1.4	ug/L	842	Standard
| >	**Ge**	72	290370.5	0.9				ug/L	293466	Standard
|	**As**	75	54358.6	1.1	**50.0000**	0.571	1.1	ug/L	-207	Standard
|	**Se**	82	5367.3	1.7	**50.0000**	0.937	1.9	ug/L	19	Standard
⌊	**Se-1**	77	3701.5	0.5	**50.0000**	0.431	0.9	ug/L	80	Standard
	Ga	71	228050.6	2.1				mg/L	234805	Standard
⌈	**Rb**	85	3023.0	1.0				ug/L	13	Standard
| >	**Y**	89	264137.3	1.1				ug/L	262487	Standard
⌊	**Rh**	103	24.0	16.7				ug/L	4	Standard
⌈	**Mo**	98	363247.7	1.4	**100.0000**	1.719	1.7	ug/L	10	Standard
|	**Ag**	107	352866.8	0.7	**50.0000**	0.188	0.4	ug/L	39	Standard
|	**Cd**	111	208708.9	1.4	**50.0000**	0.679	1.4	mg/L	525	Standard
|	**Cd**	114	602567.8	0.5	**50.0000**	0.185	0.4	ug/L	1503	Standard
| >	**In**	115	899036.1	0.4				ug/L	917693	Standard
|	**Sn**	118	789085.6	0.3	**50.0000**	0.270	0.5	ug/L	5013	Standard
|	**Sb**	123	509180.7	1.5	**50.0000**	0.714	1.4	ug/L	29	Standard
⌊	**Ba**	135	250447.3	0.8	**50.0000**	0.419	0.8	ug/L	68	Standard
⌈	**Ce**	140	229.3	17.3				ug/L	58	Standard
⌊>	**Tb**	159	1007946.0	1.4				ug/L	1008624	Standard
⌈	**Ho**	165	20.0	70.0				ug/L	12	Standard
|	**Tl**	203	843379.9	0.6	**50.0000**	0.832	1.7	ug/L	9	Standard
|	**Tl**	205	2182935.0	0.4	**50.0000**	0.854	1.7	ug/L	29	Standard
|	**Pb**	206	686507.4	1.5	**50.0000**	1.343	2.7	ug/L	458	Standard
|	**Pb**	207	567164.1	0.8	**50.0000**	0.769	1.5	ug/L	380	Standard
|	**Pb**	208	2622036.3	0.8	**50.0000**	0.848	1.7	ug/L	1773	Standard
|	**U**	238	2543814.0	0.8	**50.0000**	0.358	0.7	ug/L	42	Standard
⌊>	**Bi**	209	563411.7	1.4				ug/L	569761	Standard
⌈	**Na**	23	15049.5	1.5	**5.0000**	0.039	0.8	mg/L	89	Standard
|	**Mg**	24	1361313.5	1.6	**5.0000**	0.051	1.0	mg/L	158	Standard

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	K	39	52688.1	1.5	**5.0000**	0.034	0.7	mg/L	532	Standard
	Ca	43	3555.1	3.3	**5.0000**	0.127	2.5	mg/L	142	Standard
	Fe	54	26898.0	0.9	**5.0000**	0.021	0.4	mg/L	890	Standard
	Fe	57	533232.9	1.1	**5.0000**	0.054	1.1	mg/L	3398	Standard
>	**Sc-1**	45	401822.1	0.8				mg/L	408994	Standard
	Cl	35	56734.1	2.4				ug/L	45742	Standard
	Kr	83	56.4	2.5				ug/L	47	Standard
	Br	81	11276.9	2.3				ug/L	11318	Standard
	P	31	62668.7	2.2				ug/L	55334	Standard
	S	34	671817.8	2.8				ug/L	546407	Standard
	Sr	88	6991.6	0.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89			
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
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Method 6020 - Summary Report

Sample ID: Standard 4
Sample Date/Time: Tuesday, May 01, 2012 10:10:38
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	22692.0	0.2	**113.5428**	32.999	29.1	ug/L	21640	Standard
|	**Be**	9	347226.8	0.8	**100.8221**	2.158	2.1	ug/L	16	Standard
|	**Al**	27	2174379.4	0.9	**101.3560**	3.017	3.0	ug/L	19981	Standard
⌊>	**Sc**	45	389217.6	2.6				ug/L	408994	Standard
⌈	**Ti**	47	349438.0	2.6	**200.8838**	2.620	1.3	ug/L	102	Standard
|	**V**	51	2025831.9	3.1	**101.6870**	1.872	1.8	ug/L	5722	Standard
|	**Cr**	52	1638393.6	1.3	**101.0010**	1.993	2.0	ug/L	18417	Standard
|	**Cr**	53	183570.2	1.5	**100.4039**	2.359	2.3	ug/L	405	Standard
|	**Mn**	55	2124271.5	1.2	**102.1971**	3.301	3.2	ug/L	4298	Standard
|	**Co**	59	1430635.7	1.2	**100.5780**	2.026	2.0	ug/L	123	Standard
|	**Ni**	60	290955.6	1.0	**100.2385**	2.402	2.4	ug/L	90	Standard
|	**Cu**	65	256897.0	1.7	**100.2801**	2.885	2.9	ug/L	148	Standard
|	**Zn**	66	116947.3	0.2	**101.1194**	3.262	3.2	ug/L	842	Standard
| >	**Ge**	72	276334.1	3.2				ug/L	293466	Standard
|	**As**	75	106976.9	1.5	**101.6051**	1.845	1.8	ug/L	-207	Standard
|	**Se**	82	10461.2	0.9	**101.3166**	2.906	2.9	ug/L	19	Standard
⌊	**Se-1**	77	7278.1	2.9	**102.2565**	0.498	0.5	ug/L	80	Standard
	Ga	71	216641.2	3.7				mg/L	234805	Standard
⌈	**Rb**	85	5736.4	2.0				ug/L	13	Standard
| >	**Y**	89	255451.8	1.6				ug/L	262487	Standard
⌊	**Rh**	103	59.3	10.8				ug/L	4	Standard
⌈	**Mo**	98	709556.7	0.1	**200.4190**	1.396	0.7	ug/L	10	Standard
|	**Ag**	107	671542.3	0.6	**98.9114**	1.188	1.2	ug/L	39	Standard
|	**Cd**	111	402827.2	1.0	**99.6716**	1.530	1.5	mg/L	525	Standard
|	**Cd**	114	1166093.6	0.6	**99.8017**	0.530	0.5	ug/L	1503	Standard
| >	**In**	115	874417.0	0.6				ug/L	917693	Standard
|	**Sn**	118	1541196.9	1.3	**100.3174**	1.446	1.4	ug/L	5013	Standard
|	**Sb**	123	996831.9	0.7	**100.3226**	1.047	1.0	ug/L	29	Standard
⌊	**Ba**	135	485915.4	1.1	**99.8784**	1.603	1.6	ug/L	68	Standard
⌈	**Ce**	140	364.7	6.6				ug/L	58	Standard
⌊>	**Tb**	159	1005254.8	0.9				ug/L	1008624	Standard
⌈	**Ho**	165	26.7	37.0				ug/L	12	Standard
|	**Tl**	203	1652326.0	0.9	**101.0158**	0.708	0.7	ug/L	9	Standard
|	**Tl**	205	4232199.2	1.3	**100.4885**	0.200	0.2	ug/L	29	Standard
|	**Pb**	206	1338400.3	0.3	**100.7861**	1.190	1.2	ug/L	458	Standard
|	**Pb**	207	1105928.0	0.3	**100.8011**	1.252	1.2	ug/L	380	Standard
|	**Pb**	208	5296854.6	0.6	**102.5657**	1.023	1.0	ug/L	1773	Standard
|	**U**	238	4955494.3	0.1	**100.7381**	1.460	1.4	ug/L	42	Standard
⌊>	**Bi**	209	540755.9	1.5				ug/L	569761	Standard
⌈	**Na**	23	29196.1	2.4	**10.0214**	0.094	0.9	mg/L	89	Standard
|	**Mg**	24	2599312.1	1.2	**9.9292**	0.140	1.4	mg/L	158	Standard

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	K	39	99692.2	0.4	**9.9097**	0.219	2.2	mg/L	532	Standard
	Ca	43	6518.7	1.8	**9.8219**	0.429	4.4	mg/L	142	Standard
	Fe	54	50459.4	1.3	**9.9232**	0.213	2.1	mg/L	890	Standard
	Fe	57	1022438.9	3.4	**9.9656**	0.369	3.7	mg/L	3398	Standard
>	**Sc-1**	45	389217.6	2.6				mg/L	408994	Standard
	Cl	35	57755.9	0.9				ug/L	45742	Standard
	Kr	83	51.1	4.2				ug/L	47	Standard
	Br	81	10646.4	1.0				ug/L	11318	Standard
	P	31	61486.9	2.7				ug/L	55334	Standard
	S	34	650485.0	2.1				ug/L	546407	Standard
	Sr	88	13352.5	1.3				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89			
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207
Pb	208
U	238
> Bi	209
Na	23
Mg	24
K	39
Ca	43
Fe	54
Fe	57
> Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34
Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 4
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Method 6020 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, May 01, 2012 10:13:28
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	20820.0	1.4	**7.6948**	5.112	66.4	ug/L	21640	Standard
|	**Be**	9	170718.7	2.1	**49.8716**	0.574	1.2	ug/L	16	Standard
|	**Al**	27	1079234.6	2.9	**50.2301**	0.968	1.9	ug/L	19981	Standard
⌊>	**Sc**	45	386702.6	1.1				ug/L	408994	Standard
⌈	**Ti**	47	178598.1	2.1	**100.7659**	0.846	0.8	ug/L	102	Standard
|	**V**	51	997925.6	0.4	**49.0610**	0.847	1.7	ug/L	5722	Standard
|	**Cr**	52	830224.8	0.5	**49.7266**	0.998	2.0	ug/L	18417	Standard
|	**Cr**	53	92139.3	1.1	**49.3792**	0.663	1.3	ug/L	405	Standard
|	**Mn**	55	1043012.0	0.6	**49.1833**	1.075	2.2	ug/L	4298	Standard
|	**Co**	59	711592.9	1.8	**49.1070**	0.514	1.0	ug/L	123	Standard
|	**Ni**	60	147666.5	0.9	**49.9339**	0.850	1.7	ug/L	90	Standard
|	**Cu**	65	130337.6	1.0	**49.9149**	0.387	0.8	ug/L	148	Standard
|	**Zn**	66	62727.3	1.3	**52.7583**	0.339	0.6	ug/L	842	Standard
| >	**Ge**	72	281379.2	1.7				ug/L	293466	Standard
|	**As**	75	53741.8	1.0	**50.1936**	0.471	0.9	ug/L	-207	Standard
|	**Se**	82	5303.4	1.0	**50.3180**	0.453	0.9	ug/L	19	Standard
⌊	**Se-1**	77	3613.8	0.8	**49.2591**	1.237	2.5	ug/L	80	Standard
	Ga	71	219064.4	1.1				mg/L	234805	Standard
⌈	**Rb**	85	870.0	2.9				ug/L	13	Standard
| >	**Y**	89	257071.2	0.6				ug/L	262487	Standard
⌊	**Rh**	103	32.7	23.2				ug/L	4	Standard
⌈	**Mo**	98	362668.9	0.5	**101.6048**	2.070	2.0	ug/L	10	Standard
|	**Ag**	107	342934.2	1.3	**50.1049**	1.601	3.2	ug/L	39	Standard
|	**Cd**	111	204797.5	0.4	**50.2010**	1.002	2.0	mg/L	525	Standard
|	**Cd**	114	588684.5	1.5	**49.9101**	0.835	1.7	ug/L	1503	Standard
| >	**In**	115	881799.5	2.2				ug/L	917693	Standard
|	**Sn**	118	806043.5	1.9	**51.9187**	0.168	0.3	ug/L	5013	Standard
|	**Sb**	123	502975.4	0.6	**50.2091**	1.110	2.2	ug/L	29	Standard
⌊	**Ba**	135	245950.2	0.3	**50.1403**	1.218	2.4	ug/L	68	Standard
⌈	**Ce**	140	910.7	4.2				ug/L	58	Standard
⌊>	**Tb**	159	997390.7	1.8				ug/L	1008624	Standard
⌈	**Ho**	165	24.0	46.4				ug/L	12	Standard
|	**Tl**	203	829953.6	0.2	**49.1367**	0.821	1.7	ug/L	9	Standard
|	**Tl**	205	2173481.9	0.3	**49.9800**	0.874	1.7	ug/L	29	Standard
|	**Pb**	206	676336.5	0.4	**49.3024**	0.906	1.8	ug/L	458	Standard
|	**Pb**	207	570126.3	1.4	**50.3074**	1.351	2.7	ug/L	380	Standard
|	**Pb**	208	2616205.8	1.3	**49.0441**	1.253	2.6	ug/L	1773	Standard
|	**U**	238	2387435.4	2.3	**47.0066**	1.746	3.7	ug/L	42	Standard
⌊>	**Bi**	209	558462.9	1.5				ug/L	569761	Standard
⌈	**Na**	23	14759.9	0.9	**5.0854**	0.034	0.7	mg/L	89	Standard
|	**Mg**	24	1312470.9	3.2	**5.0439**	0.111	2.2	mg/L	158	Standard

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	K	39	51400.4	1.5	**5.1154**	0.081	1.6	mg/L	532	Standard
	Ca	43	3339.0	1.9	**4.9625**	0.075	1.5	mg/L	142	Standard
	Fe	54	25757.0	0.7	**5.0128**	0.057	1.1	mg/L	890	Standard
	Fe	57	496535.9	4.9	**4.8522**	0.190	3.9	mg/L	3398	Standard
>	**Sc-1**	45	386702.6	1.1				mg/L	408994	Standard
	Cl	35	61736.5	1.7				ug/L	45742	Standard
	Kr	83	41.1	6.8				ug/L	47	Standard
	Br	81	10598.4	2.9				ug/L	11318	Standard
	P	31	60204.7	2.0				ug/L	55334	Standard
	S	34	653582.8	0.7				ug/L	546407	Standard
	Sr	88	560.0	11.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9	99.743		
	Al	27	100.460		
>	Sc	45			
	Ti	47	100.766		
	V	51	98.122		
	Cr	52	99.453		
	Cr	53	98.758		
	Mn	55	98.367		
	Co	59	98.214		
	Ni	60	99.868		
	Cu	65	99.830		
	Zn	66	105.517		
>	Ge	72		95.881	
	As	75	100.387		
	Se	82	100.636		
	Se-1	77	98.518		
	Ga	71			
	Rb	85			
>	Y	89		97.937	
	Rh	103			
	Mo	98	101.605		
	Ag	107	100.210		
	Cd	111	100.402		
	Cd	114			
>	In	115		96.089	
	Sn	118	103.837		
	Sb	123	100.418		
	Ba	135	100.281		
	Ce	140			
>	Tb	159		98.886	
	Ho	165			
	Tl	203	98.273		
	Tl	205			
	Pb	206	98.605		

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	Pb	207	100.615	
	Pb	208	98.088	
	U	238	94.013	
>	Bi	209		98.017
	Na	23	101.708	
	Mg	24	100.879	
	K	39	102.309	
	Ca	43	99.250	
	Fe	54	100.255	
	Fe	57	97.044	
>	Sc-1	45		
	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: Tuesday, May 01, 2012 10:16:17
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	20735.8	1.3	**-2.9590**	11.890	401.8	ug/L	21640	Standard
|	**Be**	9	75.7	95.6	**0.0211**	0.021	98.5	ug/L	16	Standard
|	**Al**	27	14148.6	4.2	**-0.0800**	0.025	31.1	ug/L	19981	Standard
⌊>	**Sc**	45	388400.7	0.7				ug/L	408994	Standard
⌈	**Ti**	47	154.7	21.5	**-0.0027**	0.018	678.8	ug/L	102	Standard
|	**V**	51	5612.1	6.4	**0.0194**	0.017	87.0	ug/L	5722	Standard
|	**Cr**	52	17454.0	1.9	**0.0342**	0.018	53.9	ug/L	18417	Standard
|	**Cr**	53	314.7	10.8	**-0.0193**	0.018	92.9	ug/L	405	Standard
|	**Mn**	55	1568.7	11.5	**-0.0719**	0.008	11.3	ug/L	4298	Standard
|	**Co**	59	258.0	59.3	**0.0105**	0.010	99.9	ug/L	123	Standard
|	**Ni**	60	82.7	21.5	**0.0064**	0.006	92.5	ug/L	90	Standard
|	**Cu**	65	129.0	8.2	**-0.0068**	0.004	59.7	ug/L	148	Standard
|	**Zn**	66	176.3	5.3	**-0.8477**	0.010	1.2	ug/L	842	Standard
|>	**Ge**	72	277471.7	1.6				ug/L	293466	Standard
|	**As**	75	-159.6	6.6	**0.0061**	0.008	136.7	ug/L	-207	Standard
|	**Se**	82	26.7	12.5	**0.0598**	0.036	60.1	ug/L	19	Standard
⌊	**Se-1**	77	72.0	19.6	**-0.1817**	0.185	101.6	ug/L	80	Standard
	Ga	71	219414.8	2.8				mg/L	234805	Standard
⌈	**Rb**	85	20.7	24.4				ug/L	13	Standard
|>	**Y**	89	247827.1	0.7				ug/L	262487	Standard
⌊	**Rh**	103	2.0	100.0				ug/L	4	Standard
⌈	**Mo**	98	151.6	102.2	**0.0377**	0.044	116.6	ug/L	10	Standard
|	**Ag**	107	142.7	92.5	**0.0149**	0.020	131.2	ug/L	39	Standard
|	**Cd**	111	538.5	16.4	**0.0129**	0.023	177.9	mg/L	525	Standard
|	**Cd**	114	1588.3	14.1	**0.0154**	0.020	131.8	ug/L	1503	Standard
|>	**In**	115	881008.6	0.8				ug/L	917693	Standard
|	**Sn**	118	1184.0	21.3	**-0.1493**	0.017	11.4	ug/L	5013	Standard
|	**Sb**	123	501.5	49.9	**0.0480**	0.026	53.2	ug/L	29	Standard
⌊	**Ba**	135	80.7	61.2	**0.0052**	0.010	196.7	ug/L	68	Standard
⌈	**Ce**	140	43.3	22.8				ug/L	58	Standard
⌊>	**Tb**	159	980485.8	1.8				ug/L	1008624	Standard
⌈	**Ho**	165	10.0	20.0				ug/L	12	Standard
|	**Tl**	203	121.3	88.0	**0.0087**	0.006	73.9	ug/L	9	Standard
|	**Tl**	205	337.3	72.9	**0.0112**	0.006	51.2	ug/L	29	Standard
|	**Pb**	206	484.7	17.5	**0.0031**	0.006	192.9	ug/L	458	Standard
|	**Pb**	207	445.3	23.0	**0.0063**	0.008	133.4	ug/L	380	Standard
|	**Pb**	208	2019.1	23.4	**0.0074**	0.008	112.3	ug/L	1773	Standard
|	**U**	238	761.7	115.7	**0.0191**	0.017	88.8	ug/L	42	Standard
⌊>	**Bi**	209	558853.5	1.6				ug/L	569761	Standard
⌈	**Na**	23	73.3	16.4	**-0.0023**	0.004	179.9	mg/L	89	Standard
|	**Mg**	24	596.0	106.8	**0.0018**	0.002	136.0	mg/L	158	Standard

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	K	39	580.0	4.2	**0.0053**	0.002	39.2	mg/L	532	Standard
	Ca	43	124.7	2.5	**-0.0092**	0.006	62.1	mg/L	142	Standard
	Fe	54	815.2	5.7	**-0.0097**	0.008	85.4	mg/L	890	Standard
	Fe	57	2892.9	9.3	**-0.0035**	0.002	69.7	mg/L	3398	Standard
>	**Sc-1**	45	388400.7	0.7				mg/L	408994	Standard
	Cl	35	54265.0	0.7				ug/L	45742	Standard
	Kr	83	44.4	3.5				ug/L	47	Standard
	Br	81	10547.7	3.5				ug/L	11318	Standard
	P	31	59535.2	3.3				ug/L	55334	Standard
	S	34	643515.0	1.8				ug/L	546407	Standard
	Sr	88	149.3	13.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.550	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.415	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.003	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.210	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.086
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
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Method 6020 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, May 01, 2012 10:19:06
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	21109.4	0.9	**4.1785**	12.890	308.5	ug/L	21640	Standard
|	**Be**	9	14.7	37.6	**0.0034**	0.002	46.7	ug/L	16	Standard
|	**Al**	27	14216.0	1.2	**-0.0848**	0.012	14.6	ug/L	19981	Standard
⌊>	**Sc**	45	393216.0	1.7				ug/L	408994	Standard
⌈	**Ti**	47	102.0	15.6	**-0.0335**	0.009	27.0	ug/L	102	Standard
|	**V**	51	13259.8	1.6	**0.3951**	0.011	2.9	ug/L	5722	Standard
|	**Cr**	52	30697.7	0.6	**0.8337**	0.014	1.7	ug/L	18417	Standard
|	**Cr**	53	1819.4	4.1	**0.7902**	0.038	4.8	ug/L	405	Standard
|	**Mn**	55	12535.9	1.9	**0.4472**	0.013	2.9	ug/L	4298	Standard
|	**Co**	59	5682.7	2.2	**0.3857**	0.009	2.4	ug/L	123	Standard
|	**Ni**	60	6003.5	1.4	**2.0139**	0.030	1.5	ug/L	90	Standard
|	**Cu**	65	2219.2	2.1	**0.7960**	0.018	2.3	ug/L	148	Standard
|	**Zn**	66	9900.2	1.2	**7.5051**	0.117	1.6	ug/L	842	Standard
| >	**Ge**	72	280663.6	0.3				ug/L	293466	Standard
|	**As**	75	243.4	21.1	**0.3838**	0.048	12.5	ug/L	-207	Standard
|	**Se**	82	60.3	20.1	**0.3779**	0.116	30.7	ug/L	19	Standard
⌊	**Se-1**	77	98.7	22.0	**0.1820**	0.305	167.6	ug/L	80	Standard
	Ga	71	224467.8	0.3				mg/L	234805	Standard
⌈	**Rb**	85	16.7	42.1				ug/L	13	Standard
| >	**Y**	89	253230.7	2.4				ug/L	262487	Standard
⌊	**Rh**	103	2.7	43.3				ug/L	4	Standard
⌈	**Mo**	98	34.8	17.6	**0.0047**	0.002	36.6	ug/L	10	Standard
|	**Ag**	107	2776.9	4.2	**0.3981**	0.016	4.1	ug/L	39	Standard
|	**Cd**	111	1457.7	1.0	**0.2372**	0.002	0.9	mg/L	525	Standard
|	**Cd**	114	4164.8	1.1	**0.2328**	0.005	1.9	ug/L	1503	Standard
| >	**In**	115	884961.3	0.6				ug/L	917693	Standard
|	**Sn**	118	962.0	7.8	**-0.1640**	0.005	2.8	ug/L	5013	Standard
|	**Sb**	123	4048.1	1.3	**0.4003**	0.007	1.8	ug/L	29	Standard
⌊	**Ba**	135	3845.2	2.2	**0.7698**	0.022	2.8	ug/L	68	Standard
⌈	**Ce**	140	52.0	24.0				ug/L	58	Standard
⌊>	**Tb**	159	982735.7	1.0				ug/L	1008624	Standard
⌈	**Ho**	165	12.0	60.1				ug/L	12	Standard
|	**Tl**	203	1362.1	1.5	**0.0809**	0.001	1.8	ug/L	9	Standard
|	**Tl**	205	3253.7	3.3	**0.0771**	0.003	3.4	ug/L	29	Standard
|	**Pb**	206	3094.0	1.7	**0.1903**	0.005	2.5	ug/L	458	Standard
|	**Pb**	207	2579.9	3.2	**0.1916**	0.007	3.9	ug/L	380	Standard
|	**Pb**	208	12014.2	1.3	**0.1917**	0.004	2.1	ug/L	1773	Standard
|	**U**	238	17444.4	0.6	**0.3427**	0.003	0.9	ug/L	42	Standard
⌊>	**Bi**	209	566536.2	0.5				ug/L	569761	Standard
⌈	**Na**	23	63.3	11.1	**-0.0060**	0.002	37.4	mg/L	89	Standard
|	**Mg**	24	131.0	14.0	**-0.0000**	0.000	4382.1	mg/L	158	Standard

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	K	39	610.7	9.6	**0.0077**	0.007	87.7	mg/L	532	Standard
	Ca	43	132.0	13.5	**-0.0001**	0.030	22321.6	mg/L	142	Standard
	Fe	54	788.4	5.9	**-0.0169**	0.010	58.2	mg/L	890	Standard
	Fe	57	2772.9	0.7	**-0.0050**	0.000	5.7	mg/L	3398	Standard
>	**Sc-1**	45	393216.0	1.7				mg/L	408994	Standard
	Cl	35	54422.6	1.4				ug/L	45742	Standard
	Kr	83	49.1	7.5				ug/L	47	Standard
	Br	81	10537.3	0.5				ug/L	11318	Standard
	P	31	56994.5	4.6				ug/L	55334	Standard
	S	34	623790.5	2.7				ug/L	546407	Standard
	Sr	88	181.3	21.3				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	98.776		
	Cr	52	104.207		
	Cr	53			
	Mn	55	89.444		
	Co	59	96.429		
	Ni	60	125.868		
	Cu	65	99.497		
	Zn	66	120.081		
>	Ge	72		95.638	
	As	75	95.955		
	Se	82	94.468		
	Se-1	77	45.489		
	Ga	71			
	Rb	85			
>	Y	89		96.474	
	Rh	103			
	Mo	98			
	Ag	107	99.515		
	Cd	111	98.825		
	Cd	114			
>	In	115		96.433	
	Sn	118			
	Sb	123	100.075		
	Ba	135	102.636		
	Ce	140			
>	Tb	159		97.433	
	Ho	165			
	Tl	203	101.185		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	95.862		
	U	238	85.677		
>	Bi	209		99.434	
	Na	23			
	Mg	24			
	K	39			
	Ca	43			
	Fe	54			
	Fe	57			
>	Sc-1	45			
	Cl	35			
	Kr	83			
	Br	81			
	P	31			
	S	34			
	Sr	88			

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Se-1	77	

Sample ID: QC Std 3
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Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, May 01, 2012 10:21:53
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	19900.7	1.6	**41.4585**	13.509	32.6	ug/L	21640	Standard
|	**Be**	9	12.3	23.4	**0.0031**	0.001	30.0	ug/L	16	Standard
|	**Al**	27	95889246.6	1.0	**4864.4097**	61.140	1.3	ug/L	19981	Standard
⌊>	**Sc**	45	360101.2	2.1				ug/L	408994	Standard
⌈	**Ti**	47	170547.8	3.3	**104.3857**	1.381	1.3	ug/L	102	Standard
|	**V**	51	5602.7	3.1	**0.0387**	0.012	30.5	ug/L	5722	Standard
|	**Cr**	52	17501.1	1.0	**0.1130**	0.013	11.8	ug/L	18417	Standard
|	**Cr**	53	1700.8	5.4	**0.8014**	0.041	5.1	ug/L	405	Standard
|	**Mn**	55	1457.1	5.8	**-0.0724**	0.003	3.9	ug/L	4298	Standard
|	**Co**	59	392.7	1.0	**0.0219**	0.001	2.3	ug/L	123	Standard
|	**Ni**	60	943.0	6.2	**0.3239**	0.014	4.4	ug/L	90	Standard
|	**Cu**	65	445.7	5.0	**0.1284**	0.006	4.9	ug/L	148	Standard
|	**Zn**	66	3448.4	3.1	**2.2052**	0.077	3.5	ug/L	842	Standard
| >	**Ge**	72	259353.2	2.1				ug/L	293466	Standard
|	**As**	75	-143.2	77.2	**0.0126**	0.109	867.8	ug/L	-207	Standard
|	**Se**	82	17.1	73.9	**-0.0208**	0.130	623.9	ug/L	19	Standard
⌊	**Se-1**	77	187.7	8.5	**1.6466**	0.294	17.8	ug/L	80	Standard
	Ga	71	199689.1	3.6				mg/L	234805	Standard
⌈	**Rb**	85	2613.6	1.0				ug/L	13	Standard
| >	**Y**	89	235326.6	2.1				ug/L	262487	Standard
⌊	**Rh**	103	4.7	65.5				ug/L	4	Standard
⌈	**Mo**	98	315627.0	1.6	**94.9529**	0.991	1.0	ug/L	10	Standard
|	**Ag**	107	73.7	18.1	**0.0055**	0.002	38.2	ug/L	39	Standard
|	**Cd**	111	715.5	3.5	**0.0692**	0.008	12.3	mg/L	525	Standard
|	**Cd**	114	2667.3	3.5	**0.1236**	0.004	3.3	ug/L	1503	Standard
| >	**In**	115	821009.6	2.0				ug/L	917693	Standard
|	**Sn**	118	655.3	6.1	**-0.1805**	0.003	1.6	ug/L	5013	Standard
|	**Sb**	123	492.2	8.0	**0.0504**	0.003	6.4	ug/L	29	Standard
⌊	**Ba**	135	112.0	11.2	**0.0133**	0.003	23.7	ug/L	68	Standard
⌈	**Ce**	140	1784.1	2.8				ug/L	58	Standard
⌊>	**Tb**	159	945085.9	2.4				ug/L	1008624	Standard
⌈	**Ho**	165	16.0	12.5				ug/L	12	Standard
|	**Tl**	203	273.3	6.3	**0.0187**	0.001	6.4	ug/L	9	Standard
|	**Tl**	205	643.3	4.7	**0.0191**	0.001	3.2	ug/L	29	Standard
|	**Pb**	206	670.7	3.3	**0.0199**	0.002	10.8	ug/L	458	Standard
|	**Pb**	207	536.0	7.0	**0.0174**	0.003	17.3	ug/L	380	Standard
|	**Pb**	208	2511.7	0.6	**0.0197**	0.000	1.6	ug/L	1773	Standard
|	**U**	238	22.0	130.9	**0.0047**	0.001	12.9	ug/L	42	Standard
⌊>	**Bi**	209	525135.2	1.2				ug/L	569761	Standard
⌈	**Na**	23	33023.3	1.5	**12.2606**	0.321	2.6	mg/L	89	Standard
|	**Mg**	24	1221232.2	1.0	**5.0419**	0.089	1.8	mg/L	158	Standard

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	K	39	46721.3	1.1	**4.9925**	0.051	1.0	mg/L	532	Standard
	Ca	43	8972.7	1.7	**14.7019**	0.255	1.7	mg/L	142	Standard
	Fe	54	56030.9	2.1	**11.9409**	0.099	0.8	mg/L	890	Standard
	Fe	57	1046988.3	7.3	**11.0228**	0.602	5.5	mg/L	3398	Standard
>	**Sc-1**	45	360101.2	2.1				mg/L	408994	Standard
	Cl	35	8043864.0	2.2				ug/L	45742	Standard
	Kr	83	45.6	22.4				ug/L	47	Standard
	Br	81	9474.0	3.7				ug/L	11318	Standard
	P	31	6914951.6	2.2				ug/L	55334	Standard
	S	34	1231112.2	2.4				ug/L	546407	Standard
	Sr	88	908.0	5.0				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.288		
>	Sc	45			
	Ti	47	104.386		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.376	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.653	
	Rh	103			
	Mo	98	94.953		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.465	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.701	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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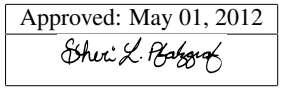

	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		92.168
	Na	23	98.085	
	Mg	24	100.838	
	K	39	99.850	
	Ca	43	98.013	
	Fe	54	95.527	
	Fe	57	88.182	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Se-1	77	

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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, May 01, 2012 10:24:41
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	22077.1	0.4	**49.2874**	18.978	38.5	ug/L	21640	Standard
|	**Be**	9	361357.8	0.7	**102.8180**	1.656	1.6	ug/L	16	Standard
|	**Al**	27	105415031.7	0.6	**4849.2338**	85.210	1.8	ug/L	19981	Standard
⌊>	**Sc**	45	397117.1	1.6				ug/L	408994	Standard
⌈	**Ti**	47	195903.1	0.9	**109.8711**	0.564	0.5	ug/L	102	Standard
|	**V**	51	2098312.9	1.9	**102.7995**	1.765	1.7	ug/L	5722	Standard
|	**Cr**	52	1696124.8	2.2	**102.0405**	2.717	2.7	ug/L	18417	Standard
|	**Cr**	53	189669.2	0.9	**101.2287**	1.758	1.7	ug/L	405	Standard
|	**Mn**	55	2225327.4	1.1	**104.4453**	1.623	1.6	ug/L	4298	Standard
|	**Co**	59	1458027.9	0.6	**100.0265**	1.925	1.9	ug/L	123	Standard
|	**Ni**	60	298537.2	0.7	**100.3565**	1.863	1.9	ug/L	90	Standard
|	**Cu**	65	265081.1	1.6	**100.9556**	1.797	1.8	ug/L	148	Standard
|	**Zn**	66	123036.6	1.6	**103.8135**	2.509	2.4	ug/L	842	Standard
|>	**Ge**	72	283105.7	1.3				ug/L	293466	Standard
|	**As**	75	110616.1	0.9	**102.5128**	0.504	0.5	ug/L	-207	Standard
|	**Se**	82	10691.2	1.4	**101.0264**	2.446	2.4	ug/L	19	Standard
⌊	**Se-1**	77	7567.2	0.9	**103.7930**	0.960	0.9	ug/L	80	Standard
	Ga	71	224537.6	0.8				mg/L	234805	Standard
⌈	**Rb**	85	3035.6	5.5				ug/L	13	Standard
|>	**Y**	89	252649.3	1.5				ug/L	262487	Standard
⌊	**Rh**	103	56.7	15.9				ug/L	4	Standard
⌈	**Mo**	98	359063.5	1.0	**100.2019**	2.361	2.4	ug/L	10	Standard
|	**Ag**	107	622717.9	1.3	**90.6086**	1.538	1.7	ug/L	39	Standard
|	**Cd**	111	433080.0	0.5	**105.8724**	1.989	1.9	mg/L	525	Standard
|	**Cd**	114	1227122.4	0.5	**103.7690**	2.009	1.9	ug/L	1503	Standard
|>	**In**	115	885189.9	1.4				ug/L	917693	Standard
|	**Sn**	118	3531.7	1.8	**0.0016**	0.001	93.4	ug/L	5013	Standard
|	**Sb**	123	1076141.6	1.0	**107.0057**	2.497	2.3	ug/L	29	Standard
⌊	**Ba**	135	502476.5	0.9	**102.0406**	2.295	2.2	ug/L	68	Standard
⌈	**Ce**	140	2103.5	3.4				ug/L	58	Standard
⌊>	**Tb**	159	1024346.7	0.9				ug/L	1008624	Standard
⌈	**Ho**	165	21.3	14.3				ug/L	12	Standard
|	**Tl**	203	1693234.8	1.2	**102.6729**	1.679	1.6	ug/L	9	Standard
|	**Tl**	205	4330435.5	0.7	**101.9870**	1.280	1.3	ug/L	29	Standard
|	**Pb**	206	1356970.0	0.5	**101.3430**	0.728	0.7	ug/L	458	Standard
|	**Pb**	207	1168596.1	0.7	**105.6367**	0.914	0.9	ug/L	380	Standard
|	**Pb**	208	5506438.2	0.4	**105.7499**	0.859	0.8	ug/L	1773	Standard
|	**U**	238	4899203.5	0.3	**98.7703**	0.372	0.4	ug/L	42	Standard
⌊>	**Bi**	209	545194.3	0.6				ug/L	569761	Standard
⌈	**Na**	23	35671.3	1.0	**12.0085**	0.314	2.6	mg/L	89	Standard
|	**Mg**	24	1310927.6	0.8	**4.9072**	0.066	1.3	mg/L	158	Standard

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	K	39	50091.3	0.7	**4.8522**	0.066	1.4	mg/L	532	Standard
	Ca	43	9761.1	1.0	**14.4993**	0.115	0.8	mg/L	142	Standard
	Fe	54	62498.3	0.5	**12.0809**	0.146	1.2	mg/L	890	Standard
	Fe	57	1379412.7	2.9	**13.1899**	0.576	4.4	mg/L	3398	Standard
>	**Sc-1**	45	397117.1	1.6				mg/L	408994	Standard
	Cl	35	8968307.5	0.8				ug/L	45742	Standard
	Kr	83	44.0	7.6				ug/L	47	Standard
	Br	81	11048.7	0.3				ug/L	11318	Standard
	P	31	7120547.6	0.4				ug/L	55334	Standard
	S	34	1358509.2	1.0				ug/L	546407	Standard
	Sr	88	1184.0	0.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.985		
>	Sc	45			
	Ti	47	109.871		
	V	51	102.800		
	Cr	52	102.040		
	Cr	53			
	Mn	55	104.445		
	Co	59	100.026		
	Ni	60	100.357		
	Cu	65	100.956		
	Zn	66	103.814		
>	Ge	72		96.470	
	As	75	102.513		
	Se	82	101.026		
	Se-1	77	103.793		
	Ga	71			
	Rb	85			
>	Y	89		96.252	
	Rh	103			
	Mo	98	100.202		
	Ag	107	90.609		
	Cd	111	105.872		
	Cd	114			
>	In	115		96.458	
	Sn	118			
	Sb	123	107.006		
	Ba	135	102.041		
	Ce	140			
>	Tb	159		101.559	
	Ho	165			
	Tl	203	102.673		
	Tl	205			
	Pb	206	101.343		

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	Pb	207	105.637	
	Pb	208	105.750	
	U	238	98.770	
>	Bi	209		95.688
	Na	23	96.068	
	Mg	24	98.145	
	K	39	97.043	
	Ca	43	96.662	
	Fe	54	96.647	
	Fe	57	105.519	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 10:27:30
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	21471.5	0.5	**-0.1673**	22.464	13425.3	ug/L	21640	Standard
|	**Be**	9	177798.1	0.7	**50.0521**	0.752	1.5	ug/L	16	Standard
|	**Al**	27	1079143.8	1.7	**48.3710**	0.535	1.1	ug/L	19981	Standard
⌊>	**Sc**	45	401360.1	1.3				ug/L	408994	Standard
⌈	**Ti**	47	177705.5	1.5	**98.4814**	0.674	0.7	ug/L	102	Standard
|	**V**	51	1023417.1	0.9	**49.4245**	1.250	2.5	ug/L	5722	Standard
|	**Cr**	52	846056.6	1.7	**49.7634**	0.392	0.8	ug/L	18417	Standard
|	**Cr**	53	95977.7	1.2	**50.5223**	0.410	0.8	ug/L	405	Standard
|	**Mn**	55	1071055.7	1.7	**49.5958**	0.207	0.4	ug/L	4298	Standard
|	**Co**	59	723607.4	1.0	**49.0560**	1.046	2.1	ug/L	123	Standard
|	**Ni**	60	148642.2	0.5	**49.3714**	1.012	2.0	ug/L	90	Standard
|	**Cu**	65	131911.1	0.2	**49.6232**	0.889	1.8	ug/L	148	Standard
|	**Zn**	66	59563.5	0.7	**49.1476**	1.145	2.3	ug/L	842	Standard
| >	**Ge**	72	286486.0	1.9				ug/L	293466	Standard
|	**As**	75	54864.0	0.7	**50.3302**	0.603	1.2	ug/L	-207	Standard
|	**Se**	82	5355.0	1.1	**49.9133**	1.465	2.9	ug/L	19	Standard
⌊	**Se-1**	77	3722.8	1.5	**49.8560**	1.435	2.9	ug/L	80	Standard
	Ga	71	227747.2	2.9				mg/L	234805	Standard
⌈	**Rb**	85	825.4	3.6				ug/L	13	Standard
| >	**Y**	89	259003.0	2.3				ug/L	262487	Standard
⌊	**Rh**	103	38.0	24.1				ug/L	4	Standard
⌈	**Mo**	98	359810.0	1.0	**96.9992**	0.775	0.8	ug/L	10	Standard
|	**Ag**	107	369853.6	1.4	**51.9909**	0.724	1.4	ug/L	39	Standard
|	**Cd**	111	217855.9	0.8	**51.3910**	0.565	1.1	mg/L	525	Standard
|	**Cd**	114	608024.3	1.0	**49.6106**	0.633	1.3	ug/L	1503	Standard
| >	**In**	115	916111.2	0.3				ug/L	917693	Standard
|	**Sn**	118	803073.3	1.3	**49.7775**	0.493	1.0	ug/L	5013	Standard
|	**Sb**	123	531786.2	0.6	**51.0811**	0.310	0.6	ug/L	29	Standard
⌊	**Ba**	135	249885.8	0.6	**49.0166**	0.171	0.3	ug/L	68	Standard
⌈	**Ce**	140	956.0	1.2				ug/L	58	Standard
⌊>	**Tb**	159	1025814.4	1.4				ug/L	1008624	Standard
⌈	**Ho**	165	30.7	30.8				ug/L	12	Standard
|	**Tl**	203	848333.4	0.5	**49.3353**	0.414	0.8	ug/L	9	Standard
|	**Tl**	205	2208617.9	1.5	**49.8880**	0.808	1.6	ug/L	29	Standard
|	**Pb**	206	689145.2	0.6	**49.3458**	0.467	0.9	ug/L	458	Standard
|	**Pb**	207	572958.6	0.7	**49.6597**	0.783	1.6	ug/L	380	Standard
|	**Pb**	208	2658132.8	0.3	**48.9451**	0.572	1.2	ug/L	1773	Standard
|	**U**	238	2440415.9	0.3	**47.1905**	0.478	1.0	ug/L	42	Standard
⌊>	**Bi**	209	568475.7	1.2				ug/L	569761	Standard
⌈	**Na**	23	14719.8	1.4	**4.8863**	0.127	2.6	mg/L	89	Standard
|	**Mg**	24	1319776.9	0.7	**4.8878**	0.031	0.6	mg/L	158	Standard

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	K	39	51070.6	0.8	**4.8953**	0.095	1.9	mg/L	532	Standard
	Ca	43	3401.0	2.4	**4.8660**	0.075	1.5	mg/L	142	Standard
	Fe	54	25772.6	1.3	**4.8262**	0.029	0.6	mg/L	890	Standard
	Fe	57	543509.0	0.9	**5.1209**	0.081	1.6	mg/L	3398	Standard
>	**Sc-1**	45	401360.1	1.3				mg/L	408994	Standard
	Cl	35	136764.2	37.2				ug/L	45742	Standard
	Kr	83	41.1	11.0				ug/L	47	Standard
	Br	81	10696.1	1.7				ug/L	11318	Standard
	P	31	63758.0	7.5				ug/L	55334	Standard
	S	34	657876.0	3.8				ug/L	546407	Standard
	Sr	88	482.7	7.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.742		
>	Sc	45			
	Ti	47	98.481		
	V	51	98.849		
	Cr	52	99.527		
	Cr	53			
	Mn	55	99.192		
	Co	59	98.112		
	Ni	60	98.743		
	Cu	65	99.246		
	Zn	66	98.295		
>	Ge	72		97.622	
	As	75	100.660		
	Se	82	99.827		
	Se-1	77	99.712		
	Ga	71			
	Rb	85			
>	Y	89		98.673	
	Rh	103			
	Mo	98	96.999		
	Ag	107	103.982		
	Cd	111	102.782		
	Cd	114			
>	In	115		99.828	
	Sn	118	99.555		
	Sb	123	102.162		
	Ba	135	98.033		
	Ce	140			
>	Tb	159		101.704	
	Ho	165			
	Tl	203	98.671		
	Tl	205			
	Pb	206	98.692		

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	Pb	207	99.319	
	Pb	208	97.890	
	U	238	94.381	
>	Bi	209		99.774
	Na	23	97.726	
	Mg	24	97.756	
	K	39	97.907	
	Ca	43	97.321	
	Fe	54	96.524	
	Fe	57	102.419	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 10:30:18
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	21753.9	0.3	**1.1396**	27.156	2383.0	ug/L	21640	Standard
|	**Be**	9	25.3	51.4	**0.0062**	0.004	57.0	ug/L	16	Standard
|	**Al**	27	16468.7	25.6	**-0.0065**	0.178	2741.6	ug/L	19981	Standard
⌊>	**Sc**	45	406267.0	2.0				ug/L	408994	Standard
⌈	**Ti**	47	95.3	12.3	**-0.0390**	0.006	16.6	ug/L	102	Standard
|	**V**	51	5719.9	2.0	**0.0127**	0.007	51.8	ug/L	5722	Standard
|	**Cr**	52	18153.2	2.1	**0.0299**	0.025	84.6	ug/L	18417	Standard
|	**Cr**	53	428.7	4.0	**0.0330**	0.008	23.7	ug/L	405	Standard
|	**Mn**	55	1448.7	5.4	**-0.0805**	0.003	4.0	ug/L	4298	Standard
|	**Co**	59	143.7	22.7	**0.0021**	0.002	102.7	ug/L	123	Standard
|	**Ni**	60	56.0	6.4	**-0.0036**	0.001	31.7	ug/L	90	Standard
|	**Cu**	65	115.7	3.6	**-0.0139**	0.001	10.5	ug/L	148	Standard
|	**Zn**	66	181.0	5.8	**-0.8504**	0.009	1.1	ug/L	842	Standard
| >	**Ge**	72	289720.5	0.8				ug/L	293466	Standard
|	**As**	75	-189.4	33.8	**-0.0144**	0.057	394.8	ug/L	-207	Standard
|	**Se**	82	22.5	43.7	**0.0105**	0.092	868.9	ug/L	19	Standard
⌊	**Se-1**	77	75.0	9.2	**-0.1817**	0.101	55.7	ug/L	80	Standard
	Ga	71	230056.3	1.4				mg/L	234805	Standard
⌈	**Rb**	85	15.3	15.1				ug/L	13	Standard
| >	**Y**	89	263366.0	0.9				ug/L	262487	Standard
⌊	**Rh**	103	2.7	173.2				ug/L	4	Standard
⌈	**Mo**	98	70.4	53.8	**0.0138**	0.010	75.3	ug/L	10	Standard
|	**Ag**	107	2342.2	52.6	**0.3162**	0.167	52.8	ug/L	39	Standard
|	**Cd**	111	574.2	3.3	**0.0140**	0.006	45.7	mg/L	525	Standard
|	**Cd**	114	1539.1	3.5	**0.0040**	0.003	79.9	ug/L	1503	Standard
| >	**In**	115	931614.8	1.5				ug/L	917693	Standard
|	**Sn**	118	1155.4	3.9	**-0.1552**	0.004	2.4	ug/L	5013	Standard
|	**Sb**	123	478.1	22.4	**0.0430**	0.011	24.9	ug/L	29	Standard
⌊	**Ba**	135	76.7	28.6	**0.0035**	0.004	116.4	ug/L	68	Standard
⌈	**Ce**	140	44.7	20.2				ug/L	58	Standard
⌊>	**Tb**	159	1015551.0	0.4				ug/L	1008624	Standard
⌈	**Ho**	165	12.7	24.1				ug/L	12	Standard
|	**Tl**	203	384.3	144.7	**0.0234**	0.032	135.6	ug/L	9	Standard
|	**Tl**	205	992.7	141.2	**0.0254**	0.031	122.4	ug/L	29	Standard
|	**Pb**	206	672.7	71.2	**0.0151**	0.034	222.9	ug/L	458	Standard
|	**Pb**	207	556.0	60.7	**0.0144**	0.029	200.2	ug/L	380	Standard
|	**Pb**	208	2446.1	60.4	**0.0138**	0.027	193.7	ug/L	1773	Standard
|	**U**	238	511.7	144.1	**0.0140**	0.014	100.1	ug/L	42	Standard
⌊>	**Bi**	209	579751.6	0.8				ug/L	569761	Standard
⌈	**Na**	23	74.7	24.0	**-0.0030**	0.006	203.4	mg/L	89	Standard
|	**Mg**	24	291.7	88.0	**0.0006**	0.001	163.3	mg/L	158	Standard

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	K	39	627.3	3.1	**0.0073**	0.002	27.8	mg/L	532	Standard
	Ca	43	140.0	5.7	**0.0050**	0.013	262.2	mg/L	142	Standard
	Fe	54	854.9	6.4	**-0.0093**	0.007	79.0	mg/L	890	Standard
	Fe	57	2902.3	8.1	**-0.0046**	0.002	40.5	mg/L	3398	Standard
>	**Sc-1**	45	406267.0	2.0				mg/L	408994	Standard
	Cl	35	78515.1	4.0				ug/L	45742	Standard
	Kr	83	44.7	24.0				ug/L	47	Standard
	Br	81	10878.6	1.8				ug/L	11318	Standard
	P	31	61675.9	0.3				ug/L	55334	Standard
	S	34	670787.3	0.8				ug/L	546407	Standard
	Sr	88	156.0	14.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.724	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.335	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.517	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.687	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

101.753

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 53 WG396592-02
Sample Date/Time: Tuesday, May 01, 2012 10:33:07
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	24290.5	1.1	**63.5121**	29.491	46.4	ug/L	21640	Standard
|	**Be**	9	57.3	58.4	**0.0142**	0.009	62.2	ug/L	16	Standard
|	**Al**	27	39658.5	2.8	**0.9303**	0.016	1.8	ug/L	19981	Standard
⌊>	**Sc**	45	432287.2	2.0				ug/L	408994	Standard
⌈	**Ti**	47	152.7	9.7	**-0.0092**	0.007	78.6	ug/L	102	Standard
|	**V**	51	9729.9	16.3	**0.1957**	0.073	37.3	ug/L	5722	Standard
|	**Cr**	52	23414.4	1.2	**0.3149**	0.015	4.7	ug/L	18417	Standard
|	**Cr**	53	27559.8	5.9	**13.9195**	0.709	5.1	ug/L	405	Standard
|	**Mn**	55	5100.9	1.1	**0.0826**	0.003	4.0	ug/L	4298	Standard
|	**Co**	59	134.7	14.5	**0.0013**	0.001	98.9	ug/L	123	Standard
|	**Ni**	60	246.0	6.5	**0.0573**	0.006	10.4	ug/L	90	Standard
|	**Cu**	65	534.0	5.4	**0.1379**	0.009	6.7	ug/L	148	Standard
|	**Zn**	66	5136.9	1.0	**3.1902**	0.015	0.5	ug/L	842	Standard
| >	**Ge**	72	295542.7	1.0				ug/L	293466	Standard
|	**As**	75	-27.5	631.5	**0.1313**	0.154	116.9	ug/L	-207	Standard
|	**Se**	82	34.8	12.9	**0.1170**	0.039	33.0	ug/L	19	Standard
⌊	**Se-1**	77	1357.7	3.5	**16.8429**	0.492	2.9	ug/L	80	Standard
	Ga	71	236365.6	1.4				mg/L	234805	Standard
⌈	**Rb**	85	24.0	50.7				ug/L	13	Standard
| >	**Y**	89	268206.4	0.7				ug/L	262487	Standard
⌊	**Rh**	103	2.7	43.3				ug/L	4	Standard
⌈	**Mo**	98	39.5	12.3	**0.0052**	0.001	24.6	ug/L	10	Standard
|	**Ag**	107	89.3	32.3	**0.0060**	0.004	65.5	ug/L	39	Standard
|	**Cd**	111	583.0	6.8	**0.0124**	0.009	74.0	mg/L	525	Standard
|	**Cd**	114	1561.1	2.6	**0.0025**	0.003	128.2	ug/L	1503	Standard
| >	**In**	115	956699.8	0.3				ug/L	917693	Standard
|	**Sn**	118	2049.5	4.0	**-0.1038**	0.005	5.1	ug/L	5013	Standard
|	**Sb**	123	315.5	10.6	**0.0267**	0.003	11.2	ug/L	29	Standard
⌊	**Ba**	135	137.0	6.4	**0.0144**	0.002	10.9	ug/L	68	Standard
⌈	**Ce**	140	77.3	3.0				ug/L	58	Standard
⌊>	**Tb**	159	1043207.2	0.4				ug/L	1008624	Standard
⌈	**Ho**	165	12.7	24.1				ug/L	12	Standard
|	**Tl**	203	288.0	22.8	**0.0177**	0.004	21.3	ug/L	9	Standard
|	**Tl**	205	719.4	21.2	**0.0191**	0.003	17.7	ug/L	29	Standard
|	**Pb**	206	716.0	8.1	**0.0175**	0.004	24.2	ug/L	458	Standard
|	**Pb**	207	635.7	7.0	**0.0205**	0.004	19.4	ug/L	380	Standard
|	**Pb**	208	2885.1	5.8	**0.0211**	0.003	15.1	ug/L	1773	Standard
|	**U**	238	251.7	70.6	**0.0090**	0.003	37.2	ug/L	42	Standard
⌊>	**Bi**	209	587086.4	0.4				ug/L	569761	Standard
⌈	**Na**	23	108.0	18.8	**0.0060**	0.007	116.0	mg/L	89	Standard
|	**Mg**	24	362.7	34.9	**0.0007**	0.000	58.5	mg/L	158	Standard

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	K	39	646.0	2.8	**0.0053**	0.001	25.4	mg/L	532	Standard
	Ca	43	138.7	26.8	**-0.0088**	0.054	611.6	mg/L	142	Standard
	Fe	54	932.1	6.2	**-0.0051**	0.011	224.8	mg/L	890	Standard
	Fe	57	2706.9	1.8	**-0.0080**	0.000	1.0	mg/L	3398	Standard
>	**Sc-1**	45	432287.2	2.0				mg/L	408994	Standard
	Cl	35	71415242.2	2.5				ug/L	45742	Standard
	Kr	83	45.8	0.8				ug/L	47	Standard
	Br	81	13074.6	3.2				ug/L	11318	Standard
	P	31	70902.6	2.3				ug/L	55334	Standard
	S	34	704652.8	0.7				ug/L	546407	Standard
	Sr	88	357.3	2.0				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.708	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.179	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.251	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.429	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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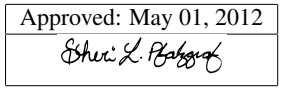

	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

103.041

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBS 53 WG396592-02
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Method 6020 - Summary Report

Sample ID: LCSS 53 WG396592-03
Sample Date/Time: Tuesday, May 01, 2012 10:35:54
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	35530.3	1.7	**381.5222**	52.811	13.8	ug/L	21640	Standard
|	**Be**	9	127063.3	1.2	**28.1519**	0.752	2.7	ug/L	16	Standard
|	**Al**	27	886255.2	0.6	**31.0040**	0.705	2.3	ug/L	19981	Standard
⌊>	**Sc**	45	510041.0	1.6				ug/L	408994	Standard
⌈	**Ti**	47	280.0	11.7	**0.0534**	0.017	31.1	ug/L	102	Standard
|	**V**	51	668806.1	1.6	**29.9811**	0.465	1.6	ug/L	5722	Standard
|	**Cr**	52	572950.8	0.5	**31.0101**	0.250	0.8	ug/L	18417	Standard
|	**Cr**	53	208552.9	0.9	**102.4729**	1.425	1.4	ug/L	405	Standard
|	**Mn**	55	663006.5	0.7	**28.5415**	0.323	1.1	ug/L	4298	Standard
|	**Co**	59	435433.8	1.2	**27.4947**	0.463	1.7	ug/L	123	Standard
|	**Ni**	60	89233.0	1.5	**27.5973**	0.367	1.3	ug/L	90	Standard
|	**Cu**	65	77454.8	0.7	**27.1161**	0.305	1.1	ug/L	148	Standard
|	**Zn**	66	39187.6	2.7	**29.7311**	0.877	2.9	ug/L	842	Standard
| >	**Ge**	72	307491.9	0.5				ug/L	293466	Standard
|	**As**	75	27934.5	2.3	**23.9540**	0.520	2.2	ug/L	-207	Standard
|	**Se**	82	2634.5	1.1	**22.7637**	0.351	1.5	ug/L	19	Standard
⌊	**Se-1**	77	8609.1	2.6	**108.7795**	3.421	3.1	ug/L	80	Standard
	Ga	71	252222.1	0.8				mg/L	234805	Standard
⌈	**Rb**	85	45.3	10.2				ug/L	13	Standard
| >	**Y**	89	288827.2	1.2				ug/L	262487	Standard
⌊	**Rh**	103	18.7	43.3				ug/L	4	Standard
⌈	**Mo**	98	88.7	2.2	**0.0152**	0.000	3.2	ug/L	10	Standard
|	**Ag**	107	197959.0	2.5	**23.5236**	0.830	3.5	ug/L	39	Standard
|	**Cd**	111	121365.7	0.5	**24.1382**	0.388	1.6	mg/L	525	Standard
|	**Cd**	114	349198.9	0.4	**24.0225**	0.221	0.9	ug/L	1503	Standard
| >	**In**	115	1083833.7	1.1				ug/L	917693	Standard
|	**Sn**	118	3483.7	2.5	**-0.0427**	0.004	9.0	ug/L	5013	Standard
|	**Sb**	123	282280.1	0.6	**22.9204**	0.397	1.7	ug/L	29	Standard
⌊	**Ba**	135	149935.2	0.5	**24.8556**	0.242	1.0	ug/L	68	Standard
⌈	**Ce**	140	268.0	14.4				ug/L	58	Standard
⌊>	**Tb**	159	1191666.3	0.8				ug/L	1008624	Standard
⌈	**Ho**	165	16.0	45.1				ug/L	12	Standard
|	**Tl**	203	485681.9	0.3	**25.8822**	0.274	1.1	ug/L	9	Standard
|	**Tl**	205	1173165.4	0.4	**24.2834**	0.232	1.0	ug/L	29	Standard
|	**Pb**	206	394453.7	0.5	**25.8651**	0.212	0.8	ug/L	458	Standard
|	**Pb**	207	338856.3	0.5	**26.8951**	0.272	1.0	ug/L	380	Standard
|	**Pb**	208	1539665.9	0.3	**25.9628**	0.241	0.9	ug/L	1773	Standard
|	**U**	238	1309537.0	0.5	**23.2048**	0.166	0.7	ug/L	42	Standard
⌊>	**Bi**	209	620389.0	0.9				ug/L	569761	Standard
⌈	**Na**	23	147.3	2.8	**0.0111**	0.001	5.4	mg/L	89	Standard
|	**Mg**	24	411.0	7.8	**0.0007**	0.000	10.9	mg/L	158	Standard

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	K	39	854.7	5.6	**0.0123**	0.003	21.4	mg/L	532	Standard
	Ca	43	133.3	4.3	**-0.0448**	0.005	11.3	mg/L	142	Standard
	Fe	54	1347.3	3.5	**0.0327**	0.010	31.2	mg/L	890	Standard
	Fe	57	1756.8	3.6	**-0.0187**	0.001	3.6	mg/L	3398	Standard
>	**Sc-1**	45	510041.0	1.6				mg/L	408994	Standard
	Cl	35	458891294.8	2.0				ug/L	45742	Standard
	Kr	83	50.0	6.1				ug/L	47	Standard
	Br	81	21457.2	5.1				ug/L	11318	Standard
	P	31	119544.8	0.5				ug/L	55334	Standard
	S	34	811488.6	1.7				ug/L	546407	Standard
	Sr	88	568.7	3.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.779	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.035	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		118.104	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		118.148	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	108.886
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Cr 53 Upper, S, EEE	Cr	53	
Se-1 77 Upper, S, EEE	Se-1	77	

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204093101 WG396592-01
Sample Date/Time: Tuesday, May 01, 2012 10:38:42
Number of Replicates: 3
Autosampler Position: 207
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	386726.6	1.5	**16606.8639**	317.250	1.9	ug/L	21640	Standard
|	**Be**	9	1593.1	7.7	**0.3516**	0.025	7.2	ug/L	16	Standard
|	**Al**	27	151352945.0	2.2	**5415.0398**	149.759	2.8	ug/L	19981	Standard
⌊>	**Sc**	45	510570.6	0.8				ug/L	408994	Standard
⌈	**Ti**	47	16657.2	1.6	**8.5621**	0.083	1.0	ug/L	102	Standard
|	**V**	51	407348.5	0.8	**18.2559**	0.034	0.2	ug/L	5722	Standard
|	**Cr**	52	184570.5	1.3	**9.3335**	0.064	0.7	ug/L	18417	Standard
|	**Cr**	53	41847.0	1.1	**20.5176**	0.195	1.0	ug/L	405	Standard
|	**Mn**	55	4079064.9	1.3	**177.2947**	2.862	1.6	ug/L	4298	Standard
|	**Co**	59	75342.6	1.4	**4.7764**	0.081	1.7	ug/L	123	Standard
|	**Ni**	60	43478.6	1.7	**13.5070**	0.208	1.5	ug/L	90	Standard
|	**Cu**	65	41821.6	0.4	**14.6928**	0.065	0.4	ug/L	148	Standard
|	**Zn**	66	62960.9	1.2	**48.6360**	0.571	1.2	ug/L	842	Standard
| >	**Ge**	72	305869.6	0.8				ug/L	293466	Standard
|	**As**	75	6686.4	0.5	**5.8832**	0.034	0.6	ug/L	-207	Standard
|	**Se**	82	137.2	12.7	**1.0038**	0.154	15.3	ug/L	19	Standard
⌊	**Se-1**	77	1472.7	1.9	**17.7124**	0.296	1.7	ug/L	80	Standard
	Ga	71	256013.0	1.3				mg/L	234805	Standard
⌈	**Rb**	85	193130.4	0.1				ug/L	13	Standard
| >	**Y**	89	409482.5	0.9				ug/L	262487	Standard
⌊	**Rh**	103	22.0	48.1				ug/L	4	Standard
⌈	**Mo**	98	1431.8	1.6	**0.3707**	0.008	2.1	ug/L	10	Standard
|	**Ag**	107	406.0	2.0	**0.0495**	0.000	0.5	ug/L	39	Standard
|	**Cd**	111	971.0	2.7	**0.1038**	0.002	2.3	mg/L	525	Standard
|	**Cd**	114	2766.5	3.5	**0.1005**	0.010	9.8	ug/L	1503	Standard
| >	**In**	115	941404.0	2.3				ug/L	917693	Standard
|	**Sn**	118	7324.4	2.9	**0.2178**	0.007	3.1	ug/L	5013	Standard
|	**Sb**	123	4610.7	7.1	**0.4294**	0.041	9.6	ug/L	29	Standard
⌊	**Ba**	135	335582.3	1.2	**64.0736**	0.757	1.2	ug/L	68	Standard
⌈	**Ce**	140	1648009.9	1.9				ug/L	58	Standard
⌊>	**Tb**	159	1064235.0	1.4				ug/L	1008624	Standard
⌈	**Ho**	165	18693.5	2.9				ug/L	12	Standard
|	**Tl**	203	2314.8	1.7	**0.1336**	0.002	1.7	ug/L	9	Standard
|	**Tl**	205	5532.3	2.1	**0.1260**	0.003	2.2	ug/L	29	Standard
|	**Pb**	206	145353.9	1.1	**10.1879**	0.095	0.9	ug/L	458	Standard
|	**Pb**	207	118317.6	1.7	**10.0363**	0.141	1.4	ug/L	380	Standard
|	**Pb**	208	549782.1	0.9	**9.9096**	0.063	0.6	ug/L	1773	Standard
|	**U**	238	33260.2	3.4	**0.6353**	0.020	3.2	ug/L	42	Standard
⌊>	**Bi**	209	579257.9	0.3				ug/L	569761	Standard
⌈	**Na**	23	568.0	2.1	**0.1214**	0.003	2.8	mg/L	89	Standard
|	**Mg**	24	617872.2	0.7	**1.7985**	0.021	1.2	mg/L	158	Standard

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	K	39	13008.9	2.5	**0.9379**	0.025	2.6	mg/L	532	Standard
	Ca	43	3505.7	4.3	**3.9057**	0.194	5.0	mg/L	142	Standard
	Fe	54	67675.9	0.3	**10.1466**	0.077	0.8	mg/L	890	Standard
	Fe	57	1372872.9	0.9	**10.1991**	0.140	1.4	mg/L	3398	Standard
>	**Sc-1**	45	510570.6	0.8				mg/L	408994	Standard
	Cl	35	62309764.3	1.6				ug/L	45742	Standard
	Kr	83	57.3	12.9				ug/L	47	Standard
	Br	81	14410.2	2.4				ug/L	11318	Standard
	P	31	541135.2	1.1				ug/L	55334	Standard
	S	34	667714.9	1.6				ug/L	546407	Standard
	Sr	88	612183.5	1.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.227	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		156.001	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.584	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.514	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.667
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1204093102S WG396592-04
Sample Date/Time: Tuesday, May 01, 2012 10:41:29
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	393902.3	0.5	**16482.3889**	133.407	0.8	ug/L	21640	Standard
|	**Be**	9	22112.5	0.7	**4.7697**	0.031	0.6	ug/L	16	Standard
|	**Al**	27	147136967.9	0.6	**5132.2362**	77.826	1.5	ug/L	19981	Standard
⌊>	**Sc**	45	523687.3	1.0				ug/L	408994	Standard
⌈	**Ti**	47	20642.1	2.0	**10.7342**	0.168	1.6	ug/L	102	Standard
|	**V**	51	517201.0	1.9	**23.4725**	0.354	1.5	ug/L	5722	Standard
|	**Cr**	52	270027.3	0.3	**14.2852**	0.062	0.4	ug/L	18417	Standard
|	**Cr**	53	51637.2	0.2	**25.6055**	0.062	0.2	ug/L	405	Standard
|	**Mn**	55	5828311.4	0.6	**255.7874**	0.409	0.2	ug/L	4298	Standard
|	**Co**	59	157251.8	0.3	**10.0718**	0.018	0.2	ug/L	123	Standard
|	**Ni**	60	65537.8	1.1	**20.5654**	0.261	1.3	ug/L	90	Standard
|	**Cu**	65	57668.9	0.8	**20.4748**	0.097	0.5	ug/L	148	Standard
|	**Zn**	66	75138.9	0.8	**58.7997**	0.390	0.7	ug/L	842	Standard
| >	**Ge**	72	302985.8	0.4				ug/L	293466	Standard
|	**As**	75	12764.8	2.9	**11.1938**	0.363	3.2	ug/L	-207	Standard
|	**Se**	82	653.7	2.5	**5.5845**	0.169	3.0	ug/L	19	Standard
⌊	**Se-1**	77	1965.5	2.0	**24.2793**	0.446	1.8	ug/L	80	Standard
	Ga	71	253508.2	1.5				mg/L	234805	Standard
⌈	**Rb**	85	193292.3	2.5				ug/L	13	Standard
| >	**Y**	89	446935.3	0.2				ug/L	262487	Standard
⌊	**Rh**	103	36.0	14.7				ug/L	4	Standard
⌈	**Mo**	98	1553.6	13.2	**0.3983**	0.054	13.4	ug/L	10	Standard
|	**Ag**	107	37796.4	1.0	**5.1102**	0.066	1.3	ug/L	39	Standard
|	**Cd**	111	23803.2	1.0	**5.2993**	0.079	1.5	mg/L	525	Standard
|	**Cd**	114	67090.6	2.1	**5.1637**	0.135	2.6	ug/L	1503	Standard
| >	**In**	115	951501.9	0.5				ug/L	917693	Standard
|	**Sn**	118	7573.9	0.7	**0.2281**	0.005	2.0	ug/L	5013	Standard
|	**Sb**	123	54083.8	0.4	**4.9998**	0.002	0.0	ug/L	29	Standard
⌊	**Ba**	135	485517.2	0.6	**91.7064**	0.667	0.7	ug/L	68	Standard
⌈	**Ce**	140	1782412.4	0.3				ug/L	58	Standard
⌊>	**Tb**	159	1096824.9	1.4				ug/L	1008624	Standard
⌈	**Ho**	165	24566.6	1.1				ug/L	12	Standard
|	**Tl**	203	90081.0	0.6	**5.1014**	0.029	0.6	ug/L	9	Standard
|	**Tl**	205	215149.5	0.8	**4.7343**	0.046	1.0	ug/L	29	Standard
|	**Pb**	206	219256.4	0.4	**15.2619**	0.035	0.2	ug/L	458	Standard
|	**Pb**	207	182738.4	0.4	**15.3962**	0.162	1.1	ug/L	380	Standard
|	**Pb**	208	842360.2	0.0	**15.0790**	0.102	0.7	ug/L	1773	Standard
|	**U**	238	276932.9	0.1	**5.2172**	0.037	0.7	ug/L	42	Standard
⌊>	**Bi**	209	583898.2	0.7				ug/L	569761	Standard
⌈	**Na**	23	590.7	1.0	**0.1235**	0.002	1.5	mg/L	89	Standard
|	**Mg**	24	641862.2	0.6	**1.8216**	0.026	1.4	mg/L	158	Standard

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	K	39	13571.4	1.2	**0.9548**	0.007	0.8	mg/L	532	Standard
	Ca	43	4550.0	2.4	**4.9943**	0.080	1.6	mg/L	142	Standard
	Fe	54	76552.2	1.5	**11.2071**	0.086	0.8	mg/L	890	Standard
	Fe	57	1504465.7	3.2	**10.8976**	0.297	2.7	mg/L	3398	Standard
>	**Sc-1**	45	523687.3	1.0				mg/L	408994	Standard
	Cl	35	70138228.1	0.8				ug/L	45742	Standard
	Kr	83	66.4	13.1				ug/L	47	Standard
	Br	81	14095.9	1.2				ug/L	11318	Standard
	P	31	734201.2	1.3				ug/L	55334	Standard
	S	34	691635.0	1.6				ug/L	546407	Standard
	Sr	88	659183.7	1.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		103.244	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		170.269	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.684	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.745	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

102.481

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: L1204093102S WG396592-04
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Method 6020 - Summary Report

Sample ID: L1204093103SD WG396592-05

Sample Date/Time: Tuesday, May 01, 2012 10:44:16
Number of Replicates: 3
Autosampler Position: 209
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	381578.3	0.8	**16105.4681**	213.216	1.3	ug/L	21640	Standard
|	**Be**	9	22253.7	1.2	**4.8496**	0.021	0.4	ug/L	16	Standard
|	**Al**	27	141473835.6	0.3	**4985.8367**	77.688	1.6	ug/L	19981	Standard
⌊>	**Sc**	45	518348.2	1.6				ug/L	408994	Standard
⌈	**Ti**	47	21947.2	2.4	**11.3712**	0.254	2.2	ug/L	102	Standard
|	**V**	51	510891.6	1.2	**23.0865**	0.230	1.0	ug/L	5722	Standard
|	**Cr**	52	267912.6	1.5	**14.1017**	0.186	1.3	ug/L	18417	Standard
|	**Cr**	53	49844.5	1.5	**24.6065**	0.360	1.5	ug/L	405	Standard
|	**Mn**	55	5468790.1	1.4	**239.0043**	3.134	1.3	ug/L	4298	Standard
|	**Co**	59	156249.9	0.6	**9.9662**	0.077	0.8	ug/L	123	Standard
|	**Ni**	60	65845.1	1.3	**20.5754**	0.178	0.9	ug/L	90	Standard
|	**Cu**	65	57569.2	0.9	**20.3541**	0.059	0.3	ug/L	148	Standard
|	**Zn**	66	74215.4	2.8	**57.8151**	1.325	2.3	ug/L	842	Standard
| >	**Ge**	72	304249.1	0.6				ug/L	293466	Standard
|	**As**	75	13211.5	2.6	**11.5307**	0.223	1.9	ug/L	-207	Standard
|	**Se**	82	663.4	2.2	**5.6459**	0.156	2.8	ug/L	19	Standard
⌊	**Se-1**	77	1794.4	2.4	**21.9667**	0.548	2.5	ug/L	80	Standard
	Ga	71	252388.7	2.2				mg/L	234805	Standard
⌈	**Rb**	85	180233.8	1.5				ug/L	13	Standard
| >	**Y**	89	483044.3	1.1				ug/L	262487	Standard
⌊	**Rh**	103	25.3	38.9				ug/L	4	Standard
⌈	**Mo**	98	1499.4	1.5	**0.3811**	0.006	1.5	ug/L	10	Standard
|	**Ag**	107	37798.1	1.2	**5.0701**	0.095	1.9	ug/L	39	Standard
|	**Cd**	111	23373.9	0.8	**5.1593**	0.058	1.1	mg/L	525	Standard
|	**Cd**	114	66898.9	0.7	**5.1065**	0.014	0.3	ug/L	1503	Standard
| >	**In**	115	959106.3	0.8				ug/L	917693	Standard
|	**Sn**	118	7429.8	2.5	**0.2159**	0.012	5.7	ug/L	5013	Standard
|	**Sb**	123	53696.8	0.4	**4.9247**	0.018	0.4	ug/L	29	Standard
⌊	**Ba**	135	1485684.3	0.4	**278.4234**	1.447	0.5	ug/L	68	Standard
⌈	**Ce**	140	1903950.2	2.1				ug/L	58	Standard
⌊>	**Tb**	159	1097512.8	1.8				ug/L	1008624	Standard
⌈	**Ho**	165	27266.5	0.1				ug/L	12	Standard
|	**Tl**	203	89325.9	1.2	**5.1108**	0.080	1.6	ug/L	9	Standard
|	**Tl**	205	215783.7	0.4	**4.7971**	0.049	1.0	ug/L	29	Standard
|	**Pb**	206	207477.0	1.2	**14.5886**	0.073	0.5	ug/L	458	Standard
|	**Pb**	207	171989.4	1.2	**14.6373**	0.146	1.0	ug/L	380	Standard
|	**Pb**	208	791499.1	0.6	**14.3125**	0.082	0.6	ug/L	1773	Standard
|	**U**	238	280786.9	0.3	**5.3440**	0.031	0.6	ug/L	42	Standard
⌊>	**Bi**	209	577954.4	0.7				ug/L	569761	Standard
⌈	**Na**	23	588.0	7.8	**0.1245**	0.014	11.5	mg/L	89	Standard
|	**Mg**	24	596523.2	0.5	**1.7104**	0.021	1.2	mg/L	158	Standard

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	K	39	12463.8	2.2	**0.8823**	0.029	3.3	mg/L	532	Standard
	Ca	43	4159.2	2.1	**4.5971**	0.032	0.7	mg/L	142	Standard
	Fe	54	69652.6	2.2	**10.2923**	0.389	3.8	mg/L	890	Standard
	Fe	57	1381236.7	0.7	**10.1087**	0.222	2.2	mg/L	3398	Standard
>	**Sc-1**	45	518348.2	1.6				mg/L	408994	Standard
	Cl	35	60752663.0	1.2				ug/L	45742	Standard
	Kr	83	70.7	4.7				ug/L	47	Standard
	Br	81	14202.3	0.9				ug/L	11318	Standard
	P	31	887022.5	1.0				ug/L	55334	Standard
	S	34	694344.7	1.0				ug/L	546407	Standard
	Sr	88	767959.9	2.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		103.674	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		184.026	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.513	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.813	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.438
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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	

Sample ID: L1204093103SD WG396592-05
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Method 6020 - Summary Report

Sample ID: L1204093104
Sample Date/Time: Tuesday, May 01, 2012 10:47:03
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	211425.7	2.2	**8652.0957**	90.105	1.0	ug/L	21640	Standard
|	**Be**	9	1585.4	2.2	**0.3553**	0.005	1.5	ug/L	16	Standard
|	**Al**	27	108957205.7	0.0	**3956.6757**	67.459	1.7	ug/L	19981	Standard
⌊>	**Sc**	45	503042.1	1.7				ug/L	408994	Standard
⌈	**Ti**	47	12976.2	2.5	**6.7640**	0.078	1.1	ug/L	102	Standard
|	**V**	51	259222.8	2.1	**11.7219**	0.085	0.7	ug/L	5722	Standard
|	**Cr**	52	127719.7	0.8	**6.2587**	0.068	1.1	ug/L	18417	Standard
|	**Cr**	53	34474.5	2.2	**17.1587**	0.236	1.4	ug/L	405	Standard
|	**Mn**	55	8209397.5	1.4	**363.0349**	3.370	0.9	ug/L	4298	Standard
|	**Co**	59	91686.6	0.7	**5.9134**	0.058	1.0	ug/L	123	Standard
|	**Ni**	60	49031.9	1.0	**15.4958**	0.196	1.3	ug/L	90	Standard
|	**Cu**	65	34416.7	2.4	**12.2861**	0.091	0.7	ug/L	148	Standard
|	**Zn**	66	64859.9	1.6	**51.0009**	0.055	0.1	ug/L	842	Standard
| >	**Ge**	72	300761.6	1.7				ug/L	293466	Standard
|	**As**	75	10095.4	2.5	**8.9524**	0.322	3.6	ug/L	-207	Standard
|	**Se**	82	54.8	15.2	**0.2915**	0.082	28.2	ug/L	19	Standard
⌊	**Se-1**	77	1494.4	2.1	**18.3200**	0.498	2.7	ug/L	80	Standard
	Ga	71	250105.7	2.7				mg/L	234805	Standard
⌈	**Rb**	85	155581.4	0.3				ug/L	13	Standard
| >	**Y**	89	398194.1	2.1				ug/L	262487	Standard
⌊	**Rh**	103	23.3	27.6				ug/L	4	Standard
⌈	**Mo**	98	2078.2	1.3	**0.5366**	0.018	3.4	ug/L	10	Standard
|	**Ag**	107	422.3	2.1	**0.0513**	0.002	4.6	ug/L	39	Standard
|	**Cd**	111	974.1	0.5	**0.1030**	0.005	4.9	mg/L	525	Standard
|	**Cd**	114	2727.0	3.0	**0.0957**	0.006	6.0	ug/L	1503	Standard
| >	**In**	115	948136.9	2.1				ug/L	917693	Standard
|	**Sn**	118	7353.8	2.0	**0.2164**	0.006	2.8	ug/L	5013	Standard
|	**Sb**	123	2310.0	5.3	**0.2120**	0.007	3.2	ug/L	29	Standard
⌊	**Ba**	135	607140.1	1.5	**115.0990**	0.897	0.8	ug/L	68	Standard
⌈	**Ce**	140	1556107.5	1.4				ug/L	58	Standard
⌊>	**Tb**	159	1096662.0	1.3				ug/L	1008624	Standard
⌈	**Ho**	165	19706.8	0.7				ug/L	12	Standard
|	**Tl**	203	2986.6	3.4	**0.1710**	0.002	1.4	ug/L	9	Standard
|	**Tl**	205	7008.3	1.9	**0.1579**	0.003	2.0	ug/L	29	Standard
|	**Pb**	206	142477.8	0.8	**9.9347**	0.245	2.5	ug/L	458	Standard
|	**Pb**	207	115225.8	0.1	**9.7232**	0.211	2.2	ug/L	380	Standard
|	**Pb**	208	540193.5	0.4	**9.6857**	0.165	1.7	ug/L	1773	Standard
|	**U**	238	33417.1	0.6	**0.6350**	0.010	1.6	ug/L	42	Standard
⌊>	**Bi**	209	582417.6	2.1				ug/L	569761	Standard
⌈	**Na**	23	251.3	8.8	**0.0393**	0.005	12.6	mg/L	89	Standard
|	**Mg**	24	499082.4	1.0	**1.4744**	0.013	0.9	mg/L	158	Standard

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	K	39	8632.5	2.9	**0.6144**	0.017	2.8	mg/L	532	Standard
	Ca	43	2266.2	1.6	**2.4936**	0.075	3.0	mg/L	142	Standard
	Fe	54	78535.7	1.8	**11.9814**	0.085	0.7	mg/L	890	Standard
	Fe	57	1522499.4	2.2	**11.4831**	0.133	1.2	mg/L	3398	Standard
>	**Sc-1**	45	503042.1	1.7				mg/L	408994	Standard
	Cl	35	65905336.6	0.6				ug/L	45742	Standard
	Kr	83	63.8	10.9				ug/L	47	Standard
	Br	81	12655.0	3.5				ug/L	11318	Standard
	P	31	778148.6	2.2				ug/L	55334	Standard
	S	34	650387.8	1.8				ug/L	546407	Standard
	Sr	88	446374.7	1.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.486	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		151.700	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.317	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.729	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	102.221
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: L1204093104DL WG396655-02
Sample Date/Time: Tuesday, May 01, 2012 10:49:51
Number of Replicates: 3
Autosampler Position: 211
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	57451.7	0.9	**1939.3142**	59.342	3.1	ug/L	21640	Standard
|	**Be**	9	318.7	2.7	**0.0843**	0.003	3.7	ug/L	16	Standard
|	**Al**	27	20366068.7	1.2	**878.0238**	6.895	0.8	ug/L	19981	Standard
⌊>	**Sc**	45	423375.7	1.4				ug/L	408994	Standard
⌈	**Ti**	47	2519.5	5.1	**1.2529**	0.073	5.8	ug/L	102	Standard
|	**V**	51	53818.0	0.8	**2.2503**	0.034	1.5	ug/L	5722	Standard
|	**Cr**	52	37668.4	0.6	**1.1275**	0.026	2.3	ug/L	18417	Standard
|	**Cr**	53	8932.6	3.7	**4.3473**	0.142	3.3	ug/L	405	Standard
|	**Mn**	55	1494659.0	2.3	**66.6103**	1.615	2.4	ug/L	4298	Standard
|	**Co**	59	17551.5	1.8	**1.1367**	0.021	1.8	ug/L	123	Standard
|	**Ni**	60	9570.4	1.5	**3.0357**	0.043	1.4	ug/L	90	Standard
|	**Cu**	65	7373.1	2.7	**2.6131**	0.080	3.0	ug/L	148	Standard
|	**Zn**	66	17230.8	1.4	**12.9464**	0.132	1.0	ug/L	842	Standard
| >	**Ge**	72	297895.4	0.7				ug/L	293466	Standard
|	**As**	75	1824.8	8.0	**1.7607**	0.117	6.6	ug/L	-207	Standard
|	**Se**	82	25.8	13.2	**0.0341**	0.029	85.5	ug/L	19	Standard
⌊	**Se-1**	77	424.7	4.6	**4.3993**	0.220	5.0	ug/L	80	Standard
	Ga	71	238262.1	0.7				mg/L	234805	Standard
⌈	**Rb**	85	30654.3	2.3				ug/L	13	Standard
| >	**Y**	89	291193.7	0.8				ug/L	262487	Standard
⌊	**Rh**	103	3.3	91.7				ug/L	4	Standard
⌈	**Mo**	98	401.5	4.5	**0.1026**	0.005	5.2	ug/L	10	Standard
|	**Ag**	107	128.7	10.1	**0.0119**	0.002	16.6	ug/L	39	Standard
|	**Cd**	111	583.8	2.8	**0.0177**	0.005	30.5	mg/L	525	Standard
|	**Cd**	114	1566.5	1.2	**0.0076**	0.003	38.7	ug/L	1503	Standard
| >	**In**	115	921425.0	1.1				ug/L	917693	Standard
|	**Sn**	118	2669.6	1.3	**-0.0607**	0.002	3.6	ug/L	5013	Standard
|	**Sb**	123	621.6	0.8	**0.0571**	0.001	1.7	ug/L	29	Standard
⌊	**Ba**	135	117858.7	1.1	**22.9829**	0.486	2.1	ug/L	68	Standard
⌈	**Ce**	140	297514.2	1.2				ug/L	58	Standard
⌊>	**Tb**	159	1010677.5	0.9				ug/L	1008624	Standard
⌈	**Ho**	165	3678.4	2.1				ug/L	12	Standard
|	**Tl**	203	909.0	3.5	**0.0539**	0.002	3.0	ug/L	9	Standard
|	**Tl**	205	2242.2	4.0	**0.0536**	0.002	3.6	ug/L	29	Standard
|	**Pb**	206	28492.4	0.7	**1.9923**	0.018	0.9	ug/L	458	Standard
|	**Pb**	207	22849.5	0.4	**1.9322**	0.015	0.8	ug/L	380	Standard
|	**Pb**	208	107706.6	0.4	**1.9374**	0.010	0.5	ug/L	1773	Standard
|	**U**	238	6457.0	1.7	**0.1281**	0.002	1.6	ug/L	42	Standard
⌊>	**Bi**	209	573234.5	0.4				ug/L	569761	Standard
⌈	**Na**	23	96.7	13.8	**0.0030**	0.005	149.9	mg/L	89	Standard
|	**Mg**	24	99625.5	0.5	**0.3493**	0.005	1.3	mg/L	158	Standard

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Sheri L. Babyak

	K	39	2056.8	2.6	**0.1361**	0.005	3.4	mg/L	532	Standard
	Ca	43	549.3	4.1	**0.5747**	0.026	4.5	mg/L	142	Standard
	Fe	54	16236.4	2.3	**2.8124**	0.035	1.2	mg/L	890	Standard
	Fe	57	321405.6	1.3	**2.8572**	0.080	2.8	mg/L	3398	Standard
>	**Sc-1**	45	423375.7	1.4				mg/L	408994	Standard
	Cl	35	13097519.3	1.5				ug/L	45742	Standard
	Kr	83	51.8	9.8				ug/L	47	Standard
	Br	81	11199.5	0.8				ug/L	11318	Standard
	P	31	188574.7	1.3				ug/L	55334	Standard
	S	34	576078.7	1.3				ug/L	546407	Standard
	Sr	88	86570.1	2.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.509	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.936	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.407	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.204	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

100.610

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1204093104DL WG396655-02
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Method 6020 - Summary Report

Sample ID: L1204093104PS WG396655-01
Sample Date/Time: Tuesday, May 01, 2012 10:52:38
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	213350.6	0.6	**8744.3808**	126.408	1.4	ug/L	21640	Standard
|	**Be**	9	210674.6	0.6	**47.3184**	0.128	0.3	ug/L	16	Standard
|	**Al**	27	111812574.1	0.8	**4060.0095**	15.453	0.4	ug/L	19981	Standard
⌊>	**Sc**	45	502996.6	0.8				ug/L	408994	Standard
⌈	**Ti**	47	13328.5	0.6	**6.9285**	0.149	2.2	ug/L	102	Standard
|	**V**	51	1409936.3	0.8	**64.7097**	0.947	1.5	ug/L	5722	Standard
|	**Cr**	52	1063018.2	0.8	**59.5692**	1.368	2.3	ug/L	18417	Standard
|	**Cr**	53	139519.0	2.2	**69.7965**	1.851	2.7	ug/L	405	Standard
|	**Mn**	55	9393949.1	1.0	**414.1147**	10.168	2.5	ug/L	4298	Standard
|	**Co**	59	893795.0	1.4	**57.5154**	0.874	1.5	ug/L	123	Standard
|	**Ni**	60	214037.9	0.9	**67.4911**	1.144	1.7	ug/L	90	Standard
|	**Cu**	65	179996.1	1.8	**64.2830**	0.627	1.0	ug/L	148	Standard
|	**Zn**	66	129558.3	1.3	**102.5281**	1.068	1.0	ug/L	842	Standard
| >	**Ge**	72	301797.9	2.0				ug/L	293466	Standard
|	**As**	75	68238.7	1.4	**59.3919**	0.393	0.7	ug/L	-207	Standard
|	**Se**	82	5685.1	2.3	**50.2837**	0.172	0.3	ug/L	19	Standard
⌊	**Se-1**	77	5227.6	1.7	**66.8593**	2.081	3.1	ug/L	80	Standard
	Ga	71	248471.6	2.5				mg/L	234805	Standard
⌈	**Rb**	85	160139.3	1.5				ug/L	13	Standard
| >	**Y**	89	402468.6	2.8				ug/L	262487	Standard
⌊	**Rh**	103	47.3	24.4				ug/L	4	Standard
⌈	**Mo**	98	2252.4	2.6	**0.5830**	0.007	1.1	ug/L	10	Standard
|	**Ag**	107	384777.0	0.8	**52.3882**	1.176	2.2	ug/L	39	Standard
|	**Cd**	111	233188.9	1.5	**53.2845**	1.529	2.9	mg/L	525	Standard
|	**Cd**	114	649895.1	1.1	**51.3632**	1.236	2.4	ug/L	1503	Standard
| >	**In**	115	946053.0	1.4				ug/L	917693	Standard
|	**Sn**	118	7333.8	1.0	**0.2163**	0.011	5.0	ug/L	5013	Standard
|	**Sb**	123	566189.5	0.8	**52.6750**	1.114	2.1	ug/L	29	Standard
⌊	**Ba**	135	879592.3	0.8	**167.1200**	1.806	1.1	ug/L	68	Standard
⌈	**Ce**	140	1577568.6	1.4				ug/L	58	Standard
⌊>	**Tb**	159	1080750.4	2.2				ug/L	1008624	Standard
⌈	**Ho**	165	20078.0	1.3				ug/L	12	Standard
|	**Tl**	203	892677.9	0.6	**51.1540**	1.244	2.4	ug/L	9	Standard
|	**Tl**	205	2343694.0	0.6	**52.1676**	1.484	2.8	ug/L	29	Standard
|	**Pb**	206	864375.6	1.4	**61.0049**	2.183	3.6	ug/L	458	Standard
|	**Pb**	207	732527.5	1.8	**62.5771**	2.353	3.8	ug/L	380	Standard
|	**Pb**	208	3356961.5	1.4	**60.9231**	2.120	3.5	ug/L	1773	Standard
|	**U**	238	2668880.2	0.2	**50.8528**	1.281	2.5	ug/L	42	Standard
⌊>	**Bi**	209	577091.3	2.3				ug/L	569761	Standard
⌈	**Na**	23	258.7	8.3	**0.0413**	0.006	13.5	mg/L	89	Standard
|	**Mg**	24	503153.4	1.2	**1.4866**	0.023	1.6	mg/L	158	Standard

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	K	39	8744.5	2.1	**0.6233**	0.020	3.2	mg/L	532	Standard
	Ca	43	2266.8	3.0	**2.4941**	0.085	3.4	mg/L	142	Standard
	Fe	54	80617.5	0.7	**12.3053**	0.138	1.1	mg/L	890	Standard
	Fe	57	1561089.2	3.3	**11.7754**	0.334	2.8	mg/L	3398	Standard
>	**Sc-1**	45	502996.6	0.8				mg/L	408994	Standard
	Cl	35	66981732.5	0.9				ug/L	45742	Standard
	Kr	83	63.3	3.8				ug/L	47	Standard
	Br	81	12573.9	0.8				ug/L	11318	Standard
	P	31	787720.8	0.7				ug/L	55334	Standard
	S	34	638045.8	0.9				ug/L	546407	Standard
	Sr	88	460504.5	1.0				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.839	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		153.329	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.090	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.151	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.286
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204093105
Sample Date/Time: Tuesday, May 01, 2012 10:55:25
Number of Replicates: 3
Autosampler Position: 213
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	393858.2	1.5	**17111.0053**	163.196	1.0	ug/L	21640	Standard
|	**Be**	9	1284.4	1.3	**0.2862**	0.007	2.5	ug/L	16	Standard
|	**Al**	27	115923536.8	1.2	**4186.8795**	22.939	0.5	ug/L	19981	Standard
⌊>	**Sc**	45	505691.5	1.2				ug/L	408994	Standard
⌈	**Ti**	47	14224.7	1.0	**7.3794**	0.167	2.3	ug/L	102	Standard
|	**V**	51	316593.1	1.1	**14.2850**	0.049	0.3	ug/L	5722	Standard
|	**Cr**	52	168930.0	1.4	**8.5558**	0.023	0.3	ug/L	18417	Standard
|	**Cr**	53	39252.8	1.7	**19.4471**	0.597	3.1	ug/L	405	Standard
|	**Mn**	55	2885910.5	1.2	**126.7471**	2.261	1.8	ug/L	4298	Standard
|	**Co**	59	84675.0	1.0	**5.4265**	0.030	0.6	ug/L	123	Standard
|	**Ni**	60	53955.9	0.9	**16.9479**	0.093	0.5	ug/L	90	Standard
|	**Cu**	65	46461.5	1.0	**16.5052**	0.094	0.6	ug/L	148	Standard
|	**Zn**	66	70862.0	1.6	**55.4639**	0.574	1.0	ug/L	842	Standard
| >	**Ge**	72	302624.3	1.4				ug/L	293466	Standard
|	**As**	75	6441.0	1.2	**5.7327**	0.096	1.7	ug/L	-207	Standard
|	**Se**	82	72.7	10.1	**0.4464**	0.073	16.3	ug/L	19	Standard
⌊	**Se-1**	77	1566.4	2.1	**19.1301**	0.161	0.8	ug/L	80	Standard
	Ga	71	250405.4	1.9				mg/L	234805	Standard
⌈	**Rb**	85	181653.8	0.3				ug/L	13	Standard
| >	**Y**	89	408094.2	0.5				ug/L	262487	Standard
⌊	**Rh**	103	18.7	37.6				ug/L	4	Standard
⌈	**Mo**	98	1845.8	1.4	**0.4731**	0.011	2.3	ug/L	10	Standard
|	**Ag**	107	401.3	22.0	**0.0480**	0.011	22.9	ug/L	39	Standard
|	**Cd**	111	1030.5	10.8	**0.1143**	0.023	19.8	mg/L	525	Standard
|	**Cd**	114	2799.3	3.5	**0.1001**	0.006	5.6	ug/L	1503	Standard
| >	**In**	115	953664.7	1.6				ug/L	917693	Standard
|	**Sn**	118	7493.9	1.5	**0.2223**	0.012	5.4	ug/L	5013	Standard
|	**Sb**	123	4840.0	4.5	**0.4444**	0.019	4.3	ug/L	29	Standard
⌊	**Ba**	135	438332.9	0.7	**82.6133**	0.940	1.1	ug/L	68	Standard
⌈	**Ce**	140	1548122.3	0.8				ug/L	58	Standard
⌊>	**Tb**	159	1071855.8	1.1				ug/L	1008624	Standard
⌈	**Ho**	165	20298.9	0.9				ug/L	12	Standard
|	**Tl**	203	2356.9	2.4	**0.1369**	0.002	1.5	ug/L	9	Standard
|	**Tl**	205	5701.1	1.4	**0.1306**	0.001	0.9	ug/L	29	Standard
|	**Pb**	206	144325.8	0.9	**10.1853**	0.108	1.1	ug/L	458	Standard
|	**Pb**	207	116448.2	1.7	**9.9454**	0.176	1.8	ug/L	380	Standard
|	**Pb**	208	545419.7	0.9	**9.8983**	0.076	0.8	ug/L	1773	Standard
|	**U**	238	36053.9	1.7	**0.6930**	0.009	1.4	ug/L	42	Standard
⌊>	**Bi**	209	575339.6	0.9				ug/L	569761	Standard
⌈	**Na**	23	527.3	11.6	**0.1121**	0.016	14.1	mg/L	89	Standard
|	**Mg**	24	563401.0	1.2	**1.6557**	0.014	0.8	mg/L	158	Standard

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	K	39	11297.5	2.7	**0.8158**	0.016	2.0	mg/L	532	Standard
	Ca	43	2566.9	4.5	**2.8337**	0.106	3.7	mg/L	142	Standard
	Fe	54	66435.8	2.5	**10.0539**	0.131	1.3	mg/L	890	Standard
	Fe	57	1286637.7	3.0	**9.6478**	0.228	2.4	mg/L	3398	Standard
>	**Sc-1**	45	505691.5	1.2				mg/L	408994	Standard
	Cl	35	64577910.3	0.6				ug/L	45742	Standard
	Kr	83	65.1	9.5				ug/L	47	Standard
	Br	81	12922.5	2.4				ug/L	11318	Standard
	P	31	576854.8	2.3				ug/L	55334	Standard
	S	34	659137.7	0.9				ug/L	546407	Standard
	Sr	88	621142.3	1.3				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		103.121	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		155.472	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.920	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.269	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	100.979
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: L1204093105
Report Date/Time: Tuesday, May 01, 2012 10:57:52
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Method 6020 - Summary Report

Sample ID: L1204093106
Sample Date/Time: Tuesday, May 01, 2012 10:58:12
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	166809.0	1.1	**7526.5886**	35.452	0.5	ug/L	21640	Standard
|	**Be**	9	861.7	4.4	**0.2168**	0.013	6.0	ug/L	16	Standard
|	**Al**	27	67989856.1	0.3	**2773.4808**	33.981	1.2	ug/L	19981	Standard
⌊>	**Sc**	45	447748.8	1.5				ug/L	408994	Standard
⌈	**Ti**	47	19579.3	0.9	**10.6259**	0.022	0.2	ug/L	102	Standard
|	**V**	51	173309.6	3.8	**8.0389**	0.302	3.8	ug/L	5722	Standard
|	**Cr**	52	102147.2	1.4	**5.0057**	0.086	1.7	ug/L	18417	Standard
|	**Cr**	53	28259.1	6.3	**14.5388**	0.809	5.6	ug/L	405	Standard
|	**Mn**	55	3921898.7	0.9	**179.6057**	2.359	1.3	ug/L	4298	Standard
|	**Co**	59	43573.2	0.2	**2.9075**	0.020	0.7	ug/L	123	Standard
|	**Ni**	60	19332.0	0.7	**6.3164**	0.094	1.5	ug/L	90	Standard
|	**Cu**	65	16125.6	1.6	**5.9353**	0.109	1.8	ug/L	148	Standard
|	**Zn**	66	34785.6	1.3	**27.8929**	0.251	0.9	ug/L	842	Standard
| >	**Ge**	72	290303.5	0.8				ug/L	293466	Standard
|	**As**	75	2384.5	2.3	**2.3082**	0.035	1.5	ug/L	-207	Standard
|	**Se**	82	66.9	9.2	**0.4196**	0.058	13.9	ug/L	19	Standard
⌊	**Se-1**	77	1197.7	9.1	**14.9989**	1.349	9.0	ug/L	80	Standard
	Ga	71	235241.0	1.4				mg/L	234805	Standard
⌈	**Rb**	85	93643.9	1.7				ug/L	13	Standard
| >	**Y**	89	353173.5	1.8				ug/L	262487	Standard
⌊	**Rh**	103	15.3	15.1				ug/L	4	Standard
⌈	**Mo**	98	986.5	1.7	**0.2572**	0.003	1.3	ug/L	10	Standard
|	**Ag**	107	309.0	4.5	**0.0368**	0.002	5.6	ug/L	39	Standard
|	**Cd**	111	873.0	1.4	**0.0839**	0.002	2.8	mg/L	525	Standard
|	**Cd**	114	2527.2	4.1	**0.0839**	0.008	9.2	ug/L	1503	Standard
| >	**In**	115	929299.8	0.5				ug/L	917693	Standard
|	**Sn**	118	6002.5	1.8	**0.1424**	0.005	3.6	ug/L	5013	Standard
|	**Sb**	123	1915.2	1.6	**0.1791**	0.002	1.4	ug/L	29	Standard
⌊	**Ba**	135	181585.7	0.7	**35.1105**	0.069	0.2	ug/L	68	Standard
⌈	**Ce**	140	1020730.8	0.8				ug/L	58	Standard
⌊>	**Tb**	159	1050055.7	2.1				ug/L	1008624	Standard
⌈	**Ho**	165	12665.3	3.4				ug/L	12	Standard
|	**Tl**	203	1351.4	2.3	**0.0803**	0.002	2.3	ug/L	9	Standard
|	**Tl**	205	3197.7	0.4	**0.0758**	0.001	1.5	ug/L	29	Standard
|	**Pb**	206	169519.1	1.3	**12.1477**	0.175	1.4	ug/L	458	Standard
|	**Pb**	207	144731.3	0.5	**12.5540**	0.130	1.0	ug/L	380	Standard
|	**Pb**	208	659743.2	0.7	**12.1586**	0.116	1.0	ug/L	1773	Standard
|	**U**	238	20543.3	2.0	**0.4025**	0.003	0.8	ug/L	42	Standard
⌊>	**Bi**	209	566899.2	1.2				ug/L	569761	Standard
⌈	**Na**	23	2843.6	5.2	**0.8233**	0.045	5.5	mg/L	89	Standard
|	**Mg**	24	499291.1	0.9	**1.6572**	0.012	0.7	mg/L	158	Standard

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	K	39	6974.9	2.1	**0.5529**	0.004	0.7	mg/L	532	Standard
	Ca	43	4204.6	1.4	**5.4147**	0.023	0.4	mg/L	142	Standard
	Fe	54	36285.7	1.7	**6.1361**	0.038	0.6	mg/L	890	Standard
	Fe	57	711580.9	3.3	**6.0164**	0.250	4.2	mg/L	3398	Standard
>	**Sc-1**	45	447748.8	1.5				mg/L	408994	Standard
	Cl	35	57613959.4	1.1				ug/L	45742	Standard
	Kr	83	56.7	9.3				ug/L	47	Standard
	Br	81	12626.6	1.5				ug/L	11318	Standard
	P	31	468497.1	0.7				ug/L	55334	Standard
	S	34	824913.6	0.8				ug/L	546407	Standard
	Sr	88	415083.1	1.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.922	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		134.549	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.265	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.108	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.498
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 11:01:02
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	21068.6	2.6	**7.0759**	19.429	274.6	ug/L	21640	Standard
|	**Be**	9	176674.1	2.2	**50.9899**	1.331	2.6	ug/L	16	Standard
|	**Al**	27	1034742.2	2.2	**47.5392**	1.007	2.1	ug/L	19981	Standard
⌊>	**Sc**	45	391621.8	3.5				ug/L	408994	Standard
⌈	**Ti**	47	177011.3	0.1	**99.6363**	2.856	2.9	ug/L	102	Standard
|	**V**	51	1023352.4	1.6	**50.1808**	1.292	2.6	ug/L	5722	Standard
|	**Cr**	52	848292.4	2.0	**50.6825**	0.968	1.9	ug/L	18417	Standard
|	**Cr**	53	95086.3	3.3	**50.8070**	0.431	0.8	ug/L	405	Standard
|	**Mn**	55	1061338.4	3.5	**49.8886**	0.700	1.4	ug/L	4298	Standard
|	**Co**	59	725145.1	3.2	**49.8923**	0.080	0.2	ug/L	123	Standard
|	**Ni**	60	148602.8	3.7	**50.0880**	0.295	0.6	ug/L	90	Standard
|	**Cu**	65	130880.1	2.4	**49.9783**	0.532	1.1	ug/L	148	Standard
|	**Zn**	66	59552.5	2.9	**49.8861**	0.253	0.5	ug/L	842	Standard
| >	**Ge**	72	282210.9	3.1				ug/L	293466	Standard
|	**As**	75	54113.2	2.4	**50.3994**	1.063	2.1	ug/L	-207	Standard
|	**Se**	82	5304.9	1.2	**50.2071**	1.495	3.0	ug/L	19	Standard
⌊	**Se-1**	77	3725.8	2.4	**50.6681**	1.043	2.1	ug/L	80	Standard
	Ga	71	222364.0	3.8				mg/L	234805	Standard
⌈	**Rb**	85	828.0	1.6				ug/L	13	Standard
| >	**Y**	89	254225.8	2.3				ug/L	262487	Standard
⌊	**Rh**	103	28.0	21.4				ug/L	4	Standard
⌈	**Mo**	98	351109.6	2.4	**97.7694**	1.926	2.0	ug/L	10	Standard
|	**Ag**	107	352452.9	2.3	**51.1736**	0.743	1.5	ug/L	39	Standard
|	**Cd**	111	212543.9	1.7	**51.7892**	0.662	1.3	mg/L	525	Standard
|	**Cd**	114	594513.9	1.8	**50.1067**	0.772	1.5	ug/L	1503	Standard
| >	**In**	115	886901.1	1.1				ug/L	917693	Standard
|	**Sn**	118	772575.7	1.9	**49.4609**	0.410	0.8	ug/L	5013	Standard
|	**Sb**	123	520506.6	1.6	**51.6439**	0.560	1.1	ug/L	29	Standard
⌊	**Ba**	135	242085.1	1.1	**49.0511**	0.204	0.4	ug/L	68	Standard
⌈	**Ce**	140	952.0	6.9				ug/L	58	Standard
⌊>	**Tb**	159	978775.6	0.2				ug/L	1008624	Standard
⌈	**Ho**	165	26.7	18.9				ug/L	12	Standard
|	**Tl**	203	811886.4	0.1	**50.0644**	0.051	0.1	ug/L	9	Standard
|	**Tl**	205	1945381.1	0.2	**46.5935**	0.074	0.2	ug/L	29	Standard
|	**Pb**	206	657645.8	0.8	**49.9319**	0.441	0.9	ug/L	458	Standard
|	**Pb**	207	550987.7	0.6	**50.6351**	0.380	0.8	ug/L	380	Standard
|	**Pb**	208	2546035.2	0.2	**49.7089**	0.195	0.4	ug/L	1773	Standard
|	**U**	238	2395890.1	0.5	**49.1240**	0.291	0.6	ug/L	42	Standard
⌊>	**Bi**	209	536093.9	0.2				ug/L	569761	Standard
⌈	**Na**	23	14156.6	1.5	**4.8169**	0.095	2.0	mg/L	89	Standard
|	**Mg**	24	1292679.3	1.8	**4.9090**	0.142	2.9	mg/L	158	Standard

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	K	39	49670.0	1.0	**4.8814**	0.128	2.6	mg/L	532	Standard
	Ca	43	3318.4	1.7	**4.8694**	0.164	3.4	mg/L	142	Standard
	Fe	54	26323.8	2.3	**5.0617**	0.093	1.8	mg/L	890	Standard
	Fe	57	568612.2	4.4	**5.4922**	0.142	2.6	mg/L	3398	Standard
>	**Sc-1**	45	391621.8	3.5				mg/L	408994	Standard
	Cl	35	773434.8	32.2				ug/L	45742	Standard
	Kr	83	47.8	7.7				ug/L	47	Standard
	Br	81	10420.9	0.4				ug/L	11318	Standard
	P	31	59173.0	1.2				ug/L	55334	Standard
	S	34	666791.7	0.7				ug/L	546407	Standard
	Sr	88	476.7	17.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	95.078		
>	Sc	45			
	Ti	47	99.636		
	V	51	100.362		
	Cr	52	101.365		
	Cr	53			
	Mn	55	99.777		
	Co	59	99.785		
	Ni	60	100.176		
	Cu	65	99.957		
	Zn	66	99.772		
>	Ge	72		96.165	
	As	75	100.799		
	Se	82	100.414		
	Se-1	77	101.336		
	Ga	71			
	Rb	85			
>	Y	89		96.853	
	Rh	103			
	Mo	98	97.769		
	Ag	107	102.347		
	Cd	111	103.578		
	Cd	114			
>	In	115		96.645	
	Sn	118	98.922		
	Sb	123	103.288		
	Ba	135	98.102		
	Ce	140			
>	Tb	159		97.041	
	Ho	165			
	Tl	203	100.129		
	Tl	205			
	Pb	206	99.864		

Sample ID: QC Std 6
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	Pb	207	101.270	
	Pb	208	99.418	
	U	238	98.248	
>	Bi	209		94.091
	Na	23	96.338	
	Mg	24	98.181	
	K	39	97.629	
	Ca	43	97.389	
	Fe	54	101.234	
	Fe	57	109.844	
>	Sc-1	45		
	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: Tuesday, May 01, 2012 11:03:29
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 11:03:49
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	21860.8	0.8	**13.7399**	6.536	47.6	ug/L	21640	Standard
|	**Be**	9	25.7	57.0	**0.0063**	0.004	63.4	ug/L	16	Standard
|	**Al**	27	14468.9	7.8	**-0.0915**	0.048	52.2	ug/L	19981	Standard
⌊>	**Sc**	45	404135.7	1.3				ug/L	408994	Standard
⌈	**Ti**	47	86.7	27.5	**-0.0434**	0.013	29.8	ug/L	102	Standard
|	**V**	51	5370.4	3.3	**-0.0023**	0.009	398.3	ug/L	5722	Standard
|	**Cr**	52	17134.7	1.7	**-0.0236**	0.008	34.9	ug/L	18417	Standard
|	**Cr**	53	1357.4	2.7	**0.5234**	0.029	5.6	ug/L	405	Standard
|	**Mn**	55	2048.5	57.6	**-0.0528**	0.053	100.2	ug/L	4298	Standard
|	**Co**	59	298.0	89.7	**0.0125**	0.018	141.7	ug/L	123	Standard
|	**Ni**	60	111.0	78.9	**0.0145**	0.028	194.9	ug/L	90	Standard
|	**Cu**	65	172.0	55.9	**0.0072**	0.035	484.3	ug/L	148	Standard
|	**Zn**	66	225.3	33.0	**-0.8127**	0.059	7.3	ug/L	842	Standard
| >	**Ge**	72	287732.0	1.4				ug/L	293466	Standard
|	**As**	75	-181.6	7.4	**-0.0086**	0.010	120.2	ug/L	-207	Standard
|	**Se**	82	18.8	52.0	**-0.0230**	0.091	397.5	ug/L	19	Standard
⌊	**Se-1**	77	95.7	12.5	**0.1065**	0.157	147.6	ug/L	80	Standard
	Ga	71	229407.3	2.9				mg/L	234805	Standard
⌈	**Rb**	85	24.7	51.5				ug/L	13	Standard
| >	**Y**	89	255087.1	1.7				ug/L	262487	Standard
⌊	**Rh**	103	2.7	114.6				ug/L	4	Standard
⌈	**Mo**	98	114.8	42.4	**0.0261**	0.013	50.6	ug/L	10	Standard
|	**Ag**	107	499.0	63.2	**0.0641**	0.044	68.9	ug/L	39	Standard
|	**Cd**	111	562.8	3.8	**0.0141**	0.007	50.1	mg/L	525	Standard
|	**Cd**	114	1631.5	1.3	**0.0142**	0.003	21.5	ug/L	1503	Standard
| >	**In**	115	912230.3	1.5				ug/L	917693	Standard
|	**Sn**	118	1191.4	1.8	**-0.1515**	0.001	0.5	ug/L	5013	Standard
|	**Sb**	123	249.9	16.1	**0.0219**	0.004	19.1	ug/L	29	Standard
⌊	**Ba**	135	75.7	13.5	**0.0036**	0.002	50.4	ug/L	68	Standard
⌈	**Ce**	140	72.7	23.4				ug/L	58	Standard
⌊>	**Tb**	159	990588.2	1.9				ug/L	1008624	Standard
⌈	**Ho**	165	10.0	91.7				ug/L	12	Standard
|	**Tl**	203	442.3	6.1	**0.0274**	0.002	6.5	ug/L	9	Standard
|	**Tl**	205	1049.4	2.1	**0.0273**	0.001	2.1	ug/L	29	Standard
|	**Pb**	206	442.3	3.1	**-0.0002**	0.001	683.0	ug/L	458	Standard
|	**Pb**	207	356.3	6.5	**-0.0017**	0.002	122.3	ug/L	380	Standard
|	**Pb**	208	1651.0	2.8	**0.0003**	0.001	313.4	ug/L	1773	Standard
|	**U**	238	123.7	0.5	**0.0067**	0.000	0.2	ug/L	42	Standard
⌊>	**Bi**	209	563340.6	0.8				ug/L	569761	Standard
⌈	**Na**	23	72.0	13.9	**-0.0037**	0.003	89.9	mg/L	89	Standard
|	**Mg**	24	162.3	8.4	**0.0001**	0.000	43.2	mg/L	158	Standard

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	K	39	598.7	3.4	**0.0048**	0.002	31.9	mg/L	532	Standard
	Ca	43	124.7	7.6	**-0.0165**	0.016	96.2	mg/L	142	Standard
	Fe	54	843.6	1.7	**-0.0105**	0.005	45.9	mg/L	890	Standard
	Fe	57	3167.7	2.8	**-0.0020**	0.001	61.5	mg/L	3398	Standard
>	**Sc-1**	45	404135.7	1.3				mg/L	408994	Standard
	Cl	35	494991.2	4.4				ug/L	45742	Standard
	Kr	83	52.0	7.8				ug/L	47	Standard
	Br	81	10904.3	1.9				ug/L	11318	Standard
	P	31	63095.8	1.9				ug/L	55334	Standard
	S	34	678331.6	2.6				ug/L	546407	Standard
	Sr	88	202.0	22.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.046	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.181	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.405	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.212	
	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

98.873

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: L1204093107
Sample Date/Time: Tuesday, May 01, 2012 11:06:38
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	231574.7	2.0	**10155.6207**	49.020	0.5	ug/L	21640	Standard
|	**Be**	9	1495.7	4.7	**0.3523**	0.013	3.8	ug/L	16	Standard
|	**Al**	27	98136658.0	0.9	**3746.7611**	52.185	1.4	ug/L	19981	Standard
⌊>	**Sc**	45	478439.9	1.7				ug/L	408994	Standard
⌈	**Ti**	47	28512.8	1.5	**15.4534**	0.459	3.0	ug/L	102	Standard
|	**V**	51	263921.5	1.1	**12.3270**	0.251	2.0	ug/L	5722	Standard
|	**Cr**	52	141439.5	0.8	**7.2989**	0.079	1.1	ug/L	18417	Standard
|	**Cr**	53	29556.8	2.9	**15.1518**	0.238	1.6	ug/L	405	Standard
|	**Mn**	55	6606416.4	2.2	**301.3119**	2.404	0.8	ug/L	4298	Standard
|	**Co**	59	65926.8	1.3	**4.3840**	0.021	0.5	ug/L	123	Standard
|	**Ni**	60	26405.3	1.5	**8.5978**	0.016	0.2	ug/L	90	Standard
|	**Cu**	65	23179.7	1.6	**8.5195**	0.091	1.1	ug/L	148	Standard
|	**Zn**	66	47287.4	1.6	**38.1105**	0.441	1.2	ug/L	842	Standard
| >	**Ge**	72	291561.4	1.7				ug/L	293466	Standard
|	**As**	75	2743.2	5.7	**2.6224**	0.159	6.1	ug/L	-207	Standard
|	**Se**	82	73.7	5.3	**0.4802**	0.046	9.6	ug/L	19	Standard
⌊	**Se-1**	77	1161.4	3.8	**14.4502**	0.670	4.6	ug/L	80	Standard
	Ga	71	240223.8	1.8				mg/L	234805	Standard
⌈	**Rb**	85	146855.6	0.2				ug/L	13	Standard
| >	**Y**	89	390627.8	1.8				ug/L	262487	Standard
⌊	**Rh**	103	17.3	35.3				ug/L	4	Standard
⌈	**Mo**	98	2219.2	1.4	**0.5834**	0.015	2.6	ug/L	10	Standard
|	**Ag**	107	434.0	5.2	**0.0539**	0.002	4.5	ug/L	39	Standard
|	**Cd**	111	1122.9	5.8	**0.1413**	0.012	8.5	mg/L	525	Standard
|	**Cd**	114	3147.1	2.3	**0.1333**	0.008	5.9	ug/L	1503	Standard
| >	**In**	115	931812.9	1.2				ug/L	917693	Standard
|	**Sn**	118	8596.4	3.3	**0.3001**	0.011	3.7	ug/L	5013	Standard
|	**Sb**	123	2933.7	1.1	**0.2748**	0.004	1.5	ug/L	29	Standard
⌊	**Ba**	135	268059.7	1.9	**51.6939**	0.349	0.7	ug/L	68	Standard
⌈	**Ce**	140	1856793.4	1.9				ug/L	58	Standard
⌊>	**Tb**	159	1045666.9	2.1				ug/L	1008624	Standard
⌈	**Ho**	165	19487.2	0.9				ug/L	12	Standard
|	**Tl**	203	2011.1	1.7	**0.1213**	0.003	2.5	ug/L	9	Standard
|	**Tl**	205	4747.4	1.8	**0.1132**	0.002	2.0	ug/L	29	Standard
|	**Pb**	206	119512.9	1.8	**8.7366**	0.067	0.8	ug/L	458	Standard
|	**Pb**	207	97191.1	1.4	**8.5989**	0.080	0.9	ug/L	380	Standard
|	**Pb**	208	455198.9	1.3	**8.5580**	0.021	0.2	ug/L	1773	Standard
|	**U**	238	33089.4	1.9	**0.6594**	0.003	0.5	ug/L	42	Standard
⌊>	**Bi**	209	555097.1	1.4				ug/L	569761	Standard
⌈	**Na**	23	760.7	7.6	**0.1856**	0.020	10.6	mg/L	89	Standard
|	**Mg**	24	1389119.9	0.3	**4.3163**	0.070	1.6	mg/L	158	Standard

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	K	39	12243.6	3.3	**0.9421**	0.020	2.1	mg/L	532	Standard
	Ca	43	9567.0	1.2	**11.7579**	0.090	0.8	mg/L	142	Standard
	Fe	54	48505.5	1.7	**7.7198**	0.004	0.1	mg/L	890	Standard
	Fe	57	952606.6	5.5	**7.5425**	0.367	4.9	mg/L	3398	Standard
>	**Sc-1**	45	478439.9	1.7				mg/L	408994	Standard
	Cl	35	65762032.1	1.1				ug/L	45742	Standard
	Kr	83	56.0	7.1				ug/L	47	Standard
	Br	81	12774.4	2.4				ug/L	11318	Standard
	P	31	624470.7	0.3				ug/L	55334	Standard
	S	34	920930.8	1.4				ug/L	546407	Standard
	Sr	88	738470.3	3.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.351	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		148.818	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.539	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.673	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

97.426

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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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204093108
Sample Date/Time: Tuesday, May 01, 2012 11:09:25
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	276885.1	0.5	**11828.5555**	83.240	0.7	ug/L	21640	Standard
|	**Be**	9	1432.1	3.3	**0.3235**	0.011	3.4	ug/L	16	Standard
|	**Al**	27	130820266.7	0.1	**4788.7368**	22.756	0.5	ug/L	19981	Standard
⌊>	**Sc**	45	498966.3	0.5				ug/L	408994	Standard
⌈	**Ti**	47	69985.3	1.8	**38.3967**	0.961	2.5	ug/L	102	Standard
|	**V**	51	334675.4	0.8	**15.8433**	0.308	1.9	ug/L	5722	Standard
|	**Cr**	52	141913.2	0.7	**7.4012**	0.098	1.3	ug/L	18417	Standard
|	**Cr**	53	29906.2	1.3	**15.4750**	0.334	2.2	ug/L	405	Standard
|	**Mn**	55	4304509.3	1.9	**198.0797**	6.230	3.1	ug/L	4298	Standard
|	**Co**	59	57564.8	1.8	**3.8619**	0.121	3.1	ug/L	123	Standard
|	**Ni**	60	25011.3	1.0	**8.2169**	0.199	2.4	ug/L	90	Standard
|	**Cu**	65	22980.8	2.2	**8.5210**	0.146	1.7	ug/L	148	Standard
|	**Zn**	66	49836.8	1.5	**40.5857**	0.642	1.6	ug/L	842	Standard
| >	**Ge**	72	288995.4	1.4				ug/L	293466	Standard
|	**As**	75	2495.4	1.3	**2.4192**	0.062	2.6	ug/L	-207	Standard
|	**Se**	82	72.6	5.5	**0.4747**	0.028	5.9	ug/L	19	Standard
⌊	**Se-1**	77	1019.7	1.7	**12.6632**	0.406	3.2	ug/L	80	Standard
	Ga	71	241541.0	1.6				mg/L	234805	Standard
⌈	**Rb**	85	194903.6	0.4				ug/L	13	Standard
| >	**Y**	89	406958.3	2.4				ug/L	262487	Standard
⌊	**Rh**	103	28.0	21.4				ug/L	4	Standard
⌈	**Mo**	98	2284.4	0.9	**0.6013**	0.013	2.2	ug/L	10	Standard
|	**Ag**	107	389.7	1.6	**0.0479**	0.001	2.5	ug/L	39	Standard
|	**Cd**	111	1234.9	2.7	**0.1679**	0.011	6.3	mg/L	525	Standard
|	**Cd**	114	3348.4	3.8	**0.1498**	0.012	7.7	ug/L	1503	Standard
| >	**In**	115	930721.8	1.3				ug/L	917693	Standard
|	**Sn**	118	9146.8	0.6	**0.3347**	0.009	2.7	ug/L	5013	Standard
|	**Sb**	123	2867.4	1.1	**0.2689**	0.006	2.4	ug/L	29	Standard
⌊	**Ba**	135	347698.7	1.8	**67.1550**	2.051	3.1	ug/L	68	Standard
⌈	**Ce**	140	2270955.2	0.9				ug/L	58	Standard
⌊>	**Tb**	159	1066367.0	0.7				ug/L	1008624	Standard
⌈	**Ho**	165	22291.7	1.7				ug/L	12	Standard
|	**Tl**	203	2292.5	2.5	**0.1355**	0.004	2.9	ug/L	9	Standard
|	**Tl**	205	5523.7	1.8	**0.1289**	0.003	1.9	ug/L	29	Standard
|	**Pb**	206	134120.0	0.7	**9.6323**	0.151	1.6	ug/L	458	Standard
|	**Pb**	207	109207.9	2.0	**9.4919**	0.222	2.3	ug/L	380	Standard
|	**Pb**	208	508818.3	1.3	**9.3974**	0.168	1.8	ug/L	1773	Standard
|	**U**	238	37315.2	0.7	**0.7298**	0.005	0.7	ug/L	42	Standard
⌊>	**Bi**	209	565283.0	1.1				ug/L	569761	Standard
⌈	**Na**	23	780.7	1.0	**0.1820**	0.003	1.6	mg/L	89	Standard
|	**Mg**	24	1155399.9	1.7	**3.4416**	0.058	1.7	mg/L	158	Standard

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	K	39	16164.0	0.1	**1.2068**	0.005	0.4	mg/L	532	Standard
	Ca	43	8046.8	0.9	**9.4433**	0.108	1.1	mg/L	142	Standard
	Fe	54	54324.3	2.1	**8.3030**	0.166	2.0	mg/L	890	Standard
	Fe	57	1150663.9	4.5	**8.7415**	0.368	4.2	mg/L	3398	Standard
>	**Sc-1**	45	498966.3	0.5				mg/L	408994	Standard
	Cl	35	50058684.0	0.6				ug/L	45742	Standard
	Kr	83	62.0	14.1				ug/L	47	Standard
	Br	81	12519.8	2.1				ug/L	11318	Standard
	P	31	666897.5	1.1				ug/L	55334	Standard
	S	34	880185.7	1.6				ug/L	546407	Standard
	Sr	88	813027.9	1.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.477	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		155.039	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.420	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.725	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.214
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204093109
Sample Date/Time: Tuesday, May 01, 2012 11:12:13
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	220299.1	1.1	**9026.5029**	134.856	1.5	ug/L	21640	Standard
|	**Be**	9	1845.8	3.1	**0.4121**	0.015	3.5	ug/L	16	Standard
|	**Al**	27	121770907.2	0.4	**4403.1290**	21.022	0.5	ug/L	19981	Standard
⌊>	**Sc**	45	505115.4	0.5				ug/L	408994	Standard
⌈	**Ti**	47	14604.4	0.4	**7.6868**	0.062	0.8	ug/L	102	Standard
|	**V**	51	307830.4	1.3	**14.0842**	0.240	1.7	ug/L	5722	Standard
|	**Cr**	52	138619.9	0.9	**6.9452**	0.092	1.3	ug/L	18417	Standard
|	**Cr**	53	33426.8	2.1	**16.7661**	0.341	2.0	ug/L	405	Standard
|	**Mn**	55	10543630.4	2.1	**470.0082**	9.391	2.0	ug/L	4298	Standard
|	**Co**	59	115535.9	1.0	**7.5124**	0.065	0.9	ug/L	123	Standard
|	**Ni**	60	51000.0	1.0	**16.2465**	0.204	1.3	ug/L	90	Standard
|	**Cu**	65	37009.2	1.7	**13.3234**	0.231	1.7	ug/L	148	Standard
|	**Zn**	66	68213.6	1.3	**54.1299**	0.907	1.7	ug/L	842	Standard
| >	**Ge**	72	298371.6	0.4				ug/L	293466	Standard
|	**As**	75	10849.8	0.7	**9.6821**	0.030	0.3	ug/L	-207	Standard
|	**Se**	82	71.1	14.9	**0.4400**	0.093	21.0	ug/L	19	Standard
⌊	**Se-1**	77	1316.4	3.4	**16.1297**	0.584	3.6	ug/L	80	Standard
	Ga	71	246273.1	1.9				mg/L	234805	Standard
⌈	**Rb**	85	181629.5	0.4				ug/L	13	Standard
| >	**Y**	89	408395.4	0.1				ug/L	262487	Standard
⌊	**Rh**	103	20.0	0.0				ug/L	4	Standard
⌈	**Mo**	98	2685.0	9.2	**0.6931**	0.051	7.4	ug/L	10	Standard
|	**Ag**	107	578.3	40.2	**0.0720**	0.030	41.2	ug/L	39	Standard
|	**Cd**	111	1138.0	12.2	**0.1398**	0.027	19.3	mg/L	525	Standard
|	**Cd**	114	3139.4	14.5	**0.1276**	0.031	24.0	ug/L	1503	Standard
| >	**In**	115	949142.5	2.0				ug/L	917693	Standard
|	**Sn**	118	9257.5	2.9	**0.3303**	0.007	2.1	ug/L	5013	Standard
|	**Sb**	123	3077.7	10.0	**0.2828**	0.023	8.1	ug/L	29	Standard
⌊	**Ba**	135	749865.8	0.6	**142.0403**	3.507	2.5	ug/L	68	Standard
⌈	**Ce**	140	1762622.9	0.9				ug/L	58	Standard
⌊>	**Tb**	159	1080276.2	0.6				ug/L	1008624	Standard
⌈	**Ho**	165	21428.5	1.1				ug/L	12	Standard
|	**Tl**	203	3169.3	14.4	**0.1843**	0.026	14.2	ug/L	9	Standard
|	**Tl**	205	7829.4	14.7	**0.1789**	0.026	14.3	ug/L	29	Standard
|	**Pb**	206	171930.0	0.3	**12.1920**	0.020	0.2	ug/L	458	Standard
|	**Pb**	207	140296.3	1.5	**12.0409**	0.188	1.6	ug/L	380	Standard
|	**Pb**	208	654945.2	0.6	**11.9438**	0.089	0.7	ug/L	1773	Standard
|	**U**	238	34677.0	2.4	**0.6696**	0.015	2.3	ug/L	42	Standard
⌊>	**Bi**	209	572843.4	0.1				ug/L	569761	Standard
⌈	**Na**	23	267.3	22.1	**0.0433**	0.016	36.9	mg/L	89	Standard
|	**Mg**	24	528085.4	0.6	**1.5536**	0.008	0.5	mg/L	158	Standard

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Sheri L. Babyak

	K	39	10709.1	0.1	**0.7715**	0.005	0.6	mg/L	532	Standard
	Ca	43	2421.5	3.0	**2.6656**	0.073	2.7	mg/L	142	Standard
	Fe	54	93931.9	2.3	**14.3042**	0.305	2.1	mg/L	890	Standard
	Fe	57	1849044.8	2.7	**13.8947**	0.316	2.3	mg/L	3398	Standard
>	**Sc-1**	45	505115.4	0.5				mg/L	408994	Standard
	Cl	35	64146906.6	0.8				ug/L	45742	Standard
	Kr	83	62.7	12.5				ug/L	47	Standard
	Br	81	12445.4	1.3				ug/L	11318	Standard
	P	31	879462.8	0.5				ug/L	55334	Standard
	S	34	681372.1	2.2				ug/L	546407	Standard
	Sr	88	480384.6	0.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.672	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		155.587	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.427	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.104	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204093109
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.541
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: L1204068606
Sample Date/Time: Tuesday, May 01, 2012 11:15:01
Number of Replicates: 3
Autosampler Position: 218
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	78093.4	0.5	**3386.6005**	60.057	1.8	ug/L	21640	Standard
|	**Be**	9	29.3	16.1	**0.0076**	0.001	18.2	ug/L	16	Standard
|	**Al**	27	514147.9	4.0	**22.9514**	0.793	3.5	ug/L	19981	Standard
⌊>	**Sc**	45	396296.6	0.7				ug/L	408994	Standard
⌈	**Ti**	47	938.0	4.2	**0.4515**	0.021	4.7	ug/L	102	Standard
|	**V**	51	8145.9	0.8	**0.1507**	0.008	5.5	ug/L	5722	Standard
|	**Cr**	52	20842.7	1.4	**0.2576**	0.009	3.5	ug/L	18417	Standard
|	**Cr**	53	2168.8	13.2	**1.0031**	0.140	14.0	ug/L	405	Standard
|	**Mn**	55	189813.2	1.9	**9.0481**	0.032	0.4	ug/L	4298	Standard
|	**Co**	59	499.3	6.5	**0.0278**	0.002	6.4	ug/L	123	Standard
|	**Ni**	60	529.7	1.2	**0.1616**	0.002	1.2	ug/L	90	Standard
|	**Cu**	65	429.0	9.5	**0.1117**	0.019	16.8	ug/L	148	Standard
|	**Zn**	66	3553.4	0.3	**2.1195**	0.054	2.6	ug/L	842	Standard
|>	**Ge**	72	274637.4	1.6				ug/L	293466	Standard
|	**As**	75	2197.5	2.2	**2.2529**	0.048	2.1	ug/L	-207	Standard
|	**Se**	82	87.0	15.7	**0.6520**	0.144	22.1	ug/L	19	Standard
⌊	**Se-1**	77	123.3	13.9	**0.5632**	0.223	39.5	ug/L	80	Standard
	Ga	71	214297.4	2.4				mg/L	234805	Standard
⌈	**Rb**	85	12644.6	1.1				ug/L	13	Standard
|>	**Y**	89	247050.8	1.5				ug/L	262487	Standard
⌊	**Rh**	103	19.3	53.1				ug/L	4	Standard
⌈	**Mo**	98	6318.5	0.5	**1.7925**	0.005	0.3	ug/L	10	Standard
|	**Ag**	107	51.3	11.7	**0.0015**	0.001	58.8	ug/L	39	Standard
|	**Cd**	111	535.8	2.4	**0.0141**	0.003	21.9	mg/L	525	Standard
|	**Cd**	114	1553.7	4.8	**0.0143**	0.006	44.0	ug/L	1503	Standard
|>	**In**	115	868187.1	0.2				ug/L	917693	Standard
|	**Sn**	118	1554.1	5.5	**-0.1239**	0.006	4.5	ug/L	5013	Standard
|	**Sb**	123	586.9	6.6	**0.0572**	0.004	6.6	ug/L	29	Standard
⌊	**Ba**	135	138314.5	1.3	**28.6251**	0.444	1.6	ug/L	68	Standard
⌈	**Ce**	140	7221.7	11.2				ug/L	58	Standard
⌊>	**Tb**	159	978439.9	1.3				ug/L	1008624	Standard
⌈	**Ho**	165	102.0	13.7				ug/L	12	Standard
|	**Tl**	203	560.3	18.9	**0.0387**	0.007	18.6	ug/L	9	Standard
|	**Tl**	205	1368.1	22.2	**0.0387**	0.008	20.6	ug/L	29	Standard
|	**Pb**	206	936.7	5.0	**0.0446**	0.004	9.6	ug/L	458	Standard
|	**Pb**	207	785.0	5.6	**0.0449**	0.005	10.7	ug/L	380	Standard
|	**Pb**	208	3626.2	5.9	**0.0460**	0.005	10.6	ug/L	1773	Standard
|	**U**	238	12489.5	1.8	**0.2803**	0.003	1.2	ug/L	42	Standard
⌊>	**Bi**	209	497234.1	0.6				ug/L	569761	Standard
⌈	**Na**	23	258022.7	1.3	**87.1907**	1.178	1.4	mg/L	89	Standard
|	**Mg**	24	41212.0	1.1	**0.1541**	0.002	1.4	mg/L	158	Standard

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Sheri L. Babyak

	K	39	9358.9	1.9	**0.8654**	0.019	2.1	mg/L	532	Standard
	Ca	43	700.0	10.2	**0.8548**	0.101	11.8	mg/L	142	Standard
	Fe	54	1057.2	1.8	**0.0347**	0.005	13.9	mg/L	890	Standard
	Fe	57	9741.8	5.1	**0.0617**	0.004	6.6	mg/L	3398	Standard
>	**Sc-1**	45	396296.6	0.7				mg/L	408994	Standard
	Cl	35	2069735.5	10.7				ug/L	45742	Standard
	Kr	83	48.0	16.8				ug/L	47	Standard
	Br	81	56196.4	2.3				ug/L	11318	Standard
	P	31	100145.9	1.4				ug/L	55334	Standard
	S	34	1091347.8	0.9				ug/L	546407	Standard
	Sr	88	581760.8	0.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.584	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.119	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.605	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.007	
	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

87.271

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1204068606
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 11:17:51
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	20838.0	2.6	**-1.6373**	6.591	402.6	ug/L	21640	Standard
|	**Be**	9	179908.2	0.8	**52.1458**	1.190	2.3	ug/L	16	Standard
|	**Al**	27	1061737.6	1.5	**49.0070**	0.662	1.4	ug/L	19981	Standard
⌊>	**Sc**	45	389895.2	2.3				ug/L	408994	Standard
⌈	**Ti**	47	177041.7	0.1	**100.3885**	1.038	1.0	ug/L	102	Standard
|	**V**	51	1007590.4	0.6	**49.7755**	0.283	0.6	ug/L	5722	Standard
|	**Cr**	52	834686.2	0.5	**50.2428**	0.612	1.2	ug/L	18417	Standard
|	**Cr**	53	95035.9	2.7	**51.1769**	0.823	1.6	ug/L	405	Standard
|	**Mn**	55	1048870.0	0.4	**49.6958**	0.583	1.2	ug/L	4298	Standard
|	**Co**	59	713319.4	0.2	**49.4709**	0.620	1.3	ug/L	123	Standard
|	**Ni**	60	148311.4	0.6	**50.3951**	0.748	1.5	ug/L	90	Standard
|	**Cu**	65	130373.2	1.4	**50.1705**	0.570	1.1	ug/L	148	Standard
|	**Zn**	66	59250.0	0.3	**50.0296**	0.697	1.4	ug/L	842	Standard
| >	**Ge**	72	280005.2	1.2				ug/L	293466	Standard
|	**As**	75	54168.0	1.3	**50.8324**	0.078	0.2	ug/L	-207	Standard
|	**Se**	82	5289.7	1.5	**50.4288**	0.229	0.5	ug/L	19	Standard
⌊	**Se-1**	77	3720.5	2.2	**51.0012**	1.680	3.3	ug/L	80	Standard
	Ga	71	219455.9	0.7				mg/L	234805	Standard
⌈	**Rb**	85	797.4	5.3				ug/L	13	Standard
| >	**Y**	89	245430.7	1.3				ug/L	262487	Standard
⌊	**Rh**	103	26.7	15.6				ug/L	4	Standard
⌈	**Mo**	98	350590.3	0.3	**96.7087**	0.945	1.0	ug/L	10	Standard
|	**Ag**	107	353675.8	0.8	**50.8692**	0.371	0.7	ug/L	39	Standard
|	**Cd**	111	217614.8	0.8	**52.5254**	0.257	0.5	mg/L	525	Standard
|	**Cd**	114	614155.2	0.7	**51.2776**	0.663	1.3	ug/L	1503	Standard
| >	**In**	115	895364.0	0.7				ug/L	917693	Standard
|	**Sn**	118	793705.8	1.5	**50.3409**	0.700	1.4	ug/L	5013	Standard
|	**Sb**	123	533881.9	0.3	**52.4719**	0.250	0.5	ug/L	29	Standard
⌊	**Ba**	135	244199.9	0.6	**49.0120**	0.115	0.2	ug/L	68	Standard
⌈	**Ce**	140	871.4	2.2				ug/L	58	Standard
⌊>	**Tb**	159	994329.8	2.0				ug/L	1008624	Standard
⌈	**Ho**	165	25.3	22.8				ug/L	12	Standard
|	**Tl**	203	825104.3	1.3	**50.2371**	1.059	2.1	ug/L	9	Standard
|	**Tl**	205	1980600.7	1.3	**46.8391**	1.069	2.3	ug/L	29	Standard
|	**Pb**	206	670543.6	1.1	**50.2691**	1.060	2.1	ug/L	458	Standard
|	**Pb**	207	559258.9	1.3	**50.7480**	1.221	2.4	ug/L	380	Standard
|	**Pb**	208	2584045.8	1.0	**49.8140**	0.995	2.0	ug/L	1773	Standard
|	**U**	238	2485816.3	0.4	**50.3210**	0.544	1.1	ug/L	42	Standard
⌊>	**Bi**	209	543032.6	1.3				ug/L	569761	Standard
⌈	**Na**	23	14523.6	1.5	**4.9639**	0.132	2.7	mg/L	89	Standard
|	**Mg**	24	1334224.3	0.9	**5.0874**	0.077	1.5	mg/L	158	Standard

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Sheri L. Babgouk

	K	39	50929.5	1.2	**5.0285**	0.171	3.4	mg/L	532	Standard
	Ca	43	3391.0	2.7	**5.0007**	0.131	2.6	mg/L	142	Standard
	Fe	54	26033.7	1.2	**5.0263**	0.084	1.7	mg/L	890	Standard
	Fe	57	563484.2	0.6	**5.4686**	0.129	2.4	mg/L	3398	Standard
>	**Sc-1**	45	389895.2	2.3				mg/L	408994	Standard
	Cl	35	472574.1	8.2				ug/L	45742	Standard
	Kr	83	44.7	7.9				ug/L	47	Standard
	Br	81	10974.6	3.3				ug/L	11318	Standard
	P	31	60061.2	2.0				ug/L	55334	Standard
	S	34	678443.2	1.3				ug/L	546407	Standard
	Sr	88	456.0	18.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	98.014		
>	Sc	45			
	Ti	47	100.388		
	V	51	99.551		
	Cr	52	100.486		
	Cr	53			
	Mn	55	99.392		
	Co	59	98.942		
	Ni	60	100.790		
	Cu	65	100.341		
	Zn	66	100.059		
>	Ge	72		95.413	
	As	75	101.665		
	Se	82	100.858		
	Se-1	77	102.002		
	Ga	71			
	Rb	85			
>	Y	89		93.502	
	Rh	103			
	Mo	98	96.709		
	Ag	107	101.738		
	Cd	111	105.051		
	Cd	114			
>	In	115		97.567	
	Sn	118	100.682		
	Sb	123	104.944		
	Ba	135	98.024		
	Ce	140			
>	Tb	159		98.583	
	Ho	165			
	Tl	203	100.474		
	Tl	205			
	Pb	206	100.538		

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	Pb	207	101.496	
	Pb	208	99.628	
	U	238	100.642	
>	Bi	209		95.309
	Na	23	99.277	
	Mg	24	101.749	
	K	39	100.570	
	Ca	43	100.014	
	Fe	54	100.526	
	Fe	57	109.373	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 11:20:38
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	21742.6	1.3	**3.5660**	7.915	222.0	ug/L	21640	Standard
|	**Be**	9	29.7	28.1	**0.0075**	0.002	33.3	ug/L	16	Standard
|	**Al**	27	15862.4	13.9	**-0.0307**	0.093	304.8	ug/L	19981	Standard
⌊>	**Sc**	45	405195.1	1.9				ug/L	408994	Standard
⌈	**Ti**	47	102.7	33.1	**-0.0349**	0.019	53.1	ug/L	102	Standard
|	**V**	51	5742.7	2.8	**0.0144**	0.009	65.5	ug/L	5722	Standard
|	**Cr**	52	17646.6	1.6	**0.0019**	0.023	1215.7	ug/L	18417	Standard
|	**Cr**	53	1146.7	1.6	**0.4093**	0.008	1.9	ug/L	405	Standard
|	**Mn**	55	2419.9	38.8	**-0.0358**	0.043	120.1	ug/L	4298	Standard
|	**Co**	59	442.0	75.7	**0.0221**	0.022	100.9	ug/L	123	Standard
|	**Ni**	60	127.3	48.7	**0.0199**	0.020	101.6	ug/L	90	Standard
|	**Cu**	65	187.3	37.7	**0.0128**	0.026	202.5	ug/L	148	Standard
|	**Zn**	66	195.3	12.3	**-0.8381**	0.020	2.4	ug/L	842	Standard
| >	**Ge**	72	289157.9	0.6				ug/L	293466	Standard
|	**As**	75	-121.4	13.2	**0.0466**	0.015	32.6	ug/L	-207	Standard
|	**Se**	82	37.9	19.3	**0.1527**	0.066	43.4	ug/L	19	Standard
⌊	**Se-1**	77	88.7	5.1	**0.0057**	0.068	1207.7	ug/L	80	Standard
	Ga	71	229817.2	0.5				mg/L	234805	Standard
⌈	**Rb**	85	49.3	82.8				ug/L	13	Standard
| >	**Y**	89	259561.5	3.5				ug/L	262487	Standard
⌊	**Rh**	103	2.0	100.0				ug/L	4	Standard
⌈	**Mo**	98	130.8	62.9	**0.0299**	0.022	74.4	ug/L	10	Standard
|	**Ag**	107	265.7	41.5	**0.0304**	0.015	48.6	ug/L	39	Standard
|	**Cd**	111	575.2	9.4	**0.0137**	0.012	90.9	mg/L	525	Standard
|	**Cd**	114	1632.5	7.4	**0.0113**	0.013	118.8	ug/L	1503	Standard
| >	**In**	115	934778.0	3.2				ug/L	917693	Standard
|	**Sn**	118	1278.7	11.9	**-0.1478**	0.010	7.1	ug/L	5013	Standard
|	**Sb**	123	295.8	42.8	**0.0258**	0.012	48.2	ug/L	29	Standard
⌊	**Ba**	135	132.0	76.6	**0.0141**	0.019	136.9	ug/L	68	Standard
⌈	**Ce**	140	154.7	98.4				ug/L	58	Standard
⌊>	**Tb**	159	1005577.8	3.2				ug/L	1008624	Standard
⌈	**Ho**	165	14.0	37.8				ug/L	12	Standard
|	**Tl**	203	422.3	23.8	**0.0260**	0.006	22.7	ug/L	9	Standard
|	**Tl**	205	992.0	21.0	**0.0258**	0.005	19.2	ug/L	29	Standard
|	**Pb**	206	467.7	14.2	**0.0013**	0.005	394.2	ug/L	458	Standard
|	**Pb**	207	412.0	16.5	**0.0028**	0.006	218.8	ug/L	380	Standard
|	**Pb**	208	1811.4	14.7	**0.0029**	0.005	177.9	ug/L	1773	Standard
|	**U**	238	274.0	84.1	**0.0096**	0.005	47.6	ug/L	42	Standard
⌊>	**Bi**	209	570050.7	2.2				ug/L	569761	Standard
⌈	**Na**	23	95.3	8.5	**0.0039**	0.003	76.4	mg/L	89	Standard
|	**Mg**	24	242.3	50.3	**0.0004**	0.000	116.7	mg/L	158	Standard

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Sheri L. Babyak

	K	39	585.3	4.0	**0.0034**	0.001	38.7	mg/L	532	Standard
	Ca	43	114.7	14.8	**-0.0321**	0.023	71.9	mg/L	142	Standard
	Fe	54	875.1	5.2	**-0.0048**	0.009	178.6	mg/L	890	Standard
	Fe	57	3327.0	3.6	**-0.0006**	0.001	214.7	mg/L	3398	Standard
>	**Sc-1**	45	405195.1	1.9				mg/L	408994	Standard
	Cl	35	405576.4	2.5				ug/L	45742	Standard
	Kr	83	40.2	12.4				ug/L	47	Standard
	Br	81	10854.2	1.3				ug/L	11318	Standard
	P	31	64128.1	1.3				ug/L	55334	Standard
	S	34	696999.8	0.8				ug/L	546407	Standard
	Sr	88	269.3	66.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.532	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.885	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.862	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.698	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: QC Std 7
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Pb	207	
Pb	208	
U	238	
> Bi	209	100.051
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 01, 2012 11:23:05
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: PBW 51 WG396616-03
Sample Date/Time: Tuesday, May 01, 2012 11:25:00
Number of Replicates: 3
Autosampler Position: 219
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	23890.2	0.5	**31.8426**	22.545	70.8	ug/L	21640	Standard
|	**Be**	9	13.3	31.2	**0.0027**	0.001	39.0	ug/L	16	Standard
|	**Al**	27	46191.6	0.5	**1.1923**	0.027	2.3	ug/L	19981	Standard
⌊>	**Sc**	45	435521.0	1.3				ug/L	408994	Standard
⌈	**Ti**	47	108.7	9.4	**-0.0359**	0.006	16.5	ug/L	102	Standard
|	**V**	51	6083.3	1.1	**0.0090**	0.003	30.9	ug/L	5722	Standard
|	**Cr**	52	19075.7	0.4	**0.0028**	0.013	470.2	ug/L	18417	Standard
|	**Cr**	53	1063.4	3.4	**0.3246**	0.022	6.9	ug/L	405	Standard
|	**Mn**	55	3229.3	2.1	**-0.0095**	0.003	32.8	ug/L	4298	Standard
|	**Co**	59	121.0	10.1	**0.0000**	0.001	3491.7	ug/L	123	Standard
|	**Ni**	60	166.0	5.8	**0.0286**	0.003	10.8	ug/L	90	Standard
|	**Cu**	65	265.0	7.0	**0.0346**	0.007	20.2	ug/L	148	Standard
|	**Zn**	66	3958.2	1.4	**2.0557**	0.080	3.9	ug/L	842	Standard
| >	**Ge**	72	312318.7	1.3				ug/L	293466	Standard
|	**As**	75	-165.5	27.4	**0.0176**	0.040	226.6	ug/L	-207	Standard
|	**Se**	82	28.3	31.7	**0.0443**	0.075	168.4	ug/L	19	Standard
⌊	**Se-1**	77	90.7	4.5	**-0.0584**	0.061	104.2	ug/L	80	Standard
	Ga	71	250709.6	1.7				mg/L	234805	Standard
⌈	**Rb**	85	42.7	16.5				ug/L	13	Standard
| >	**Y**	89	279255.5	1.1				ug/L	262487	Standard
⌊	**Rh**	103	1.3	173.2				ug/L	4	Standard
⌈	**Mo**	98	32.9	15.2	**0.0032**	0.001	38.6	ug/L	10	Standard
|	**Ag**	107	104.7	47.6	**0.0075**	0.006	84.9	ug/L	39	Standard
|	**Cd**	111	584.6	6.3	**0.0080**	0.007	82.5	mg/L	525	Standard
|	**Cd**	114	1671.3	8.3	**0.0064**	0.009	141.8	ug/L	1503	Standard
| >	**In**	115	991834.4	1.1				ug/L	917693	Standard
|	**Sn**	118	1196.0	7.9	**-0.1572**	0.005	3.2	ug/L	5013	Standard
|	**Sb**	123	179.8	4.2	**0.0137**	0.001	4.7	ug/L	29	Standard
⌊	**Ba**	135	302.7	6.1	**0.0435**	0.003	6.4	ug/L	68	Standard
⌈	**Ce**	140	166.0	12.2				ug/L	58	Standard
⌊>	**Tb**	159	1059245.0	1.1				ug/L	1008624	Standard
⌈	**Ho**	165	10.7	28.6				ug/L	12	Standard
|	**Tl**	203	259.3	6.3	**0.0160**	0.001	6.6	ug/L	9	Standard
|	**Tl**	205	658.0	5.1	**0.0177**	0.001	4.6	ug/L	29	Standard
|	**Pb**	206	472.0	2.7	**0.0003**	0.001	216.1	ug/L	458	Standard
|	**Pb**	207	378.3	8.9	**-0.0014**	0.003	203.8	ug/L	380	Standard
|	**Pb**	208	1783.7	1.5	**0.0012**	0.001	51.2	ug/L	1773	Standard
|	**U**	238	19.7	19.3	**0.0046**	0.000	1.6	ug/L	42	Standard
⌊>	**Bi**	209	591465.3	0.9				ug/L	569761	Standard
⌈	**Na**	23	76.7	5.4	**-0.0040**	0.001	29.1	mg/L	89	Standard
|	**Mg**	24	2080.1	1.9	**0.0066**	0.000	0.9	mg/L	158	Standard

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Sheri L. Babyak

	K	39	637.3	2.8	**0.0041**	0.001	23.9	mg/L	532	Standard
	Ca	43	130.0	20.1	**-0.0229**	0.033	145.8	mg/L	142	Standard
	Fe	54	891.9	7.6	**-0.0137**	0.011	77.5	mg/L	890	Standard
	Fe	57	3761.1	3.6	**0.0011**	0.002	145.3	mg/L	3398	Standard
>	**Sc-1**	45	435521.0	1.3				mg/L	408994	Standard
	Cl	35	355335.7	1.1				ug/L	45742	Standard
	Kr	83	42.4	3.6				ug/L	47	Standard
	Br	81	12244.9	2.1				ug/L	11318	Standard
	P	31	66768.5	2.0				ug/L	55334	Standard
	S	34	684899.6	1.3				ug/L	546407	Standard
	Sr	88	1560.7	9.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.424	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		106.388	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.079	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.019	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	103.809
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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 51 WG396616-03
Report Date/Time: Tuesday, May 01, 2012 11:27:28
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: LCSW 51 WG396616-04
Sample Date/Time: Tuesday, May 01, 2012 11:27:48
Number of Replicates: 3
Autosampler Position: 220
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	23414.8	2.5	**22.4281**	19.964	89.0	ug/L	21640	Standard
|	**Be**	9	101785.8	1.6	**26.7506**	0.460	1.7	ug/L	16	Standard
|	**Al**	27	640908.3	0.8	**26.4924**	0.438	1.7	ug/L	19981	Standard
⌊>	**Sc**	45	429883.0	1.2				ug/L	408994	Standard
⌈	**Ti**	47	176.0	10.2	**0.0006**	0.011	1792.9	ug/L	102	Standard
|	**V**	51	587389.2	1.3	**26.5325**	0.226	0.9	ug/L	5722	Standard
|	**Cr**	52	502366.3	0.6	**27.3101**	0.491	1.8	ug/L	18417	Standard
|	**Cr**	53	55345.6	0.2	**27.2964**	0.562	2.1	ug/L	405	Standard
|	**Mn**	55	624613.4	1.6	**27.1210**	0.702	2.6	ug/L	4298	Standard
|	**Co**	59	420565.3	1.6	**26.7881**	0.431	1.6	ug/L	123	Standard
|	**Ni**	60	87229.8	1.9	**27.2192**	0.769	2.8	ug/L	90	Standard
|	**Cu**	65	77750.0	1.2	**27.4617**	0.591	2.2	ug/L	148	Standard
|	**Zn**	66	37071.6	1.1	**28.3281**	0.472	1.7	ug/L	842	Standard
| >	**Ge**	72	304850.1	2.0				ug/L	293466	Standard
|	**As**	75	30289.1	1.4	**26.1889**	0.490	1.9	ug/L	-207	Standard
|	**Se**	82	2958.6	3.3	**25.8069**	0.394	1.5	ug/L	19	Standard
⌊	**Se-1**	77	2089.8	1.6	**25.7387**	0.937	3.6	ug/L	80	Standard
	Ga	71	243852.3	2.8				mg/L	234805	Standard
⌈	**Rb**	85	39.3	7.8				ug/L	13	Standard
| >	**Y**	89	279066.6	2.1				ug/L	262487	Standard
⌊	**Rh**	103	21.3	10.8				ug/L	4	Standard
⌈	**Mo**	98	37.1	18.6	**0.0044**	0.002	45.6	ug/L	10	Standard
|	**Ag**	107	205923.6	0.8	**26.9660**	0.525	1.9	ug/L	39	Standard
|	**Cd**	111	123315.7	0.4	**27.0471**	0.680	2.5	mg/L	525	Standard
|	**Cd**	114	339689.6	0.3	**25.7665**	0.623	2.4	ug/L	1503	Standard
| >	**In**	115	983608.5	2.5				ug/L	917693	Standard
|	**Sn**	118	1350.1	2.5	**-0.1477**	0.003	1.8	ug/L	5013	Standard
|	**Sb**	123	295463.2	0.7	**26.4433**	0.697	2.6	ug/L	29	Standard
⌊	**Ba**	135	139343.5	1.0	**25.4645**	0.781	3.1	ug/L	68	Standard
⌈	**Ce**	140	132.7	3.1				ug/L	58	Standard
⌊>	**Tb**	159	1051750.0	1.8				ug/L	1008624	Standard
⌈	**Ho**	165	11.3	66.8				ug/L	12	Standard
|	**Tl**	203	468738.2	1.3	**26.0519**	0.384	1.5	ug/L	9	Standard
|	**Tl**	205	1126706.5	1.7	**24.3241**	0.505	2.1	ug/L	29	Standard
|	**Pb**	206	378615.2	1.5	**25.8940**	0.498	1.9	ug/L	458	Standard
|	**Pb**	207	325120.5	1.2	**26.9144**	0.499	1.9	ug/L	380	Standard
|	**Pb**	208	1485271.2	1.2	**26.1219**	0.409	1.6	ug/L	1773	Standard
|	**U**	238	1254283.8	0.6	**23.1806**	0.207	0.9	ug/L	42	Standard
⌊>	**Bi**	209	594832.6	0.8				ug/L	569761	Standard
⌈	**Na**	23	75.3	17.7	**-0.0041**	0.004	97.3	mg/L	89	Standard
|	**Mg**	24	866.4	4.0	**0.0025**	0.000	3.9	mg/L	158	Standard

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	K	39	584.7	11.8	**0.0001**	0.006	9483.7	mg/L	532	Standard
	Ca	43	120.7	9.4	**-0.0332**	0.017	52.7	mg/L	142	Standard
	Fe	54	959.1	4.4	**0.0006**	0.006	867.5	mg/L	890	Standard
	Fe	57	3847.8	3.9	**0.0023**	0.002	77.2	mg/L	3398	Standard
>	**Sc-1**	45	429883.0	1.2				mg/L	408994	Standard
	Cl	35	342068.6	0.2				ug/L	45742	Standard
	Kr	83	51.8	2.0				ug/L	47	Standard
	Br	81	11640.1	2.0				ug/L	11318	Standard
	P	31	67090.3	2.5				ug/L	55334	Standard
	S	34	641448.0	1.8				ug/L	546407	Standard
	Sr	88	868.7	5.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		103.879	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		106.316	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.183	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.276	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

104.400

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 51 WG396616-04
Report Date/Time: Tuesday, May 01, 2012 11:30:15
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204092801 WG396616-01
Sample Date/Time: Tuesday, May 01, 2012 11:30:35
Number of Replicates: 3
Autosampler Position: 221
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	169010.9	1.5	**7347.9359**	177.139	2.4	ug/L	21640	Standard
|	**Be**	9	32.3	21.9	**0.0071**	0.002	23.0	ug/L	16	Standard
|	**Al**	27	360062.6	2.1	**13.4601**	0.412	3.1	ug/L	19981	Standard
⌊>	**Sc**	45	463125.6	1.6				ug/L	408994	Standard
⌈	**Ti**	47	4715.4	4.7	**2.5670**	0.144	5.6	ug/L	102	Standard
|	**V**	51	18876.8	3.0	**0.6688**	0.008	1.2	ug/L	5722	Standard
|	**Cr**	52	30479.0	5.6	**0.8105**	0.063	7.8	ug/L	18417	Standard
|	**Cr**	53	2474.2	0.4	**1.1376**	0.031	2.7	ug/L	405	Standard
|	**Mn**	55	36355066.3	1.9	**1715.2419**	14.783	0.9	ug/L	4298	Standard
|	**Co**	59	7949.4	6.8	**0.5396**	0.025	4.7	ug/L	123	Standard
|	**Ni**	60	7798.0	3.2	**2.6103**	0.081	3.1	ug/L	90	Standard
|	**Cu**	65	1411.7	2.4	**0.4831**	0.002	0.3	ug/L	148	Standard
|	**Zn**	66	5173.5	1.1	**3.4242**	0.101	3.0	ug/L	842	Standard
| >	**Ge**	72	281997.2	2.2				ug/L	293466	Standard
|	**As**	75	1796.9	3.1	**1.8270**	0.082	4.5	ug/L	-207	Standard
|	**Se**	82	203.1	5.0	**1.7339**	0.141	8.1	ug/L	19	Standard
⌊	**Se-1**	77	212.7	8.8	**1.7670**	0.313	17.7	ug/L	80	Standard
	Ga	71	222430.1	2.5				mg/L	234805	Standard
⌈	**Rb**	85	19963.8	1.4				ug/L	13	Standard
| >	**Y**	89	263865.3	3.8				ug/L	262487	Standard
⌊	**Rh**	103	204.0	3.4				ug/L	4	Standard
⌈	**Mo**	98	1007.9	5.0	**0.2735**	0.013	4.8	ug/L	10	Standard
|	**Ag**	107	69.0	23.3	**0.0039**	0.002	56.7	ug/L	39	Standard
|	**Cd**	111	590.6	4.6	**0.0235**	0.005	20.6	mg/L	525	Standard
|	**Cd**	114	1605.4	2.0	**0.0148**	0.002	14.0	ug/L	1503	Standard
| >	**In**	115	893919.7	1.4				ug/L	917693	Standard
|	**Sn**	118	1366.7	1.8	**-0.1388**	0.003	2.0	ug/L	5013	Standard
|	**Sb**	123	1605.1	17.7	**0.1555**	0.026	16.5	ug/L	29	Standard
⌊	**Ba**	135	442775.6	1.0	**89.0302**	1.533	1.7	ug/L	68	Standard
⌈	**Ce**	140	20753.5	1.4				ug/L	58	Standard
⌊>	**Tb**	159	1037467.5	1.8				ug/L	1008624	Standard
⌈	**Ho**	165	390.0	8.9				ug/L	12	Standard
|	**Tl**	203	585.7	2.8	**0.0400**	0.001	3.7	ug/L	9	Standard
|	**Tl**	205	1462.7	1.2	**0.0408**	0.000	1.1	ug/L	29	Standard
|	**Pb**	206	1532.1	2.4	**0.0921**	0.003	3.8	ug/L	458	Standard
|	**Pb**	207	1267.4	4.1	**0.0914**	0.003	3.3	ug/L	380	Standard
|	**Pb**	208	5798.4	2.5	**0.0905**	0.002	1.7	ug/L	1773	Standard
|	**U**	238	27345.3	1.0	**0.6027**	0.011	1.8	ug/L	42	Standard
⌊>	**Bi**	209	502307.6	1.6				ug/L	569761	Standard
⌈	**Na**	23	92588.1	1.6	**26.7579**	0.634	2.4	mg/L	89	Standard
|	**Mg**	24	4196140.0	0.8	**13.4691**	0.110	0.8	mg/L	158	Standard

Sample ID: L1204092801 WG396616-01
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	K	39	48483.5	0.9	**4.0183**	0.077	1.9	mg/L	532	Standard
	Ca	43	63147.3	0.8	**81.3522**	1.418	1.7	mg/L	142	Standard
	Fe	54	53993.9	1.2	**8.9049**	0.172	1.9	mg/L	890	Standard
	Fe	57	1333995.6	4.0	**10.9245**	0.268	2.5	mg/L	3398	Standard
>	**Sc-1**	45	463125.6	1.6				mg/L	408994	Standard
	Cl	35	7637090.2	1.2				ug/L	45742	Standard
	Kr	83	53.8	16.8				ug/L	47	Standard
	Br	81	104043.8	2.0				ug/L	11318	Standard
	P	31	847962.6	2.6				ug/L	55334	Standard
	S	34	958859.5	2.6				ug/L	546407	Standard
	Sr	88	9932575.0	1.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.092	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.525	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.409	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.860	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.161
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204092802 WG396616-02
Sample Date/Time: Tuesday, May 01, 2012 11:33:22
Number of Replicates: 3
Autosampler Position: 222
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	238221.8	1.6	**10952.9632**	38.240	0.3	ug/L	21640	Standard
|	**Be**	9	27.3	15.2	**0.0059**	0.001	17.4	ug/L	16	Standard
|	**Al**	27	248150.9	0.4	**9.1100**	0.197	2.2	ug/L	19981	Standard
⌊>	**Sc**	45	460073.8	1.9				ug/L	408994	Standard
⌈	**Ti**	47	5026.8	2.6	**2.8189**	0.102	3.6	ug/L	102	Standard
|	**V**	51	17950.3	2.0	**0.6473**	0.018	2.8	ug/L	5722	Standard
|	**Cr**	52	31635.7	2.4	**0.9342**	0.030	3.2	ug/L	18417	Standard
|	**Cr**	53	2537.5	3.4	**1.2082**	0.050	4.1	ug/L	405	Standard
|	**Mn**	55	47447456.5	0.6	**2299.3669**	21.418	0.9	ug/L	4298	Standard
|	**Co**	59	5770.1	2.0	**0.4006**	0.004	1.1	ug/L	123	Standard
|	**Ni**	60	7498.9	1.6	**2.5781**	0.067	2.6	ug/L	90	Standard
|	**Cu**	65	788.0	1.9	**0.2527**	0.003	1.2	ug/L	148	Standard
|	**Zn**	66	3486.1	1.0	**2.0609**	0.027	1.3	ug/L	842	Standard
| >	**Ge**	72	274542.8	1.0				ug/L	293466	Standard
|	**As**	75	1310.8	4.3	**1.4071**	0.042	3.0	ug/L	-207	Standard
|	**Se**	82	192.0	6.4	**1.6754**	0.109	6.5	ug/L	19	Standard
⌊	**Se-1**	77	249.7	4.2	**2.3741**	0.189	7.9	ug/L	80	Standard
	Ga	71	214907.0	1.7				mg/L	234805	Standard
⌈	**Rb**	85	26096.5	0.4				ug/L	13	Standard
| >	**Y**	89	255389.3	1.2				ug/L	262487	Standard
⌊	**Rh**	103	210.7	4.9				ug/L	4	Standard
⌈	**Mo**	98	610.1	5.1	**0.1667**	0.009	5.4	ug/L	10	Standard
|	**Ag**	107	61.0	18.9	**0.0029**	0.002	53.2	ug/L	39	Standard
|	**Cd**	111	541.5	2.6	**0.0140**	0.003	17.9	mg/L	525	Standard
|	**Cd**	114	1533.0	7.5	**0.0110**	0.008	72.9	ug/L	1503	Standard
| >	**In**	115	877751.9	1.9				ug/L	917693	Standard
|	**Sn**	118	1158.7	1.0	**-0.1507**	0.001	0.6	ug/L	5013	Standard
|	**Sb**	123	953.0	8.6	**0.0932**	0.007	7.1	ug/L	29	Standard
⌊	**Ba**	135	490248.8	1.4	**100.3875**	0.623	0.6	ug/L	68	Standard
⌈	**Ce**	140	16182.6	1.0				ug/L	58	Standard
⌊>	**Tb**	159	1025834.4	1.7				ug/L	1008624	Standard
⌈	**Ho**	165	362.7	2.7				ug/L	12	Standard
|	**Tl**	203	540.0	5.4	**0.0379**	0.002	4.5	ug/L	9	Standard
|	**Tl**	205	1194.7	6.6	**0.0347**	0.002	5.3	ug/L	29	Standard
|	**Pb**	206	702.7	2.7	**0.0263**	0.001	4.6	ug/L	458	Standard
|	**Pb**	207	600.3	3.4	**0.0275**	0.002	6.9	ug/L	380	Standard
|	**Pb**	208	2708.1	2.9	**0.0275**	0.001	4.5	ug/L	1773	Standard
|	**U**	238	22465.6	0.3	**0.5086**	0.003	0.6	ug/L	42	Standard
⌊>	**Bi**	209	489652.9	0.8				ug/L	569761	Standard
⌈	**Na**	23	111024.0	0.8	**32.3046**	0.571	1.8	mg/L	89	Standard
|	**Mg**	24	4381469.4	0.5	**14.1601**	0.329	2.3	mg/L	158	Standard

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	K	39	53129.7	1.0	**4.4377**	0.043	1.0	mg/L	532	Standard
	Ca	43	69846.0	1.2	**90.6014**	1.543	1.7	mg/L	142	Standard
	Fe	54	65128.6	1.1	**10.8508**	0.268	2.5	mg/L	890	Standard
	Fe	57	1550997.3	2.0	**12.7968**	0.315	2.5	mg/L	3398	Standard
>	**Sc-1**	45	460073.8	1.9				mg/L	408994	Standard
	Cl	35	9126800.8	1.9				ug/L	45742	Standard
	Kr	83	63.8	1.2				ug/L	47	Standard
	Br	81	106208.7	1.7				ug/L	11318	Standard
	P	31	1084785.1	2.1				ug/L	55334	Standard
	S	34	920794.6	2.9				ug/L	546407	Standard
	Sr	88	11091852.1	1.5				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.552	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.296	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.648	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		101.706	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	85.940
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1204092803
Sample Date/Time: Tuesday, May 01, 2012 11:36:09
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	142307.2	0.8	**6326.5220**	139.084	2.2	ug/L	21640	Standard
|	**Be**	9	43.7	60.4	**0.0103**	0.007	64.9	ug/L	16	Standard
|	**Al**	27	1094844.5	16.3	**44.4233**	6.981	15.7	ug/L	19981	Standard
⌊>	**Sc**	45	442423.2	1.0				ug/L	408994	Standard
⌈	**Ti**	47	2411.5	3.9	**1.2187**	0.047	3.9	ug/L	102	Standard
|	**V**	51	16915.8	2.5	**0.5422**	0.013	2.5	ug/L	5722	Standard
|	**Cr**	52	33754.6	1.3	**0.9371**	0.004	0.4	ug/L	18417	Standard
|	**Cr**	53	2193.5	9.6	**0.9445**	0.116	12.3	ug/L	405	Standard
|	**Mn**	55	114942.4	3.9	**5.0795**	0.135	2.6	ug/L	4298	Standard
|	**Co**	59	1319.4	2.4	**0.0801**	0.003	3.6	ug/L	123	Standard
|	**Ni**	60	4003.9	3.7	**1.2809**	0.052	4.1	ug/L	90	Standard
|	**Cu**	65	1625.4	2.8	**0.5425**	0.017	3.1	ug/L	148	Standard
|	**Zn**	66	5380.0	1.3	**3.4339**	0.052	1.5	ug/L	842	Standard
| >	**Ge**	72	292535.0	1.3				ug/L	293466	Standard
|	**As**	75	417.4	15.9	**0.5309**	0.063	12.0	ug/L	-207	Standard
|	**Se**	82	312.4	5.0	**2.6634**	0.104	3.9	ug/L	19	Standard
⌊	**Se-1**	77	325.0	6.1	**3.1629**	0.210	6.6	ug/L	80	Standard
	Ga	71	228243.9	1.7				mg/L	234805	Standard
⌈	**Rb**	85	4772.1	8.2				ug/L	13	Standard
| >	**Y**	89	271185.1	1.6				ug/L	262487	Standard
⌊	**Rh**	103	70.7	22.0				ug/L	4	Standard
⌈	**Mo**	98	1907.8	19.5	**0.4938**	0.096	19.3	ug/L	10	Standard
|	**Ag**	107	205.7	128.2	**0.0219**	0.036	163.4	ug/L	39	Standard
|	**Cd**	111	664.3	21.4	**0.0327**	0.032	97.9	mg/L	525	Standard
|	**Cd**	114	1799.5	17.6	**0.0229**	0.025	107.5	ug/L	1503	Standard
| >	**In**	115	944434.7	1.2				ug/L	917693	Standard
|	**Sn**	118	1636.8	18.3	**-0.1272**	0.018	14.1	ug/L	5013	Standard
|	**Sb**	123	1253.8	14.7	**0.1145**	0.017	14.7	ug/L	29	Standard
⌊	**Ba**	135	85806.0	1.6	**16.3190**	0.127	0.8	ug/L	68	Standard
⌈	**Ce**	140	9314.9	6.2				ug/L	58	Standard
⌊>	**Tb**	159	1053838.1	0.8				ug/L	1008624	Standard
⌈	**Ho**	165	234.7	1.0				ug/L	12	Standard
|	**Tl**	203	848.0	19.6	**0.0537**	0.011	19.9	ug/L	9	Standard
|	**Tl**	205	2060.1	13.0	**0.0527**	0.007	13.0	ug/L	29	Standard
|	**Pb**	206	2063.8	11.0	**0.1242**	0.016	12.6	ug/L	458	Standard
|	**Pb**	207	1852.8	21.6	**0.1368**	0.035	25.4	ug/L	380	Standard
|	**Pb**	208	8477.0	22.1	**0.1346**	0.035	25.7	ug/L	1773	Standard
|	**U**	238	43866.4	2.9	**0.9014**	0.016	1.7	ug/L	42	Standard
⌊>	**Bi**	209	537352.8	1.1				ug/L	569761	Standard
⌈	**Na**	23	162551.3	0.6	**49.1913**	0.366	0.7	mg/L	89	Standard
|	**Mg**	24	3442331.0	0.8	**11.5668**	0.203	1.8	mg/L	158	Standard

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Sheri L. Babyak

	K	39	5045.5	1.9	**0.3906**	0.007	1.7	mg/L	532	Standard
	Ca	43	20375.7	1.0	**27.3406**	0.098	0.4	mg/L	142	Standard
	Fe	54	1486.6	4.4	**0.0885**	0.010	11.5	mg/L	890	Standard
	Fe	57	27163.2	9.9	**0.2017**	0.021	10.4	mg/L	3398	Standard
>	**Sc-1**	45	442423.2	1.0				mg/L	408994	Standard
	Cl	35	3843926.1	0.7				ug/L	45742	Standard
	Kr	83	48.9	14.0				ug/L	47	Standard
	Br	81	28912.9	3.5				ug/L	11318	Standard
	P	31	94075.6	2.3				ug/L	55334	Standard
	S	34	2991879.4	1.2				ug/L	546407	Standard
	Sr	88	3870548.2	1.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.683	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.314	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.914	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.483	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.312
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: L1204092803DL WG396659-02
Sample Date/Time: Tuesday, May 01, 2012 11:38:57
Number of Replicates: 3
Autosampler Position: 224
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	44452.4	0.4	**1427.7833**	18.675	1.3	ug/L	21640	Standard
|	**Be**	9	13.0	33.5	**0.0030**	0.001	42.1	ug/L	16	Standard
|	**Al**	27	210965.7	4.3	**9.1384**	0.334	3.7	ug/L	19981	Standard
⌊>	**Sc**	45	389827.2	1.0				ug/L	408994	Standard
⌈	**Ti**	47	436.7	20.0	**0.1589**	0.048	30.2	ug/L	102	Standard
|	**V**	51	7806.4	1.4	**0.1299**	0.009	6.7	ug/L	5722	Standard
|	**Cr**	52	20184.4	0.4	**0.2049**	0.013	6.2	ug/L	18417	Standard
|	**Cr**	53	1140.7	2.3	**0.4322**	0.022	5.0	ug/L	405	Standard
|	**Mn**	55	21957.6	1.6	**0.9072**	0.029	3.2	ug/L	4298	Standard
|	**Co**	59	336.0	6.7	**0.0160**	0.002	10.1	ug/L	123	Standard
|	**Ni**	60	818.0	2.3	**0.2590**	0.008	3.1	ug/L	90	Standard
|	**Cu**	65	485.0	3.0	**0.1319**	0.008	6.0	ug/L	148	Standard
|	**Zn**	66	13409.3	2.0	**10.6680**	0.365	3.4	ug/L	842	Standard
| >	**Ge**	72	277162.6	1.2				ug/L	293466	Standard
|	**As**	75	-25.0	93.8	**0.1331**	0.022	16.4	ug/L	-207	Standard
|	**Se**	82	80.8	5.4	**0.5839**	0.047	8.1	ug/L	19	Standard
⌊	**Se-1**	77	117.3	4.2	**0.4644**	0.089	19.2	ug/L	80	Standard
	Ga	71	213262.4	0.4				mg/L	234805	Standard
⌈	**Rb**	85	854.0	5.9				ug/L	13	Standard
| >	**Y**	89	242591.1	1.8				ug/L	262487	Standard
⌊	**Rh**	103	13.3	37.7				ug/L	4	Standard
⌈	**Mo**	98	303.5	7.2	**0.0784**	0.006	7.3	ug/L	10	Standard
|	**Ag**	107	42.7	2.7	**0.0000**	0.000	309.4	ug/L	39	Standard
|	**Cd**	111	249.2	6.8	**-0.0595**	0.005	7.7	mg/L	525	Standard
|	**Cd**	114	729.7	3.8	**-0.0589**	0.003	4.8	ug/L	1503	Standard
| >	**In**	115	898239.5	0.8				ug/L	917693	Standard
|	**Sn**	118	706.0	2.5	**-0.1812**	0.001	0.7	ug/L	5013	Standard
|	**Sb**	123	366.4	4.6	**0.0336**	0.002	4.5	ug/L	29	Standard
⌊	**Ba**	135	16683.5	1.4	**3.3272**	0.046	1.4	ug/L	68	Standard
⌈	**Ce**	140	1930.8	11.2				ug/L	58	Standard
⌊>	**Tb**	159	1001097.8	1.7				ug/L	1008624	Standard
⌈	**Ho**	165	44.7	14.4				ug/L	12	Standard
|	**Tl**	203	636.3	4.1	**0.0390**	0.001	3.2	ug/L	9	Standard
|	**Tl**	205	1504.1	3.8	**0.0379**	0.002	4.2	ug/L	29	Standard
|	**Pb**	206	782.4	3.6	**0.0247**	0.002	6.5	ug/L	458	Standard
|	**Pb**	207	648.3	3.8	**0.0241**	0.002	7.0	ug/L	380	Standard
|	**Pb**	208	2955.8	0.3	**0.0248**	0.000	1.8	ug/L	1773	Standard
|	**U**	238	8275.6	1.8	**0.1665**	0.004	2.6	ug/L	42	Standard
⌊>	**Bi**	209	560600.4	0.9				ug/L	569761	Standard
⌈	**Na**	23	33492.3	0.5	**11.4820**	0.111	1.0	mg/L	89	Standard
|	**Mg**	24	628164.5	0.3	**2.3950**	0.032	1.3	mg/L	158	Standard

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	K	39	1518.1	4.4	**0.0987**	0.008	8.0	mg/L	532	Standard
	Ca	43	4372.6	3.5	**6.5085**	0.297	4.6	mg/L	142	Standard
	Fe	54	505.0	3.7	**-0.0721**	0.005	6.4	mg/L	890	Standard
	Fe	57	5945.2	1.8	**0.0262**	0.001	3.6	mg/L	3398	Standard
>	**Sc-1**	45	389827.2	1.0				mg/L	408994	Standard
	Cl	35	906594.9	2.2				ug/L	45742	Standard
	Kr	83	43.8	4.4				ug/L	47	Standard
	Br	81	12988.9	1.8				ug/L	11318	Standard
	P	31	31589.6	1.5				ug/L	55334	Standard
	S	34	1124174.0	1.0				ug/L	546407	Standard
	Sr	88	683899.1	0.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.445	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.420	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.880	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.254	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.392
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204092803PS WG396659-01
Sample Date/Time: Tuesday, May 01, 2012 11:41:45
Number of Replicates: 3
Autosampler Position: 225
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	149638.7	1.1	**6548.9376**	51.454	0.8	ug/L	21640	Standard
|	**Be**	9	207684.4	0.3	**51.9204**	0.212	0.4	ug/L	16	Standard
|	**Al**	27	2448253.8	3.6	**98.2075**	2.847	2.9	ug/L	19981	Standard
⌊>	**Sc**	45	451909.2	0.7				ug/L	408994	Standard
⌈	**Ti**	47	3036.3	2.7	**1.5536**	0.026	1.7	ug/L	102	Standard
|	**V**	51	1162531.9	0.9	**54.8677**	1.553	2.8	ug/L	5722	Standard
|	**Cr**	52	956251.8	1.6	**55.0654**	1.903	3.5	ug/L	18417	Standard
|	**Cr**	53	106476.2	1.6	**54.7796**	1.942	3.5	ug/L	405	Standard
|	**Mn**	55	1295222.0	0.7	**58.6271**	1.679	2.9	ug/L	4298	Standard
|	**Co**	59	808166.8	0.5	**53.5139**	1.021	1.9	ug/L	123	Standard
|	**Ni**	60	162942.2	0.8	**52.8589**	0.760	1.4	ug/L	90	Standard
|	**Cu**	65	138982.6	1.2	**51.0629**	0.600	1.2	ug/L	148	Standard
|	**Zn**	66	69723.7	0.7	**56.3303**	0.889	1.6	ug/L	842	Standard
| >	**Ge**	72	293325.3	2.2				ug/L	293466	Standard
|	**As**	75	61187.7	1.6	**54.8059**	0.393	0.7	ug/L	-207	Standard
|	**Se**	82	6077.7	1.0	**55.3418**	0.800	1.4	ug/L	19	Standard
⌊	**Se-1**	77	4343.0	3.0	**56.9482**	0.539	0.9	ug/L	80	Standard
	Ga	71	229825.4	4.3				mg/L	234805	Standard
⌈	**Rb**	85	4787.4	2.3				ug/L	13	Standard
| >	**Y**	89	271057.4	1.4				ug/L	262487	Standard
⌊	**Rh**	103	133.3	13.6				ug/L	4	Standard
⌈	**Mo**	98	1842.0	0.6	**0.4735**	0.003	0.7	ug/L	10	Standard
|	**Ag**	107	372402.4	0.3	**50.4441**	0.145	0.3	ug/L	39	Standard
|	**Cd**	111	238661.5	0.8	**54.2557**	0.434	0.8	mg/L	525	Standard
|	**Cd**	114	663261.9	1.0	**52.1528**	0.435	0.8	ug/L	1503	Standard
| >	**In**	115	950715.9	0.6				ug/L	917693	Standard
|	**Sn**	118	2957.6	3.8	**-0.0486**	0.006	12.0	ug/L	5013	Standard
|	**Sb**	123	586433.7	0.9	**54.2799**	0.377	0.7	ug/L	29	Standard
⌊	**Ba**	135	352893.8	1.4	**66.7105**	1.168	1.8	ug/L	68	Standard
⌈	**Ce**	140	9487.0	1.9				ug/L	58	Standard
⌊>	**Tb**	159	1066425.2	1.4				ug/L	1008624	Standard
⌈	**Ho**	165	267.3	17.7				ug/L	12	Standard
|	**Tl**	203	869200.8	1.0	**53.6352**	0.389	0.7	ug/L	9	Standard
|	**Tl**	205	2270928.9	0.5	**54.4282**	0.288	0.5	ug/L	29	Standard
|	**Pb**	206	693082.6	0.7	**52.6607**	0.317	0.6	ug/L	458	Standard
|	**Pb**	207	594630.9	0.4	**54.6863**	0.239	0.4	ug/L	380	Standard
|	**Pb**	208	2714160.7	0.8	**53.0295**	0.242	0.5	ug/L	1773	Standard
|	**U**	238	2819982.9	0.7	**57.8601**	0.622	1.1	ug/L	42	Standard
⌊>	**Bi**	209	535732.2	0.9				ug/L	569761	Standard
⌈	**Na**	23	168272.0	1.2	**49.8517**	0.495	1.0	mg/L	89	Standard
|	**Mg**	24	3556765.8	0.8	**11.6990**	0.040	0.3	mg/L	158	Standard

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	K	39	5183.6	3.7	**0.3933**	0.019	4.9	mg/L	532	Standard
	Ca	43	20825.0	0.6	**27.3581**	0.306	1.1	mg/L	142	Standard
	Fe	54	1521.3	3.3	**0.0891**	0.010	11.6	mg/L	890	Standard
	Fe	57	27382.7	0.6	**0.1987**	0.003	1.3	mg/L	3398	Standard
>	**Sc-1**	45	451909.2	0.7				mg/L	408994	Standard
	Cl	35	3843543.7	1.1				ug/L	45742	Standard
	Kr	83	56.2	6.7				ug/L	47	Standard
	Br	81	28379.9	2.2				ug/L	11318	Standard
	P	31	100995.9	1.3				ug/L	55334	Standard
	S	34	3142185.8	0.7				ug/L	546407	Standard
	Sr	88	3956473.9	0.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.952	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.265	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.598	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.731	
	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

94.027

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204092804
Sample Date/Time: Tuesday, May 01, 2012 11:44:32
Number of Replicates: 3
Autosampler Position: 226
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	157533.5	1.3	**7003.9939**	77.211	1.1	ug/L	21640	Standard
|	**Be**	9	29.7	94.5	**0.0066**	0.007	105.7	ug/L	16	Standard
|	**Al**	27	213291.0	1.5	**7.9218**	0.142	1.8	ug/L	19981	Standard
⌊>	**Sc**	45	449556.6	0.5				ug/L	408994	Standard
⌈	**Ti**	47	2120.8	1.3	**1.0597**	0.012	1.2	ug/L	102	Standard
|	**V**	51	14736.9	0.3	**0.4381**	0.013	2.9	ug/L	5722	Standard
|	**Cr**	52	30367.4	2.1	**0.7361**	0.024	3.2	ug/L	18417	Standard
|	**Cr**	53	2603.6	1.3	**1.1550**	0.022	1.9	ug/L	405	Standard
|	**Mn**	55	67867.7	1.5	**2.9367**	0.021	0.7	ug/L	4298	Standard
|	**Co**	59	943.7	10.1	**0.0550**	0.005	9.3	ug/L	123	Standard
|	**Ni**	60	3662.1	2.6	**1.1683**	0.025	2.1	ug/L	90	Standard
|	**Cu**	65	1612.4	1.4	**0.5371**	0.012	2.2	ug/L	148	Standard
|	**Zn**	66	4937.1	4.0	**3.0643**	0.126	4.1	ug/L	842	Standard
|>	**Ge**	72	292832.1	2.0				ug/L	293466	Standard
|	**As**	75	352.6	29.2	**0.4733**	0.098	20.6	ug/L	-207	Standard
|	**Se**	82	289.8	6.7	**2.4571**	0.232	9.5	ug/L	19	Standard
⌊	**Se-1**	77	322.0	4.3	**3.1234**	0.268	8.6	ug/L	80	Standard
	Ga	71	231477.9	2.0				mg/L	234805	Standard
⌈	**Rb**	85	3231.7	0.8				ug/L	13	Standard
|>	**Y**	89	267504.6	1.7				ug/L	262487	Standard
⌊	**Rh**	103	82.0	15.2				ug/L	4	Standard
⌈	**Mo**	98	1760.6	4.5	**0.4471**	0.016	3.6	ug/L	10	Standard
|	**Ag**	107	166.3	119.7	**0.0161**	0.027	164.2	ug/L	39	Standard
|	**Cd**	111	664.6	26.0	**0.0300**	0.038	127.3	mg/L	525	Standard
|	**Cd**	114	1918.3	24.7	**0.0296**	0.036	122.4	ug/L	1503	Standard
|>	**In**	115	961708.3	1.1				ug/L	917693	Standard
|	**Sn**	118	1012.7	1.2	**-0.1659**	0.000	0.3	ug/L	5013	Standard
|	**Sb**	123	2327.0	33.5	**0.2106**	0.071	33.6	ug/L	29	Standard
⌊	**Ba**	135	85198.2	1.4	**15.9120**	0.084	0.5	ug/L	68	Standard
⌈	**Ce**	140	2310.2	4.3				ug/L	58	Standard
⌊>	**Tb**	159	1065102.9	2.0				ug/L	1008624	Standard
⌈	**Ho**	165	138.7	11.2				ug/L	12	Standard
|	**Tl**	203	894.0	26.7	**0.0568**	0.015	26.0	ug/L	9	Standard
|	**Tl**	205	2087.5	21.1	**0.0535**	0.011	19.7	ug/L	29	Standard
|	**Pb**	206	604.7	23.9	**0.0139**	0.011	78.8	ug/L	458	Standard
|	**Pb**	207	510.3	23.3	**0.0142**	0.011	77.0	ug/L	380	Standard
|	**Pb**	208	2278.4	22.0	**0.0142**	0.010	68.4	ug/L	1773	Standard
|	**U**	238	45411.6	2.2	**0.9381**	0.022	2.4	ug/L	42	Standard
⌊>	**Bi**	209	534544.9	1.1				ug/L	569761	Standard
⌈	**Na**	23	154224.9	0.3	**45.9280**	0.228	0.5	mg/L	89	Standard
|	**Mg**	24	3434198.9	0.2	**11.3552**	0.058	0.5	mg/L	158	Standard

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Sheri L. Babyak

	K	39	3933.2	1.8	**0.2874**	0.005	1.7	mg/L	532	Standard
	Ca	43	18917.8	3.4	**24.9617**	0.722	2.9	mg/L	142	Standard
	Fe	54	1108.1	5.9	**0.0189**	0.011	57.4	mg/L	890	Standard
	Fe	57	17040.3	3.9	**0.1124**	0.005	4.6	mg/L	3398	Standard
>	**Sc-1**	45	449556.6	0.5				mg/L	408994	Standard
	Cl	35	3158299.0	0.8				ug/L	45742	Standard
	Kr	83	47.8	7.0				ug/L	47	Standard
	Br	81	26001.0	1.0				ug/L	11318	Standard
	P	31	88684.5	2.3				ug/L	55334	Standard
	S	34	3036527.0	1.7				ug/L	546407	Standard
	Sr	88	3651396.0	1.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.784	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.911	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.796	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.600	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.819
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 11:47:21
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	23878.1	2.7	**79.5251**	25.752	32.4	ug/L	21640	Standard
|	**Be**	9	201439.7	2.3	**54.2171**	1.066	2.0	ug/L	16	Standard
|	**Al**	27	1162184.9	1.7	**49.8325**	0.438	0.9	ug/L	19981	Standard
⌊>	**Sc**	45	419814.0	2.6				ug/L	408994	Standard
⌈	**Ti**	47	187019.3	3.3	**100.3988**	1.124	1.1	ug/L	102	Standard
|	**V**	51	1090657.0	2.5	**51.0244**	0.130	0.3	ug/L	5722	Standard
|	**Cr**	52	906617.2	1.3	**51.7141**	0.796	1.5	ug/L	18417	Standard
|	**Cr**	53	101257.4	2.4	**51.6424**	0.375	0.7	ug/L	405	Standard
|	**Mn**	55	1135503.3	2.0	**50.9501**	0.436	0.9	ug/L	4298	Standard
|	**Co**	59	764530.8	2.4	**50.2053**	0.234	0.5	ug/L	123	Standard
|	**Ni**	60	157429.9	2.2	**50.6521**	0.191	0.4	ug/L	90	Standard
|	**Cu**	65	137035.4	2.2	**49.9371**	0.242	0.5	ug/L	148	Standard
|	**Zn**	66	61654.6	2.7	**49.2773**	0.455	0.9	ug/L	842	Standard
| >	**Ge**	72	295695.7	2.5				ug/L	293466	Standard
|	**As**	75	56013.2	1.7	**49.7852**	0.417	0.8	ug/L	-207	Standard
|	**Se**	82	5517.4	2.7	**49.8088**	0.740	1.5	ug/L	19	Standard
⌊	**Se-1**	77	3823.5	2.2	**49.5924**	0.537	1.1	ug/L	80	Standard
	Ga	71	233135.2	2.3				mg/L	234805	Standard
⌈	**Rb**	85	871.4	7.8				ug/L	13	Standard
| >	**Y**	89	266104.2	2.7				ug/L	262487	Standard
⌊	**Rh**	103	47.3	10.6				ug/L	4	Standard
⌈	**Mo**	98	371247.1	2.3	**94.8066**	0.515	0.5	ug/L	10	Standard
|	**Ag**	107	376072.2	2.5	**50.0766**	0.337	0.7	ug/L	39	Standard
|	**Cd**	111	233596.3	2.0	**52.2031**	0.448	0.9	mg/L	525	Standard
|	**Cd**	114	655511.1	2.2	**50.6702**	0.692	1.4	ug/L	1503	Standard
| >	**In**	115	967189.9	2.8				ug/L	917693	Standard
|	**Sn**	118	843059.4	1.0	**49.5143**	1.011	2.0	ug/L	5013	Standard
|	**Sb**	123	559991.3	1.3	**50.9662**	0.949	1.9	ug/L	29	Standard
⌊	**Ba**	135	260676.0	2.6	**48.4350**	0.181	0.4	ug/L	68	Standard
⌈	**Ce**	140	922.0	0.9				ug/L	58	Standard
⌊>	**Tb**	159	1057301.0	1.8				ug/L	1008624	Standard
⌈	**Ho**	165	34.0	5.9				ug/L	12	Standard
|	**Tl**	203	869228.0	2.1	**50.8572**	0.132	0.3	ug/L	9	Standard
|	**Tl**	205	2305843.5	2.2	**52.3999**	0.255	0.5	ug/L	29	Standard
|	**Pb**	206	708381.8	2.6	**51.0302**	0.553	1.1	ug/L	458	Standard
|	**Pb**	207	585878.2	2.9	**51.0832**	0.803	1.6	ug/L	380	Standard
|	**Pb**	208	2717977.1	2.5	**50.3492**	0.527	1.0	ug/L	1773	Standard
|	**U**	238	2693623.6	1.5	**52.4062**	0.390	0.7	ug/L	42	Standard
⌊>	**Bi**	209	565007.8	2.1				ug/L	569761	Standard
⌈	**Na**	23	15379.8	1.8	**4.8810**	0.094	1.9	mg/L	89	Standard
|	**Mg**	24	1434169.9	1.6	**5.0785**	0.048	1.0	mg/L	158	Standard

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	K	39	54686.5	1.3	**5.0132**	0.080	1.6	mg/L	532	Standard
	Ca	43	3648.4	0.8	**4.9976**	0.090	1.8	mg/L	142	Standard
	Fe	54	27739.5	3.6	**4.9704**	0.075	1.5	mg/L	890	Standard
	Fe	57	637584.3	2.1	**5.7470**	0.050	0.9	mg/L	3398	Standard
>	**Sc-1**	45	419814.0	2.6				mg/L	408994	Standard
	Cl	35	254078.2	10.3				ug/L	45742	Standard
	Kr	83	50.9	14.4				ug/L	47	Standard
	Br	81	11546.1	3.0				ug/L	11318	Standard
	P	31	67299.6	3.2				ug/L	55334	Standard
	S	34	772081.8	2.8				ug/L	546407	Standard
	Sr	88	648.0	30.5				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	99.665		
>	Sc	45			
	Ti	47	100.399		
	V	51	102.049		
	Cr	52	103.428		
	Cr	53			
	Mn	55	101.900		
	Co	59	100.411		
	Ni	60	101.304		
	Cu	65	99.874		
	Zn	66	98.555		
>	Ge	72		100.760	
	As	75	99.570		
	Se	82	99.618		
	Se-1	77	99.185		
	Ga	71			
	Rb	85			
>	Y	89		101.378	
	Rh	103			
	Mo	98	94.807		
	Ag	107	100.153		
	Cd	111	104.406		
	Cd	114			
>	In	115		105.394	
	Sn	118	99.029		
	Sb	123	101.932		
	Ba	135	96.870		
	Ce	140			
>	Tb	159		104.826	
	Ho	165			
	Tl	203	101.714		
	Tl	205			
	Pb	206	102.060		

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	Pb	207	102.166	
	Pb	208	100.698	
	U	238	104.812	
>	Bi	209		99.166
	Na	23	97.620	
	Mg	24	101.570	
	K	39	100.264	
	Ca	43	99.951	
	Fe	54	99.408	
	Fe	57	114.939	
>	Sc-1	45		
	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	

Sample ID: QC Std 6
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 11:50:08
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	24518.5	2.2	**63.0727**	31.665	50.2	ug/L	21640	Standard
|	**Be**	9	44.7	74.3	**0.0108**	0.009	79.8	ug/L	16	Standard
|	**Al**	27	14847.9	1.0	**-0.1238**	0.008	6.2	ug/L	19981	Standard
⌊>	**Sc**	45	436392.6	0.2				ug/L	408994	Standard
⌈	**Ti**	47	114.7	13.2	**-0.0309**	0.008	26.1	ug/L	102	Standard
|	**V**	51	6008.1	3.8	**0.0146**	0.011	75.9	ug/L	5722	Standard
|	**Cr**	52	18810.0	1.9	**0.0227**	0.023	101.4	ug/L	18417	Standard
|	**Cr**	53	780.0	3.1	**0.1998**	0.013	6.4	ug/L	405	Standard
|	**Mn**	55	1500.4	5.1	**-0.0810**	0.004	4.4	ug/L	4298	Standard
|	**Co**	59	167.7	27.9	**0.0033**	0.003	92.4	ug/L	123	Standard
|	**Ni**	60	58.3	26.9	**-0.0036**	0.005	138.6	ug/L	90	Standard
|	**Cu**	65	150.7	13.0	**-0.0032**	0.007	223.8	ug/L	148	Standard
|	**Zn**	66	177.7	6.2	**-0.8593**	0.009	1.0	ug/L	842	Standard
| >	**Ge**	72	302211.9	0.3				ug/L	293466	Standard
|	**As**	75	-209.4	8.6	**-0.0249**	0.016	64.7	ug/L	-207	Standard
|	**Se**	82	18.9	46.5	**-0.0303**	0.078	256.9	ug/L	19	Standard
⌊	**Se-1**	77	94.0	11.1	**0.0226**	0.135	596.2	ug/L	80	Standard
	Ga	71	246305.1	2.1				mg/L	234805	Standard
⌈	**Rb**	85	15.3	27.2				ug/L	13	Standard
| >	**Y**	89	270742.9	0.2				ug/L	262487	Standard
⌊	**Rh**	103	2.0	0.0				ug/L	4	Standard
⌈	**Mo**	98	74.5	76.1	**0.0135**	0.014	104.6	ug/L	10	Standard
|	**Ag**	107	71.0	36.5	**0.0031**	0.003	108.8	ug/L	39	Standard
|	**Cd**	111	628.6	3.9	**0.0169**	0.006	33.3	mg/L	525	Standard
|	**Cd**	114	1666.8	4.6	**0.0054**	0.006	112.6	ug/L	1503	Standard
| >	**In**	115	997775.2	0.3				ug/L	917693	Standard
|	**Sn**	118	1266.1	8.0	**-0.1536**	0.006	3.9	ug/L	5013	Standard
|	**Sb**	123	304.9	30.0	**0.0246**	0.008	33.1	ug/L	29	Standard
⌊	**Ba**	135	72.7	32.3	**0.0018**	0.004	237.2	ug/L	68	Standard
⌈	**Ce**	140	52.7	19.5				ug/L	58	Standard
⌊>	**Tb**	159	1072800.9	1.4				ug/L	1008624	Standard
⌈	**Ho**	165	9.3	24.7				ug/L	12	Standard
|	**Tl**	203	234.7	30.8	**0.0145**	0.004	27.3	ug/L	9	Standard
|	**Tl**	205	574.7	26.2	**0.0158**	0.003	20.2	ug/L	29	Standard
|	**Pb**	206	414.3	10.2	**-0.0037**	0.003	74.6	ug/L	458	Standard
|	**Pb**	207	372.7	15.3	**-0.0019**	0.005	243.0	ug/L	380	Standard
|	**Pb**	208	1678.0	12.0	**-0.0007**	0.003	463.2	ug/L	1773	Standard
|	**U**	238	140.7	98.7	**0.0069**	0.003	37.2	ug/L	42	Standard
⌊>	**Bi**	209	592838.5	0.6				ug/L	569761	Standard
⌈	**Na**	23	90.0	33.6	**0.0000**	0.009	27991.5	mg/L	89	Standard
|	**Mg**	24	289.3	44.5	**0.0005**	0.000	90.1	mg/L	158	Standard

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	K	39	562.0	3.3	**-0.0027**	0.002	60.4	mg/L	532	Standard
	Ca	43	110.0	6.6	**-0.0504**	0.010	19.6	mg/L	142	Standard
	Fe	54	915.7	8.7	**-0.0096**	0.015	150.8	mg/L	890	Standard
	Fe	57	3504.4	3.3	**-0.0013**	0.001	74.6	mg/L	3398	Standard
>	**Sc-1**	45	436392.6	0.2				mg/L	408994	Standard
	Cl	35	228325.2	0.7				ug/L	45742	Standard
	Kr	83	52.9	18.7				ug/L	47	Standard
	Br	81	11870.3	0.4				ug/L	11318	Standard
	P	31	73154.6	3.2				ug/L	55334	Standard
	S	34	784247.7	0.7				ug/L	546407	Standard
	Sr	88	227.3	17.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.980	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.145	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.726	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.363	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

104.050

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: L1204092805
Sample Date/Time: Tuesday, May 01, 2012 11:52:57
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	674877.5	0.4	**25583.9375**	587.319	2.3	ug/L	21640	Standard
|	**Be**	9	2083.5	2.6	**0.3962**	0.016	3.9	ug/L	16	Standard
|	**Al**	27	253705764.7	1.8	**7814.5804**	234.424	3.0	ug/L	19981	Standard
⌊>	**Sc**	45	593245.6	2.5				ug/L	408994	Standard
⌈	**Ti**	47	820154.0	0.7	**520.2767**	5.432	1.0	ug/L	102	Standard
|	**V**	51	1961416.5	0.7	**108.6330**	1.131	1.0	ug/L	5722	Standard
|	**Cr**	52	4089054.3	0.5	**279.8468**	1.512	0.5	ug/L	18417	Standard
|	**Cr**	53	440839.3	0.2	**266.2366**	2.285	0.9	ug/L	405	Standard
|	**Mn**	55	3666998.4	2.2	**194.6380**	2.811	1.4	ug/L	4298	Standard
|	**Co**	59	126163.2	1.4	**9.7748**	0.082	0.8	ug/L	123	Standard
|	**Ni**	60	103388.6	1.9	**39.2639**	0.472	1.2	ug/L	90	Standard
|	**Cu**	65	307441.9	1.3	**132.3576**	1.377	1.0	ug/L	148	Standard
|	**Zn**	66	3271677.2	1.4	**3148.7697**	13.581	0.4	ug/L	842	Standard
| >	**Ge**	72	250462.3	1.0				ug/L	293466	Standard
|	**As**	75	20365.4	1.7	**21.4558**	0.186	0.9	ug/L	-207	Standard
|	**Se**	82	358.5	5.3	**3.6388**	0.240	6.6	ug/L	19	Standard
⌊	**Se-1**	77	427.0	5.6	**5.4985**	0.402	7.3	ug/L	80	Standard
	Ga	71	222255.1	1.2				mg/L	234805	Standard
⌈	**Rb**	85	232700.9	1.4				ug/L	13	Standard
| >	**Y**	89	411360.6	1.8				ug/L	262487	Standard
⌊	**Rh**	103	264.7	6.2				ug/L	4	Standard
⌈	**Mo**	98	144805.5	0.6	**43.8044**	0.294	0.7	ug/L	10	Standard
|	**Ag**	107	2311.5	2.8	**0.3586**	0.007	2.0	ug/L	39	Standard
|	**Cd**	111	232377.2	1.1	**61.5354**	0.581	0.9	mg/L	525	Standard
|	**Cd**	114	632579.7	1.5	**57.9354**	0.395	0.7	ug/L	1503	Standard
| >	**In**	115	816391.9	0.9				ug/L	917693	Standard
|	**Sn**	118	907448.1	1.4	**63.1795**	0.742	1.2	ug/L	5013	Standard
|	**Sb**	123	64817.9	1.1	**6.9847**	0.051	0.7	ug/L	29	Standard
⌊	**Ba**	135	590266.9	0.5	**129.9500**	0.659	0.5	ug/L	68	Standard
⌈	**Ce**	140	1641888.1	0.7				ug/L	58	Standard
⌊>	**Tb**	159	982065.5	0.7				ug/L	1008624	Standard
⌈	**Ho**	165	30442.6	0.8				ug/L	12	Standard
|	**Tl**	203	5229.2	1.3	**0.4093**	0.009	2.1	ug/L	9	Standard
|	**Tl**	205	12763.4	1.1	**0.3900**	0.006	1.5	ug/L	29	Standard
|	**Pb**	206	3664224.3	0.8	**352.0346**	1.444	0.4	ug/L	458	Standard
|	**Pb**	207	3079671.4	1.0	**358.1190**	1.322	0.4	ug/L	380	Standard
|	**Pb**	208	13997228.2	0.8	**345.7942**	1.574	0.5	ug/L	1773	Standard
|	**U**	238	598370.1	0.7	**15.5192**	0.143	0.9	ug/L	42	Standard
⌊>	**Bi**	209	423910.1	1.2				ug/L	569761	Standard
⌈	**Na**	23	1604316.1	0.3	**362.3656**	8.123	2.2	mg/L	89	Standard
|	**Mg**	24	2370573.5	0.4	**5.9423**	0.169	2.8	mg/L	158	Standard

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	K	39	56657.1	0.4	**3.6618**	0.082	2.2	mg/L	532	Standard
	Ca	43	8162.2	0.0	**8.0302**	0.205	2.5	mg/L	142	Standard
	Fe	54	56611.5	2.1	**7.2571**	0.103	1.4	mg/L	890	Standard
	Fe	57	1883184.2	4.7	**12.0414**	0.287	2.4	mg/L	3398	Standard
>	**Sc-1**	45	593245.6	2.5				mg/L	408994	Standard
	Cl	35	14085500.0	0.4				ug/L	45742	Standard
	Kr	83	116.7	12.0				ug/L	47	Standard
	Br	81	109592.3	1.0				ug/L	11318	Standard
	P	31	1836234.5	0.1				ug/L	55334	Standard
	S	34	12850543.0	0.7				ug/L	546407	Standard
	Sr	88	6535079.6	1.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		85.346	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		156.716	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		88.961	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.367	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	74.401
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	
V 51 Upper, S, EEE	V	51	
Cr 52 Upper, S, EEE	Cr	52	
Cr 53 Upper, S, EEE	Cr	53	
Mn 55 Upper, S, EEE	Mn	55	
Cu 65 Upper, S, EEE	Cu	65	
Zn 66 Upper, S, EEE	Zn	66	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	
Pb 206 Upper, S, EEE	Pb	206	
Pb 207 Upper, S, EEE	Pb	207	
Pb 208 Upper, S, EEE	Pb	208	
Na 23 Upper, S, EEE	Na	23	

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204092806
Sample Date/Time: Tuesday, May 01, 2012 11:55:45
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	614460.4	1.0	**23088.8560**	325.260	1.4	ug/L	21640	Standard
|	**Be**	9	1917.1	2.7	**0.3632**	0.016	4.5	ug/L	16	Standard
|	**Al**	27	225063355.2	1.9	**6906.0285**	141.121	2.0	ug/L	19981	Standard
⌊>	**Sc**	45	595388.8	2.4				ug/L	408994	Standard
⌈	**Ti**	47	776296.5	1.1	**479.2184**	11.532	2.4	ug/L	102	Standard
|	**V**	51	1965241.0	0.8	**105.9319**	3.392	3.2	ug/L	5722	Standard
|	**Cr**	52	4096929.8	0.7	**272.8575**	7.691	2.8	ug/L	18417	Standard
|	**Cr**	53	439475.5	0.9	**258.2843**	6.519	2.5	ug/L	405	Standard
|	**Mn**	55	3341258.3	0.5	**172.6177**	5.593	3.2	ug/L	4298	Standard
|	**Co**	59	112884.4	1.6	**8.5112**	0.256	3.0	ug/L	123	Standard
|	**Ni**	60	98625.7	1.4	**36.4574**	1.260	3.5	ug/L	90	Standard
|	**Cu**	65	261685.2	0.5	**109.6365**	2.997	2.7	ug/L	148	Standard
|	**Zn**	66	2870356.1	0.4	**2688.8671**	85.677	3.2	ug/L	842	Standard
| >	**Ge**	72	257481.7	3.0				ug/L	293466	Standard
|	**As**	75	20053.4	0.9	**20.5752**	0.826	4.0	ug/L	-207	Standard
|	**Se**	82	427.2	1.9	**4.2497**	0.104	2.4	ug/L	19	Standard
⌊	**Se-1**	77	455.0	3.8	**5.7517**	0.485	8.4	ug/L	80	Standard
	Ga	71	226387.7	2.9				mg/L	234805	Standard
⌈	**Rb**	85	222566.5	1.9				ug/L	13	Standard
| >	**Y**	89	414440.0	1.7				ug/L	262487	Standard
⌊	**Rh**	103	325.3	17.0				ug/L	4	Standard
⌈	**Mo**	98	152539.2	1.4	**43.7617**	0.730	1.7	ug/L	10	Standard
|	**Ag**	107	2193.5	3.1	**0.3221**	0.008	2.5	ug/L	39	Standard
|	**Cd**	111	200228.6	0.5	**50.2629**	0.410	0.8	mg/L	525	Standard
|	**Cd**	114	546166.8	0.6	**47.4196**	0.430	0.9	ug/L	1503	Standard
| >	**In**	115	860859.5	1.0				ug/L	917693	Standard
|	**Sn**	118	901176.9	1.5	**59.4923**	1.060	1.8	ug/L	5013	Standard
|	**Sb**	123	71897.0	1.0	**7.3475**	0.041	0.6	ug/L	29	Standard
⌊	**Ba**	135	550106.7	0.3	**114.8574**	1.394	1.2	ug/L	68	Standard
⌈	**Ce**	140	1452500.5	0.3				ug/L	58	Standard
⌊>	**Tb**	159	1031494.0	0.7				ug/L	1008624	Standard
⌈	**Ho**	165	27866.3	1.0				ug/L	12	Standard
|	**Tl**	203	4593.0	0.9	**0.3492**	0.002	0.7	ug/L	9	Standard
|	**Tl**	205	11027.3	0.6	**0.3276**	0.002	0.5	ug/L	29	Standard
|	**Pb**	206	3127162.5	1.1	**291.6349**	2.091	0.7	ug/L	458	Standard
|	**Pb**	207	2608406.5	0.6	**294.4385**	0.139	0.0	ug/L	380	Standard
|	**Pb**	208	11880568.1	0.7	**284.9094**	1.648	0.6	ug/L	1773	Standard
|	**U**	238	613368.1	0.4	**15.4424**	0.082	0.5	ug/L	42	Standard
⌊>	**Bi**	209	436678.8	0.6				ug/L	569761	Standard
⌈	**Na**	23	1644682.6	1.5	**370.0959**	7.064	1.9	mg/L	89	Standard
|	**Mg**	24	2214736.0	1.2	**5.5306**	0.119	2.1	mg/L	158	Standard

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Sheri L. Babyak

	K	39	54806.9	0.3	**3.5277**	0.091	2.6	mg/L	532	Standard
	Ca	43	7582.6	1.7	**7.4158**	0.063	0.9	mg/L	142	Standard
	Fe	54	49114.4	0.3	**6.2519**	0.174	2.8	mg/L	890	Standard
	Fe	57	1693893.5	0.9	**10.7951**	0.165	1.5	mg/L	3398	Standard
>	**Sc-1**	45	595388.8	2.4				mg/L	408994	Standard
	Cl	35	14894993.5	0.7				ug/L	45742	Standard
	Kr	83	137.3	8.9				ug/L	47	Standard
	Br	81	122535.2	0.6				ug/L	11318	Standard
	P	31	1895515.3	1.0				ug/L	55334	Standard
	S	34	13774498.8	1.5				ug/L	546407	Standard
	Sr	88	6426109.0	0.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.738	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		157.890	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		93.807	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.267	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	76.642
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	
V 51 Upper, S, EEE	V	51	
Cr 52 Upper, S, EEE	Cr	52	
Cr 53 Upper, S, EEE	Cr	53	
Mn 55 Upper, S, EEE	Mn	55	
Cu 65 Upper, S, EEE	Cu	65	
Zn 66 Upper, S, EEE	Zn	66	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	
Pb 206 Upper, S, EEE	Pb	206	
Pb 207 Upper, S, EEE	Pb	207	
Pb 208 Upper, S, EEE	Pb	208	
Na 23 Upper, S, EEE	Na	23	

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204092808S WG396616-05

Sample Date/Time: Tuesday, May 01, 2012 11:58:32
Number of Replicates: 3
Autosampler Position: 229
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	171066.0	0.6	**7434.4971**	127.317	1.7	ug/L	21640	Standard
	Be	9	94630.3	0.7	**23.0389**	0.351	1.5	ug/L	16	Standard
	Al	27	1966924.6	0.2	**76.6871**	0.922	1.2	ug/L	19981	Standard
>	Sc	45	464064.7	1.1				ug/L	408994	Standard
	Ti	47	5809.1	2.9	**3.2208**	0.083	2.6	ug/L	102	Standard
	V	51	558636.5	0.2	**27.6113**	0.286	1.0	ug/L	5722	Standard
	Cr	52	456585.5	2.2	**27.1361**	0.339	1.2	ug/L	18417	Standard
	Cr	53	51097.4	0.7	**27.5615**	0.222	0.8	ug/L	405	Standard
	Mn	55	40189087.2	1.7	**1918.3734**	13.212	0.7	ug/L	4298	Standard
	Co	59	372223.4	1.2	**25.9300**	0.168	0.6	ug/L	123	Standard
	Ni	60	82210.4	0.6	**28.0547**	0.295	1.1	ug/L	90	Standard
	Cu	65	64498.0	1.7	**24.9066**	0.208	0.8	ug/L	148	Standard
	Zn	66	34530.0	1.9	**28.8736**	0.284	1.0	ug/L	842	Standard
>	Ge	72	278696.3	1.0				ug/L	293466	Standard
	As	75	30286.3	1.2	**28.6237**	0.167	0.6	ug/L	-207	Standard
	Se	82	3000.4	0.1	**28.6561**	0.332	1.2	ug/L	19	Standard
	Se-1	77	2077.1	2.8	**28.0713**	0.537	1.9	ug/L	80	Standard
	Ga	71	221908.9	1.8				mg/L	234805	Standard
	Rb	85	19758.9	1.8				ug/L	13	Standard
>	Y	89	261572.3	1.7				ug/L	262487	Standard
	Rh	103	231.3	13.8				ug/L	4	Standard
	Mo	98	994.2	4.0	**0.2618**	0.006	2.3	ug/L	10	Standard
	Ag	107	175274.8	1.4	**24.5333**	0.255	1.0	ug/L	39	Standard
	Cd	111	114442.7	2.2	**26.8249**	0.339	1.3	mg/L	525	Standard
	Cd	114	316374.9	1.8	**25.6495**	0.470	1.8	ug/L	1503	Standard
>	In	115	919995.7	1.8				ug/L	917693	Standard
	Sn	118	2463.5	3.9	**-0.0732**	0.008	10.6	ug/L	5013	Standard
	Sb	123	277443.2	1.6	**26.5388**	0.387	1.5	ug/L	29	Standard
	Ba	135	594907.2	0.6	**116.2476**	2.493	2.1	ug/L	68	Standard
	Ce	140	30237.5	1.1				ug/L	58	Standard
>	Tb	159	1073820.9	1.2				ug/L	1008624	Standard
	Ho	165	582.7	6.9				ug/L	12	Standard
	Tl	203	407222.6	0.6	**26.9074**	0.219	0.8	ug/L	9	Standard
	Tl	205	973793.0	0.4	**24.9925**	0.184	0.7	ug/L	29	Standard
	Pb	206	325094.1	0.8	**26.4319**	0.124	0.5	ug/L	458	Standard
	Pb	207	278429.1	0.9	**27.4008**	0.127	0.5	ug/L	380	Standard
	Pb	208	1266726.6	0.9	**26.4848**	0.084	0.3	ug/L	1773	Standard
	U	238	1280279.0	1.5	**28.1268**	0.184	0.7	ug/L	42	Standard
>	Bi	209	500335.6	0.9				ug/L	569761	Standard
	Na	23	98555.5	1.1	**28.4213**	0.076	0.3	mg/L	89	Standard
	Mg	24	4612407.1	0.1	**14.7752**	0.157	1.1	mg/L	158	Standard

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	K	39	49359.6	1.3	**4.0833**	0.094	2.3	mg/L	532	Standard
	Ca	43	67803.4	1.3	**87.1859**	1.897	2.2	mg/L	142	Standard
	Fe	54	61040.0	1.3	**10.0687**	0.234	2.3	mg/L	890	Standard
	Fe	57	1601981.3	2.2	**13.1034**	0.339	2.6	mg/L	3398	Standard
>	**Sc-1**	45	464064.7	1.1				mg/L	408994	Standard
	Cl	35	8310484.4	0.4				ug/L	45742	Standard
	Kr	83	68.0	17.7				ug/L	47	Standard
	Br	81	138094.1	0.6				ug/L	11318	Standard
	P	31	934081.3	0.7				ug/L	55334	Standard
	S	34	913517.1	2.0				ug/L	546407	Standard
	Sr	88	10618585.1	1.0				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.967	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.651	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.251	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.464	
	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

87.815

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1204092808S WG396616-05
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Method 6020 - Summary Report

Sample ID: L1204092809S WG396616-07
Sample Date/Time: Tuesday, May 01, 2012 12:01:19
Number of Replicates: 3
Autosampler Position: 230
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	259616.1	1.7	**11547.7992**	98.484	0.9	ug/L	21640	Standard
	Be	9	96528.9	0.9	**22.8108**	0.128	0.6	ug/L	16	Standard
	Al	27	908279.7	2.1	**33.9682**	1.093	3.2	ug/L	19981	Standard
>	**Sc**	45	478074.4	1.1				ug/L	408994	Standard
	Ti	47	5427.6	2.4	**2.9291**	0.032	1.1	ug/L	102	Standard
	V	51	565067.1	2.1	**27.2575**	0.581	2.1	ug/L	5722	Standard
	Cr	52	467820.8	1.5	**27.1440**	0.523	1.9	ug/L	18417	Standard
	Cr	53	52006.5	2.8	**27.3867**	1.060	3.9	ug/L	405	Standard
	Mn	55	51094396.5	2.4	**2381.1221**	70.708	3.0	ug/L	4298	Standard
	Co	59	381017.5	1.7	**25.9115**	0.607	2.3	ug/L	123	Standard
	Ni	60	82949.2	2.3	**27.6311**	0.735	2.7	ug/L	90	Standard
	Cu	65	65184.6	1.6	**24.5727**	0.505	2.1	ug/L	148	Standard
	Zn	66	33763.6	0.8	**27.5171**	0.454	1.7	ug/L	842	Standard
>	**Ge**	72	285526.9	1.4				ug/L	293466	Standard
	As	75	30214.9	0.4	**27.8811**	0.435	1.6	ug/L	-207	Standard
	Se	82	2981.1	1.7	**27.7875**	0.723	2.6	ug/L	19	Standard
	Se-1	77	2168.8	1.6	**28.6349**	0.112	0.4	ug/L	80	Standard
	Ga	71	225611.0	1.8				mg/L	234805	Standard
	Rb	85	27752.7	2.2				ug/L	13	Standard
>	**Y**	89	259826.3	0.7				ug/L	262487	Standard
	Rh	103	241.3	6.2				ug/L	4	Standard
	Mo	98	697.5	1.0	**0.1819**	0.002	1.2	ug/L	10	Standard
	Ag	107	174767.6	2.5	**24.4147**	0.397	1.6	ug/L	39	Standard
	Cd	111	115245.7	1.0	**26.9654**	0.074	0.3	mg/L	525	Standard
	Cd	114	318652.5	1.3	**25.7854**	0.130	0.5	ug/L	1503	Standard
>	**In**	115	921641.6	1.0				ug/L	917693	Standard
	Sn	118	1844.1	4.6	**-0.1119**	0.005	4.3	ug/L	5013	Standard
	Sb	123	279013.3	0.8	**26.6393**	0.058	0.2	ug/L	29	Standard
	Ba	135	638402.1	1.2	**124.4978**	1.529	1.2	ug/L	68	Standard
	Ce	140	17282.5	1.5				ug/L	58	Standard
>	**Tb**	159	1086537.8	1.0				ug/L	1008624	Standard
	Ho	165	377.3	5.0				ug/L	12	Standard
	Tl	203	410041.3	0.8	**26.9048**	0.185	0.7	ug/L	9	Standard
	Tl	205	983963.0	1.0	**25.0777**	0.239	1.0	ug/L	29	Standard
	Pb	206	323228.7	1.3	**26.0967**	0.230	0.9	ug/L	458	Standard
	Pb	207	278155.2	1.1	**27.1845**	0.369	1.4	ug/L	380	Standard
	Pb	208	1264565.1	0.9	**26.2561**	0.205	0.8	ug/L	1773	Standard
	U	238	1296981.7	0.7	**28.2976**	0.228	0.8	ug/L	42	Standard
>	**Bi**	209	503862.8	1.5				ug/L	569761	Standard
	Na	23	114106.2	2.1	**31.9454**	0.609	1.9	mg/L	89	Standard
	Mg	24	4639761.4	1.3	**14.4264**	0.144	1.0	mg/L	158	Standard

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	K	39	55335.5	1.8	**4.4478**	0.089	2.0	mg/L	532	Standard
	Ca	43	72424.7	1.0	**90.3973**	0.787	0.9	mg/L	142	Standard
	Fe	54	68210.2	1.5	**10.9358**	0.226	2.1	mg/L	890	Standard
	Fe	57	1870665.1	1.3	**14.8555**	0.104	0.7	mg/L	3398	Standard
>	**Sc-1**	45	478074.4	1.1				mg/L	408994	Standard
	Cl	35	9695425.0	2.0				ug/L	45742	Standard
	Kr	83	66.9	6.6				ug/L	47	Standard
	Br	81	129199.6	1.8				ug/L	11318	Standard
	P	31	1169799.9	0.5				ug/L	55334	Standard
	S	34	959307.1	1.3				ug/L	546407	Standard
	Sr	88	11682625.5	0.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.295	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.986	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.430	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.725	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

88.434

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1204092809S WG396616-07
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Method 6020 - Summary Report

Sample ID: L1204092810SD WG396616-06
Sample Date/Time: Tuesday, May 01, 2012 12:04:07
Number of Replicates: 3
Autosampler Position: 231
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	211039.4	1.3	**9046.2944**	320.861	3.5	ug/L	21640	Standard
|	**Be**	9	98390.1	1.4	**23.0173**	0.799	3.5	ug/L	16	Standard
|	**Al**	27	1002347.9	1.5	**37.1699**	1.264	3.4	ug/L	19981	Standard
⌊>	**Sc**	45	483146.2	2.1				ug/L	408994	Standard
⌈	**Ti**	47	5807.8	8.7	**3.1277**	0.299	9.6	ug/L	102	Standard
|	**V**	51	585158.5	1.1	**28.1103**	0.543	1.9	ug/L	5722	Standard
|	**Cr**	52	485931.2	1.0	**28.1043**	0.490	1.7	ug/L	18417	Standard
|	**Cr**	53	52761.7	1.5	**27.6545**	0.350	1.3	ug/L	405	Standard
|	**Mn**	55	49981078.6	0.6	**2318.5189**	7.499	0.3	ug/L	4298	Standard
|	**Co**	59	387223.4	0.4	**26.2141**	0.288	1.1	ug/L	123	Standard
|	**Ni**	60	85462.4	2.1	**28.3412**	0.729	2.6	ug/L	90	Standard
|	**Cu**	65	66292.0	0.6	**24.8781**	0.286	1.1	ug/L	148	Standard
|	**Zn**	66	34717.7	0.9	**28.1890**	0.167	0.6	ug/L	842	Standard
| >	**Ge**	72	286802.1	0.8				ug/L	293466	Standard
|	**As**	75	31194.5	0.7	**28.6495**	0.259	0.9	ug/L	-207	Standard
|	**Se**	82	3078.8	1.5	**28.5745**	0.651	2.3	ug/L	19	Standard
⌊	**Se-1**	77	2218.8	2.4	**29.1887**	0.762	2.6	ug/L	80	Standard
	Ga	71	226582.4	0.9				mg/L	234805	Standard
⌈	**Rb**	85	22302.4	3.3				ug/L	13	Standard
| >	**Y**	89	260629.7	2.9				ug/L	262487	Standard
⌊	**Rh**	103	258.0	16.2				ug/L	4	Standard
⌈	**Mo**	98	799.8	3.4	**0.2087**	0.008	4.0	ug/L	10	Standard
|	**Ag**	107	176761.8	0.5	**24.6164**	0.165	0.7	ug/L	39	Standard
|	**Cd**	111	116410.4	1.0	**27.1518**	0.323	1.2	mg/L	525	Standard
|	**Cd**	114	321177.7	0.6	**25.9076**	0.192	0.7	ug/L	1503	Standard
| >	**In**	115	924611.8	0.5				ug/L	917693	Standard
|	**Sn**	118	1578.1	2.7	**-0.1287**	0.002	1.7	ug/L	5013	Standard
|	**Sb**	123	281523.1	0.1	**26.7925**	0.112	0.4	ug/L	29	Standard
⌊	**Ba**	135	644111.3	0.8	**125.2055**	1.256	1.0	ug/L	68	Standard
⌈	**Ce**	140	19497.2	0.6				ug/L	58	Standard
⌊>	**Tb**	159	1086121.3	0.8				ug/L	1008624	Standard
⌈	**Ho**	165	400.0	2.2				ug/L	12	Standard
|	**Tl**	203	419195.6	0.5	**27.5728**	0.431	1.6	ug/L	9	Standard
|	**Tl**	205	1008049.3	0.6	**25.7529**	0.271	1.1	ug/L	29	Standard
|	**Pb**	206	331611.8	0.9	**26.8413**	0.512	1.9	ug/L	458	Standard
|	**Pb**	207	281508.9	1.0	**27.5801**	0.559	2.0	ug/L	380	Standard
|	**Pb**	208	1292382.1	0.2	**26.8995**	0.339	1.3	ug/L	1773	Standard
|	**U**	238	1319549.7	0.3	**28.8585**	0.229	0.8	ug/L	42	Standard
⌊>	**Bi**	209	502653.3	1.1				ug/L	569761	Standard
⌈	**Na**	23	115452.2	0.9	**31.9902**	0.614	1.9	mg/L	89	Standard
|	**Mg**	24	4854021.9	1.5	**14.9354**	0.134	0.9	mg/L	158	Standard

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	K	39	53216.0	1.4	**4.2304**	0.063	1.5	mg/L	532	Standard
	Ca	43	73511.2	0.4	**90.8136**	1.825	2.0	mg/L	142	Standard
	Fe	54	72061.9	1.9	**11.4404**	0.211	1.8	mg/L	890	Standard
	Fe	57	1917586.7	1.5	**15.0704**	0.155	1.0	mg/L	3398	Standard
>	**Sc-1**	45	483146.2	2.1				mg/L	408994	Standard
	Cl	35	9680751.5	1.6				ug/L	45742	Standard
	Kr	83	60.7	10.8				ug/L	47	Standard
	Br	81	119086.2	1.5				ug/L	11318	Standard
	P	31	1061265.3	0.7				ug/L	55334	Standard
	S	34	911033.2	0.3				ug/L	546407	Standard
	Sr	88	11688104.3	1.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.729	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.292	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.754	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.684	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.222
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1204092810SD WG396616-06
Report Date/Time: Tuesday, May 01, 2012 12:06:35
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Method 6020 - Summary Report

Sample ID: L1204092811SD WG396616-08
Sample Date/Time: Tuesday, May 01, 2012 12:06:55
Number of Replicates: 3
Autosampler Position: 232
Sample Description: 1
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	251597.7	1.3	**11270.3505**	243.881	2.2	ug/L	21640	Standard
	Be	9	94720.8	1.0	**22.5956**	0.414	1.8	ug/L	16	Standard
	Al	27	638047.2	0.8	**23.8659**	0.398	1.7	ug/L	19981	Standard
>	Sc	45	473627.1	0.9				ug/L	408994	Standard
	Ti	47	5206.2	2.8	**2.8590**	0.092	3.2	ug/L	102	Standard
	V	51	550538.5	0.9	**27.0362**	0.316	1.2	ug/L	5722	Standard
	Cr	52	462217.2	1.6	**27.3106**	0.540	2.0	ug/L	18417	Standard
	Cr	53	50423.1	0.5	**27.0251**	0.161	0.6	ug/L	405	Standard
	Mn	55	50096723.8	0.4	**2376.7052**	17.669	0.7	ug/L	4298	Standard
	Co	59	368422.5	0.5	**25.5064**	0.045	0.2	ug/L	123	Standard
	Ni	60	80954.7	0.8	**27.4530**	0.133	0.5	ug/L	90	Standard
	Cu	65	63489.7	0.4	**24.3655**	0.061	0.3	ug/L	148	Standard
	Zn	66	33559.5	3.1	**27.8554**	0.856	3.1	ug/L	842	Standard
>	Ge	72	280429.4	0.3				ug/L	293466	Standard
	As	75	29490.6	1.3	**27.7053**	0.440	1.6	ug/L	-207	Standard
	Se	82	2970.7	0.6	**28.1921**	0.248	0.9	ug/L	19	Standard
	Se-1	77	2144.5	1.9	**28.8376**	0.601	2.1	ug/L	80	Standard
	Ga	71	218191.9	0.9				mg/L	234805	Standard
	Rb	85	26459.8	0.9				ug/L	13	Standard
>	Y	89	256083.3	0.6				ug/L	262487	Standard
	Rh	103	251.3	3.3				ug/L	4	Standard
	Mo	98	672.8	2.3	**0.1771**	0.004	2.1	ug/L	10	Standard
	Ag	107	166585.9	1.4	**23.5117**	0.548	2.3	ug/L	39	Standard
	Cd	111	110259.1	0.2	**26.0562**	0.202	0.8	mg/L	525	Standard
	Cd	114	306934.3	2.1	**25.0876**	0.642	2.6	ug/L	1503	Standard
>	In	115	912430.5	0.9				ug/L	917693	Standard
	Sn	118	1508.7	2.1	**-0.1317**	0.002	1.5	ug/L	5013	Standard
	Sb	123	270505.4	0.7	**26.0886**	0.286	1.1	ug/L	29	Standard
	Ba	135	632521.2	1.1	**124.6067**	2.526	2.0	ug/L	68	Standard
	Ce	140	11437.0	1.7				ug/L	58	Standard
>	Tb	159	1075012.6	0.8				ug/L	1008624	Standard
	Ho	165	338.0	3.3				ug/L	12	Standard
	Tl	203	402790.2	0.8	**26.3412**	0.366	1.4	ug/L	9	Standard
	Tl	205	962708.2	1.5	**24.4570**	0.636	2.6	ug/L	29	Standard
	Pb	206	317830.2	1.1	**25.5776**	0.577	2.3	ug/L	458	Standard
	Pb	207	271715.3	1.1	**26.4670**	0.574	2.2	ug/L	380	Standard
	Pb	208	1239638.0	0.8	**25.6536**	0.491	1.9	ug/L	1773	Standard
	U	238	1261056.6	0.6	**27.4224**	0.387	1.4	ug/L	42	Standard
>	Bi	209	505552.9	1.1				ug/L	569761	Standard
	Na	23	113623.8	1.1	**32.1119**	0.600	1.9	mg/L	89	Standard
	Mg	24	4636892.6	0.6	**14.5538**	0.203	1.4	mg/L	158	Standard

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	K	39	55441.2	0.2	**4.4987**	0.044	1.0	mg/L	532	Standard
	Ca	43	71860.0	0.9	**90.5405**	1.545	1.7	mg/L	142	Standard
	Fe	54	68369.1	1.0	**11.0657**	0.149	1.3	mg/L	890	Standard
	Fe	57	1791372.2	1.7	**14.3587**	0.258	1.8	mg/L	3398	Standard
>	**Sc-1**	45	473627.1	0.9				mg/L	408994	Standard
	Cl	35	9459811.2	0.1				ug/L	45742	Standard
	Kr	83	60.4	8.0				ug/L	47	Standard
	Br	81	109384.5	2.0				ug/L	11318	Standard
	P	31	1100255.2	0.1				ug/L	55334	Standard
	S	34	954735.0	1.2				ug/L	546407	Standard
	Sr	88	11424110.0	0.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.558	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.560	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.427	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.582	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.731
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: L1204096301
Sample Date/Time: Tuesday, May 01, 2012 12:09:42
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	146177.8	0.6	**6373.2189**	46.057	0.7	ug/L	21640	Standard
|	**Be**	9	42.7	43.2	**0.0099**	0.005	47.1	ug/L	16	Standard
|	**Al**	27	858559.8	6.2	**33.9864**	2.240	6.6	ug/L	19981	Standard
⌊>	**Sc**	45	451624.0	0.4				ug/L	408994	Standard
⌈	**Ti**	47	3622.4	14.3	**1.8689**	0.282	15.1	ug/L	102	Standard
|	**V**	51	14352.9	1.6	**0.4177**	0.010	2.4	ug/L	5722	Standard
|	**Cr**	52	32554.6	1.9	**0.8590**	0.034	3.9	ug/L	18417	Standard
|	**Cr**	53	1298.1	9.2	**0.4781**	0.061	12.8	ug/L	405	Standard
|	**Mn**	55	438160.4	0.7	**19.7035**	0.149	0.8	ug/L	4298	Standard
|	**Co**	59	1821.1	2.9	**0.1129**	0.004	3.2	ug/L	123	Standard
|	**Ni**	60	4595.0	3.8	**1.4672**	0.057	3.9	ug/L	90	Standard
|	**Cu**	65	1018.4	7.0	**0.3171**	0.026	8.2	ug/L	148	Standard
|	**Zn**	66	4531.0	0.4	**2.7193**	0.012	0.5	ug/L	842	Standard
| >	**Ge**	72	293677.8	0.1				ug/L	293466	Standard
|	**As**	75	106.0	34.8	**0.2512**	0.033	13.1	ug/L	-207	Standard
|	**Se**	82	245.6	4.0	**2.0427**	0.087	4.3	ug/L	19	Standard
⌊	**Se-1**	77	222.7	3.2	**1.7790**	0.094	5.3	ug/L	80	Standard
	Ga	71	233863.1	0.6				mg/L	234805	Standard
⌈	**Rb**	85	1756.8	5.5				ug/L	13	Standard
| >	**Y**	89	270823.1	0.9				ug/L	262487	Standard
⌊	**Rh**	103	58.0	23.9				ug/L	4	Standard
⌈	**Mo**	98	857.1	1.7	**0.2132**	0.003	1.4	ug/L	10	Standard
|	**Ag**	107	89.3	19.7	**0.0058**	0.002	40.5	ug/L	39	Standard
|	**Cd**	111	677.5	1.2	**0.0317**	0.002	6.8	mg/L	525	Standard
|	**Cd**	114	1874.3	3.9	**0.0250**	0.006	25.5	ug/L	1503	Standard
| >	**In**	115	970214.8	0.6				ug/L	917693	Standard
|	**Sn**	118	1508.7	3.3	**-0.1373**	0.003	2.0	ug/L	5013	Standard
|	**Sb**	123	518.3	1.9	**0.0447**	0.001	2.4	ug/L	29	Standard
⌊	**Ba**	135	115844.9	1.0	**21.4500**	0.101	0.5	ug/L	68	Standard
⌈	**Ce**	140	10543.7	4.7				ug/L	58	Standard
⌊>	**Tb**	159	1076858.9	1.5				ug/L	1008624	Standard
⌈	**Ho**	165	160.7	6.9				ug/L	12	Standard
|	**Tl**	203	582.7	16.6	**0.0366**	0.006	15.8	ug/L	9	Standard
|	**Tl**	205	1452.7	16.1	**0.0375**	0.005	14.5	ug/L	29	Standard
|	**Pb**	206	1150.4	4.5	**0.0534**	0.004	6.9	ug/L	458	Standard
|	**Pb**	207	994.4	3.4	**0.0566**	0.003	5.2	ug/L	380	Standard
|	**Pb**	208	4481.3	3.9	**0.0553**	0.003	5.8	ug/L	1773	Standard
|	**U**	238	21377.1	0.9	**0.4334**	0.003	0.8	ug/L	42	Standard
⌊>	**Bi**	209	547549.8	0.2				ug/L	569761	Standard
⌈	**Na**	23	39798.9	1.3	**11.7772**	0.161	1.4	mg/L	89	Standard
|	**Mg**	24	3500636.8	0.6	**11.5219**	0.092	0.8	mg/L	158	Standard

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	K	39	13919.1	1.8	**1.1455**	0.022	1.9	mg/L	532	Standard
	Ca	43	33275.8	0.5	**43.8617**	0.307	0.7	mg/L	142	Standard
	Fe	54	1021.8	1.3	**0.0031**	0.003	91.4	mg/L	890	Standard
	Fe	57	23599.7	2.5	**0.1670**	0.006	3.3	mg/L	3398	Standard
>	**Sc-1**	45	451624.0	0.4				mg/L	408994	Standard
	Cl	35	562144.5	9.8				ug/L	45742	Standard
	Kr	83	54.4	12.7				ug/L	47	Standard
	Br	81	23556.0	6.4				ug/L	11318	Standard
	P	31	74603.9	1.5				ug/L	55334	Standard
	S	34	1897106.9	0.8				ug/L	546407	Standard
	Sr	88	2815678.5	0.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.072	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.176	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.723	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.765	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.102
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1204096302
Sample Date/Time: Tuesday, May 01, 2012 12:12:29
Number of Replicates: 3
Autosampler Position: 234
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	91471.3	1.3	**3454.7270**	43.050	1.2	ug/L	21640	Standard
|	**Be**	9	26.0	11.5	**0.0056**	0.001	13.6	ug/L	16	Standard
|	**Al**	27	182635.6	1.3	**6.5478**	0.066	1.0	ug/L	19981	Standard
⌊>	**Sc**	45	457441.4	0.4				ug/L	408994	Standard
⌈	**Ti**	47	1048.7	4.0	**0.4622**	0.025	5.3	ug/L	102	Standard
|	**V**	51	11820.1	1.6	**0.2840**	0.011	4.0	ug/L	5722	Standard
|	**Cr**	52	28254.7	1.7	**0.5662**	0.038	6.7	ug/L	18417	Standard
|	**Cr**	53	1108.7	3.5	**0.3662**	0.013	3.5	ug/L	405	Standard
|	**Mn**	55	41278.9	5.0	**1.6758**	0.059	3.5	ug/L	4298	Standard
|	**Co**	59	1139.7	4.4	**0.0660**	0.004	5.5	ug/L	123	Standard
|	**Ni**	60	4912.5	3.7	**1.5302**	0.039	2.5	ug/L	90	Standard
|	**Cu**	65	1057.7	5.3	**0.3219**	0.022	6.7	ug/L	148	Standard
|	**Zn**	66	6051.2	2.9	**3.8436**	0.103	2.7	ug/L	842	Standard
| >	**Ge**	72	301183.6	1.7				ug/L	293466	Standard
|	**As**	75	94.2	61.5	**0.2381**	0.049	20.7	ug/L	-207	Standard
|	**Se**	82	309.7	3.9	**2.5569**	0.060	2.4	ug/L	19	Standard
⌊	**Se-1**	77	266.0	4.2	**2.2702**	0.147	6.5	ug/L	80	Standard
	Ga	71	237602.5	2.4				mg/L	234805	Standard
⌈	**Rb**	85	1270.7	6.0				ug/L	13	Standard
| >	**Y**	89	270682.6	0.8				ug/L	262487	Standard
⌊	**Rh**	103	70.7	13.1				ug/L	4	Standard
⌈	**Mo**	98	1052.0	2.1	**0.2582**	0.008	2.9	ug/L	10	Standard
|	**Ag**	107	57.3	9.6	**0.0014**	0.001	46.9	ug/L	39	Standard
|	**Cd**	111	609.9	4.4	**0.0142**	0.005	38.4	mg/L	525	Standard
|	**Cd**	114	1788.4	4.3	**0.0159**	0.005	34.1	ug/L	1503	Standard
| >	**In**	115	987455.2	0.8				ug/L	917693	Standard
|	**Sn**	118	1232.1	3.9	**-0.1548**	0.003	2.1	ug/L	5013	Standard
|	**Sb**	123	440.7	5.9	**0.0370**	0.003	7.0	ug/L	29	Standard
⌊	**Ba**	135	133923.4	1.6	**24.3655**	0.201	0.8	ug/L	68	Standard
⌈	**Ce**	140	2526.2	3.4				ug/L	58	Standard
⌊>	**Tb**	159	1090713.7	1.5				ug/L	1008624	Standard
⌈	**Ho**	165	88.7	3.4				ug/L	12	Standard
|	**Tl**	203	431.3	7.5	**0.0272**	0.002	6.2	ug/L	9	Standard
|	**Tl**	205	1026.7	3.9	**0.0272**	0.001	2.7	ug/L	29	Standard
|	**Pb**	206	550.3	10.0	**0.0082**	0.004	47.1	ug/L	458	Standard
|	**Pb**	207	479.7	13.8	**0.0097**	0.005	56.5	ug/L	380	Standard
|	**Pb**	208	2183.4	11.4	**0.0108**	0.004	39.9	ug/L	1773	Standard
|	**U**	238	21123.4	0.7	**0.4227**	0.005	1.3	ug/L	42	Standard
⌊>	**Bi**	209	554944.3	0.9				ug/L	569761	Standard
⌈	**Na**	23	29263.6	0.4	**8.5419**	0.038	0.4	mg/L	89	Standard
|	**Mg**	24	3050281.4	0.5	**9.9118**	0.067	0.7	mg/L	158	Standard

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	K	39	19795.6	1.4	**1.6298**	0.022	1.4	mg/L	532	Standard
	Ca	43	36279.4	0.6	**47.2279**	0.345	0.7	mg/L	142	Standard
	Fe	54	975.5	7.4	**-0.0070**	0.012	178.3	mg/L	890	Standard
	Fe	57	22444.6	1.7	**0.1549**	0.002	1.6	mg/L	3398	Standard
>	**Sc-1**	45	457441.4	0.4				mg/L	408994	Standard
	Cl	35	476444.7	1.5				ug/L	45742	Standard
	Kr	83	52.0	19.4				ug/L	47	Standard
	Br	81	26076.1	0.5				ug/L	11318	Standard
	P	31	74926.2	1.9				ug/L	55334	Standard
	S	34	1704971.9	1.9				ug/L	546407	Standard
	Sr	88	3409531.0	1.5				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.630	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.122	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.602	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.139	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.399
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	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: L1204096302
Report Date/Time: Tuesday, May 01, 2012 12:14:57
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204096303
Sample Date/Time: Tuesday, May 01, 2012 12:15:17
Number of Replicates: 3
Autosampler Position: 235
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	148741.3	1.4	**6419.3146**	77.280	1.2	ug/L	21640	Standard
|	**Be**	9	21.7	61.5	**0.0046**	0.003	72.3	ug/L	16	Standard
|	**Al**	27	254670.1	6.8	**9.4308**	0.460	4.9	ug/L	19981	Standard
⌊>	**Sc**	45	456856.6	2.4				ug/L	408994	Standard
⌈	**Ti**	47	1129.4	10.4	**0.5141**	0.070	13.6	ug/L	102	Standard
|	**V**	51	11674.9	2.5	**0.2855**	0.023	8.0	ug/L	5722	Standard
|	**Cr**	52	29182.7	0.9	**0.6442**	0.032	5.0	ug/L	18417	Standard
|	**Cr**	53	1664.1	7.7	**0.6581**	0.067	10.2	ug/L	405	Standard
|	**Mn**	55	3133653.1	1.6	**140.3641**	0.617	0.4	ug/L	4298	Standard
|	**Co**	59	4003.9	1.9	**0.2545**	0.002	0.8	ug/L	123	Standard
|	**Ni**	60	23040.2	1.0	**7.3690**	0.094	1.3	ug/L	90	Standard
|	**Cu**	65	12887.5	1.4	**4.6283**	0.018	0.4	ug/L	148	Standard
|	**Zn**	66	13498.0	1.9	**9.9693**	0.215	2.2	ug/L	842	Standard
| >	**Ge**	72	296731.0	1.8				ug/L	293466	Standard
|	**As**	75	1547.1	3.4	**1.5225**	0.041	2.7	ug/L	-207	Standard
|	**Se**	82	108.4	2.8	**0.7812**	0.033	4.2	ug/L	19	Standard
⌊	**Se-1**	77	157.7	7.6	**0.8866**	0.122	13.7	ug/L	80	Standard
	Ga	71	235135.8	2.3				mg/L	234805	Standard
⌈	**Rb**	85	6896.9	2.4				ug/L	13	Standard
| >	**Y**	89	274193.0	1.2				ug/L	262487	Standard
⌊	**Rh**	103	146.0	13.1				ug/L	4	Standard
⌈	**Mo**	98	3172.2	2.8	**0.7864**	0.010	1.3	ug/L	10	Standard
|	**Ag**	107	54.7	23.3	**0.0010**	0.002	160.0	ug/L	39	Standard
|	**Cd**	111	882.6	2.1	**0.0735**	0.001	1.7	mg/L	525	Standard
|	**Cd**	114	2587.4	3.0	**0.0761**	0.007	8.7	ug/L	1503	Standard
| >	**In**	115	989950.1	1.5				ug/L	917693	Standard
|	**Sn**	118	1223.4	5.3	**-0.1555**	0.005	3.0	ug/L	5013	Standard
|	**Sb**	123	1934.5	2.6	**0.1697**	0.006	3.4	ug/L	29	Standard
⌊	**Ba**	135	138466.9	0.9	**25.1314**	0.164	0.7	ug/L	68	Standard
⌈	**Ce**	140	3161.7	2.2				ug/L	58	Standard
⌊>	**Tb**	159	1096067.1	1.1				ug/L	1008624	Standard
⌈	**Ho**	165	265.3	14.1				ug/L	12	Standard
|	**Tl**	203	892.0	6.0	**0.0552**	0.003	5.6	ug/L	9	Standard
|	**Tl**	205	2047.5	2.4	**0.0513**	0.001	2.6	ug/L	29	Standard
|	**Pb**	206	1743.8	2.6	**0.0972**	0.003	3.1	ug/L	458	Standard
|	**Pb**	207	1441.1	4.9	**0.0964**	0.006	5.9	ug/L	380	Standard
|	**Pb**	208	6639.6	3.1	**0.0962**	0.003	3.4	ug/L	1773	Standard
|	**U**	238	29510.0	1.0	**0.5949**	0.003	0.5	ug/L	42	Standard
⌊>	**Bi**	209	549172.8	0.5				ug/L	569761	Standard
⌈	**Na**	23	54041.5	1.0	**15.8240**	0.411	2.6	mg/L	89	Standard
|	**Mg**	24	2151540.9	1.7	**7.0008**	0.046	0.7	mg/L	158	Standard

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	K	39	17301.2	1.5	**1.4202**	0.043	3.0	mg/L	532	Standard
	Ca	43	34318.2	1.8	**44.7259**	0.403	0.9	mg/L	142	Standard
	Fe	54	1523.8	1.1	**0.0868**	0.008	9.6	mg/L	890	Standard
	Fe	57	36419.1	3.0	**0.2716**	0.010	3.8	mg/L	3398	Standard
>	**Sc-1**	45	456856.6	2.4				mg/L	408994	Standard
	Cl	35	1730304.9	0.4				ug/L	45742	Standard
	Kr	83	53.8	9.3				ug/L	47	Standard
	Br	81	26553.9	1.0				ug/L	11318	Standard
	P	31	71615.7	4.2				ug/L	55334	Standard
	S	34	2500605.9	2.5				ug/L	546407	Standard
	Sr	88	5661150.8	1.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.113	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.460	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.874	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.670	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.386
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204096304
Sample Date/Time: Tuesday, May 01, 2012 12:18:04
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	145039.0	1.8	**6372.2700**	219.397	3.4	ug/L	21640	Standard
|	**Be**	9	14.3	24.5	**0.0028**	0.001	31.6	ug/L	16	Standard
|	**Al**	27	39165.3	4.6	**0.8518**	0.101	11.9	ug/L	19981	Standard
⌊>	**Sc**	45	448281.5	1.7				ug/L	408994	Standard
⌈	**Ti**	47	814.7	4.5	**0.3498**	0.021	6.1	ug/L	102	Standard
|	**V**	51	11620.6	0.5	**0.2887**	0.006	2.2	ug/L	5722	Standard
|	**Cr**	52	31378.8	1.4	**0.7911**	0.032	4.1	ug/L	18417	Standard
|	**Cr**	53	1562.1	5.5	**0.6148**	0.051	8.3	ug/L	405	Standard
|	**Mn**	55	4478449.7	0.7	**202.8561**	3.097	1.5	ug/L	4298	Standard
|	**Co**	59	5321.3	0.3	**0.3446**	0.004	1.1	ug/L	123	Standard
|	**Ni**	60	20919.1	0.4	**6.7609**	0.067	1.0	ug/L	90	Standard
|	**Cu**	65	10336.5	1.4	**3.7415**	0.039	1.1	ug/L	148	Standard
|	**Zn**	66	13097.7	1.0	**9.7582**	0.046	0.5	ug/L	842	Standard
| >	**Ge**	72	293543.7	0.9				ug/L	293466	Standard
|	**As**	75	3231.0	3.2	**3.0402**	0.098	3.2	ug/L	-207	Standard
|	**Se**	82	120.6	14.5	**0.9036**	0.163	18.1	ug/L	19	Standard
⌊	**Se-1**	77	166.3	3.1	**1.0266**	0.068	6.6	ug/L	80	Standard
	Ga	71	236814.1	1.9				mg/L	234805	Standard
⌈	**Rb**	85	5675.1	0.5				ug/L	13	Standard
| >	**Y**	89	264916.3	2.7				ug/L	262487	Standard
⌊	**Rh**	103	125.3	15.3				ug/L	4	Standard
⌈	**Mo**	98	3369.6	1.8	**0.8638**	0.022	2.5	ug/L	10	Standard
|	**Ag**	107	53.7	12.4	**0.0011**	0.001	54.7	ug/L	39	Standard
|	**Cd**	111	813.3	9.8	**0.0640**	0.013	20.1	mg/L	525	Standard
|	**Cd**	114	2325.7	2.9	**0.0621**	0.004	7.1	ug/L	1503	Standard
| >	**In**	115	958525.2	4.1				ug/L	917693	Standard
|	**Sn**	118	1111.4	4.8	**-0.1597**	0.006	3.7	ug/L	5013	Standard
|	**Sb**	123	1621.8	1.7	**0.1468**	0.006	4.0	ug/L	29	Standard
⌊	**Ba**	135	144560.1	1.7	**27.1363**	1.483	5.5	ug/L	68	Standard
⌈	**Ce**	140	2195.5	1.3				ug/L	58	Standard
⌊>	**Tb**	159	1073836.0	3.1				ug/L	1008624	Standard
⌈	**Ho**	165	227.3	22.0				ug/L	12	Standard
|	**Tl**	203	866.4	1.8	**0.0547**	0.001	1.1	ug/L	9	Standard
|	**Tl**	205	1932.8	3.2	**0.0495**	0.002	4.6	ug/L	29	Standard
|	**Pb**	206	837.4	2.2	**0.0312**	0.000	0.7	ug/L	458	Standard
|	**Pb**	207	705.0	2.3	**0.0317**	0.002	6.6	ug/L	380	Standard
|	**Pb**	208	3276.5	0.4	**0.0334**	0.002	5.6	ug/L	1773	Standard
|	**U**	238	28953.3	0.6	**0.5959**	0.018	3.1	ug/L	42	Standard
⌊>	**Bi**	209	538130.6	2.5				ug/L	569761	Standard
⌈	**Na**	23	52487.4	1.1	**15.6619**	0.442	2.8	mg/L	89	Standard
|	**Mg**	24	2173006.9	0.5	**7.2070**	0.158	2.2	mg/L	158	Standard

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	K	39	16467.6	1.7	**1.3760**	0.045	3.3	mg/L	532	Standard
	Ca	43	34975.7	1.4	**46.4737**	1.444	3.1	mg/L	142	Standard
	Fe	54	2820.2	5.1	**0.3171**	0.034	10.7	mg/L	890	Standard
	Fe	57	67375.5	2.2	**0.5400**	0.009	1.7	mg/L	3398	Standard
>	**Sc-1**	45	448281.5	1.7				mg/L	408994	Standard
	Cl	35	1629241.2	0.4				ug/L	45742	Standard
	Kr	83	42.7	18.4				ug/L	47	Standard
	Br	81	25116.5	1.9				ug/L	11318	Standard
	P	31	69602.2	1.0				ug/L	55334	Standard
	S	34	2618351.2	0.5				ug/L	546407	Standard
	Sr	88	5491861.6	0.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.026	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.925	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.449	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.465	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.448
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 12:20:53
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	24121.9	1.4	**69.1187**	9.113	13.2	ug/L	21640	Standard
|	**Be**	9	202887.4	1.0	**53.6341**	0.360	0.7	ug/L	16	Standard
|	**Al**	27	1169591.8	1.1	**49.2512**	0.707	1.4	ug/L	19981	Standard
⌊>	**Sc**	45	427357.3	0.7				ug/L	408994	Standard
⌈	**Ti**	47	191262.3	0.5	**102.3819**	1.946	1.9	ug/L	102	Standard
|	**V**	51	1109697.3	0.6	**51.7640**	1.115	2.2	ug/L	5722	Standard
|	**Cr**	52	920545.2	0.9	**52.3452**	0.411	0.8	ug/L	18417	Standard
|	**Cr**	53	102047.2	0.7	**51.8848**	0.731	1.4	ug/L	405	Standard
|	**Mn**	55	1179398.4	1.2	**52.7566**	0.857	1.6	ug/L	4298	Standard
|	**Co**	59	776912.7	1.5	**50.8547**	0.166	0.3	ug/L	123	Standard
|	**Ni**	60	162130.8	0.4	**52.0039**	0.821	1.6	ug/L	90	Standard
|	**Cu**	65	140535.5	0.9	**51.0570**	1.030	2.0	ug/L	148	Standard
|	**Zn**	66	63326.1	1.0	**50.4791**	0.437	0.9	ug/L	842	Standard
| >	**Ge**	72	296647.7	1.6				ug/L	293466	Standard
|	**As**	75	56749.5	1.6	**50.2737**	0.781	1.6	ug/L	-207	Standard
|	**Se**	82	5621.9	1.2	**50.6052**	1.338	2.6	ug/L	19	Standard
⌊	**Se-1**	77	3933.8	0.5	**50.8963**	0.941	1.8	ug/L	80	Standard
	Ga	71	240948.8	0.8				mg/L	234805	Standard
⌈	**Rb**	85	902.0	7.5				ug/L	13	Standard
| >	**Y**	89	268065.9	0.3				ug/L	262487	Standard
⌊	**Rh**	103	38.7	31.6				ug/L	4	Standard
⌈	**Mo**	98	373091.9	0.8	**92.3164**	1.997	2.2	ug/L	10	Standard
|	**Ag**	107	389034.6	1.8	**50.1837**	0.580	1.2	ug/L	39	Standard
|	**Cd**	111	241608.1	0.5	**52.3098**	0.897	1.7	mg/L	525	Standard
|	**Cd**	114	668308.0	0.7	**50.0438**	0.619	1.2	ug/L	1503	Standard
| >	**In**	115	998336.2	1.6				ug/L	917693	Standard
|	**Sn**	118	873017.1	0.3	**49.6630**	0.625	1.3	ug/L	5013	Standard
|	**Sb**	123	581083.9	0.9	**51.2322**	1.255	2.4	ug/L	29	Standard
⌊	**Ba**	135	265369.6	1.2	**47.7804**	1.314	2.7	ug/L	68	Standard
⌈	**Ce**	140	962.7	3.1				ug/L	58	Standard
⌊>	**Tb**	159	1094686.4	0.5				ug/L	1008624	Standard
⌈	**Ho**	165	26.7	24.1				ug/L	12	Standard
|	**Tl**	203	878810.6	0.5	**50.9692**	0.460	0.9	ug/L	9	Standard
|	**Tl**	205	2331459.0	0.1	**52.5220**	0.689	1.3	ug/L	29	Standard
|	**Pb**	206	714962.0	1.1	**51.0639**	1.244	2.4	ug/L	458	Standard
|	**Pb**	207	596115.5	0.3	**51.5267**	0.607	1.2	ug/L	380	Standard
|	**Pb**	208	2743704.9	0.2	**50.3849**	0.606	1.2	ug/L	1773	Standard
|	**U**	238	2748513.1	0.9	**53.0045**	0.797	1.5	ug/L	42	Standard
⌊>	**Bi**	209	570028.4	1.4				ug/L	569761	Standard
⌈	**Na**	23	15893.0	1.3	**4.9544**	0.088	1.8	mg/L	89	Standard
|	**Mg**	24	1447392.2	1.0	**5.0344**	0.077	1.5	mg/L	158	Standard

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	K	39	54330.6	1.5	**4.8907**	0.107	2.2	mg/L	532	Standard
	Ca	43	3618.4	1.1	**4.8625**	0.073	1.5	mg/L	142	Standard
	Fe	54	27926.7	2.0	**4.9151**	0.139	2.8	mg/L	890	Standard
	Fe	57	669750.9	3.7	**5.9320**	0.264	4.4	mg/L	3398	Standard
>	**Sc-1**	45	427357.3	0.7				mg/L	408994	Standard
	Cl	35	188622.6	7.3				ug/L	45742	Standard
	Kr	83	46.7	15.1				ug/L	47	Standard
	Br	81	12322.7	2.2				ug/L	11318	Standard
	P	31	73282.2	3.1				ug/L	55334	Standard
	S	34	802896.2	1.2				ug/L	546407	Standard
	Sr	88	2202.8	36.0				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	98.502		
>	Sc	45			
	Ti	47	102.382		
	V	51	103.528		
	Cr	52	104.690		
	Cr	53			
	Mn	55	105.513		
	Co	59	101.709		
	Ni	60	104.008		
	Cu	65	102.114		
	Zn	66	100.958		
>	Ge	72		101.084	
	As	75	100.547		
	Se	82	101.210		
	Se-1	77	101.793		
	Ga	71			
	Rb	85			
>	Y	89		102.125	
	Rh	103			
	Mo	98	92.316		
	Ag	107	100.367		
	Cd	111	104.620		
	Cd	114			
>	In	115		108.788	
	Sn	118	99.326		
	Sb	123	102.464		
	Ba	135	95.561		
	Ce	140			
>	Tb	159		108.533	
	Ho	165			
	Tl	203	101.938		
	Tl	205			
	Pb	206	102.128		

Sample ID: QC Std 6
Report Date/Time: Tuesday, May 01, 2012 12:23:20
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	Pb	207	103.053	
	Pb	208	100.770	
	U	238	106.009	
>	Bi	209		100.047
	Na	23	99.088	
	Mg	24	100.687	
	K	39	97.813	
	Ca	43	97.250	
	Fe	54	98.301	
	Fe	57	118.640	
>	Sc-1	45		
	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	

Sample ID: QC Std 6
Report Date/Time: Tuesday, May 01, 2012 12:23:20
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 12:23:40
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	25123.8	0.4	**83.4290**	20.317	24.4	ug/L	21640	Standard
|	**Be**	9	41.0	21.3	**0.0097**	0.002	22.4	ug/L	16	Standard
|	**Al**	27	16533.1	10.1	**-0.0596**	0.069	115.6	ug/L	19981	Standard
⌊>	**Sc**	45	440439.0	1.1				ug/L	408994	Standard
⌈	**Ti**	47	122.7	18.0	**-0.0288**	0.011	38.2	ug/L	102	Standard
|	**V**	51	6131.9	3.2	**0.0114**	0.002	16.1	ug/L	5722	Standard
|	**Cr**	52	19459.5	3.2	**0.0247**	0.003	12.8	ug/L	18417	Standard
|	**Cr**	53	628.0	4.5	**0.1140**	0.020	17.7	ug/L	405	Standard
|	**Mn**	55	3530.1	17.2	**0.0031**	0.022	719.9	ug/L	4298	Standard
|	**Co**	59	215.7	15.8	**0.0059**	0.002	35.0	ug/L	123	Standard
|	**Ni**	60	63.7	7.7	**-0.0026**	0.001	45.2	ug/L	90	Standard
|	**Cu**	65	188.3	8.6	**0.0082**	0.006	77.6	ug/L	148	Standard
|	**Zn**	66	251.3	9.1	**-0.8068**	0.018	2.2	ug/L	842	Standard
| >	**Ge**	72	312038.5	2.9				ug/L	293466	Standard
|	**As**	75	-153.7	10.2	**0.0277**	0.012	41.9	ug/L	-207	Standard
|	**Se**	82	34.4	1.5	**0.0979**	0.009	9.3	ug/L	19	Standard
⌊	**Se-1**	77	85.7	16.6	**-0.1235**	0.146	118.3	ug/L	80	Standard
	Ga	71	255537.3	2.8				mg/L	234805	Standard
⌈	**Rb**	85	24.7	30.7				ug/L	13	Standard
| >	**Y**	89	276105.4	2.5				ug/L	262487	Standard
⌊	**Rh**	103	2.0	100.0				ug/L	4	Standard
⌈	**Mo**	98	116.1	32.7	**0.0230**	0.010	42.4	ug/L	10	Standard
|	**Ag**	107	131.7	43.3	**0.0103**	0.007	65.1	ug/L	39	Standard
|	**Cd**	111	765.2	33.5	**0.0406**	0.048	119.1	mg/L	525	Standard
|	**Cd**	114	2058.0	27.8	**0.0294**	0.037	124.6	ug/L	1503	Standard
| >	**In**	115	1028725.4	3.0				ug/L	917693	Standard
|	**Sn**	118	1944.1	44.9	**-0.1191**	0.044	37.3	ug/L	5013	Standard
|	**Sb**	123	687.2	96.2	**0.0555**	0.054	97.2	ug/L	29	Standard
⌊	**Ba**	135	457.7	124.6	**0.0667**	0.096	143.3	ug/L	68	Standard
⌈	**Ce**	140	81.3	52.5				ug/L	58	Standard
⌊>	**Tb**	159	1110228.0	1.8				ug/L	1008624	Standard
⌈	**Ho**	165	15.3	19.9				ug/L	12	Standard
|	**Tl**	203	444.3	86.4	**0.0257**	0.021	80.1	ug/L	9	Standard
|	**Tl**	205	1008.0	82.7	**0.0248**	0.017	70.0	ug/L	29	Standard
|	**Pb**	206	632.3	42.8	**0.0105**	0.018	166.6	ug/L	458	Standard
|	**Pb**	207	538.0	32.2	**0.0111**	0.013	120.9	ug/L	380	Standard
|	**Pb**	208	2357.7	35.3	**0.0106**	0.014	130.2	ug/L	1773	Standard
|	**U**	238	573.7	68.3	**0.0147**	0.007	47.3	ug/L	42	Standard
⌊>	**Bi**	209	600581.8	1.5				ug/L	569761	Standard
⌈	**Na**	23	122.0	18.3	**0.0095**	0.006	68.5	mg/L	89	Standard
|	**Mg**	24	999.7	76.8	**0.0029**	0.003	89.5	mg/L	158	Standard

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	K	39	618.0	3.2	**0.0018**	0.002	132.0	mg/L	532	Standard
	Ca	43	115.3	17.5	**-0.0447**	0.026	57.7	mg/L	142	Standard
	Fe	54	959.4	5.8	**-0.0034**	0.011	329.1	mg/L	890	Standard
	Fe	57	4059.2	10.1	**0.0032**	0.003	101.8	mg/L	3398	Standard
>	**Sc-1**	45	440439.0	1.1				mg/L	408994	Standard
	Cl	35	176685.6	1.1				ug/L	45742	Standard
	Kr	83	47.8	5.8				ug/L	47	Standard
	Br	81	12435.1	1.5				ug/L	11318	Standard
	P	31	78656.7	1.6				ug/L	55334	Standard
	S	34	837354.7	3.5				ug/L	546407	Standard
	Sr	88	1020.0	18.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.329	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.188	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		112.099	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.074	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	105.409
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: L1204096307
Sample Date/Time: Tuesday, May 01, 2012 12:26:29
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	168033.0	0.7	**6879.1906**	149.798	2.2	ug/L	21640	Standard
|	**Be**	9	44.7	15.2	**0.0096**	0.001	15.5	ug/L	16	Standard
|	**Al**	27	2548701.9	4.2	**94.8427**	2.786	2.9	ug/L	19981	Standard
⌊>	**Sc**	45	486953.5	1.3				ug/L	408994	Standard
⌈	**Ti**	47	8253.7	25.0	**4.2963**	1.147	26.7	ug/L	102	Standard
|	**V**	51	37925.8	2.3	**1.4990**	0.023	1.5	ug/L	5722	Standard
|	**Cr**	52	33437.9	0.8	**0.8731**	0.022	2.5	ug/L	18417	Standard
|	**Cr**	53	5284.3	12.8	**2.4779**	0.316	12.7	ug/L	405	Standard
|	**Mn**	55	3874353.6	0.5	**172.0061**	2.272	1.3	ug/L	4298	Standard
|	**Co**	59	4892.8	1.3	**0.3099**	0.007	2.4	ug/L	123	Standard
|	**Ni**	60	10891.9	2.1	**3.4397**	0.061	1.8	ug/L	90	Standard
|	**Cu**	65	2296.8	2.9	**0.7704**	0.021	2.7	ug/L	148	Standard
|	**Zn**	66	8755.9	1.9	**6.0492**	0.067	1.1	ug/L	842	Standard
| >	**Ge**	72	299454.4	1.0				ug/L	293466	Standard
|	**As**	75	1154.6	12.5	**1.1659**	0.117	10.1	ug/L	-207	Standard
|	**Se**	82	263.9	6.2	**2.1631**	0.125	5.8	ug/L	19	Standard
⌊	**Se-1**	77	318.7	8.1	**2.9788**	0.297	10.0	ug/L	80	Standard
	Ga	71	242323.8	0.7				mg/L	234805	Standard
⌈	**Rb**	85	4169.9	2.4				ug/L	13	Standard
| >	**Y**	89	280376.4	0.5				ug/L	262487	Standard
⌊	**Rh**	103	111.3	14.6				ug/L	4	Standard
⌈	**Mo**	98	2376.6	16.0	**0.5900**	0.095	16.2	ug/L	10	Standard
|	**Ag**	107	53.7	5.7	**0.0009**	0.000	42.7	ug/L	39	Standard
|	**Cd**	111	1220.4	2.7	**0.1483**	0.007	4.8	mg/L	525	Standard
|	**Cd**	114	3350.9	5.3	**0.1347**	0.014	10.2	ug/L	1503	Standard
| >	**In**	115	986608.9	0.1				ug/L	917693	Standard
|	**Sn**	118	1521.4	4.2	**-0.1381**	0.004	2.6	ug/L	5013	Standard
|	**Sb**	123	2051.3	2.1	**0.1807**	0.004	2.2	ug/L	29	Standard
⌊	**Ba**	135	293876.3	0.5	**53.5282**	0.301	0.6	ug/L	68	Standard
⌈	**Ce**	140	23774.8	12.5				ug/L	58	Standard
⌊>	**Tb**	159	1102429.3	0.5				ug/L	1008624	Standard
⌈	**Ho**	165	390.0	9.3				ug/L	12	Standard
|	**Tl**	203	694.3	4.2	**0.0446**	0.002	3.8	ug/L	9	Standard
|	**Tl**	205	1577.4	2.7	**0.0415**	0.001	2.6	ug/L	29	Standard
|	**Pb**	206	10648.7	0.9	**0.7832**	0.006	0.7	ug/L	458	Standard
|	**Pb**	207	9021.0	1.3	**0.8032**	0.010	1.3	ug/L	380	Standard
|	**Pb**	208	41010.4	0.8	**0.7771**	0.005	0.6	ug/L	1773	Standard
|	**U**	238	18282.0	1.5	**0.3820**	0.005	1.4	ug/L	42	Standard
⌊>	**Bi**	209	531915.1	0.3				ug/L	569761	Standard
⌈	**Na**	23	138599.8	1.2	**38.1010**	0.354	0.9	mg/L	89	Standard
|	**Mg**	24	5260920.7	1.0	**16.0598**	0.093	0.6	mg/L	158	Standard

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	K	39	4610.7	2.2	**0.3154**	0.008	2.6	mg/L	532	Standard
	Ca	43	42726.2	0.4	**52.2765**	0.763	1.5	mg/L	142	Standard
	Fe	54	2484.0	4.7	**0.2243**	0.022	9.9	mg/L	890	Standard
	Fe	57	69763.6	2.5	**0.5134**	0.017	3.3	mg/L	3398	Standard
>	**Sc-1**	45	486953.5	1.3				mg/L	408994	Standard
	Cl	35	9700959.8	1.5				ug/L	45742	Standard
	Kr	83	59.8	8.2				ug/L	47	Standard
	Br	81	150254.4	0.7				ug/L	11318	Standard
	P	31	88502.8	1.4				ug/L	55334	Standard
	S	34	2463997.5	1.1				ug/L	546407	Standard
	Sr	88	4334755.3	1.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.041	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		106.815	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.510	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		109.300	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.358
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1204096308
Sample Date/Time: Tuesday, May 01, 2012 12:29:16
Number of Replicates: 3
Autosampler Position: 238
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	168626.0	1.7	**7023.7225**	203.585	2.9	ug/L	21640	Standard
|	**Be**	9	28.0	6.2	**0.0058**	0.001	8.7	ug/L	16	Standard
|	**Al**	27	1264732.9	1.0	**47.3783**	0.909	1.9	ug/L	19981	Standard
⌊>	**Sc**	45	480210.0	2.3				ug/L	408994	Standard
⌈	**Ti**	47	1555.4	5.2	**0.7386**	0.032	4.4	ug/L	102	Standard
|	**V**	51	34179.4	3.3	**1.3340**	0.032	2.4	ug/L	5722	Standard
|	**Cr**	52	28983.7	0.8	**0.6267**	0.010	1.6	ug/L	18417	Standard
|	**Cr**	53	5531.7	2.4	**2.6211**	0.059	2.2	ug/L	405	Standard
|	**Mn**	55	3982926.8	1.5	**177.8249**	1.046	0.6	ug/L	4298	Standard
|	**Co**	59	4562.0	2.1	**0.2900**	0.004	1.4	ug/L	123	Standard
|	**Ni**	60	9729.5	2.6	**3.0878**	0.058	1.9	ug/L	90	Standard
|	**Cu**	65	1449.1	5.8	**0.4683**	0.036	7.7	ug/L	148	Standard
|	**Zn**	66	6736.2	2.0	**4.4542**	0.075	1.7	ug/L	842	Standard
| >	**Ge**	72	297752.2	1.3				ug/L	293466	Standard
|	**As**	75	1161.0	7.0	**1.1777**	0.061	5.2	ug/L	-207	Standard
|	**Se**	82	266.2	10.6	**2.1967**	0.230	10.5	ug/L	19	Standard
⌊	**Se-1**	77	366.0	5.9	**3.6272**	0.223	6.2	ug/L	80	Standard
	Ga	71	235593.7	1.2				mg/L	234805	Standard
⌈	**Rb**	85	2967.6	5.3				ug/L	13	Standard
| >	**Y**	89	273020.6	0.7				ug/L	262487	Standard
⌊	**Rh**	103	88.0	9.1				ug/L	4	Standard
⌈	**Mo**	98	1966.2	0.6	**0.4853**	0.009	1.8	ug/L	10	Standard
|	**Ag**	107	60.3	12.2	**0.0018**	0.001	48.0	ug/L	39	Standard
|	**Cd**	111	710.3	2.8	**0.0357**	0.001	3.1	mg/L	525	Standard
|	**Cd**	114	1960.5	1.7	**0.0285**	0.002	7.1	ug/L	1503	Standard
| >	**In**	115	990681.1	2.3				ug/L	917693	Standard
|	**Sn**	118	1254.1	1.0	**-0.1538**	0.002	1.3	ug/L	5013	Standard
|	**Sb**	123	1984.5	4.4	**0.1740**	0.008	4.3	ug/L	29	Standard
⌊	**Ba**	135	282400.7	1.1	**51.2399**	1.028	2.0	ug/L	68	Standard
⌈	**Ce**	140	12499.8	1.2				ug/L	58	Standard
⌊>	**Tb**	159	1102997.1	1.3				ug/L	1008624	Standard
⌈	**Ho**	165	212.7	6.3				ug/L	12	Standard
|	**Tl**	203	650.0	5.5	**0.0420**	0.002	5.6	ug/L	9	Standard
|	**Tl**	205	1555.4	5.1	**0.0411**	0.002	5.4	ug/L	29	Standard
|	**Pb**	206	2280.5	1.6	**0.1429**	0.004	2.8	ug/L	458	Standard
|	**Pb**	207	1940.5	0.7	**0.1474**	0.003	2.0	ug/L	380	Standard
|	**Pb**	208	8790.7	0.5	**0.1432**	0.001	0.8	ug/L	1773	Standard
|	**U**	238	18094.1	1.4	**0.3792**	0.008	2.1	ug/L	42	Standard
⌊>	**Bi**	209	530517.3	1.1				ug/L	569761	Standard
⌈	**Na**	23	136173.2	1.0	**37.9672**	0.630	1.7	mg/L	89	Standard
|	**Mg**	24	5161536.0	0.8	**15.9811**	0.265	1.7	mg/L	158	Standard

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	K	39	4728.1	2.5	**0.3302**	0.014	4.2	mg/L	532	Standard
	Ca	43	41886.5	1.2	**51.9845**	1.615	3.1	mg/L	142	Standard
	Fe	54	2243.6	3.3	**0.1909**	0.015	7.9	mg/L	890	Standard
	Fe	57	61375.4	1.5	**0.4546**	0.012	2.6	mg/L	3398	Standard
>	**Sc-1**	45	480210.0	2.3				mg/L	408994	Standard
	Cl	35	9633184.0	2.3				ug/L	45742	Standard
	Kr	83	52.2	15.4				ug/L	47	Standard
	Br	81	161967.8	0.5				ug/L	11318	Standard
	P	31	77508.4	0.2				ug/L	55334	Standard
	S	34	2396550.7	0.3				ug/L	546407	Standard
	Sr	88	4207051.8	1.0				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.461	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.013	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.953	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		109.357	
	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

93.112

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1204096308
Report Date/Time: Tuesday, May 01, 2012 12:31:43
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Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, May 01, 2012 12:32:05
Number of Replicates: 3
Autosampler Position: 203
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	23329.0	2.6	**98.0295**	26.231	26.8	ug/L	21640	Standard
|	**Be**	9	13.7	4.2	**0.0030**	0.000	6.4	ug/L	16	Standard
|	**Al**	27	106946012.7	0.4	**4829.0579**	26.505	0.5	ug/L	19981	Standard
⌊>	**Sc**	45	404509.2	0.9				ug/L	408994	Standard
⌈	**Ti**	47	195312.2	0.9	**107.4980**	1.992	1.9	ug/L	102	Standard
|	**V**	51	6588.6	8.1	**0.0559**	0.028	49.7	ug/L	5722	Standard
|	**Cr**	52	19800.3	2.2	**0.1327**	0.025	18.5	ug/L	18417	Standard
|	**Cr**	53	2961.0	4.8	**1.3631**	0.088	6.5	ug/L	405	Standard
|	**Mn**	55	1826.8	6.6	**-0.0628**	0.006	9.4	ug/L	4298	Standard
|	**Co**	59	434.3	1.4	**0.0217**	0.000	1.8	ug/L	123	Standard
|	**Ni**	60	1083.0	5.0	**0.3355**	0.021	6.4	ug/L	90	Standard
|	**Cu**	65	597.0	4.7	**0.1662**	0.008	5.1	ug/L	148	Standard
|	**Zn**	66	4009.9	2.7	**2.3504**	0.078	3.3	ug/L	842	Standard
| >	**Ge**	72	288500.3	1.0				ug/L	293466	Standard
|	**As**	75	-144.7	39.8	**0.0250**	0.054	214.5	ug/L	-207	Standard
|	**Se**	82	25.7	16.5	**0.0404**	0.037	92.6	ug/L	19	Standard
⌊	**Se-1**	77	228.3	7.9	**1.9110**	0.270	14.1	ug/L	80	Standard
	Ga	71	226581.2	1.5				mg/L	234805	Standard
⌈	**Rb**	85	2945.6	1.0				ug/L	13	Standard
| >	**Y**	89	251078.1	1.4				ug/L	262487	Standard
⌊	**Rh**	103	6.0					ug/L	4	Standard
⌈	**Mo**	98	341530.7	1.0	**89.0078**	2.646	3.0	ug/L	10	Standard
|	**Ag**	107	77.7	10.3	**0.0045**	0.001	27.9	ug/L	39	Standard
|	**Cd**	111	957.9	4.7	**0.0992**	0.007	6.8	mg/L	525	Standard
|	**Cd**	114	3130.0	1.2	**0.1277**	0.007	5.4	ug/L	1503	Standard
| >	**In**	115	948021.1	2.0				ug/L	917693	Standard
|	**Sn**	118	756.7	7.5	**-0.1805**	0.003	1.8	ug/L	5013	Standard
|	**Sb**	123	543.5	4.9	**0.0482**	0.003	6.0	ug/L	29	Standard
⌊	**Ba**	135	156.3	3.9	**0.0183**	0.001	6.6	ug/L	68	Standard
⌈	**Ce**	140	2020.1	3.2				ug/L	58	Standard
⌊>	**Tb**	159	1074837.5	0.5				ug/L	1008624	Standard
⌈	**Ho**	165	15.3	19.9				ug/L	12	Standard
|	**Tl**	203	355.7	3.2	**0.0225**	0.001	2.5	ug/L	9	Standard
|	**Tl**	205	828.0	3.1	**0.0225**	0.001	3.0	ug/L	29	Standard
|	**Pb**	206	647.3	2.9	**0.0151**	0.001	9.0	ug/L	458	Standard
|	**Pb**	207	522.0	3.9	**0.0132**	0.002	13.0	ug/L	380	Standard
|	**Pb**	208	2502.4	1.8	**0.0166**	0.001	4.5	ug/L	1773	Standard
|	**U**	238	18.0	27.8	**0.0046**	0.000	2.2	ug/L	42	Standard
⌊>	**Bi**	209	558060.2	0.5				ug/L	569761	Standard
⌈	**Na**	23	36231.9	1.4	**11.9705**	0.071	0.6	mg/L	89	Standard
|	**Mg**	24	1370902.3	0.8	**5.0374**	0.014	0.3	mg/L	158	Standard

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	K	39	50940.8	0.2	**4.8439**	0.056	1.1	mg/L	532	Standard
	Ca	43	9797.2	1.0	**14.2828**	0.014	0.1	mg/L	142	Standard
	Fe	54	62139.0	0.7	**11.7873**	0.176	1.5	mg/L	890	Standard
	Fe	57	1474031.2	3.1	**13.8339**	0.479	3.5	mg/L	3398	Standard
>	**Sc-1**	45	404509.2	0.9				mg/L	408994	Standard
	Cl	35	9093692.5	0.3				ug/L	45742	Standard
	Kr	83	48.7	4.7				ug/L	47	Standard
	Br	81	13533.4	10.9				ug/L	11318	Standard
	P	31	7839071.0	1.4				ug/L	55334	Standard
	S	34	1492687.9	0.5				ug/L	546407	Standard
	Sr	88	1236.1	11.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.581		
>	Sc	45			
	Ti	47	107.498		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.308	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.653	
	Rh	103			
	Mo	98	89.008		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.305	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.565	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		97.946
	Na	23	95.764	
	Mg	24	100.748	
	K	39	96.878	
	Ca	43	95.218	
	Fe	54	94.299	
	Fe	57	110.671	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Se-1	77	

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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, May 01, 2012 12:34:52
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	25986.3	1.1	**96.4564**	28.756	29.8	ug/L	21640	Standard
|	**Be**	9	432667.1	0.6	**108.3436**	1.564	1.4	ug/L	16	Standard
|	**Al**	27	120210069.2	1.1	**4866.7865**	101.755	2.1	ug/L	19981	Standard
⌊>	**Sc**	45	451203.2	1.0				ug/L	408994	Standard
⌈	**Ti**	47	227875.6	1.1	**114.0635**	1.046	0.9	ug/L	102	Standard
|	**V**	51	2482938.7	1.0	**108.5781**	1.031	0.9	ug/L	5722	Standard
|	**Cr**	52	1962315.5	0.9	**105.3903**	1.453	1.4	ug/L	18417	Standard
|	**Cr**	53	218722.3	1.5	**104.1815**	1.764	1.7	ug/L	405	Standard
|	**Mn**	55	2624212.2	0.9	**109.9286**	1.567	1.4	ug/L	4298	Standard
|	**Co**	59	1681464.9	1.2	**102.9409**	1.464	1.4	ug/L	123	Standard
|	**Ni**	60	341650.7	2.3	**102.4919**	2.550	2.5	ug/L	90	Standard
|	**Cu**	65	296799.3	0.9	**100.8782**	1.056	1.0	ug/L	148	Standard
|	**Zn**	66	139152.4	0.7	**104.7862**	1.213	1.2	ug/L	842	Standard
| >	**Ge**	72	317203.0	0.5				ug/L	293466	Standard
|	**As**	75	124108.9	1.2	**102.6550**	1.757	1.7	ug/L	-207	Standard
|	**Se**	82	12042.0	1.4	**101.5464**	1.858	1.8	ug/L	19	Standard
⌊	**Se-1**	77	8611.1	1.8	**105.4248**	1.585	1.5	ug/L	80	Standard
	Ga	71	256291.1	1.5				mg/L	234805	Standard
⌈	**Rb**	85	3523.1	2.7				ug/L	13	Standard
| >	**Y**	89	283034.2	1.5				ug/L	262487	Standard
⌊	**Rh**	103	74.0	9.7				ug/L	4	Standard
⌈	**Mo**	98	400941.5	0.7	**96.0217**	0.820	0.9	ug/L	10	Standard
|	**Ag**	107	671682.9	1.7	**83.8880**	1.864	2.2	ug/L	39	Standard
|	**Cd**	111	514529.8	0.7	**107.9515**	0.333	0.3	mg/L	525	Standard
|	**Cd**	114	1402404.6	0.8	**101.7798**	1.492	1.5	ug/L	1503	Standard
| >	**In**	115	1031257.3	0.6				ug/L	917693	Standard
|	**Sn**	118	4065.9	1.6	**-0.0011**	0.002	220.7	ug/L	5013	Standard
|	**Sb**	123	1240696.8	0.7	**105.8767**	1.320	1.2	ug/L	29	Standard
⌊	**Ba**	135	553057.5	0.6	**96.3870**	0.906	0.9	ug/L	68	Standard
⌈	**Ce**	140	2388.2	4.4				ug/L	58	Standard
⌊>	**Tb**	159	1152432.6	0.3				ug/L	1008624	Standard
⌈	**Ho**	165	31.3	36.9				ug/L	12	Standard
|	**Tl**	203	1820675.8	0.5	**103.7925**	1.036	1.0	ug/L	9	Standard
|	**Tl**	205	4774323.1	0.2	**105.7098**	0.626	0.6	ug/L	29	Standard
|	**Pb**	206	1465688.0	0.2	**102.9122**	0.368	0.4	ug/L	458	Standard
|	**Pb**	207	1253283.3	0.4	**106.5143**	0.910	0.9	ug/L	380	Standard
|	**Pb**	208	6014263.3	0.5	**108.5924**	1.028	0.9	ug/L	1773	Standard
|	**U**	238	5839652.3	0.5	**110.6856**	0.824	0.7	ug/L	42	Standard
⌊>	**Bi**	209	579893.2	0.5				ug/L	569761	Standard
⌈	**Na**	23	39389.1	0.5	**11.6677**	0.177	1.5	mg/L	89	Standard
|	**Mg**	24	1485613.4	0.1	**4.8942**	0.050	1.0	mg/L	158	Standard

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	K	39	55011.7	0.5	**4.6880**	0.053	1.1	mg/L	532	Standard
	Ca	43	10549.0	1.2	**13.7820**	0.277	2.0	mg/L	142	Standard
	Fe	54	71914.4	1.1	**12.2367**	0.233	1.9	mg/L	890	Standard
	Fe	57	1969273.4	0.6	**16.5754**	0.272	1.6	mg/L	3398	Standard
>	**Sc-1**	45	451203.2	1.0				mg/L	408994	Standard
	Cl	35	10150213.8	0.3				ug/L	45742	Standard
	Kr	83	55.1	7.9				ug/L	47	Standard
	Br	81	13872.0	3.3				ug/L	11318	Standard
	P	31	8219881.5	1.0				ug/L	55334	Standard
	S	34	1652935.4	1.6				ug/L	546407	Standard
	Sr	88	1681.4	4.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.336		
>	Sc	45			
	Ti	47	114.064		
	V	51	108.578		
	Cr	52	105.390		
	Cr	53			
	Mn	55	109.929		
	Co	59	102.941		
	Ni	60	102.492		
	Cu	65	100.878		
	Zn	66	104.786		
>	Ge	72		108.089	
	As	75	102.655		
	Se	82	101.546		
	Se-1	77	105.425		
	Ga	71			
	Rb	85			
>	Y	89		107.828	
	Rh	103			
	Mo	98	96.022		
	Ag	107	83.888		
	Cd	111	107.952		
	Cd	114			
>	In	115		112.375	
	Sn	118			
	Sb	123	105.877		
	Ba	135	96.387		
	Ce	140			
>	Tb	159		114.258	
	Ho	165			
	Tl	203	103.792		
	Tl	205			
	Pb	206	102.912		

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	Pb	207	106.514	
	Pb	208	108.592	
	U	238	110.686	
>	Bi	209		101.778
	Na	23	93.341	
	Mg	24	97.885	
	K	39	93.759	
	Ca	43	91.880	
	Fe	54	97.894	
	Fe	57	132.603	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 12:37:42
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	25059.4	1.6	**54.4785**	38.302	70.3	ug/L	21640	Standard
|	**Be**	9	211096.1	0.8	**53.1177**	0.940	1.8	ug/L	16	Standard
|	**Al**	27	1203245.6	0.5	**48.2163**	1.170	2.4	ug/L	19981	Standard
⌊>	**Sc**	45	449105.5	2.5				ug/L	408994	Standard
⌈	**Ti**	47	202101.2	1.8	**100.4431**	1.905	1.9	ug/L	102	Standard
|	**V**	51	1180486.2	1.0	**51.1222**	0.590	1.2	ug/L	5722	Standard
|	**Cr**	52	986171.0	0.9	**52.0647**	0.325	0.6	ug/L	18417	Standard
|	**Cr**	53	109599.1	2.0	**51.7484**	1.523	2.9	ug/L	405	Standard
|	**Mn**	55	1242671.6	1.2	**51.6151**	1.072	2.1	ug/L	4298	Standard
|	**Co**	59	837896.9	2.2	**50.9351**	1.319	2.6	ug/L	123	Standard
|	**Ni**	60	171103.9	1.8	**50.9575**	1.003	2.0	ug/L	90	Standard
|	**Cu**	65	149040.8	0.8	**50.2725**	0.449	0.9	ug/L	148	Standard
|	**Zn**	66	67108.3	1.4	**49.6555**	0.563	1.1	ug/L	842	Standard
| >	**Ge**	72	319452.7	0.9				ug/L	293466	Standard
|	**As**	75	60524.8	0.5	**49.7894**	0.293	0.6	ug/L	-207	Standard
|	**Se**	82	6008.3	1.5	**50.2075**	0.655	1.3	ug/L	19	Standard
⌊	**Se-1**	77	4243.6	2.6	**50.9882**	1.827	3.6	ug/L	80	Standard
	Ga	71	254477.5	2.6				mg/L	234805	Standard
⌈	**Rb**	85	936.7	6.0				ug/L	13	Standard
| >	**Y**	89	284028.6	1.6				ug/L	262487	Standard
⌊	**Rh**	103	32.7	12.7				ug/L	4	Standard
⌈	**Mo**	98	395347.6	0.4	**92.4404**	1.569	1.7	ug/L	10	Standard
|	**Ag**	107	421313.3	2.8	**51.3529**	0.744	1.4	ug/L	39	Standard
|	**Cd**	111	253989.0	1.1	**51.9607**	0.473	0.9	mg/L	525	Standard
|	**Cd**	114	703449.9	0.8	**49.7805**	0.843	1.7	ug/L	1503	Standard
| >	**In**	115	1056402.8	1.4				ug/L	917693	Standard
|	**Sn**	118	927170.4	1.2	**49.8459**	0.961	1.9	ug/L	5013	Standard
|	**Sb**	123	612790.9	0.6	**51.0486**	0.387	0.8	ug/L	29	Standard
⌊	**Ba**	135	276511.3	0.3	**47.0434**	0.774	1.6	ug/L	68	Standard
⌈	**Ce**	140	1063.4	6.1				ug/L	58	Standard
⌊>	**Tb**	159	1140133.4	1.3				ug/L	1008624	Standard
⌈	**Ho**	165	36.7	27.5				ug/L	12	Standard
|	**Tl**	203	911636.9	0.5	**50.7868**	0.467	0.9	ug/L	9	Standard
|	**Tl**	205	2420386.7	0.6	**52.3705**	0.212	0.4	ug/L	29	Standard
|	**Pb**	206	738718.2	0.4	**50.6708**	0.335	0.7	ug/L	458	Standard
|	**Pb**	207	613767.0	0.2	**50.9571**	0.336	0.7	ug/L	380	Standard
|	**Pb**	208	2840003.4	0.3	**50.0938**	0.407	0.8	ug/L	1773	Standard
|	**U**	238	2834691.6	1.0	**52.5066**	0.472	0.9	ug/L	42	Standard
⌊>	**Bi**	209	593423.3	0.9				ug/L	569761	Standard
⌈	**Na**	23	16224.0	1.5	**4.8132**	0.117	2.4	mg/L	89	Standard
|	**Mg**	24	1481876.7	1.1	**4.9058**	0.091	1.9	mg/L	158	Standard

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	K	39	55667.4	0.6	**4.7688**	0.134	2.8	mg/L	532	Standard
	Ca	43	3739.1	2.0	**4.7788**	0.096	2.0	mg/L	142	Standard
	Fe	54	29614.0	0.7	**4.9625**	0.123	2.5	mg/L	890	Standard
	Fe	57	781908.1	1.5	**6.5940**	0.127	1.9	mg/L	3398	Standard
>	**Sc-1**	45	449105.5	2.5				mg/L	408994	Standard
	Cl	35	253829.1	25.7				ug/L	45742	Standard
	Kr	83	51.1	10.9				ug/L	47	Standard
	Br	81	13161.4	1.3				ug/L	11318	Standard
	P	31	77397.2	1.6				ug/L	55334	Standard
	S	34	819575.9	1.4				ug/L	546407	Standard
	Sr	88	727.4	11.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.433		
>	Sc	45			
	Ti	47	100.443		
	V	51	102.244		
	Cr	52	104.129		
	Cr	53			
	Mn	55	103.230		
	Co	59	101.870		
	Ni	60	101.915		
	Cu	65	100.545		
	Zn	66	99.311		
>	Ge	72		108.855	
	As	75	99.579		
	Se	82	100.415		
	Se-1	77	101.976		
	Ga	71			
	Rb	85			
>	Y	89		108.207	
	Rh	103			
	Mo	98	92.440		
	Ag	107	102.706		
	Cd	111	103.921		
	Cd	114			
>	In	115		115.115	
	Sn	118	99.692		
	Sb	123	102.097		
	Ba	135	94.087		
	Ce	140			
>	Tb	159		113.039	
	Ho	165			
	Tl	203	101.574		
	Tl	205			
	Pb	206	101.342		

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	Pb	207	101.914	
	Pb	208	100.188	
	U	238	105.013	
>	Bi	209		104.153
	Na	23	96.264	
	Mg	24	98.116	
	K	39	95.375	
	Ca	43	95.576	
	Fe	54	99.251	
	Fe	57	131.880	
>	Sc-1	45		
	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: Tuesday, May 01, 2012 12:40:29
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	24859.4	0.8	**30.4487**	25.887	85.0	ug/L	21640	Standard
|	**Be**	9	33.3	35.5	**0.0075**	0.003	40.6	ug/L	16	Standard
|	**Al**	27	19098.0	3.0	**0.0237**	0.028	116.8	ug/L	19981	Standard
⌊>	**Sc**	45	453684.5	1.2				ug/L	408994	Standard
⌈	**Ti**	47	120.7	12.0	**-0.0318**	0.006	20.1	ug/L	102	Standard
|	**V**	51	6533.0	1.2	**0.0200**	0.003	16.4	ug/L	5722	Standard
|	**Cr**	52	20210.1	0.6	**0.0305**	0.019	60.8	ug/L	18417	Standard
|	**Cr**	53	728.0	4.8	**0.1508**	0.013	8.8	ug/L	405	Standard
|	**Mn**	55	1679.1	2.5	**-0.0778**	0.002	2.6	ug/L	4298	Standard
|	**Co**	59	206.3	22.2	**0.0049**	0.003	55.8	ug/L	123	Standard
|	**Ni**	60	67.3	15.6	**-0.0021**	0.003	141.5	ug/L	90	Standard
|	**Cu**	65	192.3	5.3	**0.0074**	0.004	53.0	ug/L	148	Standard
|	**Zn**	66	212.3	11.2	**-0.8421**	0.019	2.3	ug/L	842	Standard
| >	**Ge**	72	322404.3	1.7				ug/L	293466	Standard
|	**As**	75	-201.7	19.8	**-0.0074**	0.033	449.6	ug/L	-207	Standard
|	**Se**	82	32.1	22.9	**0.0682**	0.057	83.4	ug/L	19	Standard
⌊	**Se-1**	77	89.3	13.0	**-0.1096**	0.151	137.9	ug/L	80	Standard
	Ga	71	263536.2	0.9				mg/L	234805	Standard
⌈	**Rb**	85	24.7	4.7				ug/L	13	Standard
| >	**Y**	89	282778.7	1.2				ug/L	262487	Standard
⌊	**Rh**	103	2.7	43.3				ug/L	4	Standard
⌈	**Mo**	98	132.2	35.5	**0.0262**	0.011	41.0	ug/L	10	Standard
|	**Ag**	107	108.7	30.6	**0.0073**	0.004	54.1	ug/L	39	Standard
|	**Cd**	111	647.8	3.1	**0.0145**	0.003	19.7	mg/L	525	Standard
|	**Cd**	114	1748.5	3.9	**0.0054**	0.004	70.4	ug/L	1503	Standard
| >	**In**	115	1045953.9	1.0				ug/L	917693	Standard
|	**Sn**	118	1352.1	6.6	**-0.1523**	0.004	2.7	ug/L	5013	Standard
|	**Sb**	123	633.5	20.3	**0.0510**	0.010	20.1	ug/L	29	Standard
⌊	**Ba**	135	99.7	12.6	**0.0058**	0.002	35.0	ug/L	68	Standard
⌈	**Ce**	140	58.7	16.8				ug/L	58	Standard
⌊>	**Tb**	159	1123945.1	0.9				ug/L	1008624	Standard
⌈	**Ho**	165	10.7	47.2				ug/L	12	Standard
|	**Tl**	203	260.0	19.1	**0.0156**	0.003	18.6	ug/L	9	Standard
|	**Tl**	205	618.0	15.2	**0.0164**	0.002	13.3	ug/L	29	Standard
|	**Pb**	206	518.3	9.8	**0.0024**	0.004	160.4	ug/L	458	Standard
|	**Pb**	207	436.0	11.6	**0.0023**	0.005	199.0	ug/L	380	Standard
|	**Pb**	208	1982.7	9.0	**0.0036**	0.004	97.6	ug/L	1773	Standard
|	**U**	238	434.0	24.9	**0.0121**	0.002	17.1	ug/L	42	Standard
⌊>	**Bi**	209	611034.2	1.5				ug/L	569761	Standard
⌈	**Na**	23	108.7	12.3	**0.0045**	0.004	95.2	mg/L	89	Standard
|	**Mg**	24	359.0	17.4	**0.0007**	0.000	32.0	mg/L	158	Standard

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	K	39	602.0	7.4	**-0.0012**	0.004	337.1	mg/L	532	Standard
	Ca	43	106.0	10.0	**-0.0613**	0.015	24.9	mg/L	142	Standard
	Fe	54	971.9	3.4	**-0.0062**	0.008	123.8	mg/L	890	Standard
	Fe	57	4291.3	3.7	**0.0042**	0.001	32.0	mg/L	3398	Standard
>	**Sc-1**	45	453684.5	1.2				mg/L	408994	Standard
	Cl	35	189563.9	2.4				ug/L	45742	Standard
	Kr	83	48.0	9.7				ug/L	47	Standard
	Br	81	13050.0	1.8				ug/L	11318	Standard
	P	31	82430.3	1.8				ug/L	55334	Standard
	S	34	846829.1	1.1				ug/L	546407	Standard
	Sr	88	297.3	11.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		109.861	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		107.730	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		113.976	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.434	
	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

107.244

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 17 WG396596-02
Sample Date/Time: Tuesday, May 01, 2012 12:54:15
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	26672.8	0.4	**38.7439**	29.250	75.5	ug/L	21640	Standard
	Be	9	18.7	13.5	**0.0036**	0.001	19.3	ug/L	16	Standard
	Al	27	119625.6	4.3	**3.7749**	0.265	7.0	ug/L	19981	Standard
>	**Sc**	45	483769.2	2.4				ug/L	408994	Standard
	Ti	47	344.7	19.9	**0.0688**	0.032	46.5	ug/L	102	Standard
	V	51	7142.3	1.6	**0.0283**	0.006	22.1	ug/L	5722	Standard
	Cr	52	22588.2	1.2	**0.0873**	0.021	23.7	ug/L	18417	Standard
	Cr	53	679.3	0.6	**0.1095**	0.004	3.3	ug/L	405	Standard
	Mn	55	5714.4	2.1	**0.0751**	0.006	8.3	ug/L	4298	Standard
	Co	59	886.4	36.1	**0.0427**	0.018	41.9	ug/L	123	Standard
	Ni	60	145.3	3.5	**0.0184**	0.001	7.5	ug/L	90	Standard
	Cu	65	664.7	2.5	**0.1525**	0.005	3.0	ug/L	148	Standard
	Zn	66	5401.6	0.9	**2.8043**	0.033	1.2	ug/L	842	Standard
>	**Ge**	72	342292.0	0.7				ug/L	293466	Standard
	As	75	-234.9	32.3	**-0.0233**	0.059	251.2	ug/L	-207	Standard
	Se	82	29.1	25.6	**0.0293**	0.057	193.3	ug/L	19	Standard
	Se-1	77	96.0	12.0	**-0.0976**	0.130	133.1	ug/L	80	Standard
	Ga	71	283542.6	0.8				mg/L	234805	Standard
	Rb	85	134.0	22.5				ug/L	13	Standard
>	**Y**	89	306817.7	1.3				ug/L	262487	Standard
	Rh	103	0.7	173.2				ug/L	4	Standard
	Mo	98	29.4	10.3	**0.0016**	0.001	37.3	ug/L	10	Standard
	Ag	107	49.0	25.1	**-0.0003**	0.001	407.8	ug/L	39	Standard
	Cd	111	647.3	6.4	**0.0080**	0.007	90.4	mg/L	525	Standard
	Cd	114	1796.1	4.6	**0.0027**	0.006	212.9	ug/L	1503	Standard
>	**In**	115	1098286.5	1.3				ug/L	917693	Standard
	Sn	118	2037.5	3.3	**-0.1202**	0.002	1.9	ug/L	5013	Standard
	Sb	123	241.3	2.3	**0.0171**	0.000	2.9	ug/L	29	Standard
	Ba	135	366.0	11.2	**0.0486**	0.006	12.4	ug/L	68	Standard
	Ce	140	400.7	5.2				ug/L	58	Standard
>	**Tb**	159	1149157.1	0.5				ug/L	1008624	Standard
	Ho	165	21.3	32.9				ug/L	12	Standard
	Tl	203	177.0	2.3	**0.0108**	0.000	1.7	ug/L	9	Standard
	Tl	205	404.7	4.0	**0.0117**	0.000	2.6	ug/L	29	Standard
	Pb	206	578.0	5.2	**0.0053**	0.002	36.0	ug/L	458	Standard
	Pb	207	493.3	4.1	**0.0058**	0.001	20.3	ug/L	380	Standard
	Pb	208	2243.1	3.1	**0.0070**	0.001	10.9	ug/L	1773	Standard
	U	238	48.0	10.4	**0.0051**	0.000	1.5	ug/L	42	Standard
>	**Bi**	209	627552.5	1.1				ug/L	569761	Standard
	Na	23	124.7	9.7	**0.0070**	0.004	59.3	mg/L	89	Standard
	Mg	24	2359.2	2.4	**0.0068**	0.000	5.1	mg/L	158	Standard

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	K	39	648.0	2.7	**-0.0007**	0.002	346.8	mg/L	532	Standard
	Ca	43	130.7	6.4	**-0.0396**	0.009	22.9	mg/L	142	Standard
	Fe	54	1060.9	3.5	**-0.0023**	0.006	245.1	mg/L	890	Standard
	Fe	57	5541.0	1.5	**0.0118**	0.001	10.0	mg/L	3398	Standard
>	**Sc-1**	45	483769.2	2.4				mg/L	408994	Standard
	Cl	35	218559.8	2.0				ug/L	45742	Standard
	Kr	83	49.3	17.7				ug/L	47	Standard
	Br	81	15047.5	0.6				ug/L	11318	Standard
	P	31	89527.1	1.7				ug/L	55334	Standard
	S	34	895659.4	1.0				ug/L	546407	Standard
	Sr	88	2032.8	5.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		116.638	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		116.889	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		119.679	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.933	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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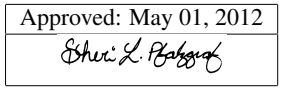

	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

110.143

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 17 WG396596-02
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Method 6020 - Summary Report

Sample ID: LCSW 17 WG396596-03
Sample Date/Time: Tuesday, May 01, 2012 12:57:02
Number of Replicates: 3
Autosampler Position: 238
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26951.6	0.8	**62.1844**	14.399	23.2	ug/L	21640	Standard
|	**Be**	9	110196.6	0.2	**25.9371**	0.409	1.6	ug/L	16	Standard
|	**Al**	27	675904.6	0.5	**24.9782**	0.336	1.3	ug/L	19981	Standard
⌊>	**Sc**	45	480061.0	1.7				ug/L	408994	Standard
⌈	**Ti**	47	173.3	9.4	**-0.0110**	0.008	68.1	ug/L	102	Standard
|	**V**	51	618830.5	1.8	**24.7918**	0.082	0.3	ug/L	5722	Standard
|	**Cr**	52	541378.5	1.2	**26.0736**	0.127	0.5	ug/L	18417	Standard
|	**Cr**	53	59046.8	0.5	**25.8371**	0.463	1.8	ug/L	405	Standard
|	**Mn**	55	673342.0	0.9	**25.9418**	0.406	1.6	ug/L	4298	Standard
|	**Co**	59	451104.7	0.7	**25.5064**	0.534	2.1	ug/L	123	Standard
|	**Ni**	60	92934.2	1.1	**25.7389**	0.648	2.5	ug/L	90	Standard
|	**Cu**	65	82398.1	0.7	**25.8294**	0.553	2.1	ug/L	148	Standard
|	**Zn**	66	40449.9	0.6	**27.4038**	0.409	1.5	ug/L	842	Standard
| >	**Ge**	72	343434.5	1.5				ug/L	293466	Standard
|	**As**	75	31782.0	1.2	**24.4004**	0.321	1.3	ug/L	-207	Standard
|	**Se**	82	3186.3	0.5	**24.6691**	0.365	1.5	ug/L	19	Standard
⌊	**Se-1**	77	2270.8	1.1	**24.7728**	0.147	0.6	ug/L	80	Standard
	Ga	71	281245.7	2.9				mg/L	234805	Standard
⌈	**Rb**	85	44.7	24.7				ug/L	13	Standard
| >	**Y**	89	311350.5	1.8				ug/L	262487	Standard
⌊	**Rh**	103	26.7	24.1				ug/L	4	Standard
⌈	**Mo**	98	46.7	9.2	**0.0055**	0.001	18.2	ug/L	10	Standard
|	**Ag**	107	226054.9	0.7	**26.3792**	0.677	2.6	ug/L	39	Standard
|	**Cd**	111	130882.2	1.0	**25.5752**	0.826	3.2	mg/L	525	Standard
|	**Cd**	114	365042.1	1.2	**24.6686**	0.721	2.9	ug/L	1503	Standard
| >	**In**	115	1103858.4	2.3				ug/L	917693	Standard
|	**Sn**	118	1478.7	5.6	**-0.1496**	0.004	2.6	ug/L	5013	Standard
|	**Sb**	123	311640.8	0.4	**24.8511**	0.581	2.3	ug/L	29	Standard
⌊	**Ba**	135	144316.4	0.4	**23.4970**	0.593	2.5	ug/L	68	Standard
⌈	**Ce**	140	144.0	10.8				ug/L	58	Standard
⌊>	**Tb**	159	1160859.3	1.1				ug/L	1008624	Standard
⌈	**Ho**	165	9.3	32.7				ug/L	12	Standard
|	**Tl**	203	476655.3	1.0	**24.8238**	0.218	0.9	ug/L	9	Standard
|	**Tl**	205	1148319.2	0.9	**23.2286**	0.081	0.3	ug/L	29	Standard
|	**Pb**	206	386563.0	0.9	**24.7706**	0.190	0.8	ug/L	458	Standard
|	**Pb**	207	331434.7	0.9	**25.7068**	0.221	0.9	ug/L	380	Standard
|	**Pb**	208	1514037.8	0.8	**24.9493**	0.162	0.7	ug/L	1773	Standard
|	**U**	238	1315815.3	0.9	**22.7864**	0.137	0.6	ug/L	42	Standard
⌊>	**Bi**	209	634790.3	0.8				ug/L	569761	Standard
⌈	**Na**	23	99.3	15.2	**0.0001**	0.004	5113.3	mg/L	89	Standard
|	**Mg**	24	1007.0	3.2	**0.0026**	0.000	3.1	mg/L	158	Standard

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	K	39	629.3	3.2	**-0.0018**	0.002	85.2	mg/L	532	Standard
	Ca	43	117.3	15.8	**-0.0551**	0.022	40.5	mg/L	142	Standard
	Fe	54	1001.3	4.5	**-0.0106**	0.009	84.5	mg/L	890	Standard
	Fe	57	5160.9	4.9	**0.0091**	0.002	18.0	mg/L	3398	Standard
>	**Sc-1**	45	480061.0	1.7				mg/L	408994	Standard
	Cl	35	164358.4	1.3				ug/L	45742	Standard
	Kr	83	49.3	16.9				ug/L	47	Standard
	Br	81	14052.2	0.7				ug/L	11318	Standard
	P	31	87183.9	2.7				ug/L	55334	Standard
	S	34	871984.1	0.6				ug/L	546407	Standard
	Sr	88	973.4	3.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		117.027	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.615	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		120.286	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.093	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	111.413
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for sample	In	115	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: FBLK WG396634-01
Sample Date/Time: Tuesday, May 01, 2012 12:59:49
Number of Replicates: 3
Autosampler Position: 239
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	27036.8	0.9	**68.0057**	29.746	43.7	ug/L	21640	Standard
|	**Be**	9	24.3	44.3	**0.0050**	0.003	52.6	ug/L	16	Standard
|	**Al**	27	117901.6	1.0	**3.7465**	0.052	1.4	ug/L	19981	Standard
⌊>	**Sc**	45	479542.3	1.9				ug/L	408994	Standard
⌈	**Ti**	47	452.0	29.7	**0.1170**	0.063	53.5	ug/L	102	Standard
|	**V**	51	7343.0	1.4	**0.0341**	0.008	23.4	ug/L	5722	Standard
|	**Cr**	52	23535.3	0.6	**0.1251**	0.016	12.6	ug/L	18417	Standard
|	**Cr**	53	748.0	8.5	**0.1369**	0.025	18.1	ug/L	405	Standard
|	**Mn**	55	4268.9	1.4	**0.0175**	0.004	25.3	ug/L	4298	Standard
|	**Co**	59	140.3	11.0	**0.0004**	0.001	230.8	ug/L	123	Standard
|	**Ni**	60	274.3	3.4	**0.0537**	0.003	5.3	ug/L	90	Standard
|	**Cu**	65	2240.5	2.4	**0.6434**	0.024	3.7	ug/L	148	Standard
|	**Zn**	66	7493.5	1.8	**4.2339**	0.059	1.4	ug/L	842	Standard
| >	**Ge**	72	345171.2	1.4				ug/L	293466	Standard
|	**As**	75	-230.0	15.1	**-0.0177**	0.024	137.6	ug/L	-207	Standard
|	**Se**	82	26.6	21.4	**0.0084**	0.045	537.2	ug/L	19	Standard
⌊	**Se-1**	77	96.0	6.3	**-0.1059**	0.082	77.6	ug/L	80	Standard
	Ga	71	277350.9	1.0				mg/L	234805	Standard
⌈	**Rb**	85	110.0	13.1				ug/L	13	Standard
| >	**Y**	89	311336.3	0.8				ug/L	262487	Standard
⌊	**Rh**	103	4.0	0.0				ug/L	4	Standard
⌈	**Mo**	98	29.6	15.2	**0.0016**	0.001	63.4	ug/L	10	Standard
|	**Ag**	107	69.3	24.8	**0.0020**	0.002	97.5	ug/L	39	Standard
|	**Cd**	111	663.6	8.0	**0.0099**	0.009	93.2	mg/L	525	Standard
|	**Cd**	114	1873.8	2.2	**0.0068**	0.004	64.9	ug/L	1503	Standard
| >	**In**	115	1109443.0	1.5				ug/L	917693	Standard
|	**Sn**	118	1728.1	1.5	**-0.1371**	0.002	1.3	ug/L	5013	Standard
|	**Sb**	123	824.9	31.7	**0.0630**	0.020	31.2	ug/L	29	Standard
⌊	**Ba**	135	632.7	1.6	**0.0912**	0.003	3.1	ug/L	68	Standard
⌈	**Ce**	140	290.7	8.5				ug/L	58	Standard
⌊>	**Tb**	159	1159816.8	0.4				ug/L	1008624	Standard
⌈	**Ho**	165	11.3	20.4				ug/L	12	Standard
|	**Tl**	203	152.7	22.4	**0.0095**	0.002	18.8	ug/L	9	Standard
|	**Tl**	205	400.7	21.1	**0.0116**	0.002	14.8	ug/L	29	Standard
|	**Pb**	206	1660.4	0.5	**0.0753**	0.000	0.4	ug/L	458	Standard
|	**Pb**	207	1386.1	1.5	**0.0757**	0.002	2.3	ug/L	380	Standard
|	**Pb**	208	6311.2	1.1	**0.0747**	0.001	1.8	ug/L	1773	Standard
|	**U**	238	128.3	21.2	**0.0065**	0.000	7.3	ug/L	42	Standard
⌊>	**Bi**	209	629288.5	0.6				ug/L	569761	Standard
⌈	**Na**	23	177.3	0.7	**0.0219**	0.001	5.3	mg/L	89	Standard
|	**Mg**	24	3008.3	2.3	**0.0088**	0.000	2.3	mg/L	158	Standard

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	K	39	645.3	5.8	**-0.0004**	0.004	907.1	mg/L	532	Standard
	Ca	43	124.7	8.2	**-0.0455**	0.016	34.9	mg/L	142	Standard
	Fe	54	1085.1	6.7	**0.0033**	0.014	429.6	mg/L	890	Standard
	Fe	57	5731.8	3.8	**0.0137**	0.002	15.8	mg/L	3398	Standard
>	**Sc-1**	45	479542.3	1.9				mg/L	408994	Standard
	Cl	35	303125.9	0.6				ug/L	45742	Standard
	Kr	83	54.2	13.5				ug/L	47	Standard
	Br	81	17035.9	1.6				ug/L	11318	Standard
	P	31	88136.0	1.1				ug/L	55334	Standard
	S	34	865358.9	1.5				ug/L	546407	Standard
	Sr	88	2847.6	1.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		117.619	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.610	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		120.895	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.990	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	110.448
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for sample	In	115	Rerun sample

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Method 6020 - Summary Report

Sample ID: L1204091004 WG396596-01
Sample Date/Time: Tuesday, May 01, 2012 13:02:36
Number of Replicates: 3
Autosampler Position: 240
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	38020.3	0.6	**569.1802**	50.219	8.8	ug/L	21640	Standard
	Be	9	186.0	9.4	**0.0420**	0.003	7.1	ug/L	16	Standard
	Al	27	1848738.7	4.2	**68.2268**	3.606	5.3	ug/L	19981	Standard
>	**Sc**	45	489966.8	3.0				ug/L	408994	Standard
	Ti	47	1688.1	0.9	**0.6953**	0.017	2.5	ug/L	102	Standard
	V	51	9556.0	2.5	**0.1277**	0.009	6.9	ug/L	5722	Standard
	Cr	52	40009.4	0.9	**0.9702**	0.025	2.6	ug/L	18417	Standard
	Cr	53	2618.2	2.9	**0.9708**	0.021	2.2	ug/L	405	Standard
	Mn	55	643524.8	3.0	**24.9514**	0.425	1.7	ug/L	4298	Standard
	Co	59	15387.1	1.3	**0.8686**	0.002	0.3	ug/L	123	Standard
	Ni	60	3944.8	4.5	**1.0785**	0.038	3.5	ug/L	90	Standard
	Cu	65	1151.4	3.2	**0.3071**	0.007	2.3	ug/L	148	Standard
	Zn	66	6260.3	2.6	**3.4247**	0.094	2.7	ug/L	842	Standard
>	**Ge**	72	341092.2	1.6				ug/L	293466	Standard
	As	75	-141.4	7.7	**0.0480**	0.010	20.1	ug/L	-207	Standard
	Se	82	34.5	18.0	**0.0725**	0.046	63.0	ug/L	19	Standard
	Se-1	77	110.7	5.5	**0.0752**	0.063	84.2	ug/L	80	Standard
	Ga	71	280829.1	2.6				mg/L	234805	Standard
	Rb	85	6540.7	2.4				ug/L	13	Standard
>	**Y**	89	313120.7	1.1				ug/L	262487	Standard
	Rh	103	6.0	57.7				ug/L	4	Standard
	Mo	98	472.5	7.2	**0.1017**	0.008	7.8	ug/L	10	Standard
	Ag	107	106.3	25.4	**0.0064**	0.003	47.3	ug/L	39	Standard
	Cd	111	730.7	5.0	**0.0251**	0.006	22.4	mg/L	525	Standard
	Cd	114	2017.3	6.2	**0.0184**	0.007	39.8	ug/L	1503	Standard
>	**In**	115	1093747.7	1.4				ug/L	917693	Standard
	Sn	118	1323.4	4.8	**-0.1570**	0.003	2.2	ug/L	5013	Standard
	Sb	123	376.8	11.0	**0.0280**	0.003	10.5	ug/L	29	Standard
	Ba	135	52835.3	1.8	**8.6713**	0.056	0.6	ug/L	68	Standard
	Ce	140	38715.4	1.2				ug/L	58	Standard
>	**Tb**	159	1146616.8	1.7				ug/L	1008624	Standard
	Ho	165	834.0	1.5				ug/L	12	Standard
	Tl	203	316.0	20.9	**0.0181**	0.003	17.7	ug/L	9	Standard
	Tl	205	798.7	19.9	**0.0197**	0.003	15.0	ug/L	29	Standard
	Pb	206	1948.1	6.8	**0.0944**	0.006	6.7	ug/L	458	Standard
	Pb	207	1569.1	1.8	**0.0905**	0.001	1.6	ug/L	380	Standard
	Pb	208	7371.0	4.5	**0.0928**	0.003	3.7	ug/L	1773	Standard
	U	238	1089.4	8.2	**0.0234**	0.001	5.5	ug/L	42	Standard
>	**Bi**	209	626624.6	1.9				ug/L	569761	Standard
	Na	23	2860.9	0.8	**0.7551**	0.027	3.6	mg/L	89	Standard
	Mg	24	56060.5	1.3	**0.1696**	0.003	1.9	mg/L	158	Standard

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	K	39	3281.0	2.4	**0.2078**	0.011	5.3	mg/L	532	Standard
	Ca	43	282.7	1.5	**0.1440**	0.007	4.8	mg/L	142	Standard
	Fe	54	2030.2	3.7	**0.1499**	0.020	13.1	mg/L	890	Standard
	Fe	57	31751.3	4.5	**0.2150**	0.015	7.0	mg/L	3398	Standard
>	**Sc-1**	45	489966.8	3.0				mg/L	408994	Standard
	Cl	35	280450.6	1.8				ug/L	45742	Standard
	Kr	83	56.2	2.5				ug/L	47	Standard
	Br	81	19927.1	4.2				ug/L	11318	Standard
	P	31	89311.2	1.6				ug/L	55334	Standard
	S	34	791572.6	0.5				ug/L	546407	Standard
	Sr	88	45888.8	3.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		116.229	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		119.290	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		119.184	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.681	
	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

109.980

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091005S WG396596-04
Sample Date/Time: Tuesday, May 01, 2012 13:05:24
Number of Replicates: 3
Autosampler Position: 241
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	36788.6	1.4	**435.1456**	45.965	10.6	ug/L	21640	Standard
	Be	9	115674.6	0.6	**25.5593**	0.500	2.0	ug/L	16	Standard
	Al	27	2407365.0	1.4	**85.2742**	2.449	2.9	ug/L	19981	Standard
>	Sc	45	511374.9	1.4				ug/L	408994	Standard
	Ti	47	2460.2	6.7	**1.0228**	0.071	6.9	ug/L	102	Standard
	V	51	656352.9	2.4	**25.7555**	1.013	3.9	ug/L	5722	Standard
	Cr	52	577555.4	1.5	**27.2749**	0.728	2.7	ug/L	18417	Standard
	Cr	53	63155.4	2.1	**27.0600**	0.972	3.6	ug/L	405	Standard
	Mn	55	1306690.6	1.0	**49.4077**	1.209	2.4	ug/L	4298	Standard
	Co	59	488837.8	0.7	**27.0517**	0.596	2.2	ug/L	123	Standard
	Ni	60	101203.2	0.6	**27.4319**	0.558	2.0	ug/L	90	Standard
	Cu	65	85900.2	1.1	**26.3548**	0.614	2.3	ug/L	148	Standard
	Zn	66	41885.5	0.9	**27.7856**	0.502	1.8	ug/L	842	Standard
>	Ge	72	350914.4	1.5				ug/L	293466	Standard
	As	75	33055.4	1.5	**24.8374**	0.613	2.5	ug/L	-207	Standard
	Se	82	3229.6	3.3	**24.4762**	1.108	4.5	ug/L	19	Standard
	Se-1	77	2329.8	1.6	**24.8785**	0.013	0.1	ug/L	80	Standard
	Ga	71	285419.8	1.8				mg/L	234805	Standard
	Rb	85	5296.3	1.0				ug/L	13	Standard
>	Y	89	322291.8	1.8				ug/L	262487	Standard
	Rh	103	32.7	28.9				ug/L	4	Standard
	Mo	98	312.8	1.5	**0.0638**	0.002	3.4	ug/L	10	Standard
	Ag	107	232634.8	2.1	**26.6692**	0.183	0.7	ug/L	39	Standard
	Cd	111	135991.9	1.7	**26.1063**	0.092	0.4	mg/L	525	Standard
	Cd	114	373710.3	1.6	**24.8108**	0.076	0.3	ug/L	1503	Standard
>	In	115	1123188.8	1.8				ug/L	917693	Standard
	Sn	118	2486.9	1.5	**-0.0997**	0.003	3.0	ug/L	5013	Standard
	Sb	123	313643.1	2.1	**24.5722**	0.334	1.4	ug/L	29	Standard
	Ba	135	201342.4	1.2	**32.2151**	0.591	1.8	ug/L	68	Standard
	Ce	140	43177.4	1.4				ug/L	58	Standard
>	Tb	159	1179648.1	0.9				ug/L	1008624	Standard
	Ho	165	1130.0	7.4				ug/L	12	Standard
	Tl	203	494197.1	1.0	**25.5471**	0.191	0.7	ug/L	9	Standard
	Tl	205	1189440.4	1.3	**23.8831**	0.294	1.2	ug/L	29	Standard
	Pb	206	400578.1	0.9	**25.4800**	0.165	0.6	ug/L	458	Standard
	Pb	207	342713.0	0.6	**26.3870**	0.257	1.0	ug/L	380	Standard
	Pb	208	1567198.0	0.8	**25.6357**	0.196	0.8	ug/L	1773	Standard
	U	238	1358307.0	1.0	**23.3494**	0.297	1.3	ug/L	42	Standard
>	Bi	209	639506.8	0.7				ug/L	569761	Standard
	Na	23	2818.9	2.7	**0.7110**	0.027	3.8	mg/L	89	Standard
	Mg	24	44925.5	0.5	**0.1301**	0.001	1.0	mg/L	158	Standard

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	K	39	2913.6	2.3	**0.1687**	0.004	2.3	mg/L	532	Standard
	Ca	43	245.3	4.0	**0.0859**	0.015	17.7	mg/L	142	Standard
	Fe	54	1435.5	4.6	**0.0456**	0.013	27.5	mg/L	890	Standard
	Fe	57	16221.4	5.3	**0.0890**	0.008	8.9	mg/L	3398	Standard
>	**Sc-1**	45	511374.9	1.4				mg/L	408994	Standard
	Cl	35	253506.4	2.1				ug/L	45742	Standard
	Kr	83	54.2	5.8				ug/L	47	Standard
	Br	81	19481.5	2.6				ug/L	11318	Standard
	P	31	94443.1	0.7				ug/L	55334	Standard
	S	34	802684.5	0.6				ug/L	546407	Standard
	Sr	88	41225.4	2.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		119.576	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		122.784	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		122.393	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		116.956	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	112.241
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample

Sample ID: L1204091005S WG396596-04
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Approved: May 01, 2012
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Method 6020 - Summary Report

Sample ID: L1204091006SD WG396596-05
Sample Date/Time: Tuesday, May 01, 2012 13:08:11
Number of Replicates: 3
Autosampler Position: 242
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	36720.5	2.3	**462.6534**	3.959	0.9	ug/L	21640	Standard
|	**Be**	9	113331.7	1.5	**25.4994**	0.236	0.9	ug/L	16	Standard
|	**Al**	27	2455386.2	2.0	**88.5869**	1.550	1.8	ug/L	19981	Standard
⌊>	**Sc**	45	502169.2	2.3				ug/L	408994	Standard
⌈	**Ti**	47	2118.1	5.9	**0.8724**	0.065	7.5	ug/L	102	Standard
|	**V**	51	639014.5	1.3	**25.1669**	0.207	0.8	ug/L	5722	Standard
|	**Cr**	52	562493.3	2.2	**26.6466**	0.388	1.5	ug/L	18417	Standard
|	**Cr**	53	61673.9	1.4	**26.5261**	0.367	1.4	ug/L	405	Standard
|	**Mn**	55	1299623.7	3.4	**49.3269**	0.868	1.8	ug/L	4298	Standard
|	**Co**	59	476354.8	2.5	**26.4638**	0.198	0.7	ug/L	123	Standard
|	**Ni**	60	97551.5	2.6	**26.5447**	0.232	0.9	ug/L	90	Standard
|	**Cu**	65	84615.4	2.9	**26.0600**	0.302	1.2	ug/L	148	Standard
|	**Zn**	66	42341.4	2.6	**28.2170**	0.546	1.9	ug/L	842	Standard
| >	**Ge**	72	349445.7	1.8				ug/L	293466	Standard
|	**As**	75	32633.7	1.1	**24.6240**	0.404	1.6	ug/L	-207	Standard
|	**Se**	82	3168.8	0.4	**24.1109**	0.546	2.3	ug/L	19	Standard
⌊	**Se-1**	77	2301.8	3.0	**24.6763**	0.768	3.1	ug/L	80	Standard
	Ga	71	285227.1	2.2				mg/L	234805	Standard
⌈	**Rb**	85	5930.5	3.8				ug/L	13	Standard
| >	**Y**	89	322235.6	1.3				ug/L	262487	Standard
⌊	**Rh**	103	16.0	25.0				ug/L	4	Standard
⌈	**Mo**	98	316.2	2.3	**0.0642**	0.001	1.8	ug/L	10	Standard
|	**Ag**	107	228082.5	1.5	**26.0194**	0.433	1.7	ug/L	39	Standard
|	**Cd**	111	134231.6	1.4	**25.6412**	0.558	2.2	mg/L	525	Standard
|	**Cd**	114	367955.2	1.3	**24.3063**	0.419	1.7	ug/L	1503	Standard
| >	**In**	115	1128806.6	1.2				ug/L	917693	Standard
|	**Sn**	118	2426.2	1.2	**-0.1034**	0.003	2.8	ug/L	5013	Standard
|	**Sb**	123	308202.0	0.8	**24.0271**	0.320	1.3	ug/L	29	Standard
⌊	**Ba**	135	196411.0	1.1	**31.2663**	0.459	1.5	ug/L	68	Standard
⌈	**Ce**	140	43897.5	1.1				ug/L	58	Standard
⌊>	**Tb**	159	1166470.7	0.9				ug/L	1008624	Standard
⌈	**Ho**	165	1012.0	6.1				ug/L	12	Standard
|	**Tl**	203	479936.8	1.5	**24.7342**	0.281	1.1	ug/L	9	Standard
|	**Tl**	205	1159620.7	0.7	**23.2174**	0.504	2.2	ug/L	29	Standard
|	**Pb**	206	399270.9	0.8	**25.3223**	0.469	1.9	ug/L	458	Standard
|	**Pb**	207	341664.8	0.9	**26.2277**	0.459	1.8	ug/L	380	Standard
|	**Pb**	208	1563397.5	1.5	**25.4954**	0.327	1.3	ug/L	1773	Standard
|	**U**	238	1336484.2	2.2	**22.9005**	0.108	0.5	ug/L	42	Standard
⌊>	**Bi**	209	641590.6	2.6				ug/L	569761	Standard
⌈	**Na**	23	2724.2	4.1	**0.6994**	0.037	5.2	mg/L	89	Standard
|	**Mg**	24	44705.9	1.6	**0.1319**	0.001	0.9	mg/L	158	Standard

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	K	39	3058.3	5.0	**0.1839**	0.008	4.2	mg/L	532	Standard
	Ca	43	238.0	9.2	**0.0822**	0.023	28.4	mg/L	142	Standard
	Fe	54	1388.7	5.5	**0.0424**	0.015	34.5	mg/L	890	Standard
	Fe	57	17098.4	12.5	**0.0975**	0.013	13.7	mg/L	3398	Standard
>	**Sc-1**	45	502169.2	2.3				mg/L	408994	Standard
	Cl	35	253516.5	1.2				ug/L	45742	Standard
	Kr	83	60.7	1.9				ug/L	47	Standard
	Br	81	22189.6	1.1				ug/L	11318	Standard
	P	31	90094.5	1.7				ug/L	55334	Standard
	S	34	786796.9	1.7				ug/L	546407	Standard
	Sr	88	40782.2	1.5				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		119.075	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		122.762	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		123.005	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.650	
	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

112.607

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample

Sample ID: L1204091006SD WG396596-05
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Method 6020 - Summary Report

Sample ID: L1204091011
Sample Date/Time: Tuesday, May 01, 2012 13:10:58
Number of Replicates: 3
Autosampler Position: 243
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	44024.9	1.8	**716.8138**	52.001	7.3	ug/L	21640	Standard
|	**Be**	9	122.7	3.4	**0.0256**	0.001	4.5	ug/L	16	Standard
|	**Al**	27	4932657.5	3.8	**170.9338**	5.812	3.4	ug/L	19981	Standard
⌊>	**Sc**	45	524824.7	1.0				ug/L	408994	Standard
⌈	**Ti**	47	5556.4	9.2	**2.4132**	0.240	9.9	ug/L	102	Standard
|	**V**	51	14128.6	0.6	**0.2953**	0.004	1.3	ug/L	5722	Standard
|	**Cr**	52	40642.8	1.1	**0.9349**	0.031	3.3	ug/L	18417	Standard
|	**Cr**	53	2783.6	3.3	**1.0039**	0.041	4.1	ug/L	405	Standard
|	**Mn**	55	300950.3	1.6	**11.2077**	0.133	1.2	ug/L	4298	Standard
|	**Co**	59	4069.5	0.9	**0.2166**	0.003	1.5	ug/L	123	Standard
|	**Ni**	60	3898.2	4.0	**1.0301**	0.037	3.6	ug/L	90	Standard
|	**Cu**	65	1306.1	2.6	**0.3426**	0.012	3.5	ug/L	148	Standard
|	**Zn**	66	8773.9	0.8	**4.9987**	0.020	0.4	ug/L	842	Standard
| >	**Ge**	72	352626.3	0.5				ug/L	293466	Standard
|	**As**	75	-162.6	32.3	**0.0360**	0.038	106.5	ug/L	-207	Standard
|	**Se**	82	36.7	18.6	**0.0811**	0.053	65.4	ug/L	19	Standard
⌊	**Se-1**	77	109.3	5.3	**0.0189**	0.067	355.4	ug/L	80	Standard
	Ga	71	289766.0	0.7				mg/L	234805	Standard
⌈	**Rb**	85	14834.6	1.8				ug/L	13	Standard
| >	**Y**	89	323411.3	0.6				ug/L	262487	Standard
⌊	**Rh**	103	10.0	34.6				ug/L	4	Standard
⌈	**Mo**	98	511.6	10.0	**0.1063**	0.011	10.1	ug/L	10	Standard
|	**Ag**	107	101.3	19.3	**0.0054**	0.002	42.9	ug/L	39	Standard
|	**Cd**	111	778.3	3.7	**0.0289**	0.004	13.7	mg/L	525	Standard
|	**Cd**	114	2284.4	4.1	**0.0310**	0.004	13.5	ug/L	1503	Standard
| >	**In**	115	1134698.2	1.3				ug/L	917693	Standard
|	**Sn**	118	1434.7	0.9	**-0.1539**	0.002	1.1	ug/L	5013	Standard
|	**Sb**	123	1614.7	29.9	**0.1232**	0.039	31.7	ug/L	29	Standard
⌊	**Ba**	135	40094.3	0.5	**6.3409**	0.114	1.8	ug/L	68	Standard
⌈	**Ce**	140	48613.9	1.0				ug/L	58	Standard
⌊>	**Tb**	159	1184293.7	0.3				ug/L	1008624	Standard
⌈	**Ho**	165	588.7	6.9				ug/L	12	Standard
|	**Tl**	203	388.3	9.4	**0.0215**	0.002	8.9	ug/L	9	Standard
|	**Tl**	205	904.0	12.0	**0.0215**	0.002	10.0	ug/L	29	Standard
|	**Pb**	206	5615.0	2.8	**0.3250**	0.012	3.7	ug/L	458	Standard
|	**Pb**	207	4806.1	1.0	**0.3371**	0.006	1.7	ug/L	380	Standard
|	**Pb**	208	21699.7	0.8	**0.3245**	0.005	1.6	ug/L	1773	Standard
|	**U**	238	944.7	6.8	**0.0205**	0.001	5.6	ug/L	42	Standard
⌊>	**Bi**	209	640409.5	1.0				ug/L	569761	Standard
⌈	**Na**	23	2117.5	6.9	**0.5131**	0.042	8.1	mg/L	89	Standard
|	**Mg**	24	85394.3	0.4	**0.2414**	0.003	1.1	mg/L	158	Standard

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Sheri L. Babyak

	K	39	3463.1	2.4	**0.2038**	0.008	3.9	mg/L	532	Standard
	Ca	43	393.3	7.9	**0.2473**	0.040	16.1	mg/L	142	Standard
	Fe	54	2838.9	1.3	**0.2481**	0.005	2.2	mg/L	890	Standard
	Fe	57	56020.8	4.0	**0.3744**	0.020	5.3	mg/L	3398	Standard
>	**Sc-1**	45	524824.7	1.0				mg/L	408994	Standard
	Cl	35	335357.8	2.2				ug/L	45742	Standard
	Kr	83	52.9	14.2				ug/L	47	Standard
	Br	81	19721.8	1.2				ug/L	11318	Standard
	P	31	107148.2	0.7				ug/L	55334	Standard
	S	34	818279.8	1.5				ug/L	546407	Standard
	Sr	88	49173.0	0.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		120.159	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		123.210	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		123.647	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		117.417	
	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

112.400

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ge 72 Int Std for sample	Ge	72	Rerun sample
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091011DL WG396696-02
Sample Date/Time: Tuesday, May 01, 2012 13:13:45
Number of Replicates: 3
Autosampler Position: 244
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	26659.4	1.2	**184.7939**	19.042	10.3	ug/L	21640	Standard
	Be	9	36.0	15.5	**0.0086**	0.001	17.3	ug/L	16	Standard
	Al	27	784359.8	2.1	**32.2230**	0.537	1.7	ug/L	19981	Standard
>	**Sc**	45	434584.2	0.6				ug/L	408994	Standard
	Ti	47	969.4	18.3	**0.4053**	0.090	22.2	ug/L	102	Standard
	V	51	6726.9	3.0	**0.0397**	0.010	24.3	ug/L	5722	Standard
	Cr	52	19909.4	1.8	**0.0561**	0.018	32.3	ug/L	18417	Standard
	Cr	53	800.7	7.7	**0.1998**	0.030	15.2	ug/L	405	Standard
	Mn	55	50595.7	1.6	**2.0231**	0.032	1.6	ug/L	4298	Standard
	Co	59	765.7	1.3	**0.0404**	0.001	1.4	ug/L	123	Standard
	Ni	60	834.4	7.0	**0.2340**	0.017	7.4	ug/L	90	Standard
	Cu	65	478.3	6.5	**0.1094**	0.011	9.6	ug/L	148	Standard
	Zn	66	7987.1	2.0	**5.2079**	0.116	2.2	ug/L	842	Standard
>	**Ge**	72	310187.0	0.2				ug/L	293466	Standard
	As	75	-169.9	21.0	**0.0132**	0.030	229.0	ug/L	-207	Standard
	Se	82	24.1	30.0	**0.0104**	0.062	599.0	ug/L	19	Standard
	Se-1	77	86.7	4.1	**-0.1016**	0.043	42.4	ug/L	80	Standard
	Ga	71	247624.5	0.7				mg/L	234805	Standard
	Rb	85	2369.5	2.4				ug/L	13	Standard
>	**Y**	89	274822.4	1.6				ug/L	262487	Standard
	Rh	103	3.3	91.7				ug/L	4	Standard
	Mo	98	92.5	9.3	**0.0180**	0.002	12.0	ug/L	10	Standard
	Ag	107	53.3	3.9	**0.0009**	0.000	30.3	ug/L	39	Standard
	Cd	111	297.5	1.9	**-0.0547**	0.002	2.9	mg/L	525	Standard
	Cd	114	843.7	4.6	**-0.0561**	0.004	6.3	ug/L	1503	Standard
>	**In**	115	992765.6	1.1				ug/L	917693	Standard
	Sn	118	930.7	3.1	**-0.1725**	0.002	1.3	ug/L	5013	Standard
	Sb	123	448.0	1.7	**0.0375**	0.001	2.8	ug/L	29	Standard
	Ba	135	7049.6	1.4	**1.2650**	0.008	0.7	ug/L	68	Standard
	Ce	140	8551.1	0.3				ug/L	58	Standard
>	**Tb**	159	1071068.1	0.1				ug/L	1008624	Standard
	Ho	165	102.7	6.8				ug/L	12	Standard
	Tl	203	236.7	8.3	**0.0144**	0.001	7.9	ug/L	9	Standard
	Tl	205	595.3	5.9	**0.0160**	0.001	5.1	ug/L	29	Standard
	Pb	206	1360.4	2.5	**0.0592**	0.003	4.7	ug/L	458	Standard
	Pb	207	1120.7	4.7	**0.0582**	0.004	6.6	ug/L	380	Standard
	Pb	208	5248.4	1.7	**0.0603**	0.001	2.0	ug/L	1773	Standard
	U	238	176.7	13.8	**0.0075**	0.000	6.2	ug/L	42	Standard
>	**Bi**	209	606329.3	0.6				ug/L	569761	Standard
	Na	23	452.0	2.9	**0.1117**	0.003	2.9	mg/L	89	Standard
	Mg	24	15756.2	0.7	**0.0534**	0.000	0.2	mg/L	158	Standard

Sample ID: L1204091011DL WG396696-02
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Approved: May 01, 2012
Sheri L. Babyak

	K	39	1137.4	3.9	**0.0490**	0.004	8.6	mg/L	532	Standard
	Ca	43	174.0	14.0	**0.0382**	0.032	85.0	mg/L	142	Standard
	Fe	54	760.4	8.7	**-0.0368**	0.011	30.4	mg/L	890	Standard
	Fe	57	11109.4	4.2	**0.0655**	0.005	7.0	mg/L	3398	Standard
>	**Sc-1**	45	434584.2	0.6				mg/L	408994	Standard
	Cl	35	153495.2	2.4				ug/L	45742	Standard
	Kr	83	50.9	11.9				ug/L	47	Standard
	Br	81	12304.3	1.5				ug/L	11318	Standard
	P	31	37609.6	3.0				ug/L	55334	Standard
	S	34	698701.0	1.2				ug/L	546407	Standard
	Sr	88	8452.4	0.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.698	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.699	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.181	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.191	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204091011DL WG396696-02
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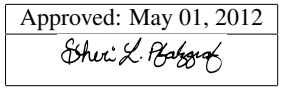

Pb	207	
Pb	208	
U	238	
> Bi	209	106.418
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1204091011DL WG396696-02
Report Date/Time: Tuesday, May 01, 2012 13:16:13
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091011PS WG396696-01
Sample Date/Time: Tuesday, May 01, 2012 13:16:33
Number of Replicates: 3
Autosampler Position: 245
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	43220.9	0.6	**722.5813**	14.515	2.0	ug/L	21640	Standard
|	**Be**	9	228097.1	0.5	**50.1669**	0.253	0.5	ug/L	16	Standard
|	**Al**	27	6101514.8	1.4	**216.2463**	3.285	1.5	ug/L	19981	Standard
⌊>	**Sc**	45	513666.4	0.4				ug/L	408994	Standard
⌈	**Ti**	47	5587.7	3.2	**2.4492**	0.073	3.0	ug/L	102	Standard
|	**V**	51	1313310.5	1.4	**51.9894**	0.658	1.3	ug/L	5722	Standard
|	**Cr**	52	1120322.5	0.9	**54.1046**	0.450	0.8	ug/L	18417	Standard
|	**Cr**	53	124504.8	1.0	**53.7329**	0.509	0.9	ug/L	405	Standard
|	**Mn**	55	1700407.5	1.0	**64.5901**	0.867	1.3	ug/L	4298	Standard
|	**Co**	59	944442.3	0.4	**52.4753**	0.395	0.8	ug/L	123	Standard
|	**Ni**	60	198342.2	1.3	**53.9938**	0.745	1.4	ug/L	90	Standard
|	**Cu**	65	173998.8	1.1	**53.6522**	0.781	1.5	ug/L	148	Standard
|	**Zn**	66	83859.8	0.6	**56.8625**	0.561	1.0	ug/L	842	Standard
| >	**Ge**	72	349480.3	0.4				ug/L	293466	Standard
|	**As**	75	67956.0	0.9	**51.0929**	0.252	0.5	ug/L	-207	Standard
|	**Se**	82	6687.4	1.6	**51.0832**	0.761	1.5	ug/L	19	Standard
⌊	**Se-1**	77	4657.4	3.9	**51.1444**	2.064	4.0	ug/L	80	Standard
	Ga	71	283999.2	1.4				mg/L	234805	Standard
⌈	**Rb**	85	14433.5	2.2				ug/L	13	Standard
| >	**Y**	89	317539.5	1.6				ug/L	262487	Standard
⌊	**Rh**	103	42.0	4.8				ug/L	4	Standard
⌈	**Mo**	98	635.2	5.3	**0.1360**	0.008	6.0	ug/L	10	Standard
|	**Ag**	107	477096.8	1.2	**55.2064**	1.049	1.9	ug/L	39	Standard
|	**Cd**	111	273192.6	1.2	**53.0532**	1.166	2.2	mg/L	525	Standard
|	**Cd**	114	748230.0	0.6	**50.2536**	0.695	1.4	ug/L	1503	Standard
| >	**In**	115	1113047.9	1.1				ug/L	917693	Standard
|	**Sn**	118	1702.1	3.0	**-0.1388**	0.002	1.4	ug/L	5013	Standard
|	**Sb**	123	635399.0	1.4	**50.2437**	1.226	2.4	ug/L	29	Standard
⌊	**Ba**	135	341021.6	1.6	**55.0703**	1.459	2.6	ug/L	68	Standard
⌈	**Ce**	140	47983.2	1.4				ug/L	58	Standard
⌊>	**Tb**	159	1173411.5	0.7				ug/L	1008624	Standard
⌈	**Ho**	165	1058.1	78.6				ug/L	12	Standard
|	**Tl**	203	991362.2	0.7	**51.9053**	0.706	1.4	ug/L	9	Standard
|	**Tl**	205	2644717.8	1.1	**53.7797**	0.550	1.0	ug/L	29	Standard
|	**Pb**	206	801106.5	1.2	**51.6420**	0.500	1.0	ug/L	458	Standard
|	**Pb**	207	686755.3	0.8	**53.5884**	0.791	1.5	ug/L	380	Standard
|	**Pb**	208	3138392.6	0.4	**52.0253**	0.265	0.5	ug/L	1773	Standard
|	**U**	238	3042056.9	0.8	**52.9588**	0.770	1.5	ug/L	42	Standard
⌊>	**Bi**	209	631426.0	0.7				ug/L	569761	Standard
⌈	**Na**	23	2057.5	1.1	**0.5089**	0.005	0.9	mg/L	89	Standard
|	**Mg**	24	85549.5	0.9	**0.2471**	0.003	1.2	mg/L	158	Standard

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	K	39	3495.1	2.5	**0.2118**	0.006	2.7	mg/L	532	Standard
	Ca	43	402.7	2.1	**0.2677**	0.009	3.2	mg/L	142	Standard
	Fe	54	2760.5	2.0	**0.2454**	0.007	2.9	mg/L	890	Standard
	Fe	57	55331.5	0.8	**0.3780**	0.003	0.8	mg/L	3398	Standard
>	**Sc-1**	45	513666.4	0.4				mg/L	408994	Standard
	Cl	35	317928.8	0.8				ug/L	45742	Standard
	Kr	83	46.4	16.1				ug/L	47	Standard
	Br	81	19529.9	1.2				ug/L	11318	Standard
	P	31	105310.4	1.6				ug/L	55334	Standard
	S	34	803845.9	3.8				ug/L	546407	Standard
	Sr	88	49434.5	0.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		119.087	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		120.973	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		121.288	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		116.338	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	110.823
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091014
Sample Date/Time: Tuesday, May 01, 2012 13:19:21
Number of Replicates: 3
Autosampler Position: 246
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	59045.2	1.5	**1532.8774**	26.285	1.7	ug/L	21640	Standard
|	**Be**	9	132.7	15.3	**0.0292**	0.004	14.4	ug/L	16	Standard
|	**Al**	27	2968277.2	5.0	**108.1508**	7.407	6.8	ug/L	19981	Standard
⌊>	**Sc**	45	498338.4	1.8				ug/L	408994	Standard
⌈	**Ti**	47	2242.2	11.0	**0.9357**	0.110	11.8	ug/L	102	Standard
|	**V**	51	9361.7	41.8	**0.1129**	0.155	137.7	ug/L	5722	Standard
|	**Cr**	52	54098.1	1.2	**1.6350**	0.020	1.2	ug/L	18417	Standard
|	**Cr**	53	4362.6	2.3	**1.7126**	0.036	2.1	ug/L	405	Standard
|	**Mn**	55	303912.4	0.6	**11.5100**	0.100	0.9	ug/L	4298	Standard
|	**Co**	59	5762.1	6.0	**0.3151**	0.018	5.8	ug/L	123	Standard
|	**Ni**	60	5786.4	1.4	**1.5657**	0.024	1.5	ug/L	90	Standard
|	**Cu**	65	1165.0	8.3	**0.3053**	0.029	9.5	ug/L	148	Standard
|	**Zn**	66	7704.6	1.0	**4.3552**	0.077	1.8	ug/L	842	Standard
| >	**Ge**	72	346879.2	0.5				ug/L	293466	Standard
|	**As**	75	-149.2	29.3	**0.0439**	0.033	76.1	ug/L	-207	Standard
|	**Se**	82	35.2	49.8	**0.0735**	0.135	183.2	ug/L	19	Standard
⌊	**Se-1**	77	105.0	6.7	**-0.0098**	0.085	860.2	ug/L	80	Standard
	Ga	71	286500.6	1.8				mg/L	234805	Standard
⌈	**Rb**	85	5999.9	12.9				ug/L	13	Standard
| >	**Y**	89	316038.1	1.9				ug/L	262487	Standard
⌊	**Rh**	103	4.7	24.7				ug/L	4	Standard
⌈	**Mo**	98	786.2	5.9	**0.1727**	0.010	6.0	ug/L	10	Standard
|	**Ag**	107	134.0	47.0	**0.0097**	0.007	74.5	ug/L	39	Standard
|	**Cd**	111	717.9	4.8	**0.0227**	0.005	23.6	mg/L	525	Standard
|	**Cd**	114	2101.6	0.6	**0.0243**	0.002	9.0	ug/L	1503	Standard
| >	**In**	115	1092724.6	1.1				ug/L	917693	Standard
|	**Sn**	118	1336.1	1.1	**-0.1563**	0.000	0.2	ug/L	5013	Standard
|	**Sb**	123	2805.9	38.6	**0.2242**	0.089	39.8	ug/L	29	Standard
⌊	**Ba**	135	20928.8	1.1	**3.4318**	0.069	2.0	ug/L	68	Standard
⌈	**Ce**	140	51691.4	1.3				ug/L	58	Standard
⌊>	**Tb**	159	1154296.0	0.6				ug/L	1008624	Standard
⌈	**Ho**	165	696.7	5.8				ug/L	12	Standard
|	**Tl**	203	559.0	8.3	**0.0308**	0.002	7.1	ug/L	9	Standard
|	**Tl**	205	1275.4	8.6	**0.0294**	0.002	6.9	ug/L	29	Standard
|	**Pb**	206	3372.4	1.3	**0.1858**	0.001	0.5	ug/L	458	Standard
|	**Pb**	207	2717.9	2.6	**0.1797**	0.004	2.2	ug/L	380	Standard
|	**Pb**	208	12849.8	1.7	**0.1832**	0.002	1.2	ug/L	1773	Standard
|	**U**	238	1008.4	12.5	**0.0219**	0.002	9.3	ug/L	42	Standard
⌊>	**Bi**	209	630030.8	0.8				ug/L	569761	Standard
⌈	**Na**	23	1918.8	1.6	**0.4884**	0.018	3.6	mg/L	89	Standard
|	**Mg**	24	101110.6	1.6	**0.3011**	0.001	0.2	mg/L	158	Standard

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	K	39	2236.2	1.3	**0.1217**	0.005	4.3	mg/L	532	Standard
	Ca	43	348.0	4.5	**0.2167**	0.025	11.3	mg/L	142	Standard
	Fe	54	2824.7	4.5	**0.2684**	0.021	7.9	mg/L	890	Standard
	Fe	57	55237.9	1.2	**0.3900**	0.007	1.8	mg/L	3398	Standard
>	**Sc-1**	45	498338.4	1.8				mg/L	408994	Standard
	Cl	35	332846.6	0.5				ug/L	45742	Standard
	Kr	83	55.8	6.8				ug/L	47	Standard
	Br	81	20869.4	0.8				ug/L	11318	Standard
	P	31	93668.4	2.1				ug/L	55334	Standard
	S	34	779625.7	1.1				ug/L	546407	Standard
	Sr	88	51275.4	4.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		118.201	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		120.401	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		119.073	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.443	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	110.578
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 13:22:11
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	26093.1	1.5	**52.0549**	24.223	46.5	ug/L	21640	Standard
|	**Be**	9	220688.5	2.3	**53.2368**	1.156	2.2	ug/L	16	Standard
|	**Al**	27	1267066.6	0.8	**48.6810**	0.708	1.5	ug/L	19981	Standard
⌊>	**Sc**	45	468334.9	1.1				ug/L	408994	Standard
⌈	**Ti**	47	212660.1	1.2	**100.3964**	2.010	2.0	ug/L	102	Standard
|	**V**	51	1253154.5	1.6	**51.5549**	1.296	2.5	ug/L	5722	Standard
|	**Cr**	52	1041054.6	1.8	**52.2147**	1.359	2.6	ug/L	18417	Standard
|	**Cr**	53	116111.2	1.1	**52.0707**	1.015	2.0	ug/L	405	Standard
|	**Mn**	55	1307803.8	0.8	**51.5938**	0.803	1.6	ug/L	4298	Standard
|	**Co**	59	895036.3	1.6	**51.6793**	1.086	2.1	ug/L	123	Standard
|	**Ni**	60	183392.7	1.4	**51.8825**	1.169	2.3	ug/L	90	Standard
|	**Cu**	65	159642.3	0.4	**51.1503**	0.605	1.2	ug/L	148	Standard
|	**Zn**	66	71288.3	0.8	**50.1164**	0.859	1.7	ug/L	842	Standard
| >	**Ge**	72	336321.6	0.9				ug/L	293466	Standard
|	**As**	75	64567.9	0.6	**50.4516**	0.731	1.4	ug/L	-207	Standard
|	**Se**	82	6347.7	0.7	**50.3879**	0.774	1.5	ug/L	19	Standard
⌊	**Se-1**	77	4478.7	1.9	**51.1127**	1.401	2.7	ug/L	80	Standard
	Ga	71	269741.3	0.5				mg/L	234805	Standard
⌈	**Rb**	85	1033.4	5.1				ug/L	13	Standard
| >	**Y**	89	304995.1	1.8				ug/L	262487	Standard
⌊	**Rh**	103	46.0	11.5				ug/L	4	Standard
⌈	**Mo**	98	427707.9	1.7	**98.2868**	2.619	2.7	ug/L	10	Standard
|	**Ag**	107	437852.6	1.4	**52.4566**	0.522	1.0	ug/L	39	Standard
|	**Cd**	111	259372.6	0.7	**52.1481**	0.457	0.9	mg/L	525	Standard
|	**Cd**	114	721143.4	1.1	**50.1483**	0.408	0.8	ug/L	1503	Standard
| >	**In**	115	1074936.6	1.2				ug/L	917693	Standard
|	**Sn**	118	945361.3	1.0	**49.9417**	0.117	0.2	ug/L	5013	Standard
|	**Sb**	123	615648.2	0.3	**50.4028**	0.502	1.0	ug/L	29	Standard
⌊	**Ba**	135	283284.8	0.7	**47.3618**	0.594	1.3	ug/L	68	Standard
⌈	**Ce**	140	1042.7	5.7				ug/L	58	Standard
⌊>	**Tb**	159	1152642.6	0.4				ug/L	1008624	Standard
⌈	**Ho**	165	32.7	33.7				ug/L	12	Standard
|	**Tl**	203	934847.2	0.4	**51.4242**	0.510	1.0	ug/L	9	Standard
|	**Tl**	205	2487193.2	0.5	**53.1379**	0.085	0.2	ug/L	29	Standard
|	**Pb**	206	758024.6	0.4	**51.3400**	0.160	0.3	ug/L	458	Standard
|	**Pb**	207	627579.3	0.4	**51.4471**	0.206	0.4	ug/L	380	Standard
|	**Pb**	208	2903226.8	0.9	**50.5620**	0.184	0.4	ug/L	1773	Standard
|	**U**	238	2903344.7	1.4	**53.0985**	0.428	0.8	ug/L	42	Standard
⌊>	**Bi**	209	600988.0	0.7				ug/L	569761	Standard
⌈	**Na**	23	17123.7	2.6	**4.8706**	0.134	2.8	mg/L	89	Standard
|	**Mg**	24	1546871.8	1.6	**4.9093**	0.060	1.2	mg/L	158	Standard

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	K	39	57651.5	1.5	**4.7335**	0.067	1.4	mg/L	532	Standard
	Ca	43	3858.5	2.5	**4.7253**	0.076	1.6	mg/L	142	Standard
	Fe	54	32043.8	1.4	**5.1536**	0.036	0.7	mg/L	890	Standard
	Fe	57	870810.4	2.4	**7.0432**	0.194	2.7	mg/L	3398	Standard
>	**Sc-1**	45	468334.9	1.1				mg/L	408994	Standard
	Cl	35	142986.3	1.4				ug/L	45742	Standard
	Kr	83	53.8	6.4				ug/L	47	Standard
	Br	81	14005.5	2.1				ug/L	11318	Standard
	P	31	90630.3	0.6				ug/L	55334	Standard
	S	34	891681.1	1.6				ug/L	546407	Standard
	Sr	88	614.7	6.5				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.362		
>	Sc	45			
	Ti	47	100.396		
	V	51	103.110		
	Cr	52	104.429		
	Cr	53			
	Mn	55	103.188		
	Co	59	103.359		
	Ni	60	103.765		
	Cu	65	102.301		
	Zn	66	100.233		
>	Ge	72		114.603	
	As	75	100.903		
	Se	82	100.776		
	Se-1	77	102.225		
	Ga	71			
	Rb	85			
>	Y	89		116.194	
	Rh	103			
	Mo	98	98.287		
	Ag	107	104.913		
	Cd	111	104.296		
	Cd	114			
>	In	115		117.135	
	Sn	118	99.883		
	Sb	123	100.806		
	Ba	135	94.724		
	Ce	140			
>	Tb	159		114.279	
	Ho	165			
	Tl	203	102.848		
	Tl	205			
	Pb	206	102.680		

Sample ID: QC Std 6
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	Pb	207	102.894	
	Pb	208	101.124	
	U	238	106.197	
>	Bi	209		105.481
	Na	23	97.411	
	Mg	24	98.186	
	K	39	94.671	
	Ca	43	94.507	
	Fe	54	103.073	
	Fe	57	140.864	
>	Sc-1	45		
	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	

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 13:24:58
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	26556.3	0.2	**43.4763**	13.104	30.1	ug/L	21640	Standard
|	**Be**	9	31.3	68.2	**0.0066**	0.005	77.4	ug/L	16	Standard
|	**Al**	27	17749.1	4.9	**-0.0695**	0.035	50.7	ug/L	19981	Standard
⌊>	**Sc**	45	479766.8	0.8				ug/L	408994	Standard
⌈	**Ti**	47	122.0	38.3	**-0.0343**	0.022	63.0	ug/L	102	Standard
|	**V**	51	6614.5	1.6	**0.0086**	0.005	58.1	ug/L	5722	Standard
|	**Cr**	52	21133.4	1.5	**0.0210**	0.016	77.1	ug/L	18417	Standard
|	**Cr**	53	560.7	4.4	**0.0586**	0.010	16.9	ug/L	405	Standard
|	**Mn**	55	1683.4	3.3	**-0.0812**	0.002	3.0	ug/L	4298	Standard
|	**Co**	59	160.3	44.7	**0.0017**	0.004	248.2	ug/L	123	Standard
|	**Ni**	60	73.0	28.1	**-0.0015**	0.006	383.4	ug/L	90	Standard
|	**Cu**	65	167.3	4.0	**-0.0039**	0.002	56.5	ug/L	148	Standard
|	**Zn**	66	191.0	6.9	**-0.8656**	0.009	1.1	ug/L	842	Standard
| >	**Ge**	72	340092.6	0.7				ug/L	293466	Standard
|	**As**	75	-239.8	11.6	**-0.0280**	0.020	71.8	ug/L	-207	Standard
|	**Se**	82	22.5	11.9	**-0.0205**	0.021	101.0	ug/L	19	Standard
⌊	**Se-1**	77	86.0	10.3	**-0.2062**	0.096	46.7	ug/L	80	Standard
	Ga	71	277536.6	1.7				mg/L	234805	Standard
⌈	**Rb**	85	15.3	32.8				ug/L	13	Standard
| >	**Y**	89	303616.7	0.9				ug/L	262487	Standard
⌊	**Rh**	103	2.0	100.0				ug/L	4	Standard
⌈	**Mo**	98	91.2	58.3	**0.0156**	0.012	74.7	ug/L	10	Standard
|	**Ag**	107	82.0	38.3	**0.0036**	0.004	97.7	ug/L	39	Standard
|	**Cd**	111	648.2	3.5	**0.0099**	0.005	49.5	mg/L	525	Standard
|	**Cd**	114	1794.8	3.5	**0.0042**	0.002	52.9	ug/L	1503	Standard
| >	**In**	115	1084758.1	2.2				ug/L	917693	Standard
|	**Sn**	118	1415.4	2.5	**-0.1516**	0.000	0.2	ug/L	5013	Standard
|	**Sb**	123	627.3	28.0	**0.0484**	0.013	27.3	ug/L	29	Standard
⌊	**Ba**	135	75.7	26.2	**0.0012**	0.003	253.8	ug/L	68	Standard
⌈	**Ce**	140	54.0	6.4				ug/L	58	Standard
⌊>	**Tb**	159	1154588.5	0.6				ug/L	1008624	Standard
⌈	**Ho**	165	10.7	28.6				ug/L	12	Standard
|	**Tl**	203	154.3	24.0	**0.0096**	0.002	20.1	ug/L	9	Standard
|	**Tl**	205	334.0	29.6	**0.0102**	0.002	19.6	ug/L	29	Standard
|	**Pb**	206	479.0	12.4	**-0.0012**	0.004	315.5	ug/L	458	Standard
|	**Pb**	207	411.0	17.1	**-0.0007**	0.005	735.4	ug/L	380	Standard
|	**Pb**	208	1855.4	14.6	**0.0005**	0.004	967.2	ug/L	1773	Standard
|	**U**	238	199.0	76.2	**0.0077**	0.003	34.0	ug/L	42	Standard
⌊>	**Bi**	209	629917.1	0.4				ug/L	569761	Standard
⌈	**Na**	23	67.3	21.1	**-0.0088**	0.004	43.2	mg/L	89	Standard
|	**Mg**	24	223.3	41.4	**0.0002**	0.000	150.0	mg/L	158	Standard

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	K	39	590.7	4.6	**-0.0049**	0.002	37.5	mg/L	532	Standard
	Ca	43	108.7	18.5	**-0.0657**	0.025	38.4	mg/L	142	Standard
	Fe	54	1034.4	2.8	**-0.0051**	0.006	112.8	mg/L	890	Standard
	Fe	57	4666.7	2.2	**0.0052**	0.001	15.3	mg/L	3398	Standard
>	**Sc-1**	45	479766.8	0.8				mg/L	408994	Standard
	Cl	35	141461.8	1.6				ug/L	45742	Standard
	Kr	83	49.1	12.9				ug/L	47	Standard
	Br	81	14060.5	0.5				ug/L	11318	Standard
	P	31	93514.4	1.8				ug/L	55334	Standard
	S	34	934885.4	1.7				ug/L	546407	Standard
	Sr	88	267.3	6.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		115.888	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		115.669	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		118.205	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.472	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	110.558
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: L1204091017
Sample Date/Time: Tuesday, May 01, 2012 13:27:48
Number of Replicates: 3
Autosampler Position: 247
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	75279.6	1.6	**2239.6100**	43.142	1.9	ug/L	21640	Standard
|	**Be**	9	89.0	17.0	**0.0190**	0.003	15.9	ug/L	16	Standard
|	**Al**	27	5107596.2	1.4	**183.2456**	1.597	0.9	ug/L	19981	Standard
⌊>	**Sc**	45	507151.7	2.0				ug/L	408994	Standard
⌈	**Ti**	47	2277.5	6.1	**0.9605**	0.062	6.5	ug/L	102	Standard
|	**V**	51	11804.2	0.5	**0.2152**	0.004	1.8	ug/L	5722	Standard
|	**Cr**	52	53211.3	0.9	**1.6125**	0.019	1.2	ug/L	18417	Standard
|	**Cr**	53	4159.9	2.6	**1.6391**	0.053	3.2	ug/L	405	Standard
|	**Mn**	55	321671.5	0.6	**12.2909**	0.033	0.3	ug/L	4298	Standard
|	**Co**	59	5558.0	2.0	**0.3062**	0.006	1.9	ug/L	123	Standard
|	**Ni**	60	6195.3	2.1	**1.6917**	0.039	2.3	ug/L	90	Standard
|	**Cu**	65	1820.1	1.0	**0.5136**	0.004	0.8	ug/L	148	Standard
|	**Zn**	66	16210.7	0.5	**10.3596**	0.093	0.9	ug/L	842	Standard
| >	**Ge**	72	344088.3	0.3				ug/L	293466	Standard
|	**As**	75	-198.1	8.8	**0.0058**	0.014	235.3	ug/L	-207	Standard
|	**Se**	82	28.5	9.2	**0.0242**	0.021	87.2	ug/L	19	Standard
⌊	**Se-1**	77	91.7	6.4	**-0.1526**	0.067	43.7	ug/L	80	Standard
	Ga	71	276911.0	0.9				mg/L	234805	Standard
⌈	**Rb**	85	5573.7	2.9				ug/L	13	Standard
| >	**Y**	89	307687.1	1.4				ug/L	262487	Standard
⌊	**Rh**	103	8.7	48.0				ug/L	4	Standard
⌈	**Mo**	98	731.8	4.4	**0.1592**	0.009	5.4	ug/L	10	Standard
|	**Ag**	107	92.0	6.5	**0.0047**	0.001	17.6	ug/L	39	Standard
|	**Cd**	111	698.7	0.9	**0.0179**	0.001	4.2	mg/L	525	Standard
|	**Cd**	114	1833.8	5.3	**0.0050**	0.005	103.8	ug/L	1503	Standard
| >	**In**	115	1100994.7	1.3				ug/L	917693	Standard
|	**Sn**	118	3739.1	3.1	**-0.0323**	0.004	12.9	ug/L	5013	Standard
|	**Sb**	123	444.6	6.3	**0.0333**	0.002	6.5	ug/L	29	Standard
⌊	**Ba**	135	20701.5	2.1	**3.3681**	0.030	0.9	ug/L	68	Standard
⌈	**Ce**	140	68870.8	0.7				ug/L	58	Standard
⌊>	**Tb**	159	1162861.9	0.8				ug/L	1008624	Standard
⌈	**Ho**	165	306.0	8.8				ug/L	12	Standard
|	**Tl**	203	255.0	8.5	**0.0148**	0.001	7.6	ug/L	9	Standard
|	**Tl**	205	608.0	5.6	**0.0158**	0.001	4.9	ug/L	29	Standard
|	**Pb**	206	3541.1	1.1	**0.1968**	0.005	2.5	ug/L	458	Standard
|	**Pb**	207	2946.0	2.0	**0.1976**	0.008	3.8	ug/L	380	Standard
|	**Pb**	208	13614.7	1.0	**0.1959**	0.005	2.5	ug/L	1773	Standard
|	**U**	238	535.7	4.9	**0.0136**	0.000	2.6	ug/L	42	Standard
⌊>	**Bi**	209	630120.4	1.4				ug/L	569761	Standard
⌈	**Na**	23	2034.8	4.9	**0.5101**	0.033	6.4	mg/L	89	Standard
|	**Mg**	24	109711.1	0.9	**0.3211**	0.006	1.7	mg/L	158	Standard

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Sheri L. Babyak

	K	39	1846.1	2.9	**0.0887**	0.002	2.5	mg/L	532	Standard
	Ca	43	433.3	10.4	**0.3105**	0.060	19.3	mg/L	142	Standard
	Fe	54	3667.0	3.2	**0.3898**	0.009	2.4	mg/L	890	Standard
	Fe	57	79238.7	2.1	**0.5627**	0.012	2.1	mg/L	3398	Standard
>	**Sc-1**	45	507151.7	2.0				mg/L	408994	Standard
	Cl	35	241129.5	2.1				ug/L	45742	Standard
	Kr	83	58.0	11.1				ug/L	47	Standard
	Br	81	18276.4	1.5				ug/L	11318	Standard
	P	31	106007.9	3.7				ug/L	55334	Standard
	S	34	814219.3	5.0				ug/L	546407	Standard
	Sr	88	67385.5	0.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		117.250	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		117.220	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		119.974	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.292	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	110.594
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091020
Sample Date/Time: Tuesday, May 01, 2012 13:30:35
Number of Replicates: 3
Autosampler Position: 248
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	75532.8	1.3	**2191.3074**	112.602	5.1	ug/L	21640	Standard
|	**Be**	9	109.7	18.7	**0.0233**	0.005	20.9	ug/L	16	Standard
|	**Al**	27	6007663.3	7.7	**212.0869**	19.518	9.2	ug/L	19981	Standard
⌊>	**Sc**	45	516149.5	2.0				ug/L	408994	Standard
⌈	**Ti**	47	6478.9	93.6	**2.8528**	2.736	95.9	ug/L	102	Standard
|	**V**	51	12338.2	14.0	**0.2311**	0.073	31.5	ug/L	5722	Standard
|	**Cr**	52	57973.4	0.2	**1.8157**	0.047	2.6	ug/L	18417	Standard
|	**Cr**	53	4646.7	0.6	**1.8286**	0.040	2.2	ug/L	405	Standard
|	**Mn**	55	320331.6	0.7	**12.0893**	0.101	0.8	ug/L	4298	Standard
|	**Co**	59	5160.2	2.2	**0.2802**	0.003	1.0	ug/L	123	Standard
|	**Ni**	60	5826.1	0.0	**1.5701**	0.022	1.4	ug/L	90	Standard
|	**Cu**	65	2064.8	1.5	**0.5825**	0.001	0.2	ug/L	148	Standard
|	**Zn**	66	8043.5	0.6	**4.5678**	0.070	1.5	ug/L	842	Standard
| >	**Ge**	72	348326.9	1.4				ug/L	293466	Standard
|	**As**	75	-217.7	4.2	**-0.0072**	0.009	128.6	ug/L	-207	Standard
|	**Se**	82	28.1	32.5	**0.0180**	0.068	379.9	ug/L	19	Standard
⌊	**Se-1**	77	100.0	8.0	**-0.0720**	0.077	107.2	ug/L	80	Standard
	Ga	71	286438.1	1.9				mg/L	234805	Standard
⌈	**Rb**	85	6883.6	8.0				ug/L	13	Standard
| >	**Y**	89	313304.1	2.5				ug/L	262487	Standard
⌊	**Rh**	103	8.0	25.0				ug/L	4	Standard
⌈	**Mo**	98	856.8	10.5	**0.1853**	0.016	8.8	ug/L	10	Standard
|	**Ag**	107	116.0	9.5	**0.0074**	0.001	19.3	ug/L	39	Standard
|	**Cd**	111	701.8	2.8	**0.0172**	0.003	15.0	mg/L	525	Standard
|	**Cd**	114	1992.4	4.6	**0.0145**	0.004	28.8	ug/L	1503	Standard
| >	**In**	115	1111002.2	1.9				ug/L	917693	Standard
|	**Sn**	118	1431.4	1.5	**-0.1525**	0.001	0.9	ug/L	5013	Standard
|	**Sb**	123	412.2	25.9	**0.0304**	0.008	27.9	ug/L	29	Standard
⌊	**Ba**	135	20132.7	0.8	**3.2467**	0.069	2.1	ug/L	68	Standard
⌈	**Ce**	140	61902.2	0.6				ug/L	58	Standard
⌊>	**Tb**	159	1168931.5	0.4				ug/L	1008624	Standard
⌈	**Ho**	165	293.3	6.9				ug/L	12	Standard
|	**Tl**	203	547.0	66.0	**0.0300**	0.019	62.3	ug/L	9	Standard
|	**Tl**	205	1257.4	56.8	**0.0289**	0.014	49.7	ug/L	29	Standard
|	**Pb**	206	3726.8	5.8	**0.2076**	0.014	6.6	ug/L	458	Standard
|	**Pb**	207	3157.0	7.1	**0.2129**	0.018	8.2	ug/L	380	Standard
|	**Pb**	208	14461.7	6.1	**0.2089**	0.015	7.3	ug/L	1773	Standard
|	**U**	238	1270.7	46.7	**0.0264**	0.010	39.4	ug/L	42	Standard
⌊>	**Bi**	209	633125.2	0.5				ug/L	569761	Standard
⌈	**Na**	23	2121.5	1.8	**0.5230**	0.001	0.2	mg/L	89	Standard
|	**Mg**	24	116384.7	1.1	**0.3348**	0.010	2.9	mg/L	158	Standard

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Sheri L. Babyak

	K	39	2111.5	6.9	**0.1065**	0.014	13.1	mg/L	532	Standard
	Ca	43	453.3	2.4	**0.3244**	0.021	6.4	mg/L	142	Standard
	Fe	54	3559.2	1.7	**0.3639**	0.010	2.7	mg/L	890	Standard
	Fe	57	80256.2	3.7	**0.5601**	0.029	5.1	mg/L	3398	Standard
>	**Sc-1**	45	516149.5	2.0				mg/L	408994	Standard
	Cl	35	227587.2	0.6				ug/L	45742	Standard
	Kr	83	57.6	8.7				ug/L	47	Standard
	Br	81	17085.6	0.6				ug/L	11318	Standard
	P	31	97379.9	3.5				ug/L	55334	Standard
	S	34	798580.1	1.7				ug/L	546407	Standard
	Sr	88	72813.3	3.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		118.694	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		119.360	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		121.065	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.894	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	111.121
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for sample	In	115	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091023
Sample Date/Time: Tuesday, May 01, 2012 13:33:22
Number of Replicates: 3
Autosampler Position: 249
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	54176.7	0.7	**1251.1012**	57.012	4.6	ug/L	21640	Standard
|	**Be**	9	65.0	8.1	**0.0136**	0.001	8.3	ug/L	16	Standard
|	**Al**	27	858662.5	4.4	**30.0940**	1.223	4.1	ug/L	19981	Standard
⌊>	**Sc**	45	508601.8	1.6				ug/L	408994	Standard
⌈	**Ti**	47	1561.4	4.5	**0.6156**	0.027	4.4	ug/L	102	Standard
|	**V**	51	7967.6	1.2	**0.0538**	0.002	4.0	ug/L	5722	Standard
|	**Cr**	52	28651.1	0.7	**0.3564**	0.005	1.5	ug/L	18417	Standard
|	**Cr**	53	1346.1	2.3	**0.3896**	0.012	3.1	ug/L	405	Standard
|	**Mn**	55	63961.4	1.9	**2.2776**	0.029	1.3	ug/L	4298	Standard
|	**Co**	59	3291.0	2.3	**0.1746**	0.003	2.0	ug/L	123	Standard
|	**Ni**	60	1883.5	0.4	**0.4888**	0.004	0.9	ug/L	90	Standard
|	**Cu**	65	542.7	6.2	**0.1098**	0.009	8.6	ug/L	148	Standard
|	**Zn**	66	6138.6	0.8	**3.2168**	0.034	1.0	ug/L	842	Standard
| >	**Ge**	72	350957.6	0.7				ug/L	293466	Standard
|	**As**	75	-226.3	12.9	**-0.0124**	0.023	185.6	ug/L	-207	Standard
|	**Se**	82	31.2	28.0	**0.0403**	0.066	163.8	ug/L	19	Standard
⌊	**Se-1**	77	101.3	6.3	**-0.0646**	0.078	121.0	ug/L	80	Standard
	Ga	71	284119.9	0.6				mg/L	234805	Standard
⌈	**Rb**	85	3277.7	4.9				ug/L	13	Standard
| >	**Y**	89	316549.0	1.5				ug/L	262487	Standard
⌊	**Rh**	103	1.3	86.6				ug/L	4	Standard
⌈	**Mo**	98	355.9	10.5	**0.0755**	0.008	11.0	ug/L	10	Standard
|	**Ag**	107	61.7	8.0	**0.0012**	0.001	54.2	ug/L	39	Standard
|	**Cd**	111	707.2	4.9	**0.0206**	0.007	36.0	mg/L	525	Standard
|	**Cd**	114	1905.6	1.3	**0.0110**	0.005	42.5	ug/L	1503	Standard
| >	**In**	115	1092541.2	2.2				ug/L	917693	Standard
|	**Sn**	118	2852.9	2.3	**-0.0770**	0.007	8.8	ug/L	5013	Standard
|	**Sb**	123	313.5	2.6	**0.0230**	0.001	5.2	ug/L	29	Standard
⌊	**Ba**	135	13804.6	1.7	**2.2607**	0.070	3.1	ug/L	68	Standard
⌈	**Ce**	140	14452.2	1.6				ug/L	58	Standard
⌊>	**Tb**	159	1149618.6	1.5				ug/L	1008624	Standard
⌈	**Ho**	165	1040.7	9.6				ug/L	12	Standard
|	**Tl**	203	193.3	3.9	**0.0116**	0.000	3.7	ug/L	9	Standard
|	**Tl**	205	462.0	2.6	**0.0128**	0.000	2.3	ug/L	29	Standard
|	**Pb**	206	904.7	1.5	**0.0261**	0.001	4.1	ug/L	458	Standard
|	**Pb**	207	722.0	3.6	**0.0234**	0.002	7.5	ug/L	380	Standard
|	**Pb**	208	3473.2	0.3	**0.0272**	0.000	1.4	ug/L	1773	Standard
|	**U**	238	782.4	1.3	**0.0179**	0.000	0.8	ug/L	42	Standard
⌊>	**Bi**	209	632211.1	0.5				ug/L	569761	Standard
⌈	**Na**	23	2451.5	3.8	**0.6182**	0.027	4.3	mg/L	89	Standard
|	**Mg**	24	104222.9	0.8	**0.3042**	0.007	2.3	mg/L	158	Standard

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	K	39	1769.4	2.3	**0.0825**	0.005	6.4	mg/L	532	Standard
	Ca	43	388.0	2.7	**0.2553**	0.020	7.7	mg/L	142	Standard
	Fe	54	1201.1	5.0	**0.0110**	0.012	109.0	mg/L	890	Standard
	Fe	57	10006.6	7.3	**0.0431**	0.006	14.0	mg/L	3398	Standard
>	**Sc-1**	45	508601.8	1.6				mg/L	408994	Standard
	Cl	35	184697.8	1.8				ug/L	45742	Standard
	Kr	83	53.1	9.1				ug/L	47	Standard
	Br	81	16273.1	0.6				ug/L	11318	Standard
	P	31	92652.1	1.2				ug/L	55334	Standard
	S	34	793916.6	1.1				ug/L	546407	Standard
	Sr	88	58921.7	0.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		119.591	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		120.596	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		119.053	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.979	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	110.961
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091026
Sample Date/Time: Tuesday, May 01, 2012 13:36:09
Number of Replicates: 3
Autosampler Position: 250
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	74265.2	0.6	**2053.2832**	35.993	1.8	ug/L	21640	Standard
|	**Be**	9	171.3	12.9	**0.0358**	0.005	13.6	ug/L	16	Standard
|	**Al**	27	7220678.0	0.5	**248.8834**	1.585	0.6	ug/L	19981	Standard
⌊>	**Sc**	45	528407.0	0.6				ug/L	408994	Standard
⌈	**Ti**	47	3294.4	2.6	**1.3859**	0.025	1.8	ug/L	102	Standard
|	**V**	51	13205.6	1.7	**0.2564**	0.013	5.2	ug/L	5722	Standard
|	**Cr**	52	63025.5	1.0	**2.0120**	0.026	1.3	ug/L	18417	Standard
|	**Cr**	53	5046.2	2.2	**1.9644**	0.032	1.6	ug/L	405	Standard
|	**Mn**	55	586467.0	0.2	**21.8745**	0.198	0.9	ug/L	4298	Standard
|	**Co**	59	9802.2	1.3	**0.5297**	0.003	0.5	ug/L	123	Standard
|	**Ni**	60	7237.7	1.7	**1.9220**	0.025	1.3	ug/L	90	Standard
|	**Cu**	65	1941.5	2.3	**0.5342**	0.018	3.5	ug/L	148	Standard
|	**Zn**	66	36651.6	1.9	**23.9399**	0.335	1.4	ug/L	842	Standard
| >	**Ge**	72	354346.9	0.9				ug/L	293466	Standard
|	**As**	75	-204.9	23.7	**0.0050**	0.037	747.5	ug/L	-207	Standard
|	**Se**	82	34.5	10.2	**0.0633**	0.029	46.1	ug/L	19	Standard
⌊	**Se-1**	77	119.7	7.0	**0.1281**	0.105	81.9	ug/L	80	Standard
	Ga	71	291469.8	2.3				mg/L	234805	Standard
⌈	**Rb**	85	4923.5	4.1				ug/L	13	Standard
| >	**Y**	89	344647.8	0.6				ug/L	262487	Standard
⌊	**Rh**	103	3.3	124.9				ug/L	4	Standard
⌈	**Mo**	98	982.6	1.0	**0.2093**	0.002	1.1	ug/L	10	Standard
|	**Ag**	107	67.3	3.4	**0.0016**	0.000	15.0	ug/L	39	Standard
|	**Cd**	111	716.0	4.0	**0.0174**	0.006	33.5	mg/L	525	Standard
|	**Cd**	114	1950.3	1.1	**0.0092**	0.002	21.6	ug/L	1503	Standard
| >	**In**	115	1132418.8	0.4				ug/L	917693	Standard
|	**Sn**	118	7549.9	2.1	**0.1543**	0.010	6.3	ug/L	5013	Standard
|	**Sb**	123	450.4	4.0	**0.0327**	0.002	4.7	ug/L	29	Standard
⌊	**Ba**	135	38360.5	0.4	**6.0776**	0.046	0.8	ug/L	68	Standard
⌈	**Ce**	140	198196.0	1.2				ug/L	58	Standard
⌊>	**Tb**	159	1184543.0	0.8				ug/L	1008624	Standard
⌈	**Ho**	165	3785.1	1.1				ug/L	12	Standard
|	**Tl**	203	210.7	4.0	**0.0123**	0.000	3.6	ug/L	9	Standard
|	**Tl**	205	508.7	6.0	**0.0136**	0.001	4.3	ug/L	29	Standard
|	**Pb**	206	4597.7	2.0	**0.2597**	0.005	2.0	ug/L	458	Standard
|	**Pb**	207	3650.1	3.2	**0.2476**	0.011	4.5	ug/L	380	Standard
|	**Pb**	208	17300.2	1.3	**0.2520**	0.005	2.1	ug/L	1773	Standard
|	**U**	238	3638.4	0.8	**0.0666**	0.001	1.4	ug/L	42	Standard
⌊>	**Bi**	209	641655.8	0.9				ug/L	569761	Standard
⌈	**Na**	23	2174.8	1.3	**0.5237**	0.008	1.5	mg/L	89	Standard
|	**Mg**	24	100886.8	0.8	**0.2833**	0.001	0.2	mg/L	158	Standard

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Sheri L. Babyak

	K	39	1684.8	3.3	**0.0712**	0.004	5.7	mg/L	532	Standard
	Ca	43	321.3	9.6	**0.1624**	0.033	20.4	mg/L	142	Standard
	Fe	54	3934.1	4.8	**0.4065**	0.025	6.2	mg/L	890	Standard
	Fe	57	84688.1	2.1	**0.5779**	0.011	1.9	mg/L	3398	Standard
>	**Sc-1**	45	528407.0	0.6				mg/L	408994	Standard
	Cl	35	194611.9	0.5				ug/L	45742	Standard
	Kr	83	55.8	12.0				ug/L	47	Standard
	Br	81	16391.2	1.1				ug/L	11318	Standard
	P	31	122251.2	0.7				ug/L	55334	Standard
	S	34	784763.8	2.1				ug/L	546407	Standard
	Sr	88	43021.0	1.5				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		120.745	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		131.301	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		123.398	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		117.442	
	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

112.618

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ge 72 Int Std for sample	Ge	72	Rerun sample
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091029
Sample Date/Time: Tuesday, May 01, 2012 13:38:57
Number of Replicates: 3
Autosampler Position: 251
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	28094.4	1.4	**124.2592**	11.458	9.2	ug/L	21640	Standard
|	**Be**	9	28.0	27.9	**0.0058**	0.002	32.1	ug/L	16	Standard
|	**Al**	27	273939.2	2.5	**9.7240**	0.189	1.9	ug/L	19981	Standard
⌊>	**Sc**	45	477944.7	0.7				ug/L	408994	Standard
⌈	**Ti**	47	672.7	3.6	**0.2298**	0.020	8.9	ug/L	102	Standard
|	**V**	51	7524.6	3.2	**0.0525**	0.020	38.6	ug/L	5722	Standard
|	**Cr**	52	22688.0	0.5	**0.1239**	0.044	35.7	ug/L	18417	Standard
|	**Cr**	53	688.0	4.7	**0.1219**	0.022	18.0	ug/L	405	Standard
|	**Mn**	55	13764.2	1.0	**0.4027**	0.017	4.2	ug/L	4298	Standard
|	**Co**	59	293.7	3.4	**0.0096**	0.000	3.1	ug/L	123	Standard
|	**Ni**	60	164.0	4.8	**0.0248**	0.001	3.5	ug/L	90	Standard
|	**Cu**	65	315.3	9.5	**0.0450**	0.008	18.6	ug/L	148	Standard
|	**Zn**	66	3404.7	2.0	**1.4642**	0.109	7.5	ug/L	842	Standard
| >	**Ge**	72	333320.7	3.3				ug/L	293466	Standard
|	**As**	75	-178.9	10.1	**0.0163**	0.010	60.0	ug/L	-207	Standard
|	**Se**	82	32.2	20.0	**0.0611**	0.054	87.6	ug/L	19	Standard
⌊	**Se-1**	77	98.7	3.8	**-0.0346**	0.083	238.7	ug/L	80	Standard
	Ga	71	272350.7	0.5				mg/L	234805	Standard
⌈	**Rb**	85	544.7	5.4				ug/L	13	Standard
| >	**Y**	89	299411.5	0.7				ug/L	262487	Standard
⌊	**Rh**	103	3.3	34.6				ug/L	4	Standard
⌈	**Mo**	98	25.3	8.7	**0.0008**	0.000	62.3	ug/L	10	Standard
|	**Ag**	107	91.0	19.3	**0.0047**	0.002	45.5	ug/L	39	Standard
|	**Cd**	111	644.0	2.4	**0.0086**	0.003	29.5	mg/L	525	Standard
|	**Cd**	114	1867.1	4.8	**0.0088**	0.007	75.1	ug/L	1503	Standard
| >	**In**	115	1088221.9	0.8				ug/L	917693	Standard
|	**Sn**	118	1181.4	11.8	**-0.1641**	0.007	4.1	ug/L	5013	Standard
|	**Sb**	123	249.9	5.9	**0.0179**	0.001	7.4	ug/L	29	Standard
⌊	**Ba**	135	1674.4	1.8	**0.2653**	0.003	1.0	ug/L	68	Standard
⌈	**Ce**	140	4104.6	2.1				ug/L	58	Standard
⌊>	**Tb**	159	1145764.2	0.8				ug/L	1008624	Standard
⌈	**Ho**	165	66.0	27.3				ug/L	12	Standard
|	**Tl**	203	123.0	6.7	**0.0080**	0.000	6.0	ug/L	9	Standard
|	**Tl**	205	259.3	11.8	**0.0088**	0.001	7.6	ug/L	29	Standard
|	**Pb**	206	676.7	3.1	**0.0124**	0.002	12.2	ug/L	458	Standard
|	**Pb**	207	534.3	2.3	**0.0097**	0.000	3.8	ug/L	380	Standard
|	**Pb**	208	2605.8	1.5	**0.0137**	0.001	4.3	ug/L	1773	Standard
|	**U**	238	205.0	9.1	**0.0079**	0.000	4.5	ug/L	42	Standard
⌊>	**Bi**	209	618493.1	1.6				ug/L	569761	Standard
⌈	**Na**	23	1243.4	1.0	**0.3209**	0.005	1.7	mg/L	89	Standard
|	**Mg**	24	4826.8	1.3	**0.0145**	0.000	1.6	mg/L	158	Standard

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	K	39	694.7	7.0	**0.0037**	0.004	113.9	mg/L	532	Standard
	Ca	43	108.7	3.8	**-0.0651**	0.006	9.3	mg/L	142	Standard
	Fe	54	1169.7	4.7	**0.0175**	0.009	52.8	mg/L	890	Standard
	Fe	57	8321.0	1.2	**0.0344**	0.000	1.0	mg/L	3398	Standard
>	**Sc-1**	45	477944.7	0.7				mg/L	408994	Standard
	Cl	35	129272.9	1.3				ug/L	45742	Standard
	Kr	83	50.4	16.7				ug/L	47	Standard
	Br	81	15181.6	1.7				ug/L	11318	Standard
	P	31	88844.4	1.1				ug/L	55334	Standard
	S	34	786935.7	1.8				ug/L	546407	Standard
	Sr	88	4590.7	1.3				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		113.581	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		114.067	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		118.582	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.597	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	108.553
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204091032
Sample Date/Time: Tuesday, May 01, 2012 13:41:45
Number of Replicates: 3
Autosampler Position: 252
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	27678.9	0.6	**79.1007**	10.177	12.9	ug/L	21640	Standard
|	**Be**	9	43.7	17.5	**0.0093**	0.002	19.5	ug/L	16	Standard
|	**Al**	27	61575.6	2.3	**1.5657**	0.065	4.1	ug/L	19981	Standard
⌊>	**Sc**	45	486750.1	0.5				ug/L	408994	Standard
⌈	**Ti**	47	488.0	19.4	**0.1327**	0.041	31.1	ug/L	102	Standard
|	**V**	51	7057.5	2.2	**0.0220**	0.007	31.7	ug/L	5722	Standard
|	**Cr**	52	22929.3	1.6	**0.0929**	0.032	34.0	ug/L	18417	Standard
|	**Cr**	53	793.4	2.2	**0.1564**	0.011	7.2	ug/L	405	Standard
|	**Mn**	55	3931.5	6.4	**0.0042**	0.010	240.7	ug/L	4298	Standard
|	**Co**	59	231.3	15.9	**0.0055**	0.002	39.2	ug/L	123	Standard
|	**Ni**	60	218.3	3.7	**0.0381**	0.003	7.8	ug/L	90	Standard
|	**Cu**	65	313.7	3.5	**0.0409**	0.005	11.4	ug/L	148	Standard
|	**Zn**	66	4239.6	2.5	**1.9549**	0.038	1.9	ug/L	842	Standard
| >	**Ge**	72	345820.7	1.3				ug/L	293466	Standard
|	**As**	75	-245.3	1.9	**-0.0291**	0.001	4.9	ug/L	-207	Standard
|	**Se**	82	15.1	16.7	**-0.0810**	0.019	23.4	ug/L	19	Standard
⌊	**Se-1**	77	104.7	4.0	**-0.0105**	0.033	314.9	ug/L	80	Standard
	Ga	71	280356.0	0.5				mg/L	234805	Standard
⌈	**Rb**	85	157.3	15.5				ug/L	13	Standard
| >	**Y**	89	310802.2	2.0				ug/L	262487	Standard
⌊	**Rh**	103	3.3	34.6				ug/L	4	Standard
⌈	**Mo**	98	35.2	11.9	**0.0030**	0.001	32.1	ug/L	10	Standard
|	**Ag**	107	98.0	24.6	**0.0056**	0.003	51.7	ug/L	39	Standard
|	**Cd**	111	687.3	4.4	**0.0175**	0.006	35.7	mg/L	525	Standard
|	**Cd**	114	1800.7	2.0	**0.0044**	0.002	52.3	ug/L	1503	Standard
| >	**In**	115	1086114.9	0.3				ug/L	917693	Standard
|	**Sn**	118	1394.1	5.4	**-0.1528**	0.004	2.5	ug/L	5013	Standard
|	**Sb**	123	365.0	13.6	**0.0273**	0.004	14.9	ug/L	29	Standard
⌊	**Ba**	135	1683.1	1.7	**0.2672**	0.005	1.8	ug/L	68	Standard
⌈	**Ce**	140	242.7	1.9				ug/L	58	Standard
⌊>	**Tb**	159	1140775.7	0.5				ug/L	1008624	Standard
⌈	**Ho**	165	11.3	40.8				ug/L	12	Standard
|	**Tl**	203	240.7	26.2	**0.0143**	0.003	24.0	ug/L	9	Standard
|	**Tl**	205	586.7	24.9	**0.0155**	0.003	19.7	ug/L	29	Standard
|	**Pb**	206	911.4	2.7	**0.0276**	0.001	5.3	ug/L	458	Standard
|	**Pb**	207	764.0	7.4	**0.0277**	0.005	17.3	ug/L	380	Standard
|	**Pb**	208	3495.5	4.8	**0.0286**	0.003	10.4	ug/L	1773	Standard
|	**U**	238	287.3	49.3	**0.0094**	0.003	27.0	ug/L	42	Standard
⌊>	**Bi**	209	621133.9	0.6				ug/L	569761	Standard
⌈	**Na**	23	1270.7	3.4	**0.3221**	0.011	3.4	mg/L	89	Standard
|	**Mg**	24	7739.3	1.7	**0.0231**	0.000	1.8	mg/L	158	Standard

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	K	39	763.4	7.2	**0.0082**	0.005	55.6	mg/L	532	Standard
	Ca	43	131.3	3.5	**-0.0398**	0.006	16.1	mg/L	142	Standard
	Fe	54	1049.2	7.2	**-0.0052**	0.012	223.7	mg/L	890	Standard
	Fe	57	5086.9	2.5	**0.0080**	0.001	10.8	mg/L	3398	Standard
>	**Sc-1**	45	486750.1	0.5				mg/L	408994	Standard
	Cl	35	230869.8	1.2				ug/L	45742	Standard
	Kr	83	56.7	10.2				ug/L	47	Standard
	Br	81	15238.3	1.0				ug/L	11318	Standard
	P	31	86969.9	0.4				ug/L	55334	Standard
	S	34	806188.9	0.9				ug/L	546407	Standard
	Sr	88	6534.7	1.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		117.840	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.407	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		118.353	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.102	
	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

109.016

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1204095102
Sample Date/Time: Tuesday, May 01, 2012 13:44:32
Number of Replicates: 3
Autosampler Position: 253
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	57528.0	2.4	**1406.4355**	33.772	2.4	ug/L	21640	Standard
|	**Be**	9	137.3	6.4	**0.0297**	0.002	5.2	ug/L	16	Standard
|	**Al**	27	13846681.3	4.7	**496.5522**	16.107	3.2	ug/L	19981	Standard
⌊>	**Sc**	45	508477.2	1.5				ug/L	408994	Standard
⌈	**Ti**	47	31052.7	10.8	**14.2818**	1.637	11.5	ug/L	102	Standard
|	**V**	51	38626.0	1.2	**1.3023**	0.049	3.8	ug/L	5722	Standard
|	**Cr**	52	52252.8	5.7	**1.5718**	0.209	13.3	ug/L	18417	Standard
|	**Cr**	53	3537.1	5.9	**1.3667**	0.062	4.5	ug/L	405	Standard
|	**Mn**	55	303085.0	1.8	**11.5929**	0.184	1.6	ug/L	4298	Standard
|	**Co**	59	3004.6	1.5	**0.1624**	0.006	3.5	ug/L	123	Standard
|	**Ni**	60	3120.0	3.5	**0.8423**	0.015	1.8	ug/L	90	Standard
|	**Cu**	65	73621.5	2.1	**23.0618**	0.184	0.8	ug/L	148	Standard
|	**Zn**	66	22070.4	2.1	**14.4932**	0.303	2.1	ug/L	842	Standard
| >	**Ge**	72	343531.3	2.2				ug/L	293466	Standard
|	**As**	75	3032.9	3.0	**2.4692**	0.035	1.4	ug/L	-207	Standard
|	**Se**	82	66.2	3.3	**0.3182**	0.015	4.6	ug/L	19	Standard
⌊	**Se-1**	77	113.0	4.4	**0.0941**	0.082	87.4	ug/L	80	Standard
	Ga	71	273678.0	1.7				mg/L	234805	Standard
⌈	**Rb**	85	27156.4	4.7				ug/L	13	Standard
| >	**Y**	89	317720.9	2.0				ug/L	262487	Standard
⌊	**Rh**	103	43.3	11.6				ug/L	4	Standard
⌈	**Mo**	98	2552.3	2.1	**0.5731**	0.007	1.3	ug/L	10	Standard
|	**Ag**	107	338.0	6.6	**0.0338**	0.002	6.6	ug/L	39	Standard
|	**Cd**	111	893.8	1.0	**0.0580**	0.002	3.9	mg/L	525	Standard
|	**Cd**	114	2437.4	6.1	**0.0477**	0.009	19.7	ug/L	1503	Standard
| >	**In**	115	1090386.6	1.1				ug/L	917693	Standard
|	**Sn**	118	5746.4	2.8	**0.0746**	0.006	8.6	ug/L	5013	Standard
|	**Sb**	123	4955.2	1.6	**0.3976**	0.005	1.2	ug/L	29	Standard
⌊	**Ba**	135	60664.2	1.7	**9.9887**	0.120	1.2	ug/L	68	Standard
⌈	**Ce**	140	56782.3	3.3				ug/L	58	Standard
⌊>	**Tb**	159	1154439.5	0.1				ug/L	1008624	Standard
⌈	**Ho**	165	796.7	7.3				ug/L	12	Standard
|	**Tl**	203	319.3	10.6	**0.0189**	0.002	9.8	ug/L	9	Standard
|	**Tl**	205	720.0	8.3	**0.0187**	0.001	5.7	ug/L	29	Standard
|	**Pb**	206	129239.6	1.0	**8.6624**	0.070	0.8	ug/L	458	Standard
|	**Pb**	207	109087.0	1.2	**8.8501**	0.117	1.3	ug/L	380	Standard
|	**Pb**	208	500669.0	1.0	**8.6310**	0.107	1.2	ug/L	1773	Standard
|	**U**	238	5454.6	2.4	**0.1033**	0.003	3.2	ug/L	42	Standard
⌊>	**Bi**	209	605443.1	1.4				ug/L	569761	Standard
⌈	**Na**	23	33302.6	2.5	**8.7455**	0.142	1.6	mg/L	89	Standard
|	**Mg**	24	310968.5	1.5	**0.9086**	0.003	0.4	mg/L	158	Standard

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Sheri L. Babyak

	K	39	32404.0	1.6	**2.4250**	0.012	0.5	mg/L	532	Standard
	Ca	43	7470.5	0.5	**8.5857**	0.085	1.0	mg/L	142	Standard
	Fe	54	3749.6	2.2	**0.4011**	0.006	1.5	mg/L	890	Standard
	Fe	57	86335.0	4.7	**0.6140**	0.022	3.5	mg/L	3398	Standard
>	**Sc-1**	45	508477.2	1.5				mg/L	408994	Standard
	Cl	35	279575.7	1.3				ug/L	45742	Standard
	Kr	83	56.0	11.5				ug/L	47	Standard
	Br	81	20408.1	0.8				ug/L	11318	Standard
	P	31	496658.2	1.6				ug/L	55334	Standard
	S	34	2213680.7	1.6				ug/L	546407	Standard
	Sr	88	1297796.6	1.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		117.060	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		121.042	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		118.818	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.457	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	106.263
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204096802
Sample Date/Time: Tuesday, May 01, 2012 13:47:19
Number of Replicates: 3
Autosampler Position: 254
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	1564778.9	1.0	**65569.7308**	360.818	0.6	ug/L	21640	Standard
|	**Be**	9	31.3	4.9	**0.0056**	0.000	6.5	ug/L	16	Standard
|	**Al**	27	118824.2	1.9	**3.1851**	0.108	3.4	ug/L	19981	Standard
⌊>	**Sc**	45	552337.4	0.8				ug/L	408994	Standard
⌈	**Ti**	47	3041.6	4.9	**1.3963**	0.083	5.9	ug/L	102	Standard
|	**V**	51	285637.4	1.1	**11.9591**	0.163	1.4	ug/L	5722	Standard
|	**Cr**	52	51915.8	2.1	**1.7008**	0.092	5.4	ug/L	18417	Standard
|	**Cr**	53	3997.9	10.6	**1.6688**	0.167	10.0	ug/L	405	Standard
|	**Mn**	55	30943.9	1.3	**1.1198**	0.024	2.1	ug/L	4298	Standard
|	**Co**	59	11198.5	2.1	**0.6617**	0.015	2.3	ug/L	123	Standard
|	**Ni**	60	5294.9	4.5	**1.5280**	0.041	2.7	ug/L	90	Standard
|	**Cu**	65	2060.1	4.5	**0.6267**	0.023	3.7	ug/L	148	Standard
|	**Zn**	66	4973.5	2.7	**2.6902**	0.147	5.5	ug/L	842	Standard
| >	**Ge**	72	325030.0	1.8				ug/L	293466	Standard
|	**As**	75	2083.9	2.7	**1.8360**	0.018	1.0	ug/L	-207	Standard
|	**Se**	82	1170.1	2.6	**9.4494**	0.124	1.3	ug/L	19	Standard
⌊	**Se-1**	77	856.7	4.0	**9.1509**	0.239	2.6	ug/L	80	Standard
	Ga	71	257455.7	1.0				mg/L	234805	Standard
⌈	**Rb**	85	19662.1	0.9				ug/L	13	Standard
| >	**Y**	89	298538.0	1.0				ug/L	262487	Standard
⌊	**Rh**	103	1080.7	10.1				ug/L	4	Standard
⌈	**Mo**	98	16251.2	1.6	**3.8904**	0.052	1.3	ug/L	10	Standard
|	**Ag**	107	62.0	4.3	**0.0017**	0.000	20.1	ug/L	39	Standard
|	**Cd**	111	655.9	2.3	**0.0183**	0.003	18.7	mg/L	525	Standard
|	**Cd**	114	1789.6	1.0	**0.0103**	0.002	18.4	ug/L	1503	Standard
| >	**In**	115	1030375.7	0.5				ug/L	917693	Standard
|	**Sn**	118	1288.1	10.3	**-0.1547**	0.007	4.7	ug/L	5013	Standard
|	**Sb**	123	895.7	3.0	**0.0742**	0.002	3.2	ug/L	29	Standard
⌊	**Ba**	135	43949.7	1.1	**7.6554**	0.065	0.8	ug/L	68	Standard
⌈	**Ce**	140	666.0	10.4				ug/L	58	Standard
⌊>	**Tb**	159	1195028.3	0.4				ug/L	1008624	Standard
⌈	**Ho**	165	21.3	14.3				ug/L	12	Standard
|	**Tl**	203	758.0	10.5	**0.0513**	0.005	10.4	ug/L	9	Standard
|	**Tl**	205	1782.8	8.2	**0.0489**	0.004	7.8	ug/L	29	Standard
|	**Pb**	206	594.3	2.8	**0.0159**	0.001	8.9	ug/L	458	Standard
|	**Pb**	207	499.0	3.1	**0.0160**	0.002	9.5	ug/L	380	Standard
|	**Pb**	208	2247.4	1.1	**0.0164**	0.000	2.7	ug/L	1773	Standard
|	**U**	238	1149943.1	1.2	**25.1139**	0.364	1.4	ug/L	42	Standard
⌊>	**Bi**	209	503354.1	0.2				ug/L	569761	Standard
⌈	**Na**	23	160123.7	0.4	**38.8076**	0.235	0.6	mg/L	89	Standard
|	**Mg**	24	8972318.5	1.2	**24.1462**	0.101	0.4	mg/L	158	Standard

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Sheri L. Babyak

	K	39	27637.9	0.1	**1.8928**	0.015	0.8	mg/L	532	Standard
	Ca	43	24545.9	1.9	**26.3733**	0.303	1.2	mg/L	142	Standard
	Fe	54	1038.1	2.4	**-0.0267**	0.004	13.2	mg/L	890	Standard
	Fe	57	22059.4	1.0	**0.1201**	0.001	0.4	mg/L	3398	Standard
>	**Sc-1**	45	552337.4	0.8				mg/L	408994	Standard
	Cl	35	3121421.3	1.2				ug/L	45742	Standard
	Kr	83	49.1	3.4				ug/L	47	Standard
	Br	81	94356.9	1.4				ug/L	11318	Standard
	P	31	92862.1	1.5				ug/L	55334	Standard
	S	34	8894078.5	1.3				ug/L	546407	Standard
	Sr	88	42192019.4	0.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.756	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.734	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		112.279	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		118.481	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.345
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204096804
Sample Date/Time: Tuesday, May 01, 2012 13:50:07
Number of Replicates: 3
Autosampler Position: 255
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	1314165.7	0.4	**54681.1133**	241.708	0.4	ug/L	21640	Standard
|	**Be**	9	34.3	3.4	**0.0062**	0.000	3.8	ug/L	16	Standard
|	**Al**	27	539642.0	1.2	**17.0445**	0.318	1.9	ug/L	19981	Standard
⌊>	**Sc**	45	554171.8	0.7				ug/L	408994	Standard
⌈	**Ti**	47	3545.1	2.5	**1.6488**	0.043	2.6	ug/L	102	Standard
|	**V**	51	304188.0	0.6	**12.8031**	0.032	0.3	ug/L	5722	Standard
|	**Cr**	52	40959.7	3.1	**1.1288**	0.073	6.4	ug/L	18417	Standard
|	**Cr**	53	3519.1	3.8	**1.4543**	0.056	3.9	ug/L	405	Standard
|	**Mn**	55	27037.8	1.2	**0.9641**	0.010	1.0	ug/L	4298	Standard
|	**Co**	59	4060.2	1.7	**0.2361**	0.005	2.0	ug/L	123	Standard
|	**Ni**	60	5155.5	2.4	**1.4938**	0.042	2.8	ug/L	90	Standard
|	**Cu**	65	2030.1	1.9	**0.6195**	0.013	2.2	ug/L	148	Standard
|	**Zn**	66	5329.3	1.3	**2.9686**	0.059	2.0	ug/L	842	Standard
| >	**Ge**	72	323735.4	0.4				ug/L	293466	Standard
|	**As**	75	147616.8	0.5	**119.6032**	0.505	0.4	ug/L	-207	Standard
|	**Se**	82	678.0	2.3	**5.4142**	0.114	2.1	ug/L	19	Standard
⌊	**Se-1**	77	587.3	3.1	**5.9274**	0.242	4.1	ug/L	80	Standard
	Ga	71	259173.2	0.3				mg/L	234805	Standard
⌈	**Rb**	85	37284.5	2.5				ug/L	13	Standard
| >	**Y**	89	302450.3	0.5				ug/L	262487	Standard
⌊	**Rh**	103	602.7	6.7				ug/L	4	Standard
⌈	**Mo**	98	8619.3	1.2	**1.9999**	0.038	1.9	ug/L	10	Standard
|	**Ag**	107	67.3	12.0	**0.0021**	0.001	47.5	ug/L	39	Standard
|	**Cd**	111	822.3	4.9	**0.0482**	0.009	19.0	mg/L	525	Standard
|	**Cd**	114	2096.1	1.2	**0.0281**	0.000	1.3	ug/L	1503	Standard
| >	**In**	115	1061950.5	1.2				ug/L	917693	Standard
|	**Sn**	118	1593.4	3.8	**-0.1404**	0.002	1.6	ug/L	5013	Standard
|	**Sb**	123	957.8	6.8	**0.0771**	0.005	6.1	ug/L	29	Standard
⌊	**Ba**	135	206982.6	0.7	**35.0244**	0.325	0.9	ug/L	68	Standard
⌈	**Ce**	140	8236.2	0.7				ug/L	58	Standard
⌊>	**Tb**	159	1187463.4	0.4				ug/L	1008624	Standard
⌈	**Ho**	165	98.7	9.4				ug/L	12	Standard
|	**Tl**	203	1047.7	1.3	**0.0663**	0.001	1.1	ug/L	9	Standard
|	**Tl**	205	2555.5	1.5	**0.0649**	0.001	1.6	ug/L	29	Standard
|	**Pb**	206	742.4	4.1	**0.0245**	0.002	9.0	ug/L	458	Standard
|	**Pb**	207	634.0	3.6	**0.0256**	0.002	8.4	ug/L	380	Standard
|	**Pb**	208	2987.8	3.5	**0.0282**	0.002	7.0	ug/L	1773	Standard
|	**U**	238	592863.6	0.3	**12.2076**	0.044	0.4	ug/L	42	Standard
⌊>	**Bi**	209	533956.7	0.2				ug/L	569761	Standard
⌈	**Na**	23	133962.3	0.7	**32.3542**	0.064	0.2	mg/L	89	Standard
|	**Mg**	24	5052344.8	1.3	**13.5527**	0.236	1.7	mg/L	158	Standard

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	K	39	22792.5	0.7	**1.5464**	0.013	0.8	mg/L	532	Standard
	Ca	43	25301.1	1.6	**27.1032**	0.520	1.9	mg/L	142	Standard
	Fe	54	1124.1	6.8	**-0.0151**	0.010	64.7	mg/L	890	Standard
	Fe	57	27100.9	1.4	**0.1543**	0.003	2.1	mg/L	3398	Standard
>	**Sc-1**	45	554171.8	0.7				mg/L	408994	Standard
	Cl	35	3153168.3	0.1				ug/L	45742	Standard
	Kr	83	53.8	7.5				ug/L	47	Standard
	Br	81	77575.1	1.5				ug/L	11318	Standard
	P	31	95229.1	2.0				ug/L	55334	Standard
	S	34	4697619.0	1.0				ug/L	546407	Standard
	Sr	88	23592318.8	1.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.314	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		115.225	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.720	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		117.731	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.716
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
As 75 Upper, S, EEE	As	75	

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Method 6020 - Summary Report

Sample ID: L1204096806
Sample Date/Time: Tuesday, May 01, 2012 13:52:54
Number of Replicates: 3
Autosampler Position: 256
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	1550587.9	1.4	**66018.3258**	1280.736	1.9	ug/L	21640	Standard
|	**Be**	9	39.0	5.1	**0.0073**	0.000	6.0	ug/L	16	Standard
|	**Al**	27	603289.6	3.0	**19.5246**	0.637	3.3	ug/L	19981	Standard
⌊>	**Sc**	45	543714.6	0.7				ug/L	408994	Standard
⌈	**Ti**	47	4609.4	1.5	**2.2348**	0.048	2.2	ug/L	102	Standard
|	**V**	51	406299.1	0.7	**17.6774**	0.063	0.4	ug/L	5722	Standard
|	**Cr**	52	63289.9	0.8	**2.4097**	0.041	1.7	ug/L	18417	Standard
|	**Cr**	53	8484.4	1.0	**3.8869**	0.019	0.5	ug/L	405	Standard
|	**Mn**	55	184222.2	0.7	**7.6362**	0.072	0.9	ug/L	4298	Standard
|	**Co**	59	14400.8	1.8	**0.8805**	0.011	1.2	ug/L	123	Standard
|	**Ni**	60	142634.3	0.9	**43.0846**	0.247	0.6	ug/L	90	Standard
|	**Cu**	65	2542.9	2.8	**0.8140**	0.022	2.7	ug/L	148	Standard
|	**Zn**	66	6228.9	0.5	**3.7686**	0.024	0.6	ug/L	842	Standard
|>	**Ge**	72	314919.8	0.6				ug/L	293466	Standard
|	**As**	75	84538.0	1.5	**70.4775**	1.047	1.5	ug/L	-207	Standard
|	**Se**	82	1767.0	0.9	**14.8395**	0.180	1.2	ug/L	19	Standard
⌊	**Se-1**	77	1432.4	2.0	**16.6669**	0.401	2.4	ug/L	80	Standard
	Ga	71	251675.1	0.7				mg/L	234805	Standard
⌈	**Rb**	85	39334.3	1.6				ug/L	13	Standard
|>	**Y**	89	294507.9	1.7				ug/L	262487	Standard
⌊	**Rh**	103	1333.4	2.6				ug/L	4	Standard
⌈	**Mo**	98	22188.6	0.3	**5.4082**	0.020	0.4	ug/L	10	Standard
|	**Ag**	107	60.7	4.8	**0.0016**	0.000	19.7	ug/L	39	Standard
|	**Cd**	111	690.0	6.9	**0.0281**	0.011	39.8	mg/L	525	Standard
|	**Cd**	114	1835.2	1.3	**0.0160**	0.003	15.9	ug/L	1503	Standard
|>	**In**	115	1012402.1	0.6				ug/L	917693	Standard
|	**Sn**	118	1201.4	6.1	**-0.1583**	0.004	2.7	ug/L	5013	Standard
|	**Sb**	123	988.2	1.6	**0.0836**	0.001	1.1	ug/L	29	Standard
⌊	**Ba**	135	57098.1	0.5	**10.1261**	0.041	0.4	ug/L	68	Standard
⌈	**Ce**	140	5246.9	2.5				ug/L	58	Standard
⌊>	**Tb**	159	1189073.4	0.8				ug/L	1008624	Standard
⌈	**Ho**	165	120.0	18.8				ug/L	12	Standard
|	**Tl**	203	864.7	2.5	**0.0615**	0.001	2.3	ug/L	9	Standard
|	**Tl**	205	2078.8	2.1	**0.0595**	0.001	2.3	ug/L	29	Standard
|	**Pb**	206	900.0	0.2	**0.0448**	0.000	0.6	ug/L	458	Standard
|	**Pb**	207	712.0	4.7	**0.0408**	0.003	8.1	ug/L	380	Standard
|	**Pb**	208	3383.1	1.5	**0.0440**	0.001	2.4	ug/L	1773	Standard
|	**U**	238	829045.8	0.1	**19.1438**	0.074	0.4	ug/L	42	Standard
⌊>	**Bi**	209	476081.3	0.5				ug/L	569761	Standard
⌈	**Na**	23	174246.2	0.6	**42.9027**	0.334	0.8	mg/L	89	Standard
|	**Mg**	24	9550838.9	0.3	**26.1123**	0.243	0.9	mg/L	158	Standard

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	K	39	48812.5	0.3	**3.4378**	0.019	0.6	mg/L	532	Standard
	Ca	43	34869.4	0.6	**38.1530**	0.470	1.2	mg/L	142	Standard
	Fe	54	1042.6	7.7	**-0.0238**	0.011	45.6	mg/L	890	Standard
	Fe	57	31893.5	1.2	**0.1914**	0.003	1.6	mg/L	3398	Standard
>	**Sc-1**	45	543714.6	0.7				mg/L	408994	Standard
	Cl	35	8434087.7	1.3				ug/L	45742	Standard
	Kr	83	58.9	21.8				ug/L	47	Standard
	Br	81	140542.1	0.2				ug/L	11318	Standard
	P	31	98726.1	2.6				ug/L	55334	Standard
	S	34	8091450.4	0.4				ug/L	546407	Standard
	Sr	88	46597268.2	0.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		107.310	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		112.199	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.320	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		117.891	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	83.558
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 13:55:44
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	26386.0	1.0	**77.9493**	3.528	4.5	ug/L	21640	Standard
|	**Be**	9	223688.6	1.3	**54.4153**	0.388	0.7	ug/L	16	Standard
|	**Al**	27	1238300.2	1.5	**47.9630**	0.520	1.1	ug/L	19981	Standard
⌊>	**Sc**	45	464398.1	0.7				ug/L	408994	Standard
⌈	**Ti**	47	211701.5	1.3	**101.2248**	0.856	0.8	ug/L	102	Standard
|	**V**	51	1256038.3	2.0	**52.3348**	0.641	1.2	ug/L	5722	Standard
|	**Cr**	52	1040898.4	1.6	**52.8880**	0.766	1.4	ug/L	18417	Standard
|	**Cr**	53	116583.5	1.5	**52.9576**	0.858	1.6	ug/L	405	Standard
|	**Mn**	55	1323268.9	1.9	**52.8760**	0.682	1.3	ug/L	4298	Standard
|	**Co**	59	880033.6	1.4	**51.4689**	0.942	1.8	ug/L	123	Standard
|	**Ni**	60	180657.9	2.9	**51.7588**	1.168	2.3	ug/L	90	Standard
|	**Cu**	65	158630.9	1.6	**51.4826**	0.925	1.8	ug/L	148	Standard
|	**Zn**	66	70417.9	1.3	**50.1388**	0.336	0.7	ug/L	842	Standard
| >	**Ge**	72	332066.0	2.0				ug/L	293466	Standard
|	**As**	75	64383.7	1.8	**50.9482**	0.144	0.3	ug/L	-207	Standard
|	**Se**	82	6406.5	2.9	**51.4996**	0.494	1.0	ug/L	19	Standard
⌊	**Se-1**	77	4358.6	2.6	**50.3522**	0.465	0.9	ug/L	80	Standard
	Ga	71	271097.7	1.9				mg/L	234805	Standard
⌈	**Rb**	85	1038.7	6.8				ug/L	13	Standard
| >	**Y**	89	297898.1	0.7				ug/L	262487	Standard
⌊	**Rh**	103	36.0	29.4				ug/L	4	Standard
⌈	**Mo**	98	420450.0	1.0	**95.8621**	1.603	1.7	ug/L	10	Standard
|	**Ag**	107	449493.2	1.9	**53.4298**	0.376	0.7	ug/L	39	Standard
|	**Cd**	111	267809.8	2.1	**53.4219**	0.216	0.4	mg/L	525	Standard
|	**Cd**	114	726218.1	1.9	**50.1050**	0.347	0.7	ug/L	1503	Standard
| >	**In**	115	1083386.8	1.7				ug/L	917693	Standard
|	**Sn**	118	959150.7	2.4	**50.2720**	0.388	0.8	ug/L	5013	Standard
|	**Sb**	123	627236.9	2.5	**50.9424**	0.409	0.8	ug/L	29	Standard
⌊	**Ba**	135	280439.3	1.5	**46.5185**	0.448	1.0	ug/L	68	Standard
⌈	**Ce**	140	1012.7	5.6				ug/L	58	Standard
⌊>	**Tb**	159	1152372.7	1.1				ug/L	1008624	Standard
⌈	**Ho**	165	27.3	25.7				ug/L	12	Standard
|	**Tl**	203	932544.6	1.2	**51.0809**	0.601	1.2	ug/L	9	Standard
|	**Tl**	205	2490109.9	0.6	**52.9780**	0.399	0.8	ug/L	29	Standard
|	**Pb**	206	756799.1	0.5	**51.0418**	0.224	0.4	ug/L	458	Standard
|	**Pb**	207	630557.6	0.8	**51.4746**	0.418	0.8	ug/L	380	Standard
|	**Pb**	208	2911014.5	0.8	**50.4859**	0.293	0.6	ug/L	1773	Standard
|	**U**	238	2959978.8	1.8	**53.9078**	0.766	1.4	ug/L	42	Standard
⌊>	**Bi**	209	603522.0	0.8				ug/L	569761	Standard
⌈	**Na**	23	16578.4	1.3	**4.7549**	0.094	2.0	mg/L	89	Standard
|	**Mg**	24	1525017.9	2.0	**4.8807**	0.071	1.5	mg/L	158	Standard

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	K	39	56191.3	1.1	**4.6520**	0.080	1.7	mg/L	532	Standard
	Ca	43	3761.8	1.2	**4.6434**	0.088	1.9	mg/L	142	Standard
	Fe	54	30533.9	2.0	**4.9455**	0.080	1.6	mg/L	890	Standard
	Fe	57	860731.0	2.4	**7.0193**	0.117	1.7	mg/L	3398	Standard
>	**Sc-1**	45	464398.1	0.7				mg/L	408994	Standard
	Cl	35	190537.1	29.7				ug/L	45742	Standard
	Kr	83	57.3	7.1				ug/L	47	Standard
	Br	81	16235.7	7.0				ug/L	11318	Standard
	P	31	88803.6	2.9				ug/L	55334	Standard
	S	34	937561.7	2.7				ug/L	546407	Standard
	Sr	88	3040.3	25.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	95.926		
>	Sc	45			
	Ti	47	101.225		
	V	51	104.670		
	Cr	52	105.776		
	Cr	53			
	Mn	55	105.752		
	Co	59	102.938		
	Ni	60	103.518		
	Cu	65	102.965		
	Zn	66	100.278		
>	Ge	72		113.153	
	As	75	101.896		
	Se	82	102.999		
	Se-1	77	100.704		
	Ga	71			
	Rb	85			
>	Y	89		113.491	
	Rh	103			
	Mo	98	95.862		
	Ag	107	106.860		
	Cd	111	106.844		
	Cd	114			
>	In	115		118.055	
	Sn	118	100.544		
	Sb	123	101.885		
	Ba	135	93.037		
	Ce	140			
>	Tb	159		114.252	
	Ho	165			
	Tl	203	102.162		
	Tl	205			
	Pb	206	102.084		

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	Pb	207	102.949	
	Pb	208	100.972	
	U	238	107.816	
>	Bi	209		105.925
	Na	23	95.098	
	Mg	24	97.615	
	K	39	93.041	
	Ca	43	92.869	
	Fe	54	98.911	
	Fe	57	140.386	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 13:58:31
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	26262.1	1.1	**71.1761**	33.289	46.8	ug/L	21640	Standard
|	**Be**	9	25.7	65.7	**0.0055**	0.004	76.9	ug/L	16	Standard
|	**Al**	27	21019.9	45.6	**0.0844**	0.391	462.7	ug/L	19981	Standard
⌊>	**Sc**	45	464691.3	1.7				ug/L	408994	Standard
⌈	**Ti**	47	126.7	35.0	**-0.0308**	0.021	68.6	ug/L	102	Standard
|	**V**	51	6555.9	0.9	**0.0121**	0.006	51.3	ug/L	5722	Standard
|	**Cr**	52	21151.8	2.1	**0.0456**	0.036	79.8	ug/L	18417	Standard
|	**Cr**	53	568.7	6.9	**0.0679**	0.021	31.4	ug/L	405	Standard
|	**Mn**	55	1893.8	1.3	**-0.0713**	0.001	2.0	ug/L	4298	Standard
|	**Co**	59	136.0	7.5	**0.0004**	0.000	112.6	ug/L	123	Standard
|	**Ni**	60	52.3	5.8	**-0.0070**	0.001	11.6	ug/L	90	Standard
|	**Cu**	65	193.0	5.8	**0.0056**	0.003	54.2	ug/L	148	Standard
|	**Zn**	66	206.0	4.7	**-0.8517**	0.009	1.1	ug/L	842	Standard
| >	**Ge**	72	332830.4	1.4				ug/L	293466	Standard
|	**As**	75	-228.7	14.3	**-0.0236**	0.028	118.3	ug/L	-207	Standard
|	**Se**	82	29.6	12.3	**0.0402**	0.028	69.0	ug/L	19	Standard
⌊	**Se-1**	77	96.0	3.1	**-0.0656**	0.051	78.2	ug/L	80	Standard
	Ga	71	268159.7	1.0				mg/L	234805	Standard
⌈	**Rb**	85	22.7	31.0				ug/L	13	Standard
| >	**Y**	89	293259.0	0.9				ug/L	262487	Standard
⌊	**Rh**	103	2.0	173.2				ug/L	4	Standard
⌈	**Mo**	98	85.8	48.9	**0.0149**	0.010	65.7	ug/L	10	Standard
|	**Ag**	107	69.3	34.8	**0.0023**	0.003	127.3	ug/L	39	Standard
|	**Cd**	111	647.6	1.2	**0.0119**	0.001	11.8	mg/L	525	Standard
|	**Cd**	114	1772.1	3.9	**0.0047**	0.005	106.4	ug/L	1503	Standard
| >	**In**	115	1066546.1	0.9				ug/L	917693	Standard
|	**Sn**	118	1815.4	31.5	**-0.1288**	0.031	24.1	ug/L	5013	Standard
|	**Sb**	123	664.9	99.8	**0.0527**	0.055	104.5	ug/L	29	Standard
⌊	**Ba**	135	338.0	140.9	**0.0459**	0.081	175.9	ug/L	68	Standard
⌈	**Ce**	140	112.7	88.7				ug/L	58	Standard
⌊>	**Tb**	159	1120948.0	0.4				ug/L	1008624	Standard
⌈	**Ho**	165	11.3	71.3				ug/L	12	Standard
|	**Tl**	203	459.7	132.5	**0.0264**	0.033	124.9	ug/L	9	Standard
|	**Tl**	205	988.7	124.0	**0.0242**	0.026	106.4	ug/L	29	Standard
|	**Pb**	206	676.0	64.7	**0.0131**	0.029	222.7	ug/L	458	Standard
|	**Pb**	207	526.3	58.9	**0.0097**	0.025	256.5	ug/L	380	Standard
|	**Pb**	208	2423.1	55.4	**0.0113**	0.023	202.9	ug/L	1773	Standard
|	**U**	238	569.0	138.2	**0.0145**	0.014	97.4	ug/L	42	Standard
⌊>	**Bi**	209	607872.8	0.8				ug/L	569761	Standard
⌈	**Na**	23	97.3	20.3	**0.0005**	0.006	1207.6	mg/L	89	Standard
|	**Mg**	24	1299.8	145.8	**0.0037**	0.006	165.9	mg/L	158	Standard

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	K	39	597.3	4.0	**-0.0028**	0.003	98.8	mg/L	532	Standard
	Ca	43	108.7	7.7	**-0.0612**	0.013	21.1	mg/L	142	Standard
	Fe	54	973.8	6.4	**-0.0099**	0.009	91.6	mg/L	890	Standard
	Fe	57	4668.1	1.2	**0.0064**	0.001	15.2	mg/L	3398	Standard
>	**Sc-1**	45	464691.3	1.7				mg/L	408994	Standard
	Cl	35	139179.9	2.4				ug/L	45742	Standard
	Kr	83	51.8	11.0				ug/L	47	Standard
	Br	81	14314.8	2.5				ug/L	11318	Standard
	P	31	92900.0	1.6				ug/L	55334	Standard
	S	34	945312.9	0.7				ug/L	546407	Standard
	Sr	88	674.0	57.7				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		113.414	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		111.723	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		116.220	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.136	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

106.689

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: L1204096808
Sample Date/Time: Tuesday, May 01, 2012 14:01:21
Number of Replicates: 3
Autosampler Position: 257
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	1561398.4	1.4	**66501.9718**	1297.998	2.0	ug/L	21640	Standard
|	**Be**	9	43.3	26.2	**0.0082**	0.002	28.1	ug/L	16	Standard
|	**Al**	27	521732.2	1.2	**16.7887**	0.341	2.0	ug/L	19981	Standard
⌊>	**Sc**	45	543606.6	0.8				ug/L	408994	Standard
⌈	**Ti**	47	4290.6	13.2	**2.1011**	0.203	9.7	ug/L	102	Standard
|	**V**	51	335027.8	0.6	**14.7778**	0.745	5.0	ug/L	5722	Standard
|	**Cr**	52	40639.1	0.8	**1.2083**	0.079	6.6	ug/L	18417	Standard
|	**Cr**	53	4527.3	6.7	**2.0247**	0.238	11.7	ug/L	405	Standard
|	**Mn**	55	199705.9	0.8	**8.4277**	0.300	3.6	ug/L	4298	Standard
|	**Co**	59	10590.0	1.2	**0.6561**	0.020	3.1	ug/L	123	Standard
|	**Ni**	60	7680.9	1.0	**2.3383**	0.122	5.2	ug/L	90	Standard
|	**Cu**	65	2354.5	1.0	**0.7626**	0.027	3.5	ug/L	148	Standard
|	**Zn**	66	6994.9	0.8	**4.4447**	0.275	6.2	ug/L	842	Standard
| >	**Ge**	72	310175.4	4.2				ug/L	293466	Standard
|	**As**	75	107296.1	1.4	**90.8554**	3.060	3.4	ug/L	-207	Standard
|	**Se**	82	2312.2	1.8	**19.7946**	0.541	2.7	ug/L	19	Standard
⌊	**Se-1**	77	1574.1	3.4	**18.7629**	1.221	6.5	ug/L	80	Standard
	Ga	71	248170.8	4.6				mg/L	234805	Standard
⌈	**Rb**	85	36468.5	0.4				ug/L	13	Standard
| >	**Y**	89	292900.0	0.5				ug/L	262487	Standard
⌊	**Rh**	103	1420.7	6.0				ug/L	4	Standard
⌈	**Mo**	98	14883.2	1.1	**3.6087**	0.029	0.8	ug/L	10	Standard
|	**Ag**	107	85.0	15.6	**0.0047**	0.002	34.0	ug/L	39	Standard
|	**Cd**	111	666.5	1.3	**0.0223**	0.002	9.2	mg/L	525	Standard
|	**Cd**	114	1829.7	2.3	**0.0150**	0.003	23.1	ug/L	1503	Standard
| >	**In**	115	1017220.9	0.7				ug/L	917693	Standard
|	**Sn**	118	1505.4	4.9	**-0.1416**	0.004	2.5	ug/L	5013	Standard
|	**Sb**	123	1249.2	2.2	**0.1058**	0.003	2.4	ug/L	29	Standard
⌊	**Ba**	135	46652.4	0.9	**8.2327**	0.119	1.4	ug/L	68	Standard
⌈	**Ce**	140	3323.0	1.7				ug/L	58	Standard
⌊>	**Tb**	159	1193506.3	1.9				ug/L	1008624	Standard
⌈	**Ho**	165	65.3	1.8				ug/L	12	Standard
|	**Tl**	203	1007.0	2.7	**0.0717**	0.002	3.4	ug/L	9	Standard
|	**Tl**	205	2360.2	4.1	**0.0674**	0.002	3.2	ug/L	29	Standard
|	**Pb**	206	788.0	1.6	**0.0356**	0.002	4.5	ug/L	458	Standard
|	**Pb**	207	627.0	7.6	**0.0323**	0.005	15.2	ug/L	380	Standard
|	**Pb**	208	2954.4	2.5	**0.0349**	0.002	5.7	ug/L	1773	Standard
|	**U**	238	1105684.5	0.8	**25.6558**	0.405	1.6	ug/L	42	Standard
⌊>	**Bi**	209	473784.8	0.8				ug/L	569761	Standard
⌈	**Na**	23	176160.8	0.4	**43.3839**	0.380	0.9	mg/L	89	Standard
|	**Mg**	24	10007995.1	0.9	**27.3689**	0.460	1.7	mg/L	158	Standard

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Sheri L. Babyak

	K	39	39437.3	0.4	**2.7681**	0.034	1.2	mg/L	532	Standard
	Ca	43	33335.3	1.6	**36.4752**	0.859	2.4	mg/L	142	Standard
	Fe	54	1059.4	1.5	**-0.0213**	0.003	15.8	mg/L	890	Standard
	Fe	57	32396.6	2.7	**0.1950**	0.007	3.6	mg/L	3398	Standard
>	**Sc-1**	45	543606.6	0.8				mg/L	408994	Standard
	Cl	35	5589163.2	1.8				ug/L	45742	Standard
	Kr	83	59.6	12.1				ug/L	47	Standard
	Br	81	217879.7	1.6				ug/L	11318	Standard
	P	31	98909.5	1.7				ug/L	55334	Standard
	S	34	10296312.6	1.1				ug/L	546407	Standard
	Sr	88	49372217.5	2.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.694	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		111.586	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.845	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		118.330	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	83.155
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204096810
Sample Date/Time: Tuesday, May 01, 2012 14:04:09
Number of Replicates: 3
Autosampler Position: 258
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	2369291.6	1.6	**101312.0275**	964.754	1.0	ug/L	21640	Standard
|	**Be**	9	72.3	17.6	**0.0142**	0.003	17.9	ug/L	16	Standard
|	**Al**	27	231380.7	0.7	**7.0124**	0.115	1.6	ug/L	19981	Standard
⌊>	**Sc**	45	544877.1	0.8				ug/L	408994	Standard
⌈	**Ti**	47	4019.9	2.2	**2.0262**	0.045	2.2	ug/L	102	Standard
|	**V**	51	105990.3	1.0	**4.6240**	0.099	2.1	ug/L	5722	Standard
|	**Cr**	52	50920.8	0.6	**1.8561**	0.034	1.8	ug/L	18417	Standard
|	**Cr**	53	11194.1	1.8	**5.4261**	0.132	2.4	ug/L	405	Standard
|	**Mn**	55	258013.4	0.8	**11.2323**	0.072	0.6	ug/L	4298	Standard
|	**Co**	59	8044.8	1.9	**0.5104**	0.008	1.6	ug/L	123	Standard
|	**Ni**	60	18328.1	0.5	**5.7606**	0.055	1.0	ug/L	90	Standard
|	**Cu**	65	3178.0	2.2	**1.0794**	0.019	1.8	ug/L	148	Standard
|	**Zn**	66	21310.6	0.8	**16.0331**	0.048	0.3	ug/L	842	Standard
| >	**Ge**	72	301680.7	1.1				ug/L	293466	Standard
|	**As**	75	5786.7	1.3	**5.1815**	0.062	1.2	ug/L	-207	Standard
|	**Se**	82	3990.4	0.1	**35.2529**	0.409	1.2	ug/L	19	Standard
⌊	**Se-1**	77	2755.3	2.1	**34.6704**	0.351	1.0	ug/L	80	Standard
	Ga	71	243654.3	1.1				mg/L	234805	Standard
⌈	**Rb**	85	91523.6	0.8				ug/L	13	Standard
| >	**Y**	89	293691.8	1.9				ug/L	262487	Standard
⌊	**Rh**	103	2752.3	3.9				ug/L	4	Standard
⌈	**Mo**	98	4496.8	1.7	**1.1498**	0.024	2.1	ug/L	10	Standard
|	**Ag**	107	79.7	14.9	**0.0046**	0.002	35.8	ug/L	39	Standard
|	**Cd**	111	702.4	2.4	**0.0386**	0.004	9.3	mg/L	525	Standard
|	**Cd**	114	1800.8	5.8	**0.0205**	0.007	35.8	ug/L	1503	Standard
| >	**In**	115	961837.7	0.7				ug/L	917693	Standard
|	**Sn**	118	1292.1	2.0	**-0.1494**	0.002	1.2	ug/L	5013	Standard
|	**Sb**	123	1048.6	6.3	**0.0936**	0.005	5.8	ug/L	29	Standard
⌊	**Ba**	135	241558.8	0.8	**45.1304**	0.251	0.6	ug/L	68	Standard
⌈	**Ce**	140	2807.6	2.4				ug/L	58	Standard
⌊>	**Tb**	159	1147965.1	0.8				ug/L	1008624	Standard
⌈	**Ho**	165	611.3	6.2				ug/L	12	Standard
|	**Tl**	203	710.7	1.9	**0.0646**	0.001	1.6	ug/L	9	Standard
|	**Tl**	205	1648.1	5.6	**0.0603**	0.003	5.0	ug/L	29	Standard
|	**Pb**	206	524.7	5.0	**0.0253**	0.003	10.3	ug/L	458	Standard
|	**Pb**	207	439.7	2.9	**0.0254**	0.002	7.3	ug/L	380	Standard
|	**Pb**	208	2058.1	2.4	**0.0275**	0.001	4.2	ug/L	1773	Standard
|	**U**	238	2766043.2	0.3	**81.7175**	0.743	0.9	ug/L	42	Standard
⌊>	**Bi**	209	372058.1	0.6				ug/L	569761	Standard
⌈	**Na**	23	222604.1	1.1	**54.7036**	1.003	1.8	mg/L	89	Standard
|	**Mg**	24	17695755.1	0.1	**48.2780**	0.378	0.8	mg/L	158	Standard

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	K	39	61721.5	0.9	**4.3517**	0.058	1.3	mg/L	532	Standard
	Ca	43	67443.8	0.6	**73.8251**	0.934	1.3	mg/L	142	Standard
	Fe	54	968.7	5.4	**-0.0346**	0.008	22.3	mg/L	890	Standard
	Fe	57	55603.9	1.9	**0.3564**	0.005	1.5	mg/L	3398	Standard
>	**Sc-1**	45	544877.1	0.8				mg/L	408994	Standard
	Cl	35	18620284.2	1.7				ug/L	45742	Standard
	Kr	83	58.4	5.7				ug/L	47	Standard
	Br	81	481522.7	2.3				ug/L	11318	Standard
	P	31	166224.6	1.2				ug/L	55334	Standard
	S	34	10602637.0	1.1				ug/L	546407	Standard
	Sr	88	98035786.0	0.4				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.799	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		111.888	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.810	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.815	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		65.301
	Na	23		
	Mg	24		
	K	39		
	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204096812
Sample Date/Time: Tuesday, May 01, 2012 14:06:56
Number of Replicates: 3
Autosampler Position: 259
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	1423429.5	0.7	**61959.7186**	491.898	0.8	ug/L	21640	Standard
|	**Be**	9	52.3	16.3	**0.0103**	0.002	16.8	ug/L	16	Standard
|	**Al**	27	210106.0	3.6	**6.4813**	0.284	4.4	ug/L	19981	Standard
⌊>	**Sc**	45	531145.4	0.7				ug/L	408994	Standard
⌈	**Ti**	47	2899.6	3.2	**1.3423**	0.061	4.5	ug/L	102	Standard
|	**V**	51	499030.8	1.2	**21.3208**	0.070	0.3	ug/L	5722	Standard
|	**Cr**	52	47508.4	1.1	**1.4946**	0.052	3.5	ug/L	18417	Standard
|	**Cr**	53	5306.3	1.4	**2.3077**	0.061	2.6	ug/L	405	Standard
|	**Mn**	55	31536.8	1.1	**1.1581**	0.017	1.5	ug/L	4298	Standard
|	**Co**	59	7406.8	2.2	**0.4399**	0.010	2.4	ug/L	123	Standard
|	**Ni**	60	6751.2	1.8	**1.9769**	0.053	2.7	ug/L	90	Standard
|	**Cu**	65	2517.5	3.5	**0.7877**	0.024	3.1	ug/L	148	Standard
|	**Zn**	66	6318.7	2.7	**3.7380**	0.104	2.8	ug/L	842	Standard
| >	**Ge**	72	321498.0	1.1				ug/L	293466	Standard
|	**As**	75	107231.3	0.6	**87.5319**	0.629	0.7	ug/L	-207	Standard
|	**Se**	82	1794.5	2.0	**14.7630**	0.426	2.9	ug/L	19	Standard
⌊	**Se-1**	77	1251.7	1.4	**14.0941**	0.240	1.7	ug/L	80	Standard
	Ga	71	257629.9	0.4				mg/L	234805	Standard
⌈	**Rb**	85	20367.0	2.7				ug/L	13	Standard
| >	**Y**	89	298250.4	1.2				ug/L	262487	Standard
⌊	**Rh**	103	1272.7	1.8				ug/L	4	Standard
⌈	**Mo**	98	17757.2	2.2	**4.3004**	0.099	2.3	ug/L	10	Standard
|	**Ag**	107	64.3	1.8	**0.0021**	0.000	7.5	ug/L	39	Standard
|	**Cd**	111	696.8	1.7	**0.0286**	0.003	9.5	mg/L	525	Standard
|	**Cd**	114	1908.1	1.6	**0.0205**	0.002	11.1	ug/L	1503	Standard
| >	**In**	115	1018685.2	0.1				ug/L	917693	Standard
|	**Sn**	118	1689.4	2.3	**-0.1314**	0.002	1.7	ug/L	5013	Standard
|	**Sb**	123	869.7	1.8	**0.0729**	0.001	1.9	ug/L	29	Standard
⌊	**Ba**	135	41912.6	1.2	**7.3840**	0.080	1.1	ug/L	68	Standard
⌈	**Ce**	140	2042.1	7.5				ug/L	58	Standard
⌊>	**Tb**	159	1188194.4	0.1				ug/L	1008624	Standard
⌈	**Ho**	165	80.7	16.1				ug/L	12	Standard
|	**Tl**	203	879.4	1.2	**0.0618**	0.001	1.1	ug/L	9	Standard
|	**Tl**	205	2181.5	1.7	**0.0615**	0.001	2.0	ug/L	29	Standard
|	**Pb**	206	871.0	4.8	**0.0415**	0.003	8.3	ug/L	458	Standard
|	**Pb**	207	705.0	1.7	**0.0392**	0.001	2.5	ug/L	380	Standard
|	**Pb**	208	3321.8	1.4	**0.0418**	0.001	2.0	ug/L	1773	Standard
|	**U**	238	1016706.3	0.6	**23.1990**	0.222	1.0	ug/L	42	Standard
⌊>	**Bi**	209	481778.6	0.6				ug/L	569761	Standard
⌈	**Na**	23	143673.3	0.6	**36.2074**	0.120	0.3	mg/L	89	Standard
|	**Mg**	24	9019341.5	0.9	**25.2423**	0.258	1.0	mg/L	158	Standard

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Sheri L. Babyak

	K	39	29857.4	1.3	**2.1329**	0.027	1.3	mg/L	532	Standard
	Ca	43	31152.7	0.8	**34.8739**	0.182	0.5	mg/L	142	Standard
	Fe	54	970.9	1.0	**-0.0307**	0.002	5.6	mg/L	890	Standard
	Fe	57	28269.0	2.0	**0.1707**	0.003	1.6	mg/L	3398	Standard
>	**Sc-1**	45	531145.4	0.7				mg/L	408994	Standard
	Cl	35	4634287.9	1.5				ug/L	45742	Standard
	Kr	83	57.6	0.7				ug/L	47	Standard
	Br	81	159858.2	0.8				ug/L	11318	Standard
	P	31	108584.4	1.1				ug/L	55334	Standard
	S	34	10254983.2	0.2				ug/L	546407	Standard
	Sr	88	44753420.8	0.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		109.552	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.625	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.005	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		117.804	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	84.558
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204096814
Sample Date/Time: Tuesday, May 01, 2012 14:09:43
Number of Replicates: 3
Autosampler Position: 260
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	1429005.0	0.4	**62263.6296**	1066.519	1.7	ug/L	21640	Standard
|	**Be**	9	46.0	9.5	**0.0090**	0.001	11.6	ug/L	16	Standard
|	**Al**	27	1710233.5	0.7	**58.1258**	0.879	1.5	ug/L	19981	Standard
⌊>	**Sc**	45	530744.2	1.4				ug/L	408994	Standard
⌈	**Ti**	47	6221.3	1.3	**3.0170**	0.023	0.8	ug/L	102	Standard
|	**V**	51	274543.2	1.0	**11.7422**	0.243	2.1	ug/L	5722	Standard
|	**Cr**	52	56820.7	0.3	**2.0257**	0.024	1.2	ug/L	18417	Standard
|	**Cr**	53	6047.2	1.1	**2.6870**	0.024	0.9	ug/L	405	Standard
|	**Mn**	55	37651.4	1.3	**1.4280**	0.013	0.9	ug/L	4298	Standard
|	**Co**	59	1895.5	4.4	**0.1082**	0.005	4.7	ug/L	123	Standard
|	**Ni**	60	6989.3	2.7	**2.0693**	0.041	2.0	ug/L	90	Standard
|	**Cu**	65	2224.5	0.5	**0.6976**	0.007	1.1	ug/L	148	Standard
|	**Zn**	66	8444.0	3.0	**5.4001**	0.136	2.5	ug/L	842	Standard
| >	**Ge**	72	318053.4	1.0				ug/L	293466	Standard
|	**As**	75	25629.9	0.5	**21.2670**	0.186	0.9	ug/L	-207	Standard
|	**Se**	82	1419.8	1.3	**11.7676**	0.279	2.4	ug/L	19	Standard
⌊	**Se-1**	77	986.4	3.0	**10.9847**	0.471	4.3	ug/L	80	Standard
	Ga	71	256732.2	0.4				mg/L	234805	Standard
⌈	**Rb**	85	41967.4	1.1				ug/L	13	Standard
| >	**Y**	89	295719.4	2.1				ug/L	262487	Standard
⌊	**Rh**	103	1179.4	4.0				ug/L	4	Standard
⌈	**Mo**	98	16567.5	0.5	**4.0026**	0.028	0.7	ug/L	10	Standard
|	**Ag**	107	60.3	5.3	**0.0015**	0.000	25.9	ug/L	39	Standard
|	**Cd**	111	651.8	4.4	**0.0187**	0.007	37.7	mg/L	525	Standard
|	**Cd**	114	1879.2	1.7	**0.0181**	0.003	19.2	ug/L	1503	Standard
| >	**In**	115	1021070.0	0.8				ug/L	917693	Standard
|	**Sn**	118	1526.7	2.9	**-0.1407**	0.003	2.1	ug/L	5013	Standard
|	**Sb**	123	1796.4	2.0	**0.1526**	0.003	2.2	ug/L	29	Standard
⌊	**Ba**	135	69529.9	1.5	**12.2282**	0.145	1.2	ug/L	68	Standard
⌈	**Ce**	140	13154.4	3.1				ug/L	58	Standard
⌊>	**Tb**	159	1183741.5	1.4				ug/L	1008624	Standard
⌈	**Ho**	165	228.7	9.7				ug/L	12	Standard
|	**Tl**	203	585.3	10.1	**0.0413**	0.004	10.0	ug/L	9	Standard
|	**Tl**	205	1420.7	7.1	**0.0409**	0.003	6.9	ug/L	29	Standard
|	**Pb**	206	1518.4	4.1	**0.0951**	0.005	4.8	ug/L	458	Standard
|	**Pb**	207	1182.7	2.2	**0.0871**	0.003	3.6	ug/L	380	Standard
|	**Pb**	208	5573.1	0.8	**0.0897**	0.001	1.2	ug/L	1773	Standard
|	**U**	238	995604.8	0.2	**22.5197**	0.088	0.4	ug/L	42	Standard
⌊>	**Bi**	209	486005.5	0.6				ug/L	569761	Standard
⌈	**Na**	23	141061.7	1.1	**35.5795**	0.596	1.7	mg/L	89	Standard
|	**Mg**	24	8562380.6	0.5	**23.9833**	0.273	1.1	mg/L	158	Standard

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	K	39	32579.7	0.6	**2.3343**	0.045	1.9	mg/L	532	Standard
	Ca	43	29711.1	0.3	**33.2794**	0.371	1.1	mg/L	142	Standard
	Fe	54	1262.3	3.5	**0.0121**	0.005	43.9	mg/L	890	Standard
	Fe	57	35001.1	1.8	**0.2191**	0.003	1.2	mg/L	3398	Standard
>	**Sc-1**	45	530744.2	1.4				mg/L	408994	Standard
	Cl	35	4161460.3	1.2				ug/L	45742	Standard
	Kr	83	57.8	7.3				ug/L	47	Standard
	Br	81	156781.3	0.4				ug/L	11318	Standard
	P	31	96406.5	2.5				ug/L	55334	Standard
	S	34	8331601.4	1.2				ug/L	546407	Standard
	Sr	88	42138191.3	1.5				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		108.378	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		112.661	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.265	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		117.362	
	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

85.300

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1204096814
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 14:12:32
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	26423.7	1.7	**73.6780**	29.972	40.7	ug/L	21640	Standard
|	**Be**	9	220425.0	1.3	**53.3721**	0.853	1.6	ug/L	16	Standard
|	**Al**	27	1215306.3	0.4	**46.8383**	0.687	1.5	ug/L	19981	Standard
⌊>	**Sc**	45	466608.5	1.1				ug/L	408994	Standard
⌈	**Ti**	47	211831.6	2.0	**100.7123**	2.069	2.1	ug/L	102	Standard
|	**V**	51	1240857.2	2.3	**51.4058**	1.141	2.2	ug/L	5722	Standard
|	**Cr**	52	1028314.5	1.8	**51.9336**	0.994	1.9	ug/L	18417	Standard
|	**Cr**	53	112331.6	0.8	**50.7269**	0.507	1.0	ug/L	405	Standard
|	**Mn**	55	1301453.6	1.0	**51.7079**	0.615	1.2	ug/L	4298	Standard
|	**Co**	59	876338.0	0.5	**50.9582**	0.365	0.7	ug/L	123	Standard
|	**Ni**	60	179258.3	1.2	**51.0704**	0.705	1.4	ug/L	90	Standard
|	**Cu**	65	156544.6	0.3	**50.5132**	0.183	0.4	ug/L	148	Standard
|	**Zn**	66	70383.1	1.9	**49.8253**	1.035	2.1	ug/L	842	Standard
| >	**Ge**	72	333929.0	0.2				ug/L	293466	Standard
|	**As**	75	63891.2	0.3	**50.2774**	0.254	0.5	ug/L	-207	Standard
|	**Se**	82	6375.0	0.4	**50.9651**	0.325	0.6	ug/L	19	Standard
⌊	**Se-1**	77	4487.7	1.4	**51.5862**	0.782	1.5	ug/L	80	Standard
	Ga	71	274388.5	1.3				mg/L	234805	Standard
⌈	**Rb**	85	1005.4	0.9				ug/L	13	Standard
| >	**Y**	89	300486.6	1.2				ug/L	262487	Standard
⌊	**Rh**	103	31.3	24.2				ug/L	4	Standard
⌈	**Mo**	98	418991.3	1.3	**95.5288**	1.557	1.6	ug/L	10	Standard
|	**Ag**	107	448979.7	2.3	**53.3781**	1.382	2.6	ug/L	39	Standard
|	**Cd**	111	267459.3	1.6	**53.3624**	1.001	1.9	mg/L	525	Standard
|	**Cd**	114	722988.6	1.8	**49.8905**	1.096	2.2	ug/L	1503	Standard
| >	**In**	115	1083261.5	0.4				ug/L	917693	Standard
|	**Sn**	118	958527.4	1.4	**50.2504**	0.842	1.7	ug/L	5013	Standard
|	**Sb**	123	628941.6	1.7	**51.0933**	1.024	2.0	ug/L	29	Standard
⌊	**Ba**	135	279532.3	1.9	**46.3716**	0.928	2.0	ug/L	68	Standard
⌈	**Ce**	140	1020.7	1.8				ug/L	58	Standard
⌊>	**Tb**	159	1159445.9	0.9				ug/L	1008624	Standard
⌈	**Ho**	165	34.7	29.0				ug/L	12	Standard
|	**Tl**	203	930144.9	0.8	**51.4625**	0.379	0.7	ug/L	9	Standard
|	**Tl**	205	2485316.0	1.0	**53.4075**	0.457	0.9	ug/L	29	Standard
|	**Pb**	206	744849.1	0.4	**50.7416**	0.102	0.2	ug/L	458	Standard
|	**Pb**	207	623352.0	0.2	**51.3996**	0.353	0.7	ug/L	380	Standard
|	**Pb**	208	2874138.2	0.3	**50.3491**	0.300	0.6	ug/L	1773	Standard
|	**U**	238	2973958.7	1.2	**54.7083**	0.391	0.7	ug/L	42	Standard
⌊>	**Bi**	209	597496.5	0.5				ug/L	569761	Standard
⌈	**Na**	23	16496.3	0.8	**4.7088**	0.080	1.7	mg/L	89	Standard
|	**Mg**	24	1496039.4	1.1	**4.7662**	0.098	2.1	mg/L	158	Standard

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	K	39	55472.7	1.6	**4.5701**	0.103	2.3	mg/L	532	Standard
	Ca	43	3681.8	3.4	**4.5175**	0.149	3.3	mg/L	142	Standard
	Fe	54	30850.3	0.2	**4.9748**	0.067	1.4	mg/L	890	Standard
	Fe	57	875048.0	1.2	**7.1032**	0.029	0.4	mg/L	3398	Standard
>	**Sc-1**	45	466608.5	1.1				mg/L	408994	Standard
	Cl	35	189716.3	16.3				ug/L	45742	Standard
	Kr	83	49.1	6.8				ug/L	47	Standard
	Br	81	17246.2	6.2				ug/L	11318	Standard
	P	31	89445.2	4.1				ug/L	55334	Standard
	S	34	958810.0	1.1				ug/L	546407	Standard
	Sr	88	2384.2	35.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	93.677		
>	Sc	45			
	Ti	47	100.712		
	V	51	102.812		
	Cr	52	103.867		
	Cr	53			
	Mn	55	103.416		
	Co	59	101.916		
	Ni	60	102.141		
	Cu	65	101.026		
	Zn	66	99.651		
>	Ge	72		113.788	
	As	75	100.555		
	Se	82	101.930		
	Se-1	77	103.172		
	Ga	71			
	Rb	85			
>	Y	89		114.477	
	Rh	103			
	Mo	98	95.529		
	Ag	107	106.756		
	Cd	111	106.725		
	Cd	114			
>	In	115		118.042	
	Sn	118	100.501		
	Sb	123	102.187		
	Ba	135	92.743		
	Ce	140			
>	Tb	159		114.953	
	Ho	165			
	Tl	203	102.925		
	Tl	205			
	Pb	206	101.483		

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	Pb	207	102.799	
	Pb	208	100.698	
	U	238	109.417	
>	Bi	209		104.868
	Na	23	94.175	
	Mg	24	95.324	
	K	39	91.403	
	Ca	43	90.350	
	Fe	54	99.495	
	Fe	57	142.064	
>	Sc-1	45		
	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	

Sample ID: QC Std 6
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 14:15:19
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	25453.4	0.8	**50.2758**	36.592	72.8	ug/L	21640	Standard
|	**Be**	9	23.0	30.4	**0.0049**	0.002	36.8	ug/L	16	Standard
|	**Al**	27	15313.7	0.2	**-0.1339**	0.012	8.9	ug/L	19981	Standard
⌊>	**Sc**	45	457604.6	2.0				ug/L	408994	Standard
⌈	**Ti**	47	112.0	12.9	**-0.0368**	0.008	22.2	ug/L	102	Standard
|	**V**	51	6419.9	2.5	**0.0108**	0.003	31.7	ug/L	5722	Standard
|	**Cr**	52	20949.1	1.5	**0.0528**	0.006	11.1	ug/L	18417	Standard
|	**Cr**	53	608.7	6.2	**0.0904**	0.014	15.8	ug/L	405	Standard
|	**Mn**	55	1694.1	6.8	**-0.0782**	0.004	5.5	ug/L	4298	Standard
|	**Co**	59	176.0	35.2	**0.0029**	0.004	122.1	ug/L	123	Standard
|	**Ni**	60	72.7	23.4	**-0.0009**	0.005	535.0	ug/L	90	Standard
|	**Cu**	65	237.0	8.8	**0.0212**	0.007	34.8	ug/L	148	Standard
|	**Zn**	66	238.0	7.3	**-0.8258**	0.011	1.3	ug/L	842	Standard
| >	**Ge**	72	327415.7	2.0				ug/L	293466	Standard
|	**As**	75	-205.9	27.6	**-0.0079**	0.044	557.4	ug/L	-207	Standard
|	**Se**	82	26.3	35.2	**0.0178**	0.077	432.5	ug/L	19	Standard
⌊	**Se-1**	77	81.7	18.7	**-0.2168**	0.204	94.0	ug/L	80	Standard
	Ga	71	271038.2	1.0				mg/L	234805	Standard
⌈	**Rb**	85	22.0	41.7				ug/L	13	Standard
| >	**Y**	89	294996.5	1.6				ug/L	262487	Standard
⌊	**Rh**	103	1.3	173.2				ug/L	4	Standard
⌈	**Mo**	98	91.4	65.0	**0.0161**	0.014	84.3	ug/L	10	Standard
|	**Ag**	107	81.0	40.7	**0.0037**	0.004	106.2	ug/L	39	Standard
|	**Cd**	111	686.9	5.1	**0.0195**	0.007	34.2	mg/L	525	Standard
|	**Cd**	114	1817.4	1.6	**0.0076**	0.003	34.1	ug/L	1503	Standard
| >	**In**	115	1069317.0	0.6				ug/L	917693	Standard
|	**Sn**	118	1441.4	10.9	**-0.1492**	0.008	5.3	ug/L	5013	Standard
|	**Sb**	123	408.9	44.6	**0.0313**	0.015	47.1	ug/L	29	Standard
⌊	**Ba**	135	92.0	25.4	**0.0041**	0.004	92.2	ug/L	68	Standard
⌈	**Ce**	140	50.7	16.0				ug/L	58	Standard
⌊>	**Tb**	159	1124393.1	2.1				ug/L	1008624	Standard
⌈	**Ho**	165	14.0	28.6				ug/L	12	Standard
|	**Tl**	203	153.7	40.0	**0.0098**	0.003	33.6	ug/L	9	Standard
|	**Tl**	205	402.0	29.3	**0.0119**	0.002	20.5	ug/L	29	Standard
|	**Pb**	206	479.0	16.6	**-0.0001**	0.005	3468.6	ug/L	458	Standard
|	**Pb**	207	412.0	18.7	**0.0004**	0.006	1444.0	ug/L	380	Standard
|	**Pb**	208	1867.4	15.6	**0.0017**	0.005	284.2	ug/L	1773	Standard
|	**U**	238	212.7	58.4	**0.0081**	0.002	27.4	ug/L	42	Standard
⌊>	**Bi**	209	609142.7	0.5				ug/L	569761	Standard
⌈	**Na**	23	89.3	6.5	**-0.0014**	0.002	133.1	mg/L	89	Standard
|	**Mg**	24	241.3	22.8	**0.0003**	0.000	66.5	mg/L	158	Standard

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	K	39	589.3	10.2	**-0.0028**	0.004	162.9	mg/L	532	Standard
	Ca	43	105.3	8.8	**-0.0636**	0.009	14.6	mg/L	142	Standard
	Fe	54	953.0	7.9	**-0.0107**	0.015	141.7	mg/L	890	Standard
	Fe	57	4786.1	1.7	**0.0080**	0.001	14.9	mg/L	3398	Standard
>	**Sc-1**	45	457604.6	2.0				mg/L	408994	Standard
	Cl	35	156293.7	1.2				ug/L	45742	Standard
	Kr	83	49.1	16.3				ug/L	47	Standard
	Br	81	15098.5	1.1				ug/L	11318	Standard
	P	31	91299.3	0.7				ug/L	55334	Standard
	S	34	971342.4	1.2				ug/L	546407	Standard
	Sr	88	710.7	40.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		111.569	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		112.385	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		116.522	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.478	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	106.912
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

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 01, 2012 14:17:47
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Method 6020 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, May 01, 2012 14:18:08
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	25439.7	0.6	**50.6835**	22.872	45.1	ug/L	21640	Standard
|	**Be**	9	16.0	39.0	**0.0032**	0.002	51.9	ug/L	16	Standard
|	**Al**	27	15893.0	2.6	**-0.1099**	0.032	28.7	ug/L	19981	Standard
⌊>	**Sc**	45	457166.1	2.3				ug/L	408994	Standard
⌈	**Ti**	47	100.0	7.2	**-0.0426**	0.003	7.6	ug/L	102	Standard
|	**V**	51	15993.5	0.1	**0.4195**	0.004	0.9	ug/L	5722	Standard
|	**Cr**	52	36678.7	0.2	**0.8851**	0.008	0.9	ug/L	18417	Standard
|	**Cr**	53	2322.8	3.2	**0.8861**	0.028	3.1	ug/L	405	Standard
|	**Mn**	55	15220.0	0.2	**0.4733**	0.005	1.0	ug/L	4298	Standard
|	**Co**	59	6851.2	2.0	**0.4001**	0.009	2.2	ug/L	123	Standard
|	**Ni**	60	7057.0	0.2	**2.0357**	0.011	0.5	ug/L	90	Standard
|	**Cu**	65	2717.2	4.4	**0.8410**	0.040	4.7	ug/L	148	Standard
|	**Zn**	66	12785.4	1.4	**8.4444**	0.162	1.9	ug/L	842	Standard
| >	**Ge**	72	326419.4	0.6				ug/L	293466	Standard
|	**As**	75	278.8	22.6	**0.3802**	0.049	13.0	ug/L	-207	Standard
|	**Se**	82	80.4	8.8	**0.4615**	0.055	11.9	ug/L	19	Standard
⌊	**Se-1**	77	116.0	10.5	**0.1963**	0.138	70.2	ug/L	80	Standard
	Ga	71	262164.0	0.5				mg/L	234805	Standard
⌈	**Rb**	85	20.0	26.5				ug/L	13	Standard
| >	**Y**	89	290178.8	1.5				ug/L	262487	Standard
⌊	**Rh**	103	5.3	43.3				ug/L	4	Standard
⌈	**Mo**	98	26.2	25.1	**0.0011**	0.002	136.4	ug/L	10	Standard
|	**Ag**	107	3494.4	2.3	**0.4195**	0.004	1.0	ug/L	39	Standard
|	**Cd**	111	1834.7	2.4	**0.2563**	0.009	3.5	mg/L	525	Standard
|	**Cd**	114	4943.9	2.4	**0.2306**	0.011	4.8	ug/L	1503	Standard
| >	**In**	115	1057417.8	1.4				ug/L	917693	Standard
|	**Sn**	118	1151.4	3.1	**-0.1639**	0.002	1.2	ug/L	5013	Standard
|	**Sb**	123	4915.5	0.7	**0.4069**	0.008	2.1	ug/L	29	Standard
⌊	**Ba**	135	4158.6	1.6	**0.6957**	0.015	2.2	ug/L	68	Standard
⌈	**Ce**	140	62.0	22.6				ug/L	58	Standard
⌊>	**Tb**	159	1116432.4	0.2				ug/L	1008624	Standard
⌈	**Ho**	165	10.0					ug/L	12	Standard
|	**Tl**	203	1516.1	3.6	**0.0848**	0.003	3.3	ug/L	9	Standard
|	**Tl**	205	3669.8	3.1	**0.0818**	0.002	3.0	ug/L	29	Standard
|	**Pb**	206	3455.7	1.0	**0.2020**	0.002	0.9	ug/L	458	Standard
|	**Pb**	207	2869.9	2.8	**0.2024**	0.006	3.0	ug/L	380	Standard
|	**Pb**	208	13247.9	1.4	**0.2004**	0.003	1.3	ug/L	1773	Standard
|	**U**	238	20725.8	0.6	**0.3832**	0.001	0.4	ug/L	42	Standard
⌊>	**Bi**	209	601153.8	0.3				ug/L	569761	Standard
⌈	**Na**	23	69.3	24.9	**-0.0073**	0.005	66.9	mg/L	89	Standard
|	**Mg**	24	267.7	21.0	**0.0004**	0.000	53.1	mg/L	158	Standard

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	K	39	593.3	5.1	**-0.0023**	0.003	108.5	mg/L	532	Standard
	Ca	43	109.3	13.7	**-0.0583**	0.017	28.7	mg/L	142	Standard
	Fe	54	918.0	2.1	**-0.0166**	0.005	27.6	mg/L	890	Standard
	Fe	57	4780.1	1.7	**0.0080**	0.001	18.5	mg/L	3398	Standard
>	**Sc-1**	45	457166.1	2.3				mg/L	408994	Standard
	Cl	35	146265.1	2.1				ug/L	45742	Standard
	Kr	83	44.2	8.3				ug/L	47	Standard
	Br	81	14426.9	1.4				ug/L	11318	Standard
	P	31	87257.1	3.7				ug/L	55334	Standard
	S	34	939381.6	0.8				ug/L	546407	Standard
	Sr	88	971.4	51.6				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	104.870		
	Cr	52	110.642		
	Cr	53			
	Mn	55	94.665		
	Co	59	100.031		
	Ni	60	127.231		
	Cu	65	105.130		
	Zn	66	135.110		
>	Ge	72		111.229	
	As	75	95.050		
	Se	82	115.377		
	Se-1	77	49.070		
	Ga	71			
	Rb	85			
>	Y	89		110.550	
	Rh	103			
	Mo	98			
	Ag	107	104.879		
	Cd	111	106.772		
	Cd	114			
>	In	115		115.226	
	Sn	118			
	Sb	123	101.722		
	Ba	135	92.758		
	Ce	140			
>	Tb	159		110.689	
	Ho	165			
	Tl	203	106.041		
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208	100.206	
	U	238	95.801	
>	Bi	209		105.510
	Na	23		
	Mg	24		
	K	39		
	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	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 8	Zn	66	
QC Std 8	Se-1	77	

Sample ID: QC Std 8
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Method 6020 - Summary Report

Sample ID: L1204092805
Sample Date/Time: Tuesday, May 01, 2012 14:47:23
Number of Replicates: 3
Autosampler Position: 205
Sample Description: 50
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

Due to autosampler malfunction, sample was reanalyzed later in the analytical sequence.

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	34529.0	1.0	**779.5230**	4.991	0.6	ug/L	21640	Standard
|	**Be**	9	66.3	14.0	**0.0180**	0.003	14.8	ug/L	16	Standard
|	**Al**	27	4592538.1	0.7	**209.5625**	0.403	0.2	ug/L	19981	Standard
⌊>	**Sc**	45	398913.3	0.8				ug/L	408994	Standard
⌈	**Ti**	47	15997.1	1.3	**8.7448**	0.078	0.9	ug/L	102	Standard
|	**V**	51	43311.0	2.1	**1.8315**	0.038	2.1	ug/L	5722	Standard
|	**Cr**	52	98464.3	1.1	**4.8405**	0.045	0.9	ug/L	18417	Standard
|	**Cr**	53	9524.3	1.4	**4.8203**	0.061	1.3	ug/L	405	Standard
|	**Mn**	55	69671.2	0.3	**3.0752**	0.020	0.7	ug/L	4298	Standard
|	**Co**	59	2512.5	1.6	**0.1621**	0.003	2.1	ug/L	123	Standard
|	**Ni**	60	2416.5	1.4	**0.7775**	0.012	1.6	ug/L	90	Standard
|	**Cu**	65	6548.4	0.9	**2.3986**	0.023	0.9	ug/L	148	Standard
|	**Zn**	66	81160.8	0.7	**67.0302**	0.535	0.8	ug/L	842	Standard
|>	**Ge**	72	287677.7	0.4				ug/L	293466	Standard
|	**As**	75	297.8	14.7	**0.4277**	0.039	9.1	ug/L	-207	Standard
|	**Se**	82	32.4	16.1	**0.1034**	0.049	47.4	ug/L	19	Standard
⌊	**Se-1**	77	88.0	8.6	**0.0023**	0.100	4282.3	ug/L	80	Standard
	Ga	71	223574.8	0.3				mg/L	234805	Standard
⌈	**Rb**	85	4498.0	1.7				ug/L	13	Standard
|>	**Y**	89	258070.0	0.7				ug/L	262487	Standard
⌊	**Rh**	103	3.3	91.7				ug/L	4	Standard
⌈	**Mo**	98	3050.2	1.5	**0.8087**	0.021	2.6	ug/L	10	Standard
|	**Ag**	107	93.3	16.5	**0.0069**	0.002	29.2	ug/L	39	Standard
|	**Cd**	111	5184.0	1.5	**1.0931**	0.031	2.8	mg/L	525	Standard
|	**Cd**	114	14673.3	2.2	**1.0673**	0.012	1.2	ug/L	1503	Standard
|>	**In**	115	926076.6	1.1				ug/L	917693	Standard
|	**Sn**	118	19571.3	1.2	**0.9797**	0.027	2.8	ug/L	5013	Standard
|	**Sb**	123	1594.4	3.1	**0.1492**	0.003	2.3	ug/L	29	Standard
⌊	**Ba**	135	12060.5	3.1	**2.3302**	0.097	4.2	ug/L	68	Standard
⌈	**Ce**	140	31985.7	1.4				ug/L	58	Standard
⌊>	**Tb**	159	1005380.3	1.5				ug/L	1008624	Standard
⌈	**Ho**	165	550.0	2.8				ug/L	12	Standard
|	**Tl**	203	625.3	7.1	**0.0377**	0.002	5.6	ug/L	9	Standard
|	**Tl**	205	1460.7	7.8	**0.0362**	0.002	5.9	ug/L	29	Standard
|	**Pb**	206	66534.5	2.9	**4.7163**	0.116	2.5	ug/L	458	Standard
|	**Pb**	207	56045.5	2.9	**4.8088**	0.132	2.8	ug/L	380	Standard
|	**Pb**	208	257627.9	2.9	**4.6975**	0.104	2.2	ug/L	1773	Standard
|	**U**	238	12632.3	1.8	**0.2476**	0.002	1.0	ug/L	42	Standard
⌊>	**Bi**	209	570663.9	1.3				ug/L	569761	Standard
⌈	**Na**	23	41258.1	0.8	**13.8270**	0.068	0.5	mg/L	89	Standard
|	**Mg**	24	48112.6	0.6	**0.1788**	0.002	1.3	mg/L	158	Standard

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Sheri L. Babgiak

	K	39	2114.8	2.4	**0.1533**	0.005	3.4	mg/L	532	Standard
	Ca	43	384.0	7.8	**0.3748**	0.049	13.0	mg/L	142	Standard
	Fe	54	1827.5	3.8	**0.1837**	0.016	8.7	mg/L	890	Standard
	Fe	57	38585.1	1.1	**0.3362**	0.007	2.0	mg/L	3398	Standard
>	**Sc-1**	45	398913.3	0.8				mg/L	408994	Standard
	Cl	35	381159.8	2.4				ug/L	45742	Standard
	Kr	83	47.6	5.3				ug/L	47	Standard
	Br	81	13115.3	2.3				ug/L	11318	Standard
	P	31	76584.8	2.0				ug/L	55334	Standard
	S	34	1067831.3	2.4				ug/L	546407	Standard
	Sr	88	132841.3	2.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.028	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.317	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.914	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.678	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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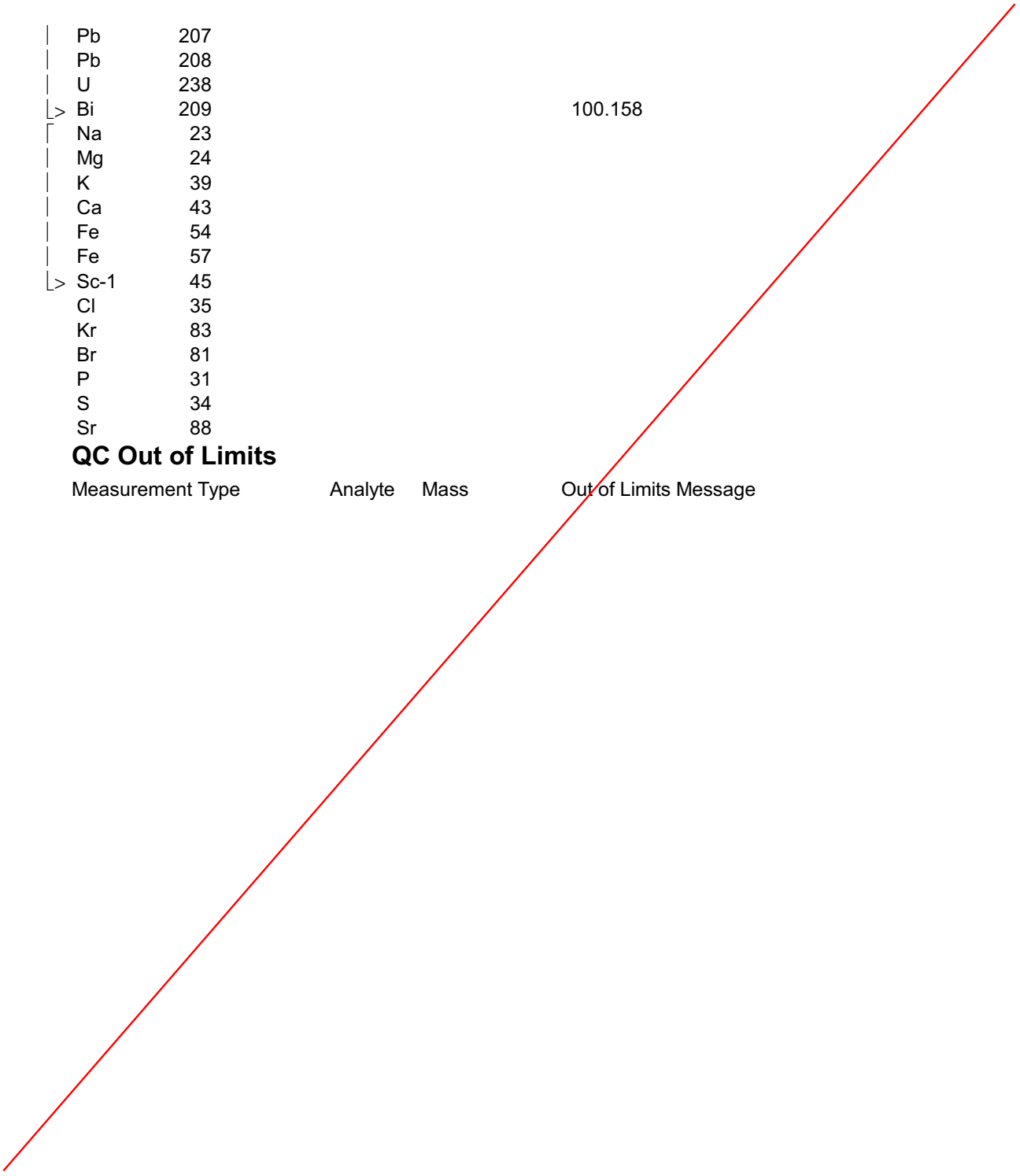
	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

100.158

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message



Sample ID: L1204092805
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204092806
Sample Date/Time: Tuesday, May 01, 2012 14:50:10
Number of Replicates: 3
Autosampler Position: 206
Sample Description: 50
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

Due to autosampler malfunction, sample was reanalyzed later in the analytical sequence.

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	21003.1	13.7	**44.3518**	243.559	549.2	ug/L	21640	Standard
	Be	9	6.3	9.1	**0.0011**	0.000	35.8	ug/L	16	Standard
	Al	27	35402.3	63.3	**0.8671**	0.747	86.2	ug/L	19981	Standard
>	**Sc**	45	386575.5	20.0				ug/L	408994	Standard
	Ti	47	118.7	25.0	**-0.0202**	0.029	142.3	ug/L	102	Standard
	V	51	3469.0	13.8	**-0.0593**	0.140	236.8	ug/L	5722	Standard
	Cr	52	11093.4	10.3	**-0.2468**	0.544	220.5	ug/L	18417	Standard
	Cr	53	302.7	14.1	**-0.0047**	0.113	2397.8	ug/L	405	Standard
	Mn	55	1281.7	34.1	**-0.0736**	0.061	82.3	ug/L	4298	Standard
	Co	59	138.0	26.5	**0.0036**	0.008	218.1	ug/L	123	Standard
	Ni	60	47.0	25.8	**-0.0045**	0.010	214.7	ug/L	90	Standard
	Cu	65	87.0	27.5	**-0.0220**	0.013	59.9	ug/L	148	Standard
	Zn	66	215.3	59.4	**-0.8353**	0.066	7.9	ug/L	842	Standard
>	**Ge**	72	313185.7	57.9				ug/L	293466	Standard
	As	75	-109.9	40.5	**0.0538**	0.033	61.2	ug/L	-207	Standard
	Se	82	47.5	80.2	**0.2906**	0.407	140.1	ug/L	19	Standard
	Se-1	77	52.7	40.0	**-0.4564**	0.250	54.7	ug/L	80	Standard
	Ga	71	245775.6	55.7				mg/L	234805	Standard
	Rb	85	73.3	81.7				ug/L	13	Standard
>	**Y**	89	323368.0	46.5				ug/L	262487	Standard
	Rh	103	2.7	114.6				ug/L	4	Standard
	Mo	98	24.8	84.6	**-0.0001**	0.004	4077.4	ug/L	10	Standard
	Ag	107	57.3	51.9	**-0.0013**	0.002	123.2	ug/L	39	Standard
	Cd	111	235.6	28.3	**-0.0841**	0.008	9.1	mg/L	525	Standard
	Cd	114	664.9	34.7	**-0.0857**	0.006	7.0	ug/L	1503	Standard
>	**In**	115	1544653.7	49.1				ug/L	917693	Standard
	Sn	118	736.0	21.3	**-0.1955**	0.010	5.3	ug/L	5013	Standard
	Sb	123	39.2	20.6	**0.0002**	0.001	360.5	ug/L	29	Standard
	Ba	135	193.7	46.9	**0.0179**	0.020	114.3	ug/L	68	Standard
	Ce	140	385.3	79.9				ug/L	58	Standard
>	**Tb**	159	1112592.5	33.5				ug/L	1008624	Standard
	Ho	165	14.7	61.5				ug/L	12	Standard
	Tl	203	269.0	19.7	**0.0191**	0.003	13.5	ug/L	9	Standard
	Tl	205	612.0	9.5	**0.0191**	0.000	1.7	ug/L	29	Standard
	Pb	206	1799.5	73.4	**0.1196**	0.124	103.8	ug/L	458	Standard
	Pb	207	1452.1	82.4	**0.1164**	0.136	116.8	ug/L	380	Standard
	Pb	208	6563.8	83.0	**0.1130**	0.131	116.2	ug/L	1773	Standard
	U	238	58.7	93.0	**0.0056**	0.001	23.8	ug/L	42	Standard
>	**Bi**	209	501231.4	10.2				ug/L	569761	Standard
	Na	23	106.0	33.1	**0.0094**	0.011	115.7	mg/L	89	Standard
	Mg	24	191.3	42.4	**0.0002**	0.000	118.8	mg/L	158	Standard

Sample ID: L1204092806
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Approved: May 01, 2012
Sheri L. Babgard

	K	39	438.7	7.1	**-0.0077**	0.008	102.7	mg/L	532	Standard
	Ca	43	151.3	9.7	**0.0386**	0.046	119.7	mg/L	142	Standard
	Fe	54	1252.9	76.1	**0.0603**	0.148	246.0	mg/L	890	Standard
	Fe	57	1425.4	44.3	**-0.0181**	0.003	18.9	mg/L	3398	Standard
>	**Sc-1**	45	386575.5	20.0				mg/L	408994	Standard
	Cl	35	68823.1	10.5				ug/L	45742	Standard
	Kr	83	122.0	77.3				ug/L	47	Standard
	Br	81	6418.5	42.1				ug/L	11318	Standard
	P	31	51241.7	63.0				ug/L	55334	Standard
	S	34	305727.1	3.0				ug/L	546407	Standard
	Sr	88	538.7	86.8				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.720	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		123.194	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		168.319	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.308	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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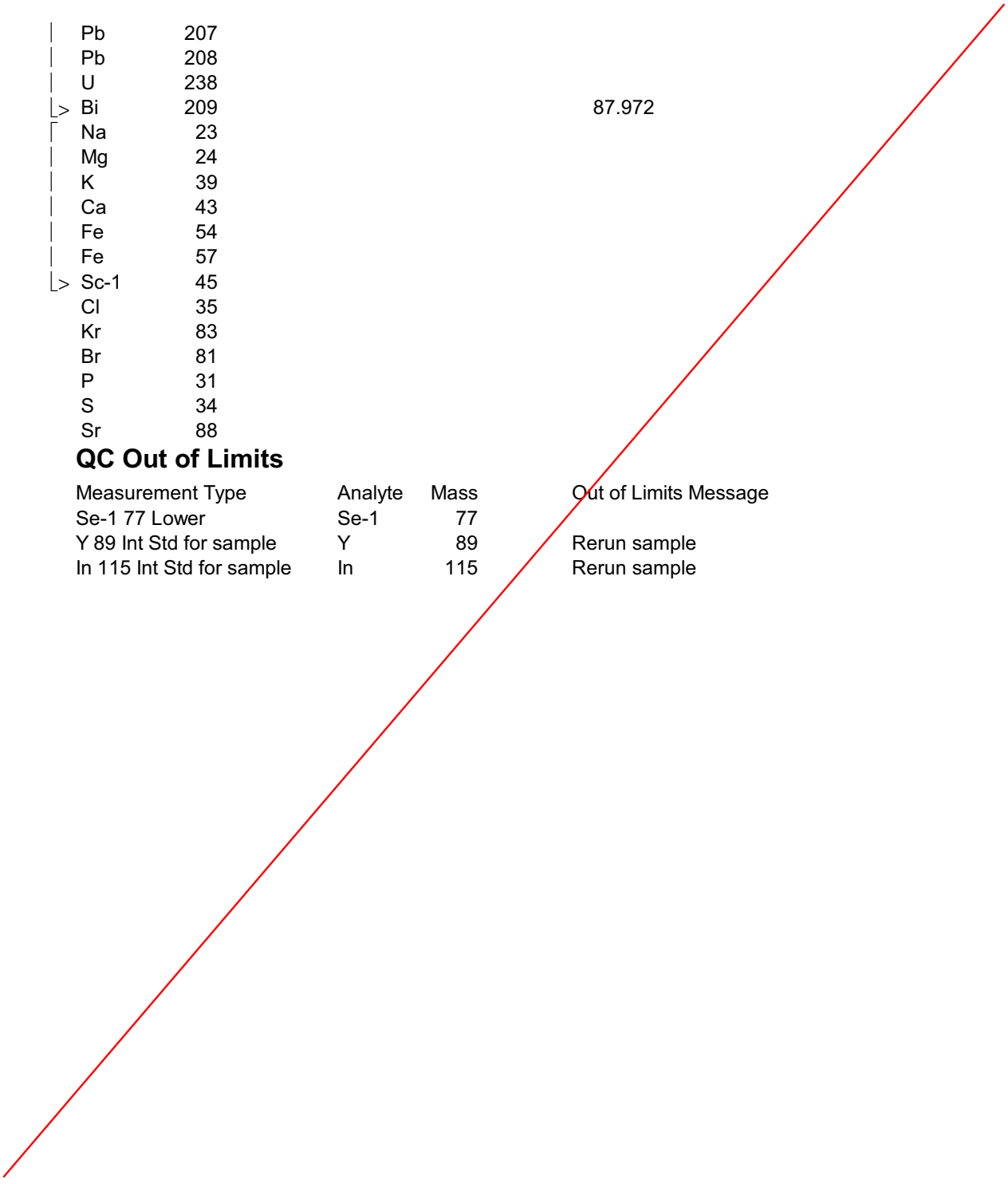
	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

87.972

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Se-1 77 Lower	Se-1	77	
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample



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Method 6020 - Summary Report

Sample ID: L1204096804
Sample Date/Time: Tuesday, May 01, 2012 14:52:57
Number of Replicates: 3
Autosampler Position: 207
Sample Description: 2
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

Due to autosampler malfunction, sample was reanalyzed later in the analytical sequence.

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25693.8	1.7	**57.7825**	32.034	55.4	ug/L	21640	Standard
|	**Be**	9	14.0	43.4	**0.0026**	0.001	55.5	ug/L	16	Standard
|	**Al**	27	129485.8	68.4	**4.3881**	3.469	79.1	ug/L	19981	Standard
⌊>	**Sc**	45	459183.4	0.8				ug/L	408994	Standard
⌈	**Ti**	47	561.3	40.8	**0.1729**	0.109	62.9	ug/L	102	Standard
|	**V**	51	35436.1	0.2	**1.1964**	0.002	0.2	ug/L	5722	Standard
|	**Cr**	52	110298.4	0.5	**4.5681**	0.019	0.4	ug/L	18417	Standard
|	**Cr**	53	1601.4	10.4	**0.5264**	0.075	14.2	ug/L	405	Standard
|	**Mn**	55	10034.0	41.3	**0.2480**	0.163	65.7	ug/L	4298	Standard
|	**Co**	59	102.0	9.4	**-0.0016**	0.001	33.2	ug/L	123	Standard
|	**Ni**	60	165.3	37.6	**0.0246**	0.017	71.0	ug/L	90	Standard
|	**Cu**	65	165.3	14.8	**-0.0042**	0.008	189.3	ug/L	148	Standard
|	**Zn**	66	1780.8	54.4	**0.2696**	0.690	255.9	ug/L	842	Standard
|>	**Ge**	72	337886.3	0.3				ug/L	293466	Standard
|	**As**	75	-220.0	8.0	**-0.0139**	0.014	101.5	ug/L	-207	Standard
|	**Se**	82	18.4	43.3	**-0.0526**	0.063	119.4	ug/L	19	Standard
⌊	**Se-1**	77	87.0	8.3	**-0.1875**	0.087	46.1	ug/L	80	Standard
	Ga	71	271226.1	0.4				mg/L	234805	Standard
⌈	**Rb**	85	267.3	29.3				ug/L	13	Standard
|>	**Y**	89	296809.0	0.2				ug/L	262487	Standard
⌊	**Rh**	103	3.3	91.7				ug/L	4	Standard
⌈	**Mo**	98	30.0	16.6	**0.0020**	0.001	58.2	ug/L	10	Standard
|	**Ag**	107	49.0	7.4	**-0.0001**	0.000	316.6	ug/L	39	Standard
|	**Cd**	111	208.0	10.0	**-0.0773**	0.004	5.3	mg/L	525	Standard
|	**Cd**	114	566.2	4.6	**-0.0799**	0.002	2.5	ug/L	1503	Standard
|>	**In**	115	1063486.6	0.4				ug/L	917693	Standard
|	**Sn**	118	1358.7	8.8	**-0.1531**	0.007	4.3	ug/L	5013	Standard
|	**Sb**	123	191.1	18.1	**0.0135**	0.003	21.4	ug/L	29	Standard
⌊	**Ba**	135	184.7	42.8	**0.0199**	0.013	67.4	ug/L	68	Standard
⌈	**Ce**	140	159.3	62.4				ug/L	58	Standard
⌊>	**Tb**	159	1118395.7	2.4				ug/L	1008624	Standard
⌈	**Ho**	165	18.7	53.9				ug/L	12	Standard
|	**Tl**	203	30.0	26.0	**0.0030**	0.000	13.6	ug/L	9	Standard
|	**Tl**	205	72.0	22.0	**0.0048**	0.000	6.7	ug/L	29	Standard
|	**Pb**	206	401.3	2.1	**-0.0071**	0.000	4.7	ug/L	458	Standard
|	**Pb**	207	357.0	6.3	**-0.0059**	0.002	31.8	ug/L	380	Standard
|	**Pb**	208	1615.7	2.5	**-0.0044**	0.000	10.4	ug/L	1773	Standard
|	**U**	238	37.0	9.7	**0.0049**	0.000	1.2	ug/L	42	Standard
⌊>	**Bi**	209	652412.7	0.8				ug/L	569761	Standard
⌈	**Na**	23	1449.4	12.3	**0.3953**	0.053	13.5	mg/L	89	Standard
|	**Mg**	24	410.0	24.7	**0.0008**	0.000	38.2	mg/L	158	Standard

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	K	39	672.7	7.5	**0.0042**	0.004	92.6	mg/L	532	Standard
	Ca	43	130.0	26.8	**-0.0319**	0.045	141.1	mg/L	142	Standard
	Fe	54	388.1	9.3	**-0.1072**	0.006	5.2	mg/L	890	Standard
	Fe	57	4237.3	9.4	**0.0033**	0.003	102.2	mg/L	3398	Standard
>	**Sc-1**	45	459183.4	0.8				mg/L	408994	Standard
	Cl	35	96128.7	8.2				ug/L	45742	Standard
	Kr	83	43.1	12.0				ug/L	47	Standard
	Br	81	12910.5	1.5				ug/L	11318	Standard
	P	31	113564.9	2.8				ug/L	55334	Standard
	S	34	893497.7	4.0				ug/L	546407	Standard
	Sr	88	654.0	30.3				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		115.136	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.076	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.887	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.883	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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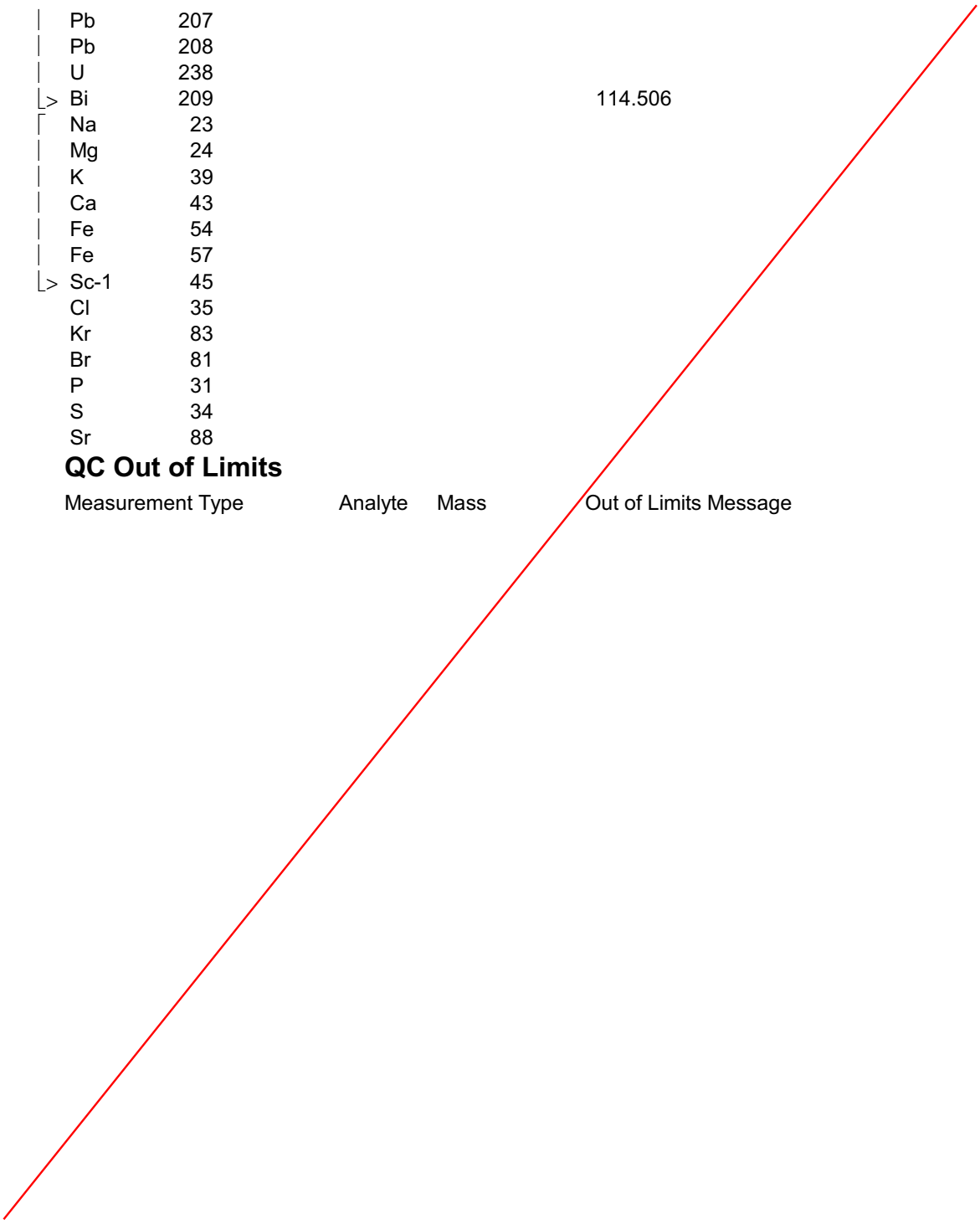
Pb	207	
Pb	208	
U	238	
> Bi	209	114.506
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message



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Method 6020 - Summary Report

Sample ID: L1204092805
Sample Date/Time: Tuesday, May 01, 2012 14:58:00
Number of Replicates: 3
Autosampler Position: 205
Sample Description: 50
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	37210.0	2.7	**870.5402**	8.111	0.9	ug/L	21640	Standard
|	**Be**	9	67.3	18.8	**0.0177**	0.004	21.3	ug/L	16	Standard
|	**Al**	27	5428706.0	0.7	**240.3161**	5.443	2.3	ug/L	19981	Standard
⌊>	**Sc**	45	411524.8	2.4				ug/L	408994	Standard
⌈	**Ti**	47	17523.5	1.9	**8.9639**	0.160	1.8	ug/L	102	Standard
|	**V**	51	46407.5	0.8	**1.8367**	0.031	1.7	ug/L	5722	Standard
|	**Cr**	52	105433.9	1.0	**4.8510**	0.084	1.7	ug/L	18417	Standard
|	**Cr**	53	10416.9	1.0	**4.9363**	0.009	0.2	ug/L	405	Standard
|	**Mn**	55	88397.5	0.6	**3.6776**	0.031	0.8	ug/L	4298	Standard
|	**Co**	59	3121.3	3.4	**0.1896**	0.006	3.2	ug/L	123	Standard
|	**Ni**	60	3132.3	1.1	**0.9475**	0.005	0.6	ug/L	90	Standard
|	**Cu**	65	8378.3	2.0	**2.8818**	0.034	1.2	ug/L	148	Standard
|	**Zn**	66	102797.9	1.3	**79.6072**	0.735	0.9	ug/L	842	Standard
| >	**Ge**	72	307514.8	0.9				ug/L	293466	Standard
|	**As**	75	366.1	19.4	**0.4685**	0.060	12.9	ug/L	-207	Standard
|	**Se**	82	33.3	24.1	**0.0918**	0.069	74.9	ug/L	19	Standard
⌊	**Se-1**	77	84.0	10.4	**-0.1255**	0.120	95.3	ug/L	80	Standard
	Ga	71	242138.8	0.3				mg/L	234805	Standard
⌈	**Rb**	85	5246.9	2.7				ug/L	13	Standard
| >	**Y**	89	268500.1	1.9				ug/L	262487	Standard
⌊	**Rh**	103	10.0	20.0				ug/L	4	Standard
⌈	**Mo**	98	3184.8	1.2	**0.8068**	0.010	1.2	ug/L	10	Standard
|	**Ag**	107	102.3	7.2	**0.0075**	0.001	12.8	ug/L	39	Standard
|	**Cd**	111	6392.2	1.0	**1.3093**	0.012	0.9	mg/L	525	Standard
|	**Cd**	114	18163.5	1.7	**1.2847**	0.023	1.8	ug/L	1503	Standard
| >	**In**	115	969070.1	1.6				ug/L	917693	Standard
|	**Sn**	118	21598.1	2.5	**1.0452**	0.013	1.2	ug/L	5013	Standard
|	**Sb**	123	1702.3	5.8	**0.1523**	0.009	5.9	ug/L	29	Standard
⌊	**Ba**	135	13865.0	1.8	**2.5606**	0.042	1.6	ug/L	68	Standard
⌈	**Ce**	140	37968.2	0.6				ug/L	58	Standard
⌊>	**Tb**	159	1041884.2	0.6				ug/L	1008624	Standard
⌈	**Ho**	165	686.7	7.2				ug/L	12	Standard
|	**Tl**	203	371.7	19.3	**0.0220**	0.004	17.2	ug/L	9	Standard
|	**Tl**	205	868.7	6.1	**0.0221**	0.001	4.1	ug/L	29	Standard
|	**Pb**	206	83558.2	2.5	**5.6673**	0.098	1.7	ug/L	458	Standard
|	**Pb**	207	69843.6	1.7	**5.7335**	0.028	0.5	ug/L	380	Standard
|	**Pb**	208	321418.5	2.0	**5.6071**	0.050	0.9	ug/L	1773	Standard
|	**U**	238	12868.8	0.5	**0.2412**	0.003	1.1	ug/L	42	Standard
⌊>	**Bi**	209	597080.1	1.2				ug/L	569761	Standard
⌈	**Na**	23	41633.8	1.1	**13.5275**	0.182	1.3	mg/L	89	Standard
|	**Mg**	24	53912.8	1.0	**0.1943**	0.005	2.7	mg/L	158	Standard

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	K	39	2194.2	3.2	**0.1545**	0.006	3.8	mg/L	532	Standard
	Ca	43	426.7	6.7	**0.4192**	0.045	10.7	mg/L	142	Standard
	Fe	54	2108.3	4.6	**0.2259**	0.017	7.7	mg/L	890	Standard
	Fe	57	48018.0	2.1	**0.4123**	0.012	2.8	mg/L	3398	Standard
>	**Sc-1**	45	411524.8	2.4				mg/L	408994	Standard
	Cl	35	367612.4	3.0				ug/L	45742	Standard
	Kr	83	38.2	13.3				ug/L	47	Standard
	Br	81	12923.8	1.7				ug/L	11318	Standard
	P	31	81447.0	0.8				ug/L	55334	Standard
	S	34	1091325.4	2.1				ug/L	546407	Standard
	Sr	88	144826.9	1.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.787	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.291	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.598	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.298	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	104.795
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204092806
Sample Date/Time: Tuesday, May 01, 2012 15:01:37
Number of Replicates: 3
Autosampler Position: 206
Sample Description: 50
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	36629.6	1.9	**790.7920**	19.574	2.5	ug/L	21640	Standard
|	**Be**	9	85.7	10.2	**0.0222**	0.002	10.4	ug/L	16	Standard
|	**Al**	27	4721074.9	1.3	**204.1784**	0.928	0.5	ug/L	19981	Standard
⌊>	**Sc**	45	420865.9	1.7				ug/L	408994	Standard
⌈	**Ti**	47	16638.5	1.5	**8.5627**	0.183	2.1	ug/L	102	Standard
|	**V**	51	45153.4	1.5	**1.7933**	0.049	2.7	ug/L	5722	Standard
|	**Cr**	52	102246.9	1.8	**4.7100**	0.148	3.2	ug/L	18417	Standard
|	**Cr**	53	10056.7	0.5	**4.7915**	0.085	1.8	ug/L	405	Standard
|	**Mn**	55	82048.6	1.0	**3.4262**	0.079	2.3	ug/L	4298	Standard
|	**Co**	59	2661.6	0.6	**0.1617**	0.002	1.2	ug/L	123	Standard
|	**Ni**	60	3462.7	2.9	**1.0567**	0.033	3.2	ug/L	90	Standard
|	**Cu**	65	6942.9	0.1	**2.3945**	0.037	1.6	ug/L	148	Standard
|	**Zn**	66	88171.9	2.5	**68.5883**	1.875	2.7	ug/L	842	Standard
| >	**Ge**	72	305564.9	1.6				ug/L	293466	Standard
|	**As**	75	319.8	7.2	**0.4308**	0.020	4.6	ug/L	-207	Standard
|	**Se**	82	27.9	13.9	**0.0466**	0.032	68.0	ug/L	19	Standard
⌊	**Se-1**	77	82.7	17.6	**-0.1347**	0.203	150.5	ug/L	80	Standard
	Ga	71	238306.5	1.8				mg/L	234805	Standard
⌈	**Rb**	85	4912.8	2.2				ug/L	13	Standard
| >	**Y**	89	270997.6	1.2				ug/L	262487	Standard
⌊	**Rh**	103	8.0	90.1				ug/L	4	Standard
⌈	**Mo**	98	3126.5	0.9	**0.7997**	0.009	1.1	ug/L	10	Standard
|	**Ag**	107	96.0	14.8	**0.0068**	0.002	31.3	ug/L	39	Standard
|	**Cd**	111	5578.3	2.0	**1.1393**	0.006	0.5	mg/L	525	Standard
|	**Cd**	114	15394.2	1.2	**1.0824**	0.036	3.3	ug/L	1503	Standard
| >	**In**	115	959777.0	1.7				ug/L	917693	Standard
|	**Sn**	118	22522.7	3.3	**1.1127**	0.042	3.7	ug/L	5013	Standard
|	**Sb**	123	1855.4	4.4	**0.1679**	0.010	5.8	ug/L	29	Standard
⌊	**Ba**	135	12659.6	0.4	**2.3600**	0.039	1.6	ug/L	68	Standard
⌈	**Ce**	140	33290.5	1.6				ug/L	58	Standard
⌊>	**Tb**	159	1045050.2	1.9				ug/L	1008624	Standard
⌈	**Ho**	165	613.3	9.7				ug/L	12	Standard
|	**Tl**	203	580.7	3.1	**0.0338**	0.001	3.8	ug/L	9	Standard
|	**Tl**	205	1364.1	7.3	**0.0329**	0.002	7.0	ug/L	29	Standard
|	**Pb**	206	69494.4	0.9	**4.7401**	0.078	1.6	ug/L	458	Standard
|	**Pb**	207	58230.3	0.4	**4.8070**	0.046	1.0	ug/L	380	Standard
|	**Pb**	208	268278.0	0.7	**4.7069**	0.076	1.6	ug/L	1773	Standard
|	**U**	238	13136.4	0.9	**0.2477**	0.002	0.7	ug/L	42	Standard
⌊>	**Bi**	209	593155.3	1.0				ug/L	569761	Standard
⌈	**Na**	23	42365.2	1.2	**13.4580**	0.171	1.3	mg/L	89	Standard
|	**Mg**	24	49853.2	1.2	**0.1756**	0.001	0.5	mg/L	158	Standard

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	K	39	2135.5	1.7	**0.1445**	0.004	2.7	mg/L	532	Standard
	Ca	43	391.3	4.6	**0.3550**	0.027	7.5	mg/L	142	Standard
	Fe	54	1900.3	6.9	**0.1786**	0.025	14.0	mg/L	890	Standard
	Fe	57	41613.8	2.8	**0.3445**	0.014	4.2	mg/L	3398	Standard
>	**Sc-1**	45	420865.9	1.7				mg/L	408994	Standard
	Cl	35	376445.2	0.6				ug/L	45742	Standard
	Kr	83	39.8	19.4				ug/L	47	Standard
	Br	81	13705.2	0.8				ug/L	11318	Standard
	P	31	82556.7	1.7				ug/L	55334	Standard
	S	34	1126034.6	1.0				ug/L	546407	Standard
	Sr	88	136069.7	1.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.123	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.242	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.586	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.612	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	104.106
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: L1204096804
Sample Date/Time: Tuesday, May 01, 2012 15:04:25
Number of Replicates: 3
Autosampler Position: 207
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	624547.4	1.6	**28633.2120**	533.181	1.9	ug/L	21640	Standard
|	**Be**	9	22.7	9.2	**0.0044**	0.000	7.7	ug/L	16	Standard
|	**Al**	27	301101.9	2.8	**10.4124**	0.055	0.5	ug/L	19981	Standard
⌊>	**Sc**	45	493000.9	3.1				ug/L	408994	Standard
⌈	**Ti**	47	1884.1	4.3	**0.8572**	0.029	3.4	ug/L	102	Standard
|	**V**	51	144514.1	2.6	**6.1058**	0.162	2.6	ug/L	5722	Standard
|	**Cr**	52	26808.0	1.2	**0.4136**	0.029	7.1	ug/L	18417	Standard
|	**Cr**	53	1693.4	7.2	**0.6224**	0.077	12.3	ug/L	405	Standard
|	**Mn**	55	14506.6	1.6	**0.4646**	0.009	1.8	ug/L	4298	Standard
|	**Co**	59	1942.1	5.8	**0.1119**	0.004	4.0	ug/L	123	Standard
|	**Ni**	60	2461.5	1.5	**0.7205**	0.011	1.5	ug/L	90	Standard
|	**Cu**	65	1100.0	2.2	**0.3193**	0.018	5.6	ug/L	148	Standard
|	**Zn**	66	6153.3	5.3	**3.6976**	0.113	3.0	ug/L	842	Standard
| >	**Ge**	72	315651.3	3.0				ug/L	293466	Standard
|	**As**	75	74564.3	1.2	**62.0579**	1.073	1.7	ug/L	-207	Standard
|	**Se**	82	357.2	4.7	**2.8373**	0.182	6.4	ug/L	19	Standard
⌊	**Se-1**	77	317.0	6.0	**2.7463**	0.231	8.4	ug/L	80	Standard
	Ga	71	252754.1	2.3				mg/L	234805	Standard
⌈	**Rb**	85	16795.3	2.1				ug/L	13	Standard
| >	**Y**	89	287358.2	2.9				ug/L	262487	Standard
⌊	**Rh**	103	260.0	8.1				ug/L	4	Standard
⌈	**Mo**	98	4136.1	1.6	**1.0075**	0.013	1.3	ug/L	10	Standard
|	**Ag**	107	47.0	7.7	**-0.0001**	0.001	750.4	ug/L	39	Standard
|	**Cd**	111	467.9	3.0	**-0.0191**	0.004	19.8	mg/L	525	Standard
|	**Cd**	114	1342.2	3.5	**-0.0201**	0.004	17.5	ug/L	1503	Standard
| >	**In**	115	1008915.5	0.7				ug/L	917693	Standard
|	**Sn**	118	1658.8	3.6	**-0.1322**	0.003	2.4	ug/L	5013	Standard
|	**Sb**	123	605.4	7.4	**0.0505**	0.004	7.7	ug/L	29	Standard
⌊	**Ba**	135	102814.3	1.1	**18.3060**	0.209	1.1	ug/L	68	Standard
⌈	**Ce**	140	4237.3	5.1				ug/L	58	Standard
⌊>	**Tb**	159	1118722.2	1.0				ug/L	1008624	Standard
⌈	**Ho**	165	50.7	23.1				ug/L	12	Standard
|	**Tl**	203	781.0	4.9	**0.0463**	0.003	5.9	ug/L	9	Standard
|	**Tl**	205	1834.8	3.2	**0.0443**	0.002	4.0	ug/L	29	Standard
|	**Pb**	206	1063.4	33.1	**0.0429**	0.024	55.5	ug/L	458	Standard
|	**Pb**	207	900.4	37.6	**0.0440**	0.028	63.3	ug/L	380	Standard
|	**Pb**	208	4125.2	34.5	**0.0445**	0.025	55.7	ug/L	1773	Standard
|	**U**	238	280335.7	0.4	**5.3568**	0.061	1.1	ug/L	42	Standard
⌊>	**Bi**	209	575692.2	1.3				ug/L	569761	Standard
⌈	**Na**	23	68676.7	2.2	**18.6366**	0.177	0.9	mg/L	89	Standard
|	**Mg**	24	2554770.0	1.1	**7.7063**	0.179	2.3	mg/L	158	Standard

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	K	39	11968.7	1.2	**0.8915**	0.020	2.3	mg/L	532	Standard
	Ca	43	12988.2	1.1	**15.5662**	0.608	3.9	mg/L	142	Standard
	Fe	54	740.3	4.9	**-0.0560**	0.007	12.1	mg/L	890	Standard
	Fe	57	15252.3	2.4	**0.0859**	0.002	2.2	mg/L	3398	Standard
>	**Sc-1**	45	493000.9	3.1				mg/L	408994	Standard
	Cl	35	1564965.9	1.4				ug/L	45742	Standard
	Kr	83	45.3	15.9				ug/L	47	Standard
	Br	81	40783.8	0.7				ug/L	11318	Standard
	P	31	60676.2	5.7				ug/L	55334	Standard
	S	34	2900740.3	3.5				ug/L	546407	Standard
	Sr	88	11145495.7	0.3				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		107.560	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.475	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.940	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.916	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

101.041

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1204096804
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Approved: May 01, 2012

Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, May 01, 2012 15:07:14
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	25677.8	3.4	**95.3239**	31.241	32.8	ug/L	21640	Standard
|	**Be**	9	9.3	24.7	**0.0016**	0.001	36.3	ug/L	16	Standard
|	**Al**	27	112869159.6	1.0	**4621.4663**	30.203	0.7	ug/L	19981	Standard
⌊>	**Sc**	45	446100.6	1.6				ug/L	408994	Standard
⌈	**Ti**	47	220455.2	1.6	**109.4189**	1.846	1.7	ug/L	102	Standard
|	**V**	51	6971.4	1.6	**0.0412**	0.007	17.9	ug/L	5722	Standard
|	**Cr**	52	22287.7	2.1	**0.1504**	0.016	10.8	ug/L	18417	Standard
|	**Cr**	53	3297.0	4.9	**1.3687**	0.063	4.6	ug/L	405	Standard
|	**Mn**	55	1751.1	6.3	**-0.0743**	0.004	5.1	ug/L	4298	Standard
|	**Co**	59	519.0	4.4	**0.0240**	0.001	4.3	ug/L	123	Standard
|	**Ni**	60	1391.4	2.8	**0.3920**	0.011	2.7	ug/L	90	Standard
|	**Cu**	65	680.3	5.0	**0.1724**	0.009	5.4	ug/L	148	Standard
|	**Zn**	66	2920.9	1.3	**1.2008**	0.032	2.7	ug/L	842	Standard
| >	**Ge**	72	319905.5	1.1				ug/L	293466	Standard
|	**As**	75	-155.3	13.4	**0.0294**	0.017	58.5	ug/L	-207	Standard
|	**Se**	82	29.4	31.0	**0.0488**	0.079	161.0	ug/L	19	Standard
⌊	**Se-1**	77	227.7	10.6	**1.5956**	0.285	17.8	ug/L	80	Standard
	Ga	71	253779.9	1.1				mg/L	234805	Standard
⌈	**Rb**	85	3362.4	4.1				ug/L	13	Standard
| >	**Y**	89	284275.1	1.5				ug/L	262487	Standard
⌊	**Rh**	103	8.0	25.0				ug/L	4	Standard
⌈	**Mo**	98	380689.7	0.4	**92.0782**	1.075	1.2	ug/L	10	Standard
|	**Ag**	107	92.3	7.0	**0.0056**	0.001	17.6	ug/L	39	Standard
|	**Cd**	111	1096.8	1.1	**0.1130**	0.002	1.4	mg/L	525	Standard
|	**Cd**	114	3654.7	1.6	**0.1484**	0.008	5.6	ug/L	1503	Standard
| >	**In**	115	1021199.2	1.5				ug/L	917693	Standard
|	**Sn**	118	859.4	2.8	**-0.1780**	0.001	0.6	ug/L	5013	Standard
|	**Sb**	123	532.1	5.2	**0.0436**	0.002	5.3	ug/L	29	Standard
⌊	**Ba**	135	162.0	4.5	**0.0172**	0.002	9.1	ug/L	68	Standard
⌈	**Ce**	140	2114.8	2.2				ug/L	58	Standard
⌊>	**Tb**	159	1123338.1	1.3				ug/L	1008624	Standard
⌈	**Ho**	165	16.0	33.1				ug/L	12	Standard
|	**Tl**	203	368.0	6.0	**0.0219**	0.002	6.9	ug/L	9	Standard
|	**Tl**	205	848.7	3.2	**0.0217**	0.001	3.8	ug/L	29	Standard
|	**Pb**	206	717.4	7.4	**0.0168**	0.003	19.7	ug/L	458	Standard
|	**Pb**	207	627.0	11.6	**0.0189**	0.005	28.4	ug/L	380	Standard
|	**Pb**	208	2845.1	7.5	**0.0195**	0.003	16.7	ug/L	1773	Standard
|	**U**	238	29.0	71.3	**0.0048**	0.000	7.8	ug/L	42	Standard
⌊>	**Bi**	209	596633.0	1.5				ug/L	569761	Standard
⌈	**Na**	23	38048.4	2.0	**11.3979**	0.176	1.5	mg/L	89	Standard
|	**Mg**	24	1424243.4	1.7	**4.7454**	0.036	0.8	mg/L	158	Standard

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	K	39	52226.5	1.5	**4.4996**	0.078	1.7	mg/L	532	Standard
	Ca	43	10292.2	2.2	**13.5975**	0.322	2.4	mg/L	142	Standard
	Fe	54	69704.2	1.7	**11.9933**	0.267	2.2	mg/L	890	Standard
	Fe	57	1865592.9	2.8	**15.8784**	0.316	2.0	mg/L	3398	Standard
>	**Sc-1**	45	446100.6	1.6				mg/L	408994	Standard
	Cl	35	9743138.9	0.6				ug/L	45742	Standard
	Kr	83	46.9	26.3				ug/L	47	Standard
	Br	81	13624.1	2.9				ug/L	11318	Standard
	P	31	8636749.3	0.8				ug/L	55334	Standard
	S	34	1739152.6	1.4				ug/L	546407	Standard
	Sr	88	1945.5	42.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	92.429		
>	Sc	45			
	Ti	47	109.419		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		109.009	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		108.301	
	Rh	103			
	Mo	98	92.078		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.279	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.373	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		104.716
⌈	Na	23	91.184	
	Mg	24	94.908	
	K	39	89.992	
	Ca	43	90.650	
	Fe	54	95.947	
	Fe	57	127.027	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Se-1	77	
QC Std 4	Fe	57	

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, May 01, 2012 15:10:02
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	27710.0	1.1	**91.2283**	5.276	5.8	ug/L	21640	Standard
|	**Be**	9	446511.7	1.2	**104.4577**	0.860	0.8	ug/L	16	Standard
|	**Al**	27	128599485.4	0.3	**4863.9675**	22.270	0.5	ug/L	19981	Standard
⌊>	**Sc**	45	482914.0	0.7				ug/L	408994	Standard
⌈	**Ti**	47	254733.1	1.4	**118.6295**	2.299	1.9	ug/L	102	Standard
|	**V**	51	2604699.0	0.7	**105.9569**	1.013	1.0	ug/L	5722	Standard
|	**Cr**	52	2164821.8	1.4	**108.1891**	1.972	1.8	ug/L	18417	Standard
|	**Cr**	53	233976.8	0.7	**103.6776**	1.246	1.2	ug/L	405	Standard
|	**Mn**	55	2795645.8	0.7	**108.9426**	1.157	1.1	ug/L	4298	Standard
|	**Co**	59	1793858.7	1.5	**102.1657**	1.818	1.8	ug/L	123	Standard
|	**Ni**	60	366029.9	0.4	**102.1471**	0.304	0.3	ug/L	90	Standard
|	**Cu**	65	310839.4	1.1	**98.2857**	1.467	1.5	ug/L	148	Standard
|	**Zn**	66	145343.2	1.1	**101.7872**	1.245	1.2	ug/L	842	Standard
| >	**Ge**	72	340975.1	0.5				ug/L	293466	Standard
|	**As**	75	131669.1	0.7	**101.3114**	0.197	0.2	ug/L	-207	Standard
|	**Se**	82	13009.7	0.8	**102.0542**	0.682	0.7	ug/L	19	Standard
⌊	**Se-1**	77	9067.0	0.9	**103.2474**	1.099	1.1	ug/L	80	Standard
	Ga	71	274766.8	1.7				mg/L	234805	Standard
⌈	**Rb**	85	4019.9	0.4				ug/L	13	Standard
| >	**Y**	89	305231.4	1.1				ug/L	262487	Standard
⌊	**Rh**	103	84.0	23.8				ug/L	4	Standard
⌈	**Mo**	98	445201.5	0.7	**101.8542**	0.861	0.8	ug/L	10	Standard
|	**Ag**	107	516967.5	3.0	**61.6695**	1.712	2.8	ug/L	39	Standard
|	**Cd**	111	531126.6	0.5	**106.4502**	0.363	0.3	mg/L	525	Standard
|	**Cd**	114	1450535.7	0.4	**100.5593**	0.327	0.3	ug/L	1503	Standard
| >	**In**	115	1079522.2	0.5				ug/L	917693	Standard
|	**Sn**	118	3690.4	2.7	**-0.0310**	0.006	19.6	ug/L	5013	Standard
|	**Sb**	123	1264111.6	0.5	**103.0498**	0.942	0.9	ug/L	29	Standard
⌊	**Ba**	135	569097.2	0.8	**94.7489**	1.230	1.3	ug/L	68	Standard
⌈	**Ce**	140	2490.2	3.1				ug/L	58	Standard
⌊>	**Tb**	159	1177926.5	1.0				ug/L	1008624	Standard
⌈	**Ho**	165	22.0	31.5				ug/L	12	Standard
|	**Tl**	203	1868977.1	0.5	**103.0434**	0.276	0.3	ug/L	9	Standard
|	**Tl**	205	4894286.0	0.5	**104.8050**	0.402	0.4	ug/L	29	Standard
|	**Pb**	206	1504721.4	0.8	**102.1820**	0.786	0.8	ug/L	458	Standard
|	**Pb**	207	1284812.4	0.6	**105.6046**	0.574	0.5	ug/L	380	Standard
|	**Pb**	208	6137649.5	0.6	**107.1766**	0.345	0.3	ug/L	1773	Standard
|	**U**	238	5778795.6	0.9	**105.9334**	0.978	0.9	ug/L	42	Standard
⌊>	**Bi**	209	599584.4	0.3				ug/L	569761	Standard
⌈	**Na**	23	42109.8	0.8	**11.6535**	0.103	0.9	mg/L	89	Standard
|	**Mg**	24	1583022.3	1.3	**4.8723**	0.039	0.8	mg/L	158	Standard

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	K	39	57517.0	0.7	**4.5782**	0.040	0.9	mg/L	532	Standard
	Ca	43	11278.2	1.0	**13.7652**	0.082	0.6	mg/L	142	Standard
	Fe	54	79432.3	0.9	**12.6330**	0.153	1.2	mg/L	890	Standard
	Fe	57	2325295.7	3.0	**18.2860**	0.420	2.3	mg/L	3398	Standard
>	**Sc-1**	45	482914.0	0.7				mg/L	408994	Standard
	Cl	35	11036182.5	1.1				ug/L	45742	Standard
	Kr	83	52.4	19.5				ug/L	47	Standard
	Br	81	15059.1	2.6				ug/L	11318	Standard
	P	31	9060186.2	1.3				ug/L	55334	Standard
	S	34	1910637.0	2.9				ug/L	546407	Standard
	Sr	88	1850.1	6.5				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.279		
>	Sc	45			
	Ti	47	118.629		
	V	51	105.957		
	Cr	52	108.189		
	Cr	53			
	Mn	55	108.943		
	Co	59	102.166		
	Ni	60	102.147		
	Cu	65	98.286		
	Zn	66	101.787		
>	Ge	72		116.189	
	As	75	101.311		
	Se	82	102.054		
	Se-1	77	103.247		
	Ga	71			
	Rb	85			
>	Y	89		116.284	
	Rh	103			
	Mo	98	101.854		
	Ag	107	61.669		
	Cd	111	106.450		
	Cd	114			
>	In	115		117.634	
	Sn	118			
	Sb	123	103.050		
	Ba	135	94.749		
	Ce	140			
>	Tb	159		116.786	
	Ho	165			
	Tl	203	103.043		
	Tl	205			
	Pb	206	102.182		

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	Pb	207	105.605	
	Pb	208	107.177	
	U	238	105.933	
>	Bi	209		105.234
	Na	23	93.228	
	Mg	24	97.445	
	K	39	91.563	
	Ca	43	91.768	
	Fe	54	101.064	
	Fe	57	146.288	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ag	107	
QC Std 5	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 01, 2012 15:12:52
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	26669.5	1.0	**34.3875**	8.776	25.5	ug/L	21640	Standard
|	**Be**	9	225573.2	1.2	**52.5248**	0.123	0.2	ug/L	16	Standard
|	**Al**	27	1267023.2	2.7	**46.9538**	0.700	1.5	ug/L	19981	Standard
⌊>	**Sc**	45	485179.6	1.3				ug/L	408994	Standard
⌈	**Ti**	47	219928.8	1.3	**100.8261**	0.150	0.1	ug/L	102	Standard
|	**V**	51	1295397.8	1.8	**51.7504**	0.620	1.2	ug/L	5722	Standard
|	**Cr**	52	1063502.5	2.5	**51.7833**	0.697	1.3	ug/L	18417	Standard
|	**Cr**	53	120050.0	2.8	**52.2771**	1.073	2.1	ug/L	405	Standard
|	**Mn**	55	1376267.3	1.8	**52.7280**	0.472	0.9	ug/L	4298	Standard
|	**Co**	59	929867.5	0.8	**52.1413**	0.279	0.5	ug/L	123	Standard
|	**Ni**	60	190589.0	1.4	**52.3601**	0.580	1.1	ug/L	90	Standard
|	**Cu**	65	165821.2	2.7	**51.5906**	0.816	1.6	ug/L	148	Standard
|	**Zn**	66	73943.4	2.0	**50.4846**	0.359	0.7	ug/L	842	Standard
| >	**Ge**	72	346298.8	1.3				ug/L	293466	Standard
|	**As**	75	65292.2	1.6	**49.5454**	0.307	0.6	ug/L	-207	Standard
|	**Se**	82	6616.4	1.9	**51.0025**	0.343	0.7	ug/L	19	Standard
⌊	**Se-1**	77	4660.0	1.4	**51.6672**	1.416	2.7	ug/L	80	Standard
	Ga	71	278806.1	1.3				mg/L	234805	Standard
⌈	**Rb**	85	1055.4	2.4				ug/L	13	Standard
| >	**Y**	89	307318.6	1.7				ug/L	262487	Standard
⌊	**Rh**	103	36.0	14.7				ug/L	4	Standard
⌈	**Mo**	98	438903.3	2.9	**97.1316**	1.444	1.5	ug/L	10	Standard
|	**Ag**	107	470518.4	2.9	**54.2962**	0.816	1.5	ug/L	39	Standard
|	**Cd**	111	273675.2	1.8	**53.0044**	0.239	0.5	mg/L	525	Standard
|	**Cd**	114	743901.9	2.8	**49.8265**	0.706	1.4	ug/L	1503	Standard
| >	**In**	115	1115818.8	1.4				ug/L	917693	Standard
|	**Sn**	118	982131.9	2.3	**49.9786**	0.424	0.8	ug/L	5013	Standard
|	**Sb**	123	647916.0	1.1	**51.0995**	0.363	0.7	ug/L	29	Standard
⌊	**Ba**	135	290545.9	1.2	**46.7931**	0.201	0.4	ug/L	68	Standard
⌈	**Ce**	140	1079.4	4.1				ug/L	58	Standard
⌊>	**Tb**	159	1183301.1	0.3				ug/L	1008624	Standard
⌈	**Ho**	165	36.0	16.7				ug/L	12	Standard
|	**Tl**	203	965316.3	1.3	**51.3837**	0.369	0.7	ug/L	9	Standard
|	**Tl**	205	2558447.0	0.3	**52.9024**	0.928	1.8	ug/L	29	Standard
|	**Pb**	206	779963.4	1.1	**51.1209**	0.466	0.9	ug/L	458	Standard
|	**Pb**	207	648777.6	1.2	**51.4676**	0.420	0.8	ug/L	380	Standard
|	**Pb**	208	2990543.6	1.7	**50.3984**	0.146	0.3	ug/L	1773	Standard
|	**U**	238	2949238.9	2.4	**52.1905**	0.213	0.4	ug/L	42	Standard
⌊>	**Bi**	209	621096.6	2.0				ug/L	569761	Standard
⌈	**Na**	23	16959.5	0.4	**4.6552**	0.044	1.0	mg/L	89	Standard
|	**Mg**	24	1538287.6	2.2	**4.7122**	0.044	0.9	mg/L	158	Standard

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Sheri L. Babyak

	K	39	57007.7	0.2	**4.5161**	0.053	1.2	mg/L	532	Standard
	Ca	43	3803.1	2.0	**4.4863**	0.034	0.8	mg/L	142	Standard
	Fe	54	32312.4	0.4	**5.0123**	0.055	1.1	mg/L	890	Standard
	Fe	57	926885.0	5.0	**7.2343**	0.276	3.8	mg/L	3398	Standard
>	**Sc-1**	45	485179.6	1.3				mg/L	408994	Standard
	Cl	35	212962.9	34.0				ug/L	45742	Standard
	Kr	83	54.0	21.1				ug/L	47	Standard
	Br	81	14672.8	1.7				ug/L	11318	Standard
	P	31	95824.4	1.6				ug/L	55334	Standard
	S	34	957026.1	1.1				ug/L	546407	Standard
	Sr	88	1622.1	96.9				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	93.908		
>	Sc	45			
	Ti	47	100.826		
	V	51	103.501		
	Cr	52	103.567		
	Cr	53			
	Mn	55	105.456		
	Co	59	104.283		
	Ni	60	104.720		
	Cu	65	103.181		
	Zn	66	100.969		
>	Ge	72		118.003	
	As	75	99.091		
	Se	82	102.005		
	Se-1	77	103.334		
	Ga	71			
	Rb	85			
>	Y	89		117.079	
	Rh	103			
	Mo	98	97.132		
	Ag	107	108.592		
	Cd	111	106.009		
	Cd	114			
>	In	115		121.590	
	Sn	118	99.957		
	Sb	123	102.199		
	Ba	135	93.586		
	Ce	140			
>	Tb	159		117.318	
	Ho	165			
	Tl	203	102.767		
	Tl	205			
	Pb	206	102.242		

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	Pb	207	102.935	
	Pb	208	100.797	
	U	238	104.381	
>	Bi	209		109.010
	Na	23	93.104	
	Mg	24	94.243	
	K	39	90.321	
	Ca	43	89.725	
	Fe	54	100.246	
	Fe	57	144.685	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for QC Std	In	115	Rerun sample
QC Std 6	Ca	43	
QC Std 6	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 01, 2012 15:15:39
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: 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	26319.5	1.3	**44.7409**	11.953	26.7	ug/L	21640	Standard
|	**Be**	9	45.3	114.0	**0.0100**	0.012	123.2	ug/L	16	Standard
|	**Al**	27	27062.7	28.1	**0.2955**	0.292	98.9	ug/L	19981	Standard
⌊>	**Sc**	45	474996.4	0.6				ug/L	408994	Standard
⌈	**Ti**	47	137.3	31.7	**-0.0268**	0.020	74.6	ug/L	102	Standard
|	**V**	51	7021.8	2.4	**0.0268**	0.004	15.3	ug/L	5722	Standard
|	**Cr**	52	22393.2	0.7	**0.0909**	0.006	6.1	ug/L	18417	Standard
|	**Cr**	53	592.0	6.7	**0.0740**	0.018	24.9	ug/L	405	Standard
|	**Mn**	55	2679.6	3.5	**-0.0417**	0.003	7.9	ug/L	4298	Standard
|	**Co**	59	178.3	35.8	**0.0027**	0.004	131.5	ug/L	123	Standard
|	**Ni**	60	95.3	17.1	**0.0048**	0.004	89.9	ug/L	90	Standard
|	**Cu**	65	213.3	5.2	**0.0111**	0.003	27.8	ug/L	148	Standard
|	**Zn**	66	264.7	8.9	**-0.8124**	0.016	1.9	ug/L	842	Standard
|>	**Ge**	72	338242.0	1.0				ug/L	293466	Standard
|	**As**	75	-250.3	15.5	**-0.0373**	0.032	84.6	ug/L	-207	Standard
|	**Se**	82	22.7	21.6	**-0.0183**	0.038	206.3	ug/L	19	Standard
⌊	**Se-1**	77	103.7	10.2	**0.0045**	0.118	2601.5	ug/L	80	Standard
	Ga	71	276540.8	2.0				mg/L	234805	Standard
⌈	**Rb**	85	23.3	13.1				ug/L	13	Standard
|>	**Y**	89	307738.1	1.2				ug/L	262487	Standard
⌊	**Rh**	103	3.3	34.6				ug/L	4	Standard
⌈	**Mo**	98	94.2	78.9	**0.0161**	0.017	102.9	ug/L	10	Standard
|	**Ag**	107	272.0	46.6	**0.0258**	0.015	57.1	ug/L	39	Standard
|	**Cd**	111	675.2	4.7	**0.0135**	0.006	45.3	mg/L	525	Standard
|	**Cd**	114	1822.9	6.5	**0.0045**	0.007	165.4	ug/L	1503	Standard
|>	**In**	115	1098552.2	0.5				ug/L	917693	Standard
|	**Sn**	118	1609.4	6.5	**-0.1425**	0.005	3.7	ug/L	5013	Standard
|	**Sb**	123	797.2	32.3	**0.0616**	0.020	33.2	ug/L	29	Standard
⌊	**Ba**	135	93.7	27.1	**0.0040**	0.004	101.8	ug/L	68	Standard
⌈	**Ce**	140	63.3	20.5				ug/L	58	Standard
⌊>	**Tb**	159	1138339.7	1.3				ug/L	1008624	Standard
⌈	**Ho**	165	12.7	9.1				ug/L	12	Standard
|	**Tl**	203	514.0	139.4	**0.0287**	0.038	132.1	ug/L	9	Standard
|	**Tl**	205	1328.8	143.0	**0.0307**	0.039	127.0	ug/L	29	Standard
|	**Pb**	206	910.4	86.6	**0.0273**	0.051	188.3	ug/L	458	Standard
|	**Pb**	207	718.4	84.9	**0.0239**	0.048	201.4	ug/L	380	Standard
|	**Pb**	208	3301.9	83.3	**0.0250**	0.046	183.7	ug/L	1773	Standard
|	**U**	238	829.7	160.0	**0.0189**	0.023	123.6	ug/L	42	Standard
⌊>	**Bi**	209	623086.5	1.0				ug/L	569761	Standard
⌈	**Na**	23	104.7	6.1	**0.0019**	0.002	93.8	mg/L	89	Standard
|	**Mg**	24	483.3	94.9	**0.0010**	0.001	141.5	mg/L	158	Standard

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	K	39	608.0	2.6	**-0.0030**	0.001	42.4	mg/L	532	Standard
	Ca	43	126.7	4.6	**-0.0417**	0.007	17.6	mg/L	142	Standard
	Fe	54	1050.7	4.9	**-0.0008**	0.008	1004.6	mg/L	890	Standard
	Fe	57	5369.0	5.9	**0.0112**	0.002	21.3	mg/L	3398	Standard
>	**Sc-1**	45	474996.4	0.6				mg/L	408994	Standard
	Cl	35	134953.7	5.1				ug/L	45742	Standard
	Kr	83	50.7	14.2				ug/L	47	Standard
	Br	81	14941.7	1.5				ug/L	11318	Standard
	P	31	99888.4	3.3				ug/L	55334	Standard
	S	34	972751.3	1.0				ug/L	546407	Standard
	Sr	88	422.7	12.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		115.258	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		117.239	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		119.708	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.861	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	109.359
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, May 01, 2012 15:18:29
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	26304.8	2.3	**37.3823**	23.868	63.8	ug/L	21640	Standard
|	**Be**	9	17.7	36.4	**0.0034**	0.002	46.0	ug/L	16	Standard
|	**Al**	27	17087.7	11.4	**-0.0918**	0.070	76.2	ug/L	19981	Standard
⌊>	**Sc**	45	477412.2	1.0				ug/L	408994	Standard
⌈	**Ti**	47	113.3	2.7	**-0.0386**	0.002	4.2	ug/L	102	Standard
|	**V**	51	16629.0	2.0	**0.4140**	0.011	2.7	ug/L	5722	Standard
|	**Cr**	52	38190.1	1.1	**0.8725**	0.017	1.9	ug/L	18417	Standard
|	**Cr**	53	2286.2	1.7	**0.8207**	0.023	2.8	ug/L	405	Standard
|	**Mn**	55	14947.4	0.2	**0.4343**	0.003	0.6	ug/L	4298	Standard
|	**Co**	59	7107.7	1.0	**0.3960**	0.006	1.6	ug/L	123	Standard
|	**Ni**	60	6493.7	1.4	**1.7847**	0.027	1.5	ug/L	90	Standard
|	**Cu**	65	2723.2	3.8	**0.8017**	0.030	3.7	ug/L	148	Standard
|	**Zn**	66	10811.5	0.8	**6.6198**	0.081	1.2	ug/L	842	Standard
| >	**Ge**	72	342104.8	0.6				ug/L	293466	Standard
|	**As**	75	263.6	9.9	**0.3586**	0.021	5.9	ug/L	-207	Standard
|	**Se**	82	71.6	8.2	**0.3629**	0.047	12.9	ug/L	19	Standard
⌊	**Se-1**	77	119.3	11.2	**0.1716**	0.159	92.4	ug/L	80	Standard
	Ga	71	278840.6	3.0				mg/L	234805	Standard
⌈	**Rb**	85	18.7	37.6				ug/L	13	Standard
| >	**Y**	89	309814.4	1.1				ug/L	262487	Standard
⌊	**Rh**	103	4.7	89.2				ug/L	4	Standard
⌈	**Mo**	98	24.9	10.5	**0.0005**	0.001	118.7	ug/L	10	Standard
|	**Ag**	107	3628.4	2.4	**0.4151**	0.015	3.7	ug/L	39	Standard
|	**Cd**	111	1897.8	1.9	**0.2507**	0.002	0.8	mg/L	525	Standard
|	**Cd**	114	5137.2	1.6	**0.2270**	0.003	1.2	ug/L	1503	Standard
| >	**In**	115	1109877.3	1.4				ug/L	917693	Standard
|	**Sn**	118	1080.0	5.3	**-0.1705**	0.002	1.4	ug/L	5013	Standard
|	**Sb**	123	5251.7	1.9	**0.4142**	0.009	2.1	ug/L	29	Standard
⌊	**Ba**	135	4267.9	2.0	**0.6800**	0.020	2.9	ug/L	68	Standard
⌈	**Ce**	140	44.0	18.2				ug/L	58	Standard
⌊>	**Tb**	159	1138814.0	0.7				ug/L	1008624	Standard
⌈	**Ho**	165	11.3	10.2				ug/L	12	Standard
|	**Tl**	203	1557.1	3.3	**0.0836**	0.002	2.8	ug/L	9	Standard
|	**Tl**	205	3755.1	9.3	**0.0803**	0.007	8.3	ug/L	29	Standard
|	**Pb**	206	3539.7	3.1	**0.1978**	0.006	2.8	ug/L	458	Standard
|	**Pb**	207	2930.0	3.7	**0.1975**	0.008	4.0	ug/L	380	Standard
|	**Pb**	208	13653.7	3.1	**0.1977**	0.006	2.8	ug/L	1773	Standard
|	**U**	238	20959.5	1.6	**0.3718**	0.004	1.0	ug/L	42	Standard
⌊>	**Bi**	209	626850.3	0.7				ug/L	569761	Standard
⌈	**Na**	23	81.3	6.2	**-0.0048**	0.001	27.0	mg/L	89	Standard
|	**Mg**	24	195.0	46.5	**0.0001**	0.000	259.8	mg/L	158	Standard

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	K	39	619.3	5.2	**-0.0023**	0.003	132.8	mg/L	532	Standard
	Ca	43	110.0	8.3	**-0.0633**	0.013	20.1	mg/L	142	Standard
	Fe	54	998.7	3.6	**-0.0101**	0.007	71.8	mg/L	890	Standard
	Fe	57	5240.2	1.2	**0.0100**	0.001	7.4	mg/L	3398	Standard
>	**Sc-1**	45	477412.2	1.0				mg/L	408994	Standard
	Cl	35	116889.7	2.4				ug/L	45742	Standard
	Kr	83	48.4	4.4				ug/L	47	Standard
	Br	81	14539.6	0.9				ug/L	11318	Standard
	P	31	92488.8	4.3				ug/L	55334	Standard
	S	34	961000.4	1.8				ug/L	546407	Standard
	Sr	88	327.3	4.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	103.508		
	Cr	52	109.058		
	Cr	53			
	Mn	55	86.854		
	Co	59	99.000		
	Ni	60	111.541		
	Cu	65	100.210		
	Zn	66	105.917		
>	Ge	72		116.574	
	As	75	89.653		
	Se	82	90.725		
	Se-1	77	42.890		
	Ga	71			
	Rb	85			
>	Y	89		118.030	
	Rh	103			
	Mo	98			
	Ag	107	103.781		
	Cd	111	104.478		
	Cd	114			
>	In	115		120.942	
	Sn	118			
	Sb	123	103.544		
	Ba	135	90.672		
	Ce	140			
>	Tb	159		112.908	
	Ho	165			
	Tl	203	104.470		
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208	98.857	
	U	238	92.938	
>	Bi	209		110.020
	Na	23		
	Mg	24		
	K	39		
	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	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 8	Se-1	77	
In 115 Int Std for QC Std	In	115	Rerun sample

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Method 6020 - Summary Report

Sample ID: TRITON
Sample Date/Time: Tuesday, May 01, 2012 15:23:32
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	30938.7	15.8	**-42.8166**	69.472	162.3	ug/L	21640	Standard
|	**Be**	9	12.7	29.9	**0.0016**	0.001	50.2	ug/L	16	Standard
|	**Al**	27	211159.2	64.0	**5.8421**	4.678	80.1	ug/L	19981	Standard
⌊>	**Sc**	45	597717.6	13.1				ug/L	408994	Standard
⌈	**Ti**	47	663.4	65.8	**0.1785**	0.177	99.3	ug/L	102	Standard
|	**V**	51	10110.9	18.8	**0.0899**	0.045	49.8	ug/L	5722	Standard
|	**Cr**	52	30703.2	19.7	**0.2728**	0.182	66.8	ug/L	18417	Standard
|	**Cr**	53	553.3	21.4	**0.0188**	0.037	194.9	ug/L	405	Standard
|	**Mn**	55	2095.5	25.7	**-0.0774**	0.015	19.7	ug/L	4298	Standard
|	**Co**	59	143.7	17.8	**-0.0005**	0.001	197.6	ug/L	123	Standard
|	**Ni**	60	73.0	15.3	**-0.0045**	0.002	42.7	ug/L	90	Standard
|	**Cu**	65	125.0	8.3	**-0.0230**	0.003	13.9	ug/L	148	Standard
|	**Zn**	66	307.0	20.6	**-0.8160**	0.027	3.3	ug/L	842	Standard
| >	**Ge**	72	397565.9	7.0				ug/L	293466	Standard
|	**As**	75	-139.8	13.4	**0.0641**	0.016	25.0	ug/L	-207	Standard
|	**Se**	82	55.4	25.5	**0.1720**	0.071	41.0	ug/L	19	Standard
⌊	**Se-1**	77	51.7	16.9	**-0.6910**	0.052	7.6	ug/L	80	Standard
	Ga	71	327013.5	10.0				mg/L	234805	Standard
⌈	**Rb**	85	208.7	54.9				ug/L	13	Standard
| >	**Y**	89	303900.8	15.9				ug/L	262487	Standard
⌊	**Rh**	103	7.3	63.0				ug/L	4	Standard
⌈	**Mo**	98	35.5	22.8	**0.0034**	0.003	88.1	ug/L	10	Standard
|	**Ag**	107	59.3	40.5	**0.0013**	0.004	288.3	ug/L	39	Standard
|	**Cd**	111	183.6	19.8	**-0.0827**	0.002	2.8	mg/L	525	Standard
|	**Cd**	114	526.3	28.5	**-0.0835**	0.004	5.3	ug/L	1503	Standard
| >	**In**	115	1075498.9	17.4				ug/L	917693	Standard
|	**Sn**	118	1355.4	20.3	**-0.1522**	0.023	15.2	ug/L	5013	Standard
|	**Sb**	123	225.5	43.7	**0.0168**	0.010	59.3	ug/L	29	Standard
⌊	**Ba**	135	135.0	38.3	**0.0116**	0.009	81.6	ug/L	68	Standard
⌈	**Ce**	140	168.0	34.6				ug/L	58	Standard
⌊>	**Tb**	159	1273533.4	17.4				ug/L	1008624	Standard
⌈	**Ho**	165	19.3	43.1				ug/L	12	Standard
|	**Tl**	203	91.3	20.3	**0.0051**	0.001	11.7	ug/L	9	Standard
|	**Tl**	205	219.3	28.2	**0.0068**	0.000	5.5	ug/L	29	Standard
|	**Pb**	206	538.0	14.0	**-0.0055**	0.003	61.0	ug/L	458	Standard
|	**Pb**	207	470.7	25.2	**-0.0051**	0.003	55.1	ug/L	380	Standard
|	**Pb**	208	2143.7	17.7	**-0.0032**	0.002	48.8	ug/L	1773	Standard
|	**U**	238	86.7	32.7	**0.0054**	0.000	4.3	ug/L	42	Standard
⌊>	**Bi**	209	828736.2	18.1				ug/L	569761	Standard
⌈	**Na**	23	304.0	25.9	**0.0400**	0.012	29.8	mg/L	89	Standard
|	**Mg**	24	512.7	43.1	**0.0008**	0.001	80.6	mg/L	158	Standard

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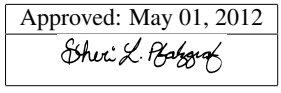

	K	39	543.3	7.9	**-0.0173**	0.002	10.3	mg/L	532	Standard
	Ca	43	149.3	6.3	**-0.0496**	0.026	52.3	mg/L	142	Standard
	Fe	54	801.8	22.9	**-0.0691**	0.015	21.1	mg/L	890	Standard
	Fe	57	2094.8	26.9	**-0.0183**	0.004	23.2	mg/L	3398	Standard
>	**Sc-1**	45	597717.6	13.1				mg/L	408994	Standard
	Cl	35	70607.7	10.6				ug/L	45742	Standard
	Kr	83	154.0	24.4				ug/L	47	Standard
	Br	81	7357.5	3.5				ug/L	11318	Standard
	P	31	60032.6	21.4				ug/L	55334	Standard
	S	34	431723.1	8.6				ug/L	546407	Standard
	Sr	88	476.0	12.0				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		135.473	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		115.777	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		117.196	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		126.264	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	145.453
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ge 72 Int Std for sample	Ge	72	Rerun sample
Se-1 77 Lower	Se-1	77	
Tb 159 Int Std for sample	Tb	159	Rerun sample
Bi 209 Int Std for sample	Bi	209	Rerun sample

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Method 6020 - Summary Report

Sample ID: TRITON
Sample Date/Time: Tuesday, May 01, 2012 15:26:19
Number of Replicates: 3
Autosampler Position: 209
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25221.0	1.5	**59.2653**	52.509	88.6	ug/L	21640	Standard
|	**Be**	9	112.3	129.3	**0.0280**	0.038	134.6	ug/L	16	Standard
|	**Al**	27	45871.4	115.5	**1.1511**	2.226	193.3	ug/L	19981	Standard
⌊>	**Sc**	45	450469.4	2.5				ug/L	408994	Standard
⌈	**Ti**	47	418.0	45.6	**0.1089**	0.096	88.0	ug/L	102	Standard
|	**V**	51	35995.9	2.0	**1.2375**	0.057	4.6	ug/L	5722	Standard
|	**Cr**	52	110682.8	0.7	**4.6551**	0.115	2.5	ug/L	18417	Standard
|	**Cr**	53	1484.7	8.1	**0.4829**	0.070	14.5	ug/L	405	Standard
|	**Mn**	55	8566.4	60.8	**0.1962**	0.213	108.7	ug/L	4298	Standard
|	**Co**	59	541.3	91.5	**0.0244**	0.030	122.2	ug/L	123	Standard
|	**Ni**	60	235.7	45.0	**0.0455**	0.031	69.0	ug/L	90	Standard
|	**Cu**	65	228.3	44.9	**0.0172**	0.035	202.7	ug/L	148	Standard
|	**Zn**	66	2025.2	44.5	**0.4568**	0.628	137.5	ug/L	842	Standard
| >	**Ge**	72	333987.0	2.2				ug/L	293466	Standard
|	**As**	75	-143.0	70.1	**0.0454**	0.077	170.7	ug/L	-207	Standard
|	**Se**	82	27.0	45.6	**0.0197**	0.104	527.4	ug/L	19	Standard
⌊	**Se-1**	77	85.3	13.5	**-0.1933**	0.157	81.3	ug/L	80	Standard
	Ga	71	258852.5	2.3				mg/L	234805	Standard
⌈	**Rb**	85	164.0	39.1				ug/L	13	Standard
| >	**Y**	89	290593.4	1.7				ug/L	262487	Standard
⌊	**Rh**	103	5.3	78.1				ug/L	4	Standard
⌈	**Mo**	98	138.0	129.3	**0.0278**	0.043	153.3	ug/L	10	Standard
|	**Ag**	107	162.3	116.1	**0.0141**	0.024	167.3	ug/L	39	Standard
|	**Cd**	111	292.8	49.1	**-0.0588**	0.030	51.7	mg/L	525	Standard
|	**Cd**	114	796.3	41.8	**-0.0626**	0.024	39.1	ug/L	1503	Standard
| >	**In**	115	1045944.2	1.7				ug/L	917693	Standard
|	**Sn**	118	1134.0	36.6	**-0.1640**	0.023	14.2	ug/L	5013	Standard
|	**Sb**	123	395.2	77.2	**0.0311**	0.026	83.8	ug/L	29	Standard
⌊	**Ba**	135	292.7	89.9	**0.0392**	0.046	117.1	ug/L	68	Standard
⌈	**Ce**	140	246.0	108.7				ug/L	58	Standard
⌊>	**Tb**	159	1103523.8	0.3				ug/L	1008624	Standard
⌈	**Ho**	165	11.3	66.8				ug/L	12	Standard
|	**Tl**	203	307.7	142.3	**0.0174**	0.023	130.7	ug/L	9	Standard
|	**Tl**	205	703.4	140.7	**0.0176**	0.020	113.8	ug/L	29	Standard
|	**Pb**	206	732.0	74.2	**0.0144**	0.035	243.9	ug/L	458	Standard
|	**Pb**	207	663.0	84.8	**0.0181**	0.044	241.7	ug/L	380	Standard
|	**Pb**	208	3025.5	78.8	**0.0191**	0.040	207.1	ug/L	1773	Standard
|	**U**	238	1210.5	157.6	**0.0252**	0.033	131.0	ug/L	42	Standard
⌊>	**Bi**	209	644231.5	1.1				ug/L	569761	Standard
⌈	**Na**	23	1545.4	12.3	**0.4321**	0.057	13.1	mg/L	89	Standard
|	**Mg**	24	2883.7	148.5	**0.0093**	0.015	157.5	mg/L	158	Standard

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Sheri L. Babgiak

	K	39	635.3	12.7	**0.0022**	0.008	385.0	mg/L	532	Standard
	Ca	43	150.7	8.8	**-0.0007**	0.023	3136.7	mg/L	142	Standard
	Fe	54	403.4	15.0	**-0.1031**	0.012	11.9	mg/L	890	Standard
	Fe	57	4893.5	23.1	**0.0097**	0.011	109.3	mg/L	3398	Standard
>	**Sc-1**	45	450469.4	2.5				mg/L	408994	Standard
	Cl	35	93764.7	15.2				ug/L	45742	Standard
	Kr	83	42.4	7.1				ug/L	47	Standard
	Br	81	12399.1	3.9				ug/L	11318	Standard
	P	31	113147.9	3.7				ug/L	55334	Standard
	S	34	818299.0	5.1				ug/L	546407	Standard
	Sr	88	7573.3	148.1				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		113.808	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.708	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		113.975	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		109.409	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	113.070
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: TRITON
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Method 6020 - Summary Report

Sample ID: ACID WATER
Sample Date/Time: Tuesday, May 01, 2012 15:29:07
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	25927.8	1.1	**53.2577**	25.325	47.6	ug/L	21640	Standard
|	**Be**	9	30.3	96.1	**0.0066**	0.007	108.6	ug/L	16	Standard
|	**Al**	27	22764.5	9.3	**0.1495**	0.091	60.6	ug/L	19981	Standard
⌊>	**Sc**	45	464955.2	0.8				ug/L	408994	Standard
⌈	**Ti**	47	114.7	27.3	**-0.0368**	0.015	40.4	ug/L	102	Standard
|	**V**	51	7156.1	5.3	**0.0357**	0.015	41.9	ug/L	5722	Standard
|	**Cr**	52	22295.4	3.2	**0.0988**	0.033	33.0	ug/L	18417	Standard
|	**Cr**	53	479.3	6.7	**0.0261**	0.016	63.1	ug/L	405	Standard
|	**Mn**	55	1899.8	53.0	**-0.0716**	0.040	55.6	ug/L	4298	Standard
|	**Co**	59	157.0	53.5	**0.0016**	0.005	302.3	ug/L	123	Standard
|	**Ni**	60	126.3	33.4	**0.0140**	0.012	84.9	ug/L	90	Standard
|	**Cu**	65	998.4	3.4	**0.2650**	0.008	3.2	ug/L	148	Standard
|	**Zn**	66	4226.6	2.9	**2.0464**	0.077	3.8	ug/L	842	Standard
| >	**Ge**	72	334429.1	1.0				ug/L	293466	Standard
|	**As**	75	-240.2	23.5	**-0.0312**	0.043	136.2	ug/L	-207	Standard
|	**Se**	82	25.2	24.5	**0.0037**	0.050	1353.2	ug/L	19	Standard
⌊	**Se-1**	77	95.7	6.8	**-0.0750**	0.084	112.5	ug/L	80	Standard
	Ga	71	270975.7	0.7				mg/L	234805	Standard
⌈	**Rb**	85	19.3	41.8				ug/L	13	Standard
| >	**Y**	89	303228.9	1.8				ug/L	262487	Standard
⌊	**Rh**	103	3.3	34.6				ug/L	4	Standard
⌈	**Mo**	98	14.9	40.6	**-0.0015**	0.001	88.5	ug/L	10	Standard
|	**Ag**	107	59.0	12.2	**0.0010**	0.001	77.1	ug/L	39	Standard
|	**Cd**	111	555.0	2.2	**-0.0072**	0.003	44.7	mg/L	525	Standard
|	**Cd**	114	1543.9	0.4	**-0.0117**	0.001	7.5	ug/L	1503	Standard
| >	**In**	115	1069802.0	1.1				ug/L	917693	Standard
|	**Sn**	118	1896.8	4.2	**-0.1249**	0.003	2.5	ug/L	5013	Standard
|	**Sb**	123	221.3	19.5	**0.0159**	0.003	21.4	ug/L	29	Standard
⌊	**Ba**	135	89.7	42.9	**0.0037**	0.006	169.7	ug/L	68	Standard
⌈	**Ce**	140	63.3	35.5				ug/L	58	Standard
⌊>	**Tb**	159	1123661.6	1.2				ug/L	1008624	Standard
⌈	**Ho**	165	14.7	41.7				ug/L	12	Standard
|	**Tl**	203	48.7	72.1	**0.0041**	0.002	46.1	ug/L	9	Standard
|	**Tl**	205	114.0	110.9	**0.0058**	0.003	45.6	ug/L	29	Standard
|	**Pb**	206	491.7	8.0	**0.0003**	0.003	758.9	ug/L	458	Standard
|	**Pb**	207	401.7	12.0	**-0.0008**	0.004	502.5	ug/L	380	Standard
|	**Pb**	208	1858.7	11.7	**0.0012**	0.004	303.9	ug/L	1773	Standard
|	**U**	238	74.0	124.9	**0.0056**	0.002	29.4	ug/L	42	Standard
⌊>	**Bi**	209	616010.0	0.1				ug/L	569761	Standard
⌈	**Na**	23	60.7	14.9	**-0.0101**	0.003	27.0	mg/L	89	Standard
|	**Mg**	24	226.7	56.1	**0.0002**	0.000	180.8	mg/L	158	Standard

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Sheri L. Babyak

	K	39	566.7	3.3	**-0.0054**	0.002	33.7	mg/L	532	Standard
	Ca	43	118.0	3.4	**-0.0494**	0.005	10.2	mg/L	142	Standard
	Fe	54	870.0	2.4	**-0.0274**	0.002	9.1	mg/L	890	Standard
	Fe	57	4945.5	5.3	**0.0087**	0.002	28.5	mg/L	3398	Standard
>	**Sc-1**	45	464955.2	0.8				mg/L	408994	Standard
	Cl	35	89218.4	5.1				ug/L	45742	Standard
	Kr	83	49.6	8.2				ug/L	47	Standard
	Br	81	14290.4	2.2				ug/L	11318	Standard
	P	31	78964.3	2.7				ug/L	55334	Standard
	S	34	928420.5	2.6				ug/L	546407	Standard
	Sr	88	582.7	88.2				ug/L	205	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		113.958	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		115.521	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		116.575	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.405	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: ACID WATER
Report Date/Time: Tuesday, May 01, 2012 15:31:35
Page 2

Approved: May 01, 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

108.117

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: ACID WATER
Report Date/Time: Tuesday, May 01, 2012 15:31:35
Page 3

Approved: May 01, 2012

2.3.3 Metals CVAA Data (Mercury)

2.3.3.1 Summary Data

Login Number: L12040928
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.

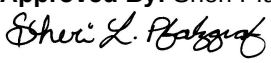
Serial Dilution/Post Digestion Spikes: WG396767 - All acceptance criteria were met.

Matrix Spikes: WG396767 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 08(MS) and 10(MSD) met all acceptance criteria. Sample 02 was chosen by the client for MS/MSD analysis. Samples 09(MS) and 11(MSD) met all acceptance criteria.

SAMPLES

Samples: WG3967667 - Client samples 05 and 06 contained significant amounts of sediment.

Narrative ID: 45820
Approved By: Sheri Pfalzgraf



Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:29
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.112944
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 #: L12040928-02 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.113526
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 #: L12040928-03 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-10-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:37
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** HY.050212.113729
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 #: L12040928-04 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-10-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:40
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** HY.050212.114055
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 #: L12040928-05 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-31-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:42
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** HY.050212.114239
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00401		0.000200	0.000100

Sample #: L12040928-06 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-31-042612 **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:41
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:44
Collect Date: 04/26/2012 12:30 **Dilution:** 1 **File ID:** HY.050212.114434
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00523		0.000200	0.000100

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612-MS **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:40
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:46
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.114628
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00469		0.000222	0.000111

Certificate of Analysis

Sample #: L12040928-09 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612-MS **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:40
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:48
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.114811
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00477		0.000222	0.000111

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612-MSD **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:40
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:49
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.114953
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00459		0.000222	0.000111

Sample #: L12040928-11 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-27-042612-MSD **Prep Method:** 7470A **Prep Date:** 05/01/2012 10:40
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/02/2012 10:19
Workgroup #: WG396767 **Analyst:** PDM **Run Date:** 05/02/2012 11:51
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** HY.050212.115140
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00488		0.000222	0.000111

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: WG396683
Analyst: REK
Spike Analyst: REK
Method: 7470A
Run Date: 05/01/2012 10:41
Hotblock Start Temp: 93.8 @ 10:30
Hotblock End Temp: 94.6 @ 12:30

SOP: ME404 Revison 13
Spike Solution: STD51414
Spike Witness: VC
H2SO4 Lot #: COA16022
HNO3 Lot #: COA16033
Digestion Tubes Lot #: COA16053
K2S2O8 1:1 Lot #: RGT16987
KMnO4 1:1 Lot #: RGT17201
Mercury Water ICV Lot #: STD51416
HG H2O STDS 10PPM Lot #: STD51422

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG396683-03	BLANK	1	40 mL	40 mL		
2	WG396644-01	FBLK	17	4 mL	40 mL		
3	WG396683-04	LCS	1	40 mL	40 mL	4 mL	
4	L12040886-01	SAMP	17	4 mL	40 mL		05/03/12
5	L12040912-01	SAMP	17	4 mL	40 mL		05/02/12
6	L12040918-01	SAMP	17	4 mL	40 mL		05/08/12
7	L12040918-02	SAMP	17	4 mL	40 mL		05/08/12
8	L12040918-03	SAMP	17	4 mL	40 mL		05/08/12
9	WG396683-01	REF	1	40 mL	40 mL		
10	L12040928-01	RS01	1	40 mL	40 mL		05/11/12
11	WG396683-02	REF	1	40 mL	40 mL		
12	L12040928-02	RS02	1	40 mL	40 mL		05/11/12
13	L12040928-03	SAMP	1	40 mL	40 mL		05/11/12
14	L12040928-04	SAMP	1	40 mL	40 mL		05/11/12
15	L12040928-05	SAMP	1	40 mL	40 mL		05/11/12
16	L12040928-06	SAMP	1	40 mL	40 mL		05/11/12
17	WG396683-05	MS	1	36 mL	40 mL	4 mL	
18	L12040928-08	MS01	1	36 mL	40 mL	4 mL	05/11/12
19	WG396683-07	MS	1	36 mL	40 mL	4 mL	
20	L12040928-09	MS02	1	36 mL	40 mL	4 mL	05/11/12
21	WG396683-06	MSD	1	36 mL	40 mL	4 mL	
22	L12040928-10	SD01	1	36 mL	40 mL	4 mL	05/11/12
23	WG396683-08	MSD	1	36 mL	40 mL	4 mL	
24	L12040928-11	SD02	1	36 mL	40 mL	4 mL	05/11/12
25	L12040937-01	SAMP	17	4 mL	40 mL		05/04/12
26	L12040937-02	SAMP	17	4 mL	40 mL		05/04/12

Analyst: _____

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 2398502
Report generated: 05/01/2012 13:17

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 050212C.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 13
Maintenance Log ID: 41571

Calibration Std: STD51422 ICV Std: STD51416 Post Spike: STD51422
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

396767
Workgroups:

Comments: Sequences 39 through 42 and 50 through 68 were not reported due to LCS noncomplinace.

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.050212.100949	WG396826-01	Calibration Point		1		05/02/12 10:09
2	HY.050212.101146	WG396826-02	Calibration Point		1		05/02/12 10:11
3	HY.050212.101329	WG396826-03	Calibration Point		1		05/02/12 10:13
4	HY.050212.101515	WG396826-04	Calibration Point		1		05/02/12 10:15
5	HY.050212.101700	WG396826-05	Calibration Point		1		05/02/12 10:17
6	HY.050212.101902	WG396826-06	Calibration Point		1		05/02/12 10:19
7	HY.050212.105944	WG396826-07	Initial Calibration Verification		1		05/02/12 10:59
8	HY.050212.110127	WG396826-08	Initial Calib Blank		1		05/02/12 11:01
9	HY.050212.110336	WG396826-09	CCV		1		05/02/12 11:03
10	HY.050212.110530	WG396826-10	CCB		1		05/02/12 11:05
11	HY.050212.111315	WG396683-03	Method/Prep Blank	40/40	1		05/02/12 11:13
12	HY.050212.111458	WG396683-04	Laboratory Control S	40/40	1		05/02/12 11:14
13	HY.050212.111641	WG396644-01	Fluid Blank		1		05/02/12 11:16
14	HY.050212.111824	L12040886-01	SCWTW-UNK-042312	4/40	1		05/02/12 11:18
15	HY.050212.112005	WG396767-01	Post Digestion Spike		1	L12040886-01	05/02/12 11:20
16	HY.050212.112200	L12040912-01	1717SOXWSS	4/40	1		05/02/12 11:22
17	HY.050212.112404	L12040918-01	1109.142.D001	4/40	1		05/02/12 11:24
18	HY.050212.112546	L12040918-02	1109.142.D002	4/40	1		05/02/12 11:25
19	HY.050212.112730	L12040918-03	1109.142.D003	4/40	1		05/02/12 11:27
20	HY.050212.112944	WG396683-01	Reference Sample	40/40	1	L12040928-01	05/02/12 11:29
21	HY.050212.113157	WG396826-11	CCV		1		05/02/12 11:31
22	HY.050212.113339	WG396826-12	CCB		1		05/02/12 11:33
23	HY.050212.113526	WG396683-02	Reference Sample	40/40	1	L12040928-02	05/02/12 11:35
24	HY.050212.113729	L12040928-03	MW-10-042612	40/40	1		05/02/12 11:37
25	HY.050212.113911	WG396767-02	Post Digestion Spike		1	L12040928-01	05/02/12 11:39
26	HY.050212.114055	L12040928-04	MW-10-042612	40/40	1		05/02/12 11:40
27	HY.050212.114239	L12040928-05	MW-31-042612	40/40	1		05/02/12 11:42
28	HY.050212.114434	L12040928-06	MW-31-042612	40/40	1		05/02/12 11:44
29	HY.050212.114628	L12040928-08	MW-27-042612-MS	36/40	1	WG396683-05	05/02/12 11:46
30	HY.050212.114811	L12040928-09	MW-27-042612-MS	36/40	1	WG396683-07	05/02/12 11:48
31	HY.050212.114953	L12040928-10	MW-27-042612-MSD	36/40	1	WG396683-06	05/02/12 11:49
32	HY.050212.115140	L12040928-11	MW-27-042612-MSD	36/40	1	WG396683-08	05/02/12 11:51
33	HY.050212.115333	WG396826-13	CCV		1		05/02/12 11:53
34	HY.050212.115516	WG396826-14	CCB		1		05/02/12 11:55

Page: 1 Approved: May 02, 2012

Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 050212C.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 13
Maintenance Log ID: 41571

Calibration Std: STD51422 ICV Std: STD51416 Post Spike: STD51422
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

396767
Workgroups:

Comments: Sequences 39 through 42 and 50 through 68 were not reported due to LCS noncomplinace.

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.050212.115701	L12040937-01	2041580-01	4/40	1		05/02/12 11:57
36	HY.050212.115845	L12040937-02	2041580-02	4/40	1		05/02/12 11:58
37	HY.050212.120027	WG396826-15	CCV		1		05/02/12 12:00
38	HY.050212.120210	WG396826-16	CCB		1		05/02/12 12:02
39	HY.050212.120406	WG396617-02	Method/Prep Blank		1		05/02/12 12:04
40	HY.050212.120559	WG396617-03	Laboratory Control S		1		05/02/12 12:05
41	HY.050212.120752	L12040898-03	MW-22-042512		1		05/02/12 12:07
42	HY.050212.120936	WG396770-01	Post Digestion Spike		1	L12040898-03	05/02/12 12:09
43	HY.050212.122309	WG396826-17	CCV		1		05/02/12 12:23
44	HY.050212.122452	WG396826-18	CCB		1		05/02/12 12:24
45	HY.050212.122855	WG396767-03	Post Digestion Spike		1	L12040912-01	05/02/12 12:28
46	HY.050212.123112	WG396767-04	Post Digestion Spike		1	L12040918-01	05/02/12 12:31
47	HY.050212.123325	WG396767-05	Post Digestion Spike		1	L12040937-01	05/02/12 12:33
48	HY.050212.123507	WG396826-19	CCV		1		05/02/12 12:35
49	HY.050212.123649	WG396826-20	CCB		1		05/02/12 12:36
50	HY.050212.124704	WG396617-02	Method/Prep Blank		1		05/02/12 12:47
51	HY.050212.124853	WG396617-03	Laboratory Control S		1		05/02/12 12:48
52	HY.050212.125056	L12040898-03	MW-22-042512		1		05/02/12 12:50
53	HY.050212.125300	WG396770-01	Post Digestion Spike		1	L12040898-03	05/02/12 12:53
54	HY.050212.125448	L12040898-04	MW-22-042512		1		05/02/12 12:54
55	HY.050212.125633	L12040898-05	MW-23-042512		1		05/02/12 12:56
56	HY.050212.125817	L12040898-06	MW-23-042512		1		05/02/12 12:58
57	HY.050212.130000	L12040898-08	MW-30-042512		1		05/02/12 13:00
58	HY.050212.130149	L12040898-09	MW-30-042512		1		05/02/12 13:01
59	HY.050212.130334	L12040898-10	MW-32-042512		1		05/02/12 13:03
60	HY.050212.130523	WG396826-21	Ck4CCV		1		05/02/12 13:05
61	HY.050212.130708	WG396826-22	Ck5CCB		1		05/02/12 13:07
62	HY.050212.130852	L12040898-11	MW-32-042512		1		05/02/12 13:08
63	HY.050212.131037	L12040898-12	DUP-GW-042512		1		05/02/12 13:10
64	HY.050212.131222	L12040898-13	DUP-GW-042512		1		05/02/12 13:12
65	HY.050212.131405	L12040898-14	EB-042512-GW		1		05/02/12 13:14
66	HY.050212.131602	L12040963-01	MW-20-042712		1	WG396617-01	05/02/12 13:16
67	HY.050212.131756	WG396617-04	Matrix Spike		1	L12040963-01	05/02/12 13:17
68	HY.050212.131941	WG396617-05	Matrix Spike Duplica		1	L12040963-01	05/02/12 13:19

Page: 2 Approved: May 02, 2012

Sheri L. Babcock

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 02-MAY-2012
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: 396826
Runlog ID: 46516
Analytical Workgroups: 396767

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	0886,0912,0918,0928,0937
Client Forms	X
Level X	
Level 3	
Level 4	0912,0918,0928
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:
02-MAY-2012

Secondary Reviewer:
02-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-02-2012 15:32:09

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A AAB#: WG396767

Login Number: L12040928

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-27-042612	01	04/26/12					05/01/12	5	28		05/02/12	6	28	
MW-10-042612	03	04/26/12					05/01/12	4.9	28		05/02/12	6	28	
MW-31-042612	05	04/26/12					05/01/12	4.9	28		05/02/12	6	28	
MW-27-042612-MS	08	04/26/12					05/01/12	5	28		05/02/12	6	28	
MW-27-042612-MSD	10	04/26/12					05/01/12	5	28		05/02/12	6.1	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2400356
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A AAB#: WG396767

Login Number: L12040928

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-27-042612	02	04/26/12					05/01/12	5	28		05/02/12	6	28	
MW-10-042612	04	04/26/12					05/01/12	4.9	28		05/02/12	6	28	
MW-31-042612	06	04/26/12					05/01/12	4.9	28		05/02/12	6	28	
MW-27-042612-MS	09	04/26/12					05/01/12	5	28		05/02/12	6	28	
MW-27-042612-MSD	11	04/26/12					05/01/12	5	28		05/02/12	6.1	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2400368
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396767
Blank File ID: HY.050212.111315
Blank Sample ID: WG396683-03
Prep Date: 05/01/12 10:41
Instrument ID: HYDRA
Analyzed Date: 05/02/12 11:13
Method: 7470A
Analyst: PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396683-04	HY.050212.111458	05/02/12 11:14	01
MW-27-042612	L12040928-01	HY.050212.112944	05/02/12 11:29	01
MW-27-042612	L12040928-02	HY.050212.113526	05/02/12 11:35	01
MW-10-042612	L12040928-03	HY.050212.113729	05/02/12 11:37	01
MW-10-042612	L12040928-04	HY.050212.114055	05/02/12 11:40	01
MW-31-042612	L12040928-05	HY.050212.114239	05/02/12 11:42	01
MW-31-042612	L12040928-06	HY.050212.114434	05/02/12 11:44	01
MW-27-042612-MS	L12040928-08	HY.050212.114628	05/02/12 11:46	01
MW-27-042612-MS	L12040928-09	HY.050212.114811	05/02/12 11:48	01
MW-27-042612-MSD	L12040928-10	HY.050212.114953	05/02/12 11:49	01
MW-27-042612-MSD	L12040928-11	HY.050212.115140	05/02/12 11:51	01

Report Name: BLANK_SUMMARY
PDF File ID: 2400357
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396767
Blank File ID: HY.050212.111315
Blank Sample ID: WG396683-03
Prep Date: 05/01/12 10:41
Instrument ID: HYDRA
Analyzed Date: 05/02/12 11:13
Method: 7470A
Analyst: PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396683-04	HY.050212.111458	05/02/12 11:14	01
MW-27-042612	L12040928-01	HY.050212.112944	05/02/12 11:29	01
MW-27-042612	L12040928-02	HY.050212.113526	05/02/12 11:35	01
MW-10-042612	L12040928-03	HY.050212.113729	05/02/12 11:37	01
MW-10-042612	L12040928-04	HY.050212.114055	05/02/12 11:40	01
MW-31-042612	L12040928-05	HY.050212.114239	05/02/12 11:42	01
MW-31-042612	L12040928-06	HY.050212.114434	05/02/12 11:44	01
MW-27-042612-MS	L12040928-08	HY.050212.114628	05/02/12 11:46	01
MW-27-042612-MS	L12040928-09	HY.050212.114811	05/02/12 11:48	01
MW-27-042612-MSD	L12040928-10	HY.050212.114953	05/02/12 11:49	01
MW-27-042612-MSD	L12040928-11	HY.050212.115140	05/02/12 11:51	01

Report Name: BLANK_SUMMARY
PDF File ID: 2400369
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/01/12 10:41 Sample ID: WG396683-03
Instrument ID: HYDRA Run Date: 05/02/12 11:13 Prep Method: 7470A
File ID: HY.050212.111315 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG396767 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-02-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

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

Report Name:BLANK
PDF ID: 2400358
02-MAY-2012 15:03

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/01/12 10:41 Sample ID: WG396683-03
Instrument ID: HYDRA Run Date: 05/02/12 11:13 Prep Method: 7470A
File ID: HY.050212.111315 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG396767 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-02-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury, Dissolved	0.000100	0.000200	0.000100	1	U

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

Report Name:BLANK
PDF ID: 2400370
02-MAY-2012 15:03

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 **Run Date:** 05/02/2012 **Sample ID:** WG396683-04
Instrument ID: HYDRA **Run Time:** 11:14 **Prep Method:** 7470A
File ID: HY.050212.111458 **Analyst:** PDM **Method:** 7470A
Workgroup (AAB#): WG396767 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD51414 **Cal ID:** HYDRA-02-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00432	108	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2400359
Report generated: 05/02/2012 15:03

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 **Run Date:** 05/02/2012 **Sample ID:** WG396683-04
Instrument ID: HYDRA **Run Time:** 11:14 **Prep Method:** 7470A
File ID: HY.050212.111458 **Analyst:** PDM **Method:** 7470A
Workgroup (AAB#): WG396767 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD51414 **Cal ID:** HYDRA-02-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, Dissolved	0.00400	0.00432	108	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2400371
Report generated: 05/02/2012 15:03

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum: L12040928 Cal ID: HYDRA- 02-MAY-12 Worknum: WG396767

Instrument ID: HYDRA Contract #: Prep Method: 7470A

Parent ID: L12040928-01 File ID: HY.050212.112944 Dil: 1 Method: 7470A

Sample ID: L12040928-08 MS File ID: HY.050212.114628 Dil: 1 Matrix: Water

Sample ID: L12040928-10 MSD File ID: HY.050212.114953 Dil: 1 Units: mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	U	0.00444	0.00469	106	0.00444	0.00459	103	2.16	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2400360

Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:HYDRA- 02-MAY-12 Worknum:WG396767

Instrument ID:HYDRA Contract #: Prep Method:7470A

Parent ID:L12040928-02 File ID:HY.050212.113526 Dil:1 Method:7470A

Sample ID:L12040928-09 MS File ID:HY.050212.114811 Dil:1 Matrix:Water

Sample ID:L12040928-11 MSD File ID:HY.050212.115140 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Dissolved	U	0.00444	0.00477	107	0.00444	0.00488	110	2.30	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2400372

Report generated 05/02/2012 15:03

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12040928 **Worknum:** WG396767
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG396767-02 **File ID:** HY.050212.113911 **Dil:** 1 **Units:** ug/L
Sample ID: L12040928-01 **File ID:** HY.050212.112944 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.11		0	U	1	111.0	85 - 115	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2400355
Report generated: 05/02/2012 15:03

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12040928 **Worknum:** WG396767
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG396767-02 **File ID:** HY.050212.113911 **Dil:** 1 **Units:** ug/L
Sample ID: L12040928-01 **File ID:** HY.050212.112944 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.11		0	U	1	111.0	85 - 115	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2400367
Report generated: 05/02/2012 15:03

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040928
Analytical Method: 7470A
ICAL Worknum: WG396826

Workgroup (AAB#): WG396767
Instrument ID: HYDRA
Initial Calibration Date: 05/02/2012 10:19

Analyte	WG396826-01		WG396826-02		WG396826-03		WG396826-04		WG396826-05		WG396826-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-353	0.200	452	1.00	2713	2.00	6222	5.00	15098	10.0	29388

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: 2400361
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040928
Analytical Method: 7470A
ICAL Worknum: WG396826

Workgroup (AAB#): WG396767
Instrument ID: HYDRA
Initial Calibration Date: 05/02/2012 10:19

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: 2400361
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040928
Analytical Method: 7470A
ICAL Worknum: WG396826

Workgroup (AAB#): WG396767
Instrument ID: HYDRA
Initial Calibration Date: 05/02/2012 10:19

Analyte	WG396826-01		WG396826-02		WG396826-03		WG396826-04		WG396826-05		WG396826-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-353	0.200	452	1.00	2713	2.00	6222	5.00	15098	10.0	29388

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: 2400373
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12040928
Analytical Method: 7470A
ICAL Worknum: WG396826

Workgroup (AAB#): WG396767
Instrument ID: HYDRA
Initial Calibration Date: 05/02/2012 10:19

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: 2400373
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-08
Instrument ID: HYDRA Run Time: 11:01 Method: 7470A
File ID: HY.050212.110127 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2400364
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-08
Instrument ID: HYDRA Run Time: 11:01 Method: 7470A
File ID: HY.050212.110127 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2400375
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040928	Run Date:	05/02/2012	Sample ID:	WG396826-10
Instrument ID:	HYDRA	Run Time:	11:05	Method:	7470A
File ID:	HY.050212.110530	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396767	Cal ID:	HYDRA - 02-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400366
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040928	Run Date:	05/02/2012	Sample ID:	WG396826-12
Instrument ID:	HYDRA	Run Time:	11:33	Method:	7470A
File ID:	HY.050212.113339	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396767	Cal ID:	HYDRA - 02-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400366
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-14

Instrument ID: HYDRA Run Time: 11:55 Method: 7470A

File ID: HY.050212.115516 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400366
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040928	Run Date:	05/02/2012	Sample ID:	WG396826-18
Instrument ID:	HYDRA	Run Time:	12:24	Method:	7470A
File ID:	HY.050212.122452	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396767	Cal ID:	HYDRA - 02-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400366
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040928	Run Date:	05/02/2012	Sample ID:	WG396826-20
Instrument ID:	HYDRA	Run Time:	12:36	Method:	7470A
File ID:	HY.050212.123649	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396767	Cal ID:	HYDRA - 02-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400366
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-10

Instrument ID: HYDRA Run Time: 11:05 Method: 7470A

File ID: HY.050212.110530 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400378
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040928	Run Date:	05/02/2012	Sample ID:	WG396826-12
Instrument ID:	HYDRA	Run Time:	11:33	Method:	7470A
File ID:	HY.050212.113339	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396767	Cal ID:	HYDRA - 02-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400378
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040928	Run Date:	05/02/2012	Sample ID:	WG396826-14
Instrument ID:	HYDRA	Run Time:	11:55	Method:	7470A
File ID:	HY.050212.115516	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396767	Cal ID:	HYDRA - 02-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400378
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12040928	Run Date:	05/02/2012	Sample ID:	WG396826-18
Instrument ID:	HYDRA	Run Time:	12:24	Method:	7470A
File ID:	HY.050212.122452	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG396767	Cal ID:	HYDRA - 02-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400378
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-20

Instrument ID: HYDRA Run Time: 12:36 Method: 7470A

File ID: HY.050212.123649 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2400378
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-07
Instrument ID: HYDRA Run Time: 10:59 Method: 7470A
File ID: HY.050212.105944 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.13	107	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2400362
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-07
Instrument ID: HYDRA Run Time: 10:59 Method: 7470A
File ID: HY.050212.105944 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.13	107	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2400374
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-09
Instrument ID: HYDRA Run Time: 11:03 Method: 7470A
File ID: HY.050212.110336 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00226	mg/L	113	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2400365
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-11

Instrument ID: HYDRA Run Time: 11:31 Method: 7470A

File ID: HY.050212.113157 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00220	mg/L	110	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2400365

Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-13

Instrument ID: HYDRA Run Time: 11:53 Method: 7470A

File ID: HY.050212.115333 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00229	mg/L	115	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2400365

Report generated 05/02/2012 15:03

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-17
Instrument ID: HYDRA Run Time: 12:23 Method: 7470A
File ID: HY.050212.122309 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00205	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2400365
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-19

Instrument ID: HYDRA Run Time: 12:35 Method: 7470A

File ID: HY.050212.123507 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00220	mg/L	110	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2400365

Report generated 05/02/2012 15:03

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-09
Instrument ID: HYDRA Run Time: 11:03 Method: 7470A
File ID: HY.050212.110336 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00226	mg/L	113	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2400376
Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-11

Instrument ID: HYDRA Run Time: 11:31 Method: 7470A

File ID: HY.050212.113157 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00220	mg/L	110	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2400376

Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-13

Instrument ID: HYDRA Run Time: 11:53 Method: 7470A

File ID: HY.050212.115333 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00229	mg/L	115	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2400376

Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-17

Instrument ID: HYDRA Run Time: 12:23 Method: 7470A

File ID: HY.050212.122309 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00205	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2400376

Report generated 05/02/2012 15:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12040928 Run Date: 05/02/2012 Sample ID: WG396826-19

Instrument ID: HYDRA Run Time: 12:35 Method: 7470A

File ID: HY.050212.123507 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG396767 Cal ID: HYDRA - 02-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00220	mg/L	110	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2400376

Report generated 05/02/2012 15:03

2.3.3.3 Raw Data

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Standard: 1 Rep: 1              Seq:  1       10:09:49 02 May 12   HG

Hg    .000    ppb      -353

*** Standard: 2 Rep: 1              Seq:  2       10:11:46 02 May 12   HG

Hg    .200    ppb      452

*** Standard: 3 Rep: 1              Seq:  3       10:13:29 02 May 12   HG

Hg    1.00    ppb      2713

*** Standard: 4 Rep: 1              Seq:  4       10:15:15 02 May 12   HG

Hg    2.00    ppb      6222

*** Standard: 5 Rep: 1              Seq:  5       10:17:00 02 May 12   HG

Hg    5.00    ppb      15098

*** Standard: 6 Rep: 1              Seq:  6       10:19:02 02 May 12   HG

Hg    10.0    ppb      29388

*** Check Standard: 2  Ck2ICV       Seq:  7       10:59:44 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          107.     2.13    2.00   ppb        .000

*** Check Standard: 3  Ck3ICB       Seq:  8       11:01:27 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          5.59     .011    .200   ppb        .000

*** Check Standard: 4  Ck4CCV       Seq:  9       11:03:36 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          113.     2.26    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB       Seq:  10      11:05:30 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          17.0     .034    .200   ppb        .000

*** Sample ID: WG39668303            Seq:  11     11:13:15 02 May 12   HG
                          PBW 12
Hg   -.002    ppb       .000     -.002

===============================================================================
*** Sample ID: WG39668304            Seq:  12     11:14:58 02 May 12   HG
                         LCSW 12
Hg    4.32    ppb       .000      4.32
                                                                             =
===============================================================================
```

Approved: May 02, 2012

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID: WG39664401            Seq:  13     11:16:41 02 May 12   HG

Hg   -.003    ppb       .000     -.003
                                                                              =
================================================================================
*** Sample ID: 1204088601            Seq:  14     11:18:24 02 May 12   HG

Hg    .039    ppb       .000      .039
                                                                              =
================================================================================
*** Sample ID: WG39676701            Seq:  15     11:20:05 02 May 12   HG
                          1204088601PS.9
Hg    1.20    ppb       .000      1.20
                                                                              =
================================================================================
*** Sample ID: 1204091201            Seq:  16     11:22:00 02 May 12   HG

Hg    .066    ppb       .000      .066
                                                                              =
================================================================================
*** Sample ID: 1204091801            Seq:  17     11:24:04 02 May 12   HG

Hg    .056    ppb       .000      .056
                                                                              =
================================================================================
*** Sample ID: 1204091802            Seq:  18     11:25:46 02 May 12   HG

Hg    .111    ppb       .000      .111
                                                                              =
================================================================================
*** Sample ID: 1204091803            Seq:  19     11:27:30 02 May 12   HG

Hg    .001    ppb       .000      .001
                                                                              =
================================================================================
*** Sample ID: 1204092801            Seq:  20     11:29:44 02 May 12   HG
                           WG39668301
Hg    .007    ppb       .000      .007
                                                                              =
*** Check Standard: 4  Ck4CCV        Seq:  21     11:31:57 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          110.     2.20    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB        Seq:  22     11:33:39 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -14.6    -.029    .200   ppb        .000
                                                                              =
```

Approved: May 02, 2012

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 1204092802				Seq: 23	11:35:26 02 May 12	HG		
				WG39668302				
Hg	.100	ppb	.000	.100				
*** Sample ID: 1204092803				Seq: 24	11:37:29 02 May 12	HG		
Hg	-.025	ppb	.000	-.025				
*** Sample ID: WG39676702				Seq: 25	11:39:11 02 May 12	HG		
				1204092803PS.9				
Hg	1.11	ppb	.000	1.11				
*** Sample ID: 1204092804				Seq: 26	11:40:55 02 May 12	HG		
Hg	.014	ppb	.000	.014				
*** Sample ID: 1204092805				Seq: 27	11:42:39 02 May 12	HG		
Hg	4.01	ppb	.000	4.01				
*** Sample ID: 1204092806				Seq: 28	11:44:34 02 May 12	HG		
Hg	5.23	ppb	.000	5.23				
*** Sample ID: WG39668305				Seq: 29	11:46:28 02 May 12	HG		
				1204092808S				
Hg	4.22	ppb	.000	4.22				
*** Sample ID: WG39668307				Seq: 30	11:48:11 02 May 12	HG		
				1204092809S				
Hg	4.29	ppb	.000	4.29				
*** Sample ID: WG39668306				Seq: 31	11:49:53 02 May 12	HG		
				1204092810SD				
Hg	4.13	ppb	.000	4.13				
*** Sample ID: WG39668308				Seq: 32	11:51:40 02 May 12	HG		
				1204092811SD				
Hg	4.39	ppb	.000	4.39				

Approved: May 02, 2012

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Check Standard: 4  Ck4CCV       Seq:  33      11:53:33 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          115.     2.29    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  34      11:55:16 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -23.2    -.046    .200   ppb        .000
                                                                              =
*** Sample ID: 1204093701           Seq:  35      11:57:01 02 May 12   HG

Hg   -.018    ppb       .000     -.018
                                                                              =
===============================================================================
*** Sample ID: 1204039702           Seq:  36      11:58:45 02 May 12   HG

Hg    .028    ppb       .000      .028
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  37      12:00:27 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          112.     2.24    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  38      12:02:10 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          11.3     .023    .200   ppb        .000
                                                                              =
*** Sample ID: WG39661702           Seq:  39      12:04:06 02 May 12   HG
                          PBW 9R
Hg    .017    ppb       .000      .017
                                                                              =
===============================================================================
*** Sample ID: WG39661703           Seq:  40      12:05:59 02 May 12   HG
                          LCSW 9R
Hg    2.24    ppb       .000      2.24
                                                                              =
===============================================================================
*** Sample ID: 1204089803           Seq:  41      12:07:52 02 May 12   HG

Hg    .077    ppb       .000      .077
                                                                              =
===============================================================================
*** Sample ID: WG39677001           Seq:  42      12:09:36 02 May 12   HG
                        1204089803PS.9
Hg    1.20    ppb       .000      1.20
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  43      12:23:09 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          103.     2.05    2.00   ppb        .000
                                                                              =
```

Not reported due to LCS failure.

Approved: May 02, 2012

Not reported due to LCS failure.

```
HYDRA 245.1/7470A/7471A        Folder:   050212C                    Page   12
                               Protocol: standard
                              ***POST-RUN REPORT***
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Check Standard: 5  Ck5CCB       Seq:  44      12:24:52 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -21.7    -.043    .200   ppb        .000
                                                                              =
*** Sample ID: WG39676703           Seq:  45      12:28:55 02 May 12   HG
                           1204091201PS.9
Hg    1.21    ppb       .000      1.21
                                                                              =
===============================================================================
*** Sample ID: WG39676704           Seq:  46      12:31:12 02 May 12   HG
                           1204091801PS.9
Hg    1.08    ppb       .000      1.08
                                                                              =
===============================================================================
*** Sample ID: WG39676705           Seq:  47      12:33:25 02 May 12   HG
                           1204093701PS.9
Hg    1.15    ppb       .000      1.15
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  48      12:35:07 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          110.     2.20    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  49      12:36:49 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -24.4    -.049    .200   ppb        .000
                                                                              =
*** Sample ID: WG39661702           Seq:  50      12:47:04 02 May 12   HG
                           PBW 9R
Hg    .022    ppb       .000      .022
                                                                              =
===============================================================================
*** Sample ID: WG39661703           Seq:  51      12:48:53 02 May 12   HG
                           LCSW 9R
Hg    5.17    ppb       .000      5.17
                                                                              =
===============================================================================
*** Sample ID: 1204089803           Seq:  52      12:50:56 02 May 12   HG

Hg   -.010    ppb       .000     -.010
                                                                              =
===============================================================================
*** Sample ID: WG39677001           Seq:  53      12:53:00 02 May 12   HG
                           1204089803PS.9
Hg    1.33    ppb       .000      1.33
                                                                              =
===============================================================================
```

Approved: May 02, 2012

Sheri L. Babgard

Not reported due to LCS failure.

```
HYDRA 245.1/7470A/7471A        Folder:   050212C                    Page   13
                               Protocol: standard
                              ***POST-RUN REPORT***
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: 1204089804            Seq:  54     12:54:48 02 May 12   HG

Hg    .005    ppb       .000      .005                                        =
===============================================================================
*** Sample ID: 1204089805            Seq:  55     12:56:33 02 May 12   HG

Hg    .117    ppb       .000      .117                                        =
===============================================================================
*** Sample ID: 1204089806            Seq:  56     12:58:17 02 May 12   HG

Hg    .070    ppb       .000      .070                                        =
===============================================================================
*** Sample ID: 1204089808            Seq:  57     13:00:00 02 May 12   HG

Hg   -.007    ppb       .000     -.007                                        =
===============================================================================
*** Sample ID: 1204089809            Seq:  58     13:01:49 02 May 12   HG

Hg    .107    ppb       .000      .107                                        =
===============================================================================
*** Sample ID: 1204089810            Seq:  59     13:03:34 02 May 12   HG

Hg    .120    ppb       .000      .120                                        =
*** Check Standard: 4  Ck4CCV        Seq:  60     13:05:23 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          115.     2.29    2.00  ppb         .000
                                                                             =
*** Check Standard: 5  Ck5CCB        Seq:  61     13:07:08 02 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -56.2    -.112    .200  ppb         .000
                                                                             =
*** Sample ID: 1204089811            Seq:  62     13:08:52 02 May 12   HG

Hg    .073    ppb       .000      .073                                        =
===============================================================================
*** Sample ID: 1204089812            Seq:  63     13:10:37 02 May 12   HG

Hg   -.021    ppb       .000     -.021                                        =
===============================================================================
```

Approved: May 02, 2012

Not reported due to LCS failure.


```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: 1204089813            Seq:  64     13:12:22 02 May 12   HG

Hg   -.053    ppb       .000     -.053
                                                                        =
================================================================================
*** Sample ID: 1204089814            Seq:  65     13:14:05 02 May 12   HG

Hg    .032    ppb       .000      .032
                                                                        =
================================================================================
*** Sample ID: 1204096301            Seq:  66     13:16:02 02 May 12   HG
                          WG39661701
Hg    .136    ppb       .000      .136
                                                                        =
================================================================================
*** Sample ID: WG39661704            Seq:  67     13:17:56 02 May 12   HG
                          1204096301S
Hg    4.82    ppb       .000      4.82
                                                                        =
================================================================================
*** Sample ID: WG39661705            Seq:  68     13:19:41 02 May 12   HG
                          1204096301SD
Hg    3.41    ppb       .000      3.41
                                                                        =
```

Approved: May 02, 2012

2.4 General Chemistry Data

2.4.1 Alkalinity Data

2.4.1.1 Summary Data

Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Alkalinity, Total (as CaCO3). Please see the applicable QC report for a detailed presentation of the failures.

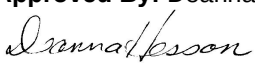
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46068
Approved By: Deanna Hesson



2.4.1.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
Analyst: DIH
Analyst: NA
Method: ALK
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397057 WG397067 WG397079 WG397052

Calibration/Linearity	5/4/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
05-MAY-2012
Dianna Ibsson

Secondary Reviewer:
05-MAY-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-05-2012 11:49:21

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 310.2 **AAB#:** WG397052

Login Number: L12040928

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-27-042612	01	04/26/12							14		05/04/12	8.1	14	
MW-10-042612	03	04/26/12							14		05/04/12	8.1	14	
MW-27-042612-MS	08	04/26/12							14		05/04/12	8.1	14	
MW-27-042612-MSD	10	04/26/12							14		05/04/12	8.1	14	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2403004
Report generated 05/04/2012 16:11

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Blank File ID: SC120504003.010
Prep Date: 05/04/12 13:11
Analyzed Date: 05/04/12 13:11
Analyst: DIH

Work Group: WG397052
Blank Sample ID: WG397052-01
Instrument ID: SMARTCHEM
Method: 310.2

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397052-02	SC120504003.011	05/04/12 13:11	01
LCS2	WG397052-03	SC120504003.012	05/04/12 13:12	01
MW-27-042612	L12040928-01	SC120504003.035	05/04/12 13:26	DL01
MW-27-042612-MS	L12040928-08	SC120504003.036	05/04/12 13:27	DL01
MW-27-042612-MSD	L12040928-10	SC120504003.037	05/04/12 13:27	DL01
MW-10-042612	L12040928-03	SC120504003.038	05/04/12 13:28	DL01
DUP	WG397052-05	SC120504003.039	05/04/12 13:28	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2403005
Report generated 05/04/2012 16:11

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/04/12 13:11 Sample ID: WG397052-01
Instrument ID: SMARTCHEM Run Date: 05/04/12 13:11 Prep Method: 310.2
File ID: SC120504003.010 Analyst: DIH Method: 310.2
Workgroup (AAB#): WG397052 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-04-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Alkalinity, Total (as CaCO3)	10.0	20.0	10.0	1	U

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

Report Name:BLANK
PDF ID: 2403006
04-MAY-2012 16:11

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Analyst: DIH Prep Method: 310.2
Instrument ID: SMARTCHEM Matrix: Water Method: 310.2
Workgroup (AAB#): WG397052 Units: mg/L
QC Key: WATERLOO Lot #: STD51238

Sample ID: WG397052-02 LCS File ID: SC120504003.011 Run Date: 05/04/2012 13:11
Sample ID: WG397052-03 LCS2 File ID: SC120504003.012 Run Date: 05/04/2012 13:12

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Alkalinity, Total (as CaCO3)	200	200	100	200	204	102	1.85	85 - 115	25	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2403007
Report generated: 05/04/2012 16:11

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID: SMARTCHEM- 04-MAY-12 Worknum:WG397052

Instrument ID:SMARTCHEM Contract #: Prep Method:310.2

Parent ID:L12040928-01 File ID:SC120504003.035 Dil:5 Method:310.2

Sample ID:L12040928-08 MS File ID:SC120504003.036 Dil:5 Matrix:Water

Sample ID:L12040928-10 MSD File ID:SC120504003.037 Dil:5 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Alkalinity, Total (as CaCO3)	726	100	794	67.1	100	774	48	2.43	85 - 115	25	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2403008

Report generated 05/04/2012 16:11

2.4.1.3 Raw Data

WORKGROUP: WG397052 A

B 397057
C 397067
D 397079

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # _____

1) **Workgroup** A
Plan # 20120504003
2) **Workgroup** B
Plan # 20120504004
3) **Workgroup** C
Plan # 20120504006
D 20120504007

	Analyte	1	2	3
	Run1	ALK Dilution		
SC Prepared Curve				
Position				
1-1	ICV 250			
1-2	BLK			
1-3	LCS 200			
1-4	LCSDUP			
1-5	04-932-02	1/5		color
1-6	03	1/5		
1-7	05	1/5		
1-8	06	1/5		
1-9	08	1/5		
1-10	09	1/5		
1-11	04-913-01			
1-12	05-018-02	1/5		color
1-13	03	1/5		
1-14	05	1/5		
1-15	06	1/5		
1-16	07	1/100		
1-17	04-898-01	1/100		color
1-18	03	1/4		
1-19	05	1/5		
1-20	08	1/4		
1-21	10	~~1/4~~ 1/50	1/50	color
1-22	12	1/4		
2-1	04-928-01	1/5		
2-2	MS 08	1/5		
2-3	MSD 10	1/5		

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

2-4 04928~~03~~ am 1/2
2-5 DUP 928-01 1/5

Position	Analyte	1	2	3
	Run 2			
2-4 1	ICV			
2-5 2	BLK			
2-6 3	LCS 200			
2-7 4	LCSDUP			
2-8 5	04-963-01	1/2		
2-9 6	03			
2-10 7	05	1/100		color
2-11 8	07	1/2		
2-12 9	05-010-01			
2-13 10	DUP 01			
2-14 11	MS 02			
2-15 12	MSD 03			
2-16 13	04			
2-17 14	MS 05			
2-18 15	MSD 06			
2-19 16	07			
2-20 17	MS 08			
2-21 18	MSD 09			
2-22 19	10			
2-23 20	11			
2-24 21	12			
2-25 22	13			
2-26 1	14			
3-1 2	15			
3-2 3	05-052-01	~~1/2~~ 1/3	1/3	
4	02			
5	03			
6	04			
7	05			
8	06	1/3		
9	07			
10				
11				

DCN#90758

Pg 1

WORKGROUP: WG397052

SMARTCHEM RUN LOG

Position	Analyte	1	2	3
	Run3			
3-3 1	ICV250			
3-4 2	BLK			
3-5 3	LCS200			
3-6 4	LCSDUP			
3-7 5	05-052-08			
3-8 6	09	dm 5/4/12	—	
3-9 7	10			
3-10 8	11			
3-11 9	14	1/3		
3-12 10	15			
3-13 11	16			
3-14 12	17	1/3		
3-15 13	05-011-01	dm 5/4/12	1/2	

Position	Analyte	1	2	3
3-16/4	05-011-03	dm 5/4/12	1/2	
3-17/5	05-089-01	1/4		
3-18/6	02			
3-19/7	03	1/50		color
3-20/8	04	dm 5/4/12	—	
3-21/9	06	1/3		Color
3-22/20	07	1/3		
3-23/21	08			
3-24/22	11			
3-25 1	12	1/2 dm 5/4/12	1/0	Color
3-26 2	13			
3-27 3	DUP 13			
3-28 4				

- [ ] Chloride — EPA 325.2/SM 4500-Cl⁻ E
- [ ] Sulfate — EPA 375.4/SM 426C(15th)
- [x] Alkalinity — EPA 310.2
- [ ] Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- [ ] Ammonia — EPA 350.1/SM 4500-NH3 B
- [ ] TKN — EPA 351.2
- [ ] Phos — EPA 365.4

Analyte	ALK		Reagents
SOP & Revision	12 3102 R14		R6+17318
Curve Stock (SC made)	std 50178		
Curve ID (user made)	~~std 50179~~ dm 5/4/12		
ICV	std 51237		
CCV	std 51236		
LCS	std 51238		
MS	std 50179 Dilution 0.4/5(2500)=100		

Comments: _____

Analyst: Deanne Hasson Date: 5/4/12

DCN#90758

pg 2

WORKGROUP: WG397052

SMARTCHEM RUN LOG

Daily Check

- ☐ Lamp On
- ☐ Probe Rinse Full
- ☐ DI Water > ½ Full
- ☐ Wash Solution > ½ Full
- ☐ NO3 Reagent bottle connected / purged
- ☐ NO3 pH adj to pH 5-9
- ☐ WBL Run
- ☐ Reagents Full
- ☐ Dilution H_2O Full
- ☐ Waste Container Check

Syringe filter lot # _____

1) **Workgroup** _____
Plan # _____
2) **Workgroup** _____
Plan # _____
3) **Workgroup** _____
Plan # _____

Analyte		1	2	3
Run 4		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 250			
1-2	BLK			
1-3	LCS 200			
1-4	LCS DUP			
1-5	04-963-03	1/2		
1-6	05-052-03	1/2		
1-7	05-089-14	1/50		color
1-8	05-050-01			
1-9	03			
1-10	05	1/5		
1-11	07			
1-12	05-099-01	1/2		
1-13	03	1/2 SH		
1-14	05			
1-15	07	1/2		
1-16	09			
1-17	DUP 0905			
1-18	05-152-02	1/5		color
1-19	03	1/5		
1-20	05	1/5		
1-21	06	1/5		
1-22	08	1/95	Flow Stop	
2-1	09	1/5		
2-2 R	BLK			
2-3				

Analyte		1	2	3
Position				
2-4				
2-5				
2-6				
2-7				
2-8				
2-9				
2-10				
2-11				
2-12				
2-13				
2-14				
2-15				
2-16				
2-17				
2-18				
2-19				
2-20				
2-21				
2-22				
2-23				
2-24				
2-25				
2-26				
3-1				
3-2				

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

DCN#90758

pg 3

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.0	0.7342	0.00		1:04:21 PM
DIL-1	RBL	0.0	0.7426	0.00		1:04:39 PM
DIL-1	RBL	0.0	0.7382	0.00		1:05:33 PM
DIL-1	Std-1	0.0	-0.0016	0.00		1:05:52 PM
SR5-1	Std-2	10.0	-0.0118	0.00		1:06:46 PM
SR5-2	Std-3	20.0	-0.0229	0.00		1:07:04 PM
SR5-3	Std-4	50.0	-0.0666	0.00		1:07:58 PM
SR5-4	Std-5	100.0	-0.1386	0.00		1:08:16 PM
SR5-5	Std-6	200.0	-0.3196	0.00		1:09:10 PM
SR5-6	Std-7	250.0	-0.3898	0.00		1:09:28 PM
SR5-7	Std-8	300.0	-0.4694	0.00		1:10:22 PM
1	ICV 250	250.0	-0.3898	0.00		1:10:40 PM
2	WG397052-01 BLK	-8.8	0.0183	0.00	INV,><,LL	1:11:34 PM
3	WG397052-02 LCS	200.1	-0.3077	0.00		1:11:52 PM
4	WG397052-03 LCSDUP	203.9	-0.3138	0.00		1:12:46 PM
5	L12040932-02 (5)	249.2	-0.3886	0.00		1:13:04 PM
6	L12040932-03 (5)	157.5	-0.2388	0.00		1:13:58 PM
7	L12040932-05 (5)	199.3	-0.3063	0.00		1:14:16 PM
8	L12040932-06 (5)	175.2	-0.2673	0.00		1:15:10 PM
9	L12040932-08 (5)	206.1	-0.3175	0.00		1:15:28 PM
10	L12040932-09 (5)	151.0	-0.2285	0.00		1:16:22 PM
ST-2	CCV (150 mg/L)	154.5	-0.2341	103.01		1:16:40 PM
ST-3	CCB (0 mg/L)	4.4	-0.0015	0.00		1:17:34 PM
11	L12040913-01	356.6	-0.5722	0.00	><,LH	1:17:52 PM
12	L12050018-02 (5)	255.8	-0.3995	0.00		1:18:46 PM
13	L12050018-03 (5)	172.7	-0.2632	0.00		1:19:04 PM
14	L12050018-05 (5)	183.6	-0.2808	0.00		1:19:58 PM
15	L12050018-06 (5)	148.7	-0.2248	0.00		1:20:16 PM
16	L12050018-07 (100)	111.6	-0.1661	0.00		1:21:10 PM
17	L12040898-01 (100)	161.0	-0.2444	0.00		1:21:28 PM
18	L12040898-03 (4)	89.2	-0.1312	0.00		1:22:22 PM
19	L12040898-05 (5)	196.0	-0.3010	0.00		1:22:40 PM

Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504003**

Plan Description : ALK-A-DIH/5/4/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20	L12040898-08 (4)	170.1	-0.2591	0.00		1:23:34 PM
ST-2	CCV (150 mg/L)	162.5	-0.2468	108.30		1:23:52 PM
ST-3	CCB (0 mg/L)	6.6	-0.0048	0.00		1:24:46 PM
21	L12040898-10 ~~(4)~~ (50)	76.4	-0.1113	0.00		1:25:04 PM
22	L12040898-12 (4)	176.1	-0.2688	0.00		1:25:58 PM
23	L12040928-01 (5)	145.3	-0.2194	0.00		1:26:16 PM
24	L12040928-08 (5) MS	158.7	-0.2408	0.00		1:27:10 PM
25	L12040928-10 (5)	154.9	-0.2347	0.00		1:27:28 PM
26	L12040928-03 (2)	202.3	-0.3113	0.00		1:28:22 PM
27	WG397052-05 (5) DUP	139.3	-0.2099	0.00		1:28:40 PM
28	ID 28	11.9	-0.0128	0.00		1:29:34 PM
29	ID 29	6.5	-0.0047	0.00		1:29:52 PM
ST-2	CCV (150 mg/L)	163.7	-0.2488	109.13		1:30:46 PM
ST-3	CCB (0 mg/L)	13.1	-0.0146	0.00		1:31:05 PM
11-[1/2]	L12040913-01	481.6	-0.3746	0.00	LH	1:38:45 PM
ST-2	CCV (150 mg/L)	165.8	-0.2521	110.50		1:38:45 PM
ST-3	CCB (0 mg/L)	16.9	-0.0204	0.00		1:39:39 PM

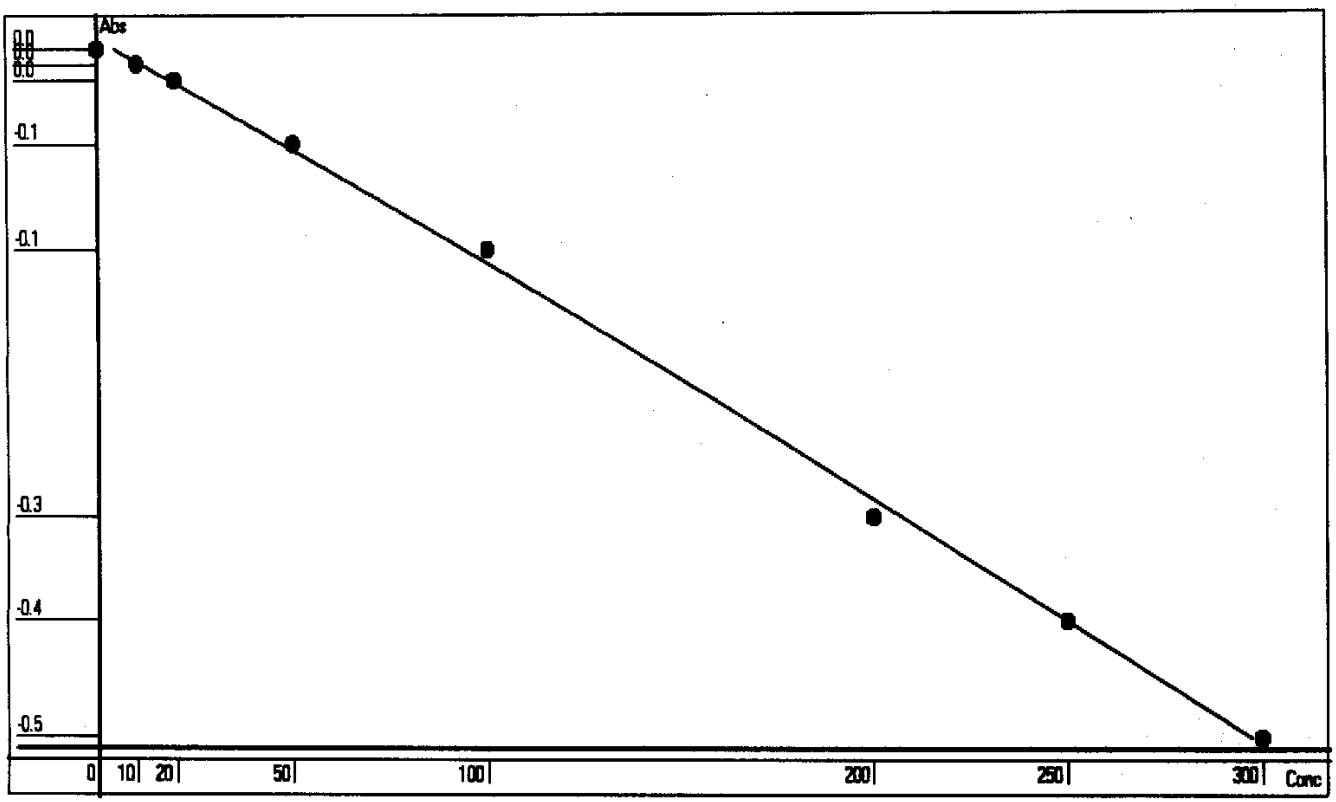
Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504003**

Plan Description : ALK-A-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120504003 Description : [ALK-A-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0016	0	4.4266	442.66
2	-0.0118	10	11.2015	12.02
3	-0.0229	20	18.5543	-7.23
4	-0.0666	50	47.3008	-5.40
5	-0.1386	100	93.9642	-6.04
6	-0.3196	200	207.4272	3.71
7	-0.3898	250	249.9531	-0.02
8	-0.4694	300	297.1725	-0.94

Conc= -83.9371*Abso^2 -665.3272*Abso +3.3623 R^2=0.9987

RBL
0.7362
0

Report Date 5/4/2012 Run Date 5/4/2012

2.4.2 Nitrate Data

2.4.2.1 Summary Data

Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Nitrate (as N). Please see the applicable QC report for a detailed presentation of the failures.

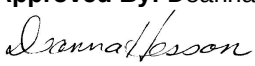
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46071
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/01/2012 15:43
Workgroup #: WG396738 **Analyst:** DIH **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 10:37 **Dilution:** 20 **File ID:** SC12050709023701
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8		U	1.00	0.500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-10-042612 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/01/2012 15:43
Workgroup #: WG396738 **Analyst:** DIH **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 12:05 **Dilution:** 4 **File ID:** SC12050709033801
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	2.96		0.200	0.100

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MS **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/01/2012 15:43
Workgroup #: WG396738 **Analyst:** DIH **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 10:37 **Dilution:** 20 **File ID:** SC12050709034601
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.880		1.00	0.500

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MSD **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/01/2012 15:43
Workgroup #: WG396738 **Analyst:** DIH **Run Date:** 05/02/2012 11:35
Collect Date: 04/26/2012 10:37 **Dilution:** 20 **File ID:** SC12050709035401
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.720		1.00	0.500

2.4.2.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 02-MAY-2012
Analyst: DIH
Analyst: NA
Method: NO3
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396739 WG396816 WG396738

Calibration/Linearity	5/2/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
05-MAY-2012
Dianna Ibsson

Secondary Reviewer:
05-MAY-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-05-2012 11:49:23

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 353.2 **AAB#:** WG396738

Login Number: L12040928

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-27-042612	01	04/26/12							2		05/02/12	6	2	*
MW-10-042612	03	04/26/12							2		05/02/12	6	2	*
MW-27-042612-MS	08	04/26/12							2		05/02/12	6	2	*
MW-27-042612-MSD	10	04/26/12							2		05/02/12	6	2	*

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2404983
Report generated 05/08/2012 08:23

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396738
Blank File ID: SC12050709000501
Blank Sample ID: WG396738-01
Prep Date: 05/02/12 11:35
Instrument ID: SMARTCHEM
Analyzed Date: 05/02/12 11:35
Method: 353.2
Analyst: DIH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
DUP	WG396738-05	SC12050709004301	05/02/12 11:35	
MW-10-042612	L12040928-03	SC12050709033801	05/02/12 11:35	
MW-27-042612	L12040928-01	SC12050709023701	05/02/12 11:35	
MW-27-042612-MS	L12040928-08	SC12050709034601	05/02/12 11:35	
LCS2	WG396738-03	SC12050709002301	05/02/12 11:35	
LCS	WG396738-02	SC12050709001701	05/02/12 11:35	
MW-27-042612-MSD	L12040928-10	SC12050709035401	05/02/12 11:35	

Report Name: BLANK_SUMMARY
PDF File ID: 2404984
Report generated 05/08/2012 08:23

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/02/12 11:35 Sample ID: WG396738-01
Instrument ID: SMARTCHEM Run Date: 05/02/12 11:35 Prep Method: 353.2
File ID: SC12050709000501 Analyst: DIH Method: 353.2
Workgroup (AAB#): WG396738 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-01-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Nitrate (as N)	0.0250	0.0500	0.0250	1	U

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

Report Name:BLANK
PDF ID: 2404985
08-MAY-2012 08:23

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 **Analyst:** DIH **Prep Method:** 353.2
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 353.2
Workgroup (AAB#): WG396738 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51196

Sample ID: WG396738-02 LCS **File ID:** SC12050709001701 **Run Date:** 05/02/2012 11:35
Sample ID: WG396738-03 LCS2 **File ID:** SC12050709002301 **Run Date:** 05/02/2012 11:35

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Nitrate (as N)	1.00	1.07	107	1.00	1.05	105	1.70	90 - 110	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2404986
Report generated: 05/08/2012 08:23

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum: L12040928 Cal ID: SMARTCHEM- 01-MAY-12 Worknum: WG396738

Instrument ID: SMARTCHEM Contract #: Prep Method: 353.2

Parent ID: L12040928-01 File ID: SC12050709023701 Dil: 20 Method: 353.2

Sample ID: L12040928-08 MS File ID: SC12050709034601 Dil: 20 Matrix: Water

Sample ID: L12040928-10 MSD File ID: SC12050709035401 Dil: 20 Units: mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Nitrate (as N)	U	0.500	0.880	176	0.500	0.720	144	20.0	90 - 110	15	*#

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2404987

Report generated 05/08/2012 08:23

2.4.2.3 Raw Data

WORKGROUP: WG396738

SMARTCHEM RUN LOG

396739
396816

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [x] NO3 Reagent bottle connected / purged
- [x] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # 141872

1) Workgroup A
   Plan # 20120502001
2) Workgroup
   Plan #
3) Workgroup B
   Plan # 20120502002

	Analyte	1	2	3
		NO3		
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 1.5			
1-2	BLK			
1-3	LCS 1			
1-4	LCSDUP			
1-5	NO2 1			
1-6	05-009-01	1/4		
1-7	02			
1-8	03	1/10		
1-9	04	1/4		
1-10	05			
1-11	04-898-01	1/50 1/100		* color
1-12	03	1/25 *	1/5	
1-13	* 05	1/25		
1-14	* 08	1/25 1/50 1/100		color
1-15	10	1/50		color
1-16	12	1/5		color
1-17	04-928-01	1/20		*
1-18	MS 08	1/20		*
1-19	MSD 10	1/20		*
1-20	03	1/4		
1-21	04-963-01			
1-22	03			
2-1	07			
2-2	05-011-01			
2-3	03			

Position	Analyte	1	2	3
2-4	05-018-08	1/5		color
2-5	09	1/50		↓
2-6	DUP 009-01		1/4	
2-7	MS ↓		1/4	
2-8	BLK			
2-9	LCS			
2-10	LCSDUP			
2-11	04-897-01	1/5		color
2-12	02	1/5		↓
2-13	03	1/5		
2-14	04-963-05	1/25	*	
2-15	DUP 897-01	1/5		
2-16	MS ↓	1/5		↓
2-17	05-028-01			
2-18				
2-19	Run 2			
2-20				
2-21 1	ICV 1.5			
2-22 2	BLK			
2-23 3	LCS 1			
2-24 4	LCS 1			
2-25 5	NO2 1			
2-26 6	~~05-05~~ A	05-051-01		
3-1 7	B		02	
3-2 8	C		03	
9	D		04	
10	E		05	

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

* matrix interference

DCN#90724

WORKGROUP: WG396738

SMARTCHEM RUN LOG

Position	Analyte	1	2	3
3-3 11	F 05-051-06			
3-4 12	G	07		
3-5 13	H	08		
3-6 14	I	11		
3-7 15	J	12		
3-8 16	K	13		
3-9 17	05-050-01	1/2		
3-10 18	03	1/4		
3-11 19	05	1/5		
3-12 20	07	1/5		
3-13 21	DUP ↓	1/5		
3-14 22	MS ↓	1/5		
3-15 23	MS R 051-13			

Position	Analyte	1	2	3
3-16 24				
3-17 1				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- [ ] Chloride — EPA 325.2/SM 4500-Cl⁻ E
- [ ] Sulfate — EPA 375.4/SM 426C(15th)
- [ ] Alkalinity — EPA 310.2
- [x] Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- [ ] Ammonia — EPA 350.1/SM 4500-NH3 B
- [ ] TKN — EPA 351.2
- [ ] Phos — EPA 365.4

Analyte	NO3		Reagents
SOP & Revision	K 3532 R		Rgt 17254
Curve Stock (SC made)	std 50996		Rgt 17239
Curve ID (user made) NO2	std 51363		
ICV	std 50998		
CCV	std 50997		
LCS	std 51196		
MS	std 48249		
	Dilution 0.1/5(25)=0.5		

Comments: _____

Analyst: Dawn Dawson Date: 5/2/12

DCN#90724

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag		Analysis Time
DIL-1	RBL	0.000	0.0239	0.00			11:23:10 AM
DIL-1	RBL	0.000	0.0173	0.00			11:24:22 AM
DIL-1	RBL	0.000	0.0190	0.00			11:25:34 AM
DIL-1	RBL	0.000	0.0209	0.00			11:26:46 AM
DIL-1	Std-1	0.000	0.0007	0.00			11:27:58 AM
SR5-1	Std-2	0.040	0.0081	0.00			11:29:10 AM
SR5-2	Std-3	0.100	0.0296	0.00			11:30:22 AM
SR5-3	Std-4	0.500	0.1532	0.00			11:31:34 AM
SR5-4	Std-5	1.000	0.3265	0.00			11:32:46 AM
ST-1	Std-6	2.000	0.6357	0.00			11:33:58 AM
1	ICV 1.5	1.596	0.5093	0.00			11:35:10 AM
2	WG396738-01 BLK	0.007	0.0001	0.00	><		11:36:22 AM
3	WG396738-02 LCS	1.067	0.3397	0.00			11:37:34 AM
4	WG396738-03 LCSDUP	1.049	0.3340	0.00			11:38:46 AM
5	NO2 1	1.020	0.3246	0.00			11:39:58 AM
6	L12050009-01 (4)	2.026	0.6471	0.00	><,LH		11:41:10 AM
7	L12050009-02	1.227	0.3910	0.00		0	11:42:22 AM
8	L12050009-03 (10)	1.303	0.4154	0.00		0	11:43:34 AM
9	L12050009-04 (4)	1.037	0.3302	0.00			11:44:46 AM
10	L12050009-05	1.485	0.4738	0.00			11:45:58 AM
ST-2	CCV (1 mg/L)	0.995	0.3167	99.49			11:47:10 AM
ST-3	CCB (0 mg/L)	-0.002	-0.0026	0.00	INV,><,LL		11:48:22 AM
11	L12040898-01 (100)	0.008	0.0004	0.00	><	L2	11:49:35 AM
12	L12040898-03 ~~(2)~~ (5)	1.811	0.5780	0.00		0	11:50:46 AM
13	L12040898-05 (25)	0.013	0.0020	0.00		0	11:51:59 AM
14	L12040898-06 ~~(25)~~ (200)	0.004	-0.0009	0.00	INV,><	0	11:53:11 AM
15	L12040898-10 (50)	0.012	0.0018	0.00		0	11:54:23 AM
16	L12040898-12 ~~(5)~~ (5)	0.002	-0.0014	0.00	INV,><	0	11:55:35 AM
17	L12040928-01 (20)	0.016	0.0031	0.00		0.007	11:56:47 AM
18	L12040928-08 (20) MS	0.044	0.0121	0.00			11:57:59 AM
19	L12040928-10 (20) MS	0.036	0.0094	0.00			11:59:11 AM
20	L12040928-03 (4)	0.748	0.2377	0.00		0.009	12:00:23 PM

Report Date :05/02/2012 Run Date :5/2/2012 Operator : WESTCO Plan # :20120502001

Plan Description : NO3-A-DIH/5/2/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
ST-2	CCV (1 mg/L)	0.969	0.3149	98.93		12:01:35 PM
ST-3	CCB (0 mg/L)	0.013	0.0021	0.00		12:02:47 PM
21	L12040963-01	0.834	0.2650	0.00	0	12:03:59 PM
22	L12040963-03	0.070	0.0203	0.00	0	12:05:11 PM
23	L12040963-07	0.015	0.0028	0.00	0	12:06:23 PM
24	L12050061-01	0.027	0.0065	0.00	0	12:07:35 PM
25	L12050061-03	0.037	0.0096	0.00		12:08:47 PM
26	L12050018-08 (5)	0.310	0.0973	0.00	0.189	12:09:59 PM
27	L12050018-09 (50)	1.956	0.6245	0.00	0.061	12:11:11 PM
28	DUP 009-01 (4)	1.931	0.6165	0.00		12:12:23 PM
29	MS 009-01 (4)	2.006 X	0.6407	0.00	><,LH	12:13:35 PM
30	WG396739-01 BLK	0.010	0.0010	0.00		12:14:47 PM
ST-2	CCV (1 mg/L)	0.985	0.3134	98.46		12:15:59 PM
ST-3	CCB (0 mg/L)	0.012	0.0017	0.00		12:17:11 PM
31	WG396739-02 LCS	1.021	0.3250	0.00		12:18:23 PM
32	WG396739-03 LCSDUP	1.052	0.3348	0.00		12:19:35 PM
33	L12040897-01 (5)	0.009	0.0008	0.00		12:20:47 PM
34	L12040897-02 (5)	0.019	0.0039	0.00		12:21:59 PM
35	L12040897-03 (5)	0.005	-0.0004	0.00	INV,><	12:23:11 PM
36	L12040963-05 (25)	0.004	-0.0006	0.00	INV,><	12:24:23 PM
37	DUP 897-01 (5)	0.081	0.0238	0.00		12:25:36 PM
38	MS 897-01 (5)	0.103	0.0308	0.00		12:26:48 PM
39	DP004 05-028-01	0.291	0.0912	0.00		12:28:00 PM
40	ID 40	0.003 X	-0.0013	0.00	INV,><	12:29:12 PM
ST-2	CCV (1 mg/L)	0.971	0.3090	97.09		12:30:24 PM
ST-3	CCB (0 mg/L)	0.004	-0.0007	0.00	INV,><	12:31:36 PM
6-[1/4]	L12050009-01 (4)	2.154	0.1705	0.00	LH	12:40:46 PM
29-[1/4]	MS 009-01 (4)	2.172	0.1719	0.00	LH	12:42:52 PM
ST-2	CCV (1 mg/L)	0.944	0.3003	94.38		12:43:46 PM
ST-3	CCB (0 mg/L)	0.015	0.0029	0.00		12:44:58 PM

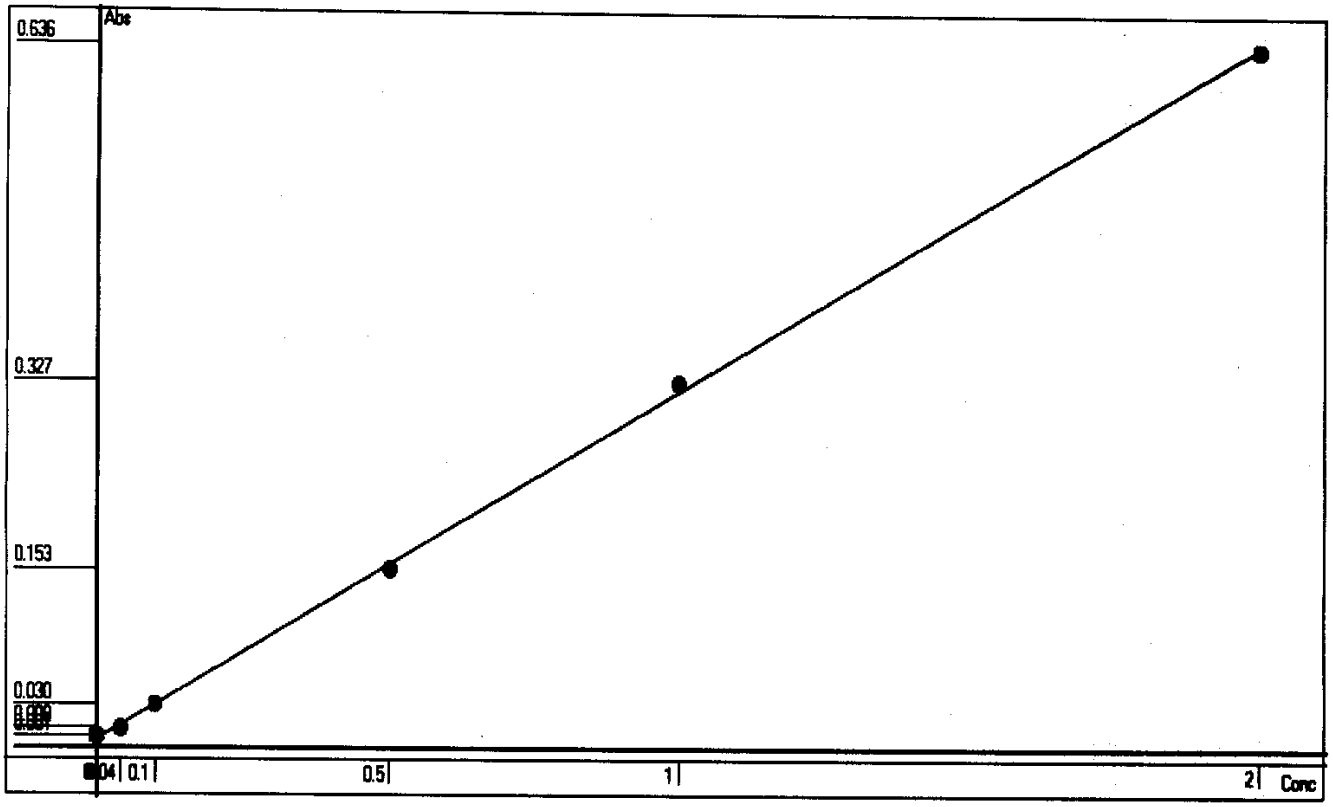
Report Date :05/02/2012 **Run Date :5/2/2012** **Operator : WESTCO** **Plan # :20120502001**

Plan Description : NO3-A-DIH/5/2/2012

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120502001 Description : [NO3-A-DIH/5/2/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0007	0	0.0087	0.87
2	0.0081	0.04	0.0318	-20.50
3	0.0296	0.1	0.0989	-1.10
4	0.1532	0.5	0.4847	-3.06
5	0.3265	1	1.0257	2.57
6	0.6357	2	1.9910	-0.45

Conc= +3.1217*Abso +0.0065 R^2=0.9996

RBL
0.02
0

Report Date 5/2/2012 Run Date 5/2/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag		Analysis Time
DIL-1	RBL	0.000	0.0293	0.00			1:51:43 PM
DIL-1	RBL	0.000	0.0143	0.00			1:52:55 PM
DIL-1	RBL	0.000	0.0175	0.00			1:54:07 PM
DIL-1	RBL	0.000	0.0171	0.00			1:55:19 PM
DIL-1	Std-1	0.000	0.0010	0.00			1:56:31 PM
SR5-1	Std-2	0.040	0.0108	0.00			1:57:43 PM
SR5-2	Std-3	0.100	0.0303	0.00			1:58:55 PM
SR5-3	Std-4	0.500	0.1530	0.00			2:00:07 PM
SR5-4	Std-5	1.000	0.3204	0.00			2:01:19 PM
ST-1	Std-6	2.000	0.6772	0.00			2:02:31 PM
1	ICV 1.5	1.487	0.4965	0.00			2:03:43 PM
2	WG396816-01 BLK	0.022	0.0011	0.00			2:04:55 PM
3	WG396816-02 LCS	0.977	0.3239	0.00			2:06:07 PM
4	WG396816-03 LCSDUP	0.972	0.3222	0.00			2:07:19 PM
5	NO2 1	1.001	0.3321	0.00			2:08:31 PM
6	A05-051-01	0.101	0.0277	0.00		0	2:09:43 PM
7	B 02	0.149	0.0441	0.00		0	2:10:55 PM
8	C 03	0.225	0.0697	0.00		0.010	2:12:07 PM
9	D 04	0.090	0.0241	0.00		0.011	2:13:19 PM
10	E 05	0.241	0.0751	0.00		0.013	2:14:31 PM
ST-2	CCV (1 mg/L)	0.945	0.3132	94.51			2:15:43 PM
ST-3	CCB (0 mg/L)	0.019	0.0002	0.00	><		2:16:55 PM
11	F 05-051-06	0.052	0.0111	0.00		0.023	2:18:07 PM
12	G 07	0.154	0.0459	0.00		0.019	2:19:20 PM
13	H 08	2.726 X	0.9153	0.00	><,LH		2:20:32 PM
14	I 11	2.090 X	0.7004	0.00	><,LH		2:21:44 PM
15	J 12	4.011 X	1.3495	0.00	><,LH		2:22:56 PM
16	K 13	4.032 X	1.3566	0.00	><,LH		2:24:08 PM
17	L12050050-01	0.083	0.0216	0.00		0	2:25:20 PM
18	L12050050-03	0.115	0.0324	0.00		0	2:26:32 PM
19	L12050050-05	0.027	0.0028	0.00		0.011	2:27:44 PM
20	L12050050-07	0.107	0.0298	0.00		0	2:28:56 PM

Report Date :05/02/2012 **Run Date :5/2/2012** **Operator : WESTCO** **Plan # :20120502002**

Plan Description : NO3-B-DIH/5/2/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag		Analysis Time
ST-2	CCV (1 mg/L)	0.926	0.3067	92.59			2:30:08 PM
ST-3	CCB (0 mg/L)	0.025	0.0021	0.00			2:31:20 PM
21	DUP 050-07	0.122	0.0350	0.00			2:32:32 PM
22	MS 050-07	0.107	0.0300	0.00			2:33:44 PM
23	ID 23 MS 051-13	4.516 X	1.5203	0.00	><,LH		2:34:56 PM
24	ID 24	0.016 Y	-0.0010	0.00	INV,><		2:36:08 PM
25	ID 25	0.955 X	0.3164	0.00			2:37:20 PM
ST-2	CCV (1 mg/L)	0.930	0.3080	92.97			2:38:32 PM
ST-3	CCB (0 mg/L)	0.029	0.0036	0.00			2:39:44 PM
13-[1/4]	H 05-051-08	2.978	0.2454	0.00	LH	0.048	2:48:55 PM
14-[1/4]	I 11	2.337	0.1912	0.00	LH	0	2:51:00 PM
15-[1/4]	J 12	4.280	0.3554	0.00	LH	0	2:53:06 PM
16-[1/4]	K 13	4.498	0.3738	0.00	LH		2:55:12 PM
23-[1/4]	ID 23 MS 13	4.890	0.4070	0.00	LH		2:57:18 PM
ST-2	CCV (1 mg/L)	0.942	0.3121	94.19			2:58:12 PM
ST-3	CCB (0 mg/L)	0.029	0.0036	0.00			2:59:24 PM

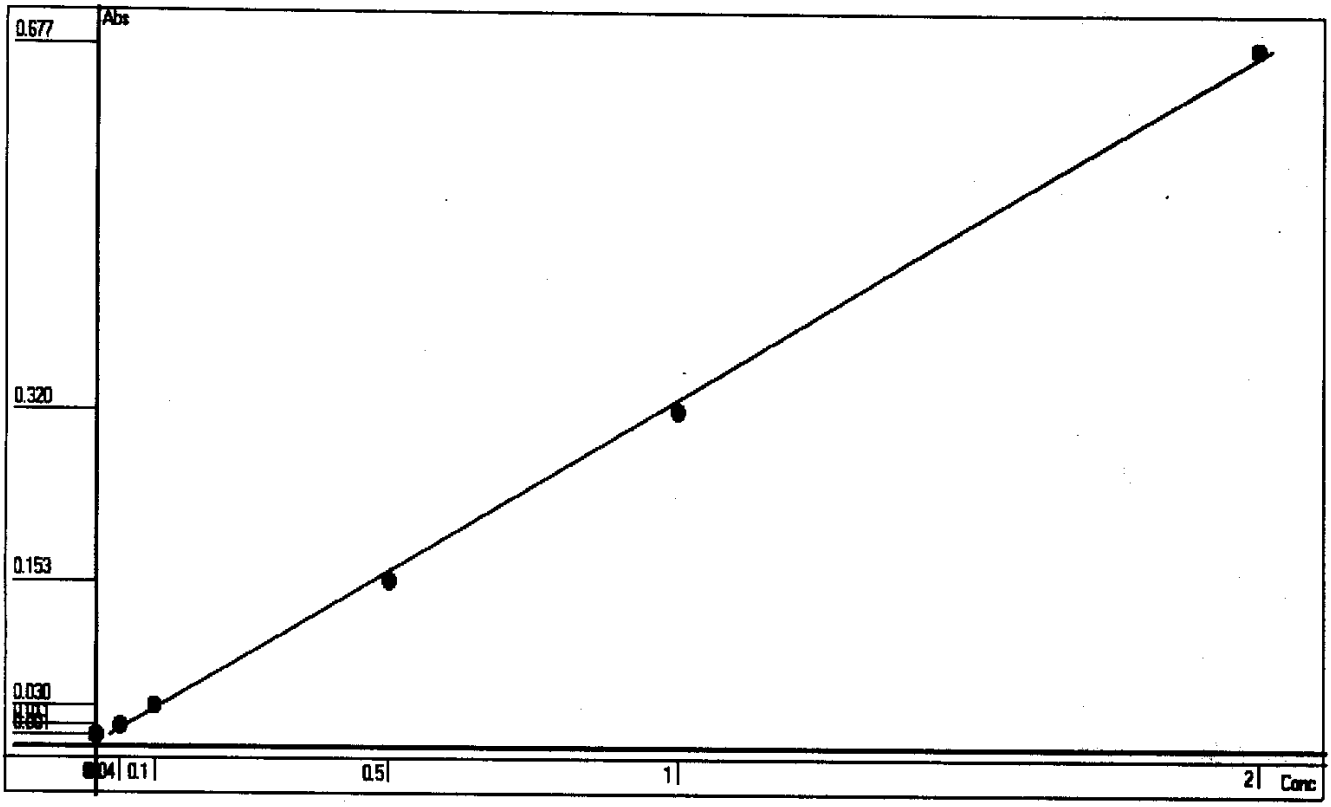
Report Date :05/02/2012 **Run Date :5/2/2012** **Operator : WESTCO** **Plan # :20120502002**

Plan Description : NO3-B-DIH/5/2/2012

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120502002 Description : [NO3-B-DIH/5/2/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0010	0	0.0217	2.17
2	0.0108	0.04	0.0506	26.50
3	0.0303	0.1	0.1083	8.30
4	0.1530	0.5	0.4713	-5.74
5	0.3204	1	0.9664	-3.36
6	0.6772	2	2.0219	1.10

Conc= +2.958*Abso +0.0187 **R^2=0.9990**

RBL
0.0173
0

Report Date 5/2/2012 Run Date 5/2/2012

2.4.3 Phosphorus Data

2.4.3.1 Summary Data

Login Number: L12040928
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: Recoveries out of range were observed for the following analytes: Phosphorus, Total. Please see the applicable QC report for a detailed presentation of the failures.

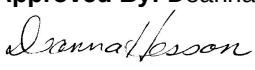
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46069
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/30/2012 09:56
Workgroup #: WG396495 **Analyst:** DIH **Run Date:** 04/30/2012 10:13
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120430004.034
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	0.998		0.200	0.100

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-10-042612 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/30/2012 09:56
Workgroup #: WG396495 **Analyst:** DIH **Run Date:** 04/30/2012 10:14
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** SC120430004.037
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 #: L12040928-08 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MS **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/30/2012 09:56
Workgroup #: WG396495 **Analyst:** DIH **Run Date:** 04/30/2012 10:13
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120430004.035
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	1.94		0.200	0.100

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MSD **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 04/30/2012 09:56
Workgroup #: WG396495 **Analyst:** DIH **Run Date:** 04/30/2012 10:14
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120430004.036
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	1.45		0.200	0.100

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: 01-MAY-2012
Analyst: DIH
Analyst: NA
Method: PHOS
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396495

Calibration/Linearity	4/30/2012
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:
02-MAY-2012
Dianna Ibsson

Secondary Reviewer:
02-MAY-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-02-2012 17:34:50

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 365.4 AAB#: WG396495

Login Number: L12040928

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-27-042612	01	04/26/12							28		04/30/12	4	28	
MW-10-042612	03	04/26/12							28		04/30/12	3.9	28	
MW-27-042612-MS	08	04/26/12							28		04/30/12	4	28	
MW-27-042612-MSD	10	04/26/12							28		04/30/12	4	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2399785
Report generated 05/02/2012 11:43

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396495
Blank File ID: SC120430004.008
Blank Sample ID: WG396495-01
Prep Date: 04/30/12 09:57
Instrument ID: SMARTCHEM
Analyzed Date: 04/30/12 09:57
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	WG396495-02	SC120430004.009	04/30/12 09:57	01
DUP	WG396495-04	SC120430004.021	04/30/12 10:05	01
MW-27-042612	L12040928-01	SC120430004.034	04/30/12 10:13	01
MW-27-042612-MS	L12040928-08	SC120430004.035	04/30/12 10:13	01
MW-27-042612-MSD	L12040928-10	SC120430004.036	04/30/12 10:14	01
MW-10-042612	L12040928-03	SC120430004.037	04/30/12 10:14	01

Report Name: BLANK_SUMMARY
PDF File ID: 2399786
Report generated 05/02/2012 11:43

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 04/30/12 09:57 Sample ID: WG396495-01
Instrument ID: SMARTCHEM Run Date: 04/30/12 09:57 Prep Method: 365.4
File ID: SC120430004.008 Analyst: DIH Method: 365.4
Workgroup (AAB#): WG396495 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-30-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: 2399787
02-MAY-2012 11:43

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928	**Run Date:** 04/30/2012	**Sample ID:** WG396495-02
Instrument ID: SMARTCHEM	**Run Time:** 09:57	**Prep Method:** 365.4
File ID: SC120430004.009	**Analyst:** DIH	**Method:** 365.4
Workgroup (AAB#): WG396495	**Matrix:** Water	**Units:** mg/L
QC Key: WATERLOO	**Lot#:** STD51133	**Cal ID:** SMARTC - 30-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Phosphorus, Total	1.00	1.05	105	70 - 130	

LCS - Modified 03/06/2008
PDF File ID: 2399788
Report generated: 05/02/2012 11:43

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID: SMARTCHEM- 30-APR-12 Worknum:WG396495

Instrument ID:SMARTCHEM Contract #: Prep Method:365.4

Parent ID:L12040928-01 File ID:SC120430004.034 Dil:1 Method:365.4

Sample ID:L12040928-08 MS File ID:SC120430004.035 Dil:1 Matrix:Water

Sample ID:L12040928-10 MSD File ID:SC120430004.036 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Phosphorus, Total	0.998	1.00	1.94	93.8	1.00	1.45	45.4	28.6	70 - 130	25	*#

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2399789

Report generated 05/02/2012 11:43

2.4.3.3 Raw Data

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # _____

1) **Workgroup Plan #** 20120430004
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	04-824-01			
1-5	02			
1-6	03			
1-7	04			
1-8	04-884-01			
1-9	04-897-01			
1-10	02			
1-11	03			
1-12	04-826-01			
1-13	DUP 01			
1-14	MS 02			
1-15	MSD 03			
1-16	04-875-02			
1-17	04			
1-18	04-898-01	1/10		
1-19	03			
1-20	05			
1-21	08			
1-22	10	1/10		
2-1	12			
2-2	04-928-01			
2-3	MS 08			

Position	Analyte	1	2	3
2-4	MSD 10			
2-5	04-928-03			
2-6	~~DUP 826-01~~ BLK			
2-7	LCS (1)			
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#90701

SMARTCHEM RUN LOG

Analyte		1	2	3
Position				
3-3				
3-4				
3-5				
3-6				
3-7				
3-8				
3-9				
3-10				
3-11				
3-12				
3-13				
3-14				
3-15				

Analyte		1	2	3
Position				
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

☐ Chloride EPA 325.2/SM 4500-Cl^- E
☐ Sulfate EPA 375.4/SM 426C(15th)
☐ Alkalinity EPA 310.2
☐ 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	Phos		Reagents
SOP & Revision	K3654 R16		R6+17302
Curve Stock (SC made)			RDt 16897
Curve ID (user made)			RDt 17276
ICV	All digest log		
CCV			
LCS			
MS	Dilution ______		

Comments: Final CCV low but LCS immediately before was 106%

Analyst: Deanna Hesson Date: 4/30/12

DCN#90701

TKN/Phosphorus Digestion Log

TKN WG: WG 396484
TKN Std: 50969
TKN CCV: ↓ (½)(5)=2.5
TKN ICV: Std 51194
TKN LCS: Std 51195

Phos WG:
Phos Std: 50969
Phos CCV: ↓ ½(2)=1
Phos ICV: 51132
Phos LCS: 51133

MS/MSD: Std 51384
Daily Dilution: 1(25)/25=1

Block Digester Temperature: 380 °C
Digest Reagent: RGT 17224

	Sample	Volume	TKN Dilution	Phos Dilution		Sample	Volume	TKN Dilution	Phos Dilution
1	Std		5	2	26	04898-05			✓
2	CCV		2.5	1	27	08			✓
3	BLK		✓	✓	28	10			✓ 1/10
4	LCST		1		29	12			✓
5	LCSP			1	30	DUP 826-01		✓	✓
6	BH=ICVT		2		31	MW2704-928-01			✓
7	ICV P			1.5	32	MS04-928-08			✓
8	04-824-01		✓	✓	33	MSD 04-928-10			✓
9	02		✓	✓	34	MW10 04-928-03			✓
10	03		✓	✓	35				
11	04		✓	✓	36				
12	04-884-01		✓	✓	37				
13	04-897-01		✓	✓	38				
14	02		✓	✓	39				
15	03		✓	✓	40				
16	04-826-01		calc ✓	✓	41				
17	MS02		calc ✓	✓	42				
18	MSD03			✓	43				
19	04-875-02			✓	44				
20	04			✓	45				
~~21~~	~~04-897-01~~			~~✓~~	~~46~~				
~~22~~	~~02~~			~~✓~~	~~47~~				
~~23~~	~~03~~			~~✓~~	~~48~~				
24	04-898-01		✓	✓ 1/10	49				
25	03			✓	50				

Analyst: Tammy Morris Date: 4/27/12

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	0.0254	0.00		9:51:30 AM
DIL-1	RBL	0.000	0.0295	0.00		9:51:47 AM
DIL-1	RBL	0.000	0.0260	0.00		9:52:42 AM
SR5-1	Std-1	0.010	0.0045	0.00		9:52:59 AM
SR5-2	Std-2	0.200	0.0312	0.00		9:53:54 AM
SR5-3	Std-3	0.500	0.0744	0.00		9:54:11 AM
SR5-4	Std-4	1.000	0.1427	0.00		9:55:06 AM
SR5-5	Std-5	1.500	0.2106	0.00		9:55:23 AM
ST-1	Std-6	2.000	0.2824	0.00		9:56:18 AM
1	ICV 1.5	1.422	0.2013	0.00		9:56:35 AM
2	WG396495-01 BLK	-0.083	-0.0079	0.00	INV,><,LL	9:57:30 AM
3	WG396495-02 LCS	1.054	0.1501	0.00		9:57:48 AM
4	L12040824-01	-0.103	-0.0107	0.00	INV,><,LL	9:58:42 AM
5	L12040824-02	-0.040	-0.0020	0.00	INV,><,LL	9:59:00 AM
6	L12040824-03	-0.078	-0.0072	0.00	INV,><,LL	9:59:54 AM
7	L12040824-04	-0.079	-0.0074	0.00	INV,><,LL	10:00:12 AM
8	L12040884-01	0.304	0.0459	0.00	EPL	10:01:06 AM
9	L12040897-01	0.056	0.0113	0.00		10:01:24 AM
10	L12040897-02	0.087	0.0157	0.00		10:02:18 AM
ST-2	CCV (1 mg/L)	0.973	0.1388	97.26		10:02:36 AM
ST-3	CCB (0 mg/L)	-0.090	-0.0089	0.00	INV,><,LL	10:03:30 AM
11	L12040897-03	0.135	0.0224	0.00		10:03:48 AM
12	L12040826-01	1.442	0.2041	0.00		10:04:42 AM
13	WG396495-04 DUP	1.378	0.1951	0.00		10:05:00 AM
14	L12040826-02 MS	2.426 OR	0.3408	0.00	><,LH	10:05:54 AM
15	L12040826-03 MSD	2.141 OR	0.3012	0.00	><,LH	10:06:12 AM
16	L12040875-02	0.473	0.0693	0.00		10:07:06 AM
17	L12040875-04	1.184	0.1682	0.00		10:07:24 AM
18	L12040898-01 (10)	1.716	0.2421	0.00		10:08:18 AM
19	L12040898-03	-0.092	-0.0092	0.00	INV,><,LL	10:08:36 AM
20	L12040898-05	1.271	0.1803	0.00		10:09:30 AM
ST-2	CCV (1 mg/L)	0.931	0.1330	93.09		10:09:48 AM

Report Date :04/30/2012 **Run Date :4/30/2012** **Operator : WESTCO** **Plan # :20120430004**

Plan Description : PHOS-A-DIH/4/30/2012

MICROBAC (OVD)
SMARTCHEM REPORT (VER3.0.53)
NH3, TKN, NO3NO2 (MG/L N)
ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WTPH - EPA 365.4 TOTAL PHOSPHORUS

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
ST-3	CCB (0 mg/L)	-0.076	-0.0070	0.00	INV,><,LL	10:10:42 AM
21	L12040898-08	0.357	0.0532	0.00		10:11:00 AM
22	L12040898-10 (10)	0.250	0.0383	0.00		10:11:54 AM
23	L12040898-12	0.362	0.0539	0.00		10:12:12 AM
24	L12040928-01	0.998	0.1423	0.00		10:13:06 AM
25	L12040928-08 MS	1.936	0.2727	0.00	EPL	10:13:24 AM
26	L12040928-10 MSD	1.452	0.2054	0.00	EPL	10:14:18 AM
27	L12040928-03	-0.061	-0.0049	0.00	INV,><,LL	10:14:36 AM
28	ID 28	-0.074	-0.0067	0.00	INV,><,LL	10:15:30 AM
29	ID 29 (LCS 1)	→ 1.064 ok	0.1515	0.00		10:15:48 AM
ST-2	CCV (1 mg/L)	0.812 *	0.1165	81.22		10:16:42 AM
ST-3	CCB (0 mg/L)	-0.080	-0.0076	0.00	INV,><,LL	10:17:00 AM
14-[1/2]	L12040826-02 MS	2.493 X	0.1769	0.00	LH	10:24:40 AM
ST-2	CCV (1 mg/L)	0.919 X	0.1314	91.94		10:24:40 AM
ST-3	CCB (0 mg/L)	-0.081 X	-0.0077	0.00	INV,><,LL	10:25:34 AM
ST-2	CCV (1 mg/L)	0.940 X	0.1343	94.03		10:27:04 AM
15-[1/2]	L12040826-03 MSD	2.229 X	0.1585	0.00	LH	10:27:04 AM
ST-3	CCB (0 mg/L)	-0.091 X	-0.0090	0.00	INV,><,LL	10:27:58 AM

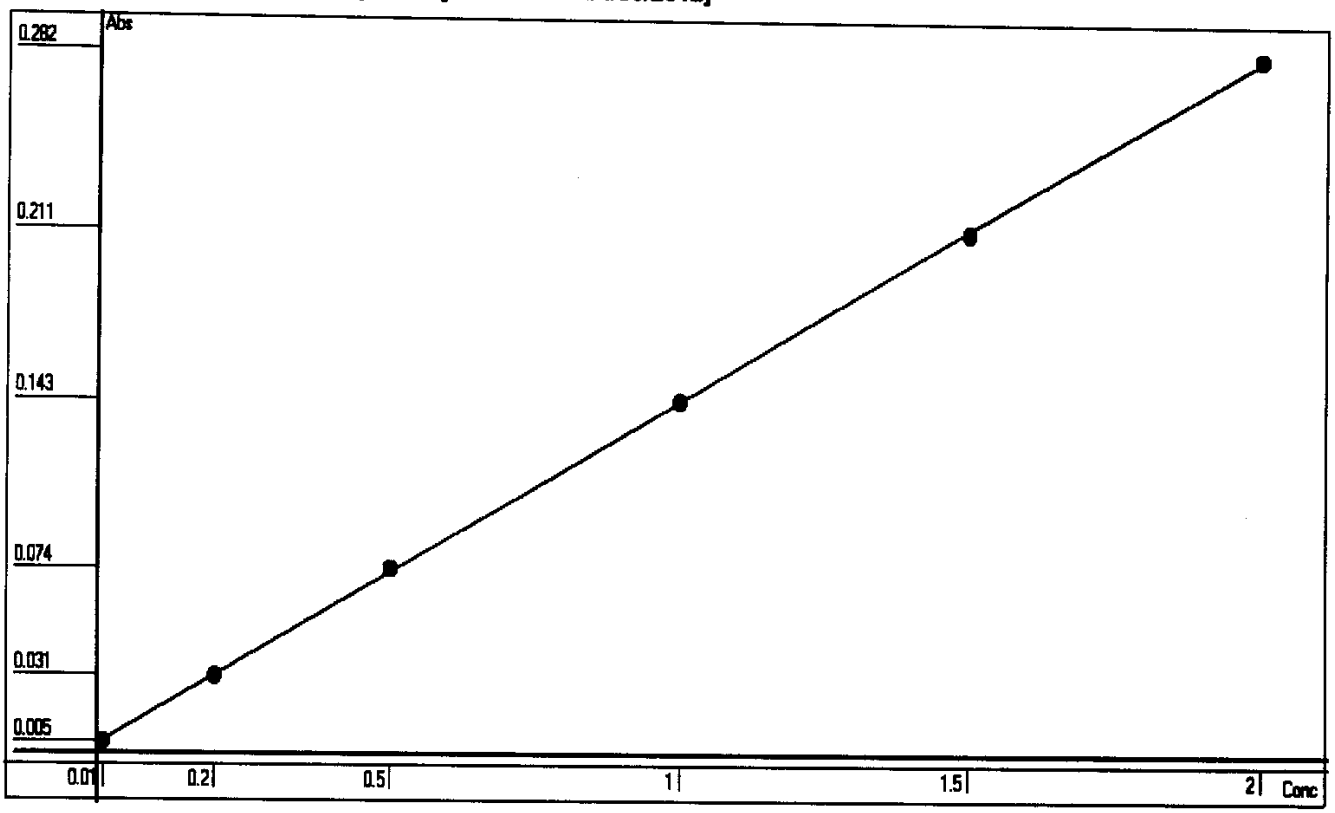
Report Date :04/30/2012 **Run Date :4/30/2012** **Operator : WESTCO** **Plan # :20120430004**

Plan Description : PHOS-A-DIH/4/30/2012

Calibrant Report - WTPH -

Calib Lot #:010104 Exp Date:6/18/2020 User:MICROBAC

Plan # : 20120430004 Description : [PHOS-A-DIH/4/30/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0045	0.01	0.0067	-33.00
2	0.0312	0.2	0.1987	-0.65
3	0.0744	0.5	0.5094	1.88
4	0.1427	1	1.0007	0.07
5	0.2106	1.5	1.4891	-0.73
6	0.2824	2	2.0055	0.28

Conc= +7.1928*Abso -0.0257 **R^2=0.9999**

RBL
0.0257
0

Report Date 4/30/2012 Run Date 4/30/2012

2.4.4 Sulfate Data

2.4.4.1 Summary Data

Login Number: L12040928
Department: Conventionals
Analyst: Deanna Hesson

METHOD

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

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

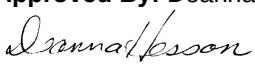
Matrix Spikes: Recoveries out of range were observed for the following analytes: Sulfate. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46070
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612 **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 07:43
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120503001.030
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	9.45		5.00	2.50

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-10-042612 **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 07:45
Collect Date: 04/26/2012 12:05 **Dilution:** 3 **File ID:** SC120503001.035
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	99.8		15.0	7.50

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MS **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 07:44
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120503001.032
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	22.1		5.00	2.50

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-27-042612-MSD **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 07:45
Collect Date: 04/26/2012 10:37 **Dilution:** 1 **File ID:** SC120503001.034
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	21.7		5.00	2.50

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
Dianna Ibsson

Secondary Reviewer:
05-MAY-2012
Dianna Ibsson

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: L12040928

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-27-042612	01	04/26/12							28		05/03/12	6.9	28	
MW-10-042612	03	04/26/12							28		05/03/12	6.8	28	
MW-27-042612-MS	08	04/26/12							28		05/03/12	6.9	28	
MW-27-042612-MSD	10	04/26/12							28		05/03/12	6.9	28	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2401444
Report generated 05/03/2012 15:21

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396805
Blank File ID: SC120503001.010
Blank Sample ID: WG396805-01
Prep Date: 05/03/12 07:31
Instrument ID: SMARTCHEM
Analyzed Date: 05/03/12 07:31
Method: 375.4
Analyst: DIH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396805-02	SC120503001.011	05/03/12 07:31	01
LCS2	WG396805-03	SC120503001.012	05/03/12 07:32	01
MW-27-042612	L12040928-01	SC120503001.030	05/03/12 07:43	01
DUP	WG396805-05	SC120503001.031	05/03/12 07:43	01
MW-27-042612-MS	L12040928-08	SC120503001.032	05/03/12 07:44	01
MW-27-042612-MSD	L12040928-10	SC120503001.034	05/03/12 07:45	01
MW-10-042612	L12040928-03	SC120503001.035	05/03/12 07:45	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2401445
Report generated 05/03/2012 15:21

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 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: 2401446
03-MAY-2012 15:21

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 **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: 2401447
Report generated: 05/03/2012 15:21

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID: SMARTCHEM- 03-MAY-12 Worknum:WG396805

Instrument ID:SMARTCHEM Contract #: Prep Method:375.4

Parent ID:L12040928-01 File ID:SC120503001.030 Dil:1 Method:375.4

Sample ID:L12040928-08 MS File ID:SC120503001.032 Dil:1 Matrix:Water

Sample ID:L12040928-10 MSD File ID:SC120503001.034 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Sulfate	9.45	20.0	22.1	63.1	20.0	21.7	61.2	1.67	85 - 115	10	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2401448

Report generated 05/03/2012 15:21

2.4.4.3 Raw Data

WORKGROUP: WG396805

396835

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # ______

1) Workgroup ______ Plan # 20120503001
2) Workgroup ______ Plan # ______
3) Workgroup ______ Plan # ______

Analyte		1	2	3
		SO4		
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 30			
1-2	Blk			
1-3	LCS 20			
1-4	LCSDUP			
1-5	04-835-02	1/500		color
1-6	06	1/100		↓
1-7	04-844-01	1/4		
1-8	03	~~1/5~~	1/2	
1-9	05	~~1/4~~	1/2	
1-10	05-044-02	1/500		color
1-11	06	1/100		↓
1-12	04-898-01	1/100		color
1-13	03	~~1/100~~	1/20	
1-14	05	1/100		
1-15	08	1/10		
1-16	10	1/50		color
1-17	12	1/10		
1-18	04-928-01	~~1/2~~	–	
1-19	DUP 01	~~1/2~~	–	
1-20	MS 08	~~1/2~~	–	
1-21	MSD 10	~~1/2~~	–	
1-22	03	1/3		
2-1	04-963-01		1/2	
2-2	03	1/2		
2-3	07	1/3		

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	~~auto~~	~~1/2~~
2-5	03	1/10	~~auto~~	~~1/5~~
2-6	Blk			
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 Blk			
2-17	RR LCS			
2-18	RR LCS			
2-19				
2-20				
2-21				
2-22				
2-23				
2-24				
2-25				
2-26				
3-1				
3-2				

~~* poured out NO3 LCS for 2nd wg & reruns~~ 5/3/12

DCN#90728

SMARTCHEM RUN LOG

Analyte		1	2	3
Position				
3-3				
3-4				
3-5				
3-6				
3-7				
3-8				
3-9				
3-10				
3-11				
3-12				
3-13				
3-14				
3-15				

Analyte		1	2	3
Position				
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- ☐ Chloride — EPA 325.2/SM 4500-Cl⁻ E
- ☑ 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

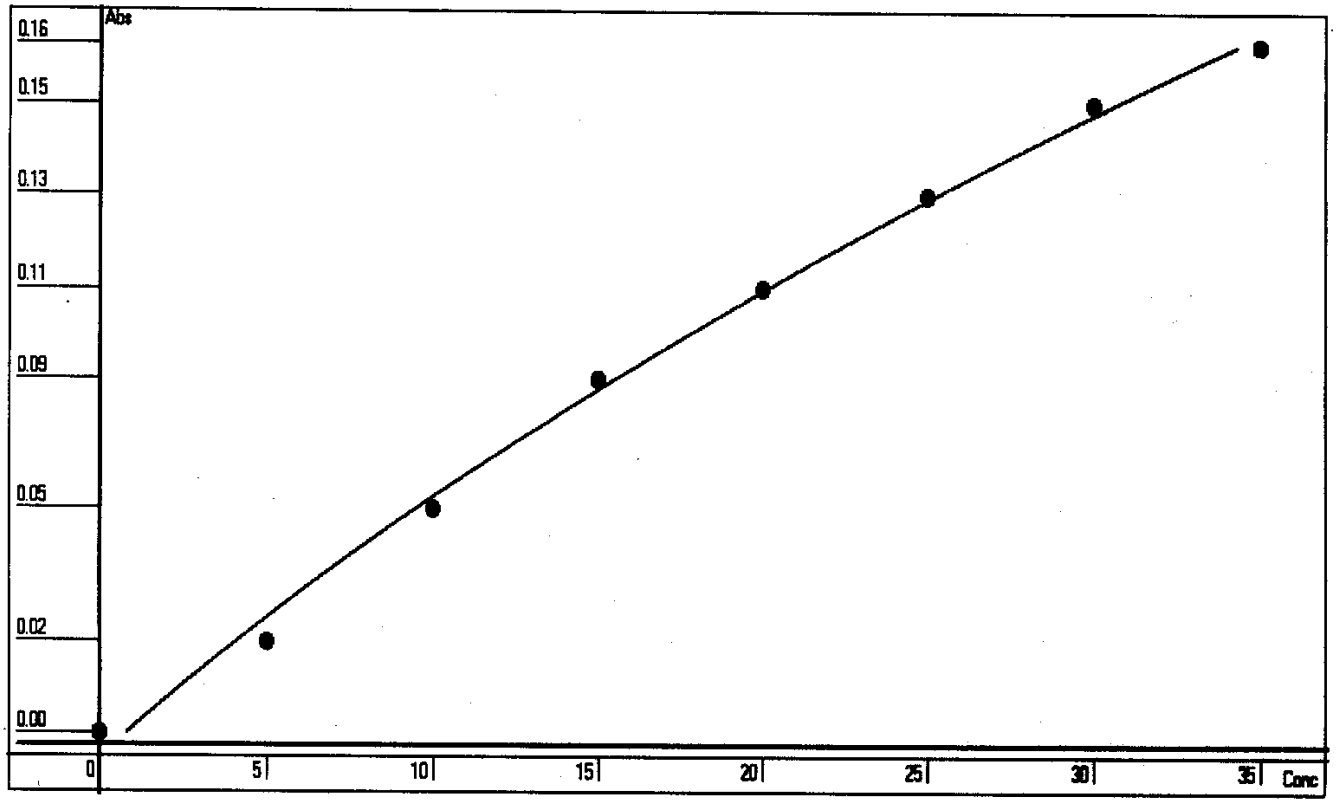
Report Date :05/03/2012 **Run Date :5/3/2012** **Operator : WESTCO** **Plan # :20120503001**

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: L12040928
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.

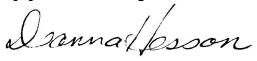
Matrix Spikes: Recoveries out of range were observed for the following analytes: Total Organic Carbon. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46072
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12040928-01 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-27-042612 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396993 **Analyst:** DIH **Run Date:** 05/04/2012 10:58
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** TC05042012.006
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		26.7		5.00	2.50

Sample #: L12040928-03 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-10-042612 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396601 **Analyst:** DIH **Run Date:** 05/01/2012 22:55
Collect Date: 04/26/2012 12:05 **Dilution:** 1 **File ID:** TC05012012.046
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		4.58		1.00	0.500

Sample #: L12040928-08 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-27-042612-MS **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396993 **Analyst:** DIH **Run Date:** 05/04/2012 11:12
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** TC05042012.007
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		31.8		5.00	2.50

Sample #: L12040928-10 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-27-042612-MSD **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG396993 **Analyst:** DIH **Run Date:** 05/04/2012 11:26
Collect Date: 04/26/2012 10:37 **Dilution:** 5 **File ID:** TC05042012.008
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		41.4		5.00	2.50

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.

Data Checklist

Date: 04-MAY-2012
Analyst: DIH
Analyst: NA
Method: TOC
Instrument: TOC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396994 WG396996 WG396993

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	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
05-MAY-2012
Dianna Ibsson

Secondary Reviewer:
05-MAY-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-05-2012 11:47:56

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 415.1 **AAB#:** WG396601

Login Number: L12040928

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-10-042612	03	04/26/12							28		05/01/12	5.5	28	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2403206
Report generated 05/05/2012 11:21

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 415.1 AAB#: WG396993

Login Number: L12040928

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-27-042612	01	04/26/12							28		05/04/12	8	28	
MW-27-042612-MS	08	04/26/12							28		05/04/12	8	28	
MW-27-042612-MSD	10	04/26/12							28		05/04/12	8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2403206
Report generated 05/05/2012 11:21

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12040928	Work Group:	WG396601
Blank File ID:	TC05012012.035	Blank Sample ID:	WG396601-01
Prep Date:	05/01/12 18:46	Instrument ID:	TOC-VWP
Analyzed Date:	05/01/12 18:46	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	WG396601-02	TC05012012.036	05/01/12 19:05	01
LCS2	WG396601-03	TC05012012.037	05/01/12 19:26	01
DUP	WG396601-05	TC05012012.043	05/01/12 21:27	01
MW-10-042612	L12040928-03	TC05012012.046	05/01/12 22:55	01

Report Name: BLANK_SUMMARY
PDF File ID: 2403207
Report generated 05/05/2012 11:21

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12040928
Work Group: WG396993
Blank File ID: TC05042012.003
Blank Sample ID: WG396993-01
Prep Date: 05/04/12 10:22
Instrument ID: TOC-VWP
Analyzed Date: 05/04/12 10:22
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	WG396993-02	TC05042012.004	05/04/12 10:34	01
LCS2	WG396993-03	TC05042012.005	05/04/12 10:46	01
MW-27-042612	L12040928-01	TC05042012.006	05/04/12 10:58	DL01
MW-27-042612-MS	L12040928-08	TC05042012.007	05/04/12 11:12	DL01
MW-27-042612-MSD	L12040928-10	TC05042012.008	05/04/12 11:26	DL01
DUP	WG396993-05	TC05042012.009	05/04/12 11:39	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2403207
Report generated 05/05/2012 11:21

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/01/12 18:46 Sample ID: WG396601-01
Instrument ID: TOC-VWP Run Date: 05/01/12 18:46 Prep Method: 415.1
File ID: TC05012012.035 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG396601 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: 2403208
05-MAY-2012 11:21

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12040928 Prep Date: 05/04/12 10:22 Sample ID: WG396993-01
Instrument ID: TOC-VWP Run Date: 05/04/12 10:22 Prep Method: 415.1
File ID: TC05042012.003 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG396993 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: 2403208
05-MAY-2012 11:21

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG396601 Units: mg/L
QC Key: WATERLOO Lot #: STD50986

Sample ID: WG396601-02 LCS File ID: TC05012012.036 Run Date: 05/01/2012 19:05
Sample ID: WG396601-03 LCS2 File ID: TC05012012.037 Run Date: 05/01/2012 19:26

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	22.9	91.6	25.0	23.5	94.0	2.59	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2403209
Report generated: 05/05/2012 11:21

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12040928 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG396993 Units: mg/L
QC Key: WATERLOO Lot #: STD50986

Sample ID: WG396993-02 LCS File ID: TC05042012.004 Run Date: 05/04/2012 10:34
Sample ID: WG396993-03 LCS2 File ID: TC05042012.005 Run Date: 05/04/2012 10:46

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	23.8	95.2	25.0	23.5	94.1	1.23	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2403209
Report generated: 05/05/2012 11:21

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12040928 Cal ID:TOC-VWP- 06-DEC-11 Worknum:WG396993

Instrument ID:TOC-VWP Contract #: Prep Method:415.1

Parent ID:L12040928-01 File ID:TC05042012.006 Dil:5 Method:415.1

Sample ID:L12040928-08 MS File ID:TC05042012.007 Dil:5 Matrix:Water

Sample ID:L12040928-10 MSD File ID:TC05042012.008 Dil:5 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Total Organic Carbon	26.7	10.0	31.8	51.4	10.0	41.4	147	26.2	85 - 115	15	*#

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2403330

Report generated 05/05/2012 11:21

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

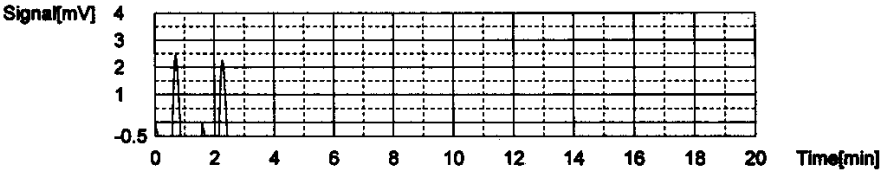
Sample Name:	TC CURVE
Sample ID:	Untitled
Cal. Curve:	TCCURVE-12-06-2011.2011_12_06_08_40_57.cal
Status	Completed

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

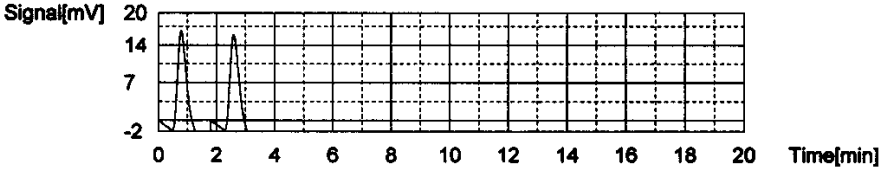
Acid Add. 0.000%
Mean Area 5.716



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

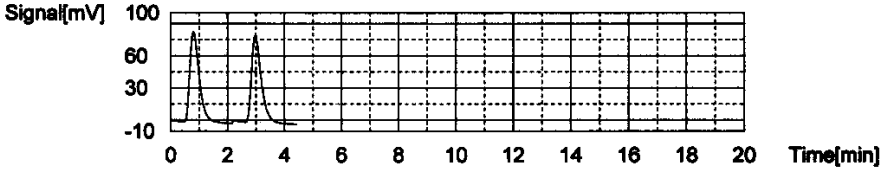
Acid Add. 0.000%
Mean Area 39.48



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

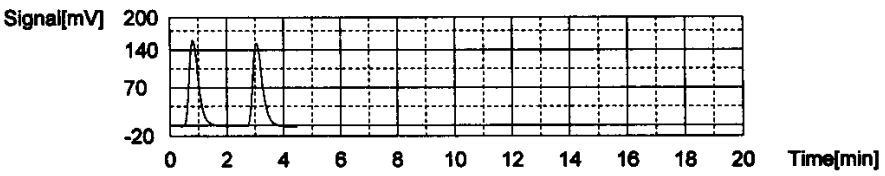
Acid Add. 0.000%
Mean Area 190.6



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

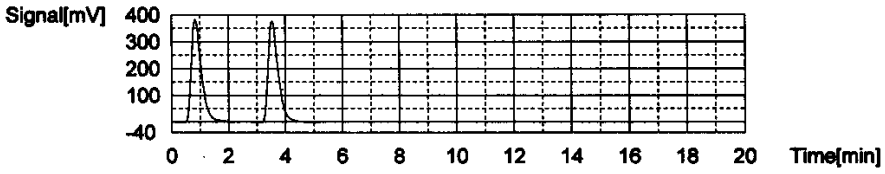
Acid Add. 0.000%
Mean Area 367.4



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

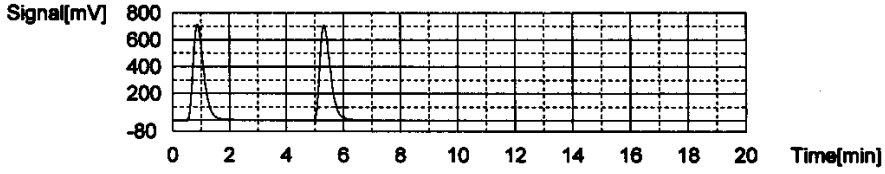
Acid Add. 0.000%
Mean Area 933.4



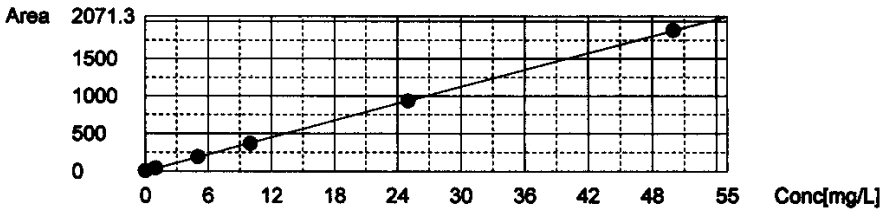
Conc: 50.00mg/L

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

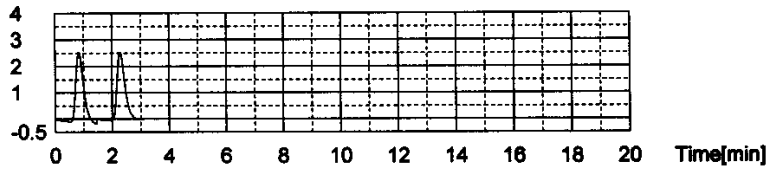
Sample Name: TIC CURVE
Sample ID: Untitled
Cal. Curve: TICCURVE-12-06-2011B.2011_12_06_15_47_44.cal
Status Completed

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

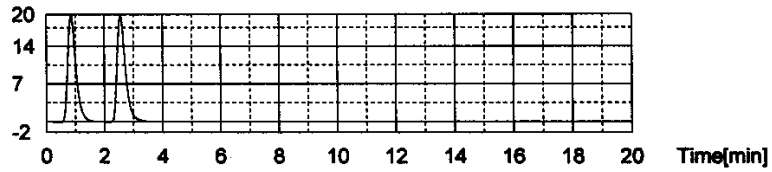
Acid Add. 10.00%
Mean Area 4.883



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

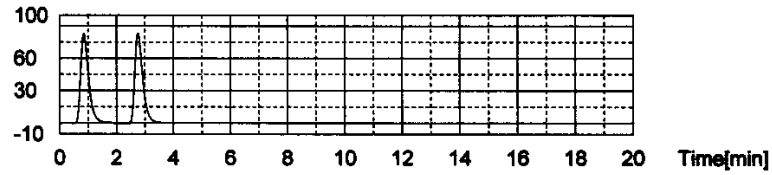
Acid Add. 10.00%
Mean Area 38.90



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

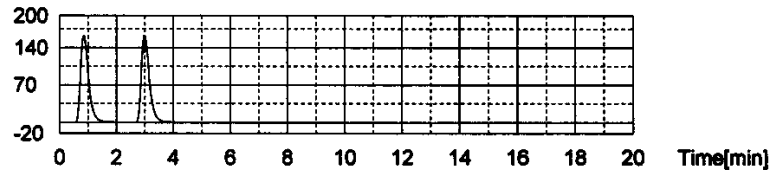
Acid Add. 10.00%
Mean Area 161.3



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

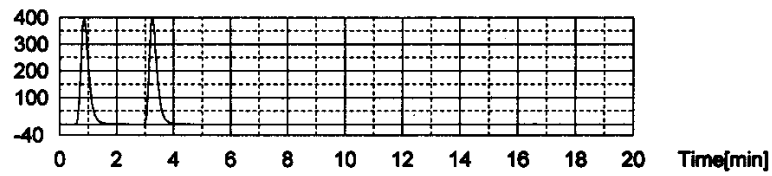
Acid Add. 10.00%
Mean Area 318.9



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

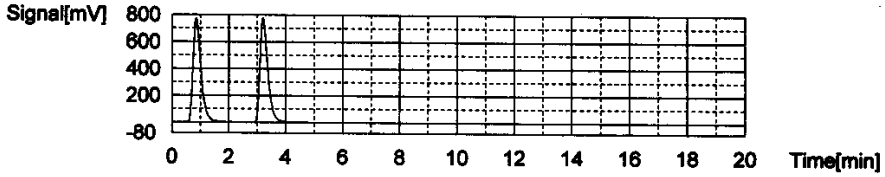
Acid Add. 10.00%
Mean Area 765.5



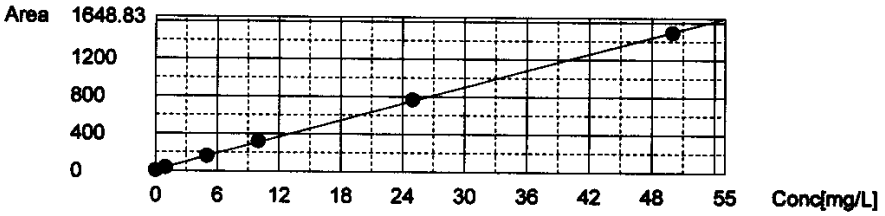
Conc: 50.00mg/L

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

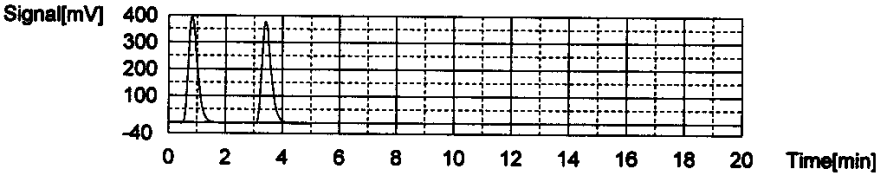
Type	Anal.	Dil.	Result
Unknown	TC	1.000	TC:23.27mg/L

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

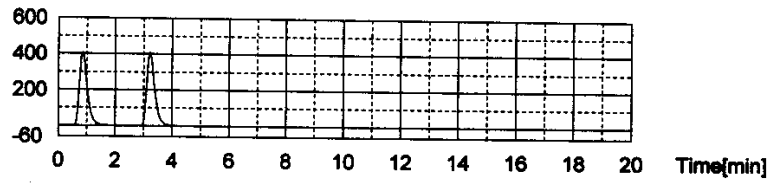
Type	Anal.	Dil.	Result
Unknown	IC	1.000	IC:26.21mg/L

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: WG396993

Total Organic Carbon

396994

396996

MAKE DAILY

CCV (TOC): std48750 (5/200)(1000) = 25mg/L

LCS (TOC): std50986 (5/200)(1000) = 25mg/L

CCV (TIC): std50244 (5/200)(1000) = 25mg/L

MS (TOC): 0.4/40(100) = 10

Calibration Curve Date: 12/6/11

Reagent: R6t17216 R6t17380

☑ SM5310-C: Matrix 2 WG 396994

☐ EPA 415.1/9060A(mod): Matrix 1 WG 396993 SOP: K 4151 Rev. 14

WG 396996 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	TIC 25	
2	CCV 25	
~~20~~	BLK	
4	LCS 25	
5	LCSDUP	
6	04-928-01	1/5
7	MS 08	1/5
8	MSD 10	1/5
9	DUP 01	1/5
10	04-963-05	1/5
11	05-009-01 DISS	
12	02	
13	03	
14	CCV	
~~180~~	CCB	
16	05-009-04 DISS	
17	05	
18	05-010-01	
19	MS 02	
20	MSD 03	
21	04	
22	MS 05	
23	MSD 06	
24	07	
25	MS 08	

Position	Sample ID	Dilution
26	CCV	
~~270~~	CCB	
28	MSD 09	
29	10	
30	11	
31	12	1/3
32	13	
33	14	1/3
34	15	1/2
35	05-051-01 DISS	
36	02	
37	03	
38	CCV	
~~390~~	CCB/BLK	
40	LCS 25	
41	LCSDUP	
42	05-092-08	
43	05-107-05	
44	DUP 092-08	
45	MS	
46	05-183-01	
47	03	
48	05	
49	07	
~~5026~~	CCV	

Position	Sample ID	Dilution
~~510~~	CCB/BLK	
~~514~~	LCS	
~~515~~	LCSDUP	
54	05-051-04 DISS	
55	05	
56	06	
57	07	1/8 dup sample
58	08	
59	11	
60	12	
61	13	
~~6214~~	CCV	
~~630~~	CCB	
64	05-052-01	1/2 dup sample
65	02	
66	03	
67	04	
68	05	
~~693~~	06	1/5
~~7015~~	07	
~~7127~~	08	
~~7239~~	09	1/3
~~7351~~	10	
~~742~~	CCV	
~~750~~	CCB	

Analyst: Deanna Nason Date/Time: 5/4/12

TOC-D 05-009, 05-051
Received unpreserved
filtered in lab

DCN#90751

pg 1

Total Organic Carbon

MAKE DAILY

CCV (TOC): _____ (5/200)(1000) = 25mg/L

LCS (TOC): _____ (5/200)(1000) = 25mg/L

CCV (TIC): _____ (5/200)(1000) = 25mg/L

MS (TOC): _____

Calibration Curve Date: _____

Reagent: _____

☐ SM5310-C : Matrix 2 WG_____

☐ EPA 415.1/9060A(mod): Matrix 1 WG_____ SOP: K _____ Rev. _____

WG_____ Instrument: Shimadza TOC-VWP/ASI

DAILY CHECK

☐ drain reservoir filled
☐ ASI water bottle full
☐ dilution water bottle full
☐ 3rd bottle full
☐ sufficient gas
☐ sufficient persulfate
☐ sufficient acid
☐ waste container

Position	Sample ID	Dilution
~~63~~	05-052-11	
~~62~~	12	
~~50~~	DUP 052-04	
~~52~~	MS ↓	
63 ~~38~~	CCV DISS BK	
~~88~~	CCB CCV	
~~70~~	CCB	
10 8 R	04-963-05	1/10
48 9 R	05-050-05	1/5
5 10 R	LCS DUP	
3 11	05-052-06	1/3
2 12	CCV	
0 13	CCB	
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Position	Sample ID	Dilution
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
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42		
43		
44		
45		
46		
47		
48		
49		
50		

Position	Sample ID	Dilution
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
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70		
71		
72		
73		
74		
75		

Analyst: Deanna Nesson Date/Time: 5/4/12

DCN#90751

Pg 2

	Analys	Sample Name	Result	Status	Date / Time	Vial
1	TOC	TIC 25	TOC:1.184mg/L TC:25.03mg/L IC:23.85mg/L	Complet	05/04/2012 10:05:25 AM	1
2	TOC	CCV 25	!!Error!! TOC:23.63mg/L TC:23.44mg/L IC:-0.1862mg/	Complet	05/04/2012 10:17:34 AM	2
3	TOC	WG396993-01 BLK	!!Error!! TOC:0.3849mg/L TC:0.2049mg/L IC:-0.1800m	Complet	05/04/2012 10:26:37 AM	0
4	TOC	WG396993-02 LCS	!!Error!! TOC:23.81mg/L TC:23.60mg/L IC:-0.2080mg/	Complet	05/04/2012 10:38:59 AM	4
5	TOC	WG396993-03 LCSDUP	!!Error!! TOC:23.52mg/L TC:23.31mg/L IC:-0.2039mg/	Complet	05/04/2012 10:51:19 AM	5
6	TOC	L12040928-01 (5)	TOC:5.331mg/L TC:33.03mg/L IC:27.70mg/L	Complet	05/04/2012 11:04:22 AM	6
7	TOC	L12040928-08 (5) MS	TOC:6.359mg/L TC:32.20mg/L IC:25.84mg/L	Complet	05/04/2012 11:18:18 AM	7
8	TOC	L12040928-10 (5)	TOC:8.275mg/L TC:41.01mg/L IC:32.74mg/L	Complet	05/04/2012 11:31:44 AM	8
9	TOC	WG396993-05 (5) DUP	TOC:5.799mg/L TC:37.69mg/L IC:31.89mg/L	Complet	05/04/2012 11:45:30 AM	9
10	TOC		TOC:19.10mg/L TC:52.51mg/L IC:33.41mg/L	Complet	05/04/2012 11:59:10 AM	10
11	TOC	L12050009-01	TOC:2.103mg/L TC:10.37mg/L IC:8.267mg/L	Complet	05/04/2012 12:11:40 PM	11
12	TOC	L12050009-02	TOC:2.221mg/L TC:12.61mg/L IC:10.39mg/L	Complet	05/04/2012 12:24:30 PM	12
13	TOC	L12050009-03	TOC:1.199mg/L TC:10.31mg/L IC:9.115mg/L	Complet	05/04/2012 12:37:21 PM	13
14	TOC	CCV	!!Error!! TOC:23.20mg/L TC:23.03mg/L IC:-0.1722mg/	Complet	05/04/2012 12:49:26 PM	14
15	TOC	CCB	!!Error!! TOC:0.3715mg/L TC:0.1882mg/L IC:-0.1833m	Complet	05/04/2012 12:58:23 PM	0
16	TOC	L12050009-04	TOC:0.3613mg/L TC:9.396mg/L IC:9.034mg/L	Complet	05/04/2012 01:10:52 PM	16
17	TOC	L12050009-05	TOC:0.8123mg/L TC:3.128mg/L IC:2.315mg/L	Complet	05/04/2012 01:22:48 PM	17
18	TOC	L12050010-01	TOC:3.263mg/L TC:21.24mg/L IC:17.97mg/L	Complet	05/04/2012 01:35:52 PM	18
19	TOC	L12050010-02 MS	TOC:11.56mg/L TC:23.97mg/L IC:12.41mg/L	Complet	05/04/2012 01:49:00 PM	19
20	TOC	L12050010-03 MSD	TOC:11.15mg/L TC:22.54mg/L IC:11.39mg/L	Complet	05/04/2012 02:01:44 PM	20
21	TOC	L12050010-04	TOC:0.8853mg/L TC:12.21mg/L IC:11.33mg/L	Complet	05/04/2012 02:14:31 PM	21
22	TOC	L12050010-05 MS	TOC:9.598mg/L TC:17.81mg/L IC:8.214mg/L	Complet	05/04/2012 02:27:17 PM	22
23	TOC	L12050010-06 MSD	TOC:9.886mg/L TC:15.53mg/L IC:5.640mg/L	Complet	05/04/2012 02:40:07 PM	23
24	TOC	L12050010-07	TOC:2.761mg/L TC:23.74mg/L IC:20.98mg/L	Complet	05/04/2012 02:53:16 PM	24
25	TOC	L12050010-08 MS	TOC:10.92mg/L TC:24.09mg/L IC:13.17mg/L	Complet	05/04/2012 03:06:24 PM	25
26	TOC	CCV	!!Error!! TOC:23.80mg/L TC:23.64mg/L IC:-0.1575mg/	Complet	05/04/2012 03:18:45 PM	26
27	TOC	CCB	!!Error!! TOC:0.3727mg/L TC:0.1880mg/L IC:-0.1846m	Complet	05/04/2012 03:27:42 PM	0
28	TOC	L12050010-09 MSD	TOC:10.69mg/L TC:20.11mg/L IC:9.411mg/L	Complet	05/04/2012 03:40:43 PM	28
29	TOC	L12050010-10	TOC:1.831mg/L TC:11.70mg/L IC:9.872mg/L	Complet	05/04/2012 03:53:19 PM	29
30	TOC	L12050010-11	TOC:2.636mg/L TC:8.938mg/L IC:6.302mg/L	Complet	05/04/2012 04:06:18 PM	30
31	TOC	L12050010-12 (3)	TOC:5.279mg/L TC:22.46mg/L IC:17.18mg/L	Complet	05/04/2012 04:19:22 PM	31
32	TOC	L12050010-13	TOC:3.604mg/L TC:14.38mg/L IC:10.78mg/L	Complet	05/04/2012 04:32:23 PM	32
33	TOC	L12050010-14 (3)	TOC:6.637mg/L TC:28.80mg/L IC:22.16mg/L	Complet	05/04/2012 04:45:48 PM	33
34	TOC	L12050010-15 (2)	TOC:6.662mg/L TC:13.57mg/L IC:6.905mg/L	Complet	05/04/2012 04:58:34 PM	34
35	TOC	L12050051-01	TOC:4.799mg/L TC:5.667mg/L IC:0.8679mg/L	Complet	05/04/2012 05:10:33 PM	35
36	TOC	L12050051-02	TOC:8.973mg/L TC:9.398mg/L IC:0.4251mg/L	Complet	05/04/2012 05:22:38 PM	36
37	TOC	L12050051-03	TOC:8.250mg/L TC:8.656mg/L IC:0.4059mg/L	Complet	05/04/2012 05:34:29 PM	37
38	TOC	CCV	!!Error!! TOC:23.83mg/L TC:23.63mg/L IC:-0.2047mg/	Complet	05/04/2012 05:46:48 PM	38
39	TOC	WG396994-01 BLK	!!Error!! TOC:0.3804mg/L TC:0.1817mg/L IC:-0.1987m	Complet	05/04/2012 06:03:17 PM	0
40	TOC	WG396994-02 LCS	!!Error!! TOC:25.23mg/L TC:25.02mg/L IC:-0.2085mg/	Complet	05/04/2012 06:24:59 PM	40
41	TOC	WG396994-03 LCSDUP	!!Error!! TOC:23.83mg/L TC:23.62mg/L IC:-0.2095mg/	Complet	05/04/2012 06:47:14 PM	41
42	TOC	L12050092-08	TOC:4.160mg/L TC:7.064mg/L IC:2.904mg/L	Complet	05/04/2012 07:09:02 PM	42
43	TOC	L12050107-05	TOC:13.36mg/L TC:28.70mg/L IC:15.34mg/L	Complet	05/04/2012 07:33:12 PM	43
44	TOC	WG396994-05 DUP	TOC:4.449mg/L TC:7.040mg/L IC:2.591mg/L	Complet	05/04/2012 07:54:34 PM	44
45	TOC	WG396994-06 MS	TOC:14.46mg/L TC:17.70mg/L IC:3.237mg/L	Complet	05/04/2012 08:15:50 PM	45
46	TOC	L12050050-01	TOC:3.831mg/L TC:29.49mg/L IC:25.66mg/L	Complet	05/04/2012 08:39:55 PM	46
47	TOC	L12050050-03	TOC:3.141mg/L TC:26.84mg/L IC:23.70mg/L	Complet	05/04/2012 09:03:49 PM	47
48	TOC	<Untitled>	TOC:3.107mg/L TC:91.08mg/L IC:87.97mg/L	Complet	05/04/2012 09:34:23 PM	48
49	TOC	L12050050-07	TOC:7.709mg/L TC:17.20mg/L IC:9.490mg/L	Complet	05/04/2012 09:57:45 PM	49
50	TOC	CCV	!!Error!! TOC:23.15mg/L TC:23.00mg/L IC:-0.1453mg/	Complet	05/04/2012 10:10:17 PM	26
51	TOC	WG396996-01 BLK	!!Error!! TOC:0.3717mg/L TC:0.1985mg/L IC:-0.1732m	Complet	05/04/2012 10:19:25 PM	0
52	TOC	WG396996-02 LCS	!!Error!! TOC:23.78mg/L TC:23.58mg/L IC:-0.1974mg/	Complet	05/04/2012 10:31:35 PM	4
53	TOC		!!Error!! TOC:0.5722mg/L TC:0.3885mg/L IC:-0.1837m	Complet	05/04/2012 10:42:55 PM	53
54	TOC	L12050051-04	TOC:2.743mg/L TC:4.307mg/L IC:1.563mg/L	Complet	05/04/2012 10:54:54 PM	54
55	TOC	L12050051-05	TOC:8.749mg/L TC:13.88mg/L IC:5.132mg/L	Complet	05/04/2012 11:07:21 PM	55
56	TOC	L12050051-06	TOC:3.876mg/L TC:13.01mg/L IC:9.129mg/L	Complet	05/04/2012 11:20:04 PM	56
57	TOC	L12050051-07	TOC:5.014mg/L TC:7.455mg/L IC:2.442mg/L	Complet	05/04/2012 11:32:20 PM	57
58	TOC	L12050051-08	TOC:9.850mg/L TC:11.54mg/L IC:1.692mg/L	Complet	05/04/2012 11:45:08 PM	58
59	TOC	L12050051-11	TOC:0.8914mg/L TC:2.060mg/L IC:1.168mg/L	Complet	05/04/2012 11:56:57 PM	59
60	TOC	L12050051-12	TOC:1.507mg/L TC:2.670mg/L IC:1.163mg/L	Complet	05/05/2012 12:08:56 AM	60
61	TOC	L12050051-13	TOC:1.372mg/L TC:2.415mg/L IC:1.043mg/L	Complet	05/05/2012 12:20:51 AM	61
62	TOC	CCV	!!Error!! TOC:25.93mg/L TC:25.72mg/L IC:-0.2084mg/	Complet	05/05/2012 12:33:30 AM	14
63	TOC	CCB	!!Error!! TOC:0.3622mg/L TC:0.1692mg/L IC:-0.1931m	Complet	05/05/2012 12:42:27 AM	0
64	TOC	L12050052-01	TOC:2.728mg/L TC:7.940mg/L IC:5.212mg/L	Complet	05/05/2012 12:55:12 AM	64
65	TOC	L12050052-02	TOC:1.850mg/L TC:4.504mg/L IC:2.654mg/L	Complet	05/05/2012 01:07:25 AM	65
66	TOC	L12050052-03	TOC:5.311mg/L TC:23.05mg/L IC:17.74mg/L	Complet	05/05/2012 01:20:22 AM	66
67	TOC	L12050052-04	TOC:1.901mg/L TC:4.980mg/L IC:3.079mg/L	Complet	05/05/2012 01:32:42 AM	67

	Analyst	Sample Name	Result	Status	Date / Time	Vial
68	TOC	L12050052-05	TOC:1.384mg/L TC:3.820mg/L IC:2.435mg/L	Complet	05/05/2012 01:44:48 AM	68
69	TOC	L12050052-06 (15)	TOC:3.503mg/L TC:4.080mg/L IC:0.5775mg/L	Complet	05/05/2012 01:57:00 AM	3
70	TOC	L12050052-07	TOC:2.089mg/L TC:6.931mg/L IC:4.842mg/L	Complet	05/05/2012 02:09:27 AM	15
71	TOC	L12050052-08	TOC:1.965mg/L TC:5.960mg/L IC:3.994mg/L	Complet	05/05/2012 02:21:49 AM	27
72	TOC	L12050052-09 (3)	TOC:8.127mg/L TC:24.54mg/L IC:16.41mg/L	Complet	05/05/2012 02:35:33 AM	39
73	TOC	L12050052-10	TOC:2.283mg/L TC:8.017mg/L IC:5.734mg/L	Complet	05/05/2012 02:48:13 AM	51
74	TOC	CCV	!!Error!! TOC:26.34mg/L TC:26.15mg/L IC:-0.1933mg/	Complet	05/05/2012 03:01:04 AM	2
75	TOC	CCB	!!Error!! TOC:0.3477mg/L TC:0.1656mg/L IC:-0.1821m	Complet	05/05/2012 03:10:04 AM	0
76	TOC	L12050052-11	TOC:5.859mg/L TC:8.701mg/L IC:2.842mg/L	Complet	05/05/2012 03:22:23 AM	63
77	TOC	L12050052-12	TOC:10.51mg/L TC:11.56mg/L IC:1.046mg/L	Complet	05/05/2012 03:34:51 AM	62
78	TOC	WG396996-05 DUP	TOC:1.754mg/L TC:4.722mg/L IC:2.968mg/L	Complet	05/05/2012 03:47:01 AM	50
79	TOC	WG396996-06 MS	TOC:11.90mg/L TC:19.59mg/L IC:7.692mg/L	Complet	05/05/2012 04:00:00 AM	52
80	TOC	DISS BLK	!!Error!! TOC:0.6021mg/L TC:0.4343mg/L IC:-0.1678m	Complet	05/05/2012 04:11:24 AM	53
81	TOC	CCV	!!Error!! TOC:25.96mg/L TC:25.74mg/L IC:-0.2119mg/	Complet	05/05/2012 04:24:11 AM	38
82	TOC	CCB	!!Error!! TOC:0.3815mg/L TC:0.1895mg/L IC:-0.1920m	Complet	05/05/2012 04:33:08 AM	0
83	TOC	L12040963-05 (10)	TOC:12.70mg/L TC:27.89mg/L IC:15.20mg/L	Complet	05/05/2012 09:03:35 AM	10
84	TOC	L12050050-05 (5)	TOC:8.848mg/L TC:36.62mg/L IC:27.77mg/L	Complet	05/05/2012 09:28:49 AM	48
85	TOC	WG396996-03 LCSDUP	!!Error!! TOC:26.06mg/L TC:25.98mg/L IC:-0.08195mg	Complet	05/05/2012 09:41:10 AM	5
86	TOC	L12050052-06 (3) X	TOC:23.72mg/L TC:56.21mg/L IC:32.50mg/L	Complet	05/05/2012 09:57:05 AM	3
87	TOC	CCV	!!Error!! TOC:26.70mg/L TC:26.61mg/L IC:-0.09037mg	Complet	05/05/2012 10:09:53 AM	2
88	TOC	CCB	!!Error!! TOC:0.4022mg/L TC:0.2312mg/L IC:-0.1710m	Complet	05/05/2012 10:18:59 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

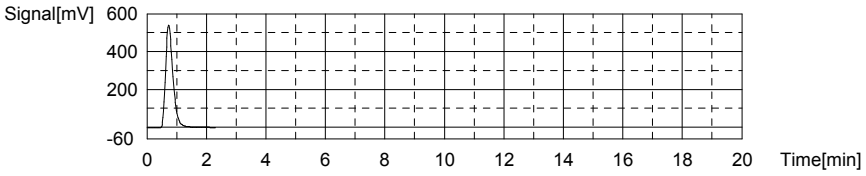
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.184mg/L TC:25.03mg/L IC:23.85mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	940.6	25.03mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 09:59:51 AM

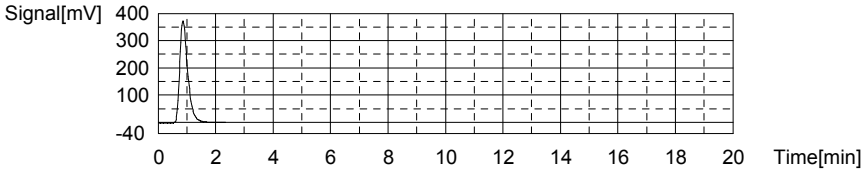
Mean Area 940.6
Mean Conc. 25.03mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	721.7	23.85mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 10:05:25 AM

Mean Area 721.7
Mean Conc. 23.85mg/L



Sample

Sample Name: CCV 25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

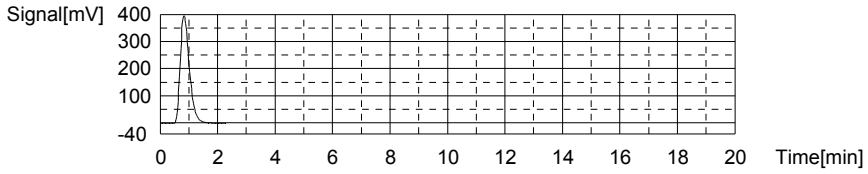
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.63mg/L TC:23.44mg/L IC:-0.1862mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	880.8	23.44mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:13:09 AM

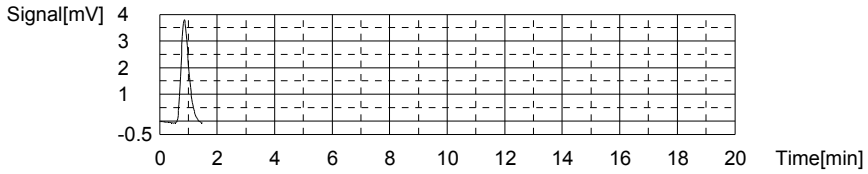
Mean Area 880.8
Mean Conc. 23.44mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.351	-0.1862mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 10:17:34 AM

Mean Area 7.351
Mean Conc. -0.1862mg/L



Sample

Sample Name: WG396993-01 BLK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

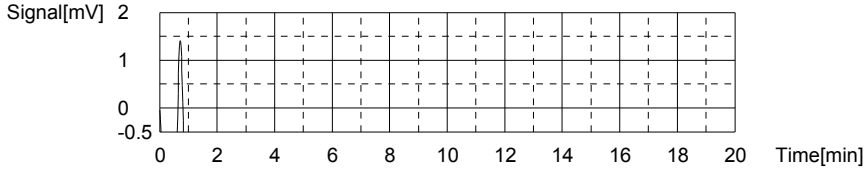
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3849mg/L TC:0.2049mg/L IC:-0.1800mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.790	0.2049mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:22:38 AM

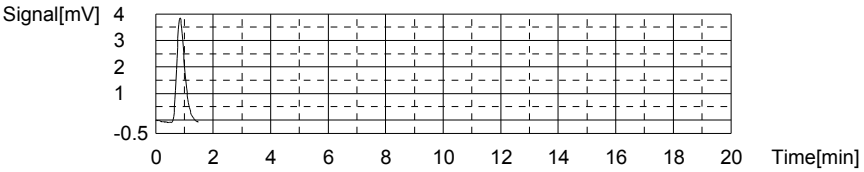
Mean Area 7.790
Mean Conc. 0.2049mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.536	-0.1800mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 10:26:37 AM

Mean Area 7.536
Mean Conc. -0.1800mg/L



Sample

Sample Name: WG396993-02 LCS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

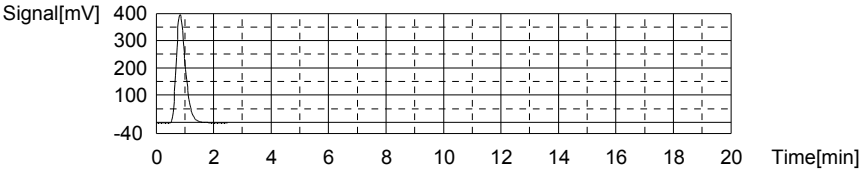
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.81mg/L TC:23.60mg/L IC:-0.2080mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	886.8	23.60mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:34:32 AM

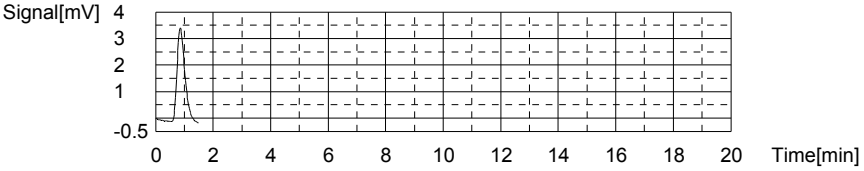
Mean Area 886.8
Mean Conc. 23.60mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.705	-0.2080mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 10:38:59 AM

Mean Area 6.705
Mean Conc. -0.2080mg/L



Sample

Sample Name: WG396993-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

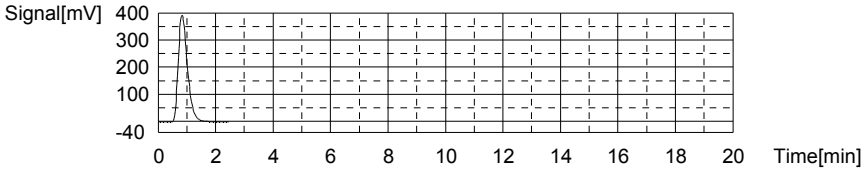
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.52mg/L TC:23.31mg/L IC:-0.2039mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	876.0	23.31mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:46:52 AM

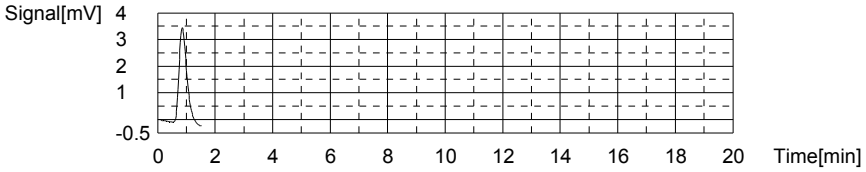
Mean Area 876.0
Mean Conc. 23.31mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.826	-0.2039mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 10:51:19 AM

Mean Area 6.826
Mean Conc. -0.2039mg/L



Sample

Sample Name: L12040928-01 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

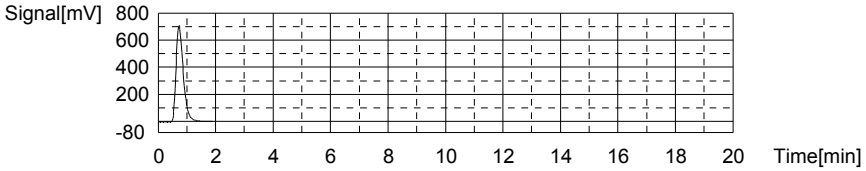
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.331mg/L TC:33.03mg/L IC:27.70mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1241	33.03mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:58:39 AM

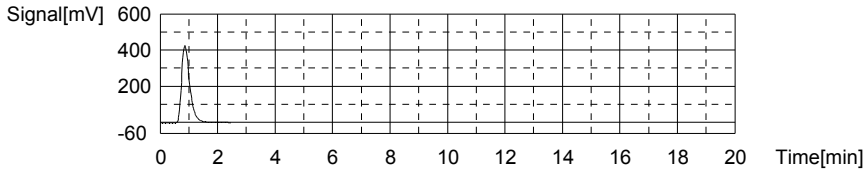
Mean Area 1241
Mean Conc. 33.03mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	836.1	27.70mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:04:22 AM

Mean Area 836.1
Mean Conc. 27.70mg/L



Sample

Sample Name: L12040928-08 (5) MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

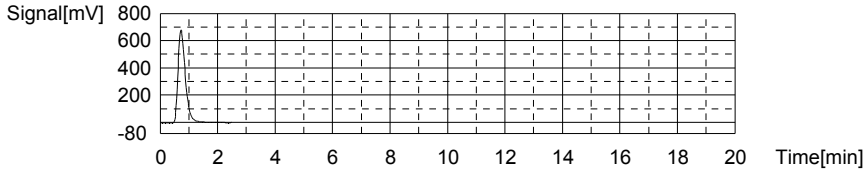
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.359mg/L TC:32.20mg/L IC:25.84mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1210	32.20mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 11:12:16 AM

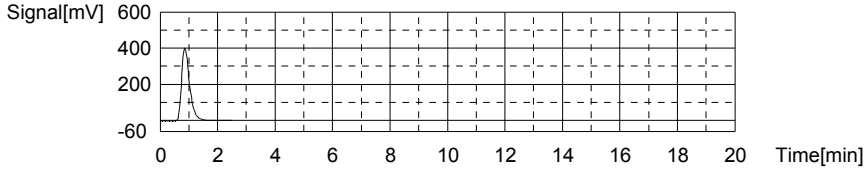
Mean Area 1210
Mean Conc. 32.20mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	781.0	25.84mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:18:18 AM

Mean Area 781.0
Mean Conc. 25.84mg/L



Sample

Sample Name: L12040928-10 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

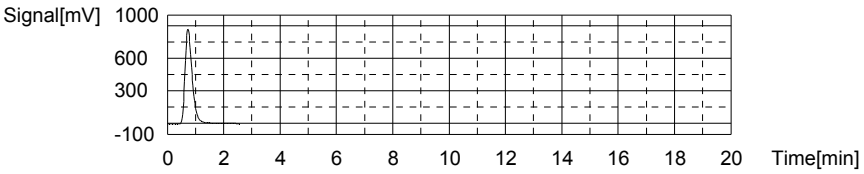
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.275mg/L TC:41.01mg/L IC:32.74mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1541	41.01mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 11:26:18 AM

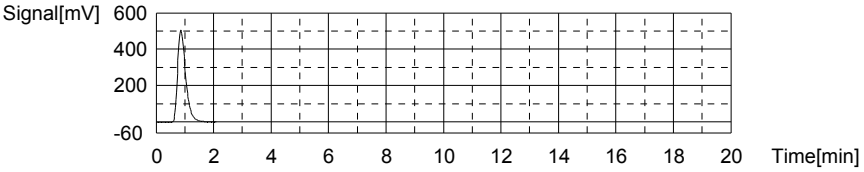
Mean Area 1541
Mean Conc. 41.01mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	985.9	32.74mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:31:44 AM

Mean Area 985.9
Mean Conc. 32.74mg/L



Sample

Sample Name: WG396993-05 (5) DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

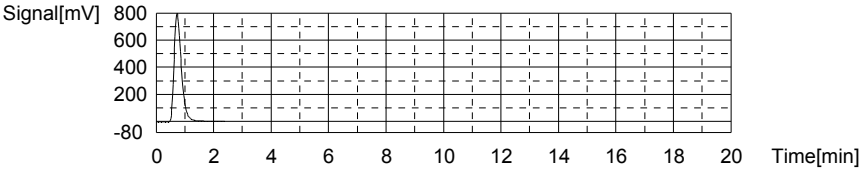
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.799mg/L TC:37.69mg/L IC:31.89mg/L

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	05/04/2012 11:39:34 AM

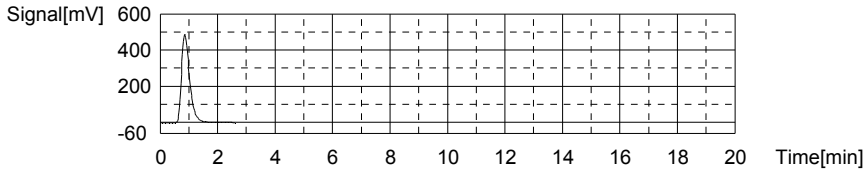
Mean Area 1416
Mean Conc. 37.69mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	960.6	31.89mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:45:30 AM

Mean Area 960.6
Mean Conc. 31.89mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

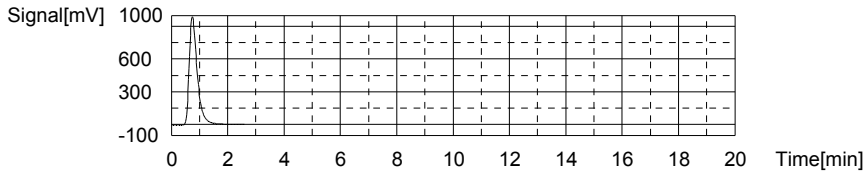
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:19.10mg/L TC:52.51mg/L IC:33.41mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1973	52.51mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 11:53:31 AM

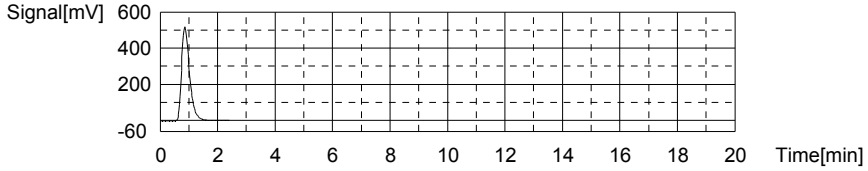
Mean Area 1973
Mean Conc. 52.51mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1006	33.41mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:59:10 AM

Mean Area 1006
Mean Conc. 33.41mg/L



Sample

Sample Name: L12050009-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

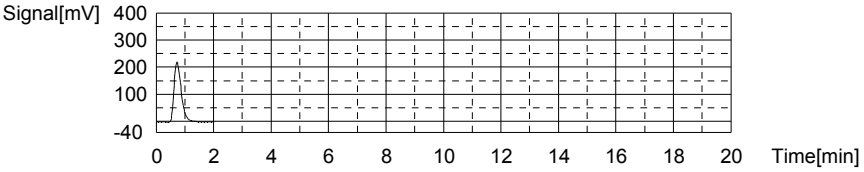
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.103mg/L TC:10.37mg/L IC:8.267mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	389.7	10.37mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 12:06:37 PM

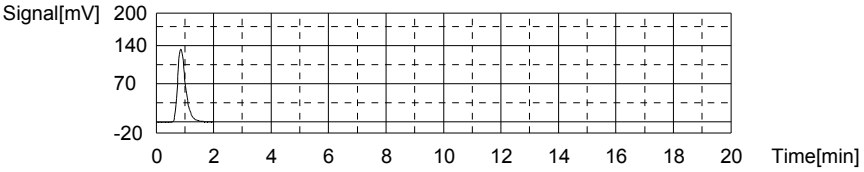
Mean Area 389.7
Mean Conc. 10.37mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	258.6	8.267mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 12:11:40 PM

Mean Area 258.6
Mean Conc. 8.267mg/L



Sample

Sample Name: L12050009-02
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

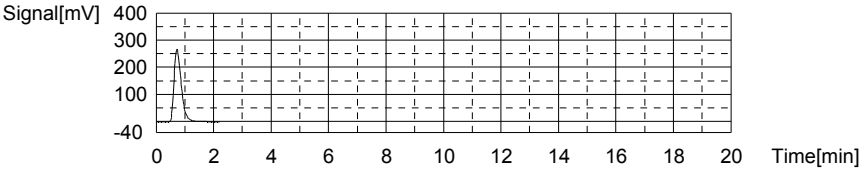
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.221mg/L TC:12.61mg/L IC:10.39mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	473.9	12.61mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 12:19:18 PM

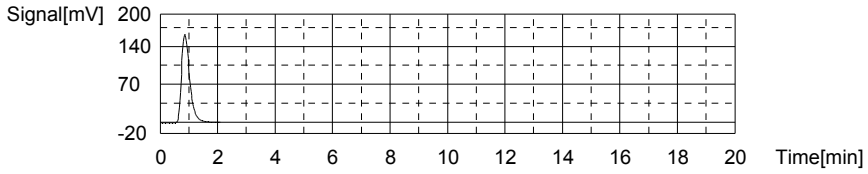
Mean Area 473.9
Mean Conc. 12.61mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	321.7	10.39mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 12:24:30 PM

Mean Area 321.7
Mean Conc. 10.39mg/L



Sample

Sample Name: L12050009-03
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

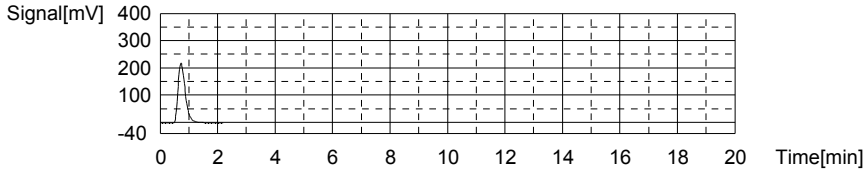
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.199mg/L TC:10.31mg/L IC:9.115mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	387.6	10.31mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 12:32:07 PM

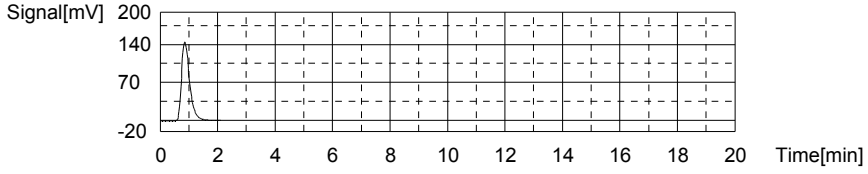
Mean Area 387.6
Mean Conc. 10.31mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	283.8	9.115mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 12:37:21 PM

Mean Area 283.8
Mean Conc. 9.115mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

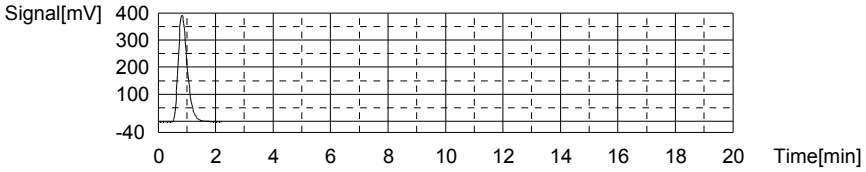
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.20mg/L TC:23.03mg/L IC:-0.1722mg/L

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	05/04/2012 12:45:01 PM

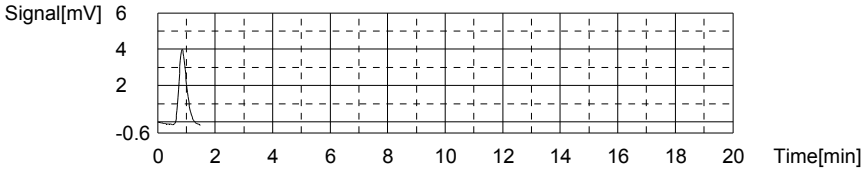
Mean Area 865.3
Mean Conc. 23.03mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.768	-0.1722mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 12:49:26 PM

Mean Area 7.768
Mean Conc. -0.1722mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

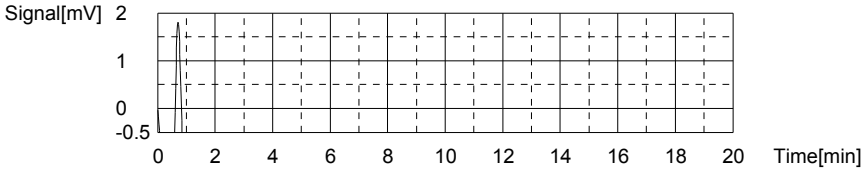
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3715mg/L TC:0.1882mg/L IC:-0.1833mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.163	0.1882mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 12:54:27 PM

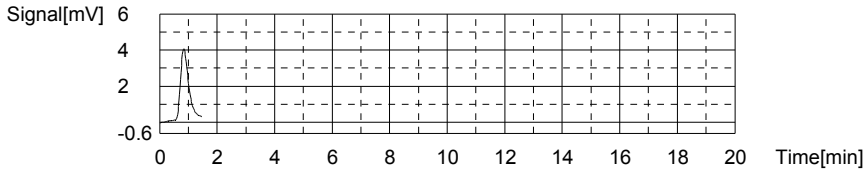
Mean Area 7.163
Mean Conc. 0.1882mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.437	-0.1833mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 12:58:23 PM

Mean Area 7.437
Mean Conc. -0.1833mg/L



Sample

Sample Name: L12050009-04
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

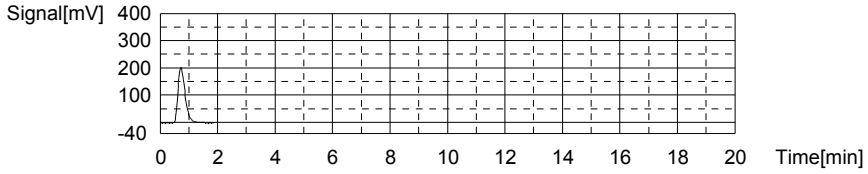
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.3613mg/L TC:9.396mg/L IC:9.034mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	353.1	9.396mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 01:05:40 PM

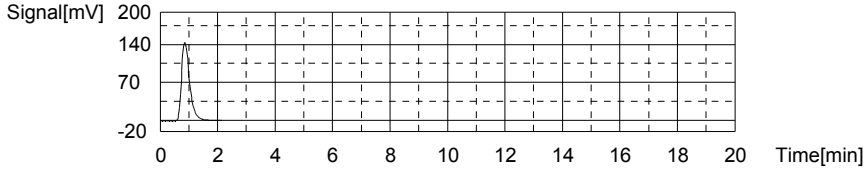
Mean Area 353.1
Mean Conc. 9.396mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	281.4	9.034mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 01:10:52 PM

Mean Area 281.4
Mean Conc. 9.034mg/L



Sample

Sample Name: L12050009-05
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

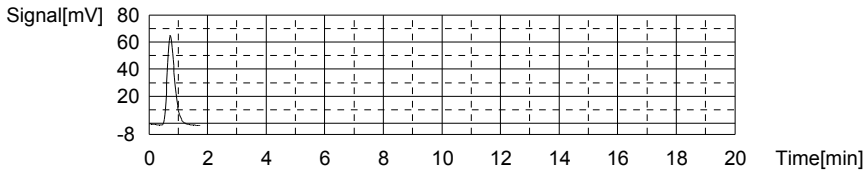
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8123mg/L TC:3.128mg/L IC:2.315mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	117.6	3.128mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 01:18:03 PM

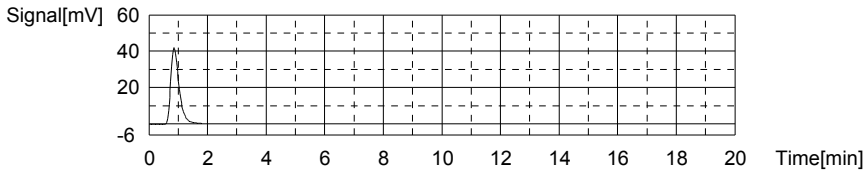
Mean Area 117.6
Mean Conc. 3.128mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.70	2.315mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 01:22:48 PM

Mean Area 81.70
Mean Conc. 2.315mg/L



Sample

Sample Name: L12050010-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

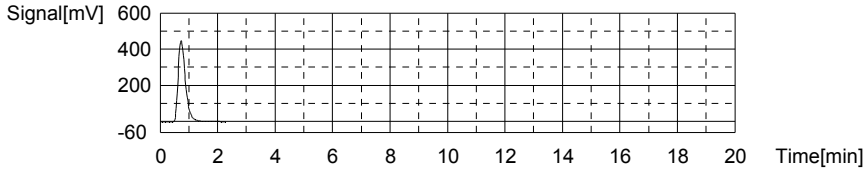
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.263mg/L TC:21.24mg/L IC:17.97mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	798.0	21.24mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 01:30:31 PM

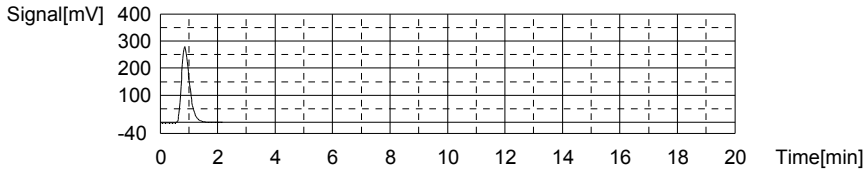
Mean Area 798.0
Mean Conc. 21.24mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	547.1	17.97mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 01:35:52 PM

Mean Area 547.1
Mean Conc. 17.97mg/L



Sample

Sample Name: L12050010-02 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

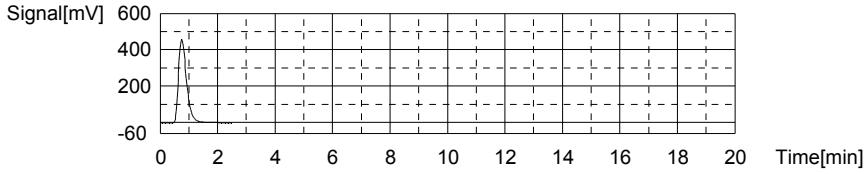
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:11.56mg/L TC:23.97mg/L IC:12.41mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	900.7	23.97mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 01:43:48 PM

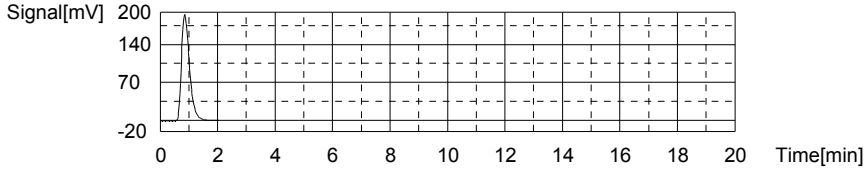
Mean Area 900.7
Mean Conc. 23.97mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	381.7	12.41mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 01:49:00 PM

Mean Area 381.7
Mean Conc. 12.41mg/L



Sample

Sample Name: L12050010-03 MSD
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

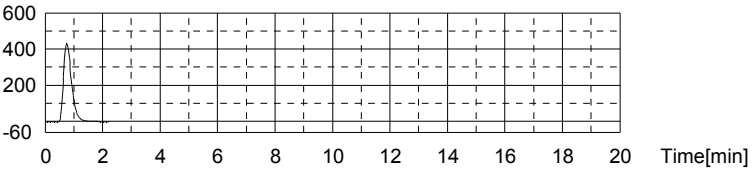
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:11.15mg/L TC:22.54mg/L IC:11.39mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	846.8	22.54mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 01:56:39 PM

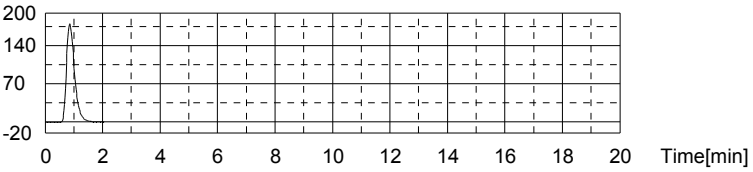
Mean Area 846.8
Mean Conc. 22.54mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	351.4	11.39mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 02:01:44 PM

Mean Area 351.4
Mean Conc. 11.39mg/L



Sample

Sample Name: L12050010-04
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

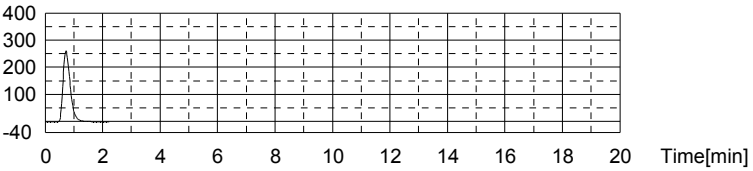
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8853mg/L TC:12.21mg/L IC:11.33mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	459.0	12.21mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 02:09:23 PM

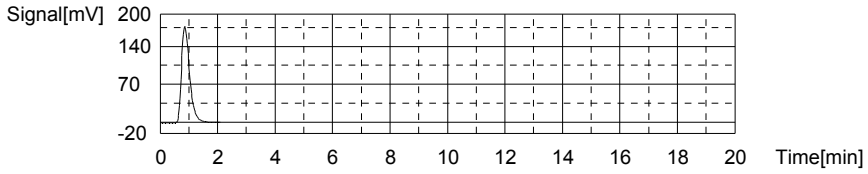
Mean Area 459.0
Mean Conc. 12.21mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	349.6	11.33mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 02:14:31 PM

Mean Area 349.6
Mean Conc. 11.33mg/L



Sample

Sample Name: L12050010-05 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

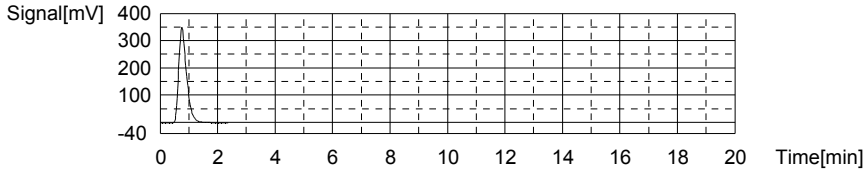
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.598mg/L TC:17.81mg/L IC:8.214mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	669.3	17.81mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 02:22:19 PM

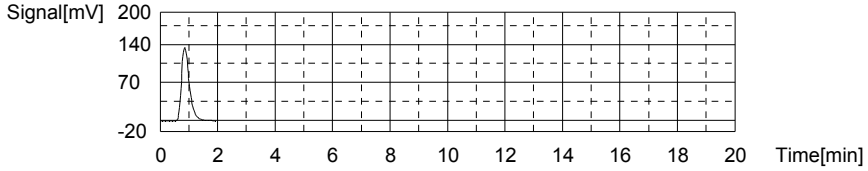
Mean Area 669.3
Mean Conc. 17.81mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	257.0	8.214mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 02:27:17 PM

Mean Area 257.0
Mean Conc. 8.214mg/L



Sample

Sample Name: L12050010-06 MSD
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

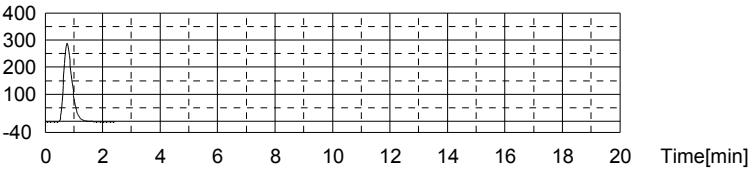
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.886mg/L TC:15.53mg/L IC:5.640mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	583.4	15.53mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 02:35:08 PM

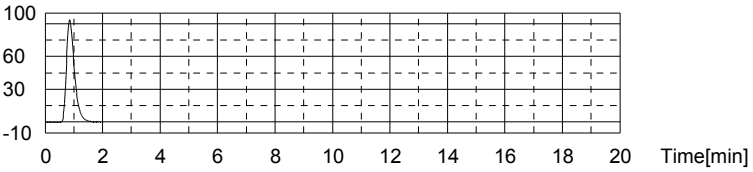
Mean Area 583.4
Mean Conc. 15.53mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	180.5	5.640mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 02:40:07 PM

Mean Area 180.5
Mean Conc. 5.640mg/L



Sample

Sample Name: L12050010-07
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

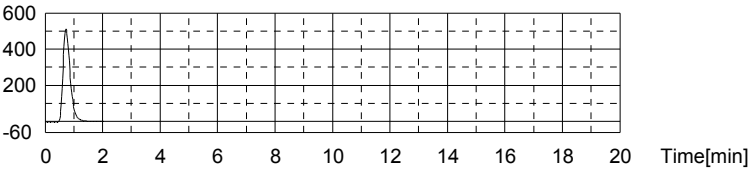
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.761mg/L TC:23.74mg/L IC:20.98mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	892.0	23.74mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 02:47:36 PM

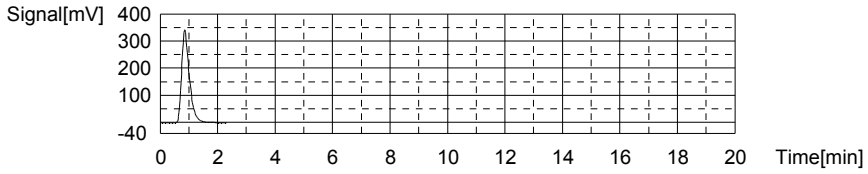
Mean Area 892.0
Mean Conc. 23.74mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	636.4	20.98mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 02:53:16 PM

Mean Area 636.4
Mean Conc. 20.98mg/L



Sample

Sample Name: L12050010-08 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

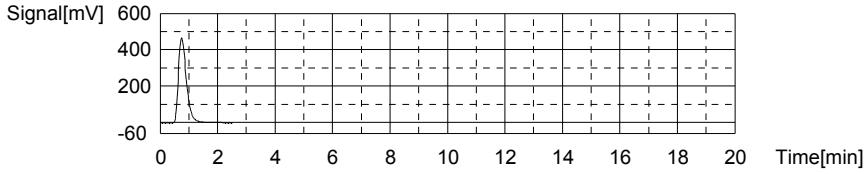
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.92mg/L TC:24.09mg/L IC:13.17mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	905.3	24.09mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 03:01:14 PM

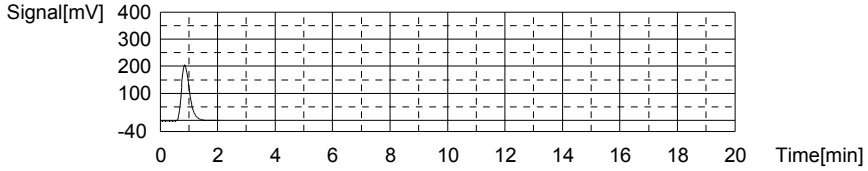
Mean Area 905.3
Mean Conc. 24.09mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	404.3	13.17mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 03:06:24 PM

Mean Area 404.3
Mean Conc. 13.17mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

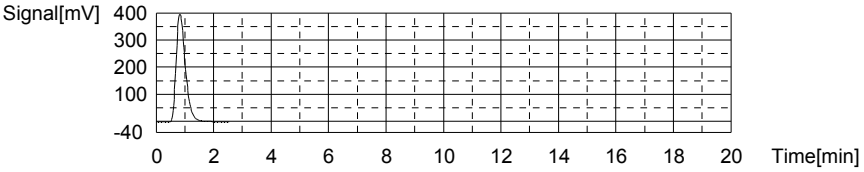
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.80mg/L TC:23.64mg/L IC:-0.1575mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	888.3	23.64mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 03:14:22 PM

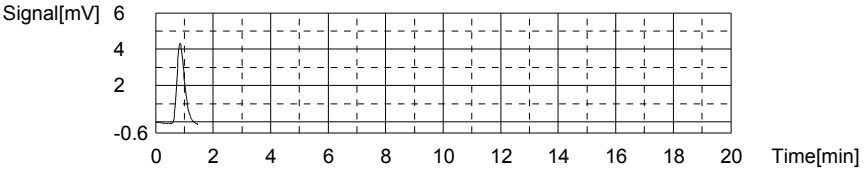
Mean Area 888.3
Mean Conc. 23.64mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.205	-0.1575mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 03:18:45 PM

Mean Area 8.205
Mean Conc. -0.1575mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

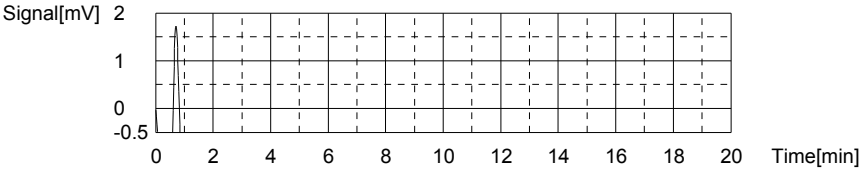
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3727mg/L TC:0.1880mg/L IC:-0.1846mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.158	0.1880mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 03:23:47 PM

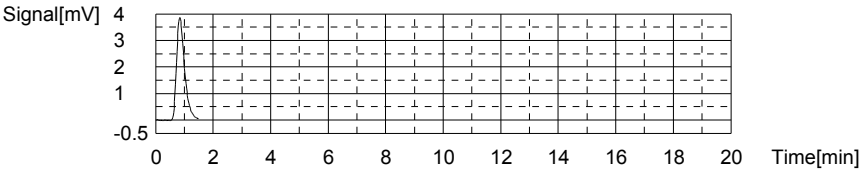
Mean Area 7.158
Mean Conc. 0.1880mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.398	-0.1846mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 03:27:42 PM

Mean Area 7.398
Mean Conc. -0.1846mg/L



Sample

Sample Name: L12050010-09 MSD
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

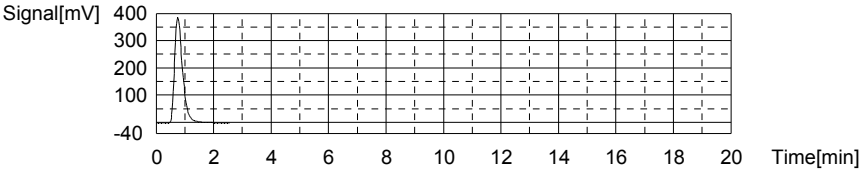
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.69mg/L TC:20.11mg/L IC:9.411mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	755.5	20.11mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 03:35:42 PM

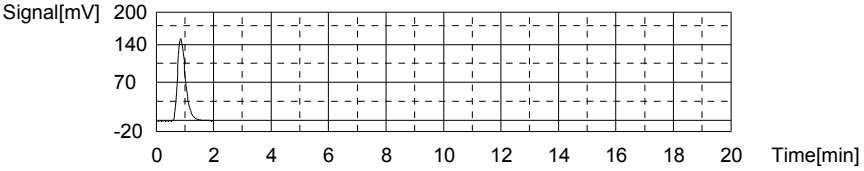
Mean Area 755.5
Mean Conc. 20.11mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	292.6	9.411mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 03:40:43 PM

Mean Area 292.6
Mean Conc. 9.411mg/L



Sample

Sample Name: L12050010-10
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

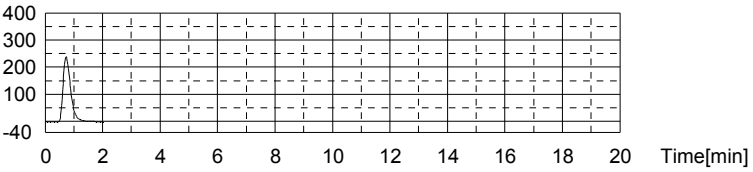
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.831mg/L TC:11.70mg/L IC:9.872mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	439.8	11.70mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 03:48:11 PM

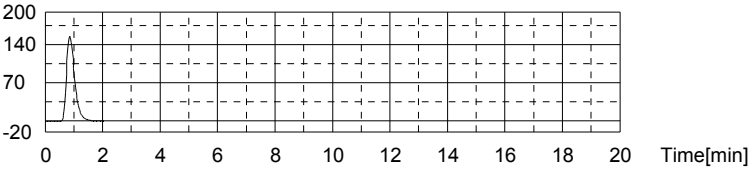
Mean Area 439.8
Mean Conc. 11.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	306.3	9.872mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 03:53:19 PM

Mean Area 306.3
Mean Conc. 9.872mg/L



Sample

Sample Name: L12050010-11
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

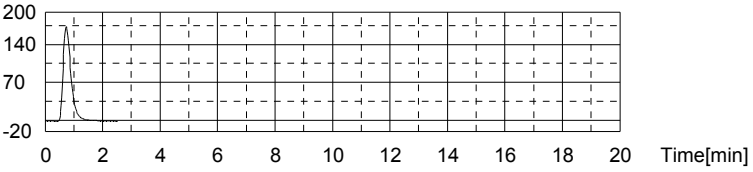
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.636mg/L TC:8.938mg/L IC:6.302mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	335.9	8.938mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 04:01:18 PM

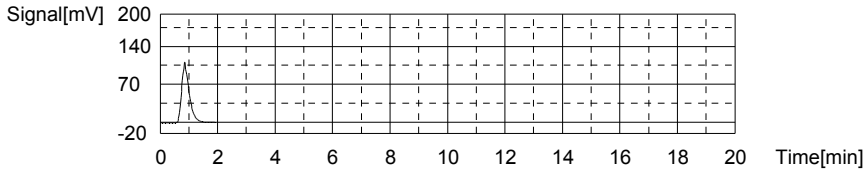
Mean Area 335.9
Mean Conc. 8.938mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	200.2	6.302mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 04:06:18 PM

Mean Area 200.2
Mean Conc. 6.302mg/L



Sample

Sample Name: L12050010-12 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

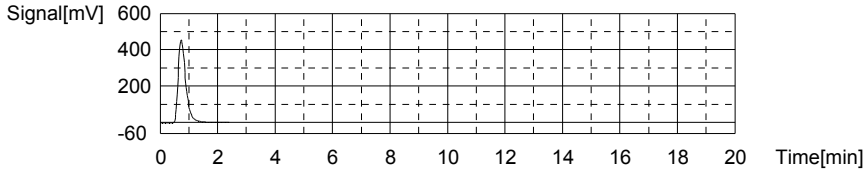
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.279mg/L TC:22.46mg/L IC:17.18mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	843.9	22.46mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 04:14:09 PM

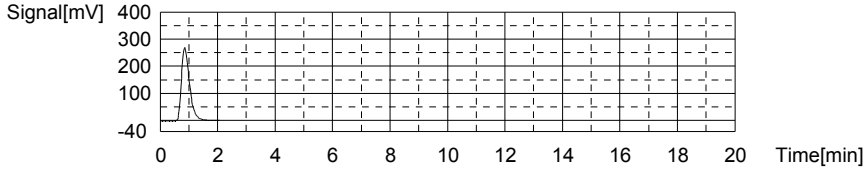
Mean Area 843.9
Mean Conc. 22.46mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	523.5	17.18mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 04:19:22 PM

Mean Area 523.5
Mean Conc. 17.18mg/L



Sample

Sample Name: L12050010-13
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

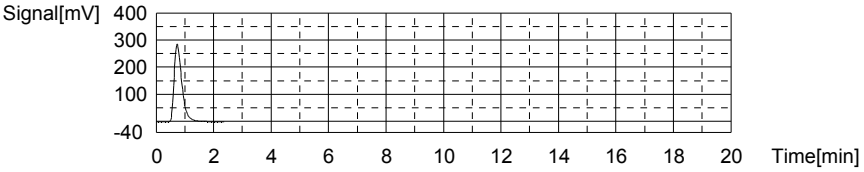
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.604mg/L TC:14.38mg/L IC:10.78mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	540.4	14.38mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 04:27:11 PM

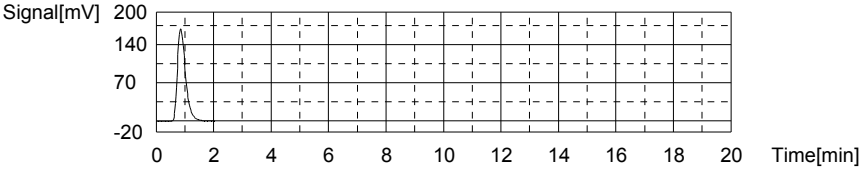
Mean Area 540.4
Mean Conc. 14.38mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	333.2	10.78mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 04:32:23 PM

Mean Area 333.2
Mean Conc. 10.78mg/L



Sample

Sample Name: L12050010-14 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

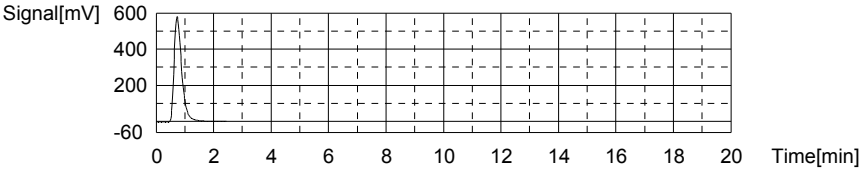
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.637mg/L TC:28.80mg/L IC:22.16mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1082	28.80mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 04:40:17 PM

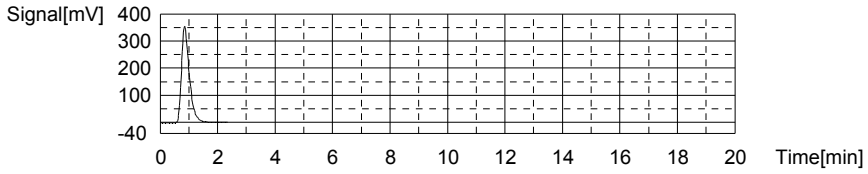
Mean Area 1082
Mean Conc. 28.80mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	671.5	22.16mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 04:45:48 PM

Mean Area 671.5
Mean Conc. 22.16mg/L



Sample

Sample Name: L12050010-15 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

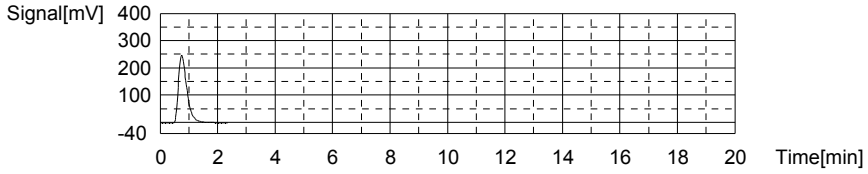
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.662mg/L TC:13.57mg/L IC:6.905mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	509.8	13.57mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 04:53:35 PM

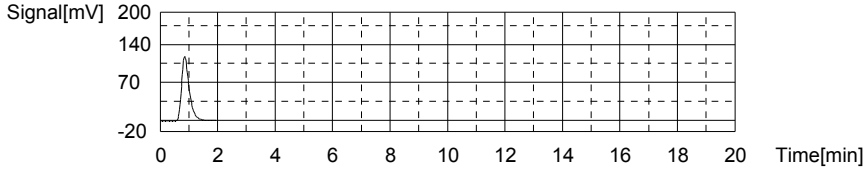
Mean Area 509.8
Mean Conc. 13.57mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	218.1	6.905mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 04:58:34 PM

Mean Area 218.1
Mean Conc. 6.905mg/L



Sample

Sample Name: L12050051-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

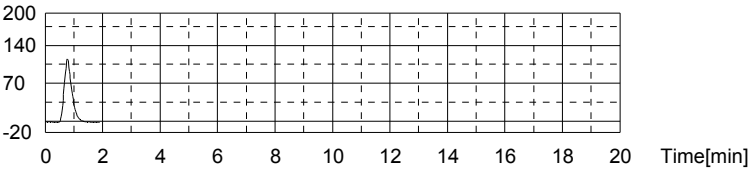
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.799mg/L TC:5.667mg/L IC:0.8679mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	213.0	5.667mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 05:05:55 PM

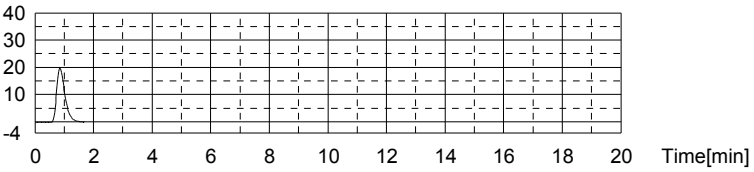
Mean Area 213.0
Mean Conc. 5.667mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	38.68	0.8679mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 05:10:33 PM

Mean Area 38.68
Mean Conc. 0.8679mg/L



Sample

Sample Name: L12050051-02
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

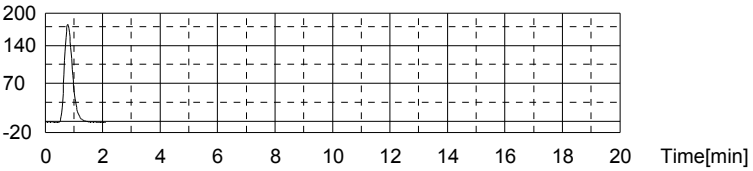
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.973mg/L TC:9.398mg/L IC:0.4251mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	353.2	9.398mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 05:18:06 PM

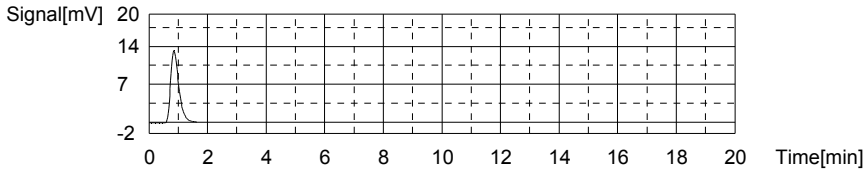
Mean Area 353.2
Mean Conc. 9.398mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.52	0.4251mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 05:22:38 PM

Mean Area 25.52
Mean Conc. 0.4251mg/L



Sample

Sample Name: L12050051-03
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

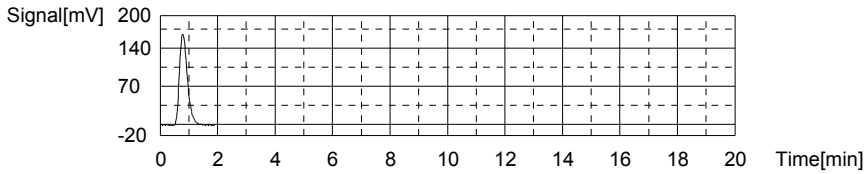
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.250mg/L TC:8.656mg/L IC:0.4059mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	325.3	8.656mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 05:29:59 PM

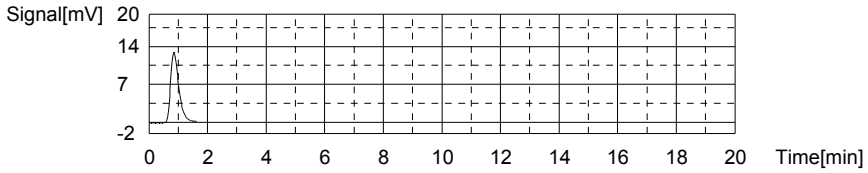
Mean Area 325.3
Mean Conc. 8.656mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.95	0.4059mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 05:34:29 PM

Mean Area 24.95
Mean Conc. 0.4059mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

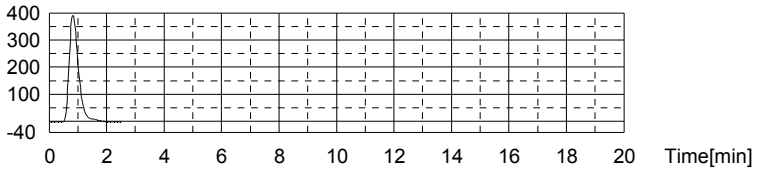
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.83mg/L TC:23.63mg/L IC:-0.2047mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	887.8	23.63mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 05:42:28 PM

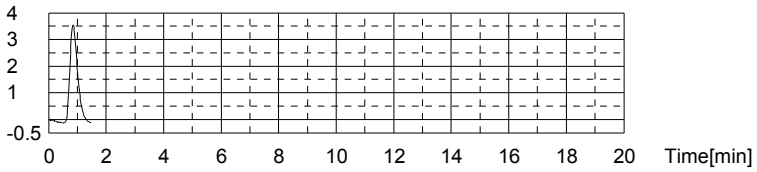
Mean Area 887.8
Mean Conc. 23.63mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.801	-0.2047mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 05:46:48 PM

Mean Area 6.801
Mean Conc. -0.2047mg/L



Sample

Sample Name: WG396994-01 BLK
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

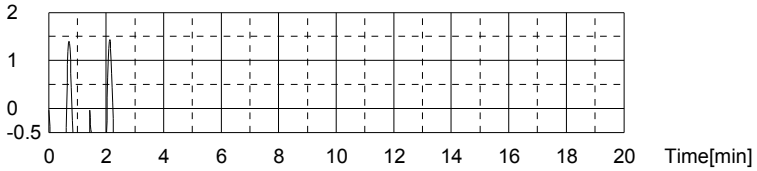
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3804mg/L TC:0.1817mg/L IC:-0.1987mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.140	0.1876mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 05:51:51 PM
2	6.703	0.1759mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 05:55:25 PM

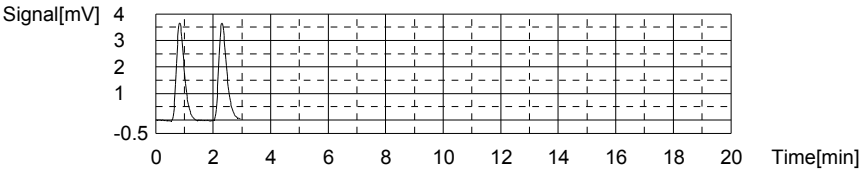
Mean Area 6.922
Mean Conc. 0.1817mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.005	-0.1979mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 05:59:22 PM
2	6.958	-0.1994mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 06:03:17 PM

Mean Area 6.982
Mean Conc. -0.1987mg/L



Sample

Sample Name: WG396994-02 LCS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

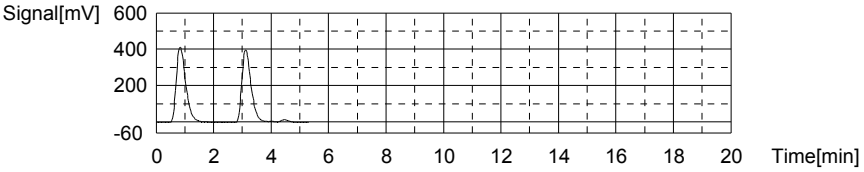
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.23mg/L TC:25.02mg/L IC:-0.2085mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	945.9	25.17mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 06:11:02 PM
2	934.4	24.87mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 06:16:27 PM

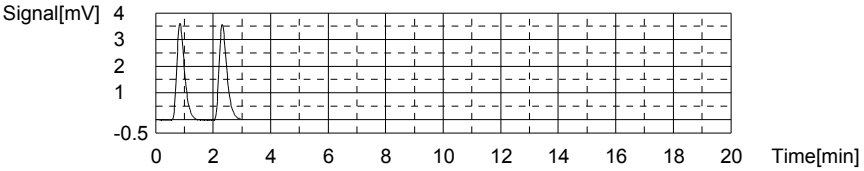
Mean Area 940.2
Mean Conc. 25.02mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.731	-0.2071mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 06:20:50 PM
2	6.645	-0.2100mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 06:24:59 PM

Mean Area 6.688
Mean Conc. -0.2085mg/L



Sample

Sample Name: WG396994-03 LCSDUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

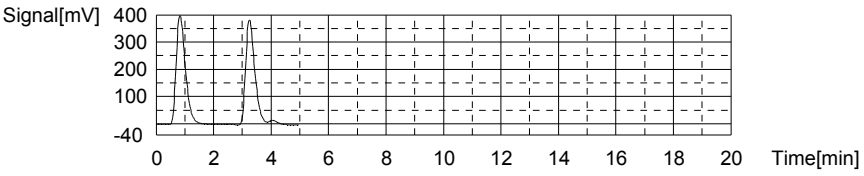
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.83mg/L TC:23.62mg/L IC:-0.2095mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	892.9	23.76mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 06:32:51 PM
2	882.2	23.48mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 06:38:49 PM

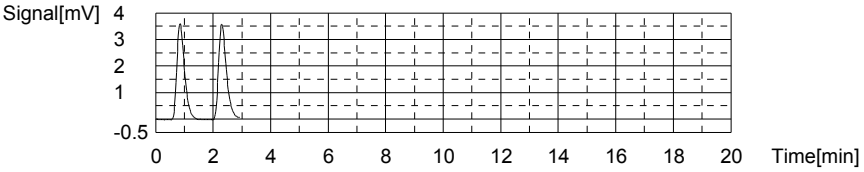
Mean Area 887.6
Mean Conc. 23.62mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.666	-0.2093mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 06:43:06 PM
2	6.652	-0.2097mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 06:47:14 PM

Mean Area 6.659
Mean Conc. -0.2095mg/L



Sample

Sample Name: L12050092-08
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

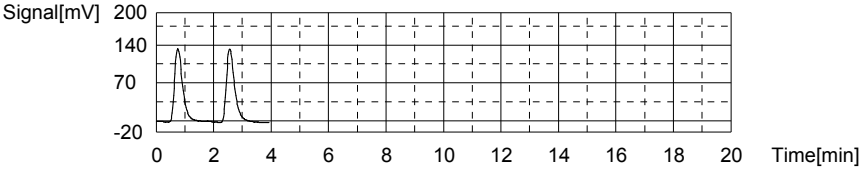
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.160mg/L TC:7.064mg/L IC:2.904mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	257.6	6.854mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 06:54:29 PM
2	273.4	7.274mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 06:59:45 PM

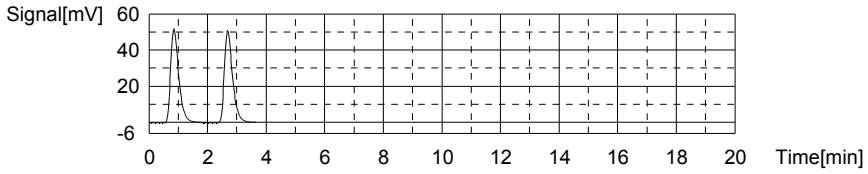
Mean Area 265.5
Mean Conc. 7.064mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	99.96	2.930mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 07:04:32 PM
2	98.43	2.878mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 07:09:02 PM

Mean Area 99.20
Mean Conc. 2.904mg/L



Sample

Sample Name: L12050107-05
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

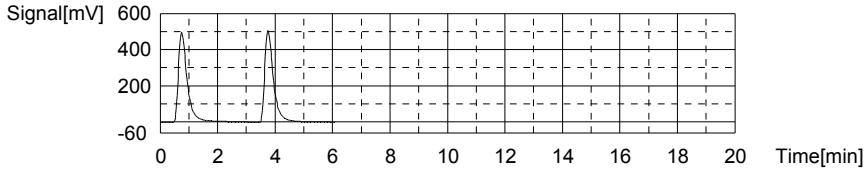
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:13.36mg/L TC:28.70mg/L IC:15.34mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1067	28.40mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 07:17:30 PM
2	1090	29.01mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 07:22:54 PM

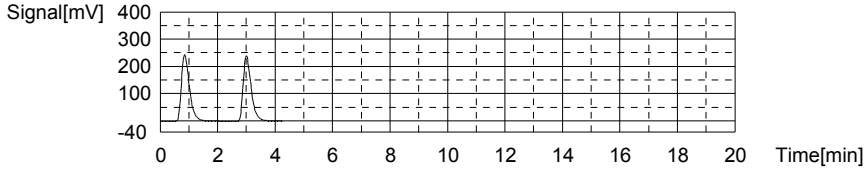
Mean Area 1079
Mean Conc. 28.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	473.3	15.49mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 07:28:13 PM
2	464.3	15.19mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 07:33:12 PM

Mean Area 468.8
Mean Conc. 15.34mg/L



Sample

Sample Name: WG396994-05 DUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

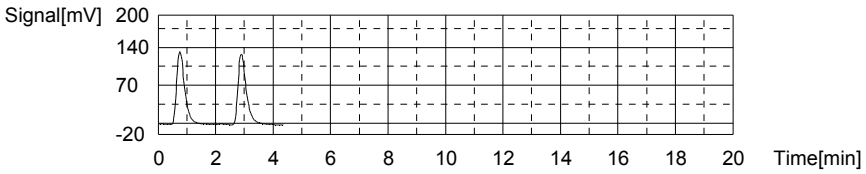
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.449mg/L TC:7.040mg/L IC:2.591mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	263.4	7.008mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 07:40:48 PM
2	265.8	7.072mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 07:45:18 PM

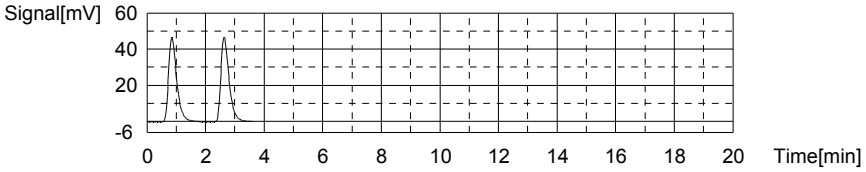
Mean Area 264.6
Mean Conc. 7.040mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.78	2.587mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 07:50:03 PM
2	90.01	2.595mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 07:54:34 PM

Mean Area 89.90
Mean Conc. 2.591mg/L



Sample

Sample Name: WG396994-06 MS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

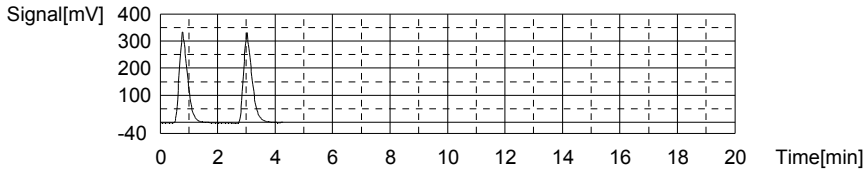
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:14.46mg/L TC:17.70mg/L IC:3.237mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	659.8	17.56mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 08:02:15 PM
2	670.2	17.84mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 08:06:36 PM

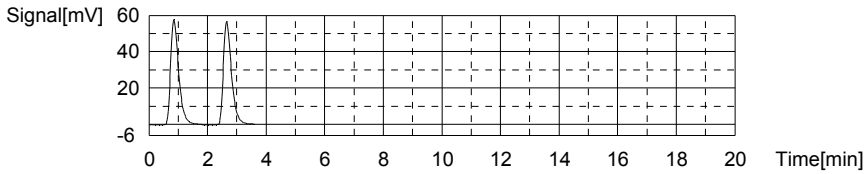
Mean Area 665.0
Mean Conc. 17.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	109.9	3.264mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 08:11:19 PM
2	108.3	3.210mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 08:15:50 PM

Mean Area 109.1
Mean Conc. 3.237mg/L



Sample

Sample Name: L12050050-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

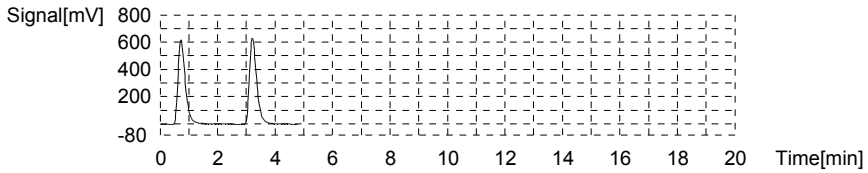
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.831mg/L TC:29.49mg/L IC:25.66mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1097	29.20mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 08:23:47 PM
2	1119	29.78mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 08:29:16 PM

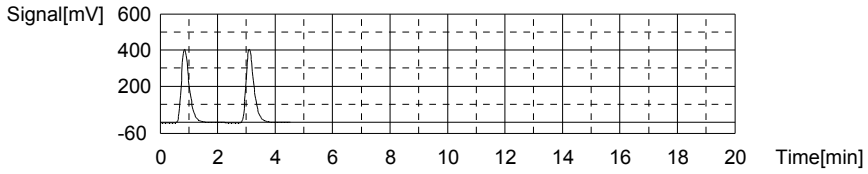
Mean Area 1108
Mean Conc. 29.49mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	776.3	25.69mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 08:34:43 PM
2	774.6	25.63mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 08:39:55 PM

Mean Area 775.5
Mean Conc. 25.66mg/L



Sample

Sample Name: L12050050-03
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

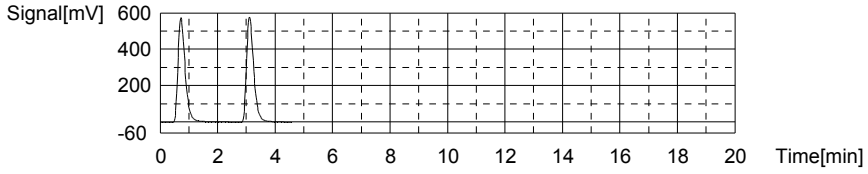
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.141mg/L TC:26.84mg/L IC:23.70mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1005	26.75mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 08:47:46 PM
2	1012	26.93mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 08:53:06 PM

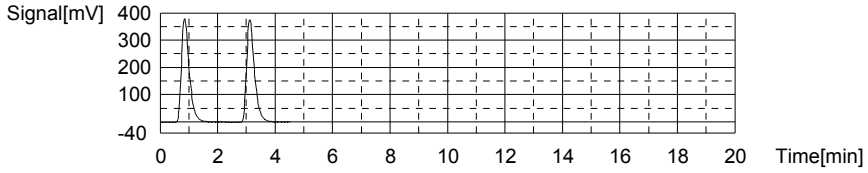
Mean Area 1009
Mean Conc. 26.84mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	719.4	23.77mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 08:58:35 PM
2	715.1	23.63mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 09:03:49 PM

Mean Area 717.3
Mean Conc. 23.70mg/L



Sample

Sample Name: <Untitled>
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

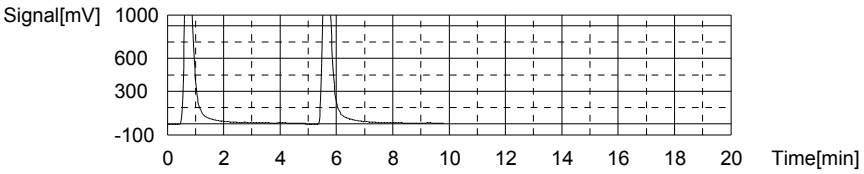
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.107mg/L TC:91.08mg/L IC:87.97mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3365	89.56mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 09:14:11 PM
2	3479	92.60mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 09:21:22 PM

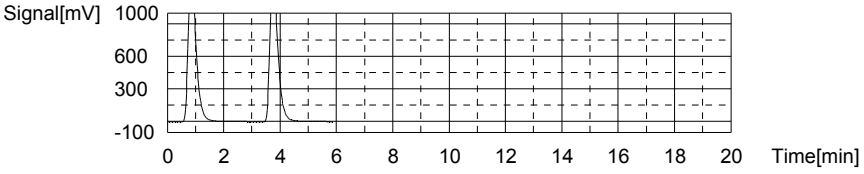
Mean Area 3422
Mean Conc. 91.08mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2632	88.12mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 09:28:02 PM
2	2623	87.82mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 09:34:23 PM

Mean Area 2628
Mean Conc. 87.97mg/L



Sample

Sample Name: L12050050-07
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

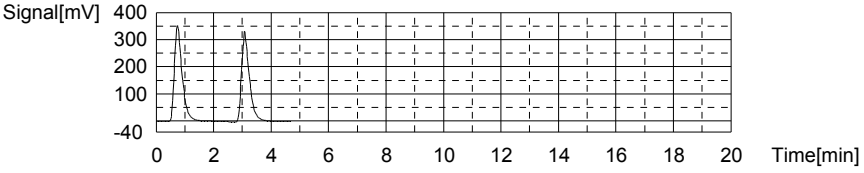
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.709mg/L TC:17.20mg/L IC:9.490mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	663.5	17.66mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 09:42:11 PM
2	629.1	16.74mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 09:47:47 PM

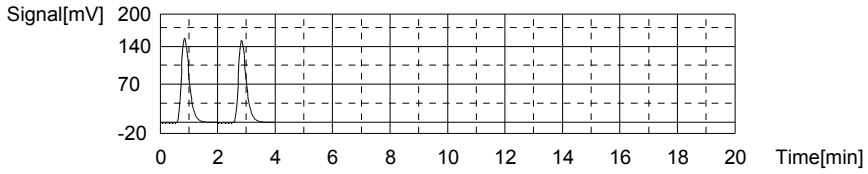
Mean Area 646.3
Mean Conc. 17.20mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	299.6	9.647mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 09:52:55 PM
2	290.3	9.334mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 09:57:45 PM

Mean Area 295.0
Mean Conc. 9.490mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

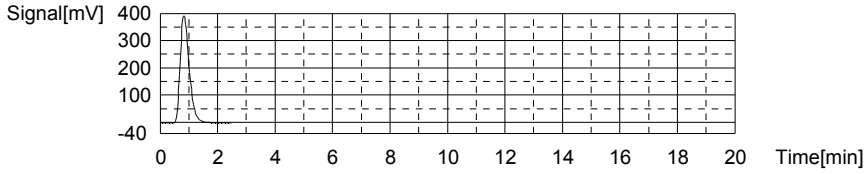
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.15mg/L TC:23.00mg/L IC:-0.1453mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	864.4	23.00mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:05:54 PM

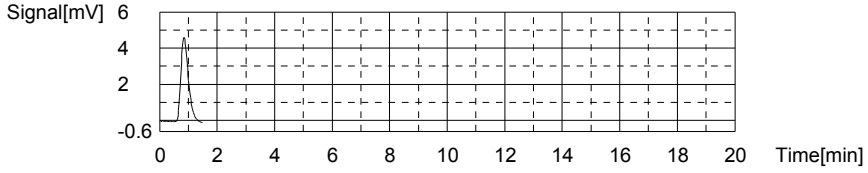
Mean Area 864.4
Mean Conc. 23.00mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.567	-0.1453mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 10:10:17 PM

Mean Area 8.567
Mean Conc. -0.1453mg/L



Sample

Sample Name: WG396996-01 BLK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

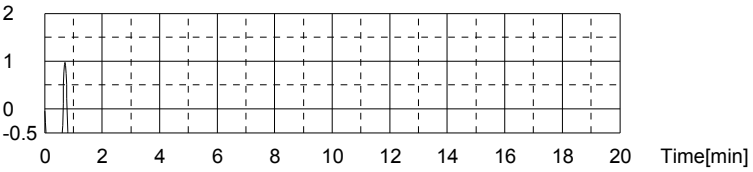
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3717mg/L TC:0.1985mg/L IC:-0.1732mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.550	0.1985mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:15:29 PM

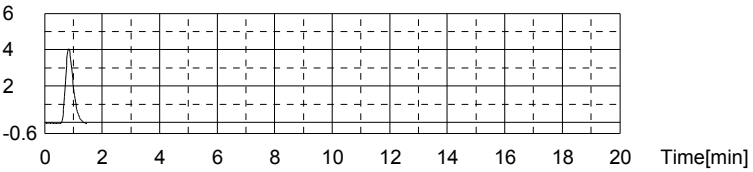
Mean Area 7.550
Mean Conc. 0.1985mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.738	-0.1732mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/04/2012 10:19:25 PM

Mean Area 7.738
Mean Conc. -0.1732mg/L



Sample

Sample Name: WG396996-02 LCS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

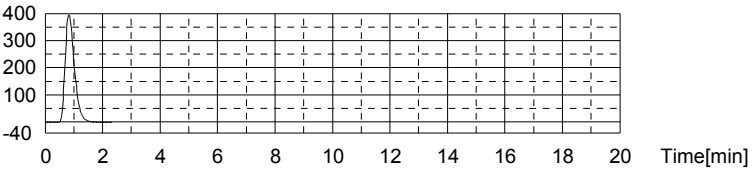
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.78mg/L TC:23.58mg/L IC:-0.1974mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	886.1	23.58mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:27:12 PM

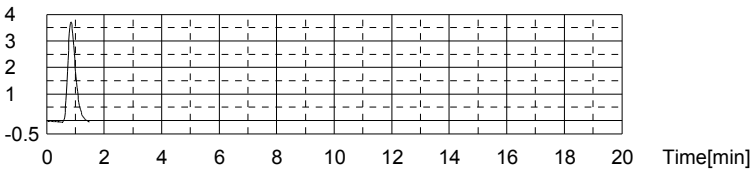
Mean Area 886.1
Mean Conc. 23.58mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.020	-0.1974mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 10:31:35 PM

Mean Area 7.020
Mean Conc. -0.1974mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

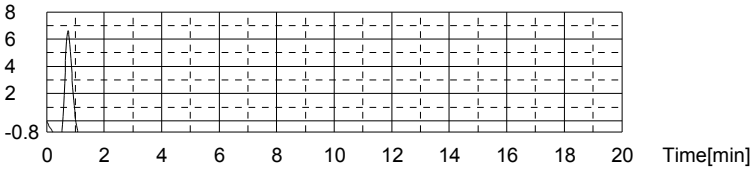
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.5722mg/L TC:0.3885mg/L IC:-0.1837mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.69	0.3885mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:38:34 PM

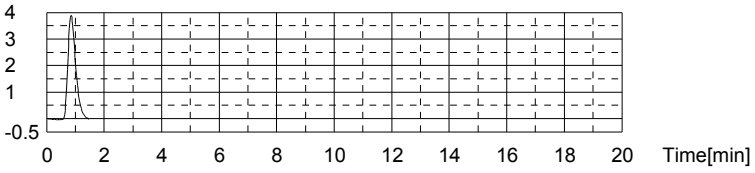
Mean Area 14.69
Mean Conc. 0.3885mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.426	-0.1837mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 10:42:55 PM

Mean Area 7.426
Mean Conc. -0.1837mg/L



Sample

Sample Name: L12050051-04
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

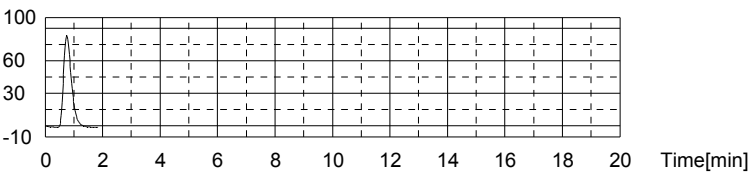
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.743mg/L TC:4.307mg/L IC:1.563mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	161.9	4.307mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 10:50:13 PM

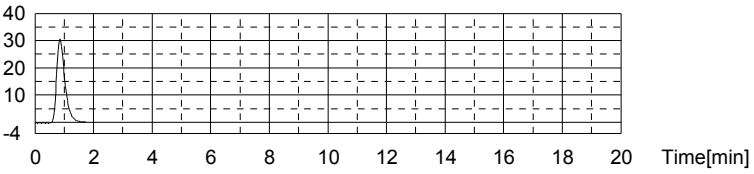
Mean Area 161.9
Mean Conc. 4.307mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.35	1.563mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/04/2012 10:54:54 PM

Mean Area 59.35
Mean Conc. 1.563mg/L



Sample

Sample Name: L12050051-05
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

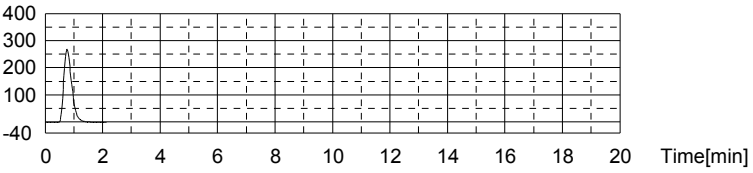
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.749mg/L TC:13.88mg/L IC:5.132mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	521.6	13.88mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 11:02:30 PM

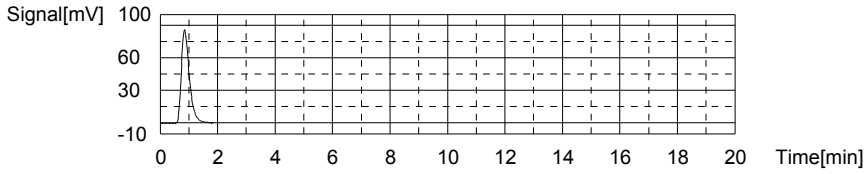
Mean Area 521.6
Mean Conc. 13.88mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	165.4	5.132mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:07:21 PM

Mean Area 165.4
Mean Conc. 5.132mg/L



Sample

Sample Name: L12050051-06
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

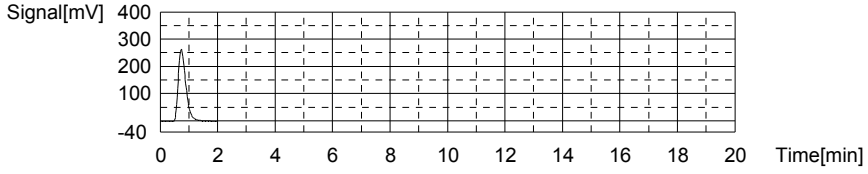
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.876mg/L TC:13.01mg/L IC:9.129mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	488.7	13.01mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 11:14:48 PM

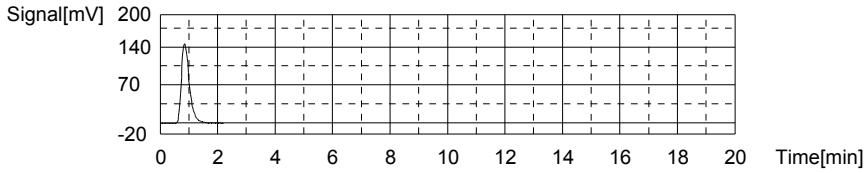
Mean Area 488.7
Mean Conc. 13.01mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	284.2	9.129mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:20:04 PM

Mean Area 284.2
Mean Conc. 9.129mg/L



Sample

Sample Name: L12050051-07
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

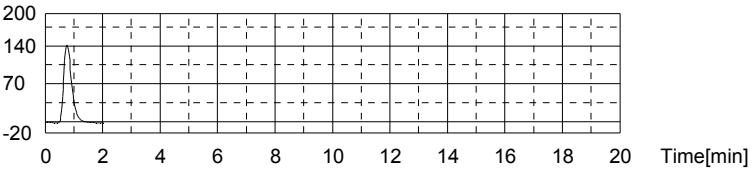
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.014mg/L TC:7.455mg/L IC:2.442mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	280.2	7.455mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 11:27:34 PM

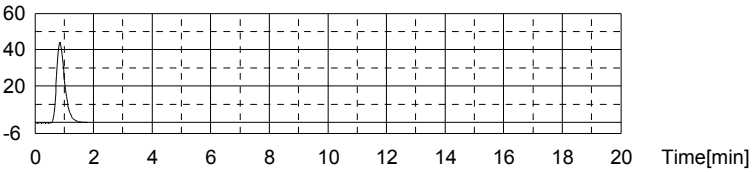
Mean Area 280.2
Mean Conc. 7.455mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.45	2.442mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/04/2012 11:32:20 PM

Mean Area 85.45
Mean Conc. 2.442mg/L



Sample

Sample Name: L12050051-08
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

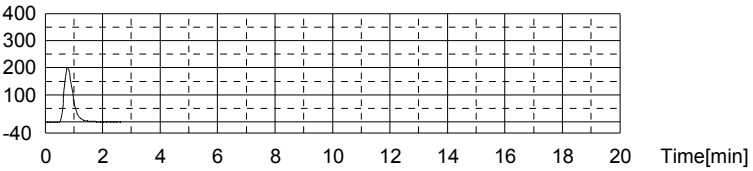
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.850mg/L TC:11.54mg/L IC:1.692mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	433.7	11.54mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 11:40:27 PM

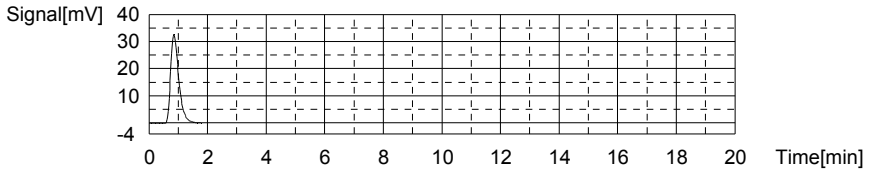
Mean Area 433.7
Mean Conc. 11.54mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.16	1.692mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:45:08 PM

Mean Area 63.16
Mean Conc. 1.692mg/L



Sample

Sample Name: L12050051-11
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

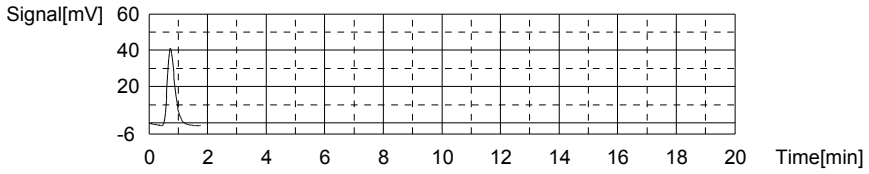
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8914mg/L TC:2.060mg/L IC:1.168mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.48	2.060mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/04/2012 11:52:21 PM

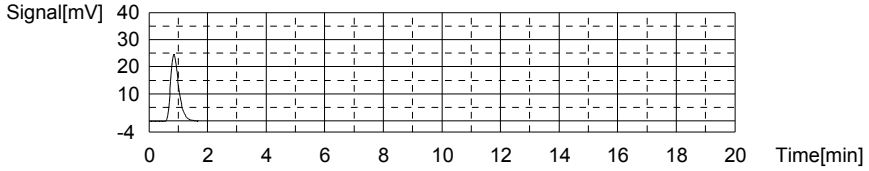
Mean Area 77.48
Mean Conc. 2.060mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.61	1.168mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/04/2012 11:56:57 PM

Mean Area 47.61
Mean Conc. 1.168mg/L



Sample

Sample Name: L12050051-12
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

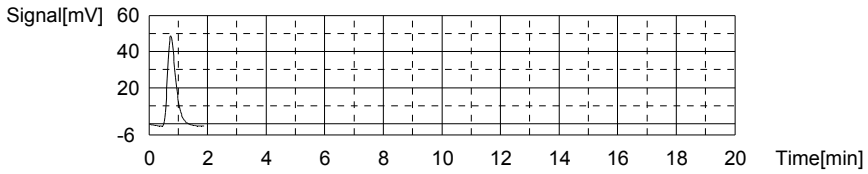
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.507mg/L TC:2.670mg/L IC:1.163mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	100.4	2.670mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 12:04:18 AM

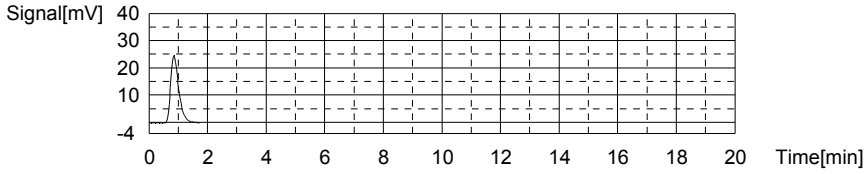
Mean Area 100.4
Mean Conc. 2.670mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.44	1.163mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 12:08:56 AM

Mean Area 47.44
Mean Conc. 1.163mg/L



Sample

Sample Name: L12050051-13
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

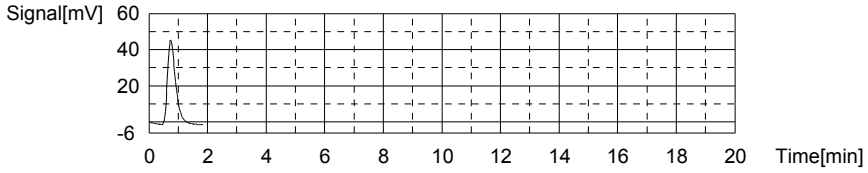
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.372mg/L TC:2.415mg/L IC:1.043mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.82	2.415mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 12:16:15 AM

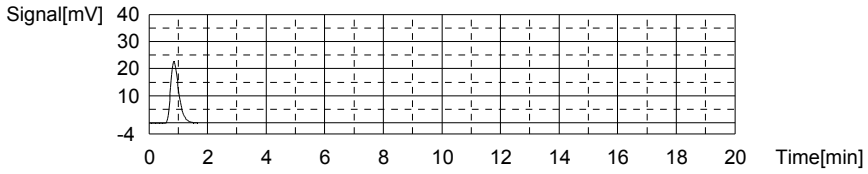
Mean Area 90.82
Mean Conc. 2.415mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.87	1.043mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 12:20:51 AM

Mean Area 43.87
Mean Conc. 1.043mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

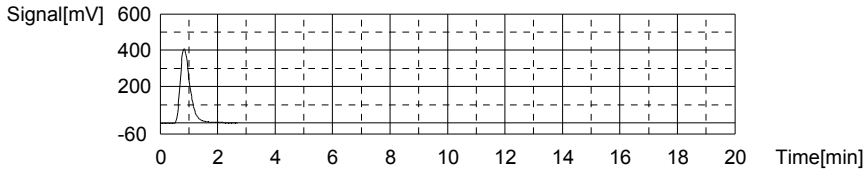
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.93mg/L TC:25.72mg/L IC:-0.2084mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	966.3	25.72mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 12:29:07 AM

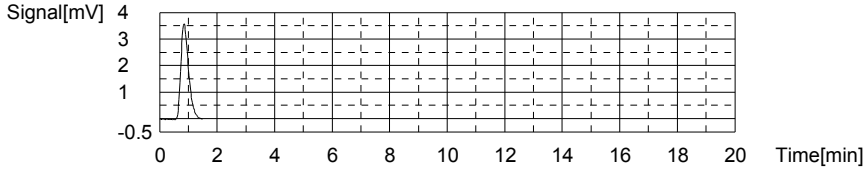
Mean Area 966.3
Mean Conc. 25.72mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.691	-0.2084mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 12:33:30 AM

Mean Area 6.691
Mean Conc. -0.2084mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

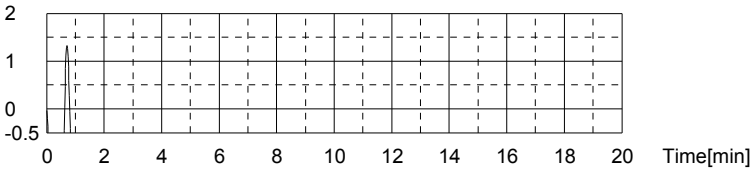
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3622mg/L TC:0.1692mg/L IC:-0.1931mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.449	0.1692mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 12:38:33 AM

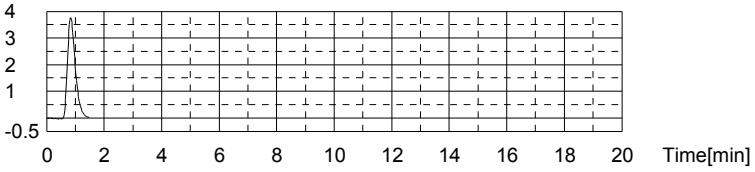
Mean Area 6.449
Mean Conc. 0.1692mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.148	-0.1931mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 12:42:27 AM

Mean Area 7.148
Mean Conc. -0.1931mg/L



Sample

Sample Name: L12050052-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

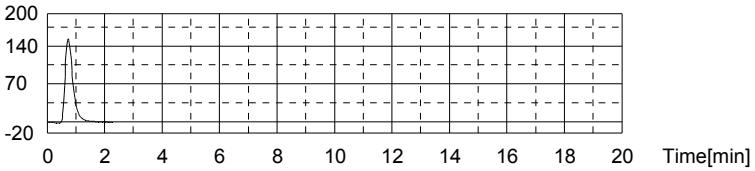
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.728mg/L TC:7.940mg/L IC:5.212mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	298.4	7.940mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 12:50:23 AM

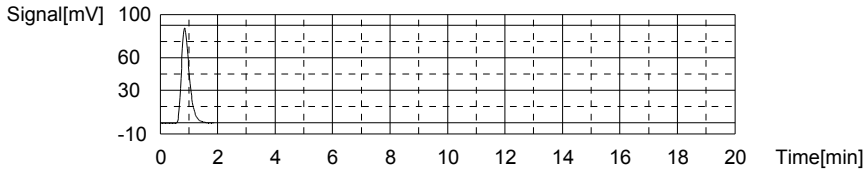
Mean Area 298.4
Mean Conc. 7.940mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	167.8	5.212mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 12:55:12 AM

Mean Area 167.8
Mean Conc. 5.212mg/L



Sample

Sample Name: L12050052-02
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

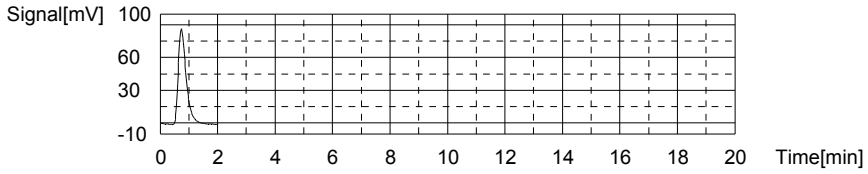
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.850mg/L TC:4.504mg/L IC:2.654mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	169.3	4.504mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 01:02:41 AM

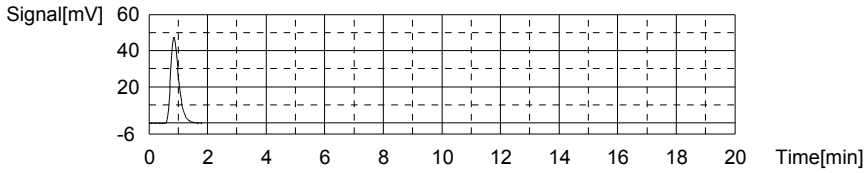
Mean Area 169.3
Mean Conc. 4.504mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.77	2.654mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 01:07:25 AM

Mean Area 91.77
Mean Conc. 2.654mg/L



Sample

Sample Name: L12050052-03
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

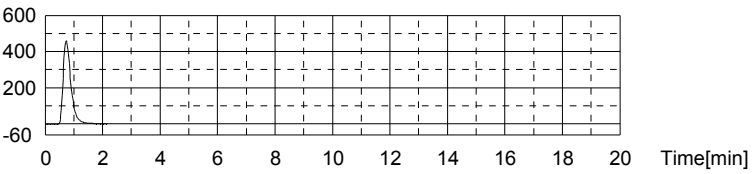
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.311mg/L TC:23.05mg/L IC:17.74mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	866.2	23.05mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 01:15:04 AM

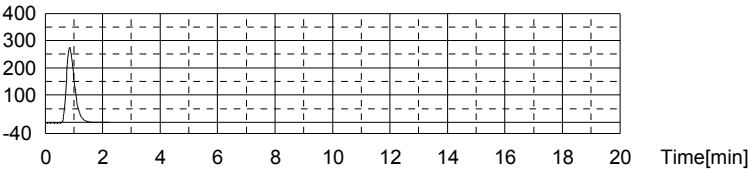
Mean Area 866.2
Mean Conc. 23.05mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	540.2	17.74mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 01:20:22 AM

Mean Area 540.2
Mean Conc. 17.74mg/L



Sample

Sample Name: L12050052-04
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

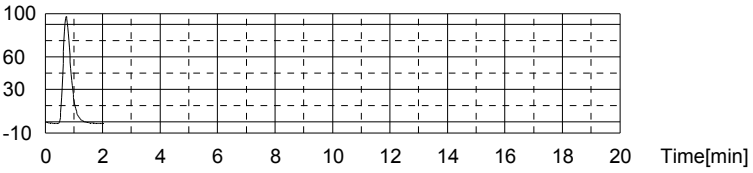
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.901mg/L TC:4.980mg/L IC:3.079mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	187.2	4.980mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 01:27:53 AM

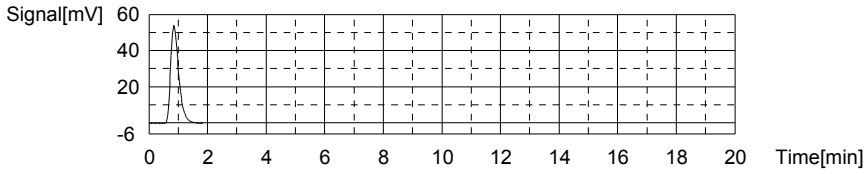
Mean Area 187.2
Mean Conc. 4.980mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.4	3.079mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 01:32:42 AM

Mean Area 104.4
Mean Conc. 3.079mg/L



Sample

Sample Name: L12050052-05
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

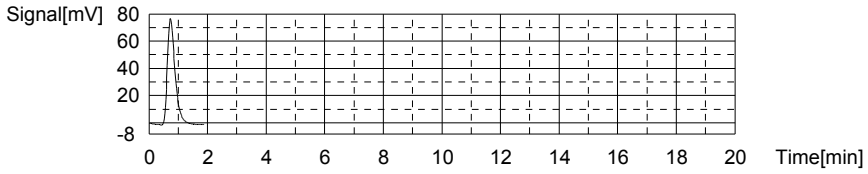
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.384mg/L TC:3.820mg/L IC:2.435mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	143.6	3.820mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 01:40:03 AM

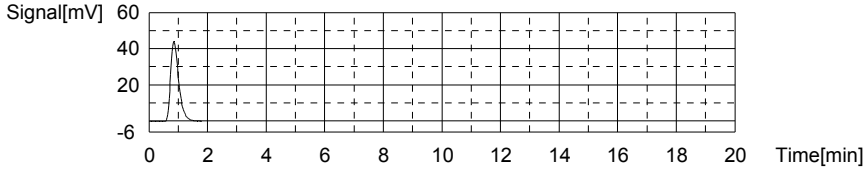
Mean Area 143.6
Mean Conc. 3.820mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.27	2.435mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 01:44:48 AM

Mean Area 85.27
Mean Conc. 2.435mg/L



Sample

Sample Name: L12050052-06 (15)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

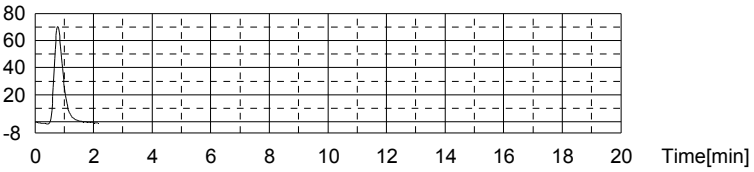
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.503mg/L TC:4.080mg/L IC:0.5775mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	153.4	4.080mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 01:52:27 AM

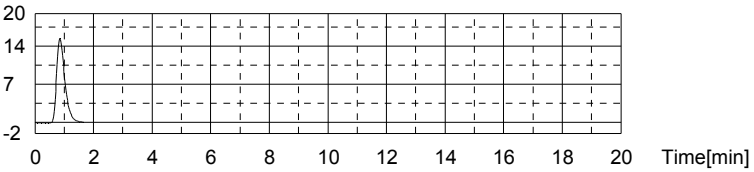
Mean Area 153.4
Mean Conc. 4.080mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.05	0.5775mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 01:57:00 AM

Mean Area 30.05
Mean Conc. 0.5775mg/L



Sample

Sample Name: L12050052-07
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

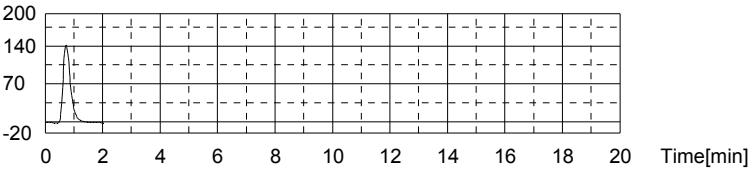
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.089mg/L TC:6.931mg/L IC:4.842mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	260.5	6.931mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 02:04:35 AM

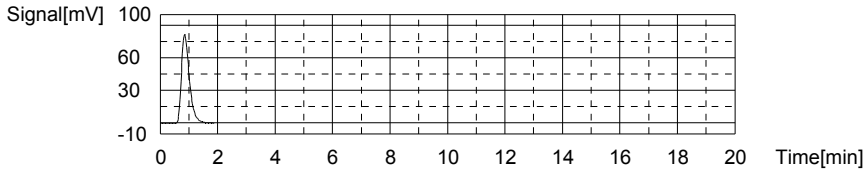
Mean Area 260.5
Mean Conc. 6.931mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	156.8	4.842mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 02:09:27 AM

Mean Area 156.8
Mean Conc. 4.842mg/L



Sample

Sample Name: L12050052-08
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

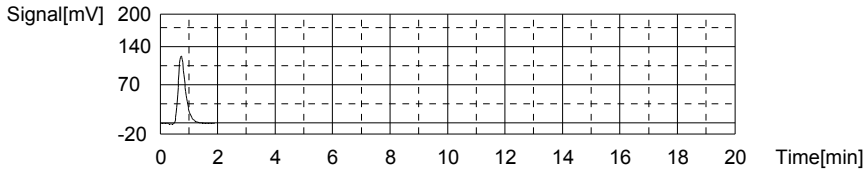
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.965mg/L TC:5.960mg/L IC:3.994mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	224.0	5.960mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 02:16:53 AM

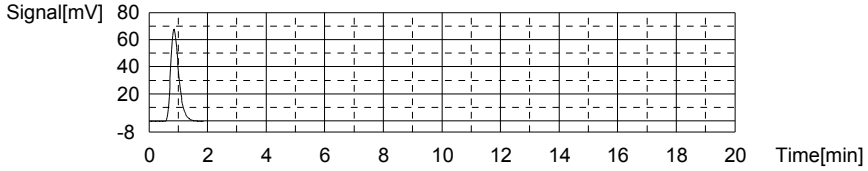
Mean Area 224.0
Mean Conc. 5.960mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	131.6	3.994mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 02:21:49 AM

Mean Area 131.6
Mean Conc. 3.994mg/L



Sample

Sample Name: L12050052-09 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

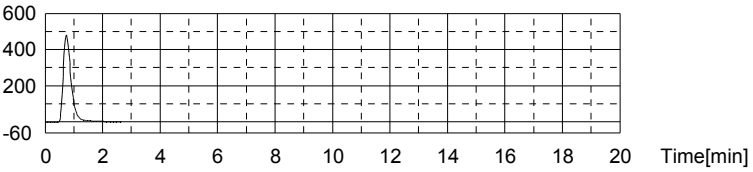
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.127mg/L TC:24.54mg/L IC:16.41mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	922.1	24.54mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 02:30:05 AM

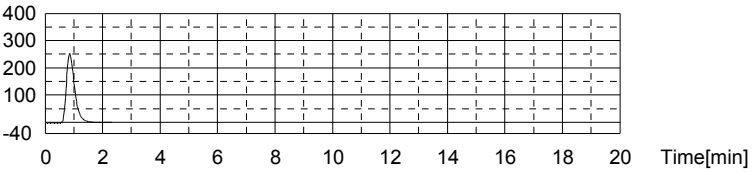
Mean Area 922.1
Mean Conc. 24.54mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	500.7	16.41mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 02:35:33 AM

Mean Area 500.7
Mean Conc. 16.41mg/L



Sample

Sample Name: L12050052-10
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

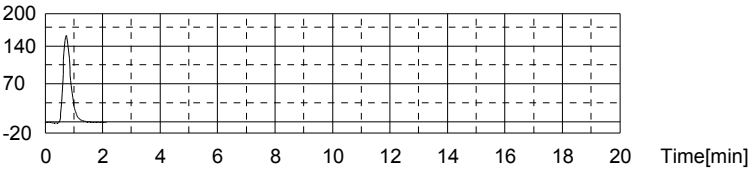
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.283mg/L TC:8.017mg/L IC:5.734mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	301.3	8.017mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 02:43:18 AM

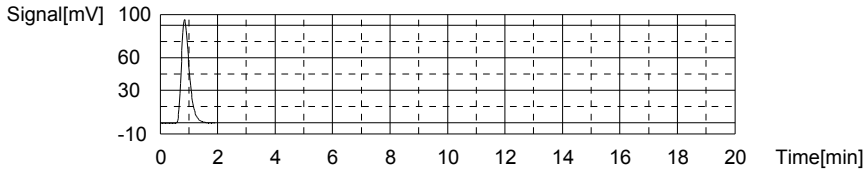
Mean Area 301.3
Mean Conc. 8.017mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	183.3	5.734mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 02:48:13 AM

Mean Area 183.3
Mean Conc. 5.734mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

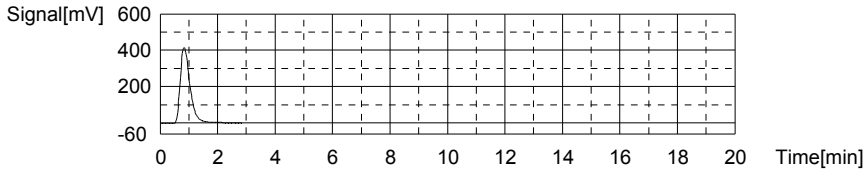
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:26.34mg/L TC:26.15mg/L IC:-0.1933mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	982.4	26.15mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 02:56:43 AM

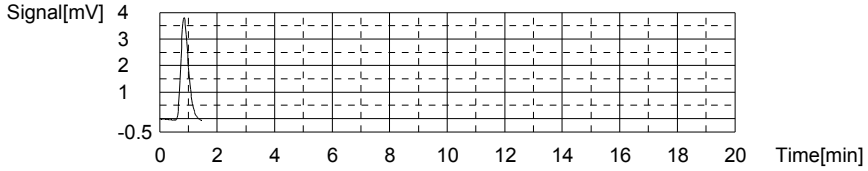
Mean Area 982.4
Mean Conc. 26.15mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.140	-0.1933mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 03:01:04 AM

Mean Area 7.140
Mean Conc. -0.1933mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

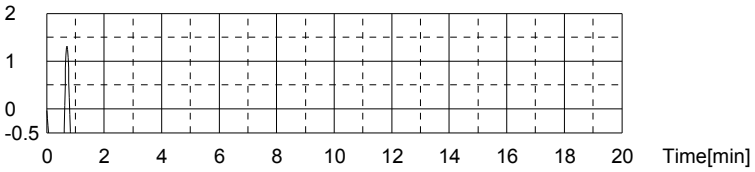
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3477mg/L TC:0.1656mg/L IC:-0.1821mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.315	0.1656mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 03:06:09 AM

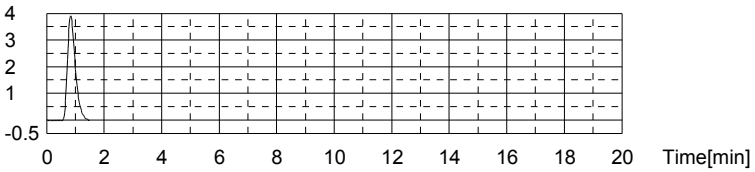
Mean Area 6.315
Mean Conc. 0.1656mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.475	-0.1821mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 03:10:04 AM

Mean Area 7.475
Mean Conc. -0.1821mg/L



Sample

Sample Name: L12050052-11
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

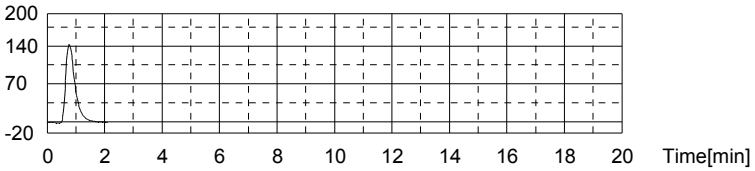
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.859mg/L TC:8.701mg/L IC:2.842mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	327.0	8.701mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 03:17:40 AM

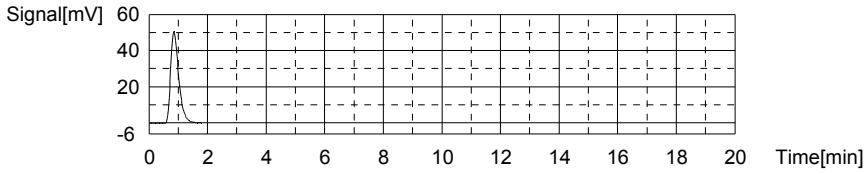
Mean Area 327.0
Mean Conc. 8.701mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	97.36	2.842mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 03:22:23 AM

Mean Area 97.36
Mean Conc. 2.842mg/L



Sample

Sample Name: L12050052-12
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

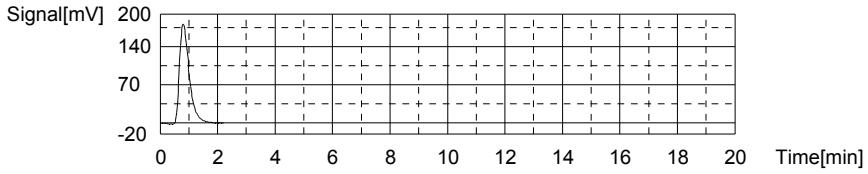
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.51mg/L TC:11.56mg/L IC:1.046mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	434.4	11.56mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 03:30:17 AM

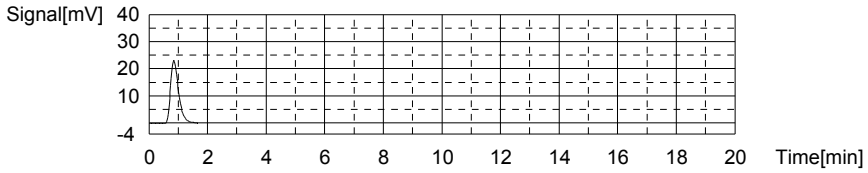
Mean Area 434.4
Mean Conc. 11.56mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.98	1.046mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 03:34:51 AM

Mean Area 43.98
Mean Conc. 1.046mg/L



Sample

Sample Name: WG396996-05 DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

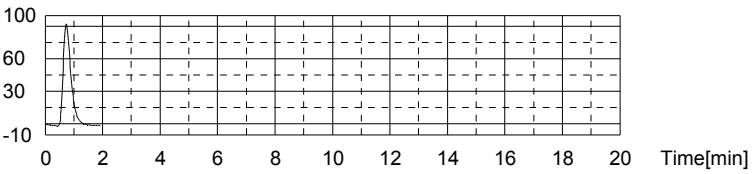
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.754mg/L TC:4.722mg/L IC:2.968mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	177.5	4.722mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 03:42:14 AM

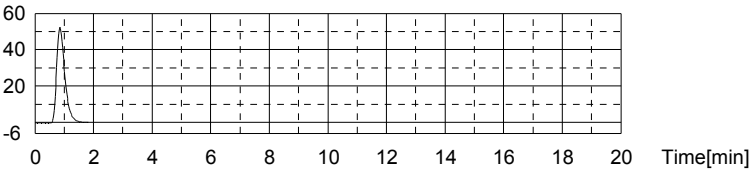
Mean Area 177.5
Mean Conc. 4.722mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	101.1	2.968mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 03:47:01 AM

Mean Area 101.1
Mean Conc. 2.968mg/L



Sample

Sample Name: WG396996-06 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

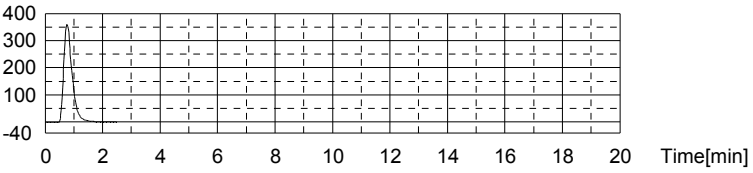
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:11.90mg/L TC:19.59mg/L IC:7.692mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	736.1	19.59mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 03:54:59 AM

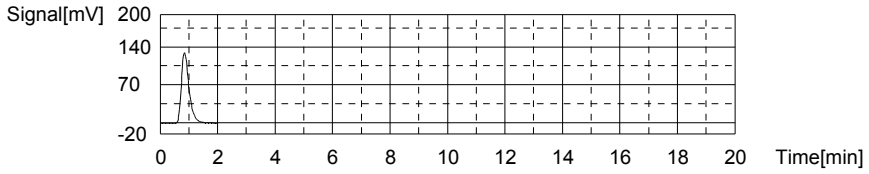
Mean Area 736.1
Mean Conc. 19.59mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	241.5	7.692mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 04:00:00 AM

Mean Area 241.5
Mean Conc. 7.692mg/L



Sample

Sample Name: DISS BLK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

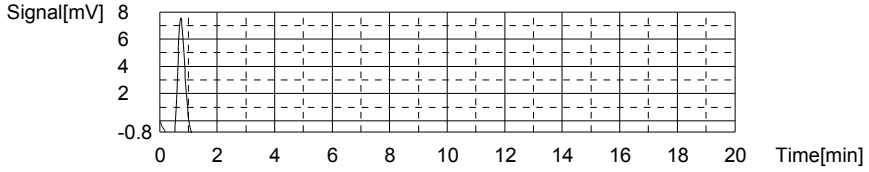
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.6021mg/L TC:0.4343mg/L IC:-0.1678mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.41	0.4343mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 04:06:59 AM

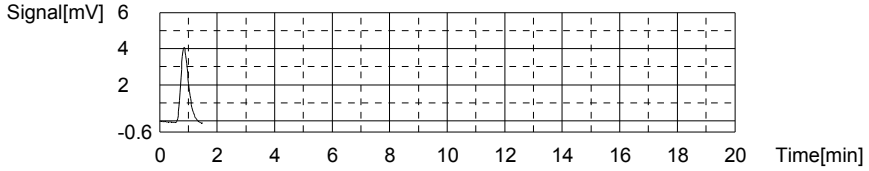
Mean Area 16.41
Mean Conc. 0.4343mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.898	-0.1678mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 04:11:24 AM

Mean Area 7.898
Mean Conc. -0.1678mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

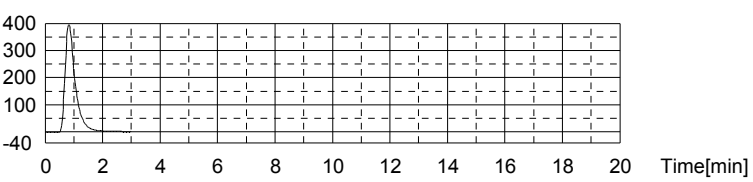
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.96mg/L TC:25.74mg/L IC:-0.2119mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	967.3	25.74mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 04:19:51 AM

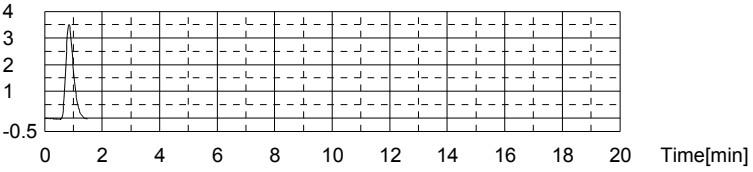
Mean Area 967.3
Mean Conc. 25.74mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.588	-0.2119mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 04:24:11 AM

Mean Area 6.588
Mean Conc. -0.2119mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

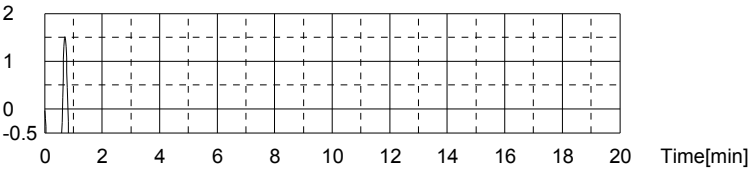
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3815mg/L TC:0.1895mg/L IC:-0.1920mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.212	0.1895mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 04:29:14 AM

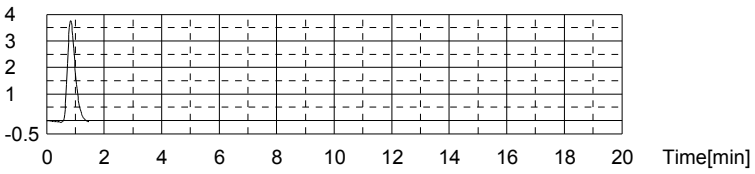
Mean Area 7.212
Mean Conc. 0.1895mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.178	-0.1920mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 04:33:08 AM

Mean Area 7.178
Mean Conc. -0.1920mg/L



Sample

Sample Name: L12040963-05 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

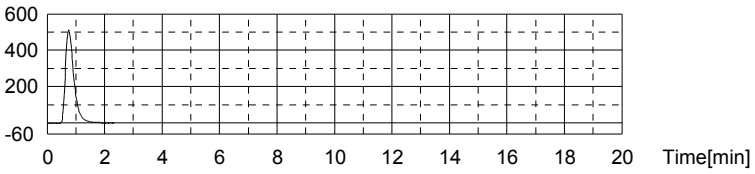
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.70mg/L TC:27.89mg/L IC:15.20mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1048	27.89mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 08:58:15 AM

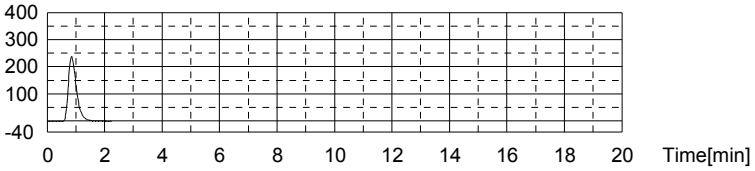
Mean Area 1048
Mean Conc. 27.89mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	464.5	15.20mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 09:03:35 AM

Mean Area 464.5
Mean Conc. 15.20mg/L



Sample

Sample Name: L12050050-05 (5)
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

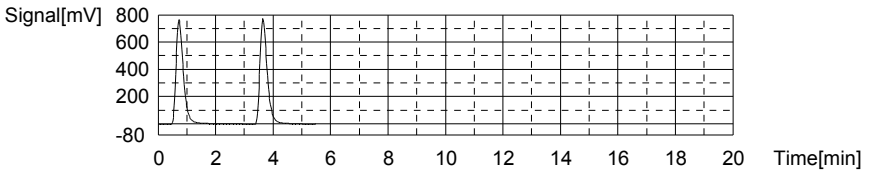
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.848mg/L TC:36.62mg/L IC:27.77mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1370	36.46mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 09:12:08 AM
2	1382	36.78mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 09:17:50 AM

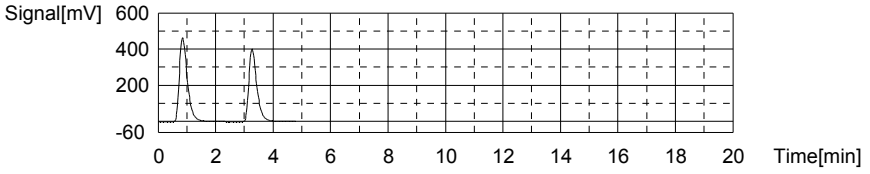
Mean Area 1376
Mean Conc. 36.62mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	902.1	29.92mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 09:23:31 AM
2	774.6	25.63mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 09:28:49 AM

Mean Area 838.4
Mean Conc. 27.77mg/L



Sample

Sample Name: WG396996-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

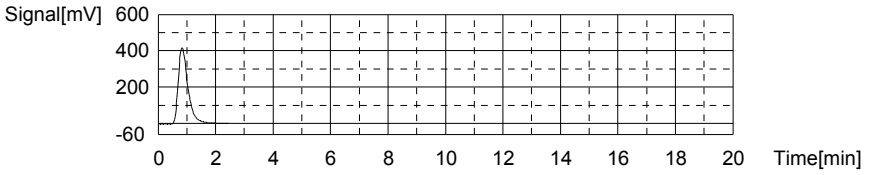
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:26.06mg/L TC:25.98mg/L IC:-0.08195mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	976.0	25.98mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 09:36:44 AM

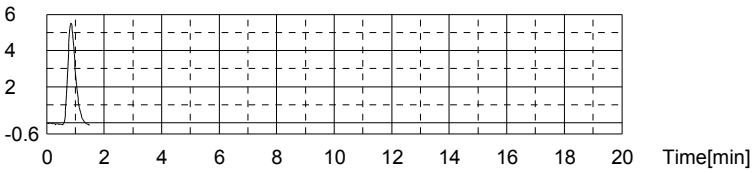
Mean Area 976.0
Mean Conc. 25.98mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.45	-0.08195mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 09:41:10 AM

Mean Area 10.45
Mean Conc. -0.08195mg/L



Sample

Sample Name: L12050052-06 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

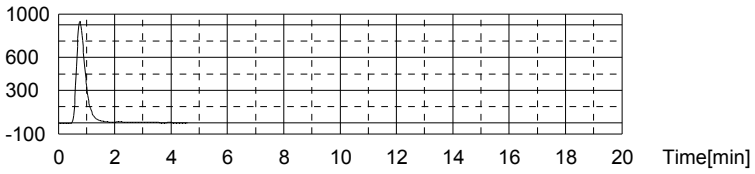
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:23.72mg/L TC:56.21mg/L IC:32.50mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2112	56.21mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 09:51:26 AM

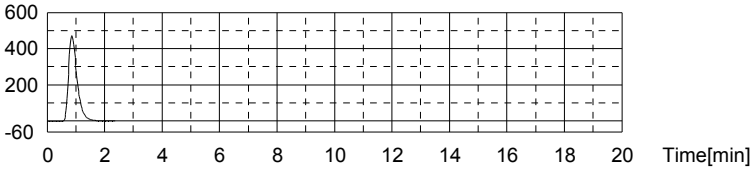
Mean Area 2112
Mean Conc. 56.21mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	978.7	32.50mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 09:57:05 AM

Mean Area 978.7
Mean Conc. 32.50mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

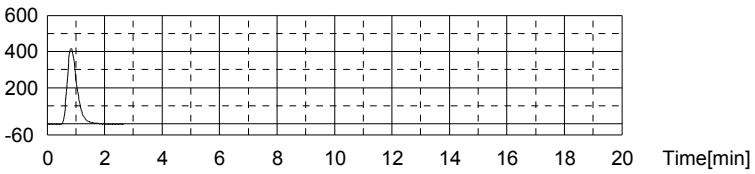
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:26.70mg/L TC:26.61mg/L IC:-0.09037mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	999.8	26.61mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 10:05:27 AM

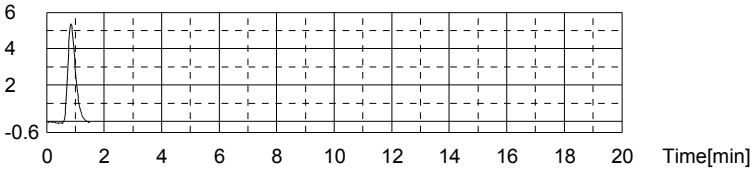
Mean Area 999.8
Mean Conc. 26.61mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.20	-0.09037mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_0	5/05/2012 10:09:53 AM

Mean Area 10.20
Mean Conc. -0.09037mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

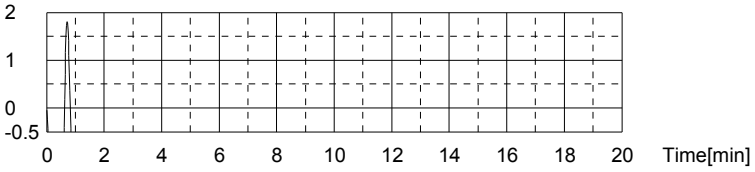
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4022mg/L TC:0.2312mg/L IC:-0.1710mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.779	0.2312mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/05/2012 10:15:02 AM

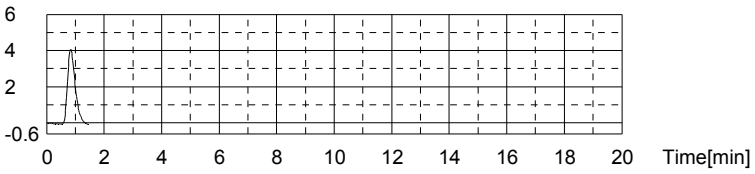
Mean Area 8.779
Mean Conc. 0.2312mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.803	-0.1710mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/05/2012 10:18:59 AM

Mean Area 7.803
Mean Conc. -0.1710mg/L



WORKGROUP: WG396600

396601

Total Organic Carbon

MAKE DAILY

CCV (TOC): std 48750 / (5/200)(1000) = 25mg/L

LCS (TOC): std 50286 / (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: R01 17216 / R01 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

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	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	

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		
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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:-0.300	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

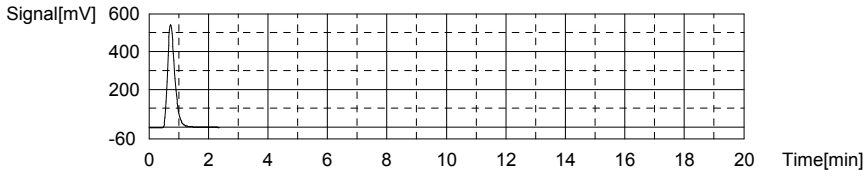
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.330mg/L TC:24.95mg/L IC:23.62mg/L

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

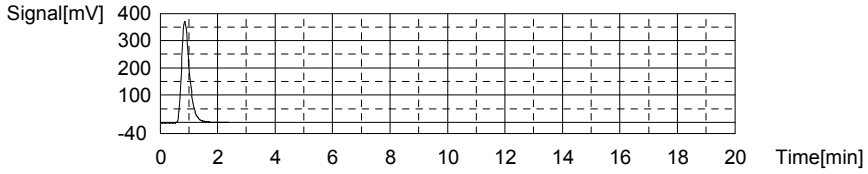
Mean Area 937.6
Mean Conc. 24.95mg/L



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

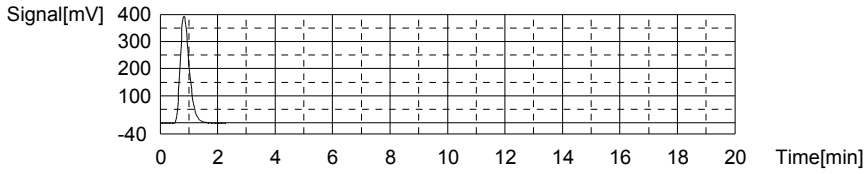
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.48mg/L TC:23.25mg/L IC:-0.2257mg/L

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

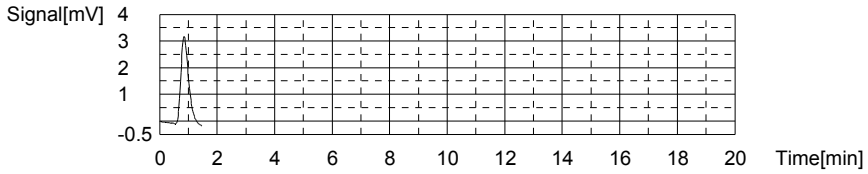
Mean Area 873.7
Mean Conc. 23.25mg/L



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

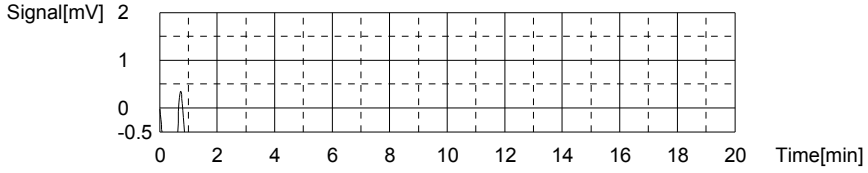
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4515mg/L TC:0.1155mg/L IC:-0.3360mg/L

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

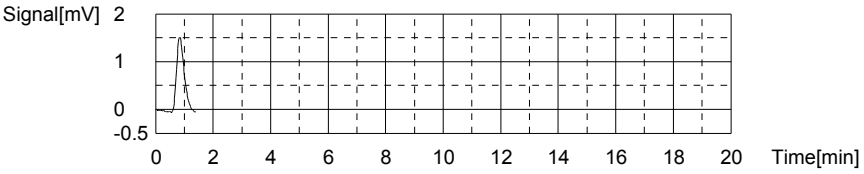
Mean Area 4.432
Mean Conc. 0.1155mg/L



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

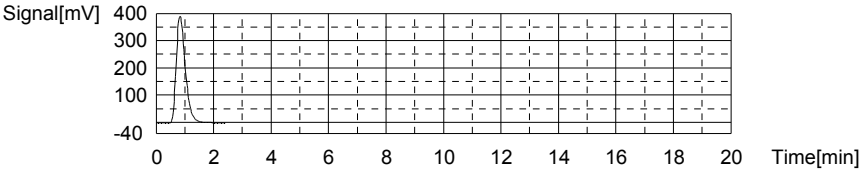
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.15mg/L TC:22.89mg/L IC:-0.2660mg/L

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

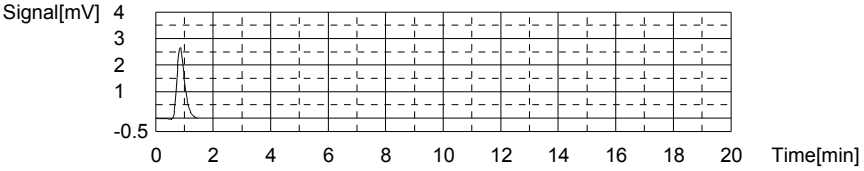
Mean Area 859.9
Mean Conc. 22.89mg/L



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

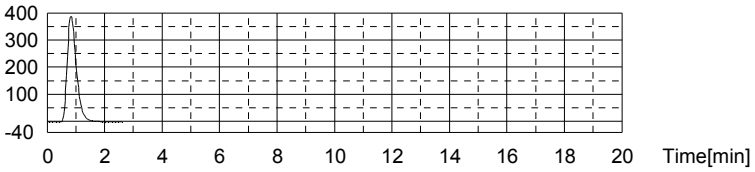
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.22mg/L TC:22.96mg/L IC:-0.2649mg/L

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

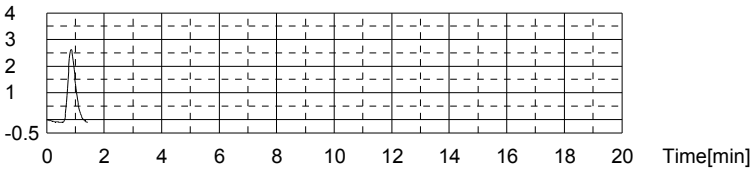
Mean Area 862.7
Mean Conc. 22.96mg/L



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

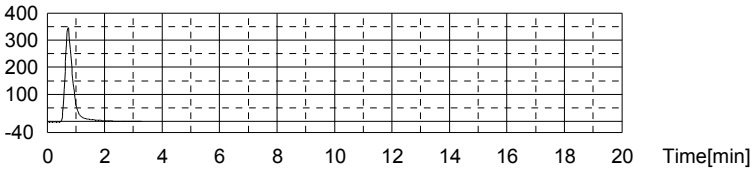
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.942mg/L TC:17.34mg/L IC:13.40mg/L

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

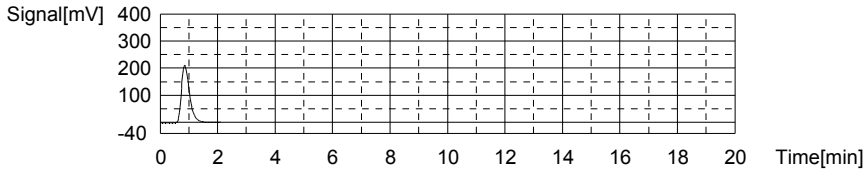
Mean Area 651.6
Mean Conc. 17.34mg/L



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

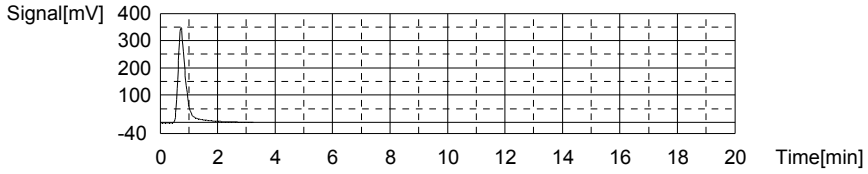
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.770mg/L TC:17.50mg/L IC:13.73mg/L

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

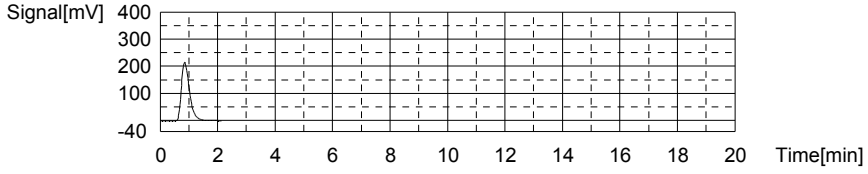
Mean Area 657.5
Mean Conc. 17.50mg/L



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

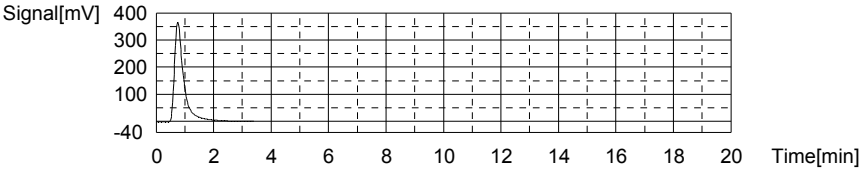
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.20mg/L TC:21.99mg/L IC:9.792mg/L

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

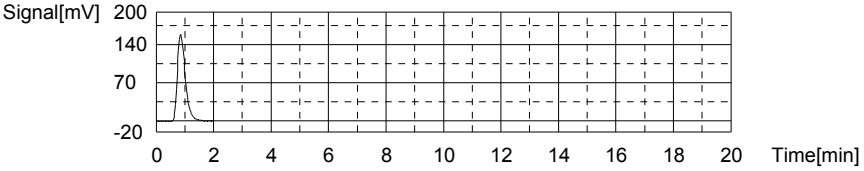
Mean Area 826.3
Mean Conc. 21.99mg/L



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

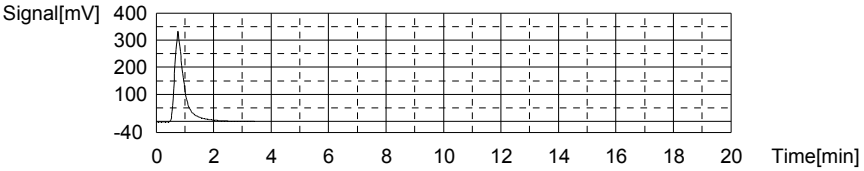
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.03mg/L TC:20.00mg/L IC:7.971mg/L

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

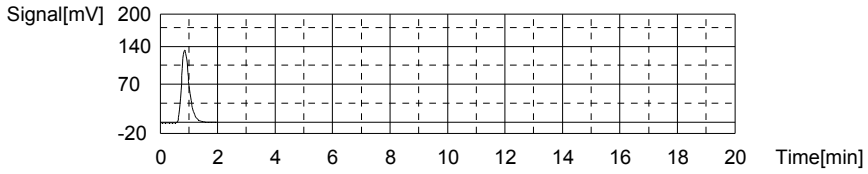
Mean Area 751.4
Mean Conc. 20.00mg/L



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

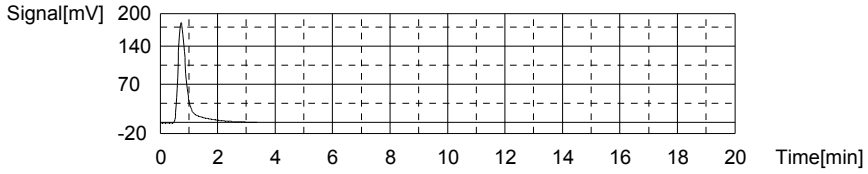
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.428mg/L TC:10.60mg/L IC:7.174mg/L

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

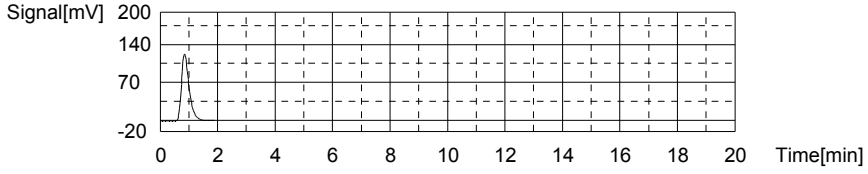
Mean Area 398.4
Mean Conc. 10.60mg/L



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

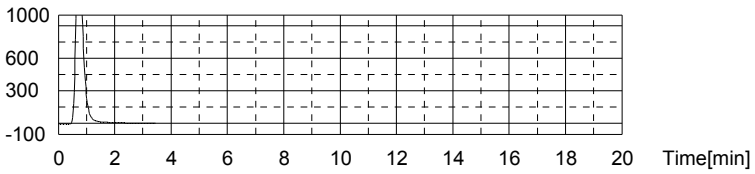
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-1.008mg/L TC:70.29mg/L IC:71.30mg/L

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

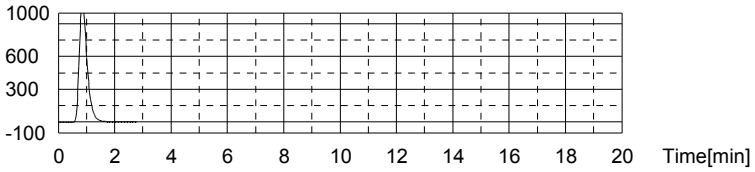
Mean Area 2641
Mean Conc. 70.29mg/L



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

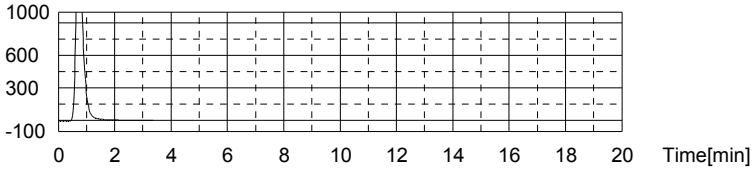
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-0.1197mg/L TC:68.46mg/L IC:68.57mg/L

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

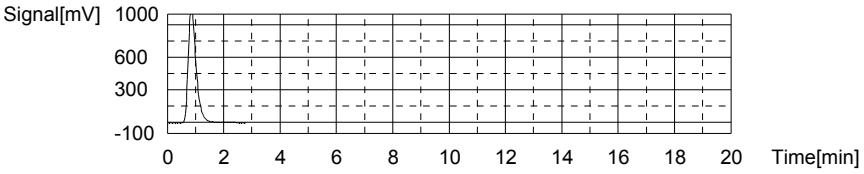
Mean Area 2572
Mean Conc. 68.46mg/L



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

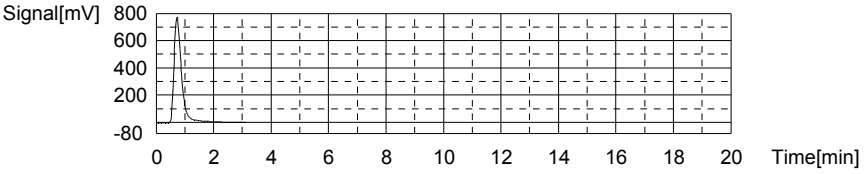
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.557mg/L TC:37.69mg/L IC:32.13mg/L

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

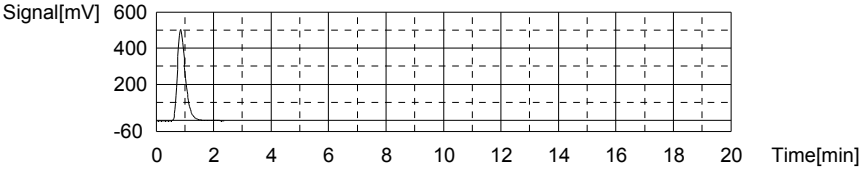
Mean Area 1416
Mean Conc. 37.69mg/L



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

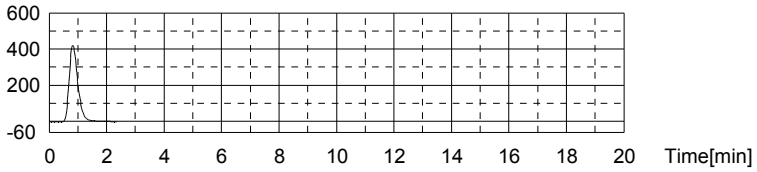
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.60mg/L TC:23.52mg/L IC:-0.07893mg/L

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

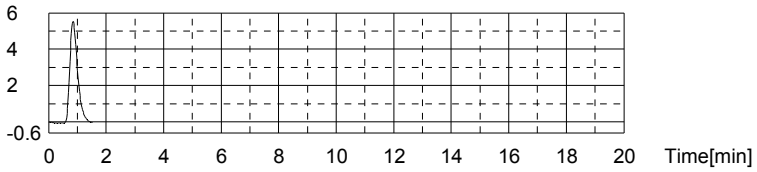
Mean Area 883.7
Mean Conc. 23.52mg/L



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

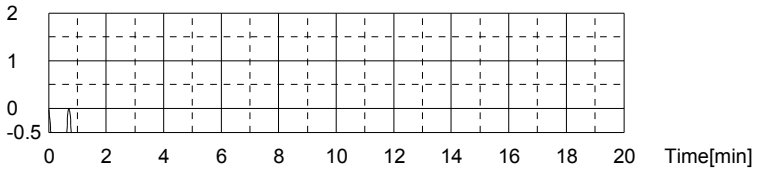
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3879mg/L TC:0.08777mg/L IC:-0.3001mg/L

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

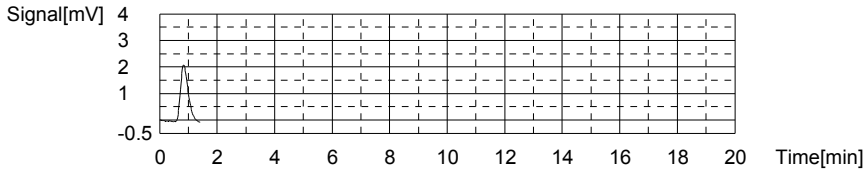
Mean Area 3.391
Mean Conc. 0.08777mg/L



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

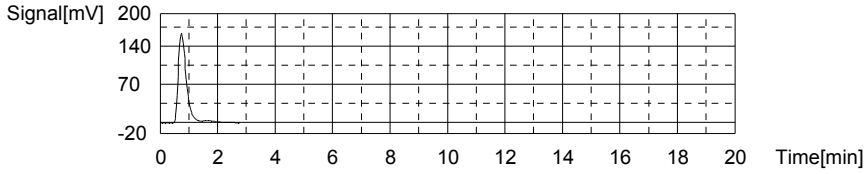
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.188mg/L TC:8.832mg/L IC:4.644mg/L

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

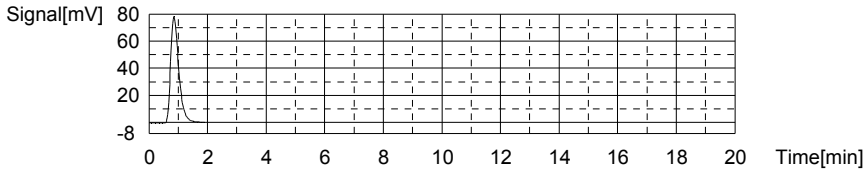
Mean Area 331.9
Mean Conc. 8.832mg/L



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

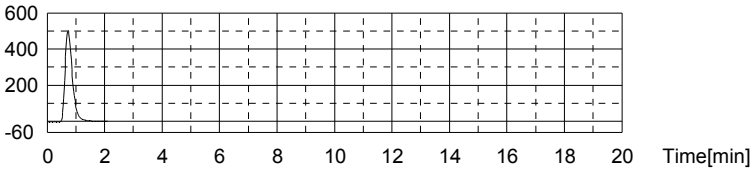
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.994mg/L TC:23.76mg/L IC:19.76mg/L

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

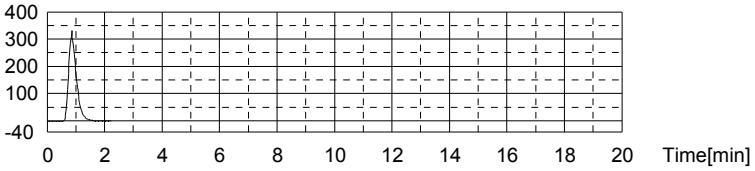
Mean Area 892.7
Mean Conc. 23.76mg/L



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

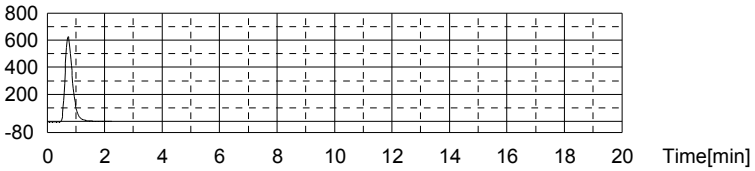
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.212mg/L TC:29.86mg/L IC:24.65mg/L

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

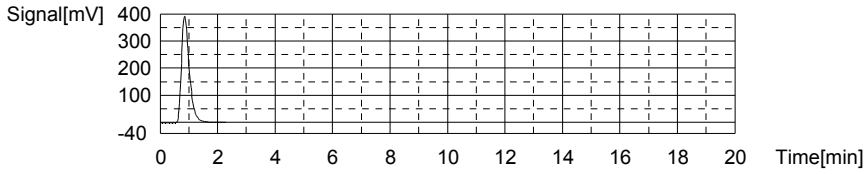
Mean Area 1122
Mean Conc. 29.86mg/L



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

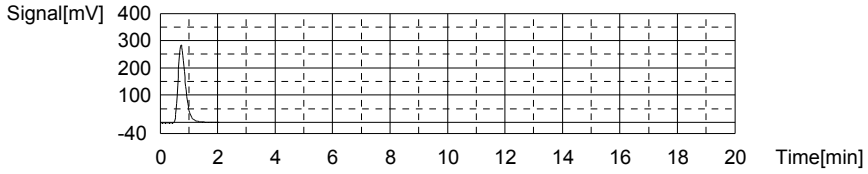
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.285mg/L TC:13.56mg/L IC:11.28mg/L

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

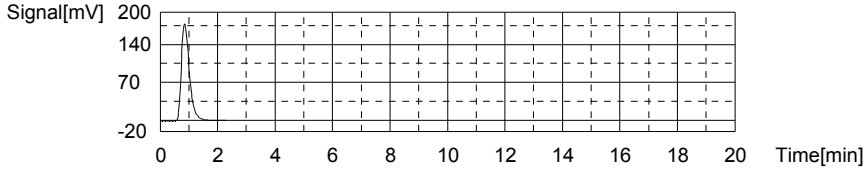
Mean Area 509.7
Mean Conc. 13.56mg/L



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

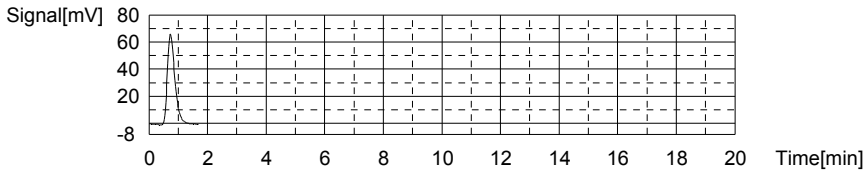
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.233mg/L TC:3.202mg/L IC:1.969mg/L

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

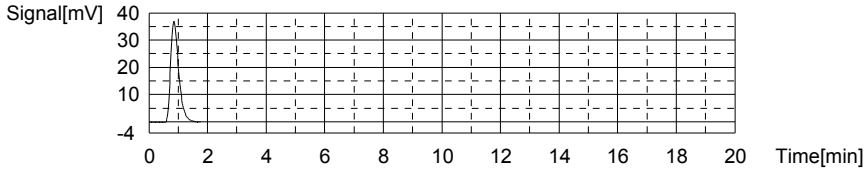
Mean Area 120.4
Mean Conc. 3.202mg/L



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

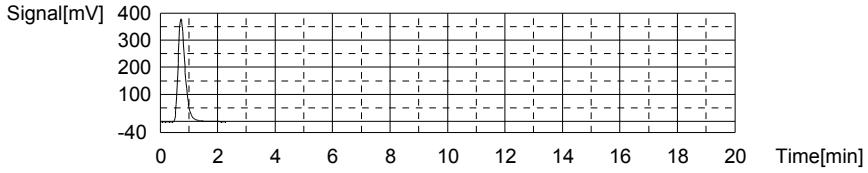
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.358mg/L TC:17.45mg/L IC:15.09mg/L

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

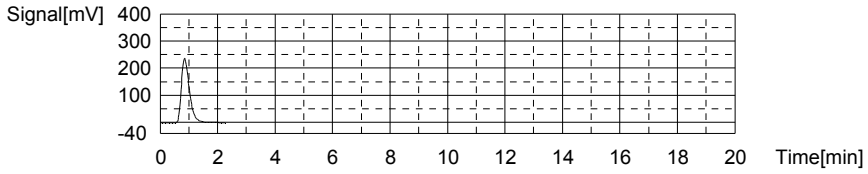
Mean Area 655.8
Mean Conc. 17.45mg/L



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

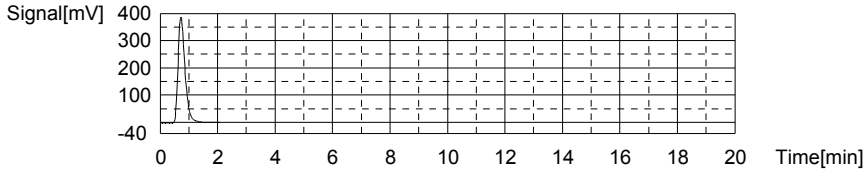
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.639mg/L TC:17.41mg/L IC:15.77mg/L

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

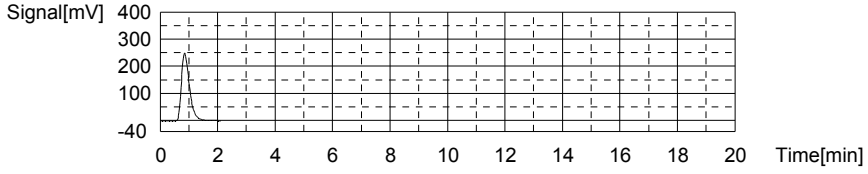
Mean Area 654.3
Mean Conc. 17.41mg/L



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

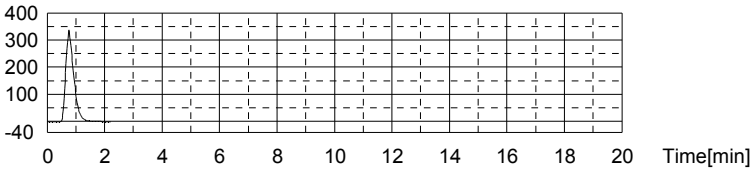
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.80mg/L TC:17.29mg/L IC:6.494mg/L

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

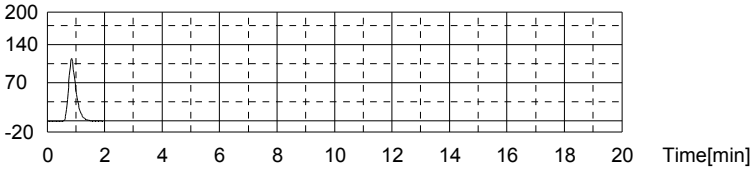
Mean Area 649.7
Mean Conc. 17.29mg/L



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

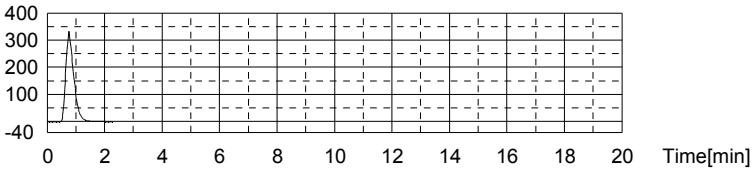
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.41mg/L TC:16.91mg/L IC:6.504mg/L

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

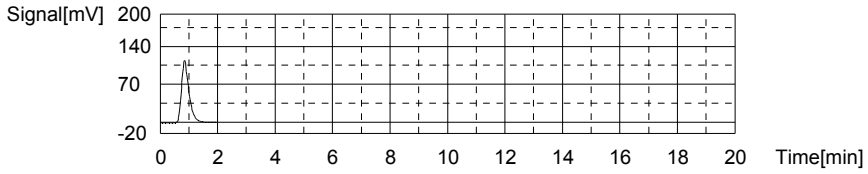
Mean Area 635.6
Mean Conc. 16.91mg/L



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

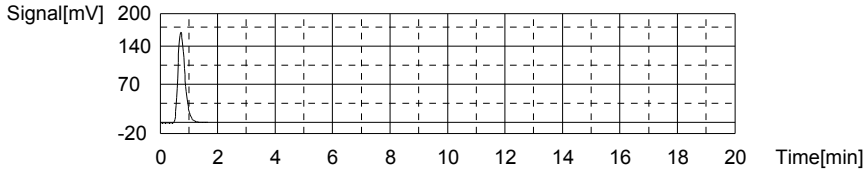
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.6818mg/L TC:7.597mg/L IC:6.915mg/L

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

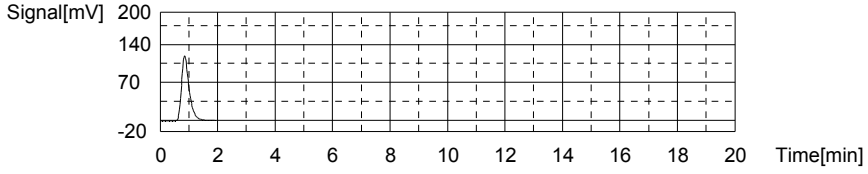
Mean Area 285.5
Mean Conc. 7.597mg/L



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

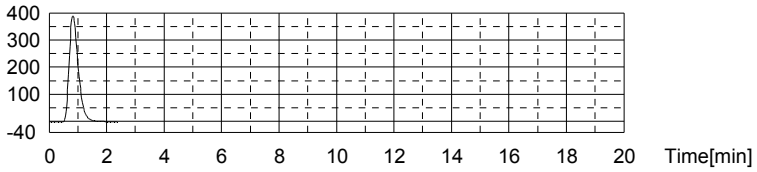
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.11mg/L TC:22.91mg/L IC:-0.2033mg/L

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

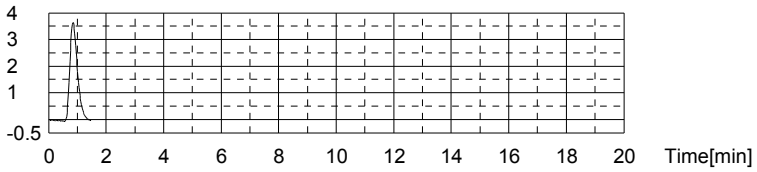
Mean Area 860.8
Mean Conc. 22.91mg/L



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

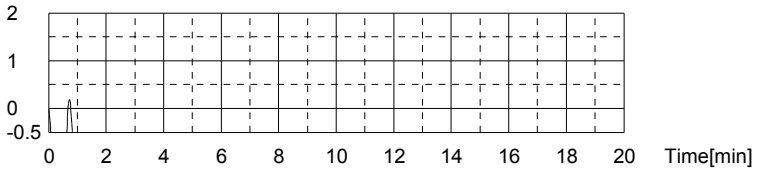
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4239mg/L TC:0.1049mg/L IC:-0.3189mg/L

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

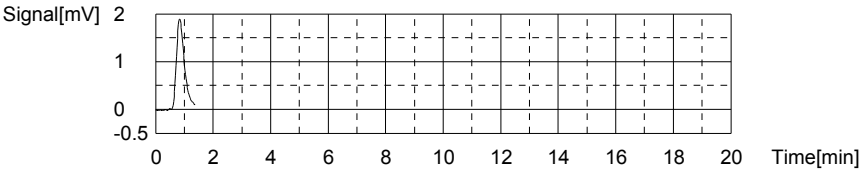
Mean Area 4.036
Mean Conc. 0.1049mg/L



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

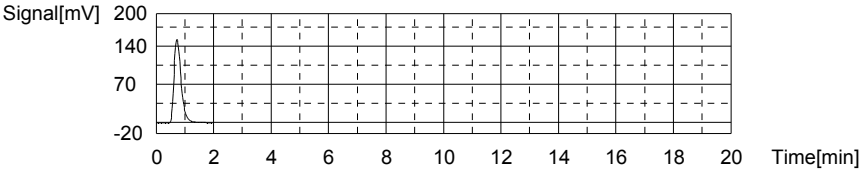
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8453mg/L TC:7.054mg/L IC:6.208mg/L

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

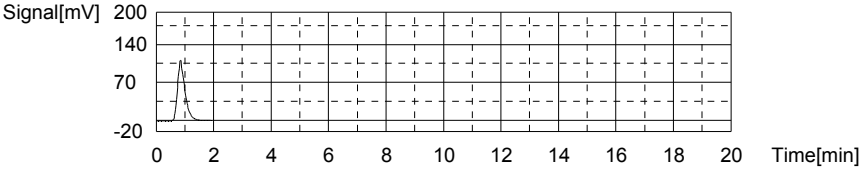
Mean Area 265.1
Mean Conc. 7.054mg/L



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

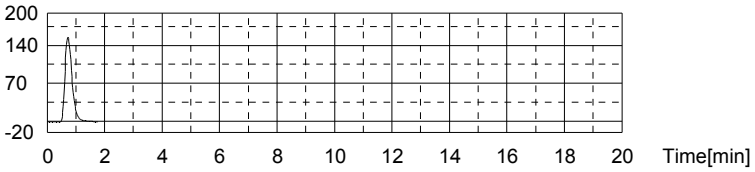
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.5666mg/L TC:7.128mg/L IC:6.561mg/L

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

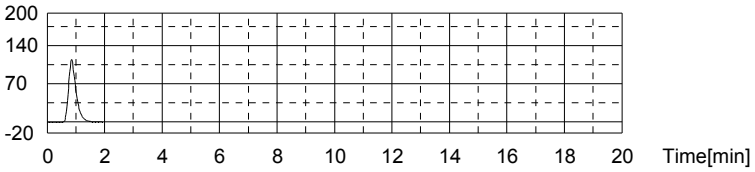
Mean Area 267.9
Mean Conc. 7.128mg/L



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

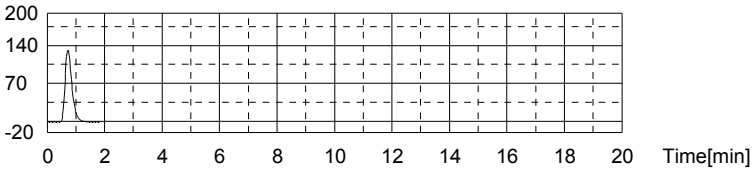
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.116mg/L TC:5.914mg/L IC:4.798mg/L

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

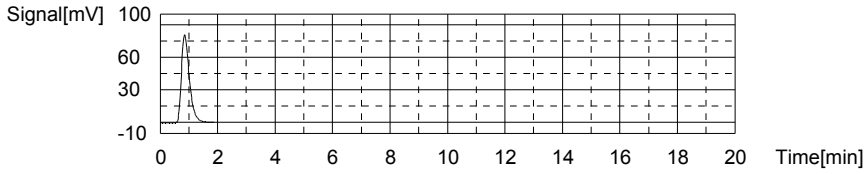
Mean Area 222.3
Mean Conc. 5.914mg/L



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

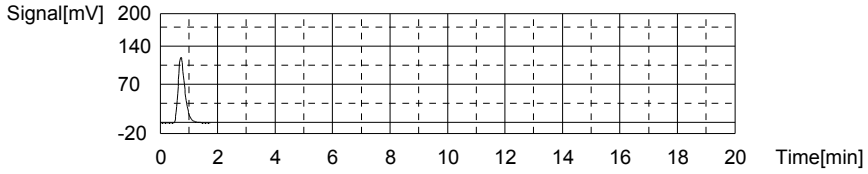
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8519mg/L TC:5.284mg/L IC:4.432mg/L

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

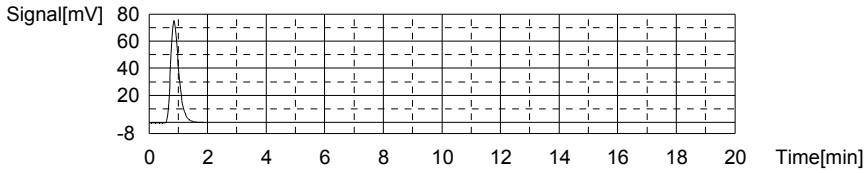
Mean Area 198.6
Mean Conc. 5.284mg/L



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

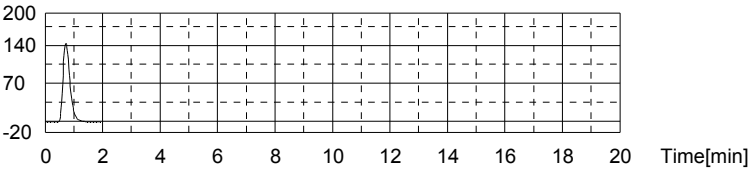
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.170mg/L TC:6.564mg/L IC:5.394mg/L

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

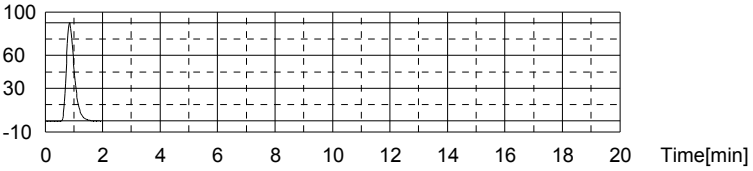
Mean Area 246.7
Mean Conc. 6.564mg/L



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

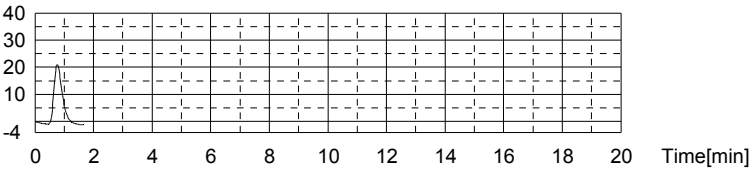
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:1.260mg/L TC:1.169mg/L IC:-0.09171mg/L

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

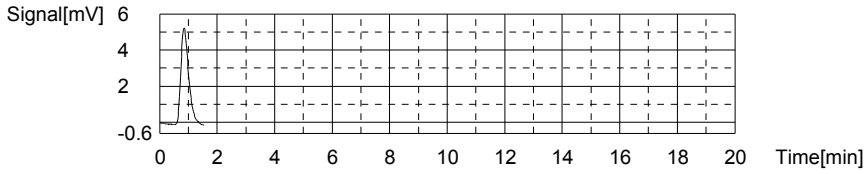
Mean Area 44.00
Mean Conc. 1.169mg/L



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

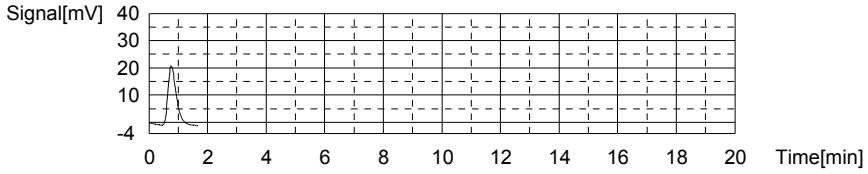
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:1.256mg/L TC:1.148mg/L IC:-0.1083mg/L

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

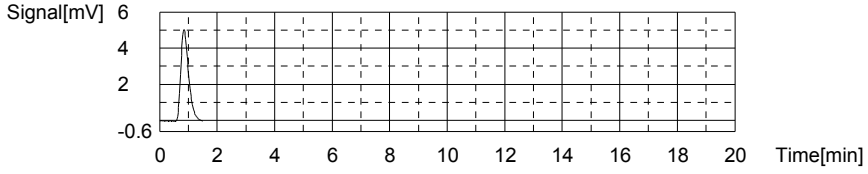
Mean Area 43.23
Mean Conc. 1.148mg/L



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

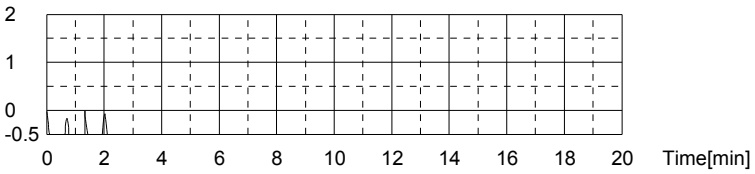
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3870mg/L TC:0.06872mg/L IC:-0.3183mg/L

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

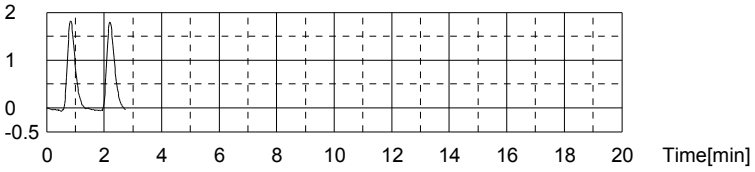
Mean Area 2.675
Mean Conc. 0.06872mg/L



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

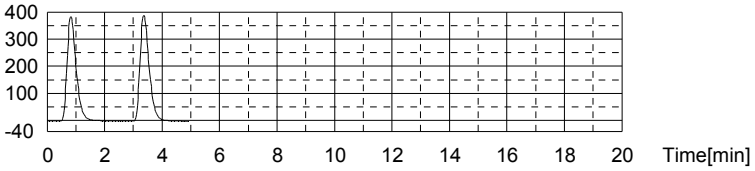
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.89mg/L TC:22.65mg/L IC:-0.2385mg/L

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

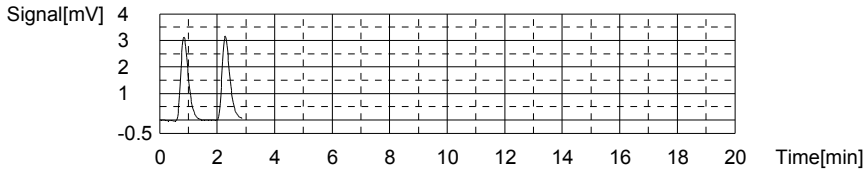
Mean Area 851.0
Mean Conc. 22.65mg/L



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

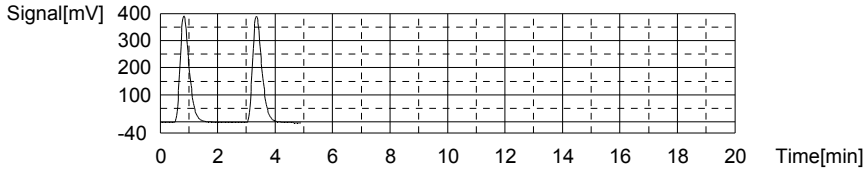
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.49mg/L TC:23.25mg/L IC:-0.2368mg/L

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

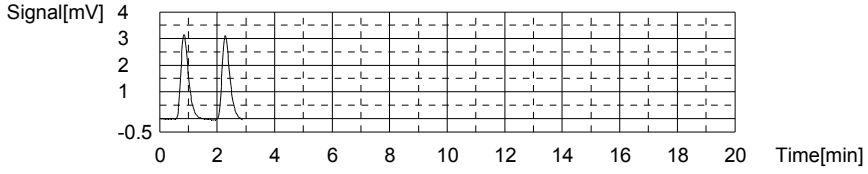
Mean Area 873.7
Mean Conc. 23.25mg/L



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

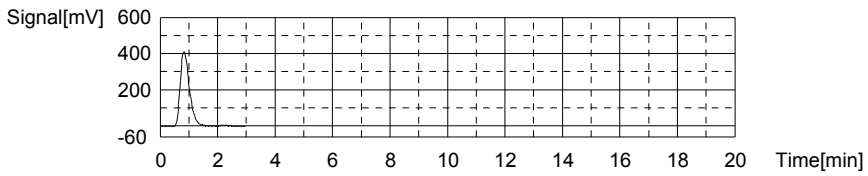
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.04mg/L TC:24.81mg/L IC:-0.2324mg/L

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

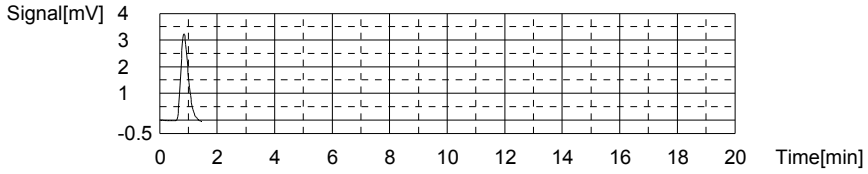
Mean Area 932.1
Mean Conc. 24.81mg/L



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

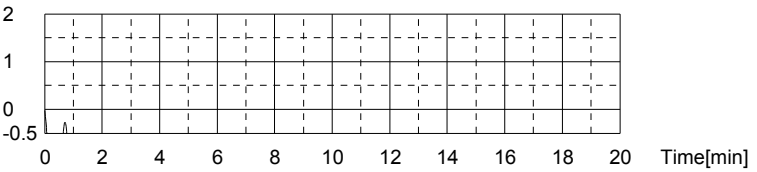
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3988mg/L TC:0.08027mg/L IC:-0.3185mg/L

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

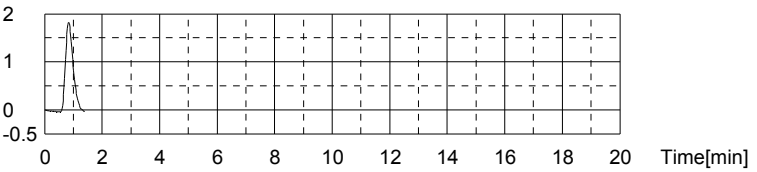
Mean Area 3.109
Mean Conc. 0.08027mg/L



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

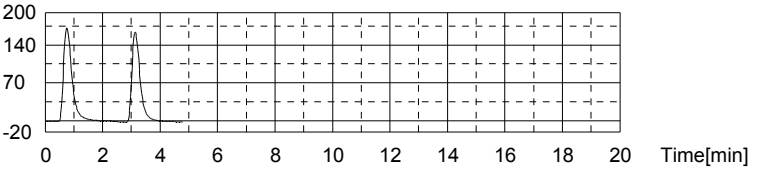
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.393mg/L TC:9.212mg/L IC:3.819mg/L

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

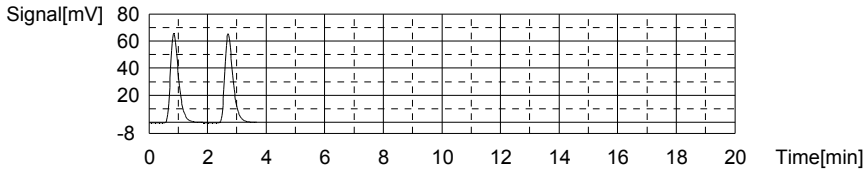
Mean Area 346.2
Mean Conc. 9.212mg/L



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

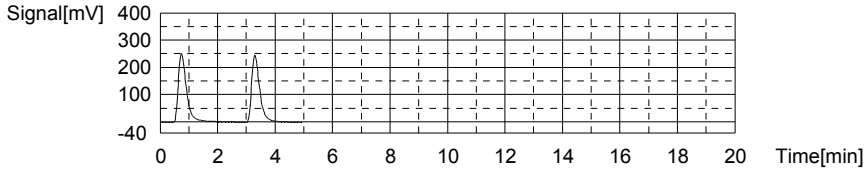
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.885mg/L TC:13.23mg/L IC:7.347mg/L

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

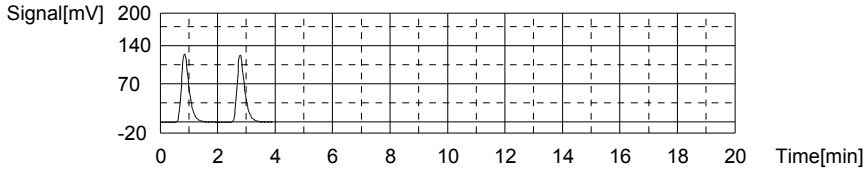
Mean Area 497.3
Mean Conc. 13.23mg/L



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

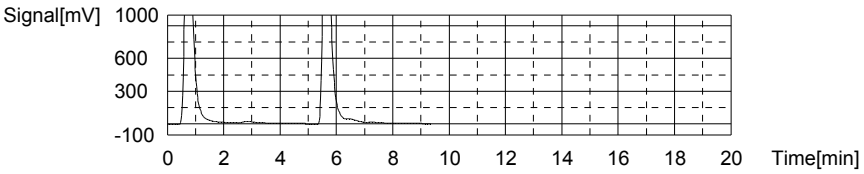
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-0.1244mg/L TC:92.42mg/L IC:92.55mg/L

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

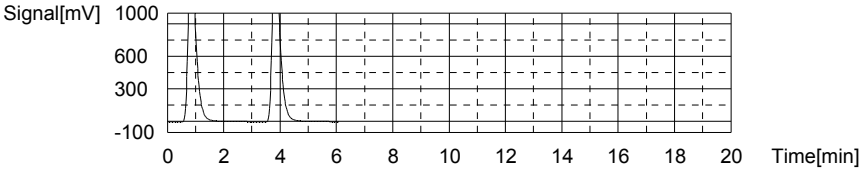
Mean Area 3473
Mean Conc. 92.42mg/L



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

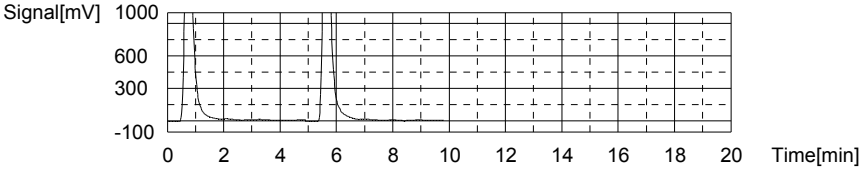
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.558mg/L TC:90.89mg/L IC:89.33mg/L

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

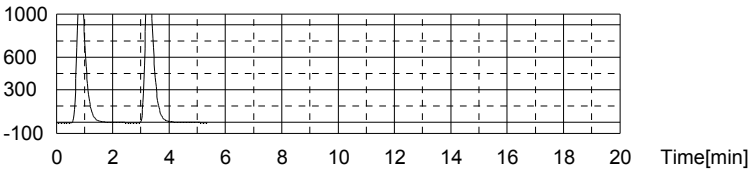
Mean Area 3415
Mean Conc. 90.89mg/L



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

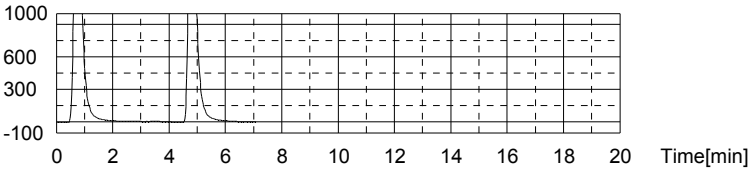
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.603mg/L TC:91.65mg/L IC:89.05mg/L

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

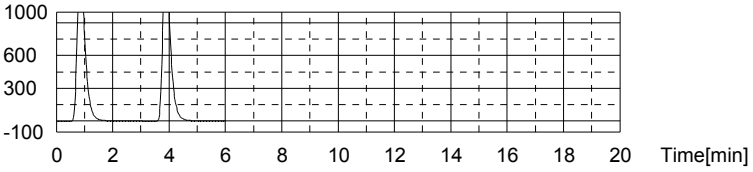
Mean Area 3444
Mean Conc. 91.65mg/L



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

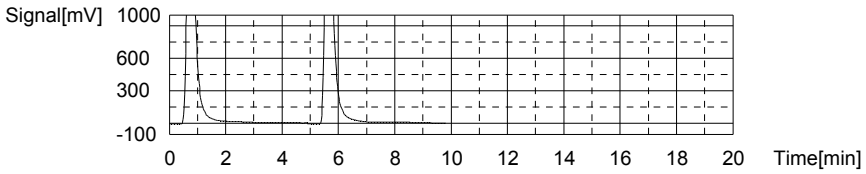
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.712mg/L TC:99.37mg/L IC:93.66mg/L

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

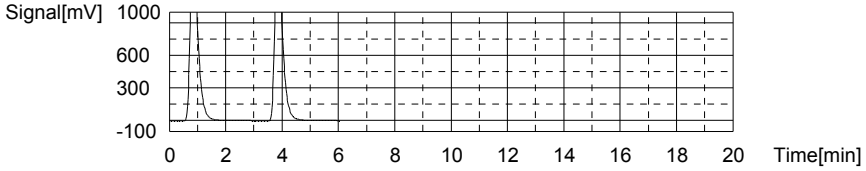
Mean Area 3734
Mean Conc. 99.37mg/L



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

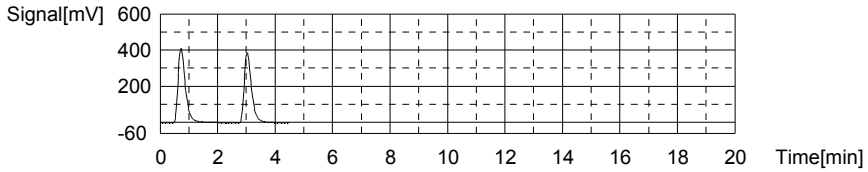
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.582mg/L TC:19.00mg/L IC:14.42mg/L

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

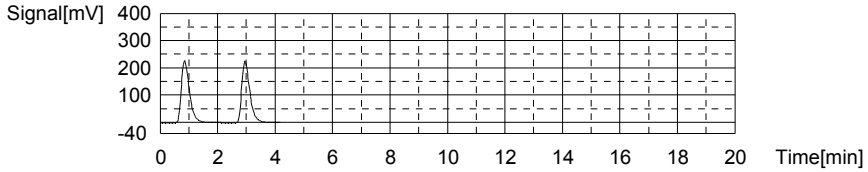
Mean Area 714.0
Mean Conc. 19.00mg/L



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

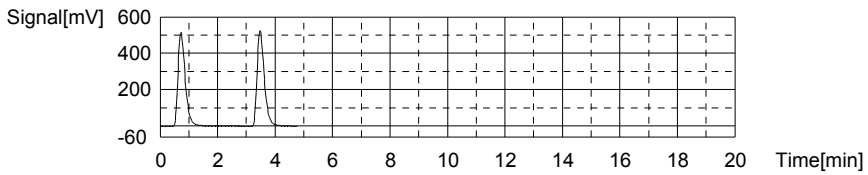
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.421mg/L TC:24.47mg/L IC:21.05mg/L

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

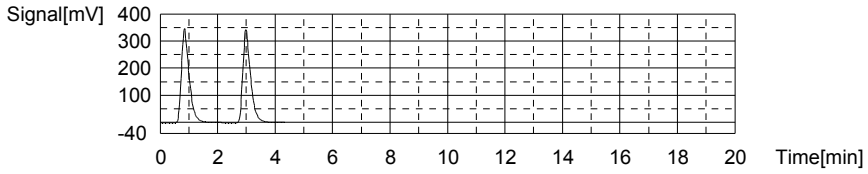
Mean Area 919.6
Mean Conc. 24.47mg/L



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

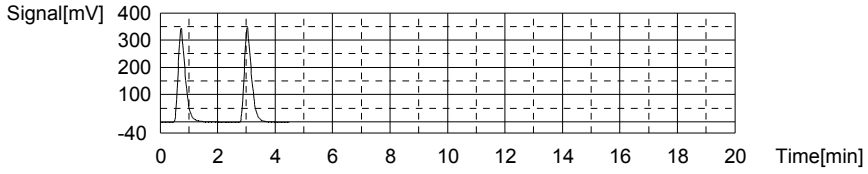
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.001mg/L TC:16.05mg/L IC:12.05mg/L

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

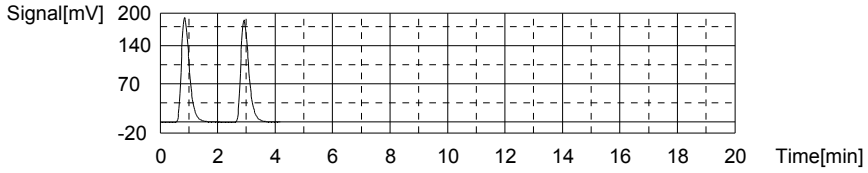
Mean Area 603.1
Mean Conc. 16.05mg/L



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

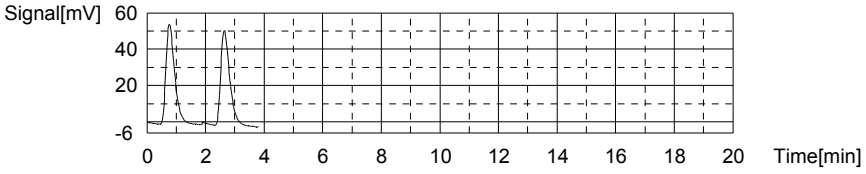
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.493mg/L TC:2.989mg/L IC:0.4963mg/L

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

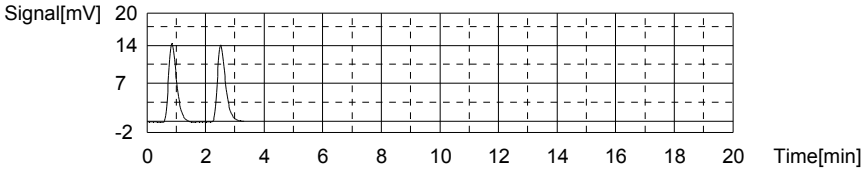
Mean Area 112.4
Mean Conc. 2.989mg/L



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

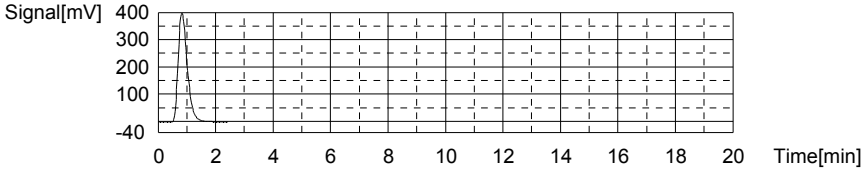
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.62mg/L TC:23.41mg/L IC:-0.2093mg/L

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

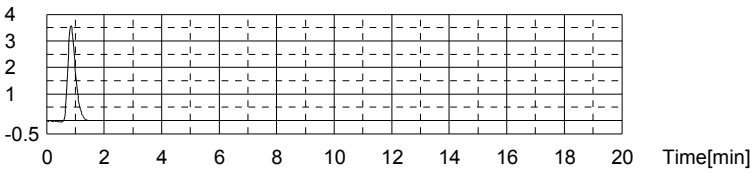
Mean Area 879.6
Mean Conc. 23.41mg/L



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

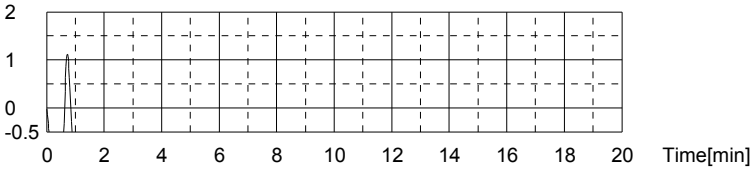
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4232mg/L TC:0.1438mg/L IC:-0.2794mg/L

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

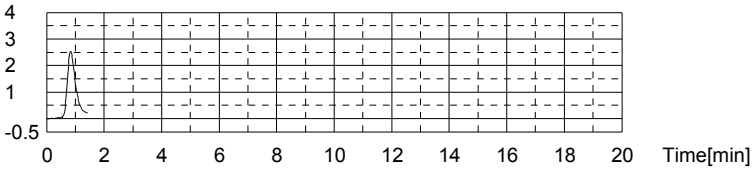
Mean Area 5.497
Mean Conc. 0.1438mg/L



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

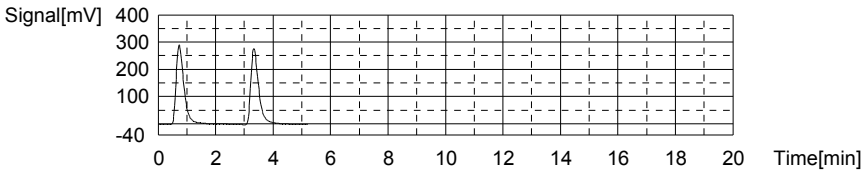
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.005mg/L TC:14.50mg/L IC:10.50mg/L

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

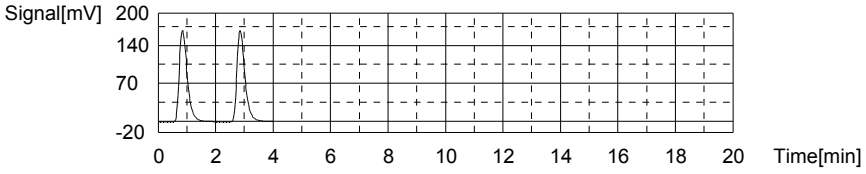
Mean Area 545.0
Mean Conc. 14.50mg/L



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

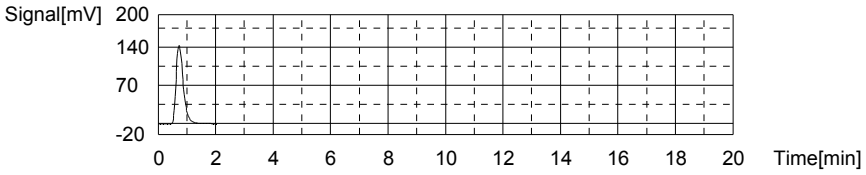
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.643mg/L TC:6.747mg/L IC:5.105mg/L

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

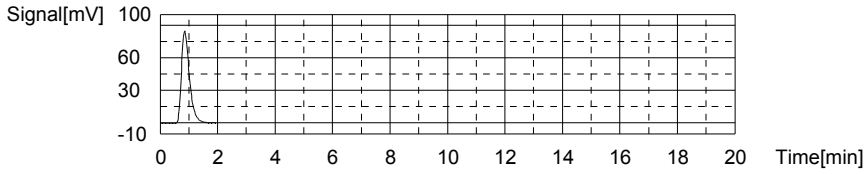
Mean Area 253.6
Mean Conc. 6.747mg/L



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

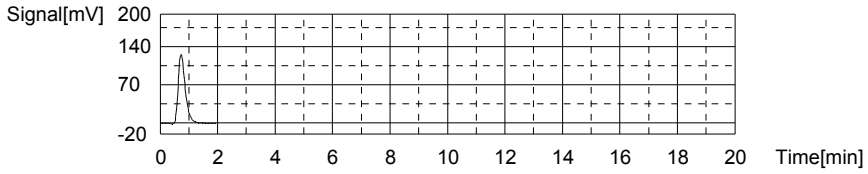
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.820mg/L TC:5.872mg/L IC:4.051mg/L

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

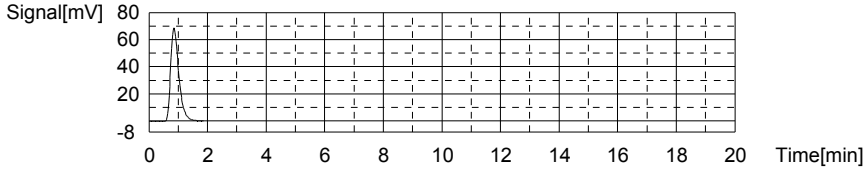
Mean Area 220.7
Mean Conc. 5.872mg/L



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

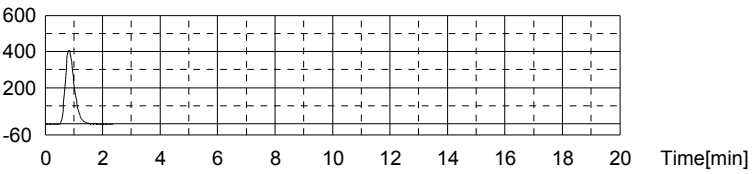
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.14mg/L TC:23.94mg/L IC:-0.2017mg/L

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

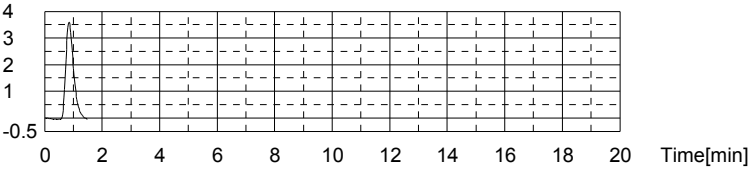
Mean Area 899.6
Mean Conc. 23.94mg/L



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

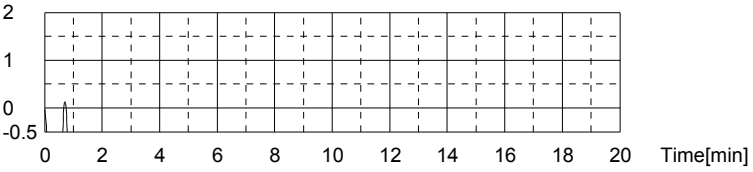
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3763mg/L TC:0.09680mg/L IC:-0.2795mg/L

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

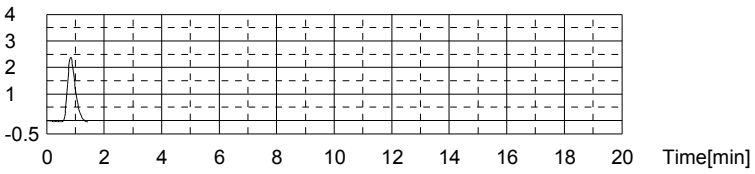
Mean Area 3.730
Mean Conc. 0.09680mg/L



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 15, 2012

ADC – ANTHONY D. CANTER	AJF – AMANDA J. FICKIESEN	ALB – ANNIE L. BROWN
ALV – AMY L. VALENTINE	AML – TONY M. LONG	AZH – AFTER HOURS
BLG – BRENDA L. GREENWALT	BRG – BRENDA R. GREGORY	CAA – CASSIE A. AUGENSTEIN
CAF – CHERYL A. FLOWERS	CEB – CHAD E. BARNES	CLC – CHRYS L. CRAWFORD
CLS – CARA L. STRICKLER	CLW – CHARISSA L. WINTERS	CPD – CHAD P. DAVIS
CS – CODY M. STRAHLER	CSH – CHRIS S. HILL	DDE – DEBRA D. ELLIOTT
DEV – DAVID E. VANDENBERG	DGB – DOUGLAS G. BUTCHER	DIH – DEANNA I. HESSON
DLB – DAVID L. BUMGARNER	DLP – DOROTHY L. PAYNE	DLR – DIANNA L. RAUCH
DSM – DAVID S. MOSSOR	ECL – ERIC C. LAWSON	EDL – ERIN D. LONG
ERP – ERIN R. PORTER	FJB – FRANCES J. BOLDEN	HAV – HEMA VILASAGAR
HJR – HOLLY J. REED	JAL – JOHN A. LENT	JBK – JEREMY B. KINNEY
JDH – JUSTIN D. HESSON	JKS – JANE K. SCHAAD	JLL – JOHN L. LENT
JWR – JOHN W. RICHARDS	JWS – JACK W. SHEAVES	JYH – JI Y. HU
KEB – KATIE E. BARNES	KHR – KIM H. RHODES	KRA – KATHY R. ALBERTSON
LKN – LINDA K. NEDEFF	LSB – LESLIE S. BUCINA	MDA – MIKE D. ALBERTSON
MDC – MIKE D. COCHRAN	MES – MARY E. SCHILLING	MMB – MAREN M. BEERY
MRT – MICHELLE R. TAYLOR	MSW – MATT S. WILSON	PDM – PIERCE D. MORRIS
PWD – PAUL W. DENT	QX – QIN XU	RAH – ROY A. HALSTEAD
REK – BOB E. KYER	RLB – BOB BUCHANAN	RLK – ROBIN L. KLINGER
RS – ROSEMARY SCOTT	RWC – RODNEY W. CAMPBELL	SJP – SUZANNE J. PAUGH
SLM – STEPHANIE L. MOSSBURG	SLP – SHERI L. PFALZGRAF	TIP – TAE I. PARRISH
TMB – TIFFANY M. BAILEY	TMM – TAMMY M. MORRIS	VC – VICKI COLLIER
WJB – WILL J. BEASLEY	WTD – WADE T. DELONG	XXX – UNAVAILABLE OR SUBCONTRACT

Microbac Laboratories Inc.
List of Valid Qualifiers
May 15, 2012

Qualkey: WATERLOO

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to interference.
E	Semiquantitative result (out of calibration range)
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration.
J	The analyte was positively identified, but the quantitation was below the RL.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Not detected at or above adjusted sample detection limit.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

Microbac

Co.Name:	CH2M HILL	**TAT:**	Standard
Prj Contact:	Dave Newman	**Phone:**	973 316 9300
Prj Name:	Dow Waterloo	**Job Number:**	434426.01.GW.FS
Location:	Waterloo, NY	**Job Name:**	Waterloo

COC No.
042612-1

Sampler Print
Graham Sharkey
Alexandra Crane
Michael Murphy

Sampler Sign

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-27-042612		X	4/26/12	10:37		15	X	X	X	X	X	X	X	X	X		
MW-10-042612		X	4/26/12	12:05		15	X	X	X	X	X	X	X	X	X		
MW-31-042612		X	4/26/12	12:30		8	X			X				X	X		
TB-042612		X	4/26/12	8:05		2	X										
MW-27-042612-MS		X	4/26/12	10:37		15	X	X	X	X	X	X	X	X	X		
MW-27-042612-MSD		X	4/26/12	10:37		15	X	X	X	X	X	X	X	X	X		

Relinquished By: G Sharkey
Date/Time 4/26/2012 @ 1700
Relinquished By:
Date/Time

Received By: FEDEX
Date/Time

Microbac OVD
Received: 04/27/2012 10:52
By: CARA STRICKLER
221000024542
Cara Strickler

Relinquished By
Date/Time:
Cooler Temp(s):

Received By:
Date/Time:
Comments:

Internal Chain of Custody Report

Login: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-01	964800	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12040928-01	964801	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	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: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-01	964802	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	EXT	30-APR-2012 10:45	CSH	CLS	
3	DISP	EXT	DISP	01-MAY-2012 08:28	RLB	RLB	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	STORE	W1	A1	30-APR-2012 16:06	BLG	BLG	

Samplenum	Container ID	Products
L12040928-01	964803	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	EXT	03-MAY-2012 06:46	CEB	AZH	

Comments:Products cancelled.

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
3	DISP	EXT	DISP	03-MAY-2012 16:44	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	STORE	W1	A1	30-APR-2012 16:06	BLG	BLG	

Samplenum	Container ID	Products
L12040928-01	964804	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:55	DIH	RLK	
3	STORE	WET	A2	07-MAY-2012 08:23	RLK	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Internal Chain of Custody Report

Login: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-01	964805	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	ANALYZ	W1	WET	27-APR-2012 14:08	HJR	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040928-01	964806	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	W1	WET	27-APR-2012 14:08	HJR	JKS	

Samplenum	Container ID	Products
L12040928-01	964807	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	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:36	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12040928-02	964808	PB-MSD SB-MSD SE-MSD TL-MSD V-D ZN-D AG-D AL-D

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:36	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: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-03	964809	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12040928-03	964810	RSK175EXT 826-SPE 827-PAHL 827-SPE-DIOX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	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: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-03	964811	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	EXT	30-APR-2012 10:45	CSH	CLS	
3	DISP	EXT	DISP	01-MAY-2012 08:28	RLB	RLB	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	STORE	W1	A1	30-APR-2012 16:08	BLG	BLG	

Samplenum	Container ID	Products
L12040928-03	964812	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	EXT	03-MAY-2012 06:46	CEB	AZH	

Comments:Products cancelled.

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
3	DISP	EXT	DISP	03-MAY-2012 16:45	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	STORE	W1	A1	30-APR-2012 16:08	BLG	BLG	

Samplenum	Container ID	Products
L12040928-03	964813	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:55	DIH	RLK	
3	STORE	WET	A2	07-MAY-2012 08:23	RLK	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-03	964814	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	ANALYZ	W1	WET	27-APR-2012 14:08	HJR	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040928-03	964815	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	W1	WET	27-APR-2012 14:08	HJR	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040928-03	964816	AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE HG K MC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:35	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12040928-04	964817	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	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:35	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: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-05	964818	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	ORG4	27-APR-2012 13:55	RLK		<2
2	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12040928-05	964819	826-SPE RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	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: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-05	964820	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	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:36	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12040928-06	964821	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	27-APR-2012 13:55	RLK		<2
Comments:Added 5mL, Lot # RGT 17283, on 4/27/12 at 1350. The pH range was acc							
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:36	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12040928-07	964822	826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Internal Chain of Custody Report

Login: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-08	964823	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12040928-08	964824	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	09-MAY-2012 07:52	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: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-08	964825	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	EXT	30-APR-2012 10:45	CSH	CLS	
3	DISP	EXT	DISP	01-MAY-2012 08:27	RLB	RLB	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	STORE	W1	A1	30-APR-2012 16:08	BLG	BLG	

Samplenum	Container ID	Products
L12040928-08	964826	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	EXT	03-MAY-2012 06:46	CEB	AZH	

Comments:Products cancelled.

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
3	DISP	EXT	DISP	03-MAY-2012 16:44	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	STORE	W1	A1	30-APR-2012 16:06	BLG	BLG	

Samplenum	Container ID	Products
L12040928-08	964827	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:55	DIH	RLK	
3	STORE	WET	A2	07-MAY-2012 08:22	RLK	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-08	964828	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	ANALYZ	W1	WET	27-APR-2012 14:08	HJR	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040928-08	964829	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	W1	WET	27-APR-2012 14:08	HJR	JKS	

Samplenum	Container ID	Products
L12040928-08	964830	FE HG K MG MN AG AL AS-MS BA BE-AX CA CD-AX CC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:36	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12040928-09	964831	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	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:36	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: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-10	964832	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	ORG4	27-APR-2012 13:55	RLK		<2
2	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	V1	ORG4	30-APR-2012 09:03	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:59	JKT	MRT	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12040928-10	964833	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:57	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:57	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	27-APR-2012 13:55	RLK		
2	ANALYZ	V1	ORG4	30-APR-2012 09:02	MRT	JKT	
3	STORE	ORG4	A2	11-MAY-2012 06:58	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: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-10	964834	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	EXT	30-APR-2012 10:45	CSH	CLS	
3	DISP	EXT	DISP	01-MAY-2012 08:27	RLB	RLB	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	STORE	W1	A1	30-APR-2012 16:06	BLG	BLG	

Samplenum	Container ID	Products
L12040928-10	964835	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	PREP	W1	EXT	03-MAY-2012 06:46	CEB	AZH	

Comments:Products cancelled.

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
3	DISP	EXT	DISP	03-MAY-2012 16:45	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	STORE	W1	A1	30-APR-2012 16:08	BLG	BLG	

Samplenum	Container ID	Products
L12040928-10	964836	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:55	DIH	RLK	
3	STORE	WET	A2	07-MAY-2012 08:23	RLK	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12040928
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 11-MAY-2012

Samplenum	Container ID	Products
L12040928-10	964837	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		
2	ANALYZ	W1	WET	27-APR-2012 14:08	HJR	JKS	
3	STORE	WET	A2	04-MAY-2012 07:42	RLK	DIH	

Samplenum	Container ID	Products
L12040928-10	964838	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	27-APR-2012 13:55	RLK		<2
2	ANALYZ	W1	WET	27-APR-2012 14:08	HJR	JKS	

Samplenum	Container ID	Products
L12040928-10	964839	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	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:36	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12040928-11	964840	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	27-APR-2012 13:55	RLK		
2	PREP	W1	DIG	30-APR-2012 06:00	REK	AZH	
3	ANALYZ*	DIG	METALS	30-APR-2012 11:48	KHR	REK	
4	STORE	DIG	A2	01-MAY-2012 14:36	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

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)