



Laboratory Report Number: L12050099

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 17 2012

David Vandenberg – Managing Director

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



Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

There were no discrepancies.

Discrepancy	Resolution

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #
0017145	H	2.0		34575025110025608720877637832152
0014953	H	2.0		1015924680310004575000795763119596
0017176	H	3.0		1015924680310004575000795763119585
0015736	H	3.0		1015924680310004575000795763119600
0014502	H	2.0		1015924680310004575000795763119574

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 preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	Yes

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
MW-13-050212	L12050099-01	05/02/2012 11:30	05/03/2012 10:16
MW-13-050212	L12050099-02	05/02/2012 11:30	05/03/2012 10:16
MW-26-050212	L12050099-03	05/02/2012 10:55	05/03/2012 10:16
MW-26-050212	L12050099-04	05/02/2012 10:55	05/03/2012 10:16
MW-25-050212	L12050099-05	05/02/2012 14:10	05/03/2012 10:16
MW-25-050212	L12050099-06	05/02/2012 14:10	05/03/2012 10:16
PZ-03-050212	L12050099-07	05/02/2012 14:30	05/03/2012 10:16
PZ-03-050212	L12050099-08	05/02/2012 14:30	05/03/2012 10:16
DUP-GW-050212	L12050099-09	05/02/2012 10:05	05/03/2012 10:16
DUP-GW-050212	L12050099-10	05/02/2012 10:05	05/03/2012 10:16
TB-050212	L12050099-11	05/02/2012 08:05	05/03/2012 10:16

Microbac REPORT L12050099
PREPARED FOR CH2MHILL, Inc
WORK ID:

1.0 Summary Data	6
1.1 Narratives	7
1.2 Certificate of Analysis	24
2.0 Full Sample Data Package	81
2.1 Volatiles Data	82
2.1.1 Volatiles GCMS Data (8260)	83
2.1.1.1 Summary Data	84
2.1.1.2 QC Summary Data	99
2.1.1.3 Sample Data	156
2.1.1.4 Standards Data	203
2.1.1.5 Raw QC Data	361
2.1.2 RSK 175	394
2.1.2.1 Summary Data	395
2.1.2.2 QC Summary Data	400
2.1.2.3 Sample Data	435
2.1.2.4 Standards Data	448
2.1.2.5 Raw QC Data	489
2.2 Semivolatiles Data	502
2.2.1 Semivolatiles GC/MS Data (8270)	503
2.2.1.1 Summary Data	504
2.2.1.2 QC Summary Data	522
2.2.1.3 Sample Data	564
2.2.1.4 Standards Data	665
2.2.1.5 Raw QC Data	758
2.2.2 Semivolatiles GC/MS Data (827-PAHL)	791
2.2.2.1 Summary Data	792
2.2.2.2 QC Summary Data	800
2.2.2.3 Sample Data	823
2.2.2.4 Standards Data	834
2.2.2.5 Raw QC Data	853
2.3 Metals Data	860
2.3.1 Metals I C P Data	861
2.3.1.1 Summary Data	862
2.3.1.2 QC Summary Data	873
2.3.1.3 Raw Data	930
2.3.2 Metals ICP-MS Data	1113
2.3.2.1 Summary Data	1114
2.3.2.2 QC Summary Data	1121
2.3.2.3 Raw Data	1163
2.3.3 Metals CVAA Data (Mercury)	1620
2.3.3.1 Summary Data	1621
2.3.3.2 QC Summary	1627
2.3.3.3 Raw Data	1663
2.4 General Chemistry Data	1670
2.4.1 Alkalinity Data	1671
2.4.1.1 Summary Data	1672
2.4.1.2 QC Summary Data	1676
2.4.1.3 Raw Data	1683
2.4.2 Nitrate Data	1699
2.4.2.1 Summary Data	1700
2.4.2.2 QC Summary Data	1704
2.4.2.3 Raw Data	1711

2.4.3 Phosphorus Data	1717
2.4.3.1 Summary Data	1718
2.4.3.2 QC Summary Data	1722
2.4.3.3 Raw Data	1729
2.4.4 Sulfate Data	1736
2.4.4.1 Summary Data	1737
2.4.4.2 QC Summary Data	1741
2.4.4.3 Raw Data	1748
2.4.5 Total Organic Carbon Data	1754
2.4.5.1 Summary Data	1755
2.4.5.2 QC Summary Data	1759
2.4.5.3 Raw Data	1771
3.0 Attachments	1871

1.0 Summary Data

1.1 Narratives



Login Number: L12050099
Department: Volatiles
Analyst: Anthony Canter

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

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

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

BATCH QA/QC

Method Blank: All acceptance criteria were met.

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

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

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: Recoveries out of range were observed for the following analytes: Dibromofluoromethane, 1,2-Dichloroethane-d4. Please see the applicable QC report for a detailed presentation of the failures. Target analytes not detected above the RLS in the associated analyses.

Other: None.

Manual Integration Reason Codes

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

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

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by

manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

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

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

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

Narrative ID: 46516

Approved By: Michael Albertson





Login Number: L12050099
Department: Volatiles - GC
Analyst: Franci Bolden

Analysis RSK-175

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

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

SAMPLES

Samples: Sample 01, required dilution analyses.

Manual Integration Reason Codes

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

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

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

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

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

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

Narrative ID: 46107

Approved By: Michael Albertson





Login Number: L12050099
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3520C

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

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

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

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

BATCH QA/QC

Method Blank: All acceptance criteria were met.

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

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

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

SAMPLES

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

Internal Standards: All acceptance criteria were met.

Surrogates: 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: 46341

Approved By: Mike Cochran





Login Number: L12050099
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3510C

Analysis SW-846 8270C

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

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

SAMPLES

Samples: All acceptance criteria were met.

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Manual Integration Reason Codes

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

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

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

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

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

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

Narrative ID: 46193

Approved By: Mike Cochran





Login Number: L12050099
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: WG397233 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG397233 - Client samples 07 and 08 required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 46045

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink that reads "Sheri L. Pfalzgraf".



Login Number: L12050099
Department: Metals
Analyst: Ji Hu

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG397649 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46162

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink that reads "Sheri L. Pfalzgraf".



Login Number: L12050099
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: WG397593 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46135

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink that reads "Sheri L. Pfalzgraf".



Login Number: L12050099
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 310.2 (Alkalinity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46563

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".



Login Number: L12050099
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 353.2/SM4500-NO3 F (Nitrate)

HOLDING TIMES

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

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46566

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".



Login Number: L12050099
Department: Conventionals
Analyst: Jeremy Kinney

METHOD

Analysis EPA 365.4 (Phosphorus)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46564

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".



Login Number: L12050099
Department: Conventionals
Analyst: Deanna Hesson

METHOD

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

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46565

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".



Login Number: L12050099
Department: Conventionals
Analyst: Jeremy Kinney

METHOD

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

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QAI/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46567

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".

1.2 Certificate of Analysis

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-13-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 18:55
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 6M108016
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-13-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 18:55
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 6M108016
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	117	80	120	
Dibromofluoromethane	116	86	118	
p-Bromofluorobenzene	103	86	115	
Toluene-d8	106	88	110	

U	Not detected at or above adjusted sample detection limit.
---	---

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HP16
Client ID: MW-13-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 14:58
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 16G32207
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	1260	E	5.00	1.00
Carbon Dioxide	124-38-9	80000		10000	2500
E	Semiquantitative result (out of calibration range)				

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HP16
Client ID: MW-13-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397238	Analyst: FJB	Run Date: 05/07/2012 16:35
Collect Date: 05/02/2012 11:30	Dilution: 5	File ID: 16G32255
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	976		25.0	5.00
Carbon Dioxide	124-38-9	64700		50000	12500

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-13-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 19:31
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 4M60831
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Morpholine		18.5		0.000	0.000
unknown		6.79		0.000	0.000
unknown		8.19		0.000	0.000
unknown		5.40		0.000	0.000
unknown		7.42		0.000	0.000
unknown		4.27		0.000	0.000
unknown		4.33		0.000	0.000
unknown		5.44		0.000	0.000

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-13-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 19:31
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 4M60831
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 #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-13-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 19:31
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 4M60831
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	75.0	10	123	
2-Fluorobiphenyl	60.6	43	116	
2-Fluorophenol	55.5	21	100	
Nitrobenzene-d5	63.9	35	114	
p-Terphenyl-d14	80.0	33	141	

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-13-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 19:31
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 4M60831
Sample Tag: 01	Units: ug/L	

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	60.7	10	94	
U	Not detected at or above adjusted sample detection limit.			

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS7
Client ID: MW-13-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 10:58
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 7M54956
Sample Tag: 01	Units: ug/L	

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	50.0	43	116	
Nitrobenzene-d5	56.1	35	114	
p-Terphenyl-d14	72.0	33	141	
U	Not detected at or above adjusted sample detection limit.			

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-13-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:02
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: P2.050812.200243
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	0.174		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00106		0.000500	0.000250
Calcium, Total	7440-70-2	118		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	7.58		0.100	0.0250
Magnesium, Total	7439-95-4	16.1		0.500	0.250
Manganese, Total	7439-96-5	0.244		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	4.32		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	67.0		0.500	0.250
Vanadium, Total	7440-62-2	0.00628		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 #: L12050099-01	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-13-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:46
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: NI.051012.134628
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	0.00469		0.00100	0.000500
Lead, Total	7439-92-1	0.000745		0.00100	0.000500
Selenium, Total	7782-49-2	0.00135		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-13-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:46
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: NI.051012.134628
Sample Tag: 01	Units: mg/L	

U	Not detected at or above adjusted sample detection limit.
---	---

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-13-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:46
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: HY.051012.104626
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 #: L12050099-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-13-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:56
Collect Date: 05/02/2012 11:30	Dilution: 2	File ID: SC120504007.022
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		306		40.0	20.0

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-13-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: SC12050708512501
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.0940		0.0500	0.0250

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-13-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:43
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: SC120515001.011
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	0.159		0.200	0.100

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-13-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:12
Collect Date: 05/02/2012 11:30	Dilution: 2	File ID: SC120507003.015
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	46.9		10.0	5.00

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: MW-13-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397767	Analyst: JBK	Run Date: 05/13/2012 07:20
Collect Date: 05/02/2012 11:30	Dilution: 2	File ID: TC05122012.045
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		6.35		2.00	1.00

Certificate of Analysis

Sample #: L12050099-02	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-13-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:08
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: P2.050812.200842
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	0.165		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000569		0.000500	0.000250
Calcium, Dissolved	7440-70-2	116		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	5.66		0.100	0.0250
Magnesium, Dissolved	7439-95-4	15.7		0.500	0.250
Manganese, Dissolved	7439-96-5	0.239		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.15		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	65.8		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00782		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 #: L12050099-02	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-13-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:49
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: NI.051012.134921
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	0.00463		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00135		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 #: L12050099-02	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-13-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:50
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: HY.051012.105016
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 #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-26-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 19:28
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 6M108017
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 #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-26-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 19:28
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 6M108017
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	113	80	120	

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-26-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 19:28
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 6M108017
Sample Tag: 01	Units: ug/L	

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	114	86	118	
p-Bromofluorobenzene	102	86	115	
Toluene-d8	104	88	110	
U	Not detected at or above adjusted sample detection limit.			

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HP16
Client ID: MW-26-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 15:07
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 16G32208
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	257		5.00	1.00
Carbon Dioxide	124-38-9	72700		10000	2500

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.31		0.000	0.000
unknown		6.00		0.000	0.000
unknown		13.8		0.000	0.000
unknown		6.13		0.000	0.000
unknown		8.65		0.000	0.000
unknown		12.7		0.000	0.000
unknown		7.33		0.000	0.000
unknown		8.69		0.000	0.000
unknown		5.07		0.000	0.000

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
unknown		9.44		0.000	0.000
unknown		6.11		0.000	0.000

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	23.5	2.94
1,3,5-Trinitrobenzene	99-35-4		U	5.88	2.94
1,3-Dinitrobenzene	99-65-0		U	5.88	2.94
1,4-Dioxane	123-91-1		U	11.8	5.88
2,4,5-Trichlorophenol	95-95-4		U	5.88	2.94
2,4,6-Trichlorophenol	88-06-2		U	5.88	2.94
2,4-Dichlorophenol	120-83-2		U	5.88	2.94
2,4-Dimethylphenol	105-67-9		U	5.88	2.94
2,4-Dinitrophenol	51-28-5		U	29.4	14.7
2,4-Dinitrotoluene	121-14-2		U	5.88	2.94
2,6-Dinitrotoluene	606-20-2		U	5.88	2.94
2-Chloronaphthalene	91-58-7		U	5.88	2.94
2-Chlorophenol	95-57-8		U	5.88	2.94
2-Methylnaphthalene	91-57-6		U	5.88	2.94
2-Methylphenol	95-48-7		U	5.88	2.94
2-Nitroaniline	88-74-4		U	29.4	14.7
2-Nitrophenol	88-75-5		U	5.88	2.94
3-Nitroaniline	99-09-2		U	29.4	14.7
3,3'-Dichlorobenzidine	91-94-1		U	5.88	2.94
3-,4-Methylphenol	106-44-5		U	5.88	2.94
4-Bromophenyl-phenylether	101-55-3		U	5.88	2.94
4-Chloroaniline	106-47-8		U	5.88	2.94

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
4-Nitrophenol	100-02-7		U	29.4	14.7
Acenaphthene	83-32-9		U	5.88	2.94
Acenaphthylene	208-96-8		U	5.88	2.94
Anthracene	120-12-7		U	5.88	2.94
Benzo(a)anthracene	56-55-3		U	5.88	2.94
Benzo(a)pyrene	50-32-8		U	5.88	2.94
Benzo(b)fluoranthene	205-99-2		U	5.88	2.94
Benzo(g,h,i)Perylene	191-24-2		U	5.88	2.94
Benzo(k)fluoranthene	207-08-9		U	5.88	2.94
Benzoic acid	65-85-0		U	23.5	11.8
Benzyl alcohol	100-51-6		U	5.88	2.94
Bis(2-Chloroethyl)ether	111-44-4		U	5.88	2.94
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.88	2.94
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.88	2.94
Butylbenzylphthalate	85-68-7		U	5.88	2.94
Carbazole	86-74-8		U	23.5	2.94
Chrysene	218-01-9		U	5.88	2.94
Di-N-Butylphthalate	84-74-2		U	5.88	2.94
Di-n-octylphthalate	117-84-0		U	5.88	2.94
Dibenzo(a,h)Anthracene	53-70-3		U	5.88	2.94
Dibenzofuran	132-64-9		U	5.88	2.94
Diethylphthalate	84-66-2		U	5.88	2.94
Dimethylphthalate	131-11-3		U	5.88	2.94
Fluoranthene	206-44-0		U	5.88	2.94
Fluorene	86-73-7		U	5.88	2.94
Hexachlorobenzene	118-74-1		U	5.88	2.94
Hexachlorobutadiene	87-68-3		U	5.88	2.94
Hexachlorocyclopentadiene	77-47-4		U	5.88	2.94
Hexachloroethane	67-72-1		U	5.88	2.94
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.88	2.94
Isophorone	78-59-1		U	5.88	2.94
N-Nitrosodiphenylamine	86-30-6		U	5.88	2.94
Naphthalene	91-20-3		U	5.88	2.94

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrobenzene	98-95-3		U	5.88	2.94
Pentachlorophenol	87-86-5		U	29.4	14.7
Phenanthrene	85-01-8		U	5.88	2.94
Phenol	108-95-2		U	5.88	2.94
Pyrene	129-00-0		U	5.88	2.94

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	80.6	10	123	
2-Fluorobiphenyl	78.8	43	116	
2-Fluorophenol	65.4	21	100	
Nitrobenzene-d5	83.1	35	114	
p-Terphenyl-d14	101	33	141	
Phenol-d5	70.8	10	94	

U Not detected at or above adjusted sample detection limit.

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS7
Client ID: MW-26-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 11:26
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 7M54957
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0562	0.0281
Acenaphthene	83-32-9		U	0.0562	0.0281
Acenaphthylene	208-96-8		U	0.0562	0.0281
Anthracene	120-12-7		U	0.0562	0.0281
Benzo(a)anthracene	56-55-3		U	0.0562	0.0281
Benzo(a)pyrene	50-32-8		U	0.0562	0.0281
Benzo(b)fluoranthene	205-99-2		U	0.0562	0.0281
Benzo(g,h,i)perylene	191-24-2		U	0.0562	0.0281
Benzo(k)fluoranthene	207-08-9		U	0.0562	0.0281
Chrysene	218-01-9		U	0.0562	0.0281
Dibenzo(a,h)anthracene	53-70-3		U	0.0562	0.0281

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS7
Client ID: MW-26-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 11:26
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 7M54957
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Fluoranthene	206-44-0		U	0.0562	0.0281
Fluorene	86-73-7		U	0.0562	0.0281
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0562	0.0281
Naphthalene	91-20-3		U	0.0562	0.0281
Phenanthrene	85-01-8		U	0.0562	0.0281
Pyrene	129-00-0		U	0.0562	0.0281
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
2-Fluorobiphenyl	69.5	43	116		
Nitrobenzene-d5	77.9	35	114		
p-Terphenyl-d14	88.3	33	141		
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-26-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:14
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: P2.050812.201441
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	0.157		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000990		0.000500	0.000250
Calcium, Total	7440-70-2	101		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	0.619		0.100	0.0250
Magnesium, Total	7439-95-4	18.8		0.500	0.250
Manganese, Total	7439-96-5	0.248		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	3.60		1.00	0.250

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-26-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:14
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: P2.050812.201441
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	65.8		0.500	0.250
Vanadium, Total	7440-62-2	0.00907		0.0100	0.00500
Zinc, Total	7440-66-6	0.123		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-26-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:52
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: NI.051012.135213
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	0.000882		0.00100	0.000500
Lead, Total	7439-92-1	0.000595		0.00100	0.000500
Selenium, Total	7782-49-2	0.00175		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-26-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:52
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: HY.051012.105200
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 #: L12050099-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-26-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:57
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: SC120504007.023
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		263		20.0	10.0

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-26-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:44
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: SC120515001.012
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 #: L12050099-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-26-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:13
Collect Date: 05/02/2012 10:55	Dilution: 2	File ID: SC120507003.016
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	46.4		10.0	5.00

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: MW-26-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397595	Analyst: JBK	Run Date: 05/10/2012 19:07
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: TC05102012.017
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		4.19		1.00	0.500

Sample #: L12050099-04	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-26-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:20
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: P2.050812.202040
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	0.158		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000943		0.000500	0.000250
Calcium, Dissolved	7440-70-2	101		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	0.599		0.100	0.0250
Magnesium, Dissolved	7439-95-4	18.7		0.500	0.250
Manganese, Dissolved	7439-96-5	0.254		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	3.50		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	65.0		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00820		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.118		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.
---	---

Certificate of Analysis

Sample #: L12050099-04	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-26-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:55
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: NI.051012.135506
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	0.000848		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00164		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-04	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-26-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:53
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: HY.051012.105352
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 #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-25-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:00
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 6M108018
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.762		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 #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-25-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:00
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 6M108018
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	119	80	120	
Dibromofluoromethane	119	86	118	*
p-Bromofluorobenzene	104	86	115	
Toluene-d8	106	88	110	

U	Not detected at or above adjusted sample detection limit.
---	---

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HP16
Client ID: MW-25-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 15:16
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 16G32209
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	56.6		5.00	1.00
Carbon Dioxide	124-38-9	47800		10000	2500

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-25-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:41
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 4M60833
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-25-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:41
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 4M60833
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-25-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:41
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 4M60833
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrobenzene	98-95-3		U	5.56	2.78
Pentachlorophenol	87-86-5		U	27.8	13.9
Phenanthrene	85-01-8		U	5.56	2.78
Phenol	108-95-2		U	5.56	2.78
Pyrene	129-00-0		U	5.56	2.78

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	93.9	10	123	
2-Fluorobiphenyl	91.4	43	116	
2-Fluorophenol	83.8	21	100	
Nitrobenzene-d5	93.3	35	114	
p-Terphenyl-d14	114	33	141	
Phenol-d5	91.3	10	94	

U Not detected at or above adjusted sample detection limit.

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-25-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:41
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 4M60833
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.69		0.000	0.000
2-Butanone, 4-hydroxy-		39.8		0.000	0.000
unknown		11.0		0.000	0.000
unknown		15.1		0.000	0.000
unknown		56.5		0.000	0.000
unknown		14.1		0.000	0.000
unknown		7.56		0.000	0.000
unknown		12.0		0.000	0.000
unknown		4.60		0.000	0.000
unknown		5.53		0.000	0.000

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS7
Client ID: MW-25-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 11:54
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 7M54958
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0595	0.0298
Acenaphthene	83-32-9		U	0.0595	0.0298
Acenaphthylene	208-96-8		U	0.0595	0.0298
Anthracene	120-12-7		U	0.0595	0.0298
Benzo(a)anthracene	56-55-3		U	0.0595	0.0298
Benzo(a)pyrene	50-32-8		U	0.0595	0.0298
Benzo(b)fluoranthene	205-99-2		U	0.0595	0.0298
Benzo(g,h,i)perylene	191-24-2		U	0.0595	0.0298
Benzo(k)fluoranthene	207-08-9		U	0.0595	0.0298
Chrysene	218-01-9		U	0.0595	0.0298
Dibenzo(a,h)anthracene	53-70-3		U	0.0595	0.0298
Fluoranthene	206-44-0		U	0.0595	0.0298
Fluorene	86-73-7		U	0.0595	0.0298
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0595	0.0298
Naphthalene	91-20-3		U	0.0595	0.0298
Phenanthrene	85-01-8		U	0.0595	0.0298
Pyrene	129-00-0		U	0.0595	0.0298

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	59.8	43	116	
Nitrobenzene-d5	66.6	35	114	
p-Terphenyl-d14	84.4	33	141	
U	Not detected at or above adjusted sample detection limit.			

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-25-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:26
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: P2.050812.202639
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	0.101		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00122		0.000500	0.000250
Calcium, Total	7440-70-2	72.0		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8	0.0202		0.0200	0.00500
Iron, Total	7439-89-6	0.551		0.100	0.0250
Magnesium, Total	7439-95-4	13.0		0.500	0.250
Manganese, Total	7439-96-5	0.0275		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	2.87		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	55.0		0.500	0.250
Vanadium, Total	7440-62-2	0.00552		0.0100	0.00500
Zinc, Total	7440-66-6	0.306		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-25-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:03
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: NI.051012.140347
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000713		0.00100	0.000500
Arsenic, Total	7440-38-2	0.000639		0.00100	0.000500
Lead, Total	7439-92-1	0.00833		0.00100	0.000500
Selenium, Total	7782-49-2	0.00234		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-25-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:55
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: HY.051012.105546
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 #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:58
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: SC120504007.024
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		182		20.0	10.0

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: SC12050708513501
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.844		0.0500	0.0250

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:44
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: SC120515001.013
Sample Tag: 01	Units: mg/L	

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

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:44
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: SC120515001.013
Sample Tag: 01	Units: mg/L	

U	Not detected at or above adjusted sample detection limit.
---	---

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:14
Collect Date: 05/02/2012 14:10	Dilution: 2	File ID: SC120507003.017
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	38.0		10.0	5.00

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: MW-25-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397595	Analyst: JBK	Run Date: 05/10/2012 19:21
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: TC05102012.018
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		3.11		1.00	0.500

Certificate of Analysis

Sample #: L12050099-06	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-25-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:45
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: P2.050812.204532
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	0.102		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.00121		0.000500	0.000250
Calcium, Dissolved	7440-70-2	71.9		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8	0.0151		0.0200	0.00500
Iron, Dissolved	7439-89-6	0.378		0.100	0.0250
Magnesium, Dissolved	7439-95-4	13.2		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0270		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	2.87		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	56.4		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00649		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.290		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-06	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-25-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:06
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: NI.051012.140640
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.000688		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.000520		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.00255		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00198		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 #: L12050099-06	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-25-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:57
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: HY.051012.105740
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 #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS6
Client ID: PZ-03-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:33
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 6M108019
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	0.770		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 #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS6
Client ID: PZ-03-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:33
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 6M108019
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	122	80	120	*

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS6
Client ID: PZ-03-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:33
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 6M108019
Sample Tag: 01	Units: ug/L	

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	120	86	118	*
p-Bromofluorobenzene	104	86	115	
Toluene-d8	106	88	110	
U	Not detected at or above adjusted sample detection limit.			

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HP16
Client ID: PZ-03-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 15:25
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 16G32210
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	310		5.00	1.00
Carbon Dioxide	124-38-9	47500		10000	2500

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS4
Client ID: PZ-03-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:15
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 4M60834
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	23.0	2.87
1,3,5-Trinitrobenzene	99-35-4		U	5.75	2.87
1,3-Dinitrobenzene	99-65-0		U	5.75	2.87
1,4-Dioxane	123-91-1		U	11.5	5.75
2,4,5-Trichlorophenol	95-95-4		U	5.75	2.87
2,4,6-Trichlorophenol	88-06-2		U	5.75	2.87
2,4-Dichlorophenol	120-83-2		U	5.75	2.87
2,4-Dimethylphenol	105-67-9		U	5.75	2.87
2,4-Dinitrophenol	51-28-5		U	28.7	14.4
2,4-Dinitrotoluene	121-14-2		U	5.75	2.87
2,6-Dinitrotoluene	606-20-2		U	5.75	2.87
2-Chloronaphthalene	91-58-7		U	5.75	2.87
2-Chlorophenol	95-57-8		U	5.75	2.87
2-Methylnaphthalene	91-57-6		U	5.75	2.87
2-Methylphenol	95-48-7		U	5.75	2.87
2-Nitroaniline	88-74-4		U	28.7	14.4
2-Nitrophenol	88-75-5		U	5.75	2.87
3-Nitroaniline	99-09-2		U	28.7	14.4
3,3'-Dichlorobenzidine	91-94-1		U	5.75	2.87
3-,4-Methylphenol	106-44-5		U	5.75	2.87
4-Bromophenyl-phenylether	101-55-3		U	5.75	2.87
4-Chloroaniline	106-47-8		U	5.75	2.87
4-Nitrophenol	100-02-7		U	28.7	14.4
Acenaphthene	83-32-9		U	5.75	2.87
Acenaphthylene	208-96-8		U	5.75	2.87
Anthracene	120-12-7		U	5.75	2.87
Benzo(a)anthracene	56-55-3		U	5.75	2.87
Benzo(a)pyrene	50-32-8		U	5.75	2.87
Benzo(b)fluoranthene	205-99-2		U	5.75	2.87
Benzo(g,h,i)Perylene	191-24-2		U	5.75	2.87
Benzo(k)fluoranthene	207-08-9		U	5.75	2.87
Benzoic acid	65-85-0		U	23.0	11.5
Benzyl alcohol	100-51-6		U	5.75	2.87

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS4
Client ID: PZ-03-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:15
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 4M60834
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.75	2.87
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.75	2.87
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.75	2.87
Butylbenzylphthalate	85-68-7		U	5.75	2.87
Carbazole	86-74-8		U	23.0	2.87
Chrysene	218-01-9		U	5.75	2.87
Di-N-Butylphthalate	84-74-2		U	5.75	2.87
Di-n-octylphthalate	117-84-0		U	5.75	2.87
Dibenzo(a,h)Anthracene	53-70-3		U	5.75	2.87
Dibenzofuran	132-64-9		U	5.75	2.87
Diethylphthalate	84-66-2		U	5.75	2.87
Dimethylphthalate	131-11-3		U	5.75	2.87
Fluoranthene	206-44-0		U	5.75	2.87
Fluorene	86-73-7		U	5.75	2.87
Hexachlorobenzene	118-74-1		U	5.75	2.87
Hexachlorobutadiene	87-68-3		U	5.75	2.87
Hexachlorocyclopentadiene	77-47-4		U	5.75	2.87
Hexachloroethane	67-72-1		U	5.75	2.87
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.75	2.87
Isophorone	78-59-1		U	5.75	2.87
N-Nitrosodiphenylamine	86-30-6		U	5.75	2.87
Naphthalene	91-20-3		U	5.75	2.87
Nitrobenzene	98-95-3		U	5.75	2.87
Pentachlorophenol	87-86-5		U	28.7	14.4
Phenanthrene	85-01-8		U	5.75	2.87
Phenol	108-95-2		U	5.75	2.87
Pyrene	129-00-0		U	5.75	2.87

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	81.7	10	123	
2-Fluorobiphenyl	66.9	43	116	
2-Fluorophenol	60.9	21	100	
Nitrobenzene-d5	70.1	35	114	
p-Terphenyl-d14	61.0	33	141	

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS4
Client ID: PZ-03-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:15
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 4M60834
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 #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS4
Client ID: PZ-03-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:15
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 4M60834
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
unknown		6.10		0.000	0.000
unknown		10.3		0.000	0.000
unknown		17.7		0.000	0.000
unknown		40.9		0.000	0.000
unknown		56.4		0.000	0.000
unknown		43.8		0.000	0.000
unknown		5.03		0.000	0.000
unknown		29.6		0.000	0.000
unknown		8.08		0.000	0.000
unknown		9.61		0.000	0.000
unknown		10.9		0.000	0.000
unknown		7.15		0.000	0.000
unknown		5.38		0.000	0.000
unknown		5.39		0.000	0.000
unknown		6.08		0.000	0.000
unknown		5.11		0.000	0.000
unknown		6.11		0.000	0.000
unknown		5.02		0.000	0.000
unknown		5.23		0.000	0.000

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS7
Client ID: PZ-03-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 12:22
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 7M54959
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	49.4	43	116	
Nitrobenzene-d5	55.9	35	114	
p-Terphenyl-d14	60.3	33	141	
U	Not detected at or above adjusted sample detection limit.			

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:51
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: P2.050812.205131
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	0.0300		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000993		0.000500	0.000250
Calcium, Total	7440-70-2	222		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	3.79		0.100	0.0250
Magnesium, Total	7439-95-4	99.9		0.500	0.250
Manganese, Total	7439-96-5	0.327		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	6.66		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.0122		0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.00500
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/09/2012 10:16
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/09/2012 13:09
Collect Date: 05/02/2012 14:30	Dilution: 100	File ID: P2.050912.130919
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	406		50.0	25.0
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: PZ-03-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:09
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: NI.051012.140932
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	0.0219		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00198		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HYDRA
Client ID: PZ-03-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 11:03
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: HY.051012.110303
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 #: L12050099-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: PZ-03-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:58
Collect Date: 05/02/2012 14:30	Dilution: 2	File ID: SC120504007.025
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		390		40.0	20.0

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: PZ-03-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: SC12050708513901
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8		U	0.0500	0.0250
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: PZ-03-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:45
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: SC120515001.014
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	0.204		0.200	0.100

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: PZ-03-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:24
Collect Date: 05/02/2012 14:30	Dilution: 10	File ID: SC120507003.034
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	255		50.0	25.0

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: PZ-03-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397595	Analyst: JBK	Run Date: 05/10/2012 19:34
Collect Date: 05/02/2012 14:30	Dilution: 4	File ID: TC05102012.019
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		9.94		4.00	2.00

Certificate of Analysis

Sample #: L12050099-08	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:57
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: P2.050812.205736
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	0.0299		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.00111		0.000500	0.000250
Calcium, Dissolved	7440-70-2	206		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	3.03		0.100	0.0250
Magnesium, Dissolved	7439-95-4	100		0.500	0.250
Manganese, Dissolved	7439-96-5	0.282		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	5.75		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0110		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-08	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/09/2012 10:16
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/09/2012 13:16
Collect Date: 05/02/2012 14:30	Dilution: 100	File ID: P2.050912.131613
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	347		50.0	25.0
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-08	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: PZ-03-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:12
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: NI.051012.141225
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	0.0220		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00169		0.00100	0.000500

Sample #: L12050099-08	PrePrep Method: N/A	Instrument: HYDRA
Client ID: PZ-03-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 11:04
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: HY.051012.110449
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 #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS8
Client ID: DUP-GW-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 03/27/2012 15:49
Workgroup #: WG397692	Analyst: TMB	Run Date: 05/11/2012 01:31
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 8M378974
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.130		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 #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS8
Client ID: DUP-GW-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 03/27/2012 15:49
Workgroup #: WG397692	Analyst: TMB	Run Date: 05/11/2012 01:31
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 8M378974
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	113	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	98.1	86	115	
Toluene-d8	98.9	88	110	

U	Not detected at or above adjusted sample detection limit.
---	---

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HP16
Client ID: DUP-GW-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 15:34
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 16G32211
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	216		5.00	1.00
Carbon Dioxide	124-38-9	61000		10000	2500

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS4
Client ID: DUP-GW-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:50
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 4M60835
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	22.5	2.81
1,3,5-Trinitrobenzene	99-35-4		U	5.62	2.81
1,3-Dinitrobenzene	99-65-0		U	5.62	2.81
1,4-Dioxane	123-91-1		U	11.2	5.62
2,4,5-Trichlorophenol	95-95-4		U	5.62	2.81
2,4,6-Trichlorophenol	88-06-2		U	5.62	2.81
2,4-Dichlorophenol	120-83-2		U	5.62	2.81
2,4-Dimethylphenol	105-67-9		U	5.62	2.81
2,4-Dinitrophenol	51-28-5		U	28.1	14.0
2,4-Dinitrotoluene	121-14-2		U	5.62	2.81
2,6-Dinitrotoluene	606-20-2		U	5.62	2.81
2-Chloronaphthalene	91-58-7		U	5.62	2.81
2-Chlorophenol	95-57-8		U	5.62	2.81
2-Methylnaphthalene	91-57-6		U	5.62	2.81
2-Methylphenol	95-48-7		U	5.62	2.81
2-Nitroaniline	88-74-4		U	28.1	14.0
2-Nitrophenol	88-75-5		U	5.62	2.81
3-Nitroaniline	99-09-2		U	28.1	14.0
3,3'-Dichlorobenzidine	91-94-1		U	5.62	2.81
3-,4-Methylphenol	106-44-5		U	5.62	2.81
4-Bromophenyl-phenylether	101-55-3		U	5.62	2.81
4-Chloroaniline	106-47-8		U	5.62	2.81

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS4
Client ID: DUP-GW-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:50
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 4M60835
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
4-Nitrophenol	100-02-7		U	28.1	14.0
Acenaphthene	83-32-9		U	5.62	2.81
Acenaphthylene	208-96-8		U	5.62	2.81
Anthracene	120-12-7		U	5.62	2.81
Benzo(a)anthracene	56-55-3		U	5.62	2.81
Benzo(a)pyrene	50-32-8		U	5.62	2.81
Benzo(b)fluoranthene	205-99-2		U	5.62	2.81
Benzo(g,h,i)Perylene	191-24-2		U	5.62	2.81
Benzo(k)fluoranthene	207-08-9		U	5.62	2.81
Benzoic acid	65-85-0		U	22.5	11.2
Benzyl alcohol	100-51-6		U	5.62	2.81
Bis(2-Chloroethyl)ether	111-44-4		U	5.62	2.81
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.62	2.81
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.62	2.81
Butylbenzylphthalate	85-68-7		U	5.62	2.81
Carbazole	86-74-8		U	22.5	2.81
Chrysene	218-01-9		U	5.62	2.81
Di-N-Butylphthalate	84-74-2		U	5.62	2.81
Di-n-octylphthalate	117-84-0		U	5.62	2.81
Dibenzo(a,h)Anthracene	53-70-3		U	5.62	2.81
Dibenzofuran	132-64-9		U	5.62	2.81
Diethylphthalate	84-66-2		U	5.62	2.81
Dimethylphthalate	131-11-3		U	5.62	2.81
Fluoranthene	206-44-0		U	5.62	2.81
Fluorene	86-73-7		U	5.62	2.81
Hexachlorobenzene	118-74-1		U	5.62	2.81
Hexachlorobutadiene	87-68-3		U	5.62	2.81
Hexachlorocyclopentadiene	77-47-4		U	5.62	2.81
Hexachloroethane	67-72-1		U	5.62	2.81
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.62	2.81
Isophorone	78-59-1		U	5.62	2.81
N-Nitrosodiphenylamine	86-30-6		U	5.62	2.81
Naphthalene	91-20-3		U	5.62	2.81

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS4
Client ID: DUP-GW-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:50
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 4M60835
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrobenzene	98-95-3		U	5.62	2.81
Pentachlorophenol	87-86-5		U	28.1	14.0
Phenanthrene	85-01-8		U	5.62	2.81
Phenol	108-95-2		U	5.62	2.81
Pyrene	129-00-0		U	5.62	2.81

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	104	10	123	
2-Fluorobiphenyl	91.4	43	116	
2-Fluorophenol	82.3	21	100	
Nitrobenzene-d5	94.2	35	114	
p-Terphenyl-d14	118	33	141	
Phenol-d5	88.6	10	94	

U Not detected at or above adjusted sample detection limit.

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS4
Client ID: DUP-GW-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:50
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 4M60835
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		4.66		0.000	0.000
unknown		9.00		0.000	0.000
unknown		6.39		0.000	0.000
unknown		16.3		0.000	0.000
unknown		6.25		0.000	0.000
unknown		11.0		0.000	0.000
unknown		14.9		0.000	0.000
unknown		8.51		0.000	0.000
unknown		11.6		0.000	0.000
unknown		11.4		0.000	0.000
unknown		7.84		0.000	0.000

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS7
Client ID: DUP-GW-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 12:49
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 7M54960
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0602	0.0301
Acenaphthene	83-32-9		U	0.0602	0.0301
Acenaphthylene	208-96-8		U	0.0602	0.0301
Anthracene	120-12-7		U	0.0602	0.0301
Benzo(a)anthracene	56-55-3		U	0.0602	0.0301
Benzo(a)pyrene	50-32-8		U	0.0602	0.0301
Benzo(b)fluoranthene	205-99-2		U	0.0602	0.0301
Benzo(g,h,i)perylene	191-24-2		U	0.0602	0.0301
Benzo(k)fluoranthene	207-08-9		U	0.0602	0.0301
Chrysene	218-01-9		U	0.0602	0.0301
Dibenzo(a,h)anthracene	53-70-3		U	0.0602	0.0301
Fluoranthene	206-44-0		U	0.0602	0.0301
Fluorene	86-73-7		U	0.0602	0.0301
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0602	0.0301
Naphthalene	91-20-3		U	0.0602	0.0301
Phenanthrene	85-01-8		U	0.0602	0.0301
Pyrene	129-00-0		U	0.0602	0.0301

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	47.1	43	116	
Nitrobenzene-d5	52.2	35	114	
p-Terphenyl-d14	66.6	33	141	
U	Not detected at or above adjusted sample detection limit.			

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 21:03
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: P2.050812.210340
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	0.152		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00109		0.000500	0.000250
Calcium, Total	7440-70-2	97.6		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	0.659		0.100	0.0250
Magnesium, Total	7439-95-4	18.1		0.500	0.250
Manganese, Total	7439-96-5	0.244		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	3.35		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	62.2		0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.114		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: DUP-GW-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:15
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: NI.051012.141517
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	0.000887		0.00100	0.000500
Lead, Total	7439-92-1	0.000503		0.00100	0.000500
Selenium, Total	7782-49-2	0.00160		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HYDRA
Client ID: DUP-GW-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 11:06
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: HY.051012.110635
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 #: L12050099-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: DUP-GW-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:59
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: SC120504007.026
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		263		20.0	10.0

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: DUP-GW-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: SC12050708514501
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8		U	0.0500	0.0250
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: DUP-GW-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:45
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: SC120515001.015
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0		U	0.200	0.100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: DUP-GW-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:16
Collect Date: 05/02/2012 10:05	Dilution: 2	File ID: SC120507003.020
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	54.4		10.0	5.00

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: DUP-GW-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397595	Analyst: JBK	Run Date: 05/10/2012 19:47
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: TC05102012.020
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		2.52		1.00	0.500

Certificate of Analysis

Sample #: L12050099-10	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 21:09
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: P2.050812.210941
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Barium, Dissolved	7440-39-3	0.155		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.00103		0.000500	0.000250
Calcium, Dissolved	7440-70-2	98.7		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	0.595		0.100	0.0250
Magnesium, Dissolved	7439-95-4	18.4		0.500	0.250
Manganese, Dissolved	7439-96-5	0.251		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	3.53		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	63.7		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.114		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-10	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: DUP-GW-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:18
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: NI.051012.141810
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	0.000855		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00154		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 #: L12050099-10	PrePrep Method: N/A	Instrument: HYDRA
Client ID: DUP-GW-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 11:08
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: HY.051012.110816
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 #: L12050099-11	PrePrep Method: N/A	Instrument: HPMS6
Client ID: TB-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 14:02
Collect Date: 05/02/2012 08:05	Dilution: 1	File ID: 6M108007
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 #: L12050099-11	PrePrep Method: N/A	Instrument: HPMS6
Client ID: TB-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 14:02
Collect Date: 05/02/2012 08:05	Dilution: 1	File ID: 6M108007
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	118	80	120	

Certificate of Analysis

Sample #: L12050099-11	PrePrep Method: N/A	Instrument: HPMS6
Client ID: TB-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 14:02
Collect Date: 05/02/2012 08:05	Dilution: 1	File ID: 6M108007
Sample Tag: 01	Units: ug/L	

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	117	86	118	
p-Bromofluorobenzene	106	86	115	
Toluene-d8	108	88	110	
U	Not detected at or above adjusted sample detection limit.			

2.0 Full Sample Data Package

2.1 Volatiles Data

2.1.1 Volatiles GCMS Data (8260)

2.1.1.1 Summary Data



Login Number: L12050099
Department: Volatiles
Analyst: Anthony Canter

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

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

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

BATCH QA/QC

Method Blank: All acceptance criteria were met.

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

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

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: Recoveries out of range were observed for the following analytes: Dibromofluoromethane, 1,2-Dichloroethane-d4. Please see the applicable QC report for a detailed presentation of the failures. Target analytes not detected above the RLS in the associated analyses.

Other: None.

Manual Integration Reason Codes

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

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

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by

manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

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

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

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

Narrative ID: 46516

Approved By: Michael Albertson



Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-13-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 18:55
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 6M108016
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-13-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 18:55
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 6M108016
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	117	80	120	
Dibromofluoromethane	116	86	118	
p-Bromofluorobenzene	103	86	115	
Toluene-d8	106	88	110	

U	Not detected at or above adjusted sample detection limit.
---	---

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-26-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 19:28
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 6M108017
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-26-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 19:28
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 6M108017
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	113	80	120	
Dibromofluoromethane	114	86	118	
p-Bromofluorobenzene	102	86	115	
Toluene-d8	104	88	110	

U Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-25-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:00
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 6M108018
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.762		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 #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS6
Client ID: MW-25-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:00
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 6M108018
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	119	80	120	
Dibromofluoromethane	119	86	118	*
p-Bromofluorobenzene	104	86	115	
Toluene-d8	106	88	110	

U	Not detected at or above adjusted sample detection limit.
---	---

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS6
Client ID: PZ-03-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:33
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 6M108019
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	0.770		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 #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS6
Client ID: PZ-03-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 20:33
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 6M108019
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	122	80	120	*
Dibromofluoromethane	120	86	118	*
p-Bromofluorobenzene	104	86	115	
Toluene-d8	106	88	110	

U Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS8
Client ID: DUP-GW-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 03/27/2012 15:49
Workgroup #: WG397692	Analyst: TMB	Run Date: 05/11/2012 01:31
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 8M378974
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.130		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 #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS8
Client ID: DUP-GW-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 03/27/2012 15:49
Workgroup #: WG397692	Analyst: TMB	Run Date: 05/11/2012 01:31
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 8M378974
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	113	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	98.1	86	115	
Toluene-d8	98.9	88	110	

U	Not detected at or above adjusted sample detection limit.
---	---

Certificate of Analysis

Sample #: L12050099-11	PrePrep Method: N/A	Instrument: HPMS6
Client ID: TB-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 14:02
Collect Date: 05/02/2012 08:05	Dilution: 1	File ID: 6M108007
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-11	PrePrep Method: N/A	Instrument: HPMS6
Client ID: TB-050212	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 04/25/2012 14:42
Workgroup #: WG397459	Analyst: ADC	Run Date: 05/09/2012 14:02
Collect Date: 05/02/2012 08:05	Dilution: 1	File ID: 6M108007
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	118	80	120	
Dibromofluoromethane	117	86	118	
p-Bromofluorobenzene	106	86	115	
Toluene-d8	108	88	110	

U Not detected at or above adjusted sample detection limit.

2.1.1.2 QC Summary Data

Example 8260 Calculations

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

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

Example

where:

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: *

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

Example

where:

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: *

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

Example

where:

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

$$Ax^2 + Bx + C - y = 0$$

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

Step 4: Solve for analyte concentration Cx

$$Cx = (Cis)(\text{Amount ratio})$$

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 quantitation report:	784848
Response ratio, y:	0.374367
C - y:	-0.40197
Root 1 - Computed amount ratio, X1:	80.44567
Root 2 - Computed amount ratio, X2:	0.794396 use this solution
Concentration of IS, Cis:	25.00
Concentration of analyte, Cx:	19.86 ug/L

Microbac Laboratories Inc.

Instrument Run Log

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

Internal Standard: STD49576 Surrogate Standard: STD49251
 CCV: STD49665; STD49721 LCS: STD49523; STD49518 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG387849; WG387881

Comments:

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

Comments

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

Approved: January 26, 2012

Page: 1

Handwritten signature



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

Page: 2

Handwritten signature



Microbac Laboratories Inc.

Instrument Run Log

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

Internal Standard: STD49574 Surrogate Standard: STD49574
 CCV: STD49665 LCS: STD49523 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG387881(ICAL), WG387845

Comments:

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

Approved: February 02, 2012

Page: 1

Handwritten signature



Microbac Laboratories Inc.

Instrument Run Log

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

Internal Standard: STD50587 Surrogate Standard: STD50587
 CCV: STD50699 LCS: STD50665 MS/MSD: STD50665
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG393321 (ICAL)

Comments:

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

Comments

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

Approved: March 30, 2012

Page: 1

Handwritten signature



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

Page: 1




Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS6 Dataset: 050912
 Analyst1: ADC Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 14
 Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13

Maintenance Log ID: 41674

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

Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG397459

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
6M107997	WG397458-01 50ng BFB STD 8260	NA	1	1	STD51241	05/09/12 08:44
6M107998	WG397458-02 50ug/L CCV STD 8260	NA	1	1	STD51468	05/09/12 09:08
6M107999	WG397458-02 50ug/L CCV STD 8260	NA	1	1	STD51468	05/09/12 09:42
6M108000	WG397XXX-01 100ug/L A9CCV STD 8260	NA	1	1	STD51240	05/09/12 10:14
6M108001	WG397459-01 BLANK 05/09 8260	NA	1	1		05/09/12 10:47
6M108002	WG397459-02 20ug/L LCS 8260	NA	1	1	STD51372	05/09/12 11:19
6M108003	WG397459-03 20ug/L LCSDUP 8260	NA	1	1	STD51372	05/09/12 11:52
6M108004	L12050185-01 A 10X 826-TC	NA	17	10		05/09/12 12:25
6M108005	L12050186-01 A 10X 826-TC	NA	17	10		05/09/12 12:57
6M108006	L12050192-01 A 10X 826-TC	NA	17	10		05/09/12 13:30
6M108007	L12050099-11 A 826-SPE	<2	1	1		05/09/12 14:02
6M108008	L12050198-12 B 826-SPE	<2	1	1		05/09/12 14:35
6M108009	L12050161-01 B 50X 826-SPE	<2	1	50		05/09/12 15:08
6M108010	L12050088-03 A 826-LOW	<2	1	1		05/09/12 15:40
6M108011	L12050088-04 A 826-LOW	<2	1	1		05/09/12 16:13
6M108012	L12050088-05 A 826-LOW	<2	1	1		05/09/12 16:45
6M108013	L12050088-06 A 826-LOW	<2	1	1		05/09/12 17:18
6M108014	L12050088-07 A 826-LOW	<2	1	1		05/09/12 17:50
6M108015	L12050088-08 A 826-LOW	<2	1	1		05/09/12 18:23
6M108016	L12050099-01 A 826-SPE	<2	1	1		05/09/12 18:55
6M108017	L12050099-03 A 826-SPE	<2	1	1		05/09/12 19:28
6M108018	L12050099-05 A 826-SPE	<2	1	1		05/09/12 20:00
6M108019	L12050099-07 A 826-SPE	<2	1	1		05/09/12 20:33
6M108020	L12050099-09 A 826-SPE	<2	1	1		05/09/12 21:05
6M108021	RINSE	NA	1	1		05/09/12 21:38
6M108022	RINSE	NA	1	1		05/09/12 22:10
6M108023	RINSE	NA	1	1		05/09/12 22:43

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2	X			
File ID: 6M107998				
Vc was low, DNR.				

Approved: May 11, 2012

Page: 1



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 050912
 Analyst1: ADC Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 14
 Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13

Maintenance Log ID: 41674

Internal Standard: STD51188 Surrogate Standard: STD51262
 CCV: STD51468 LCS: STD51372 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG397459

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
4				
File ID: 6M108000				
Not needed, DNR.				
18	X	1	Surrogate standard failure	
File ID: 6M108014				
22	X	1	Surrogate standard failure	
File ID: 6M108018				
23	X	1	Surrogate standard failure	
File ID: 6M108019				
24	X		Missed Tune	
File ID: 6M108020				
DNR.				

Approved: May 11, 2012

Page: 2

Handwritten signature



Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID: 41688

Internal Standard: STD51487 Surrogate Standard: STD51487
 CCV: STD51371 LCS: STD51372 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG397572

Comments:

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

Approved: May 15, 2012

Page: 1



Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID: 41688

Internal Standard: STD51487 Surrogate Standard: STD51487
 CCV: STD51371 LCS: STD51372 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG397572

Comments:

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

Comments

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

Approved: May 15, 2012

Page: 2




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



Secondary Reviewer:
26-JAN-2012




Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
02-FEB-2012



Secondary Reviewer:
02-FEB-2012




Microbac Laboratories Inc.

Data Checklist

Date: 27-MAR-2012
 Analyst: ADC
 Analyst: NA
 Method: 8260/624
 Instrument: HPMS8
 Curve Workgroup: WG393321
 Runlog ID: 45930
 Analytical Workgroups: _____

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

Primary Reviewer:
30-MAR-2012



Secondary Reviewer:
30-MAR-2012




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




Microbac Laboratories Inc.

Data Checklist

Date: 09-MAY-2012
 Analyst: ADC
 Analyst: NA
 Method: 8260B/OVAP
 Instrument: HPMS6
 Curve Workgroup: NA
 Runlog ID: 46682
 Analytical Workgroups: WG397459

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



Secondary Reviewer:
11-MAY-2012




Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
14-MAY-2012



Secondary Reviewer:
15-MAY-2012




Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method:8260B
 Login Number:L12050099

AAB#:WG397459

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-13-050212	01	05/02/12							14		05/09/12	7.3	14	
MW-26-050212	03	05/02/12							14		05/09/12	7.4	14	
MW-25-050212	05	05/02/12							14		05/09/12	7.2	14	
PZ-03-050212	07	05/02/12							14		05/09/12	7.3	14	
TB-050212	11	05/02/12							14		05/09/12	7.2	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2419078
 Report generated 05/17/2012 12:52



Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B
 Login Number: L12050099

AAB#: WG397692

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
DUP-GW-050212	09	05/02/12							14		05/11/12	8.6	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2419078
 Report generated 05/17/2012 12:52



Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050099
Instrument Id: HPMS8
Workgroup (AAB#): WG397692

Method: 8260
CAL ID: HPMS8 - 27-MAR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L12050099-09	1.00	01	113	103	98.1	98.9
WG397692-01	1.00	01	113	103	97.7	97.8
WG397692-02	1.00	01	112	104	98.8	101
WG397692-03	1.00	01	109	100	97.2	100

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - p-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected



Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050099
Instrument Id: HPMS6
Workgroup (AAB#): WG397459

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

Sample Number	Dilution	Tag	1	2	3	4
L12050099-01	1.00	01	117	116	103	106
L12050099-03	1.00	01	113	114	102	104
L12050099-05	1.00	01	119	<u>119</u>	104	106
L12050099-07	1.00	01	<u>122</u>	<u>120</u>	104	106
L12050099-11	1.00	01	118	117	106	108
WG397459-01	1.00	01	116	115	108	107
WG397459-02	1.00	01	114	113	104	107
WG397459-03	1.00	01	115	112	105	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



METHOD BLANK SUMMARY

Login Number:L12050099
 Blank File ID:6M108001
 Prep Date:05/09/12 10:47
 Analyzed Date:05/09/12 10:47
 Analyst:ADC

Work Group:WG397459
 Blank Sample ID:WG397459-01
 Instrument ID:HPMS6
 Method:8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397459-02	6M108002	05/09/12 11:19	01
LCS2	WG397459-03	6M108003	05/09/12 11:52	01
TB-050212	L12050099-11	6M108007	05/09/12 14:02	01
MW-13-050212	L12050099-01	6M108016	05/09/12 18:55	01
MW-26-050212	L12050099-03	6M108017	05/09/12 19:28	01
MW-25-050212	L12050099-05	6M108018	05/09/12 20:00	01
PZ-03-050212	L12050099-07	6M108019	05/09/12 20:33	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2419079
 Report generated 05/17/2012 12:52



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397692
Blank File ID: 8M378965 Blank Sample ID: WG397692-01
Prep Date: 05/10/12 20:40 Instrument ID: HPMS8
Analyzed Date: 05/10/12 20:40 Method: 8260B
Analyst: TMB

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397692-02	8M378966	05/10/12 21:13	01
LCS2	WG397692-03	8M378967	05/10/12 21:45	01
DUP-GW-050212	L12050099-09	8M378974	05/11/12 01:31	01

Report Name: BLANK_SUMMARY
PDF File ID: 2419079
Report generated 05/17/2012 12:52



METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/09/12 10:47 Sample ID: WG397459-01
Instrument ID: HPMS6 Run Date: 05/09/12 10:47 Prep Method: 5030B/5030C/503
File ID: 6M108001 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG397459 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS6-25-APR-12

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

Report Name: BLANK

PDF ID: 2419080

17-MAY-2012 12:52



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/09/12 10:47 Sample ID: WG397459-01
 Instrument ID: HPMS6 Run Date: 05/09/12 10:47 Prep Method: 5030B/5030C/503
 File ID: 6M108001 Analyst: ADC Method: 8260B
 Workgroup (AAB#): WG397459 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	116	80	- 120	PASS
Dibromofluoromethane	115	86	- 118	PASS
p-Bromofluorobenzene	108	86	- 115	PASS
Toluene-d8	107	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: 2419080
 17-MAY-2012 12:52



METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/10/12 20:40 Sample ID: WG397692-01
Instrument ID: HPMS8 Run Date: 05/10/12 20:40 Prep Method: 5030B/5030C/503
File ID: 8M378965 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG397692 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS8-27-MAR-12

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

Report Name: BLANK

PDF ID: 2419080

17-MAY-2012 12:52



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/10/12 20:40 Sample ID: WG397692-01
Instrument ID: HPMS8 Run Date: 05/10/12 20:40 Prep Method: 5030B/5030C/503
File ID: 8M378965 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG397692 Matrix: Water Units: ug/L
Contract #: _____ Cal ID: HPMS8-27-MAR-12

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

Surrogates	% Recovery	Surrogate Limits		Qualifier
1,2-Dichloroethane-d4	113	80	- 120	PASS
Dibromofluoromethane	103	86	- 118	PASS
p-Bromofluorobenzene	97.7	86	- 115	PASS
Toluene-d8	97.8	88	- 110	PASS

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

Report Name: BLANK
PDF ID: 2419080
17-MAY-2012 12:52



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: ADC Prep Method: 5030B/5030C/503
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG397459 Units: ug/L
QC Key: WATERLOO Lot #: STD51372

Sample ID: WG397459-02 LCS File ID: 6M108002 Run Date: 05/09/2012 11:19
Sample ID: WG397459-03 LCS2 File ID: 6M108003 Run Date: 05/09/2012 11:52

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	20.8	104	20.0	20.5	102	1.76	80 - 134	30	
1,1,2,2-Tetrachloroethane	20.0	21.8	109	20.0	22.0	110	0.654	79 - 125	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	19.7	98.6	20.0	19.9	99.7	1.19	80 - 130	30	
1,1,2-Trichloroethane	20.0	20.5	102	20.0	20.5	102	0.0605	80 - 125	30	
1,1-Dichloroethane	20.0	20.9	104	20.0	20.9	104	0.102	80 - 125	30	
1,1-Dichloroethene	20.0	21.1	106	20.0	21.2	106	0.564	80 - 132	30	
1,2,3-Trichlorobenzene	20.0	21.4	107	20.0	22.0	110	2.50	55 - 140	30	
1,2,4-Trichlorobenzene	20.0	21.2	106	20.0	21.9	109	3.25	65 - 135	30	
1,2-Dibromo-3-chloropropane	20.0	20.4	102	20.0	20.1	100	1.90	50 - 130	30	
1,2-Dibromoethane	20.0	20.2	101	20.0	19.8	98.8	2.42	80 - 125	30	
1,2-Dichlorobenzene	20.0	19.5	97.6	20.0	19.4	97.1	0.545	80 - 125	30	
1,2-Dichloroethane	20.0	21.5	107	20.0	21.3	107	0.639	80 - 129	30	
cis-1,2-Dichloroethene	20.0	21.7	108	20.0	21.8	109	0.638	70 - 125	30	
trans-1,2-Dichloroethene	20.0	20.8	104	20.0	20.4	102	2.09	80 - 127	30	
1,2-Dichloropropane	20.0	21.9	110	20.0	21.6	108	1.29	80 - 120	30	
1,3-Dichlorobenzene	20.0	19.6	97.9	20.0	20.0	100	2.22	80 - 120	30	
1,4-Dichlorobenzene	20.0	19.0	95.2	20.0	19.4	97.0	1.94	80 - 120	30	
2-Butanone	20.0	24.8	124	20.0	25.8	129	3.92	30 - 150	30	
2-Hexanone	20.0	21.3	107	20.0	21.4	107	0.301	55 - 130	30	
4-Methyl-2-pentanone	20.0	22.5	113	20.0	23.3	116	3.39	64 - 140	30	
Acetone	20.0	24.4	122	20.0	23.8	119	2.36	40 - 142	30	
Benzene	20.0	21.1	105	20.0	20.8	104	1.43	80 - 121	30	
Bromochloromethane	20.0	22.8	114	20.0	23.0	115	0.758	65 - 130	30	
Bromodichloromethane	20.0	22.5	113	20.0	22.3	111	1.11	80 - 131	30	
Bromoform	20.0	21.7	108	20.0	21.0	105	3.11	70 - 130	30	
Bromomethane	20.0	12.6	63.2	20.0	13.4	66.8	5.58	30 - 145	30	
Carbon disulfide	20.0	22.0	110	20.0	21.6	108	1.81	58 - 138	30	
Carbon tetrachloride	20.0	21.8	109	20.0	21.9	110	0.381	65 - 140	30	
Chlorobenzene	20.0	19.7	98.4	20.0	18.9	94.7	3.83	80 - 120	30	
Chloroethane	20.0	21.4	107	20.0	20.9	104	2.44	60 - 135	30	
Chloroform	20.0	21.2	106	20.0	21.1	105	0.305	80 - 125	30	
Chloromethane	20.0	23.0	115	20.0	23.0	115	0.109	40 - 125	30	
cis-1,3-Dichloropropene	20.0	20.1	101	20.0	20.2	101	0.397	70 - 130	30	
Cyclohexane	20.0	21.7	108	20.0	21.7	109	0.305	80 - 130	30	
Dibromochloromethane	20.0	19.5	97.5	20.0	19.1	95.5	2.08	60 - 135	30	
Dichlorodifluoromethane	20.0	28.2	141	20.0	27.7	139	1.56	50 - 133	30	*
Ethyl benzene	20.0	20.4	102	20.0	19.7	98.5	3.40	80 - 122	30	
Isopropylbenzene	20.0	17.7	88.4	20.0	17.4	87.1	1.53	80 - 122	30	
Methyl acetate	20.0	19.1	95.3	20.0	19.2	96.1	0.773	80 - 130	30	
Methyl tert-butyl ether	20.0	20.2	101	20.0	20.3	101	0.187	65 - 125	30	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2410419
Report generated: 05/17/2012 12:52



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: ADC Prep Method: 5030B/5030C/503
 Instrument ID: HPMS6 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG397459 Units: ug/L
 QC Key: WATERLOO Lot #: STD51372

Sample ID: WG397459-02 LCS File ID: 6M108002 Run Date: 05/09/2012 11:19
 Sample ID: WG397459-03 LCS2 File ID: 6M108003 Run Date: 05/09/2012 11:52

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methylcyclohexane	20.0	22.4	112	20.0	22.9	115	2.14	80 - 130	30	
Methylene chloride	20.0	21.1	106	20.0	20.8	104	1.55	80 - 123	30	
m,p-Xylene	40.0	39.9	99.7	40.0	39.4	98.6	1.14	80 - 122	30	
o-Xylene	20.0	19.6	97.9	20.0	19.3	96.7	1.23	80 - 122	30	
Styrene	20.0	18.7	93.4	20.0	18.3	91.5	1.99	80 - 123	30	
Tetrachloroethene	20.0	20.7	103	20.0	20.2	101	2.09	80 - 124	30	
Toluene	20.0	19.9	99.6	20.0	19.8	99.0	0.619	80 - 124	30	
trans-1,3-Dichloropropene	20.0	17.5	87.6	20.0	17.0	85.0	2.95	80 - 130	30	
Trichloroethene	20.0	21.2	106	20.0	20.8	104	1.74	80 - 122	30	
Trichlorofluoromethane	20.0	20.1	100	20.0	20.1	100	0.118	62 - 151	30	
Vinyl chloride	20.0	19.8	99.1	20.0	19.8	99.1	0.0201	65 - 140	30	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	114	115	80 - 120	PASS
Dibromofluoromethane	113	112	86 - 118	PASS
p-Bromofluorobenzene	104	105	86 - 115	PASS
Toluene-d8	107	105	88 - 110	PASS

* EXCEEDS %REC LIMIT
 # EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
 PDF File ID: 2410419
 Report generated: 05/17/2012 12:52



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: TMB Prep Method: 5030B/5030C/503
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG397692 Units: ug/L
QC Key: WATERLOO Lot #: STD51427

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

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

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2410419
Report generated: 05/17/2012 12:52



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: TMB Prep Method: 5030B/5030C/503
 Instrument ID: HPMS8 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG397692 Units: ug/L
 QC Key: WATERLOO Lot #: STD51427

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

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

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

* EXCEEDS %REC LIMIT
 # EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
 PDF File ID: 2410419
 Report generated: 05/17/2012 12:52



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050099 Tune ID: WG387846-01
Instrument: HPMS6 Run Date: 01/25/2012
Analyst: ADC Run Time: 08:08
Workgroup: WG387846 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



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050099
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



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050099

Tune ID: WG397458-01

Instrument: HPMS6

Run Date: 05/09/2012

Analyst: ADC

Run Time: 08:44

Workgroup: WG397458

File ID: 6M107997

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	24.6	3633	PASS
75.0	95.0	30.0	60.0	47.8	7053	PASS
95.0	95.0	100	100	100	14746	PASS
96.0	95.0	5.00	9.00	6.84	1009	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	75.6	11153	PASS
175	174	5.00	9.00	7.75	864	PASS
176	174	95.0	101	97.1	10825	PASS
177	176	5.00	9.00	6.73	729	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397458-02	CCV	01	05/09/2012 09:42	
WG397459-01	BLANK	01	05/09/2012 10:47	
WG397459-01	BLANK	01	05/09/2012 10:47	
WG397459-02	LCS	01	05/09/2012 11:19	
WG397459-03	LCS2	01	05/09/2012 11:52	
L12050099-11	TB-050212	01	05/09/2012 14:02	
L12050099-01	MW-13-050212	01	05/09/2012 18:55	
L12050099-03	MW-26-050212	01	05/09/2012 19:28	
L12050099-05	MW-25-050212	01	05/09/2012 20:00	
L12050099-07	PZ-03-050212	01	05/09/2012 20:33	

* Sample past 12 hour tune limit



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050099 Tune ID: WG387844-01
 Instrument: HPMS8 Run Date: 01/25/2012
 Analyst: ADC Run Time: 10:52
 Workgroup: WG387844 File ID: 8M376554
 Cal ID: HPMS8-12-DEC-11

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	19.8	8808	PASS
75.0	95.0	30.0	60.0	45.0	19993	PASS
95.0	95.0	100	100	100	44392	PASS
96.0	95.0	5.00	9.00	6.71	2979	PASS
173	174	0	2.00	0.970	324	PASS
174	95.0	50.0	100	75.3	33405	PASS
175	174	5.00	9.00	7.47	2495	PASS
176	174	95.0	101	97.5	32579	PASS
177	176	5.00	9.00	6.44	2099	PASS

This check relates to the following samples:

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

* Sample past 12 hour tune limit



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050099

Tune ID: WG393321-01

Instrument: HPMS8

Run Date: 03/27/2012

Analyst: ADC

Run Time: 10:51

Workgroup: WG393321

File ID: 8M377934

Cal ID: HPMS8-

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

This check relates to the following samples:

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

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2419081
Report generated 05/17/2012 12:52



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050099

Tune ID: WG397571-01

Instrument: HPMS8

Run Date: 05/10/2012

Analyst: FJB

Run Time: 06:25

Workgroup: WG397571

File ID: 8M378938

Cal ID: HPMS8-27-MAR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	19.8	4193	PASS
75.0	95.0	30.0	60.0	45.4	9612	PASS
95.0	95.0	100	100	100	21149	PASS
96.0	95.0	5.00	9.00	6.78	1434	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	92.4	19551	PASS
175	174	5.00	9.00	7.63	1491	PASS
176	174	95.0	101	95.6	18691	PASS
177	176	5.00	9.00	6.81	1273	PASS

This check relates to the following samples:

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

* Sample past 12 hour tune limit



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050099
Instrument: HPMS8
Analyst: TMB
Workgroup: WG397691

Tune ID: WG397691-01
Run Date: 05/10/2012
Run Time: 19:13
File ID: 8M378962

Cal ID: HPMS8-27-MAR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	19.3	5220	PASS
75.0	95.0	30.0	60.0	46.2	12471	PASS
95.0	95.0	100	100	100	27009	PASS
96.0	95.0	5.00	9.00	6.45	1741	PASS
173	174	0	2.00	0.467	116	PASS
174	95.0	50.0	100	92.0	24861	PASS
175	174	5.00	9.00	8.06	2005	PASS
176	174	95.0	101	97.1	24128	PASS
177	176	5.00	9.00	7.21	1740	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397691-02	CCV	01	05/10/2012 19:35	
WG397692-01	BLANK	01	05/10/2012 20:40	
WG397692-01	BLANK	01	05/10/2012 20:40	
WG397692-02	LCS	01	05/10/2012 21:13	
WG397692-03	LCS2	01	05/10/2012 21:45	
WG397693-01	CCV	01	05/10/2012 22:18	
L12050099-09	DUP-GW-050212	01	05/11/2012 01:31	

* Sample past 12 hour tune limit



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 20 50 100 200 300 400							R^2		
	6M105371.D	6M105372.D	6M105373.D	6M105374.D	6M105375.D	6M105376.D	6M105377.D	Avg	%RSD	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



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	1.4439	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	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

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

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

Wed Feb 01 15:40:12 2012



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

Fri Mar 30 11:20:43 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 Run Date: 04/25/2012 Sample ID: WG396001-12
 Instrument ID: HPMS6 Run Time: 15:46 Method: 8260B
 File ID: 6M107650 Analyst: ADC QC Key: WATERLOO
 ICal Workgroup: WG396001 Cal ID: HPMS6 - 25-APR-12

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

ALT - Modified 09/06/2007
 Version 1.5 PDF File ID: 2410420
 Report generated 05/17/2012 12:52



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 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



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 Run Date: 03/27/2012 Sample ID: WG393321-12
 Instrument ID: HPMS8 Run Time: 17:20 Method: 8260B
 File ID: 8M377947 Analyst: ADC QC Key: WATERLOO
 ICal Workgroup: WG393321 Cal ID: HPMS8 - 27-MAR-12

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

ALT - Modified 09/06/2007
 Version 1.5 PDF File ID: 2410420
 Report generated 05/17/2012 12:52



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 Run Date: 03/27/2012 Sample ID: WG393321-12
 Instrument ID: HPMS8 Run Time: 17:20 Method: 8260B
 File ID: 8M377947 Analyst: ADC QC Key: WATERLOO
 ICal Workgroup: WG393321 Cal ID: HPMS8 - 27-MAR-12

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

* Exceeds %D Limit

CCC Calibration Check Compounds
 SPCC System Performance Check Compounds



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397458-02
Instrument ID: HPMS6 Run Time: 09:42 Method: 8260B
File ID: 6M107999 Analyst: ADC QC Key: WATERLOO
Workgroup (AAB#): WG397459 Cal ID: HPMS6 - 25-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	51.0	ug/L	0.467	1.91	20	
1,2-Dichloropropane	CCC	50.0	52.1	ug/L	0.297	4.27	20	
Chloroform	CCC	50.0	50.3	ug/L	0.515	0.545	20	
Ethylbenzene	CCC	50.0	49.9	ug/L	0.537	0.211	20	
Toluene	CCC	50.0	47.5	ug/L	1.56	4.90	20	
Vinyl Chloride	CCC	50.0	43.8	ug/L	0.363	12.4	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	52.9	ug/L	0.560	5.83	20	
1,1-Dichloroethane	SPCC	50.0	50.3	ug/L	0.570	0.595	20	
Bromoform	SPCC	50.0	56.0	ug/L	0.199	12.0	20	
Chlorobenzene	SPCC	50.0	47.8	ug/L	0.997	4.48	20	
Chloromethane	SPCC	50.0	51.1	ug/L	0.458	2.19	20	
1,1,1-Trichloroethane		50.0	51.2	ug/L	0.458	2.43	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	51.0	ug/L	0.291	2.08	20	
1,1,2-Trichloroethane		50.0	49.1	ug/L	0.259	1.77	20	
1,2,3-Trichlorobenzene		50.0	52.0	ug/L	0.642	4.01	20	
1,2,4-Trichlorobenzene		50.0	53.0	ug/L	0.753	6.03	20	
1,2-Dibromo-3-Chloropropane		50.0	49.1	ug/L	0.0822	1.81	20	
1,2-Dibromoethane		50.0	49.7	ug/L	0.258	0.663	20	
1,2-Dichlorobenzene		50.0	48.9	ug/L	1.28	2.14	20	
1,2-Dichloroethane		50.0	51.3	ug/L	0.361	2.69	20	
cis-1,2-Dichloroethene		50.0	51.5	ug/L	0.299	3.06	20	
trans-1,2-Dichloroethene		50.0	51.2	ug/L	0.284	2.36	20	
1,3-Dichlorobenzene		50.0	49.2	ug/L	1.42	1.52	20	
1,4-Dichlorobenzene		50.0	47.8	ug/L	1.45	4.33	20	
2-Butanone		50.0	59.9	ug/L	0.0793	19.8	20	
2-Hexanone		50.0	55.7	ug/L	0.142	11.4	20	
4-Methyl-2-Pentanone		50.0	58.7	ug/L	0.0584	17.5	20	
Acetone		50.0	57.6	ug/L	0.0546	15.2	20	
Benzene		50.0	49.7	ug/L	1.10	0.669	20	
Bromochloromethane		50.0	54.2	ug/L	0.167	8.39	20	
Bromodichloromethane		50.0	52.6	ug/L	0.360	5.11	20	
Bromomethane		50.0	31.7	ug/L	0.149	36.6	20	*
Carbon Disulfide		50.0	52.3	ug/L	0.869	4.55	20	
Carbon Tetrachloride		50.0	52.3	ug/L	0.414	4.55	20	
Chloroethane		50.0	51.5	ug/L	0.242	2.94	20	
cis-1,3-Dichloropropene		50.0	50.3	ug/L	0.413	0.594	20	
Cyclohexane		50.0	53.9	ug/L	0.483	7.79	20	
Dibromochloromethane		50.0	48.3	ug/L	0.343	3.48	20	
Dichlorodifluoromethane		50.0	54.4	ug/L	0.357	8.78	20	
Isopropylbenzene		50.0	50.1	ug/L	1.56	0.243	20	
Methyl acetate		50.0	57.6	ug/L	0.215	15.2	20	
Methyl Tert Butyl Ether		50.0	49.5	ug/L	0.592	1.02	20	

CCV - Modified 03/05/2008
PDF File ID: 2410421
Report generated 05/17/2012 12:52



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397458-02
 Instrument ID: HPMS6 Run Time: 09:42 Method: 8260B
 File ID: 6M107999 Analyst: ADC QC Key: WATERLOO
 Workgroup (AAB#): WG397459 Cal ID: HPMS6 - 25-APR-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
Methylcyclohexane	50.0	55.9	ug/L	0.357	11.7	20	
Methylene Chloride	50.0	49.4	ug/L	0.280	1.29	20	
m-,p-Xylene	100	99.0	ug/L	0.652	1.03	20	
o-Xylene	50.0	49.7	ug/L	0.623	0.687	20	
Styrene	50.0	46.6	ug/L	1.05	6.81	20	
Tetrachloroethene	50.0	49.5	ug/L	0.380	1.02	20	
trans-1,3-Dichloropropene	50.0	48.1	ug/L	0.516	3.74	20	
Trichloroethene	50.0	50.4	ug/L	0.279	0.850	20	
Trichlorofluoromethane	50.0	50.6	ug/L	0.540	1.22	20	
1,2-Dichloroethene	100	103	ug/L	0.291	2.71	20	
Xylenes	150	149	ug/L	0.637	0.913	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
 SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
 PDF File ID: 2410421
 Report generated 05/17/2012 12:52



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397691-02
Instrument ID: HPMS8 Run Time: 19:35 Method: 8260B
File ID: 8M378963 Analyst: TMB QC Key: WATERLOO
Workgroup (AAB#): WG397692 Cal ID: HPMS8 - 27-MAR-12
Matrix: WATER

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

CCV - Modified 03/05/2008
PDF File ID: 2410421
Report generated 05/17/2012 12:52



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397691-02
 Instrument ID: HPMS8 Run Time: 19:35 Method: 8260B
 File ID: 8M378963 Analyst: TMB QC Key: WATERLOO
 Workgroup (AAB#): WG397692 Cal ID: HPMS8 - 27-MAR-12
 Matrix: WATER

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

* Exceeds %D Criteria

CCC Calibration Check Compounds
 SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
 PDF File ID: 2410421
 Report generated 05/17/2012 12:52



Microbac Laboratories Inc.
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050099
Instrument ID: HPMS6
Workgroup (AAB#): WG397459

CCV Number: WG397458-02
CAL ID: HPMS6-25-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397458-02	NA	NA	194289	388986	563705
Upper Limit	NA	NA	388578	777972	1127410
Lower Limit	NA	NA	97145	194493	281853
<u>L12050099-01</u>	1.00	01	135470	295137	426059
L12050099-03	1.00	01	135995	297166	429872
L12050099-05	1.00	01	133201	290737	417893
L12050099-07	1.00	01	132801	292656	414909
L12050099-11	1.00	01	152275	324777	468115
WG397459-01	1.00	01	161273	347880	498280
WG397459-02	1.00	01	180012	356907	518310
WG397459-03	1.00	01	178898	365840	524391

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

Underline = Response outside limits



Microbac Laboratories Inc.
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050099
Instrument ID: HPMS8
Workgroup (AAB#): WG397692

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

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397691-02	NA	NA	334842	596078	689382
Upper Limit	NA	NA	669684	1192156	1378764
Lower Limit	NA	NA	167421	298039	344691
<u>L12050099-09</u>	1.00	01	317304	567993	637078
WG397692-01	1.00	01	324450	583069	643325
WG397692-02	1.00	01	330307	585399	682617
WG397692-03	1.00	01	336616	593528	675202

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

Underline = Response outside limits



Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050099
Instrument ID: HPMS6
Workgroup (AAB#): WG397459

CCV Number: WG397458-02
CAL ID: HPMS6-25-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397458-02	NA	NA	18.6	15.04	10.54
Upper Limit	NA	NA	19.1	15.54	11.04
Lower Limit	NA	NA	18.1	14.54	10.04
<u>L12050099-01</u>	1.00	01	18.6	15.03	10.54
L12050099-03	1.00	01	18.6	15.03	10.54
L12050099-05	1.00	01	18.6	15.03	10.54
L12050099-07	1.00	01	18.6	15.04	10.54
L12050099-11	1.00	01	18.6	15.04	10.54
WG397459-01	1.00	01	18.6	15.04	10.54
WG397459-02	1.00	01	18.6	15.03	10.54
WG397459-03	1.00	01	18.6	15.03	10.54

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

Underline = Response outside limits



Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050099
Instrument ID: HPMS8
Workgroup (AAB#): WG397692

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

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397691-02	NA	NA	17.06	14.05	10.19
Upper Limit	NA	NA	17.56	14.55	10.69
Lower Limit	NA	NA	16.56	13.55	9.69
<u>L12050099-09</u>	1.00	01	17.05	14.04	10.19
WG397692-01	1.00	01	17.05	14.04	10.2
WG397692-02	1.00	01	17.06	14.05	10.19
WG397692-03	1.00	01	17.05	14.04	10.19

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

Underline = Response outside limits



2.1.1.3 Sample Data

Data File : C:\MSDCHEM\1\DATA\050912\6M108016.D Vial: 19
 Acq On : 9 May 2012 18:55 Operator: ADC
 Sample : L12050099-01 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54:42 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	426059	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	295137	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	135470	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	133348	28.9054	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	115.64%	
43) 1,2-Dichloroethane-d4	10.08	65	132953	29.3657	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	117.48%	
58) Toluene-d8	12.83	98	426416	26.5839	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	106.32%	
80) p-Bromofluorobenzene	16.82	95	137278	25.8240	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	103.28%	
Target Compounds						
						Qvalue
3) Chloromethane	2.97	50	13355	1.1390	ug/L #	43
9) Diethyl ether	5.26	59	4070	1.3180	ug/L	87
13) Acetone	5.62	43	498	0.6169	ug/L #	46
63) 1,1,2-Trichloroethane	13.26	97	4572	1.4677	ug/L #	11

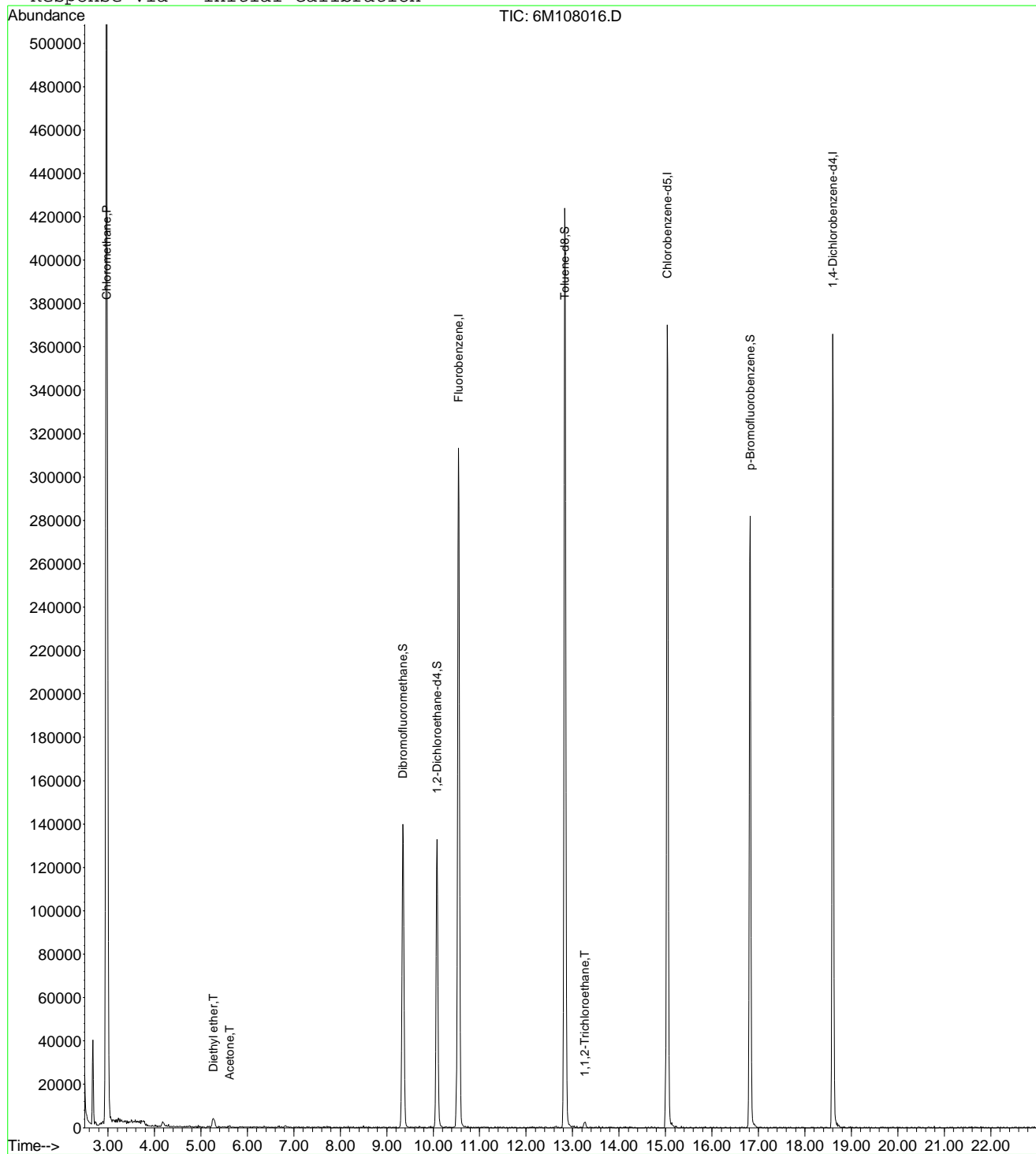
(#) = qualifier out of range (m) = manual integration
 6M108016.D 8260WTR.M Thu May 10 17:54:43 2012

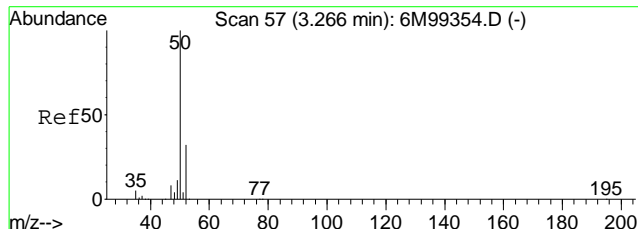
Data File : C:\MSDCHEM\1\DATA\050912\6M108016.D
 Acq On : 9 May 2012 18:55
 Sample : L12050099-01 A 826-SPE
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54 2012

Vial: 19
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: 8260WTR.RES

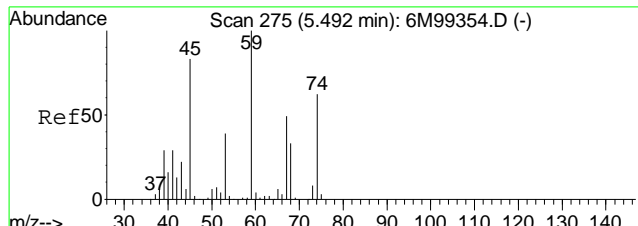
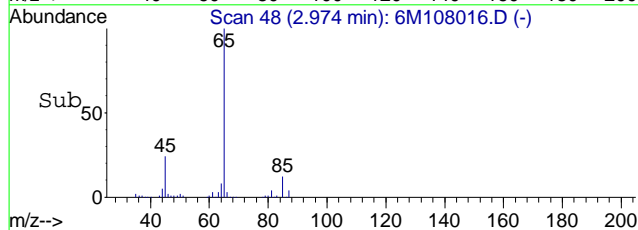
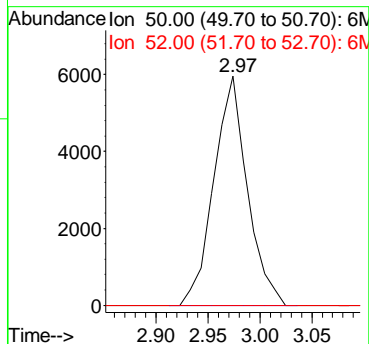
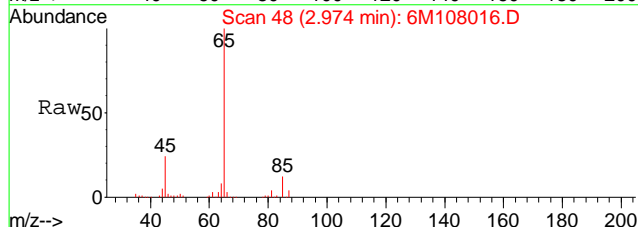
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
 Last Update : Wed Apr 25 15:22:20 2012
 Response via : Initial Calibration





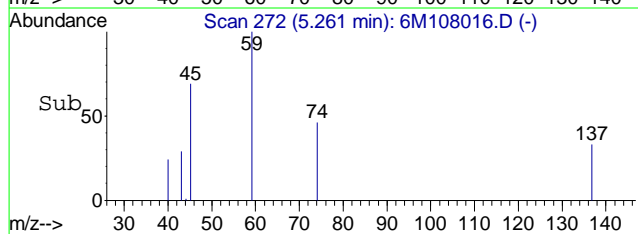
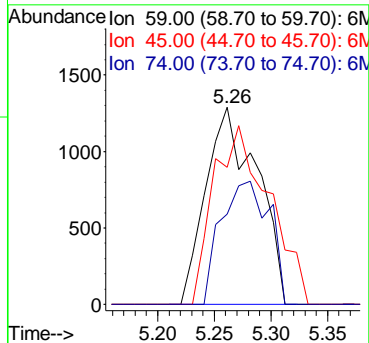
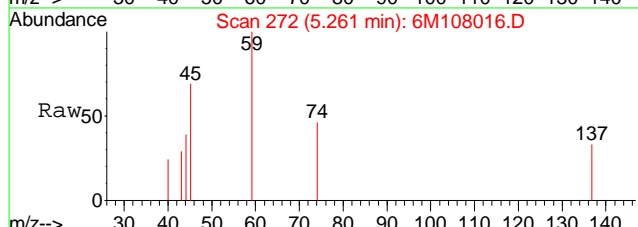
#3
 Chloromethane
 Concen: 1.14 ug/L
 RT: 2.97 min Scan# 48
 Delta R.T. -0.13 min
 Lab File: 6M108016.D
 Acq: 9 May 2012 18:55

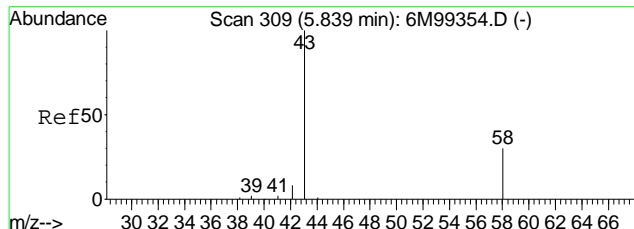
Tgt Ion	Resp	Lower	Upper
50	13355		
52	0.0	18.8	44.0#



#9
 Diethyl ether
 Concen: 1.32 ug/L
 RT: 5.26 min Scan# 272
 Delta R.T. -0.00 min
 Lab File: 6M108016.D
 Acq: 9 May 2012 18:55

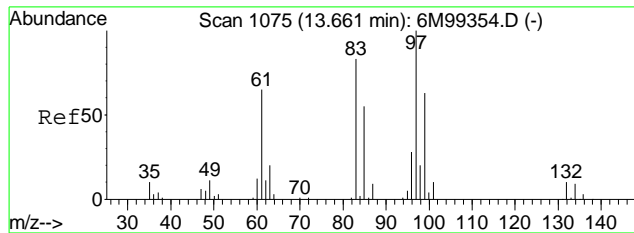
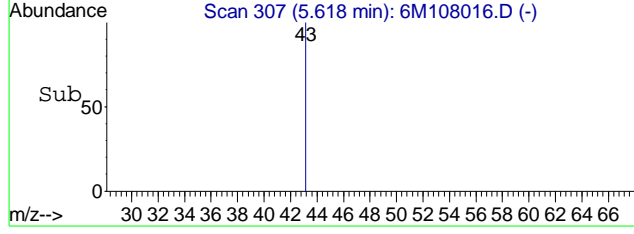
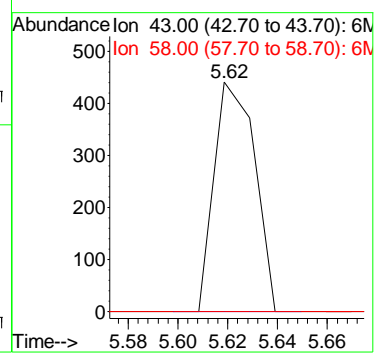
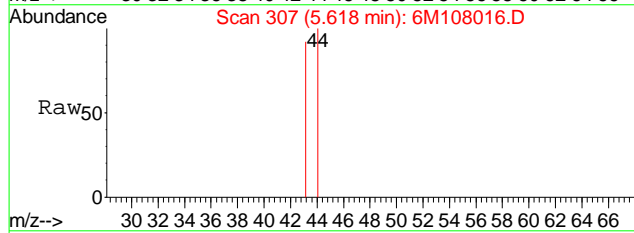
Tgt Ion	Resp	Lower	Upper
59	4070		
45	97.4	48.8	113.8
74	58.9	38.9	90.9





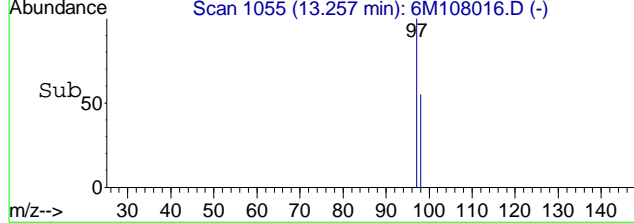
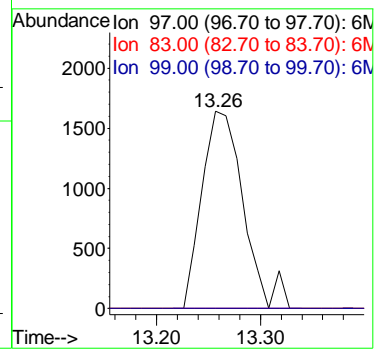
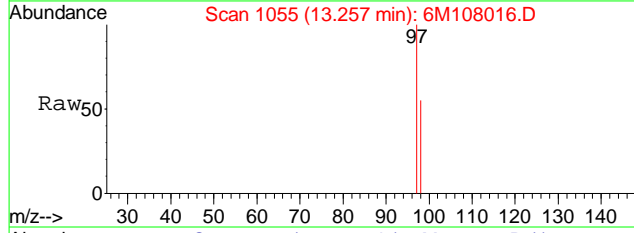
#13
 Acetone
 Concen: 0.62 ug/L
 RT: 5.62 min Scan# 307
 Delta R.T. 0.01 min
 Lab File: 6M108016.D
 Acq: 9 May 2012 18:55

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.3	40.3#



#63
 1,1,2-Trichloroethane
 Concen: 1.47 ug/L
 RT: 13.26 min Scan# 1055
 Delta R.T. -0.15 min
 Lab File: 6M108016.D
 Acq: 9 May 2012 18:55

Tgt Ion	Ratio	Lower	Upper
97	100		
83	0.0	53.1	123.9#
99	0.0	37.7	88.1#



Data File : C:\MSDCHEM\1\DATA\050912\6M108016.D Vial: 19
 Acq On : 9 May 2012 18:55 Operator: ADC
 Sample : L12050099-01 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

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

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

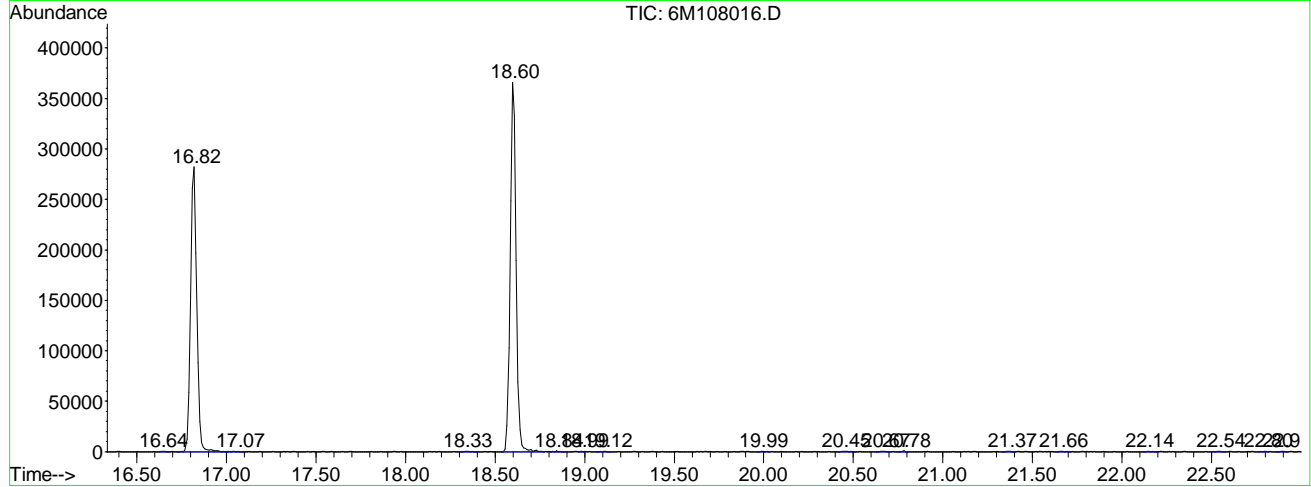
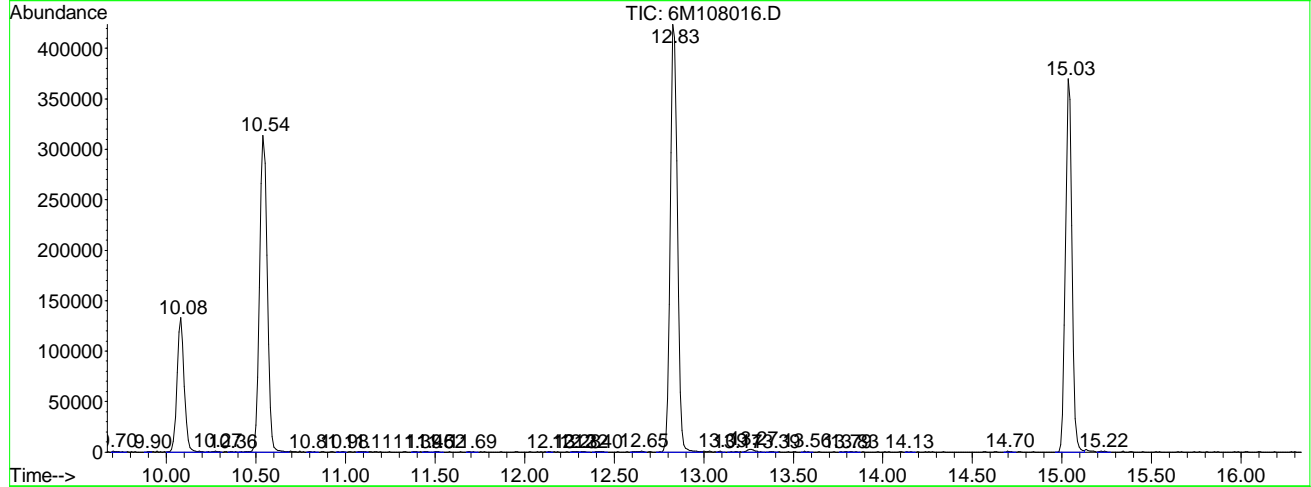
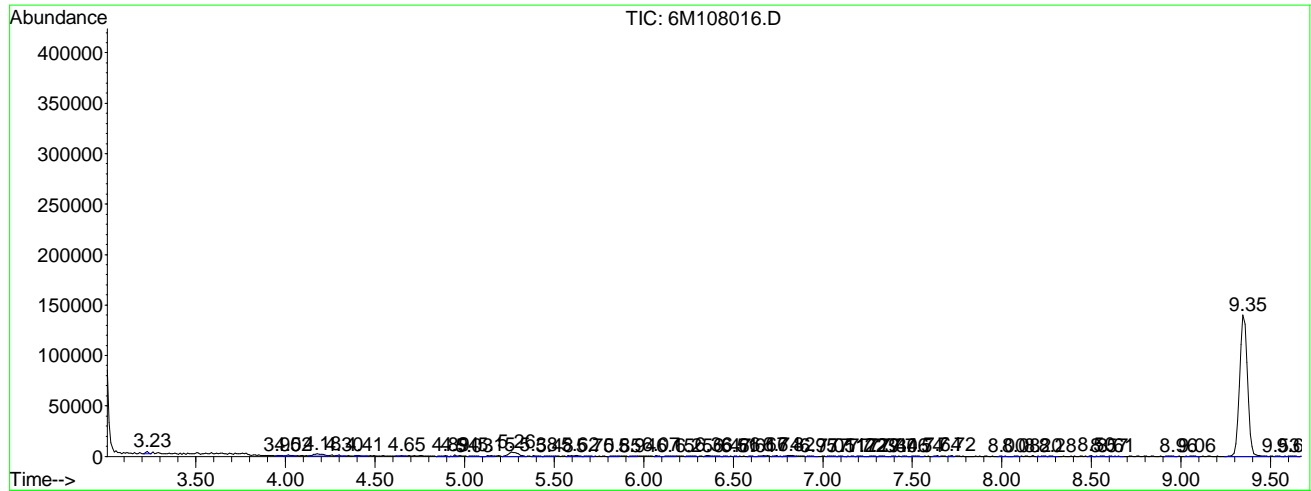
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.229	71	73	75	rBV	2143	2889	0.25%	0.053%
2	3.954	143	144	148	rBV	617	1215	0.10%	0.022%
3	4.015	148	150	154	rVB	973	1634	0.14%	0.030%
4	4.179	161	166	172	rBV2	2296	7096	0.61%	0.130%
5	4.301	176	178	181	rVB	1137	1038	0.09%	0.019%
6	4.414	186	189	193	rVB	432	859	0.07%	0.016%
7	4.648	209	212	214	rBV	538	623	0.05%	0.011%
8	4.893	231	236	238	rBB	796	1819	0.16%	0.033%
9	4.945	238	241	243	rBV	1238	1550	0.13%	0.028%
10	5.026	248	249	256	rBB	465	1385	0.12%	0.025%
11	5.149	257	261	263	rBV	799	1663	0.14%	0.030%
12	5.261	267	272	280	rBB2	4393	15701	1.36%	0.287%
13	5.384	283	284	289	rBB	739	1423	0.12%	0.026%
14	5.476	289	293	296	rBV	519	1603	0.14%	0.029%
15	5.618	302	307	311	rBB	922	2952	0.25%	0.054%
16	5.700	311	315	317	rBB	413	1067	0.09%	0.020%
17	5.853	325	330	331	rBV	473	1520	0.13%	0.028%
18	5.935	336	338	341	rBV	420	1179	0.10%	0.022%
19	6.068	350	351	354	rBB	630	801	0.07%	0.015%
20	6.149	355	359	362	rBV	520	1618	0.14%	0.030%
21	6.252	367	369	374	rBB	424	1343	0.12%	0.025%
22	6.364	377	380	387	rBB	734	2396	0.21%	0.044%
23	6.466	387	390	391	rBB	410	690	0.06%	0.013%
24	6.507	393	394	396	rBB	425	490	0.04%	0.009%
25	6.609	401	404	405	rBB	385	636	0.05%	0.012%
26	6.670	406	410	411	rBV	753	1476	0.13%	0.027%
27	6.742	414	417	420	rBB	612	1008	0.09%	0.018%
28	6.823	420	425	428	rBV2	959	3177	0.27%	0.058%
29	6.946	433	437	439	rBB2	400	857	0.07%	0.016%
30	7.048	444	447	450	rBB	421	1127	0.10%	0.021%
31	7.109	450	453	455	rBB	437	728	0.06%	0.013%
32	7.171	455	459	460	rBB	396	665	0.06%	0.012%
33	7.222	460	464	466	rBB	408	893	0.08%	0.016%
34	7.293	467	471	472	rBB	448	960	0.08%	0.018%
35	7.334	472	475	478	rBB	399	906	0.08%	0.017%
36	7.395	479	481	483	rBB	377	657	0.06%	0.012%
37	7.457	485	487	489	rBB	368	610	0.05%	0.011%
38	7.538	490	495	497	rBB	538	1154	0.10%	0.021%
39	7.640	502	505	506	rBB	612	788	0.07%	0.014%
40	7.722	510	513	514	rBB	731	1011	0.09%	0.018%
41	7.998	538	540	544	rBB	421	672	0.06%	0.012%
42	8.079	545	548	550	rBB	463	693	0.06%	0.013%

43	8.202	559	560	565	rBB	360	836	0.07%	0.015%
44	8.284	565	568	570	rBB	439	699	0.06%	0.013%
45	8.498	587	589	591	rBB	850	744	0.06%	0.014%
46	8.570	591	596	597	rBB	339	796	0.07%	0.015%
47	8.610	598	600	606	rBB	524	954	0.08%	0.017%
48	8.958	629	634	636	rBB	414	1128	0.10%	0.021%
49	9.060	640	644	648	rBB	383	1006	0.09%	0.018%
50	9.346	662	672	686	rBB	139855	422660	36.50%	7.732%
51	9.529	689	690	694	rBB	332	604	0.05%	0.011%
52	9.611	694	698	703	rBB	412	1284	0.11%	0.023%
53	9.703	706	707	714	rBB	659	1264	0.11%	0.023%
54	9.897	724	726	728	rBV	363	599	0.05%	0.011%
55	10.081	736	744	758	rBB	133057	371527	32.08%	6.796%
56	10.275	758	763	766	rBB	620	1389	0.12%	0.025%
57	10.357	770	771	776	rBB	378	621	0.05%	0.011%
58	10.540	776	789	803	rBV	313476	926639	80.02%	16.951%
59	10.806	813	815	819	rBB	330	591	0.05%	0.011%
60	10.979	829	832	834	rBB	321	588	0.05%	0.011%
61	11.112	840	845	846	rBB	398	1120	0.10%	0.020%
62	11.388	870	872	874	rBB	392	647	0.06%	0.012%
63	11.459	876	879	881	rBB	376	647	0.06%	0.012%
64	11.521	882	885	887	rBB	406	674	0.06%	0.012%
65	11.694	900	902	906	rBB	323	579	0.05%	0.011%
66	12.133	944	945	947	rBB	444	494	0.04%	0.009%
67	12.276	957	959	962	rBB	395	854	0.07%	0.016%
68	12.317	962	963	967	rBB	369	631	0.05%	0.012%
69	12.399	969	971	977	rBB	354	1002	0.09%	0.018%
70	12.654	990	996	998	rBB	651	2053	0.18%	0.038%
71	12.828	1004	1013	1029	rBV	424039	1158039	100.00%	21.184%
72	13.093	1037	1039	1041	rBB	677	613	0.05%	0.011%
73	13.175	1043	1047	1049	rBB	429	741	0.06%	0.014%
74	13.267	1051	1056	1063	rBB	2654	7735	0.67%	0.141%
75	13.389	1064	1068	1070	rBB	416	653	0.06%	0.012%
76	13.563	1083	1085	1089	rBB	757	654	0.06%	0.012%
77	13.788	1104	1107	1109	rBB	431	657	0.06%	0.012%
78	13.828	1109	1111	1115	rBB	372	642	0.06%	0.012%
79	14.135	1140	1141	1145	rBB	490	506	0.04%	0.009%
80	14.696	1194	1196	1200	rBB	630	800	0.07%	0.015%
81	15.033	1222	1229	1238	rBV	370144	939505	81.13%	17.187%
82	15.217	1245	1247	1252	rBB	743	1541	0.13%	0.028%
83	16.637	1385	1386	1390	rBB	403	660	0.06%	0.012%
84	16.820	1395	1404	1422	rBB	282058	680016	58.72%	12.440%
85	17.066	1422	1428	1430	rBB	322	762	0.07%	0.014%
86	18.332	1550	1552	1558	rBB	398	870	0.08%	0.016%
87	18.597	1572	1578	1595	rBB	366020	847577	73.19%	15.505%
88	18.842	1599	1602	1606	rBB	615	782	0.07%	0.014%
89	18.985	1614	1616	1617	rBB	463	535	0.05%	0.010%
90	19.118	1624	1629	1631	rBB	429	708	0.06%	0.013%
91	19.986	1712	1714	1718	rBB	333	577	0.05%	0.011%
92	20.446	1756	1759	1765	rBB	380	1019	0.09%	0.019%
93	20.670	1777	1781	1784	rBB	411	913	0.08%	0.017%
94	20.782	1789	1792	1794	rBB	699	648	0.06%	0.012%
95	21.375	1846	1850	1852	rBB	350	592	0.05%	0.011%
96	21.661	1876	1878	1883	rBB	413	874	0.08%	0.016%
97	22.141	1923	1925	1930	rBB	365	611	0.05%	0.011%
98	22.539	1960	1964	1967	rBB	382	826	0.07%	0.015%
99	22.804	1986	1990	1991	rBB	326	588	0.05%	0.011%
100	22.906	1996	2000	2001	rBB	398	648	0.06%	0.012%

Sum of corrected areas: 5466494

File : C:\MSDCHEM\1\DATA\050912\6M108016.D
 Operator : ADC
 Acquired : 9 May 2012 18:55 using AcqMethod 8260WTR
 Instrument : HPMS6
 Sample Name: L12050099-01 A 826-SPE
 Misc Info : 1,1
 Vial Number: 19
 Quant File :8260WTR.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 9 May 2012 18:55
Data File: C:\MSDCHEM\1\DATA\050912\6M108016.D
Name: L12050099-01 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Data File : C:\MSDCHEM\1\DATA\050912\6M108017.D Vial: 20
 Acq On : 9 May 2012 19:28 Operator: ADC
 Sample : L12050099-03 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54:44 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	429872	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	297166	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	135995	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	132983	28.5706	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	114.28%	
43) 1,2-Dichloroethane-d4	10.08	65	128677	28.1691	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	112.68%	
58) Toluene-d8	12.83	98	419652	25.9836	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	103.92%	
80) p-Bromofluorobenzene	16.81	95	135471	25.3857	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	101.56%	
Target Compounds						
3) Chloromethane	3.11	50	184	Below Cal	Qvalue #	43

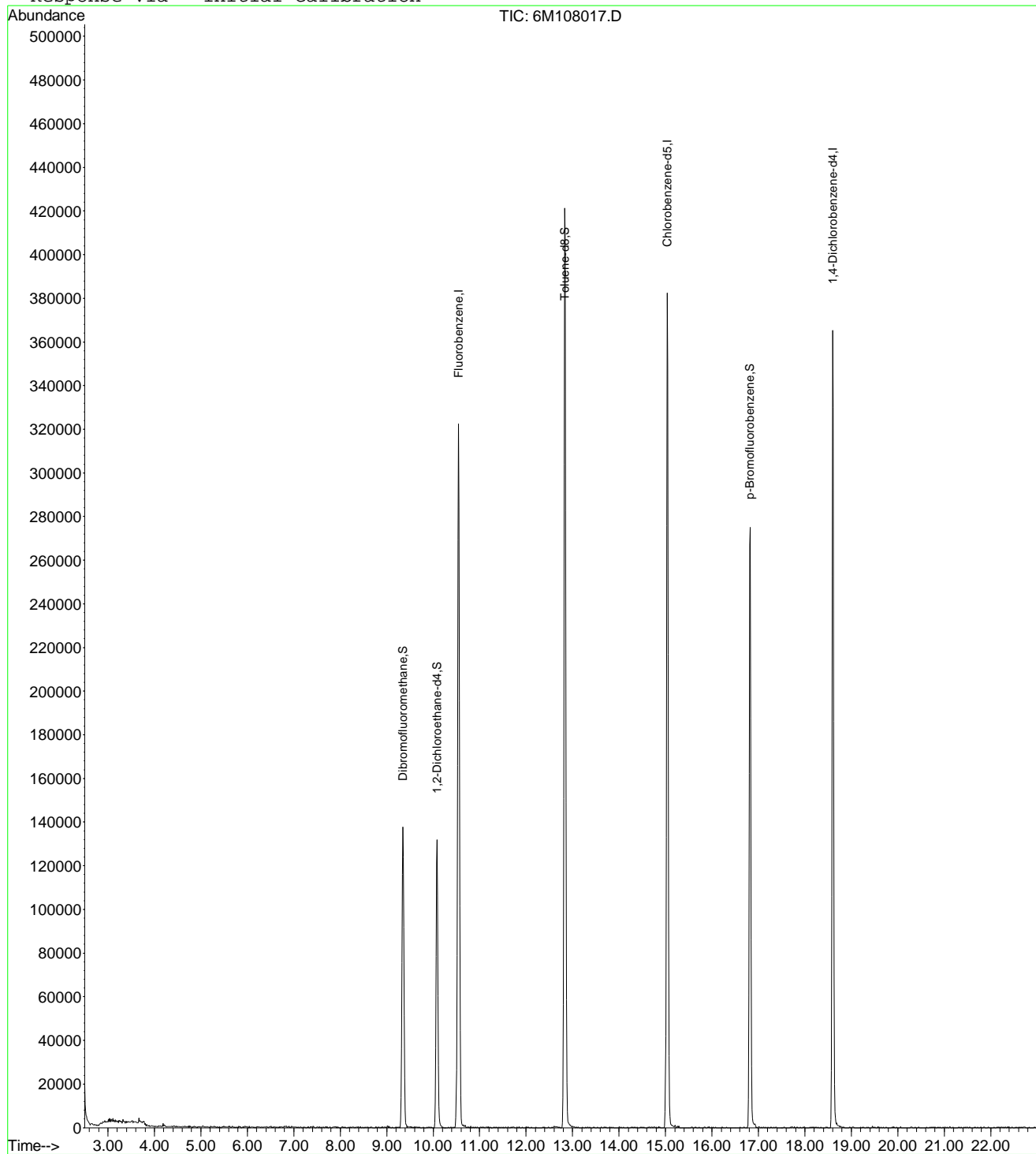
(#) = qualifier out of range (m) = manual integration
 6M108017.D 8260WTR.M Thu May 10 17:54:45 2012

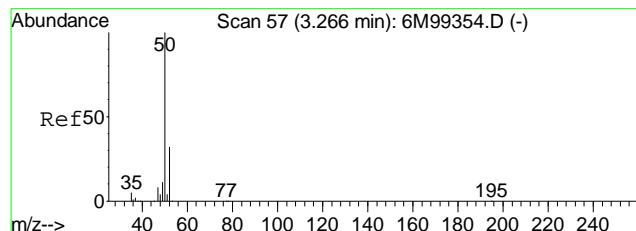
Data File : C:\MSDCHEM\1\DATA\050912\6M108017.D
 Acq On : 9 May 2012 19:28
 Sample : L12050099-03 A 826-SPE
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54 2012

Vial: 20
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: 8260WTR.RES

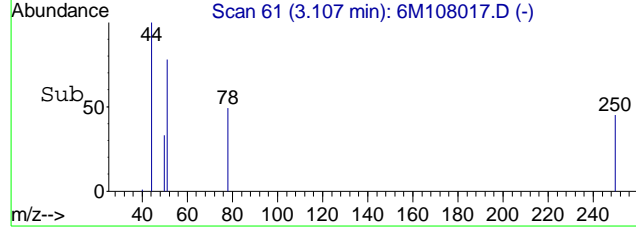
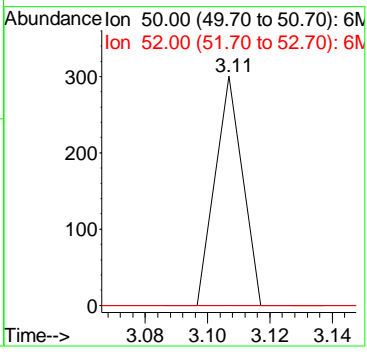
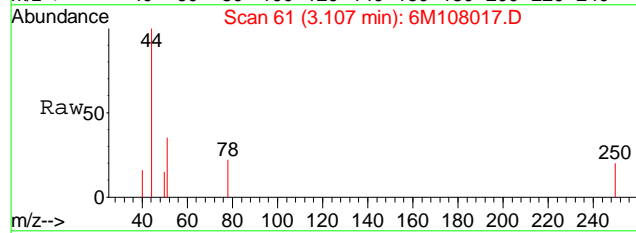
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
 Last Update : Wed Apr 25 15:22:20 2012
 Response via : Initial Calibration





#3
 Chloromethane
 Concen: Below Cal
 RT: 3.11 min Scan# 61
 Delta R.T. -0.00 min
 Lab File: 6M108017.D
 Acq: 9 May 2012 19:28

Tgt Ion	Ratio	Lower	Upper
50	100		
52	0.0	18.8	44.0#



Data File : C:\MSDCHEM\1\DATA\050912\6M108017.D Vial: 20
 Acq On : 9 May 2012 19:28 Operator: ADC
 Sample : L12050099-03 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

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

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

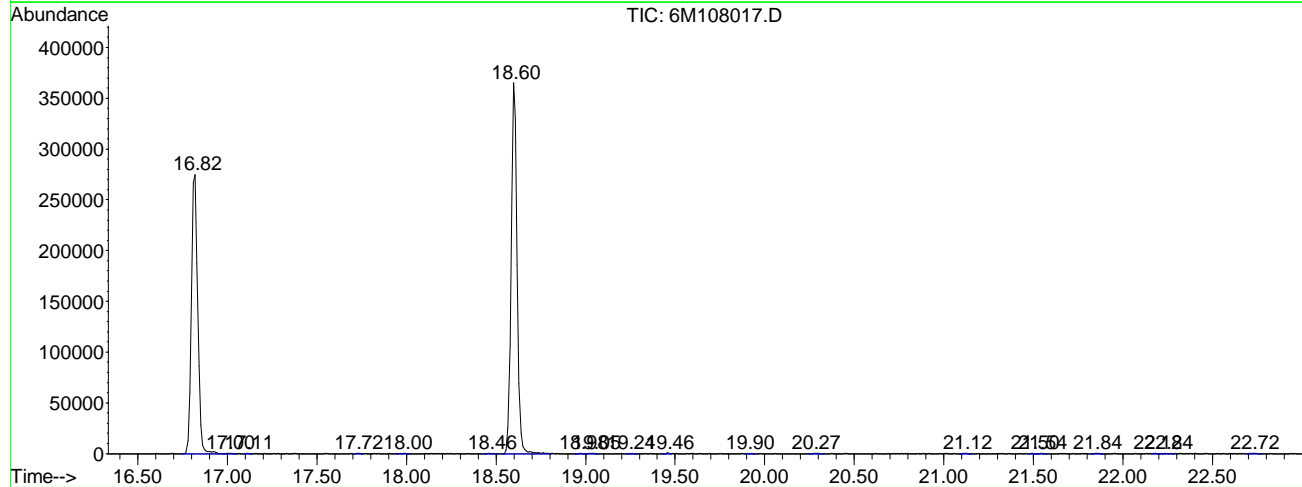
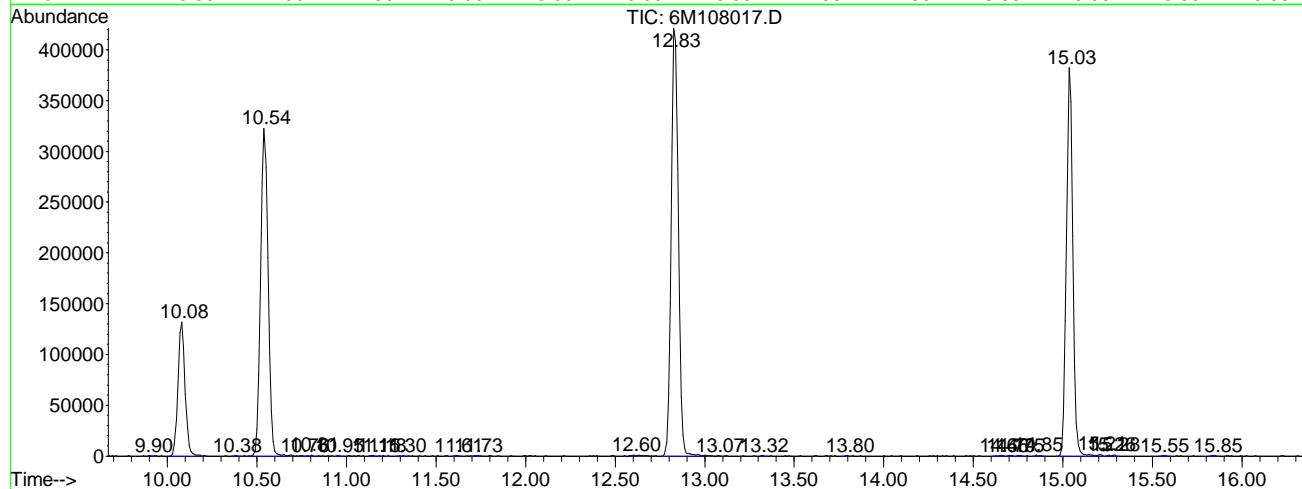
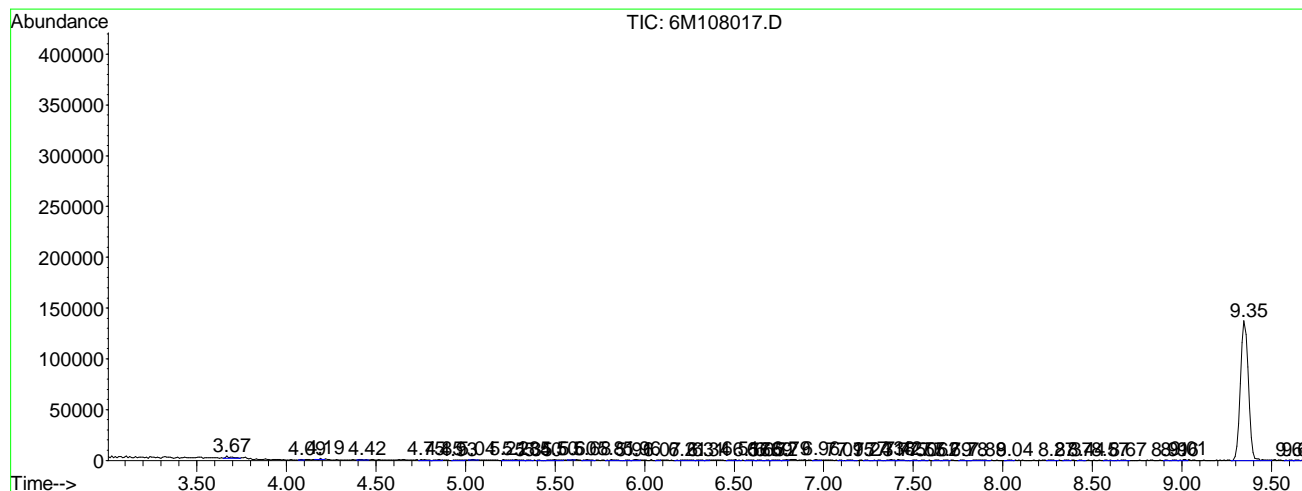
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.668	114	116	123	rBV2	2228	4218	0.36%	0.077%
2	4.087	155	157	158	rBV	554	603	0.05%	0.011%
3	4.189	164	167	169	rBV	1382	1222	0.11%	0.022%
4	4.424	187	190	193	rVB	561	935	0.08%	0.017%
5	4.751	221	222	228	rBB	895	2050	0.18%	0.038%
6	4.853	228	232	234	rBV	807	1753	0.15%	0.032%
7	4.935	239	240	246	rBV	559	1914	0.17%	0.035%
8	5.037	248	250	253	rVB	573	919	0.08%	0.017%
9	5.210	266	267	272	rBV	649	1681	0.15%	0.031%
10	5.282	272	274	279	rVB	711	1754	0.15%	0.032%
11	5.353	279	281	283	rBB	445	778	0.07%	0.014%
12	5.404	285	286	289	rBB	482	501	0.04%	0.009%
13	5.496	290	295	300	rBV	698	2592	0.22%	0.048%
14	5.598	302	305	306	rVV	509	594	0.05%	0.011%
15	5.680	310	313	317	rBB	716	1482	0.13%	0.027%
16	5.813	323	326	332	rBB	657	1699	0.15%	0.031%
17	5.915	333	336	337	rBB	441	718	0.06%	0.013%
18	5.956	337	340	342	rBV	650	1551	0.13%	0.028%
19	6.068	350	351	353	rBV	397	626	0.05%	0.012%
20	6.211	361	365	372	rBB	541	2088	0.18%	0.038%
21	6.313	372	375	377	rBB	407	864	0.07%	0.016%
22	6.344	377	378	380	rBV	379	642	0.06%	0.012%
23	6.507	389	394	397	rBB	811	1723	0.15%	0.032%
24	6.568	399	400	405	rBB	433	1040	0.09%	0.019%
25	6.650	405	408	409	rBB	382	651	0.06%	0.012%
26	6.691	410	412	413	rBB	458	486	0.04%	0.009%
27	6.722	413	415	419	rBB	485	1183	0.10%	0.022%
28	6.793	419	422	423	rBV	764	1227	0.11%	0.023%
29	6.956	436	438	441	rBV	682	1320	0.11%	0.024%
30	7.089	450	451	453	rBB	396	465	0.04%	0.009%
31	7.150	454	457	460	rBB	393	871	0.08%	0.016%
32	7.242	464	466	468	rBB	363	439	0.04%	0.008%
33	7.314	469	473	475	rBB	432	695	0.06%	0.013%
34	7.375	476	479	482	rBB	637	1331	0.11%	0.024%
35	7.416	482	483	488	rBB	663	1084	0.09%	0.020%
36	7.498	489	491	494	rBB	370	609	0.05%	0.011%
37	7.549	495	496	499	rBB	499	512	0.04%	0.009%
38	7.620	502	503	506	rBB	343	614	0.05%	0.011%
39	7.692	507	510	511	rBB	538	817	0.07%	0.015%
40	7.784	516	519	521	rBB	358	641	0.06%	0.012%
41	7.886	522	529	533	rBB	510	1898	0.16%	0.035%
42	8.039	541	544	546	rBB	437	705	0.06%	0.013%

43	8.274	564	567	570	rBB	346	816	0.07%	0.015%
44	8.366	573	576	577	rBB	395	626	0.05%	0.012%
45	8.437	581	583	585	rBB	451	526	0.05%	0.010%
46	8.570	595	596	601	rBB	379	660	0.06%	0.012%
47	8.672	602	606	609	rBB	392	884	0.08%	0.016%
48	8.907	628	629	631	rBB	495	507	0.04%	0.009%
49	8.958	632	634	636	rBB	384	646	0.06%	0.012%
50	9.009	636	639	641	rBB	1034	1323	0.11%	0.024%
51	9.346	665	672	687	rBV	137749	421396	36.40%	7.742%
52	9.601	694	697	699	rBB	511	750	0.06%	0.014%
53	9.632	699	700	703	rBB	323	585	0.05%	0.011%
54	9.897	725	726	728	rBB	405	481	0.04%	0.009%
55	10.081	737	744	755	rBB	132060	366884	31.69%	6.741%
56	10.377	771	773	776	rBB	382	466	0.04%	0.009%
57	10.541	780	789	802	rBV	322482	932263	80.52%	17.128%
58	10.755	808	810	812	rBB	450	495	0.04%	0.009%
59	10.806	812	815	817	rBB	675	646	0.06%	0.012%
60	10.949	828	829	832	rBB	423	448	0.04%	0.008%
61	11.153	846	849	850	rBB	366	633	0.05%	0.012%
62	11.184	851	852	856	rBB	440	471	0.04%	0.009%
63	11.296	861	863	867	rBB	426	485	0.04%	0.009%
64	11.613	892	894	897	rBB	352	613	0.05%	0.011%
65	11.725	903	905	909	rBB	415	830	0.07%	0.015%
66	12.603	988	991	992	rBV	679	1035	0.09%	0.019%
67	12.828	1006	1013	1029	rBV	421361	1157812	100.00%	21.272%
68	13.073	1036	1037	1039	rBB	379	448	0.04%	0.008%
69	13.318	1060	1061	1064	rBB	391	445	0.04%	0.008%
70	13.798	1105	1108	1110	rBB	378	443	0.04%	0.008%
71	14.656	1187	1192	1194	rBB	399	804	0.07%	0.015%
72	14.697	1195	1196	1199	rBB	374	636	0.05%	0.012%
73	14.748	1200	1201	1204	rBB	332	587	0.05%	0.011%
74	14.850	1209	1211	1216	rBB	613	787	0.07%	0.014%
75	15.034	1222	1229	1244	rBV	382485	955608	82.54%	17.557%
76	15.207	1244	1246	1249	rVB	1234	1764	0.15%	0.032%
77	15.258	1249	1251	1252	rBB	651	596	0.05%	0.011%
78	15.279	1252	1253	1256	rBB	697	849	0.07%	0.016%
79	15.555	1278	1280	1284	rBB	389	642	0.06%	0.012%
80	15.851	1305	1309	1311	rBB	337	607	0.05%	0.011%
81	16.821	1397	1404	1419	rBB	275034	677796	58.54%	12.453%
82	17.005	1420	1422	1426	rBB	437	848	0.07%	0.016%
83	17.107	1431	1432	1435	rBB	371	441	0.04%	0.008%
84	17.719	1491	1492	1495	rBB	459	760	0.07%	0.014%
85	17.995	1514	1519	1521	rBB	360	607	0.05%	0.011%
86	18.465	1562	1565	1569	rBB	346	589	0.05%	0.011%
87	18.598	1572	1578	1598	rBB	365428	847625	73.21%	15.573%
88	18.975	1612	1615	1617	rBB	418	449	0.04%	0.008%
89	19.047	1618	1622	1624	rBB	350	792	0.07%	0.015%
90	19.241	1640	1641	1645	rBB	418	447	0.04%	0.008%
91	19.455	1660	1662	1664	rBB	660	627	0.05%	0.012%
92	19.905	1705	1706	1710	rBB	445	520	0.04%	0.010%
93	20.272	1740	1742	1747	rBB	357	814	0.07%	0.015%
94	21.120	1822	1825	1828	rBB	440	722	0.06%	0.013%
95	21.498	1860	1862	1864	rBB	373	449	0.04%	0.008%
96	21.538	1865	1866	1869	rBB	402	465	0.04%	0.009%
97	21.845	1894	1896	1900	rBB	402	630	0.05%	0.012%
98	22.182	1927	1929	1931	rBB	395	446	0.04%	0.008%
99	22.243	1931	1935	1939	rBB	376	828	0.07%	0.015%
100	22.723	1979	1982	1986	rBB	358	1014	0.09%	0.019%

Sum of corrected areas: 5442861

File : C:\MSDCHEM\1\DATA\050912\6M108017.D
 Operator : ADC
 Acquired : 9 May 2012 19:28 using AcqMethod 8260WTR
 Instrument : HPMS6
 Sample Name: L12050099-03 A 826-SPE
 Misc Info : 1,1
 Vial Number: 20
 Quant File :8260WTR.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 9 May 2012 19:28
Data File: C:\MSDCHEM\1\DATA\050912\6M108017.D
Name: L12050099-03 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Data File : C:\MSDCHEM\1\DATA\050912\6M108018.D Vial: 21
 Acq On : 9 May 2012 20:00 Operator: ADC
 Sample : L12050099-05 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54:45 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	417893	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	290737	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	133201	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	134526	29.7306	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	118.92%#	
43) 1,2-Dichloroethane-d4	10.08	65	132589	29.8575	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	119.44%	
58) Toluene-d8	12.83	98	420391	26.6050	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	106.40%	
80) p-Bromofluorobenzene	16.81	95	136415	26.0988	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	104.40%	
Target Compounds						
						Qvalue
13) Acetone	5.61	43	736	0.9295	ug/L	# 46
33) Chloroform	9.02	83	6521	0.7616	ug/L	91

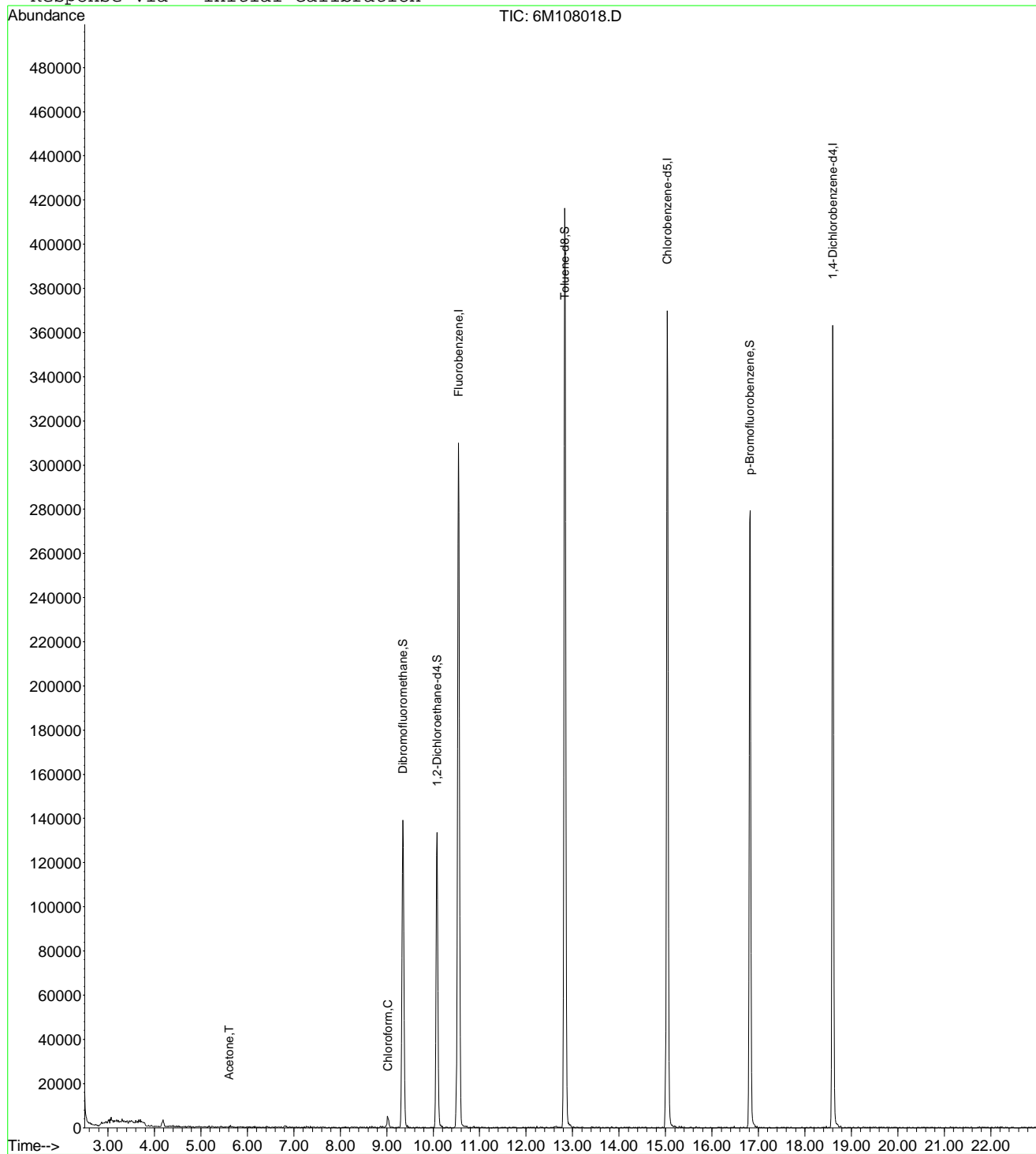
(#) = qualifier out of range (m) = manual integration
 6M108018.D 8260WTR.M Thu May 10 17:54:46 2012

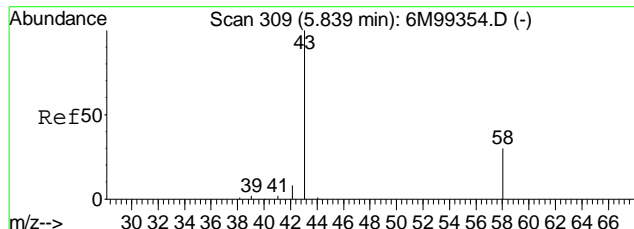
Data File : C:\MSDCHEM\1\DATA\050912\6M108018.D
 Acq On : 9 May 2012 20:00
 Sample : L12050099-05 A 826-SPE
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54 2012

Vial: 21
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: 8260WTR.RES

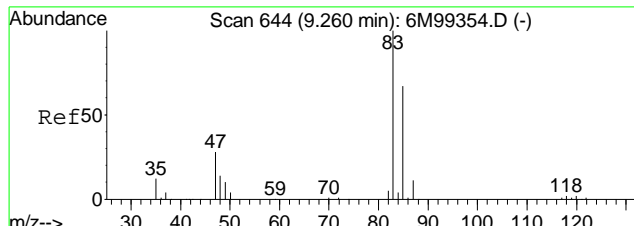
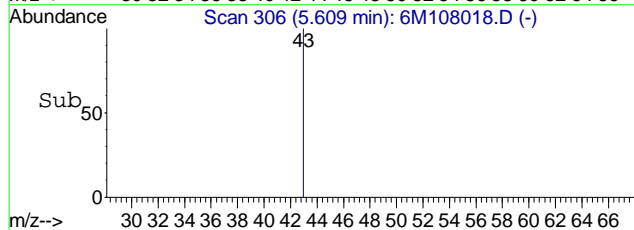
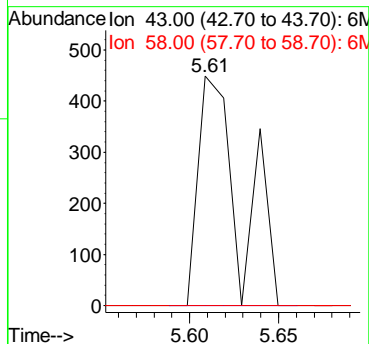
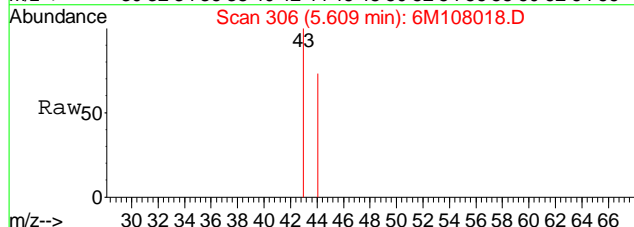
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
 Last Update : Wed Apr 25 15:22:20 2012
 Response via : Initial Calibration





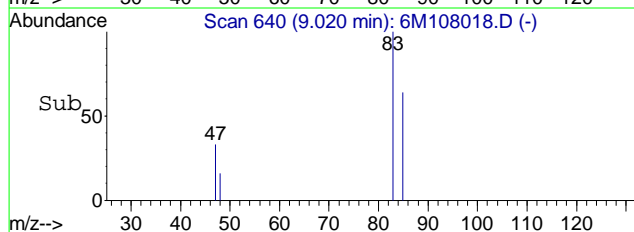
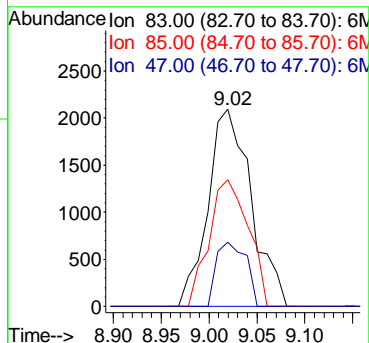
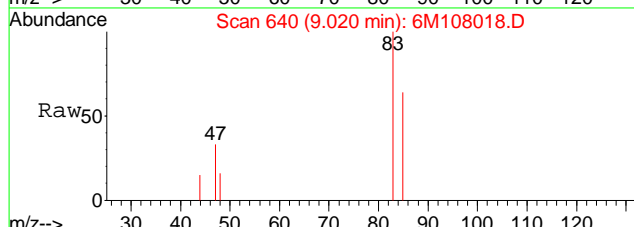
#13
 Acetone
 Concen: 0.93 ug/L
 RT: 5.61 min Scan# 306
 Delta R.T. -0.00 min
 Lab File: 6M108018.D
 Acq: 9 May 2012 20:00

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.3	40.3#



#33
 Chloroform
 Concen: 0.76 ug/L
 RT: 9.02 min Scan# 640
 Delta R.T. -0.00 min
 Lab File: 6M108018.D
 Acq: 9 May 2012 20:00

Tgt Ion	Ratio	Lower	Upper
83	100		
85	58.5	38.9	90.7
47	22.5	16.8	39.2



Data File : C:\MSDCHEM\1\DATA\050912\6M108018.D Vial: 21
 Acq On : 9 May 2012 20:00 Operator: ADC
 Sample : L12050099-05 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

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

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

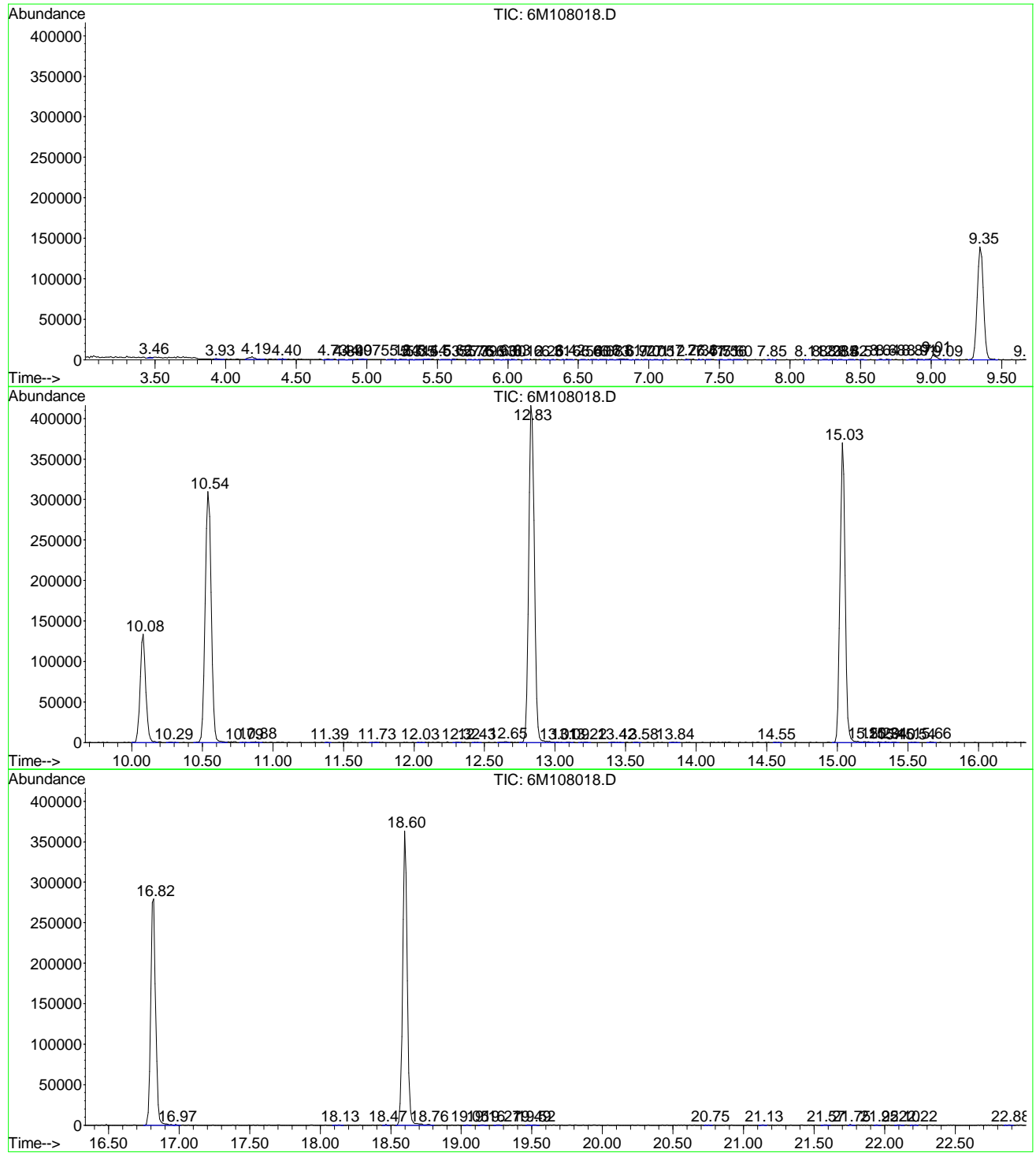
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.464	94	96	98	rBV	1335	2252	0.20%	0.042%
2	3.934	141	142	147	rVB	705	838	0.07%	0.016%
3	4.189	162	167	175	rVB3	3280	8970	0.79%	0.166%
4	4.404	185	188	190	rVV	786	754	0.07%	0.014%
5	4.731	216	220	223	rBV	672	2138	0.19%	0.040%
6	4.843	226	231	232	rBB	508	1249	0.11%	0.023%
7	4.904	233	237	238	rBV	589	1432	0.13%	0.027%
8	4.966	241	243	246	rVV	504	685	0.06%	0.013%
9	5.180	260	264	268	rBB	909	2038	0.18%	0.038%
10	5.241	268	270	275	rBB	670	1778	0.16%	0.033%
11	5.313	275	277	279	rBB	463	785	0.07%	0.015%
12	5.354	279	281	286	rBV	449	1603	0.14%	0.030%
13	5.435	286	289	290	rVV	450	626	0.05%	0.012%
14	5.527	297	298	305	rBB	515	1656	0.15%	0.031%
15	5.619	305	307	308	rBV	777	1175	0.10%	0.022%
16	5.731	316	318	320	rBB	403	659	0.06%	0.012%
17	5.762	320	321	323	rBB	384	446	0.04%	0.008%
18	5.793	323	324	327	rBV	527	963	0.08%	0.018%
19	5.925	335	337	340	rBB	505	738	0.06%	0.014%
20	5.997	340	344	346	rBB	446	931	0.08%	0.017%
21	6.028	346	347	350	rBB	627	863	0.08%	0.016%
22	6.119	355	356	359	rBB	460	779	0.07%	0.014%
23	6.262	368	370	373	rBB	380	648	0.06%	0.012%
24	6.313	374	375	377	rBB	418	478	0.04%	0.009%
25	6.416	381	385	390	rBB	678	1658	0.15%	0.031%
26	6.538	394	397	399	rBB	406	892	0.08%	0.017%
27	6.599	401	403	407	rBB	434	1150	0.10%	0.021%
28	6.681	407	411	414	rBB	410	1406	0.12%	0.026%
29	6.732	414	416	418	rBB	521	743	0.07%	0.014%
30	6.814	419	424	430	rBB	975	3354	0.29%	0.062%
31	6.916	430	434	436	rBB	466	988	0.09%	0.018%
32	7.008	438	443	444	rBB	421	918	0.08%	0.017%
33	7.049	445	447	450	rBB	460	771	0.07%	0.014%
34	7.120	450	454	456	rBB	338	594	0.05%	0.011%
35	7.263	467	468	470	rBV	662	906	0.08%	0.017%
36	7.355	476	477	479	rBV	691	626	0.05%	0.012%
37	7.406	481	482	485	rBV	367	847	0.07%	0.016%
38	7.508	490	492	495	rBB	392	643	0.06%	0.012%
39	7.559	496	497	500	rBB	362	630	0.06%	0.012%
40	7.600	500	501	507	rBB	420	1375	0.12%	0.025%
41	7.845	524	525	530	rBB	379	652	0.06%	0.012%
42	8.111	550	551	554	rBB	483	547	0.05%	0.010%

43	8.233	561	563	567	rBB	387		843	0.07%	0.016%
44	8.284	567	568	573	rBB	357		1028	0.09%	0.019%
45	8.346	573	574	578	rBB	373		600	0.05%	0.011%
46	8.417	579	581	585	rBB	375		825	0.07%	0.015%
47	8.509	588	590	593	rBB	350		605	0.05%	0.011%
48	8.642	600	603	605	rBB	619		852	0.07%	0.016%
49	8.683	606	607	610	rBB	714		862	0.08%	0.016%
50	8.866	621	625	628	rBB	707		1280	0.11%	0.024%
51	8.907	628	629	633	rBB	655		1020	0.09%	0.019%
52	9.009	633	639	646	rBB	5207		14163	1.24%	0.263%
53	9.091	646	647	654	rBB	406		1075	0.09%	0.020%
54	9.346	664	672	684	rBB	139247		421487	36.91%	7.816%
55	9.663	698	703	705	rBB	405		648	0.06%	0.012%
56	10.082	736	744	754	rBV	133678		369631	32.37%	6.854%
57	10.286	760	764	768	rBB	386		835	0.07%	0.015%
58	10.541	779	789	802	rBV	309964		913293	79.97%	16.935%
59	10.786	811	813	817	rBB	408		445	0.04%	0.008%
60	10.878	818	822	826	rBB	641		1230	0.11%	0.023%
61	11.389	870	872	874	rBB	382		461	0.04%	0.009%
62	11.726	901	905	907	rBB	332		596	0.05%	0.011%
63	12.032	934	935	939	rBB	393		465	0.04%	0.009%
64	12.318	959	963	964	rBB	377		607	0.05%	0.011%
65	12.430	972	974	978	rBB	376		441	0.04%	0.008%
66	12.655	990	996	998	rBB	713		2224	0.19%	0.041%
67	12.828	1005	1013	1030	rBB	416398		1142059	100.00%	21.177%
68	13.012	1030	1031	1036	rBB	437		684	0.06%	0.013%
69	13.094	1037	1039	1042	rBB	396		649	0.06%	0.012%
70	13.216	1046	1051	1054	rBB	328		778	0.07%	0.014%
71	13.421	1067	1071	1077	rBB	465		1077	0.09%	0.020%
72	13.584	1084	1087	1089	rBB	367		620	0.05%	0.011%
73	13.839	1109	1112	1116	rBB	438		648	0.06%	0.012%
74	14.554	1181	1182	1187	rBB	358		632	0.06%	0.012%
75	15.034	1222	1229	1243	rBV	369996		935490	81.91%	17.347%
76	15.197	1243	1245	1251	rVB	883		2054	0.18%	0.038%
77	15.289	1252	1254	1257	rBB	704		820	0.07%	0.015%
78	15.340	1258	1259	1262	rBB	666		629	0.06%	0.012%
79	15.402	1263	1265	1268	rBB	312		566	0.05%	0.010%
80	15.545	1275	1279	1282	rBB	318		567	0.05%	0.011%
81	15.657	1288	1290	1294	rBB	608		749	0.07%	0.014%
82	16.821	1397	1404	1418	rBB	279498		677999	59.37%	12.572%
83	16.974	1418	1419	1422	rBB	674		602	0.05%	0.011%
84	18.128	1528	1532	1535	rBB	407		618	0.05%	0.011%
85	18.465	1563	1565	1567	rBB	797		488	0.04%	0.009%
86	18.598	1572	1578	1592	rBV	363398		827612	72.47%	15.346%
87	18.761	1592	1594	1598	rVB	783		1378	0.12%	0.026%
88	19.047	1619	1622	1624	rBB	419		496	0.04%	0.009%
89	19.160	1629	1633	1635	rBB	363		644	0.06%	0.012%
90	19.272	1640	1644	1645	rBB	326		584	0.05%	0.011%
91	19.486	1662	1665	1666	rBB	358		616	0.05%	0.011%
92	19.517	1666	1668	1671	rBB	348		620	0.05%	0.011%
93	20.752	1786	1789	1791	rBB	369		436	0.04%	0.008%
94	21.130	1824	1826	1829	rBB	475		503	0.04%	0.009%
95	21.569	1867	1869	1873	rBB	354		630	0.06%	0.012%
96	21.753	1886	1887	1890	rBB	635		585	0.05%	0.011%
97	21.947	1904	1906	1908	rBB	379		443	0.04%	0.008%
98	22.100	1918	1921	1924	rBB	366		603	0.05%	0.011%
99	22.223	1929	1933	1934	rBB	491		687	0.06%	0.013%
100	22.876	1994	1997	2000	rBB	387		654	0.06%	0.012%

Sum of corrected areas: 5392920

File : C:\MSDCHEM\1\DATA\050912\6M108018.D
 Operator : ADC
 Acquired : 9 May 2012 20:00 using AcqMethod 8260WTR
 Instrument : HPMS6
 Sample Name: L12050099-05 A 826-SPE
 Misc Info : 1,1
 Vial Number: 21
 Quant File :8260WTR.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 9 May 2012 20:00
Data File: C:\MSDCHEM\1\DATA\050912\6M108018.D
Name: L12050099-05 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Data File : C:\MSDCHEM\1\DATA\050912\6M108019.D Vial: 22
 Acq On : 9 May 2012 20:33 Operator: ADC
 Sample : L12050099-07 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54:46 2012 Quant Results File: 8260WTR.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.54	96	414909	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	292656	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	132801	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	135129	30.0786	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	120.32%#	
43) 1,2-Dichloroethane-d4	10.07	65	134887	30.5935	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	122.36%#	
58) Toluene-d8	12.83	98	421406	26.4943	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	105.96%	
80) p-Bromofluorobenzene	16.81	95	135272	25.9581	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	103.84%	
Target Compounds						
5) 1,3-Butadiene	3.22	54	531	Below Cal	#	48
13) Acetone	5.61	43	913	1.1613	ug/L	# 46
45) 1,2-Dichloroethane	10.22	62	4496	0.7699	ug/L	# 85
63) 1,1,2-Trichloroethane	13.45	97	1274	0.4124	ug/L	# 11

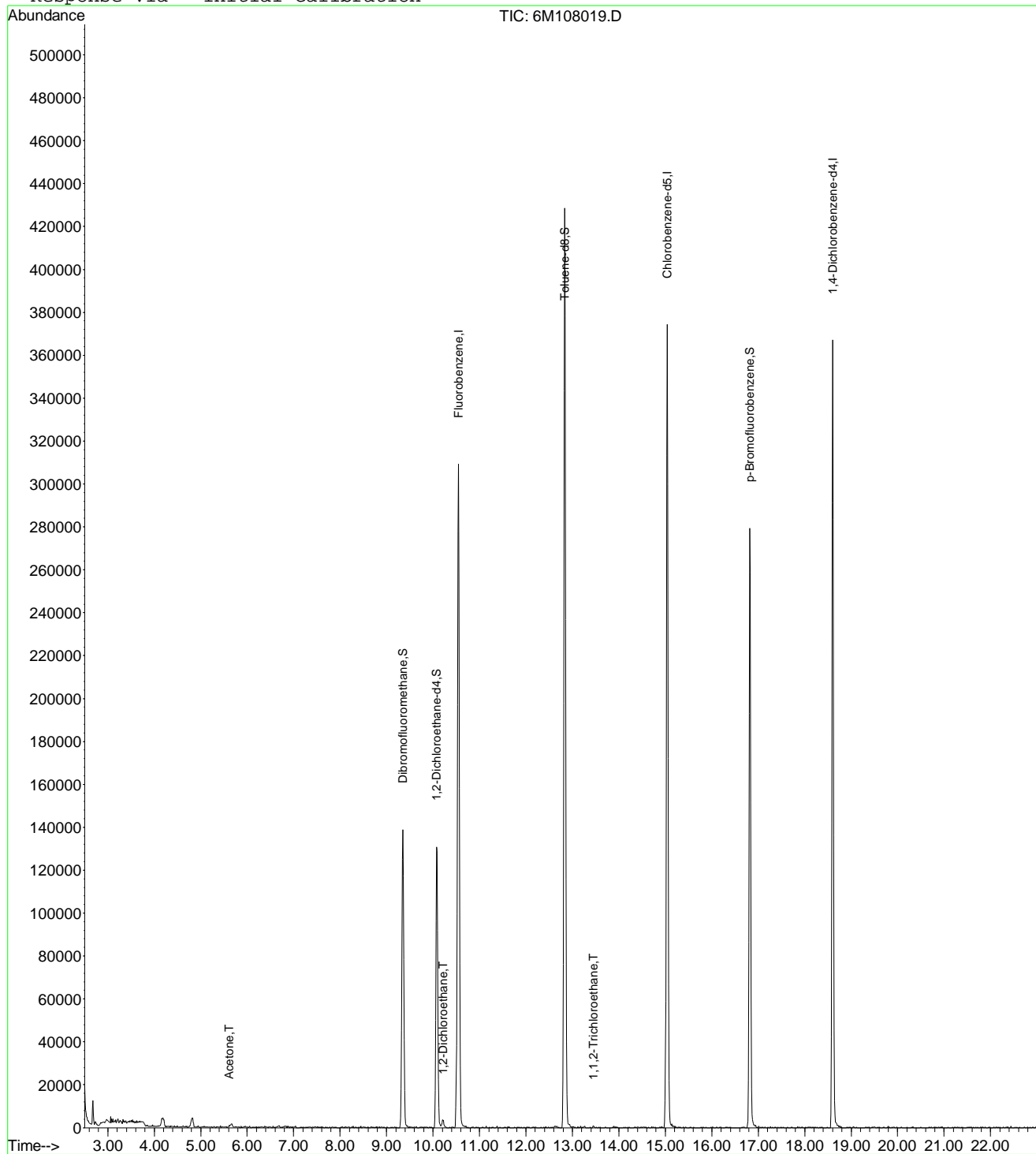
(#) = qualifier out of range (m) = manual integration
 6M108019.D 8260WTR.M Thu May 10 17:54:47 2012

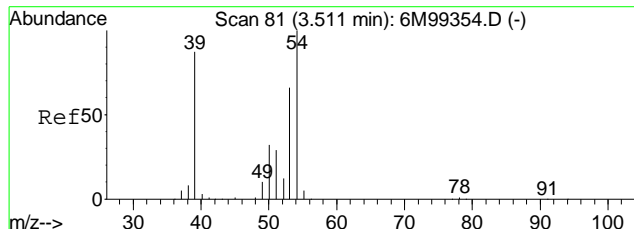
Data File : C:\MSDCHEM\1\DATA\050912\6M108019.D
Acq On : 9 May 2012 20:33
Sample : L12050099-07 A 826-SPE
Misc : 1,1
MS Integration Params: RTEINT.P
Quant Time: May 10 17:54 2012

Vial: 22
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

Quant Results File: 8260WTR.RES

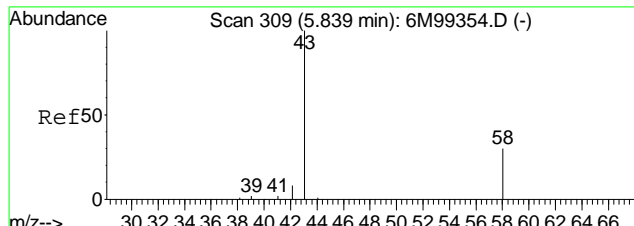
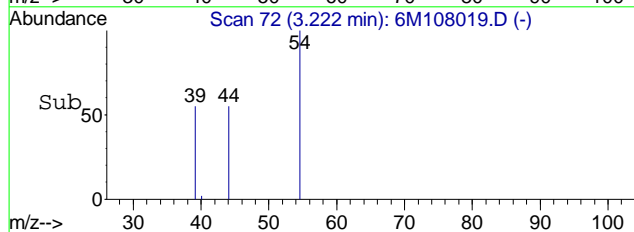
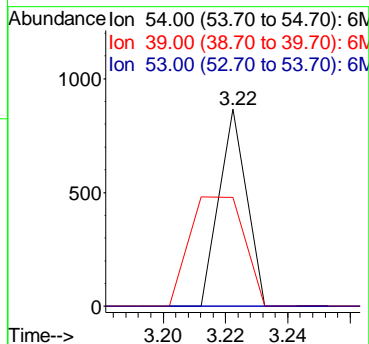
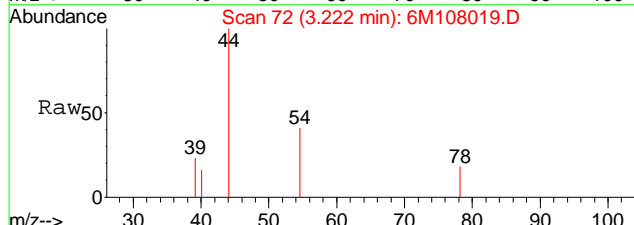
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration





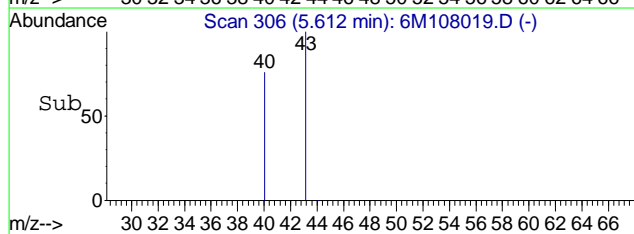
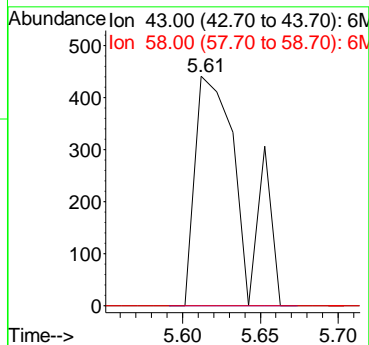
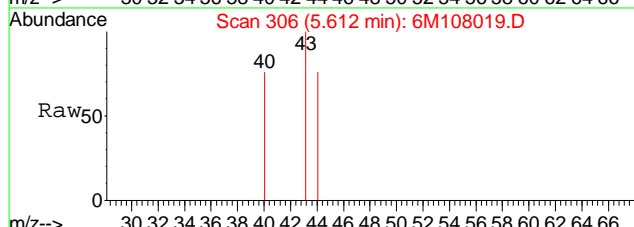
#5
 1,3-Butadiene
 Concen: Below Cal
 RT: 3.22 min Scan# 72
 Delta R.T. -0.12 min
 Lab File: 6M108019.D
 Acq: 9 May 2012 20:33

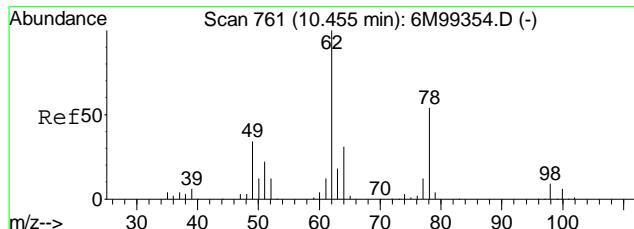
Tgt Ion	Ratio	Lower	Upper
54	100		
39	110.7	51.4	119.8
53	0.0	40.2	93.8#



#13
 Acetone
 Concen: 1.16 ug/L
 RT: 5.61 min Scan# 306
 Delta R.T. 0.00 min
 Lab File: 6M108019.D
 Acq: 9 May 2012 20:33

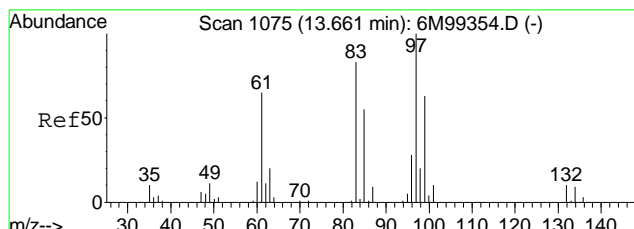
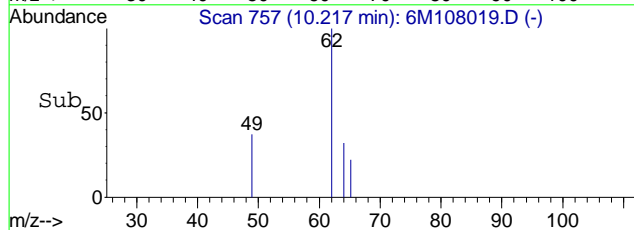
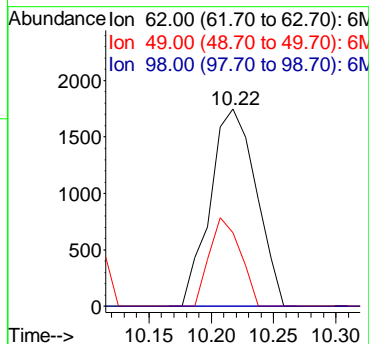
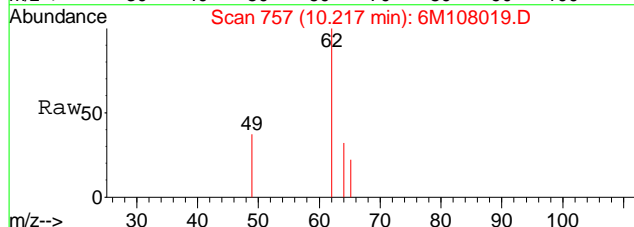
Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.3	40.3#





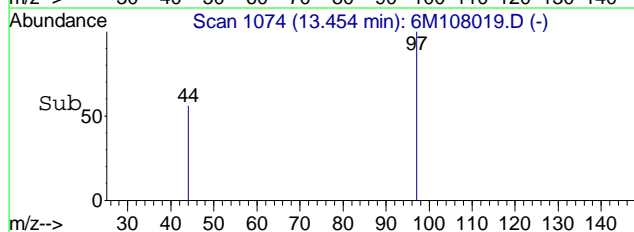
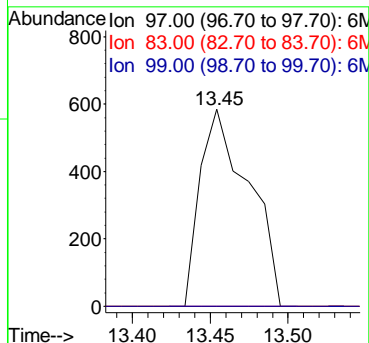
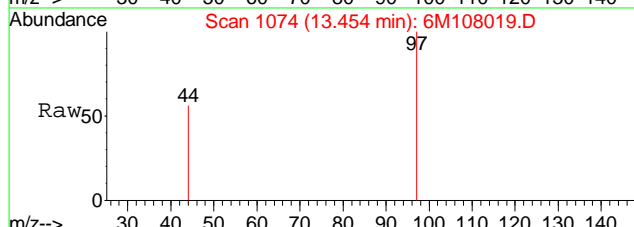
#45
 1,2-Dichloroethane
 Concen: 0.77 ug/L
 RT: 10.22 min Scan# 757
 Delta R.T. 0.00 min
 Lab File: 6M108019.D
 Acq: 9 May 2012 20:33

Tgt Ion	Resp	Lower	Upper
62	4496		
49	30.1	23.1	53.9
98	0.0	4.7	10.9#



#63
 1,1,2-Trichloroethane
 Concen: 0.41 ug/L
 RT: 13.45 min Scan# 1074
 Delta R.T. 0.04 min
 Lab File: 6M108019.D
 Acq: 9 May 2012 20:33

Tgt Ion	Resp	Lower	Upper
97	1274		
83	0.0	53.1	123.9#
99	0.0	37.7	88.1#



Data File : C:\MSDCHEM\1\DATA\050912\6M108019.D Vial: 22
 Acq On : 9 May 2012 20:33 Operator: ADC
 Sample : L12050099-07 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

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

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

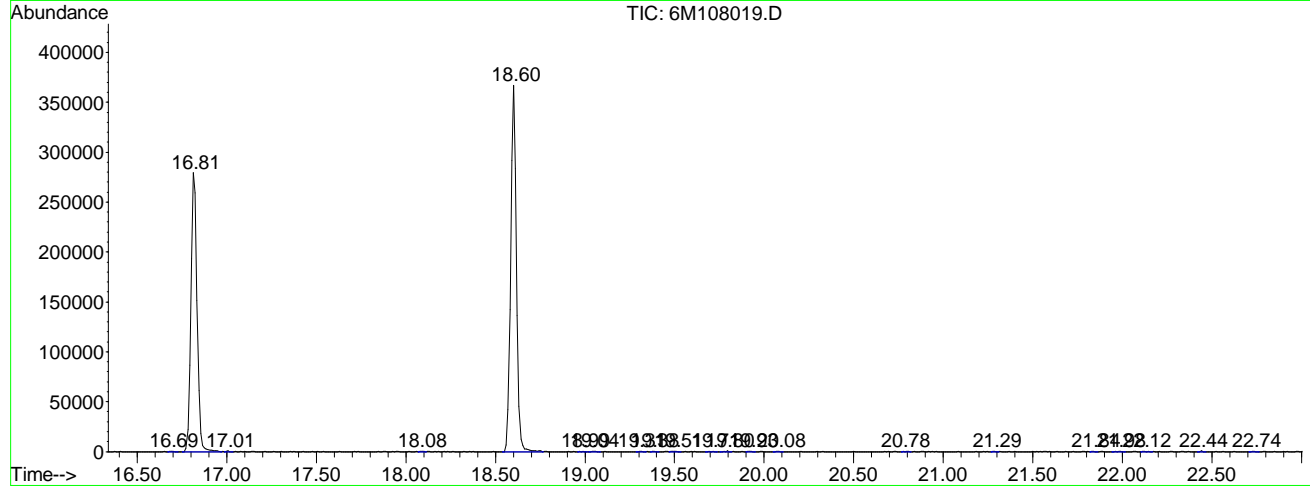
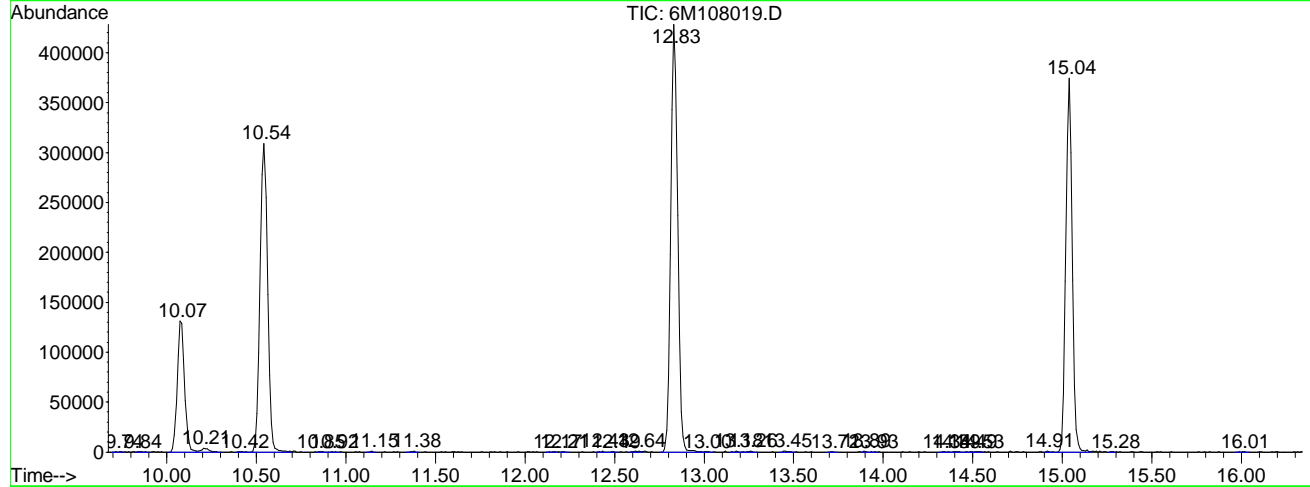
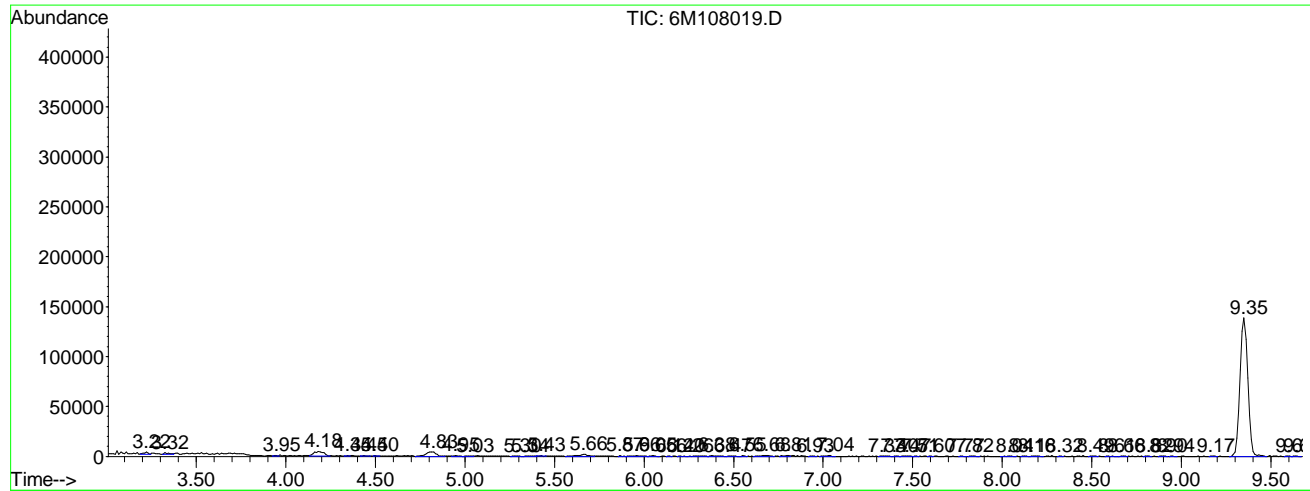
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.222	69	72	74	rVB	2028	3331	0.29%	0.062%
2	3.324	81	82	87	rBV	2012	3749	0.33%	0.069%
3	3.947	141	143	144	rBV	618	618	0.05%	0.011%
4	4.182	161	166	172	rVB5	4293	17197	1.50%	0.318%
5	4.346	180	182	183	rBV	552	459	0.04%	0.008%
6	4.437	189	191	194	rBV	702	631	0.05%	0.012%
7	4.499	196	197	199	rVV	659	435	0.04%	0.008%
8	4.825	219	229	235	rBV3	4550	17934	1.56%	0.332%
9	4.948	239	241	245	rVB	938	1538	0.13%	0.028%
10	5.030	245	249	251	rBV	530	1516	0.13%	0.028%
11	5.295	271	275	277	rBB	571	1356	0.12%	0.025%
12	5.336	278	279	285	rBV	467	1659	0.14%	0.031%
13	5.428	285	288	290	rVV	846	707	0.06%	0.013%
14	5.663	301	311	317	rBV2	1844	8403	0.73%	0.156%
15	5.867	330	331	334	rBB2	792	715	0.06%	0.013%
16	5.959	334	340	346	rBB	792	2724	0.24%	0.050%
17	6.051	346	349	352	rBB	695	1109	0.10%	0.021%
18	6.143	356	358	359	rBB	390	436	0.04%	0.008%
19	6.204	362	364	367	rBB	493	706	0.06%	0.013%
20	6.255	368	369	379	rBB	444	2175	0.19%	0.040%
21	6.378	379	381	388	rBB	726	1950	0.17%	0.036%
22	6.470	389	390	396	rBB	506	1199	0.10%	0.022%
23	6.551	397	398	400	rBB	762	731	0.06%	0.014%
24	6.684	404	411	415	rBB	1016	3345	0.29%	0.062%
25	6.807	418	423	424	rBV	777	1978	0.17%	0.037%
26	6.929	434	435	438	rBB	501	740	0.06%	0.014%
27	7.041	440	446	448	rBB	761	1847	0.16%	0.034%
28	7.327	472	474	479	rBB	385	1275	0.11%	0.024%
29	7.399	480	481	484	rBB	429	750	0.07%	0.014%
30	7.470	484	488	491	rBB	467	1332	0.12%	0.025%
31	7.511	491	492	494	rBB	483	537	0.05%	0.010%
32	7.603	499	501	502	rBB	443	508	0.04%	0.009%
33	7.766	516	517	520	rBB	384	430	0.04%	0.008%
34	7.817	521	522	527	rBB	404	815	0.07%	0.015%
35	8.042	539	544	547	rBB	436	906	0.08%	0.017%
36	8.114	550	551	554	rBB	450	689	0.06%	0.013%
37	8.165	555	556	562	rBB	413	1102	0.10%	0.020%
38	8.318	570	571	573	rBB	385	439	0.04%	0.008%
39	8.491	587	588	592	rBB	336	782	0.07%	0.014%
40	8.614	596	600	602	rBB	386	666	0.06%	0.012%
41	8.665	603	605	608	rBB	445	735	0.06%	0.014%
42	8.818	617	620	621	rBB	337	610	0.05%	0.011%

43	8.900	625	628	630	rBB	380	838	0.07%	0.016%
44	8.941	631	632	635	rBB	351	421	0.04%	0.008%
45	9.165	653	654	657	rBB	333	594	0.05%	0.011%
46	9.349	664	672	684	rBB	138901	419585	36.52%	7.765%
47	9.604	694	697	698	rBB	362	615	0.05%	0.011%
48	9.645	698	701	703	rBB	440	678	0.06%	0.013%
49	9.737	706	710	712	rBB	424	721	0.06%	0.013%
50	9.839	719	720	726	rBB	379	845	0.07%	0.016%
51	10.074	737	743	752	rBV	130938	373034	32.47%	6.904%
52	10.207	752	756	765	rVB3	3795	11267	0.98%	0.209%
53	10.421	774	777	780	rBB3	354	838	0.07%	0.016%
54	10.544	781	789	804	rBV	309295	903691	78.66%	16.725%
55	10.850	818	819	823	rBB	329	601	0.05%	0.011%
56	10.922	824	826	830	rBB	358	424	0.04%	0.008%
57	11.146	845	848	850	rBB	705	652	0.06%	0.012%
58	11.381	867	871	873	rBB	760	879	0.08%	0.016%
59	12.168	943	948	949	rBB	426	656	0.06%	0.012%
60	12.208	951	952	955	rBB	397	428	0.04%	0.008%
61	12.433	971	974	976	rBB	644	585	0.05%	0.011%
62	12.494	977	980	982	rBB	358	433	0.04%	0.008%
63	12.637	989	994	996	rBV	851	2182	0.19%	0.040%
64	12.831	1006	1013	1029	rBB	428631	1148808	100.00%	21.261%
65	13.005	1029	1030	1034	rBB	462	770	0.07%	0.014%
66	13.178	1044	1047	1050	rBB	740	912	0.08%	0.017%
67	13.260	1050	1055	1058	rBB	730	1260	0.11%	0.023%
68	13.454	1071	1074	1079	rBB	914	1662	0.14%	0.031%
69	13.720	1097	1100	1102	rBB	380	435	0.04%	0.008%
70	13.893	1116	1117	1119	rBB	677	606	0.05%	0.011%
71	13.934	1120	1121	1124	rBB	483	482	0.04%	0.009%
72	14.343	1158	1161	1164	rBB	399	633	0.06%	0.012%
73	14.394	1165	1166	1171	rBB	344	806	0.07%	0.015%
74	14.486	1172	1175	1177	rBB	398	634	0.06%	0.012%
75	14.526	1177	1179	1182	rBB	413	912	0.08%	0.017%
76	14.914	1216	1217	1221	rBB	610	772	0.07%	0.014%
77	15.037	1222	1229	1241	rBV	374396	926891	80.68%	17.154%
78	15.282	1251	1253	1254	rBB	423	455	0.04%	0.008%
79	16.007	1320	1324	1327	rBB	324	577	0.05%	0.011%
80	16.691	1389	1391	1394	rBB	354	627	0.05%	0.012%
81	16.814	1397	1403	1418	rBB	279491	670176	58.34%	12.403%
82	17.008	1420	1422	1424	rBB	688	619	0.05%	0.011%
83	18.080	1526	1527	1530	rBB	344	589	0.05%	0.011%
84	18.601	1572	1578	1594	rBB	367084	825338	71.84%	15.275%
85	18.989	1613	1616	1618	rBB	362	431	0.04%	0.008%
86	19.040	1619	1621	1625	rBB	486	694	0.06%	0.013%
87	19.305	1645	1647	1650	rBB	403	440	0.04%	0.008%
88	19.377	1653	1654	1657	rBB	402	437	0.04%	0.008%
89	19.510	1663	1667	1669	rBB	339	793	0.07%	0.015%
90	19.714	1683	1687	1689	rBB	349	426	0.04%	0.008%
91	19.796	1691	1695	1697	rBB	763	667	0.06%	0.012%
92	19.928	1705	1708	1710	rBB	400	657	0.06%	0.012%
93	20.081	1720	1723	1725	rBB	381	426	0.04%	0.008%
94	20.776	1790	1791	1795	rBB	329	584	0.05%	0.011%
95	21.286	1839	1841	1843	rBB	380	431	0.04%	0.008%
96	21.838	1893	1895	1897	rBB	414	445	0.04%	0.008%
97	21.981	1905	1909	1912	rBB	360	624	0.05%	0.012%
98	22.124	1921	1923	1927	rBB	425	643	0.06%	0.012%
99	22.440	1952	1954	1956	rBB	700	429	0.04%	0.008%
100	22.736	1980	1983	1985	rBB	380	424	0.04%	0.008%

Sum of corrected areas: 5403246

File : C:\MSDCHEM\1\DATA\050912\6M108019.D
 Operator : ADC
 Acquired : 9 May 2012 20:33 using AcqMethod 8260WTR
 Instrument : HPMS6
 Sample Name: L12050099-07 A 826-SPE
 Misc Info : 1,1
 Vial Number: 22
 Quant File :8260WTR.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 9 May 2012 20:33
Data File: C:\MSDCHEM\1\DATA\050912\6M108019.D
Name: L12050099-07 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Data File : C:\MSDCHEM\1\DATA\051012\8M378974.D Vial: 13
 Acq On : 11 May 2012 1:31 Operator: TMB
 Sample : L12050099-09 B 826-SPE Inst : HPMS8
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 15 15:04:07 2012 Quant Results File: 8260WT.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	637078	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	567993	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	317304	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	170397	25.7806	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	103.12%		
43) 1,2-Dichloroethane-d4	9.77	65	143537	28.2018	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	112.80%		
58) Toluene-d8	12.17	98	648449	24.7262	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	98.92%		
80) p-Bromofluorobenzene	15.54	95	251683	24.5197	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	98.08%		
Target Compounds						
33) Chloroform	8.86	83	1382	0.1300	ug/L #	63
56) Dimethyl Disulfide	12.17	94	18736	1.8762	ug/L #	28

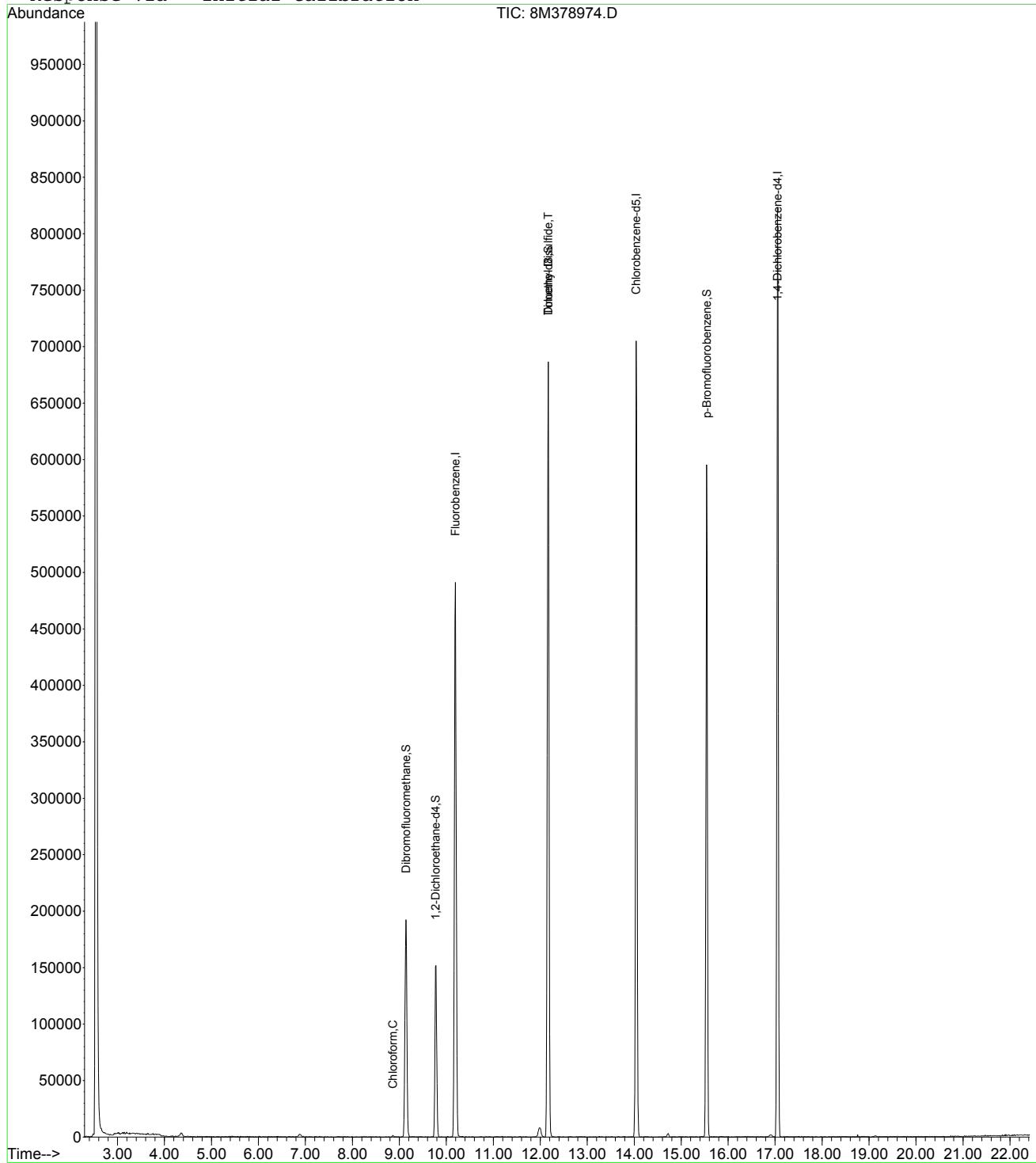
 (#) = qualifier out of range (m) = manual integration
 8M378974.D 8260WT.M Tue May 15 15:04:07 2012

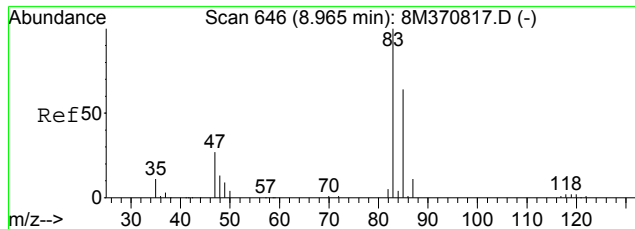
Data File : C:\MSDCHEM\1\DATA\051012\8M378974.D
 Acq On : 11 May 2012 1:31
 Sample : L12050099-09 B 826-SPE
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 15 15:04 2012

Vial: 13
 Operator: TMB
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: 8260WT.RES

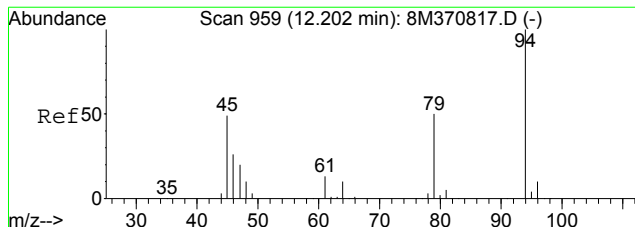
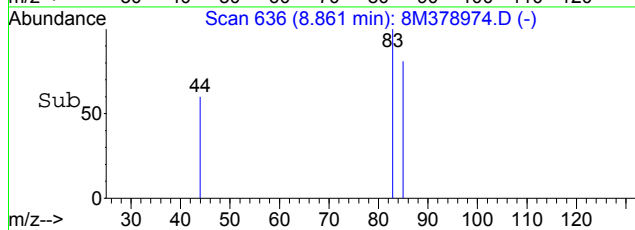
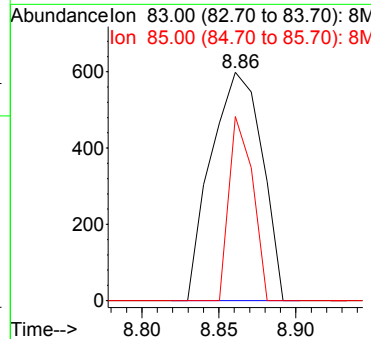
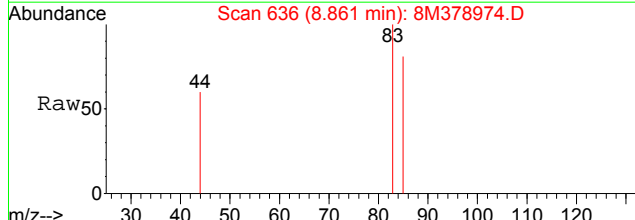
Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
 Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
 Last Update : Wed Mar 28 08:18:24 2012
 Response via : Initial Calibration





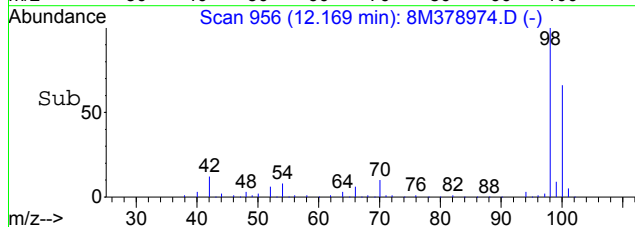
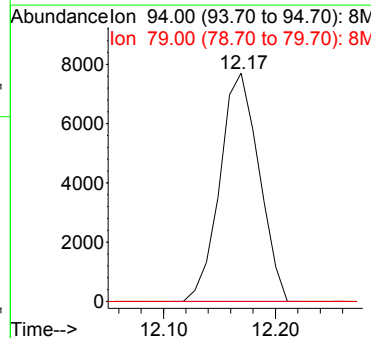
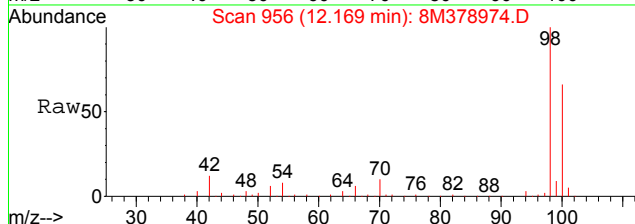
#33
 Chloroform
 Concen: 0.13 ug/L
 RT: 8.86 min Scan# 636
 Delta R.T. 0.01 min
 Lab File: 8M378974.D
 Acq: 11 May 2012 1:31

Tgt Ion	83	85	Resp	1382
Ion Ratio	100	37.3	Lower	Upper
			40.1	93.5#



#56
 Dimethyl Disulfide
 Concen: 1.88 ug/L
 RT: 12.17 min Scan# 956
 Delta R.T. 0.08 min
 Lab File: 8M378974.D
 Acq: 11 May 2012 1:31

Tgt Ion	94	79	Resp	18736
Ion Ratio	100	0.0	Lower	Upper
			29.2	68.0#



Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378974.D Vial: 13
 Acq On : 11 May 2012 1:31 Operator: TMB
 Sample : L12050099-09 B 826-SPE Inst : HPMS8
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

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

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

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.043	167	170	173	rVB	651	1074	0.06%	0.012%
2	4.167	177	182	187	rVV	811	1456	0.08%	0.017%
3	4.353	193	200	211	rVB4	3418	13077	0.76%	0.151%
4	4.487	211	213	218	rVB	485	712	0.04%	0.008%
5	4.559	218	220	221	rVB	831	726	0.04%	0.008%
6	4.601	223	224	231	rVB	490	1504	0.09%	0.017%
7	4.704	232	234	236	rBB	727	984	0.06%	0.011%
8	4.797	240	243	245	rBV	532	1258	0.07%	0.015%
9	4.952	255	258	259	rVB	416	714	0.04%	0.008%
10	4.994	259	262	265	rBB	615	999	0.06%	0.012%
11	5.221	283	284	287	rBB	472	741	0.04%	0.009%
12	5.283	287	290	291	rBB	397	669	0.04%	0.008%
13	5.407	299	302	303	rBB	802	1145	0.07%	0.013%
14	5.438	304	305	307	rBV	988	1029	0.06%	0.012%
15	5.614	321	322	324	rBB	694	719	0.04%	0.008%
16	5.811	338	341	343	rVB	565	1115	0.06%	0.013%
17	5.852	344	345	349	rBB	389	852	0.05%	0.010%
18	6.017	358	361	365	rBB	760	1243	0.07%	0.014%
19	6.110	366	370	371	rBB	406	712	0.04%	0.008%
20	6.214	376	380	381	rBB	443	662	0.04%	0.008%
21	6.276	384	386	389	rBB	493	719	0.04%	0.008%
22	6.638	419	421	427	rBB	635	1241	0.07%	0.014%
23	6.720	428	429	433	rBB	625	821	0.05%	0.010%
24	6.793	434	436	438	rBV	395	871	0.05%	0.010%
25	6.876	438	444	450	rVV2	2274	7816	0.45%	0.091%
26	7.299	483	485	488	rBB2	736	677	0.04%	0.008%
27	7.703	519	524	529	rBB2	618	1201	0.07%	0.014%
28	7.816	532	535	540	rBB	349	973	0.06%	0.011%
29	8.240	573	576	580	rBB	344	1008	0.06%	0.012%
30	8.861	632	636	640	rBB	1442	2328	0.14%	0.027%
31	9.140	652	663	673	rBB	192498	537748	31.27%	6.227%
32	9.274	674	676	678	rBB	428	683	0.04%	0.008%
33	9.316	678	680	683	rBB	393	655	0.04%	0.008%
34	9.781	718	725	732	rBB	151852	389156	22.63%	4.506%
35	10.195	754	765	778	rBB	491280	1309153	76.14%	15.159%
36	11.094	849	852	854	rBB	613	817	0.05%	0.009%
37	11.187	858	861	865	rBB	656	1225	0.07%	0.014%
38	11.580	894	899	901	rBB	439	929	0.05%	0.011%
39	11.983	928	938	948	rBB	8319	34995	2.04%	0.405%
40	12.169	949	956	966	rBB	686768	1672946	97.30%	19.371%
41	12.862	1019	1023	1024	rBB	376	849	0.05%	0.010%
42	12.934	1028	1030	1034	rBB	399	704	0.04%	0.008%

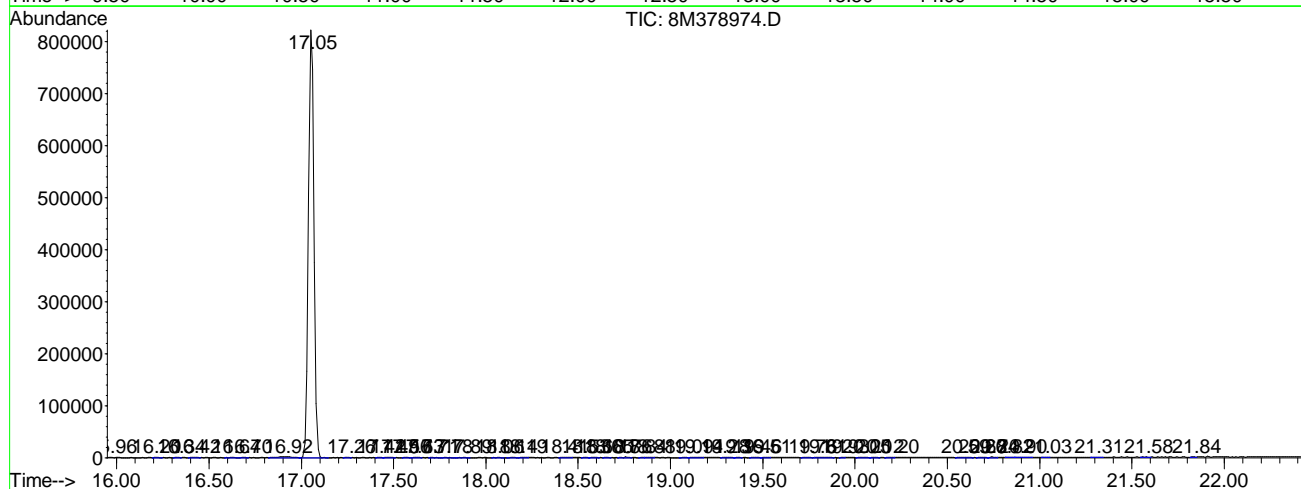
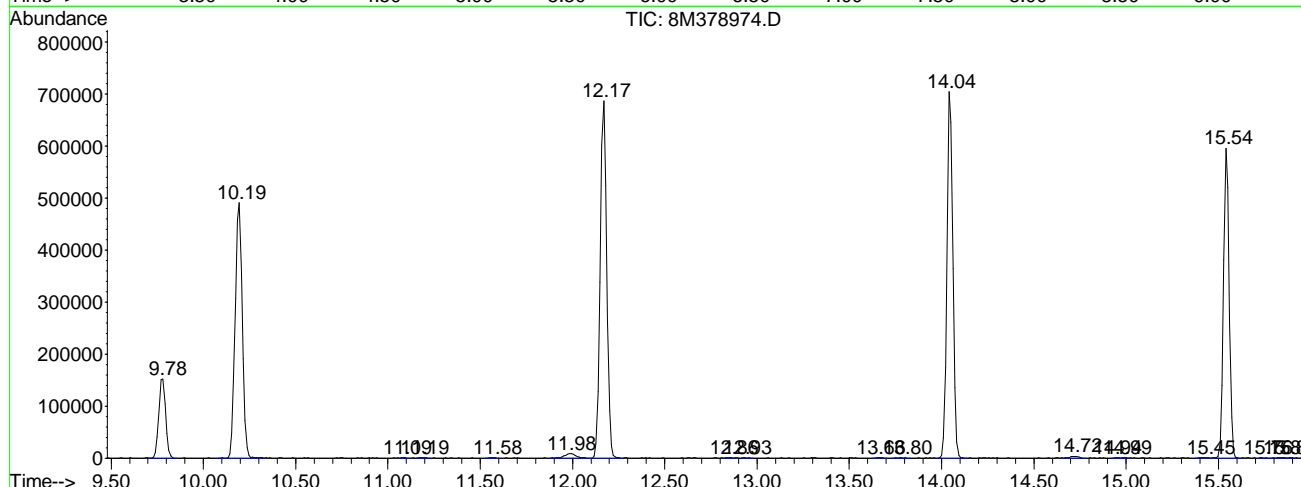
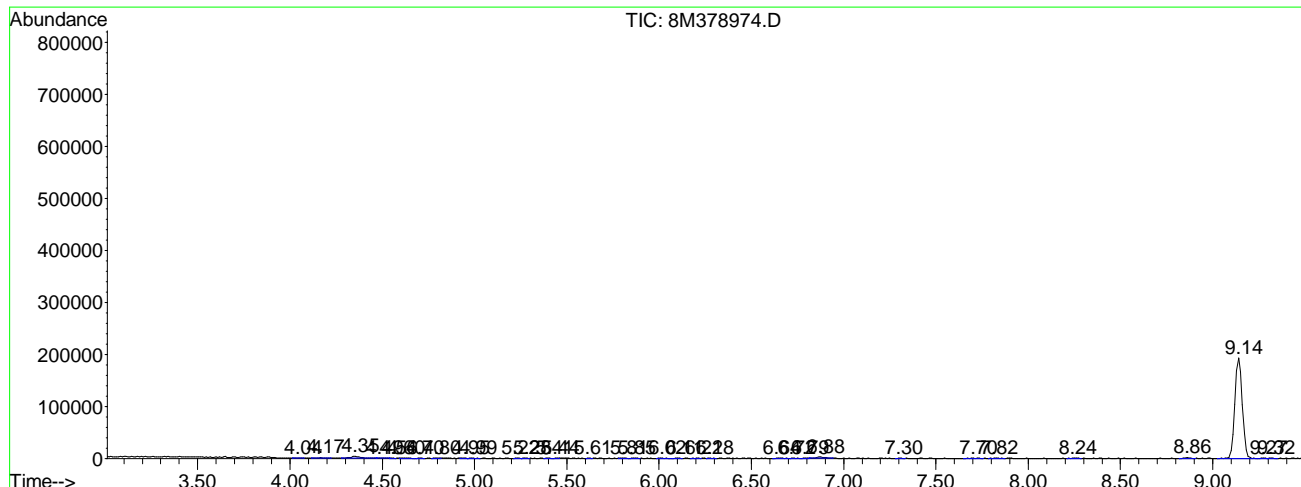
8M378974.D 8260WTR.M Tue May 15 16:23:37 2012

Page 1

43	13.658	1097	1100	1104	rBB	376	836	0.05%	0.010%
44	13.803	1107	1114	1116	rBB	424	905	0.05%	0.010%
45	14.041	1131	1137	1146	rBB	705098	1587094	92.30%	18.377%
46	14.723	1197	1203	1208	rBB2	3160	8538	0.50%	0.099%
47	14.940	1222	1224	1227	rBB2	351	621	0.04%	0.007%
48	14.992	1227	1229	1231	rBB2	391	627	0.04%	0.007%
49	15.447	1266	1273	1274	rBB2	521	1441	0.08%	0.017%
50	15.540	1276	1282	1290	rVB	595416	1255243	73.00%	14.535%
51	15.757	1299	1303	1305	rBB	353	628	0.04%	0.007%
52	15.861	1306	1313	1314	rBB	444	1374	0.08%	0.016%
53	15.892	1314	1316	1320	rBB	386	875	0.05%	0.010%
54	15.964	1321	1323	1325	rBB	358	627	0.04%	0.007%
55	16.202	1345	1346	1350	rBB	410	695	0.04%	0.008%
56	16.336	1356	1359	1360	rBB	350	636	0.04%	0.007%
57	16.419	1364	1367	1370	rBB	428	1208	0.07%	0.014%
58	16.636	1383	1388	1390	rBB	465	865	0.05%	0.010%
59	16.698	1391	1394	1395	rBB	379	666	0.04%	0.008%
60	16.915	1406	1415	1422	rBB	2013	8978	0.52%	0.104%
61	17.050	1422	1428	1437	rBB	823185	1719449	100.00%	19.910%
62	17.256	1445	1448	1449	rBB	426	682	0.04%	0.008%
63	17.422	1462	1464	1466	rBB	402	681	0.04%	0.008%
64	17.494	1466	1471	1472	rBB	427	1144	0.07%	0.013%
65	17.556	1476	1477	1480	rBB	441	752	0.04%	0.009%
66	17.629	1481	1484	1486	rBB	405	873	0.05%	0.010%
67	17.711	1490	1492	1496	rBB	387	658	0.04%	0.008%
68	17.784	1497	1499	1503	rBB	438	741	0.04%	0.009%
69	17.887	1504	1509	1511	rBB	407	731	0.04%	0.008%
70	18.063	1523	1526	1529	rBB	364	637	0.04%	0.007%
71	18.135	1531	1533	1536	rBB	400	633	0.04%	0.007%
72	18.187	1537	1538	1542	rBV	372	1078	0.06%	0.012%
73	18.414	1558	1560	1565	rBV	447	1651	0.10%	0.019%
74	18.528	1570	1571	1574	rBB	374	642	0.04%	0.007%
75	18.600	1574	1578	1579	rBB	367	845	0.05%	0.010%
76	18.652	1581	1583	1585	rBB	354	641	0.04%	0.007%
77	18.756	1589	1593	1596	rBB	2073	2136	0.12%	0.025%
78	18.838	1600	1601	1603	rBV	702	842	0.05%	0.010%
79	18.880	1603	1605	1608	rVV	643	1316	0.08%	0.015%
80	19.086	1621	1625	1626	rBB	497	756	0.04%	0.009%
81	19.138	1626	1630	1634	rBV2	1079	3306	0.19%	0.038%
82	19.283	1643	1644	1650	rBB	399	1390	0.08%	0.016%
83	19.355	1650	1651	1654	rBB	424	741	0.04%	0.009%
84	19.459	1658	1661	1664	rBB	621	1288	0.07%	0.015%
85	19.510	1664	1666	1669	rBV	442	1218	0.07%	0.014%
86	19.759	1685	1690	1691	rBB	592	1468	0.09%	0.017%
87	19.810	1692	1695	1702	rVB	483	2095	0.12%	0.024%
88	19.934	1705	1707	1708	rBV	461	731	0.04%	0.008%
89	20.048	1714	1718	1721	rBB	505	1564	0.09%	0.018%
90	20.120	1721	1725	1726	rBB	575	1070	0.06%	0.012%
91	20.203	1729	1733	1734	rBV	468	1227	0.07%	0.014%
92	20.586	1766	1770	1775	rBB	741	2258	0.13%	0.026%
93	20.679	1777	1779	1783	rBB	446	1268	0.07%	0.015%
94	20.741	1783	1785	1788	rBV	1163	1689	0.10%	0.020%
95	20.823	1792	1793	1797	rVV2	634	1160	0.07%	0.013%
96	20.896	1797	1800	1806	rVV	502	1543	0.09%	0.018%
97	21.030	1811	1813	1815	rBV2	827	1158	0.07%	0.013%
98	21.309	1837	1840	1843	rBV	269	813	0.05%	0.009%
99	21.578	1863	1866	1868	rBV	901	1521	0.09%	0.018%
100	21.837	1889	1891	1892	rVB2	1185	1054	0.06%	0.012%

Sum of corrected areas: 8636213

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378974.D
 Operator : TMB
 Acquired : 11 May 2012 1:31 using AcqMethod 8260WT
 Instrument : HPMS8
 Sample Name: L12050099-09 B 826-SPE
 Misc Info : 1,1
 Vial Number: 13
 Quant File :8260WT.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: TMB Date Acquired: 11 May 2012 1:31
Data File: K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378974.D
Name: L12050099-09 B 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

Data File : C:\MSDCHEM\1\DATA\050912\6M108007.D Vial: 10
 Acq On : 9 May 2012 14:02 Operator: ADC
 Sample : L12050099-11 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54:27 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	468115	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	324777	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	152275	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	147730	29.1460	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	116.60%	
43) 1,2-Dichloroethane-d4	10.08	65	147066	29.5645	ug/L	0.01
Spiked Amount	25.000	Range 80 - 120	Recovery	=	118.24%	
58) Toluene-d8	12.83	98	477298	27.0404	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	108.16%	
80) p-Bromofluorobenzene	16.81	95	157911	26.4271	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	105.72%	
Target Compounds						
3) Chloromethane	3.00	50	494	Below Cal	Qvalue # 43	
13) Acetone	5.62	43	399	0.4498	ug/L # 46	

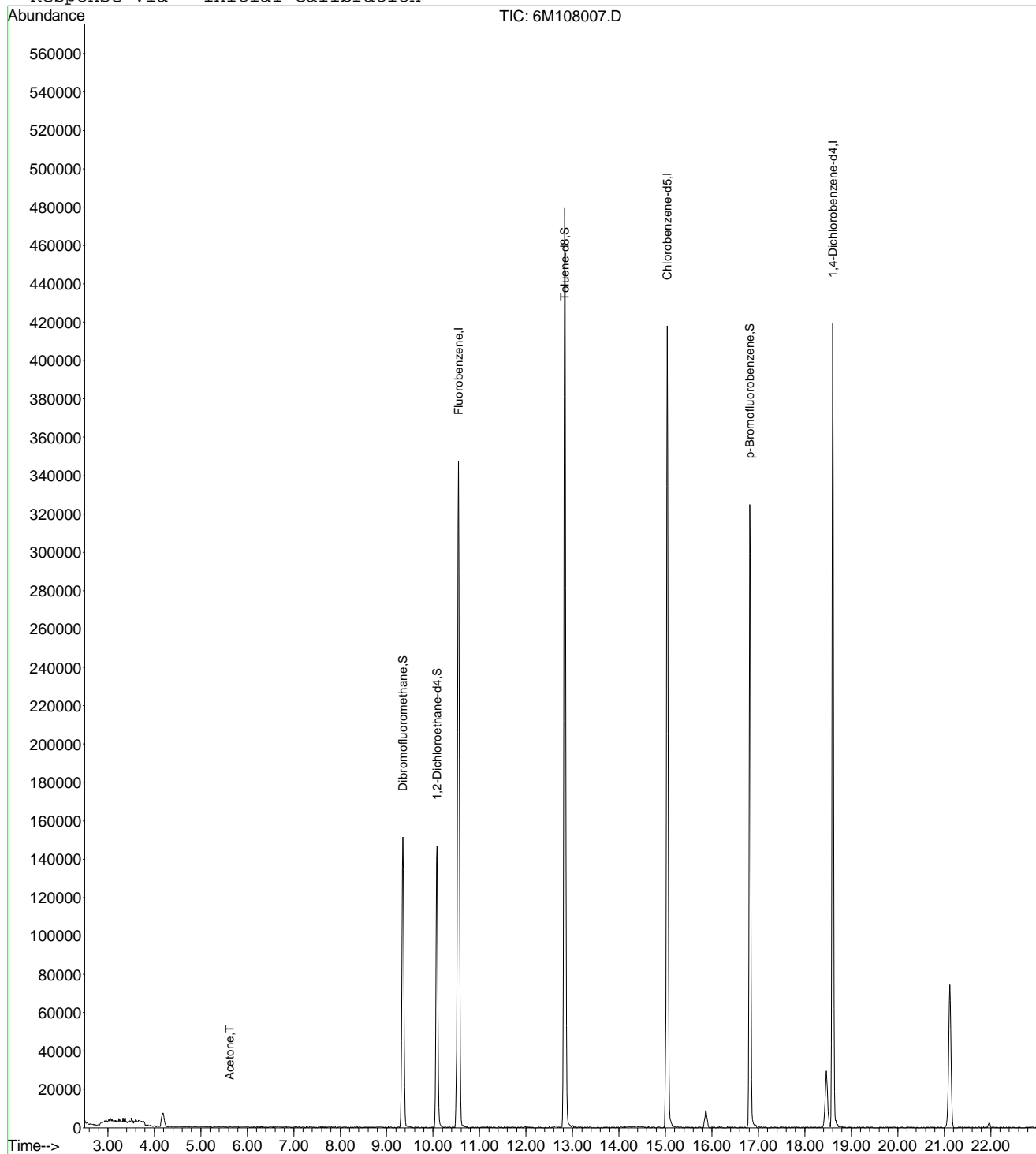
(#) = qualifier out of range (m) = manual integration
 6M108007.D 8260WTR.M Thu May 10 17:54:28 2012

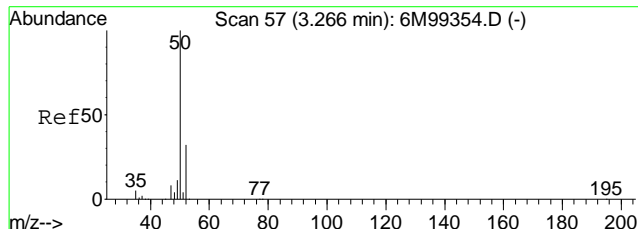
Data File : C:\MSDCHEM\1\DATA\050912\6M108007.D
Acq On : 9 May 2012 14:02
Sample : L12050099-11 A 826-SPE
Misc : 1,1
MS Integration Params: RTEINT.P
Quant Time: May 10 17:54 2012

Vial: 10
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

Quant Results File: 8260WTR.RES

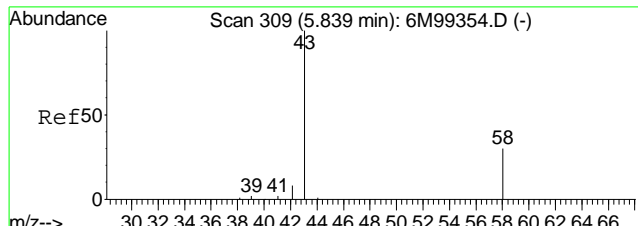
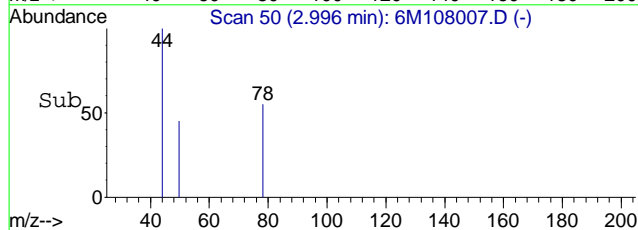
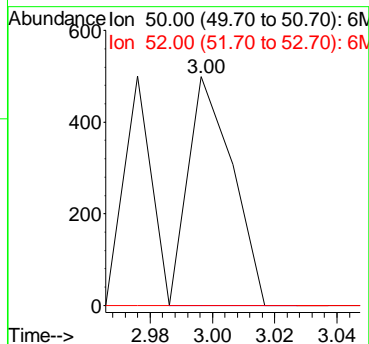
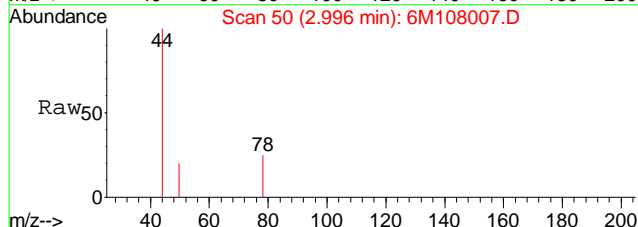
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration





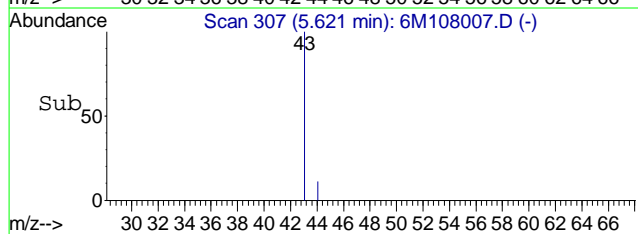
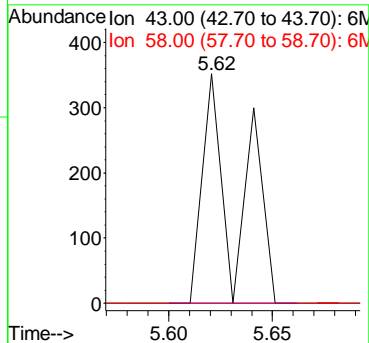
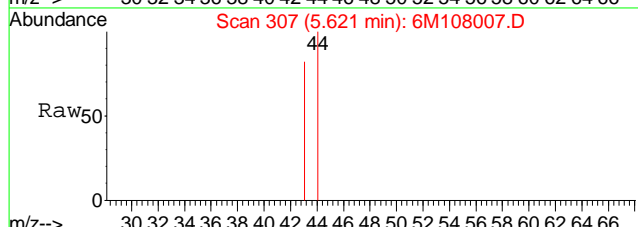
#3
 Chloromethane
 Concen: Below Cal
 RT: 3.00 min Scan# 50
 Delta R.T. -0.11 min
 Lab File: 6M108007.D
 Acq: 9 May 2012 14:02

Tgt Ion	Ratio	Lower	Upper
50	100		
52	0.0	18.8	44.0#



#13
 Acetone
 Concen: 0.45 ug/L
 RT: 5.62 min Scan# 307
 Delta R.T. 0.01 min
 Lab File: 6M108007.D
 Acq: 9 May 2012 14:02

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.3	40.3#



Data File : C:\MSDCHEM\1\DATA\050912\6M108007.D Vial: 10
 Acq On : 9 May 2012 14:02 Operator: ADC
 Sample : L12050099-11 A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

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

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

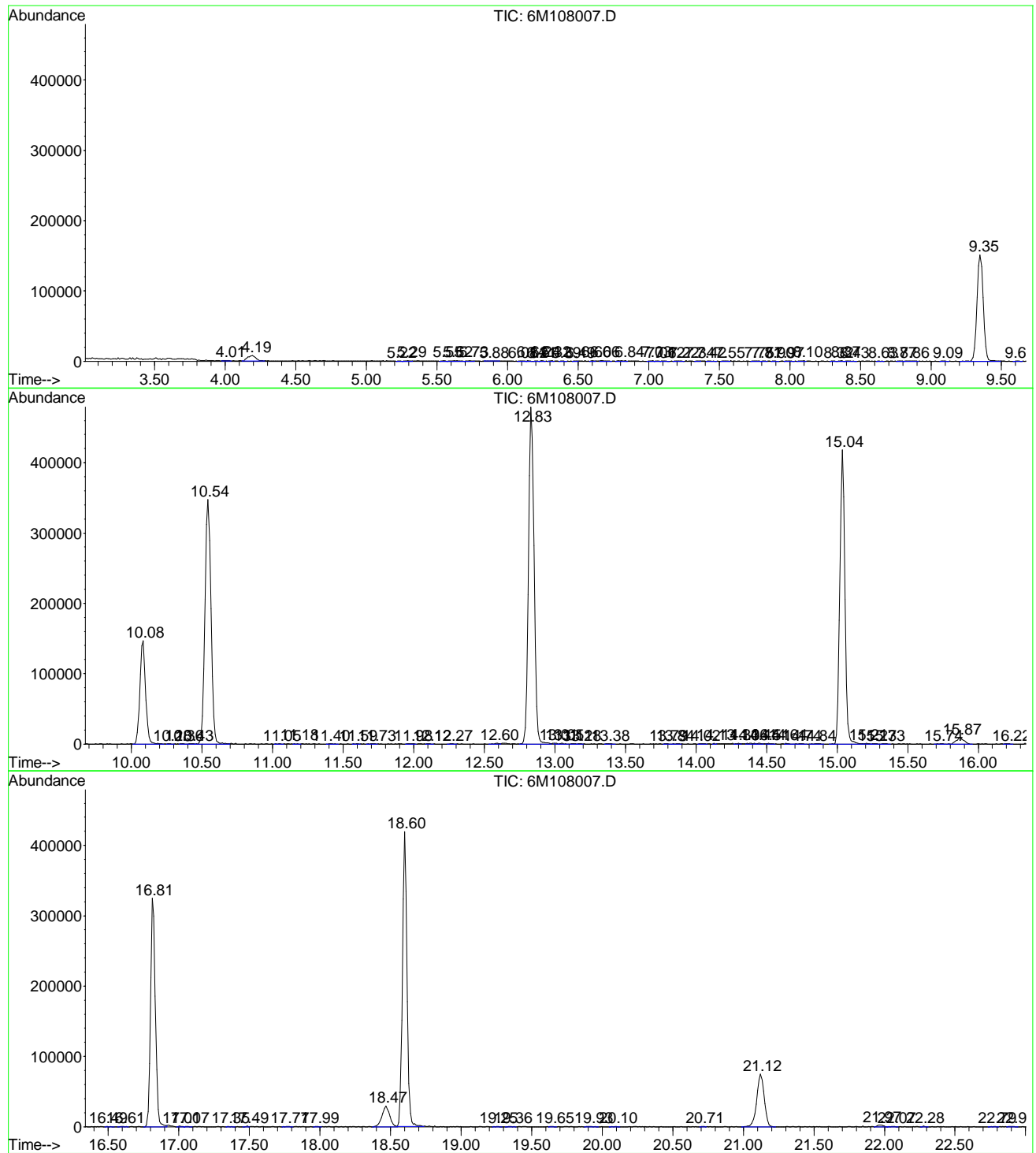
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.007	146	149	152	rVB	637	1238	0.09%	0.019%
2	4.191	160	167	175	rVB3	7446	31125	2.38%	0.477%
3	5.222	267	268	271	rBB3	610	940	0.07%	0.014%
4	5.294	271	275	278	rBV	886	1963	0.15%	0.030%
5	5.549	297	300	302	rBB	765	1172	0.09%	0.018%
6	5.621	302	307	314	rBB	779	3031	0.23%	0.046%
7	5.733	314	318	321	rBV	744	1981	0.15%	0.030%
8	5.876	328	332	338	rBV	174	714	0.05%	0.011%
9	6.080	351	352	357	rBB	427	1211	0.09%	0.019%
10	6.141	357	358	361	rBB	735	941	0.07%	0.014%
11	6.213	362	365	366	rBB	551	720	0.06%	0.011%
12	6.244	366	368	370	rBB	763	1034	0.08%	0.016%
13	6.315	372	375	376	rBB	746	1087	0.08%	0.017%
14	6.386	380	382	385	rBB	369	670	0.05%	0.010%
15	6.489	389	392	393	rBV	428	945	0.07%	0.014%
16	6.601	401	403	405	rBV	685	1163	0.09%	0.018%
17	6.662	408	409	416	rVB	844	2300	0.18%	0.035%
18	6.836	419	426	427	rBB	763	2506	0.19%	0.038%
19	7.030	441	445	446	rBB	678	1039	0.08%	0.016%
20	7.060	446	448	450	rBB	522	856	0.07%	0.013%
21	7.122	450	454	456	rBB	619	1040	0.08%	0.016%
22	7.224	459	464	466	rBB	457	1314	0.10%	0.020%
23	7.336	474	475	478	rBV	623	967	0.07%	0.015%
24	7.418	482	483	489	rBB	389	880	0.07%	0.013%
25	7.551	492	496	498	rBB	421	1165	0.09%	0.018%
26	7.755	513	516	520	rBB	396	1271	0.10%	0.019%
27	7.806	520	521	524	rBB	637	820	0.06%	0.013%
28	7.898	527	530	532	rBB	643	832	0.06%	0.013%
29	7.969	536	537	543	rBB	432	1201	0.09%	0.018%
30	8.102	545	550	551	rBB	679	1276	0.10%	0.020%
31	8.316	568	571	572	rBB	438	685	0.05%	0.010%
32	8.368	573	576	578	rBB	709	852	0.07%	0.013%
33	8.429	578	582	586	rBB	388	1043	0.08%	0.016%
34	8.633	600	602	605	rBB	358	626	0.05%	0.010%
35	8.766	614	615	619	rBB	364	814	0.06%	0.012%
36	8.858	619	624	629	rBB	456	1977	0.15%	0.030%
37	9.093	644	647	650	rBB	439	975	0.07%	0.015%
38	9.348	658	672	686	rBV	151573	464122	35.52%	7.113%
39	9.603	695	697	701	rBB	446	684	0.05%	0.010%
40	10.083	737	744	758	rBB	146820	412991	31.61%	6.329%
41	10.277	760	763	765	rBB	365	632	0.05%	0.010%
42	10.359	769	771	774	rBB	394	635	0.05%	0.010%

43	10.430	775	778	780	rBB	372	834	0.06%	0.013%
44	10.543	780	789	804	rBV	347420	1022573	78.27%	15.671%
45	11.053	835	839	841	rBB	465	683	0.05%	0.010%
46	11.176	848	851	853	rBB	670	661	0.05%	0.010%
47	11.400	871	873	879	rBB	623	1000	0.08%	0.015%
48	11.594	889	892	894	rBB	359	629	0.05%	0.010%
49	11.727	899	905	906	rBB	370	988	0.08%	0.015%
50	11.982	926	930	933	rBB	635	1460	0.11%	0.022%
51	12.115	940	943	945	rBB	368	634	0.05%	0.010%
52	12.268	955	958	961	rBB	371	633	0.05%	0.010%
53	12.595	984	990	992	rBV	773	1985	0.15%	0.030%
54	12.830	1005	1013	1027	rBV	479497	1306516	100.00%	20.023%
55	13.014	1029	1031	1032	rVB	1036	1239	0.09%	0.019%
56	13.055	1032	1035	1039	rBB	771	1726	0.13%	0.026%
57	13.116	1040	1041	1045	rBB	370	834	0.06%	0.013%
58	13.177	1045	1047	1049	rBB	391	636	0.05%	0.010%
59	13.381	1064	1067	1071	rBB	407	1059	0.08%	0.016%
60	13.790	1105	1107	1110	rBB	398	662	0.05%	0.010%
61	13.841	1111	1112	1117	rBB	328	778	0.06%	0.012%
62	14.025	1129	1130	1135	rBB	629	1330	0.10%	0.020%
63	14.127	1139	1140	1142	rBV	1069	921	0.07%	0.014%
64	14.300	1154	1157	1159	rBV	801	1639	0.13%	0.025%
65	14.362	1162	1163	1169	rVV	874	2651	0.20%	0.041%
66	14.443	1169	1171	1174	rVV	800	1669	0.13%	0.026%
67	14.515	1176	1178	1182	rVB	1007	1730	0.13%	0.027%
68	14.637	1189	1190	1194	rBB	698	862	0.07%	0.013%
69	14.739	1195	1200	1204	rBB	361	1004	0.08%	0.015%
70	14.842	1206	1210	1216	rBB	607	1393	0.11%	0.021%
71	15.036	1220	1229	1244	rBV	418191	1043436	79.86%	15.991%
72	15.209	1245	1246	1249	rVB	943	1126	0.09%	0.017%
73	15.270	1249	1252	1255	rBB	624	1248	0.10%	0.019%
74	15.332	1256	1258	1262	rBB	322	780	0.06%	0.012%
75	15.740	1293	1298	1301	rBB	438	841	0.06%	0.013%
76	15.873	1302	1311	1319	rBB4	9303	32715	2.50%	0.501%
77	16.220	1341	1345	1347	rBB4	450	853	0.07%	0.013%
78	16.486	1370	1371	1376	rBB4	420	659	0.05%	0.010%
79	16.608	1379	1383	1386	rBB	401	888	0.07%	0.014%
80	16.812	1397	1403	1413	rBV	325045	774085	59.25%	11.863%
81	17.006	1420	1422	1425	rBB	789	1177	0.09%	0.018%
82	17.068	1425	1428	1430	rBB	663	797	0.06%	0.012%
83	17.354	1454	1456	1460	rBB	357	641	0.05%	0.010%
84	17.486	1466	1469	1470	rBB	701	711	0.05%	0.011%
85	17.772	1493	1497	1500	rBB	343	815	0.06%	0.012%
86	17.987	1515	1518	1520	rBB	369	632	0.05%	0.010%
87	18.467	1556	1565	1573	rBV	29693	109930	8.41%	1.685%
88	18.599	1573	1578	1591	rBV	419030	953023	72.94%	14.605%
89	19.253	1639	1642	1645	rBB	369	632	0.05%	0.010%
90	19.355	1648	1652	1655	rBB	412	849	0.06%	0.013%
91	19.651	1678	1681	1683	rBB	417	659	0.05%	0.010%
92	19.927	1703	1708	1712	rBB	377	1309	0.10%	0.020%
93	20.100	1720	1725	1727	rBB	378	624	0.05%	0.010%
94	20.713	1783	1785	1787	rBB	380	652	0.05%	0.010%
95	21.122	1812	1825	1835	rBB	74665	273252	20.91%	4.188%
96	21.969	1904	1908	1913	rBB2	2588	7171	0.55%	0.110%
97	22.071	1913	1918	1920	rBB2	437	929	0.07%	0.014%
98	22.276	1936	1938	1941	rBB2	712	721	0.06%	0.011%
99	22.786	1983	1988	1990	rBB2	398	714	0.05%	0.011%
100	22.919	1996	2001	2003	rBB2	422	1128	0.09%	0.017%

Sum of corrected areas: 6525164

File : C:\MSDCHEM\1\DATA\050912\6M108007.D
 Operator : ADC
 Acquired : 9 May 2012 14:02 using AcqMethod 8260WTR
 Instrument : HPMS6
 Sample Name: L12050099-11 A 826-SPE
 Misc Info : 1,1
 Vial Number: 10
 Quant File : 8260WTR.RES (RTE Integrator)



Data File : C:\MSDCHEM\1\DATA\050912\6M108007.D
 Acq On : 9 May 2012 14:02
 Sample : L12050099-11 A 826-SPE
 Misc : 1,1
 MS Integration Params: RTEINT.P

Vial: 10
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

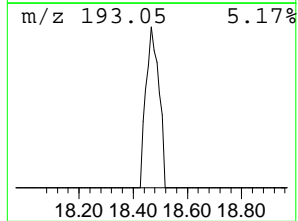
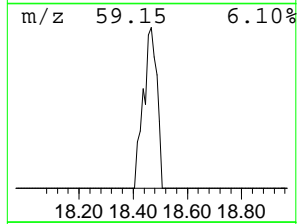
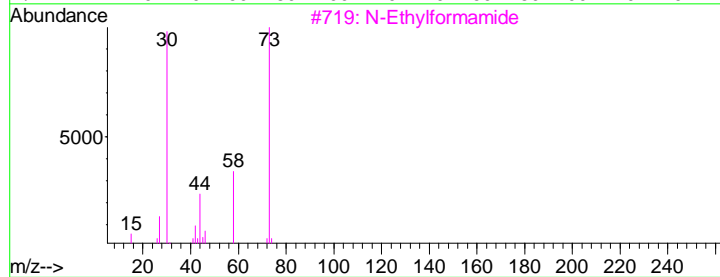
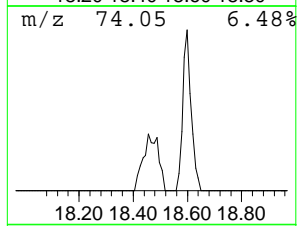
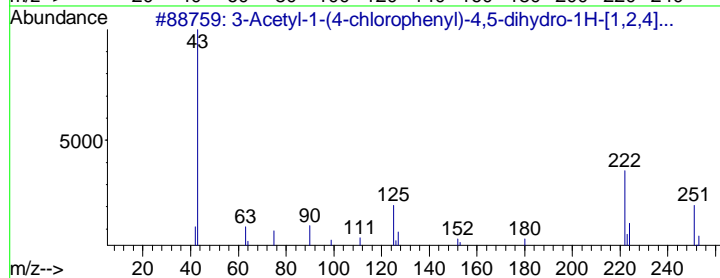
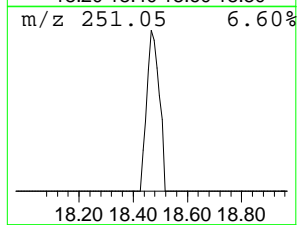
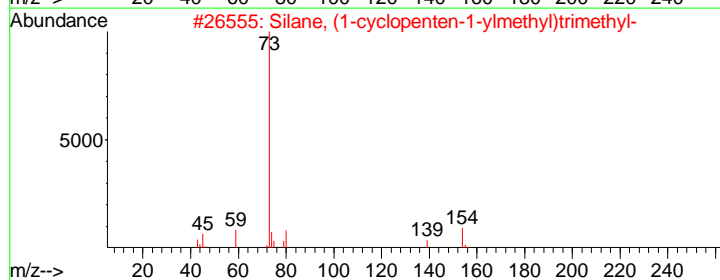
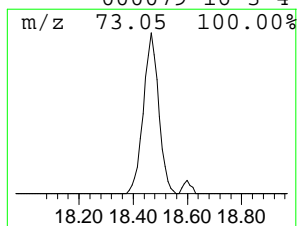
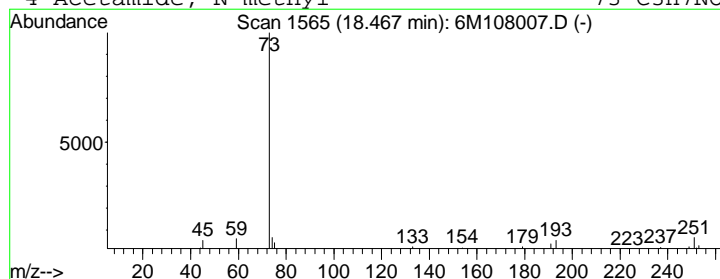
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6

Library : C:\DATABASE\NIST02.L

 Peak Number 1 Silane, (1-cyclopenten-1-yl... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.47	2.88 ug/L	109930	1,4-Dichlorobenzene-d4	18.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Silane, (1-cyclopenten-1-ylmethy...	154	C9H18Si	075311-60-3	9
2		3-Acetyl-1-(4-chlorophenyl)-4,5-...	251	C11H10ClN3O2	139455-67-7	4
3		N-Ethylformamide	73	C3H7NO	000627-45-2	4
4		Acetamide, N-methyl-	73	C3H7NO	000079-16-3	4



Data File : C:\MSDCHEM\1\DATA\050912\6M108007.D
 Acq On : 9 May 2012 14:02
 Sample : L12050099-11 A 826-SPE
 Misc : 1,1
 MS Integration Params: RTEINT.P

Vial: 10
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

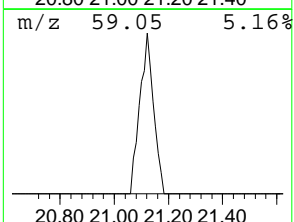
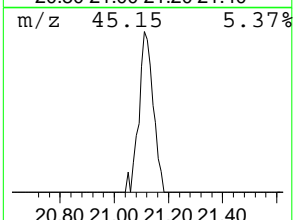
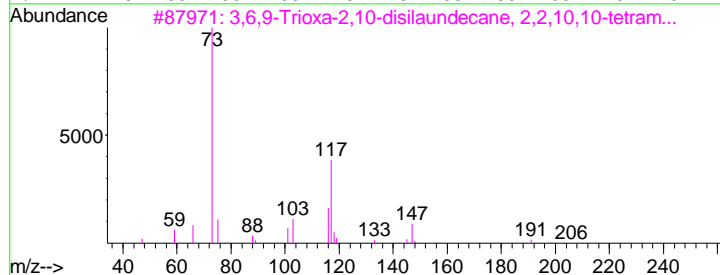
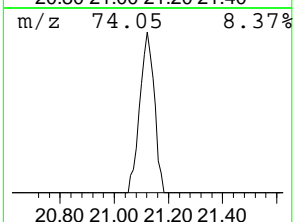
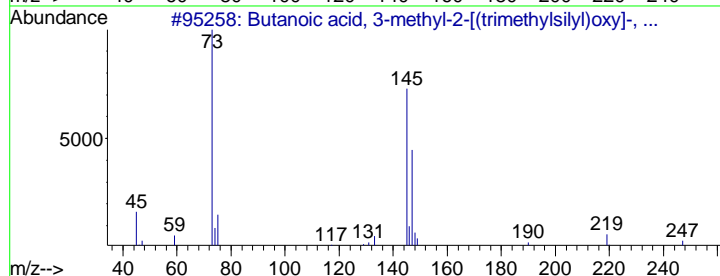
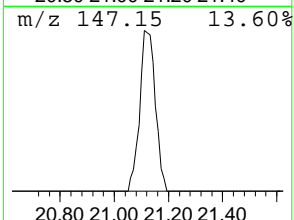
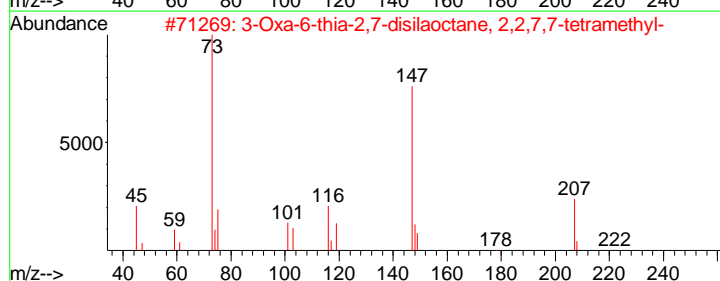
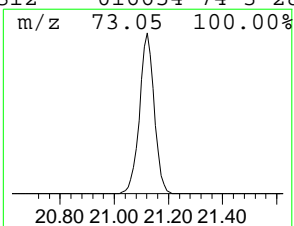
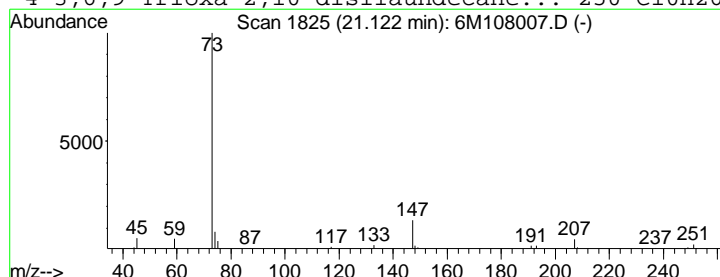
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6

Library : C:\DATABASE\NIST02.L

 Peak Number 2 3-Oxa-6-thia-2,7-disilaocta... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.12	7.17 ug/L	273252	1,4-Dichlorobenzene-d4	18.60

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSi2	078921-31-0	37
2			Butanoic acid, 3-methyl-2-[(trim...	262	C11H26O3Si2	055124-92-0	28
3			3,6,9-Trioxa-2,10-disilaundecane...	250	C10H26O3Si2	016654-74-3	28
4			3,6,9-Trioxa-2,10-disilaundecane...	250	C10H26O3Si2	016654-74-3	28



Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 9 May 2012 14:02
 Data File: C:\MSDCHEM\1\DATA\050912\6M108007.D
 Name: L12050099-11 A 826-SPE
 Misc: 1,1
 Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
 Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Silane, (1-cyclop...	18.47	2.9	ug/L	109930	3	18.60	953023	25.0
3-Oxa-6-thia-2,7-...	21.12	7.2	ug/L	273252	3	18.60	953023	25.0

2.1.1.4 Standards Data

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	R.T.	QIon	Response	Conc	Units	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

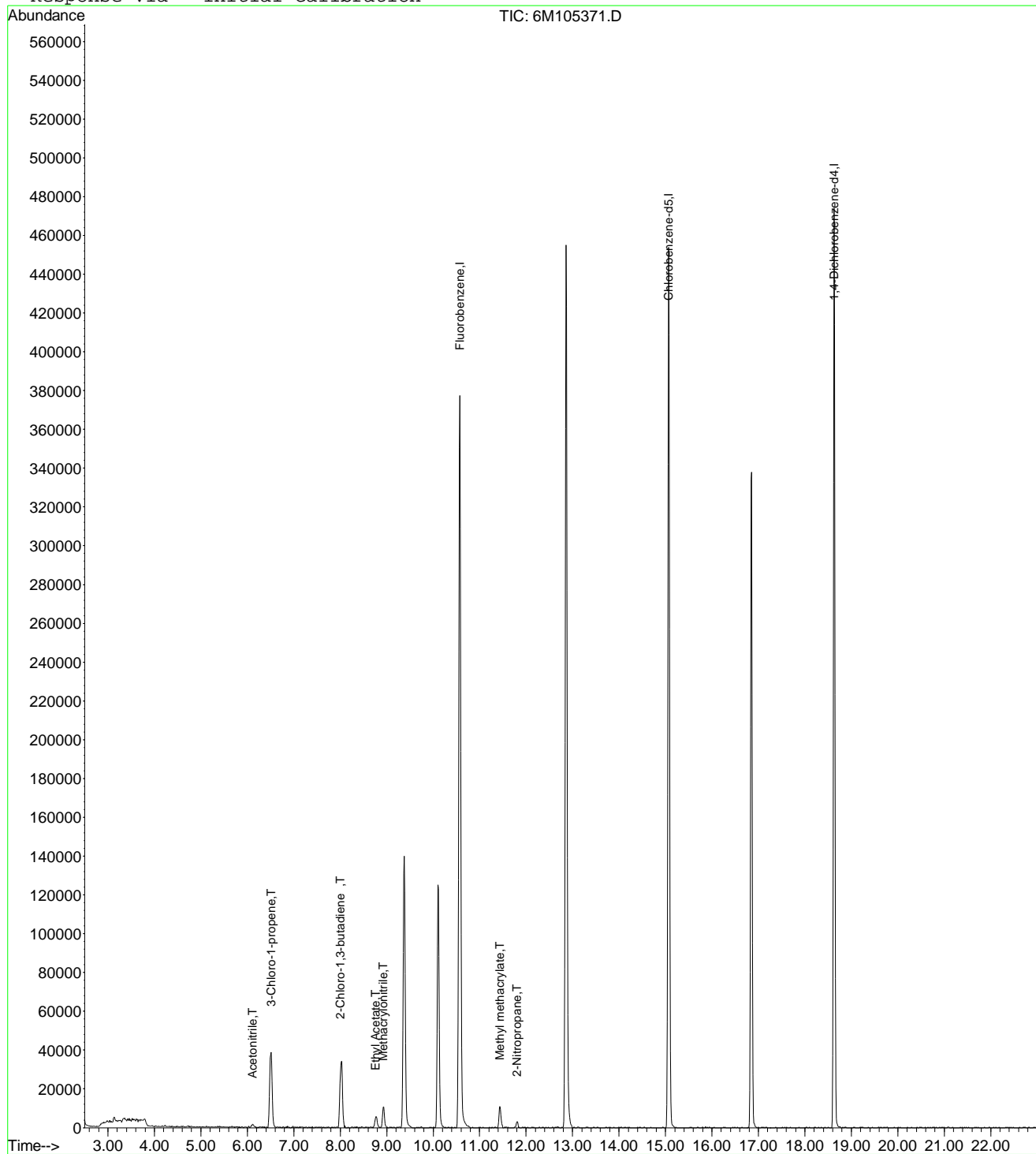


Data File : C:\MSDCHEM\2\DATA\012512\6M105371.D
Acq On : 25 Jan 2012 10:12
Sample : WG388587-01 5ug/L 826A9FOO QC
Misc : 1,1 STD49721
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012

Vial: 5
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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



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	R.T.	QIon	Response	Conc	Units	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

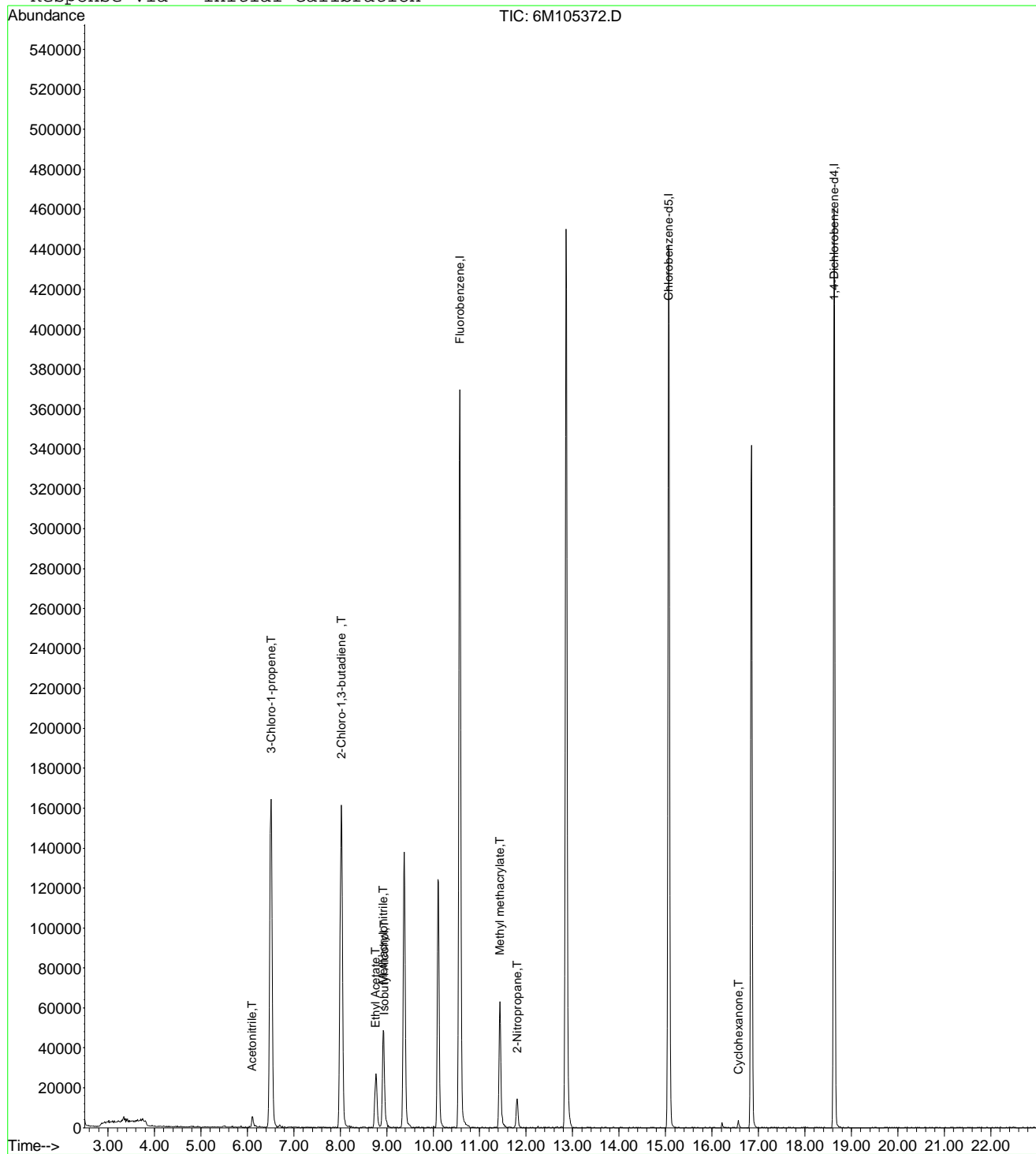


Data File : C:\MSDCHEM\2\DATA\012512\6M105372.D
 Acq On : 25 Jan 2012 10:45
 Sample : WG388587-02 20ug/L 826A9FOO QC
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 2 11:00 2012

Vial: 6
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: A9FOOWTR.RES

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



6M105372.D A9FOOWTR.M

Thu Feb 02 15:11:55 2012

Page 2



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	R.T.	QIon	Response	Conc	Units	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

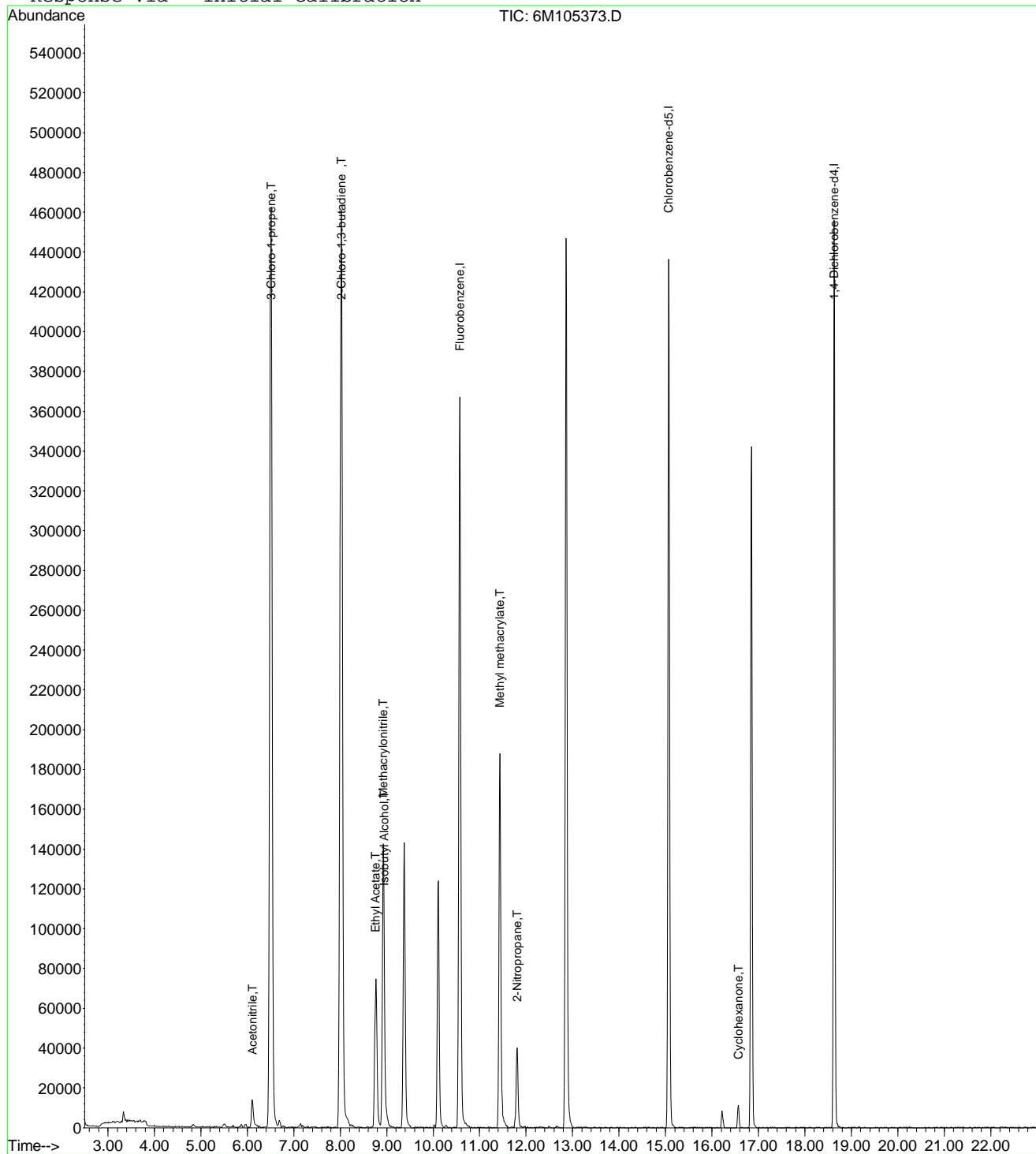


Data File : C:\MSDCHEM\2\DATA\012512\6M105373.D
 Acq On : 25 Jan 2012 11:17
 Sample : WG388587-03 50ug/L 826A9FOO QC
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 2 11:00 2012

Vial: 7
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: A9FOOWTR.RES

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



6M105373.D A9FOOWTR.M

Thu Feb 02 15:11:56 2012

Page 2



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	R.T.	QIon	Response	Conc	Units	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

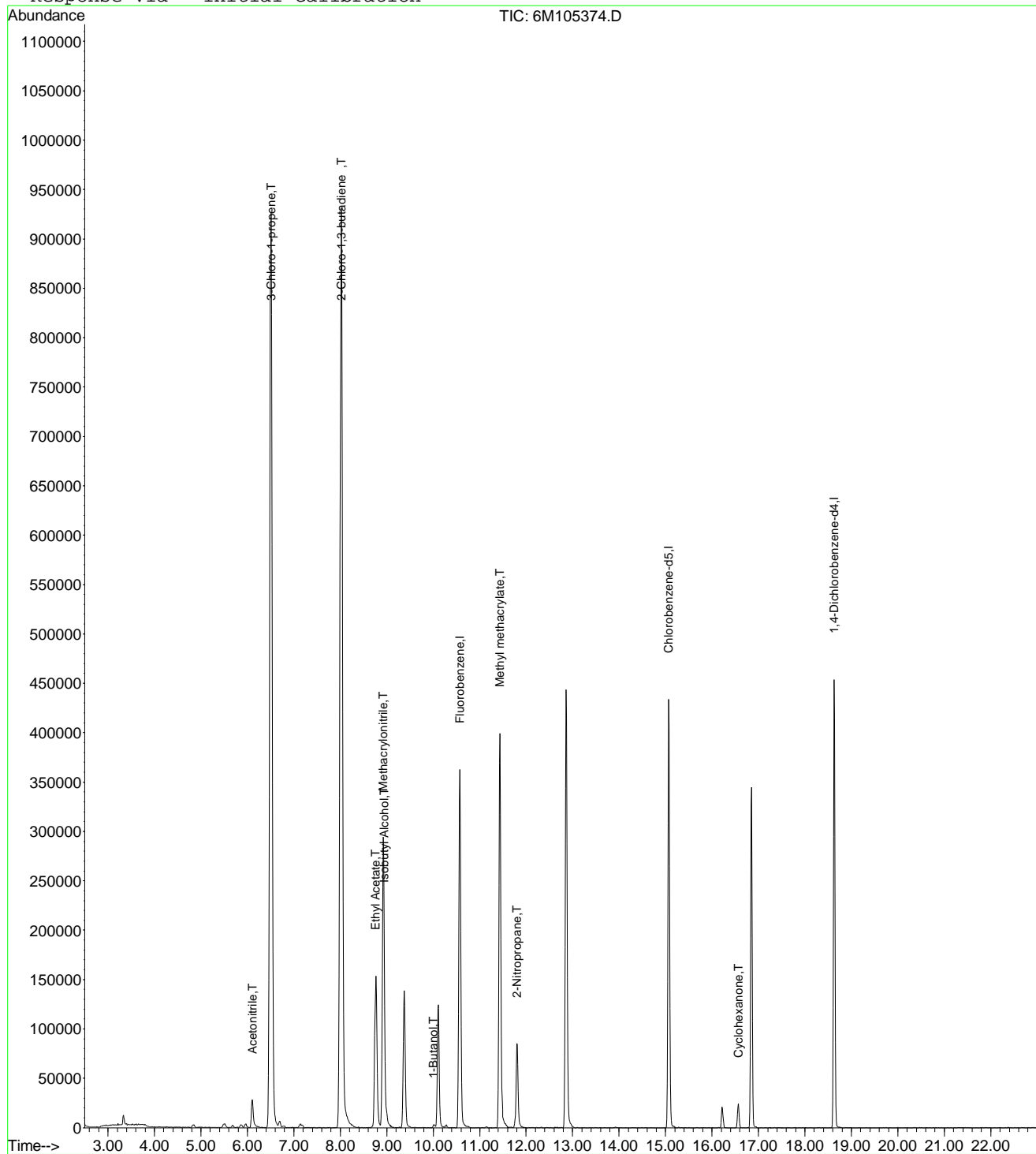


Data File : C:\MSDCHEM\2\DATA\012512\6M105374.D
 Acq On : 25 Jan 2012 11:49
 Sample : WG388587-04 100ug/L 826A9FOO QC
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 2 11:00 2012

Vial: 8
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: A9FOOWTR.RES

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



6M105374.D A9FOOWTR.M

Thu Feb 02 15:11:58 2012

Page 2



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	R.T.	QIon	Response	Conc	Units	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

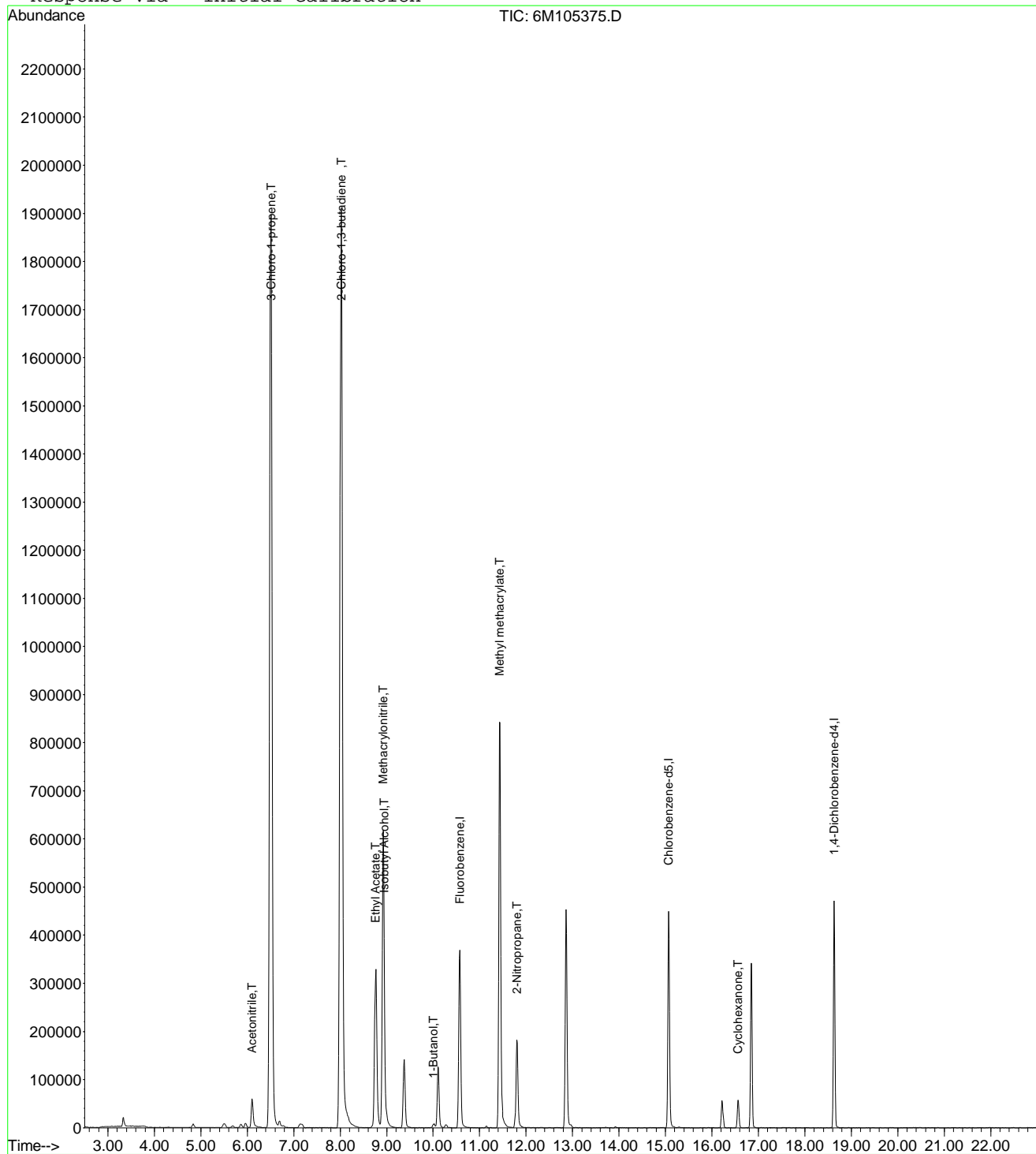


Data File : C:\MSDCHEM\2\DATA\012512\6M105375.D
Acq On : 25 Jan 2012 12:22
Sample : WG388587-05 200ug/L 826A9FOO QC
Misc : 1,1 STD49721
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012

Vial: 9
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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



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	R.T.	QIon	Response	Conc	Units	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

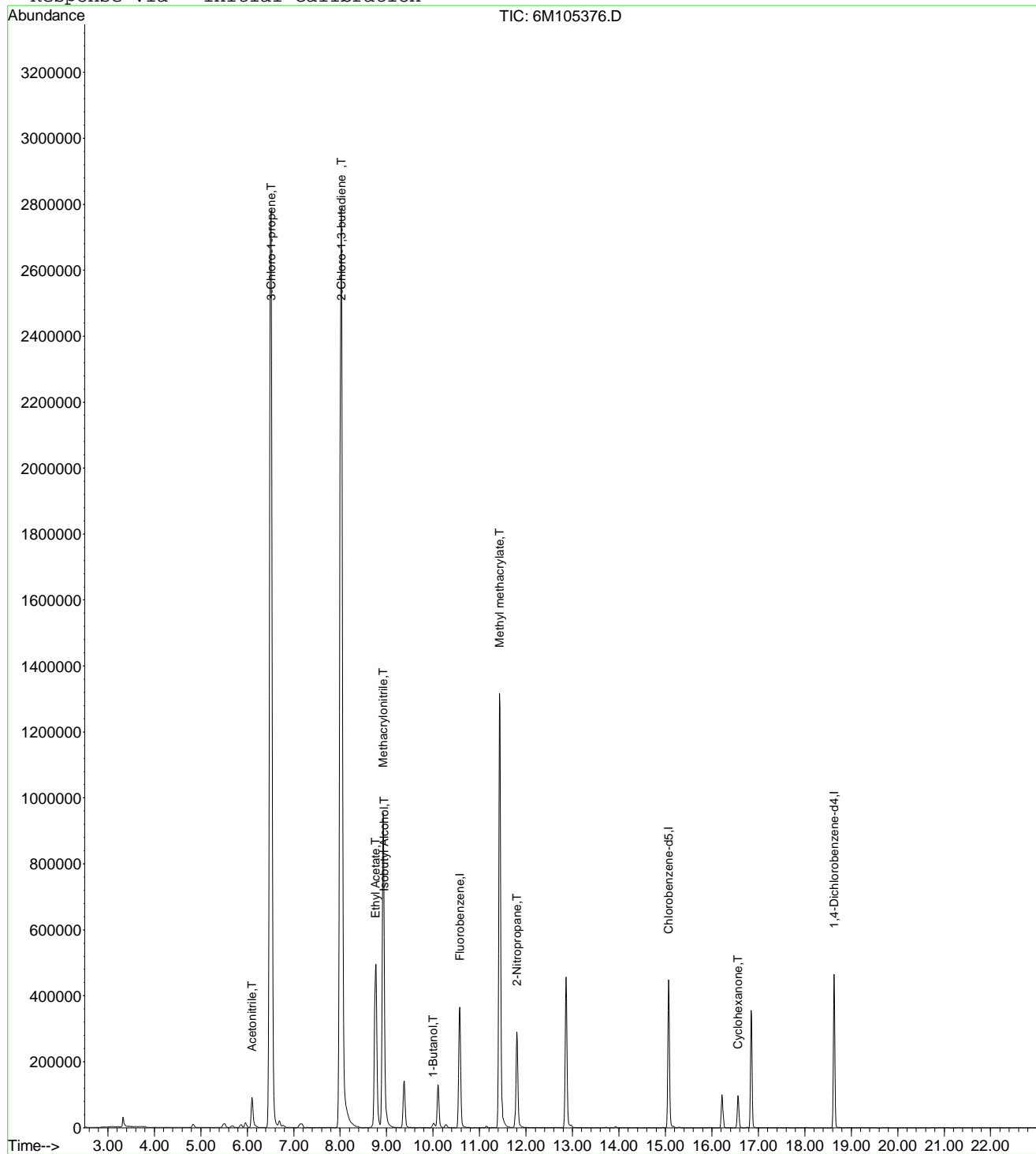


Data File : C:\MSDCHEM\2\DATA\012512\6M105376.D
 Acq On : 25 Jan 2012 12:55
 Sample : WG388587-06 300ug/L 826A9FOO QC
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 2 11:00 2012

Vial: 10
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: A9FOOWTR.RES

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



6M105376.D A9FOOWTR.M

Thu Feb 02 15:12:00 2012

Page 2



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	R.T.	QIon	Response	Conc	Units	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

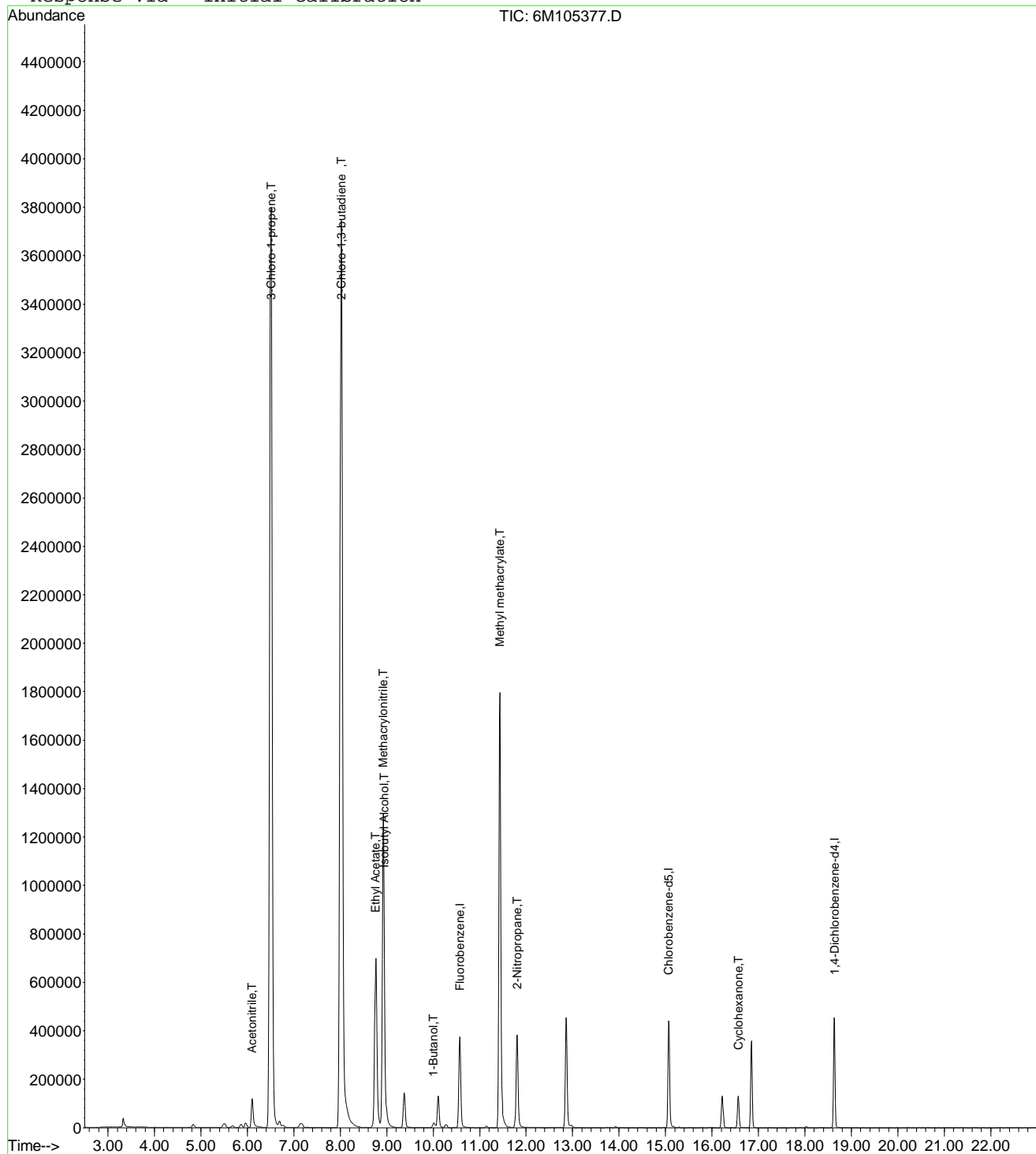


Data File : C:\MSDCHEM\2\DATA\012512\6M105377.D
 Acq On : 25 Jan 2012 13:27
 Sample : WG388587-07 400ug/L 826A9FOO QC
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 2 11:00 2012

Vial: 11
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: A9FOOWTR.RES

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

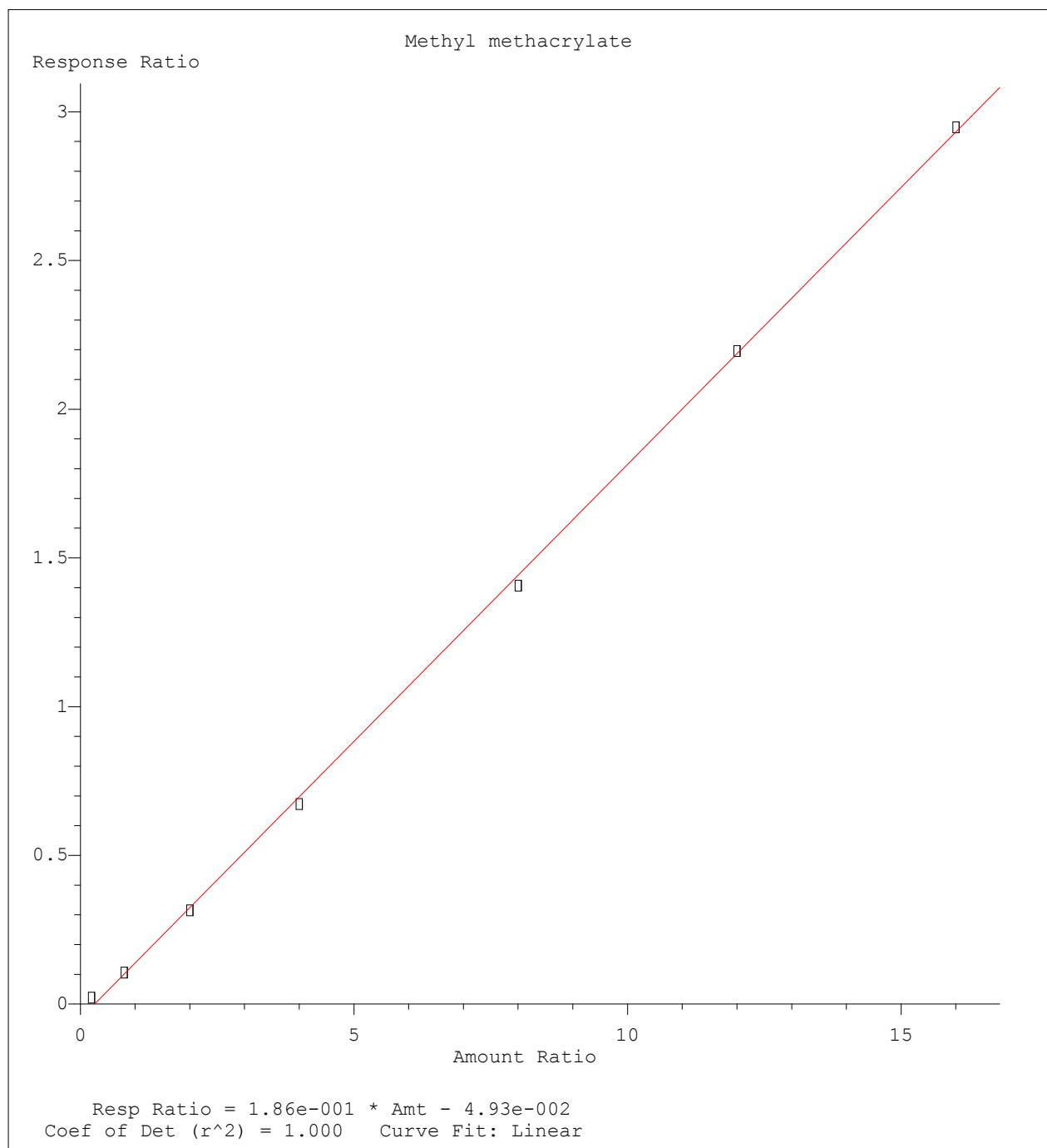


6M105377.D A9FOOWTR.M

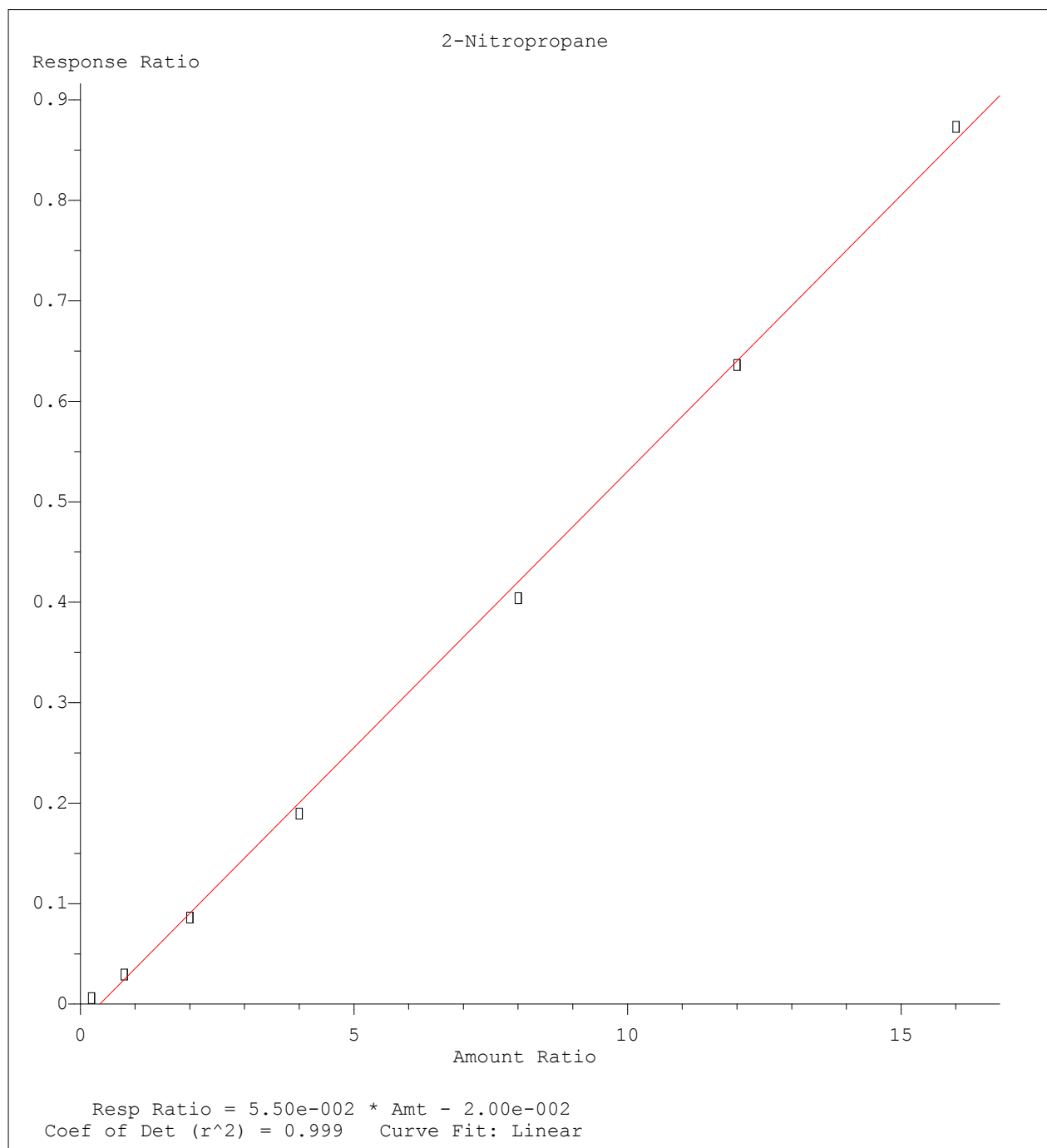
Thu Feb 02 15:12:01 2012

Page 2

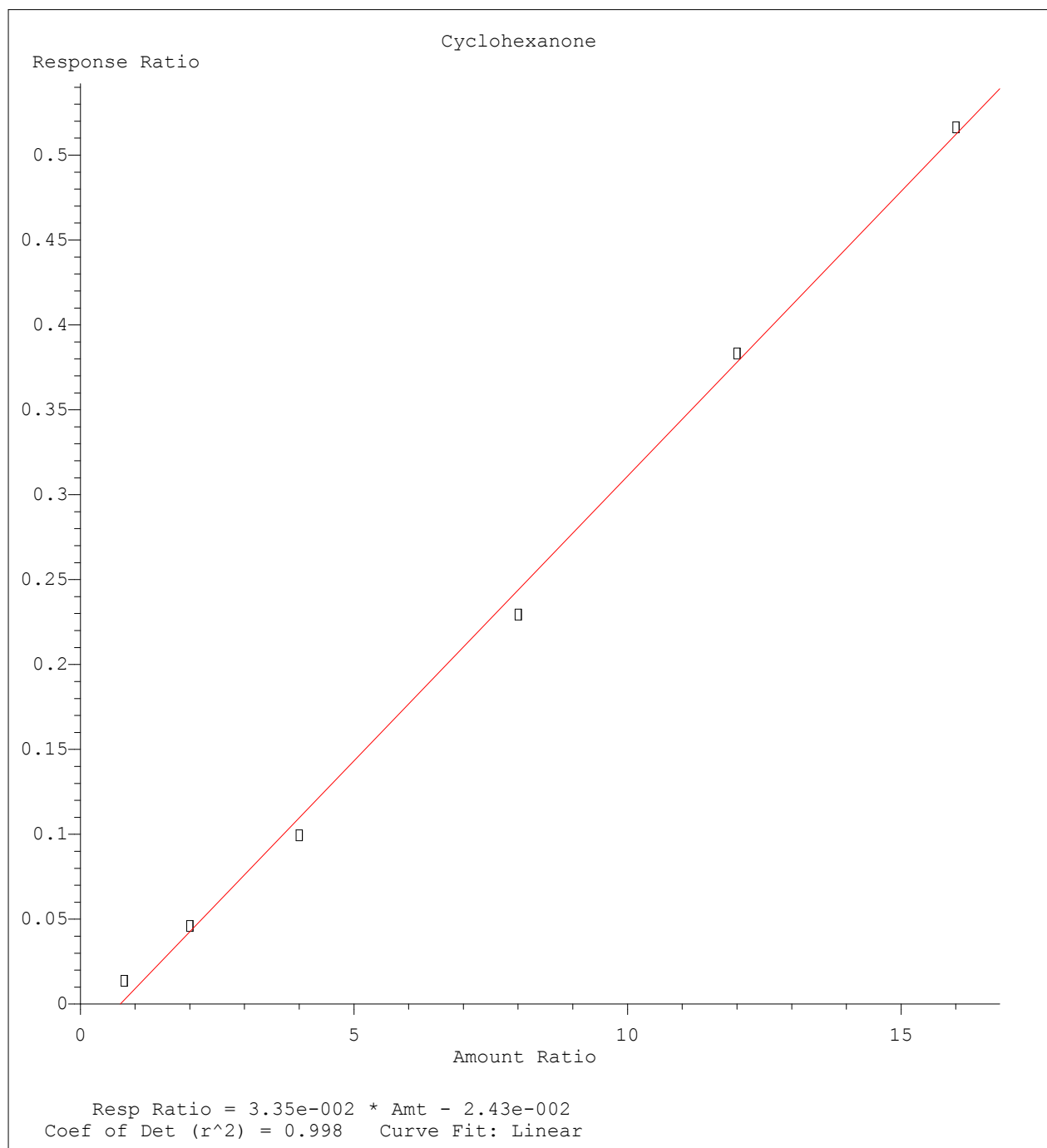




Method Name: C:\MSDCHEM\2\METHODS\A9FOOWTR.M
Calibration Table Last Updated: Thu Feb 02 09:44:46 2012



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



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

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	R.T.	QIon	Response	Conc	Units	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

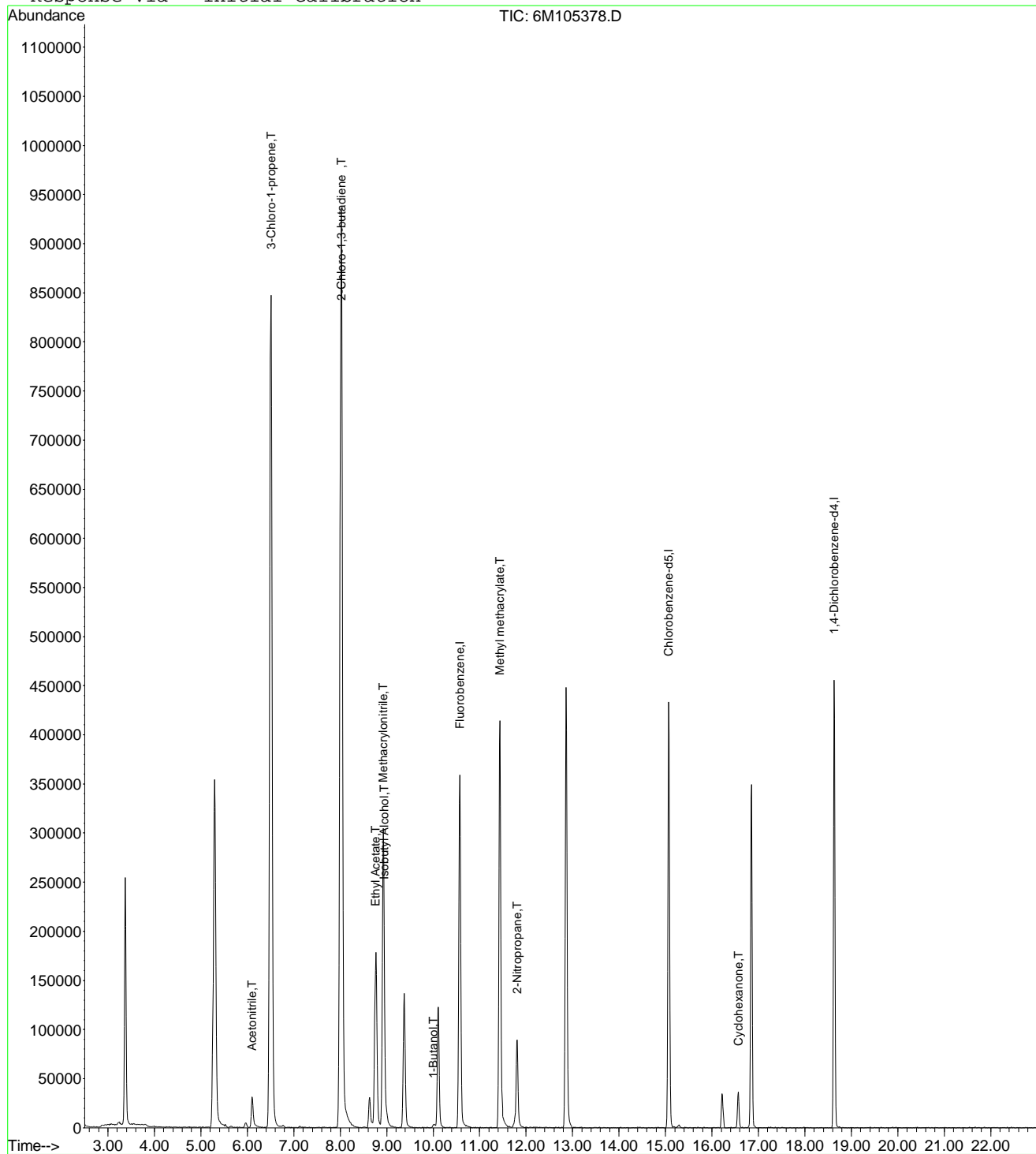


Data File : C:\MSDCHEM\2\DATA\012512\6M105378.D
Acq On : 25 Jan 2012 14:00
Sample : WG388587-08 100ug/L ALT 826A9FOO QC
Misc : 1,1 STD49721
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012

Vial: 12
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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



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

	R.T.	QIon	Response	Conc	Units	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

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

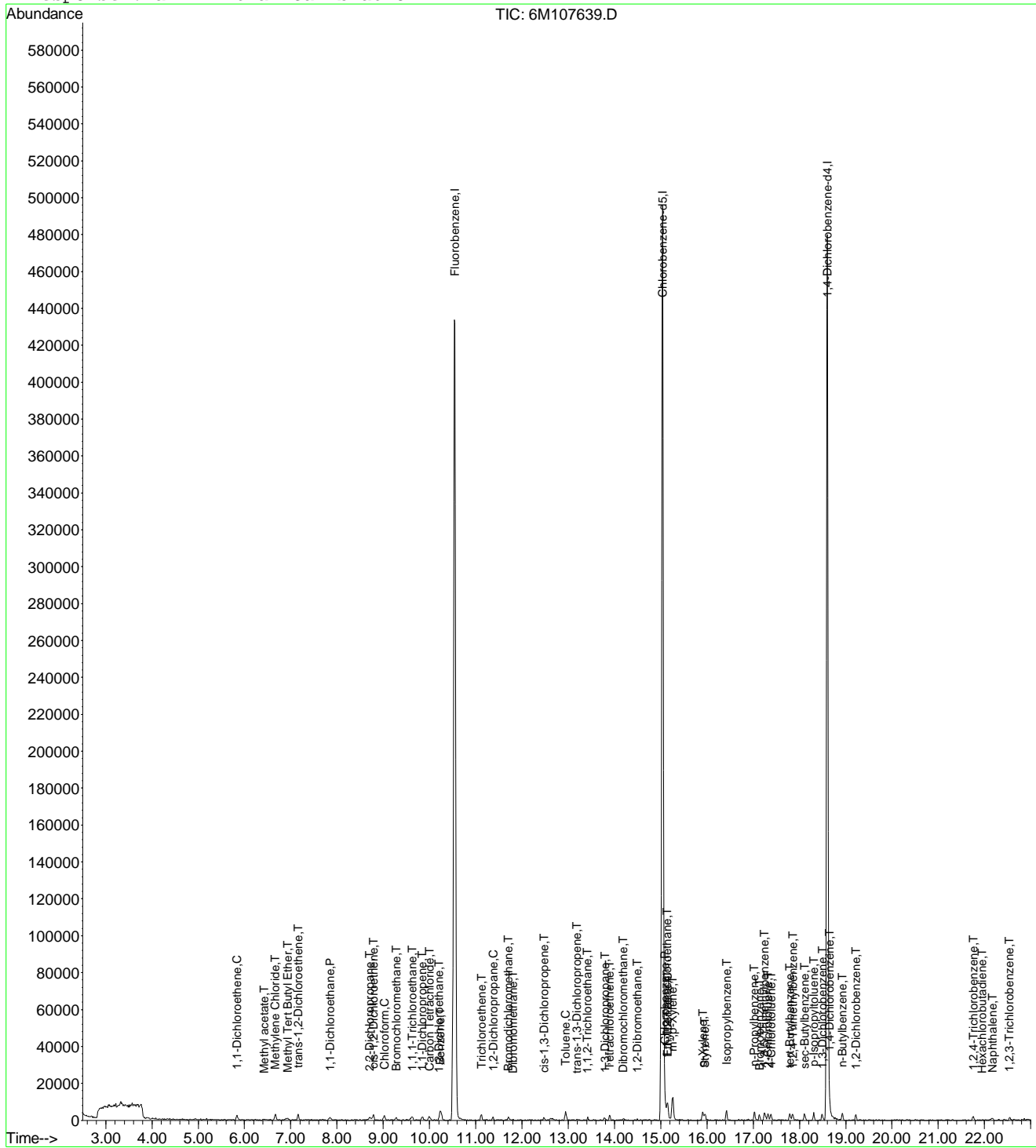
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107639.D
 Acq On : 25 Apr 2012 9:49
 Sample : WG396001-02 0.3 ug/L STD 8260
 Misc : 1,1 STD51130
 MS Integration Params: RTEINT.P
 Quant Time: Apr 25 15:08 2012

Vial: 3
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

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



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

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

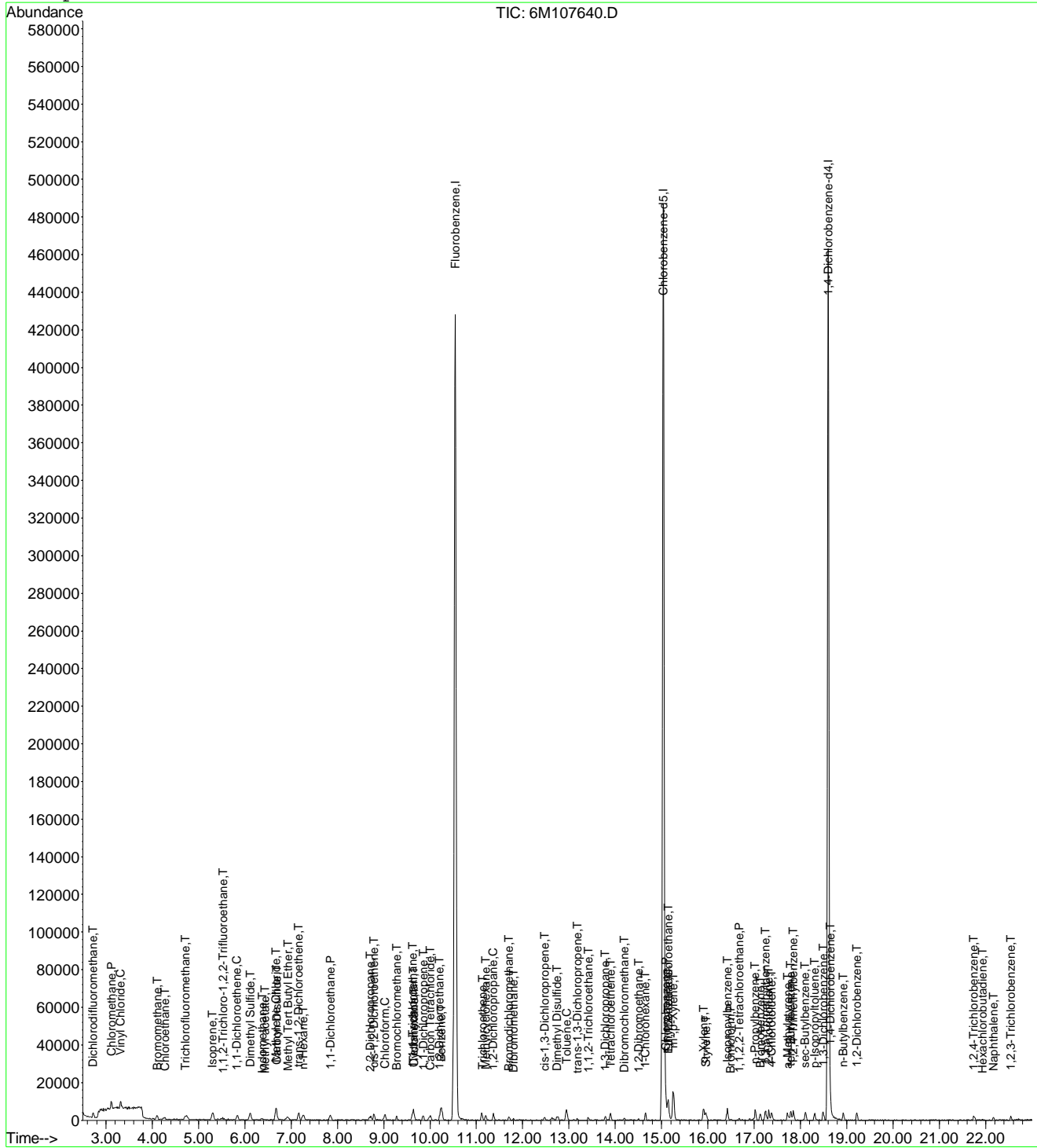
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107640.D
 Acq On : 25 Apr 2012 10:22
 Sample : WG396001-03 0.4 ug/L STD 8260
 Misc : 1,1 STD51130
 MS Integration Params: RTEINT.P
 Quant Time: Apr 25 15:15 2012

Vial: 4
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

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



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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

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

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

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

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

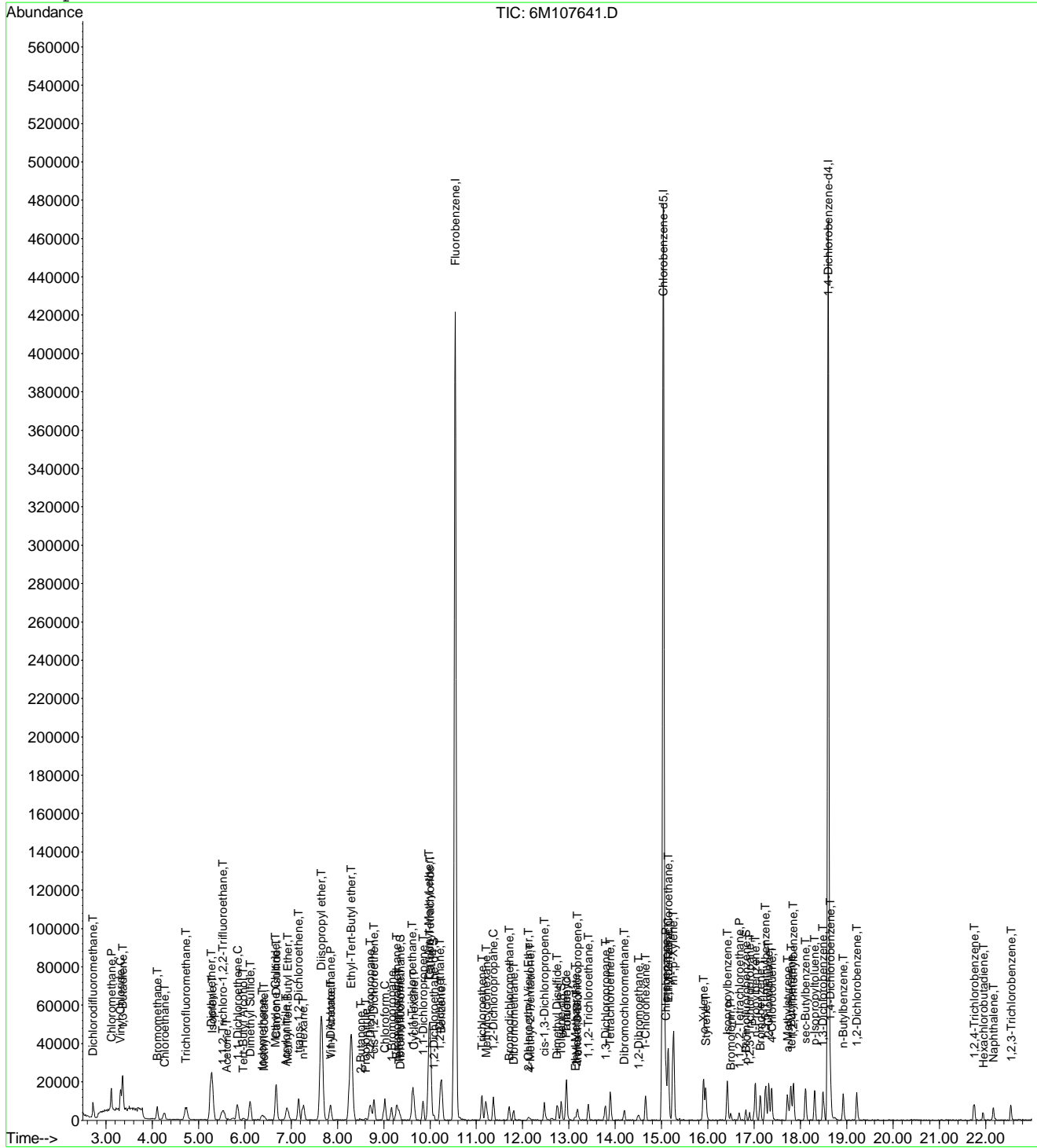
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107641.D
Acq On : 25 Apr 2012 10:54
Sample : WG396001-04 1.0 ug/L STD 8260
Misc : 1,1 STD51130
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15 2012

Vial: 5
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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



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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

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-Butene	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-Chloropropane	20.40	75	750	2.2556	ug/L	80
98) 1,2,4-Trichlorobenzene	21.75	180	10506	2.0761	ug/L	96
99) Hexachlorobutadiene	21.95	225	4168	2.1505	ug/L	96
100) Naphthalene	22.17	128	19377	2.0110	ug/L	100
101) 1,2,3-Trichlorobenzene	22.54	180	9449	2.1484	ug/L	94

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

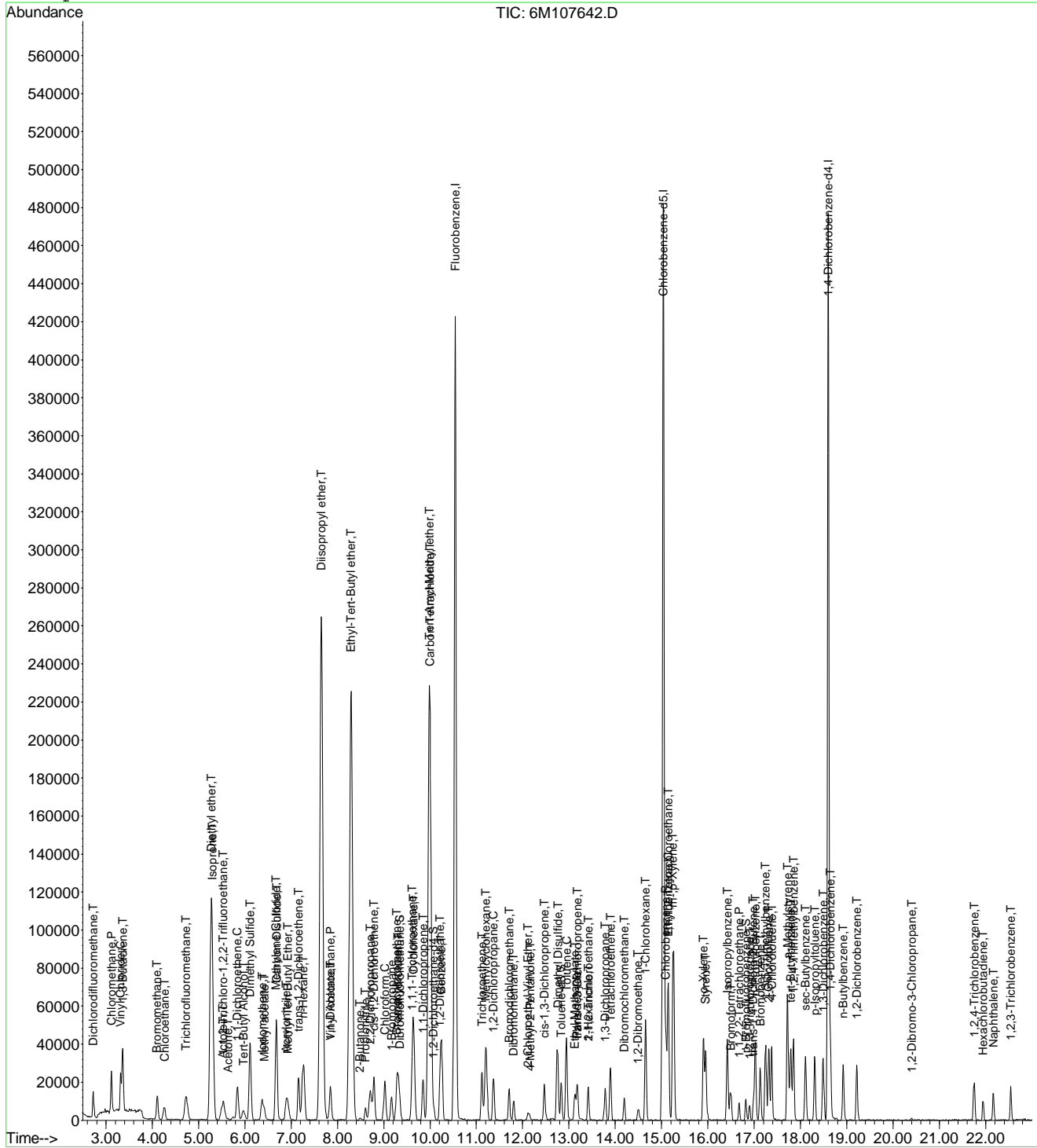
Page 2

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

Vial: 6
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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



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

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

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-Butene	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-Chloropropane	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

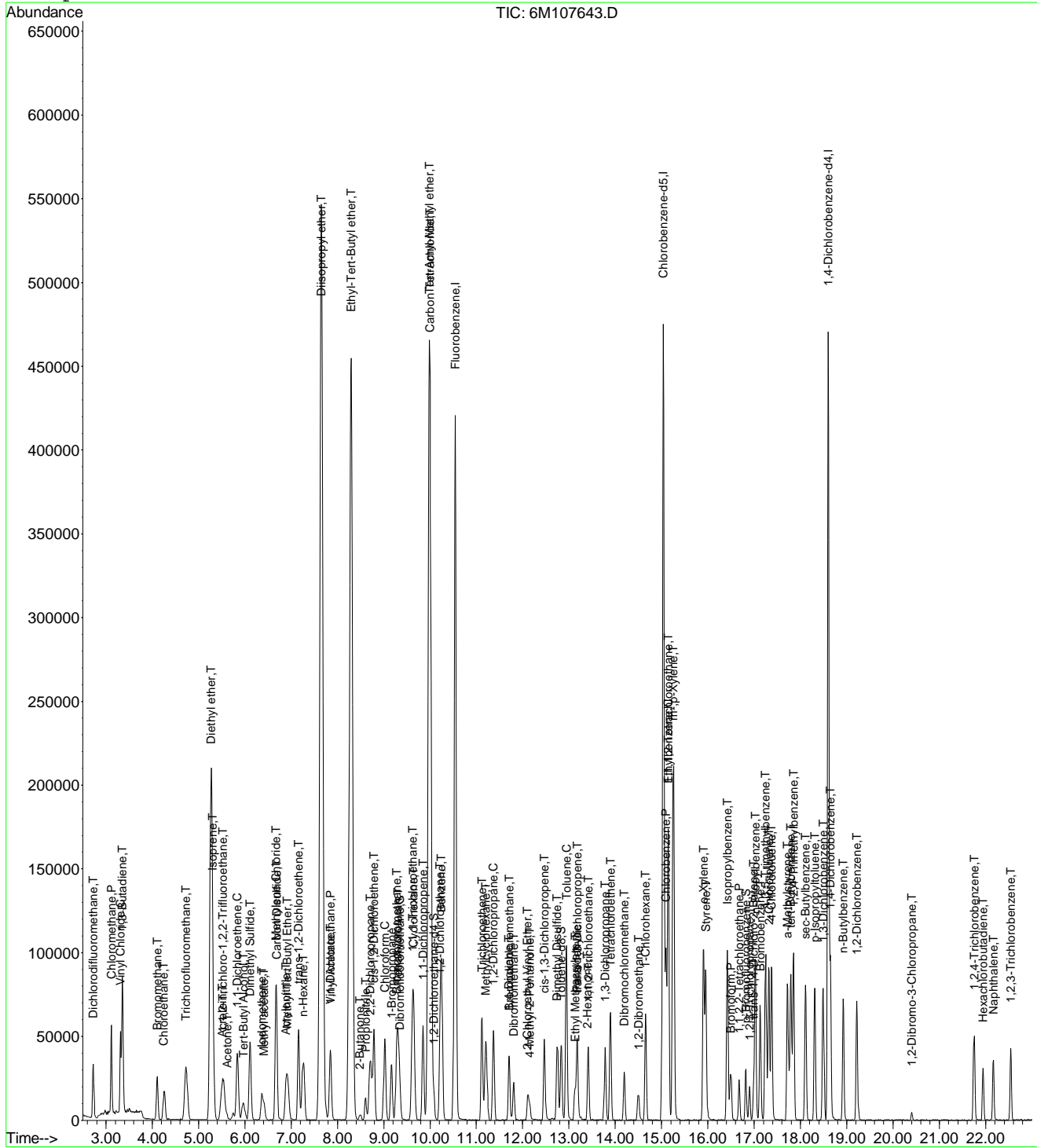
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107643.D
Acq On : 25 Apr 2012 11:59
Sample : WG396001-06 5.0 ug/L STD 8260
Misc : 1,1 STD51130
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:22 2012

Vial: 7
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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\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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

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-Butene	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-Chloropropane	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

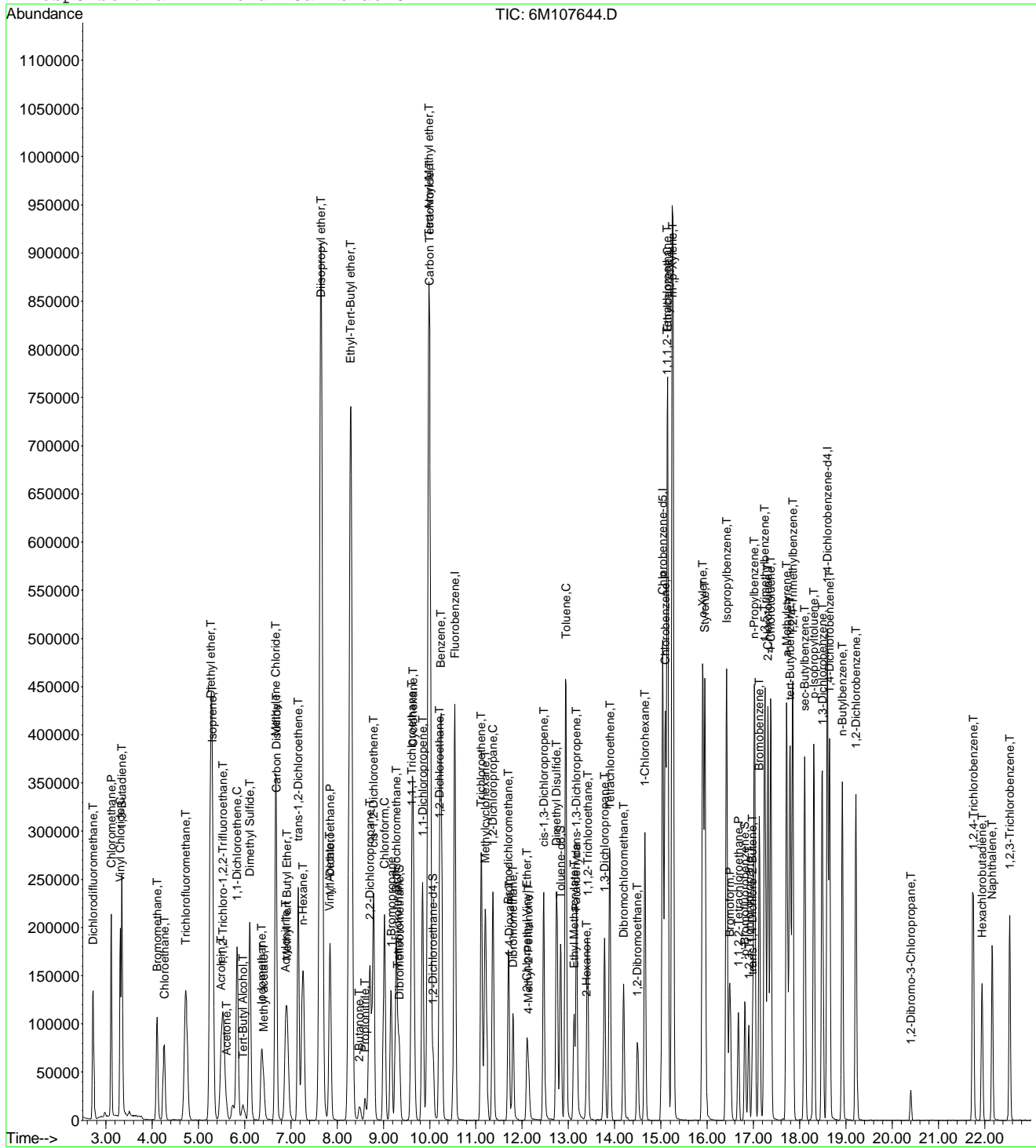
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107644.D
Acq On : 25 Apr 2012 12:32
Sample : WG396001-07 20.0 ug/L STD 8260
Misc : 1,1 STD51130
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:22 2012

Vial: 8
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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\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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

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-Butene	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-Chloropropane	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

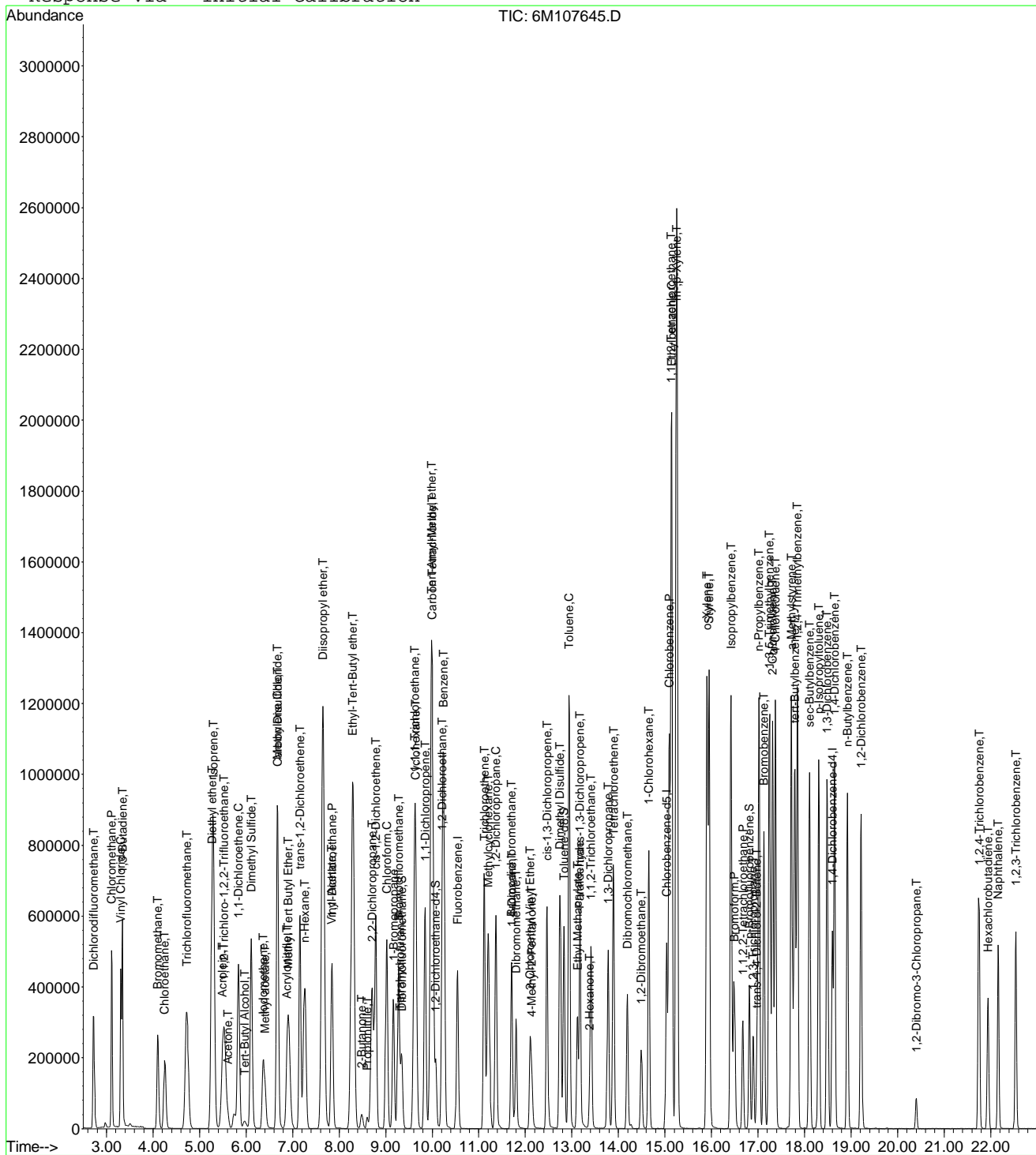
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107645.D
Acq On : 25 Apr 2012 13:04
Sample : WG396001-08 50.0 ug/L STD 8260
Misc : 1,1 STD51130
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23 2012

Vial: 9
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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\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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

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-Butene	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-Chloropropane	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

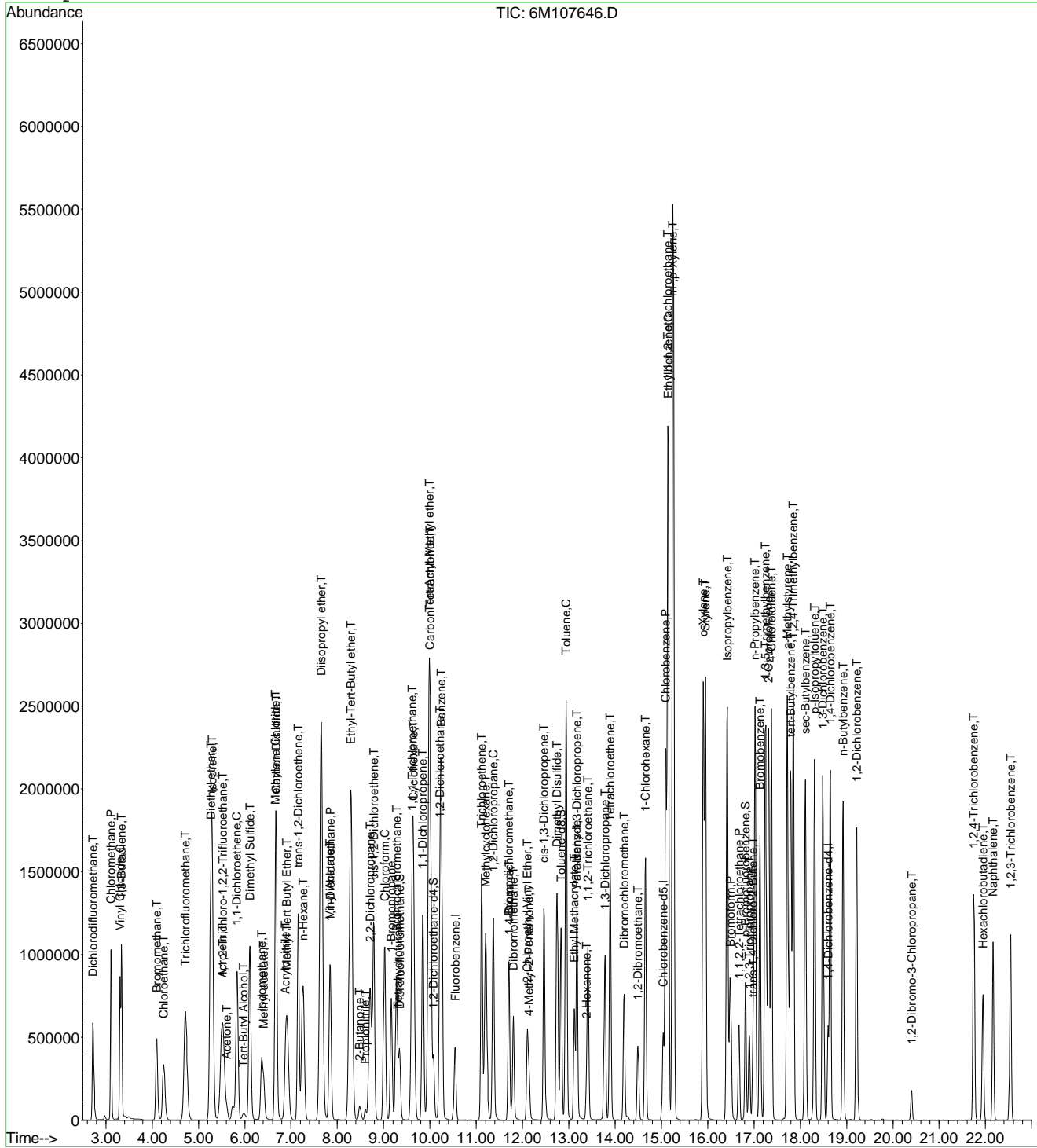
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107646.D
 Acq On : 25 Apr 2012 13:37
 Sample : WG396001-09 100.0 ug/L STD 8260
 Misc : 1,1 STD51130
 MS Integration Params: RTEINT.P
 Quant Time: Apr 25 15:23 2012

Vial: 10
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

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

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

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

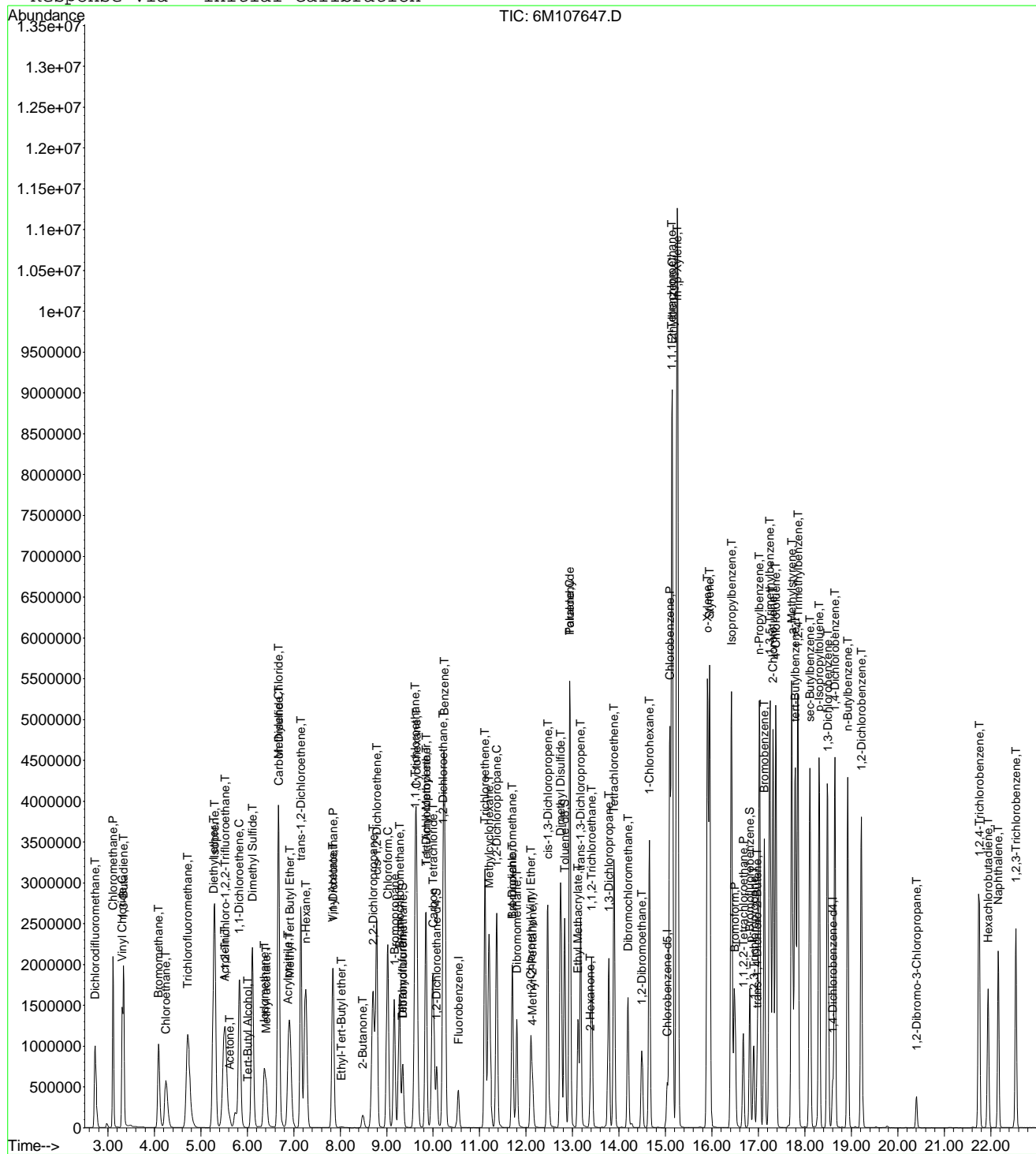
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107647.D
 Acq On : 25 Apr 2012 14:10
 Sample : WG396001-10 200.0 ug/L STD 8260
 Misc : 1,1 STD51130
 MS Integration Params: RTEINT.P
 Quant Time: Apr 25 15:23 2012

Vial: 11
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

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\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

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

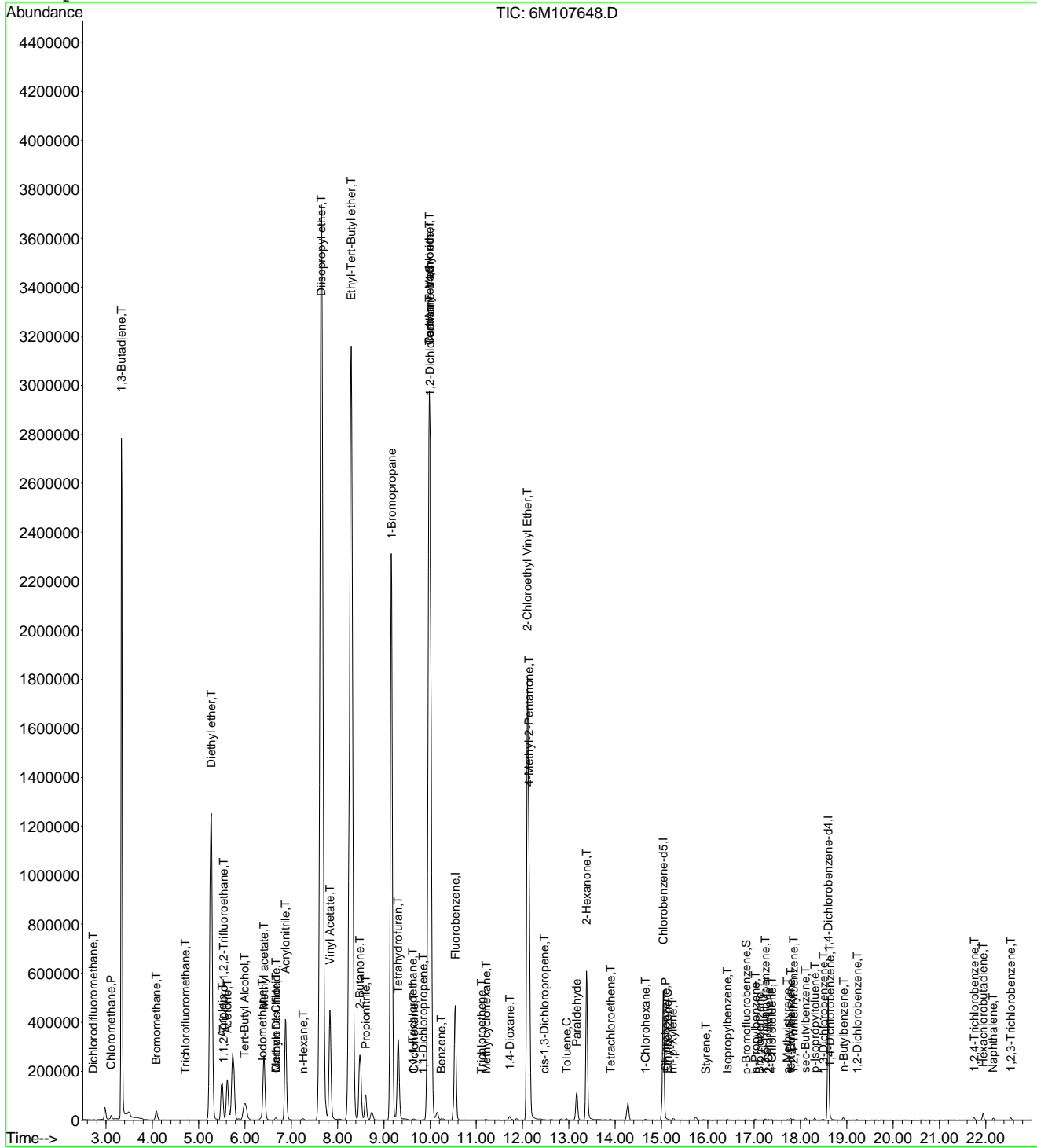
Page 2

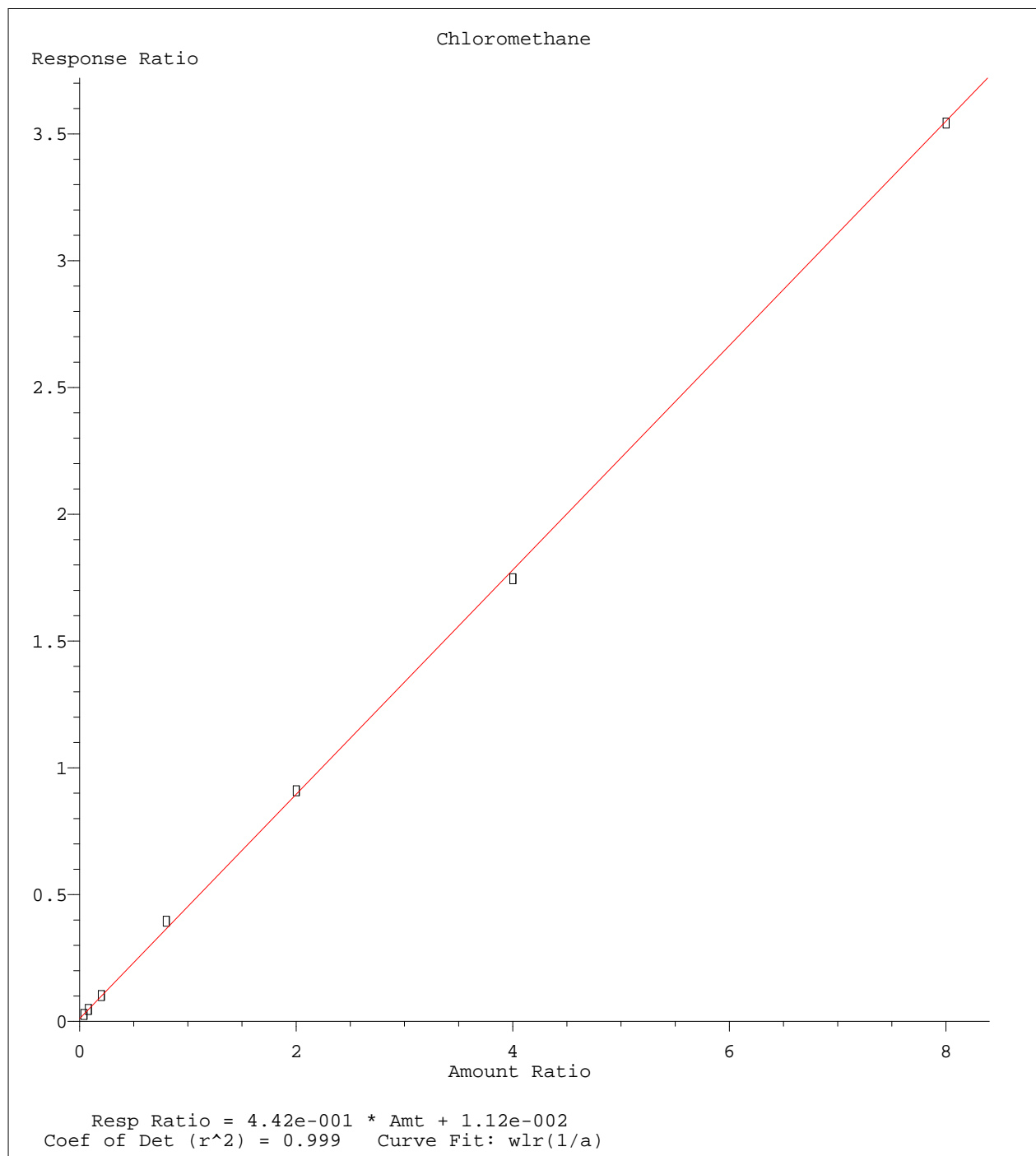
Data File : C:\MSDCHEM\1\DATA\042512\6M107648.D
 Acq On : 25 Apr 2012 14:42
 Sample : WG396001-11 300.0 ug/L STD 8260
 Misc : 1,1 STD51130
 MS Integration Params: RTEINT.P
 Quant Time: Apr 25 15:23 2012

Vial: 12
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

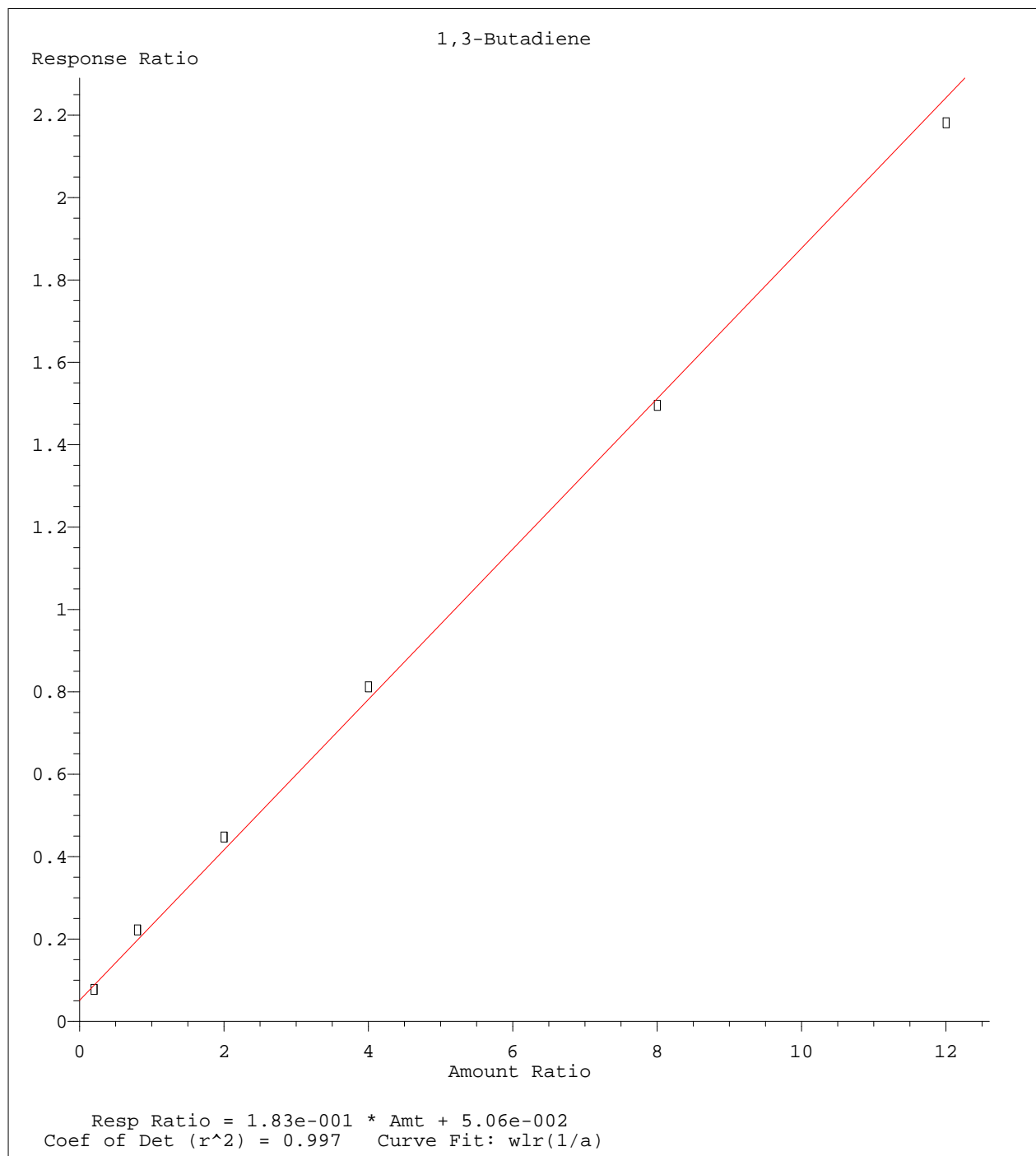
Quant Results File: 8260WTR.RES

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

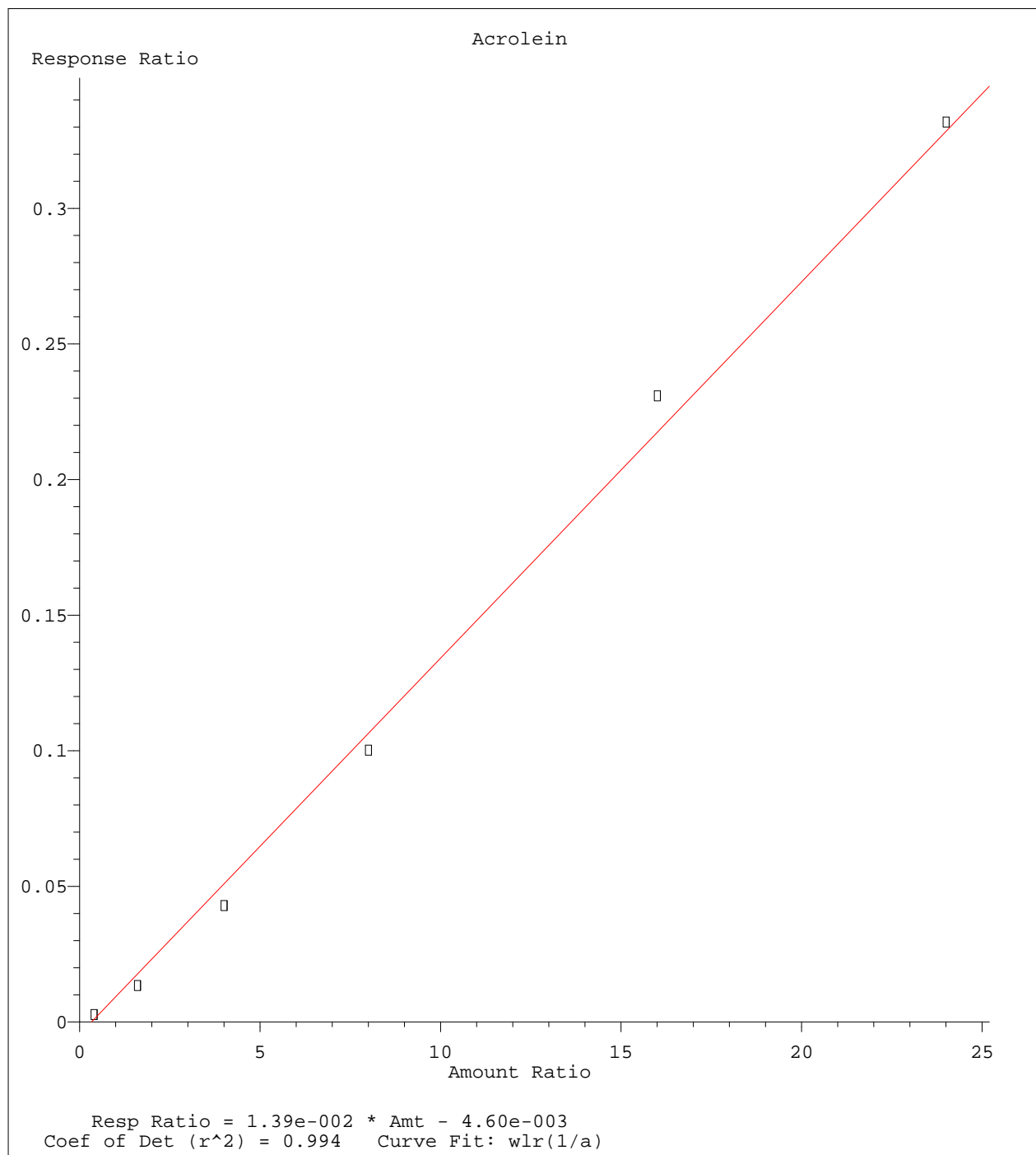




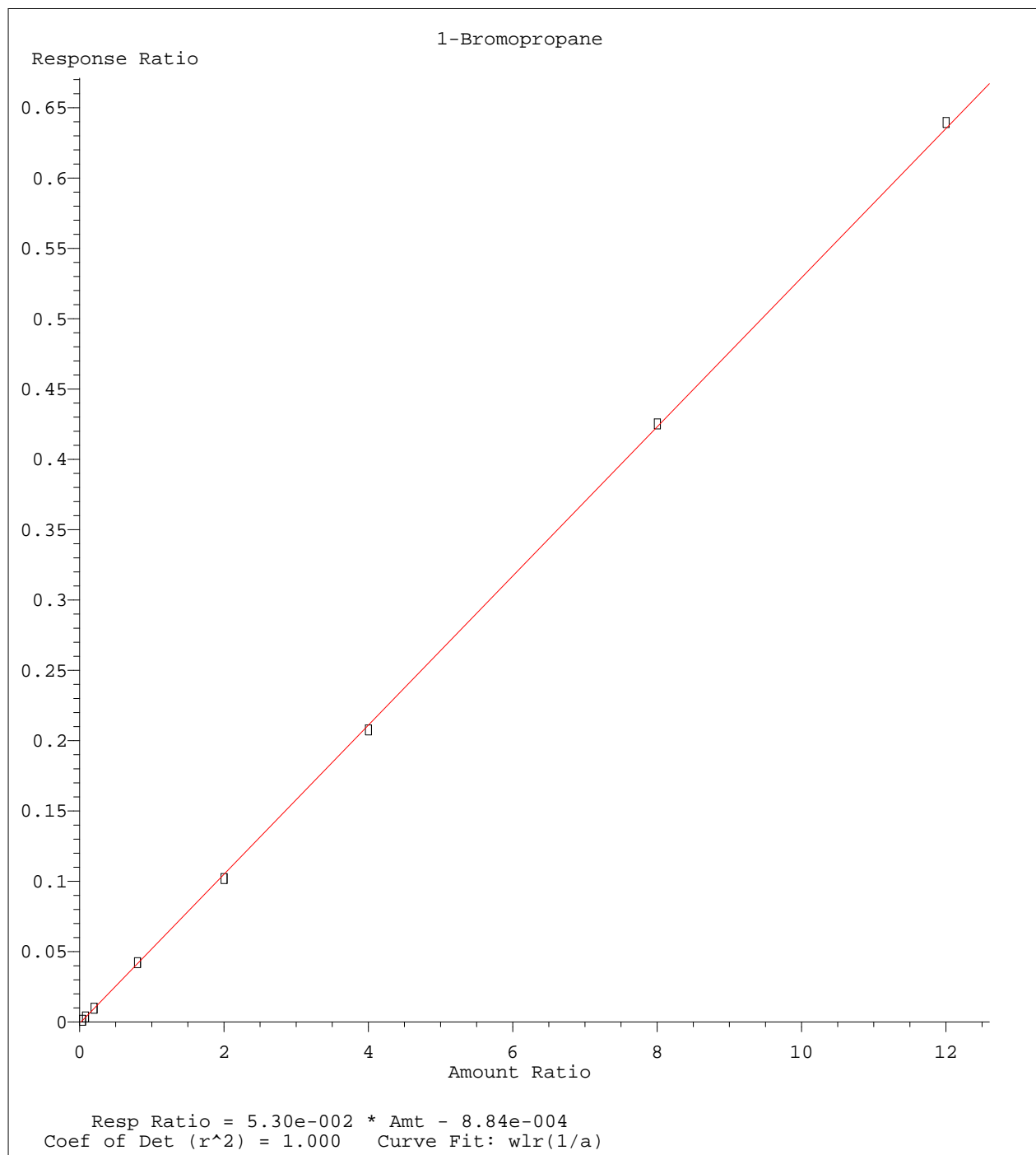
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



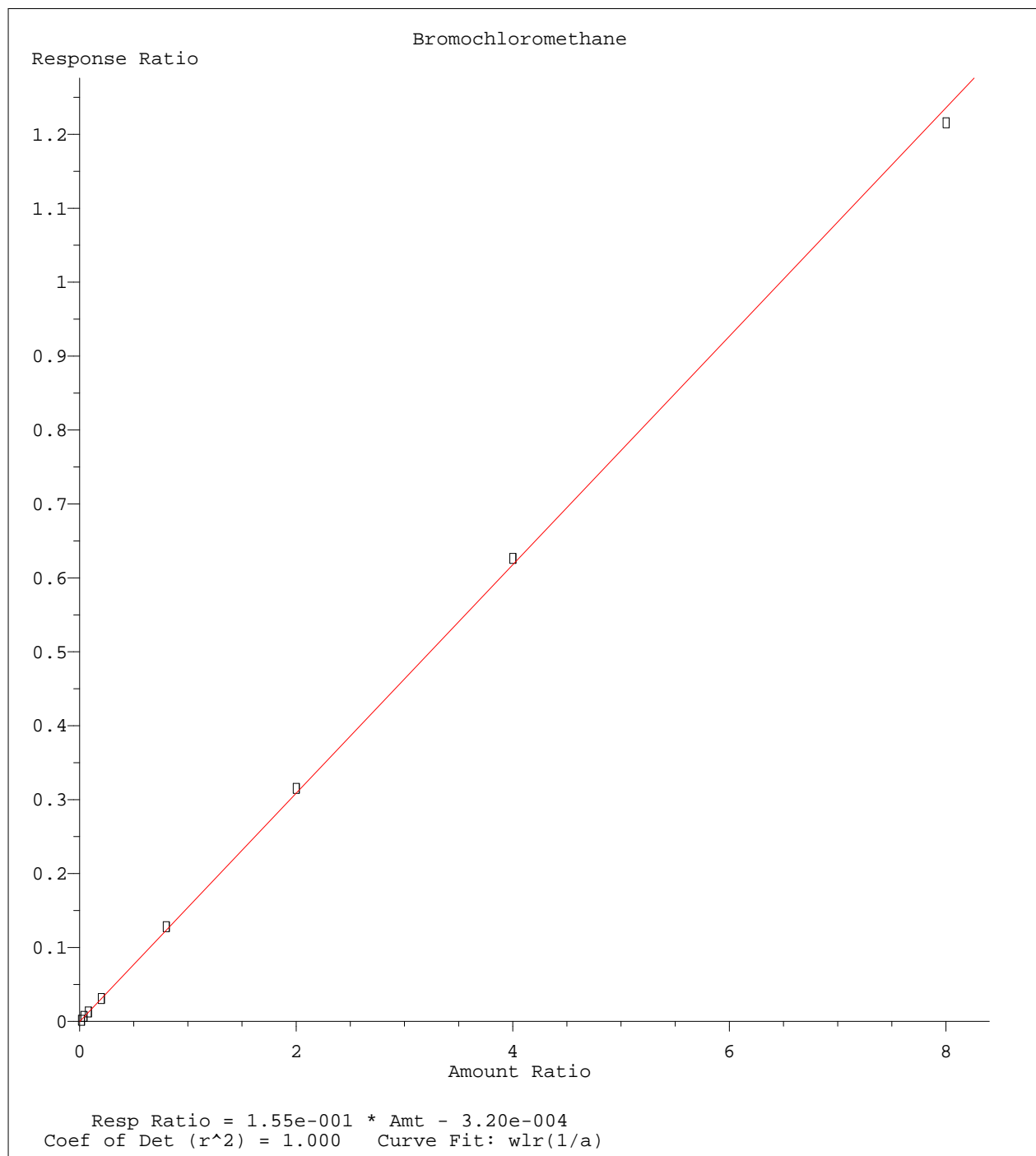
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



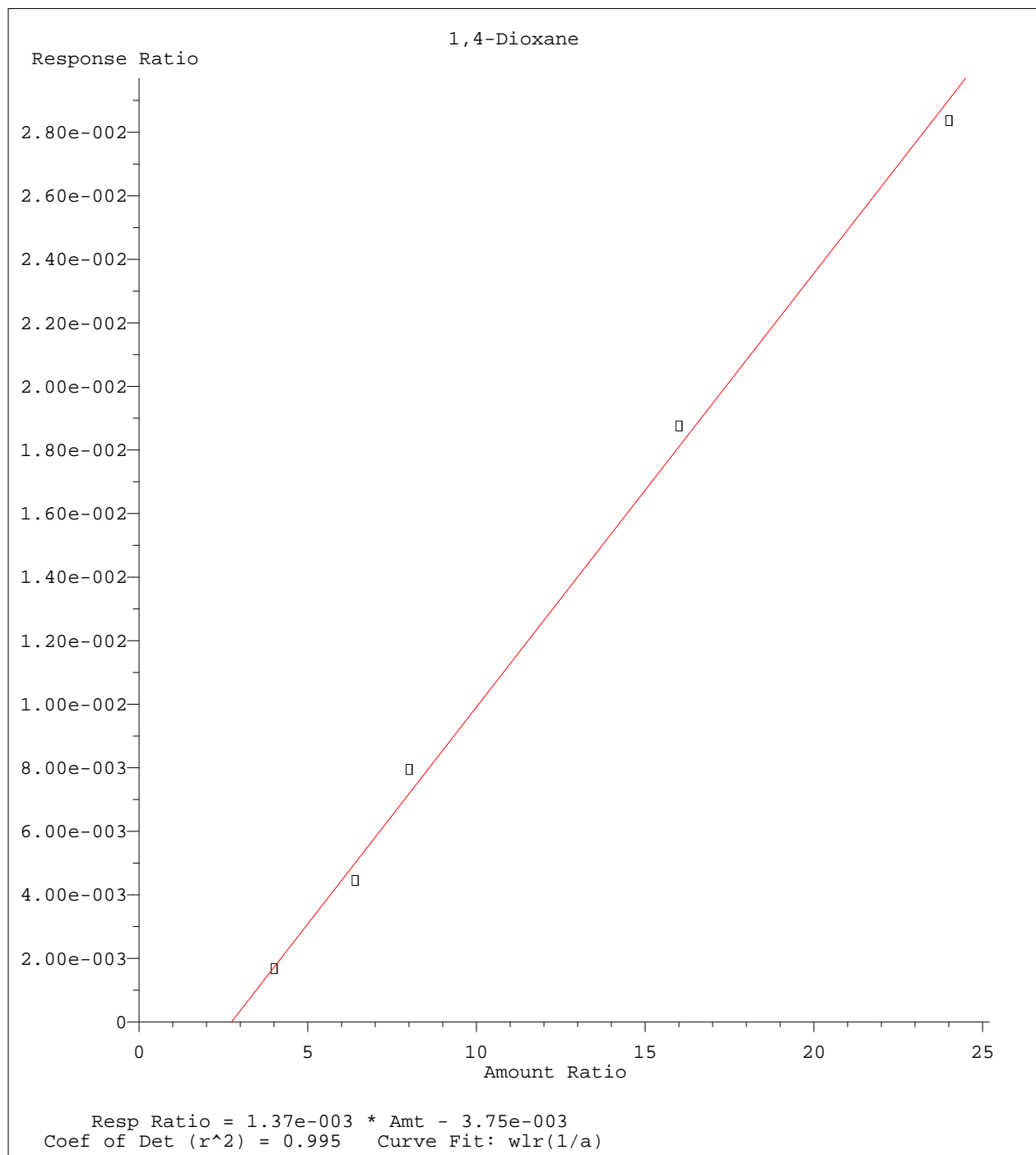
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



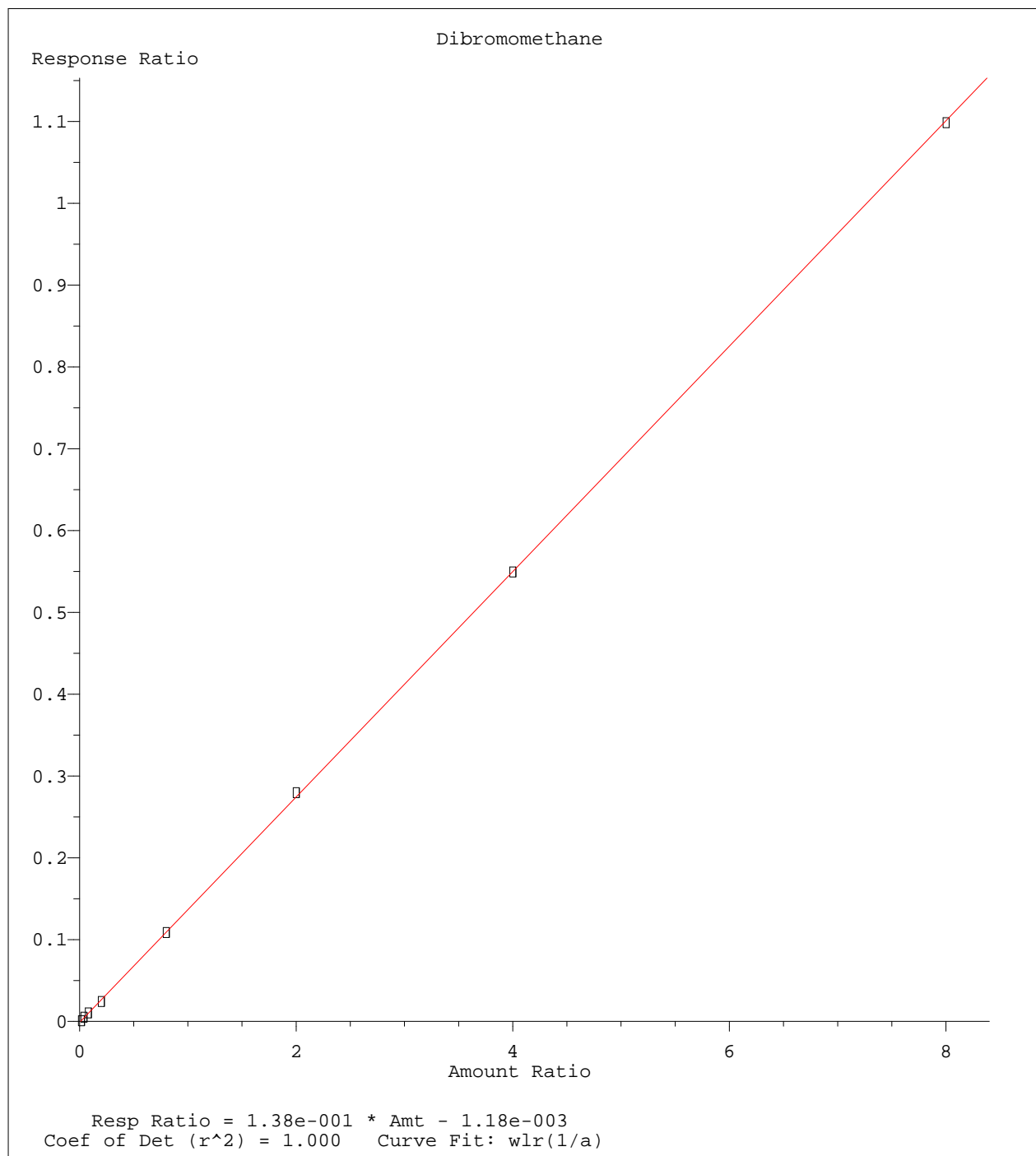
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



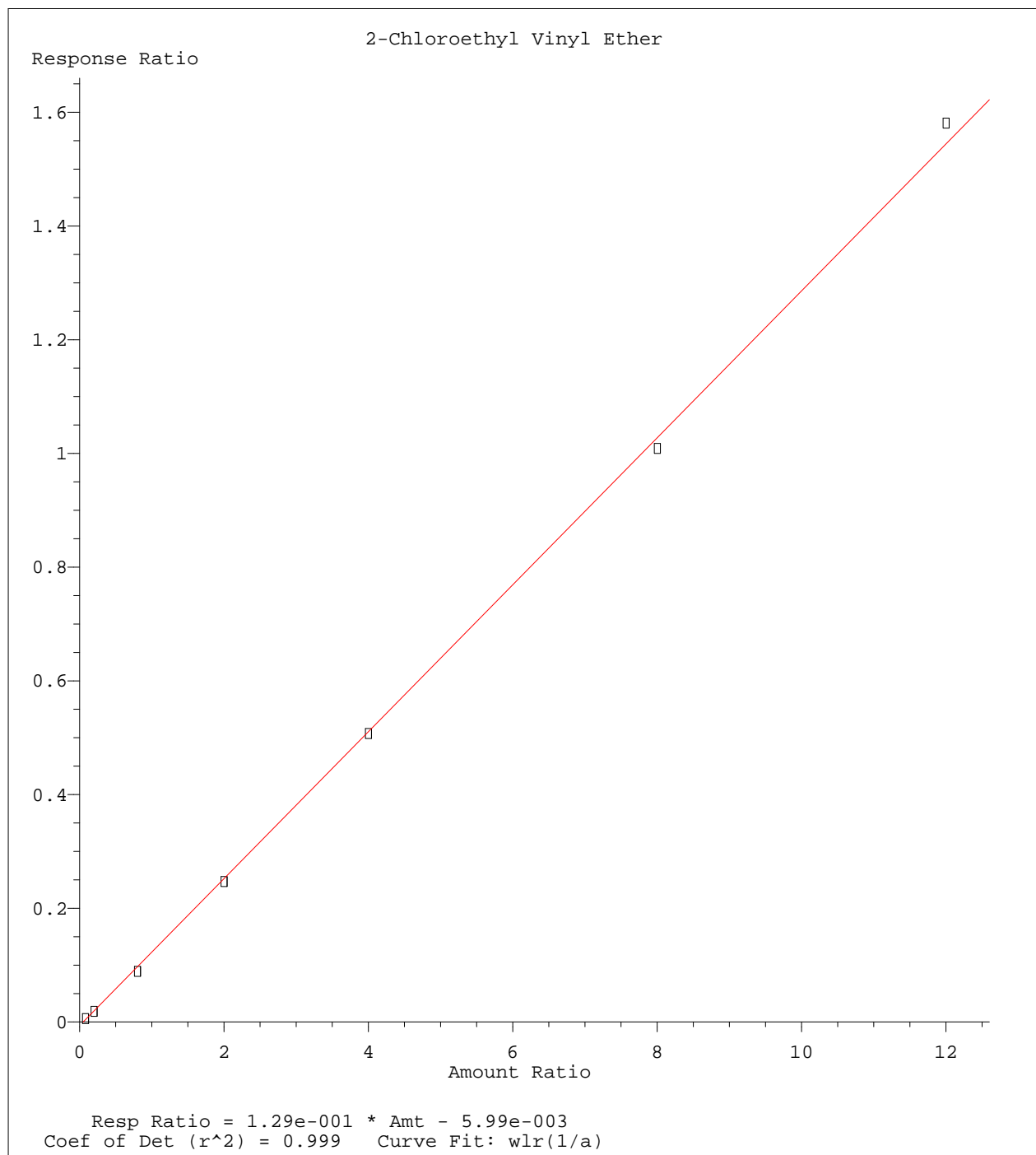
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



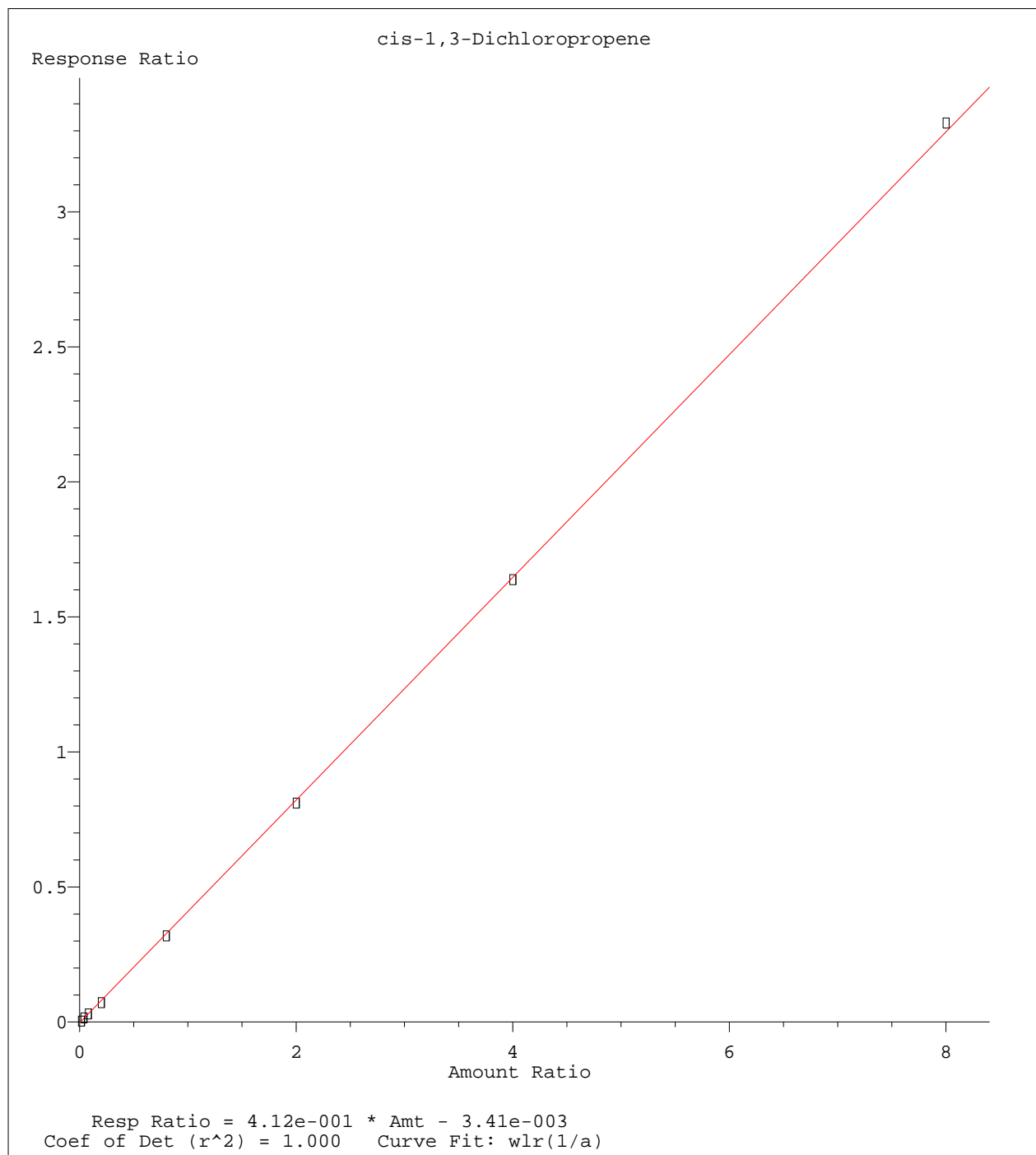
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
 Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



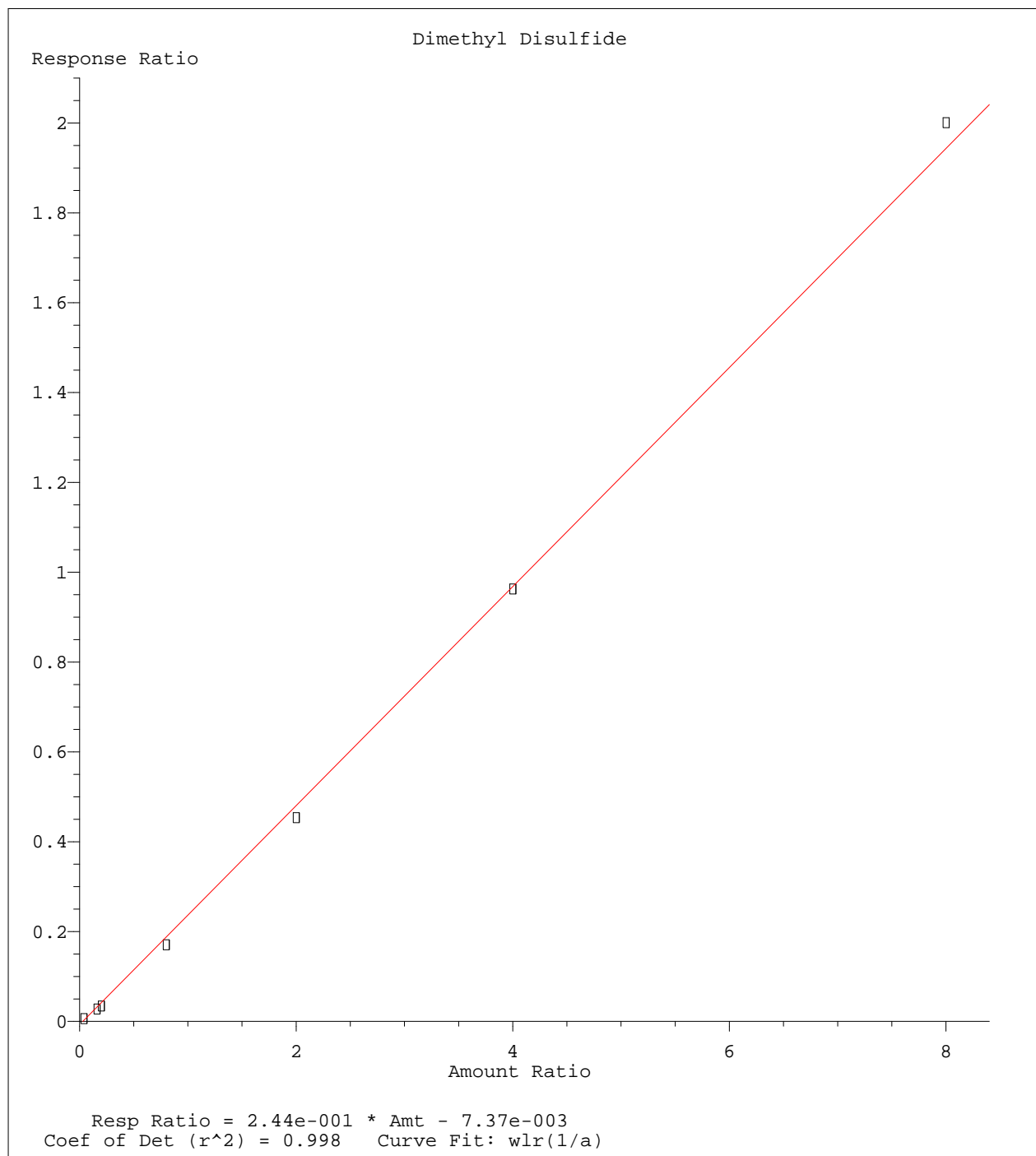
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



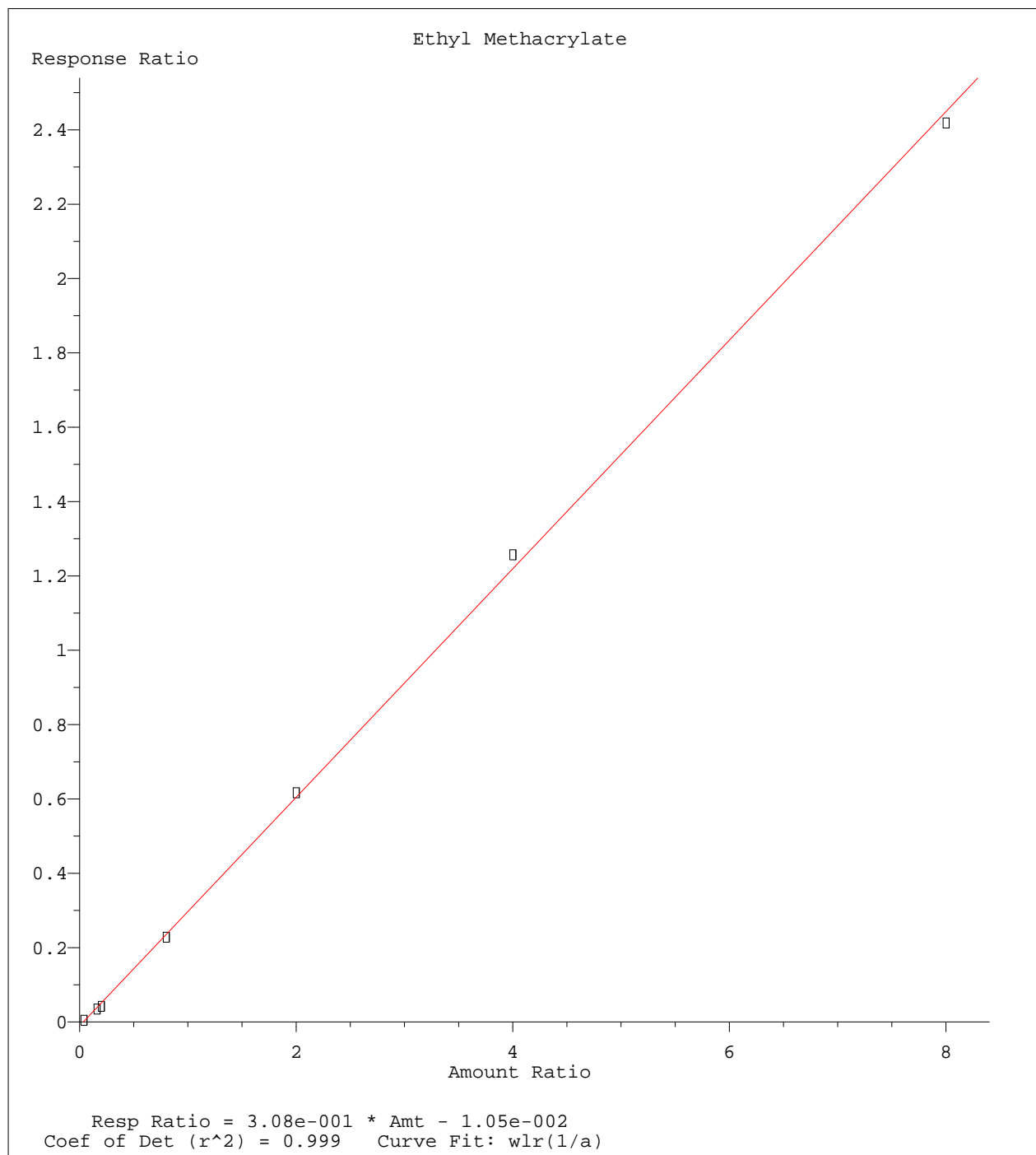
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



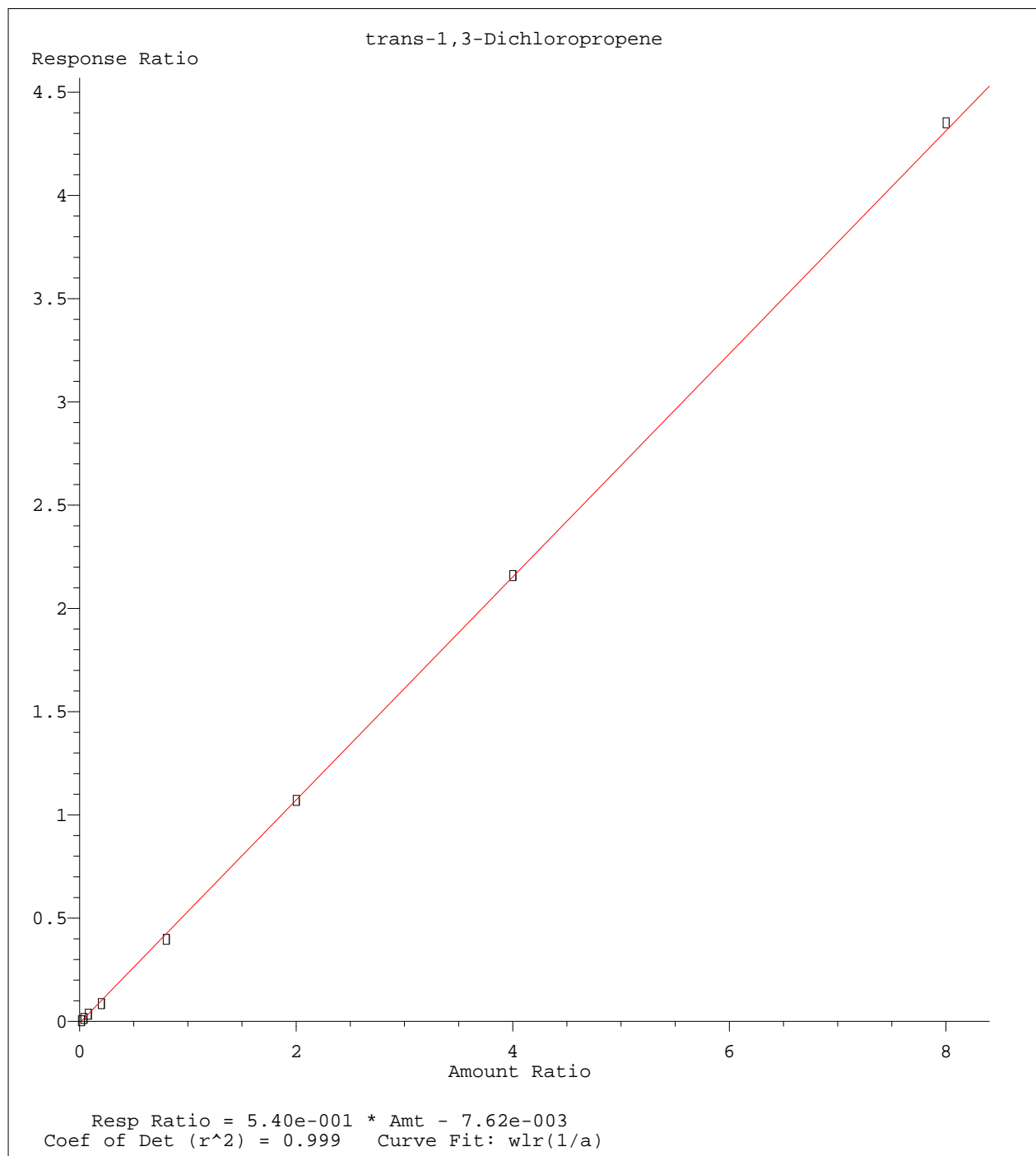
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



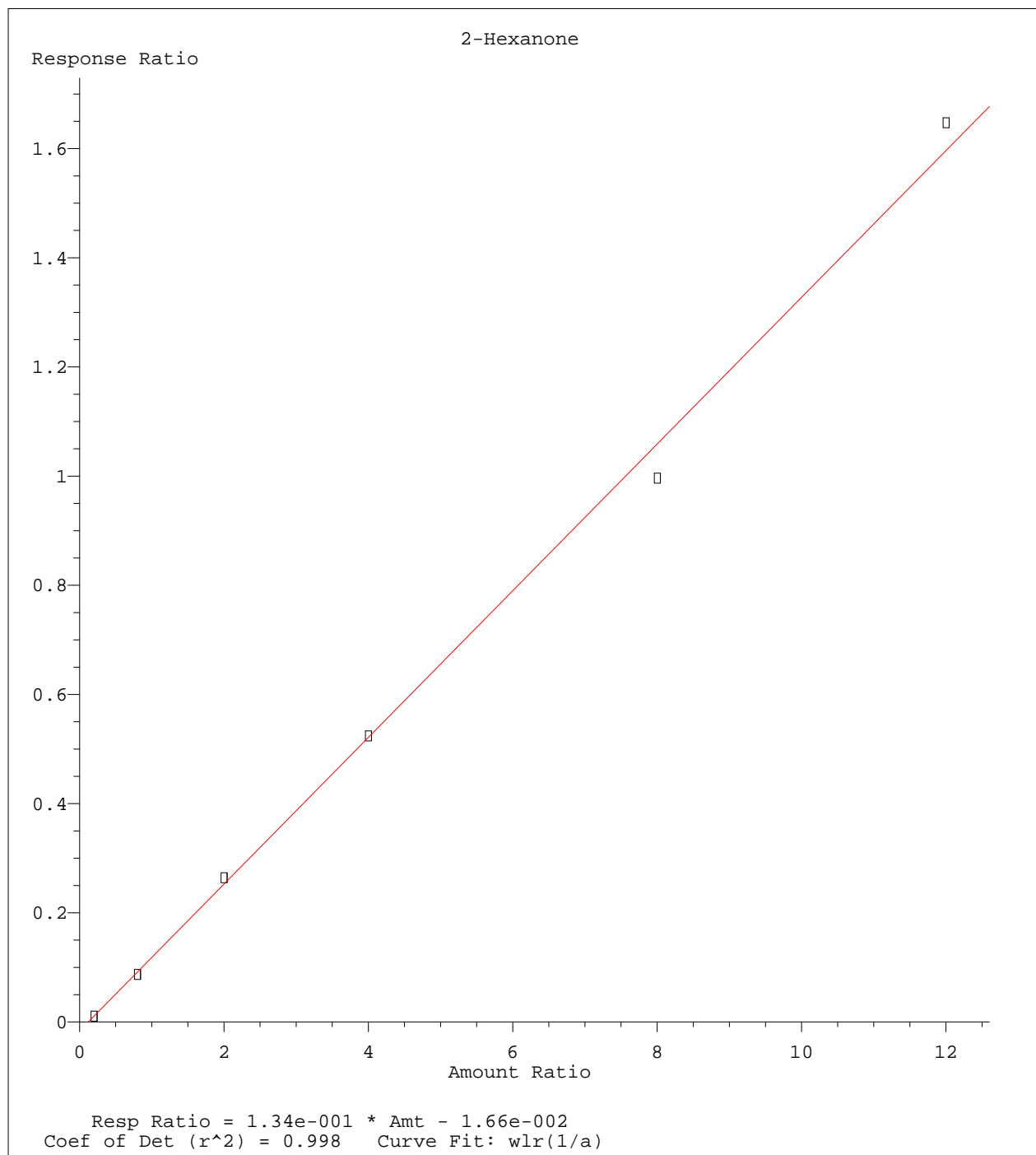
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



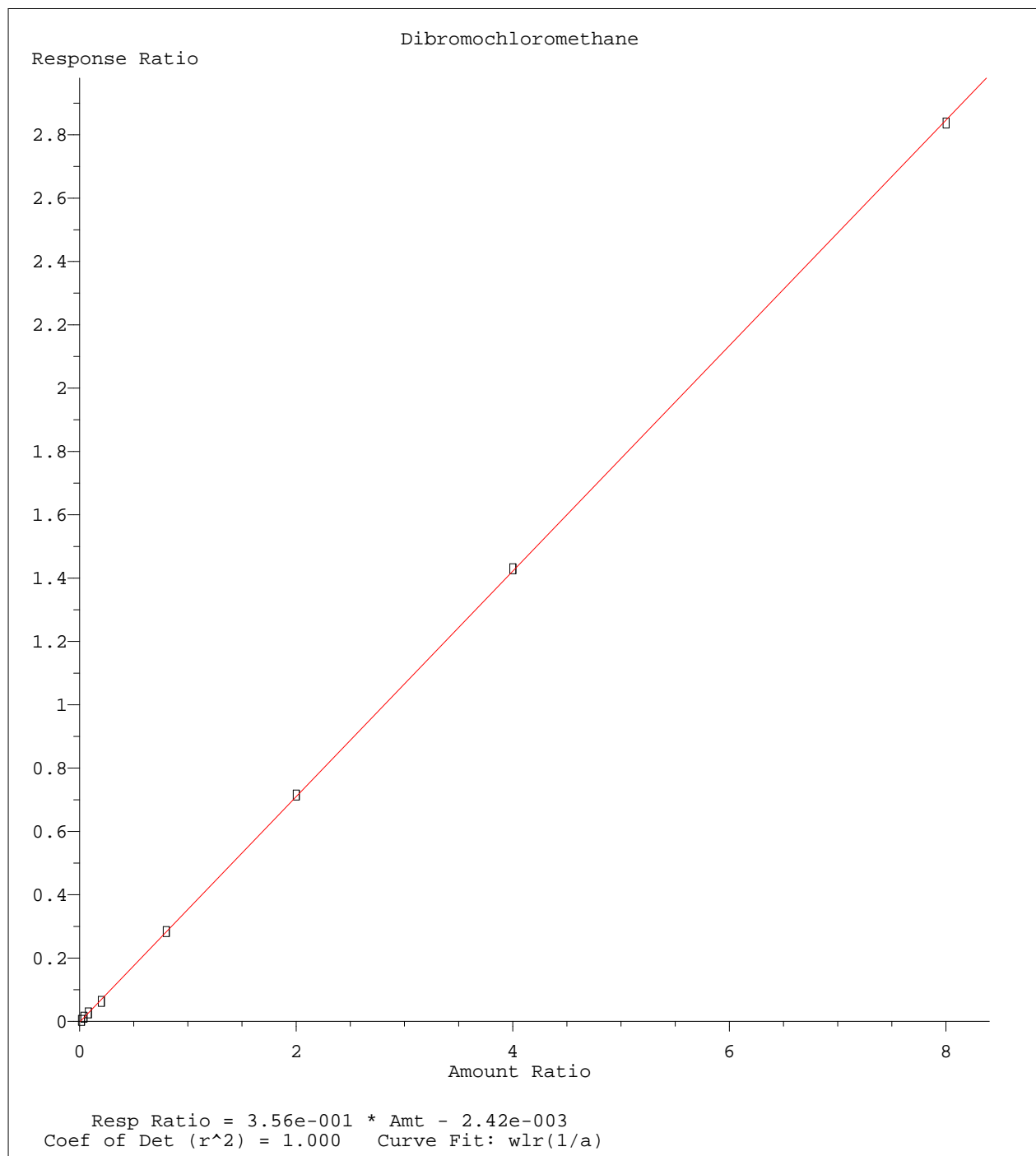
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



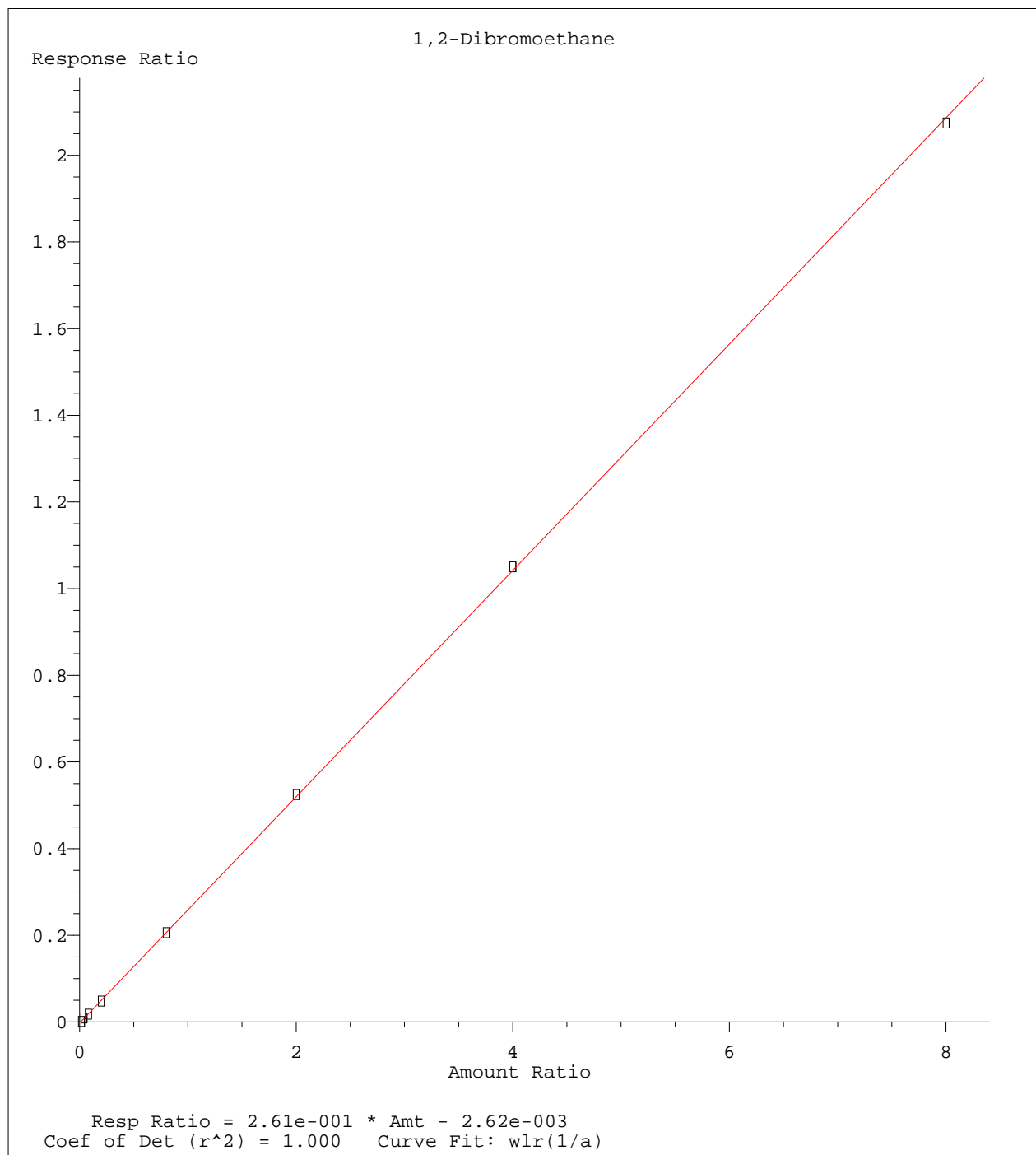
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



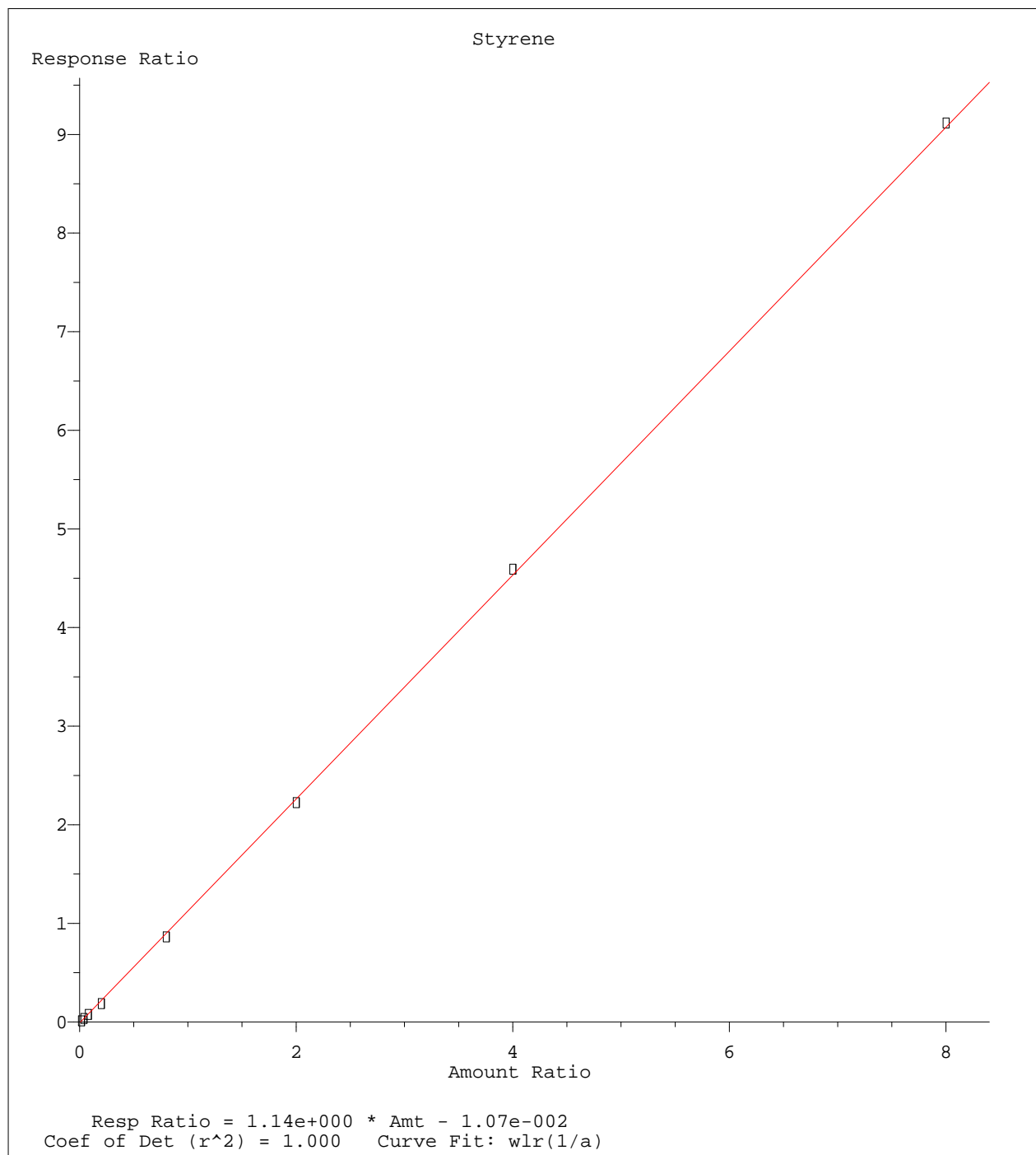
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



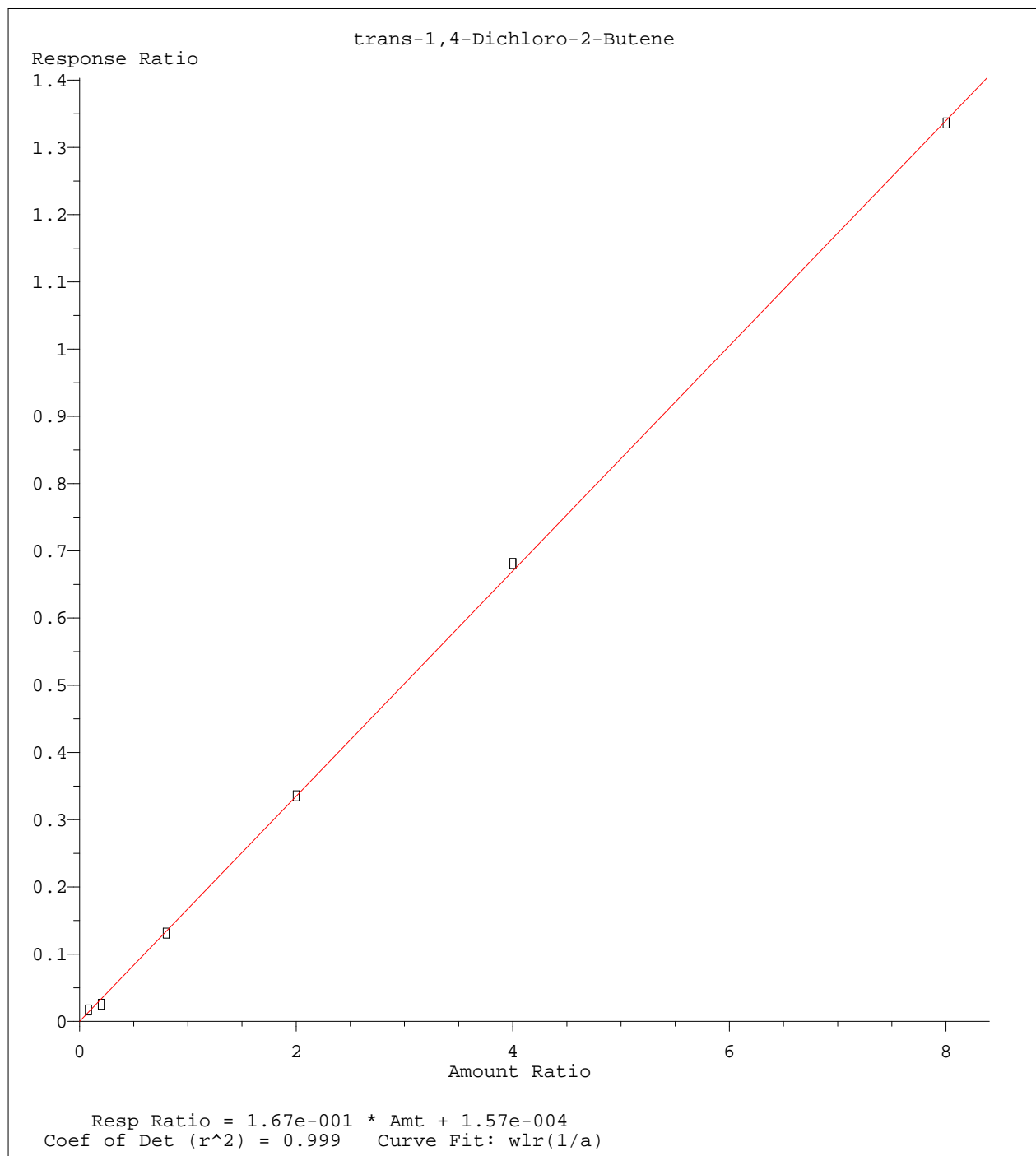
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



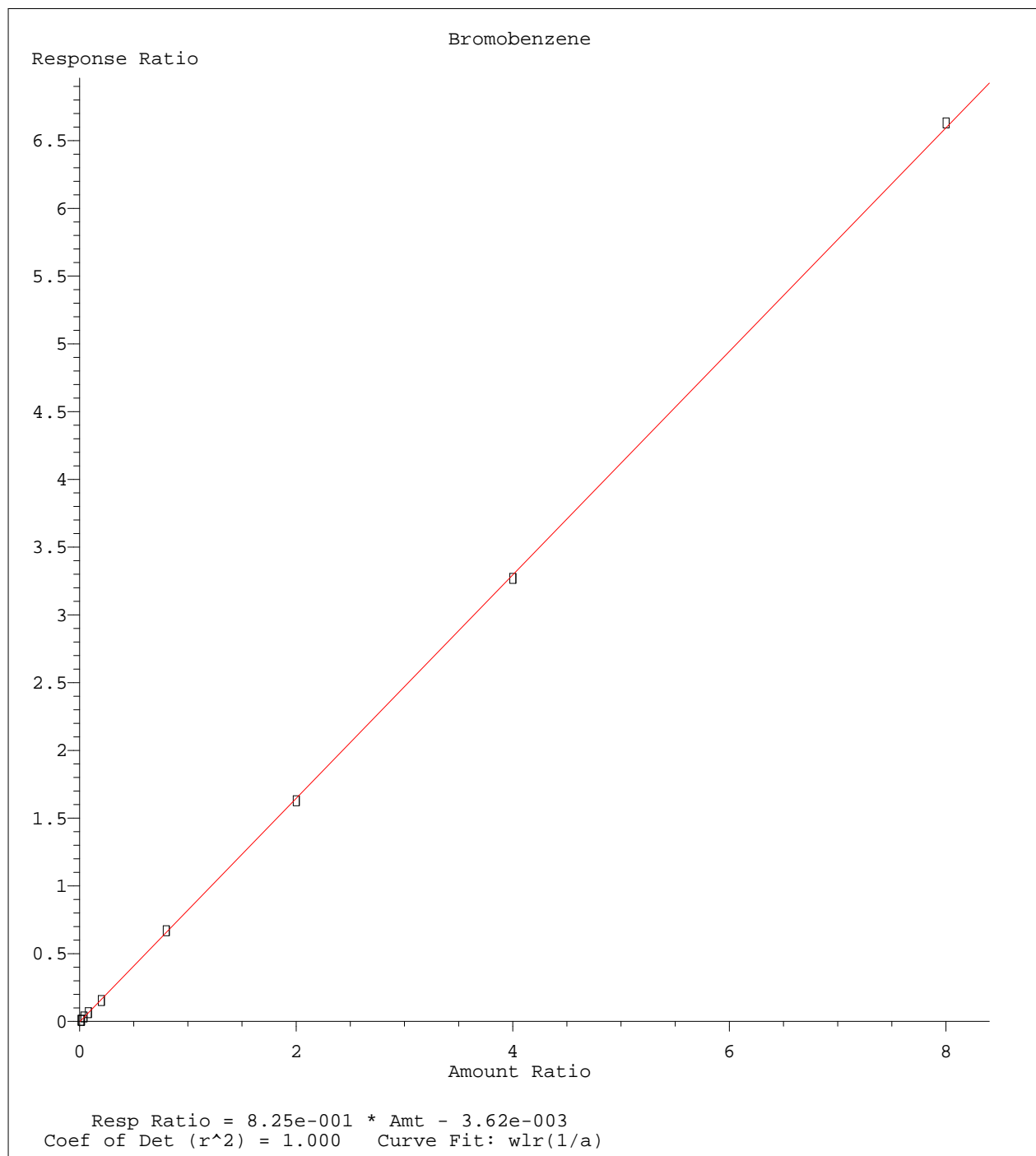
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



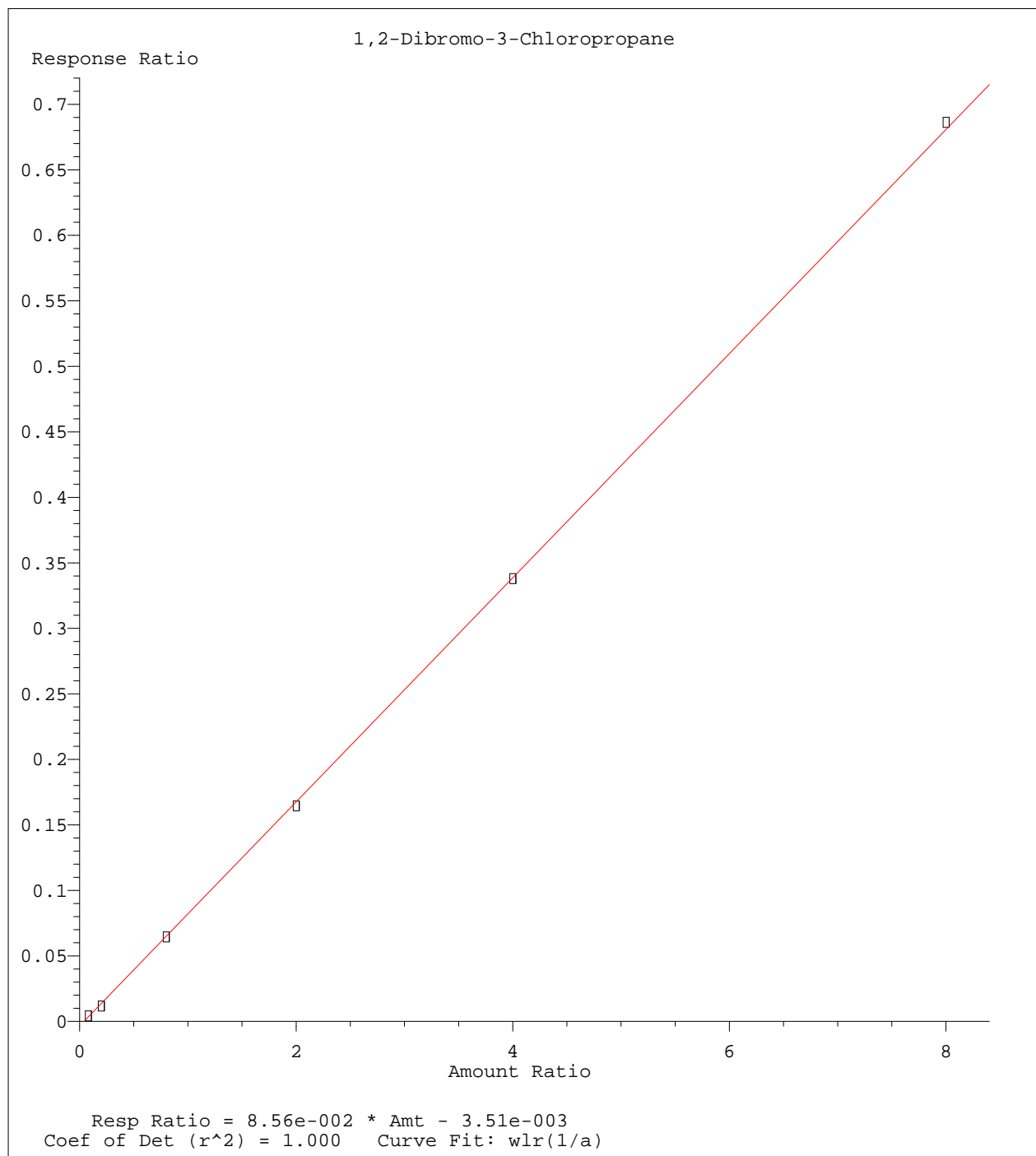
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



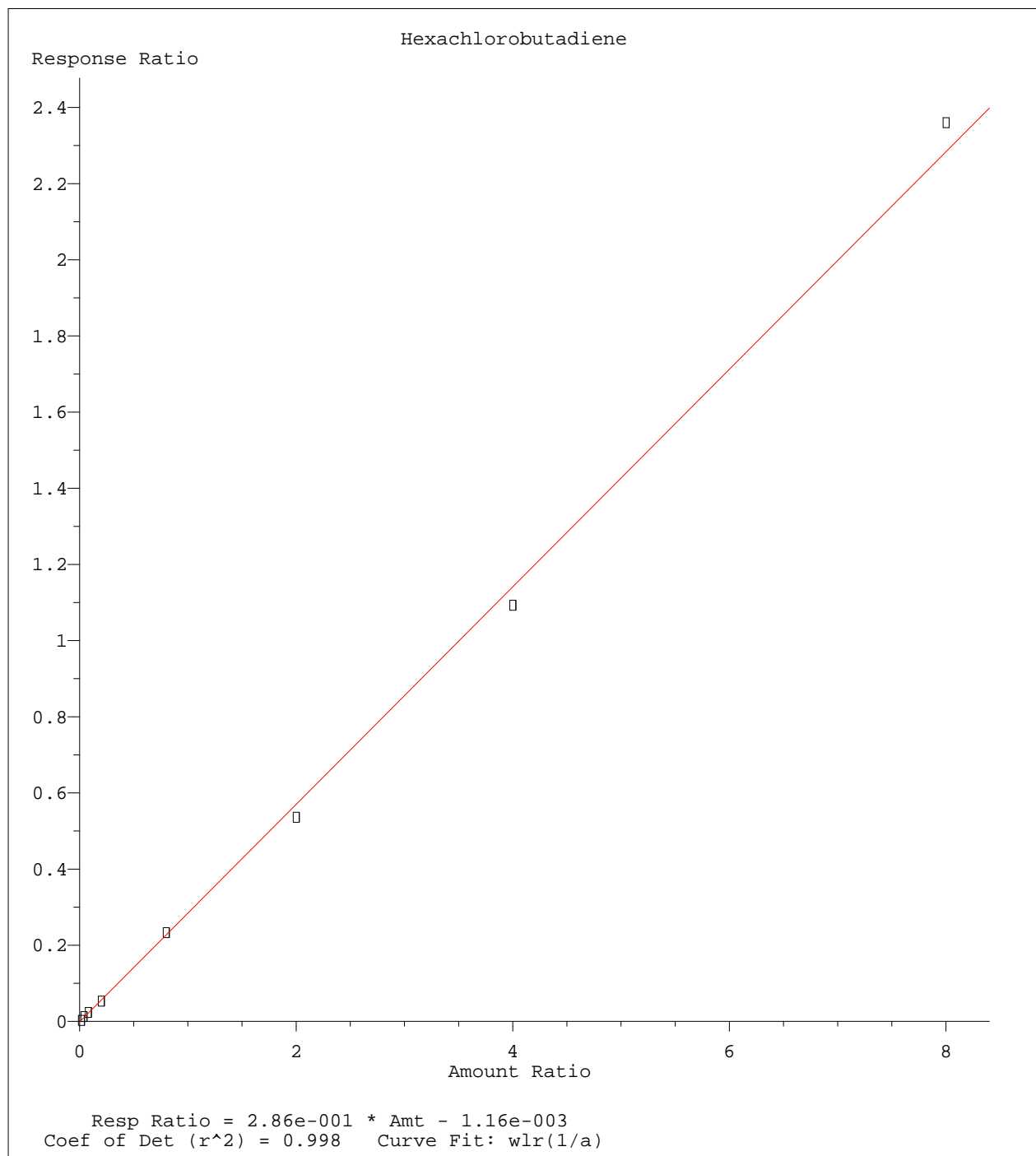
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



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

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

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-Butene	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-Chloropropane	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

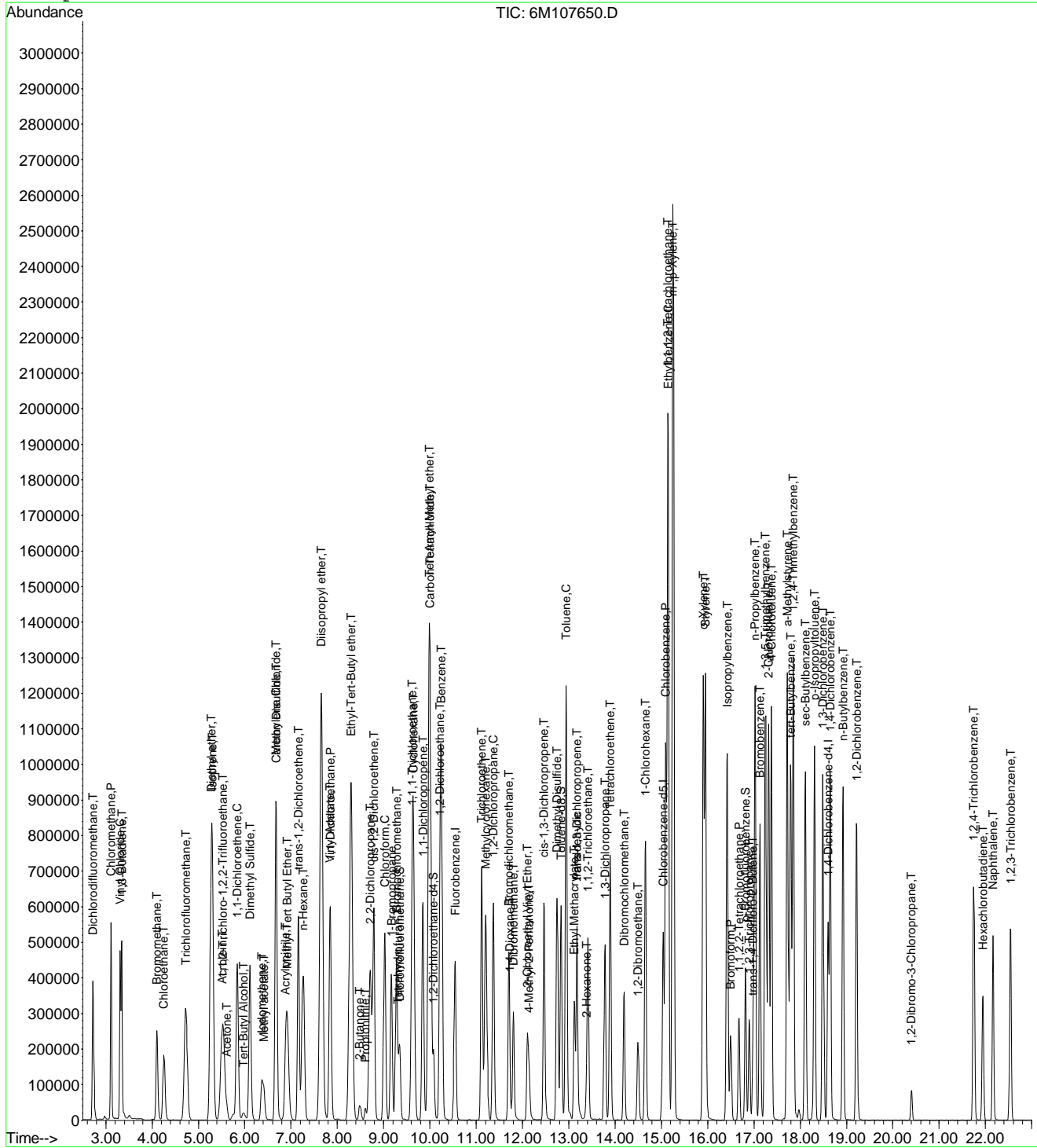
Page 2

Data File : C:\MSDCHEM\1\DATA\042512\6M107650.D
Acq On : 25 Apr 2012 15:46
Sample : WG396001-12 50.0 ug/L ALT SRC 8260
Misc : 1,1 STD51130
MS Integration Params: RTEINT.P
Quant Time: Apr 25 16:09 2012

Vial: 14
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

Quant Results File: 8260WTR.RES

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



Evaluate Continuing Calibration Report

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

Vial: 14
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

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

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	656295	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	486754	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	262855	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.18	41	2309	4.7425	ug/L	65
3) 3-Chloro-1-propene	6.59	41	49314	4.8141	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	61015	5.0296	ug/L	95
5) Ethyl Acetate	8.63	43	16418	4.7992	ug/L	95
6) Methacrylonitrile	8.77	67	6918	4.9194	ug/L	83
7) Isobutyl Alcohol	8.81	43	817	5.5399	ug/L #	11
9) Methyl methacrylate	10.96	41	18510	4.4070	ug/L	97
10) 2-Nitropropane	11.27	43	5684	3.8971	ug/L	93
13) Cyclohexanone	15.32	55	508	1.9649	ug/L #	31

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

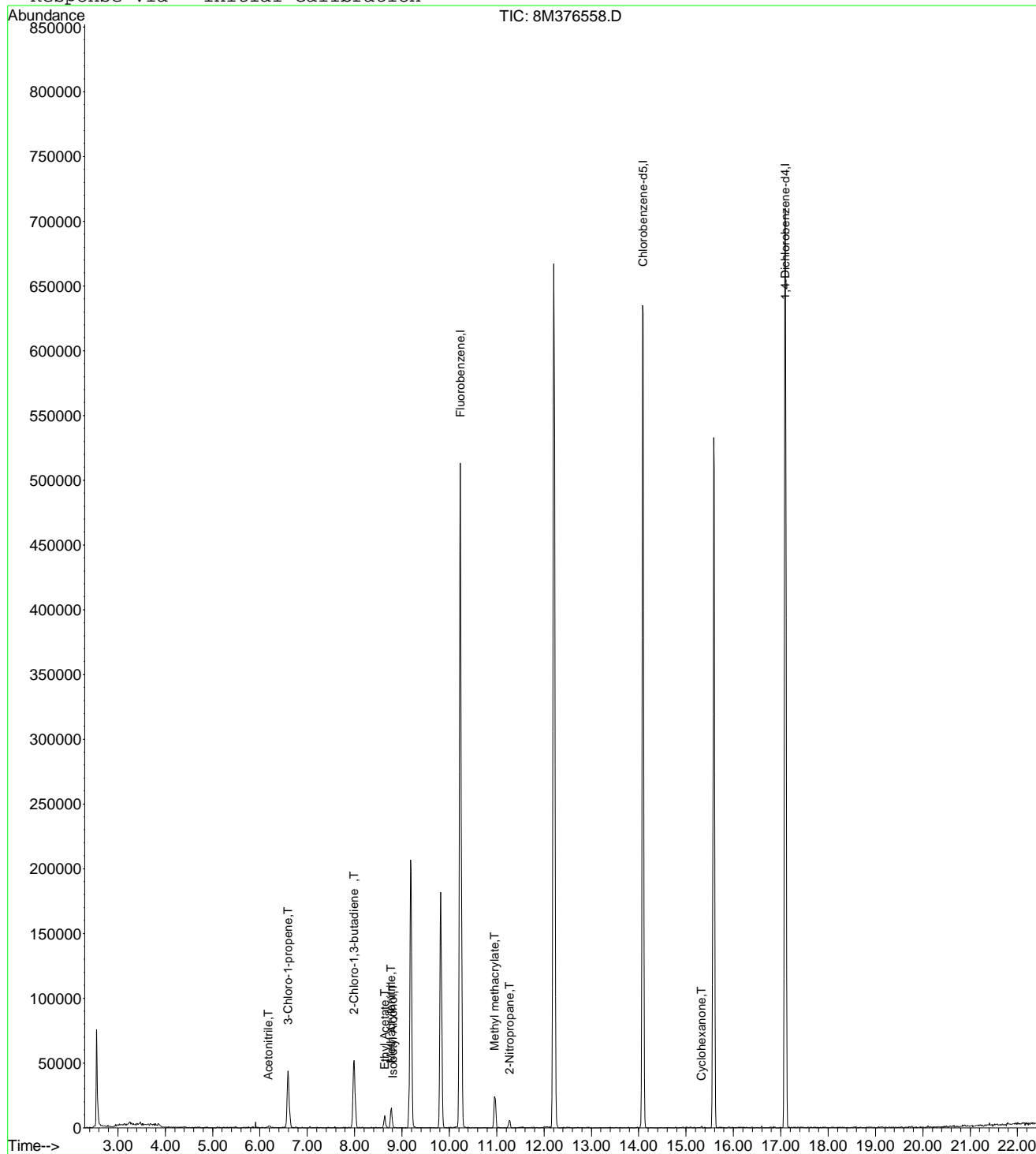


Data File : C:\MSDCHEM\1\DATA\012512\8M376558.D
 Acq On : 25 Jan 2012 12:43
 Sample : WG387881-01 5ug/L A9FOO STD
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 1 15:38 2012

Vial: 5
 Operator: ADC
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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



8M376558.D A9FOOWT.M

Wed Feb 01 15:38:15 2012

Page 2



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.24	96	641906	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	480006	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	261314	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.18	41	8633	18.1289	ug/L	99
3) 3-Chloro-1-propene	6.61	41	200453	20.0070	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	238952	20.1388	ug/L	99
5) Ethyl Acetate	8.63	43	64409	19.2495	ug/L	98
6) Methacrylonitrile	8.78	67	25503	18.5419	ug/L	95
7) Isobutyl Alcohol	8.81	43	4920	34.1090	ug/L #	53
8) 1-Butanol	9.73	56	710	18.9652	ug/L	99
9) Methyl methacrylate	10.96	41	79471	19.3450	ug/L	98
10) 2-Nitropropane	11.27	43	26253	18.4031	ug/L	99
13) Cyclohexanone	15.33	55	5242	20.3952	ug/L	88

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

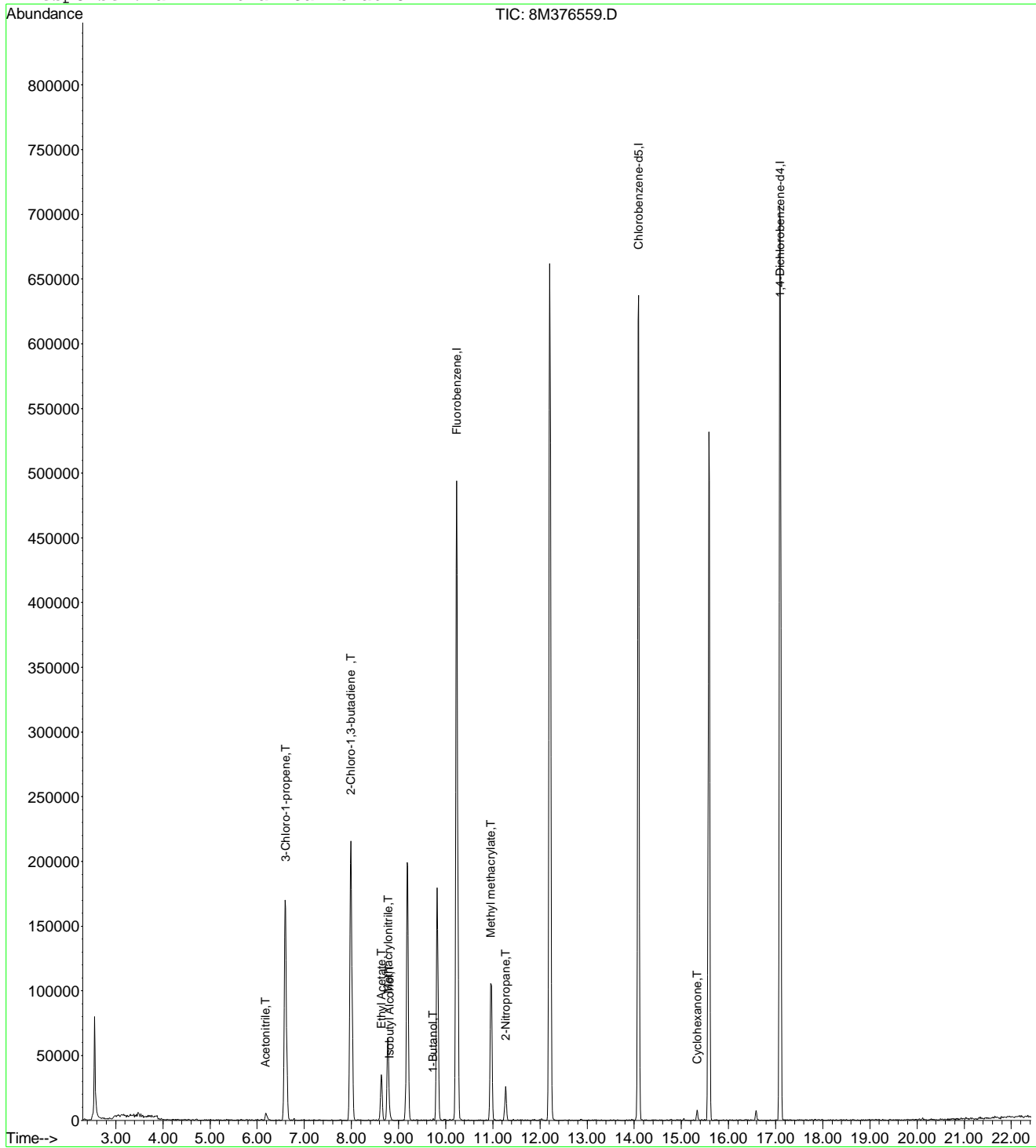


Data File : C:\MSDCHEM\1\DATA\012512\8M376559.D
 Acq On : 25 Jan 2012 13:28
 Sample : WG387881-02 20ug/L A9FOO STD
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 1 15:38 2012

Vial: 6
 Operator: ADC
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.24	96	648527	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.08	117	482506	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.09	152	263746	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.18	41	23521	48.8886	ug/L	95
3) 3-Chloro-1-propene	6.60	41	508641	50.2487	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	607253	50.6565	ug/L	99
5) Ethyl Acetate	8.62	43	166201	49.1644	ug/L	100
6) Methacrylonitrile	8.77	67	70376	50.6442	ug/L	98
7) Isobutyl Alcohol	8.81	43	14323	98.2836	ug/L	96
8) 1-Butanol	9.73	56	3105	50.3795	ug/L	79
9) Methyl methacrylate	10.96	41	210106	50.6224	ug/L	99
10) 2-Nitropropane	11.27	43	71916	49.8977	ug/L	97
13) Cyclohexanone	15.32	55	12432	47.9236	ug/L	99

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

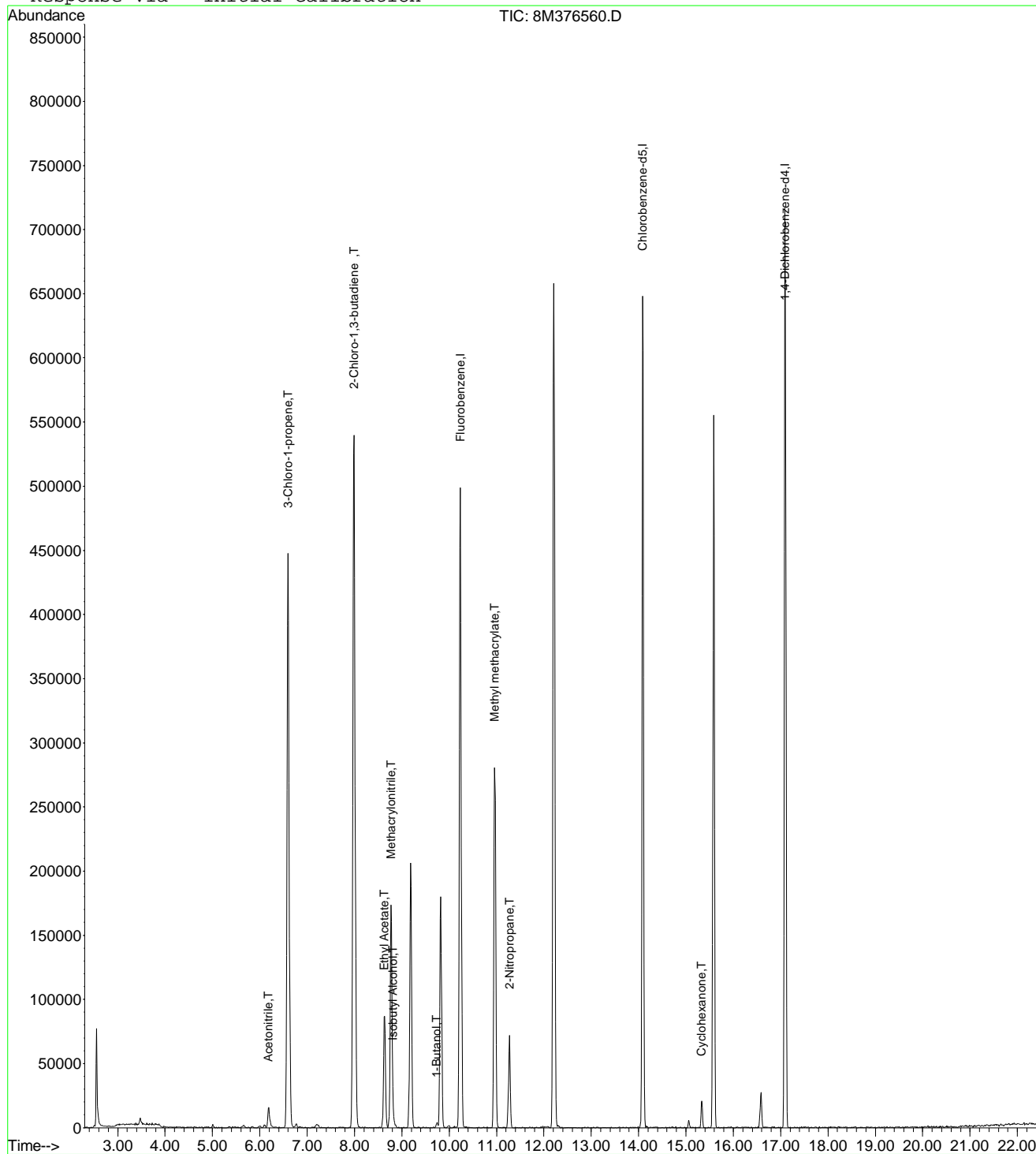


Data File : C:\MSDCHEM\1\DATA\012512\8M376560.D
 Acq On : 25 Jan 2012 13:58
 Sample : WG387881-03 50ug/L A9FOO STD
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 1 15:38 2012

Vial: 7
 Operator: ADC
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	644867	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	466673	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	256948	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.19	41	49584	103.6457	ug/L	100
3) 3-Chloro-1-propene	6.60	41	1019216	101.2600	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	1196904	100.4113	ug/L	100
5) Ethyl Acetate	8.63	43	352520	104.8718	ug/L	100
6) Methacrylonitrile	8.77	67	141285	102.2491	ug/L	100
7) Isobutyl Alcohol	8.81	43	31160	215.0317	ug/L	100
8) 1-Butanol	9.73	56	7250	105.4560	ug/L	100
9) Methyl methacrylate	10.96	41	432008	104.6777	ug/L	100
10) 2-Nitropropane	11.27	43	151905	105.9950	ug/L	100
13) Cyclohexanone	15.33	55	24800	98.1298	ug/L	100

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

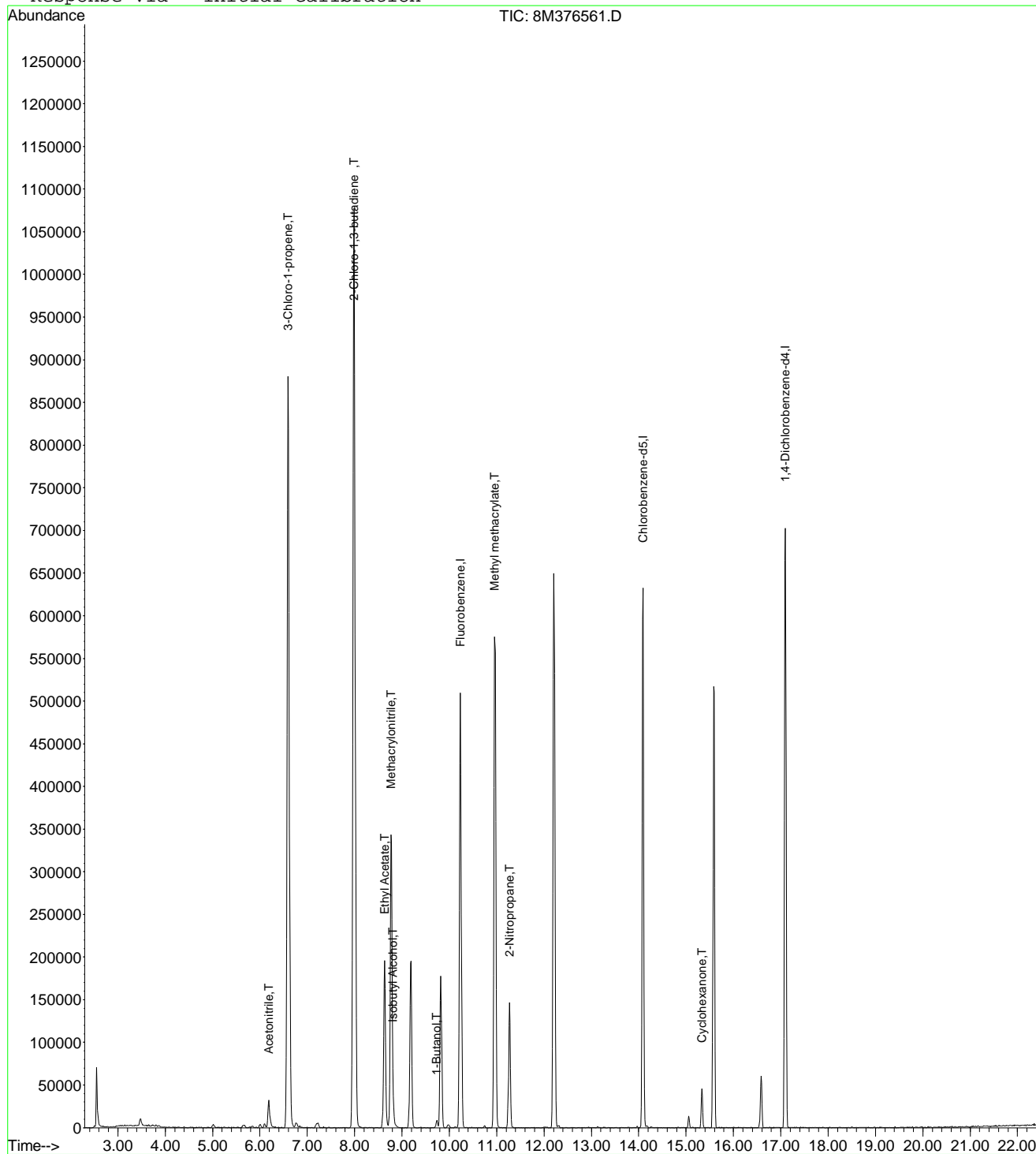


Data File : C:\MSDCHEM\1\DATA\012512\8M376561.D
 Acq On : 25 Jan 2012 14:29
 Sample : WG387881-04 100ug/L A9FOO STD
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 1 15:38 2012

Vial: 8
 Operator: ADC
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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



8M376561.D A9FOOWT.M

Wed Feb 01 15:38:21 2012

Page 2



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	635990	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	471643	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	259529	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.19	41	102381	216.9947	ug/L	99
3) 3-Chloro-1-propene	6.59	41	2077765	209.3089	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	2418154	205.6965	ug/L	99
5) Ethyl Acetate	8.63	43	702184	211.8096	ug/L	99
6) Methacrylonitrile	8.78	67	287125	210.6949	ug/L	100
7) Isobutyl Alcohol	8.81	43	59100	413.5352	ug/L #	11
8) 1-Butanol	9.73	56	13732	193.7587	ug/L	75
9) Methyl methacrylate	10.96	41	874313	214.8073	ug/L	99
10) 2-Nitropropane	11.27	43	318671	225.4632	ug/L	93
13) Cyclohexanone	15.33	55	52772	206.7341	ug/L	98

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

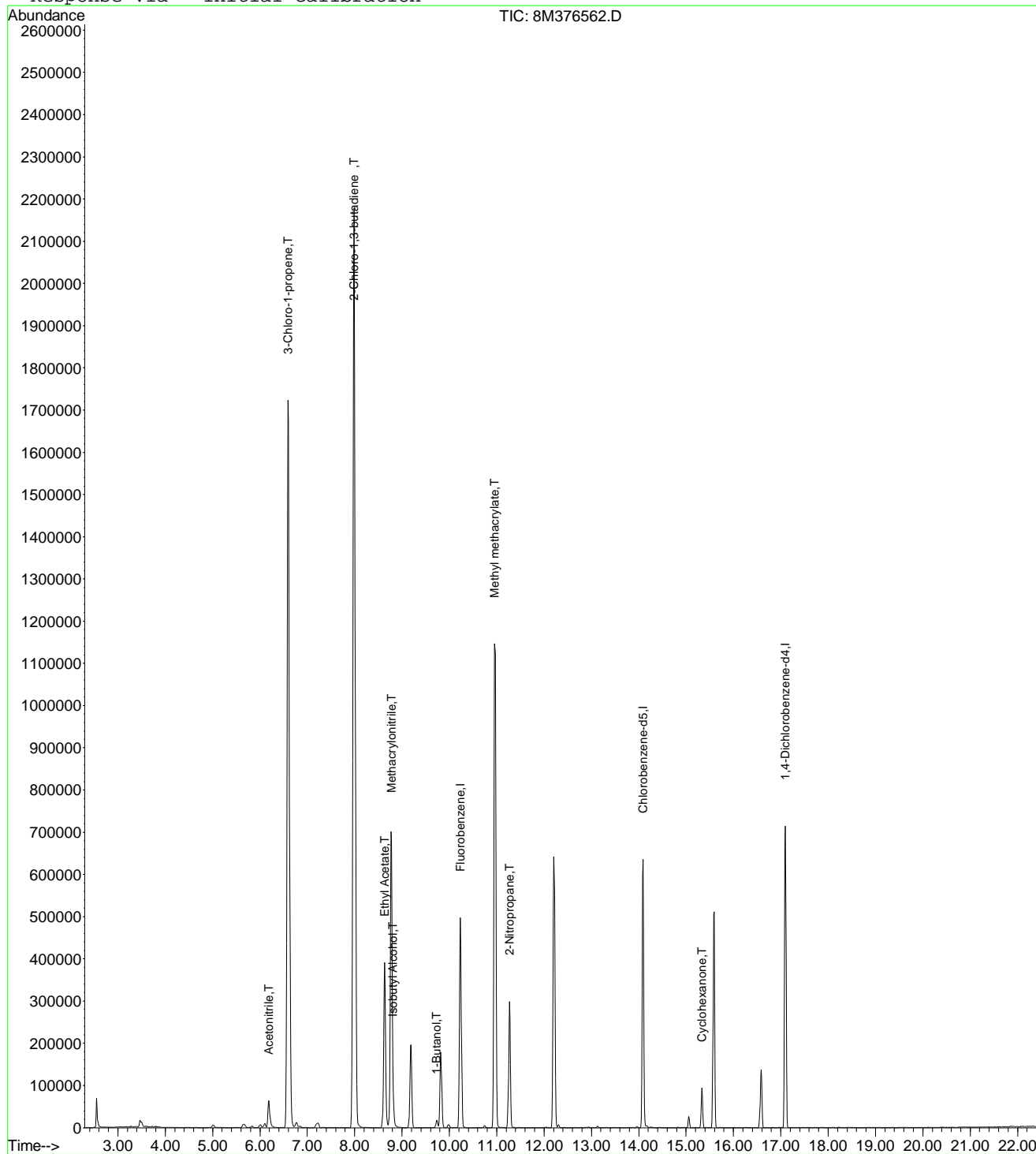


Data File : C:\MSDCHEM\1\DATA\012512\8M376562.D
 Acq On : 25 Jan 2012 14:59
 Sample : WG387881-05 200ug/L A9FOO STD
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 1 15:38 2012

Vial: 9
 Operator: ADC
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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



8M376562.D A9FOOWT.M

Wed Feb 01 15:38:23 2012

Page 2



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

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

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

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.19	41	145734	305.2302	ug/L	100
3) 3-Chloro-1-propene	6.60	41	2997257	298.3680	ug/L	100
4) 2-Chloro-1,3-butadiene	7.98	53	3489509	293.3218	ug/L	99
5) Ethyl Acetate	8.64	43	1024074	305.2552	ug/L	100
6) Methacrylonitrile	8.77	67	420542	304.9506	ug/L	100
7) Isobutyl Alcohol	8.81	43	90964	628.9722	ug/L #	11
8) 1-Butanol	9.73	56	23466	320.6313	ug/L	90
9) Methyl methacrylate	10.96	41	1263842	306.8400	ug/L	100
10) 2-Nitropropane	11.27	43	460658	322.0689	ug/L	97
13) Cyclohexanone	15.34	55	79883	313.6314	ug/L	98

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

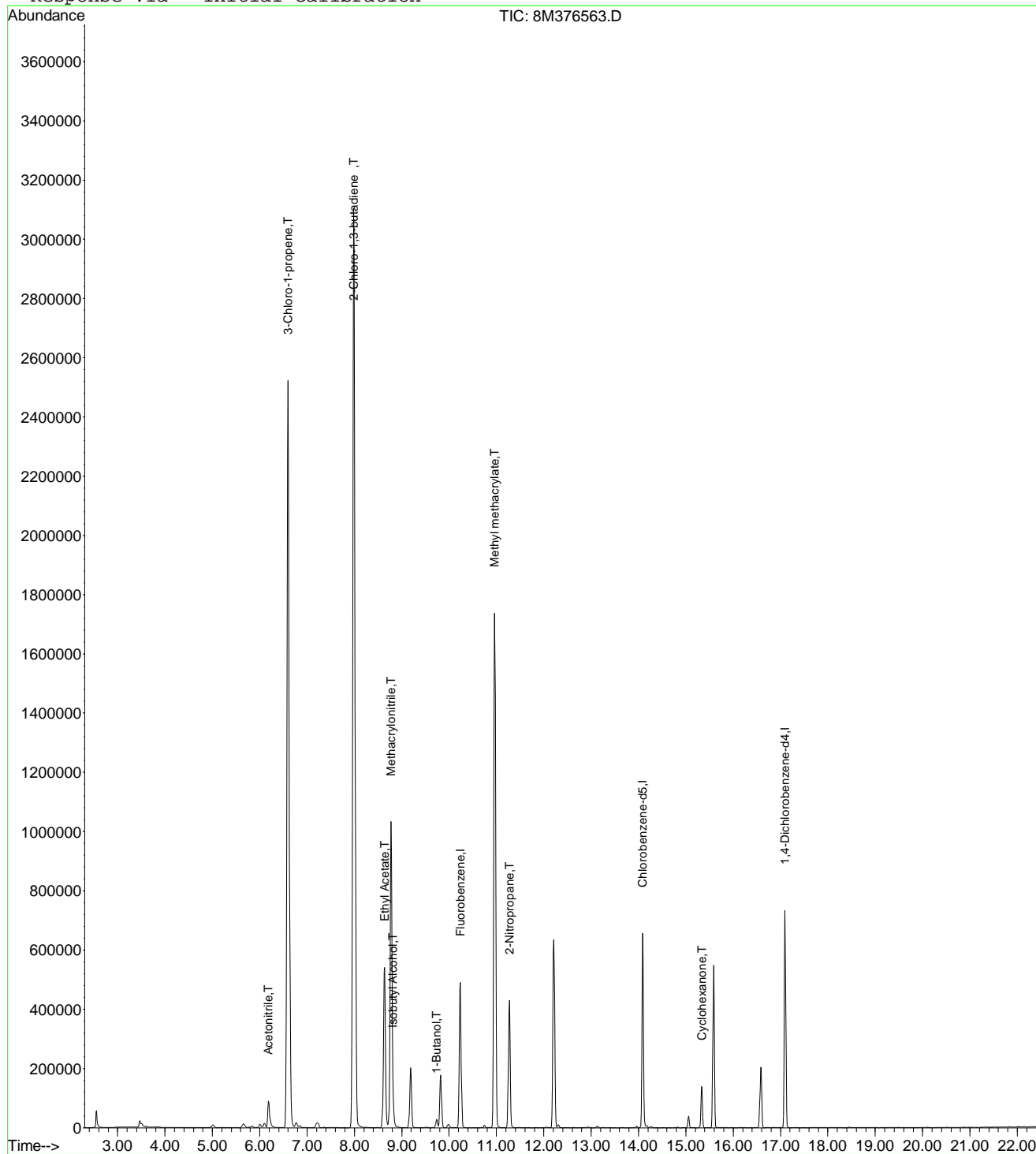


Data File : C:\MSDCHEM\1\DATA\012512\8M376563.D
Acq On : 25 Jan 2012 15:29
Sample : WG387881-06 300ug/L A9FOO STD
Misc : 1,1 STD49721
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012

Vial: 10
Operator: ADC
Inst : HPMS8
Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	641318	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	477949	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	257944	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.19	41	195716	411.3703	ug/L	97
3) 3-Chloro-1-propene	6.60	41	3916511	391.2619	ug/L	100
4) 2-Chloro-1,3-butadiene	7.98	53	4569564	385.4736	ug/L	99
5) Ethyl Acetate	8.63	43	1295880	387.6470	ug/L	99
6) Methacrylonitrile	8.77	67	540691	393.4677	ug/L	98
7) Isobutyl Alcohol	8.81	43	116114	805.7242	ug/L	95
8) 1-Butanol	9.73	56	27906	380.8093	ug/L	86
9) Methyl methacrylate	10.96	41	1633999	398.1171	ug/L	100
10) 2-Nitropropane	11.27	43	593841	416.6585	ug/L	96
13) Cyclohexanone	15.33	55	97561	384.5434	ug/L	100

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

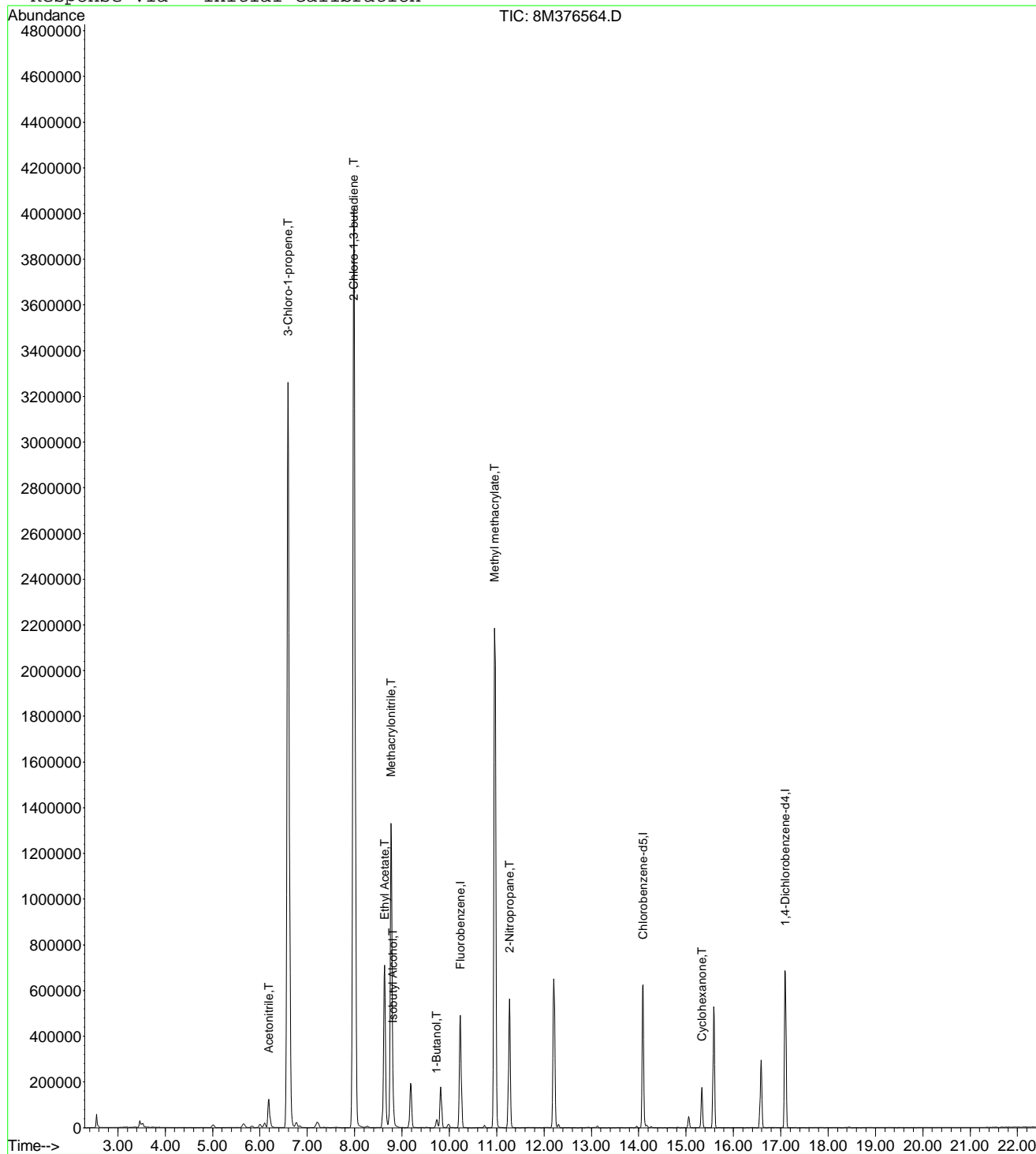


Data File : C:\MSDCHEM\1\DATA\012512\8M376564.D
 Acq On : 25 Jan 2012 15:59
 Sample : WG387881-07 400ug/L A9FOO STD
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 1 15:38 2012

Vial: 11
 Operator: ADC
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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

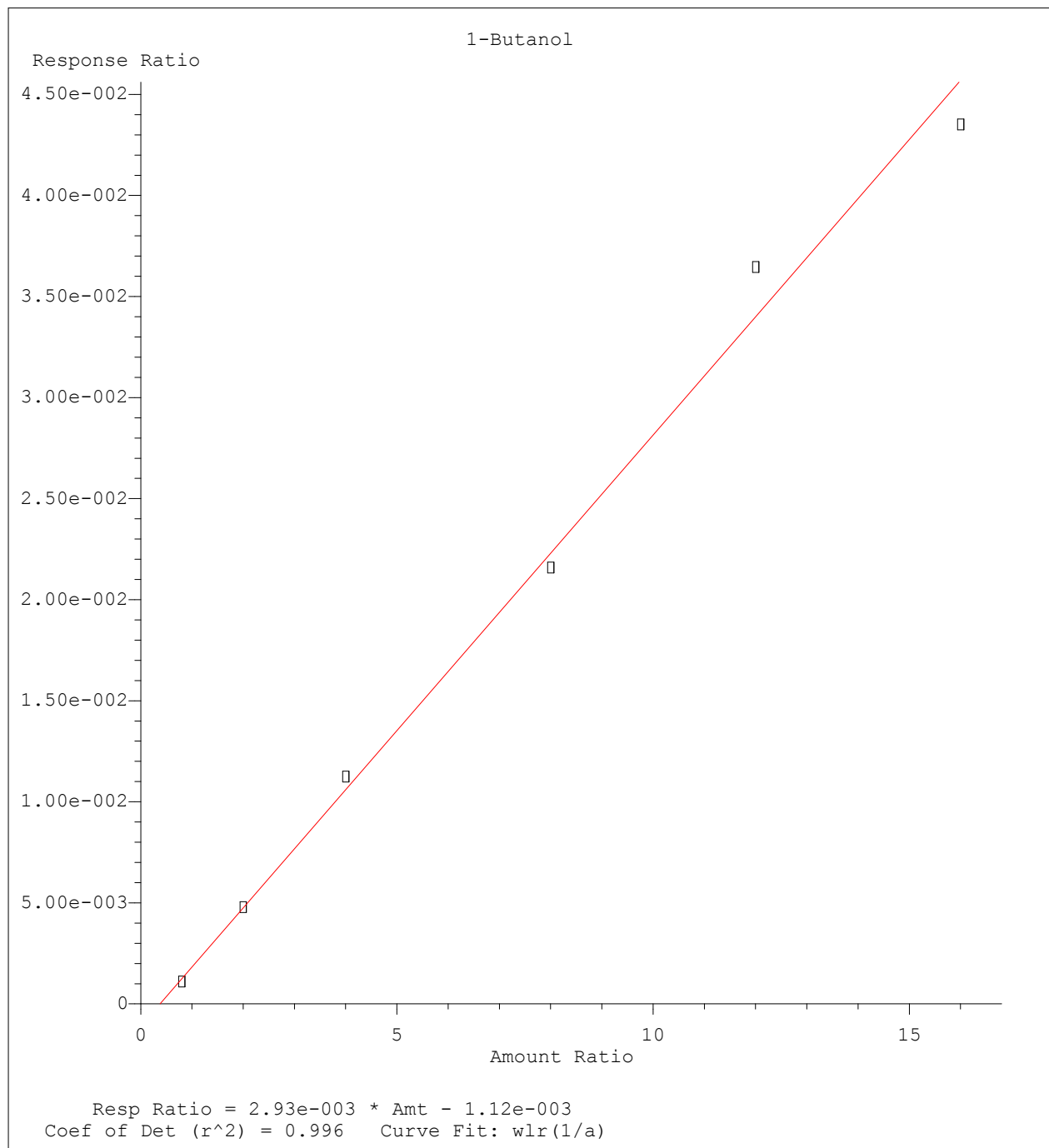


8M376564.D A9FOOWT.M

Wed Feb 01 15:38:26 2012

Page 2





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

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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	639588	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	475173	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	258713	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.19	41	44826	94.4734	ug/L	93
3) 3-Chloro-1-propene	6.59	41	937126	93.8727	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	1257481	106.3640	ug/L	99
5) Ethyl Acetate	8.63	43	386153	115.8255	ug/L	98
6) Methacrylonitrile	8.77	67	142494	103.9752	ug/L	99
7) Isobutyl Alcohol	8.81	43	32002	222.6651	ug/L	94
8) 1-Butanol	9.73	56	6562	97.0693	ug/L	93
9) Methyl methacrylate	10.96	41	422245	103.1565	ug/L	99
10) 2-Nitropropane	11.27	43	148207	104.2682	ug/L	96
13) Cyclohexanone	15.33	55	31305	123.0240	ug/L	97

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

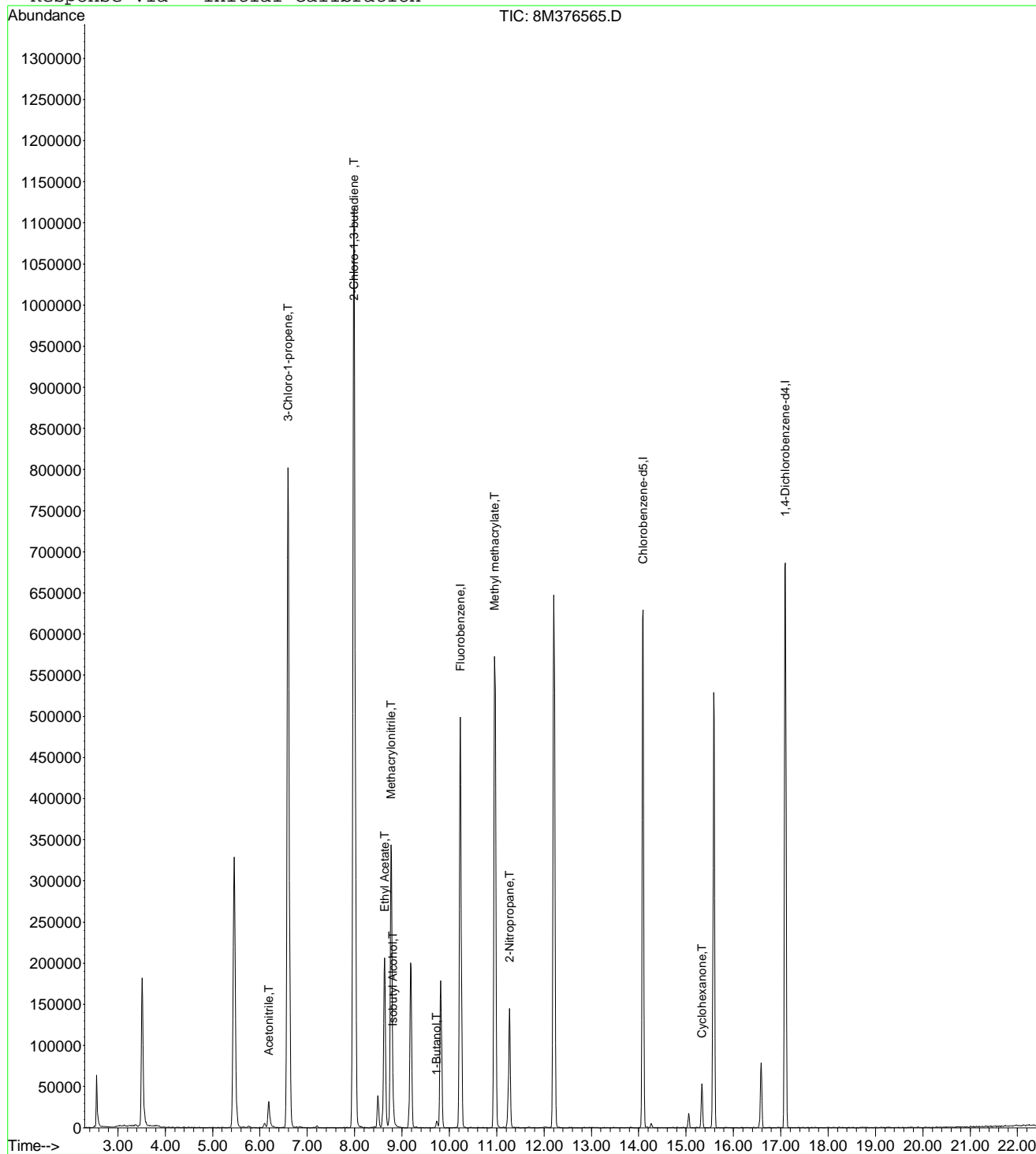


Data File : C:\MSDCHEM\1\DATA\012512\8M376565.D
 Acq On : 25 Jan 2012 16:29
 Sample : WG387881-08 100ug/L A9FOO ALT
 Misc : 1,1 STD49721
 MS Integration Params: rteint.p
 Quant Time: Feb 1 15:38 2012

Vial: 12
 Operator: ADC
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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



8M376565.D A9FOOWT.M

Wed Feb 01 15:38:28 2012

Page 2



Evaluate Continuing Calibration Report

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

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	25.000	25.000	0.0	99	0.00
2 T	Acetonitrile	100.000	94.473	5.5	90	0.00
3 T	3-Chloro-1-propene	100.000	93.873	6.1	92	0.00
4 T	2-Chloro-1,3-butadiene	100.000	106.364	-6.4	105	0.00
5 T	Ethyl Acetate	100.000	115.826	-15.8	110	0.00
6 T	Methacrylonitrile	100.000	103.975	-4.0	101	0.00
7 T	Isobutyl Alcohol	200.000	222.665	-11.3	103	0.00
8 T	1-Butanol	100.000	97.069	2.9	91	0.00
9 T	Methyl methacrylate	100.000	103.157	-3.2	98	0.00
10 T	2-Nitropropane	100.000	104.268	-4.3	98	0.00
11 I	Chlorobenzene-d5	25.000	25.000	0.0	102	0.00
12 I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	101	0.00
13 T	Cyclohexanone	100.000	123.024	-23.0	126	0.00

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	650257	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	530488	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	279514	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.13	111	1028	0.1524	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	0.60%#	
43) 1,2-Dichloroethane-d4	9.77	65	1284	0.2472	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	1.00%#	
58) Toluene-d8	12.17	98	3824	0.1561	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	0.64%#	
80) p-Bromofluorobenzene	15.54	95	1914	0.2117	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	0.84%#	

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

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

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

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

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

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

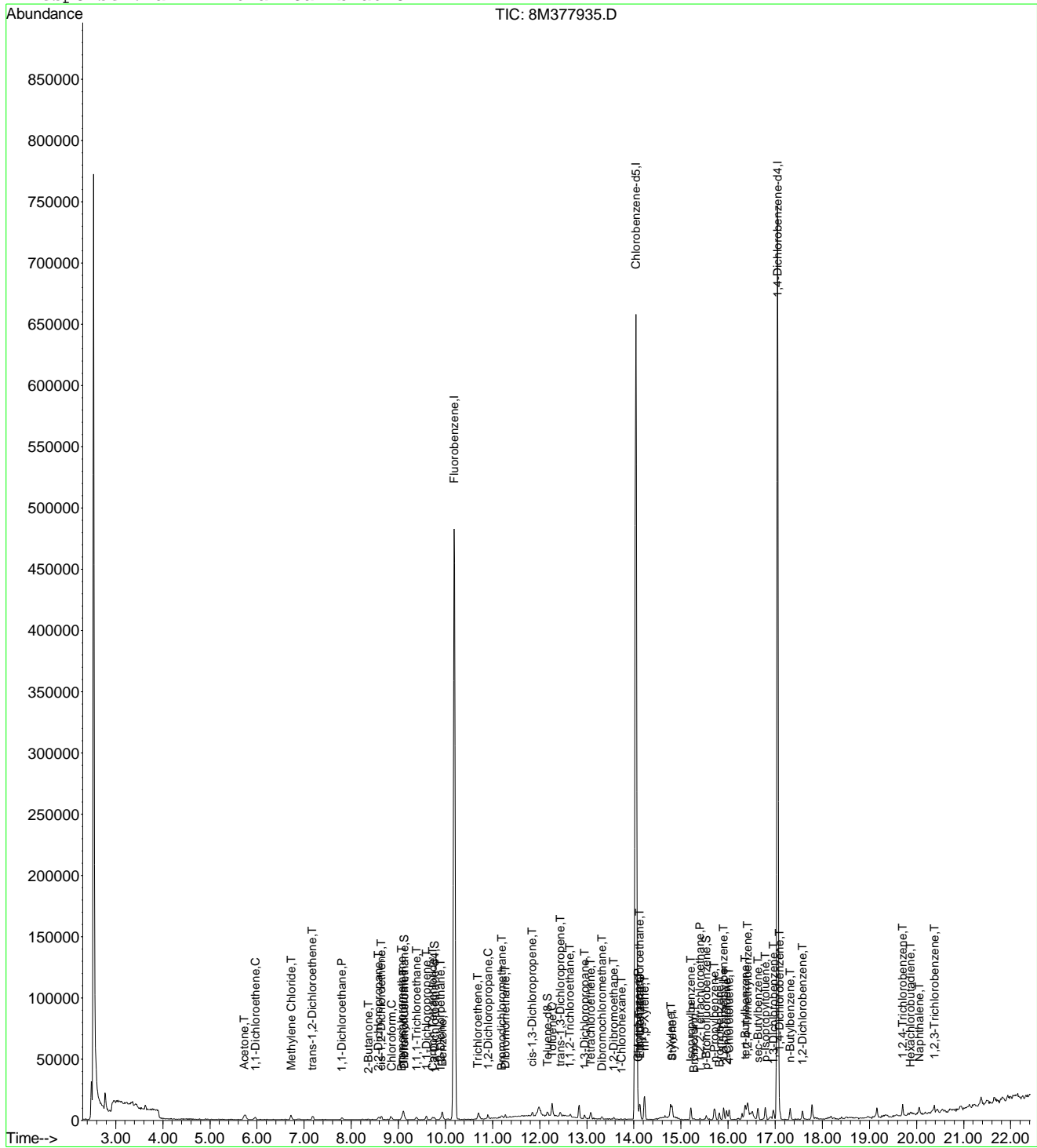
Page 2

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

Vial: 2
 Operator: adc
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	626398	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	528645	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	285256	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	409	0.0629	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery =	0.24%#		
43) 1,2-Dichloroethane-d4	0.00	65	0	0.0000	ug/L	
Spiked Amount	25.000	Range 80 - 120	Recovery =	0.00%#		
58) Toluene-d8	12.16	98	3197	0.1310	ug/L	-0.01
Spiked Amount	25.000	Range 88 - 110	Recovery =	0.52%#		
80) p-Bromofluorobenzene	15.54	95	1073	0.1163	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery =	0.48%#		

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

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

Data File : C:\MSDCHEM\2\DATA\032712\8M377936.D Vial: 3
 Acq On : 27 Mar 2012 11:45 Operator: adc
 Sample : WG393321-03 0.4 ug/L STD 8260 Inst : HPMS8
 Misc : 1,1 STD50782 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Mar 28 08:21:06 2012

Quant Results File: 8260WT.RES

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

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

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

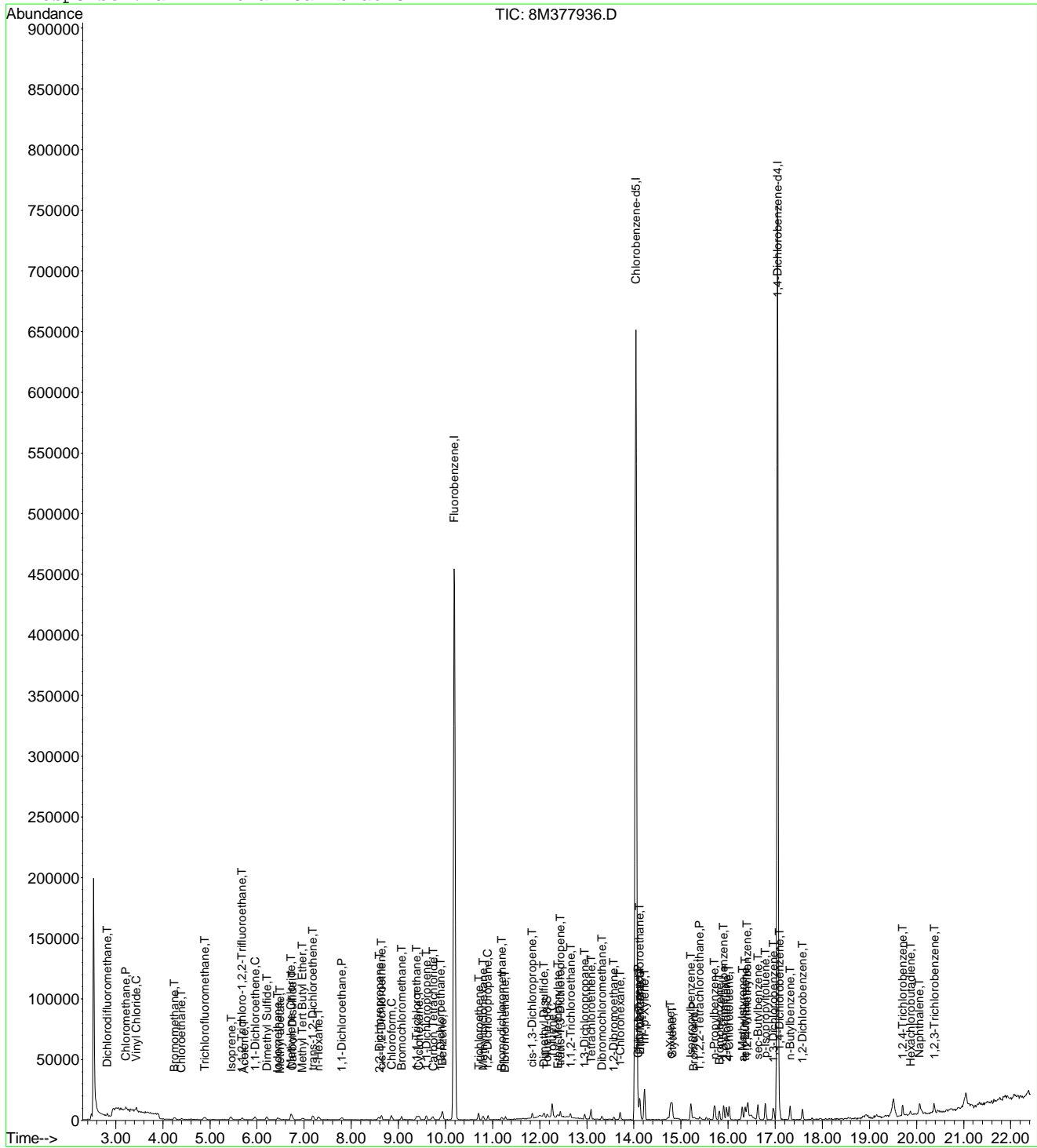
Page 2

Data File : C:\MSDCHEM\2\DATA\032712\8M377936.D
 Acq On : 27 Mar 2012 11:45
 Sample : WG393321-03 0.4 ug/L STD 8260
 Misc : 1,1 STD50782
 MS Integration Params: RTEINT.P
 Quant Time: Mar 28 8:21 2012

Vial: 3
 Operator: adc
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	638053	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	545262	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	296609	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	3914	0.5913	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	2.36%#	
43) 1,2-Dichloroethane-d4	9.77	65	3537	0.6939	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	2.76%#	
58) Toluene-d8	12.17	98	17497	0.6950	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	2.76%#	
80) p-Bromofluorobenzene	15.54	95	6710	0.6993	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	2.80%#	

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

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

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

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

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

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

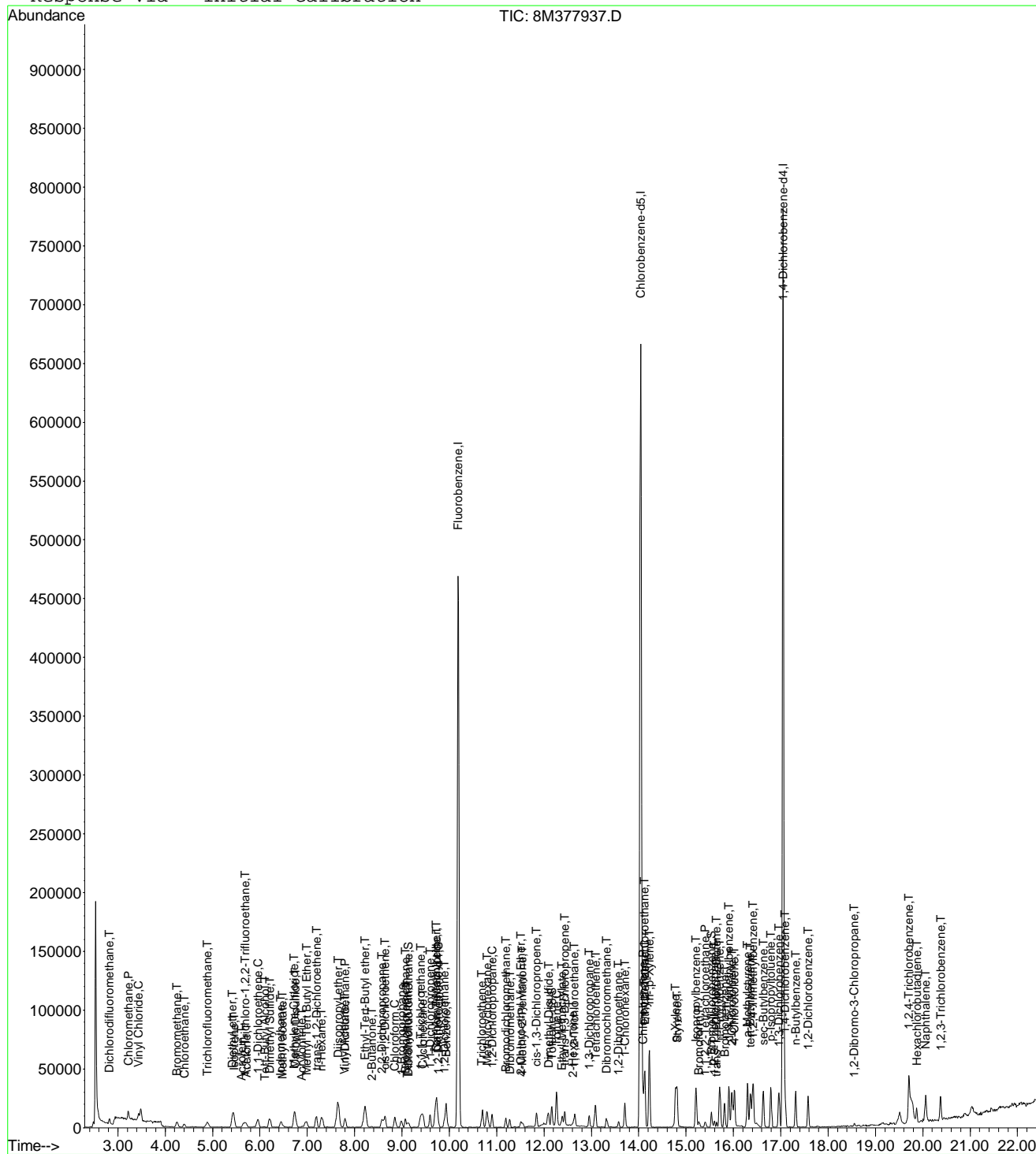
Page 2

Data File : C:\MSDCHEM\2\DATA\032712\8M377937.D
Acq On : 27 Mar 2012 12:15
Sample : WG393321-04 1.0 ug/L STD 8260
Misc : 1,1 STD50782
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:21 2012

Vial: 4
Operator: adc
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	631725	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	529182	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	285440	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.13	111	7080	1.0803	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	4.32%#	
43) 1,2-Dichloroethane-d4	9.77	65	5968	1.1825	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	4.72%#	
58) Toluene-d8	12.16	98	30704	1.2567	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	5.04%#	
80) p-Bromofluorobenzene	15.54	95	11544	1.2502	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	5.00%#	

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

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

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

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

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

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

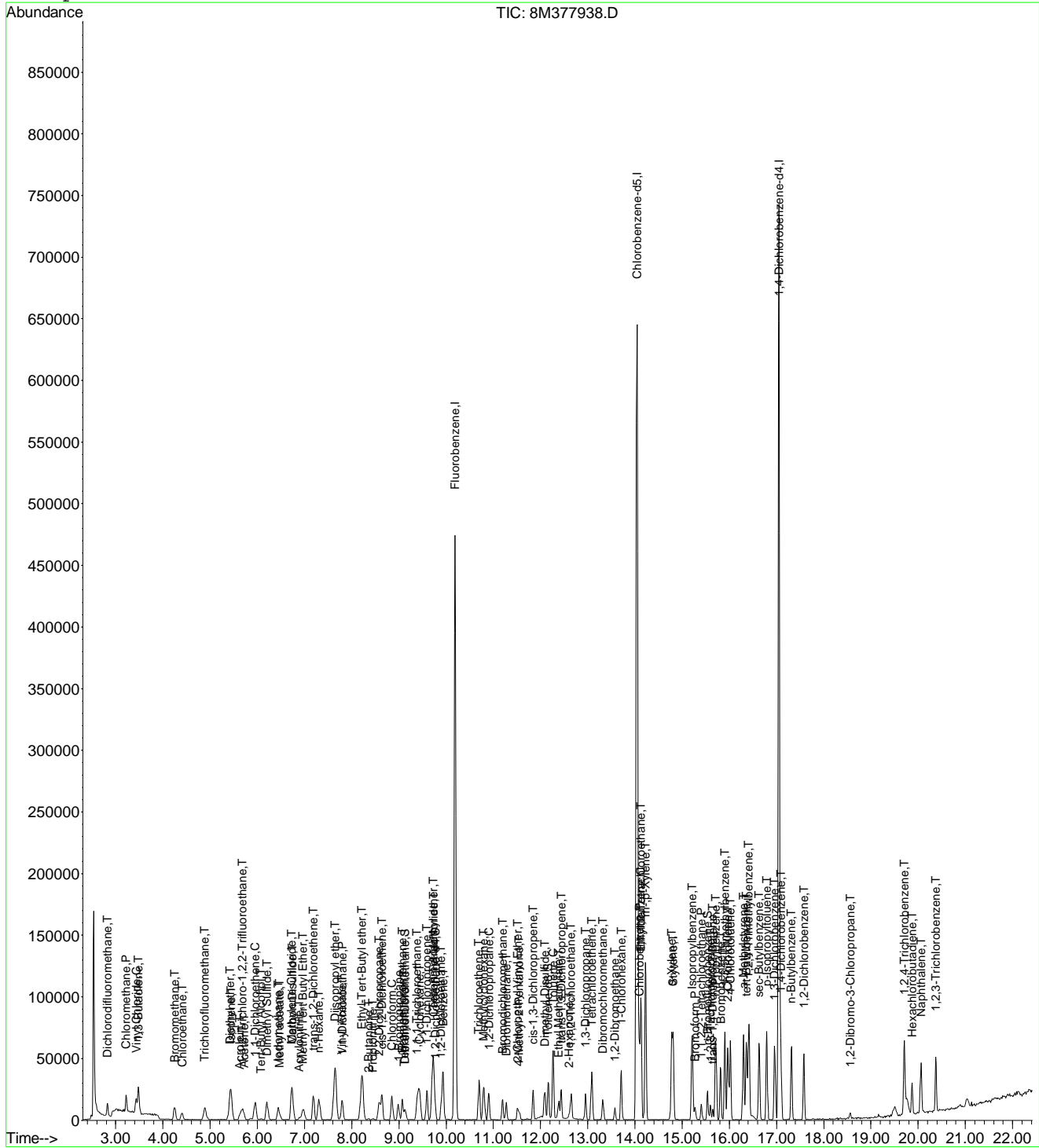
Page 2

Data File : C:\MSDCHEM\2\DATA\032712\8M377938.D
Acq On : 27 Mar 2012 12:46
Sample : WG393321-05 2.0 ug/L STD 8260
Misc : 1,1 STD50782
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:21 2012

Vial: 5
Operator: adc
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



Data File : C:\MSDCHEM\2\DATA\032712\8M377939.D Vial: 6
 Acq On : 27 Mar 2012 13:17 Operator: adc
 Sample : WG393321-06 5.0 ug/L STD 8260 Inst : HPMS8
 Misc : 1,1 STD50782 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Mar 28 08:21:07 2012

Quant Results File: 8260WT.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	650112	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	551628	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	295177	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.13	111	17585	2.6072	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	10.44%#	
43) 1,2-Dichloroethane-d4	9.77	65	13459	2.5914	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	10.36%#	
58) Toluene-d8	12.16	98	66859	2.6251	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	10.52%#	
80) p-Bromofluorobenzene	15.53	95	24412	2.5566	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	10.24%#	

Target Compounds

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

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

Page 1

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

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

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

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

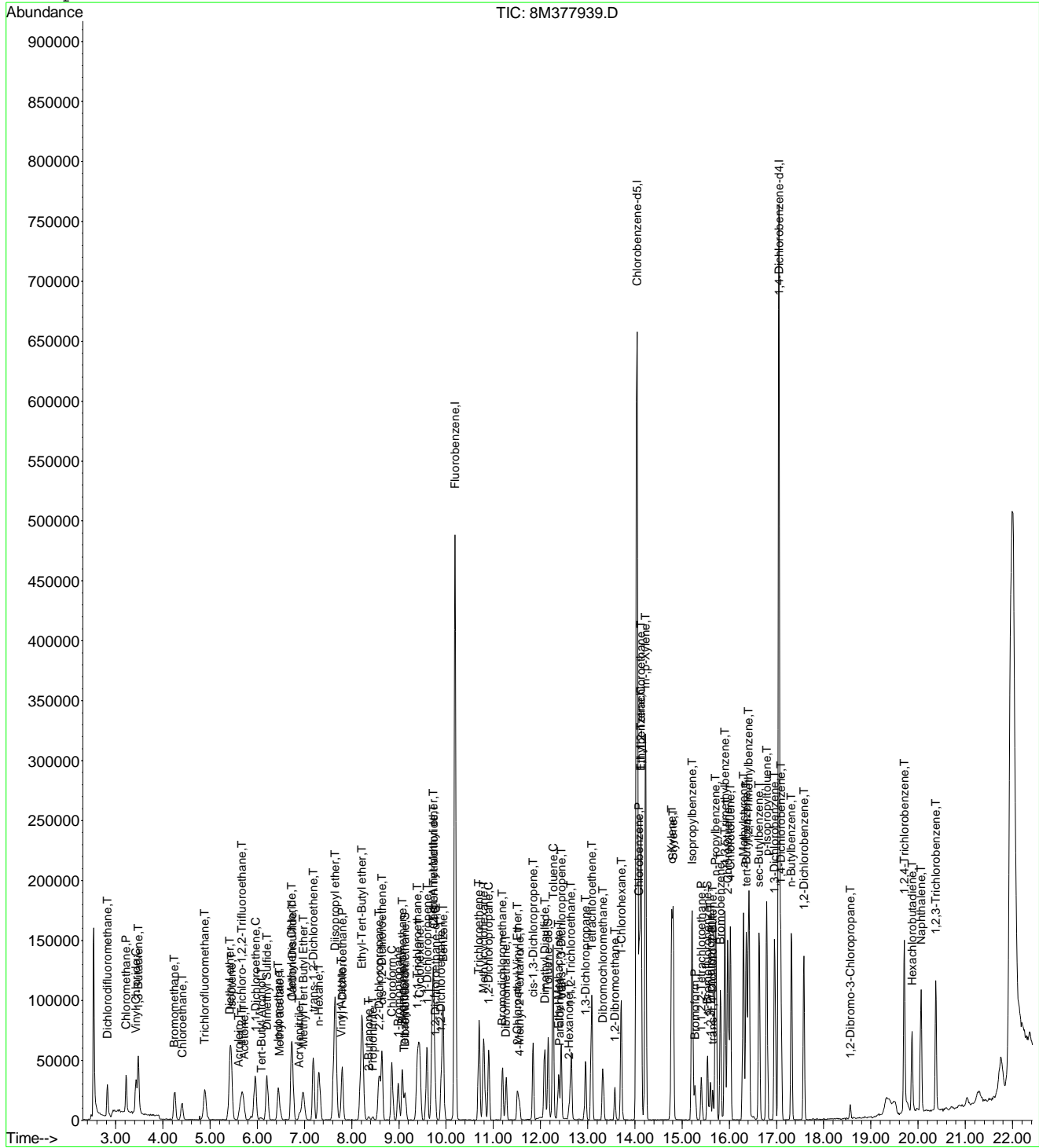
Page 2

Data File : C:\MSDCHEM\2\DATA\032712\8M377939.D
Acq On : 27 Mar 2012 13:17
Sample : WG393321-06 5.0 ug/L STD 8260
Misc : 1,1 STD50782
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:21 2012

Vial: 6
Operator: adc
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	658958	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	551915	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	291488	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	65071	9.5182	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	38.08%#	
43) 1,2-Dichloroethane-d4	9.77	65	51143	9.7148	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	38.84%#	
58) Toluene-d8	12.17	98	255470	10.0252	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	40.12%#	
80) p-Bromofluorobenzene	15.54	95	96219	10.2042	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	40.80%#	

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

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

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

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

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

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

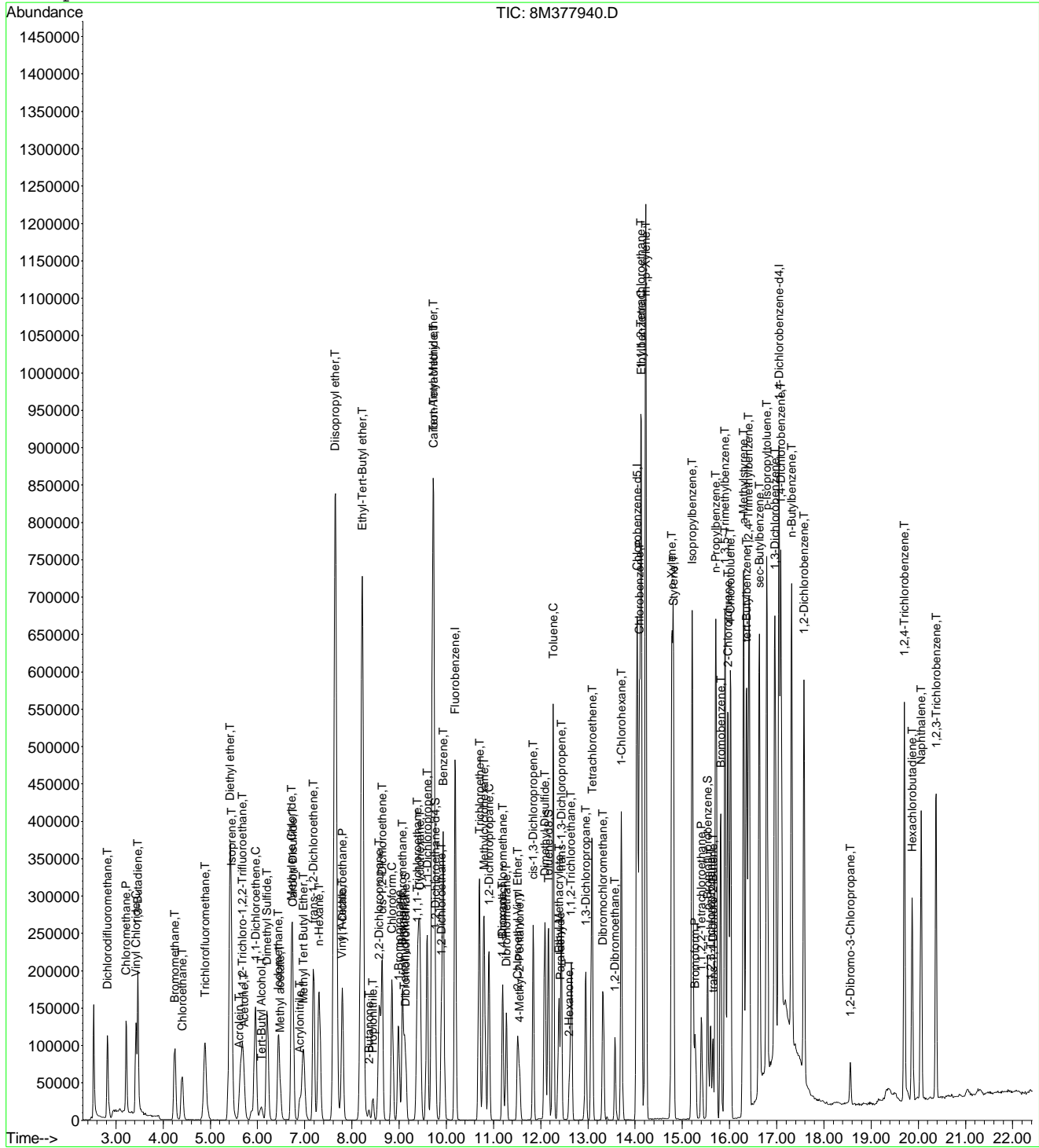
Page 2

Data File : C:\MSDCHEM\2\DATA\032712\8M377940.D
Acq On : 27 Mar 2012 13:48
Sample : WG393321-07 20.0 ug/L STD 8260
Misc : 1,1 STD50782
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:26 2012

Vial: 7
Operator: adc
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	645452	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	545860	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	297011	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	165041	24.6463	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	98.60%	
43) 1,2-Dichloroethane-d4	9.77	65	129320	25.0788	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	100.32%	
58) Toluene-d8	12.17	98	645095	25.5957	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	102.40%	
80) p-Bromofluorobenzene	15.54	95	245500	25.5515	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	102.20%	

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

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

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

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

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

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

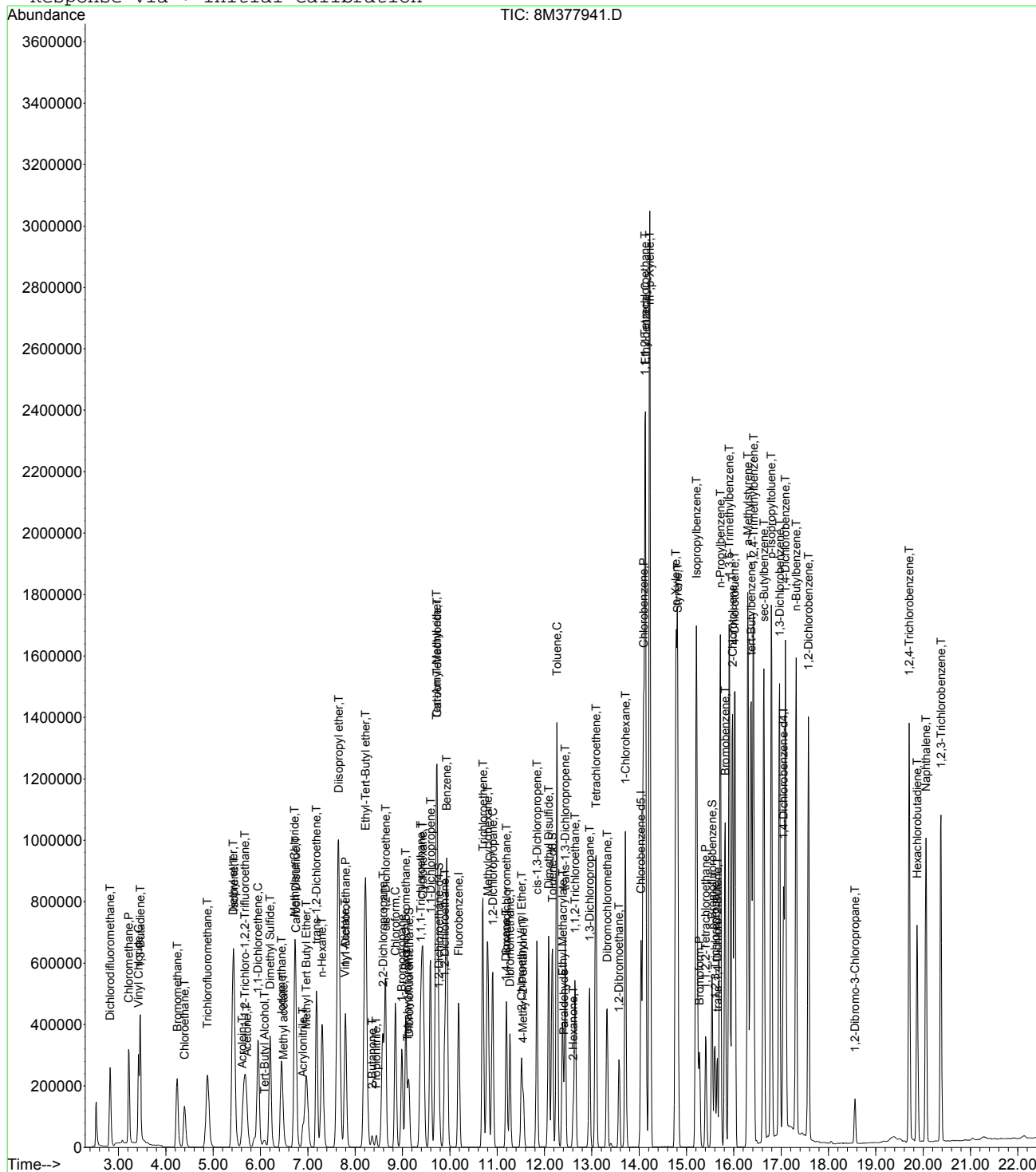
Page 2

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

Vial: 8
Operator: adc
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	634310	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	532594	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	288699	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	315635	47.9631	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	191.84%#	
43) 1,2-Dichloroethane-d4	9.77	65	248319	49.0020	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	196.00%#	
58) Toluene-d8	12.17	98	1193976	48.5539	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	194.20%#	
80) p-Bromofluorobenzene	15.54	95	453918	48.6037	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	194.40%#	

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

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

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

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

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

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

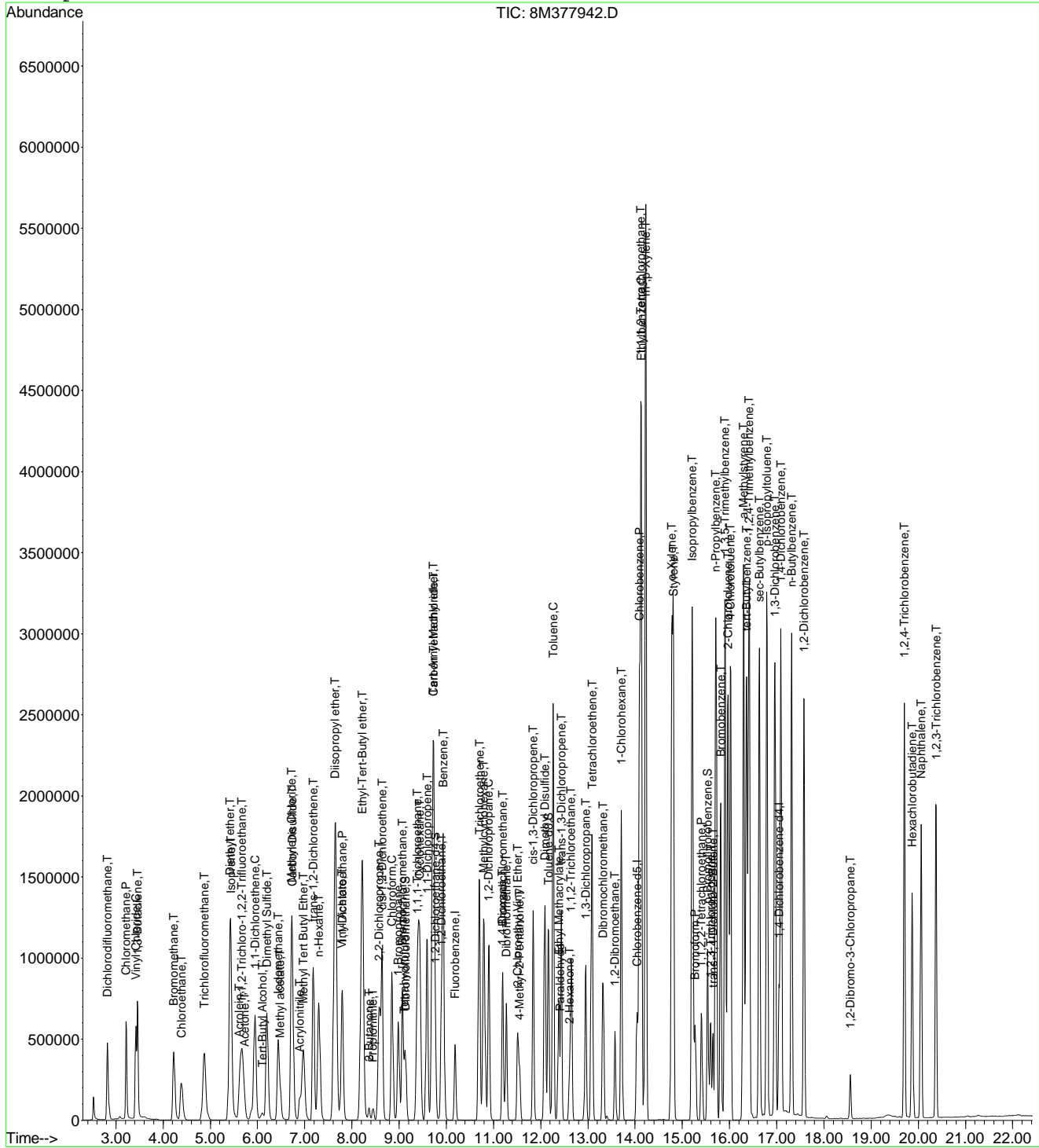
Page 2

Data File : C:\MSDCHEM\2\DATA\032712\8M377942.D
Acq On : 27 Mar 2012 14:49
Sample : WG393321-09 100.0 ug/L STD 8260
Misc : 1,1 STD50782
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:26 2012

Vial: 9
Operator: adc
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	629120	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	528582	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	280754	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.13	111	639588	97.9920	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	= 391.96%#		
43) 1,2-Dichloroethane-d4	9.77	65	507017	100.8776	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	= 403.52%#		
58) Toluene-d8	12.16	98	2324762	95.2556	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	= 381.04%#		
80) p-Bromofluorobenzene	15.54	95	874452	96.2824	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	= 385.12%#		

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

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

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

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

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

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

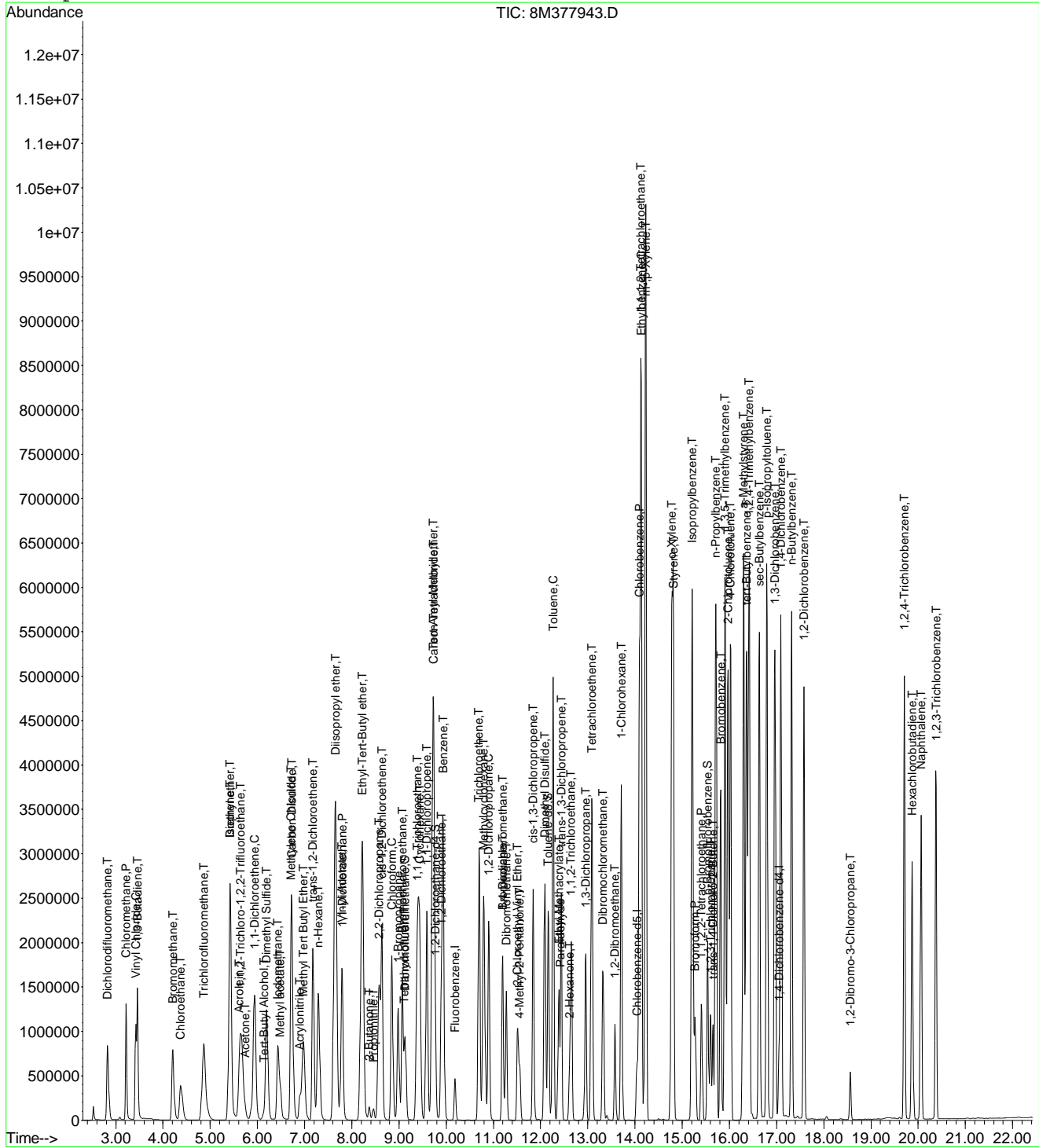
Page 2

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

Vial: 10
Operator: adc
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	620267	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	523100	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	289880	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.13	111	207	0.0322	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	0.12%#	
43) 1,2-Dichloroethane-d4	9.72	65	4294	0.8665	ug/L	-0.05
Spiked Amount	25.000	Range 80 - 120	Recovery	=	3.48%#	
58) Toluene-d8	12.16	98	3274	0.1356	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	0.56%#	
80) p-Bromofluorobenzene	15.54	95	3182	0.3393	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	1.36%#	

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

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

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

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

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

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

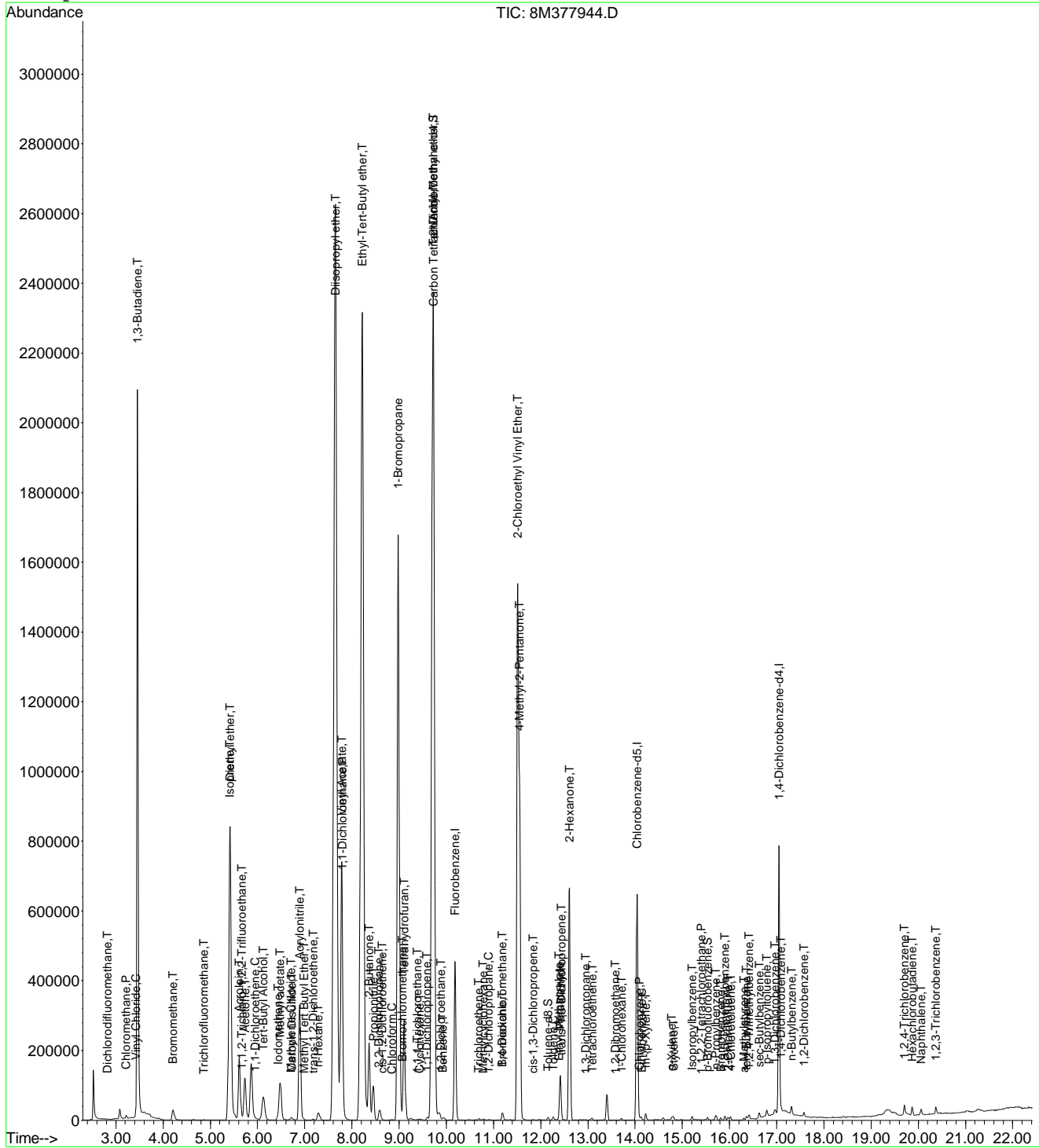
Page 2

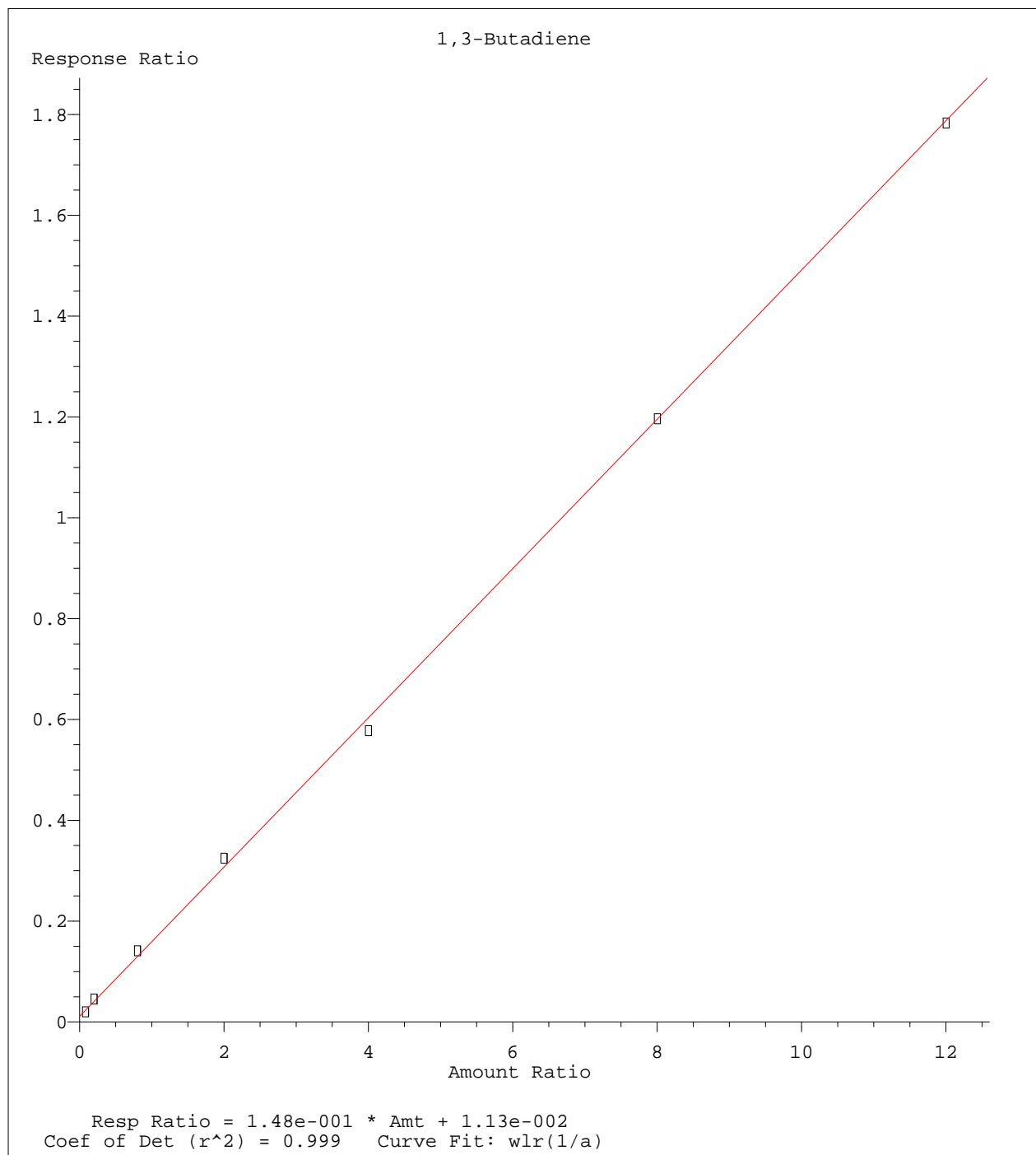
Data File : C:\MSDCHEM\2\DATA\032712\8M377944.D
Acq On : 27 Mar 2012 15:49
Sample : WG393321-11 300.0 ug/L STD 8260
Misc : 1,1 STD50782
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:27 2012

Vial: 11
Operator: adc
Inst : HPMS8
Multiplr: 1.00

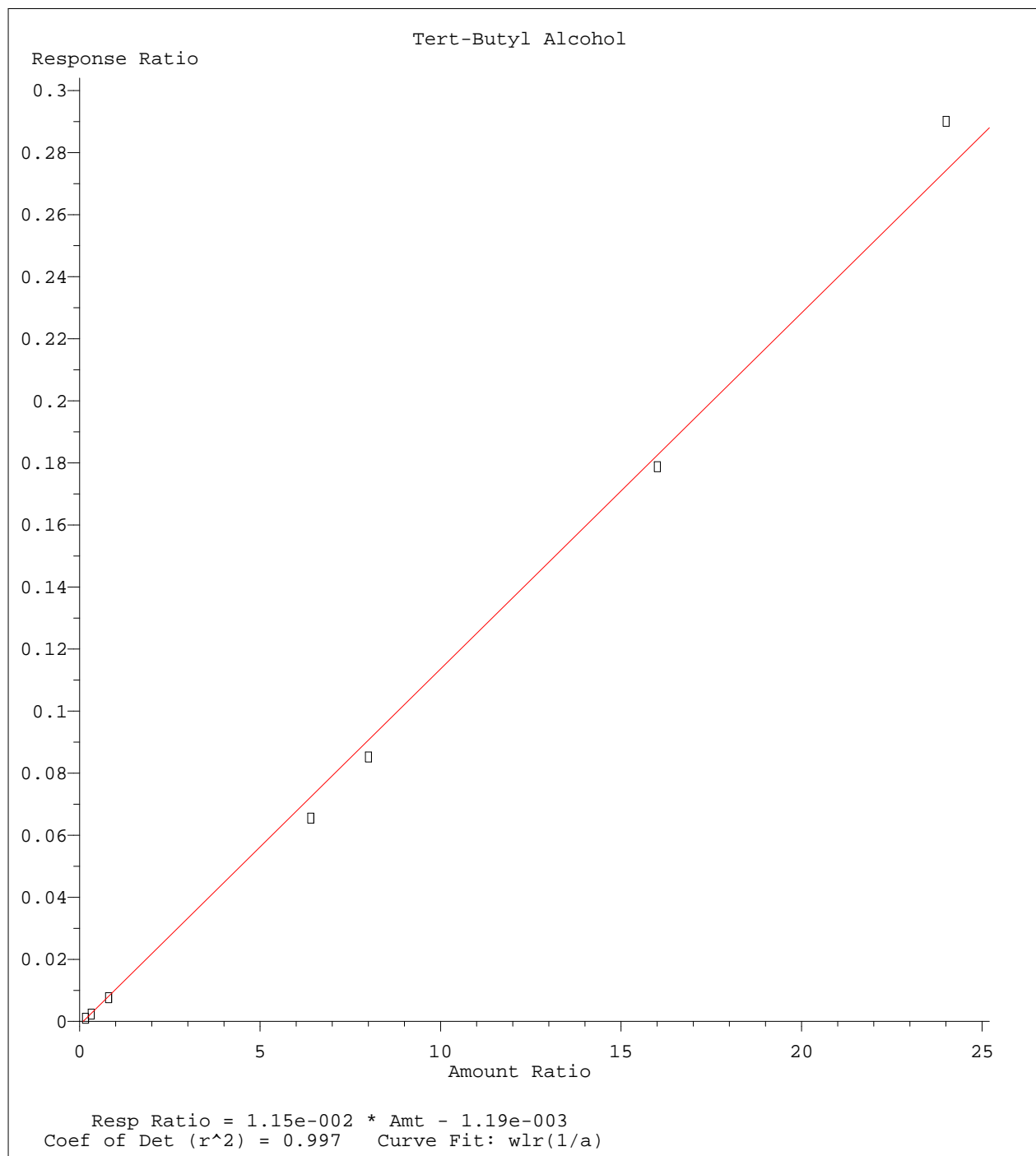
Quant Results File: 8260WT.RES

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

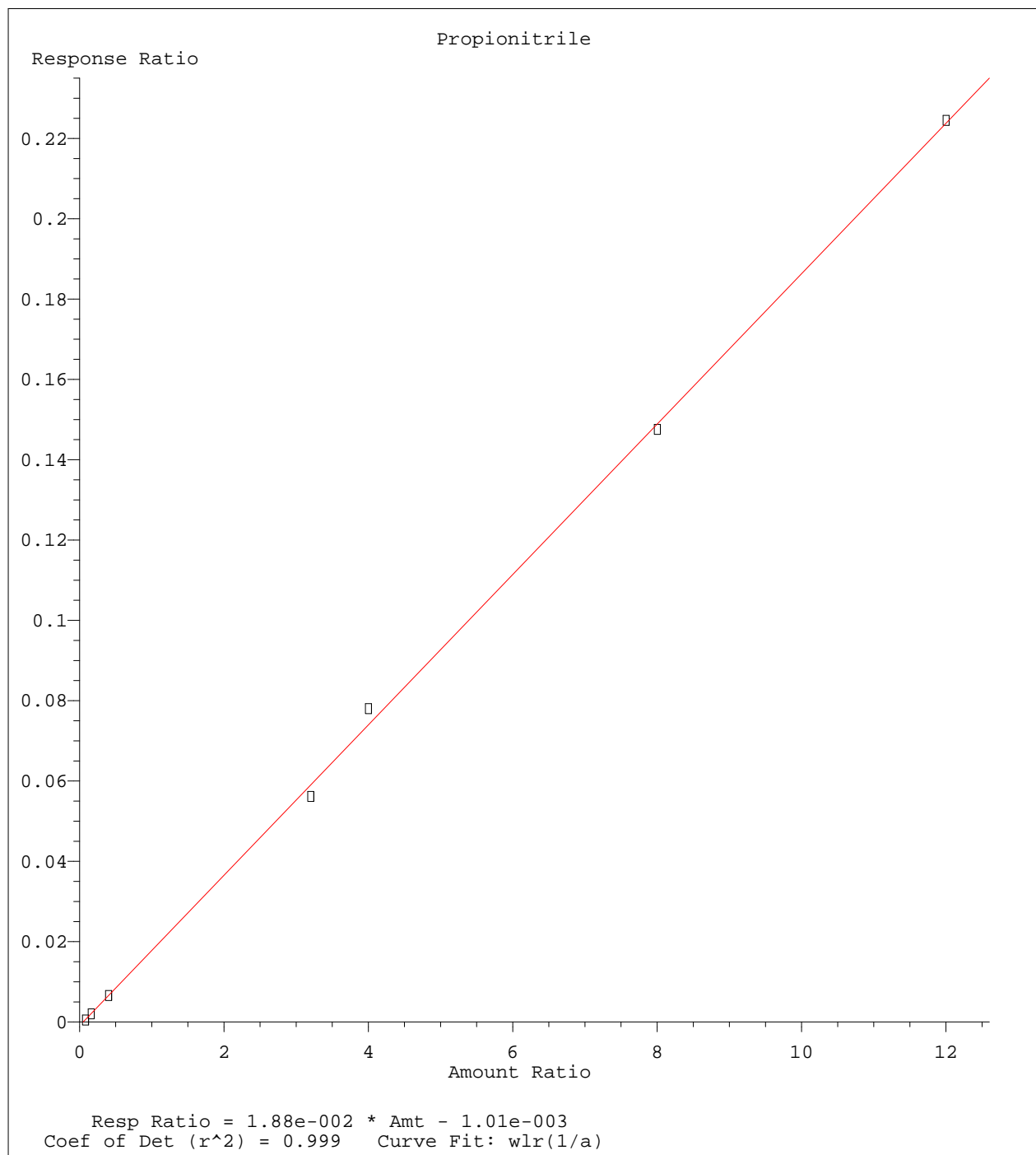




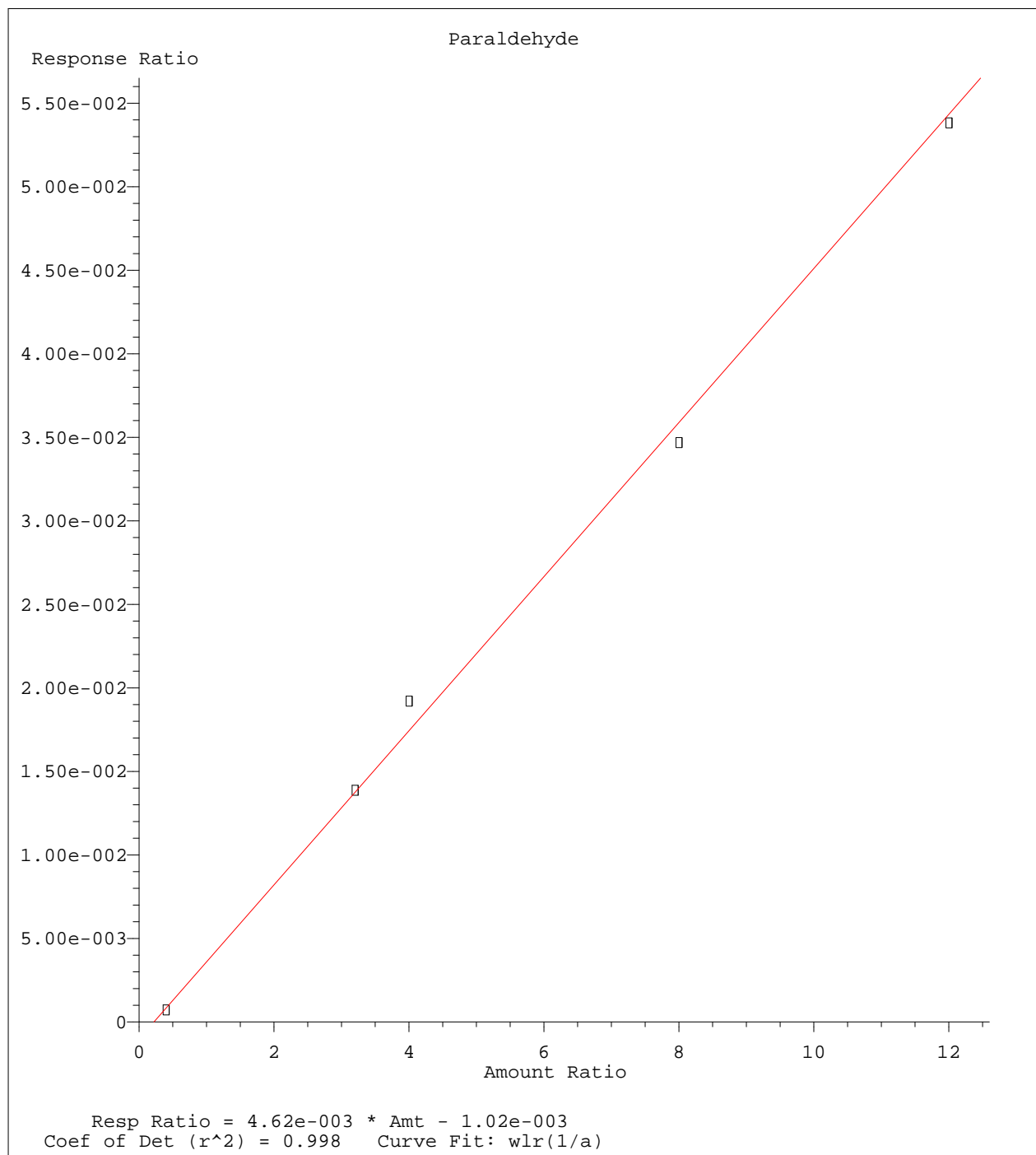
Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
Calibration Table Last Updated: Wed Mar 28 08:18:24 2012



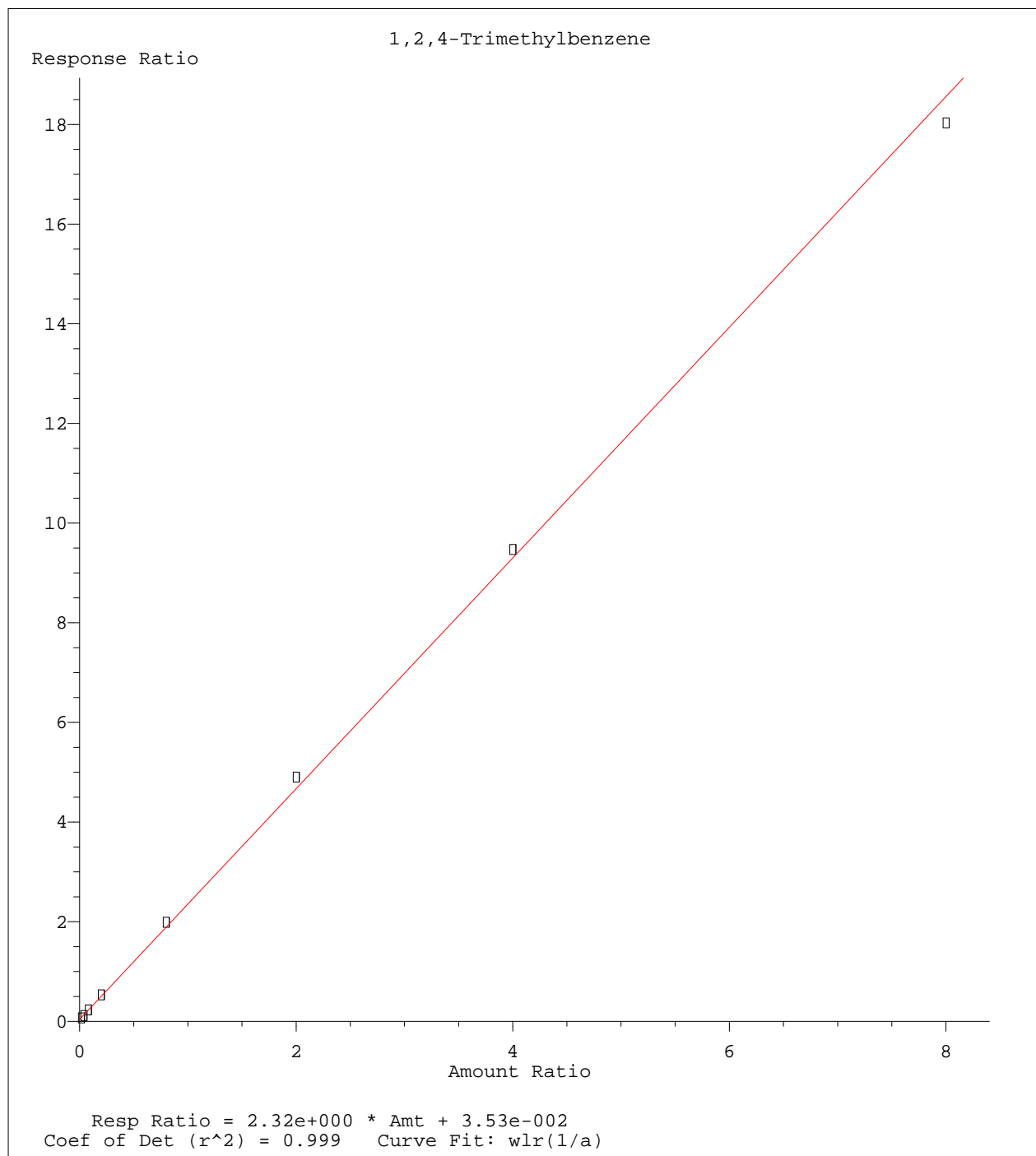
Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
 Calibration Table Last Updated: Wed Mar 28 08:18:24 2012



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



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



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

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

MS Integration Params: RTEINT.P

Quant Time: Mar 28 08:27:02 2012

Quant Results File: 8260WT.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	641347	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	533633	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	288543	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.13	111	160083	24.0589	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	96.24%	
43) 1,2-Dichloroethane-d4	9.77	65	126102	24.6113	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	98.44%	
58) Toluene-d8	12.16	98	625101	25.3707	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	101.48%	
80) p-Bromofluorobenzene	15.54	95	233558	25.0219	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	100.08%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.82	85	540229	77.4430	ug/L	98
3) Chloromethane	3.22	50	466508	58.0239	ug/L	99
4) Vinyl Chloride	3.42	62	362849	54.1500	ug/L	100
5) 1,3-Butadiene	3.46	54	116154	28.6672	ug/L	99
6) Bromomethane	4.23	94	284635	54.8498	ug/L	99
7) Chloroethane	4.40	64	241083	55.8486	ug/L	99
8) Trichlorofluoromethane	4.88	101	517814	52.3347	ug/L	99
9) Diethyl ether	5.41	59	323025	89.6865	ug/L	98
10) Isoprene	5.44	67	379566	48.7480	ug/L	100
11) Acrolein	5.62	56	54480	133.9213	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	306503	51.5794	ug/L	100
13) Acetone	5.72	43	50957	53.8482	ug/L	99
14) 1,1-Dichloroethene	5.95	61	419424	48.7771	ug/L	100
15) Tert-Butyl Alcohol	6.08	59	53032	182.7741	ug/L	98
16) Dimethyl Sulfide	6.21	62	296704	49.0148	ug/L	99
17) Iodomethane	6.44	142	318748	31.7549	ug/L	100
18) Methyl acetate	6.47	43	169282	56.8429	ug/L	98
19) Methylene Chloride	6.72	84	318173	49.7243	ug/L	99
20) Carbon Disulfide	6.74	76	844228	51.0978	ug/L	100
21) Acrylonitrile	6.89	53	69071	53.9187	ug/L	99
22) Methyl Tert Butyl Ether	6.97	73	585810	53.5046	ug/L	100
23) trans-1,2-Dichloroethene	7.19	61	420107	51.7361	ug/L	100
24) n-Hexane	7.30	57	381860	51.5360	ug/L	98
25) Diisopropyl ether	7.64	45	1934489	98.7591	ug/L	100
26) Vinyl Acetate	7.79	43	285604	45.3934	ug/L	100
27) 1,1-Dichloroethane	7.80	63	515550	49.6637	ug/L	100
28) Ethyl-Tert-Butyl ether	8.21	59	1553820	96.7931	ug/L	100
29) 2-Butanone	8.36	43	77234	54.8483	ug/L	100
30) Propionitrile	8.45	54	48457	102.0215	ug/L	99
31) 2,2-Dichloropropane	8.58	77	444280	49.7431	ug/L	99
32) cis-1,2-Dichloroethene	8.64	96	353213	52.5408	ug/L	99
33) Chloroform	8.85	83	516384	48.2661	ug/L	100
34) 1-Bromopropane	8.99	122	78530	57.7259	ug/L	99
35) Bromochloromethane	9.07	130	226534	52.3208	ug/L	99
36) Tetrahydrofuran	9.11	42	93062	97.5185	ug/L	96
38) 1,1,1-Trichloroethane	9.39	97	495477	50.9674	ug/L	100
39) Cyclohexane	9.43	56	494387	51.4731	ug/L	99
40) 1,1-Dichloropropene	9.59	75	433208	51.7350	ug/L	100
41) Tert-Amyl-Methyl ether	9.72	73	1327143	101.0247	ug/L	100
42) Carbon Tetrachloride	9.73	117	465732	51.2072	ug/L	99

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

Page 1

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

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

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

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

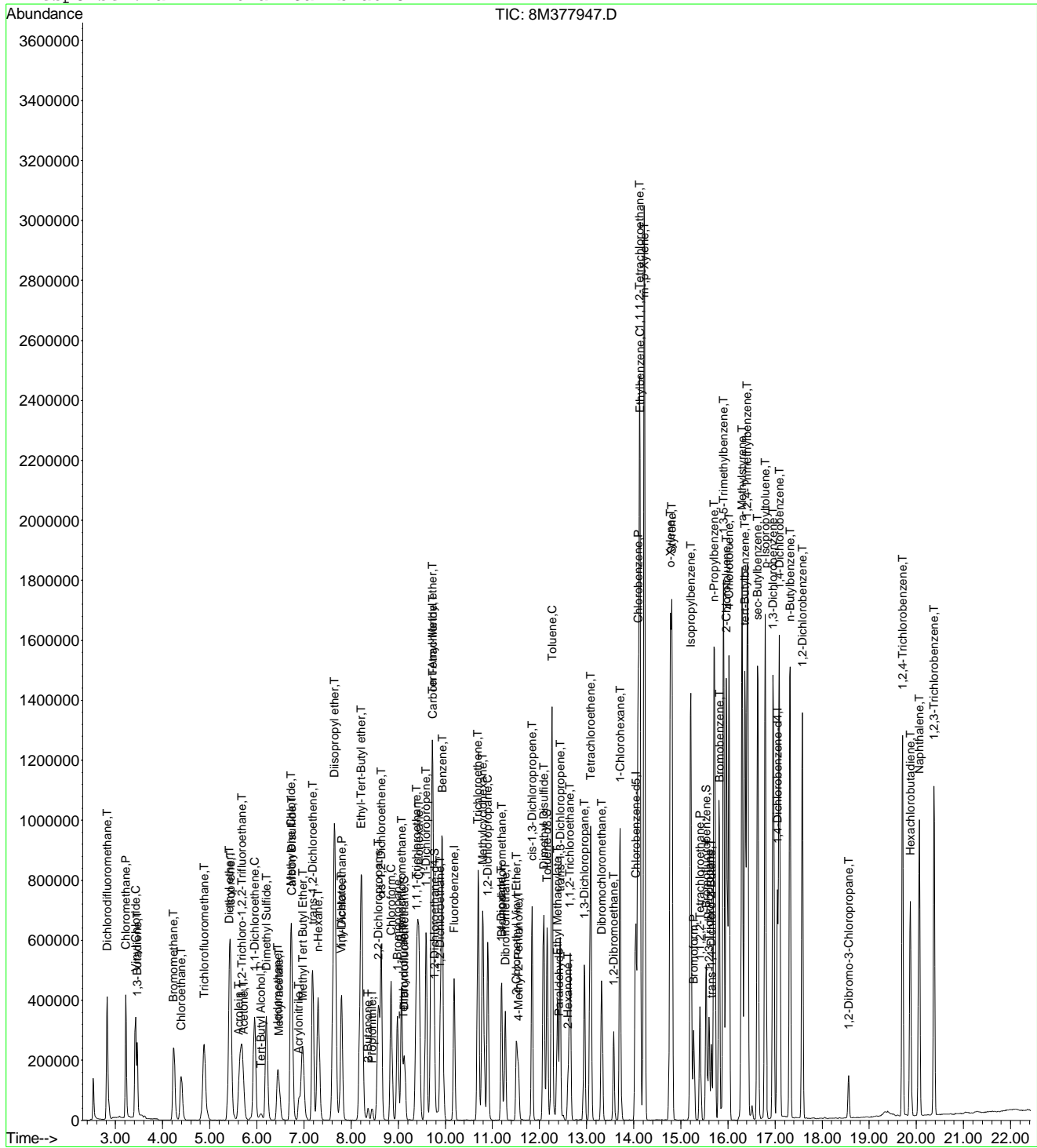
Page 2

Data File : C:\MSDCHEM\2\DATA\032712\8M377947.D
 Acq On : 27 Mar 2012 17:20
 Sample : WG393321-12 50.0 ug/L ALT SRC 8260
 Misc : 1,1 STD50783
 MS Integration Params: RTEINT.P
 Quant Time: Mar 28 8:27 2012

Vial: 14
 Operator: adc
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: 8260WT.RES

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



Evaluate Continuing Calibration Report

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

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

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

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

(#) = Out of Range

8M377947.D 8260WT.M Wed Mar 28 08:30:45 2012

Page 1

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

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

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

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

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

Data File : C:\MSDCHEM\1\data\050912\6M107999.D Vial: 3
 Acq On : 9 May 2012 9:42 Operator: ADC
 Sample : WG397458-02 50ug/L CCV STD 8260 Inst : HPMS6
 Misc : 1,1 STD51468 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 09 10:05:21 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	563705	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	388986	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	194289	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.35	111	171617	28.1171	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	112.48%	
43) 1,2-Dichloroethane-d4	10.07	65	169580	28.3096	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	113.24%	
58) Toluene-d8	12.83	98	558343	26.4105	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	105.64%	
80) p-Bromofluorobenzene	16.81	95	206147	27.0393	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	108.16%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.72	85	402157	54.3890	ug/L	100
3) Chloromethane	3.11	50	516029	51.0933	ug/L	100
4) Vinyl Chloride	3.30	62	409511	43.7891	ug/L	99
5) 1,3-Butadiene	3.34	54	217913	45.9776	ug/L	99
6) Bromomethane	4.10	94	167935	31.6907	ug/L	98
7) Chloroethane	4.25	64	272326	51.4700	ug/L	99
8) Trichlorofluoromethane	4.72	101	608521	50.6085	ug/L	100
9) Diethyl ether	5.26	59	503030	123.1246	ug/L	98
10) Isoprene	5.30	67	541297	52.9418	ug/L	99
11) Acrolein	5.50	56	13555	51.5922	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	328268	51.0424	ug/L	100
13) Acetone	5.61	43	61508	57.5866	ug/L	98
14) 1,1-Dichloroethene	5.84	61	526873	50.9526	ug/L	99
15) Tert-Butyl Alcohol	5.98	59	60870	218.2934	ug/L	94
16) Dimethyl Sulfide	6.11	62	439028	53.4803	ug/L	99
17) Iodomethane	6.37	142	197542	33.4124	ug/L	97
18) Methyl acetate	6.41	43	242764	57.5917	ug/L	98
19) Methylene Chloride	6.67	84	316104	49.3535	ug/L	95
20) Carbon Disulfide	6.68	76	979355	52.2751	ug/L	100
21) Acrylonitrile	6.88	53	84975	59.0470	ug/L	96
22) Methyl Tert Butyl Ether	6.92	73	667788	49.4895	ug/L	99
23) trans-1,2-Dichloroethene	7.16	96	320129	51.1808	ug/L	98
24) n-Hexane	7.27	57	422655	58.9033	ug/L	96
25) Diisopropyl ether	7.65	45	2599833	114.1009	ug/L	99
26) Vinyl Acetate	7.84	43	255001	77.3062	ug/L	97
27) 1,1-Dichloroethane	7.85	63	642766	50.2976	ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	2020335	109.1059	ug/L	99
29) 2-Butanone	8.49	43	89427	59.8759	ug/L	96
30) Propionitrile	8.60	54	52856	123.7329	ug/L	98
31) 2,2-Dichloropropane	8.72	77	506947	52.4729	ug/L	98
32) cis-1,2-Dichloroethene	8.79	96	336769	51.5279	ug/L	98
33) Chloroform	9.02	83	580644	50.2724	ug/L	99
34) 1-Bromopropane	9.18	122	57312	48.3612	ug/L	99
35) Bromochloromethane	9.28	130	188683	54.1935	ug/L	98
36) Tetrahydrofuran	9.31	42	120201	122.3828	ug/L	95
38) 1,1,1-Trichloroethane	9.61	97	516747	51.2169	ug/L	98
39) Cyclohexane	9.65	56	544749	53.8957	ug/L	98
40) 1,1-Dichloropropene	9.85	75	442023	53.1067	ug/L	98
41) Tert-Amyl-Methyl ether	9.99	73	1468365	106.5055	ug/L	99
42) Carbon Tetrachloride	10.00	117	466857	52.2771	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M107999.D 8260WTR.M Wed May 09 10:05:22 2012

Data File : C:\MSDCHEM\1\data\050912\6M107999.D Vial: 3
 Acq On : 9 May 2012 9:42 Operator: ADC
 Sample : WG397458-02 50ug/L CCV STD 8260 Inst : HPMS6
 Misc : 1,1 STD51468 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 09 10:05:21 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	407377	51.3468	ug/L	97
46) Benzene	10.25	78	1236831	49.6656	ug/L	99
47) Trichloroethene	11.12	130	314968	50.4252	ug/L	99
48) Methylcyclohexane	11.21	83	402366	55.8572	ug/L	99
49) 1,2-Dichloropropane	11.37	63	335194	52.1342	ug/L	99
50) 1,4-Dioxane	11.73	88	5726	253.9959	ug/L	93
51) Bromodichloromethane	11.71	83	405892	52.5548	ug/L	99
52) Dibromomethane	11.80	93	158047	51.0788	ug/L	98
53) 2-Chloroethyl Vinyl Ether	12.11	63	128392	45.2227	ug/L	98
54) 4-Methyl-2-Pentanone	12.14	58	65859	58.7450	ug/L	96
55) cis-1,3-Dichloropropene	12.47	75	465786	50.2968	ug/L	99
56) Dimethyl Disulfide	12.75	79	265243	48.9909	ug/L	99
59) Toluene	12.94	91	1215427	47.5477	ug/L	99
60) Ethyl Methacrylate	13.12	69	235213	50.0145	ug/L	96
61) Paraldehyde	13.18	89	7375	107.4519	ug/L #	16
62) trans-1,3-Dichloropropene	13.18	75	401485	48.1289	ug/L	99
63) 1,1,2-Trichloroethane	13.41	97	201647	49.1140	ug/L	99
64) 2-Hexanone	13.38	43	110072	55.7173	ug/L	98
65) 1,3-Dichloropropane	13.78	76	364202	52.0159	ug/L	97
66) Tetrachloroethene	13.89	166	295451	49.4898	ug/L	99
67) Dibromochloromethane	14.20	129	266453	48.2590	ug/L	98
68) 1,2-Dibromoethane	14.50	107	200807	49.6687	ug/L	99
69) 1-Chlorohexane	14.66	91	366156	54.0927	ug/L	99
70) Chlorobenzene	15.10	112	775761	47.7622	ug/L	100
71) 1,1,1,2-Tetrachloroethane	15.14	131	292770	50.0578	ug/L	100
72) Ethylbenzene	15.15	106	418009	49.8944	ug/L	98
73) m-,p-Xylene	15.25	106	1013652	98.9741	ug/L	98
74) o-Xylene	15.90	106	484256	49.6563	ug/L	100
75) Styrene	15.96	104	819128	46.5963	ug/L	100
76) Bromoform	16.50	173	154912	56.0101	ug/L	99
77) Isopropylbenzene	16.43	105	1216531	50.1213	ug/L	100
79) 1,1,2,2-Tetrachloroethane	16.68	83	217400	52.9142	ug/L	98
81) 1,2,3-Trichloropropane	16.91	110	54061	51.0337	ug/L	97
82) trans-1,4-Dichloro-2-Butene	16.98	53	67568	51.8847	ug/L	96
83) n-Propylbenzene	17.02	91	1426935	49.9827	ug/L	100
84) Bromobenzene	17.13	156	308899	48.3052	ug/L	98
85) 1,3,5-Trimethylbenzene	17.25	105	956442	49.1076	ug/L	100
86) 2-Chlorotoluene	17.31	91	889765	46.9394	ug/L	99
87) 4-Chlorotoluene	17.38	91	904775	47.4792	ug/L	99
88) a-Methylstyrene	17.72	118	530428	53.1057	ug/L	96
89) tert-Butylbenzene	17.79	134	190147	48.3404	ug/L	95
90) 1,2,4-Trimethylbenzene	17.85	105	1010547	49.0758	ug/L	100
91) sec-Butylbenzene	18.11	105	1115744	50.3970	ug/L	99
92) p-Isopropyltoluene	18.30	119	915736	51.4937	ug/L	99
93) 1,3-Dichlorobenzene	18.49	146	552511	49.2383	ug/L	99
94) 1,4-Dichlorobenzene	18.65	146	562924	47.8338	ug/L	99
95) n-Butylbenzene	18.93	91	825381	53.2794	ug/L	100
96) 1,2-Dichlorobenzene	19.22	146	496215	48.9282	ug/L	98
97) 1,2-Dibromo-3-Chloropropane	20.40	75	31959	49.0938	ug/L	98
98) 1,2,4-Trichlorobenzene	21.75	180	292658	53.0164	ug/L	98
99) Hexachlorobutadiene	21.95	225	111436	50.3118	ug/L	99
100) Naphthalene	22.16	128	552192	52.5344	ug/L	100
101) 1,2,3-Trichlorobenzene	22.54	180	249515	52.0055	ug/L	97

(#) = qualifier out of range (m) = manual integration
 6M107999.D 8260WTR.M Wed May 09 10:05:22 2012

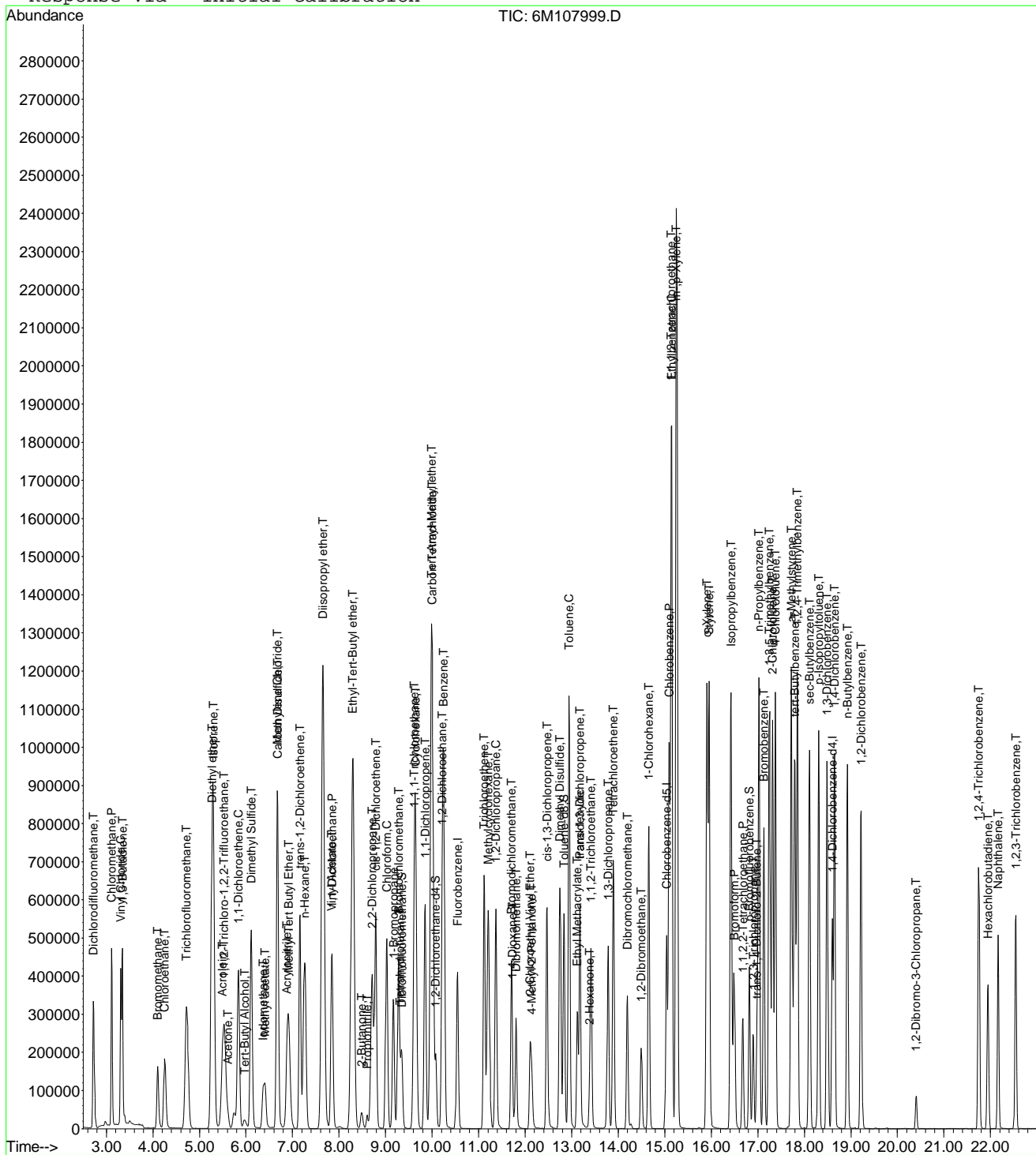
Page 2

Data File : C:\MSDchem\1\data\050912\6M107999.D
 Acq On : 9 May 2012 9:42
 Sample : WG397458-02 50ug/L CCV STD 8260
 Misc : 1,1 STD51468
 MS Integration Params: RTEINT.P
 Quant Time: May 9 10:05 2012

Vial: 3
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: 8260WTR.RES

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



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050912\6M107999.D
 Acq On : 9 May 2012 9:42
 Sample : WG397458-02 50ug/L CCV STD 8260
 Misc : 1,1 STD51468
 MS Integration Params: RTEINT.P

Vial: 3
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

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	91	0.00
2 T	Dichlorodifluoromethane	0.3279	0.3567	-8.8	103	0.00
3 P	Chloromethane	0.5138	0.4577	10.9	92	0.00
4 C	Vinyl Chloride	0.4148	0.3632	12.4	91	0.00
5 T	1,3-Butadiene	0.2435	0.1933	20.6#	79	0.00
6 T	Bromomethane	0.2350	0.1490	36.6#	63	0.00
7 T	Chloroethane	0.2347	0.2415	-2.9	96	0.00
8 T	Trichlorofluoromethane	0.5333	0.5397	-1.2	95	0.00
9 T	Diethyl ether	0.1812	0.2231	-23.1#	113	0.00
10 T	Isoprene	0.4535	0.4801	-5.9	96	0.00
11 T	Acrolein	0.0111	0.0060	46.0#	51	0.00
12 T	1,1,2-Trichloro-1,2,2-Trifl	0.2852	0.2912	-2.1	96	0.00
13 T	Acetone	0.0474	0.0546	-15.2	106	0.00
14 C	1,1-Dichloroethene	0.4586	0.4673	-1.9	91	0.00
15 T	Tert-Butyl Alcohol	0.0124	0.0135	-9.1	100	0.00
16 T	Dimethyl Sulfide	0.3641	0.3894	-7.0	98	0.00
17 T	Iodomethane	0.2622	0.1752	33.2#	54	0.00
18 T	Methyl acetate	0.1869	0.2153	-15.2	102	0.00
19 T	Methylene Chloride	0.2841	0.2804	1.3	93	0.00
20 T	Carbon Disulfide	0.8309	0.8687	-4.6	96	0.00
21 T	Acrylonitrile	0.0638	0.0754	-18.1	101	0.00
22 T	Methyl Tert Butyl Ether	0.5984	0.5923	1.0	92	0.01
23 T	trans-1,2-Dichloroethene	0.2774	0.2839	-2.4	92	0.00
24 T	n-Hexane	0.3182	0.3749	-17.8	107	0.00
25 T	Diisopropyl ether	1.0105	1.1530	-14.1	103	0.00
26 T	Vinyl Acetate	0.1463	0.2262	-54.6#	139	0.00
27 P	1,1-Dichloroethane	0.5667	0.5701	-0.6	94	0.00
28 T	Ethyl-Tert-Butyl ether	0.8212	0.8960	-9.1	98	0.00
29 T	2-Butanone	0.0662	0.0793	-19.7	104	0.00
30 T	Propionitrile	0.0190	0.0234	-23.7#	106	0.00
31 T	2,2-Dichloropropane	0.4285	0.4497	-4.9	98	0.00
32 T	cis-1,2-Dichloroethene	0.2899	0.2987	-3.1	92	0.00
33 C	Chloroform	0.5122	0.5150	-0.5	93	0.00
34	1-Bromopropane	0.0481	0.0508	-5.8	91	0.00
35 T	Bromochloromethane	0.1503	0.1674	-11.4	97	0.00
36 T	Tetrahydrofuran	0.0436	0.0533	-22.4#	108	0.00
37 S	Dibromofluoromethane	0.2707	0.3044	-12.5	99	0.00
38 T	1,1,1-Trichloroethane	0.4475	0.4583	-2.4	92	0.00
39 T	Cyclohexane	0.4483	0.4832	-7.8	98	0.00
40 T	1,1-Dichloropropene	0.3691	0.3921	-6.2	93	0.00
41 T	Tert-Amyl-Methyl ether	0.6114	0.6512	-6.5	95	0.00
42 T	Carbon Tetrachloride	0.3961	0.4141	-4.6	92	0.00
43 S	1,2-Dichloroethane-d4	0.2657	0.3008	-13.2	99	0.00
44	Heptane	0.0000	0.0000	0.0	95	0.01
45 T	1,2-Dichloroethane	0.3519	0.3613	-2.7	93	0.00
46 T	Benzene	1.1044	1.0971	0.7	92	0.00
47 T	Trichloroethene	0.2770	0.2794	-0.8	90	0.00
48 T	Methylcyclohexane	0.3195	0.3569	-11.7	101	0.00
49 C	1,2-Dichloropropane	0.2851	0.2973	-4.3	94	0.00
50 T	1,4-Dioxane	0.0009	0.0013	-42.7#	116	0.01
51 T	Bromodichloromethane	0.3425	0.3600	-5.1	93	0.00
52 T	Dibromomethane	0.1220	0.1402	-14.9	91	0.00
53 T	2-Chloroethyl Vinyl Ether	0.1124	0.1139	-1.4	84	0.00
54 T	4-Methyl-2-Pentanone	0.0497	0.0584	-17.5	98	0.00

(#) = Out of Range

6M107999.D 8260WTR.M

Wed May 09 10:38:58 2012

Page 1

Data File : C:\MSDCHEM\1\DATA\050912\6M107999.D Vial: 3
 Acq On : 9 May 2012 9:42 Operator: ADC
 Sample : WG397458-02 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	0.4132	-12.7	93	0.00
56 T	Dimethyl Disulfide	0.2035	0.2353	-15.6	94	0.00
57 I	Chlorobenzene-d5	1.0000	1.0000	0.0	95	0.00
58 S	Toluene-d8	1.3587	1.4354	-5.6	99	0.00
59 C	Toluene	1.6429	1.5623	4.9	90	0.00
60 T	Ethyl Methacrylate	0.2500	0.3023	-21.0#	93	0.00
61	Paraldehyde	0.0044	0.0047	-7.5	96	0.01
62 T	trans-1,3-Dichloropropene	0.4381	0.5161	-17.8	92	0.00
63 T	1,1,2-Trichloroethane	0.2639	0.2592	1.8	92	0.00
64 T	2-Hexanone	0.1145	0.1415	-23.6#	102	0.00
65 T	1,3-Dichloropropane	0.4500	0.4681	-4.0	92	0.00
66 T	Tetrachloroethene	0.3837	0.3798	1.0	93	0.00
67 T	Dibromochloromethane	0.3236	0.3425	-5.8	91	0.00
68 T	1,2-Dibromoethane	0.2260	0.2581	-14.2	94	0.00
69 T	1-Chlorohexane	0.4350	0.4707	-8.2	99	0.00
70 P	Chlorobenzene	1.0439	0.9972	4.5	91	0.00
71 T	1,1,1,2-Tetrachloroethane	0.3759	0.3763	-0.1	92	0.00
72 C	Ethylbenzene	0.5384	0.5373	0.2	92	0.00
73 T	m-,p-Xylene	0.6582	0.6515	1.0	90	0.00
74 T	o-Xylene	0.6268	0.6225	0.7	91	0.00
75 T	Styrene	0.9916	1.0529	-6.2	90	0.00
76 P	Bromoform	0.1778	0.1991	-12.0	95	0.00
77 T	Isopropylbenzene	1.5599	1.5637	-0.2	92	0.00
78 I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	97	0.00
79 P	1,1,2,2-Tetrachloroethane	0.5287	0.5595	-5.8	96	0.00
80 S	p-Bromofluorobenzene	0.9810	1.0610	-8.2	101	0.00
81 T	1,2,3-Trichloropropane	0.1363	0.1391	-2.1	93	0.01
82 T	trans-1,4-Dichloro-2-Butene	0.1680	0.1739	-3.5	100	0.00
83 T	n-Propylbenzene	3.6735	3.6722	0.0	96	0.00
84 T	Bromobenzene	0.7480	0.7950	-6.3	95	0.00
85 T	1,3,5-Trimethylbenzene	2.5061	2.4614	1.8	93	0.00
86 T	2-Chlorotoluene	2.4391	2.2898	6.1	92	0.00
87 T	4-Chlorotoluene	2.4520	2.3284	5.0	92	0.00
88 T	a-Methylstyrene	1.2852	1.3651	-6.2	95	0.00
89 T	tert-Butylbenzene	0.5061	0.4893	3.3	97	0.00
90 T	1,2,4-Trimethylbenzene	2.6496	2.6006	1.8	93	0.00
91 T	sec-Butylbenzene	2.8487	2.8714	-0.8	97	0.00
92 T	p-Isopropyltoluene	2.2883	2.3566	-3.0	98	0.00
93 T	1,3-Dichlorobenzene	1.4439	1.4219	1.5	94	0.00
94 T	1,4-Dichlorobenzene	1.5143	1.4487	4.3	94	0.00
95 T	n-Butylbenzene	1.9934	2.1241	-6.6	101	0.00
96 T	1,2-Dichlorobenzene	1.3050	1.2770	2.1	94	0.00
97 T	1,2-Dibromo-3-Chloropropane	0.0741	0.0823	-11.0	97	0.00
98 T	1,2,4-Trichlorobenzene	0.7103	0.7531	-6.0	102	0.00
99 T	Hexachlorobutadiene	0.2700	0.2868	-6.2	104	0.00
100 T	Naphthalene	1.3525	1.4211	-5.1	95	0.00
101 T	1,2,3-Trichlorobenzene	0.6174	0.6421	-4.0	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 6M107999.D 8260WTR.M Wed May 09 10:38:58 2012

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050912\6M107999.D Vial: 3
 Acq On : 9 May 2012 9:42 Operator: ADC
 Sample : WG397458-02 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	91	0.00
2 T Dichlorodifluoromethane	50.0000	54.3890	-8.8	103	0.00
3 P Chloromethane	50.0000	51.0933	-2.2	92	0.00
4 C Vinyl Chloride	50.0000	43.7891	12.4	91	0.00
5 T 1,3-Butadiene	50.0000	45.9776	8.0	79	0.00
6 T Bromomethane	50.0000	31.6907	36.6#	63	0.00
7 T Chloroethane	50.0000	51.4700	-2.9	96	0.00
8 T Trichlorofluoromethane	50.0000	50.6086	-1.2	95	0.00
9 T Diethyl ether	100.0000	123.1246	-23.1#	113	0.00
10 T Isoprene	50.0000	52.9418	-5.9	96	0.00
11 T Acrolein	100.0000	51.5921	48.4#	51	0.00
12 T 1,1,2-Trichloro-1,2,2-Trifl	50.0000	51.0423	-2.1	96	0.00
13 T Acetone	50.0000	57.5866	-15.2	106	0.00
14 C 1,1-Dichloroethene	50.0000	50.9526	-1.9	91	0.00
15 T Tert-Butyl Alcohol	200.0000	218.2934	-9.1	100	0.00
16 T Dimethyl Sulfide	50.0000	53.4803	-7.0	98	0.00
17 T Iodomethane	50.0000	33.4124	33.2#	54	0.00
18 T Methyl acetate	50.0000	57.5917	-15.2	102	0.00
19 T Methylene Chloride	50.0000	49.3535	1.3	93	0.00
20 T Carbon Disulfide	50.0000	52.2751	-4.6	96	0.00
21 T Acrylonitrile	50.0000	59.0470	-18.1	101	0.00
22 T Methyl Tert Butyl Ether	50.0000	49.4894	1.0	92	0.01
23 T trans-1,2-Dichloroethene	50.0000	51.1808	-2.4	92	0.00
24 T n-Hexane	50.0000	58.9033	-17.8	107	0.00
25 T Diisopropyl ether	100.0000	114.1008	-14.1	103	0.00
26 T Vinyl Acetate	50.0000	77.3062	-54.6#	139	0.00
27 P 1,1-Dichloroethane	50.0000	50.2976	-0.6	94	0.00
28 T Ethyl-Tert-Butyl ether	100.0000	109.1059	-9.1	98	0.00
29 T 2-Butanone	50.0000	59.8759	-19.8	104	0.00
30 T Propionitrile	100.0000	123.7329	-23.7#	106	0.00
31 T 2,2-Dichloropropane	50.0000	52.4729	-4.9	98	0.00
32 T cis-1,2-Dichloroethene	50.0000	51.5279	-3.1	92	0.00
33 C Chloroform	50.0000	50.2724	-0.5	93	0.00
34 1-Bromopropane	50.0000	48.3612	3.3	91	0.00
35 T Bromochloromethane	50.0000	54.1935	-8.4	97	0.00
36 T Tetrahydrofuran	100.0000	122.3828	-22.4#	108	0.00
37 S Dibromofluoromethane	25.0000	28.1171	-12.5	99	0.00
38 T 1,1,1-Trichloroethane	50.0000	51.2169	-2.4	92	0.00
39 T Cyclohexane	50.0000	53.8957	-7.8	98	0.00
40 T 1,1-Dichloropropene	50.0000	53.1067	-6.2	93	0.00
41 T Tert-Amyl-Methyl ether	100.0000	106.5055	-6.5	95	0.00
42 T Carbon Tetrachloride	50.0000	52.2771	-4.6	92	0.00
43 S 1,2-Dichloroethane-d4	25.0000	28.3096	-13.2	99	0.00
44 Heptane	-1.0000	0.0000	0.0	95	0.01
45 T 1,2-Dichloroethane	50.0000	51.3468	-2.7	93	0.00
46 T Benzene	50.0000	49.6656	0.7	92	0.00
47 T Trichloroethene	50.0000	50.4252	-0.9	90	0.00
48 T Methylcyclohexane	50.0000	55.8573	-11.7	101	0.00
49 C 1,2-Dichloropropane	50.0000	52.1342	-4.3	94	0.00
50 T 1,4-Dioxane	200.0000	253.9959	-27.0#	116	0.01
51 T Bromodichloromethane	50.0000	52.5548	-5.1	93	0.00
52 T Dibromomethane	50.0000	51.0788	-2.2	91	0.00
53 T 2-Chloroethyl Vinyl Ether	50.0000	45.2227	9.6	84	0.00
54 T 4-Methyl-2-Pentanone	50.0000	58.7450	-17.5	98	0.00

(#) = Out of Range

6M107999.D 8260WTR.M Wed May 09 10:38:57 2012

Page 1

Data File : C:\MSDCHEM\1\DATA\050912\6M107999.D Vial: 3
 Acq On : 9 May 2012 9:42 Operator: ADC
 Sample : WG397458-02 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	50.2968	-0.6	93	0.00
56 T	Dimethyl Disulfide	50.0000	48.9909	2.0	94	0.00
57 I	Chlorobenzene-d5	25.0000	25.0000	0.0	95	0.00
58 S	Toluene-d8	25.0000	26.4105	-5.6	99	0.00
59 C	Toluene	50.0000	47.5477	4.9	90	0.00
60 T	Ethyl Methacrylate	50.0000	50.0145	-0.0	93	0.00
61	Paraldehyde	100.0000	107.4519	-7.5	96	0.01
62 T	trans-1,3-Dichloropropene	50.0000	48.1289	3.7	92	0.00
63 T	1,1,2-Trichloroethane	50.0000	49.1140	1.8	92	0.00
64 T	2-Hexanone	50.0000	55.7173	-11.4	102	0.00
65 T	1,3-Dichloropropane	50.0000	52.0159	-4.0	92	0.00
66 T	Tetrachloroethene	50.0000	49.4898	1.0	93	0.00
67 T	Dibromochloromethane	50.0000	48.2590	3.5	91	0.00
68 T	1,2-Dibromoethane	50.0000	49.6687	0.7	94	0.00
69 T	1-Chlorohexane	50.0000	54.0927	-8.2	99	0.00
70 P	Chlorobenzene	50.0000	47.7622	4.5	91	0.00
71 T	1,1,1,2-Tetrachloroethane	50.0000	50.0578	-0.1	92	0.00
72 C	Ethylbenzene	50.0000	49.8944	0.2	92	0.00
73 T	m-,p-Xylene	100.0000	98.9741	1.0	90	0.00
74 T	o-Xylene	50.0000	49.6563	0.7	91	0.00
75 T	Styrene	50.0000	46.5963	6.8	90	0.00
76 P	Bromoform	50.0000	56.0101	-12.0	95	0.00
77 T	Isopropylbenzene	50.0000	50.1213	-0.2	92	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	52.9142	-5.8	96	0.00
80 S	p-Bromofluorobenzene	25.0000	27.0393	-8.2	101	0.00
81 T	1,2,3-Trichloropropane	50.0000	51.0337	-2.1	93	0.01
82 T	trans-1,4-Dichloro-2-Butene	50.0000	51.8847	-3.8	100	0.00
83 T	n-Propylbenzene	50.0000	49.9827	0.0	96	0.00
84 T	Bromobenzene	50.0000	48.3052	3.4	95	0.00
85 T	1,3,5-Trimethylbenzene	50.0000	49.1076	1.8	93	0.00
86 T	2-Chlorotoluene	50.0000	46.9395	6.1	92	0.00
87 T	4-Chlorotoluene	50.0000	47.4793	5.0	92	0.00
88 T	a-Methylstyrene	50.0000	53.1057	-6.2	95	0.00
89 T	tert-Butylbenzene	50.0000	48.3404	3.3	97	0.00
90 T	1,2,4-Trimethylbenzene	50.0000	49.0758	1.8	93	0.00
91 T	sec-Butylbenzene	50.0000	50.3970	-0.8	97	0.00
92 T	p-Isopropyltoluene	50.0000	51.4937	-3.0	98	0.00
93 T	1,3-Dichlorobenzene	50.0000	49.2383	1.5	94	0.00
94 T	1,4-Dichlorobenzene	50.0000	47.8338	4.3	94	0.00
95 T	n-Butylbenzene	50.0000	53.2794	-6.6	101	0.00
96 T	1,2-Dichlorobenzene	50.0000	48.9282	2.1	94	0.00
97 T	1,2-Dibromo-3-Chloropropane	50.0000	49.0938	1.8	97	0.00
98 T	1,2,4-Trichlorobenzene	50.0000	53.0164	-6.0	102	0.00
99 T	Hexachlorobutadiene	50.0000	50.3118	-0.6	104	0.00
100 T	Naphthalene	50.0000	52.5344	-5.1	95	0.00
101 T	1,2,3-Trichlorobenzene	50.0000	52.0055	-4.0	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 6M107999.D 8260WTR.M Wed May 09 10:38:57 2012

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

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

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

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	189105	25.6193	ug/L	0.00
Spiked Amount 25.000	Range	86 - 118	Recovery	=	102.48%	
43) 1,2-Dichloroethane-d4	9.77	65	159746	28.1045	ug/L	0.00
Spiked Amount 25.000	Range	80 - 120	Recovery	=	112.40%	
58) Toluene-d8	12.17	98	714268	24.9866	ug/L	0.00
Spiked Amount 25.000	Range	88 - 110	Recovery	=	99.96%	
80) p-Bromofluorobenzene	15.54	95	280434	24.9983	ug/L	0.00
Spiked Amount 25.000	Range	86 - 115	Recovery	=	100.00%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) 1,3-Butadiene	3.48	54	321449	74.3793	ug/L	94
9) Diethyl ether	5.42	59	401585	100.5084	ug/L	99
13) Acetone	5.73	43	6208	5.9136	ug/L	79
20) Carbon Disulfide	6.75	76	2787	0.1521	ug/L #	75
29) 2-Butanone	8.37	43	2561	1.6395	ug/L #	55
30) Propionitrile	8.45	54	45153	85.9108	ug/L	96
33) Chloroform	8.86	83	1465	0.1234	ug/L	80
51) 1,4-Dioxane	11.19	88	4931	129.6727	ug/L	88
56) Dimethyl Disulfide	12.17	94	19384	1.7382	ug/L #	28
73) m-,p-Xylene	14.23	106	4777	0.3088	ug/L	97
90) 1,2,4-Trimethylbenzene	16.42	105	1306	Below Cal	#	43
98) 1,2,4-Trichlorobenzene	19.71	182	1592	0.1204	ug/L #	41
99) Hexachlorobutadiene	19.88	225	2410	0.5128	ug/L	95
101) 1,2,3-Trichlorobenzene	20.38	180	1590	0.1403	ug/L #	80

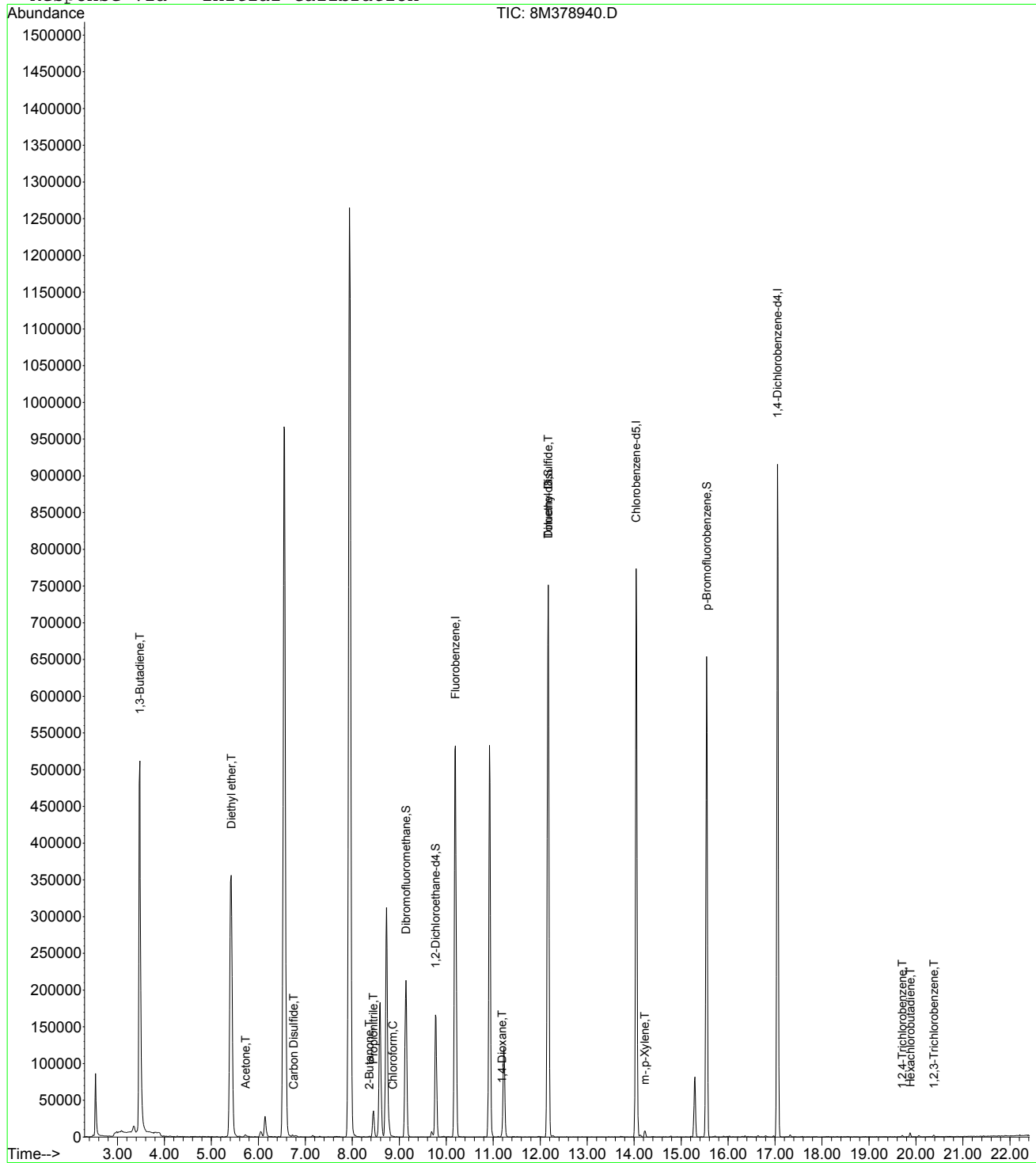
(#) = qualifier out of range (m) = manual integration
 8M378940.D 8260WT.M Thu May 10 07:41:53 2012

Data File : C:\MSDchem\1\data\051012\8M378940.D
 Acq On : 10 May 2012 7:19
 Sample : WG397XXX-01 100ug/L CCV A9
 Misc : 1,1 STDXXXXX
 MS Integration Params: RTEINT.P
 Quant Time: May 10 7:41 2012

Vial: 3
 Operator: FJB
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

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

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.14	41	42043	79.6553	ug/L	97
3) 3-Chloro-1-propene	6.55	41	1101221	99.1647	ug/L	97
4) 2-Chloro-1,3-butadiene	7.94	53	1308935	99.5296	ug/L	88
5) Ethyl Acetate	8.59	43	332174	89.5678	ug/L	98
6) Methacrylonitrile	8.73	67	128835	84.5100	ug/L	90
7) Isobutyl Alcohol	8.77	43	23844	149.1404	ug/L #	11
8) 1-Butanol	9.69	56	5013	69.6474	ug/L	80
9) Methyl methacrylate	10.92	41	376093	82.5978	ug/L	93
10) 2-Nitropropane	11.23	43	123237	77.9409	ug/L	99
13) Cyclohexanone	15.29	55	46317	135.7933	ug/L	92

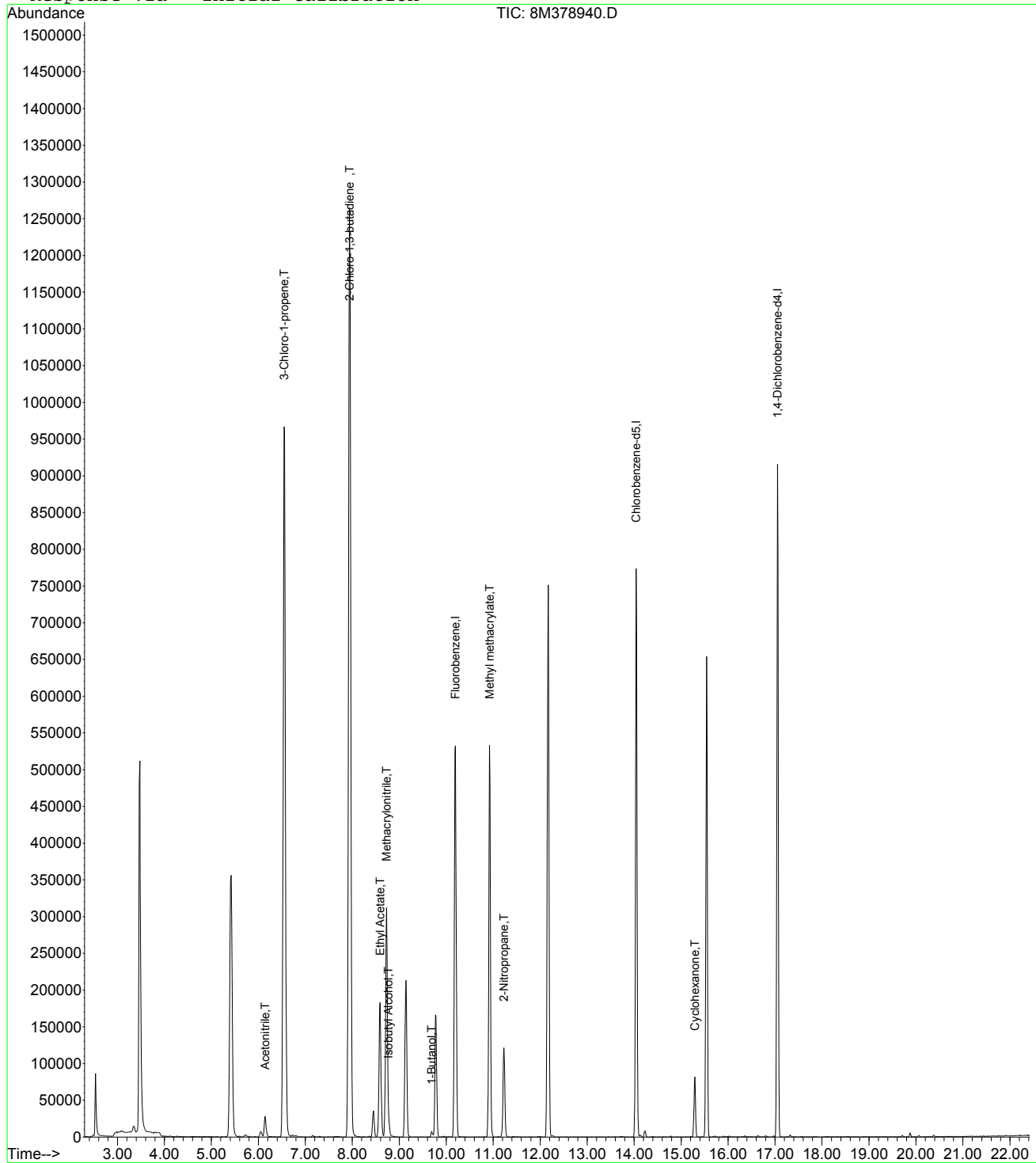
 (#) = qualifier out of range (m) = manual integration
 8M378940.D A9FOOWT.M Fri May 11 14:12:25 2012

Data File : C:\MSDCHEM\1\DATA\051012\8M378940.D
 Acq On : 10 May 2012 7:19
 Sample : WG397793-01 100ug/L CCV A9
 Misc : 1,1 STD51412
 MS Integration Params: rteint.p
 Quant Time: May 11 14:12 2012

Vial: 3
 Operator: FJB
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: A9FOOWT.RES

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



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

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	25.0000	25.0000	0.0	110	-0.04
2 T	Acetonitrile	100.0000	79.6553	20.3	85	-0.05
3 T	3-Chloro-1-propene	100.0000	99.1647	0.8	108	-0.05
4 T	2-Chloro-1,3-butadiene	100.0000	99.5296	0.5	109	-0.05
5 T	Ethyl Acetate	100.0000	89.5678	10.4	94	-0.04
6 T	Methacrylonitrile	100.0000	84.5100	15.5	91	-0.04
7 T	Isobutyl Alcohol	200.0000	149.1404	25.4	77	-0.04
8 T	1-Butanol	100.0000	69.6474	30.4	69	-0.04
9 T	Methyl methacrylate	100.0000	82.5978	17.4	87	-0.04
10 T	2-Nitropropane	100.0000	77.9409	22.1	81	-0.04
11 I	Chlorobenzene-d5	25.0000	25.0000	0.0	133	-0.05
12 I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	135	-0.05
13 T	Cyclohexanone	100.0000	135.7933	-35.8	187	-0.04

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

Page 1

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

MS Integration Params: RTEINT.P

Quant Time: May 10 19:58:15 2012

Quant Results File: 8260WT.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	689382	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.05	117	596078	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.06	152	334842	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	179037	25.0326	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	100.12%	
43) 1,2-Dichloroethane-d4	9.78	65	149062	27.0653	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	108.28%	
58) Toluene-d8	12.17	98	691630	25.1302	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	100.52%	
80) p-Bromofluorobenzene	15.54	95	266252	24.5805	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	98.32%	

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

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

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

MS Integration Params: RTEINT.P

Quant Time: May 10 19:58:15 2012

Quant Results File: 8260WT.RES

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

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

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

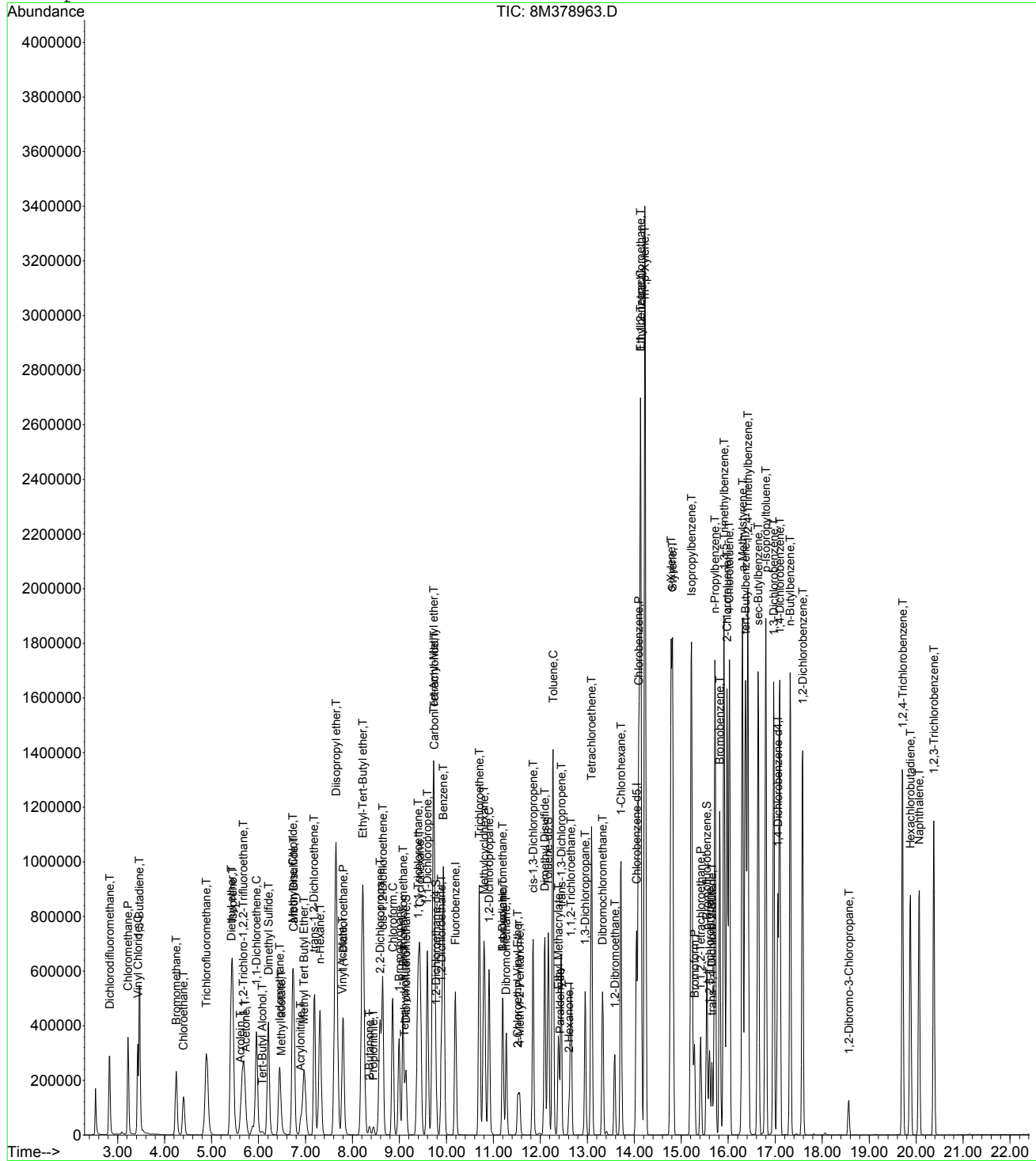
Page 2

Data File : C:\MSDchem\1\data\051012\8M378963.D
Acq On : 10 May 2012 19:35
Sample : WG397691-02 50ug/L CCV STD 8260
Misc : 1,1 STD51468
MS Integration Params: RTEINT.P
Quant Time: May 10 19:58 2012

Vial: 2
Operator: TMB
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



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

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

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

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

(#) = Out of Range

8M378963.D 8260WT.M Thu May 10 20:16:37 2012

Page 1

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

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

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

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

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

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

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

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

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

(#) = Out of Range

8M378963.D 8260WT.M Thu May 10 20:16:39 2012

Page 1

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

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

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

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

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 8M378963.D 8260WT.M Thu May 10 20:16:39 2012

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

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

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

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	173971	25.2677	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	101.08%	
43) 1,2-Dichloroethane-d4	9.78	65	146202	27.5756	ug/L	0.01
Spiked Amount	25.000	Range 80 - 120	Recovery	=	110.32%	
58) Toluene-d8	12.17	98	670677	24.6917	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	98.76%	
80) p-Bromofluorobenzene	15.54	95	265242	24.9399	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	99.76%	

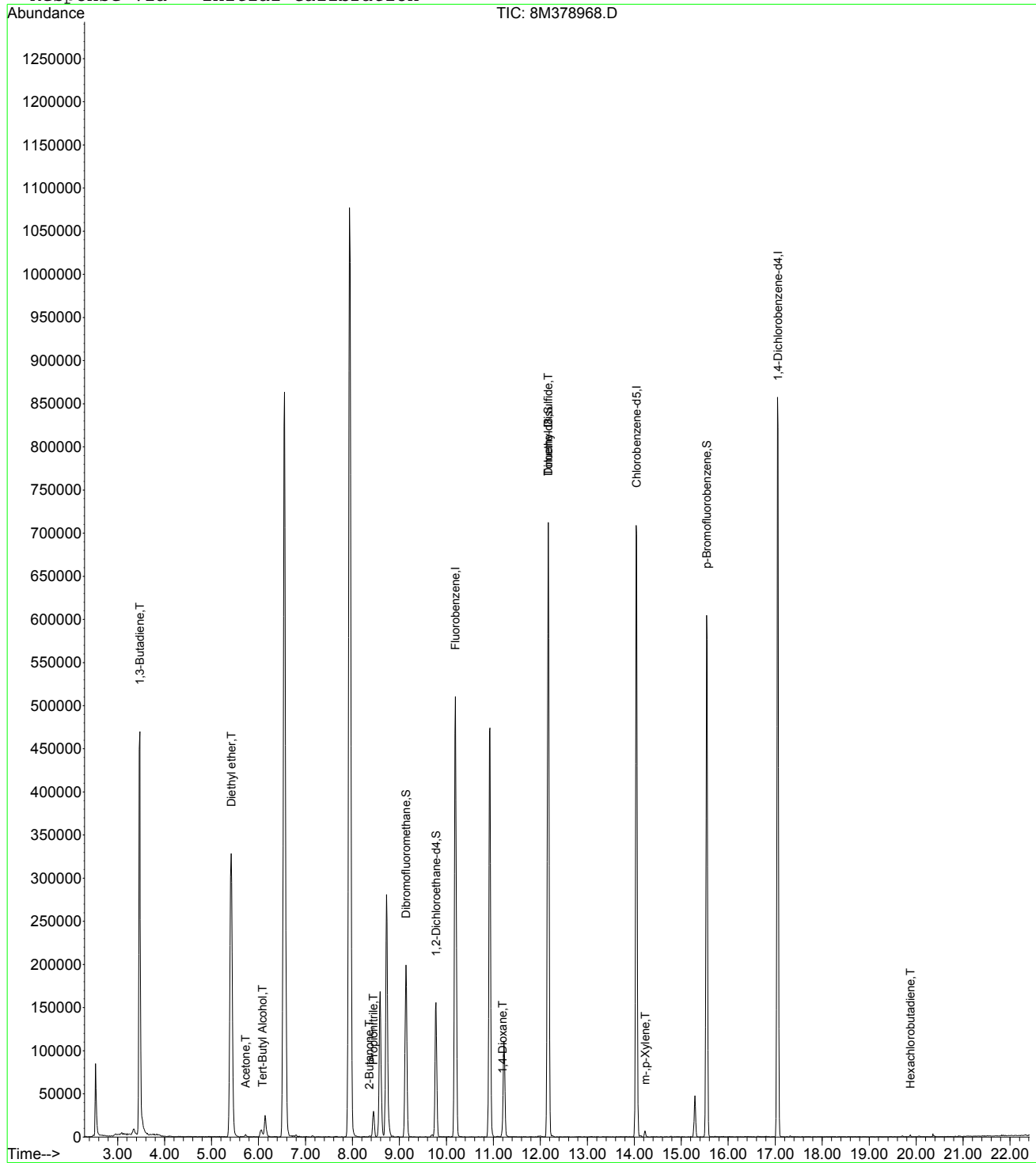
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) 1,3-Butadiene	3.47	54	256830	63.4355	ug/L	97
9) Diethyl ether	5.42	59	364536	97.8115	ug/L	98
13) Acetone	5.73	43	5364	5.4779	ug/L #	66
15) Tert-Butyl Alcohol	6.09	59	5901	21.9596	ug/L #	1
29) 2-Butanone	8.36	43	2112	1.4495	ug/L #	55
30) Propionitrile	8.45	54	39223	80.0994	ug/L	99
51) 1,4-Dioxane	11.20	88	5142	144.9673	ug/L	96
56) Dimethyl Disulfide	12.17	94	19077	1.8339	ug/L #	28
73) m-,p-Xylene	14.24	106	3780	0.2571	ug/L	93
90) 1,2,4-Trimethylbenzene	16.43	105	712	Below Cal	#	22
99) Hexachlorobutadiene	19.88	225	1274	0.2859	ug/L #	54

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

Page 1

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

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



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

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

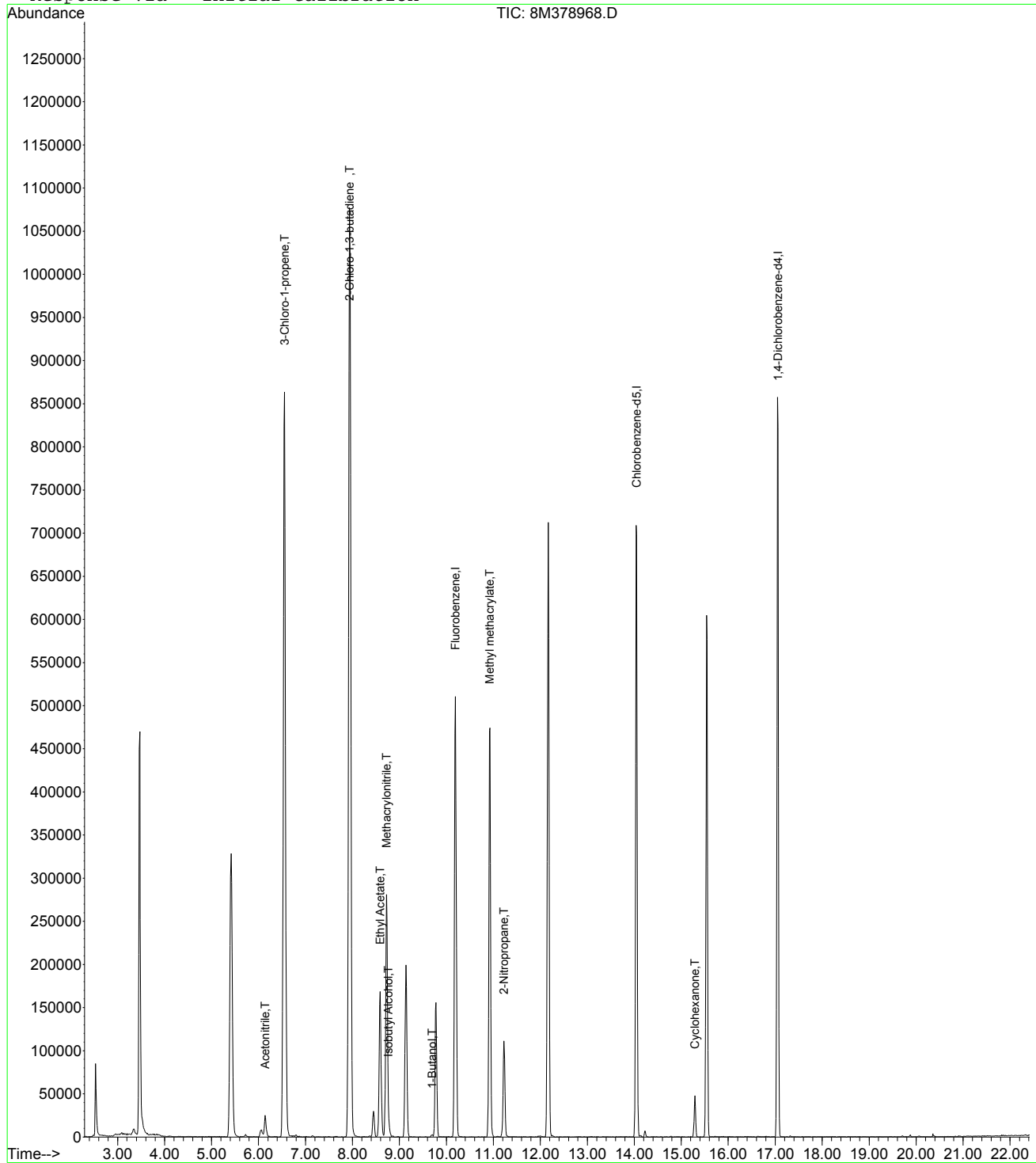
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	663643	25.00	ug/L	-0.04
11) Chlorobenzene-d5	14.05	117	588284	25.00	ug/L	-0.04
12) 1,4-Dichlorobenzene-d4	17.06	152	328764	25.00	ug/L	-0.04
Target Compounds						Qvalue
2) Acetonitrile	6.14	41	35008	71.1071	ug/L	95
3)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

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

Page 1

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

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



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

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

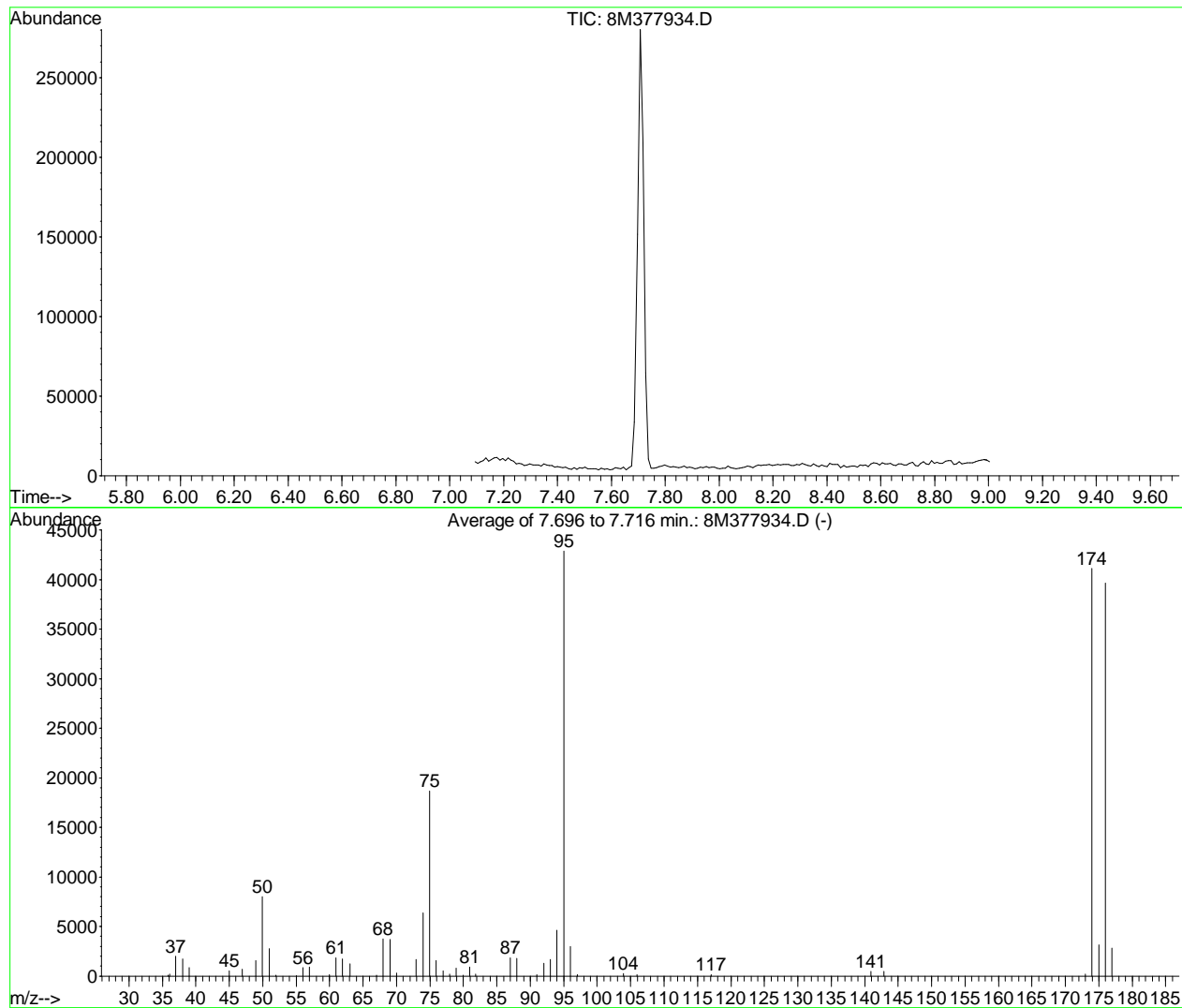
Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
 Max. RRF Dev : 75% Max. Rel. Area : 200%

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

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

2.1.1.5 Raw QC Data

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

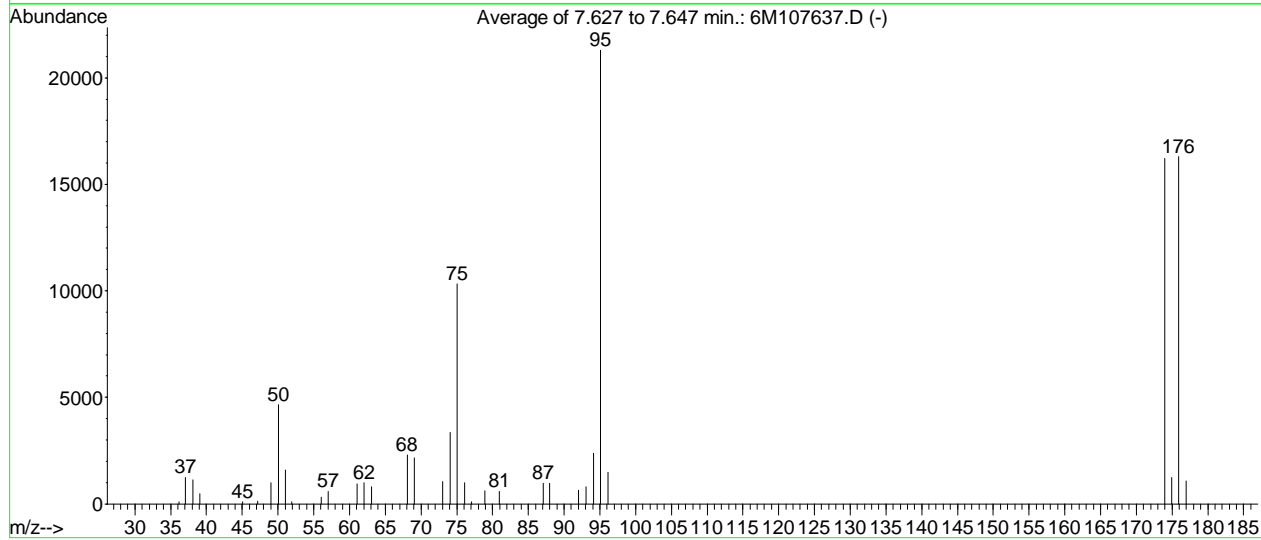
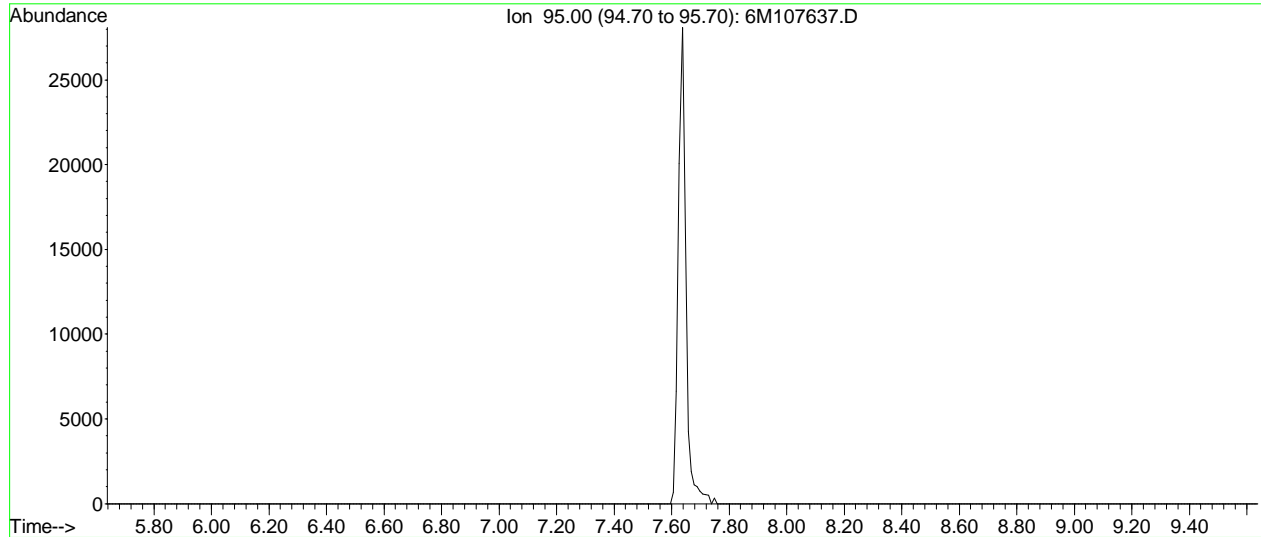


AutoFind: Scans 60, 61, 62; Background Corrected with Scan 55

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

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

Data File : C:\MSDCHEM\1\DATA\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

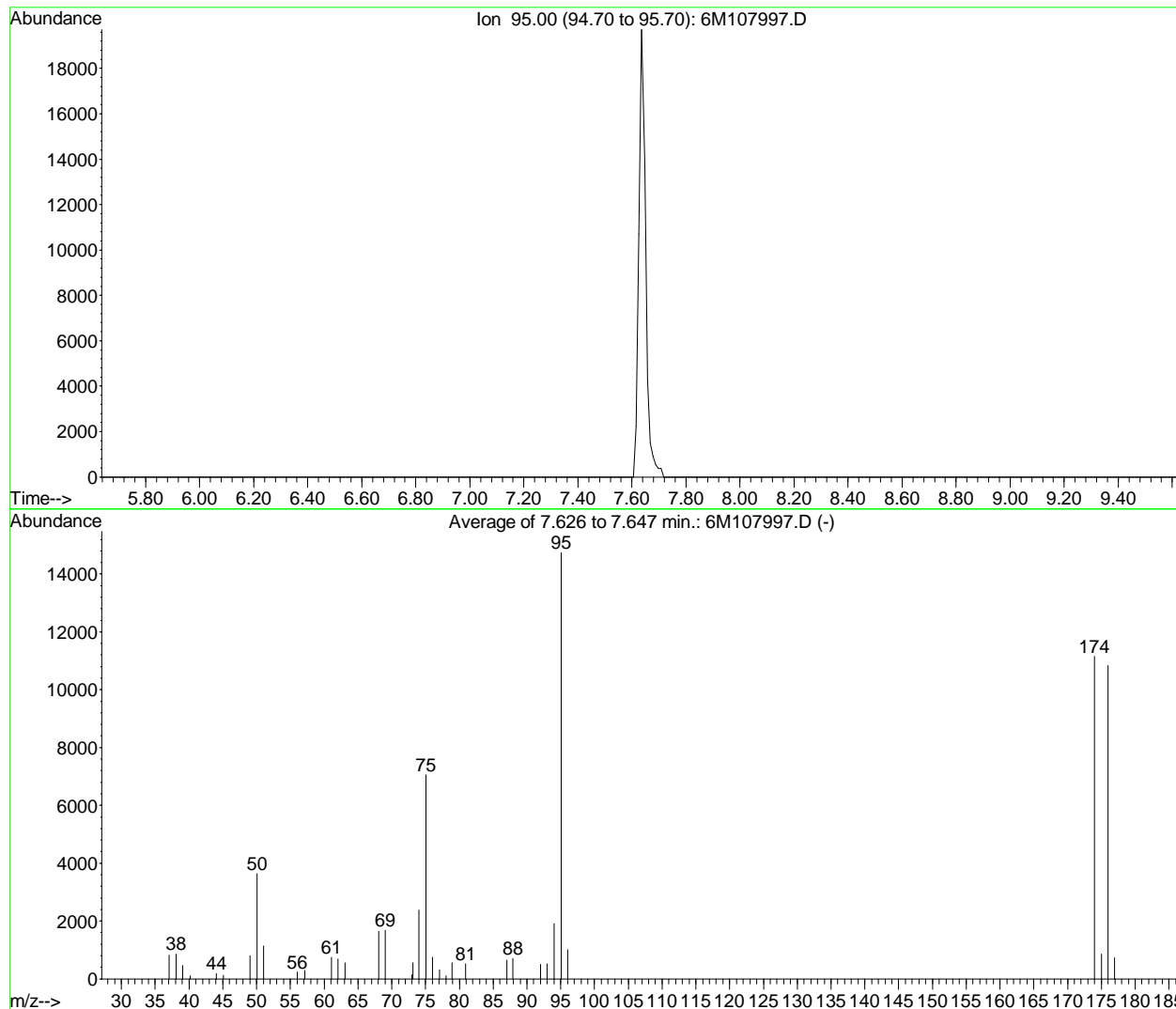


AutoFind: Scans 249, 250, 251; Background Corrected with Scan 244

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\050912\6M107997.D Vial: 1
 Acq On : 9 May 2012 8:44 Operator: ADC
 Sample : WG397458-01 50ng BFB STD 8260 Inst : HPMS6
 Misc : 1,1 STD51241 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6

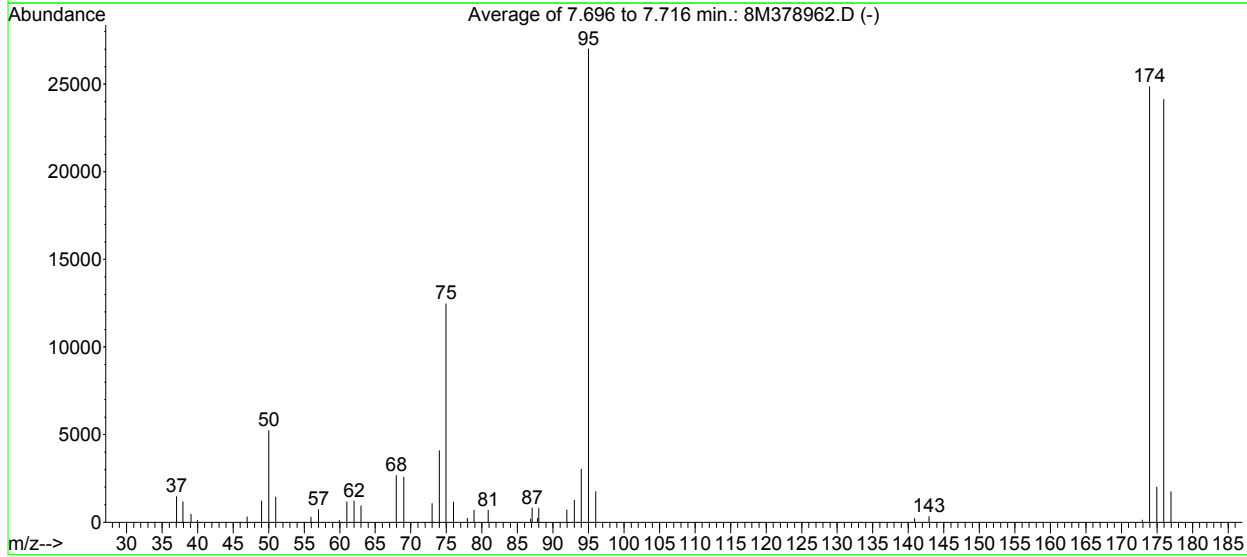
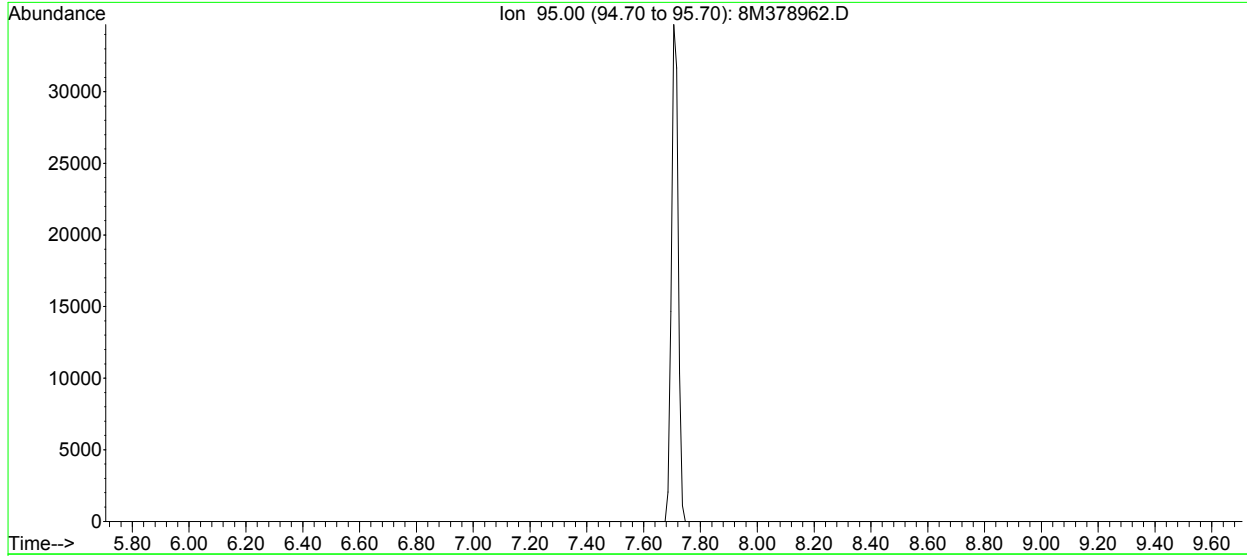


AutoFind: Scans 249, 250, 251; Background Corrected with Scan 245

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.6	3633	PASS
75	95	30	60	47.8	7053	PASS
95	95	100	100	100.0	14746	PASS
96	95	5	9	6.8	1009	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.6	11153	PASS
175	174	5	9	7.7	864	PASS
176	174	95	101	97.1	10825	PASS
177	176	5	9	6.7	729	PASS

6M107997.D 8260WTR.M Wed May 09 10:39:13 2012

Data File : C:\MSDCHEM\1\DATA\051012\8M378962.D Vial: 1
 Acq On : 10 May 2012 19:13 Operator: TMB
 Sample : WG397691-01 50ng BFB STD 8260 Inst : HPMS8
 Misc : 1,1 STD51241 Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : C:\MSDCHEM\1\METHODS\BFB.M (RTE Integrator)
 Title : SOP:OVL MSV01



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

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

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

Data File : C:\MSDCHEM\1\DATA\050912\6M108001.D Vial: 4
 Acq On : 9 May 2012 10:47 Operator: ADC
 Sample : WG397459-01 BLANK 05/09 8260 Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54:18 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	498280	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.04	117	347880	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	161273	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.35	111	155549	28.8308	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	115.32%	
43) 1,2-Dichloroethane-d4	10.08	65	153964	29.0775	ug/L	0.01
Spiked Amount	25.000	Range 80 - 120	Recovery	=	116.32%	
58) Toluene-d8	12.83	98	504902	26.7047	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	106.80%	
80) p-Bromofluorobenzene	16.81	95	170148	26.8863	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	107.56%	
Target Compounds						
3) Chloromethane	3.10	50	992	Below Cal	Qvalue #	75

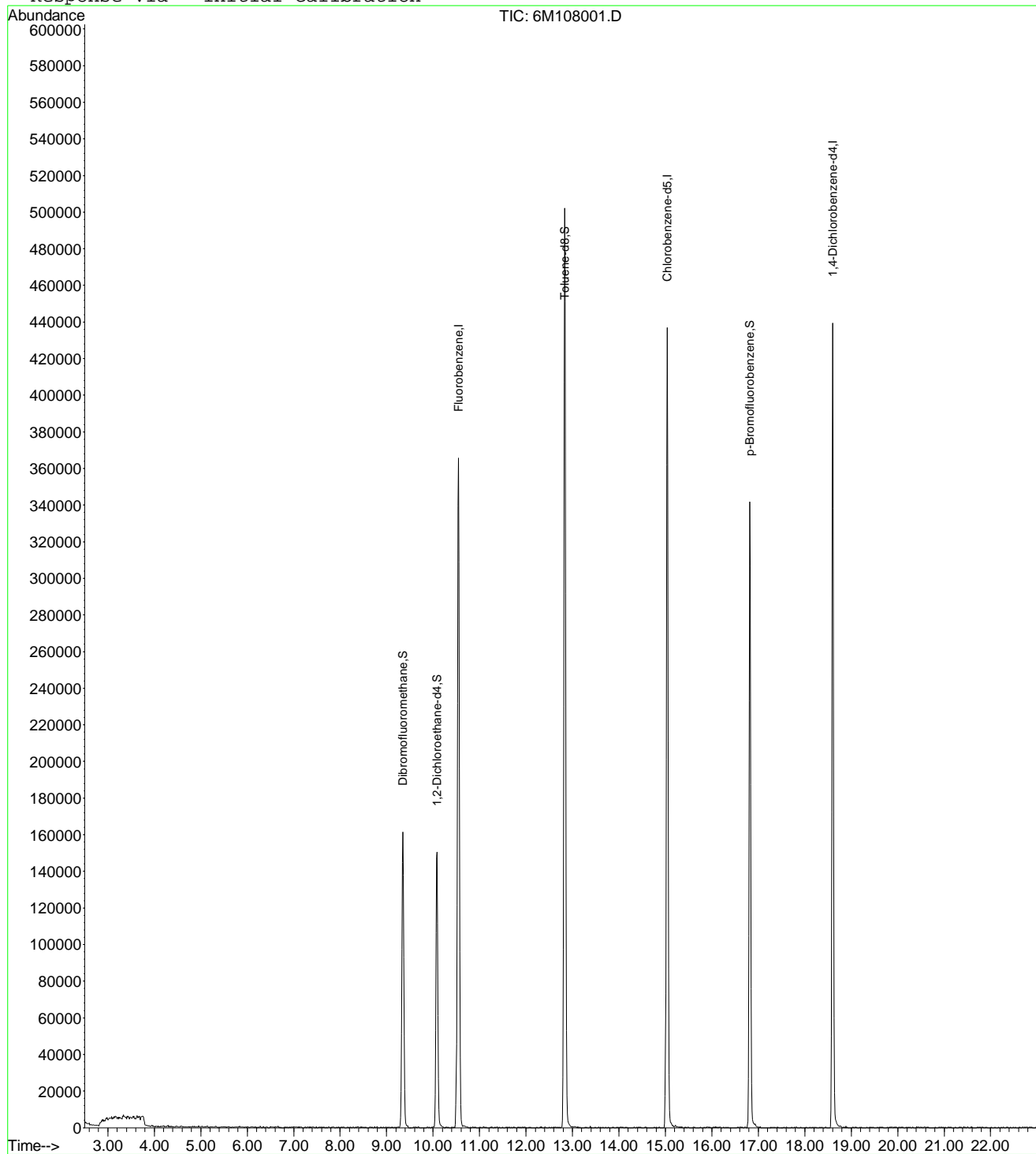
(#) = qualifier out of range (m) = manual integration
 6M108001.D 8260WTR.M Thu May 10 17:54:18 2012

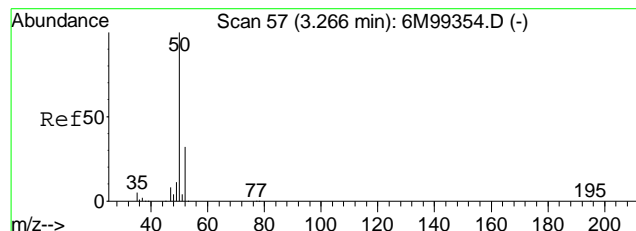
Data File : C:\MSDCHEM\1\DATA\050912\6M108001.D
 Acq On : 9 May 2012 10:47
 Sample : WG397459-01 BLANK 05/09 8260
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 10 17:54 2012

Vial: 4
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

Quant Results File: 8260WTR.RES

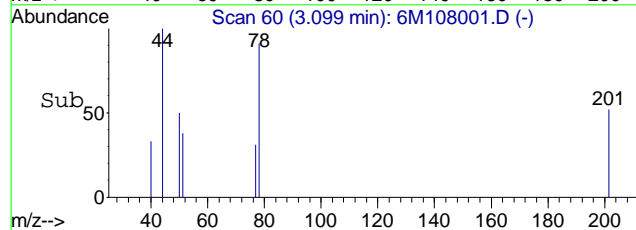
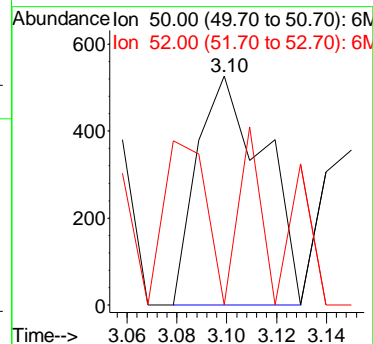
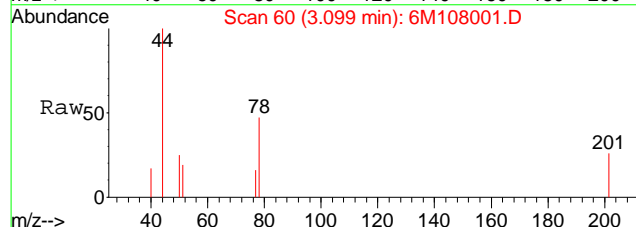
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
 Last Update : Wed Apr 25 15:22:20 2012
 Response via : Initial Calibration





#3
 Chloromethane
 Concen: Below Cal
 RT: 3.10 min Scan# 60
 Delta R.T. -0.01 min
 Lab File: 6M108001.D
 Acq: 9 May 2012 10:47

Tgt Ion: 50 Resp: 992
 Ion Ratio Lower Upper
 50 100
 52 45.4 18.8 44.0#



Data File : C:\MSDCHEM\1\DATA\050912\6M108001.D Vial: 4
 Acq On : 9 May 2012 10:47 Operator: ADC
 Sample : WG397459-01 BLANK 05/09 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

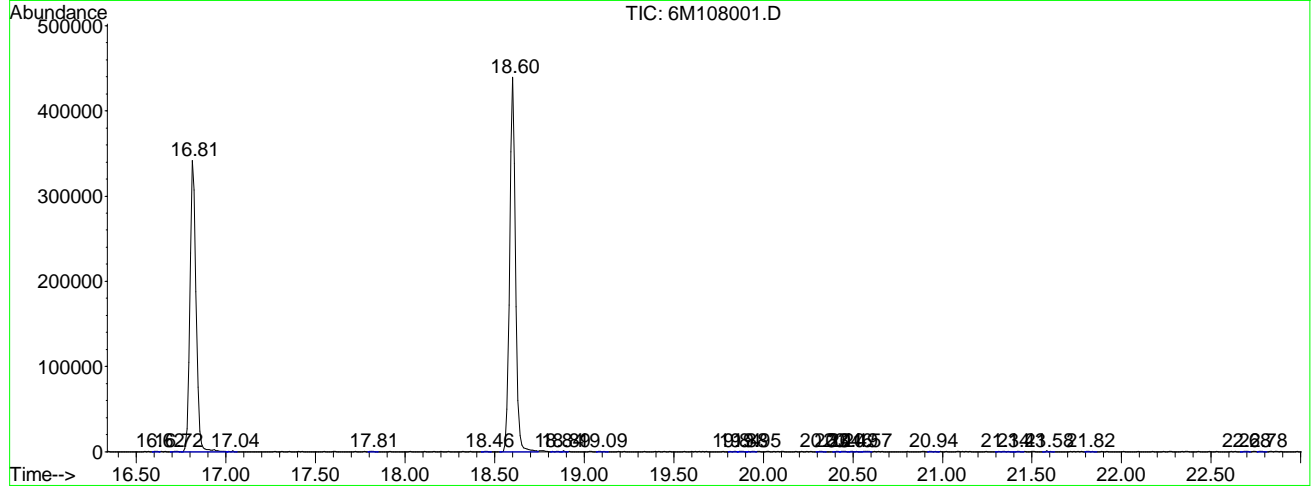
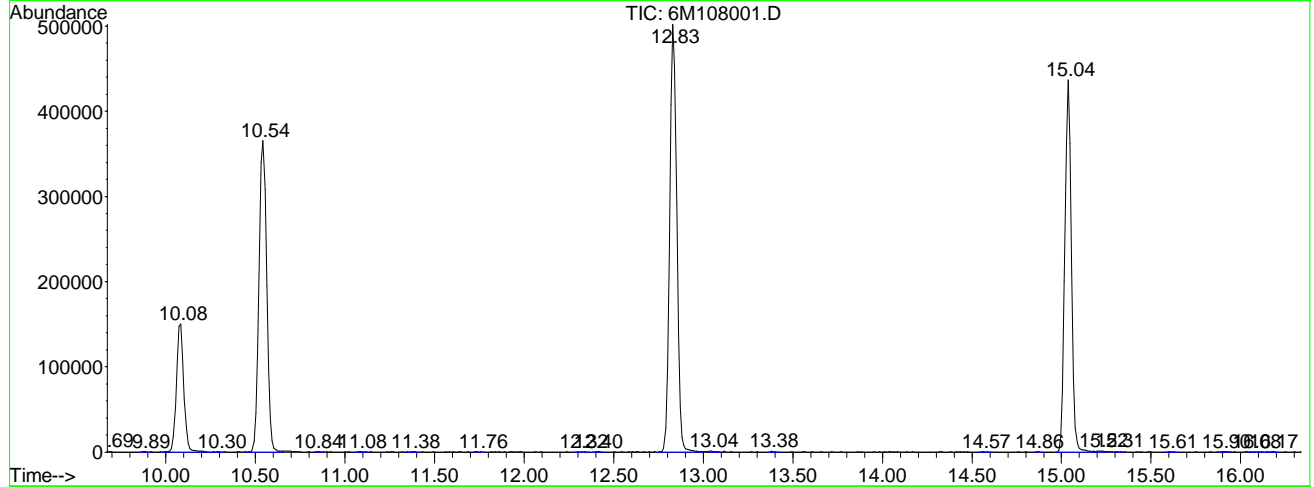
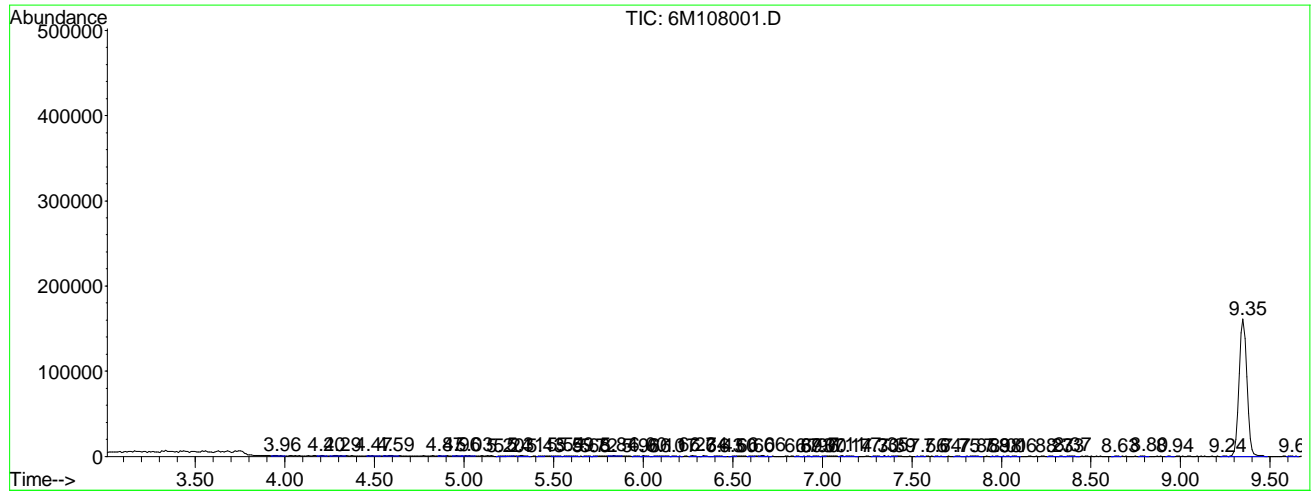
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.957	141	144	148	rVB	688	1159	0.08%	0.018%
2	4.202	166	168	171	rVV	716	791	0.06%	0.012%
3	4.294	173	177	181	rVB	840	1248	0.09%	0.019%
4	4.467	193	194	200	rBV	495	1269	0.09%	0.020%
5	4.590	202	206	210	rVB	593	1832	0.13%	0.029%
6	4.865	232	233	236	rBV	478	486	0.04%	0.008%
7	4.957	240	242	245	rVV	739	554	0.04%	0.009%
8	5.029	245	249	252	rVB	467	684	0.05%	0.011%
9	5.202	264	266	269	rBV	550	1248	0.09%	0.019%
10	5.243	269	270	273	rVV	649	1031	0.07%	0.016%
11	5.315	275	277	282	rVB	787	2133	0.15%	0.033%
12	5.427	286	288	290	rBV	449	934	0.07%	0.015%
13	5.539	294	299	300	rVB	692	1556	0.11%	0.024%
14	5.590	301	304	309	rVB	699	2161	0.16%	0.034%
15	5.682	311	313	316	rBB	499	1030	0.07%	0.016%
16	5.723	316	317	319	rBV	470	726	0.05%	0.011%
17	5.836	325	328	332	rVB	523	770	0.06%	0.012%
18	5.958	338	340	343	rBB	447	1025	0.07%	0.016%
19	5.999	343	344	348	rBB	710	1209	0.09%	0.019%
20	6.101	349	354	359	rBB	555	2034	0.15%	0.032%
21	6.173	359	361	365	rBB	530	1075	0.08%	0.017%
22	6.275	369	371	374	rBB	945	1183	0.09%	0.018%
23	6.336	375	377	381	rBB	748	1136	0.08%	0.018%
24	6.428	382	386	389	rBB	417	1128	0.08%	0.018%
25	6.499	391	393	395	rBV	651	884	0.06%	0.014%
26	6.601	401	403	405	rBV	674	1035	0.08%	0.016%
27	6.663	407	409	414	rVB	814	1394	0.10%	0.022%
28	6.867	427	429	431	rBB	504	522	0.04%	0.008%
29	6.928	431	435	436	rBB	378	674	0.05%	0.011%
30	6.959	436	438	441	rBB	419	847	0.06%	0.013%
31	7.000	441	442	444	rBV	610	794	0.06%	0.012%
32	7.112	451	453	454	rBB	725	646	0.05%	0.010%
33	7.143	455	456	461	rVB	439	941	0.07%	0.015%
34	7.296	469	471	474	rBB	436	864	0.06%	0.013%
35	7.347	475	476	479	rBB	747	644	0.05%	0.010%
36	7.388	479	480	483	rBV	500	899	0.07%	0.014%
37	7.561	493	497	498	rBB	380	665	0.05%	0.010%
38	7.643	503	505	509	rBB	420	707	0.05%	0.011%
39	7.745	514	515	519	rBB	410	693	0.05%	0.011%
40	7.847	520	525	529	rBB	431	1326	0.10%	0.021%
41	7.980	534	538	540	rBB	337	600	0.04%	0.009%
42	8.011	540	541	545	rBB	349	631	0.05%	0.010%

43	8.062	545	546	550	rBB	354	646	0.05%	0.010%
44	8.266	565	566	570	rBB	362	625	0.05%	0.010%
45	8.327	571	572	574	rBB	426	497	0.04%	0.008%
46	8.368	575	576	582	rBB	688	1257	0.09%	0.020%
47	8.633	600	602	605	rBB	426	693	0.05%	0.011%
48	8.797	615	618	620	rBB	695	809	0.06%	0.013%
49	8.940	630	632	634	rBB	446	485	0.04%	0.008%
50	9.236	660	661	664	rBB	387	654	0.05%	0.010%
51	9.348	664	672	685	rBB	161534	490646	35.65%	7.661%
52	9.624	696	699	702	rBB	360	795	0.06%	0.012%
53	9.685	703	705	708	rBB	696	816	0.06%	0.013%
54	9.890	721	725	727	rBB	363	651	0.05%	0.010%
55	10.084	734	744	760	rBB	150468	432471	31.42%	6.753%
56	10.298	761	765	767	rBB	373	660	0.05%	0.010%
57	10.543	780	789	800	rBV	365836	1091655	79.32%	17.045%
58	10.839	817	818	821	rBB	387	645	0.05%	0.010%
59	11.084	839	842	847	rBB	527	971	0.07%	0.015%
60	11.380	867	871	874	rBB	444	859	0.06%	0.013%
61	11.758	904	908	910	rBB	323	579	0.04%	0.009%
62	12.320	959	963	967	rBB	651	812	0.06%	0.013%
63	12.402	969	971	975	rBB	315	563	0.04%	0.009%
64	12.830	1005	1013	1029	rBV	502263	1376224	100.00%	21.488%
65	13.045	1032	1034	1039	rVB	730	1966	0.14%	0.031%
66	13.382	1065	1067	1071	rBB	815	686	0.05%	0.011%
67	14.566	1180	1183	1187	rBB	402	709	0.05%	0.011%
68	14.862	1210	1212	1215	rBB	404	490	0.04%	0.008%
69	15.036	1222	1229	1244	rBV	437019	1109798	80.64%	17.328%
70	15.220	1244	1247	1250	rVV	1349	2784	0.20%	0.043%
71	15.312	1254	1256	1259	rBB	695	829	0.06%	0.013%
72	15.608	1282	1285	1289	rBB	357	603	0.04%	0.009%
73	15.904	1312	1314	1317	rBB	363	810	0.06%	0.013%
74	16.078	1328	1331	1337	rBB	641	978	0.07%	0.015%
75	16.170	1337	1340	1344	rBB	395	918	0.07%	0.014%
76	16.619	1381	1384	1385	rBB	321	577	0.04%	0.009%
77	16.721	1391	1394	1396	rBB	349	613	0.04%	0.010%
78	16.813	1397	1403	1422	rBB	341777	818705	59.49%	12.783%
79	17.038	1422	1425	1427	rBB	704	662	0.05%	0.010%
80	17.814	1499	1501	1504	rBB	381	625	0.05%	0.010%
81	18.457	1561	1564	1566	rBB	408	488	0.04%	0.008%
82	18.600	1571	1578	1592	rBV	439447	1003751	72.94%	15.673%
83	18.845	1599	1602	1604	rBB	332	602	0.04%	0.009%
84	18.886	1605	1606	1608	rBB	988	605	0.04%	0.009%
85	19.090	1624	1626	1630	rBB	359	616	0.04%	0.010%
86	19.835	1696	1699	1701	rBB	331	581	0.04%	0.009%
87	19.876	1701	1703	1706	rBB	354	595	0.04%	0.009%
88	19.948	1706	1710	1711	rBB	427	653	0.05%	0.010%
89	20.326	1744	1747	1749	rBB	442	480	0.03%	0.007%
90	20.407	1753	1755	1757	rBB	674	598	0.04%	0.009%
91	20.458	1757	1760	1761	rBB	371	644	0.05%	0.010%
92	20.489	1762	1763	1768	rBB	339	589	0.04%	0.009%
93	20.571	1769	1771	1774	rBB	370	786	0.06%	0.012%
94	20.938	1805	1807	1811	rBB	324	578	0.04%	0.009%
95	21.337	1842	1846	1851	rBB	368	859	0.06%	0.013%
96	21.428	1852	1855	1857	rBB	700	627	0.05%	0.010%
97	21.582	1868	1870	1874	rBB	711	665	0.05%	0.010%
98	21.816	1891	1893	1897	rBB	473	703	0.05%	0.011%
99	22.684	1976	1978	1981	rBB	317	569	0.04%	0.009%
100	22.776	1985	1987	1990	rBB	330	597	0.04%	0.009%

Sum of corrected areas: 6404520

File : C:\MSDCHEM\1\DATA\050912\6M108001.D
 Operator : ADC
 Acquired : 9 May 2012 10:47 using AcqMethod 8260WTR
 Instrument : HPMS6
 Sample Name: WG397459-01 BLANK 05/09 8260
 Misc Info : 1,1
 Vial Number: 4
 Quant File :8260WTR.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: ADC Date Acquired: 9 May 2012 10:47
Data File: C:\MSDCHEM\1\DATA\050912\6M108001.D
Name: WG397459-01 BLANK 05/09 8260
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

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

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

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

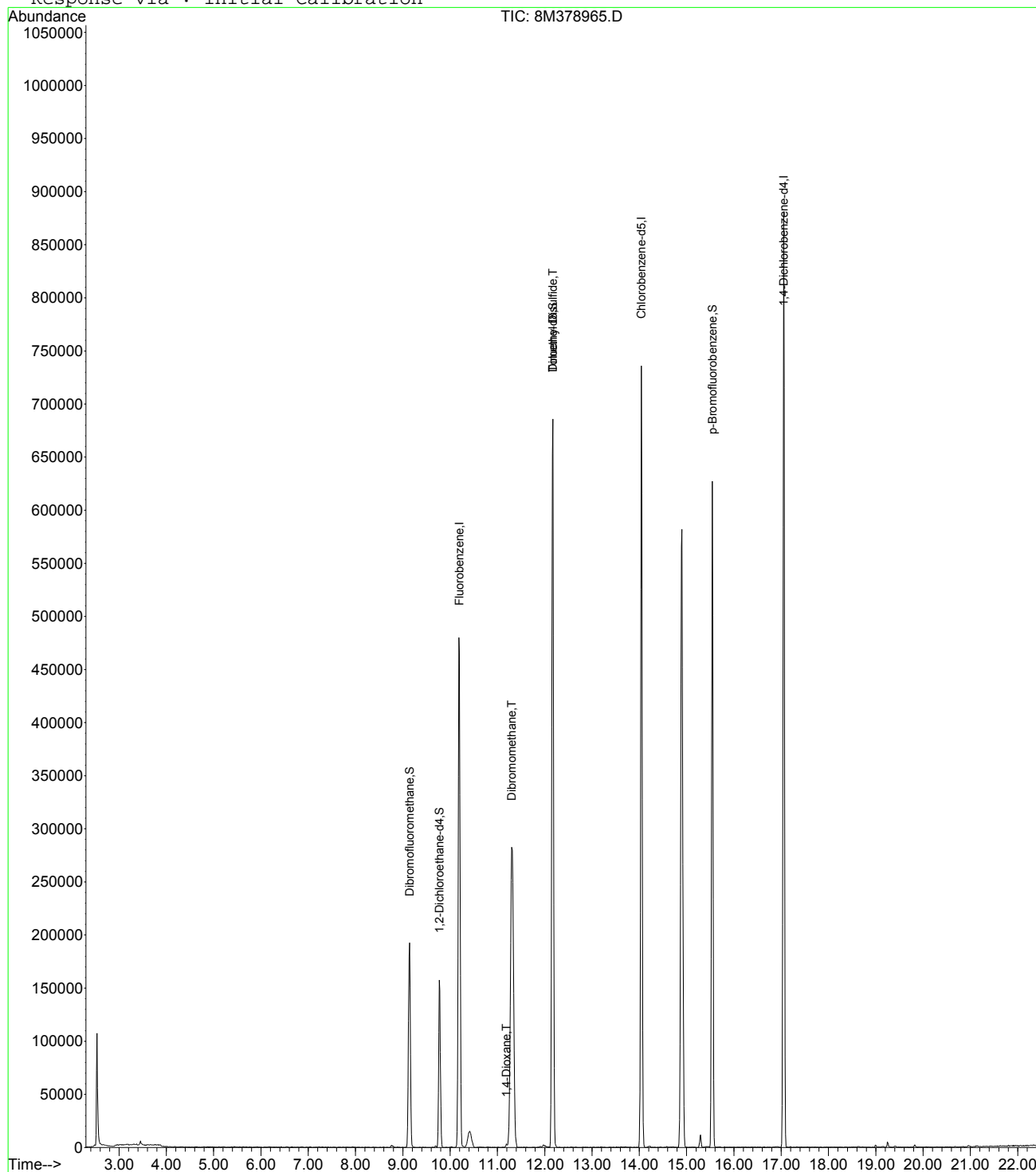
 (#) = qualifier out of range (m) = manual integration
 8M378965.D 8260WT.M Tue May 15 15:03:54 2012

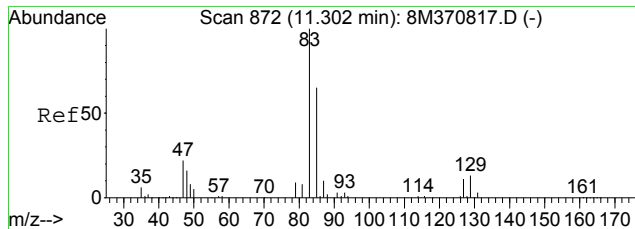
Data File : C:\MSDCHEM\1\DATA\051012\8M378965.D
 Acq On : 10 May 2012 20:40
 Sample : WG397692-01 VBLK0510 BLANK STD 8260
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 15 15:03 2012

Vial: 4
 Operator: TMB
 Inst : HPMS8
 Multiplr: 1.00

Quant Results File: 8260WT.RES

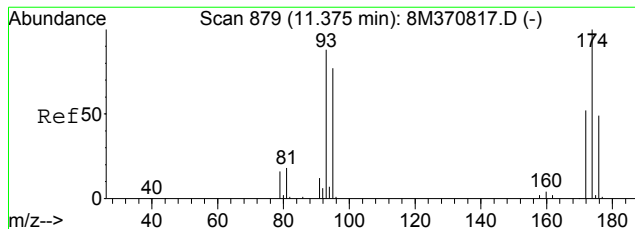
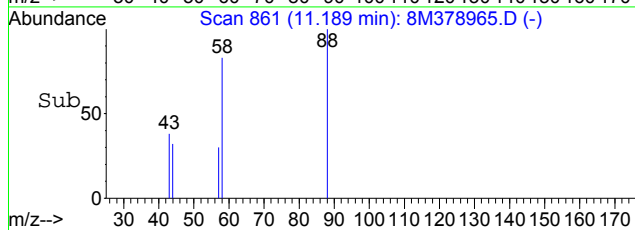
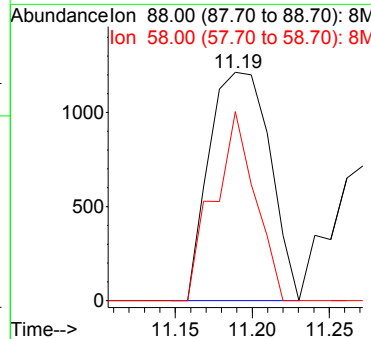
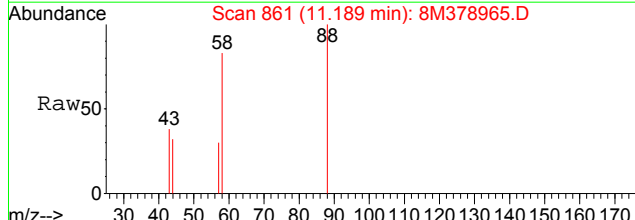
Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
 Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
 Last Update : Wed Mar 28 08:18:24 2012
 Response via : Initial Calibration





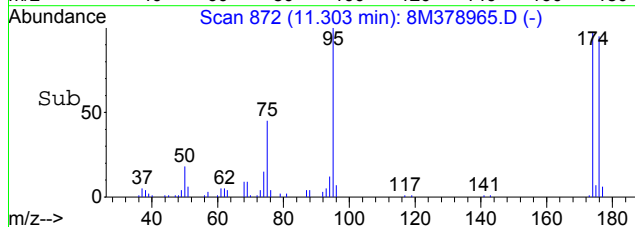
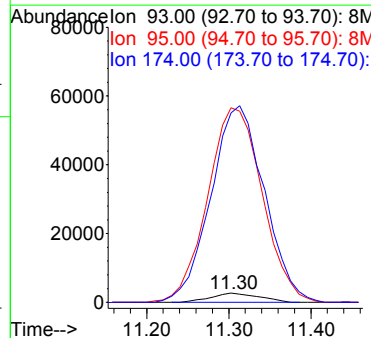
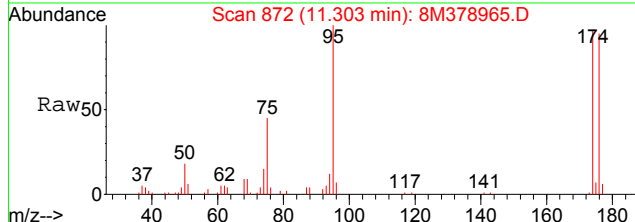
#51
 1,4-Dioxane
 Concen: 97.11 ug/L
 RT: 11.19 min Scan# 861
 Delta R.T. 0.00 min
 Lab File: 8M378965.D
 Acq: 10 May 2012 20:40

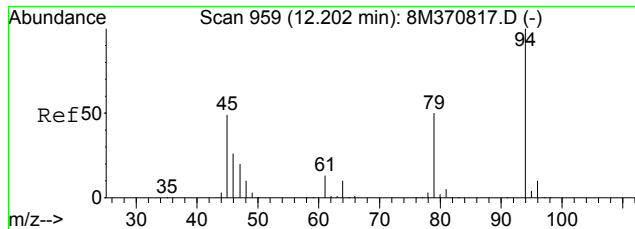
Tgt Ion	Resp	Lower	Upper
88	3339		
88	100		
58	56.1	35.0	81.6



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

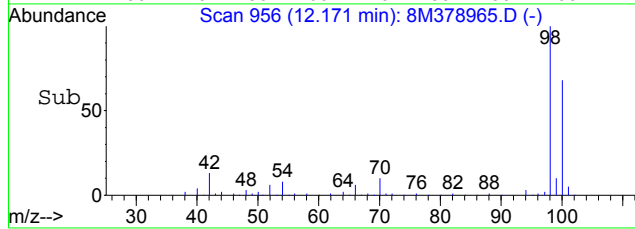
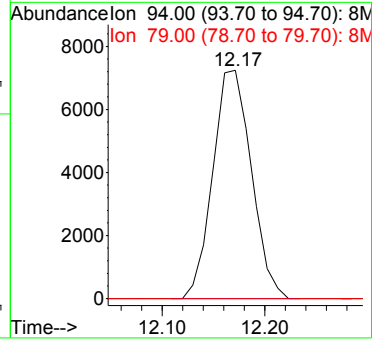
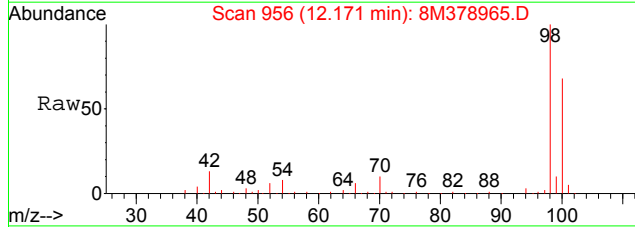
Tgt Ion	Resp	Lower	Upper
93	10950		
93	100		
95	2388.3	49.7	115.9#
174	2365.7	70.7	164.9#





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

Tgt Ion: 94 Resp: 18957
 Ion Ratio Lower Upper
 94 100
 79 0.0 29.2 68.0#



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

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

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

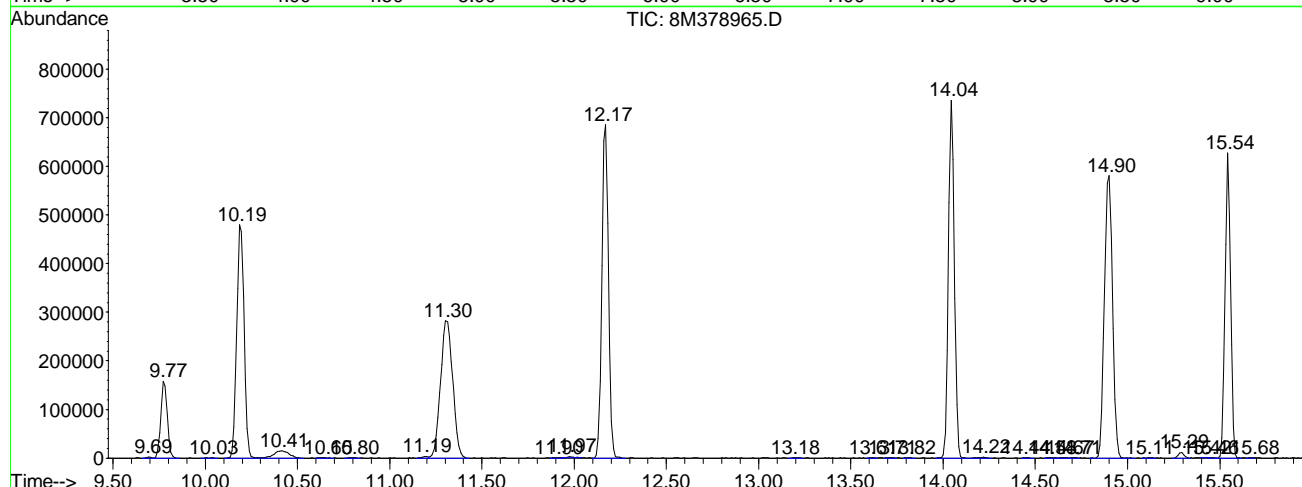
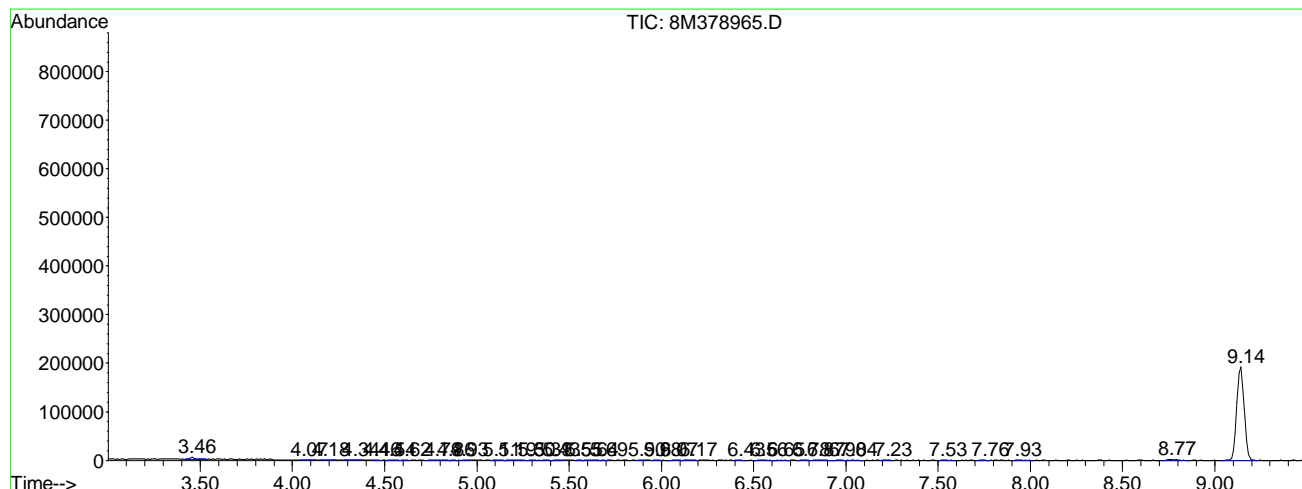
Signal : TIC

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

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

Sum of corrected areas: 12005765

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



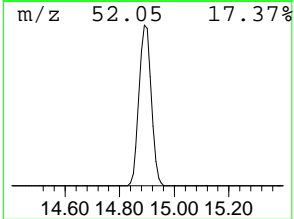
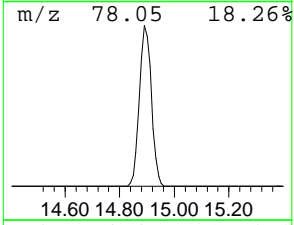
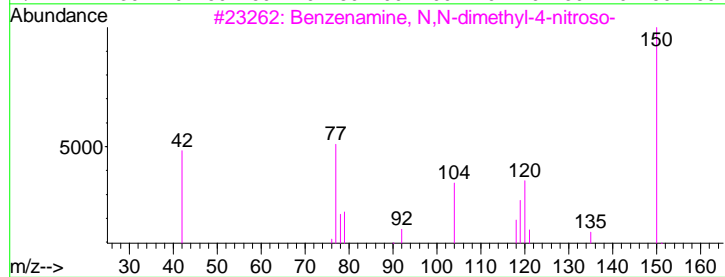
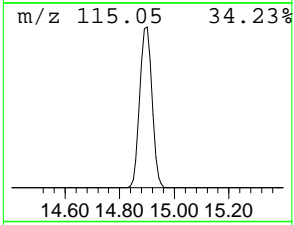
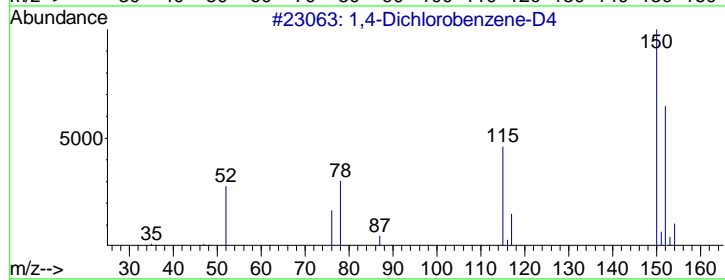
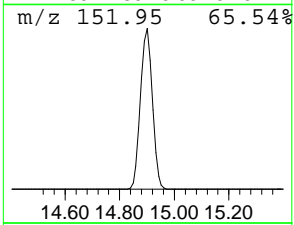
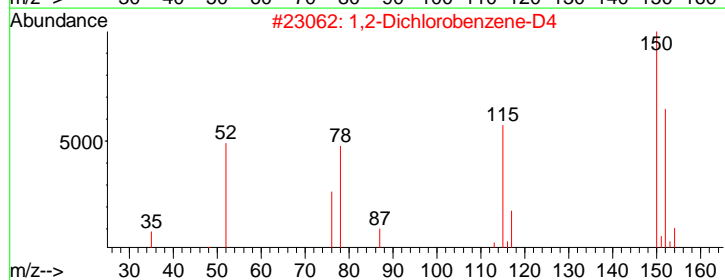
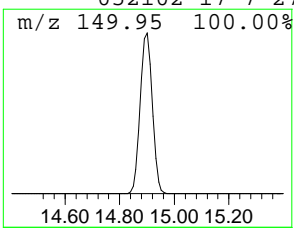
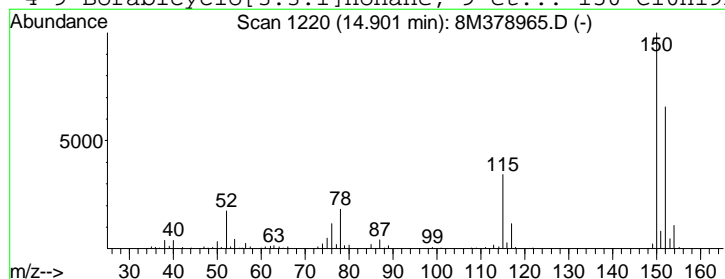
Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378965.D Vial: 4
Acq On : 10 May 2012 20:40 Operator: TMB
Sample : WG397692-01 VBLK0510 BLANK STD 8260 Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

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

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



Tentatively Identified Compound (LSC) summary

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

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

Data File : C:\MSDCHEM\1\data\050912\6M108002.D

Vial: 5

Acq On : 9 May 2012 11:19

Operator: ADC

Sample : WG397459-02 20ug/L LCS 8260

Inst : HPMS6

Misc : 1,1 STD51372

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 09 11:42:56 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	518310	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	356907	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	180012	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.35	111	157919	28.1389	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	112.56%	
43) 1,2-Dichloroethane-d4	10.08	65	157408	28.5791	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	114.32%	
58) Toluene-d8	12.83	98	519713	26.7928	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	107.16%	
80) p-Bromofluorobenzene	16.81	95	183441	25.9694	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	103.88%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.73	85	191546	28.1741	ug/L	100
3) Chloromethane	3.12	50	217019	23.0265	ug/L	99
4) Vinyl Chloride	3.31	62	170442	19.8217	ug/L	100
5) 1,3-Butadiene	3.34	54	101557	19.8912	ug/L	97
6) Bromomethane	4.11	94	61584	12.6392	ug/L	97
7) Chloroethane	4.26	64	104070	21.3921	ug/L	99
8) Trichlorofluoromethane	4.73	101	221826	20.0643	ug/L	100
9) Diethyl ether	5.27	59	398977	106.2090	ug/L	97
10) Isoprene	5.30	67	177195	18.8485	ug/L	98
11) Acrolein	5.51	56	34496	128.1555	ug/L	96
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	116563	19.7117	ug/L	97
13) Acetone	5.61	43	23922	24.3585	ug/L	100
14) 1,1-Dichloroethene	5.83	61	200699	21.1090	ug/L	98
15) Tert-Butyl Alcohol	5.96	59	57641	224.8181	ug/L	96
16) Dimethyl Sulfide	6.11	62	160343	21.2429	ug/L	98
17) Iodomethane	6.36	142	66544	12.2411	ug/L	100
18) Methyl acetate	6.41	43	73903	19.0678	ug/L	98
19) Methylene Chloride	6.67	84	124490	21.1390	ug/L	94
20) Carbon Disulfide	6.69	76	378233	21.9572	ug/L	100
21) Acrylonitrile	6.88	53	31257	23.6220	ug/L	97
22) Methyl Tert Butyl Ether	6.91	73	251118	20.2402	ug/L	99
23) trans-1,2-Dichloroethene	7.16	96	119848	20.8389	ug/L	99
24) n-Hexane	7.26	57	143023	21.6781	ug/L	96
25) Diisopropyl ether	7.65	45	2332002	111.3101	ug/L	99
26) Vinyl Acetate	7.83	43	168966	55.7101	ug/L	98
27) 1,1-Dichloroethane	7.84	63	245570	20.8993	ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	1726616	101.4105	ug/L	99
29) 2-Butanone	8.48	43	34022	24.7745	ug/L	97
30) Propionitrile	8.60	54	47491	120.9107	ug/L	98
31) 2,2-Dichloropropane	8.71	77	182761	20.5740	ug/L	95
32) cis-1,2-Dichloroethene	8.78	96	130232	21.6716	ug/L	99
33) Chloroform	9.02	83	224673	21.1559	ug/L	99
34) 1-Bromopropane	9.17	122	23140	21.4701	ug/L	98
35) Bromochloromethane	9.27	130	72848	22.7859	ug/L	100
36) Tetrahydrofuran	9.30	42	107172	118.6741	ug/L	93
38) 1,1,1-Trichloroethane	9.62	97	193185	20.8243	ug/L	98
39) Cyclohexane	9.64	56	201290	21.6592	ug/L	98
40) 1,1-Dichloropropene	9.85	75	166750	21.7888	ug/L	98
41) Tert-Amyl-Methyl ether	9.99	73	1326474	104.6403	ug/L	98
42) Carbon Tetrachloride	10.00	117	179262	21.8312	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M108002.D 8260WTR.M Wed May 09 11:42:57 2012

Page 1

Data File : C:\MSDCHEM\1\data\050912\6M108002.D Vial: 5
 Acq On : 9 May 2012 11:19 Operator: ADC
 Sample : WG397459-02 20ug/L LCS 8260 Inst : HPMS6
 Misc : 1,1 STD51372 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 09 11:42:56 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	156724	21.4840	ug/L	98
46) Benzene	10.24	78	482885	21.0888	ug/L	100
47) Trichloroethene	11.12	130	121532	21.1609	ug/L	98
48) Methylcyclohexane	11.21	83	148675	22.4470	ug/L	98
49) 1,2-Dichloropropane	11.37	63	129595	21.9218	ug/L	99
50) 1,4-Dioxane	11.71	88	4224	217.3155	ug/L	98
51) Bromodichloromethane	11.71	83	160028	22.5351	ug/L	100
52) Dibromomethane	11.80	93	61188	21.6310	ug/L	98
53) 2-Chloroethyl Vinyl Ether	12.10	63	50229	19.9072	ug/L	96
54) 4-Methyl-2-Pentanone	12.14	58	23203	22.5093	ug/L	93
55) cis-1,3-Dichloropropene	12.47	75	170307	20.1254	ug/L	100
56) Dimethyl Disulfide	12.75	79	84702	17.5076	ug/L	99
59) Toluene	12.95	91	467217	19.9204	ug/L	100
60) Ethyl Methacrylate	13.12	69	91592	21.7173	ug/L	98
61) Paraldehyde	13.17	89	4656	73.9340	ug/L #	57
62) trans-1,3-Dichloropropene	13.18	75	132324	17.5143	ug/L	99
63) 1,1,2-Trichloroethane	13.42	97	77077	20.4606	ug/L	99
64) 2-Hexanone	13.39	43	34990	21.3167	ug/L	96
65) 1,3-Dichloropropane	13.78	76	141304	21.9952	ug/L	96
66) Tetrachloroethene	13.90	166	113213	20.6683	ug/L	99
67) Dibromochloromethane	14.20	129	98312	19.5081	ug/L	98
68) 1,2-Dibromoethane	14.49	107	74536	20.2428	ug/L	99
69) 1-Chlorohexane	14.66	91	137008	22.0596	ug/L	96
70) Chlorobenzene	15.09	112	293218	19.6755	ug/L	99
71) 1,1,1,2-Tetrachloroethane	15.15	131	108185	20.1600	ug/L	96
72) Ethylbenzene	15.15	106	156628	20.3758	ug/L	99
73) m-,p-Xylene	15.26	106	374778	39.8828	ug/L	98
74) o-Xylene	15.91	106	175279	19.5888	ug/L	100
75) Styrene	15.95	104	298889	18.6731	ug/L	99
76) Bromoform	16.50	173	54972	21.6622	ug/L	98
77) Isopropylbenzene	16.42	105	393757	17.6810	ug/L	99
79) 1,1,2,2-Tetrachloroethane	16.68	83	83071	21.8227	ug/L	97
81) 1,2,3-Trichloropropane	16.90	110	23307	23.7469	ug/L	96
82) trans-1,4-Dichloro-2-Butene	16.98	53	24237	20.0730	ug/L	90
83) n-Propylbenzene	17.02	91	531447	20.0919	ug/L	99
84) Bromobenzene	17.14	156	115204	19.5099	ug/L	100
85) 1,3,5-Trimethylbenzene	17.25	105	359063	19.8979	ug/L	99
86) 2-Chlorotoluene	17.31	91	322382	18.3561	ug/L	96
87) 4-Chlorotoluene	17.37	91	334007	18.9176	ug/L	97
88) a-Methylstyrene	17.72	118	193129	20.8693	ug/L	98
89) tert-Butylbenzene	17.79	134	68391	18.7658	ug/L	99
90) 1,2,4-Trimethylbenzene	17.85	105	385862	20.2251	ug/L	100
91) sec-Butylbenzene	18.11	105	401918	19.5940	ug/L	99
92) p-Isopropyltoluene	18.31	119	336804	20.4413	ug/L	100
93) 1,3-Dichlorobenzene	18.49	146	203565	19.5800	ug/L	100
94) 1,4-Dichlorobenzene	18.65	146	207560	19.0360	ug/L	99
95) n-Butylbenzene	18.92	91	305487	21.2836	ug/L	98
96) 1,2-Dichlorobenzene	19.22	146	183435	19.5217	ug/L	99
97) 1,2-Dibromo-3-Chloropropane	20.39	75	11961	20.4421	ug/L	92
98) 1,2,4-Trichlorobenzene	21.75	180	108219	21.1592	ug/L	98
99) Hexachlorobutadiene	21.95	225	40492	19.7934	ug/L	98
100) Naphthalene	22.17	128	200967	20.6360	ug/L	100
101) 1,2,3-Trichlorobenzene	22.54	180	95167	21.4085	ug/L	97

(#) = qualifier out of range (m) = manual integration
 6M108002.D 8260WTR.M Wed May 09 11:42:57 2012

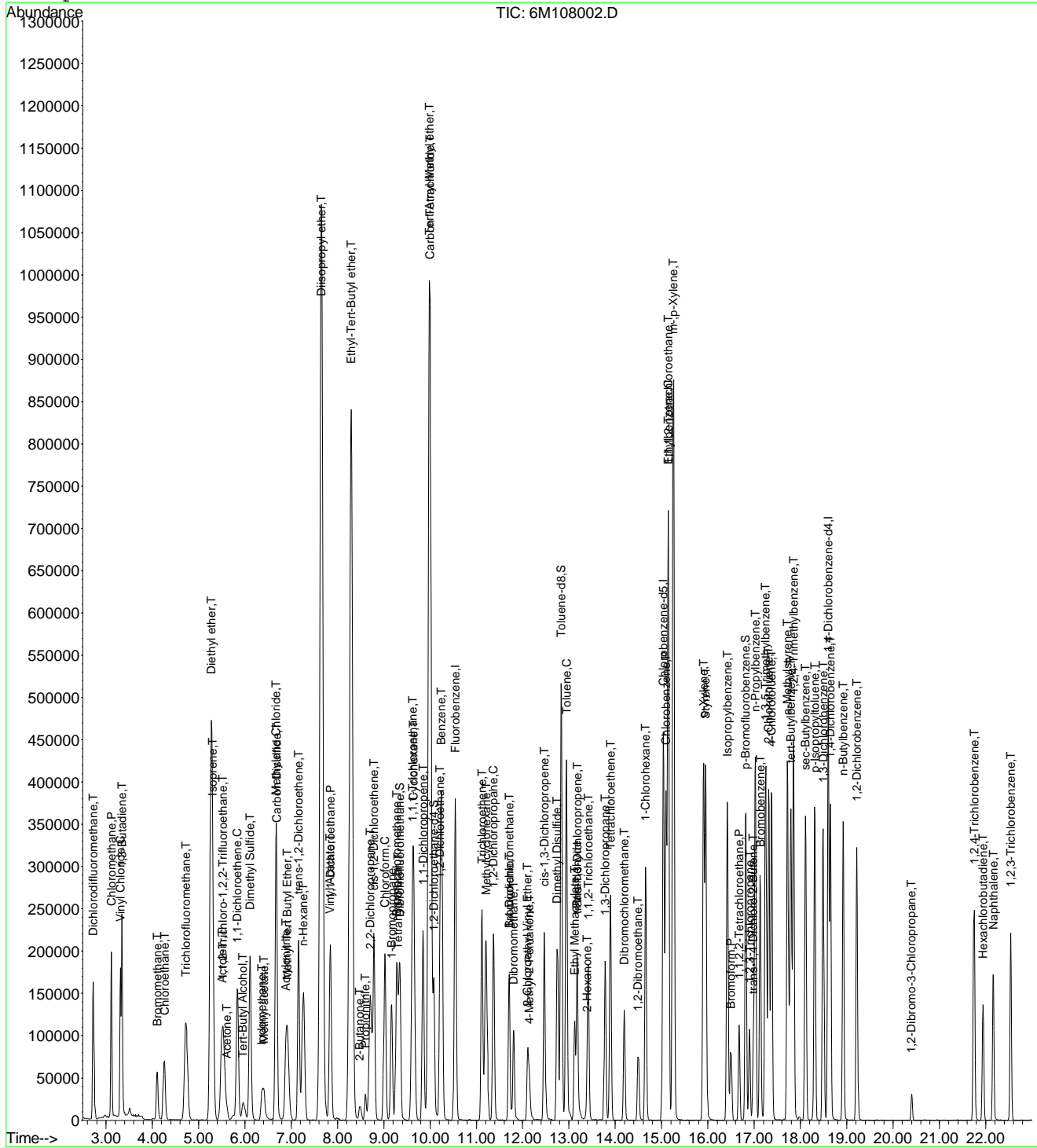
Page 2

Data File : C:\MSDchem\1\data\050912\6M108002.D
Acq On : 9 May 2012 11:19
Sample : WG397459-02 20ug/L LCS 8260
Misc : 1,1 STD51372
MS Integration Params: RTEINT.P
Quant Time: May 9 11:42 2012

Vial: 5
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

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\051012\8M378966.D Vial: 5
 Acq On : 10 May 2012 21:13 Operator: TMB
 Sample : WG397692-02 20ug/L LCS STD 8260 Inst : HPMS8
 Misc : 1,1 STD51427 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 10 21:35:47 2012

Quant Results File: 8260WT.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	682617	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.05	117	585399	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.06	152	330307	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.14	111	183372	25.8928	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	103.56%
43) 1,2-Dichloroethane-d4	9.78	65	152276	27.9229	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	111.68%
58) Toluene-d8	12.17	98	684399	25.3211	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	101.28%
80) p-Bromofluorobenzene	15.54	95	263845	24.6927	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	98.76%

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

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

Page 1

Data File : C:\MSDchem\1\data\051012\8M378966.D Vial: 5
 Acq On : 10 May 2012 21:13 Operator: TMB
 Sample : WG397692-02 20ug/L LCS STD 8260 Inst : HPMS8
 Misc : 1,1 STD51427 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 10 21:35:47 2012

Quant Results File: 8260WT.RES

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

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

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

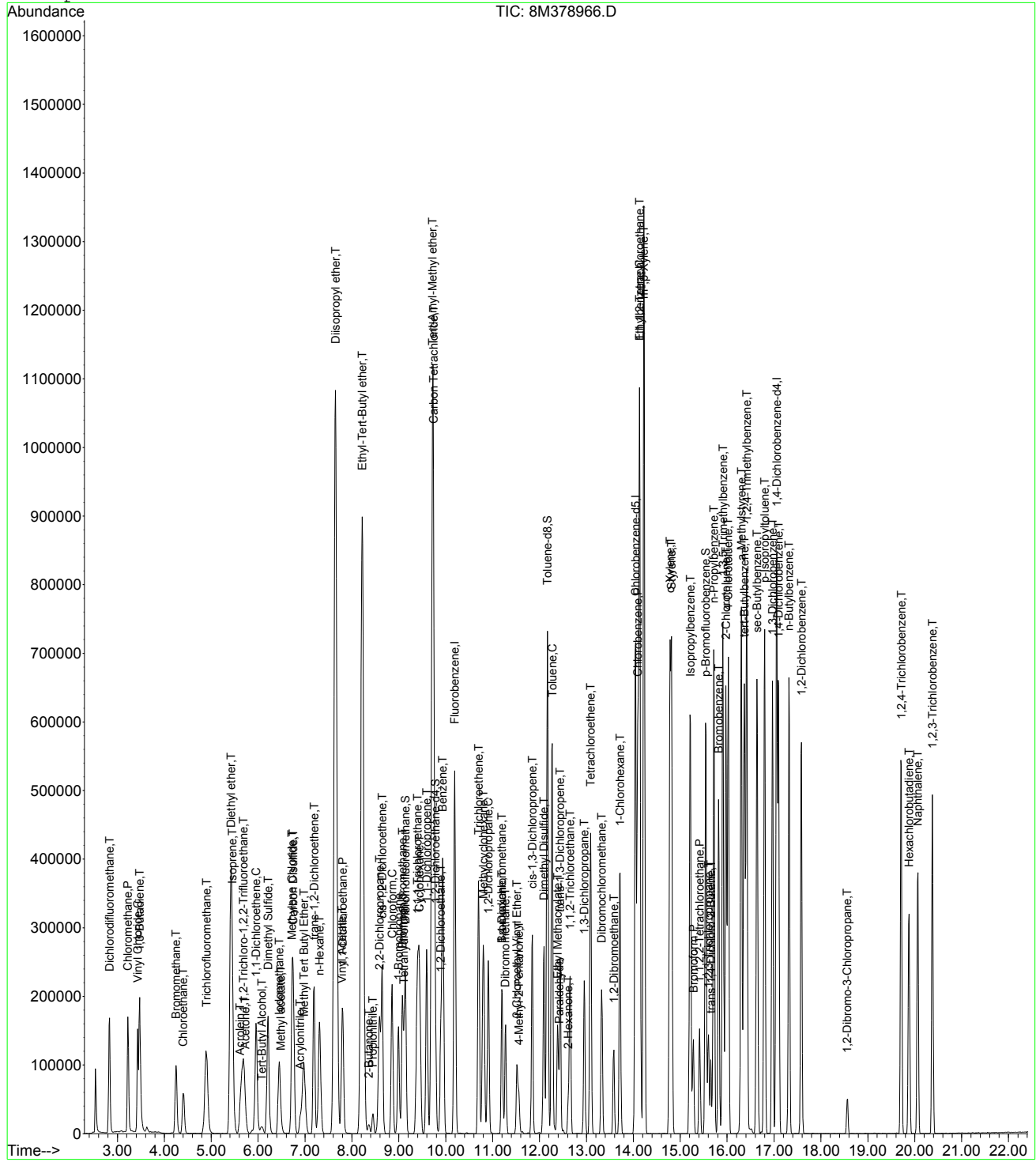
Page 2

Data File : C:\MSDchem\1\data\051012\8M378966.D
Acq On : 10 May 2012 21:13
Sample : WG397692-02 20ug/L LCS STD 8260
Misc : 1,1 STD51427
MS Integration Params: RTEINT.P
Quant Time: May 10 21:35 2012

Vial: 5
Operator: TMB
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



Data File : C:\MSDCHEM\1\data\050912\6M108003.D Vial: 6
 Acq On : 9 May 2012 11:52 Operator: ADC
 Sample : WG397459-03 20ug/L LCS DUP 8260 Inst : HPMS6
 Misc : 1,1 STD51372 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 09 12:15:28 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	524391	25.00	ug/L	0.00
57) Chlorobenzene-d5	15.03	117	365840	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	178898	25.00	ug/L	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Dibromofluoromethane	9.35	111	158821	27.9715	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	111.88%	
43) 1,2-Dichloroethane-d4	10.08	65	159736	28.6655	ug/L	0.00
Spiked Amount	25.000	Range 80 - 120	Recovery	=	114.68%	
58) Toluene-d8	12.83	98	523752	26.3417	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	105.36%	
80) p-Bromofluorobenzene	16.81	95	184504	26.2825	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	105.12%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.73	85	190797	27.7385	ug/L	99
3) Chloromethane	3.12	50	219333	23.0015	ug/L	99
4) Vinyl Chloride	3.31	62	172407	19.8177	ug/L	99
5) 1,3-Butadiene	3.34	54	105043	20.4899	ug/L	98
6) Bromomethane	4.10	94	65880	13.3641	ug/L	96
7) Chloroethane	4.25	64	102757	20.8772	ug/L	99
8) Trichlorofluoromethane	4.73	101	224693	20.0879	ug/L	100
9) Diethyl ether	5.27	59	411403	108.2468	ug/L	98
10) Isoprene	5.30	67	178952	18.8147	ug/L	98
11) Acrolein	5.51	56	33573	123.5952	ug/L	93
12) 1,1,2-Trichloro-1,2,2-Trif	5.54	101	119347	19.9485	ug/L	99
13) Acetone	5.62	43	23637	23.7892	ug/L	93
14) 1,1-Dichloroethene	5.83	61	204203	21.2285	ug/L	99
15) Tert-Butyl Alcohol	5.97	59	58140	224.1347	ug/L	94
16) Dimethyl Sulfide	6.11	62	160167	20.9735	ug/L	96
17) Iodomethane	6.36	142	74033	13.4608	ug/L	96
18) Methyl acetate	6.41	43	75350	19.2157	ug/L	97
19) Methylene Chloride	6.67	84	124009	20.8132	ug/L	92
20) Carbon Disulfide	6.69	76	375790	21.5624	ug/L	99
21) Acrylonitrile	6.88	53	31277	23.3630	ug/L	98
22) Methyl Tert Butyl Ether	6.92	73	254539	20.2780	ug/L	99
23) trans-1,2-Dichloroethene	7.16	96	118746	20.4079	ug/L	98
24) n-Hexane	7.26	57	153720	23.0293	ug/L	98
25) Diisopropyl ether	7.65	45	2397361	113.1028	ug/L	98
26) Vinyl Acetate	7.84	43	183854	59.9159	ug/L	97
27) 1,1-Dichloroethane	7.84	63	248199	20.8781	ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	1804274	104.7428	ug/L	99
29) 2-Butanone	8.49	43	35799	25.7662	ug/L	94
30) Propionitrile	8.60	54	49979	125.7695	ug/L	96
31) 2,2-Dichloropropane	8.71	77	194827	21.6780	ug/L	96
32) cis-1,2-Dichloroethene	8.78	96	132603	21.8102	ug/L	99
33) Chloroform	9.02	83	226617	21.0915	ug/L	99
34) 1-Bromopropane	9.17	122	24924	22.8303	ug/L	97
35) Bromochloromethane	9.27	130	74265	22.9594	ug/L	96
36) Tetrahydrofuran	9.31	42	107789	117.9732	ug/L	96
38) 1,1,1-Trichloroethane	9.62	97	192048	20.4617	ug/L	96
39) Cyclohexane	9.64	56	204273	21.7253	ug/L	96
40) 1,1-Dichloropropene	9.85	75	170805	22.0598	ug/L	98
41) Tert-Amyl-Methyl ether	9.99	73	1376085	107.2951	ug/L	98
42) Carbon Tetrachloride	10.00	117	182057	21.9145	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M108003.D 8260WTR.M Wed May 09 12:15:28 2012

Data File : C:\MSDCHEM\1\data\050912\6M108003.D Vial: 6
 Acq On : 9 May 2012 11:52 Operator: ADC
 Sample : WG397459-03 20ug/L LCS DUP 8260 Inst : HPMS6
 Misc : 1,1 STD51372 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 09 12:15:28 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	157553	21.3472	ug/L	98
46) Benzene	10.24	78	481627	20.7899	ug/L	100
47) Trichloroethene	11.12	130	120838	20.7961	ug/L	100
48) Methylcyclohexane	11.20	83	153666	22.9315	ug/L	99
49) 1,2-Dichloropropane	11.37	63	129437	21.6412	ug/L	98
50) 1,4-Dioxane	11.72	88	4150	213.0119	ug/L	92
51) Bromodichloromethane	11.71	83	160116	22.2860	ug/L	98
52) Dibromomethane	11.80	93	61040	21.3314	ug/L	98
53) 2-Chloroethyl Vinyl Ether	12.10	63	49312	19.3515	ug/L	99
54) 4-Methyl-2-Pentanone	12.14	58	24284	23.2848	ug/L	98
55) cis-1,3-Dichloropropene	12.47	75	172998	20.2055	ug/L	100
56) Dimethyl Disulfide	12.75	79	85239	17.4183	ug/L	97
59) Toluene	12.95	91	475954	19.7974	ug/L	98
60) Ethyl Methacrylate	13.12	69	91444	21.1750	ug/L	98
61) Paraldehyde	13.17	89	5659	87.6667	ug/L	70
62) trans-1,3-Dichloropropene	13.18	75	131609	17.0047	ug/L	99
63) 1,1,2-Trichloroethane	13.42	97	79054	20.4729	ug/L	99
64) 2-Hexanone	13.39	43	35992	21.3809	ug/L	99
65) 1,3-Dichloropropane	13.78	76	142211	21.5958	ug/L	94
66) Tetrachloroethene	13.90	166	113642	20.2401	ug/L	99
67) Dibromochloromethane	14.20	129	98682	19.1069	ug/L	99
68) 1,2-Dibromoethane	14.49	107	74549	19.7581	ug/L	98
69) 1-Chlorohexane	14.66	91	137369	21.5777	ug/L	98
70) Chlorobenzene	15.09	112	289258	18.9358	ug/L	98
71) 1,1,1,2-Tetrachloroethane	15.15	131	108634	19.7494	ug/L	98
72) Ethylbenzene	15.15	106	155184	19.6950	ug/L	99
73) m-,p-Xylene	15.26	106	379805	39.4308	ug/L	100
74) o-Xylene	15.91	106	177473	19.3497	ug/L	100
75) Styrene	15.95	104	300262	18.3055	ug/L	98
76) Bromoform	16.50	173	54620	20.9979	ug/L	99
77) Isopropylbenzene	16.42	105	397502	17.4133	ug/L	100
79) 1,1,2,2-Tetrachloroethane	16.68	83	83099	21.9660	ug/L	99
81) 1,2,3-Trichloropropane	16.90	110	23215	23.8004	ug/L	97
82) trans-1,4-Dichloro-2-Butene	16.98	53	24583	20.4868	ug/L	100
83) n-Propylbenzene	17.02	91	536322	20.4025	ug/L	100
84) Bromobenzene	17.14	156	116382	19.8303	ug/L	99
85) 1,3,5-Trimethylbenzene	17.25	105	358153	19.9711	ug/L	99
86) 2-Chlorotoluene	17.31	91	351993	20.1669	ug/L	99
87) 4-Chlorotoluene	17.38	91	313948	17.8922	ug/L	98
88) a-Methylstyrene	17.72	118	192038	20.8807	ug/L	98
89) tert-Butylbenzene	17.79	134	68814	18.9994	ug/L	98
90) 1,2,4-Trimethylbenzene	17.85	105	387021	20.4121	ug/L	100
91) sec-Butylbenzene	18.11	105	409335	20.0799	ug/L	99
92) p-Isopropyltoluene	18.30	119	341955	20.8831	ug/L	99
93) 1,3-Dichlorobenzene	18.49	146	206848	20.0196	ug/L	98
94) 1,4-Dichlorobenzene	18.65	146	210320	19.4092	ug/L	99
95) n-Butylbenzene	18.92	91	308897	21.6552	ug/L	100
96) 1,2-Dichlorobenzene	19.22	146	181309	19.4156	ug/L	100
97) 1,2-Dibromo-3-Chloropropane	20.40	75	11652	20.0583	ug/L	98
98) 1,2,4-Trichlorobenzene	21.75	180	111107	21.8592	ug/L	98
99) Hexachlorobutadiene	21.95	225	42362	20.8311	ug/L	97
100) Naphthalene	22.17	128	204864	21.1671	ug/L	100
101) 1,2,3-Trichlorobenzene	22.54	180	96977	21.9515	ug/L	97

(#) = qualifier out of range (m) = manual integration
 6M108003.D 8260WTR.M Wed May 09 12:15:28 2012

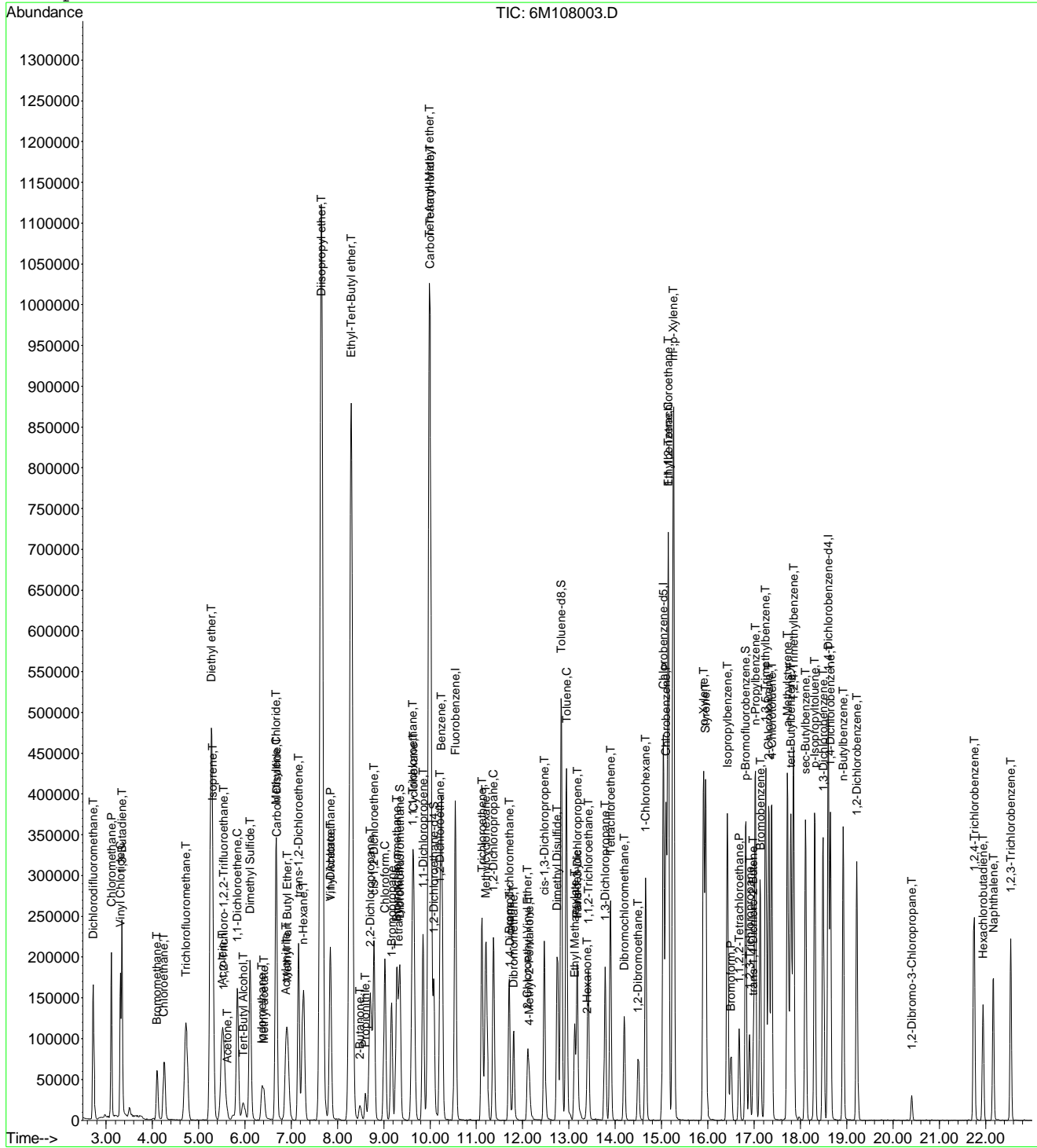
Page 2

Data File : C:\MSDchem\1\data\050912\6M108003.D
 Acq On : 9 May 2012 11:52
 Sample : WG397459-03 20ug/L LCSDUP 8260
 Misc : 1,1 STD51372
 MS Integration Params: RTEINT.P
 Quant Time: May 9 12:15 2012

Vial: 6
 Operator: ADC
 Inst : HPMS6
 Multiplr: 1.00

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\051012\8M378967.D Vial: 6
 Acq On : 10 May 2012 21:45 Operator: TMB
 Sample : WG397692-03 20ug/L LCSDUP STD 8260 Inst : HPMS8
 Misc : 1,1 STD51427 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 10 22:08:18 2012

Quant Results File: 8260WT.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	675202	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	593528	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	336616	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.14	111	175792	25.0951	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	100.40%
43) 1,2-Dichloroethane-d4	9.78	65	146634	27.1836	ug/L	0.01
Spiked Amount	25.000	Range	80 - 120	Recovery	=	108.72%
58) Toluene-d8	12.17	98	686079	25.0356	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	100.16%
80) p-Bromofluorobenzene	15.54	95	264518	24.2917	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	97.16%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.82	85	231018	31.4564	ug/L	100
3) Chloromethane	3.22	50	201753	23.8356	ug/L	98
4) Vinyl Chloride	3.43	62	171759	24.3473	ug/L	98
5) 1,3-Butadiene	3.46	54	112174	26.1384	ug/L	92
6) Bromomethane	4.25	94	105610	19.3308	ug/L	100
7) Chloroethane	4.40	64	90118	19.8297	ug/L	97
8) Trichlorofluoromethane	4.89	101	259002	24.8644	ug/L	99
9) Diethyl ether	5.42	59	310059	81.7701	ug/L	99
10) Isoprene	5.45	67	131795	16.0778	ug/L	94
11) Acrolein	5.61	56	37065	86.5438	ug/L	91
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	123344	19.7160	ug/L	97
13) Acetone	5.73	43	17595	17.6610	ug/L	90
14) 1,1-Dichloroethene	5.95	61	191533	21.1576	ug/L	93
15) Tert-Butyl Alcohol	6.09	59	37863	124.7825	ug/L	98
16) Dimethyl Sulfide	6.21	62	129421	20.3080	ug/L	94
17) Iodomethane	6.45	142	184889	17.4958	ug/L	94
18) Methyl acetate	6.48	43	53049	16.9201	ug/L	98
19) Methylene Chloride	6.72	84	130869	19.4268	ug/L	96
20) Carbon Disulfide	6.75	76	326019	18.7432	ug/L	100
21) Acrylonitrile	6.90	53	23692	17.5673	ug/L	100
22) Methyl Tert Butyl Ether	6.97	73	226388	19.6402	ug/L	99
23) trans-1,2-Dichloroethene	7.18	61	170499	19.9441	ug/L	100
24) n-Hexane	7.31	57	144660	18.5445	ug/L	96
25) Diisopropyl ether	7.65	45	1993601	96.6737	ug/L	98
26) Vinyl Acetate	7.78	43	138009	20.8351	ug/L	97
27) 1,1-Dichloroethane	7.81	63	209047	19.1281	ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	1606932	95.0825	ug/L	99
29) 2-Butanone	8.36	43	26125	17.6226	ug/L	96
30) Propionitrile	8.45	54	40403	81.0798	ug/L	98
31) 2,2-Dichloropropane	8.59	77	196409	20.8880	ug/L	99
32) cis-1,2-Dichloroethene	8.64	96	140029	19.7850	ug/L	96
33) Chloroform	8.86	83	231950	20.5932	ug/L	99
34) 1-Bromopropane	8.98	122	32678	22.8165	ug/L	99
35) Bromochloromethane	9.08	130	97746	21.4437	ug/L	97
36) Tetrahydrofuran	9.11	42	80754	80.3782	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	228768	22.3524	ug/L	99
39) Cyclohexane	9.44	56	185947	18.3892	ug/L	99
40) 1,1-Dichloropropene	9.59	75	176270	19.9952	ug/L	99
41) Tert-Amyl-Methyl ether	9.72	73	1327275	95.9688	ug/L	96
42) Carbon Tetrachloride	9.74	117	221206	23.1021	ug/L	98
45) 1,2-Dichloroethane	9.89	62	153598	22.1623	ug/L	98

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

Data File : C:\MSDchem\1\data\051012\8M378967.D Vial: 6
 Acq On : 10 May 2012 21:45 Operator: TMB
 Sample : WG397692-03 20ug/L LCSDUP STD 8260 Inst : HPMS8
 Misc : 1,1 STD51427 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 10 22:08:18 2012

Quant Results File: 8260WT.RES

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

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

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

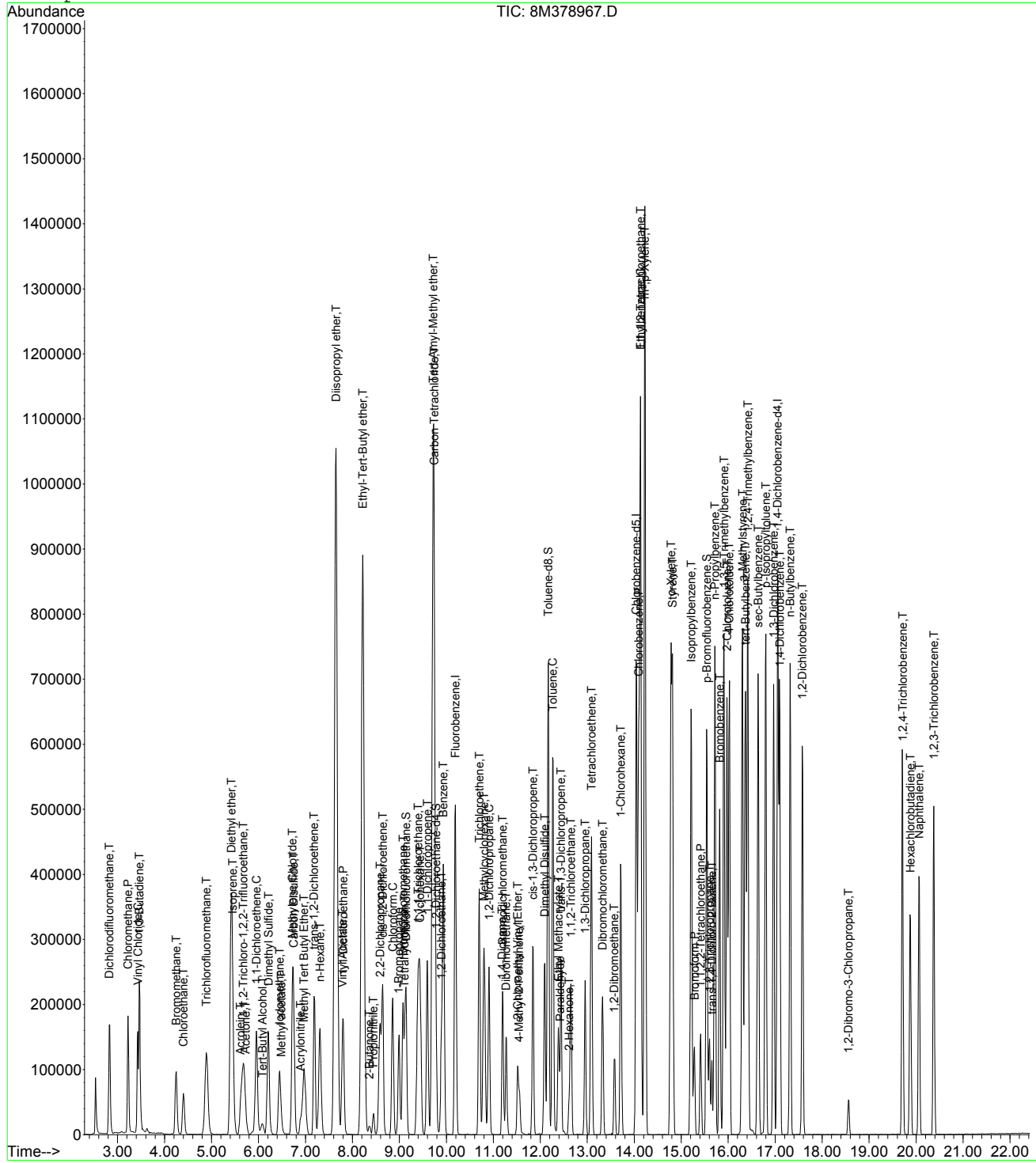
Page 2

Data File : C:\MSDchem\1\data\051012\8M378967.D
Acq On : 10 May 2012 21:45
Sample : WG397692-03 20ug/L LCSDUP STD 8260
Misc : 1,1 STD51427
MS Integration Params: RTEINT.P
Quant Time: May 10 22:08 2012

Vial: 6
Operator: TMB
Inst : HPMS8
Multiplr: 1.00

Quant Results File: 8260WT.RES

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



2.1.2 RSK 175

2.1.2.1 Summary Data



Login Number: L12050099
Department: Volatiles - GC
Analyst: Franci Bolden

Analysis RSK-175

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

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

SAMPLES

Samples: Sample 01, required dilution analyses.

Manual Integration Reason Codes

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

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

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

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

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

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

Narrative ID: 46107

Approved By: Michael Albertson



Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HP16
Client ID: MW-13-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 14:58
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 16G32207
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	1260	E	5.00	1.00
Carbon Dioxide	124-38-9	80000		10000	2500
E	Semiquantitative result (out of calibration range)				

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HP16
Client ID: MW-13-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397238	Analyst: FJB	Run Date: 05/07/2012 16:35
Collect Date: 05/02/2012 11:30	Dilution: 5	File ID: 16G32255
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	976		25.0	5.00
Carbon Dioxide	124-38-9	64700		50000	12500

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HP16
Client ID: MW-26-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 15:07
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 16G32208
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	257		5.00	1.00
Carbon Dioxide	124-38-9	72700		10000	2500

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HP16
Client ID: MW-25-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 15:16
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 16G32209
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	56.6		5.00	1.00
Carbon Dioxide	124-38-9	47800		10000	2500

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HP16
Client ID: PZ-03-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 15:25
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 16G32210
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	310		5.00	1.00
Carbon Dioxide	124-38-9	47500		10000	2500

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HP16
Client ID: DUP-GW-050212	Prep Method: 5021	Prep Date: N/A
Matrix: Water	Analytical Method: RSK175	Cal Date: 04/30/2012 15:04
Workgroup #: WG397035	Analyst: MDA	Run Date: 05/04/2012 15:34
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 16G32211
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	216		5.00	1.00
Carbon Dioxide	124-38-9	61000		10000	2500

2.1.2.2 QC Summary Data

RSK-175 - Example Calculation for Methane

1.0 Linear Calibration Models

Option A - Average RF Method

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

Where:

ICAL_x = the ICAL concentration

ICAL_r = the ICAL response (area)

RF = calibration factor = ICAL_r / ICAL_x

Option B - Agilent Linear Regression Constant

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

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

2.0 Calculate the concentration in extract, Cx

Where:

y = area response of methane from quant report

a = average RF (or Agilent regression constant)

Cx = y/a

1157414
10433.00
110.9377935

3.0 Calculate the concentration in sample

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

Where:

Cx = Concentration in extract

MW = molecular weight of analyte

TF = temperature factor = (22.4)(313/273)

HS = headspace volume

S = sample volume remaining after headspace removal

DF = dilution factor

Cs = calculated sample concentration

110.9377935 umol/mol
16.04 ug/umol
25.68 L/mol
0.015 L
0.00547 L
2
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

Page: 1



Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID: _____

Internal Standard: NA Surrogate Standard: NA
 CCV: STD38726 LCS: STD45308 MS/MSD: STD45308
 Column 1 ID: RTQBOND Column 2 ID: RTQBOND
 Workgroups: WG396526, WG396527

Comments: files 16G63290 and 16G32099 not used**Comments**

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

Approved: May 01, 2012

Page: 2




Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050412
 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: NA

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
 Workgroups: WG397035, WG397036

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32191	WG397034-01 133umol/mol CCV RSK175	NA	1	1	STD38726	05/04/12 12:31
16G32192	WG397035-01 BLANK RSK175	NA	1	1		05/04/12 12:41
16G32193	WG397035-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/04/12 12:50
16G32194	WG397035-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	05/04/12 12:59
16G32195	L12050050-07 B RSK175EXT	7	1	1		05/04/12 13:08
16G32196	L12050051-01 B RSK175	<2	1	1		05/04/12 13:18
16G32197	L12050051-02 B RSK175	<2	1	1		05/04/12 13:26
16G32198	L12050061-01 B RSK175	<2	1	1		05/04/12 13:35
16G32199	L12050062-01 B RSK175	<2	1	1		05/04/12 13:45
16G32200	L12050063-01 B RSK175	<2	1	1		05/04/12 13:54
16G32201	L12050064-01 B RSK175	<2	1	1		05/04/12 14:03
16G32202	WG397034-02 133umol/mol CCV RSK175	NA	1	1	STD38726	05/04/12 14:12
16G32203	L12050065-01 B RSK175-SPE	<2	1	1		05/04/12 14:21
16G32204	L12050010-14 B RSK175 50X	<2	1	50		05/04/12 14:30
16G32205	L12050010-15 B RSK175 50X	<2	1	50		05/04/12 14:39
16G32206	L12050050-05 B RSK175EXT 10X	7	1	10		05/04/12 14:49
16G32207	L12050099-01 A RSK175EXT	7	1	1		05/04/12 14:58
16G32208	L12050099-03 A RSK175EXT	7	1	1		05/04/12 15:07
16G32209	L12050099-05 A RSK175EXT	7	1	1		05/04/12 15:16
16G32210	L12050099-07 A RSK175EXT	7	1	1		05/04/12 15:25
16G32211	L12050099-09 A RSK175EXT	7	1	1		05/04/12 15:34
16G32212	L12050051-07 A RSK175	<2	1	1		05/04/12 15:43
16G32213	WG397034-03 133umol/mol CCV RSK175	NA	1	1	STD38726	05/04/12 15:52
16G32214	L12050051-08 A RSK175	<2	1	1		05/04/12 16:02
16G32215	L12050051-11 A RSK175	<2	1	1		05/04/12 16:11
16G32216	L12050051-12 A RSK175	<2	1	1		05/04/12 16:20
16G32217	WG397034-04 133umol/mol CCV RSK175	NA	1	1	STD397034	05/04/12 16:29
16G32218	WG397036-01 BLANK RSK175	NA	1	1		05/04/12 16:44
16G32219	WG397036-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/04/12 16:53
16G32220	WG397036-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	05/04/12 17:02
16G32221	WG397036-01 BLANK RSK175	NA	1	1		05/04/12 17:11
16G32222	L12050051-03 A RSK175	<2	1	1		05/04/12 17:20
16G32223	L12050051-04 A RSK175	<2	1	1		05/04/12 17:29
16G32224	L12050051-05 A RSK175	<2	1	1		05/04/12 17:38

Approved: May 08, 2012

Page: 1



Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050412
 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: NA
 Column 1 ID: RTQBOND Column 2 ID: RTQBOND
 Workgroups: WG397035, WG397036

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32225	L12050051-06 A RSK175	<2	1	1		05/04/12 17:47
16G32226	L12050051-13 A RSK175	<2	1	1		05/04/12 17:56
16G32227	L12050052-01 A RSK175	<2	1	1		05/04/12 18:05
16G32228	L12050052-02 A RSK175	<2	1	1		05/04/12 18:14
16G32229	WG397034-05 133umol/mol CCV RSK175	NA	1	1	STD38726	05/04/12 18:24
16G32230	L12050052-03 A RSK175	<2	1	1		05/04/12 18:33
16G32231	L12050052-04 A RSK175	<2	1	1		05/04/12 18:42
16G32232	L12050052-05 A RSK175	<2	1	1		05/04/12 18:51
16G32233	L12050052-06 A RSK175	<2	1	1		05/04/12 19:00
16G32234	L12050052-07 A RSK175	<2	1	1		05/04/12 19:09
16G32235	L12050052-08 A RSK175	<2	1	1		05/04/12 19:18
16G32236	L12050052-09 A RSK175	<2	1	1		05/04/12 19:27
16G32237	L12050052-10 A RSK175	<2	1	1		05/04/12 19:37
16G32238	L12050052-11 A RSK175	<2	1	1		05/04/12 19:46
16G32239	L12050052-12 A RSK175	<2	1	1		05/04/12 19:55
16G32240	WG397034-06 133umol/mol CCV RSK175	NA	1	1	STD38726	05/04/12 20:04
16G32241	L12050052-13 A RSK175	<2	1	1		05/04/12 20:13
16G32242	L12050052-14 A RSK175	7	1	1		05/04/12 20:22
16G32243	L12050052-15 A RSK175	<2	1	1		05/04/12 20:32
16G32244	WG397034-07 133umol/mol CCV RSK175	NA	1	1	STD38726	05/04/12 20:41

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11				
File ID: 16G32201				
rr st ccv				
17				
File ID: 16G32207				
rr 5x methane				
28				
File ID: 16G32218				
dnr rr				
37				
File ID: 16G32227				

Approved: May 08, 2012

Page: 2



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HP16 Dataset: 050412
 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: NA
 Column 1 ID: RTQBOND Column 2 ID: RTQBOND
 Workgroups: WG397035, WG397036

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
			rr 50x methane	
38			File ID: 16G32228	
			dnr rr st	
40			File ID: 16G32230	
			rr 50x methane	
41			File ID: 16G32231	
			dnr rr st	
43			File ID: 16G32233	
			rr 20x methane	
44			File ID: 16G32234	
			dnr rr st	
46			File ID: 16G32236	
			rr 50x methane	
47			File ID: 16G32237	
			rr 20x methane	
48			File ID: 16G32238	
			dnr rr st	
49			File ID: 16G32239	
			rr 50x methane, ethene	
51			File ID: 16G32241	
			rr 25x methane, ethene	
52			File ID: 16G32242	
			rr 25x methane	

Approved: May 08, 2012

Page: 3

[Signature]



Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID: 41637

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

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

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

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

Approved: May 09, 2012

Page: 1



Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID: 41637

Internal Standard: NA Surrogate Standard: NA
 CCV: STD38726 LCS: STD45308 MS/MSD: NA
 Column 1 ID: RTQBOND Column 2 ID: RTQBOND
 Workgroups: WG397238, WG397239

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

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

Comments

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

Approved: May 09, 2012

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 #: B154335

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG397034-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397034-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397034-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397034-04	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397034-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397034-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397034-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050062-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050050-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-04	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-02	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-08	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050064-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-14	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397036-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-04	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397035-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397035-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050051-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-02	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-15	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397036-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050051-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-10	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050099-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-09	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050099-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050099-09	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397036-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050052-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-11	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-12	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-15	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050061-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050099-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-11	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-14	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050050-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-12	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-06	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-13	15	mL	15	mL					5.47	mL	5.47	mL	40



Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154335

L12050052-13	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050051-08	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050099-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050065-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397035-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050063-01	15	mL	15	mL					5.47	mL	5.47	mL	40



Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154405

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



Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154405

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



Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154408

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG397237-02	15	mL	15	mL					5.47	mL	5.47	mL	40



Microbac Laboratories Inc.

Data Checklist

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

Initial Calibration	X
Average RF	X
Linear Req 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




Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
 Analyst: MDA
 Analyst: NA
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 46589
 Analytical Workgroups: WG397035, WG397036

Initial Calibration	X
Average RF	X
Linear Req or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	NA
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	X
Surrogates	NA
Calculations & Correct Factors	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	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:
07-MAY-2012



Secondary Reviewer:
08-MAY-2012




Microbac Laboratories Inc.

Data Checklist

Date: 07-MAY-2012
 Analyst: FJB
 Analyst: NA
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 46625
 Analytical Workgroups: WG397238, WG397239

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

Primary Reviewer:
08-MAY-2012

Secondary Reviewer:
09-MAY-2012





Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method: RSK175
 Login Number: L12050099

AAB#: WG397035

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-13-050212	01	05/02/12								7	05/04/12	2.1	7	
MW-26-050212	03	05/02/12								7	05/04/12	2.2	7	
MW-25-050212	05	05/02/12								7	05/04/12	2	7	
PZ-03-050212	07	05/02/12								7	05/04/12	2	7	
DUP-GW-050212	09	05/02/12								7	05/04/12	2.2	7	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2406621
 Report generated 05/10/2012 08:37



Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method: RSK175
 Login Number: L12050099

AAB#: WG397238

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-13-050212	01	05/02/12							7		05/07/12	5.2	7	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2406621
 Report generated 05/10/2012 08:37



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397035
 Blank File ID: 16G32192 Blank Sample ID: WG397035-01
 Prep Date: 05/04/12 12:41 Instrument ID: HP16
 Analyzed Date: 05/04/12 12:41 Method: RSK175
 Analyst: MDA

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397035-02	16G32193	05/04/12 12:50	01
LCS2	WG397035-03	16G32194	05/04/12 12:59	01
MW-13-050212	L12050099-01	16G32207	05/04/12 14:58	01
MW-26-050212	L12050099-03	16G32208	05/04/12 15:07	01
MW-25-050212	L12050099-05	16G32209	05/04/12 15:16	01
PZ-03-050212	L12050099-07	16G32210	05/04/12 15:25	01
DUP-GW-050212	L12050099-09	16G32211	05/04/12 15:34	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2406622
 Report generated 05/10/2012 08:37



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397238
 Blank File ID: 16G32247 Blank Sample ID: WG397238-01
 Prep Date: 05/07/12 15:23 Instrument ID: HP16
 Analyzed Date: 05/07/12 15:23 Method: RSK175
 Analyst: FJB

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397238-02	16G32248	05/07/12 15:32	01
LCS2	WG397238-03	16G32249	05/07/12 15:41	01
MW-13-050212	L12050099-01	16G32255	05/07/12 16:35	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2406622
 Report generated 05/10/2012 08:37



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/04/12 12:41 Sample ID: WG397035-01
Instrument ID: HP16 Run Date: 05/04/12 12:41 Prep Method: 5021
File ID: 16G32192 Analyst: MDA Method: RSK175
Workgroup (AAB#): WG397035 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: 2406623
10-MAY-2012 08:37



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/07/12 15:23 Sample ID: WG397238-01
Instrument ID: HP16 Run Date: 05/07/12 15:23 Prep Method: 5021
File ID: 16G32247 Analyst: FJB Method: RSK175
Workgroup (AAB#): WG397238 Matrix: Water Units: ug/L
Contract #: _____ Cal ID: HP16-30-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Methane	1.00	5.0	1.00	1	U

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: 2406623
10-MAY-2012 08:37



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: MDA Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG397035 Units: ug/L
 QC Key: WATERLOO Lot #: STD45308
 Sample ID: WG397035-02 LCS File ID: 16G32193 Run Date: 05/04/2012 12:50
 Sample ID: WG397035-03 LCS2 File ID: 16G32194 Run Date: 05/04/2012 12:59

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methane	116	100	85.9	116	98.9	84.9	1.15	56 - 140	40	
Carbon Dioxide	31300	27900	89.0	31300	21900	69.8	24.3	10 - 200	40	

LCS_LCS2 - Modified 03/06/2008
 PDF File ID: 2406624
 Report generated: 05/10/2012 08:37



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: FJB Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG397238 Units: ug/L
 QC Key: WATERLOO Lot #: STD45308
 Sample ID: WG397238-02 LCS File ID: 16G32248 Run Date: 05/07/2012 15:32
 Sample ID: WG397238-03 LCS2 File ID: 16G32249 Run Date: 05/07/2012 15:41

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methane	116	106	90.7	116	109	93.3	2.86	56 - 140	40	

LCS_LCS2 - Modified 03/06/2008
 PDF File ID: 2406624
 Report generated: 05/10/2012 08:37



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: L12050099 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: 2408126
Report generated 05/10/2012 08:37



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/04/2012 Sample ID: WG397034-01
 Instrument ID: HP16 Run Time: 12:31 Method: RSK175
 File ID: 16G32191 Analyst: MDA QC Key: WATERLOO
 Workgroup (AAB#): WG397035 Cal ID: HP16 - 30-APR-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
methane	228	210	ug/L	167000	7.90	20	
carbon dioxide	62700	59600	ug/L	5430	4.84	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2406625
 Report generated 05/10/2012 08:37



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/04/2012 Sample ID: WG397034-02
 Instrument ID: HP16 Run Time: 14:12 Method: RSK175
 File ID: 16G32202 Analyst: MDA QC Key: WATERLOO
 Workgroup (AAB#): WG397035 Cal ID: HP16 - 30-APR-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
methane	228	204	ug/L	163000	10.3	20	
carbon dioxide	62700	53500	ug/L	4870	14.6	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2406625
 Report generated 05/10/2012 08:37



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/04/2012 Sample ID: WG397034-03
 Instrument ID: HP16 Run Time: 15:52 Method: RSK175
 File ID: 16G32213 Analyst: MDA QC Key: WATERLOO
 Workgroup (AAB#): WG397035 Cal ID: HP16 - 30-APR-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
methane	228	214	ug/L	170000	6.03	20	
carbon dioxide	62700	54200	ug/L	4940	13.4	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2406625
 Report generated 05/10/2012 08:37



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/07/2012 Sample ID: WG397237-01
 Instrument ID: HP16 Run Time: 15:11 Method: RSK175
 File ID: 16G32246 Analyst: FJB QC Key: WATERLOO
 Workgroup (AAB#): WG397238 Cal ID: HP16 - 30-APR-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
methane	228	216	ug/L	172000	5.34	20	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2406625
 Report generated 05/10/2012 08:37



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/07/2012 Sample ID: WG397237-02
 Instrument ID: HP16 Run Time: 17:20 Method: RSK175
 File ID: 16G32260 Analyst: FJB QC Key: WATERLOO
 Workgroup (AAB#): WG397238 Cal ID: HP16 - 30-APR-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
methane	228	208	ug/L	165000	8.85	20	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2406625
 Report generated 05/10/2012 08:37



2.1.2.3 Sample Data

Signal #1 : C:\MSDchem\1\DATA\050412\16G32207.D\FID1A.CH Vial: 17
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32207.D\TCD2B.CH
 Acq On : 04 May 2012 14:58 Operator: MDA
 Sample : L12050099-01 A RSK175EXT Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 15:03:36 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

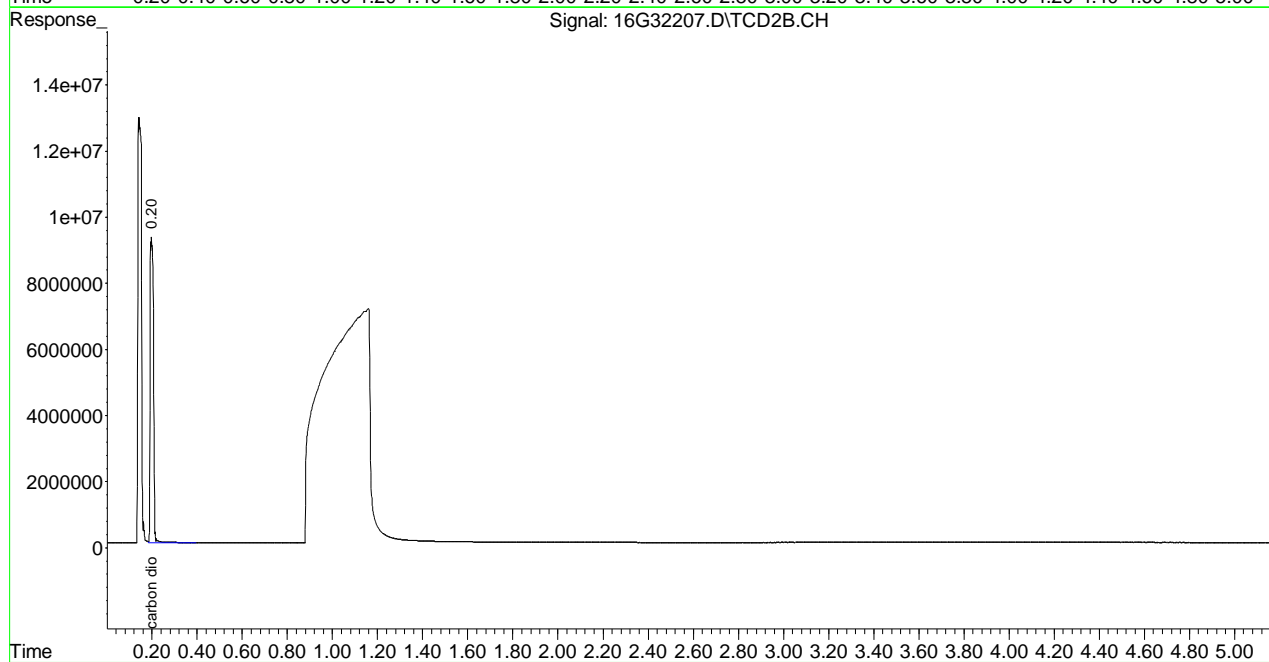
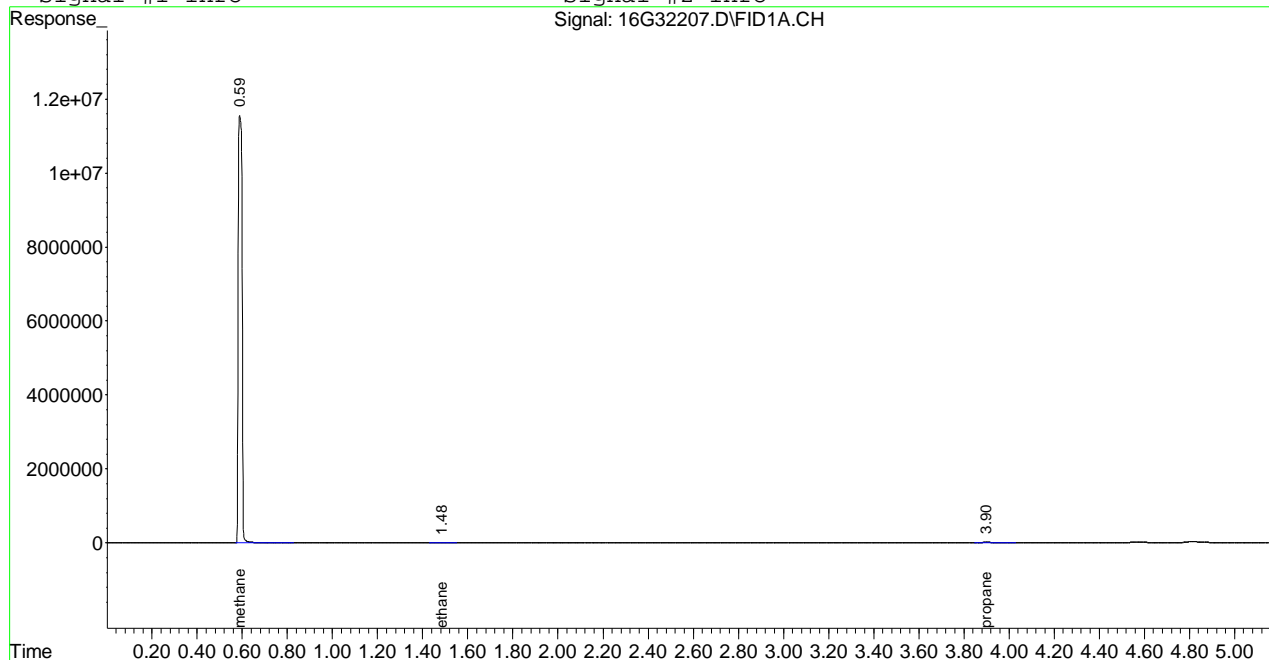
Target Compounds			
1) T methane	0.59	133589124	736.715 umol/
2) T ethene	0.00	0	N.D. umol/
3) T acetylene	0.00	0	N.D. umol/
4) T ethane	1.49	16194	0.053 umol/
5) T propane	3.90	188864	0.430 umol/
7) T carbon dioxide	0.20	97192432	17026.376 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32207.D RSK2EXT.M Fri May 04 15:03:36 2012

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32207.D\FID1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32207.D\TCD2B.CH
Acq On : 04 May 2012 14:58 Operator: MDA
Sample : L12050099-01 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 15:03 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 :



Signal #1 : C:\MSDchem\1\DATA\050712\16G32255.D\FID1A.CH Vial: 10
 Signal #2 : C:\MSDchem\1\DATA\050712\16G32255.D\TCD2B.CH
 Acq On : 07 May 2012 16:35 Operator: FJB
 Sample : L12050099-01 5X B RSK175 Inst : HP16
 Misc : 1,5 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 07 16:40:33 2012 Quant Results File: RSK2EXT.RES

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

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

Compound	R.T.	Response	Conc	Units

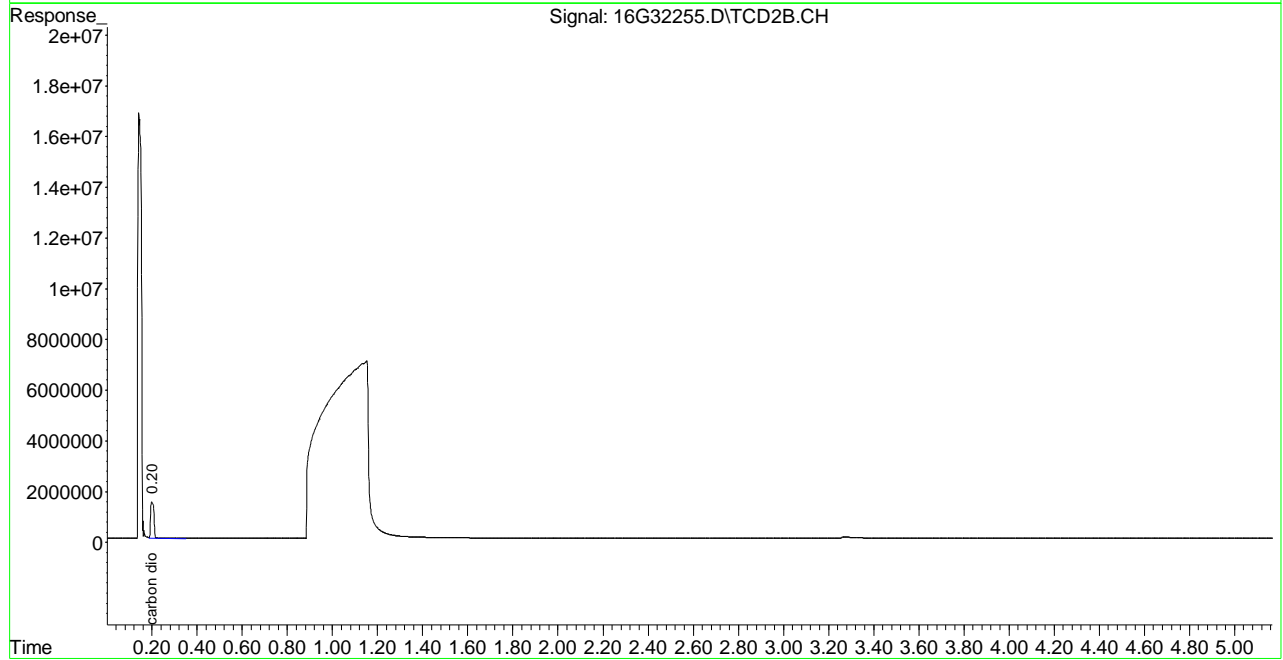
Target Compounds				
1) T methane	0.59	20659577	113.933	umol/
2) T ethene	0.00	0	N.D.	umol/
3) T acetylene	0.00	0	N.D.	umol/
4) T ethane	0.00	0	N.D.	umol/
5) T propane	3.90	32240	0.073	umol/
7) T carbon dioxide	0.20	15719409	2753.759	umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32255.D RSK2EXT.M Mon May 07 16:40:33 2012

Signal #1 : C:\MSDchem\1\DATA\050712\16G32255.D\FID1A.CH Vial: 10
Signal #2 : C:\MSDchem\1\DATA\050712\16G32255.D\TCD2B.CH
Acq On : 07 May 2012 16:35 Operator: FJB
Sample : L12050099-01 5X B RSK175 Inst : HP16
Misc : 1,5 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 16:40 2012 Quant Results File: RSK2EXT.RES

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

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



Signal #1 : C:\MSDchem\1\DATA\050412\16G32208.D\FID1A.CH Vial: 18
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32208.D\TCD2B.CH
 Acq On : 04 May 2012 15:07 Operator: MDA
 Sample : L12050099-03 A RSK175EXT Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 15:12:36 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

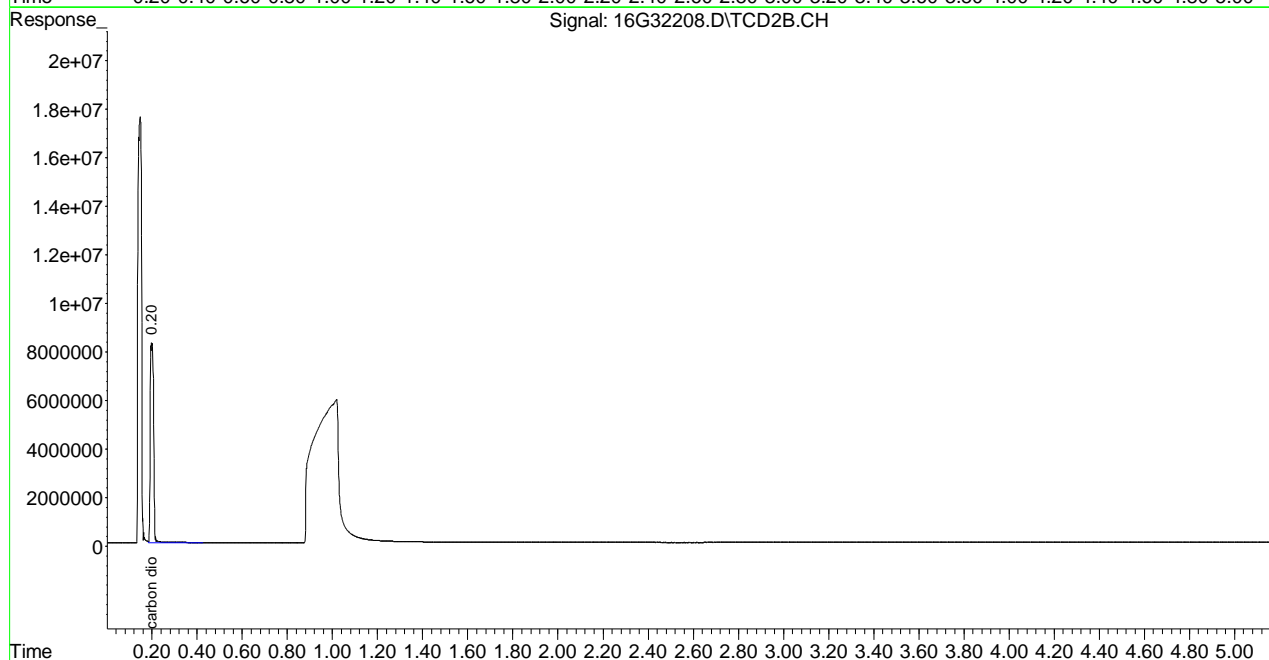
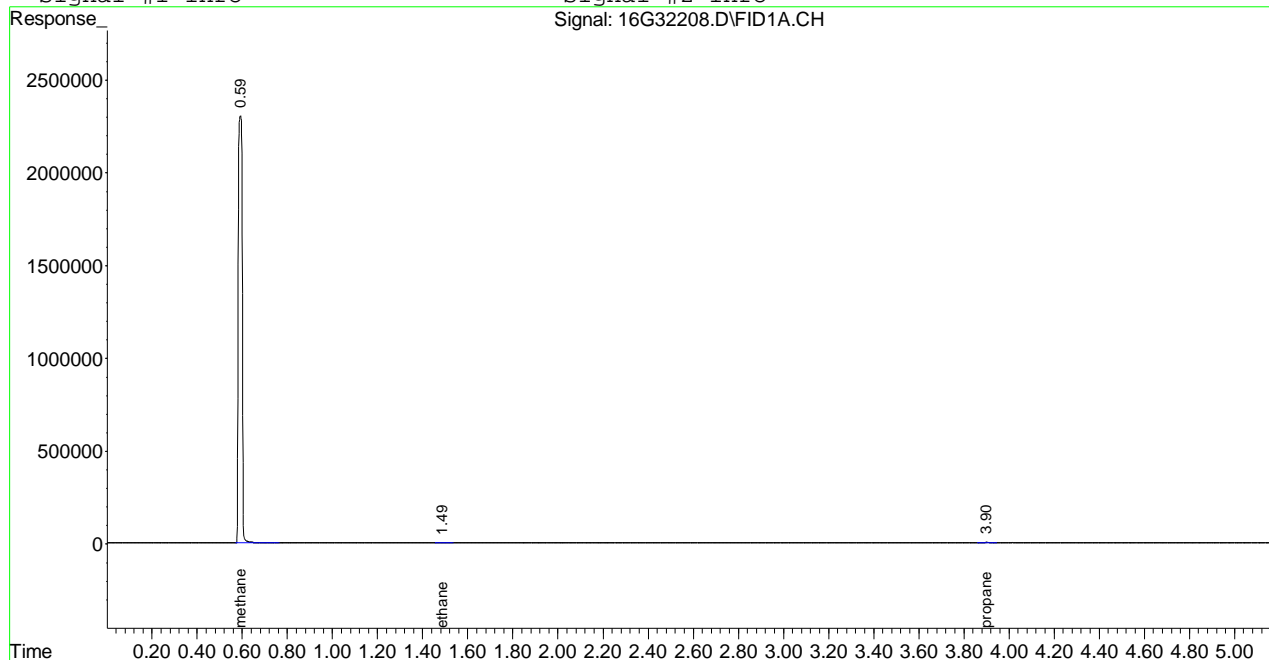
Target Compounds			
1) T methane	0.59	27179646	149.890 umol/
2) T ethene	0.00	0	N.D. umol/
3) T acetylene	0.00	0	N.D. umol/
4) T ethane	1.49	3710	0.012 umol/
5) T propane	3.90	7937	0.018 umol/
7) T carbon dioxide	0.20	88324256	15472.830 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32208.D RSK2EXT.M Fri May 04 15:12:36 2012

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32208.D\FID1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32208.D\TCD2B.CH
Acq On : 04 May 2012 15:07 Operator: MDA
Sample : L12050099-03 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 15:12 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 :



Signal #1 : C:\MSDchem\1\DATA\050412\16G32209.D\FID1A.CH Vial: 19
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32209.D\TCD2B.CH
 Acq On : 04 May 2012 15:16 Operator: MDA
 Sample : L12050099-05 A RSK175EXT Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 15:21:23 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

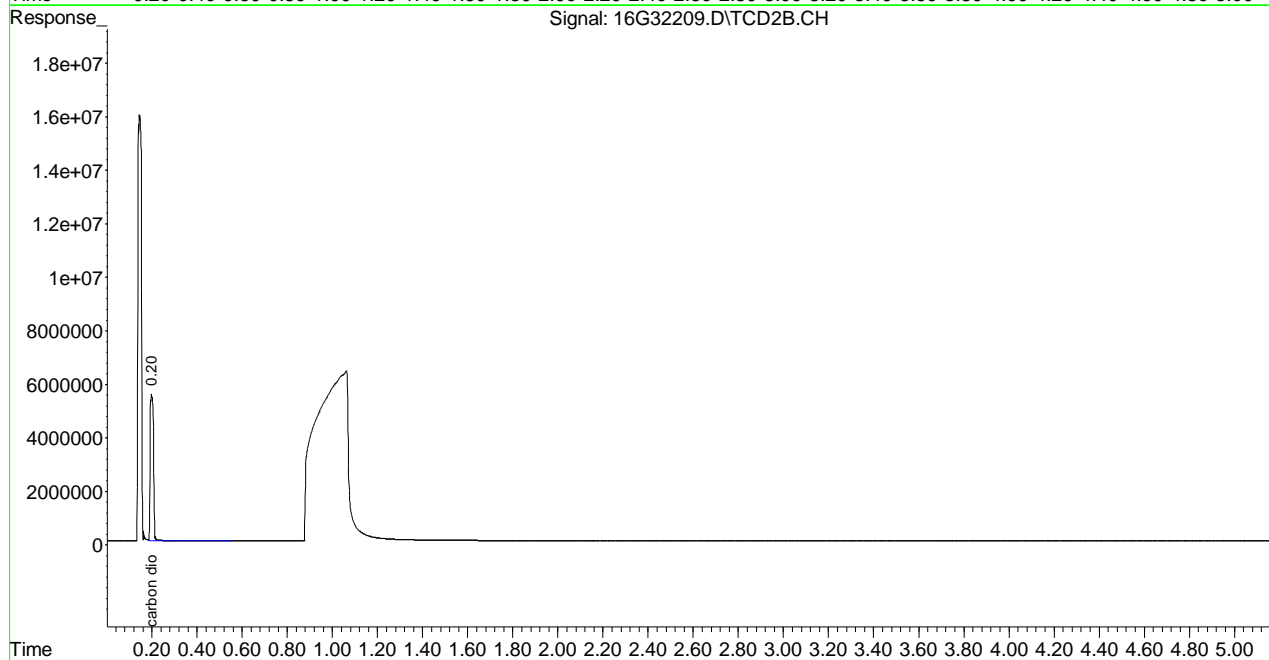
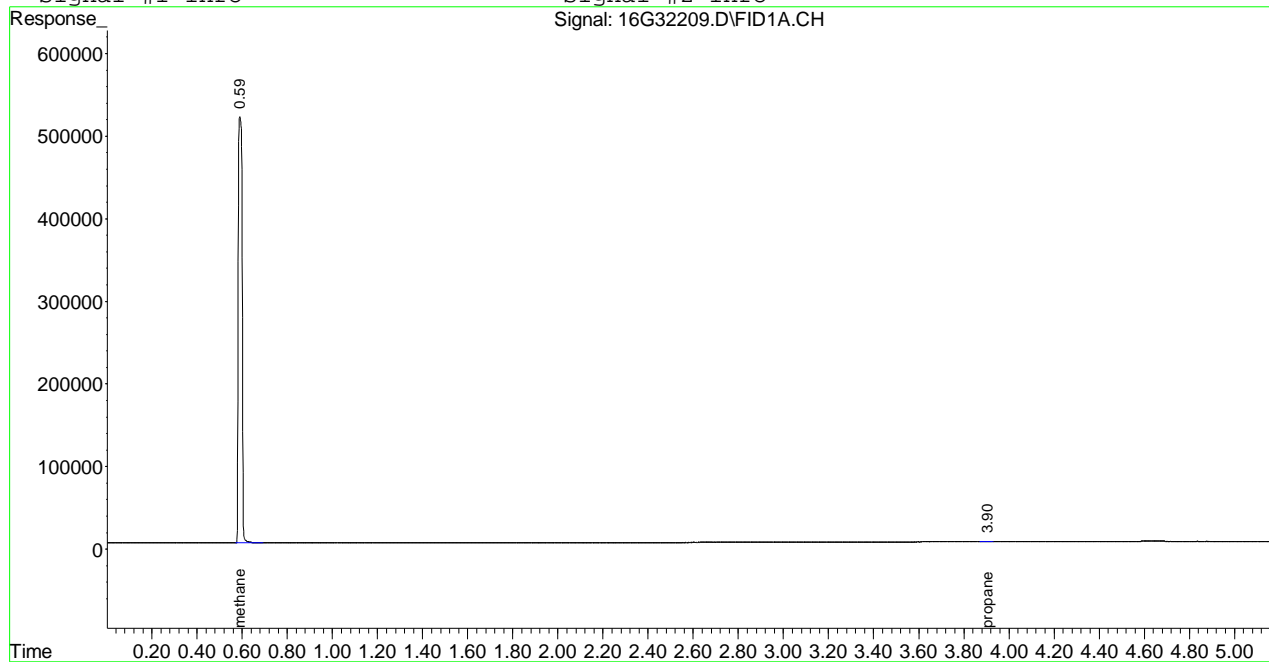
Target Compounds			
1) T methane	0.59	5997194	33.073 umol/
2) T ethene	0.00	0	N.D. umol/
3) T acetylene	0.00	0	N.D. umol/
4) T ethane	0.00	0	N.D. umol/
5) T propane	3.90	1992	0.005 umol/
7) T carbon dioxide	0.20	58059002	10170.899 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32209.D RSK2EXT.M Fri May 04 15:21:23 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32209.D\FID1A.CH Vial: 19
Signal #2 : C:\MSDchem\1\DATA\050412\16G32209.D\TCD2B.CH
Acq On : 04 May 2012 15:16 Operator: MDA
Sample : L12050099-05 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 15:21 2012 Quant Results File: RSK2EXT.RES

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

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



Signal #1 : C:\MSDchem\1\DATA\050412\16G32210.D\FID1A.CH Vial: 20
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32210.D\TCD2B.CH
 Acq On : 04 May 2012 15:25 Operator: MDA
 Sample : L12050099-07 A RSK175EXT Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 15:31:00 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 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

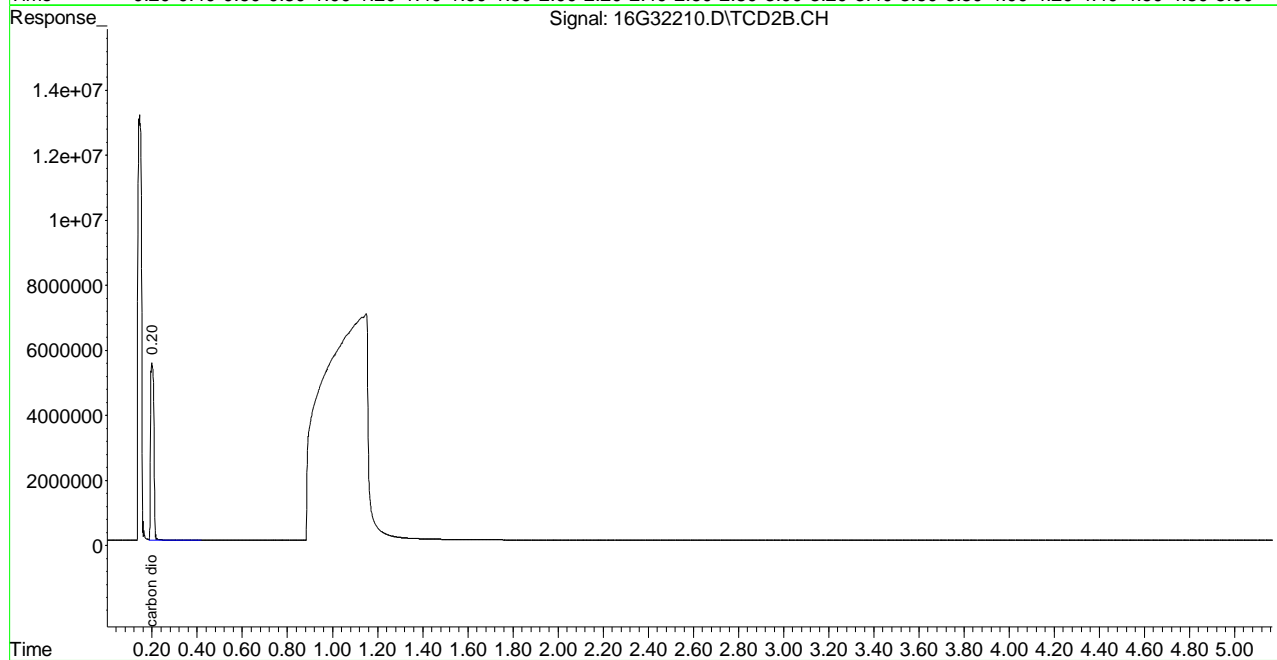
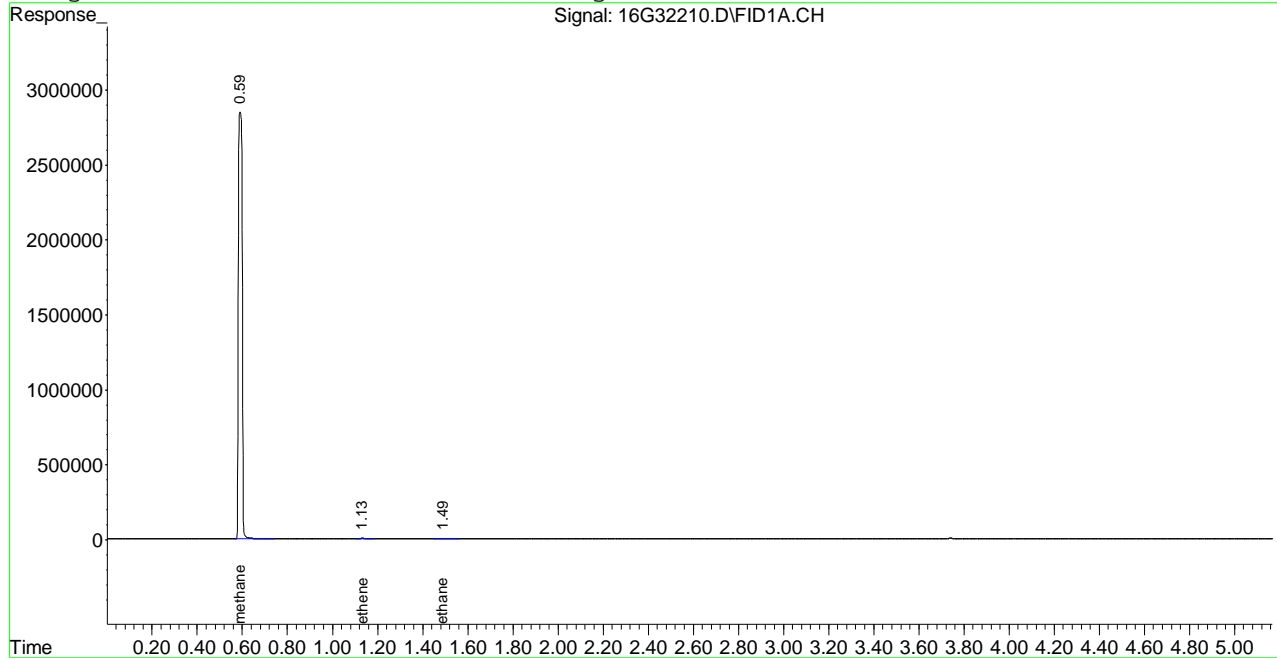
Target Compounds			
1) T methane	0.59	32815857	180.972 umol/
2) T ethene	1.13	24351	0.082 umol/
3) T acetylene	0.00	0	N.D. umol/
4) T ethane	1.49	30295	0.100 umol/
5) T propane	0.00	0	N.D. umol/
7) T carbon dioxide	0.20	57681078	10104.693 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32210.D RSK2EXT.M Fri May 04 15:31:00 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32210.D\FID1A.CH Vial: 20
Signal #2 : C:\MSDchem\1\DATA\050412\16G32210.D\TCD2B.CH
Acq On : 04 May 2012 15:25 Operator: MDA
Sample : L12050099-07 A RSK175EXT Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 4 15:31 2012 Quant Results File: RSK2EXT.RES

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

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



Signal #1 : C:\MSDchem\1\DATA\050412\16G32211.D\FID1A.CH Vial: 21
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32211.D\TCD2B.CH
 Acq On : 04 May 2012 15:34 Operator: MDA
 Sample : L12050099-09 A RSK175EXT Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 15:39:55 2012 Quant Results File: RSK2EXT.RES

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

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

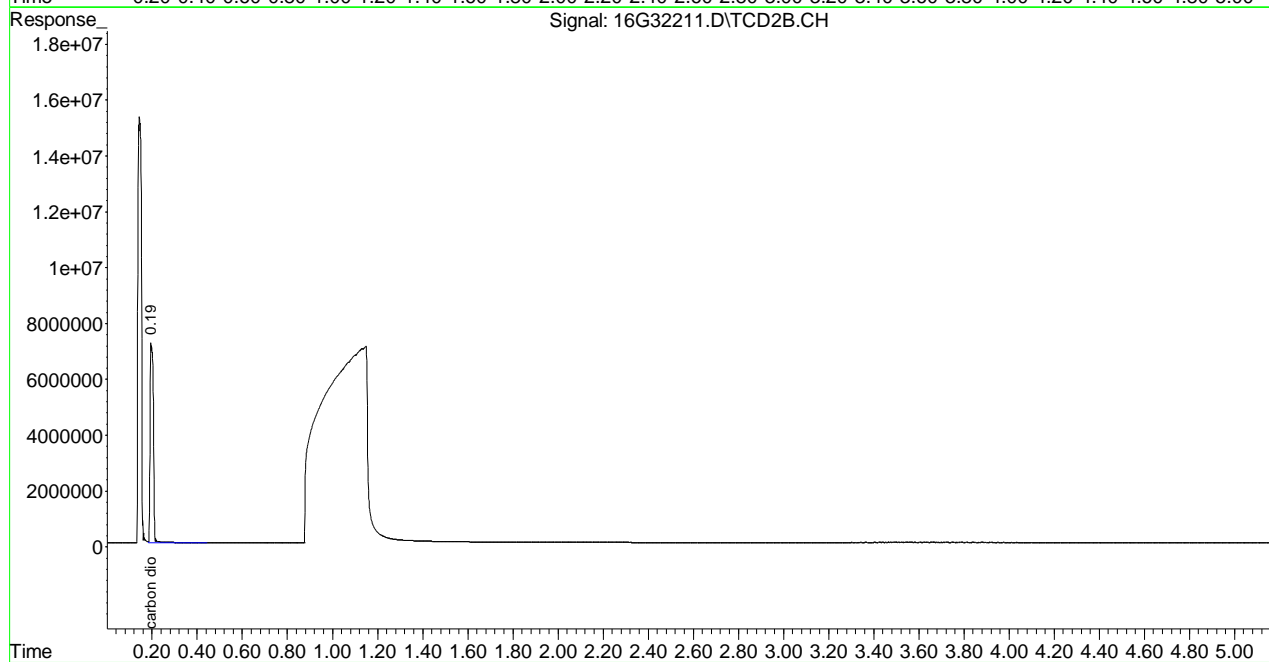
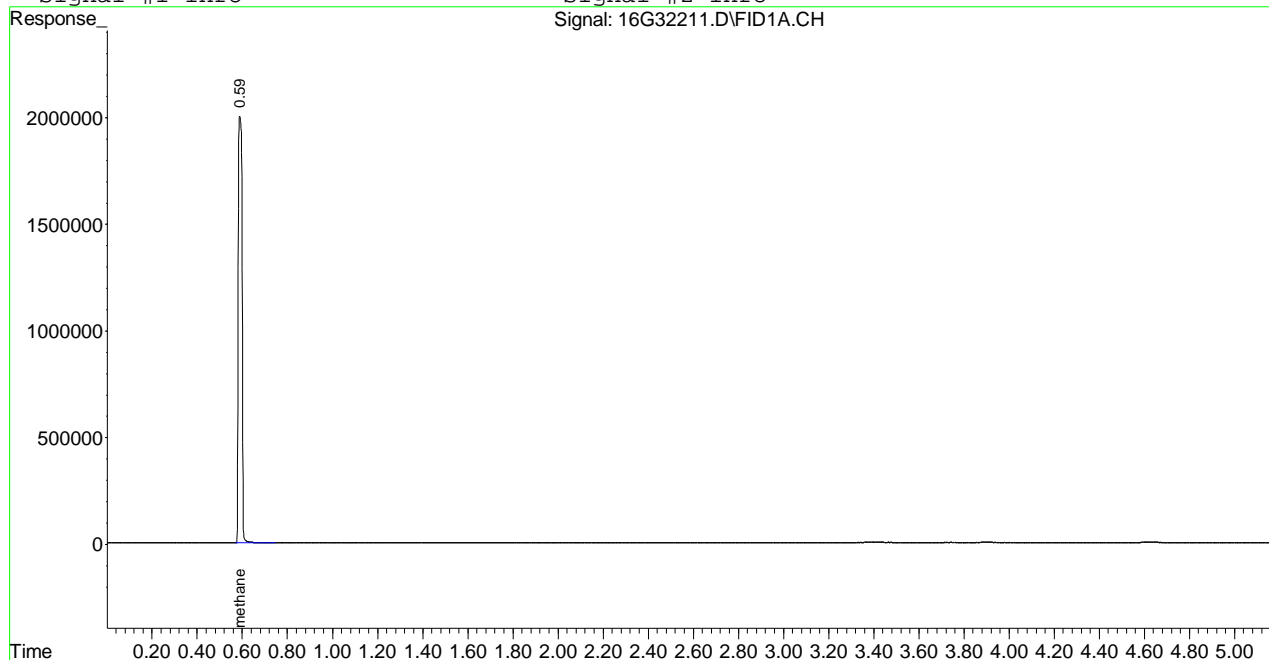
Compound	R.T.	Response	Conc Units

Target Compounds			
1) T methane	0.59	22907724	126.331 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	74125201	12985.410 umol/

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32211.D\FID1A.CH Vial: 21
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32211.D\TCD2B.CH
 Acq On : 04 May 2012 15:34 Operator: MDA
 Sample : L12050099-09 A RSK175EXT Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 4 15:39 2012 Quant Results File: RSK2EXT.RES

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

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

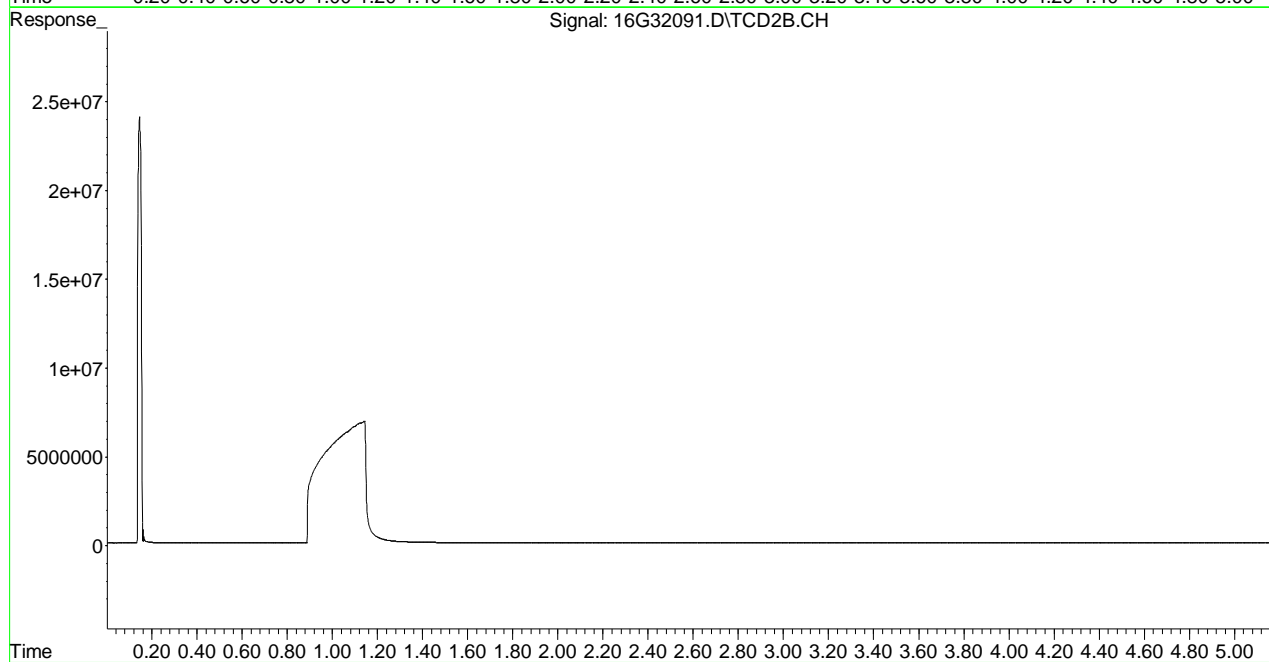
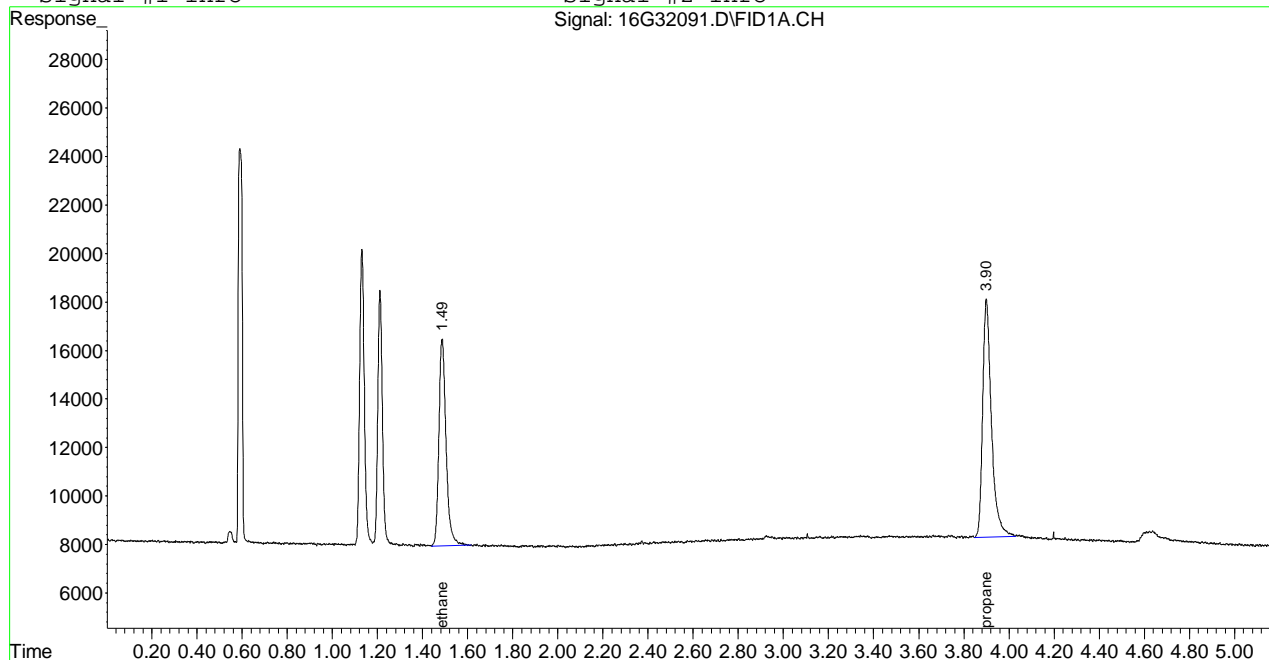
Target Compounds				
1) T methane	0.00	0	N.D.	umol/d
2) T ethene	0.00	0	N.D.	umol/d
3) T acetylene	0.00	0	N.D.	umol/d
4) T ethane	1.49	188654	0.648	umol/
5) T propane	3.90	265941	0.638	umol/
7) T carbon dioxide	0.00	0	N.D.	umol/d

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

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 :



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

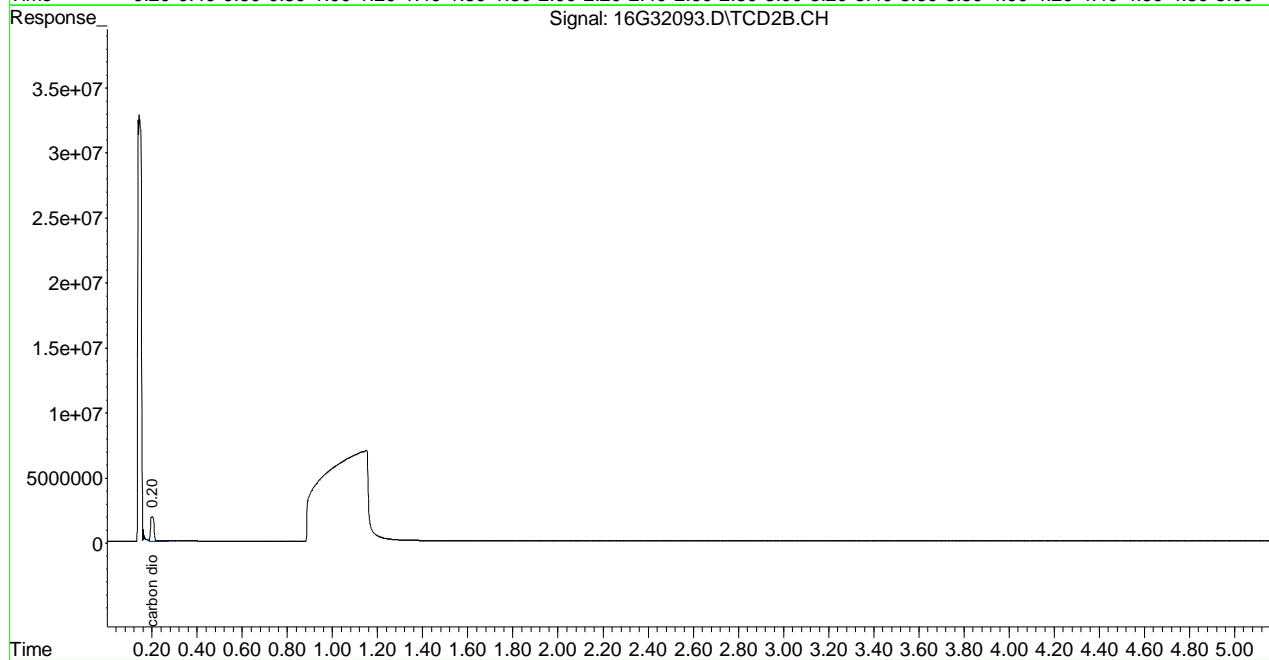
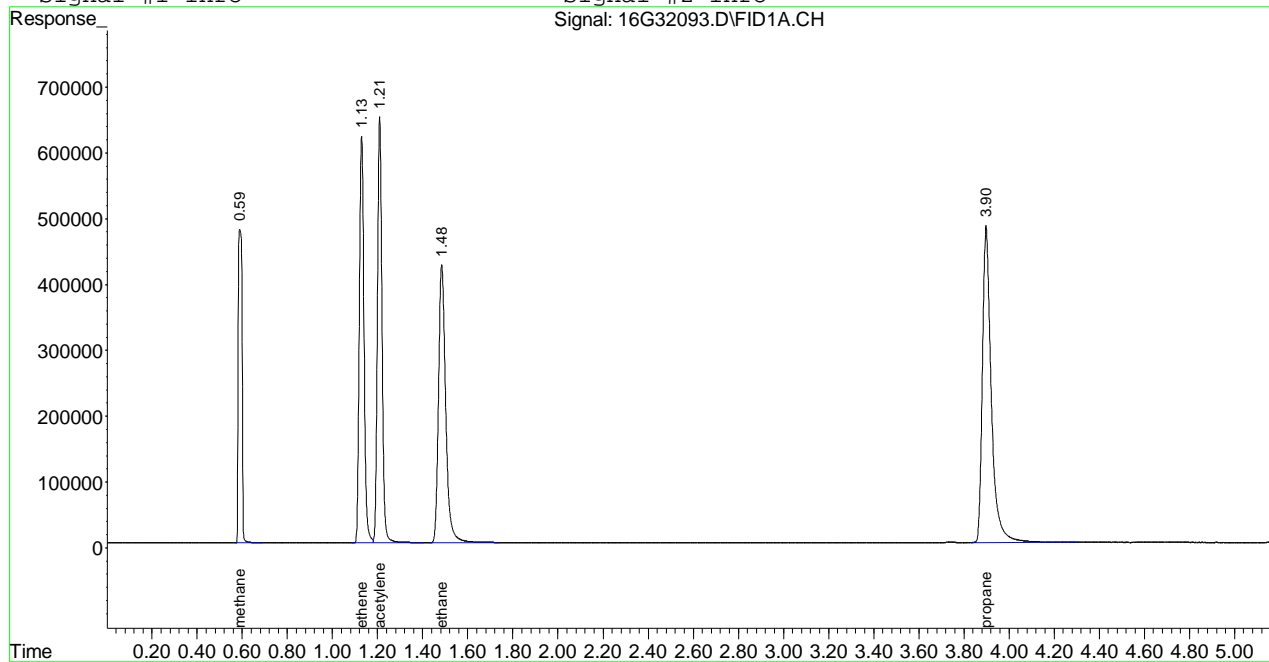
Target Compounds			
1) T methane	0.59	5543604	28.647 umol/
2) T ethene	1.13	8839249	28.434 umol/
3) T acetylene	1.21	9213469	29.702 umol/
4) T ethane	1.48	9301672	29.165 umol/
5) T propane	3.90	13193792	28.593 umol/
7) T carbon dioxide	0.20	20541926	3441.116 umol/

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

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 :



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

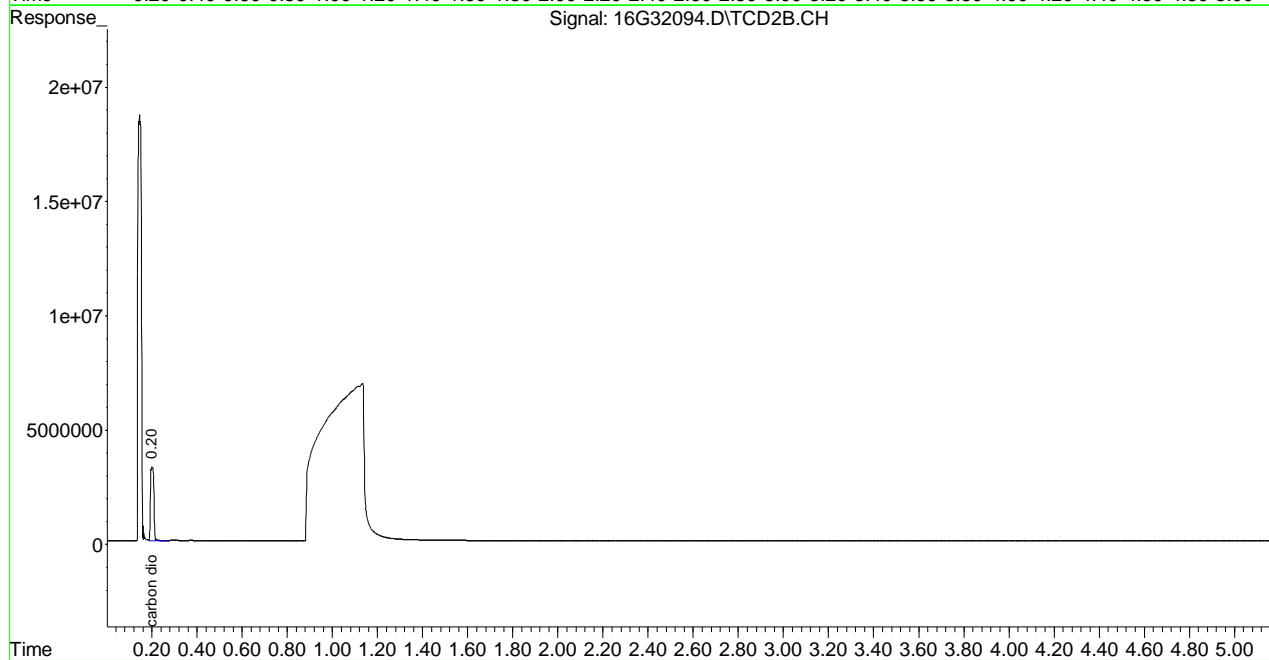
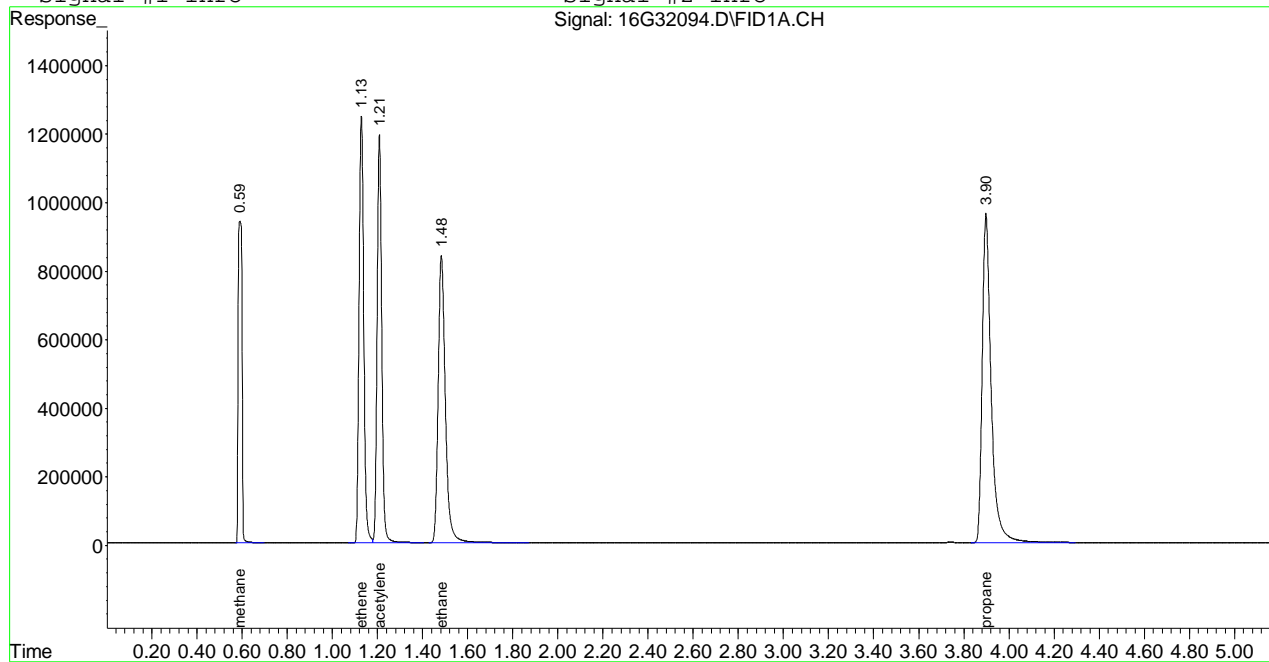
Target Compounds			
1) T methane	0.59	10967402	56.675 umol/
2) T ethene	1.13	17874985	57.501 umol/
3) T acetylene	1.21	17012722	54.845 umol/
4) T ethane	1.48	18525237	58.085 umol/
5) T propane	3.90	26527253	57.489 umol/
7) T carbon dioxide	0.20	34639522	5802.700 umol/

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

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 :



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

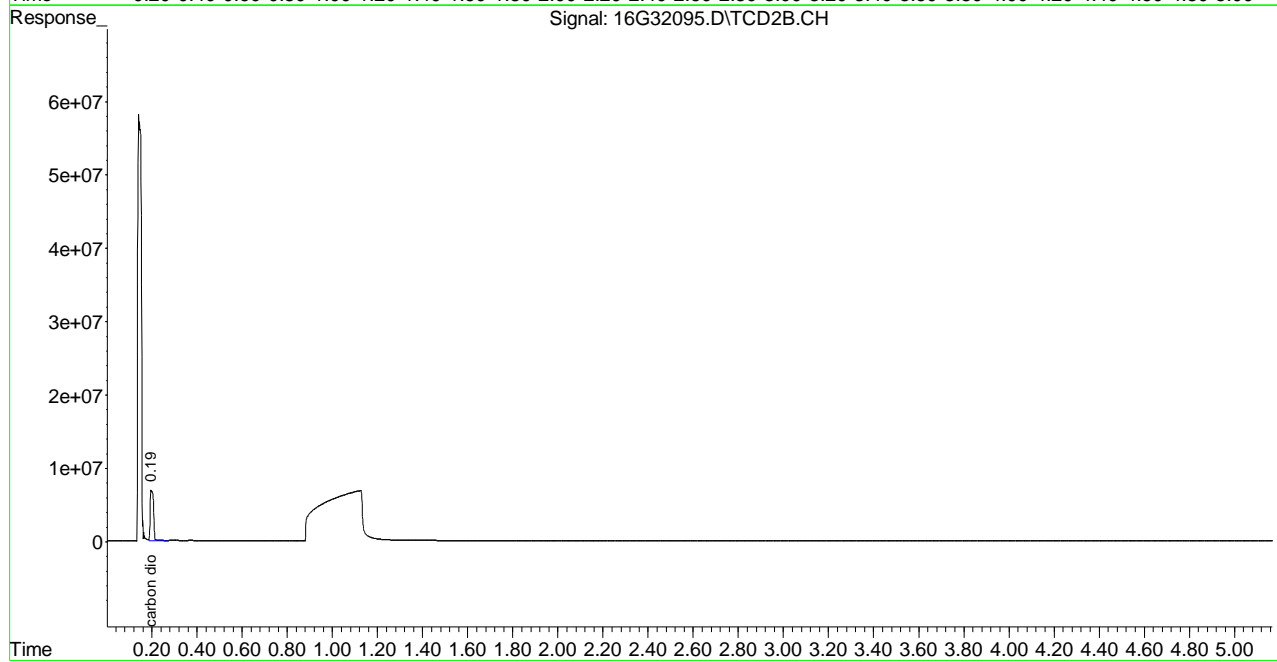
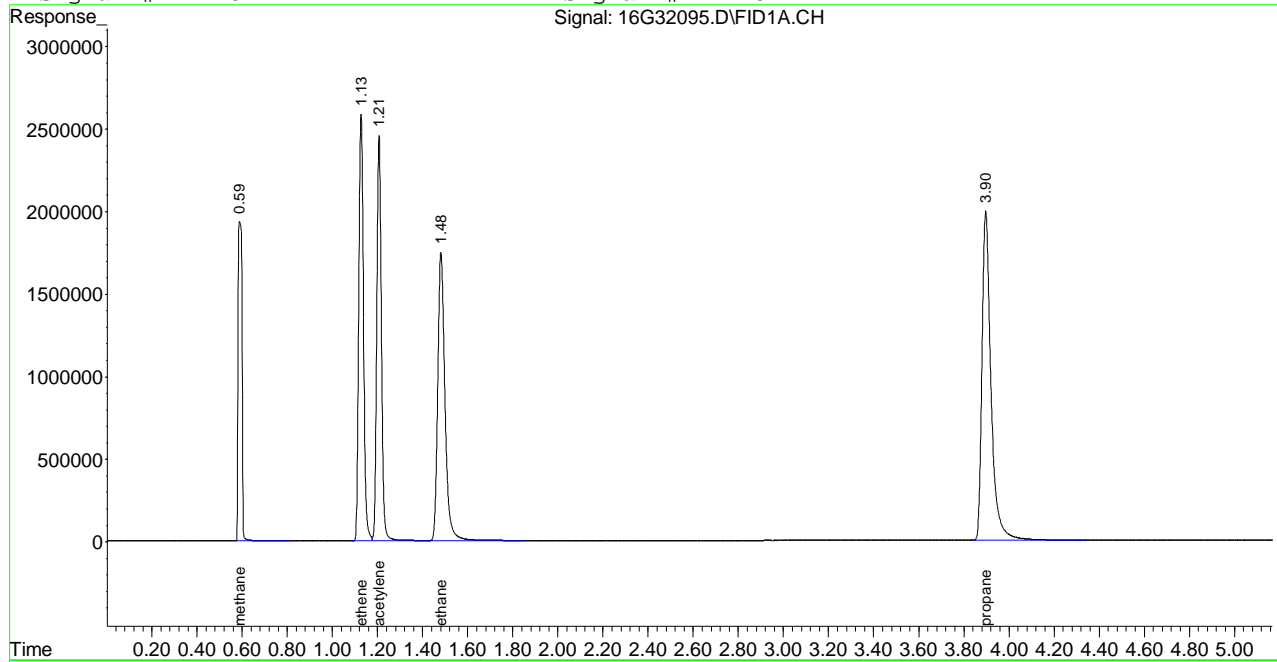
Target Compounds			
1) T methane	0.59	22928576	118.486 umol/
2) T ethene	1.13	37444591	120.453 umol/
3) T acetylene	1.21	35336293	113.917 umol/
4) T ethane	1.48	38718775	121.400 umol/
5) T propane	3.90	55608118	120.511 umol/
7) T carbon dioxide	0.20	73011522	12230.652 umol/

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

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 :



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

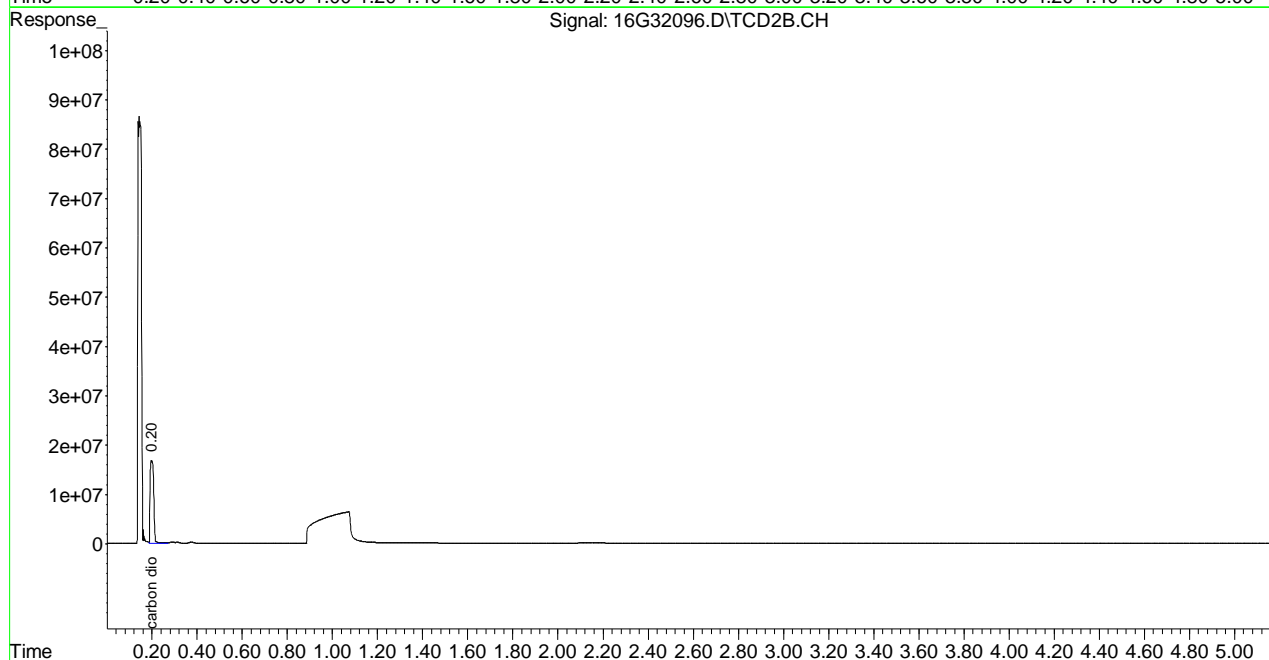
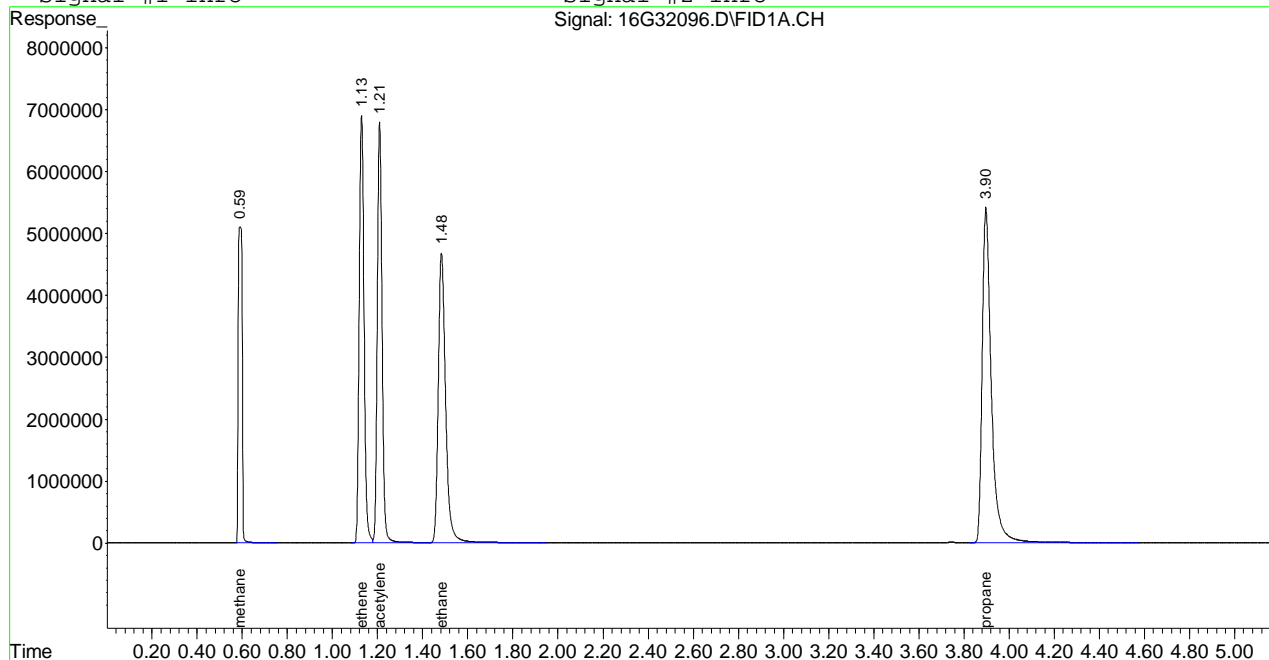
Target Compounds			
1) T methane	0.59	61151880	316.010 umol/
2) T ethene	1.13	102124387	328.518 umol/
3) T acetylene	1.21	100384614	323.619 umol/
4) T ethane	1.48	105345556	330.304 umol/
5) T propane	3.90	152068426	329.556 umol/
7) T carbon dioxide	0.20	190381445	31892.078 umol/

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

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 :



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

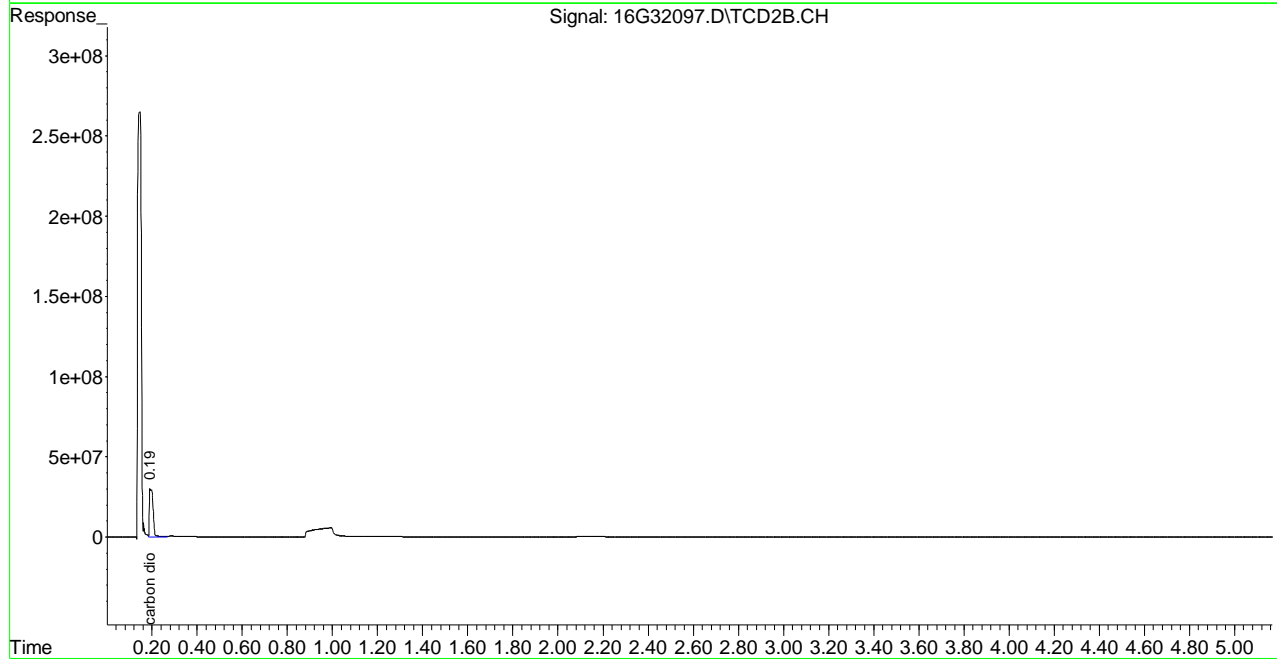
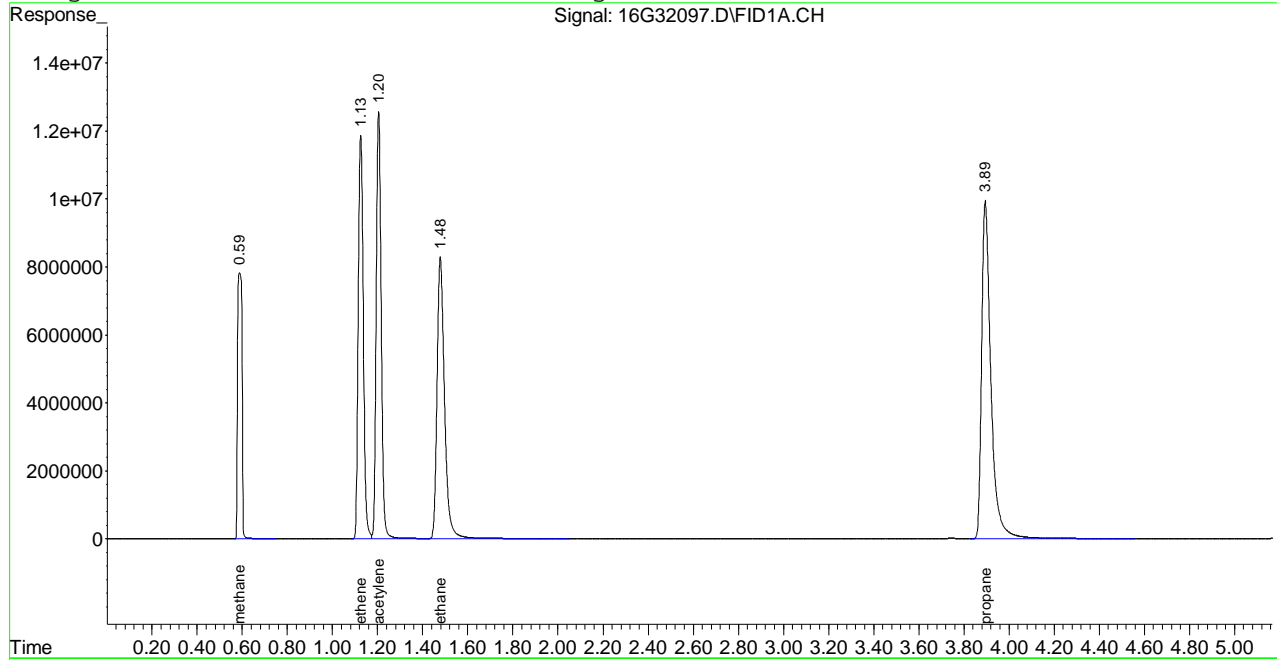
Target Compounds			
1) T methane	0.59	105407837	544.709 umol/
2) T ethene	1.13	184568763	593.729 umol/
3) T acetylene	1.20	194109593	625.769 umol/
4) T ethane	1.48	190467929	597.199 umol/
5) T propane	3.89	283665394	614.747 umol/
7) T carbon dioxide	0.19	351812796	58934.531 umol/

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

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 :



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

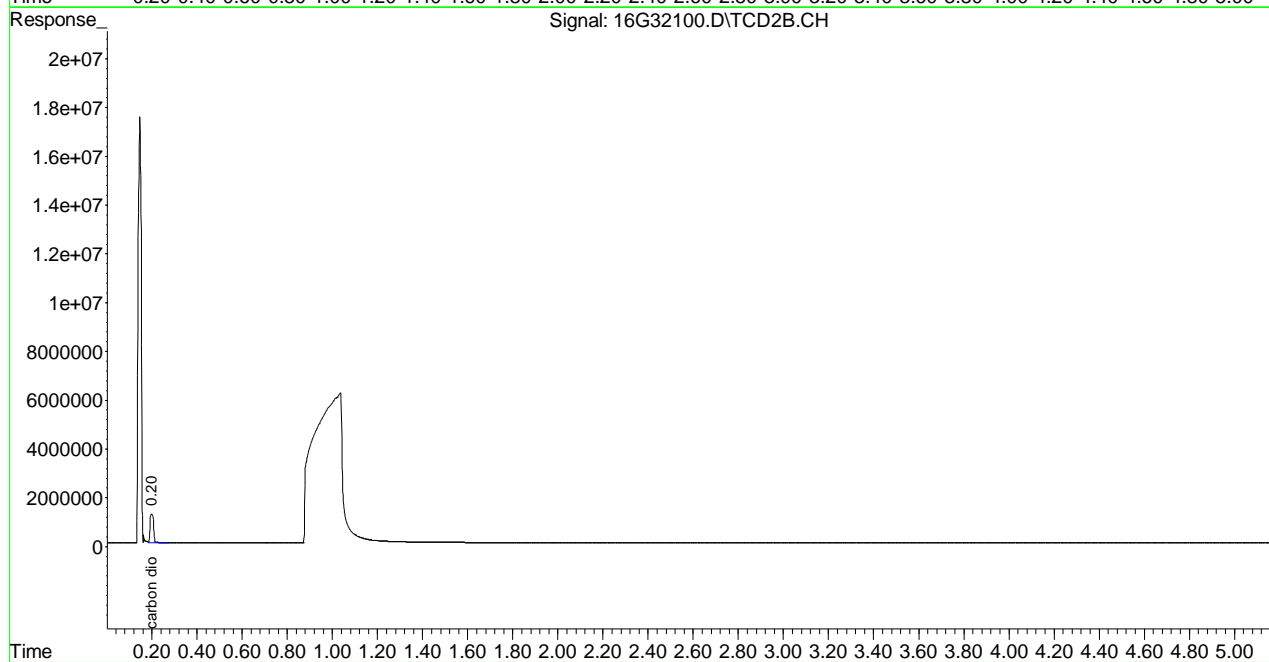
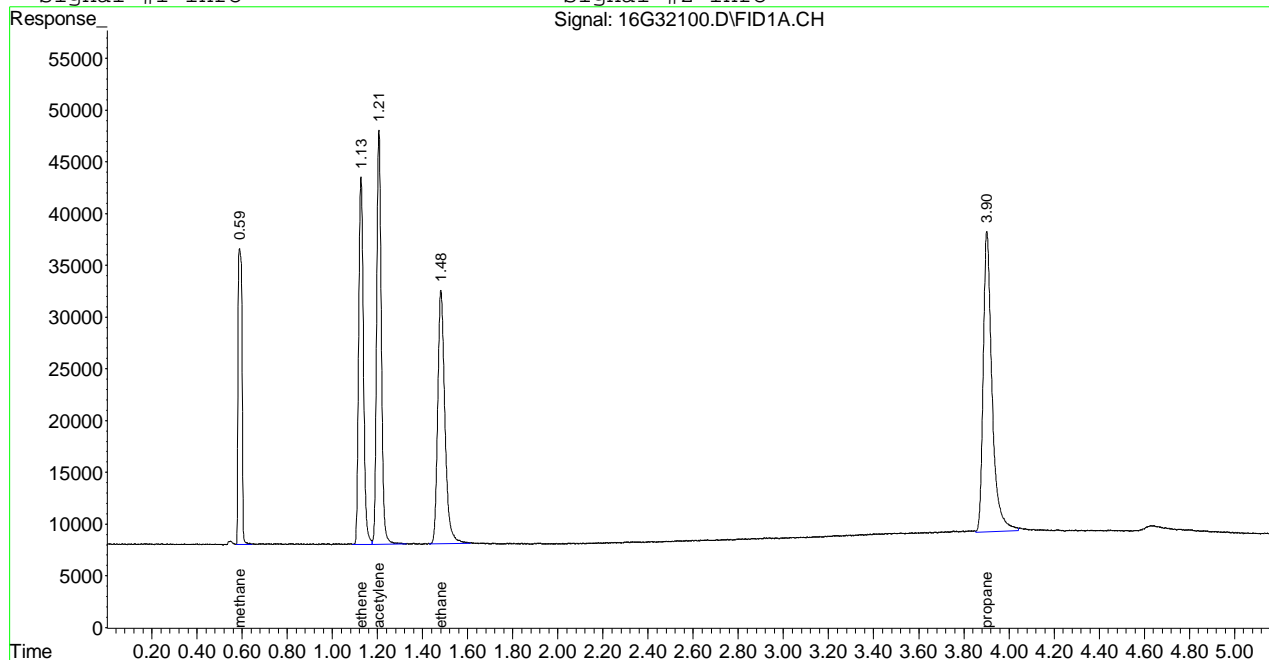
Target Compounds			
1) T methane	0.59	339694	1.927 umol/
2) T ethene	1.13	518903	1.845 umol/
3) T acetylene	1.21	583229	2.112 umol/
4) T ethane	1.48	539701	1.855 umol/
5) T propane	3.90	789587	1.895 umol/
7) T carbon dioxide	0.20	13063496	2368.342 umol/

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

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 :



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

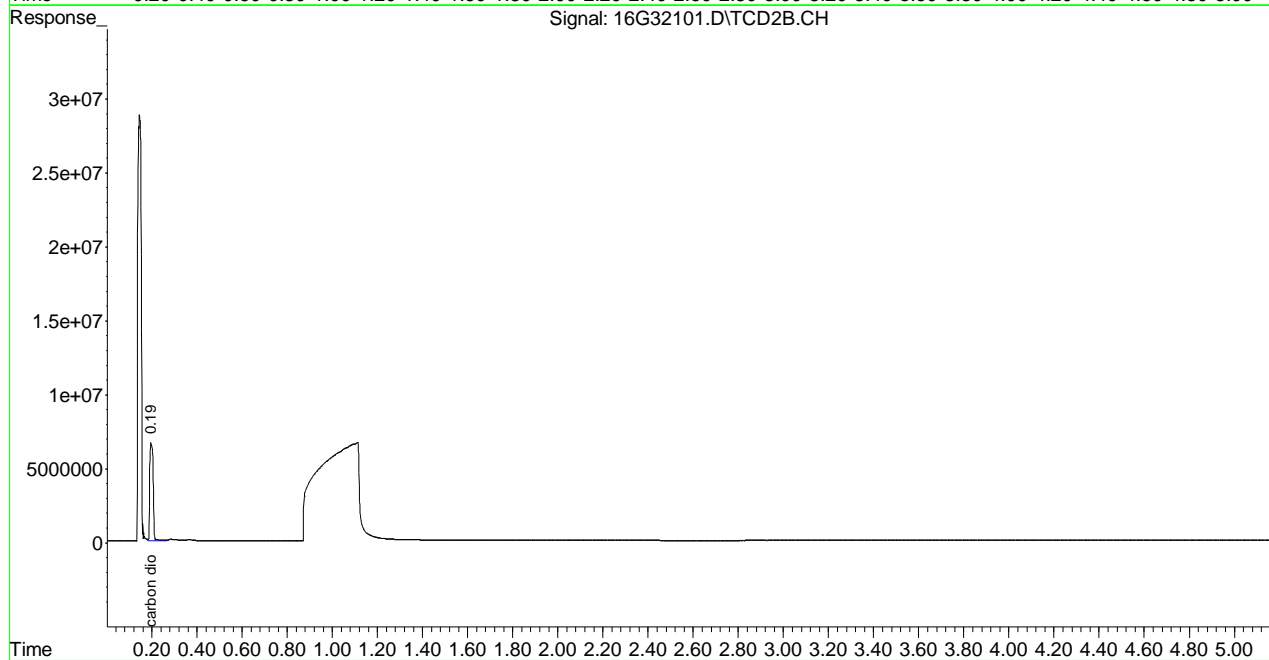
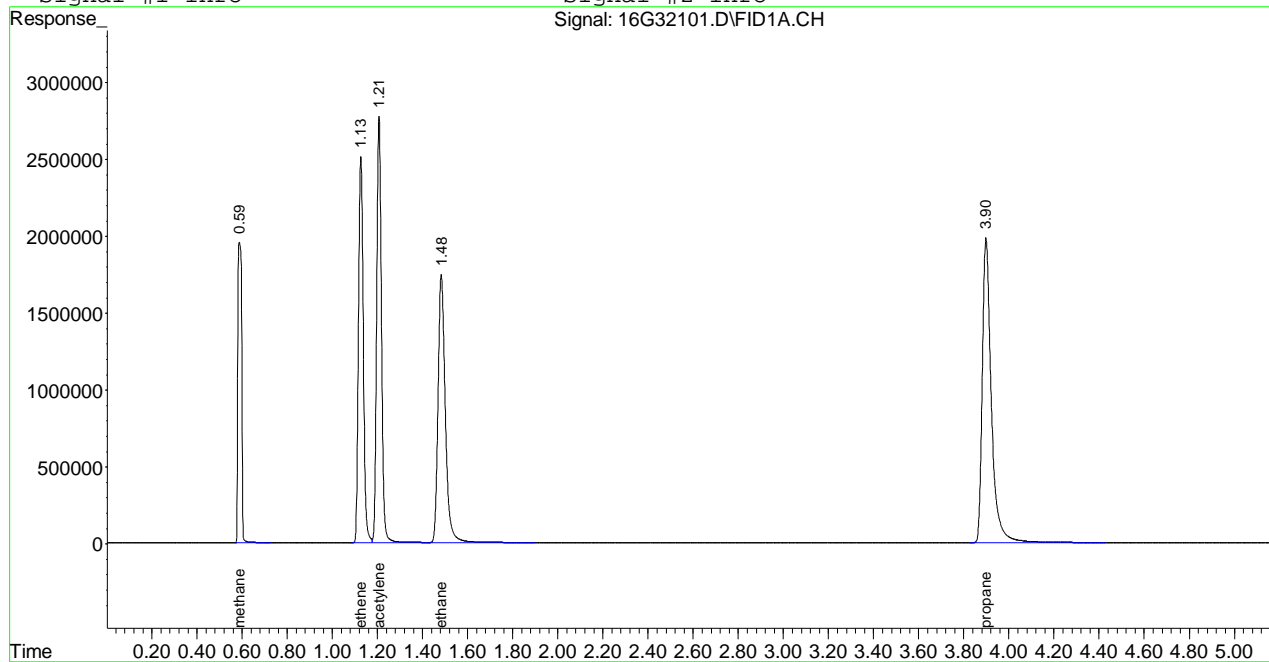
Target Compounds			
1) T methane	0.59	22836049	125.936 umol/
2) T ethene	1.13	37088559	125.126 umol/
3) T acetylene	1.21	41185177	142.223 umol/
4) T ethane	1.48	38937915	128.104 umol/
5) T propane	3.90	55298984	126.002 umol/
7) T carbon dioxide	0.20	70387680	12330.663 umol/

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

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

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

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

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

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

Signal #2

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

Signal #1 : C:\MSDchem\1\DATA\050412\16G32191.D\FID1A.CH Vial: 1
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32191.D\TCD2B.CH
 Acq On : 04 May 2012 12:31 Operator: MDA
 Sample : WG397034-01 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 12:37:12 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 : 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

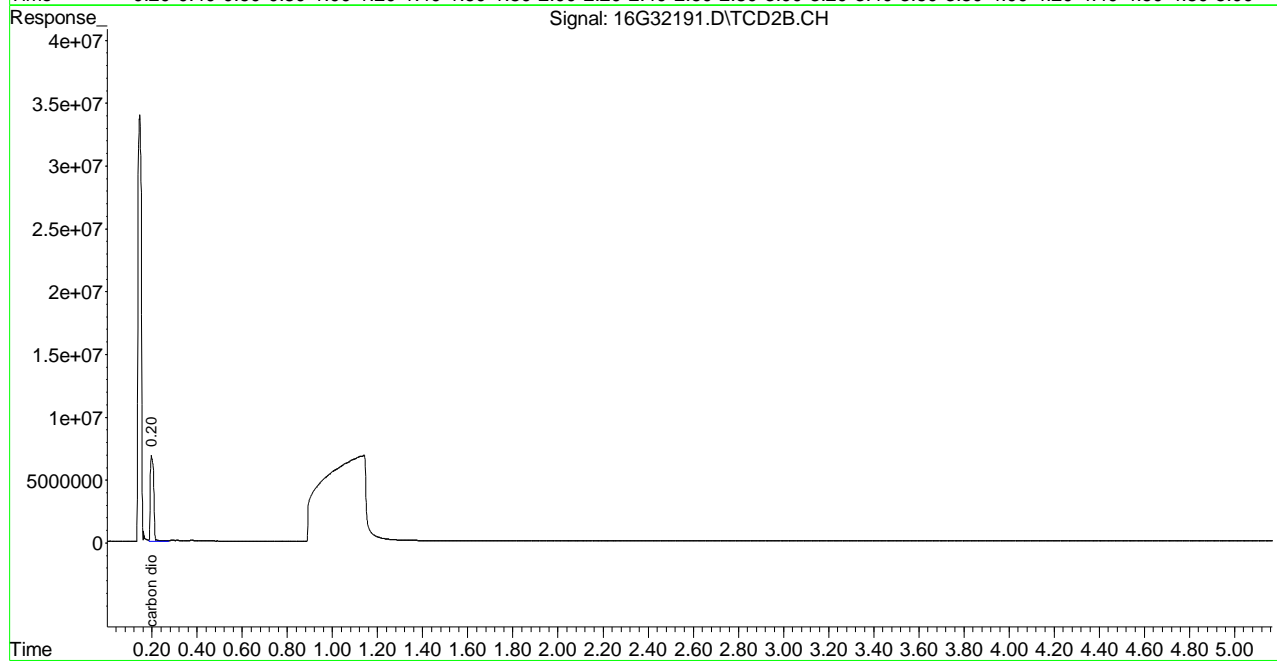
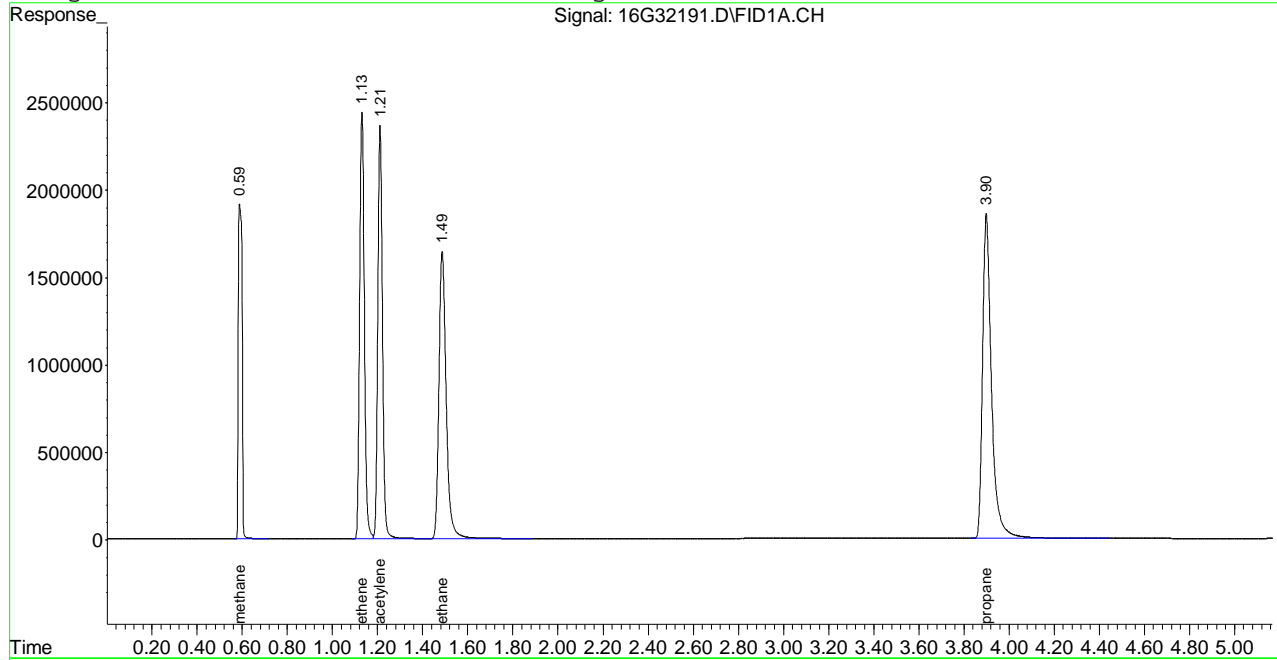
Target Compounds			
1) T methane	0.59	22210724	122.487 umol/
2) T ethene	1.13	35569921	120.003 umol/
3) T acetylene	1.21	34304903	118.464 umol/
4) T ethane	1.49	36600628	120.414 umol/
5) T propane	3.90	51437250	117.203 umol/
7) T carbon dioxide	0.20	72429458	12688.346 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32191.D RSK2EXT.M Fri May 04 12:37:12 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32191.D\FID1A.CH Vial: 1
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32191.D\TCD2B.CH
 Acq On : 04 May 2012 12:31 Operator: MDA
 Sample : WG397034-01 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 4 12:37 2012 Quant Results File: RSK2EXT.RES

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

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



Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32191.D\FID1A.CH Vial: 1
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32191.D\TCD2B.CH
 Acq On : 04 May 2012 12:31 Operator: MDA
 Sample : WG397034-01 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 T	methane	133.000	122.487	7.9	97	0.00
2 T	ethene	133.000	120.003	9.8	95	0.00
3 T	acetylene	133.000	118.464	10.9	97	0.00
4 T	ethane	133.000	120.414	9.5	95	0.00
5 T	propane	133.000	117.203	11.9	92	0.00

Signal #2
 7 T carbon dioxide 13333.000 12688.346 4.8 99 0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 16G32191.D RSK2EXT.M Fri May 04 12:39:36 2012

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32191.D\FID1A.CH Vial: 1
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32191.D\TCD2B.CH
 Acq On : 04 May 2012 12:31 Operator: MDA
 Sample : WG397034-01 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

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

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 16G32191.D RSK2EXT.M Fri May 04 12:39:36 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32202.D\FID1A.CH Vial: 12
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32202.D\TCD2B.CH
 Acq On : 04 May 2012 14:12 Operator: MDA
 Sample : WG397034-02 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 14:17:32 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

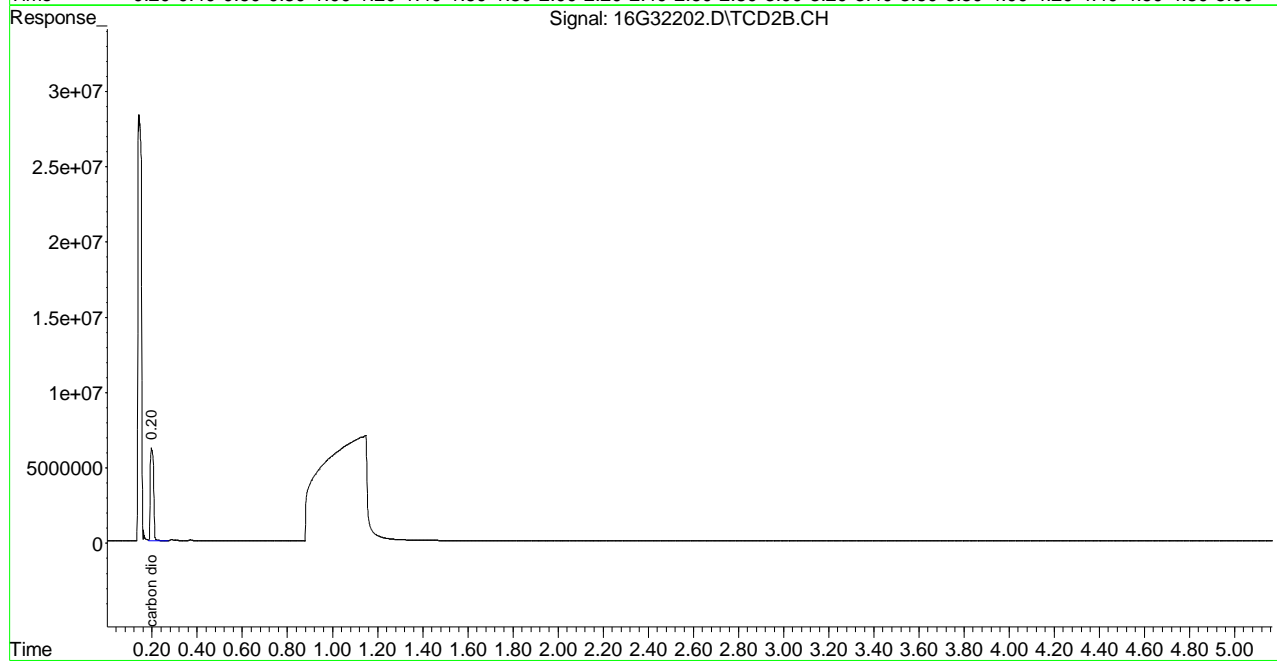
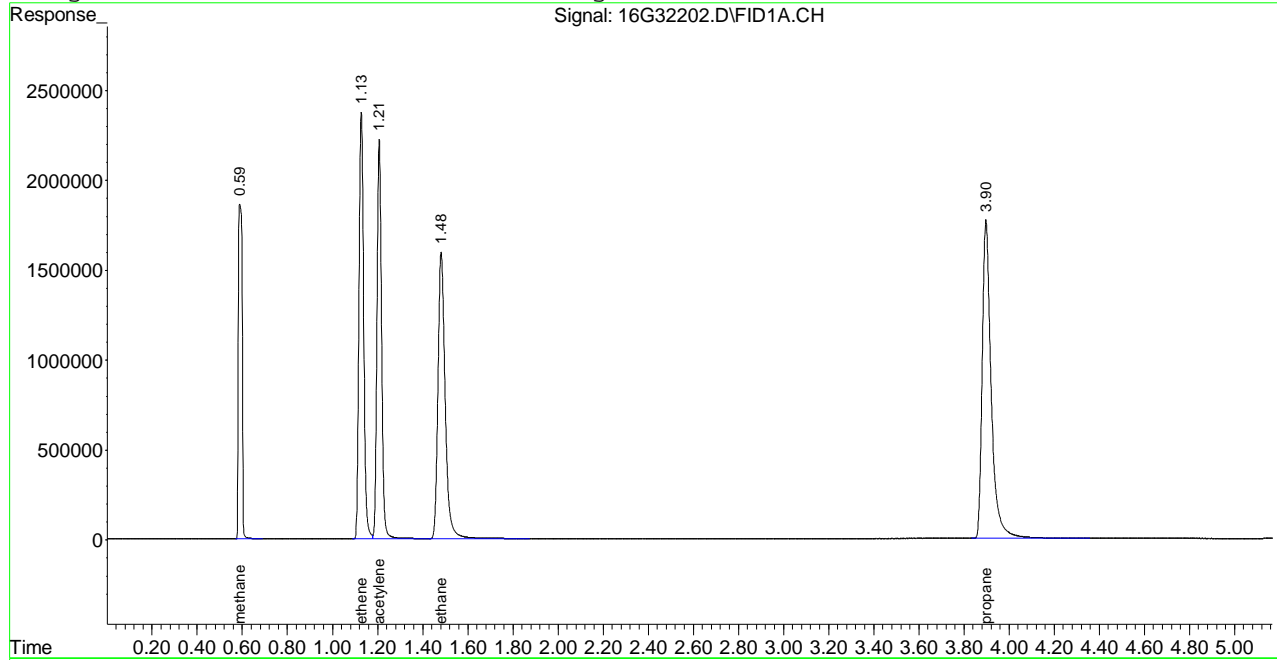
Target Compounds			
1) T methane	0.59	21639483	119.337 umol/
2) T ethene	1.13	34138506	115.173 umol/
3) T acetylene	1.21	31748915	109.637 umol/
4) T ethane	1.48	35258758	115.999 umol/
5) T propane	3.90	49187298	112.076 umol/
7) T carbon dioxide	0.20	64972289	11381.983 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32202.D RSK2EXT.M Fri May 04 14:17:32 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32202.D\FID1A.CH Vial: 12
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32202.D\TCD2B.CH
 Acq On : 04 May 2012 14:12 Operator: MDA
 Sample : WG397034-02 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 4 14:17 2012 Quant Results File: RSK2EXT.RES

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

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



Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32202.D\FID1A.CH Vial: 12
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32202.D\TCD2B.CH
 Acq On : 04 May 2012 14:12 Operator: MDA
 Sample : WG397034-02 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 T	methane	133.000	119.337	10.3	94	0.00
2 T	ethene	133.000	115.173	13.4	91	0.00
3 T	acetylene	133.000	109.637	17.6#	90	0.00
4 T	ethane	133.000	115.999	12.8	91	0.00
5 T	propane	133.000	112.076	15.7#	88	0.00

Signal #2
 7 T carbon dioxide 13333.000 11381.983 14.6 89 0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 16G32202.D RSK2EXT.M Fri May 04 14:17:46 2012

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32202.D\FID1A.CH Vial: 12
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32202.D\TCD2B.CH
 Acq On : 04 May 2012 14:12 Operator: MDA
 Sample : WG397034-02 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

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

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 16G32202.D RSK2EXT.M Fri May 04 14:17:46 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32213.D\FID1A.CH Vial: 23
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32213.D\TCD2B.CH
 Acq On : 04 May 2012 15:52 Operator: MDA
 Sample : WG397034-03 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 15:57:51 2012 Quant Results File: RSK2EXT.RES

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

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

Compound	R.T.	Response	Conc Units

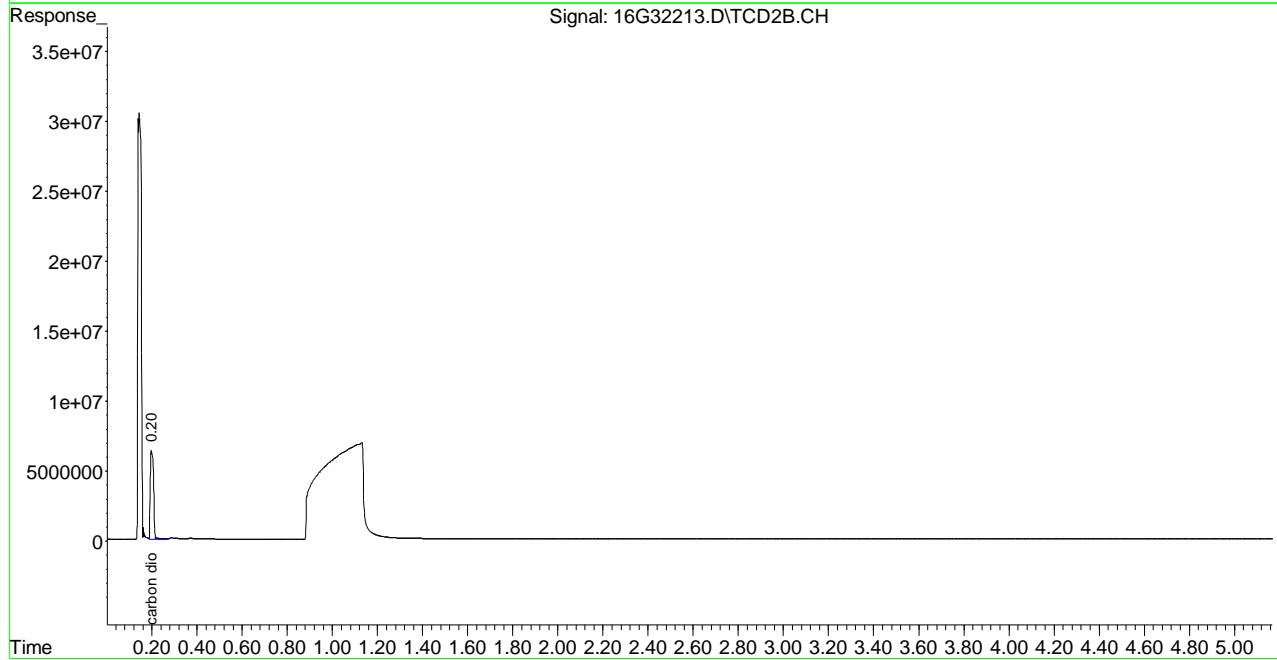
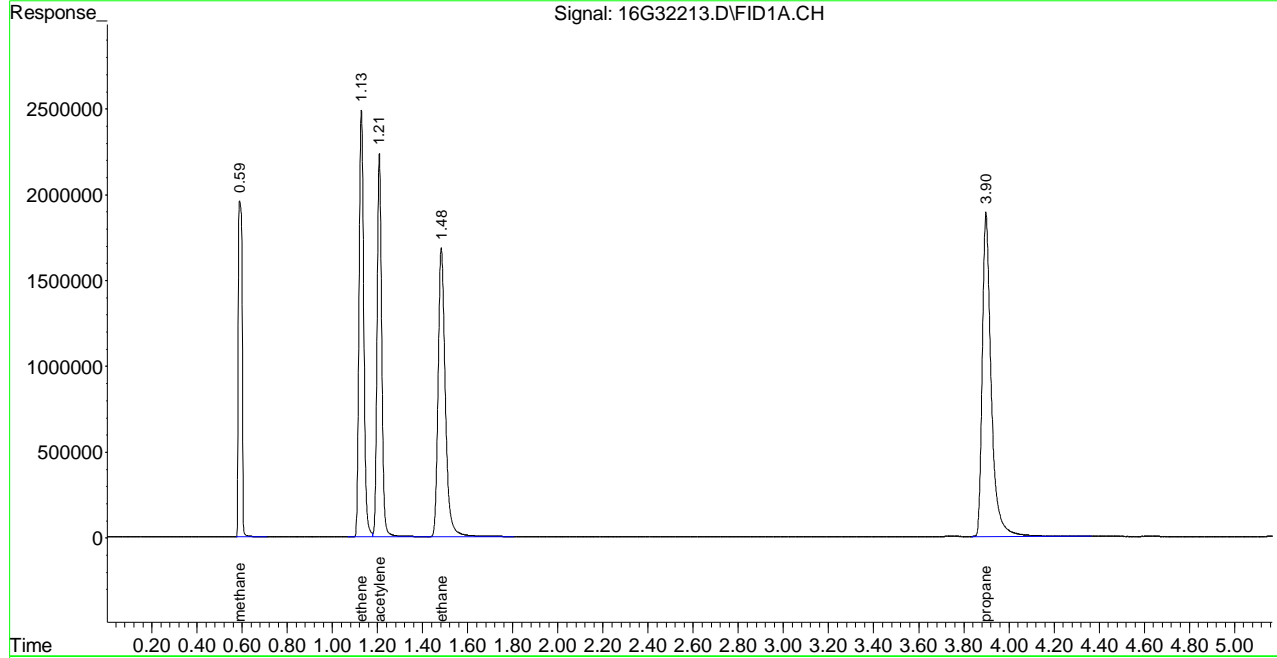
Target Compounds			
1) T methane	0.59	22661953	124.976 umol/
2) T ethene	1.13	35792672	120.754 umol/
3) T acetylene	1.21	31983558	110.448 umol/
4) T ethane	1.48	37159984	122.254 umol/
5) T propane	3.90	52190672	118.920 umol/
7) T carbon dioxide	0.20	65876274	11540.345 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32213.D RSK2EXT.M Fri May 04 15:57:51 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32213.D\FID1A.CH Vial: 23
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32213.D\TCD2B.CH
 Acq On : 04 May 2012 15:52 Operator: MDA
 Sample : WG397034-03 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 4 15:57 2012 Quant Results File: RSK2EXT.RES

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

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



Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32213.D\FID1A.CH Vial: 23
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32213.D\TCD2B.CH
 Acq On : 04 May 2012 15:52 Operator: MDA
 Sample : WG397034-03 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 T	methane	133.000	124.976	6.0	99	0.00
2 T	ethene	133.000	120.754	9.2	96	0.00
3 T	acetylene	133.000	110.448	17.0#	91	0.00
4 T	ethane	133.000	122.254	8.1	96	0.00
5 T	propane	133.000	118.920	10.6	94	0.00

Signal #2
 7 T carbon dioxide 13333.000 11540.345 13.4 90 0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 16G32213.D RSK2EXT.M Fri May 04 16:06:07 2012

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32213.D\FID1A.CH Vial: 23
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32213.D\TCD2B.CH
 Acq On : 04 May 2012 15:52 Operator: MDA
 Sample : WG397034-03 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

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

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 16G32213.D RSK2EXT.M Fri May 04 16:06:07 2012

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32246.D\FID1A.CH Vial: 2
 Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32246.D\TCD2B.CH
 Acq On : 07 May 2012 15:11 Operator: FJB
 Sample : WG397237-01 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 07 15:17:40 2012 Quant Results File: RSK2EXT.RES

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

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

Compound	R.T.	Response	Conc Units

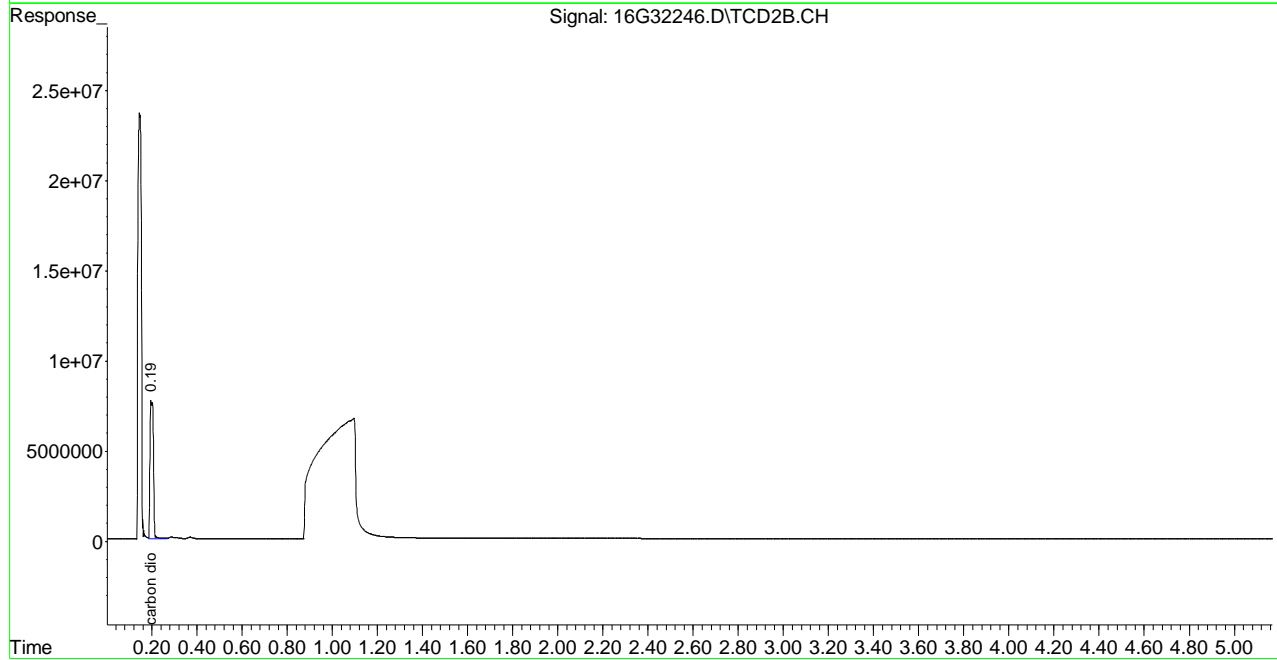
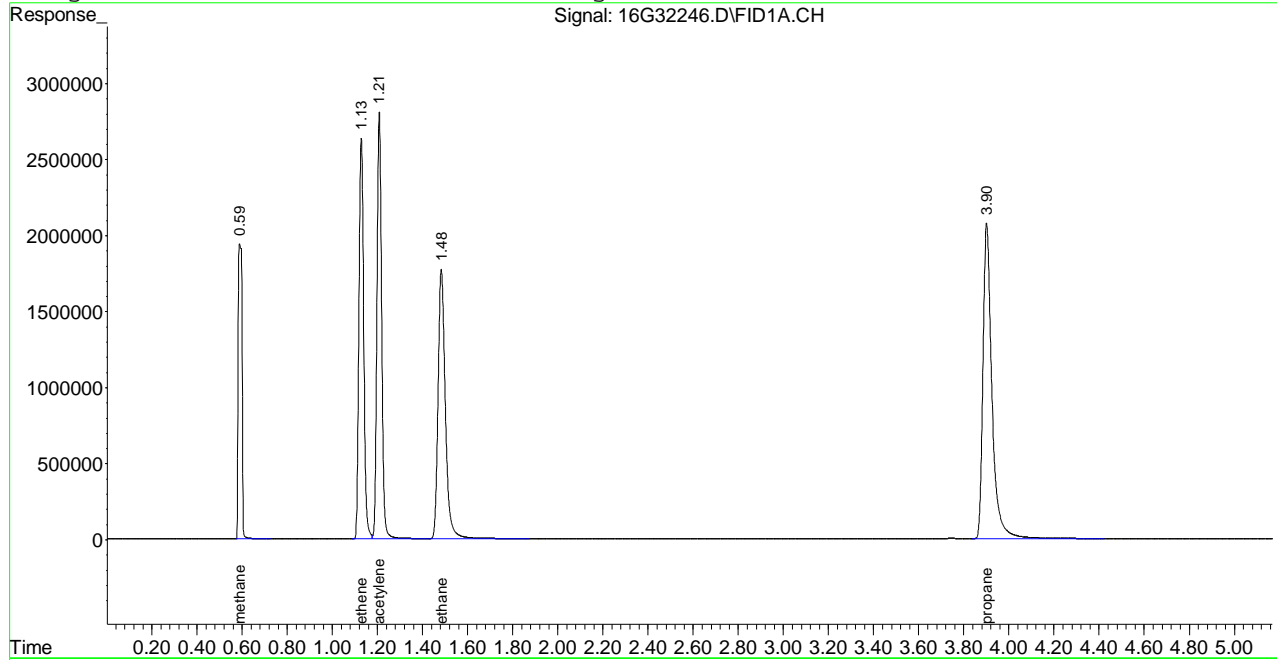
Target Compounds			
1) T methane	0.59	22829748	125.901 umol/
2) T ethene	1.13	38590572	130.193 umol/
3) T acetylene	1.21	41020344	141.654 umol/
4) T ethane	1.48	39580451	130.218 umol/
5) T propane	3.90	57410903	130.814 umol/
7) T carbon dioxide	0.20	82814213	14507.569 umol/

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

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32246.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32246.D\TCD2B.CH
Acq On : 07 May 2012 15:11 Operator: FJB
Sample : WG397237-01 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 15:17 2012 Quant Results File: RSK2EXT.RES

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

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



Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32246.D\FID1A.CH Vial: 2
 Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32246.D\TCD2B.CH
 Acq On : 07 May 2012 15:11 Operator: FJB
 Sample : WG397237-01 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 T	methane	133.000	125.901	5.3	100	0.00
2 T	ethene	133.000	130.193	2.1	103	0.00
3 T	acetylene	133.000	141.654	-6.5	116	0.00
4 T	ethane	133.000	130.218	2.1	102	0.00
5 T	propane	133.000	130.814	1.6	103	0.00

Signal #2
 7 T carbon dioxide 13333.000 14507.569 -8.8 113 0.00

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

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32246.D\FID1A.CH Vial: 2
 Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32246.D\TCD2B.CH
 Acq On : 07 May 2012 15:11 Operator: FJB
 Sample : WG397237-01 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 STD38726 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

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

Signal #2

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

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32260.D\FID1A.CH Vial: 15
 Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32260.D\TCD2B.CH
 Acq On : 07 May 2012 17:20 Operator: FJB
 Sample : WG397237-02 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 07 17:26:08 2012 Quant Results File: RSK2EXT.RES

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

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

Compound	R.T.	Response	Conc Units

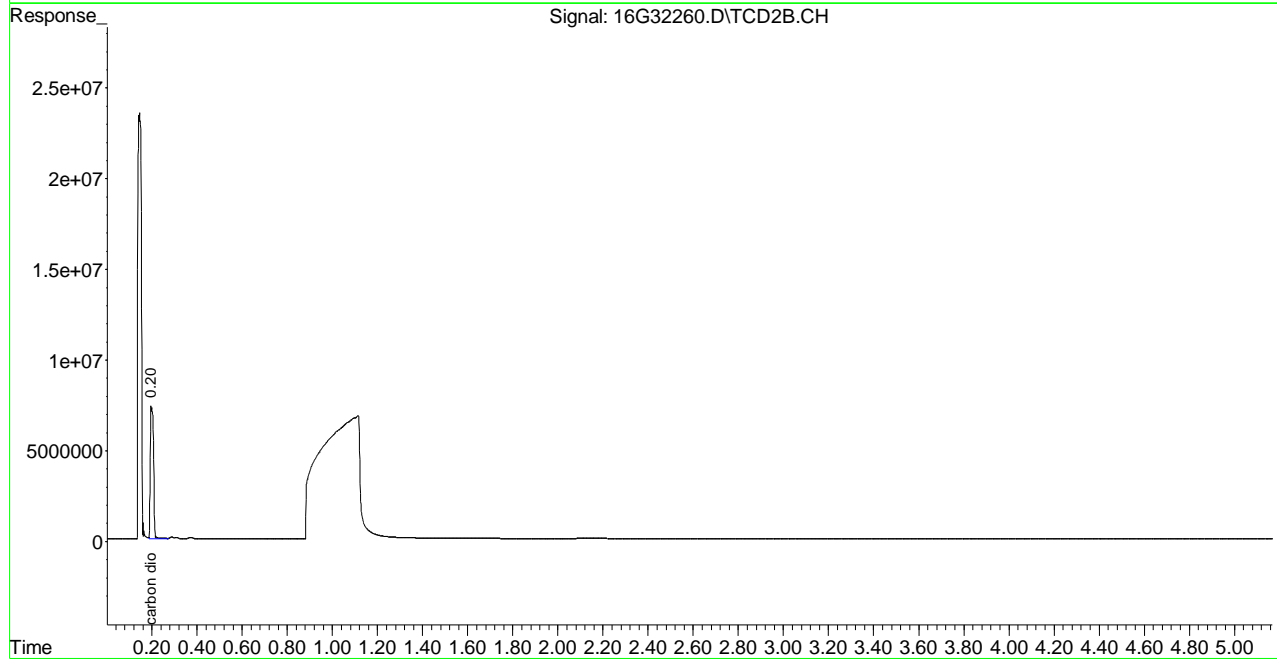
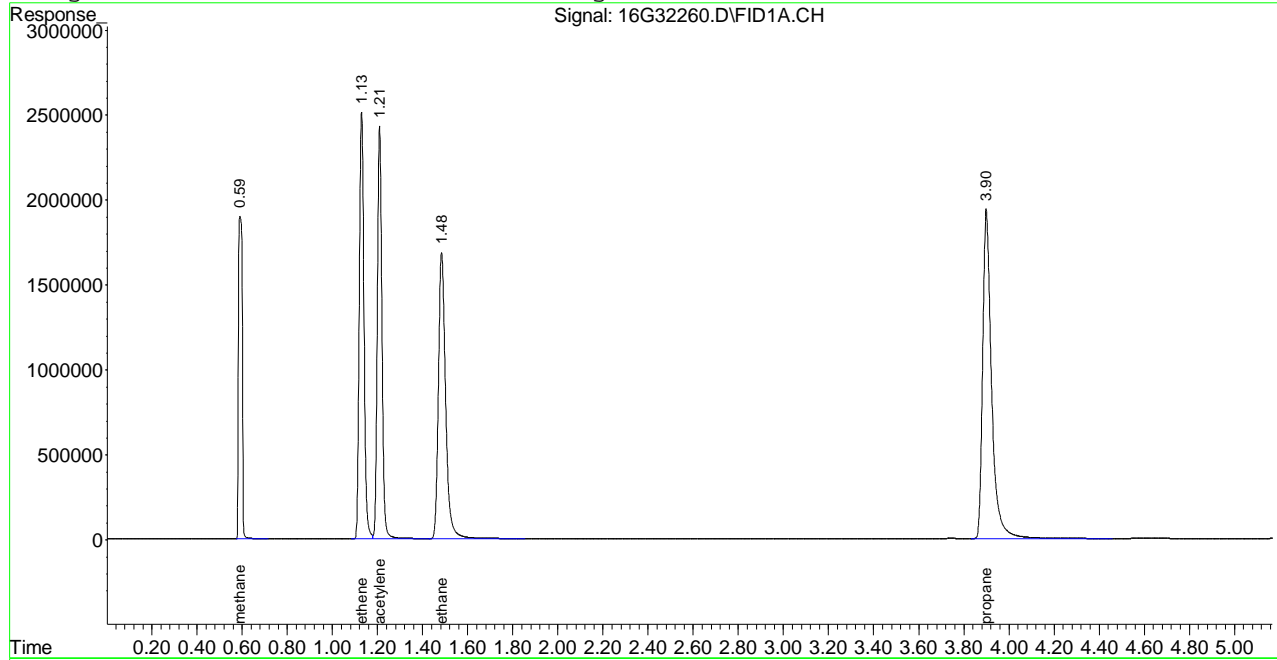
Target Compounds			
1) T methane	0.59	21983832	121.236 umol/
2) T ethene	1.13	36106378	121.812 umol/
3) T acetylene	1.21	34793650	120.152 umol/
4) T ethane	1.48	37254657	122.566 umol/
5) T propane	3.90	53368086	121.602 umol/
7) T carbon dioxide	0.20	75293129	13190.010 umol/

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

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32260.D\FID1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32260.D\TCD2B.CH
Acq On : 07 May 2012 17:20 Operator: FJB
Sample : WG397237-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 17:26 2012 Quant Results File: RSK2EXT.RES

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

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



Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32260.D\FID1A.CH Vial: 15
 Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32260.D\TCD2B.CH
 Acq On : 07 May 2012 17:20 Operator: FJB
 Sample : WG397237-02 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 T	methane	133.000	121.236	8.8	96	0.00
2 T	ethene	133.000	121.812	8.4	96	0.00
3 T	acetylene	133.000	120.152	9.7	98	0.00
4 T	ethane	133.000	122.566	7.8	96	0.00
5 T	propane	133.000	121.602	8.6	96	0.00

Signal #2
 7 T carbon dioxide 13333.000 13190.010 1.1 103 0.00

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

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32260.D\FID1A.CH Vial: 15
 Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32260.D\TCD2B.CH
 Acq On : 07 May 2012 17:20 Operator: FJB
 Sample : WG397237-02 133umol/mol CCV RSK175 Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

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

Signal #2

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

Microbac Laboratories Inc.
Daily Retention Time Window Determination

Login #: L12050099 Run Date: 05/04/2012 Sample ID: WG397034-01
 Instrument: HP16 Run Time: 12:31 Method: RSK175
 Workgroup (AAB#): WG397035 File ID: 16G32191

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	1.49	1.460	1.520
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: 2406626
 Report generated 05/10/2012 08:37



Microbac Laboratories Inc.
Daily Retention Time Window Determination

Login #: L12050099 Run Date: 05/07/2012 Sample ID: WG397237-01
 Instrument: HP16 Run Time: 15:11 Method: RSK175
 Workgroup (AAB#): WG397238 File ID: 16G32246

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

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

RT_WIN - Modified 01/06/2010
 PDF File ID: 2406626
 Report generated 05/10/2012 08:37



2.1.2.5 Raw QC Data

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32192.D\FID1A.CH Vial: 2
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32192.D\TCD2B.CH
 Acq On : 04 May 2012 12:41 Operator: MDA
 Sample : WG397035-01 BLANK RSK175 Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 12:46:35 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 : 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

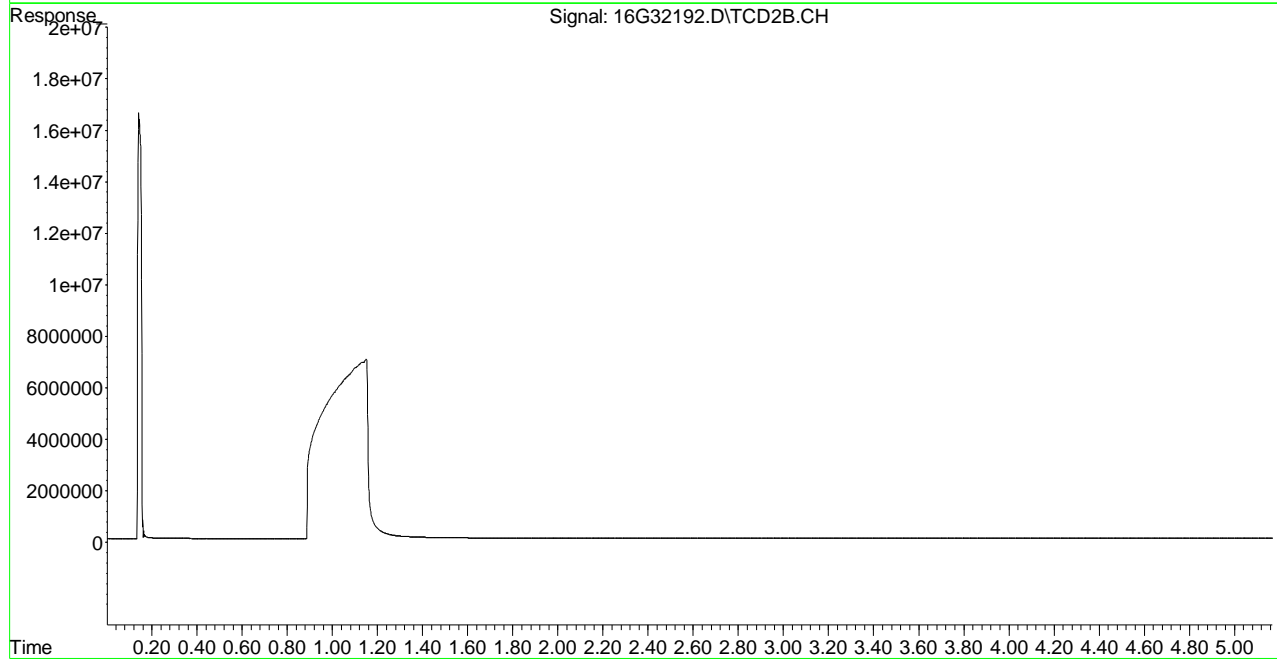
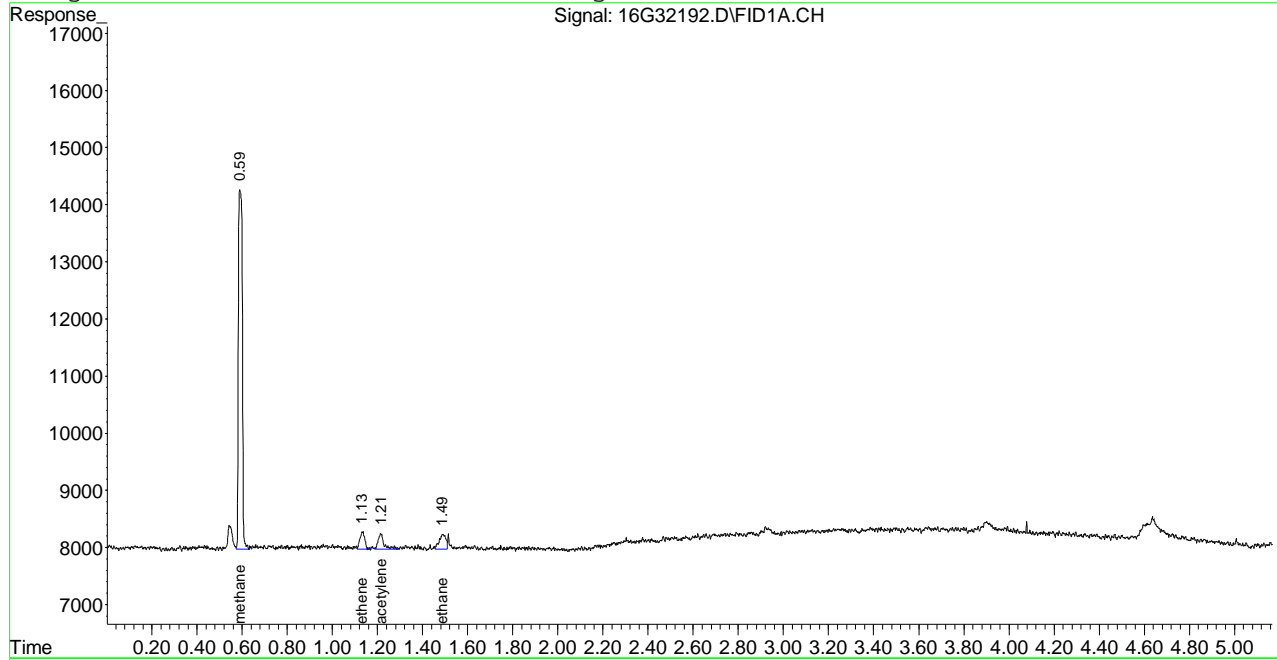
Target Compounds			
1) T methane	0.59	74670	0.412 umol/
2) T ethene	1.13	4738	0.016 umol/
3) T acetylene	1.21	5195	0.018 umol/
4) T ethane	1.49	5350	0.018 umol/
5) T propane	0.00	0	N.D. umol/
7) T carbon dioxide	0.00	0	N.D. umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32192.D RSK2EXT.M Fri May 04 12:47:34 2012

Signal #1 : C:\MSDCHEM\1\DATA\050412\16G32192.D\FID1A.CH Vial: 2
 Signal #2 : C:\MSDCHEM\1\DATA\050412\16G32192.D\TCD2B.CH
 Acq On : 04 May 2012 12:41 Operator: MDA
 Sample : WG397035-01 BLANK RSK175 Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 4 12:46 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 :



Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32247.D\FID1A.CH Vial: 2
 Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32247.D\TCD2B.CH
 Acq On : 07 May 2012 15:23 Operator: FJB
 Sample : WG397238-01 BLANK RSK175 Inst : HP16
 Misc : 1,1 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 07 15:28:20 2012 Quant Results File: RSK2EXT.RES

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

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

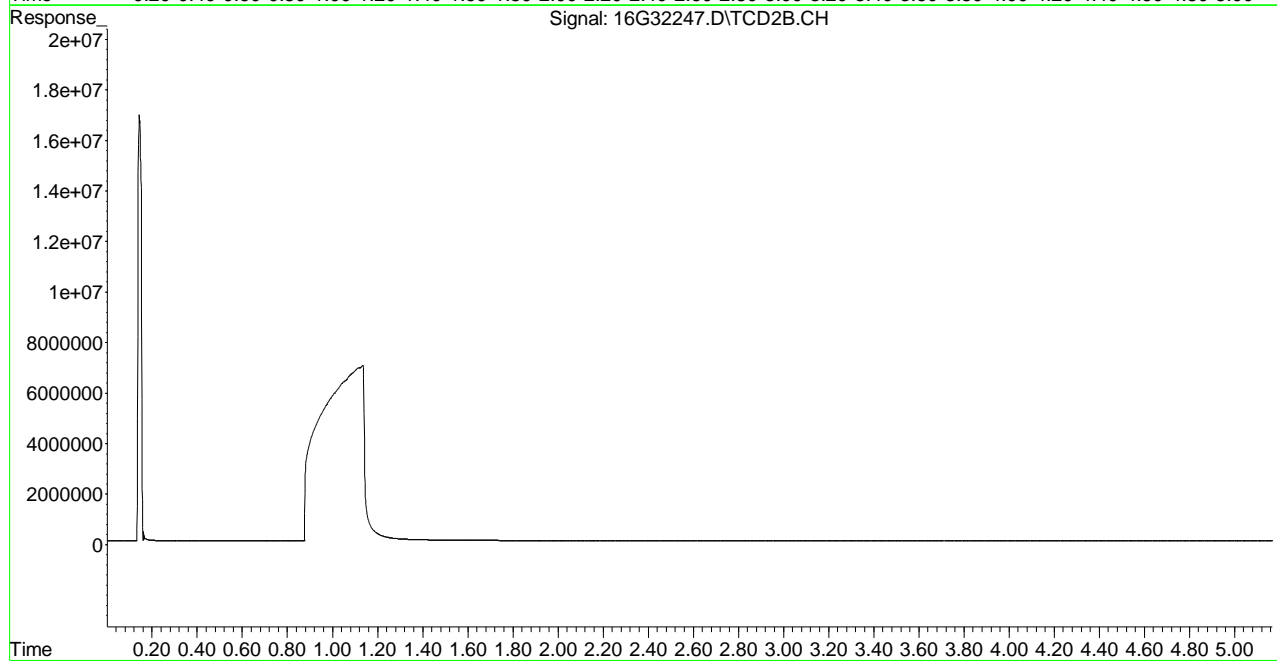
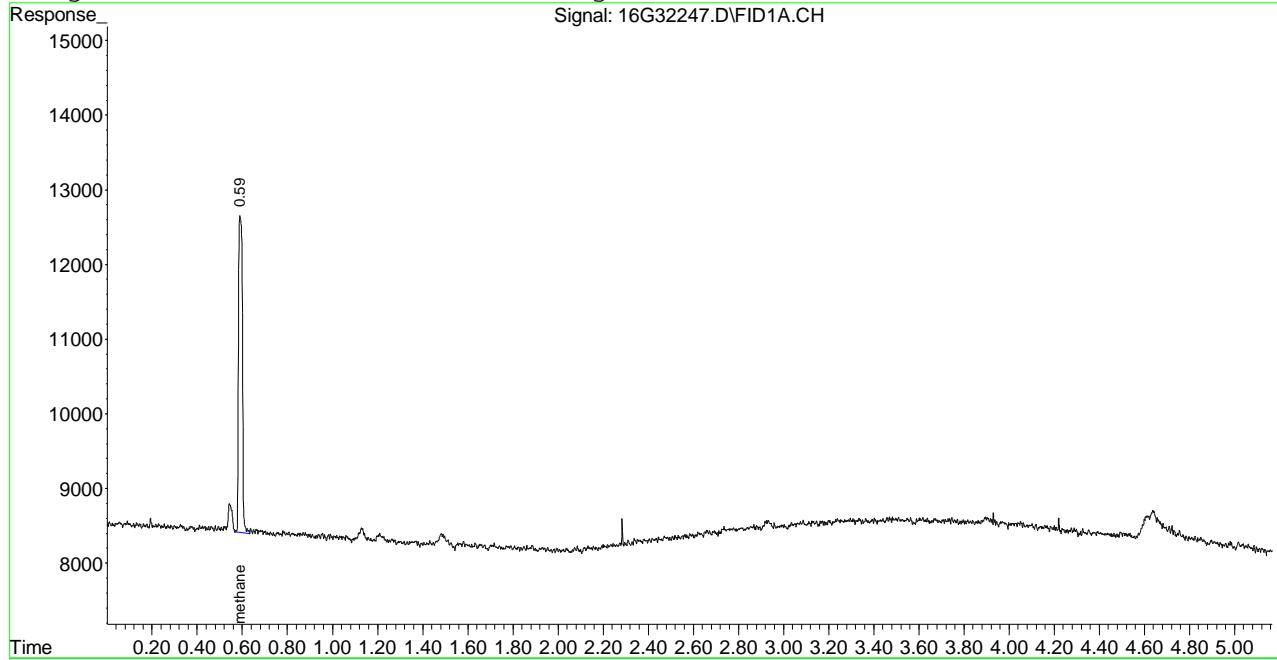
Compound	R.T.	Response	Conc Units

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

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32247.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32247.D\TCD2B.CH
Acq On : 07 May 2012 15:23 Operator: FJB
Sample : WG397238-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 15:28 2012 Quant Results File: RSK2EXT.RES

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

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



Signal #1 : C:\MSDchem\1\DATA\050412\16G32193.D\FID1A.CH Vial: 3
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32193.D\TCD2B.CH
 Acq On : 04 May 2012 12:50 Operator: MDA
 Sample : WG397035-02 67umol/mol LCS RSK175 Inst : HP16
 Misc : 1,1 STD45308 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 12:55:41 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

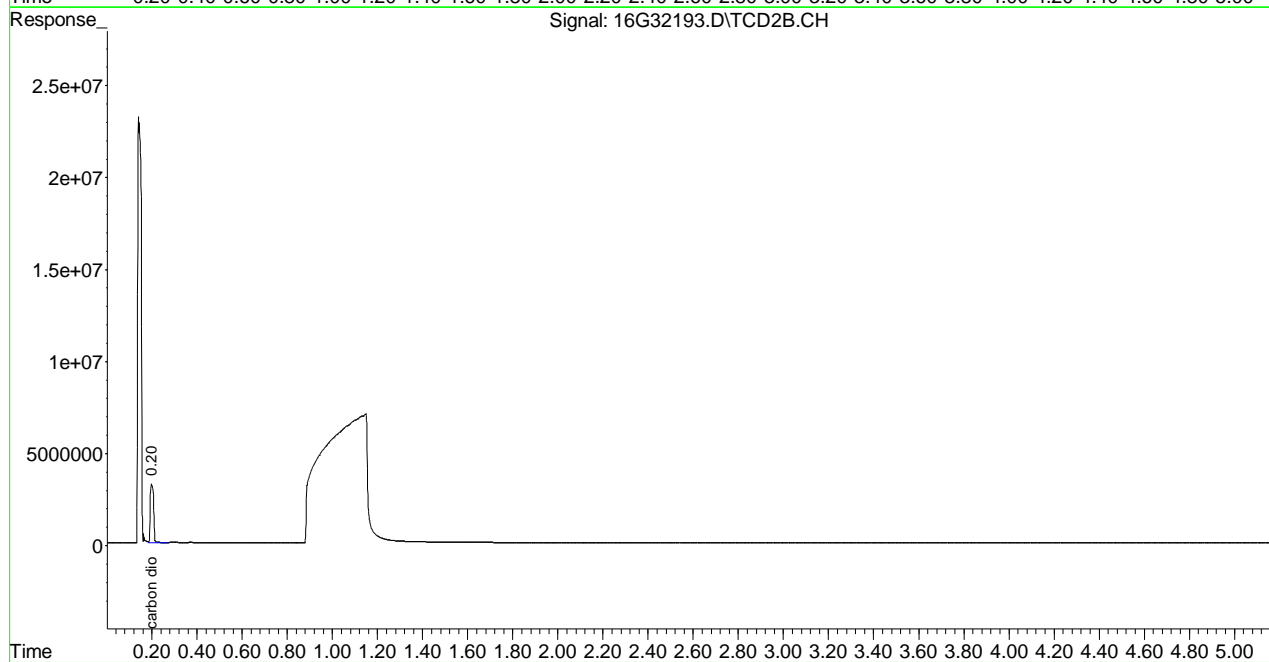
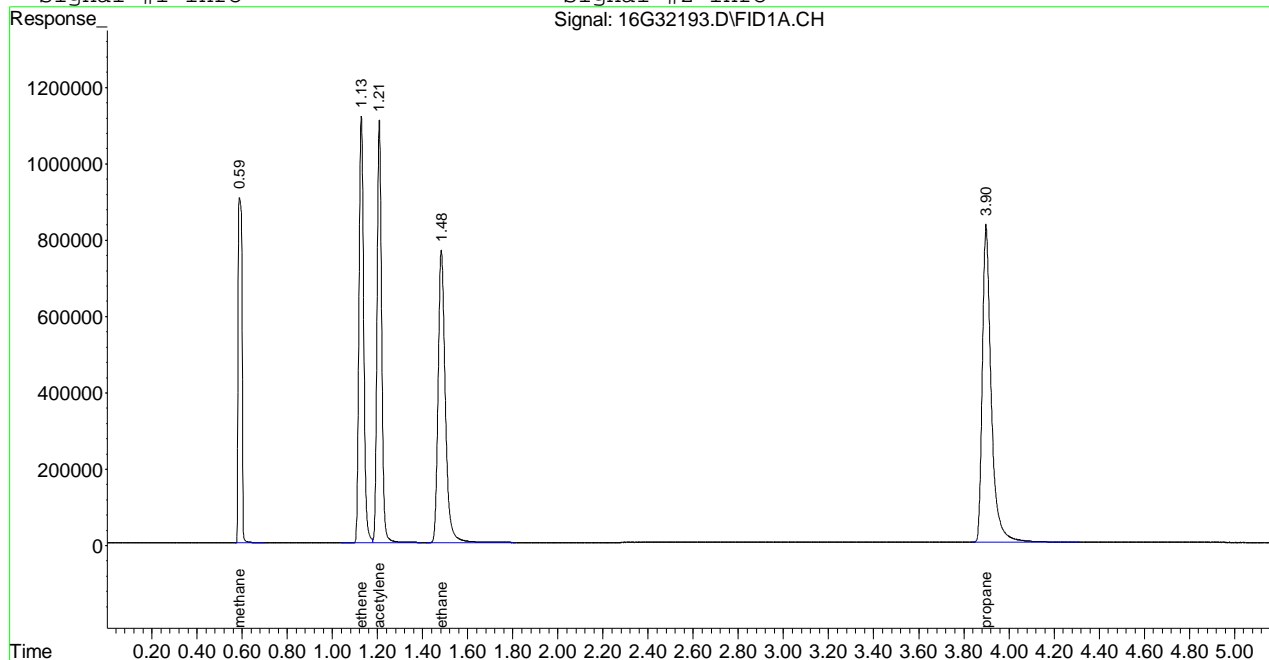
Target Compounds			
1) T methane	0.59	10593406	58.420 umol/
2) T ethene	1.13	16071584	54.221 umol/
3) T acetylene	1.21	15823143	54.641 umol/
4) T ethane	1.48	16930110	55.699 umol/
5) T propane	3.90	22879764	52.133 umol/
7) T carbon dioxide	0.20	33878313	5934.875 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32193.D RSK2EXT.M Fri May 04 12:55:41 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32193.D\FID1A.CH Vial: 3
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32193.D\TCD2B.CH
 Acq On : 04 May 2012 12:50 Operator: MDA
 Sample : WG397035-02 67umol/mol LCS RSK175 Inst : HP16
 Misc : 1,1 STD45308 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 4 12:55 2012 Quant Results File: RSK2EXT.RES

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

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



Signal #1 : C:\MSDchem\1\DATA\050712\16G32248.D\FID1A.CH Vial: 3
 Signal #2 : C:\MSDchem\1\DATA\050712\16G32248.D\TCD2B.CH
 Acq On : 07 May 2012 15:32 Operator: FJB
 Sample : WG397238-02 67umol/mol LCS RSK175 Inst : HP16
 Misc : 1,1 STD45308 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 07 15:37:13 2012 Quant Results File: RSK2EXT.RES

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

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

Compound	R.T.	Response	Conc Units

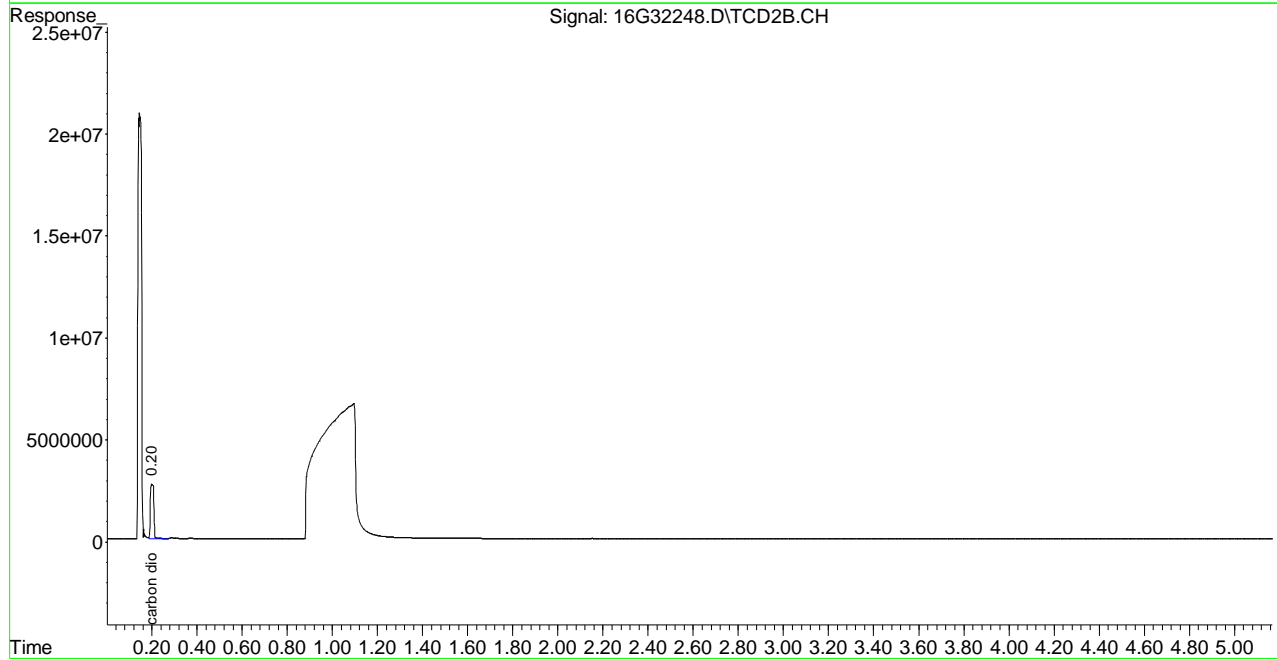
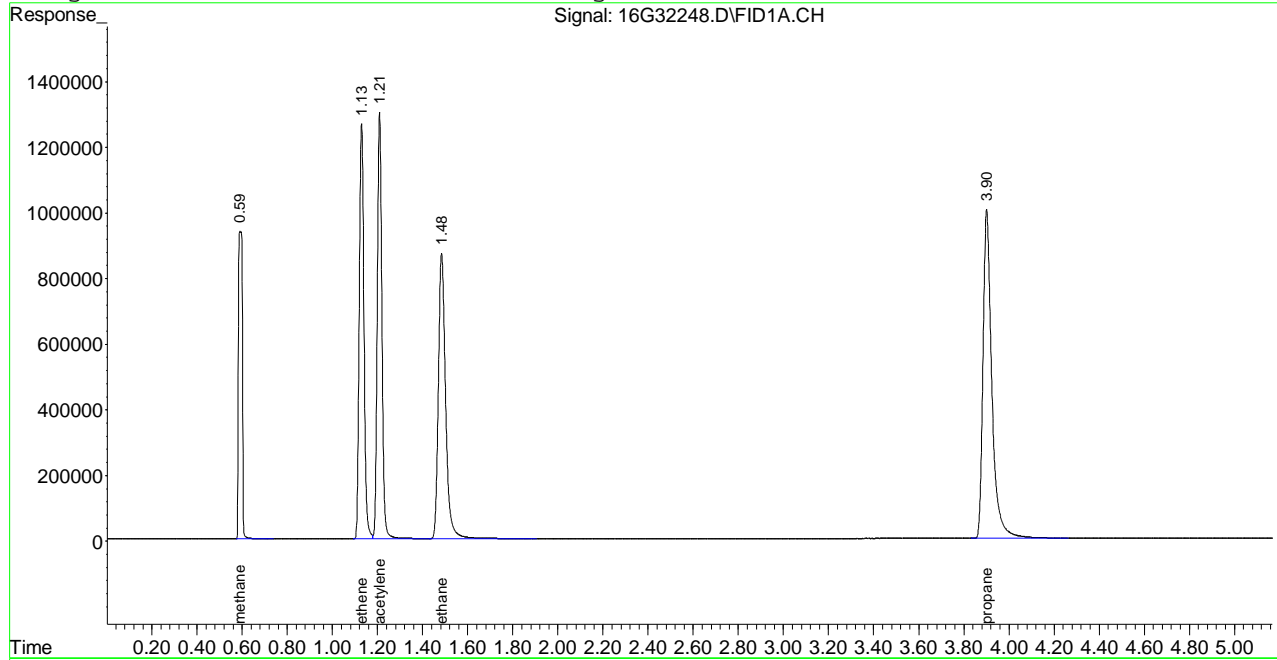
Target Compounds			
1) T methane	0.59	11179097	61.650 umol/
2) T ethene	1.13	18245071	61.554 umol/
3) T acetylene	1.21	18684734	64.523 umol/
4) T ethane	1.48	19283816	63.443 umol/
5) T propane	3.90	27429863	62.501 umol/
7) T carbon dioxide	0.20	29465005	5161.742 umol/

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

Signal #1 : C:\MSDchem\1\DATA\050712\16G32248.D\FID1A.CH Vial: 3
 Signal #2 : C:\MSDchem\1\DATA\050712\16G32248.D\TCD2B.CH
 Acq On : 07 May 2012 15:32 Operator: FJB
 Sample : WG397238-02 67umol/mol LCS RSK175 Inst : HP16
 Misc : 1,1 STD45308 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 7 15:37 2012 Quant Results File: RSK2EXT.RES

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

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



Signal #1 : C:\MSDchem\1\DATA\050412\16G32194.D\FID1A.CH Vial: 4
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32194.D\TCD2B.CH
 Acq On : 04 May 2012 12:59 Operator: MDA
 Sample : WG397035-03 67umol/mol LCSD RSK175 Inst : HP16
 Misc : 1,1 STD45308 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 04 13:04:42 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

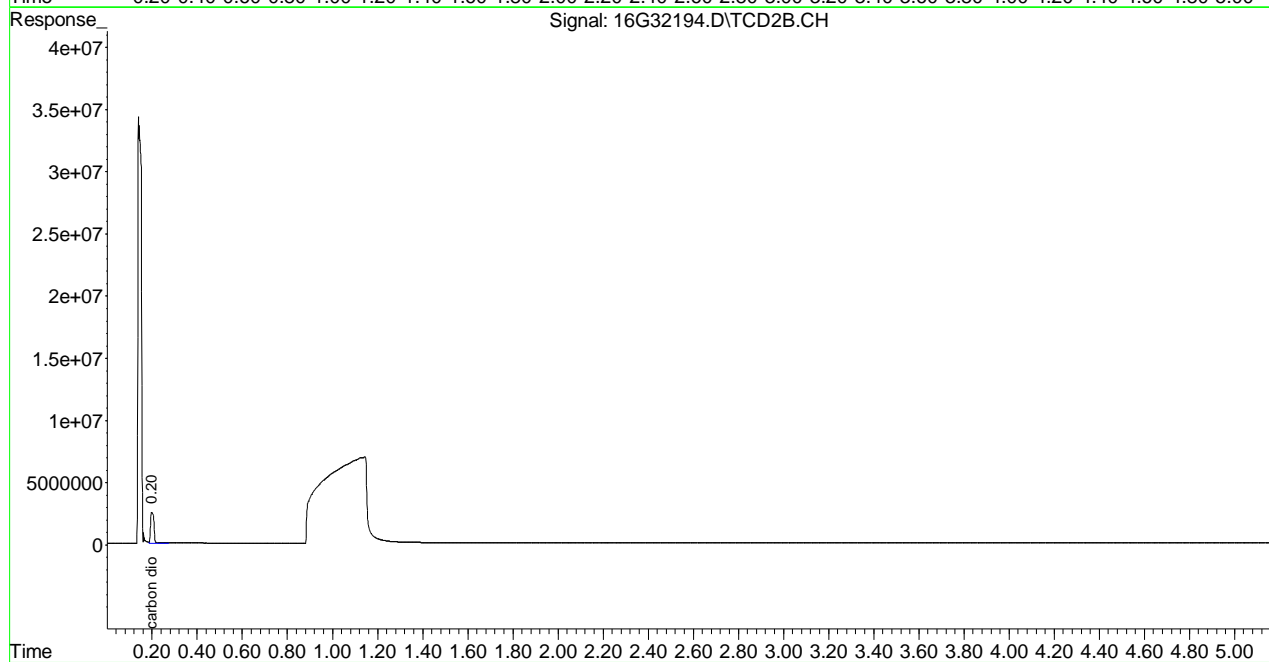
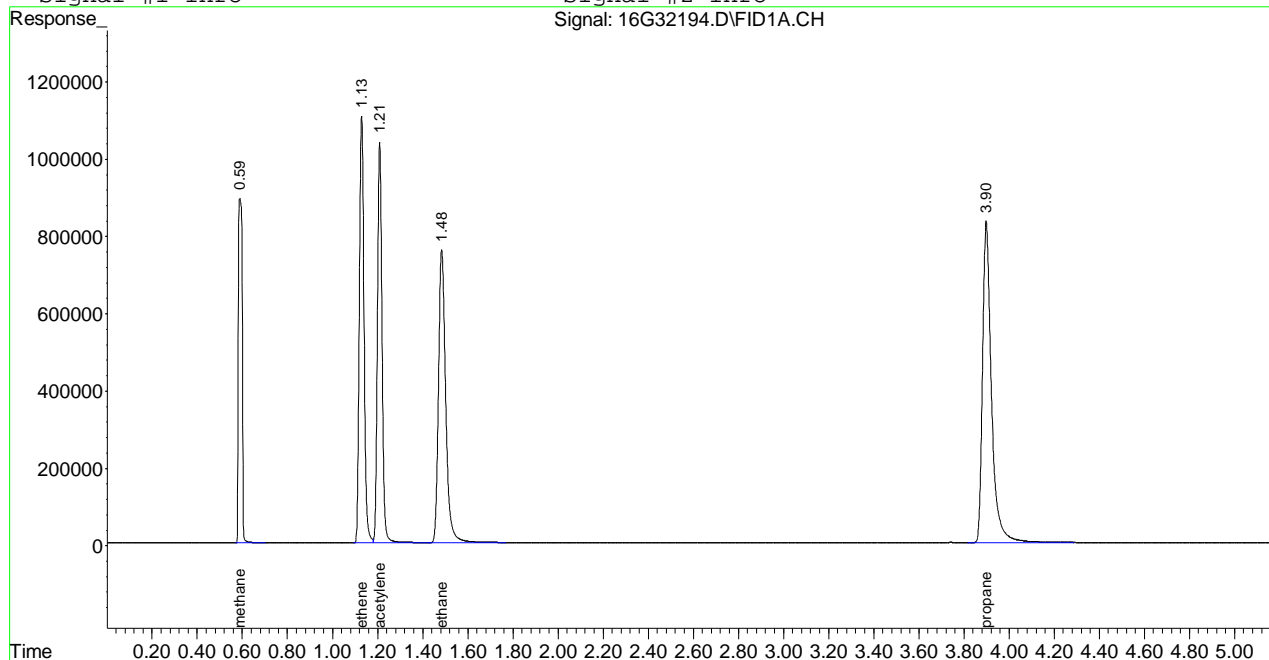
Target Compounds			
1) T methane	0.59	10471224	57.747 umol/
2) T ethene	1.13	15843904	53.453 umol/
3) T acetylene	1.21	14804694	51.124 umol/
4) T ethane	1.48	16747831	55.099 umol/
5) T propane	3.90	22917790	52.220 umol/
7) T carbon dioxide	0.20	26548728	4650.862 umol/

 (f)=RT Delta > 1/2 Window (m)=manual int.
 16G32194.D RSK2EXT.M Fri May 04 13:04:42 2012

Signal #1 : C:\MSDchem\1\DATA\050412\16G32194.D\FID1A.CH Vial: 4
 Signal #2 : C:\MSDchem\1\DATA\050412\16G32194.D\TCD2B.CH
 Acq On : 04 May 2012 12:59 Operator: MDA
 Sample : WG397035-03 67umol/mol LCSD RSK175 Inst : HP16
 Misc : 1,1 STD45308 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 4 13:04 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 30 15:17:04 2012
 Response via : Multiple Level Calibration
 DataAcq Meth : RSK2EXT.M

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



Signal #1 : C:\MSDchem\1\DATA\050712\16G32249.D\FID1A.CH Vial: 4
 Signal #2 : C:\MSDchem\1\DATA\050712\16G32249.D\TCD2B.CH
 Acq On : 07 May 2012 15:41 Operator: FJB
 Sample : WG397238-03 67umol/mol LCSD RSK175 Inst : HP16
 Misc : 1,1 STD45308 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 07 15:46:13 2012 Quant Results File: RSK2EXT.RES

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

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

Compound	R.T.	Response	Conc Units

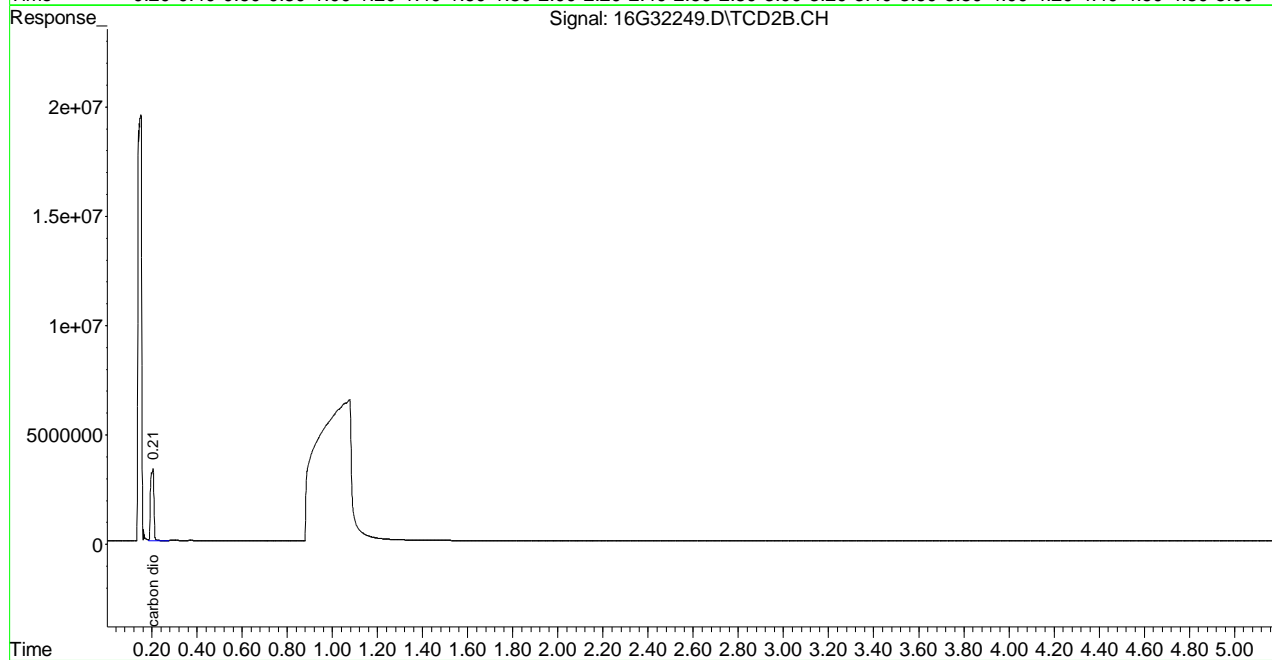
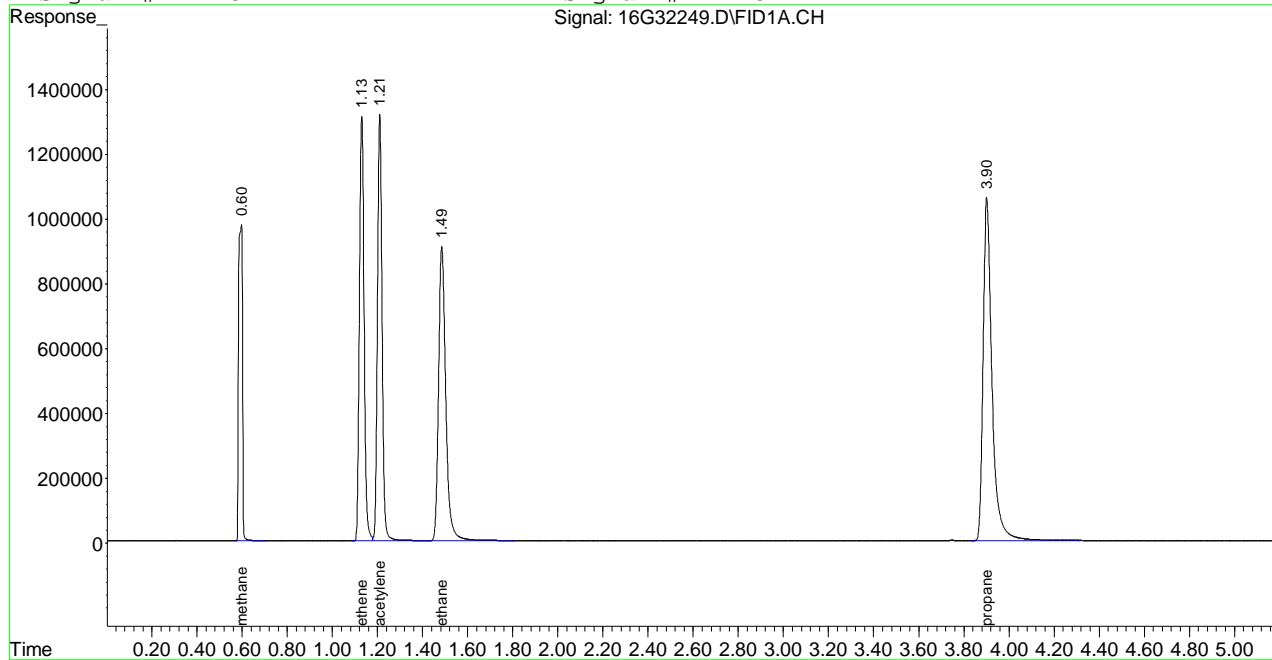
Target Compounds			
1) T methane	0.60	11504204	63.443 umol/
2) T ethene	1.13	18913969	63.810 umol/
3) T acetylene	1.21	18906389	65.289 umol/
4) T ethane	1.49	20065088	66.013 umol/
5) T propane	3.90	28969367	66.008 umol/
7) T carbon dioxide	0.20	35170160	6161.183 umol/

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

Signal #1 : C:\MSDchem\1\DATA\050712\16G32249.D\FID1A.CH Vial: 4
 Signal #2 : C:\MSDchem\1\DATA\050712\16G32249.D\TCD2B.CH
 Acq On : 07 May 2012 15:41 Operator: FJB
 Sample : WG397238-03 67umol/mol LCSD RSK175 Inst : HP16
 Misc : 1,1 STD45308 Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
 Quant Time: May 7 15:46 2012 Quant Results File: RSK2EXT.RES

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

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



2.2 Semivolatiles Data

2.2.1 Semivolatiles GC/MS Data (8270)

2.2.1.1 Summary Data



Login Number: L12050099
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3520C

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

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

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

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

BATCH QA/QC

Method Blank: All acceptance criteria were met.

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

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

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

SAMPLES

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

Internal Standards: All acceptance criteria were met.

Surrogates: 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: 46341

Approved By: Mike Cochran



Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-13-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 19:31
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 4M60831
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 #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-13-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 19:31
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 4M60831
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	75.0	10	123	
2-Fluorobiphenyl	60.6	43	116	
2-Fluorophenol	55.5	21	100	
Nitrobenzene-d5	63.9	35	114	
p-Terphenyl-d14	80.0	33	141	

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-13-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 19:31
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 4M60831
Sample Tag: 01	Units: ug/L	

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	60.7	10	94	
U	Not detected at or above adjusted sample detection limit.			

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-13-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 19:31
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 4M60831
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Morpholine		18.5		0.000	0.000
unknown		6.79		0.000	0.000
unknown		8.19		0.000	0.000
unknown		5.40		0.000	0.000
unknown		7.42		0.000	0.000
unknown		4.27		0.000	0.000
unknown		4.33		0.000	0.000
unknown		5.44		0.000	0.000

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.31		0.000	0.000
unknown		6.00		0.000	0.000
unknown		13.8		0.000	0.000
unknown		6.13		0.000	0.000
unknown		8.65		0.000	0.000

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
unknown		12.7		0.000	0.000
unknown		7.33		0.000	0.000
unknown		8.69		0.000	0.000
unknown		5.07		0.000	0.000
unknown		9.44		0.000	0.000
unknown		6.11		0.000	0.000

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	23.5	2.94
1,3,5-Trinitrobenzene	99-35-4		U	5.88	2.94
1,3-Dinitrobenzene	99-65-0		U	5.88	2.94
1,4-Dioxane	123-91-1		U	11.8	5.88
2,4,5-Trichlorophenol	95-95-4		U	5.88	2.94
2,4,6-Trichlorophenol	88-06-2		U	5.88	2.94
2,4-Dichlorophenol	120-83-2		U	5.88	2.94
2,4-Dimethylphenol	105-67-9		U	5.88	2.94
2,4-Dinitrophenol	51-28-5		U	29.4	14.7
2,4-Dinitrotoluene	121-14-2		U	5.88	2.94
2,6-Dinitrotoluene	606-20-2		U	5.88	2.94
2-Chloronaphthalene	91-58-7		U	5.88	2.94
2-Chlorophenol	95-57-8		U	5.88	2.94
2-Methylnaphthalene	91-57-6		U	5.88	2.94
2-Methylphenol	95-48-7		U	5.88	2.94
2-Nitroaniline	88-74-4		U	29.4	14.7
2-Nitrophenol	88-75-5		U	5.88	2.94
3-Nitroaniline	99-09-2		U	29.4	14.7
3,3'-Dichlorobenzidine	91-94-1		U	5.88	2.94
3-,4-Methylphenol	106-44-5		U	5.88	2.94
4-Bromophenyl-phenylether	101-55-3		U	5.88	2.94
4-Chloroaniline	106-47-8		U	5.88	2.94
4-Nitrophenol	100-02-7		U	29.4	14.7
Acenaphthene	83-32-9		U	5.88	2.94
Acenaphthylene	208-96-8		U	5.88	2.94
Anthracene	120-12-7		U	5.88	2.94
Benzo(a)anthracene	56-55-3		U	5.88	2.94
Benzo(a)pyrene	50-32-8		U	5.88	2.94
Benzo(b)fluoranthene	205-99-2		U	5.88	2.94
Benzo(g,h,i)Perylene	191-24-2		U	5.88	2.94
Benzo(k)fluoranthene	207-08-9		U	5.88	2.94
Benzoic acid	65-85-0		U	23.5	11.8
Benzyl alcohol	100-51-6		U	5.88	2.94

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.88	2.94
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.88	2.94
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.88	2.94
Butylbenzylphthalate	85-68-7		U	5.88	2.94
Carbazole	86-74-8		U	23.5	2.94
Chrysene	218-01-9		U	5.88	2.94
Di-N-Butylphthalate	84-74-2		U	5.88	2.94
Di-n-octylphthalate	117-84-0		U	5.88	2.94
Dibenzo(a,h)Anthracene	53-70-3		U	5.88	2.94
Dibenzofuran	132-64-9		U	5.88	2.94
Diethylphthalate	84-66-2		U	5.88	2.94
Dimethylphthalate	131-11-3		U	5.88	2.94
Fluoranthene	206-44-0		U	5.88	2.94
Fluorene	86-73-7		U	5.88	2.94
Hexachlorobenzene	118-74-1		U	5.88	2.94
Hexachlorobutadiene	87-68-3		U	5.88	2.94
Hexachlorocyclopentadiene	77-47-4		U	5.88	2.94
Hexachloroethane	67-72-1		U	5.88	2.94
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.88	2.94
Isophorone	78-59-1		U	5.88	2.94
N-Nitrosodiphenylamine	86-30-6		U	5.88	2.94
Naphthalene	91-20-3		U	5.88	2.94
Nitrobenzene	98-95-3		U	5.88	2.94
Pentachlorophenol	87-86-5		U	29.4	14.7
Phenanthrene	85-01-8		U	5.88	2.94
Phenol	108-95-2		U	5.88	2.94
Pyrene	129-00-0		U	5.88	2.94

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	80.6	10	123	
2-Fluorobiphenyl	78.8	43	116	
2-Fluorophenol	65.4	21	100	
Nitrobenzene-d5	83.1	35	114	
p-Terphenyl-d14	101	33	141	

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-26-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:06
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 4M60832
Sample Tag: 01	Units: ug/L	

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	70.8	10	94	
U	Not detected at or above adjusted sample detection limit.			

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-25-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:41
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 4M60833
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-25-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:41
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 4M60833
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-25-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:41
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 4M60833
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrobenzene	98-95-3		U	5.56	2.78
Pentachlorophenol	87-86-5		U	27.8	13.9
Phenanthrene	85-01-8		U	5.56	2.78
Phenol	108-95-2		U	5.56	2.78
Pyrene	129-00-0		U	5.56	2.78

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	93.9	10	123	
2-Fluorobiphenyl	91.4	43	116	
2-Fluorophenol	83.8	21	100	
Nitrobenzene-d5	93.3	35	114	
p-Terphenyl-d14	114	33	141	
Phenol-d5	91.3	10	94	

U Not detected at or above adjusted sample detection limit.

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS4
Client ID: MW-25-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 20:41
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 4M60833
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.69		0.000	0.000
2-Butanone, 4-hydroxy-		39.8		0.000	0.000
unknown		11.0		0.000	0.000
unknown		15.1		0.000	0.000
unknown		56.5		0.000	0.000
unknown		14.1		0.000	0.000
unknown		7.56		0.000	0.000
unknown		12.0		0.000	0.000
unknown		4.60		0.000	0.000
unknown		5.53		0.000	0.000

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS4
Client ID: PZ-03-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:15
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 4M60834
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	23.0	2.87
1,3,5-Trinitrobenzene	99-35-4		U	5.75	2.87
1,3-Dinitrobenzene	99-65-0		U	5.75	2.87
1,4-Dioxane	123-91-1		U	11.5	5.75
2,4,5-Trichlorophenol	95-95-4		U	5.75	2.87
2,4,6-Trichlorophenol	88-06-2		U	5.75	2.87
2,4-Dichlorophenol	120-83-2		U	5.75	2.87
2,4-Dimethylphenol	105-67-9		U	5.75	2.87
2,4-Dinitrophenol	51-28-5		U	28.7	14.4
2,4-Dinitrotoluene	121-14-2		U	5.75	2.87
2,6-Dinitrotoluene	606-20-2		U	5.75	2.87
2-Chloronaphthalene	91-58-7		U	5.75	2.87
2-Chlorophenol	95-57-8		U	5.75	2.87
2-Methylnaphthalene	91-57-6		U	5.75	2.87
2-Methylphenol	95-48-7		U	5.75	2.87
2-Nitroaniline	88-74-4		U	28.7	14.4
2-Nitrophenol	88-75-5		U	5.75	2.87
3-Nitroaniline	99-09-2		U	28.7	14.4
3,3'-Dichlorobenzidine	91-94-1		U	5.75	2.87
3-,4-Methylphenol	106-44-5		U	5.75	2.87
4-Bromophenyl-phenylether	101-55-3		U	5.75	2.87
4-Chloroaniline	106-47-8		U	5.75	2.87
4-Nitrophenol	100-02-7		U	28.7	14.4
Acenaphthene	83-32-9		U	5.75	2.87
Acenaphthylene	208-96-8		U	5.75	2.87
Anthracene	120-12-7		U	5.75	2.87
Benzo(a)anthracene	56-55-3		U	5.75	2.87
Benzo(a)pyrene	50-32-8		U	5.75	2.87
Benzo(b)fluoranthene	205-99-2		U	5.75	2.87
Benzo(g,h,i)Perylene	191-24-2		U	5.75	2.87
Benzo(k)fluoranthene	207-08-9		U	5.75	2.87
Benzoic acid	65-85-0		U	23.0	11.5
Benzyl alcohol	100-51-6		U	5.75	2.87

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS4
Client ID: PZ-03-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:15
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 4M60834
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.75	2.87
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.75	2.87
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.75	2.87
Butylbenzylphthalate	85-68-7		U	5.75	2.87
Carbazole	86-74-8		U	23.0	2.87
Chrysene	218-01-9		U	5.75	2.87
Di-N-Butylphthalate	84-74-2		U	5.75	2.87
Di-n-octylphthalate	117-84-0		U	5.75	2.87
Dibenzo(a,h)Anthracene	53-70-3		U	5.75	2.87
Dibenzofuran	132-64-9		U	5.75	2.87
Diethylphthalate	84-66-2		U	5.75	2.87
Dimethylphthalate	131-11-3		U	5.75	2.87
Fluoranthene	206-44-0		U	5.75	2.87
Fluorene	86-73-7		U	5.75	2.87
Hexachlorobenzene	118-74-1		U	5.75	2.87
Hexachlorobutadiene	87-68-3		U	5.75	2.87
Hexachlorocyclopentadiene	77-47-4		U	5.75	2.87
Hexachloroethane	67-72-1		U	5.75	2.87
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.75	2.87
Isophorone	78-59-1		U	5.75	2.87
N-Nitrosodiphenylamine	86-30-6		U	5.75	2.87
Naphthalene	91-20-3		U	5.75	2.87
Nitrobenzene	98-95-3		U	5.75	2.87
Pentachlorophenol	87-86-5		U	28.7	14.4
Phenanthrene	85-01-8		U	5.75	2.87
Phenol	108-95-2		U	5.75	2.87
Pyrene	129-00-0		U	5.75	2.87

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	81.7	10	123	
2-Fluorobiphenyl	66.9	43	116	
2-Fluorophenol	60.9	21	100	
Nitrobenzene-d5	70.1	35	114	
p-Terphenyl-d14	61.0	33	141	

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS4
Client ID: PZ-03-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:15
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 4M60834
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 #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS4
Client ID: PZ-03-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:15
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 4M60834
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
unknown		6.10		0.000	0.000
unknown		10.3		0.000	0.000
unknown		17.7		0.000	0.000
unknown		40.9		0.000	0.000
unknown		56.4		0.000	0.000
unknown		43.8		0.000	0.000
unknown		5.03		0.000	0.000
unknown		29.6		0.000	0.000
unknown		8.08		0.000	0.000
unknown		9.61		0.000	0.000
unknown		10.9		0.000	0.000
unknown		7.15		0.000	0.000
unknown		5.38		0.000	0.000
unknown		5.39		0.000	0.000
unknown		6.08		0.000	0.000
unknown		5.11		0.000	0.000
unknown		6.11		0.000	0.000
unknown		5.02		0.000	0.000
unknown		5.23		0.000	0.000

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS4
Client ID: DUP-GW-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:50
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 4M60835
Sample Tag: 01	Units: ug/L	

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

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS4
Client ID: DUP-GW-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:50
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 4M60835
Sample Tag: 01	Units: ug/L	

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	104	10	123	
2-Fluorobiphenyl	91.4	43	116	
2-Fluorophenol	82.3	21	100	
Nitrobenzene-d5	94.2	35	114	
p-Terphenyl-d14	118	33	141	

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS4
Client ID: DUP-GW-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:50
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 4M60835
Sample Tag: 01	Units: ug/L	

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	88.6	10	94	
U	Not detected at or above adjusted sample detection limit.			

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS4
Client ID: DUP-GW-050212	Prep Method: 3520C	Prep Date: 05/07/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/19/2012 13:23
Workgroup #: WG397604	Analyst: CAA	Run Date: 05/12/2012 21:50
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 4M60835
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		4.66		0.000	0.000
unknown		9.00		0.000	0.000
unknown		6.39		0.000	0.000
unknown		16.3		0.000	0.000
unknown		6.25		0.000	0.000
unknown		11.0		0.000	0.000
unknown		14.9		0.000	0.000
unknown		8.51		0.000	0.000
unknown		11.6		0.000	0.000
unknown		11.4		0.000	0.000
unknown		7.84		0.000	0.000

2.2.1.2 QC Summary Data

Example 8270 Calculations

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

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

where:

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

Example

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:

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

Example

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:

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

Example

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

$$Cx = Cis (x) = (25.0)(0.829) = 20.72 \text{ ug/L}$$

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

$$Ax^2 + Bx + C - y = 0$$

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

Step 4: Solve for analyte concentration Cx

$$Cx = (Cis)(\text{Amount ratio})$$

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 quantitation report:	1425653
Response ratio, y:	0.142554
C - y:	-0.15905
Root 1 - Computed amount ratio, X1:	-3.88278
Root 2 - Computed amount ratio, X2:	1.581623 use this solution
Concentration of IS, Cis:	40.00
Concentration of analyte, Cx:	63.26 ug/L

Microbac Laboratories Inc.
Continuous Sample Extract Log

Workgroup: WG397140 TIME ON: 15:30 OFF: 10:30 ON: 18:40 OFF: 12:40
 Analyst: CSH Methylene Chloride Lot #: COA16058
 Spike Analyst: CSH 1:1 H2SO4 Lot #: RGT17192
 Method: 3520C 10N NaOH Lot #: RGT17312
 Run Date: 05/07/2012 11:00 Sodium Sulfate, Anhydrous, Granular (Lot # COA15998)
 SOP: EXB01 Revision 16
 Spike Witness: CAF
 Surr Solution: STD50249

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

Analyst: Chris Hill

Reviewer: Cheryl A. Flowers



Microbac Laboratories Inc.
Instrument Run Log

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

Maintenance Log ID: 41422 Syringe Filter Lot#: _____

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

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

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

Comments

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

Page: 1

Approved: 20-APR-12




Microbac Laboratories Inc.
Instrument Run Log

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

Maintenance Log ID: 41572 Syringe Filter Lot#: _____

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

Comments:

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

Comments

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

Page: 1

Approved: 03-MAY-12

Eri C. Zimm



Microbac Laboratories Inc.
Instrument Run Log

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

Maintenance Log ID: 41572 Syringe Filter Lot#: _____

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

Comments

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

Page: 2

Approved: 03-MAY-12




Microbac Laboratories Inc.
Instrument Run Log

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

Maintenance Log ID: 41703 Syringe Filter Lot#: _____

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

Comments: Currently investigating high LCS recoveries.

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

Comments

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

Page: 1

Approved: 14-MAY-12




Microbac Laboratories Inc.
Instrument Run Log

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

Maintenance Log ID: 41703 Syringe Filter Lot#: _____

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

Comments

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

Page: 2

Approved: 14-MAY-12




Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
20-APR-2012

Cassio D. Augenstein

Secondary Reviewer:
20-APR-2012

Michael Cohen

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

Cassio D. Augenstein

Secondary Reviewer:
03-MAY-2012

Eri C. Zimm

CHECKLIST1 - Modified 03/05/2008

Generated: MAY-03-2012 14:47:41



Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
14-MAY-2012

Cassio D. Augenstein

Secondary Reviewer:
14-MAY-2012

Michael Cohen

CHECKLIST1 - Modified 03/05/2008

Generated: MAY-14-2012 15:19:10



Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method:8270C
 Login Number:L12050099

AAB#:WG397604

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-13-050212	01	05/02/12					05/07/12	5	7		05/12/12	5.4	40	
MW-26-050212	03	05/02/12					05/07/12	5	7		05/12/12	5.4	40	
MW-25-050212	05	05/02/12					05/07/12	4.9	7		05/12/12	5.4	40	
PZ-03-050212	07	05/02/12					05/07/12	4.9	7		05/12/12	5.4	40	
DUP-GW-050212	09	05/02/12					05/07/12	5	7		05/12/12	5.5	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2413651
 Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
 SURROGATE STANDARDS

Login Number: L12050099
 Instrument Id: HPMS4
 Workgroup (AAB#): WG397604

Method: 8270
 CAL ID: HPMS4-19-APR-12
 Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4	5	6
L12050099-01	1.00	01	75.0	60.6	55.5	63.9	80.0	60.7
L12050099-03	1.00	01	80.6	78.8	65.4	83.1	101	70.8
L12050099-05	1.00	01	93.9	91.4	83.8	93.3	114	91.3
L12050099-07	1.00	01	81.7	66.9	60.9	70.1	61.0	65.7
L12050099-09	1.00	01	104	91.4	82.3	94.2	118	88.6
WG397140-02	1.00	01	106	91.7	85.3	96.8	125	90.8
WG397140-03	1.00	01	<u>124</u>	106	98.3	106	134	<u>103</u>

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



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397604
 Blank File ID: 4M60821 Blank Sample ID: WG397140-02
 Prep Date: 05/07/12 11:00 Instrument ID: HPMS4
 Analyzed Date: 05/12/12 13:42 Method: 8270C
 Analyst: CAA

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397140-03	4M60822	05/12/12 14:17	01
MW-13-050212	L12050099-01	4M60831	05/12/12 19:31	01
MW-26-050212	L12050099-03	4M60832	05/12/12 20:06	01
MW-25-050212	L12050099-05	4M60833	05/12/12 20:41	01
PZ-03-050212	L12050099-07	4M60834	05/12/12 21:15	01
DUP-GW-050212	L12050099-09	4M60835	05/12/12 21:50	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2413652
 Report generated 05/14/2012 16:17



METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/07/12 11:00 Sample ID: WG397140-02
Instrument ID: HPMS4 Run Date: 05/12/12 13:42 Prep Method: 3520C
File ID: 4M60821 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS4-19-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
1,1'-Biphenyl	2.50	20.0	2.50	1	U
1,3,5-Trinitrobenzene	2.50	5.00	2.50	1	U
1,3-Dinitrobenzene	2.50	5.00	2.50	1	U
1,4-Dioxane	5.00	10.0	5.00	1	U
2,4,5-Trichlorophenol	2.50	5.00	2.50	1	U
2,4,6-Trichlorophenol	2.50	5.00	2.50	1	U
2,4-Dichlorophenol	2.50	5.00	2.50	1	U
2,4-Dimethylphenol	2.50	5.00	2.50	1	U
2,4-Dinitrophenol	12.5	25.0	12.5	1	U
2,4-Dinitrotoluene	2.50	5.00	2.50	1	U
2,6-Dinitrotoluene	2.50	5.00	2.50	1	U
2-Chloronaphthalene	2.50	5.00	2.50	1	U
2-Chlorophenol	2.50	5.00	2.50	1	U
2-Methylnaphthalene	2.50	5.00	2.50	1	U
2-Methylphenol	2.50	5.00	2.50	1	U
2-Nitroaniline	12.5	25.0	12.5	1	U
2-Nitrophenol	2.50	5.00	2.50	1	U
3-Nitroaniline	12.5	25.0	12.5	1	U
3,3'-Dichlorobenzidine	2.50	5.00	2.50	1	U
3-,4-Methylphenol	2.50	5.00	2.50	1	U
4-Bromophenyl-phenylether	2.50	5.00	2.50	1	U
4-Chloroaniline	2.50	5.00	2.50	1	U
4-Nitrophenol	12.5	25.0	12.5	1	U
Acenaphthene	2.50	5.00	2.50	1	U
Acenaphthylene	2.50	5.00	2.50	1	U
Anthracene	2.50	5.00	2.50	1	U
Benzo(a)anthracene	2.50	5.00	2.50	1	U
Benzo(a)pyrene	2.50	5.00	2.50	1	U
Benzo(b)fluoranthene	2.50	5.00	2.50	1	U
Benzo(g,h,i)Perylene	2.50	5.00	2.50	1	U
Benzo(k)fluoranthene	2.50	5.00	2.50	1	U
Benzoic acid	10.0	20.0	10.0	1	U
Benzyl alcohol	2.50	5.00	2.50	1	U
Bis(2-Chloroethyl)ether	2.50	5.00	2.50	1	U
Bis(2-Chloroethoxy)Methane	2.50	5.00	2.50	1	U
bis(2-Ethylhexyl)phthalate	2.50	5.00	2.50	1	U
Butylbenzylphthalate	2.50	5.00	2.50	1	U
Carbazole	2.50	20.0	2.50	1	U
Chrysene	2.50	5.00	2.50	1	U
Di-N-Butylphthalate	2.50	5.00	2.50	1	U
Di-n-octylphthalate	2.50	5.00	2.50	1	U
Dibenzo(a,h)Anthracene	2.50	5.00	2.50	1	U

Report Name: BLANK

PDF ID: 2413653

14-MAY-2012 16:17



METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/07/12 11:00 Sample ID: WG397140-02
Instrument ID: HPMS4 Run Date: 05/12/12 13:42 Prep Method: 3520C
File ID: 4M60821 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
Contract #: _____ Cal ID: HPMS4-19-APR-12

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

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

MDL Method Detection Limit

RL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 2413653

14-MAY-2012 16:17



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Run Date: 05/12/2012 Sample ID: WG397140-03
 Instrument ID: HPMS4 Run Time: 14:17 Prep Method: 3520C
 File ID: 4M60822 Analyst: CAA Method: 8270C
 Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
 QC Key: WATERLOO Lot#: STD51286 Cal ID: HPMS4-19-APR-12

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

LCS - Modified 03/06/2008
 PDF File ID: 2413654
 Report generated: 05/14/2012 16:17



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Run Date: 05/12/2012 Sample ID: WG397140-03
Instrument ID: HPMS4 Run Time: 14:17 Prep Method: 3520C
File ID: 4M60822 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51286 Cal ID: HPMS4-19-APR-12

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

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

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2413654
Report generated: 05/14/2012 16:17



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050099

Tune ID: WG395394-01

Instrument: HPMS4

Run Date: 04/19/2012

Analyst: CAA

Run Time: 08:26

Workgroup: WG395394

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



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050099
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



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050099 Tune ID: WG397824-01
 Instrument: HPMS4 Run Date: 05/12/2012
 Analyst: CAA Run Time: 11:02
 Workgroup: WG397824 File ID: 4M60816
 Cal ID: HPMS4-19-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	35.7	89354	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	37.7	94325	PASS
70.0	69.0	0	2.00	0.389	367	PASS
127	198	40.0	60.0	50.3	125853	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	249962	PASS
199	198	5.00	9.00	6.83	17080	PASS
275	198	10.0	30.0	24.1	60320	PASS
365	198	1.00	100	2.87	7186	PASS
441	443	0.0100	100	81.4	40104	PASS
442	198	40.0	100	98.9	247146	PASS
443	442	17.0	23.0	19.9	49288	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397824-02	CCV	01	05/12/2012 11:22	
WG397825-01	CCV	01	05/12/2012 11:57	
WG397140-02	BLANK	01	05/12/2012 13:42	
WG397140-02	BLANK	01	05/12/2012 13:42	
WG397140-03	LCS	01	05/12/2012 14:17	
L12050099-01	MW-13-050212	01	05/12/2012 19:31	
L12050099-03	MW-26-050212	01	05/12/2012 20:06	
L12050099-05	MW-25-050212	01	05/12/2012 20:41	
L12050099-07	PZ-03-050212	01	05/12/2012 21:15	
L12050099-09	DUP-GW-050212	01	05/12/2012 21:50	

* Sample past 12 hour tune limit



Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050099
 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: 2413657
 Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050099
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
R² = 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: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050099
Analytical Method: 8270C
ICAL Workgroup: WG396709

Instrument ID: HPMS4
Initial Calibration Date: 01-MAY-12 16:57
Column ID: F

Analyte	AVG RF	% RSD	LINEAR (R)	QUAD (R ²)
1,1'-Biphenyl	1.642	6.66		

R = Correlation coefficient; 0.995 minimum
R² = 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: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
Analytical Method: 8270C

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-02			WG395394-03			WG395394-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	50.0	302655.000	0.3692	3.00	15865.0000	0.3732	10.0	48642.0000	0.3812
2,4-Dichlorophenol	50.0	406146.000	0.2843	3.00	23297.0000	0.3097	10.0	68171.0000	0.3052
2-Nitrophenol	50.0	296019.000	0.2072	3.00	14686.0000	0.1953	10.0	44266.0000	0.1982
Acenaphthene	50.0	959014.000	1.170	3.00	54687.0000	1.286	10.0	164631.000	1.290
Benzo[a]pyrene	50.0	1420992.00	1.050	3.00	76197.0000	1.089	10.0	230518.000	1.068
Di-n-Octyl Phthalate	50.0	1737436.00	1.283	3.00	92158.0000	1.317	10.0	278406.000	1.290
Fluoranthene	50.0	1596911.00	1.089	3.00	93933.0000	1.257	10.0	276101.000	1.217
Hexachlorobutadiene	50.0	236674.000	0.1657	3.00	13857.0000	0.1842	10.0	39698.0000	0.1777
Pentachlorophenol	50.0	206843.000	0.1411	NA	NA	NA	10.0	31968.0000	0.1409
Phenol	50.0	548117.000	1.480	3.00	33658.0000	1.678	10.0	94119.0000	1.582
2,4-Dinitrophenol	50.0	130897.000	0.1597	NA	NA	NA	NA	NA	NA
4-Nitrophenol	50.0	186191.000	0.2271	NA	NA	NA	10.0	32506.0000	0.2547
Hexachlorocyclopentadiene	50.0	244269.000	0.2980	3.00	10305.0000	0.2424	10.0	34278.0000	0.2686
n-Nitrosodipropylamine	50.0	311009.000	0.8398	3.00	19190.0000	0.9568	10.0	56111.0000	0.9434
1,3-Dinitrobenzene	50.0	201353.000	0.2456	3.00	9788.00000	0.2302	10.0	31289.0000	0.2452
1,4-Dioxane	50.0	185033.000	0.4996	3.00	9565.00000	0.4769	10.0	31667.0000	0.5324
2,4,5-Trichlorophenol	50.0	308844.000	0.3768	3.00	16640.0000	0.3914	10.0	49310.0000	0.3864
2,4-Dimethylphenol	50.0	463322.000	0.3243	3.00	33490.0000	0.4453	10.0	81553.0000	0.3651
2,4-Dinitrotoluene	50.0	332745.000	0.4059	3.00	17015.0000	0.4002	10.0	53272.0000	0.4175
2,6-Dinitrotoluene	50.0	256989.000	0.3135	3.00	13905.0000	0.3271	10.0	41342.0000	0.3240
2-Chloronaphthalene	50.0	906729.000	1.106	3.00	52303.0000	1.230	10.0	153572.000	1.204
2-Chlorophenol	50.0	497875.000	1.344	3.00	29118.0000	1.452	10.0	83952.0000	1.412
2-Methylnaphthalene	50.0	967916.000	0.6775	3.00	57527.0000	0.7649	10.0	167733.000	0.7510
2-Methylphenol	50.0	380206.000	1.027	3.00	22411.0000	1.117	10.0	64478.0000	1.084
2-Nitroaniline	50.0	261334.000	0.3188	3.00	13815.0000	0.3250	10.0	42993.0000	0.3369
3,3'-Dichlorobenzidine	50.0	322552.000	0.2327	3.00	25330.0000	0.3536	10.0	53915.0000	0.2449
3-Nitroaniline	50.0	174456.000	0.2128	NA	NA	NA	10.0	29679.0000	0.2326
4-Bromophenyl Phenyl Ether	50.0	293263.000	0.2000	3.00	16506.0000	0.2208	10.0	49608.0000	0.2187
4-Chloroaniline	50.0	522329.000	0.3656	3.00	34347.0000	0.4567	10.0	88805.0000	0.3976
Acenaphthylene	50.0	1459231.00	1.780	3.00	86364.0000	2.031	10.0	253419.000	1.986
Anthracene	50.0	1564112.00	1.067	3.00	91274.0000	1.221	10.0	268336.000	1.183
Benzo[a]anthracene	50.0	1436678.00	1.036	3.00	83823.0000	1.170	10.0	248867.000	1.130
Benzo[b]fluoranthene	50.0	1510511.00	1.116	3.00	87582.0000	1.251	10.0	261129.000	1.210
Benzo[ghi]perylene	50.0	1336874.00	0.9874	3.00	70328.0000	1.005	10.0	213268.000	0.9878
Benzo[k]fluoranthene	50.0	1477424.00	1.091	3.00	80556.0000	1.151	10.0	242271.000	1.122
Benzoic Acid	50.0	336174.000	0.2353	NA	NA	NA	NA	NA	NA
Benzyl Alcohol	50.0	323130.000	0.8725	3.00	18359.0000	0.9154	10.0	52708.0000	0.8862
Butyl Benzyl Phthalate	50.0	736908.000	0.5316	3.00	42313.0000	0.5907	10.0	126613.000	0.5751
Carbazole	50.0	1383835.00	0.9437	3.00	80012.0000	1.071	10.0	214134.000	0.9439
Chrysene	50.0	1327816.00	0.9578	3.00	81007.0000	1.131	10.0	234491.000	1.065
Di-n-Butyl Phthalate	50.0	1699050.00	1.159	3.00	98435.0000	1.317	10.0	291024.000	1.283
Dibenz[ah]anthracene	50.0	1352159.00	0.9987	3.00	67905.0000	0.9703	10.0	213369.000	0.9883

INT_CAL - Modified 03/06/2008
PDF File ID: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
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

INT_CAL - Modified 03/06/2008
PDF File ID: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
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

INT_CAL - Modified 03/06/2008
PDF File ID: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
Analytical Method: 8270C

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-05			WG395394-06			WG395394-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Dibenzofuran	15.0	345492.000	1.676	25.0	542792.000	1.590	80.0	1809858.00	1.504
Diethylphthalate	15.0	273892.000	1.328	25.0	427533.000	1.252	80.0	1465764.00	1.218
Dimethylphthalate	15.0	275007.000	1.334	25.0	432481.000	1.267	80.0	1452767.00	1.207
Fluorene	15.0	294134.000	1.427	25.0	461256.000	1.351	80.0	1524152.00	1.267
Hexachlorobenzene	15.0	85076.0000	0.2293	25.0	133370.000	0.2164	80.0	454706.000	0.2123
Hexachloroethane	15.0	55844.0000	0.5900	25.0	87874.0000	0.5582	80.0	310495.000	0.5746
Indeno[1,2,3-cd]pyrene	15.0	406105.000	1.164	25.0	649328.000	1.140	80.0	2284765.00	1.194
Isophorone	15.0	231590.000	0.6391	25.0	370301.000	0.6182	80.0	1254518.00	0.5924
Naphthalene	15.0	408896.000	1.128	25.0	637382.000	1.064	80.0	2143165.00	1.012
Nitrobenzene	15.0	126438.000	0.3489	25.0	200659.000	0.3350	80.0	698206.000	0.3297
Phenanthrene	15.0	414064.000	1.116	25.0	651360.000	1.057	80.0	2157063.00	1.007
Pyrene	15.0	443567.000	1.253	25.0	695786.000	1.196	80.0	2297635.00	1.148
Sym-Trinitrobenzene	15.0	57944.0000	0.1562	25.0	97026.0000	0.1574	80.0	374190.000	0.1747
bis(2-Chloroethoxy)methane	15.0	180101.000	0.4970	25.0	285147.000	0.4760	80.0	937865.000	0.4429
bis(2-Chloroethyl)ether	15.0	94566.0000	0.9991	25.0	149268.000	0.9483	80.0	497418.000	0.9206
bis(2-Ethylhexyl)phthalate	15.0	273457.000	0.7724	25.0	431927.000	0.7426	80.0	1454801.00	0.7267

INT_CAL - Modified 03/06/2008
PDF File ID: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
Analytical Method: 8270C

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-08			WG395394-09		
	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	100	535987.000	0.3570	120	669686.000	0.3523
2,4-Dichlorophenol	100	715757.000	0.2655	120	900159.000	0.2624
2-Nitrophenol	100	514984.000	0.1910	120	659346.000	0.1922
Acenaphthene	100	1612771.00	1.074	120	1951899.00	1.027
Benzo[a]pyrene	100	2422076.00	1.044	120	2982535.00	1.043
Di-n-Octyl Phthalate	100	3002395.00	1.294	120	3682000.00	1.288
Fluoranthene	100	2684844.00	1.005	120	3249661.00	0.9809
Hexachlorobutadiene	100	411451.000	0.1526	120	507887.000	0.1481
Pentachlorophenol	100	367513.000	0.1376	120	458736.000	0.1385
Phenol	100	991961.000	1.432	120	1231425.00	1.391
2,4-Dinitrophenol	100	256771.000	0.1710	120	327279.000	0.1722
4-Nitrophenol	100	320939.000	0.2137	120	386132.000	0.2032
Hexachlorocyclopentadiene	100	403426.000	0.2687	120	490221.000	0.2579
n-Nitrosodipropylamine	100	522498.000	0.7543	120	624493.000	0.7052
1,3-Dinitrobenzene	100	365872.000	0.2437	120	463456.000	0.2438
1,4-Dioxane	100	348759.000	0.5035	120	439725.000	0.4965
2,4,5-Trichlorophenol	100	556900.000	0.3709	120	692553.000	0.3644
2,4-Dimethylphenol	100	831386.000	0.3084	120	1031288.00	0.3007
2,4-Dinitrotoluene	100	583421.000	0.3886	120	727634.000	0.3828
2,6-Dinitrotoluene	100	466415.000	0.3106	120	580776.000	0.3056
2-Chloronaphthalene	100	1597789.00	1.064	120	1980928.00	1.042
2-Chlorophenol	100	903123.000	1.304	120	1130760.00	1.277
2-Methylnaphthalene	100	1696852.00	0.6294	120	2083523.00	0.6074
2-Methylphenol	100	686225.000	0.9906	120	853772.000	0.9640
2-Nitroaniline	100	478820.000	0.3189	120	598982.000	0.3151
3,3'-Dichlorobenzidine	100	535244.000	0.2164	120	679065.000	0.2212
3-Nitroaniline	100	384870.000	0.2563	120	523691.000	0.2755
4-Bromophenyl Phenyl Ether	100	505367.000	0.1892	120	625697.000	0.1889
4-Chloroaniline	100	1131551.00	0.4197	120	1382212.00	0.4030
Acenaphthylene	100	2438377.00	1.624	120	2981097.00	1.568
Anthracene	100	2652184.00	0.9930	120	3213859.00	0.9701
Benzo[a]anthracene	100	2445804.00	0.9887	120	2986908.00	0.9731
Benzo[b]fluoranthene	100	2654859.00	1.144	120	3081081.00	1.078
Benzo[ghi]perylene	100	2198670.00	0.9474	120	2700031.00	0.9446
Benzo[k]fluoranthene	100	2404348.00	1.036	120	2836726.00	0.9924
Benzoic Acid	100	675656.000	0.2506	120	915551.000	0.2669
Benzyl Alcohol	100	594299.000	0.8579	120	747792.000	0.8444
Butyl Benzyl Phthalate	100	1272202.00	0.5143	120	1549387.00	0.5048
Carbazole	100	2461069.00	0.9215	120	3053064.00	0.9215
Chrysene	100	2259995.00	0.9136	120	2763239.00	0.9003
Di-n-Butyl Phthalate	100	2883140.00	1.080	120	3504116.00	1.058
Dibenz[ah]anthracene	100	2261465.00	0.9745	120	2804015.00	0.9810

INT_CAL - Modified 03/06/2008
PDF File ID: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
Analytical Method: 8270C

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-08			WG395394-09		
	CONC	RESP	RF	CONC	RESP	RF
Dibenzofuran	100	2178444.00	1.451	120	2633898.00	1.386
Diethylphthalate	100	1756256.00	1.170	120	2162475.00	1.138
Dimethylphthalate	100	1760527.00	1.173	120	2165968.00	1.140
Fluorene	100	1832624.00	1.221	120	2243623.00	1.180
Hexachlorobenzene	100	543444.000	0.2035	120	663561.000	0.2003
Hexachloroethane	100	384708.000	0.5553	120	480318.000	0.5424
Indeno[1,2,3-cd]pyrene	100	2721409.00	1.173	120	3353339.00	1.173
Isophorone	100	1546209.00	0.5735	120	1916721.00	0.5588
Naphthalene	100	2577401.00	0.9560	120	3171066.00	0.9245
Nitrobenzene	100	854248.000	0.3168	120	1069745.00	0.3119
Phenanthrene	100	2552198.00	0.9556	120	3120483.00	0.9419
Pyrene	100	2734557.00	1.105	120	3331157.00	1.085
Sym-Trinitrobenzene	100	450708.000	0.1688	120	571928.000	0.1726
bis(2-Chloroethoxy)methane	100	1134885.00	0.4209	120	1390586.00	0.4054
bis(2-Chloroethyl)ether	100	615863.000	0.8890	120	761552.000	0.8599
bis(2-Ethylhexyl)phthalate	100	1738038.00	0.7026	120	2123921.00	0.6920

INT_CAL - Modified 03/06/2008
PDF File ID: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
Analytical Method: 8270C

Instrument ID: HPMS4
Initial Calibration Date: 01-MAY-12 16:57
Column ID: F

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

INT_CAL - Modified 03/06/2008
PDF File ID: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
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: 2413657
Report generated 05/14/2012 16:17



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 Run Date: 04/19/2012 Sample ID: WG395394-10
 Instrument ID: HPMS4 Run Time: 13:58 Method: 8270C
 File ID: 4M60447 Analyst: CAA QC Key: WATERLOO
 ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

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

ALT - Modified 09/06/2007
 Version 1.5 PDF File ID: 2413667
 Report generated 05/14/2012 16:18



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 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



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 Run Date: 04/19/2012 Sample ID: WG395394-11
Instrument ID: HPMS4 Run Time: 14:33 Method: 8270C
File ID: 4M60448 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

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

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2413667
Report generated 05/14/2012 16:18



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 Run Date: 05/01/2012 Sample ID: WG396709-07
Instrument ID: HPMS4 Run Time: 17:31 Method: 8270C
File ID: 4M60608 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG396709 Cal ID: HPMS4 - 01-MAY-12

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

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2413667
Report generated 05/14/2012 16:18



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/12/2012 Sample ID: WG397824-02
Instrument ID: HPMS4 Run Time: 11:22 Method: 8270C
File ID: 4M60817 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397604 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

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

CCV - Modified 03/05/2008
PDF File ID: 2413671
Report generated 05/14/2012 16:18



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/12/2012 Sample ID: WG397824-02
Instrument ID: HPMS4 Run Time: 11:22 Method: 8270C
File ID: 4M60817 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397604 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

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

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2413671
Report generated 05/14/2012 16:18



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/12/2012 Sample ID: WG397825-01
Instrument ID: HPMS4 Run Time: 11:57 Method: 8270C
File ID: 4M60818 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397604 Cal ID: HPMS4 - 01-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1'-Biphenyl	50000	49500	ug/L	1.63	1.02	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2413671
Report generated 05/14/2012 16:18



Microbac Laboratories Inc.
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050099
Instrument ID: HPMS4
Workgroup (AAB#): WG397604

CCV Number: WG397824-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397824-02	NA	NA	379992	798531	1334202	1412784	1243573	1443768
Upper Limit	NA	NA	759984	1597062	2668404	2825568	2487146	2887536
Lower Limit	NA	NA	189996	399266	667101	706392	621787	721884
<u>L12050099-01</u>	1.00	01	250547	520851	890600	930329	872259	933161
<u>L12050099-03</u>	1.00	01	245049	517095	882666	921255	865986	924642
<u>L12050099-05</u>	1.00	01	246923	518118	896770	928698	866361	932714
<u>L12050099-07</u>	1.00	01	241114	508170	886500	911992	852235	915869
<u>L12050099-09</u>	1.00	01	248603	514524	865671	914573	851656	922502
WG397140-02	1.00	01	270729	559392	951577	1008897	919790	1005180
WG397140-03	1.00	01	262198	562715	959585	999831	885225	1021385

- IS-1 - 1,4-Dichlorobenzene-d4
- IS-2 - Acenaphthene-d10
- IS-3 - Chrysene-d12
- IS-4 - Naphthalene-D8
- IS-5 - Perylene-d12
- IS-6 - Phenanthrene-d10

Underline = Response outside limits



Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050099
Instrument ID: HPMS4
Workgroup (AAB#): WG397604

CCV Number: WG397824-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397824-02	NA	NA	7.23	10.32	15.6	8.51	18.33	11.92
Upper Limit	NA	NA	7.73	10.82	16.1	9.01	18.83	12.42
Lower Limit	NA	NA	6.73	9.82	15.1	8.01	17.83	11.42
<u>L12050099-01</u>	1.00	01	7.23	10.32	15.6	8.51	18.33	11.92
L12050099-03	1.00	01	7.23	10.32	15.6	8.51	18.33	11.91
L12050099-05	1.00	01	7.23	10.32	15.6	8.51	18.32	11.92
L12050099-07	1.00	01	7.23	10.32	15.6	8.51	18.33	11.92
L12050099-09	1.00	01	7.23	10.32	15.6	8.51	18.33	11.92
WG397140-02	1.00	01	7.23	10.32	15.6	8.51	18.33	11.92
WG397140-03	1.00	01	7.23	10.32	15.61	8.51	18.34	11.92

- IS-1 - 1,4-Dichlorobenzene-d4
- IS-2 - Acenaphthene-d10
- IS-3 - Chrysene-d12
- IS-4 - Naphthalene-D8
- IS-5 - Perylene-d12
- IS-6 - Phenanthrene-d10

Underline = Response outside limits



2.2.1.3 Sample Data

Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D Vial: 16
 Acq On : 12 May 2012 19:31 Operator: CAA
 Sample : L12050099-01 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40:51 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	250547	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	930329	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	520851	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	933161	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	890600	40.00	ug/ml	-0.01
128) Perylene-d12	18.33	264	872259	40.00	ug/ml	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
8) 2-Fluorophenol	6.00	112	421745	55.5187	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery =	55.52%		
12) Phenol-d5	6.83	99	539580	60.6910	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery =	60.69%		
31) Nitrobenzene-d5	7.79	82	251258	31.9318	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery =	63.86%		
59) 2-Fluorobiphenyl	9.58	172	526908	30.2953	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery =	60.60%		
86) 2,4,6-Tribromophenol	11.14	330	174149	74.9782	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery =	74.98%		
117) p-Terphenyl-d14	13.95	244	656487	39.9937	ug/ml	-0.01
Spiked Amount 50.000	Range 33 - 141		Recovery =	79.98%		

Target Compounds Qvalue

 (#) = qualifier out of range (m) = manual integration
 4M60831.D MEGAMIX.M Mon May 14 11:46:33 2012

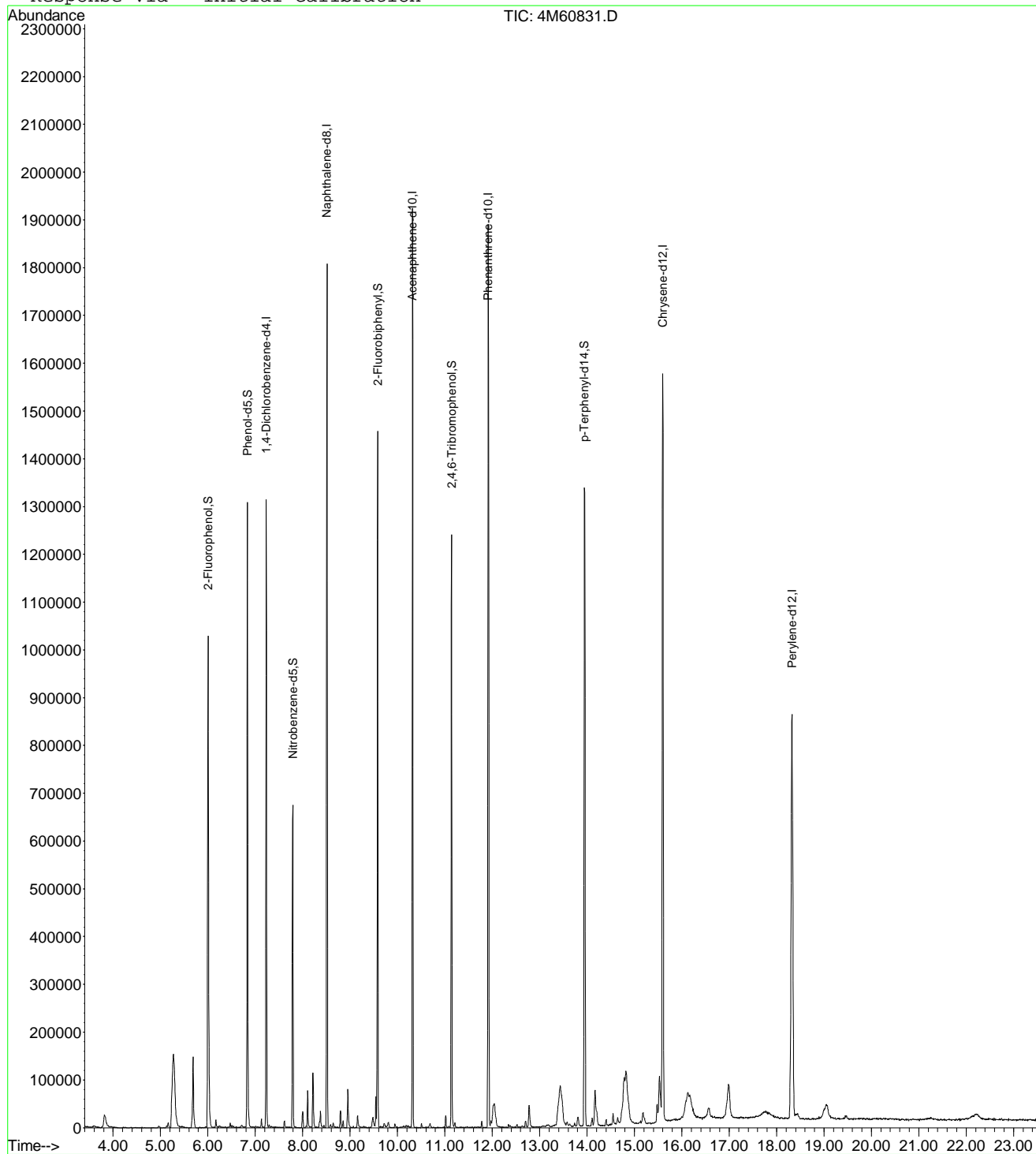
Page 1

Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40 2012

Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D Vial: 16
 Acq On : 12 May 2012 19:31 Operator: CAA
 Sample : L12050099-01 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54:29 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIion	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	250547	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	930329	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	520851	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	933161	40.00	ug/mL	0.00

Target Compounds Qvalue

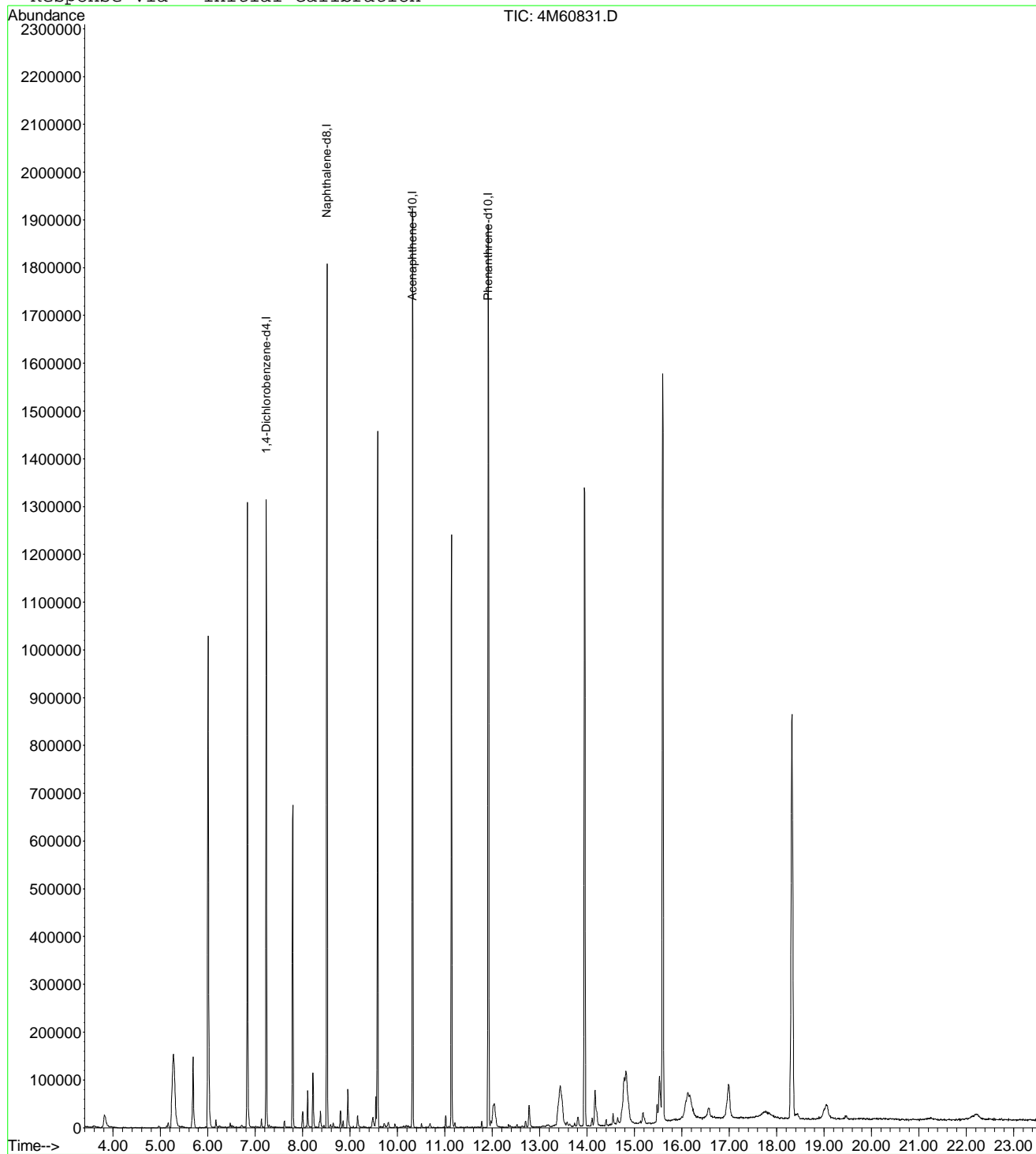
 (#) = qualifier out of range (m) = manual integration
 4M60831.D TCL.M Mon May 14 11:54:29 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54 2012

Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D Vial: 16
 Acq On : 12 May 2012 19:31 Operator: CAA
 Sample : L12050099-01 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 1 % of largest Peak
 Start Thrs: 0.05 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

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

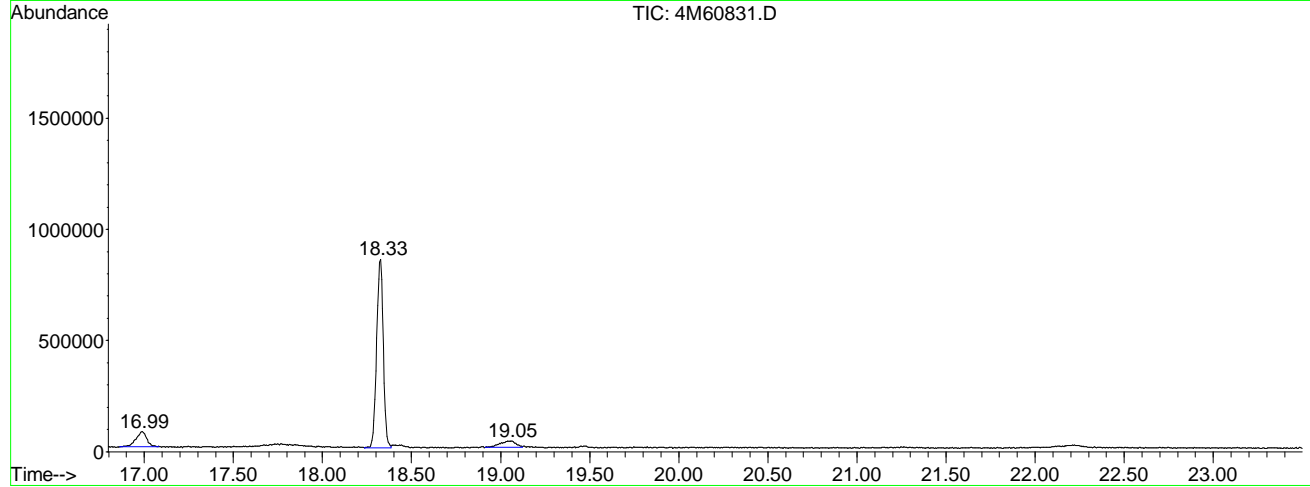
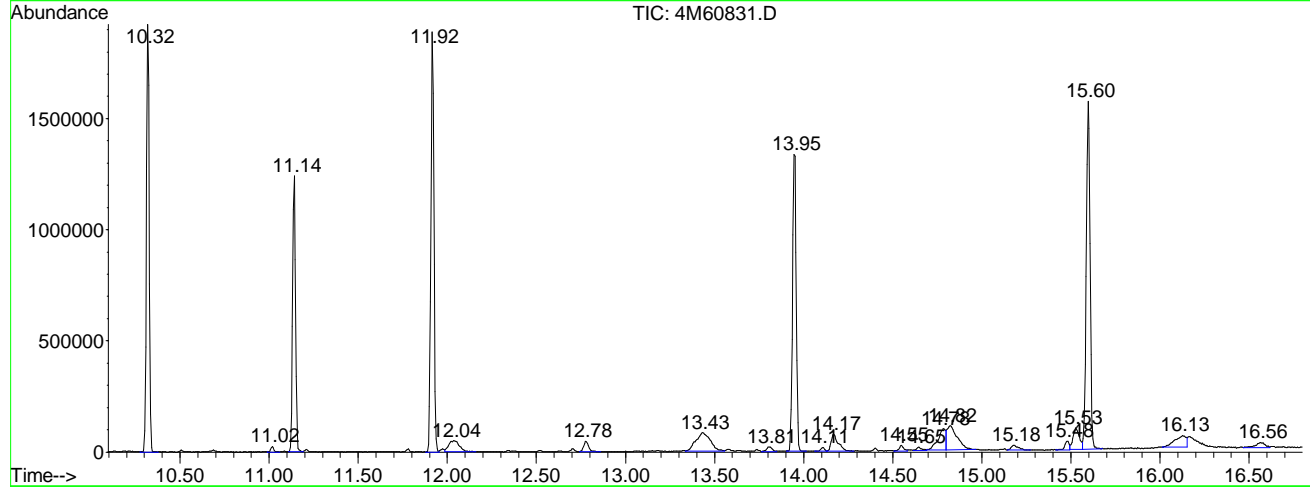
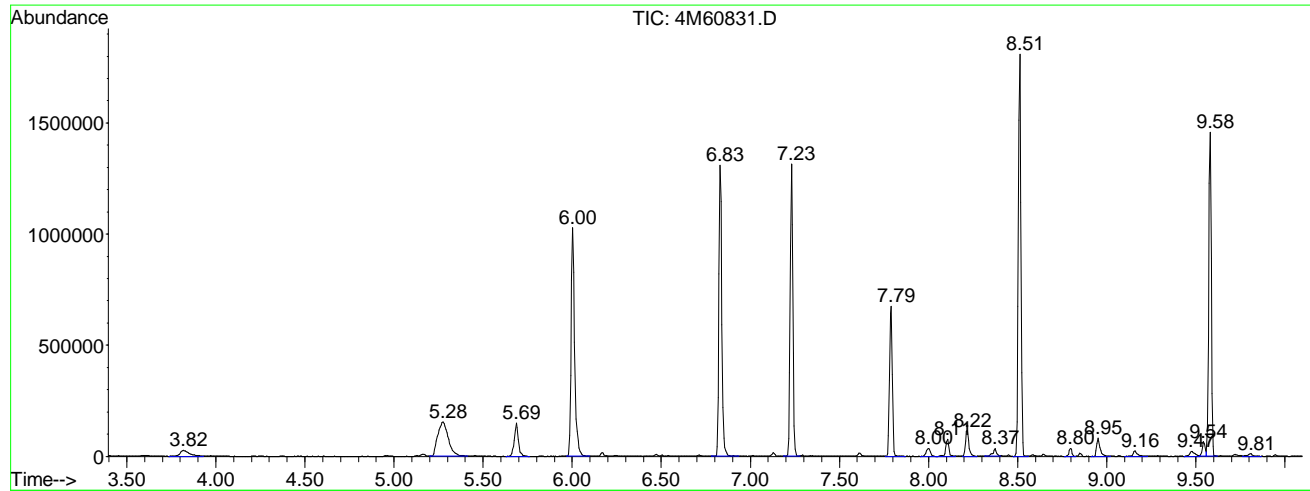
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.817	65	80	101	rBV2	27147	103380	4.47%	0.412%
2	5.275	339	353	378	rBV	153557	638686	27.59%	2.543%
3	5.687	419	430	443	rBB2	148660	234534	10.13%	0.934%
4	6.002	483	489	506	rVB	1028947	1392199	60.14%	5.543%
5	6.830	635	644	663	rVB	1308116	1467911	63.41%	5.844%
6	7.231	711	719	727	rVB	1314436	1411387	60.97%	5.619%
7	7.791	818	824	838	rVB	675004	733760	31.70%	2.921%
8	8.000	855	863	871	rBB3	34015	55781	2.41%	0.222%
9	8.107	872	883	891	rBV3	78089	96335	4.16%	0.384%
10	8.219	899	904	913	rVB	114760	150349	6.50%	0.599%
11	8.374	922	933	938	rBV2	34808	50805	2.19%	0.202%
12	8.513	952	959	968	rBV	1808107	1846801	79.78%	7.353%
13	8.796	1006	1012	1017	rBB2	35576	40325	1.74%	0.161%
14	8.951	1034	1041	1054	rBV	81037	110611	4.78%	0.440%
15	9.159	1069	1080	1093	rBV2	25019	43276	1.87%	0.172%
16	9.474	1132	1139	1148	rBV3	21882	49124	2.12%	0.196%
17	9.544	1148	1152	1155	rVV	64550	73381	3.17%	0.292%
18	9.581	1155	1159	1166	rVB	1456483	1461313	63.13%	5.818%
19	9.811	1193	1202	1212	rVB3	11480	24232	1.05%	0.096%
20	10.318	1289	1297	1307	rVB	1924816	2045760	88.38%	8.145%
21	11.018	1423	1428	1435	rVB	25384	27187	1.17%	0.108%
22	11.141	1445	1451	1460	rBV	1240687	1417449	61.23%	5.643%
23	11.916	1589	1596	1603	rBV	1890035	2246476	97.05%	8.944%
24	12.038	1609	1619	1641	rVB4	49077	206096	8.90%	0.821%
25	12.776	1751	1757	1772	rVB	46321	93324	4.03%	0.372%
26	13.433	1862	1880	1903	rBV2	82972	450878	19.48%	1.795%
27	13.807	1942	1950	1958	rBV3	20003	42817	1.85%	0.170%
28	13.946	1968	1976	1988	rBV	1335763	1877816	81.12%	7.476%
29	14.106	1998	2006	2010	rBV3	17811	26949	1.16%	0.107%
30	14.170	2010	2018	2038	rVB3	75041	207680	8.97%	0.827%
31	14.549	2081	2089	2095	rBV2	24882	41844	1.81%	0.167%
32	14.645	2101	2107	2115	rBV5	13708	27742	1.20%	0.110%
33	14.784	2115	2133	2136	rVV	97069	305863	13.21%	1.218%
34	14.822	2136	2140	2166	rVB2	108402	420466	18.16%	1.674%
35	15.180	2200	2207	2224	rVB4	23206	66993	2.89%	0.267%
36	15.479	2251	2263	2266	rBV2	40327	73047	3.16%	0.291%
37	15.527	2266	2272	2279	rVV3	96862	242127	10.46%	0.964%
38	15.596	2279	2285	2299	rVB	1564040	2314822	100.00%	9.216%
39	16.125	2363	2384	2389	rBV2	52741	245473	10.60%	0.977%
40	16.563	2448	2466	2476	rBV9	22345	87419	3.78%	0.348%
41	16.985	2522	2545	2562	rBV5	69883	293380	12.67%	1.168%
42	18.326	2779	2796	2807	rBV	847279	2199881	95.03%	8.758%

43 19.053 2906 2932 2945 rBV 29253 171723 7.42% 0.684%

Sum of corrected areas: 25117402

File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Operator : CAA
 Acquired : 12 May 2012 19:31 using AcqMethod BNATEST
 Instrument : HPMS4
 Sample Name: L12050099-01
 Misc Info : 1,1
 Vial Number: 16
 Quant File :MEGAMIX.RES (RTE Integrator)



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: LSCINT.P

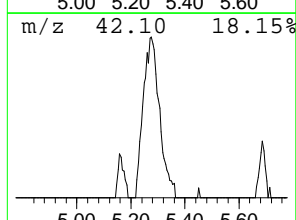
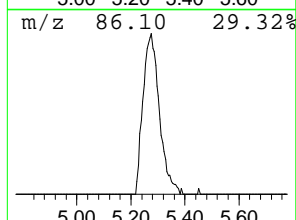
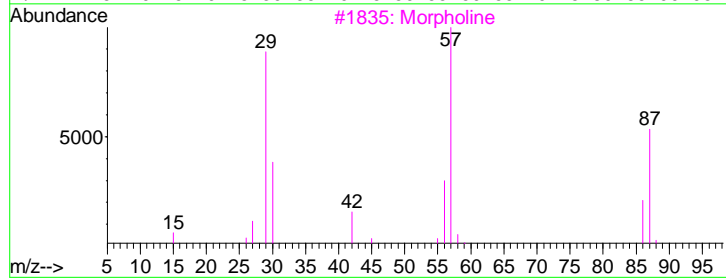
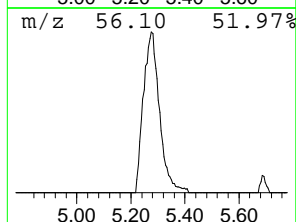
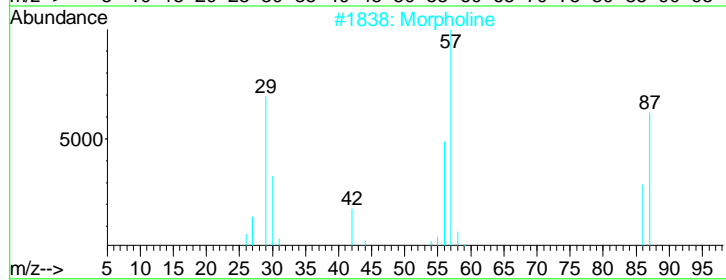
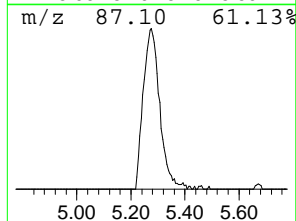
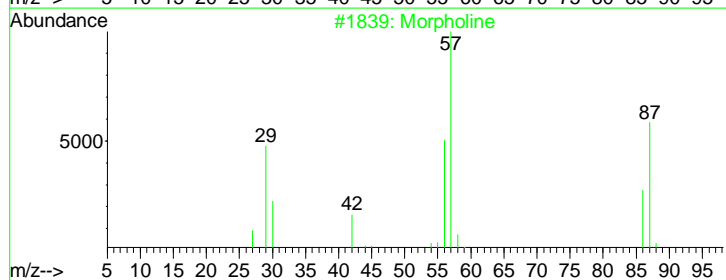
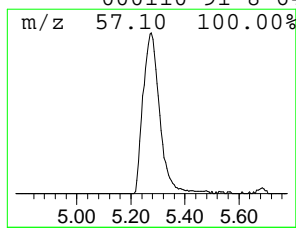
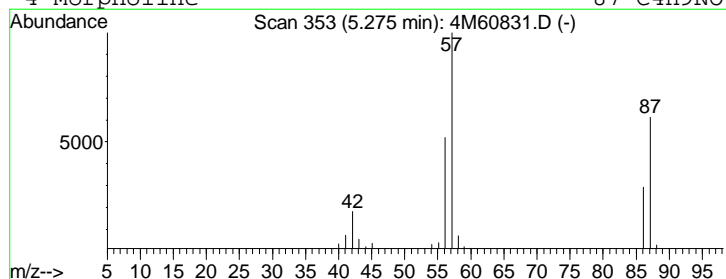
Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 Morpholine Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.28	18.10 ug/ml	638686	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Morpholine	87	C4H9NO	000110-91-8	91
2		Morpholine	87	C4H9NO	000110-91-8	86
3		Morpholine	87	C4H9NO	000110-91-8	80
4		Morpholine	87	C4H9NO	000110-91-8	64



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: LSCINT.P

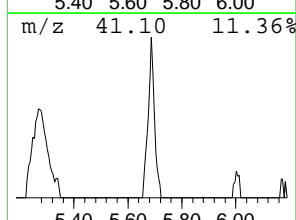
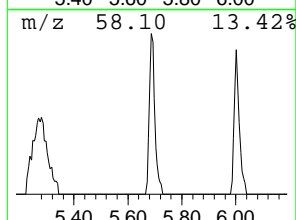
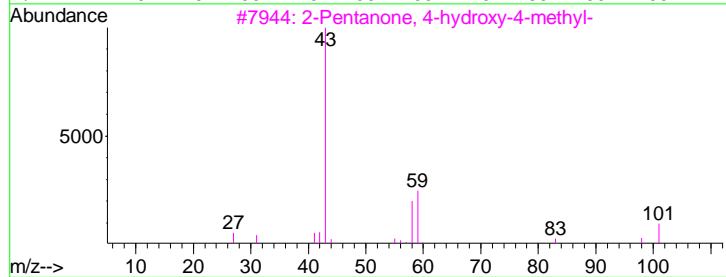
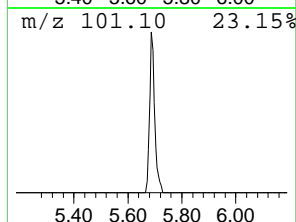
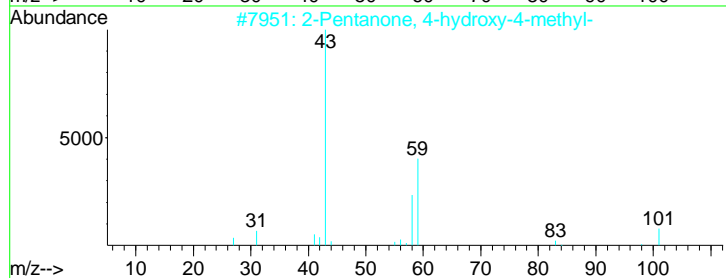
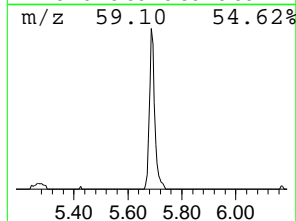
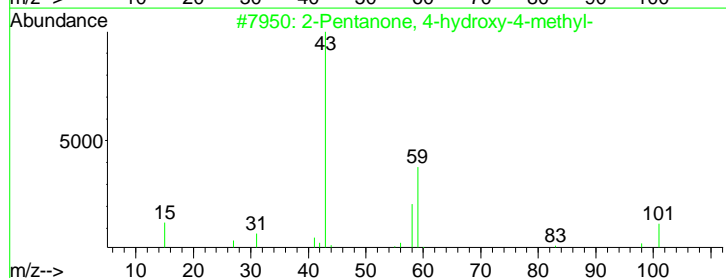
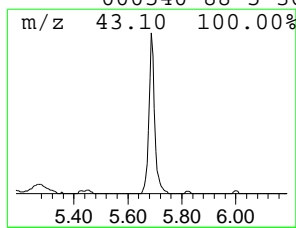
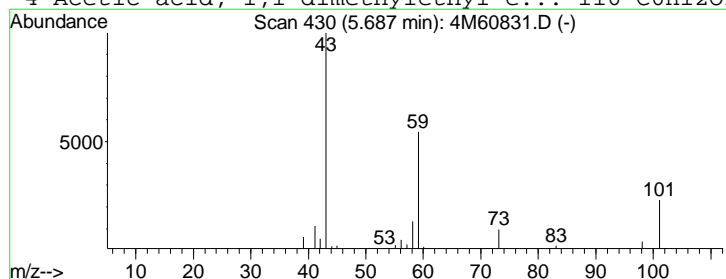
Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	6.65 ug/ml	234534	1,4-Dichlorobenzene-d4	7.23

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
4			Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	36



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: LSCINT.P

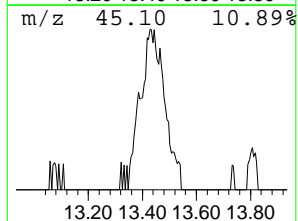
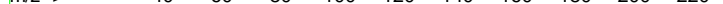
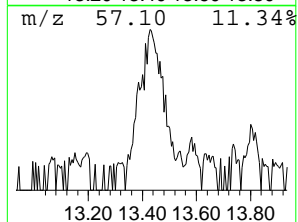
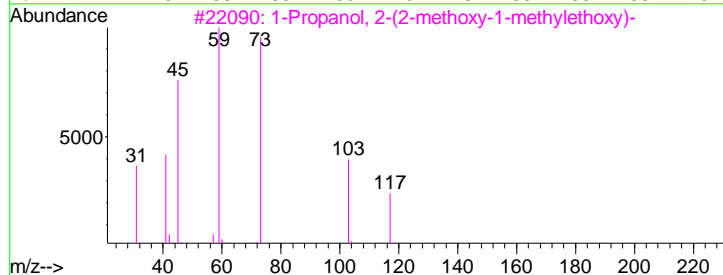
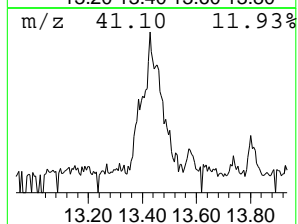
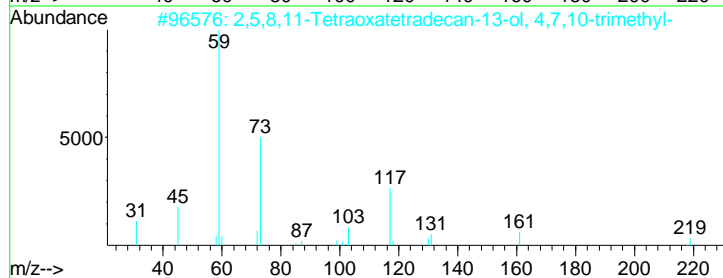
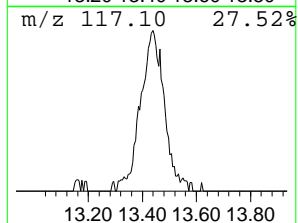
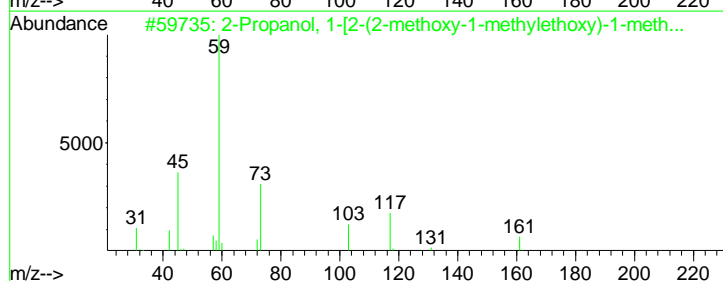
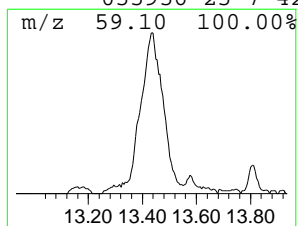
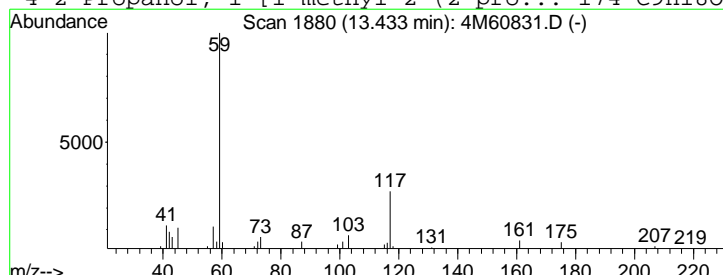
Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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.
13.43	8.03 ug/ml	450878	Phenanthrene-d10	11.92

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	59
2		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	45
3		1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	42
4		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	42



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: LSCINT.P

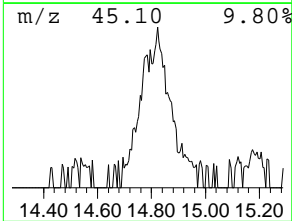
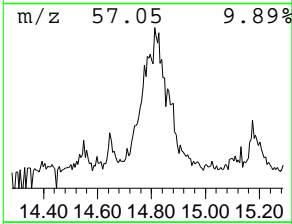
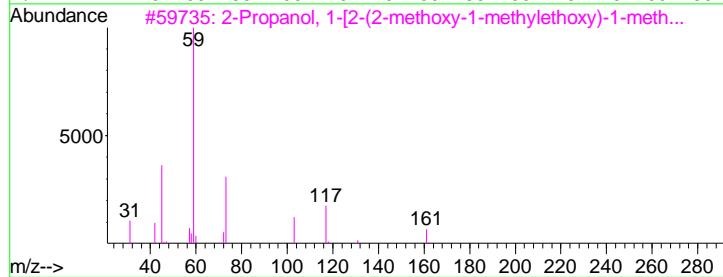
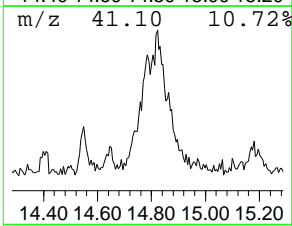
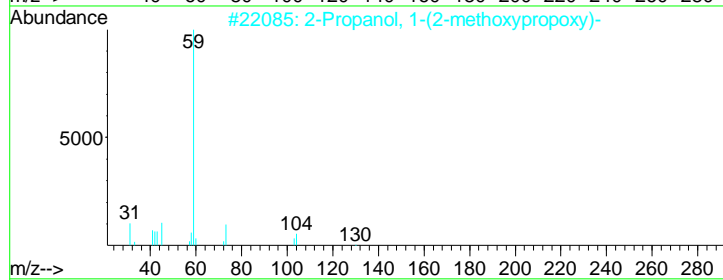
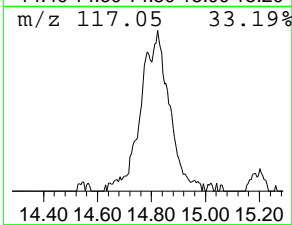
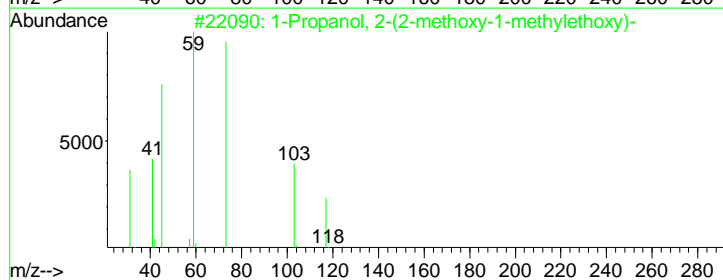
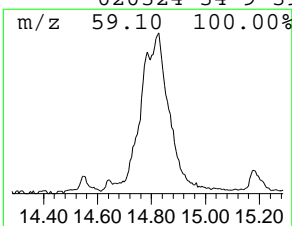
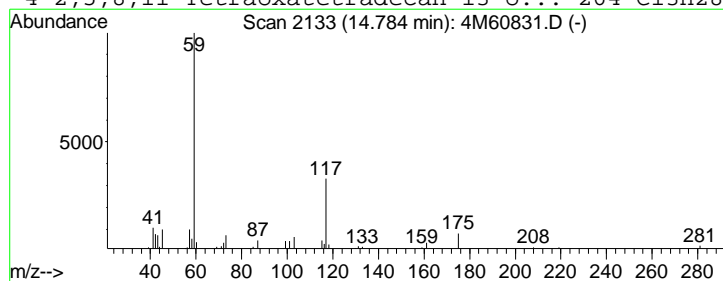
Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 4 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.78	5.29 ug/ml	305863	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	59
2		2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	47
3		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45
4		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	39



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: LSCINT.P

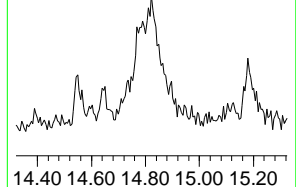
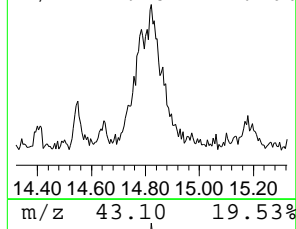
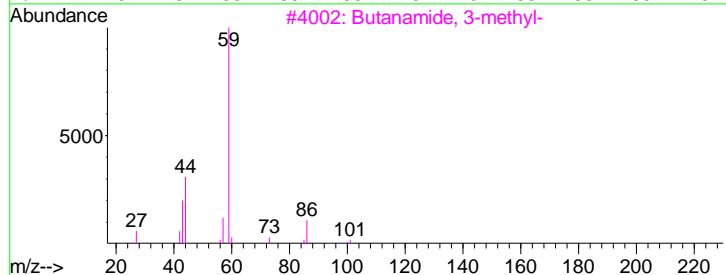
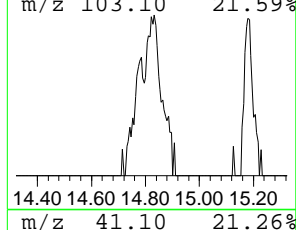
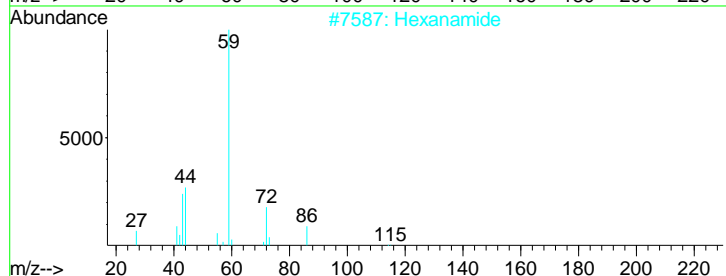
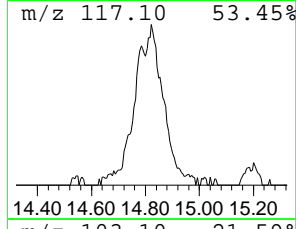
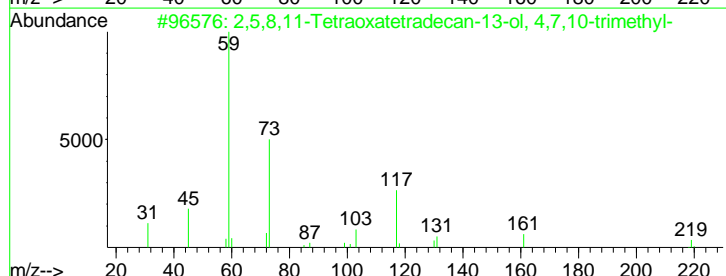
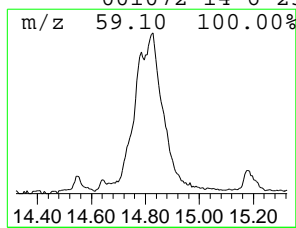
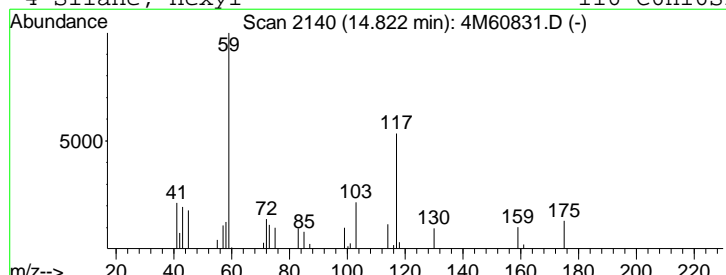
Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 5 2,5,8,11-Tetraoxatetradecan... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	7.27 ug/ml	420466	Chrysene-d12	15.60

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	36		
2	Hexanamide	115	C6H13NO	000628-02-4	35		
3	Butanamide, 3-methyl-	101	C5H11NO	000541-46-8	27		
4	Silane, hexyl-	116	C6H16Si	001072-14-6	25		



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: LSCINT.P

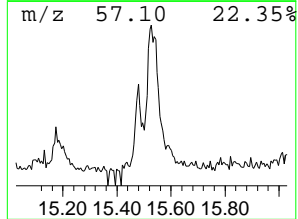
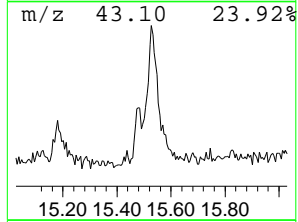
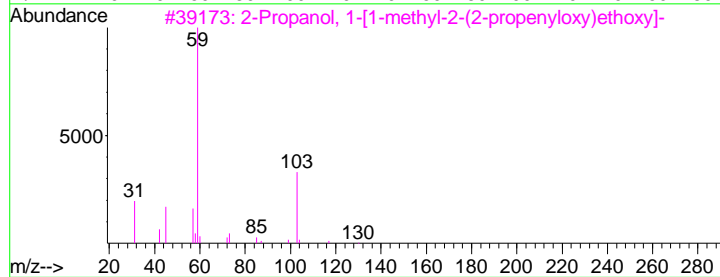
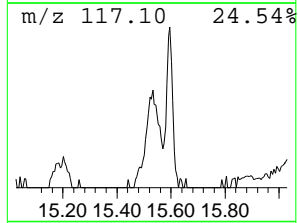
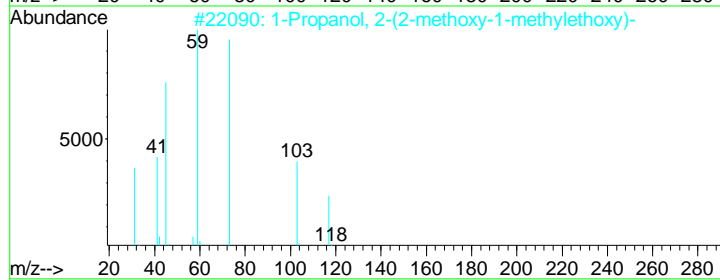
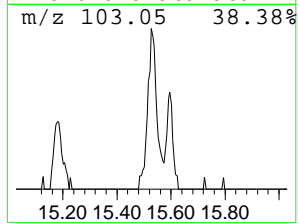
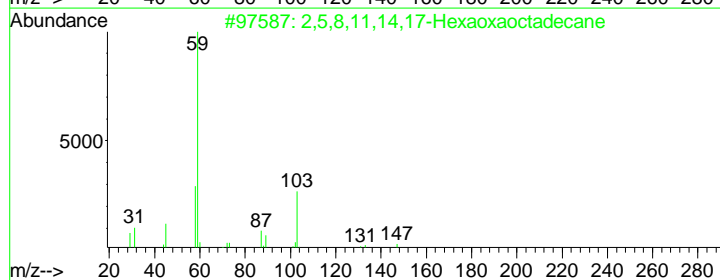
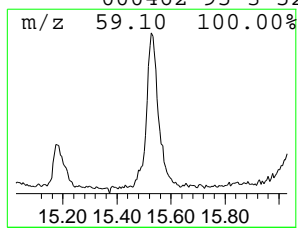
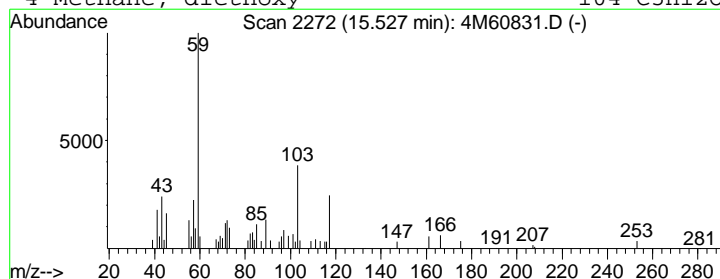
Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 6 2,5,8,11,14,17-Hexaoxaoctad... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.53	4.18 ug/ml	242127	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	53
2		1-Propanol, 2-(2-methoxy-1-methoxy-1-methyl-2-(2-propoxyethoxy)ethoxy)-	148	C7H16O3	055956-21-3	53
3		2-Propanol, 1-[1-methyl-2-(2-propoxyethoxy)ethoxy]-	174	C9H18O3	055956-25-7	53
4		Methane, diethoxy-	104	C5H12O2	000462-95-3	52



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: LSCINT.P

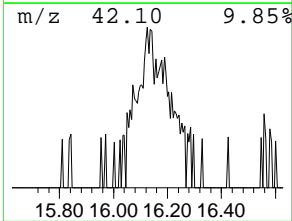
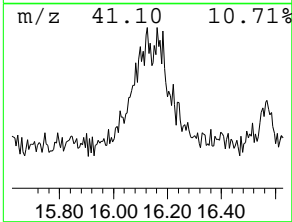
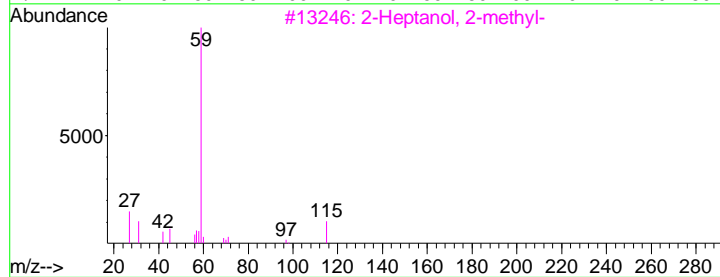
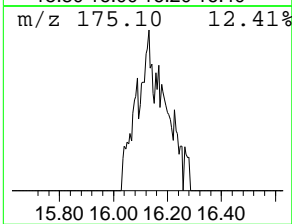
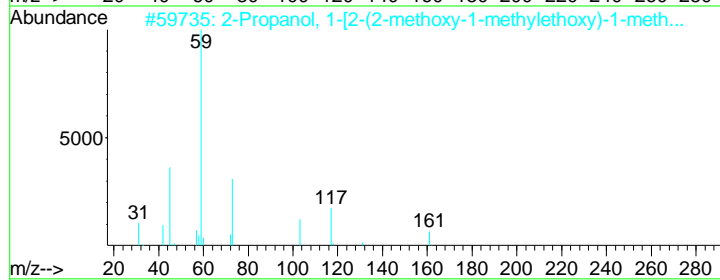
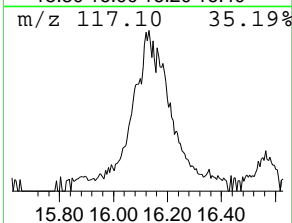
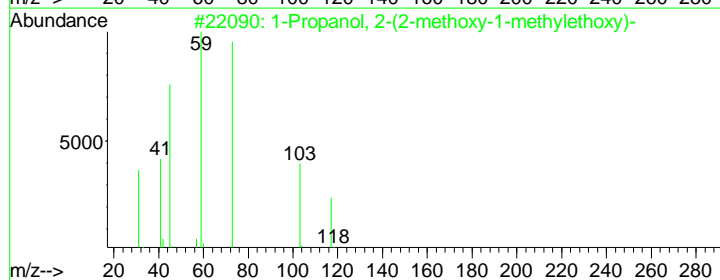
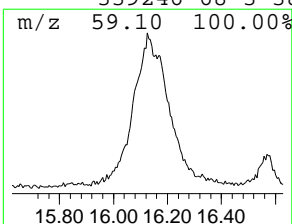
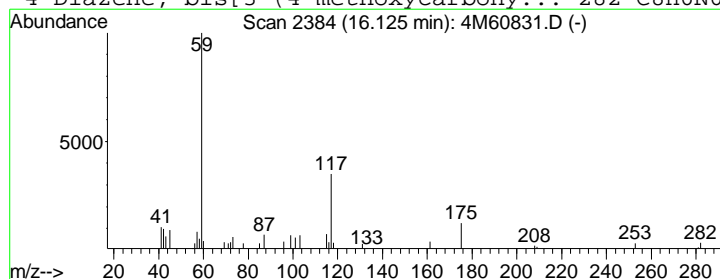
Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.13	4.24 ug/ml	245473	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	59
2		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45
3		2-Heptanol, 2-methyl-	130	C8H18O	000625-25-2	43
4		Diazene, bis[3-(4-methoxycarbo...	282	C8H6N6O6	339246-68-3	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60831.D
 Acq On : 12 May 2012 19:31
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: LSCINT.P

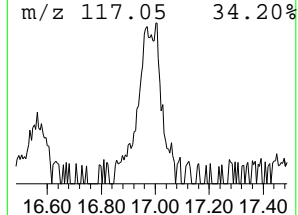
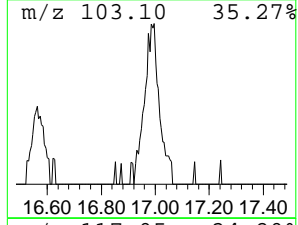
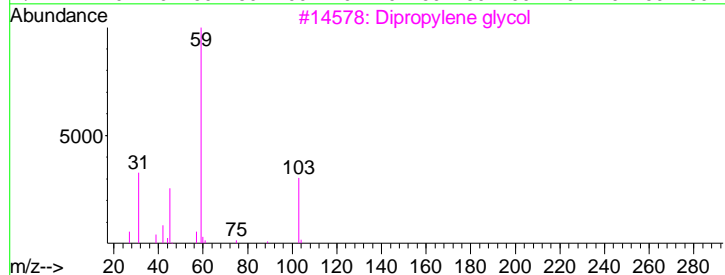
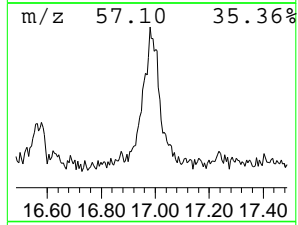
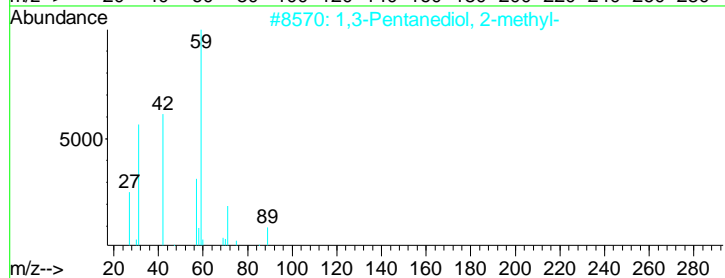
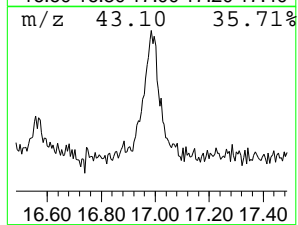
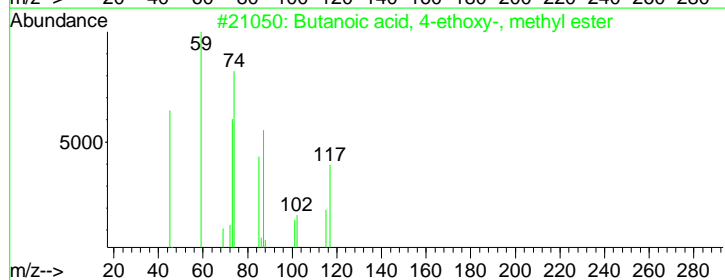
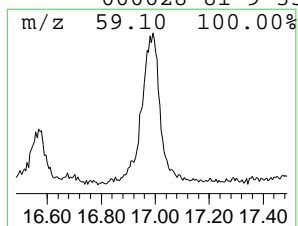
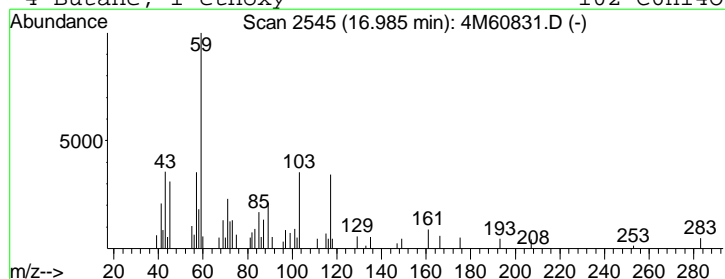
Vial: 16
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 8 Butanoic acid, 4-ethoxy-, m... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.99	5.33 ug/ml	293380	Perylene-d12	18.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Butanoic acid, 4-ethoxy-, methyl...	146	C7H14O3	029006-04-0	47
2		1,3-Pentanediol, 2-methyl-	118	C6H14O2	000149-31-5	37
3		Dipropylene glycol	134	C6H14O3	025265-71-8	35
4		Butane, 1-ethoxy-	102	C6H14O	000628-81-9	35



Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 19:31
 Data File: I:\MSDCHEM\1\DATA\051212\4M60831.D
 Name: L12050099-01
 Misc: 1,1
 Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
 Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Morpholine	5.28	18.1	ug/ml	638686	1	7.23	1411390	40.0
2-Pentanone, 4-hy...	5.69	6.6	ug/ml	234534	1	7.23	1411390	40.0
2-Propanol, 1-[2-...	13.43	8.0	ug/ml	450878	4	11.92	2246480	40.0
1-Propanol, 2-(2-...	14.78	5.3	ug/ml	305863	5	15.60	2314820	40.0
2,5,8,11-Tetraoxa...	14.82	7.3	ug/ml	420466	5	15.60	2314820	40.0
2,5,8,11,14,17-He...	15.53	4.2	ug/ml	242127	5	15.60	2314820	40.0
1-Propanol, 2-(2-...	16.13	4.2	ug/ml	245473	5	15.60	2314820	40.0
Butanoic acid, 4-...	16.99	5.3	ug/ml	293380	6	18.33	2199880	40.0

Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D Vial: 17
 Acq On : 12 May 2012 20:06 Operator: CAA
 Sample : L12050099-03 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40:52 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	245049	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	921255	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	517095	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.91	188	924642	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	882666	40.00	ug/ml	-0.01
128) Perylene-d12	18.33	264	865986	40.00	ug/ml	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
8) 2-Fluorophenol	6.00	112	486170	65.4356	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery =	65.44%		
12) Phenol-d5	6.83	99	615500	70.7836	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery =	70.78%		
31) Nitrobenzene-d5	7.79	82	323742	41.5489	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery =	83.10%		
59) 2-Fluorobiphenyl	9.58	172	680134	39.3893	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery =	78.78%		
86) 2,4,6-Tribromophenol	11.14	330	185819	80.5837	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery =	80.58%		
117) p-Terphenyl-d14	13.95	244	819866	50.3958	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery =	100.80%		

Target Compounds Qvalue

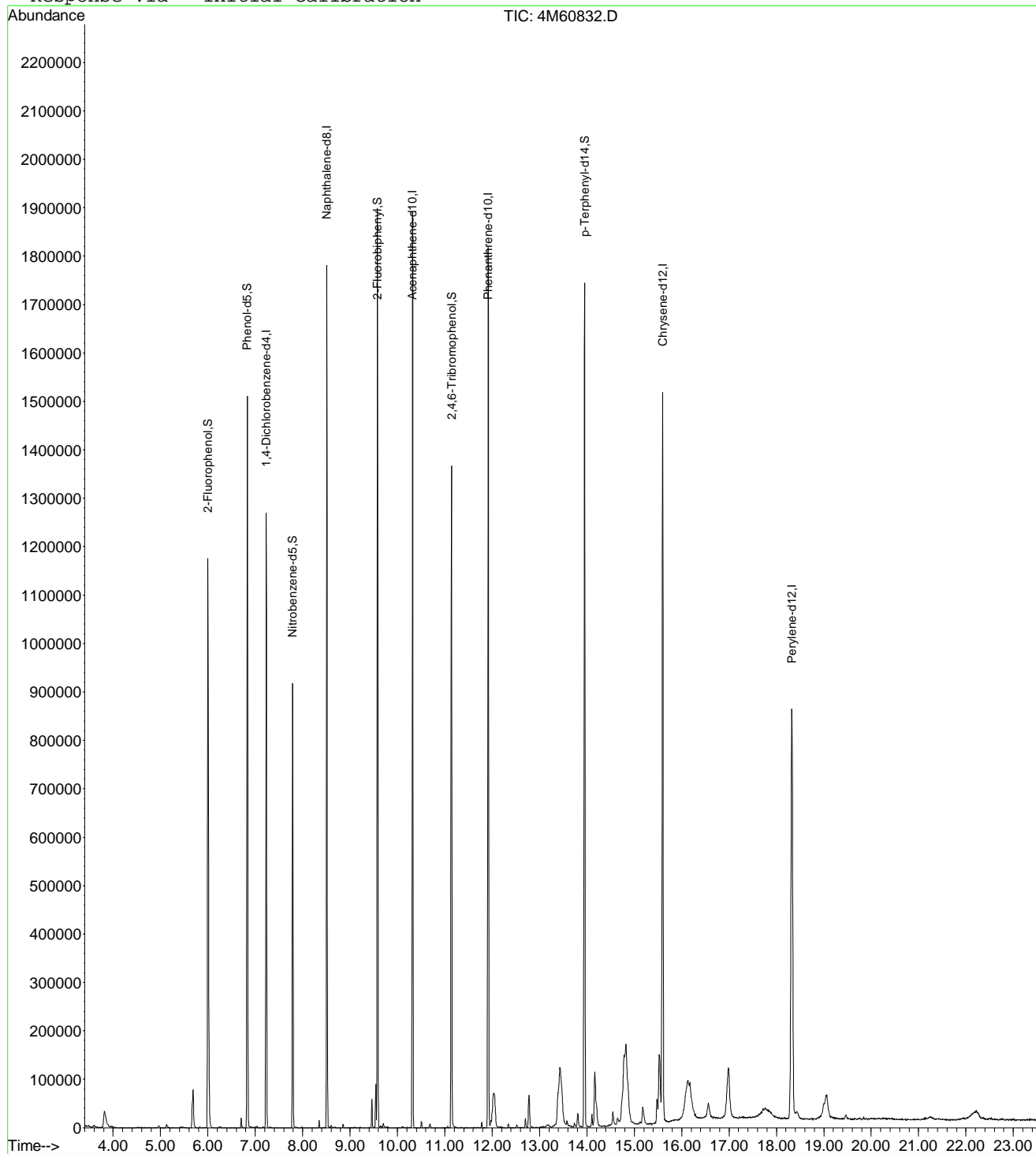
 (#) = qualifier out of range (m) = manual integration
 4M60832.D MEGAMIX.M Mon May 14 11:46:33 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40 2012

Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D Vial: 17
 Acq On : 12 May 2012 20:06 Operator: CAA
 Sample : L12050099-03 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54:29 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	245049	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	921255	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	517095	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.91	188	924642	40.00	ug/mL	0.00

Target Compounds Qvalue

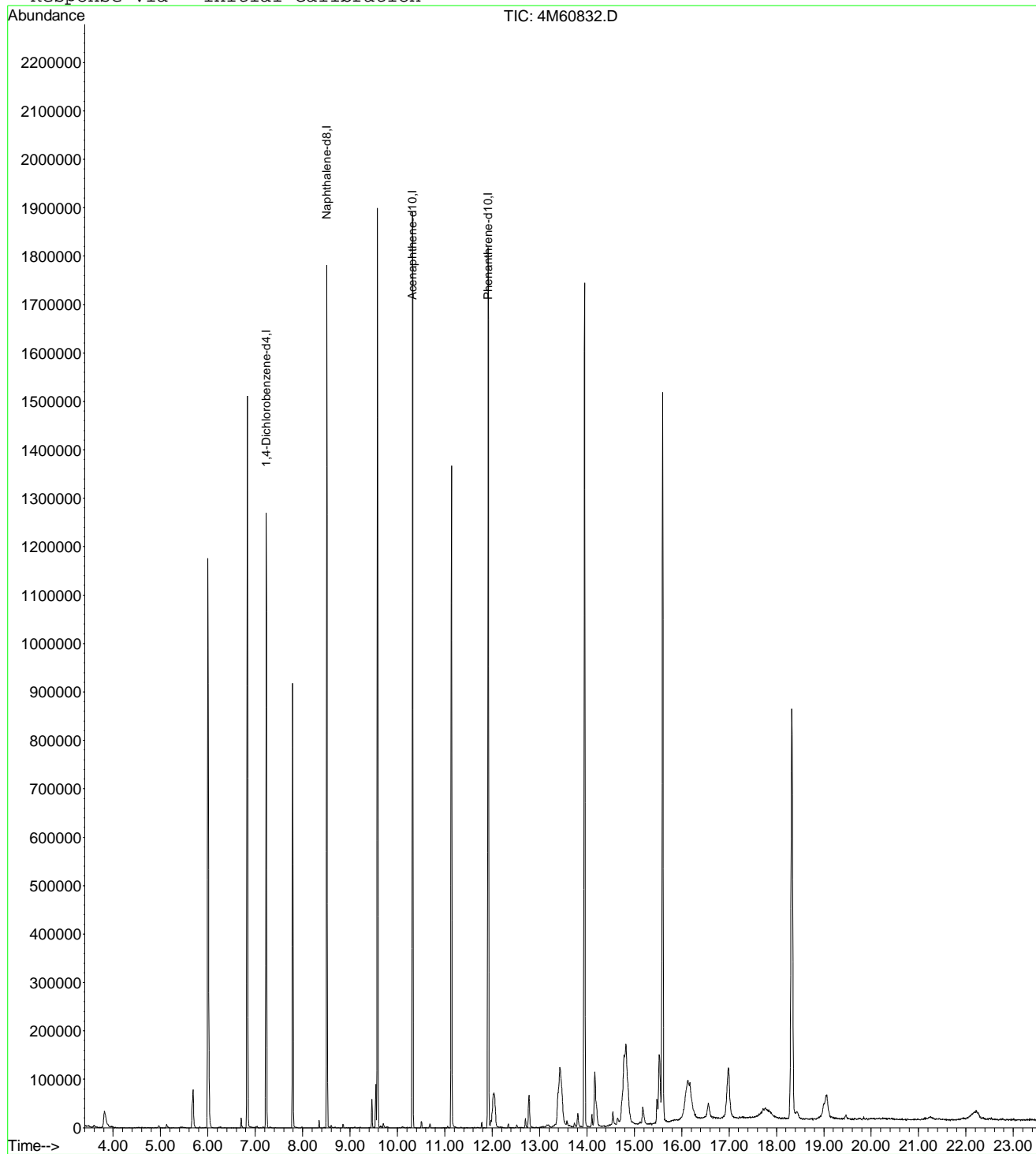
 (#) = qualifier out of range (m) = manual integration
 4M60832.D TCL.M Mon May 14 11:54:30 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54 2012

Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D Vial: 17
 Acq On : 12 May 2012 20:06 Operator: CAA
 Sample : L12050099-03 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

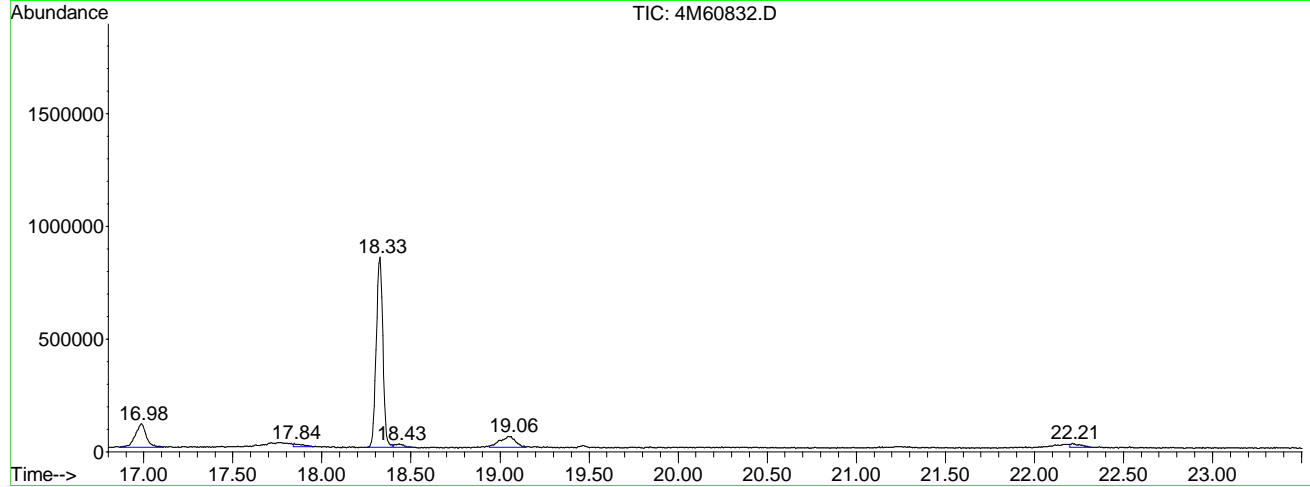
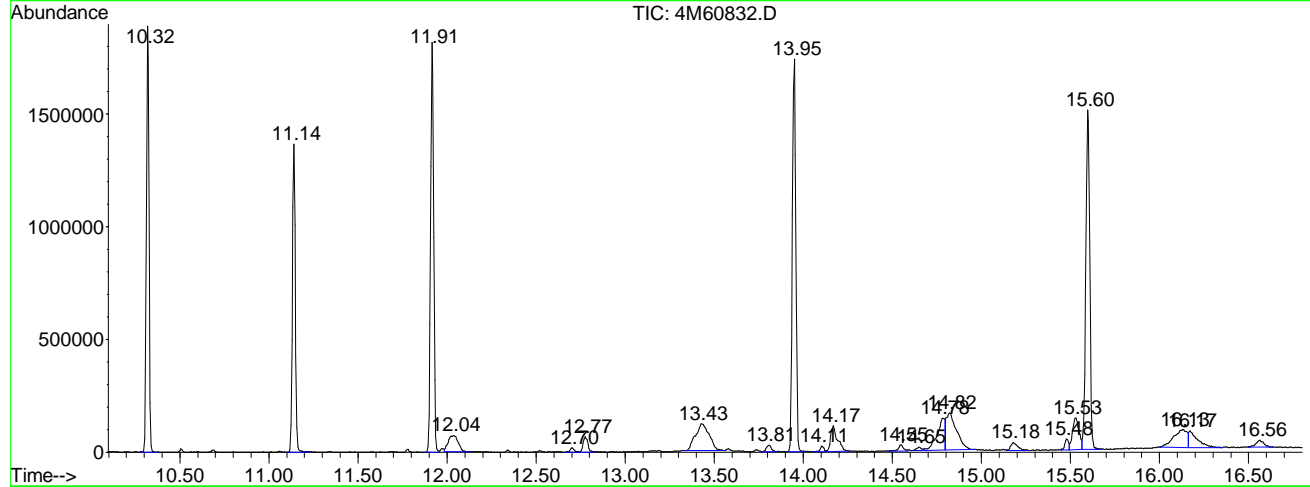
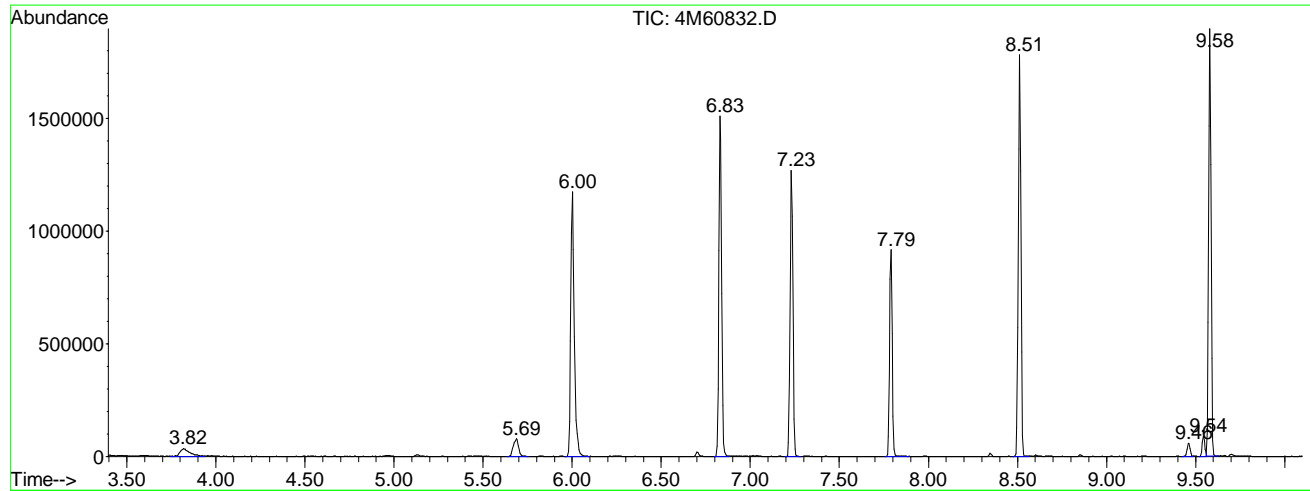
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.816	67	80	103	rBV3	34494	134167	5.69%	0.494%
2	5.686	421	430	442	rBB2	78689	156942	6.65%	0.578%
3	6.001	482	489	506	rBB	1175435	1595477	67.61%	5.880%
4	6.829	638	644	654	rBV	1511520	1675742	71.01%	6.176%
5	7.230	713	719	728	rBB	1269983	1393463	59.05%	5.135%
6	7.791	818	824	842	rBB	918246	947761	40.16%	3.493%
7	8.512	952	959	969	rBV	1782007	1825832	77.37%	6.729%
8	9.463	1130	1137	1142	rBV	58602	67358	2.85%	0.248%
9	9.543	1148	1152	1155	rBV	89658	92748	3.93%	0.342%
10	9.580	1155	1159	1167	rVB	1898838	1887236	79.97%	6.955%
11	10.318	1289	1297	1306	rBB	1890821	2016004	85.43%	7.430%
12	11.140	1444	1451	1466	rBV	1367045	1502555	63.67%	5.537%
13	11.915	1589	1596	1604	rBV	1817852	2208019	93.56%	8.137%
14	12.038	1609	1619	1635	rVB5	71307	281450	11.93%	1.037%
15	12.700	1736	1743	1751	rBB2	19492	25220	1.07%	0.093%
16	12.775	1751	1757	1768	rBV2	67210	120678	5.11%	0.445%
17	13.427	1861	1879	1904	rVB2	118679	645294	27.34%	2.378%
18	13.806	1943	1950	1958	rBV2	27192	52377	2.22%	0.193%
19	13.950	1969	1977	1988	rBV	1742799	2359920	100.00%	8.697%
20	14.105	1997	2006	2010	rBV2	26228	36128	1.53%	0.133%
21	14.169	2010	2018	2034	rVB	112689	300830	12.75%	1.109%
22	14.549	2076	2089	2096	rBV3	29150	54972	2.33%	0.203%
23	14.650	2102	2108	2112	rBV7	14191	26882	1.14%	0.099%
24	14.784	2113	2133	2135	rVV2	142640	424257	17.98%	1.564%
25	14.821	2136	2140	2166	rVB2	162286	621932	26.35%	2.292%
26	15.179	2200	2207	2223	rVB3	35985	94138	3.99%	0.347%
27	15.478	2257	2263	2266	rBV2	49849	77360	3.28%	0.285%
28	15.526	2266	2272	2279	rVV2	141269	359174	15.22%	1.324%
29	15.596	2279	2285	2299	rVB	1506777	2307431	97.78%	8.504%
30	16.130	2361	2385	2391	rBV2	77482	426036	18.05%	1.570%
31	16.173	2391	2393	2426	rVB	73923	248443	10.53%	0.916%
32	16.563	2454	2466	2479	rVB6	30153	95366	4.04%	0.351%
33	16.985	2523	2545	2568	rBV3	103543	437852	18.55%	1.614%
34	17.845	2705	2706	2726	rVB3	15167	46866	1.99%	0.173%
35	18.325	2783	2796	2809	rBV	846403	2184539	92.57%	8.051%
36	18.432	2810	2816	2830	rVB9	15438	53261	2.26%	0.196%
37	19.063	2911	2934	2949	rVB5	47743	283579	12.02%	1.045%
38	22.214	3521	3524	3543	rVB5	17699	66997	2.84%	0.247%

Sum of corrected areas: 27134286

File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Operator : CAA
 Acquired : 12 May 2012 20:06 using AcqMethod BNATEST
 Instrument : HPMS4
 Sample Name: L12050099-03
 Misc Info : 1,1
 Vial Number: 17
 Quant File :MEGAMIX.RES (RTE Integrator)



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

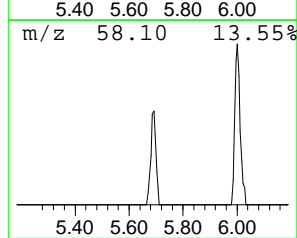
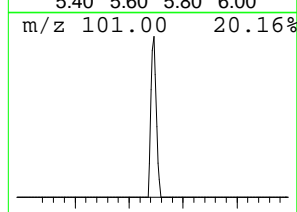
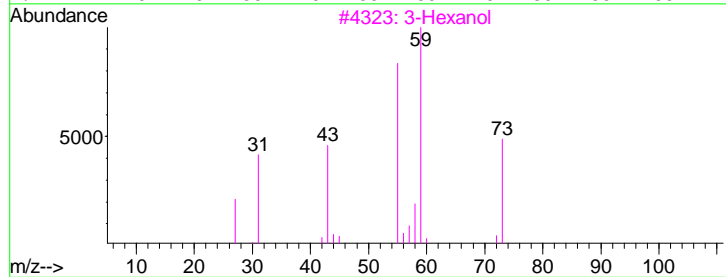
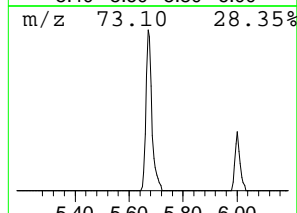
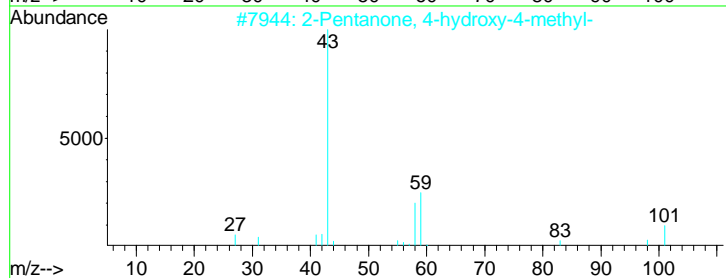
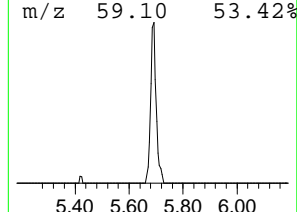
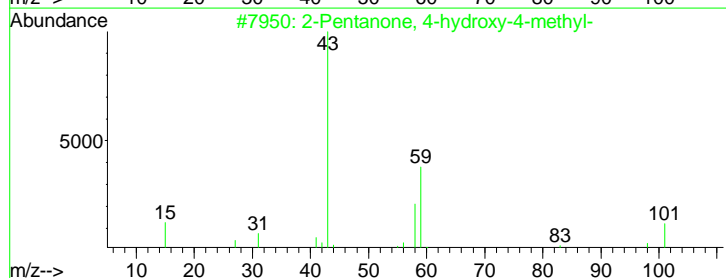
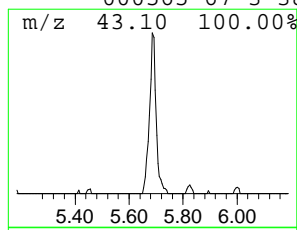
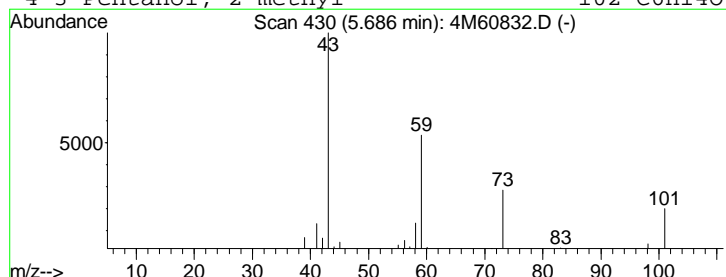
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	4.51 ug/ml	156942	1,4-Dichlorobenzene-d4	7.23

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	53
2			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3			3-Hexanol	102	C6H14O	000623-37-0	50
4			3-Pentanol, 2-methyl-	102	C6H14O	000565-67-3	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

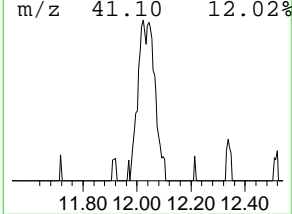
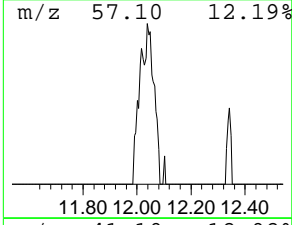
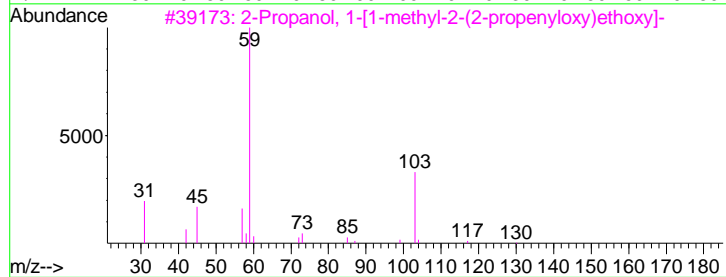
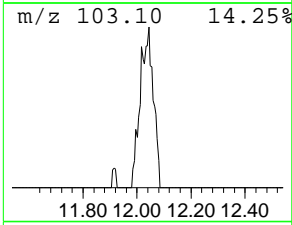
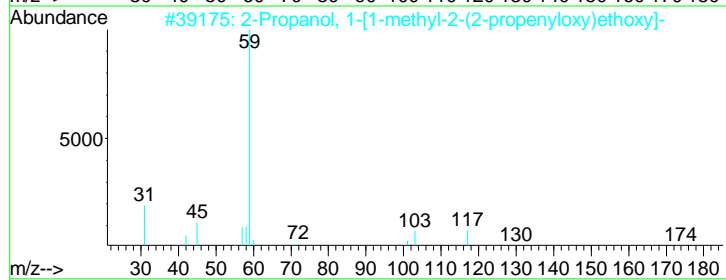
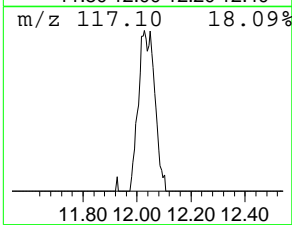
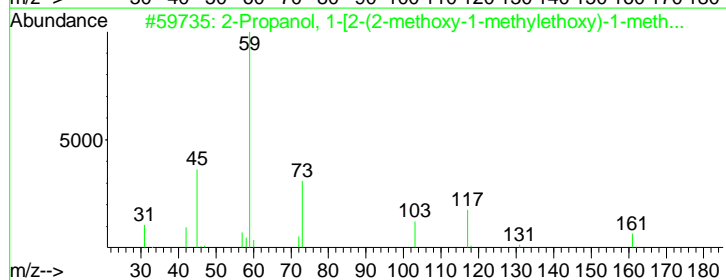
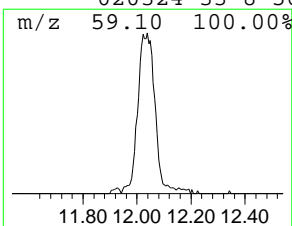
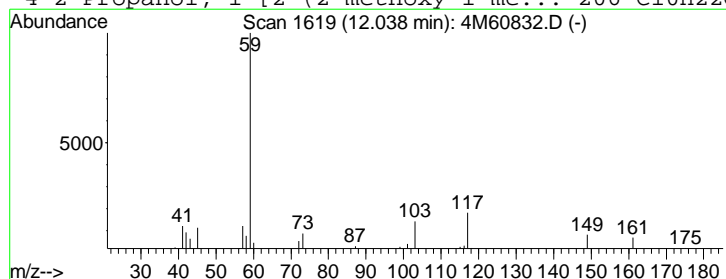
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 2 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.04	5.10 ug/ml	281450	Phenanthrene-d10	11.91

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	72
2		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	64
3		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	64
4		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	56



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

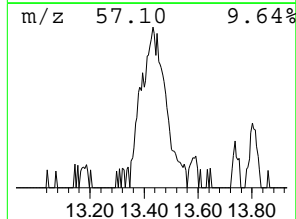
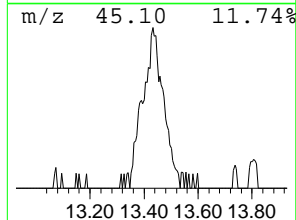
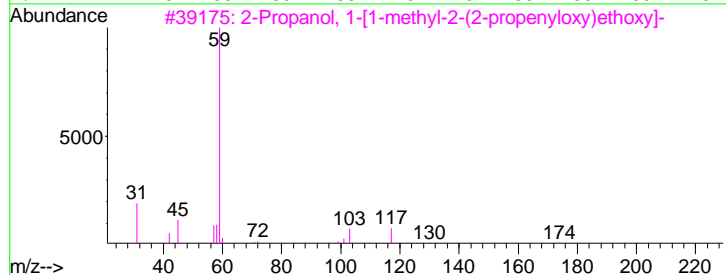
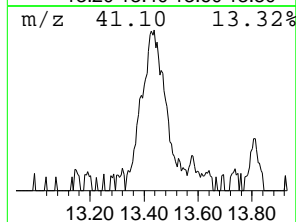
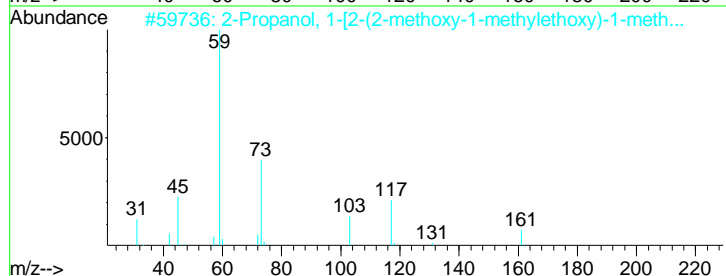
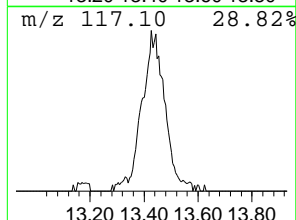
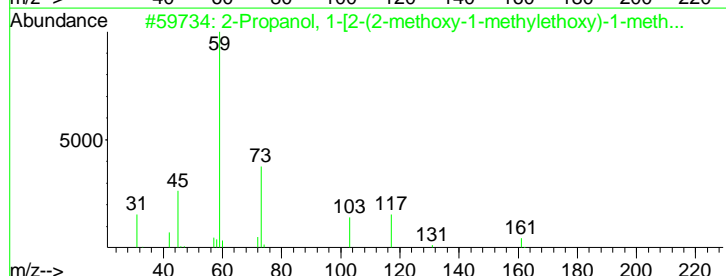
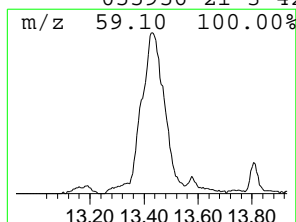
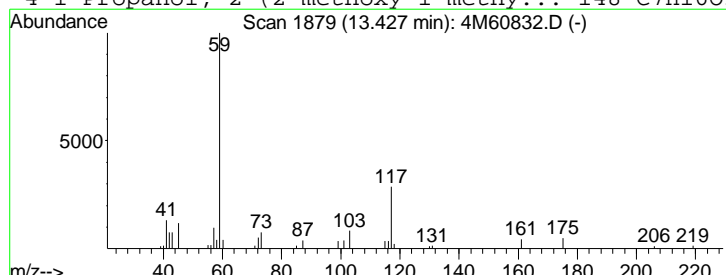
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	11.69 ug/ml	645294	Phenanthrene-d10	11.91

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42
2		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42
3		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	42
4		1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	42



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
Acq On : 12 May 2012 20:06
Sample : L12050099-03
Misc : 1,1
MS Integration Params: LSCINT.P

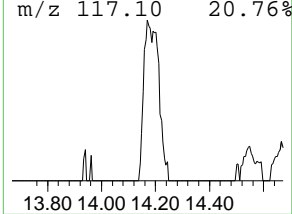
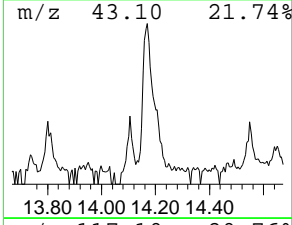
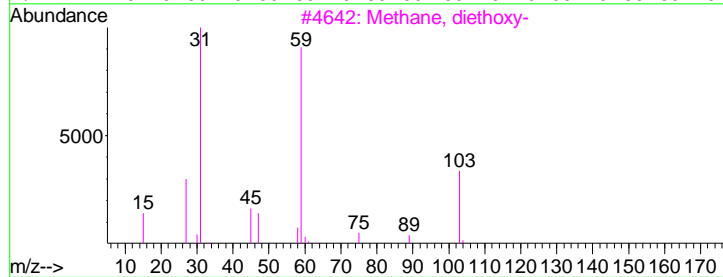
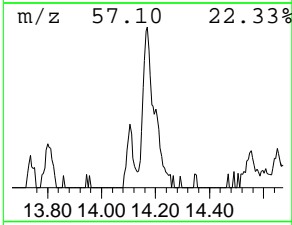
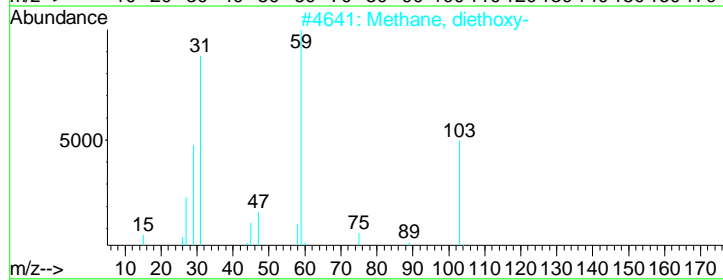
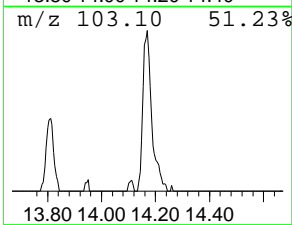
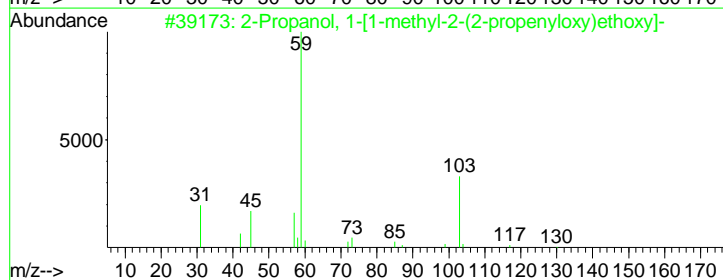
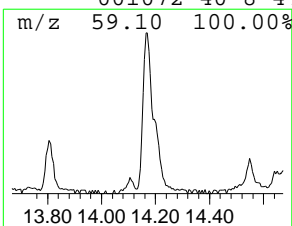
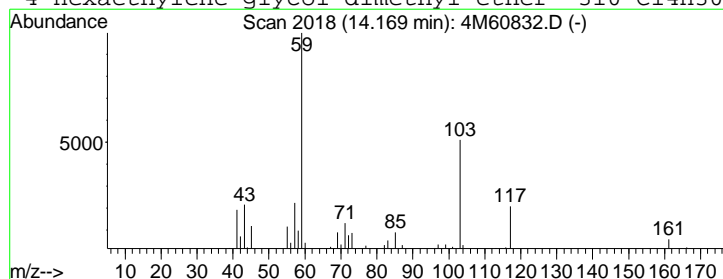
Vial: 17
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

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

Peak Number 4 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.17	5.21 ug/ml	300830	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	64
2		Methane, diethoxy-	104	C5H12O2	000462-95-3	50
3		Methane, diethoxy-	104	C5H12O2	000462-95-3	50
4		Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	47



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

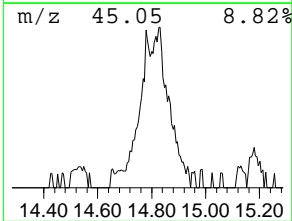
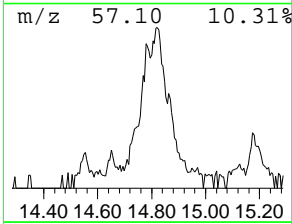
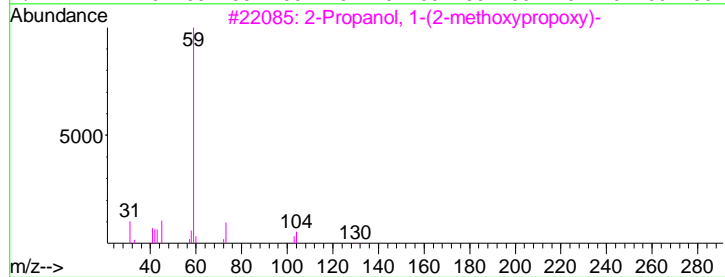
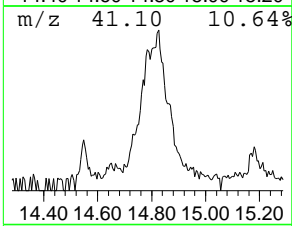
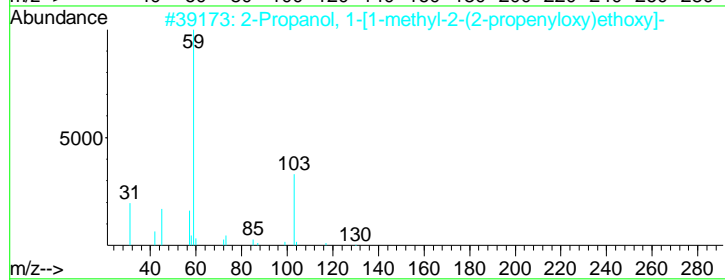
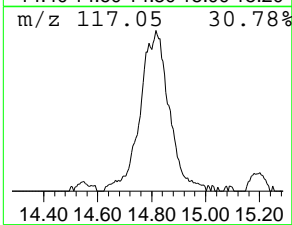
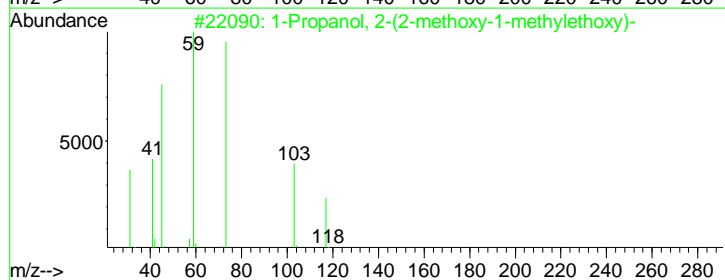
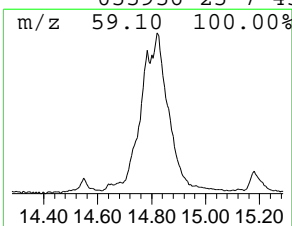
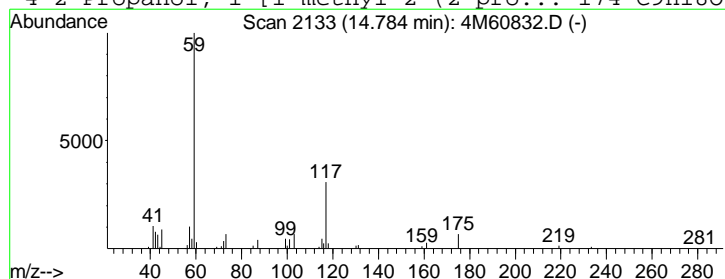
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.78	7.35 ug/ml	424257	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	64
2		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	53
3		2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	47
4		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	45



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

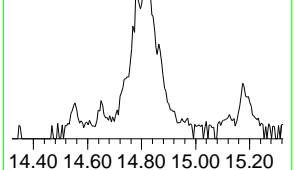
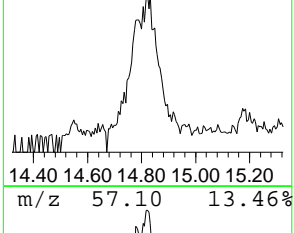
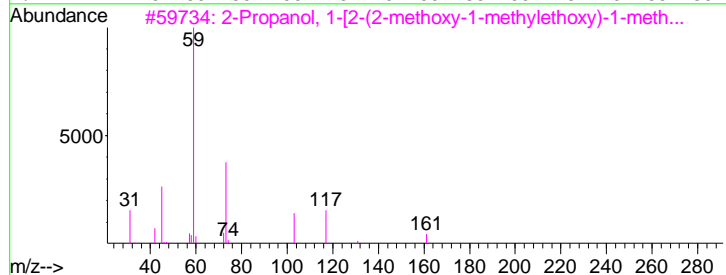
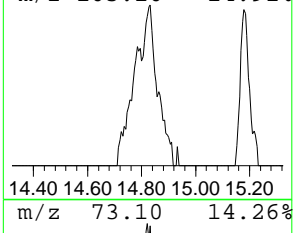
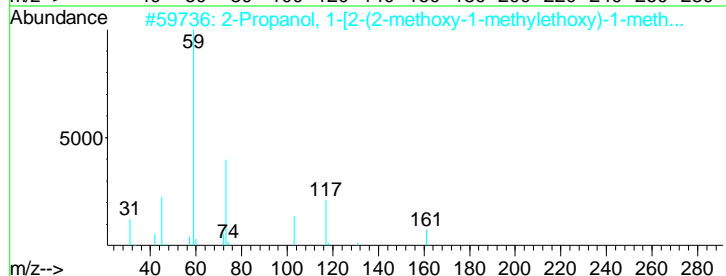
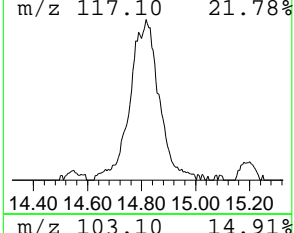
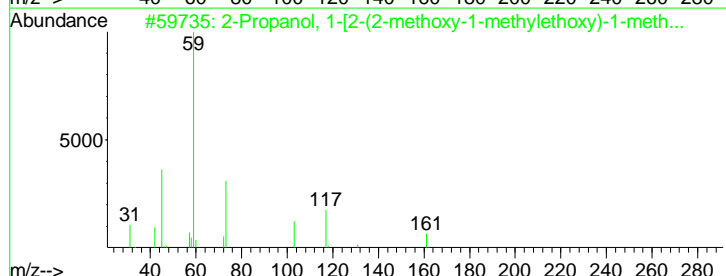
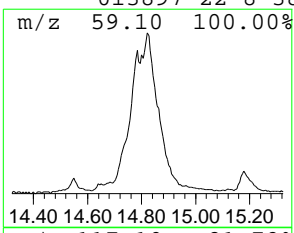
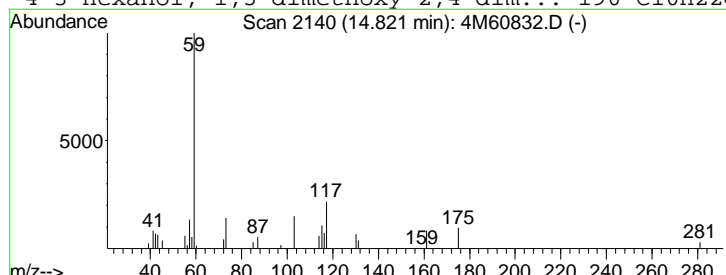
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 6 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	10.78 ug/ml	621932	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	38
2		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	38
3		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	38
4		3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

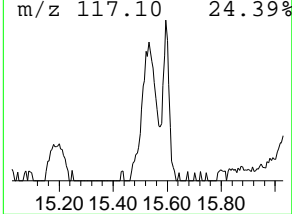
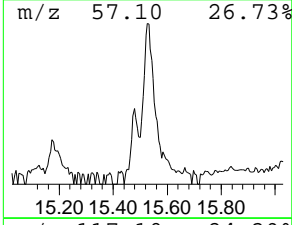
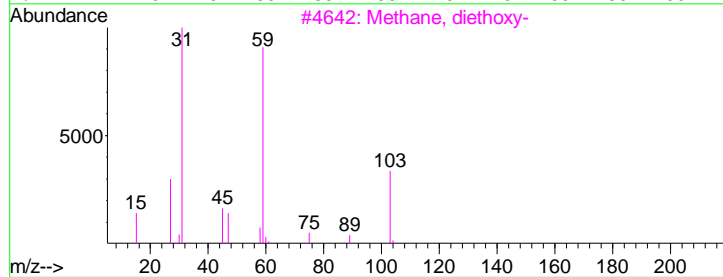
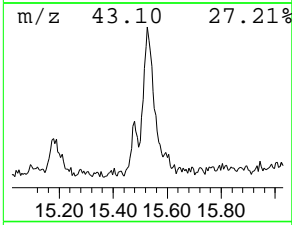
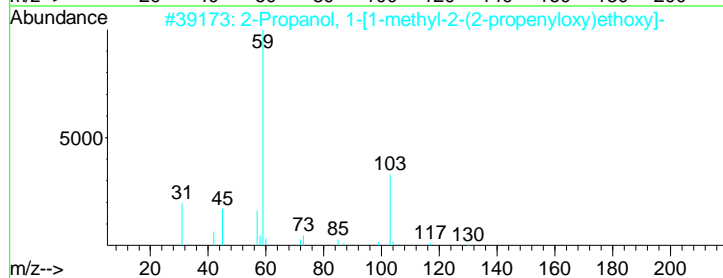
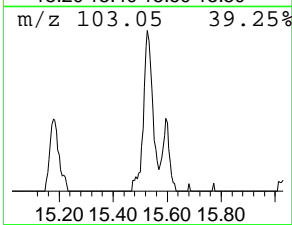
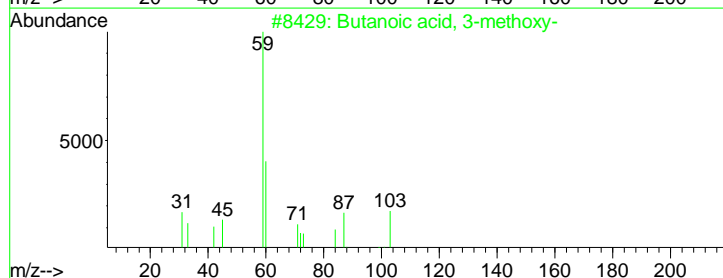
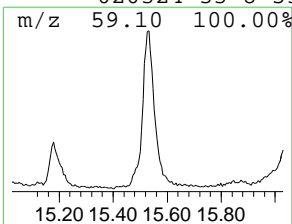
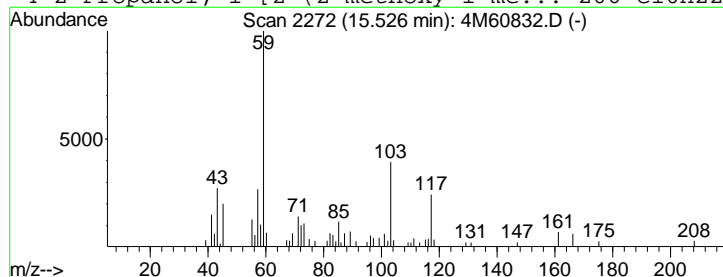
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 7 Butanoic acid, 3-methoxy- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.53	6.23 ug/ml	359174	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Butanoic acid, 3-methoxy-	118	C5H10O3	010024-70-1	59
2		2-Propanol, 1-[1-methyl-2-(2-pro...]	174	C9H18O3	055956-25-7	59
3		Methane, diethoxy-	104	C5H12O2	000462-95-3	58
4		2-Propanol, 1-[2-(2-methoxy-1-me...]	206	C10H22O4	020324-33-8	53



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

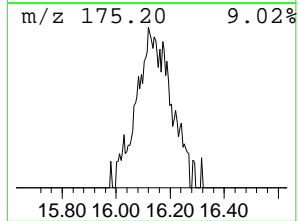
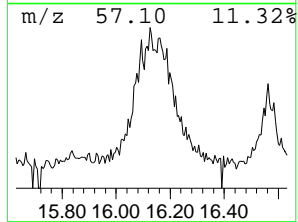
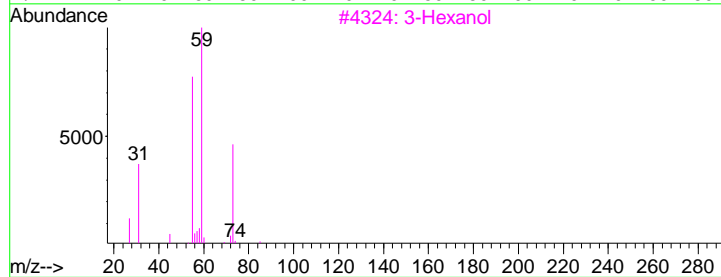
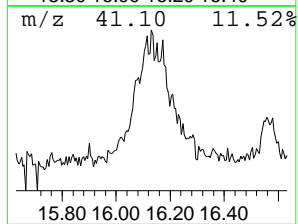
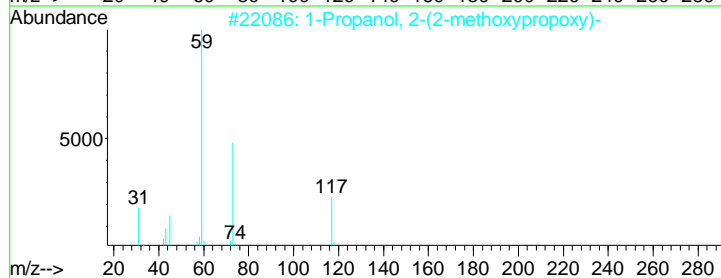
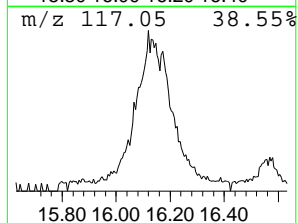
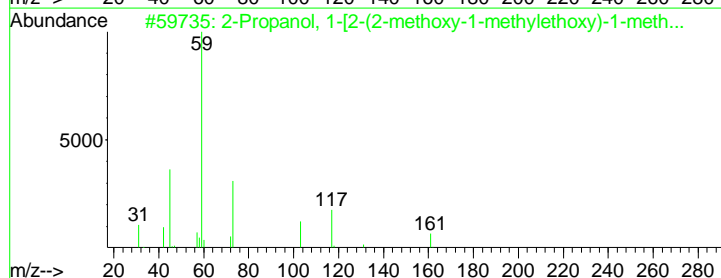
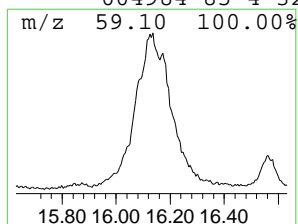
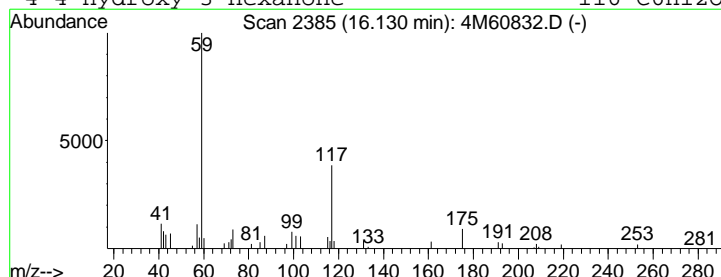
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 8 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.13	7.39 ug/ml	426036	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	50
2		1-Propanol, 2-(2-methoxypropoxy)-	148	C7H16O3	013588-28-8	33
3		3-Hexanol	102	C6H14O	000623-37-0	32
4		4-Hydroxy-3-hexanone	116	C6H12O2	004984-85-4	32



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
Acq On : 12 May 2012 20:06
Sample : L12050099-03
Misc : 1,1
MS Integration Params: LSCINT.P

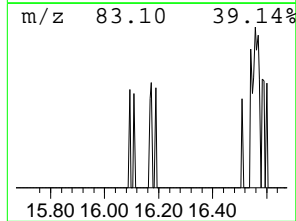
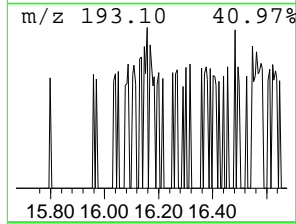
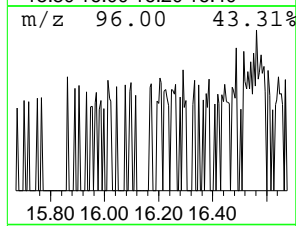
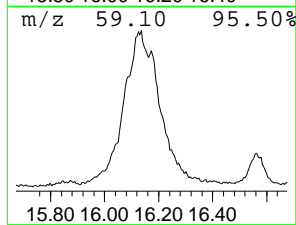
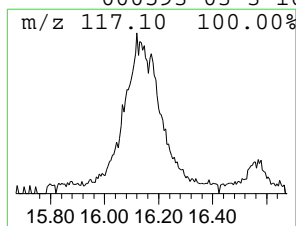
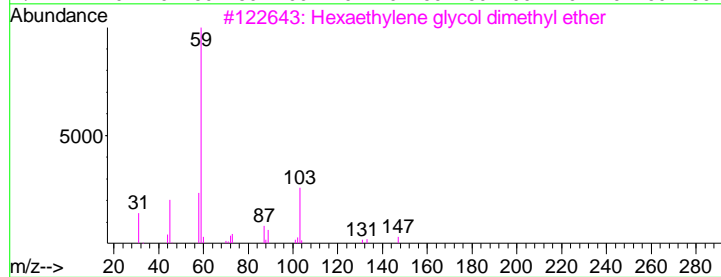
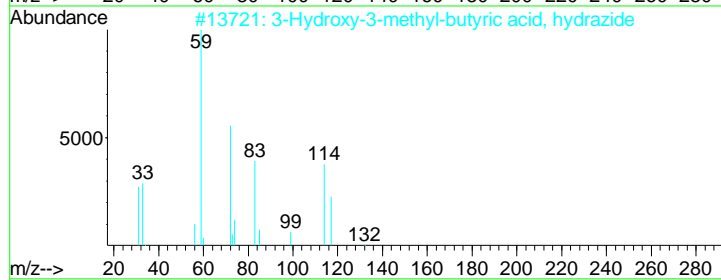
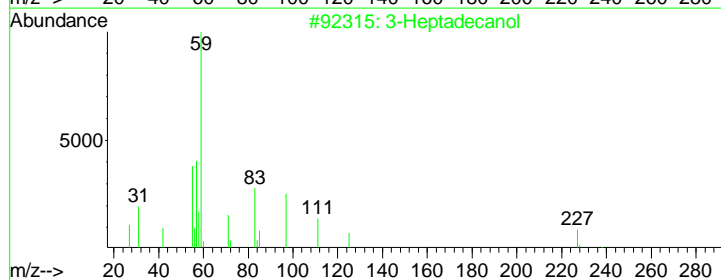
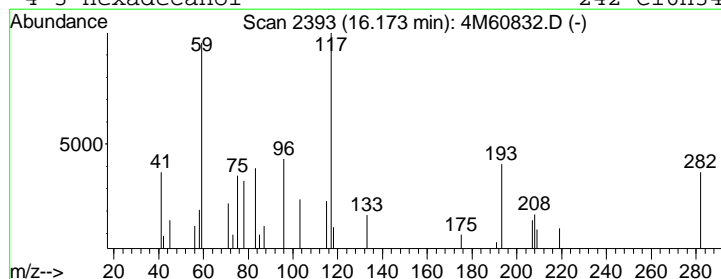
Vial: 17
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

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

Peak Number 9 3-Heptadecanol Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.17	4.31 ug/ml	248443	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Heptadecanol	256	C17H36O	084534-30-5	22
2		3-Hydroxy-3-methyl-butyric acid,...	132	C5H12N2O2	1000193-80-2	12
3		Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	10
4		3-Hexadecanol	242	C16H34O	000593-03-3	10



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

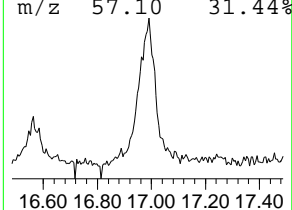
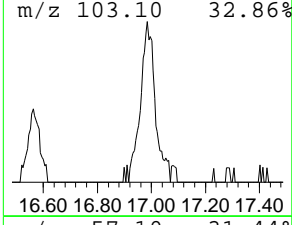
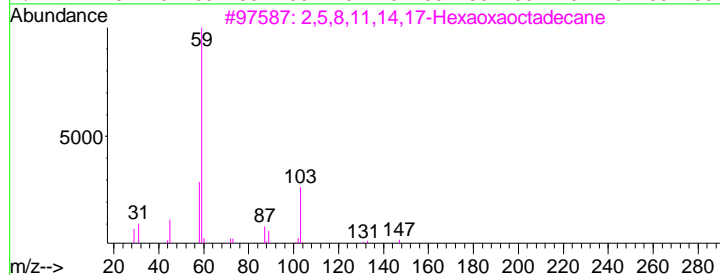
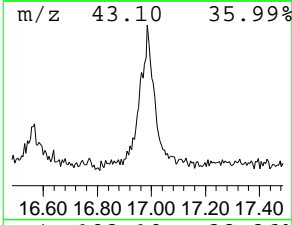
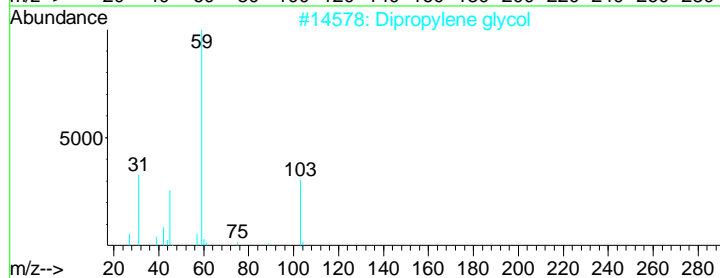
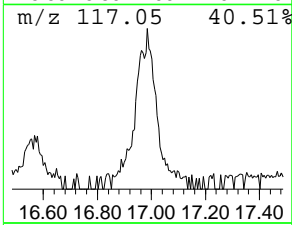
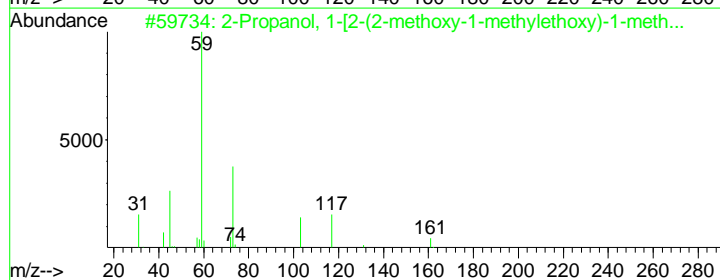
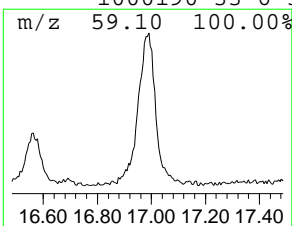
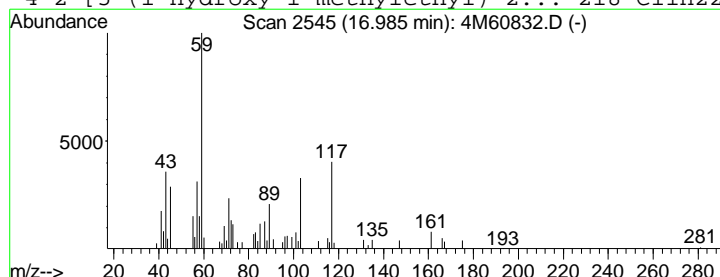
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 10 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.98	8.02 ug/ml	437852	Perylene-d12	18.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	50
2		Dipropylene glycol	134	C6H14O3	025265-71-8	38
3		2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	37
4		2-[5-(1-Hydroxy-1-methylethyl)-2...	218	C11H22O4	1000190-33-6	37



Data File : I:\MSDCHEM\1\DATA\051212\4M60832.D
 Acq On : 12 May 2012 20:06
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: LSCINT.P

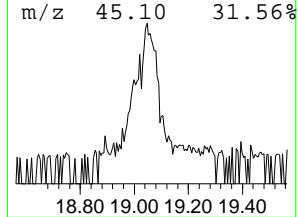
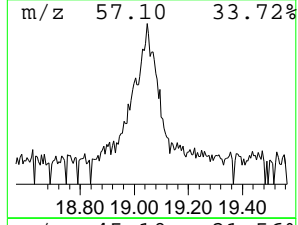
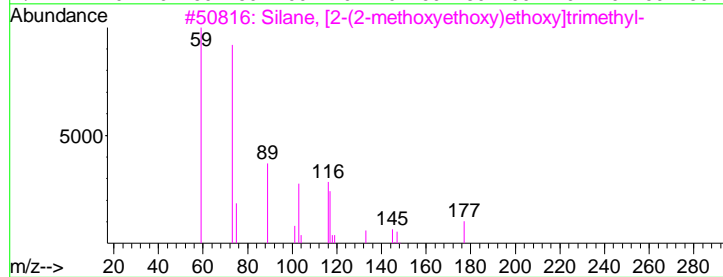
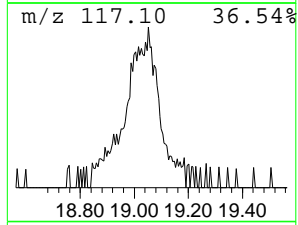
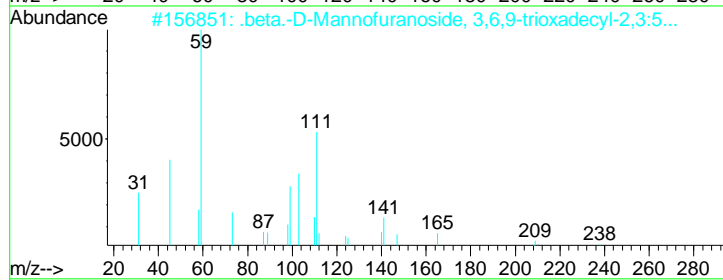
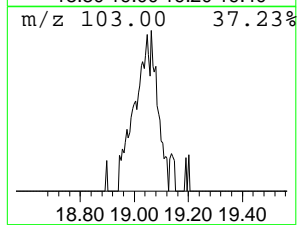
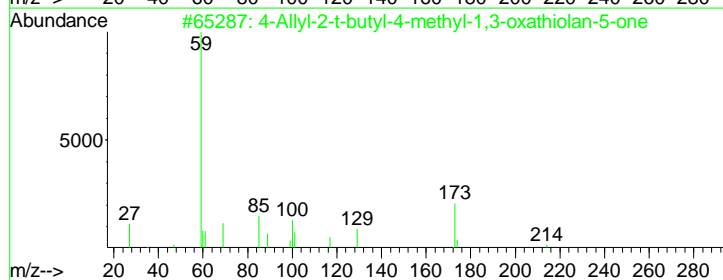
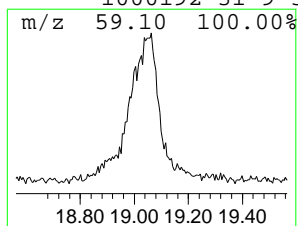
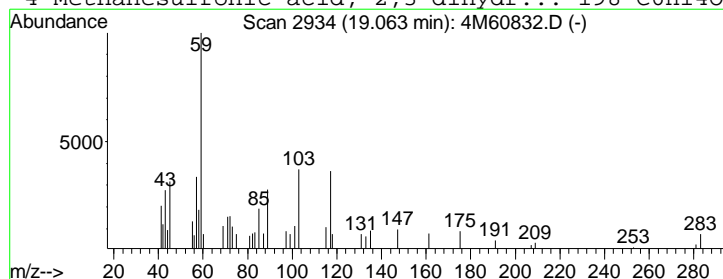
Vial: 17
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 11 4-Allyl-2-t-butyl-4-methyl-... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.06	5.19 ug/ml	283579	Perylene-d12	18.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4-Allyl-2-t-butyl-4-methyl-1,3-o...	214	C11H18O2S	092572-53-7	43
2		.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	38
3		Silane, [2-(2-methoxyethoxy)etho...	192	C8H20O3Si	062199-57-9	33
4		Methanesulfonic acid, 2,3-dihydr...	198	C6H14O5S	1000192-31-9	32



Operator ID: CAA Date Acquired: 12 May 2012 20:06
Data File: I:\MSDCHEM\1\DATA\051212\4M60832.D
Name: L12050099-03
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
2-Pentanone, 4-hy...	5.69	4.5	ug/ml	156942	1	7.23	1393460	40.0
2-Propanol, 1-[2-...	12.04	5.1	ug/ml	281450	4	11.91	2208020	40.0
2-Propanol, 1-[2-...	13.43	11.7	ug/ml	645294	4	11.91	2208020	40.0
2-Propanol, 1-[1-...	14.17	5.2	ug/ml	300830	5	15.60	2307430	40.0
1-Propanol, 2-(2-...	14.78	7.4	ug/ml	424257	5	15.60	2307430	40.0
2-Propanol, 1-[2-...	14.82	10.8	ug/ml	621932	5	15.60	2307430	40.0
Butanoic acid, 3-...	15.53	6.2	ug/ml	359174	5	15.60	2307430	40.0
2-Propanol, 1-[2-...	16.13	7.4	ug/ml	426036	5	15.60	2307430	40.0
3-Heptadecanol	16.17	4.3	ug/ml	248443	5	15.60	2307430	40.0
2-Propanol, 1-[2-...	16.98	8.0	ug/ml	437852	6	18.33	2184540	40.0
4-Allyl-2-t-butyl...	19.06	5.2	ug/ml	283579	6	18.33	2184540	40.0

Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D Vial: 18
 Acq On : 12 May 2012 20:41 Operator: CAA
 Sample : L12050099-05 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40:52 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	246923	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	928698	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	518118	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	932714	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	896770	40.00	ug/ml	0.00
128) Perylene-d12	18.32	264	866361	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.01	112	627203	83.7771	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery =	83.78%		
12) Phenol-d5	6.83	99	800117	91.3166	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery =	91.32%		
31) Nitrobenzene-d5	7.79	82	366244	46.6268	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery =	93.26%		
59) 2-Fluorobiphenyl	9.58	172	790247	45.6760	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery =	91.36%		
86) 2,4,6-Tribromophenol	11.15	330	216944	93.8959	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery =	93.90%		
117) p-Terphenyl-d14	13.95	244	938555	56.7841	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery =	113.56%		
Target Compounds						
97) Dimethoate	11.43	87	352	Below Cal	Qvalue #	58

(#) = qualifier out of range (m) = manual integration
 4M60833.D MEGAMIX.M Mon May 14 11:46:34 2012

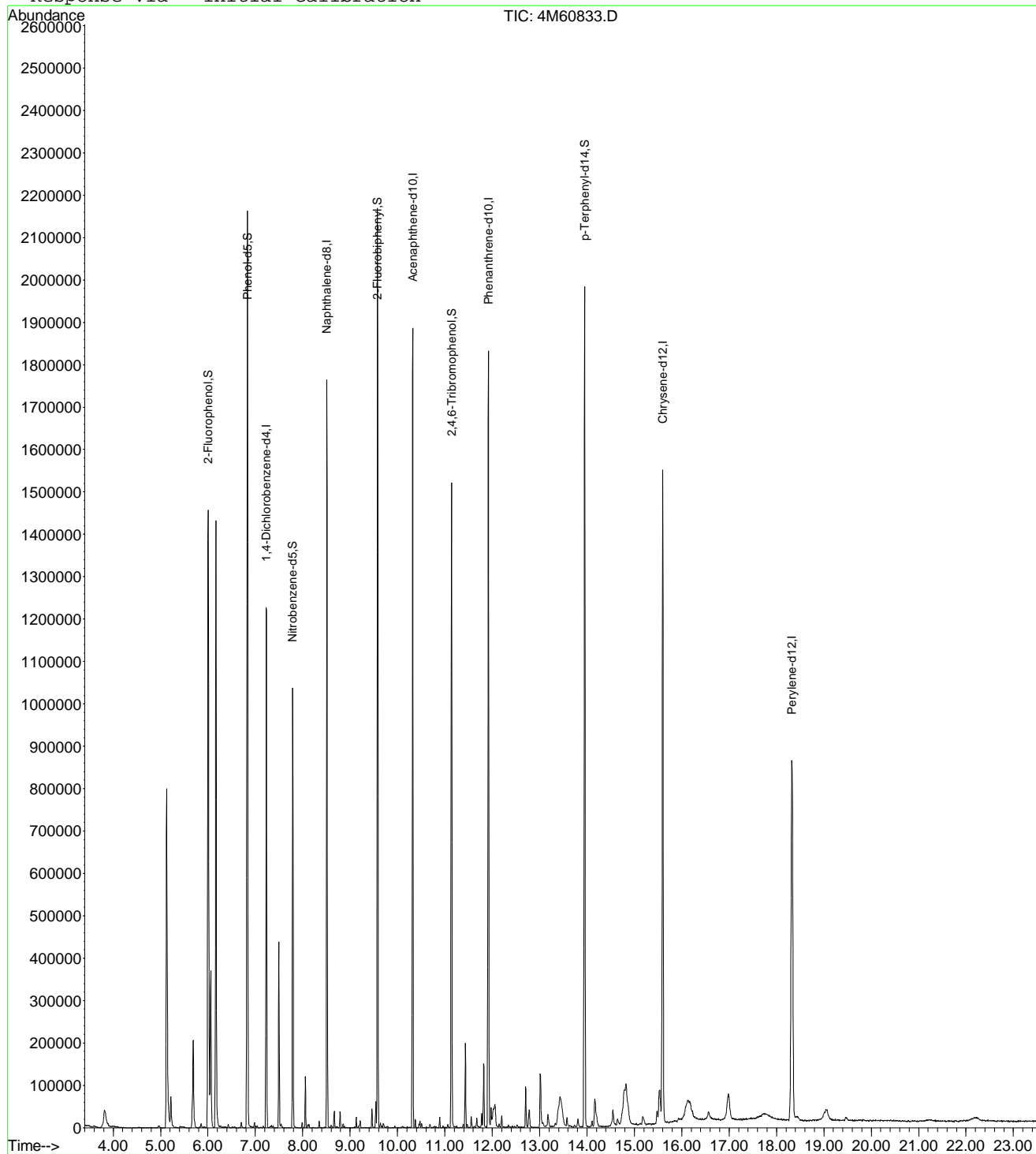
Page 1

Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40 2012

Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D Vial: 18
 Acq On : 12 May 2012 20:41 Operator: CAA
 Sample : L12050099-05 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54:30 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	246923	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	928698	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	518118	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	932714	40.00	ug/mL	0.00

Target Compounds Qvalue

 (#) = qualifier out of range (m) = manual integration
 4M60833.D TCL.M Mon May 14 11:54:30 2012

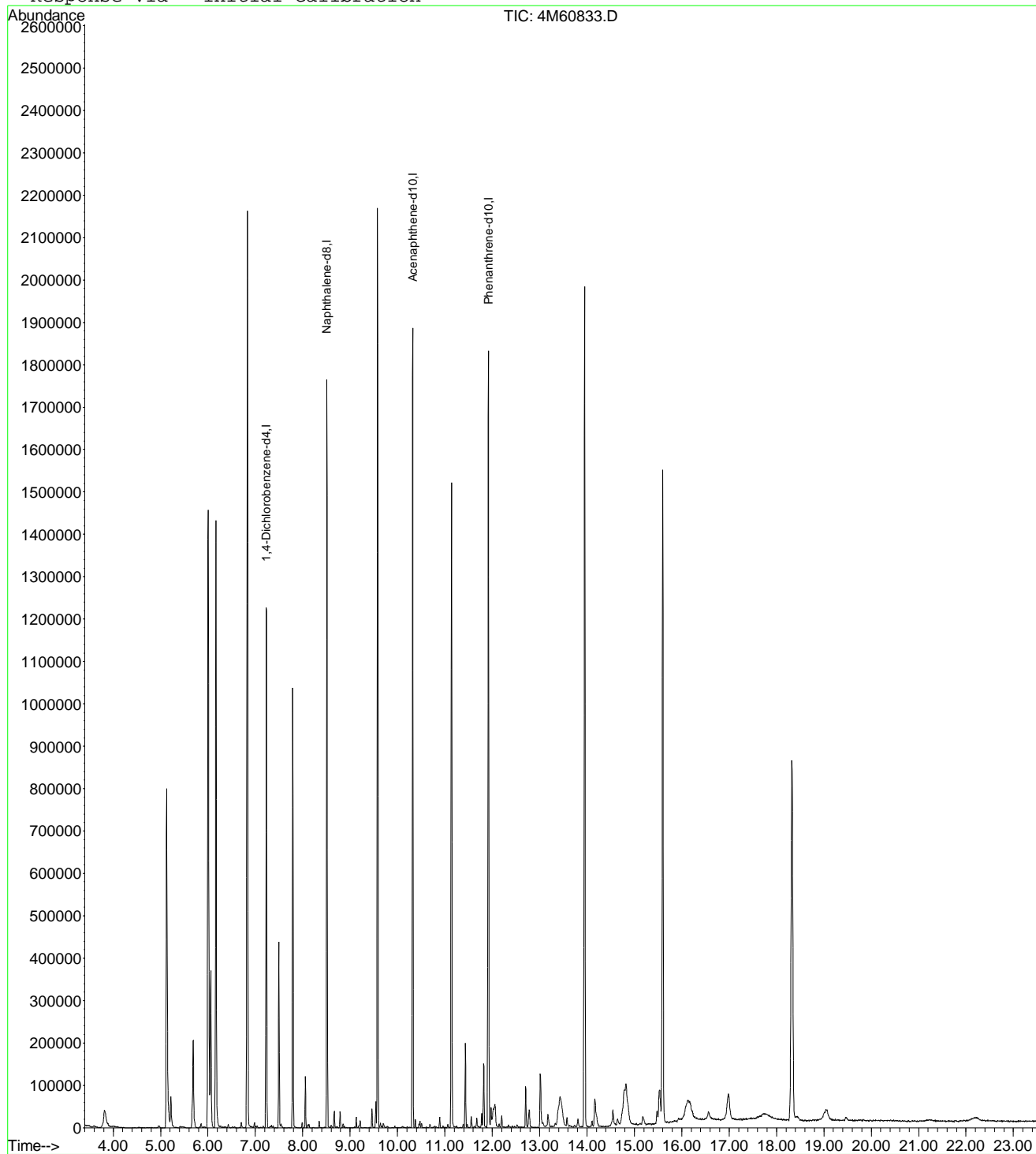
Page 1

Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54 2012

Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D Vial: 18
 Acq On : 12 May 2012 20:41 Operator: CAA
 Sample : L12050099-05 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 1 % of largest Peak
 Start Thrs: 0.05 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

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

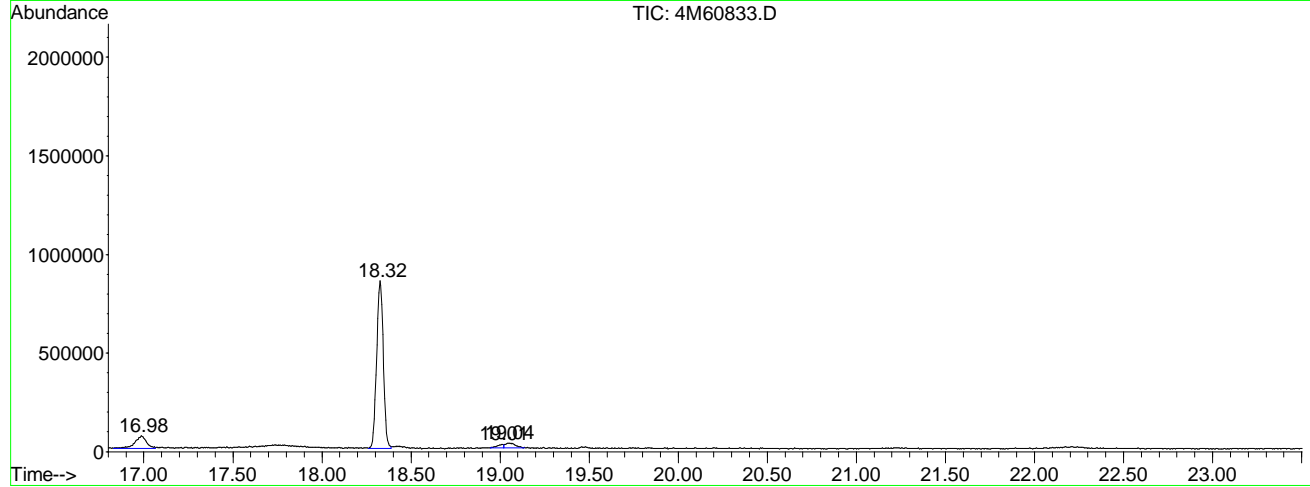
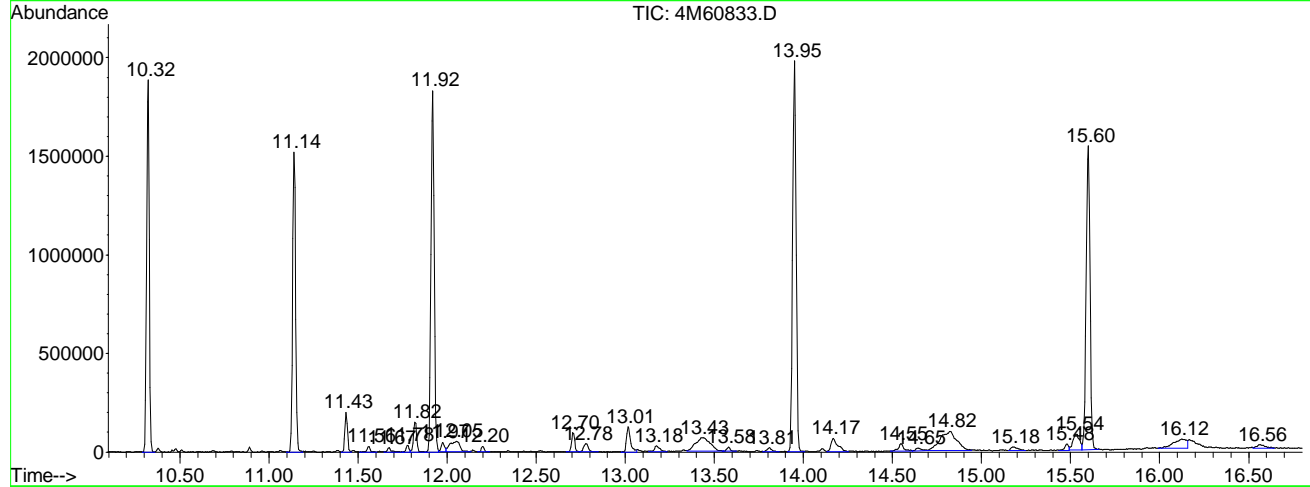
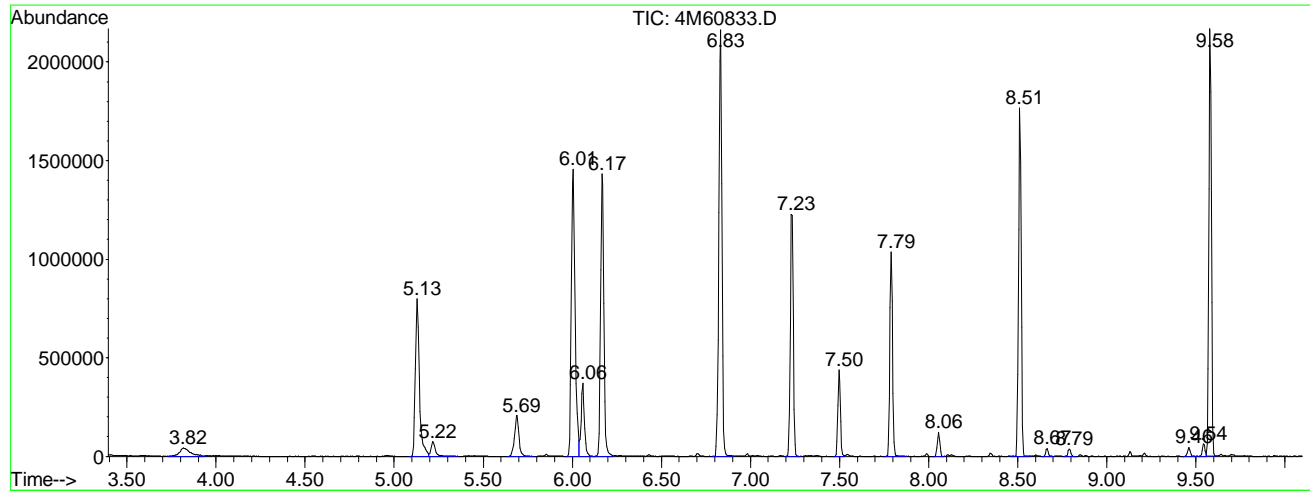
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.816	64	80	102	rBV	42016	181267	6.74%	0.545%
2	5.130	318	326	338	rBV	799871	1266973	47.09%	3.811%
3	5.215	338	342	367	rVB	73831	125313	4.66%	0.377%
4	5.685	421	430	448	rBB2	206679	349847	13.00%	1.052%
5	6.006	483	490	496	rBV	1457418	2137961	79.46%	6.431%
6	6.059	496	500	511	rVB	370866	481210	17.88%	1.447%
7	6.166	512	520	532	rBV	1433166	1800317	66.91%	5.415%
8	6.834	636	645	658	rBV	2163123	2685884	99.82%	8.079%
9	7.229	713	719	728	rBB	1227044	1414930	52.59%	4.256%
10	7.496	764	769	775	rBV	438587	450346	16.74%	1.355%
11	7.790	817	824	839	rBB	1037483	1078447	40.08%	3.244%
12	8.057	869	874	879	rBB	121189	119376	4.44%	0.359%
13	8.511	950	959	970	rBV	1765691	1841955	68.46%	5.541%
14	8.666	983	988	994	rBB2	38960	38707	1.44%	0.116%
15	8.789	1006	1011	1017	rBB2	38070	40409	1.50%	0.122%
16	9.462	1131	1137	1144	rBB	45190	47018	1.75%	0.141%
17	9.542	1147	1152	1155	rBV	61787	63791	2.37%	0.192%
18	9.580	1155	1159	1166	rVB	2168997	2194469	81.56%	6.601%
19	10.322	1292	1298	1304	rBB	1887123	2035568	75.65%	6.123%
20	11.140	1443	1451	1460	rBV	1521895	1744050	64.82%	5.246%
21	11.433	1501	1506	1511	rBV	199678	210358	7.82%	0.633%
22	11.562	1520	1530	1537	rBB	26859	31741	1.18%	0.095%
23	11.674	1546	1551	1565	rVB2	23089	30360	1.13%	0.091%
24	11.775	1565	1570	1573	rBV2	33502	38783	1.44%	0.117%
25	11.818	1573	1578	1589	rVB	151661	191625	7.12%	0.576%
26	11.920	1589	1597	1603	rBV	1832817	2289658	85.10%	6.887%
27	11.973	1603	1607	1611	rVV3	46881	66125	2.46%	0.199%
28	12.053	1611	1622	1636	rVB4	54147	206174	7.66%	0.620%
29	12.197	1644	1649	1656	rVB3	27781	30130	1.12%	0.091%
30	12.705	1737	1744	1751	rBV2	96582	118756	4.41%	0.357%
31	12.780	1751	1758	1770	rVB	41575	75504	2.81%	0.227%
32	13.015	1795	1802	1811	rBV	127288	198522	7.38%	0.597%
33	13.175	1824	1832	1842	rVB6	30041	57620	2.14%	0.173%
34	13.431	1864	1880	1902	rVV2	68770	389370	14.47%	1.171%
35	13.581	1902	1908	1915	rVB3	21065	31696	1.18%	0.095%
36	13.811	1944	1951	1960	rBV3	19106	33736	1.25%	0.101%
37	13.950	1970	1977	1987	rBV	1982474	2690705	100.00%	8.094%
38	14.169	2011	2018	2033	rVB2	66198	177308	6.59%	0.533%
39	14.548	2078	2089	2101	rBV4	38106	84355	3.14%	0.254%
40	14.649	2101	2108	2117	rVV6	14769	33947	1.26%	0.102%
41	14.820	2117	2140	2163	rVV	96282	628210	23.35%	1.890%
42	15.178	2202	2207	2219	rVB7	19502	54420	2.02%	0.164%

43	15.483	2255	2264	2266	rBV2	30152	47233	1.76%	0.142%
44	15.536	2266	2274	2279	rVV2	78459	208420	7.75%	0.627%
45	15.600	2279	2286	2296	rVB	1540131	2325447	86.43%	6.995%
46	16.124	2359	2384	2390	rBV	46246	240700	8.95%	0.724%
47	16.562	2459	2466	2480	rVB8	17755	54136	2.01%	0.163%
48	16.984	2516	2545	2560	rBV7	62158	273799	10.18%	0.824%
49	18.325	2784	2796	2808	rBV	850986	2199747	81.75%	6.617%
50	19.009	2912	2924	2926	rBV10	17183	40032	1.49%	0.120%
51	19.041	2926	2930	2947	rVB7	23181	88381	3.28%	0.266%

Sum of corrected areas: 33244836

File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Operator : CAA
 Acquired : 12 May 2012 20:41 using AcqMethod BNATEST
 Instrument : HPMS4
 Sample Name: L12050099-05
 Misc Info : 1,1
 Vial Number: 18
 Quant File : MEGAMIX.RES (RTE Integrator)



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

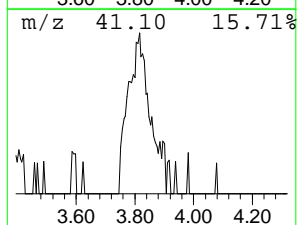
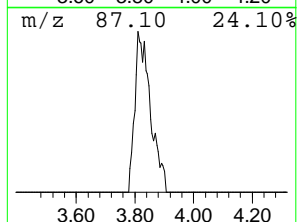
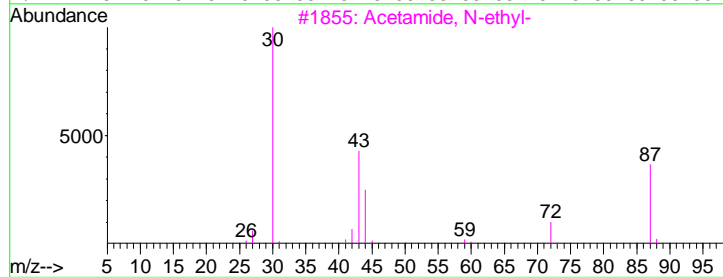
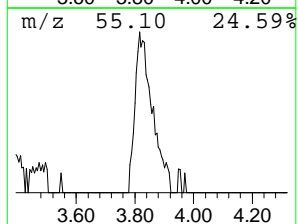
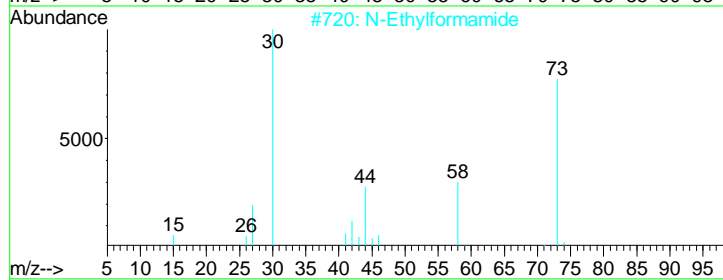
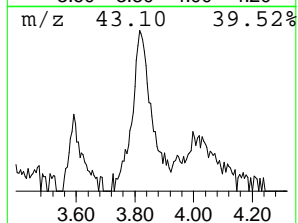
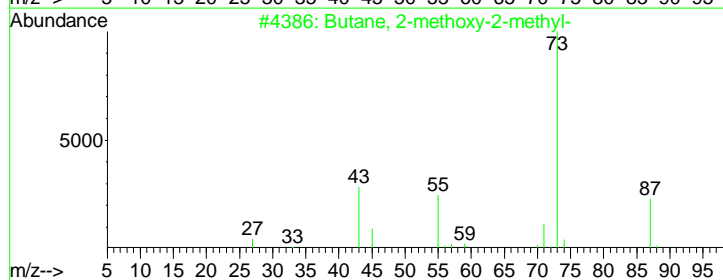
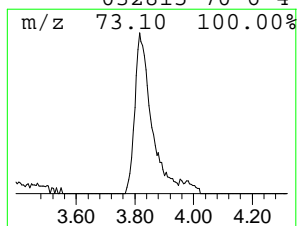
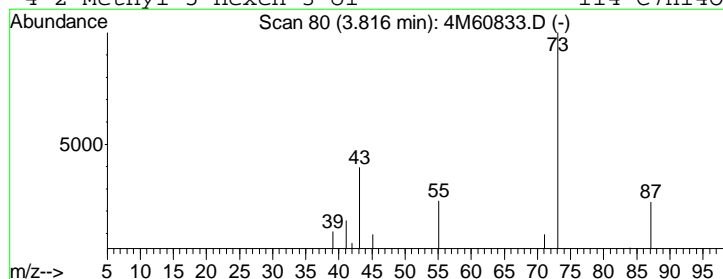
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.82	5.12 ug/ml	181267	1,4-Dichlorobenzene-d4	7.23

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	56
2			N-Ethylformamide	73	C3H7NO	000627-45-2	5
3			Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5
4			2-Methyl-5-hexen-3-ol	114	C7H14O	032815-70-6	4



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

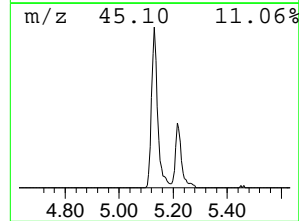
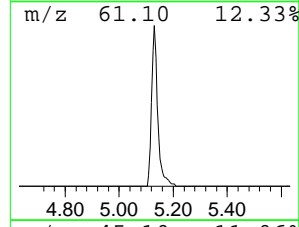
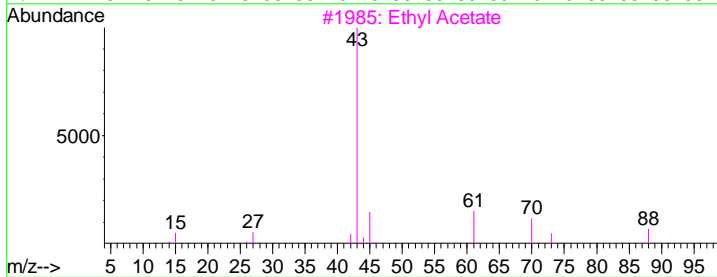
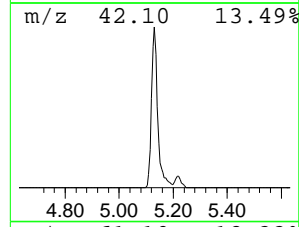
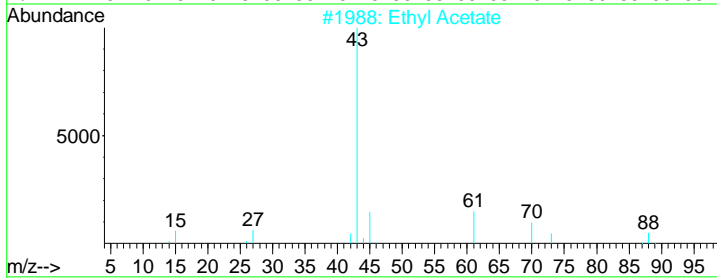
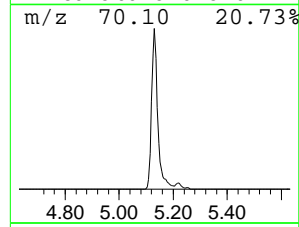
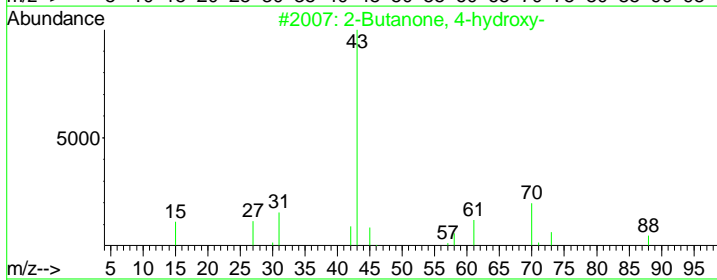
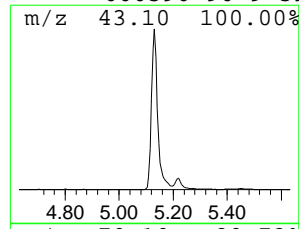
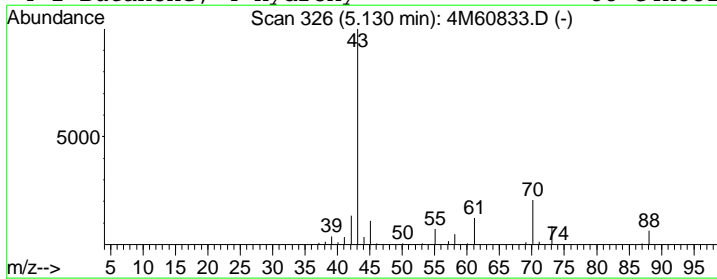
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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-Butanone, 4-hydroxy- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.13	35.82 ug/ml	1266970	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Butanone, 4-hydroxy-	88	C4H8O2	000590-90-9	87
2		Ethyl Acetate	88	C4H8O2	000141-78-6	50
3		Ethyl Acetate	88	C4H8O2	000141-78-6	50
4		2-Butanone, 4-hydroxy-	88	C4H8O2	000590-90-9	39



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

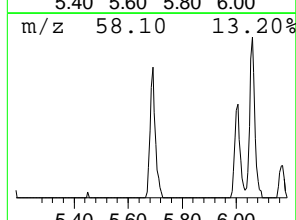
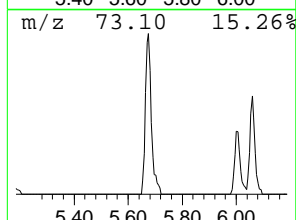
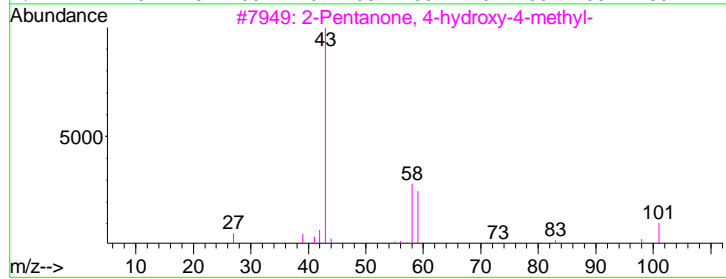
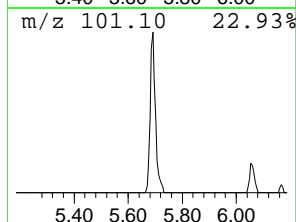
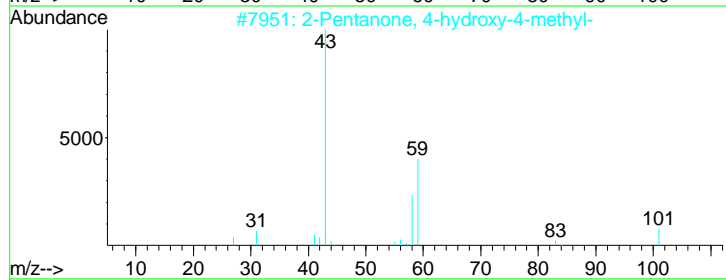
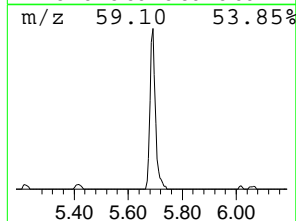
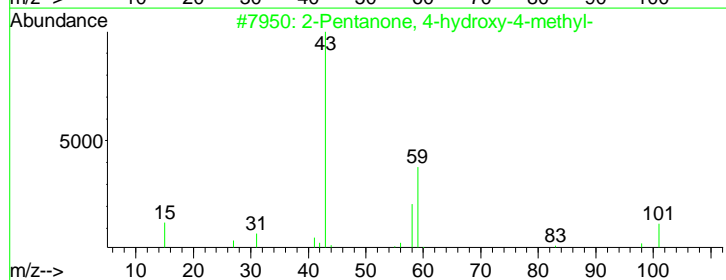
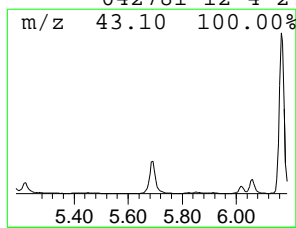
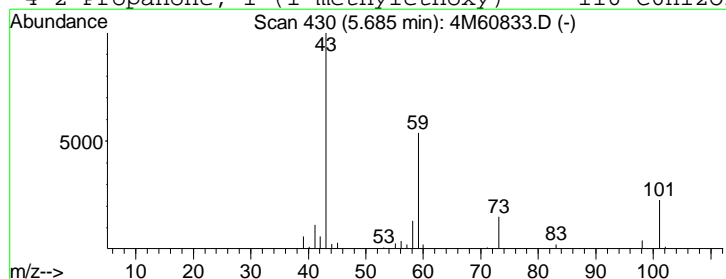
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 3 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	9.89 ug/ml	349847	1,4-Dichlorobenzene-d4	7.23

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
2			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
3			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
4			2-Propanone, 1-(1-methylethoxy)-	116	C6H12O2	042781-12-4	27



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

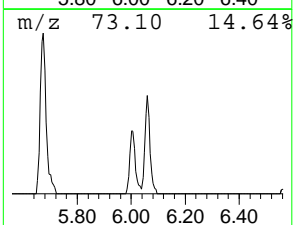
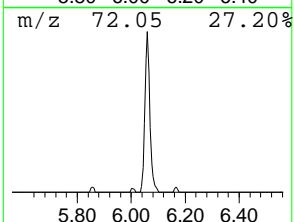
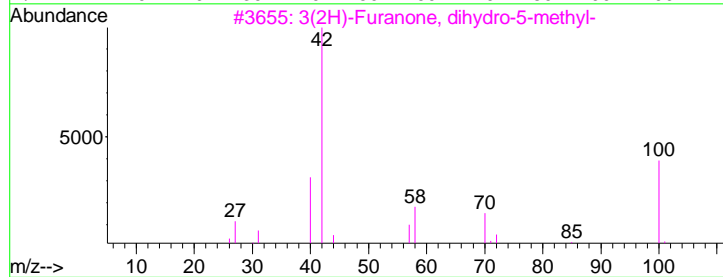
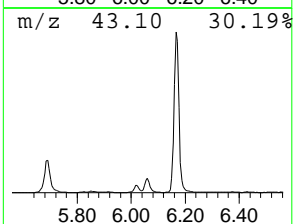
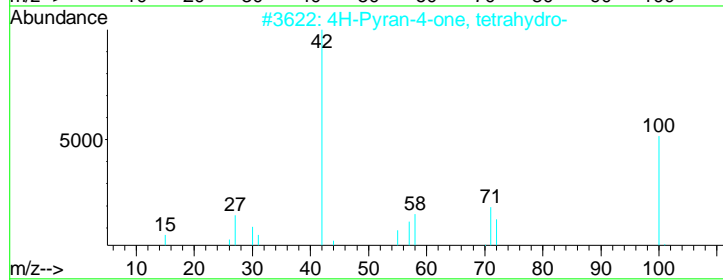
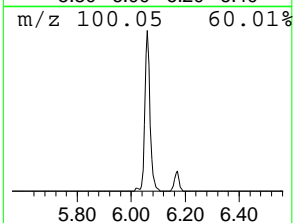
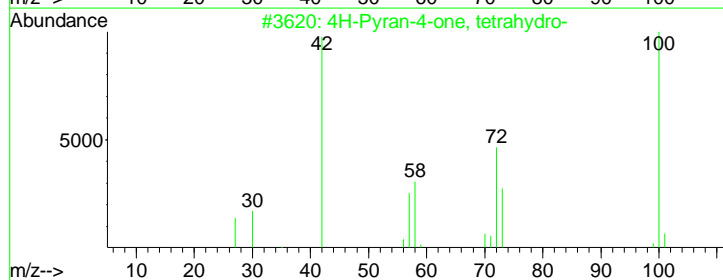
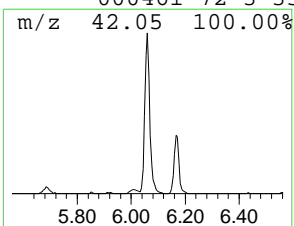
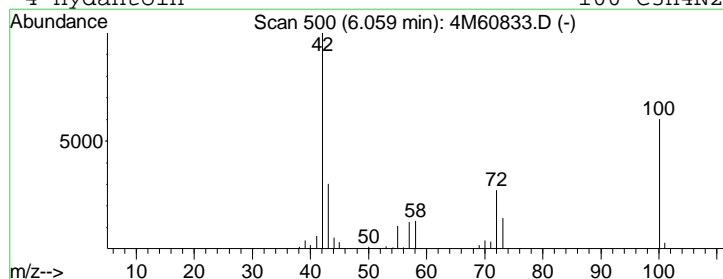
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 4H-Pyran-4-one, tetrahydro- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.06	13.60 ug/ml	481210	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Pyran-4-one, tetrahydro-	100	C5H8O2	029943-42-8	64
2		4H-Pyran-4-one, tetrahydro-	100	C5H8O2	029943-42-8	64
3		3(2H)-Furanone, dihydro-5-methyl-	100	C5H8O2	034003-72-0	47
4		Hydantoin	100	C3H4N2O2	000461-72-3	35



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

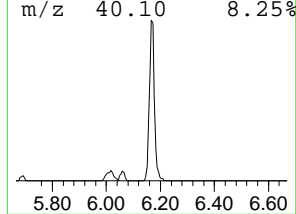
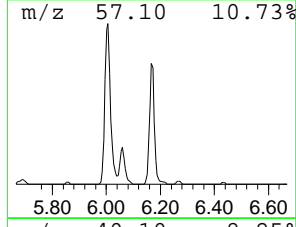
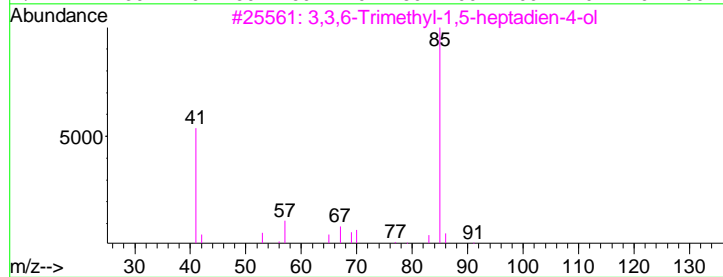
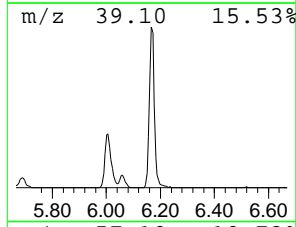
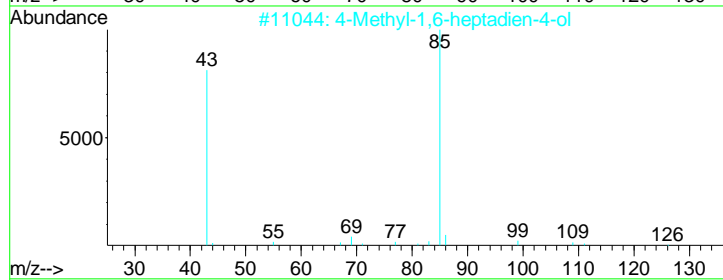
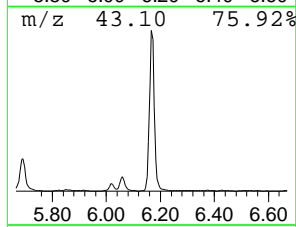
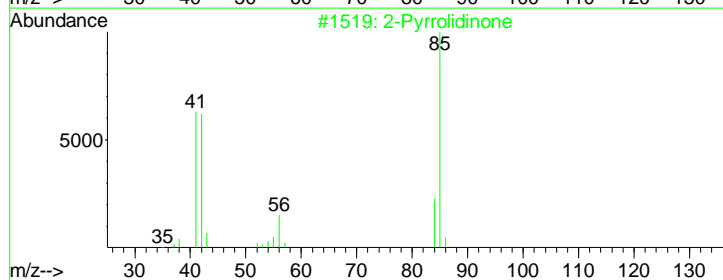
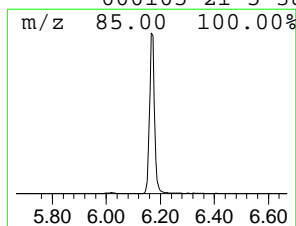
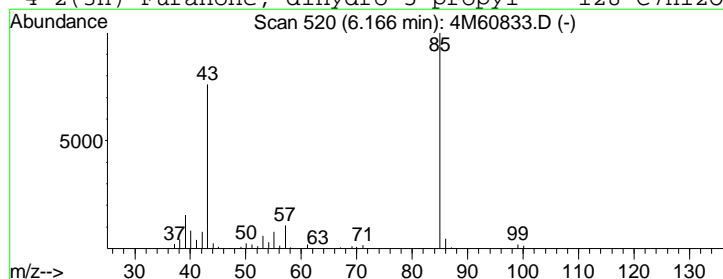
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 5 2-Pyrrolidinone Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.17	50.89 ug/ml	1800320	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Pyrrolidinone	85	C4H7NO	000616-45-5	59
2		4-Methyl-1,6-heptadien-4-ol	126	C8H14O	025201-40-5	39
3		3,3,6-Trimethyl-1,5-heptadien-4-ol	154	C10H18O	057590-19-9	38
4		2(3H)-Furanone, dihydro-5-propyl-	128	C7H12O2	000105-21-5	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

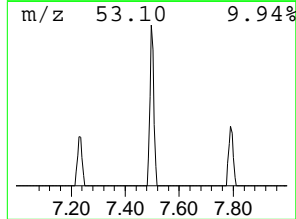
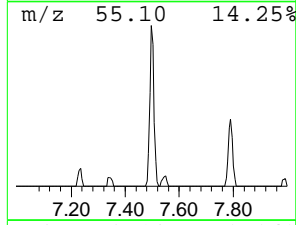
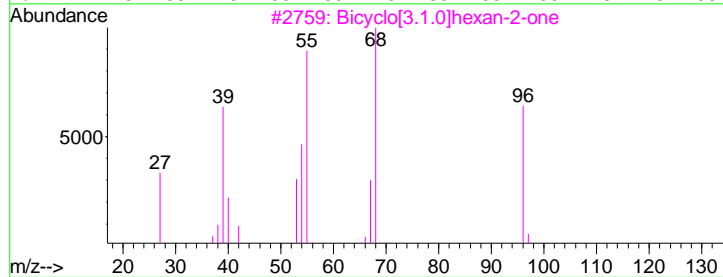
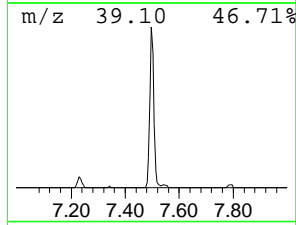
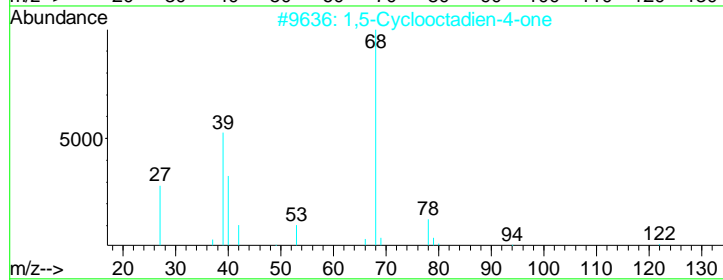
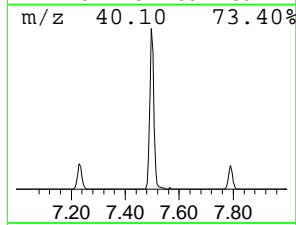
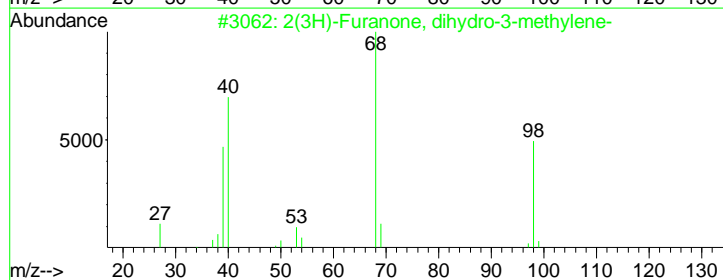
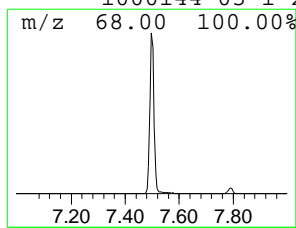
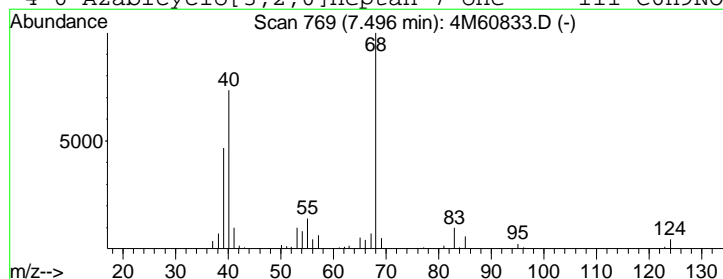
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 6 2(3H)-Furanone, dihydro-3-m... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.50	12.73 ug/ml	450346	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2(3H)-Furanone, dihydro-3-methyl...	98	C5H6O2	000547-65-9	50
2		1,5-Cyclooctadien-4-one	122	C8H10O	001460-21-5	40
3		Bicyclo[3.1.0]hexan-2-one	96	C6H8O	004160-49-0	38
4		6-Azabicyclo[3,2,0]heptan-7-one	111	C6H9NO	1000144-05-1	28



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

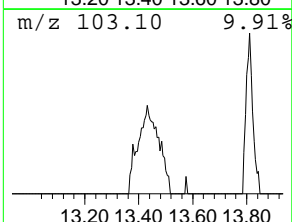
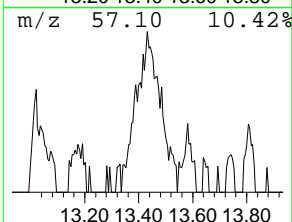
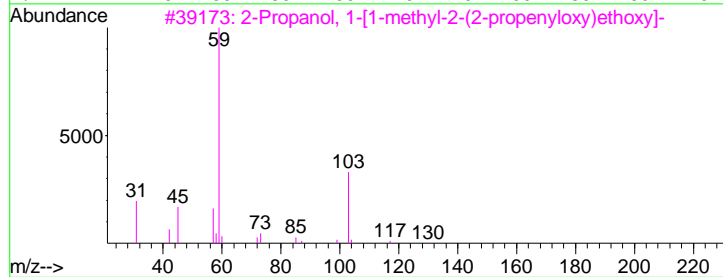
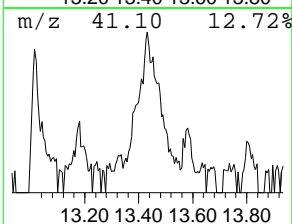
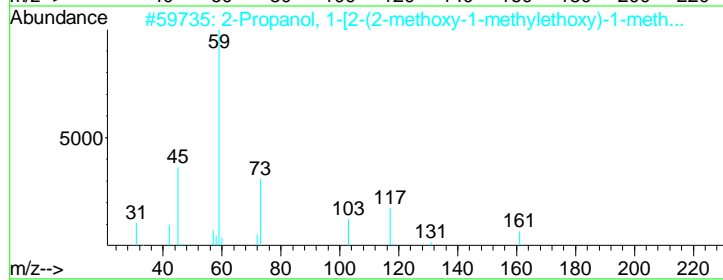
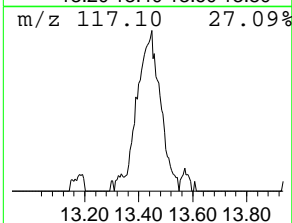
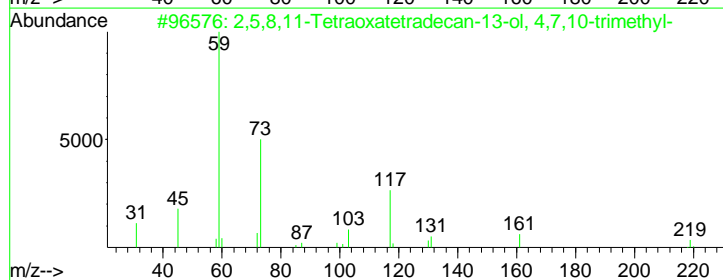
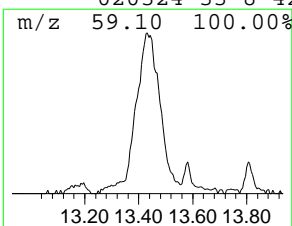
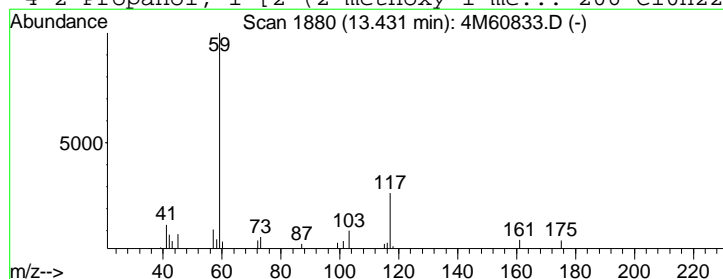
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 7 2,5,8,11-Tetraoxatetradecan... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	6.80 ug/ml	389370	Phenanthrene-d10	11.92

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	56
2		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	53
3		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	50
4		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

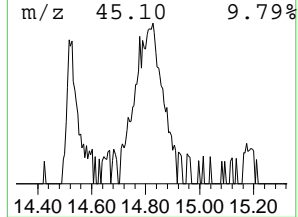
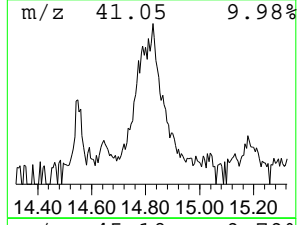
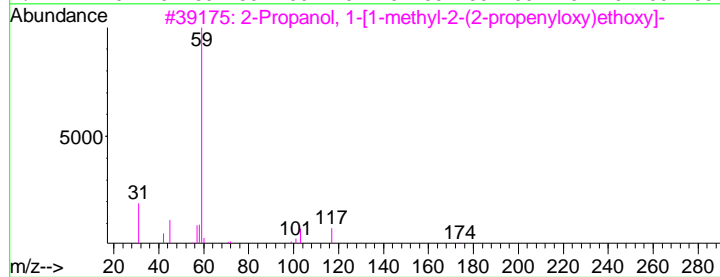
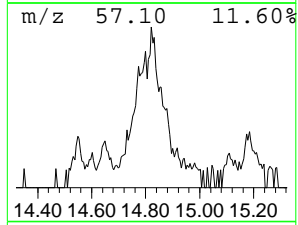
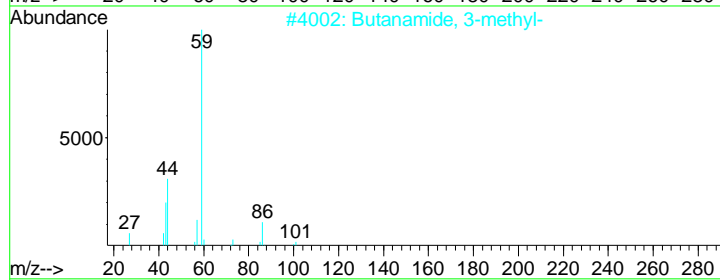
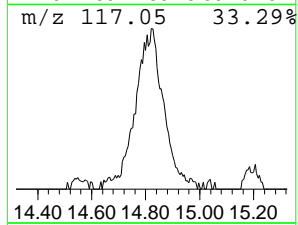
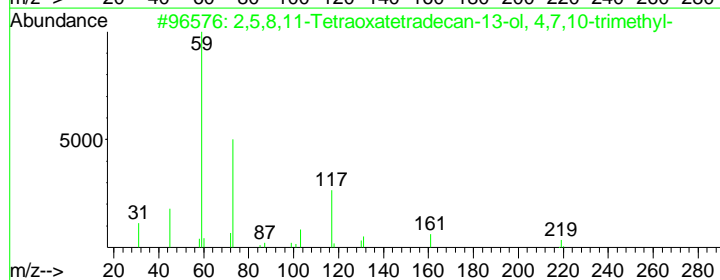
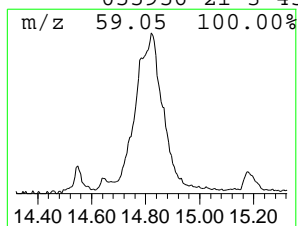
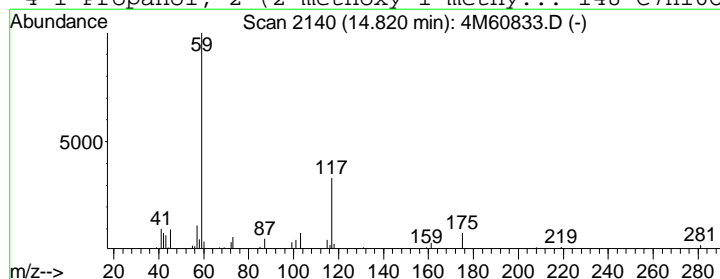
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 8 2,5,8,11-Tetraoxatetradecan... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	10.81 ug/ml	628210	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
2		Butanamide, 3-methyl-	101	C5H11NO	000541-46-8	47
3		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	45
4		1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	45



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

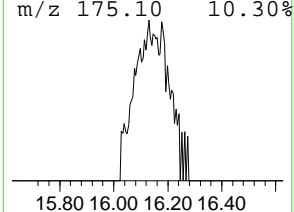
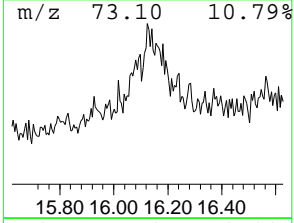
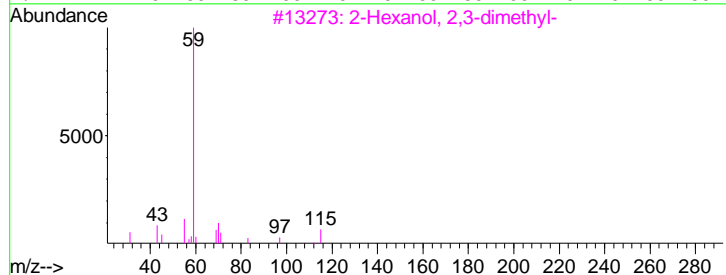
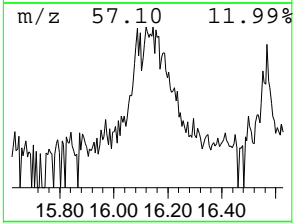
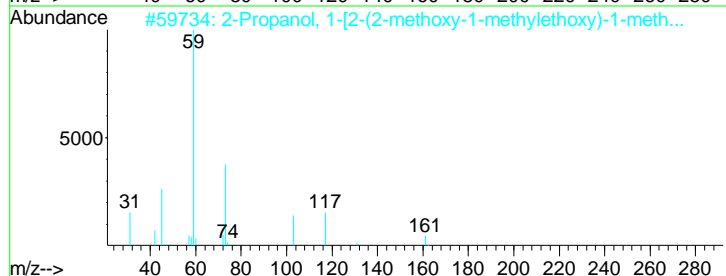
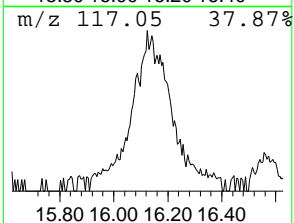
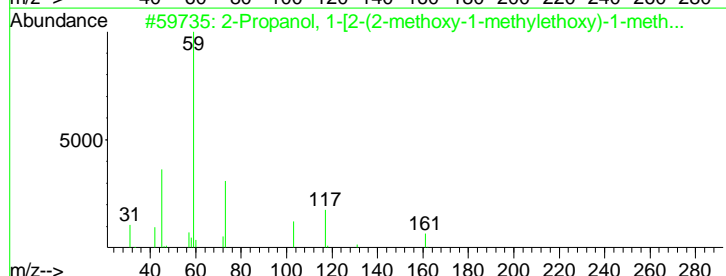
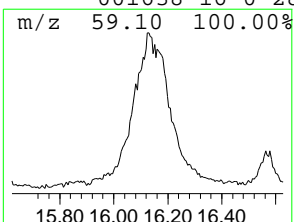
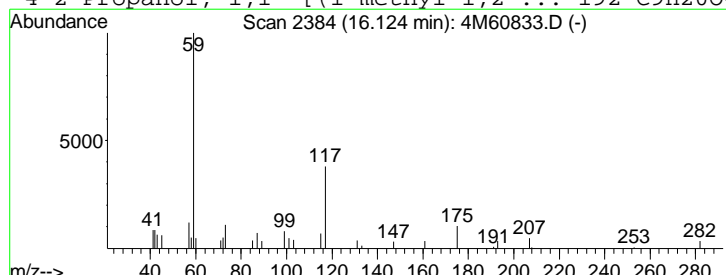
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 9 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.12	4.14 ug/ml	240700	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	36
2		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	36
3		2-Hexanol, 2,3-dimethyl-	130	C8H18O	019550-03-9	32
4		2-Propanol, 1,1'-[(1-methyl-1,2-...	192	C9H20O4	001638-16-0	28



Data File : I:\MSDCHEM\1\DATA\051212\4M60833.D
 Acq On : 12 May 2012 20:41
 Sample : L12050099-05
 Misc : 1,1
 MS Integration Params: LSCINT.P

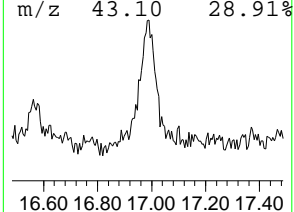
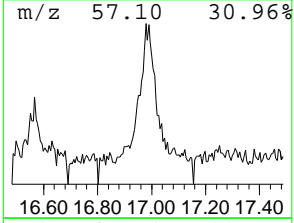
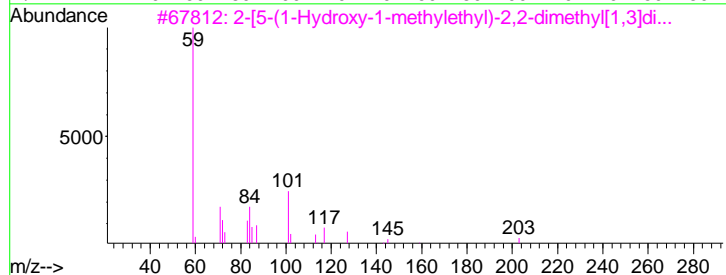
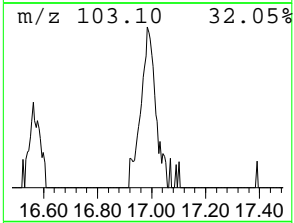
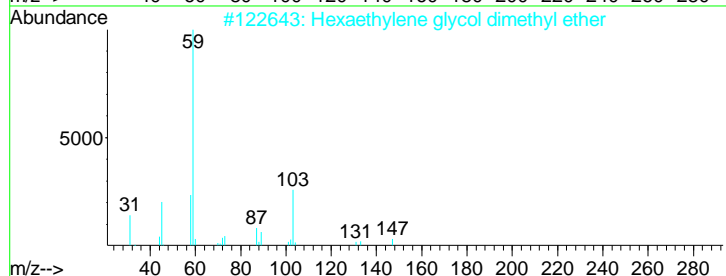
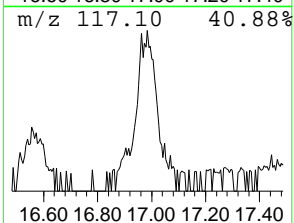
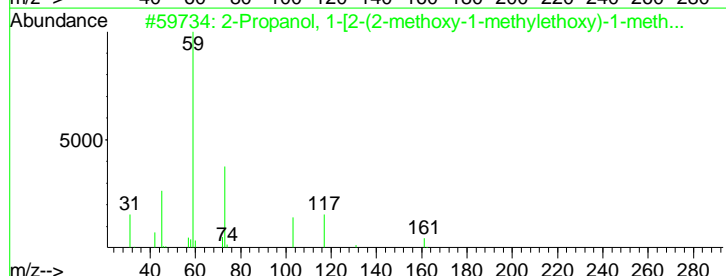
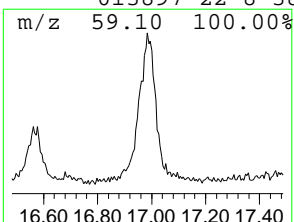
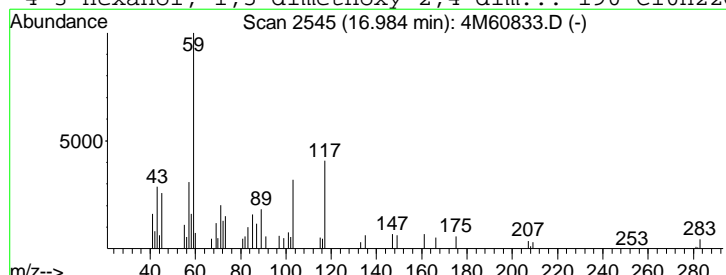
Vial: 18
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 10 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.98	4.98 ug/ml	273799	Perylene-d12	18.32

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	53
2		Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	43
3		2-[5-(1-Hydroxy-1-methylethyl)-2...	218	C11H22O4	1000190-33-6	38
4		3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	38



Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 20:41
Data File: I:\MSDCHEM\1\DATA\051212\4M60833.D
Name: L12050099-05
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Butane, 2-methoxy...	3.82	5.1	ug/ml	181267	1	7.23	1414930	40.0
2-Butanone, 4-hyd...	5.13	35.8	ug/ml	1266970	1	7.23	1414930	40.0
2-Pentanone, 4-hy...	5.69	9.9	ug/ml	349847	1	7.23	1414930	40.0
4H-Pyran-4-one, t...	6.06	13.6	ug/ml	481210	1	7.23	1414930	40.0
2-Pyrrolidinone	6.17	50.9	ug/ml	1800320	1	7.23	1414930	40.0
2(3H)-Furanone, d...	7.50	12.7	ug/ml	450346	1	7.23	1414930	40.0
2,5,8,11-Tetraoxa...	13.43	6.8	ug/ml	389370	4	11.92	2289660	40.0
2,5,8,11-Tetraoxa...	14.82	10.8	ug/ml	628210	5	15.60	2325450	40.0
2-Propanol, 1-[2-...	16.12	4.1	ug/ml	240700	5	15.60	2325450	40.0
2-Propanol, 1-[2-...	16.98	5.0	ug/ml	273799	6	18.32	2199750	40.0

Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D Vial: 19
 Acq On : 12 May 2012 21:15 Operator: CAA
 Sample : L12050099-07 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40:52 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	241114	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	911992	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	508170	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	915869	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	886500	40.00	ug/ml	-0.01
128) Perylene-d12	18.33	264	852235	40.00	ug/ml	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
8) 2-Fluorophenol	6.00	112	445276	60.9096	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery =	60.91%		
12) Phenol-d5	6.83	99	561794	65.6618	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery =	65.66%		
31) Nitrobenzene-d5	7.79	82	270205	35.0302	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery =	70.06%		
59) 2-Fluorobiphenyl	9.58	172	567323	33.4330	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery =	66.86%		
86) 2,4,6-Tribromophenol	11.14	330	185101	81.6822	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery =	81.68%		
117) p-Terphenyl-d14	13.95	244	498406	30.5037	ug/ml	-0.01
Spiked Amount 50.000	Range 33 - 141		Recovery =	61.00%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
60) Isosafrole	9.59	162	18883	2.9405	ug/ml#	54
61) 2-Chloronaphthalene	9.73	162	34858	2.4292	ug/ml#	41
62) 1-Chloronaphthalene	9.73	162	34858	2.5655	ug/ml#	41
97) Dimethoate	11.53	87	2888	Below Cal	#	20

(#) = qualifier out of range (m) = manual integration
 4M60834.D MEGAMIX.M Mon May 14 11:46:35 2012

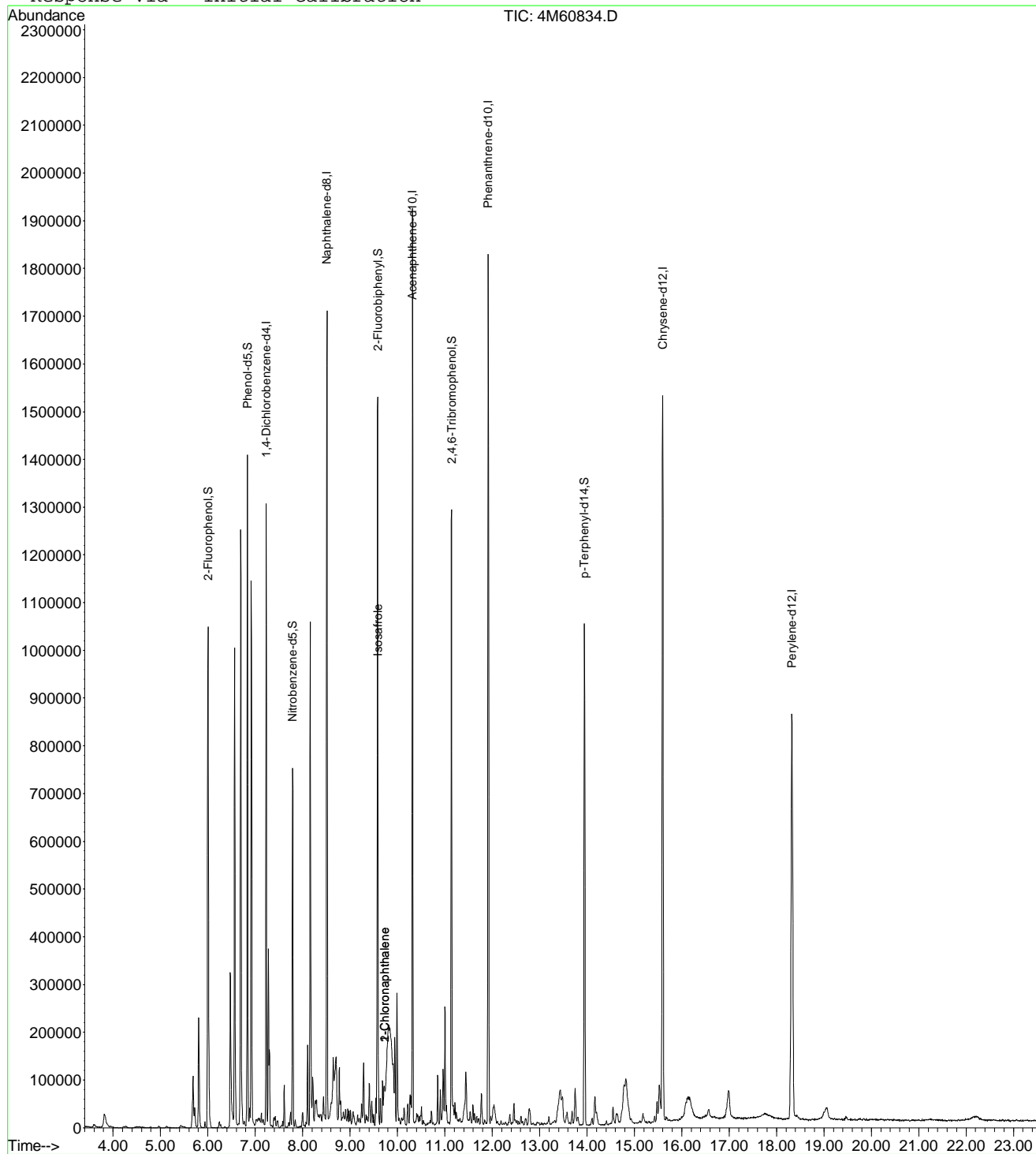
Page 1

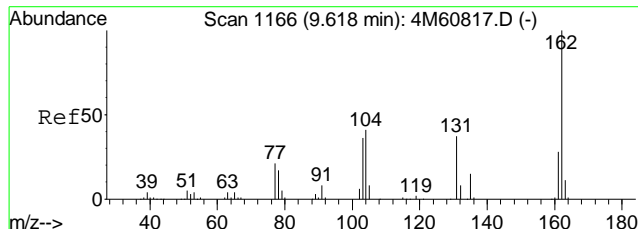
Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40 2012

Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: MEGAMIX.RES

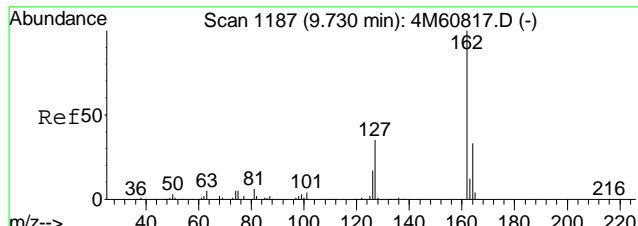
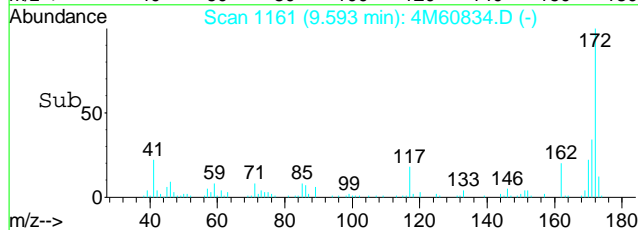
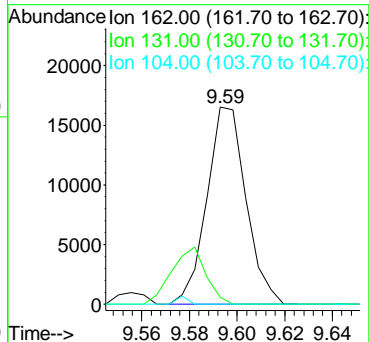
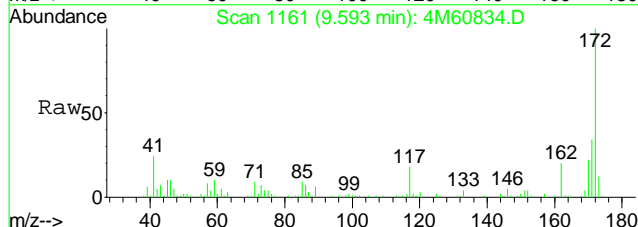
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration





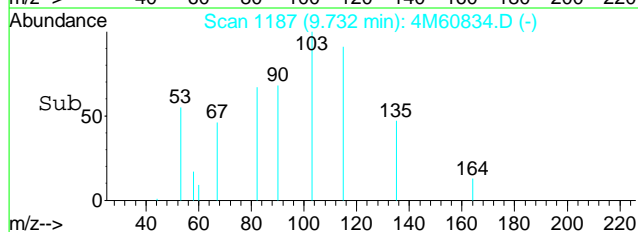
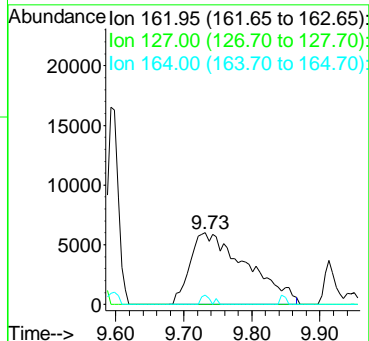
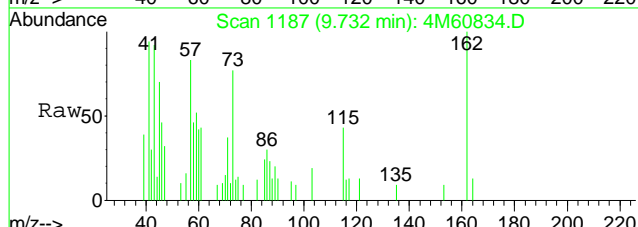
#60
 Isosafrole
 Concen: 2.94 ug/ml
 RT: 9.59 min Scan# 1161
 Delta R.T. -0.03 min
 Lab File: 4M60834.D
 Acq: 12 May 2012 21:15

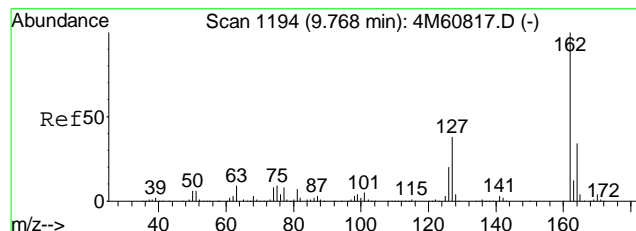
Tgt Ion	Ratio	Lower	Upper
162	100		
131	25.3	31.6	47.4#
104	1.2	35.5	53.3#



#61
 2-Chloronaphthalene
 Concen: 2.43 ug/ml
 RT: 9.73 min Scan# 1187
 Delta R.T. -0.00 min
 Lab File: 4M60834.D
 Acq: 12 May 2012 21:15

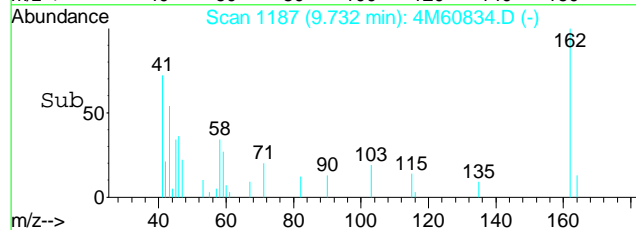
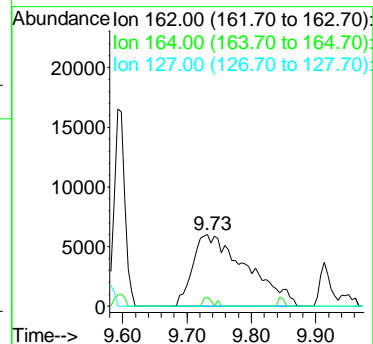
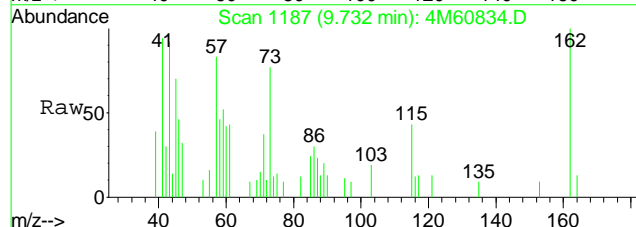
Tgt Ion	Ratio	Lower	Upper
162	100		
127	0.0	22.6	52.6#
164	2.3	20.0	46.8#





#62
 1-Chloronaphthalene
 Concen: 2.57 ug/ml
 RT: 9.73 min Scan# 1187
 Delta R.T. -0.04 min
 Lab File: 4M60834.D
 Acq: 12 May 2012 21:15

Tgt Ion	Ratio	Lower	Upper
162	100		
164	2.3	26.4	39.6#
127	0.0	29.9	44.9#



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D Vial: 19
 Acq On : 12 May 2012 21:15 Operator: CAA
 Sample : L12050099-07 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54:30 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	241114	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	911992	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	508170	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	915869	40.00	ug/mL	0.00

Target Compounds Qvalue

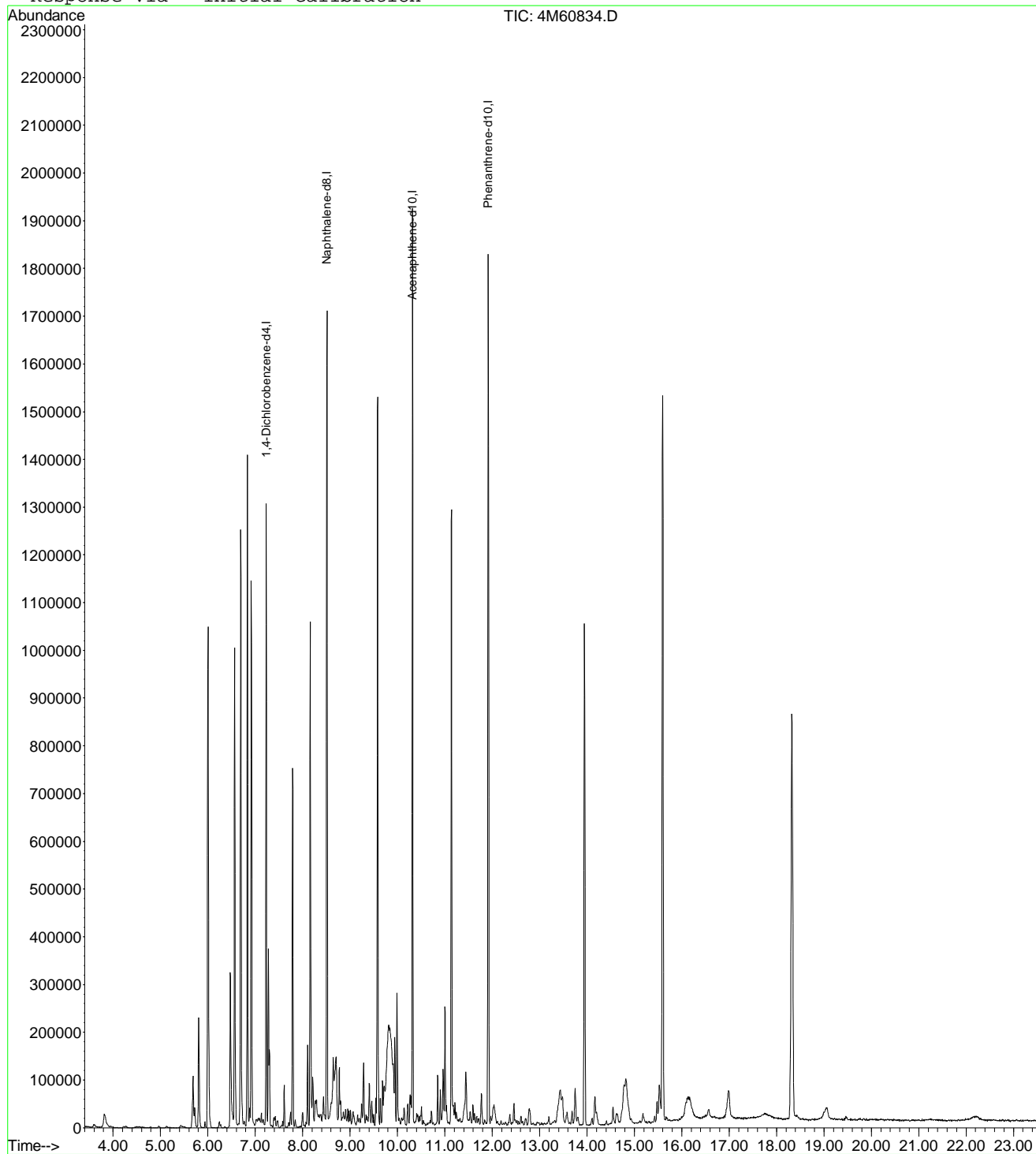
 (#) = qualifier out of range (m) = manual integration
 4M60834.D TCL.M Mon May 14 11:54:31 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54 2012

Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D Vial: 19
 Acq On : 12 May 2012 21:15 Operator: CAA
 Sample : L12050099-07 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 1 % of largest Peak
 Start Thrs: 0.05 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

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

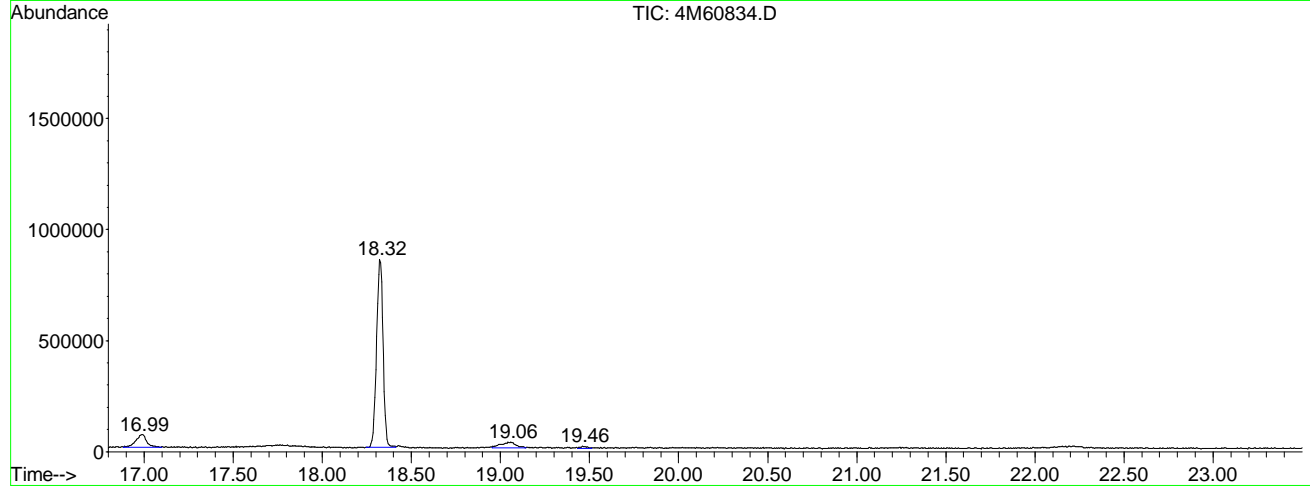
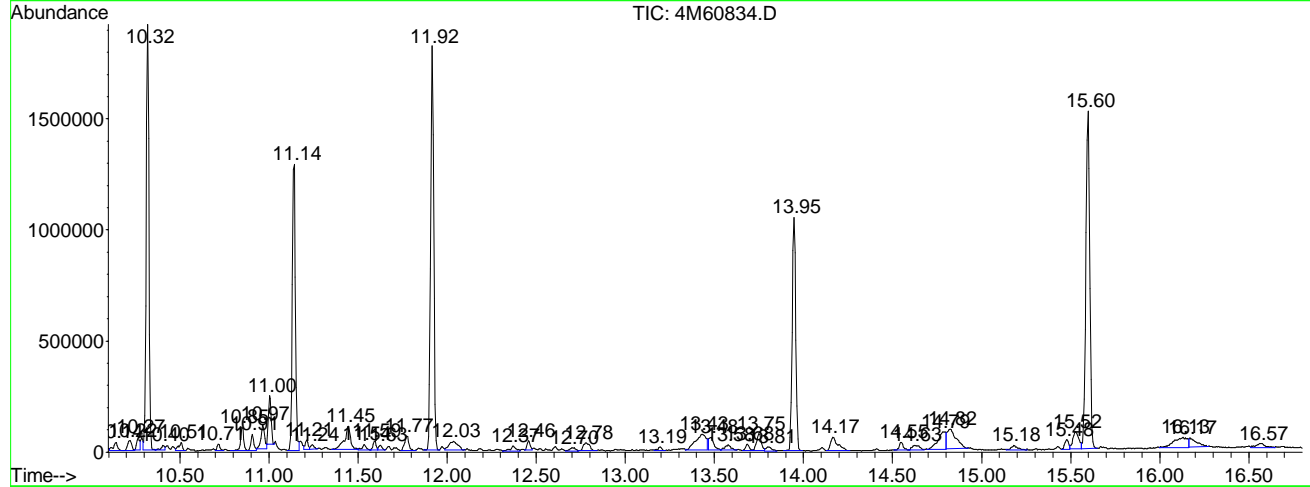
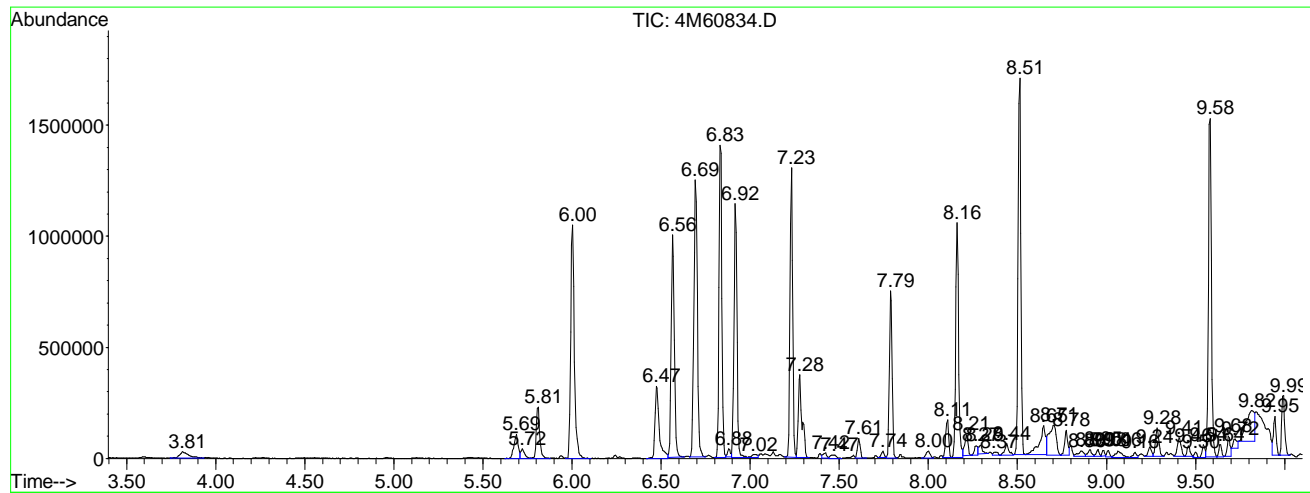
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.813	66	79	101	rBV2	27768	104232	4.54%	0.292%
2	5.688	418	430	434	rBV2	108311	182412	7.94%	0.511%
3	5.720	434	436	445	rVV2	42727	59999	2.61%	0.168%
4	5.811	445	453	465	rVB	231151	307462	13.38%	0.862%
5	6.003	482	489	507	rVB	1049583	1473332	64.12%	4.129%
6	6.473	567	577	589	rBV	325562	528047	22.98%	1.480%
7	6.564	589	594	606	rVB	1001273	1222794	53.22%	3.427%
8	6.692	612	618	628	rVB2	1245791	1687291	73.43%	4.729%
9	6.831	638	644	650	rBV	1406760	1550201	67.47%	4.345%
10	6.879	650	653	656	rVV2	35754	41917	1.82%	0.117%
11	6.916	656	660	673	rVB	1141719	1308601	56.95%	3.668%
12	7.018	673	679	684	rBV5	13508	27176	1.18%	0.076%
13	7.232	712	719	724	rBV	1301481	1374259	59.81%	3.852%
14	7.280	724	728	737	rVB2	371962	540391	23.52%	1.515%
15	7.424	751	755	758	rVV	22865	33460	1.46%	0.094%
16	7.472	758	764	771	rVB4	15045	32802	1.43%	0.092%
17	7.611	786	790	797	rVB	89006	95925	4.17%	0.269%
18	7.744	810	815	819	rBV2	29698	33465	1.46%	0.094%
19	7.787	819	823	829	rVV	750737	794303	34.57%	2.226%
20	8.001	856	863	868	rBV5	31255	51340	2.23%	0.144%
21	8.108	878	883	887	rVB2	168820	198685	8.65%	0.557%
22	8.161	887	893	899	rBV	1055680	1170381	50.94%	3.280%
23	8.215	899	903	908	rVB4	93495	117200	5.10%	0.328%
24	8.268	908	913	915	rBV2	43356	60175	2.62%	0.169%
25	8.289	915	917	925	rVB	37323	53129	2.31%	0.149%
26	8.369	930	932	938	rVB5	13264	24187	1.05%	0.068%
27	8.439	938	945	952	rBV6	50888	80290	3.49%	0.225%
28	8.514	952	959	965	rBV	1693963	1815447	79.01%	5.088%
29	8.647	965	984	987	rBV4	129526	319127	13.89%	0.894%
30	8.706	987	995	1002	rVB	133638	379240	16.51%	1.063%
31	8.775	1002	1008	1011	rBV	111456	137703	5.99%	0.386%
32	8.861	1016	1024	1028	rVV6	23282	53478	2.33%	0.150%
33	8.904	1028	1032	1037	rVV4	28940	40532	1.76%	0.114%
34	8.952	1037	1041	1044	rVV2	29503	30664	1.33%	0.086%
35	8.978	1044	1046	1049	rVV	25669	24805	1.08%	0.070%
36	9.011	1049	1052	1056	rVB	28616	28229	1.23%	0.079%
37	9.064	1056	1062	1074	rVB6	28967	67931	2.96%	0.190%
38	9.160	1074	1080	1083	rBV3	22395	30679	1.34%	0.086%
39	9.240	1090	1095	1099	rBV2	40101	52324	2.28%	0.147%
40	9.283	1099	1103	1110	rVB2	127250	166658	7.25%	0.467%
41	9.406	1121	1126	1132	rVB2	82753	117218	5.10%	0.329%
42	9.459	1132	1136	1141	rVB3	45756	51952	2.26%	0.146%

43	9.502	1141	1144	1147	rVB3	23732	24908	1.08%	0.070%
44	9.545	1147	1152	1154	rBV2	57708	63150	2.75%	0.177%
45	9.582	1154	1159	1166	rVB	1524705	1770000	77.03%	4.961%
46	9.641	1166	1170	1173	rBV	55934	62120	2.70%	0.174%
47	9.684	1173	1178	1181	rBV2	89121	106394	4.63%	0.298%
48	9.721	1181	1185	1188	rBV4	41508	65446	2.85%	0.183%
49	9.817	1188	1203	1206	rBV6	139186	478961	20.85%	1.342%
50	9.945	1224	1227	1232	rVB	176064	193894	8.44%	0.543%
51	9.993	1232	1236	1242	rBV	269042	313003	13.62%	0.877%
52	10.143	1257	1264	1271	rVB4	36463	61412	2.67%	0.172%
53	10.223	1271	1279	1283	rBV4	44731	76999	3.35%	0.216%
54	10.266	1283	1287	1289	rBV	59925	67465	2.94%	0.189%
55	10.319	1292	1297	1305	rVB	1917190	2011498	87.54%	5.638%
56	10.405	1305	1313	1315	rBV6	20684	28336	1.23%	0.079%
57	10.506	1326	1332	1336	rVB3	37151	52656	2.29%	0.148%
58	10.715	1368	1371	1376	rVB	27262	29638	1.29%	0.083%
59	10.848	1384	1396	1402	rBV	105525	129019	5.62%	0.362%
60	10.907	1402	1407	1411	rBV2	73333	86000	3.74%	0.241%
61	10.966	1411	1418	1422	rBV	106955	146051	6.36%	0.409%
62	11.003	1422	1425	1430	rBV	219381	235334	10.24%	0.660%
63	11.142	1444	1451	1456	rBV	1288177	1553224	67.60%	4.353%
64	11.211	1461	1464	1467	rVV2	41489	46140	2.01%	0.129%
65	11.244	1467	1470	1475	rVB5	19367	24373	1.06%	0.068%
66	11.447	1490	1508	1518	rBV3	105651	258975	11.27%	0.726%
67	11.537	1518	1525	1531	rVB4	24370	38134	1.66%	0.107%
68	11.591	1531	1535	1539	rBV2	38968	49057	2.14%	0.137%
69	11.628	1539	1542	1546	rVB3	20182	23660	1.03%	0.066%
70	11.772	1563	1569	1578	rVB4	65934	109839	4.78%	0.308%
71	11.917	1587	1596	1603	rVB	1821449	2210265	96.19%	6.195%
72	12.034	1609	1618	1629	rVB5	39309	132242	5.76%	0.371%
73	12.371	1670	1681	1688	rBV3	24383	49495	2.15%	0.139%
74	12.456	1693	1697	1701	rBV3	42307	51147	2.23%	0.143%
75	12.702	1736	1743	1749	rVB4	14391	29276	1.27%	0.082%
76	12.782	1750	1758	1768	rVV3	33960	86495	3.76%	0.242%
77	13.193	1829	1835	1840	rVB5	16529	23707	1.03%	0.066%
78	13.428	1862	1879	1885	rBV	68753	292284	12.72%	0.819%
79	13.482	1886	1889	1899	rVV4	56296	101271	4.41%	0.284%
80	13.578	1899	1907	1915	rVB6	24163	55578	2.42%	0.156%
81	13.685	1922	1927	1933	rBV2	28199	41076	1.79%	0.115%
82	13.749	1933	1939	1945	rVV2	76489	136867	5.96%	0.384%
83	13.808	1945	1950	1957	rVB3	18077	38378	1.67%	0.108%
84	13.947	1965	1976	1984	rBV	1050335	1422910	61.93%	3.988%
85	14.166	2010	2017	2034	rVB3	59349	165416	7.20%	0.464%
86	14.550	2081	2089	2097	rBV3	34340	54739	2.38%	0.153%
87	14.625	2097	2103	2113	rBV6	20436	60131	2.62%	0.169%
88	14.785	2116	2133	2136	rBV3	78137	255488	11.12%	0.716%
89	14.823	2136	2140	2158	rVB	87006	305769	13.31%	0.857%
90	15.181	2199	2207	2220	rVB4	20544	46109	2.01%	0.129%
91	15.480	2257	2263	2266	rVV2	42925	67304	2.93%	0.189%
92	15.523	2266	2271	2278	rVV3	75164	182463	7.94%	0.511%
93	15.597	2278	2285	2294	rVB	1517090	2297702	100.00%	6.440%
94	16.132	2360	2385	2391	rBV	45448	251038	10.93%	0.704%
95	16.169	2391	2392	2411	rVB3	40338	108407	4.72%	0.304%
96	16.570	2456	2467	2481	rVB7	17923	59189	2.58%	0.166%
97	16.986	2526	2545	2565	rVB5	58565	246629	10.73%	0.691%
98	18.322	2781	2795	2812	rBV	848398	2165903	94.26%	6.071%
99	19.059	2913	2933	2948	rVB10	24848	142149	6.19%	0.398%
100	19.460	3003	3008	3018	rBV9	9303	23775	1.03%	0.067%

Sum of corrected areas: 35678331

File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Operator : CAA
 Acquired : 12 May 2012 21:15 using AcqMethod BNATEST
 Instrument : HPMS4
 Sample Name: L12050099-07
 Misc Info : 1,1
 Vial Number: 19
 Quant File :MEGAMIX.RES (RTE Integrator)



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

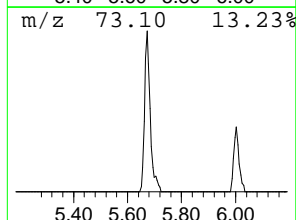
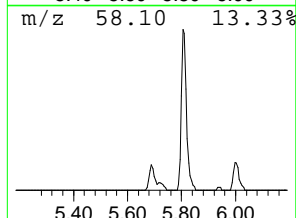
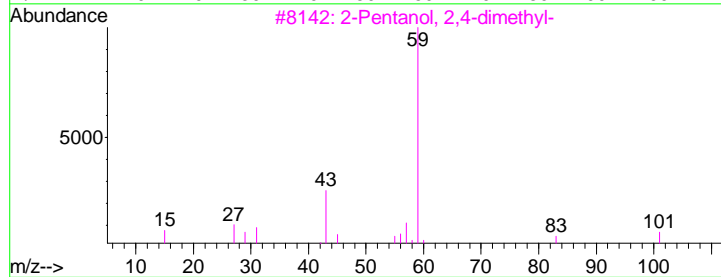
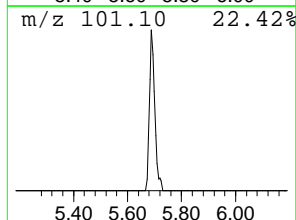
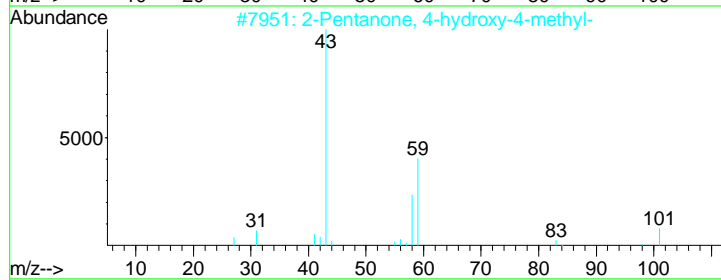
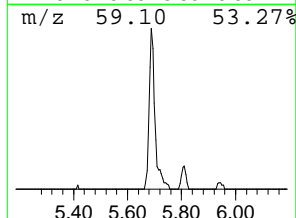
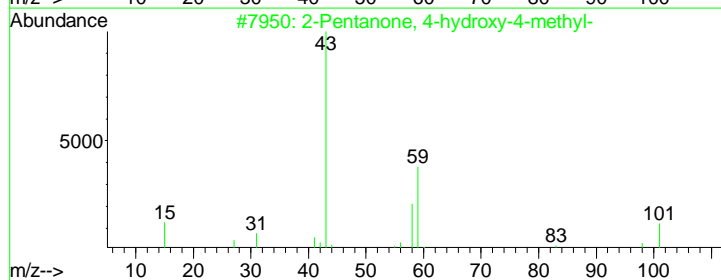
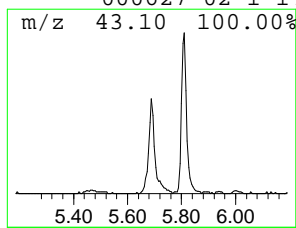
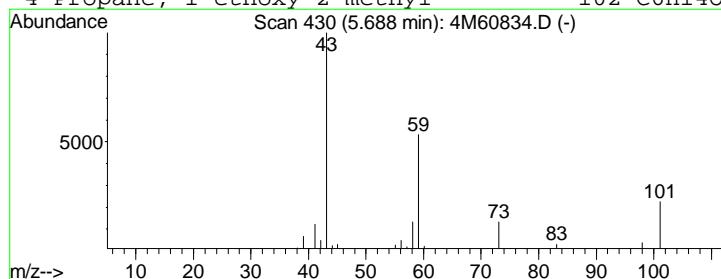
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	5.31 ug/ml	182412	1,4-Dichlorobenzene-d4	7.23

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	42
2			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
3			2-Pentanol, 2,4-dimethyl-	116	C7H16O	000625-06-9	23
4			Propane, 1-ethoxy-2-methyl-	102	C6H14O	000627-02-1	17



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

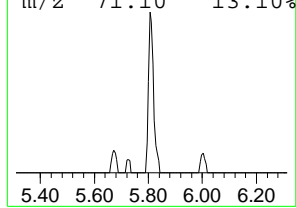
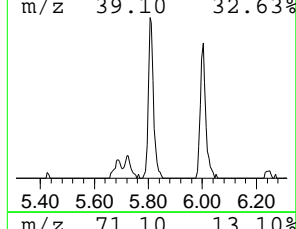
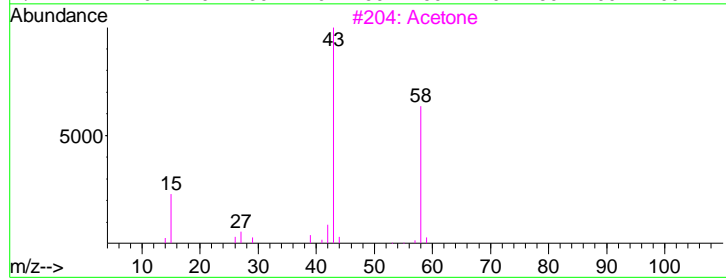
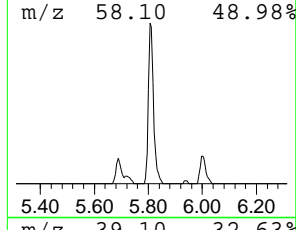
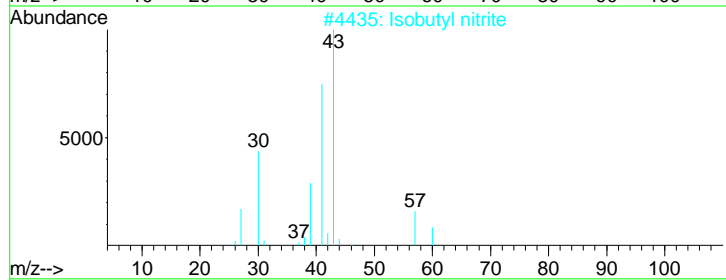
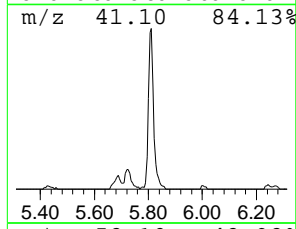
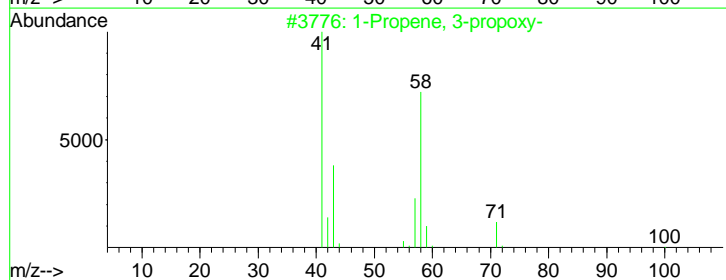
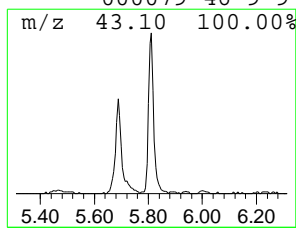
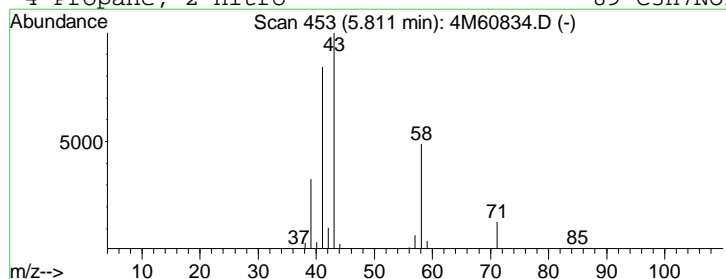
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 1-Propene, 3-propoxy- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.81	8.95 ug/ml	307462	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Propene, 3-propoxy-	100	C6H12O	001471-03-0	38
2		Isobutyl nitrite	103	C4H9NO2	000542-56-3	23
3		Acetone	58	C3H6O	000067-64-1	9
4		Propane, 2-nitro-	89	C3H7NO2	000079-46-9	9



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

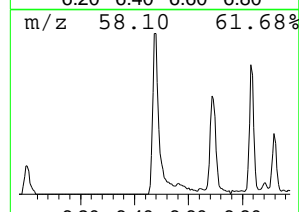
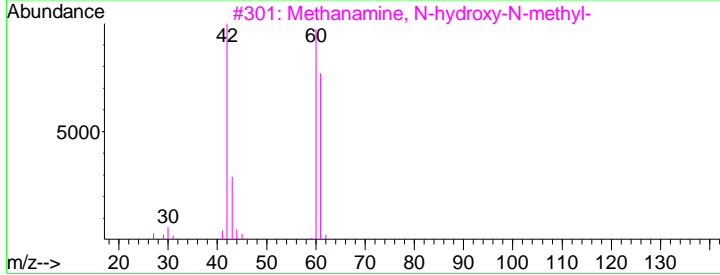
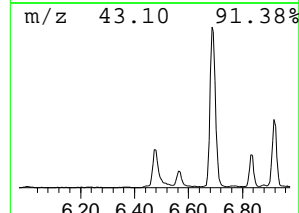
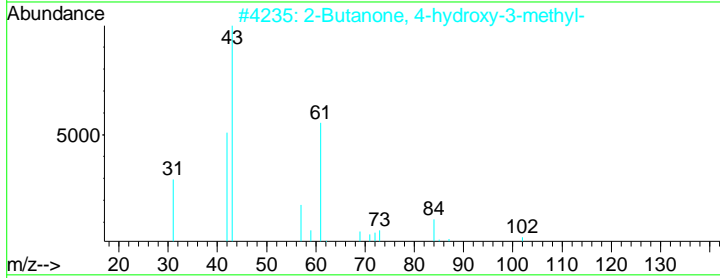
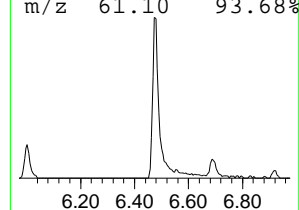
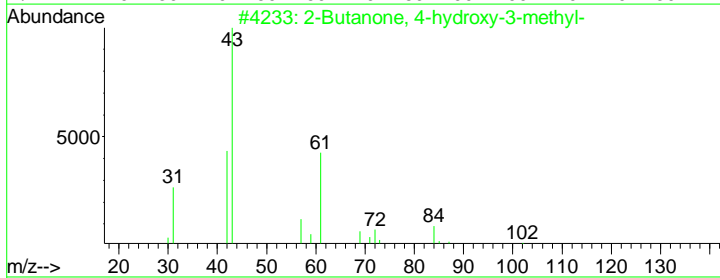
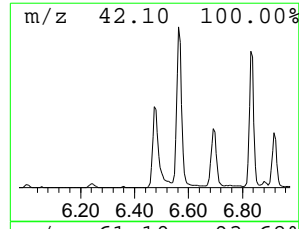
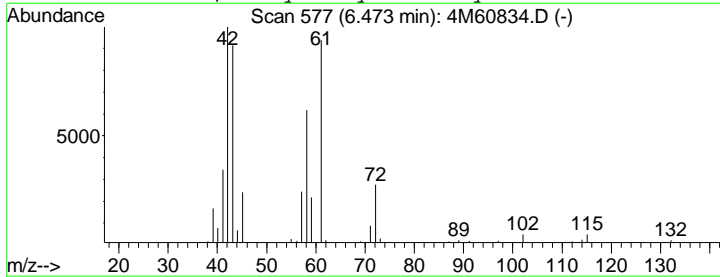
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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-Butanone, 4-hydroxy-3-met... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.47	15.37 ug/ml	528047	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Butanone, 4-hydroxy-3-methyl-	102	C5H10O2	003393-64-4	47
2		2-Butanone, 4-hydroxy-3-methyl-	102	C5H10O2	003393-64-4	38
3		Methanamine, N-hydroxy-N-methyl-	61	C2H7NO	005725-96-2	37
4		Methanamine, N-hydroxy-N-methyl-	61	C2H7NO	005725-96-2	37



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

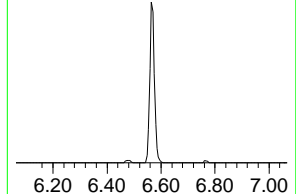
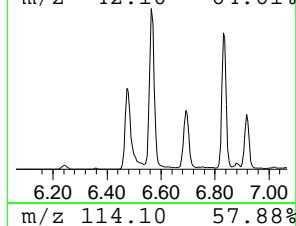
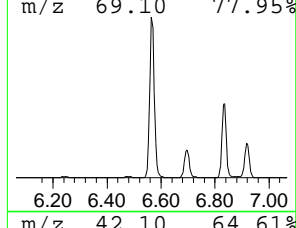
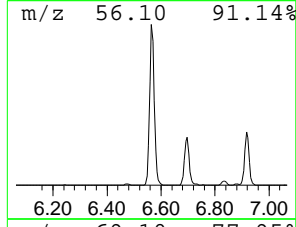
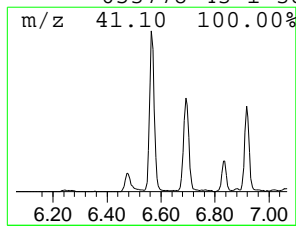
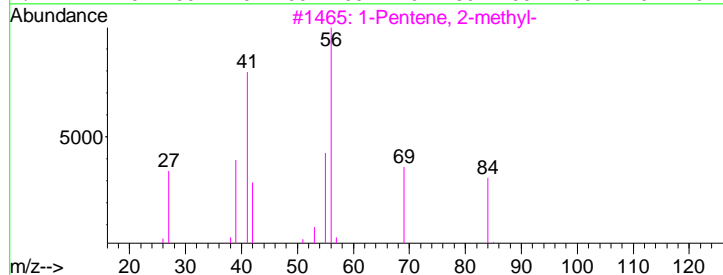
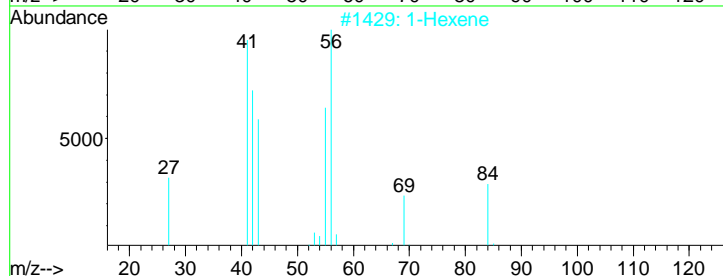
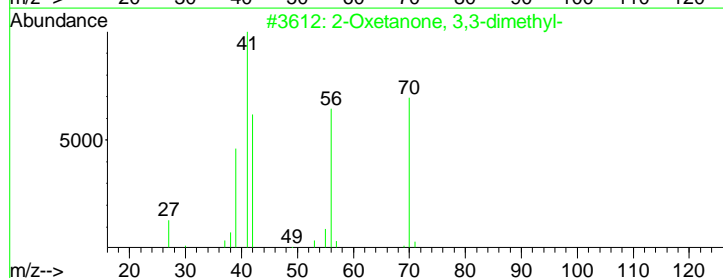
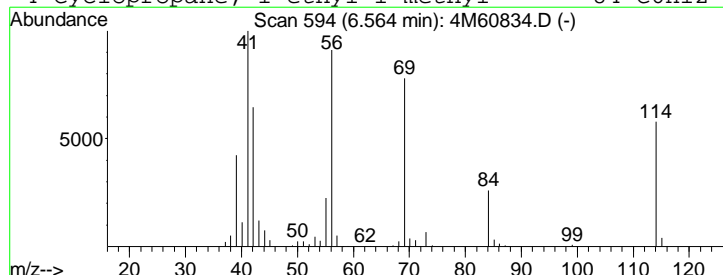
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 4 2-Oxetanone, 3,3-dimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.56	35.59 ug/ml	1222790	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Oxetanone, 3,3-dimethyl-	100	C5H8O2	001955-45-9	43
2		1-Hexene	84	C6H12	000592-41-6	43
3		1-Pentene, 2-methyl-	84	C6H12	000763-29-1	38
4		Cyclopropane, 1-ethyl-1-methyl-	84	C6H12	053778-43-1	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

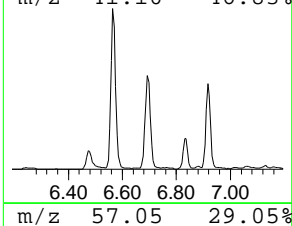
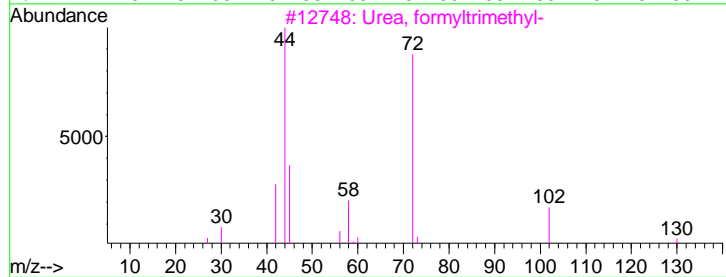
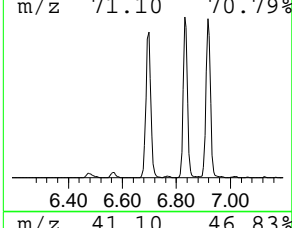
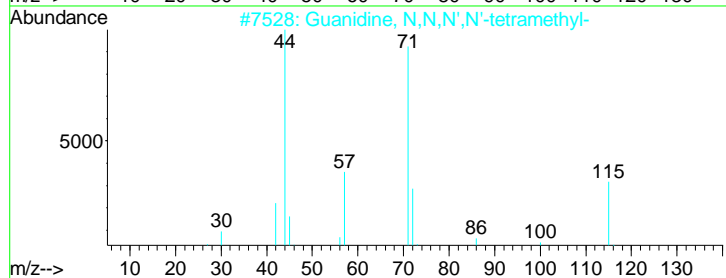
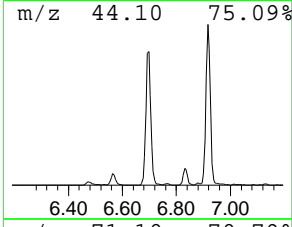
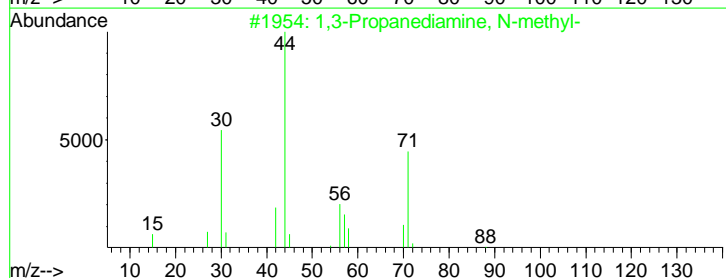
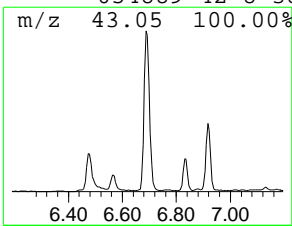
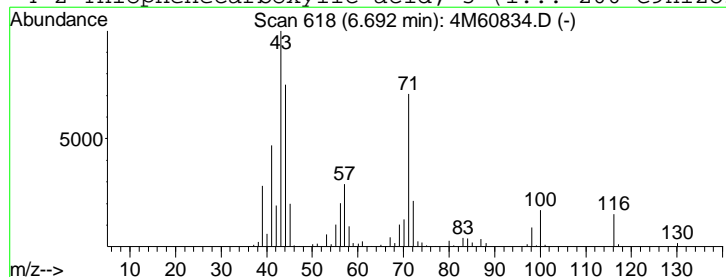
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 5 1,3-Propanediamine, N-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.69	49.11 ug/ml	1687290	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1,3-Propanediamine, N-methyl-	88	C4H12N2	006291-84-5	50
2		Guanidine, N,N,N',N'-tetramethyl-	115	C5H13N3	000080-70-6	45
3		Urea, formyltrimethyl-	130	C5H10N2O2	1000151-45-7	38
4		2-Thiophenecarboxylic acid, 5-(1...	200	C9H12O3S	054889-42-8	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

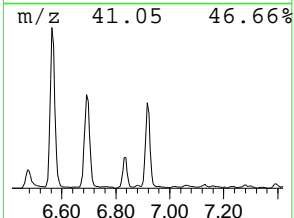
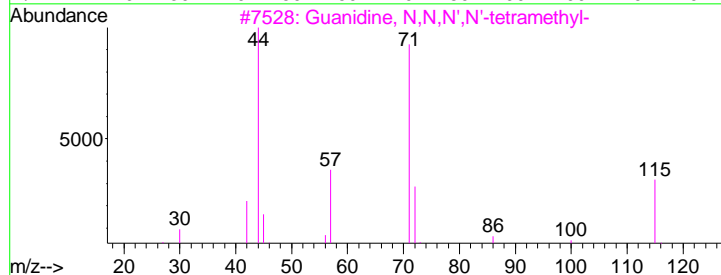
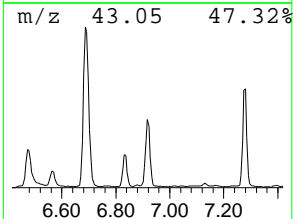
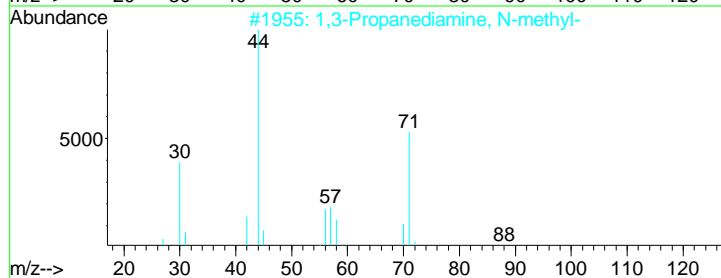
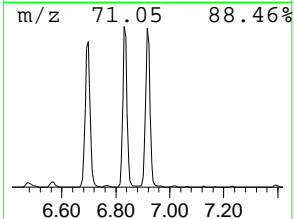
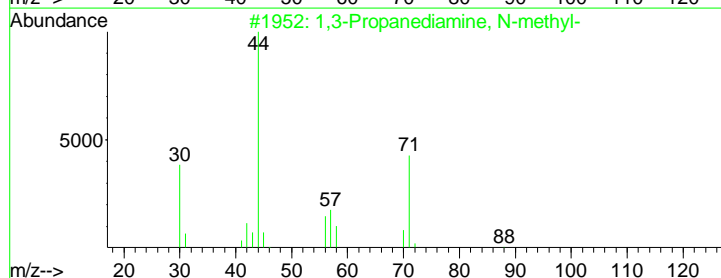
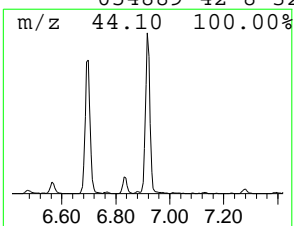
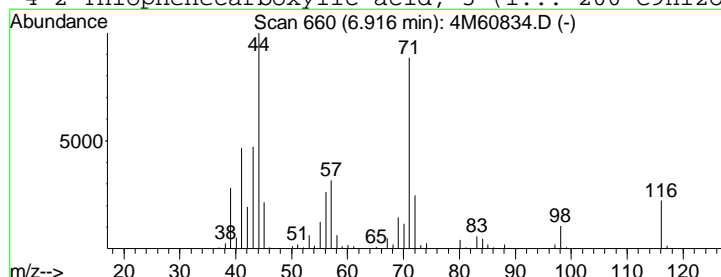
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 6 1,3-Propanediamine, N-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.92	38.09 ug/ml	1308600	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1,3-Propanediamine, N-methyl-	88	C4H12N2	006291-84-5	42
2		1,3-Propanediamine, N-methyl-	88	C4H12N2	006291-84-5	42
3		Guanidine, N,N,N',N'-tetramethyl-	115	C5H13N3	000080-70-6	38
4		2-Thiophenecarboxylic acid, 5-(1...	200	C9H12O3S	054889-42-8	32



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

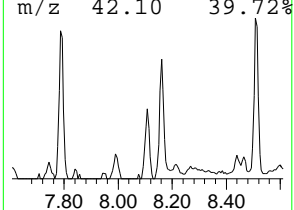
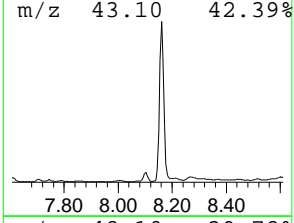
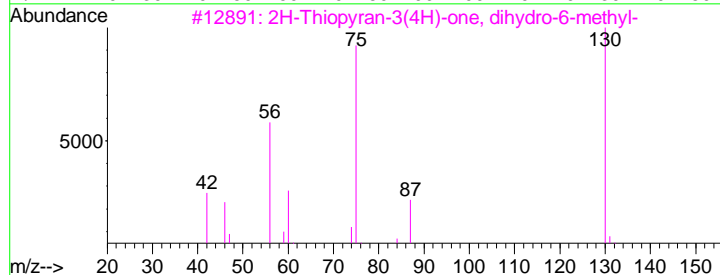
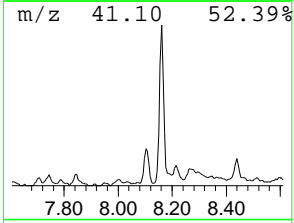
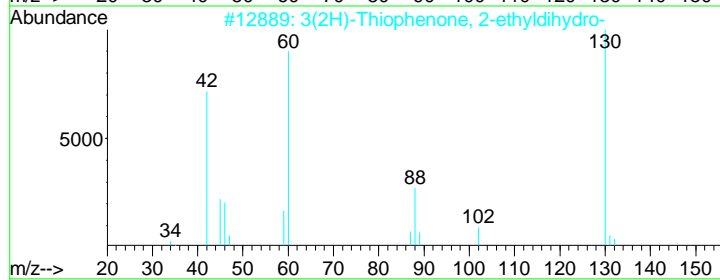
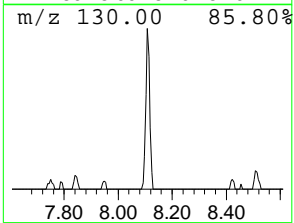
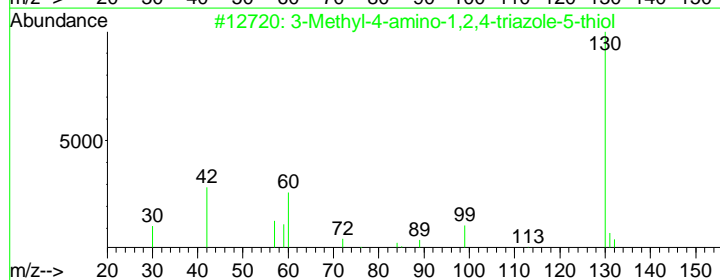
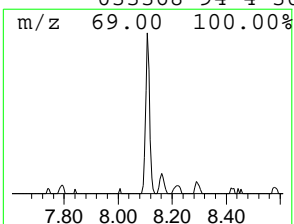
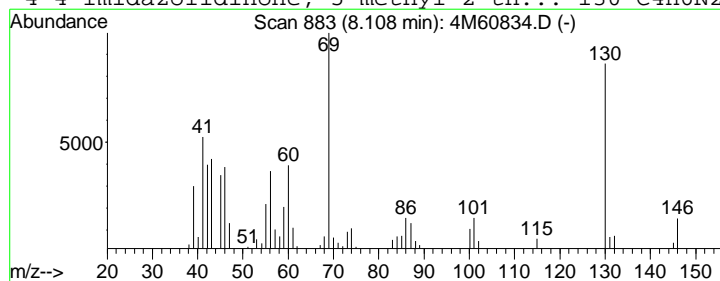
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 7 3-Methyl-4-amino-1,2,4-tria... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.11	4.38 ug/ml	198685	Naphthalene-d8	8.51

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Methyl-4-amino-1,2,4-triazole-...	130	C3H6N4S	020939-15-5	43
2		3(2H)-Thiophenone, 2-ethylidihydro-	130	C6H10OS	052662-38-1	38
3		2H-Thiopyran-3(4H)-one, dihydro-	130	C6H10OS	043152-90-5	35
4		4-Imidazolidinone, 5-methyl-2-th...	130	C4H6N2OS	033368-94-4	30



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

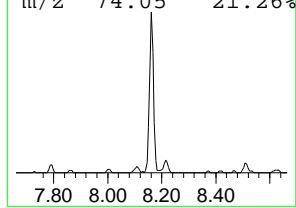
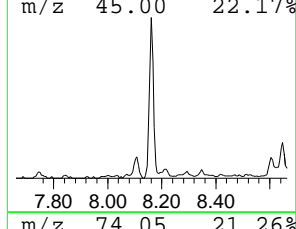
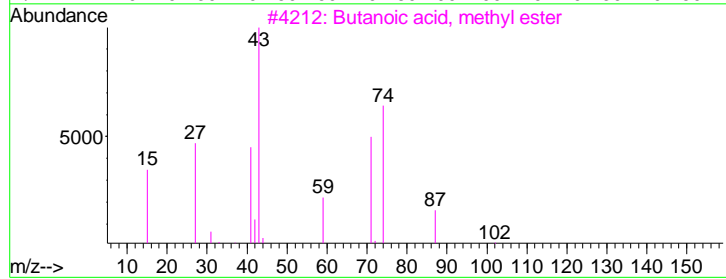
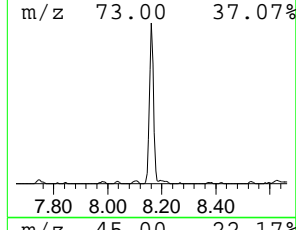
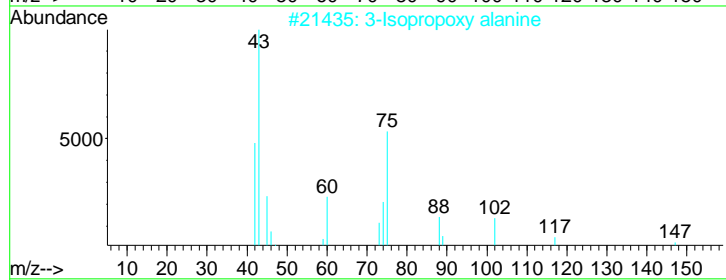
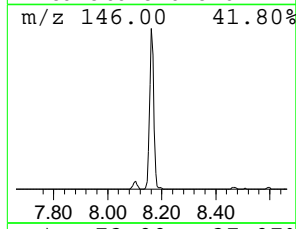
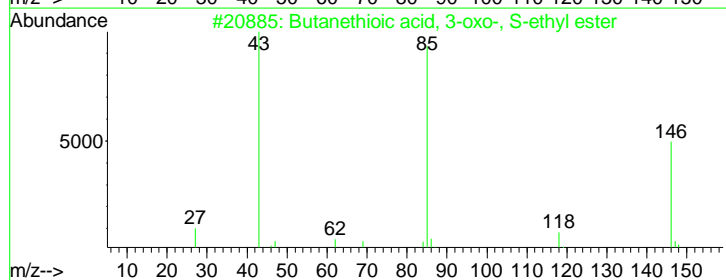
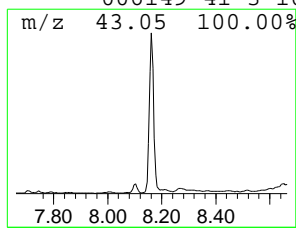
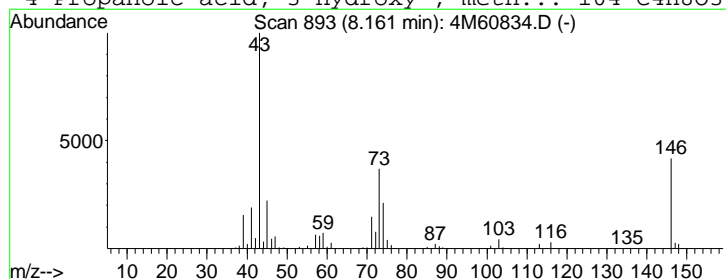
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 8 Butanethioic acid, 3-oxo-, ... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.16	25.79 ug/ml	1170380	Naphthalene-d8	8.51

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Butanethioic acid, 3-oxo-, S-eth...	146	C6H10O2S	003075-23-8	22
2		3-Isopropoxy alanine	147	C6H13NO3	1000214-51-8	12
3		Butanoic acid, methyl ester	102	C5H10O2	000623-42-7	10
4		Propanoic acid, 3-hydroxy-, meth...	104	C4H8O3	006149-41-3	10



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

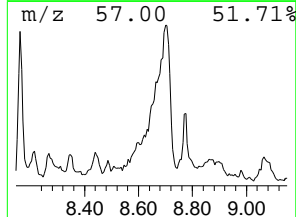
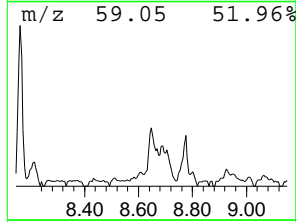
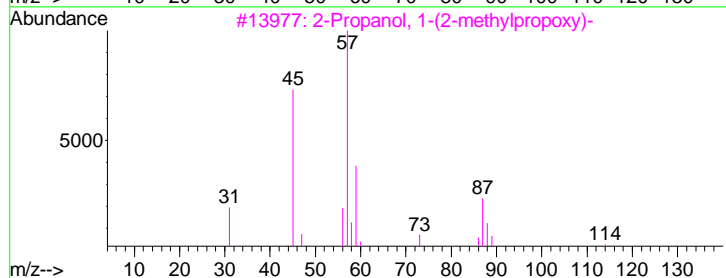
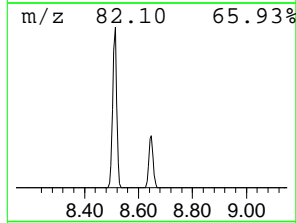
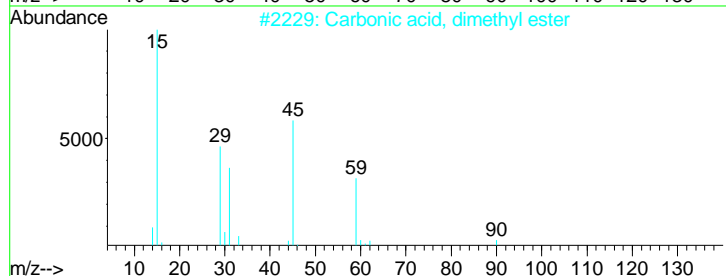
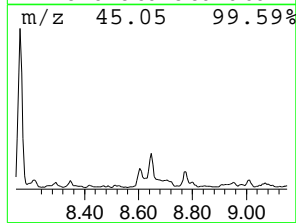
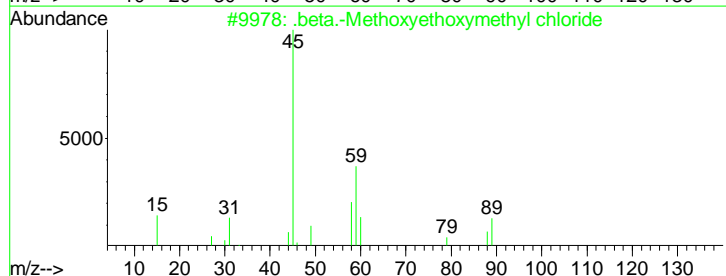
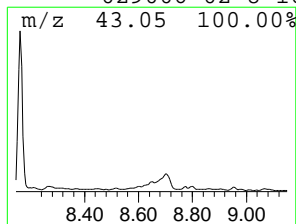
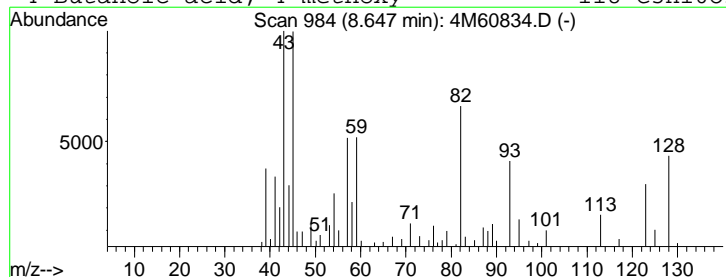
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 9 .beta.-Methoxyethoxymethyl ... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.65	7.03 ug/ml	319127	Naphthalene-d8	8.51

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	.	.beta.-Methoxyethoxymethyl chloride	124	C4H9ClO2	003970-21-6	25	
2	Carbonic acid, dimethyl ester	90	C3H6O3	000616-38-6	16		
3	2-Propanol, 1-(2-methylpropoxy)-	132	C7H16O2	023436-19-3	16		
4	Butanoic acid, 4-methoxy-	118	C5H10O3	029006-02-8	16		



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

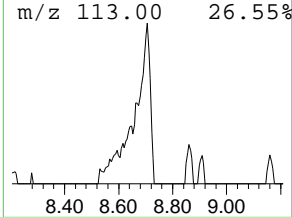
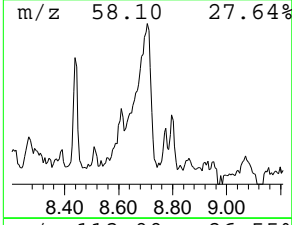
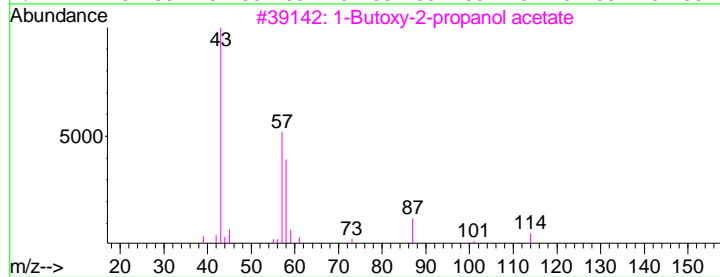
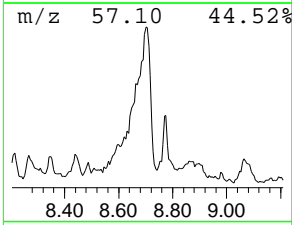
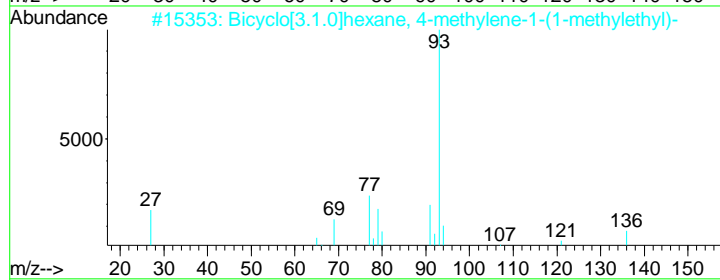
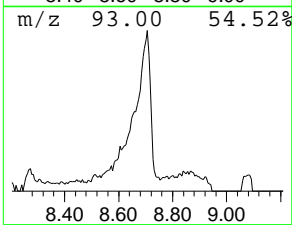
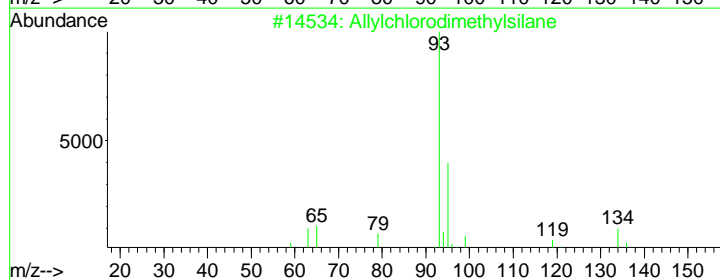
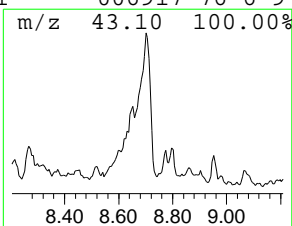
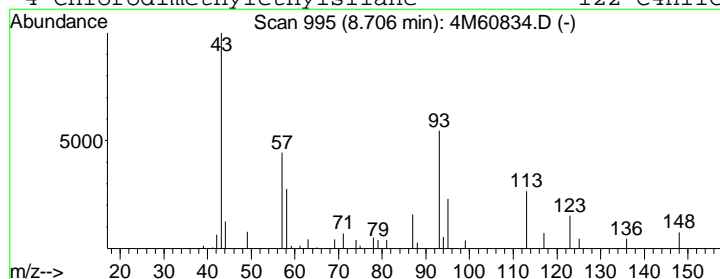
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 10 Allylchlorodimethylsilane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.71	8.36 ug/ml	379240	Naphthalene-d8	8.51

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Allylchlorodimethylsilane	134	C5H11ClSi	004028-23-3	16
2			Bicyclo[3.1.0]hexane, 4-methylen...	136	C10H16	003387-41-5	9
3			1-Butoxy-2-propanol acetate	174	C9H18O3	085409-76-3	9
4			Chlorodimethylethylsilane	122	C4H11ClSi	006917-76-6	9



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

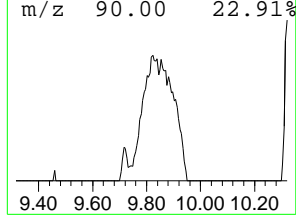
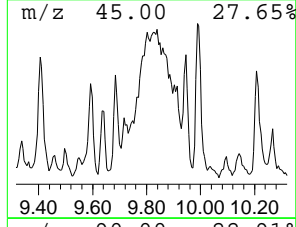
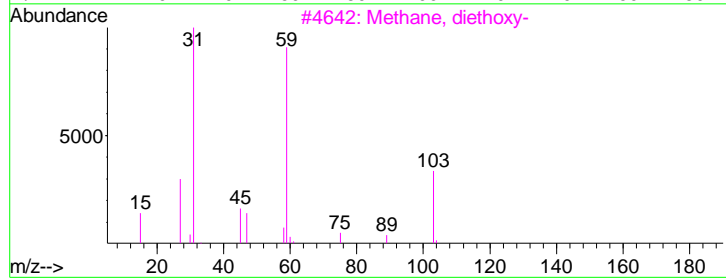
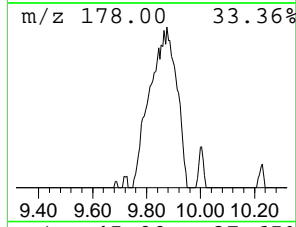
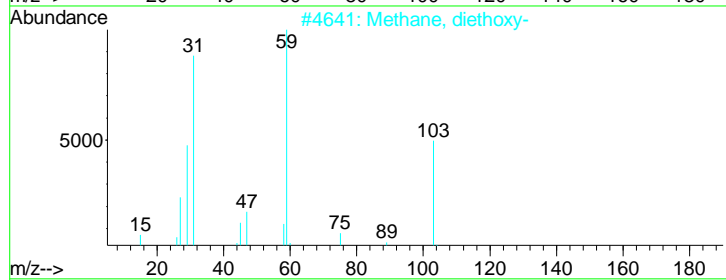
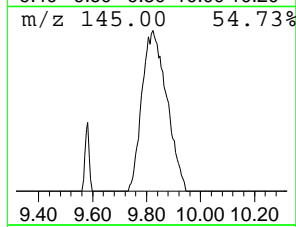
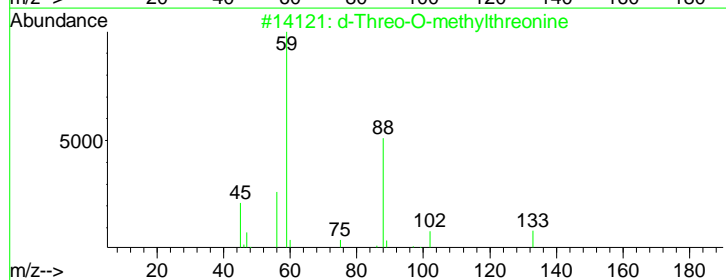
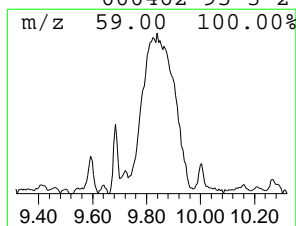
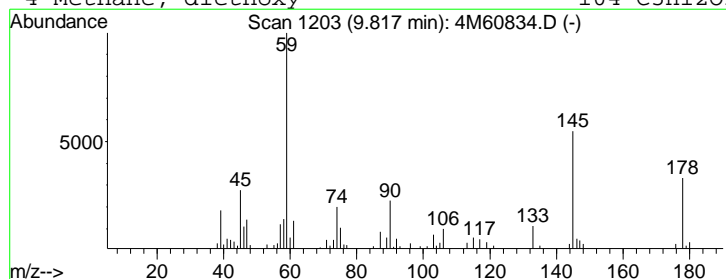
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 11 d-Threo-O-methylthreonine Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.82	9.52 ug/ml	478961	Acenaphthene-d10	10.32

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			d-Threo-O-methylthreonine	133	C5H11NO3	1000214-70-6	35
2			Methane, diethoxy-	104	C5H12O2	000462-95-3	27
3			Methane, diethoxy-	104	C5H12O2	000462-95-3	27
4			Methane, diethoxy-	104	C5H12O2	000462-95-3	27



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

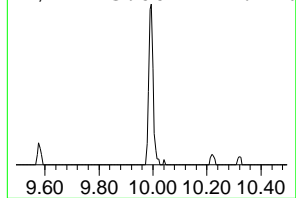
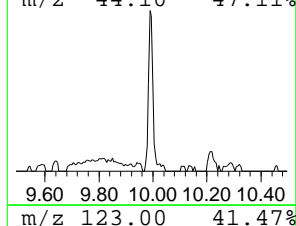
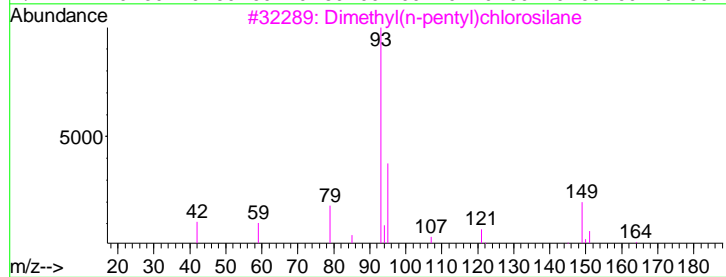
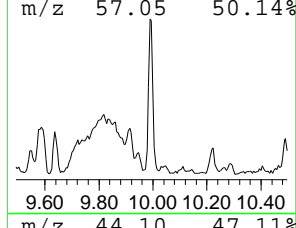
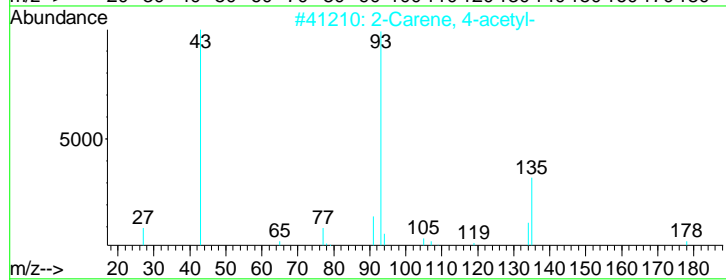
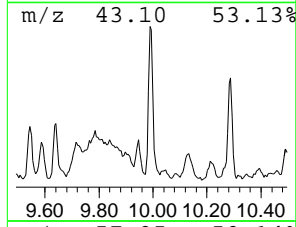
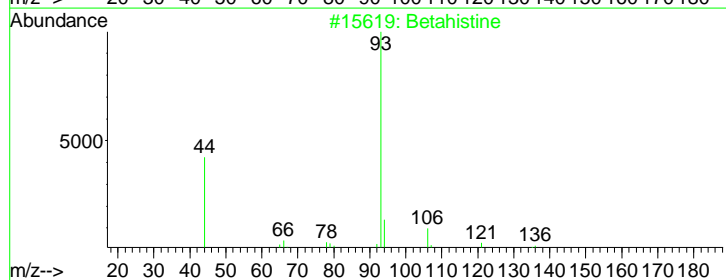
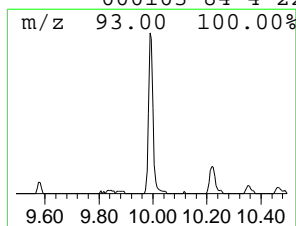
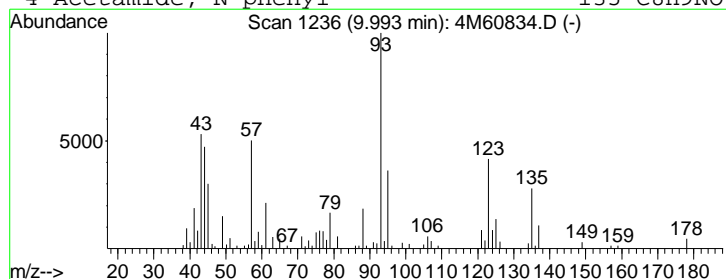
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 12 Betahistine Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.99	6.22 ug/ml	313003	Acenaphthene-d10	10.32

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Betahistine	136	C8H12N2	005638-76-6	25
2		2-Carene, 4-acetyl-	178	C12H18O	1000163-28-1	22
3		Dimethyl(n-pentyl)chlorosilane	164	C7H17ClSi	025938-34-5	22
4		Acetamide, N-phenyl-	135	C8H9NO	000103-84-4	22



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

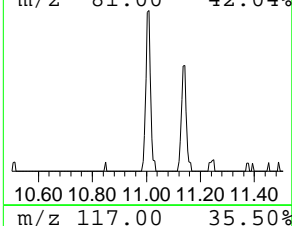
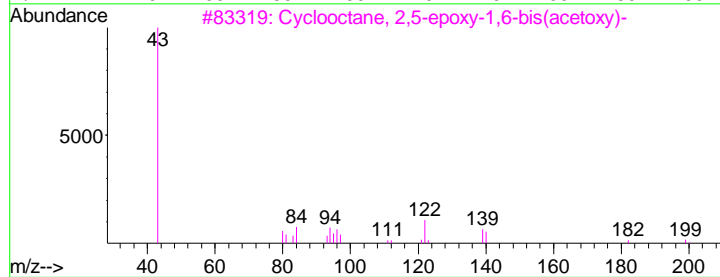
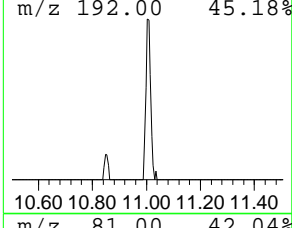
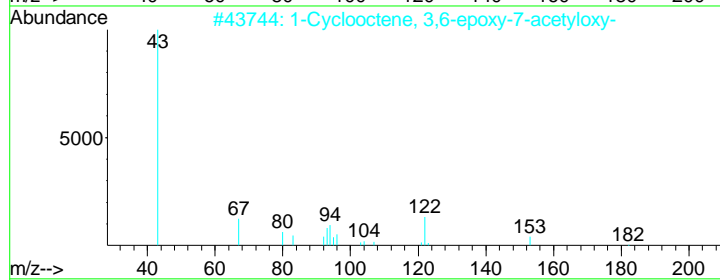
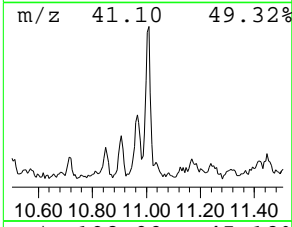
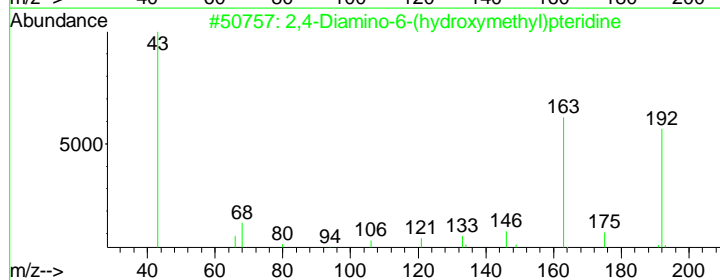
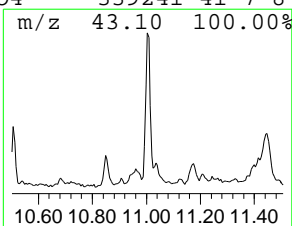
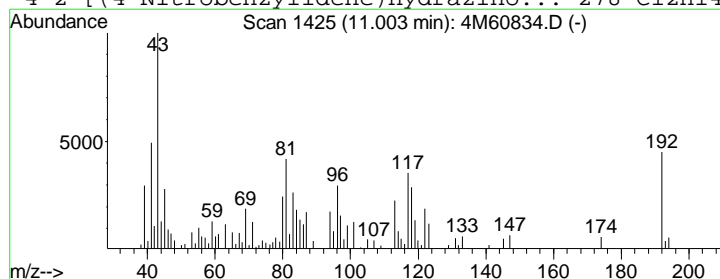
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 13 2,4-Diamino-6-(hydroxymethyl)pte... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.00	4.68 ug/ml	235334	Acenaphthene-d10	10.32

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2,4-Diamino-6-(hydroxymethyl)pte...	192	C7H8N6O	000945-24-4	9
2		1-Cyclooctene, 3,6-epoxy-7-acety...	182	C10H14O3	1000156-36-3	9
3		Cyclooctane, 2,5-epoxy-1,6-bis(a...	242	C12H18O5	1000156-36-2	9
4		2-[(4-Nitrobenzylidene)hydrazino...	278	C12H14N4O4	339241-41-7	8



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

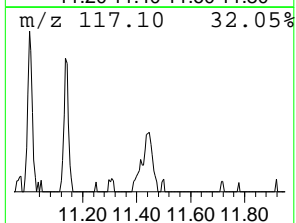
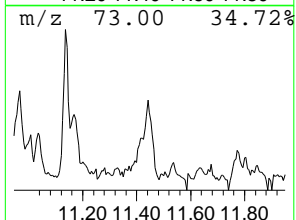
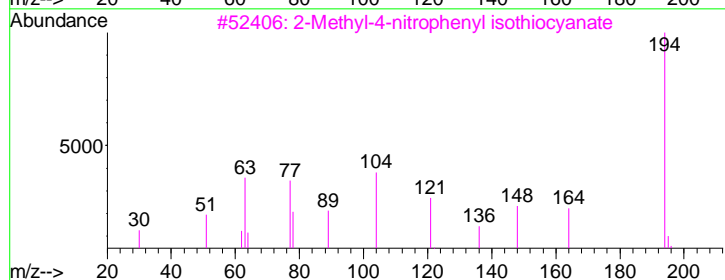
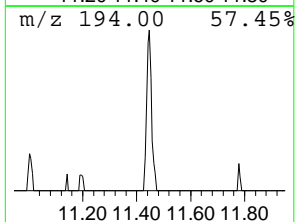
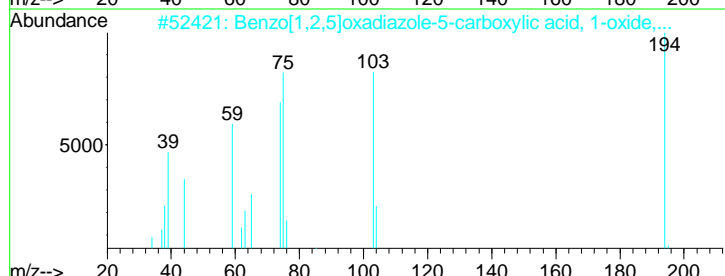
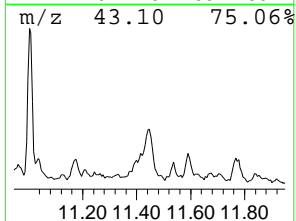
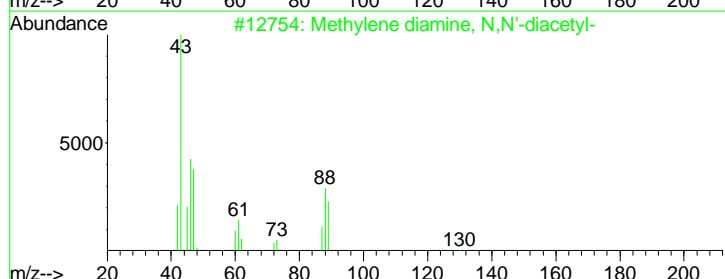
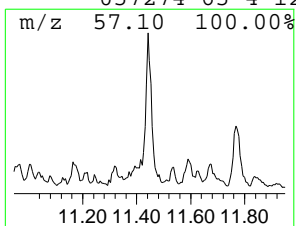
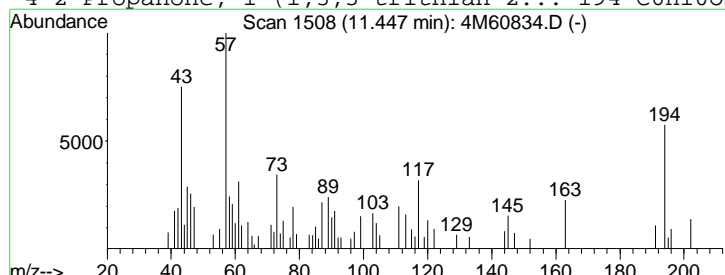
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 14 Methylene diamine, N,N'-dia... Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.45	4.69 ug/ml	258975	Phenanthrene-d10	11.92

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Methylene diamine, N,N'-diacetyl-	130	C5H10N2O2	003852-14-0	14
2		Benzo[1,2,5]oxadiazole-5-carboxy...	194	C8H6N2O4	036389-06-7	12
3		2-Methyl-4-nitrophenyl isothiocy...	194	C8H6N2O2S	135805-96-8	12
4		2-Propanone, 1-(1,3,5-trithian-2...	194	C6H10OS3	057274-65-4	12



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

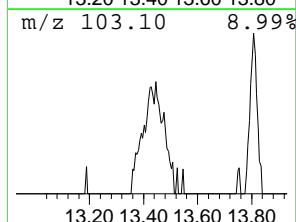
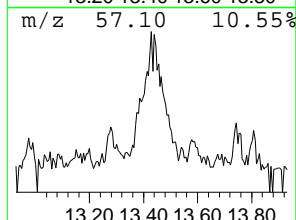
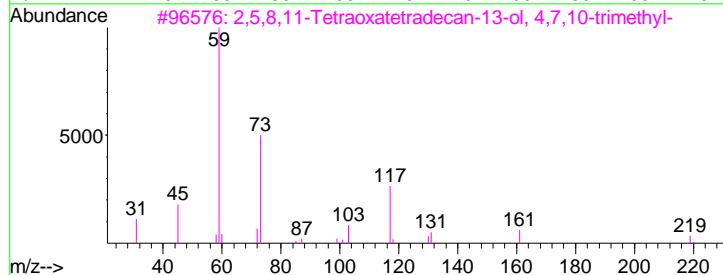
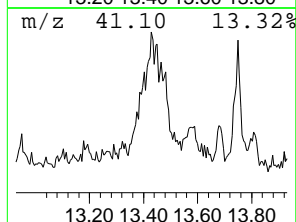
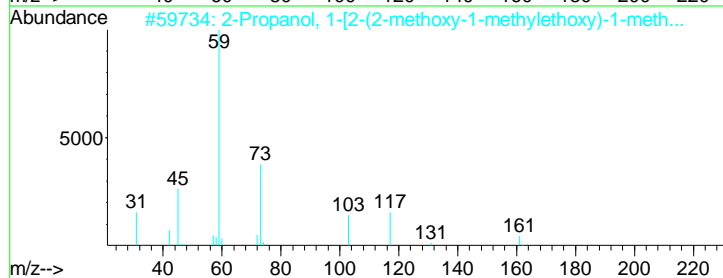
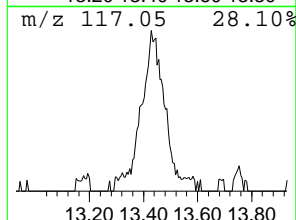
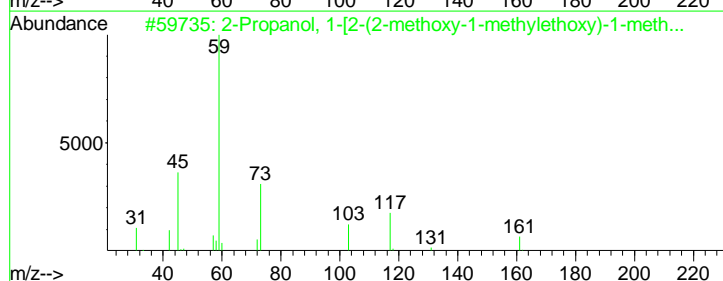
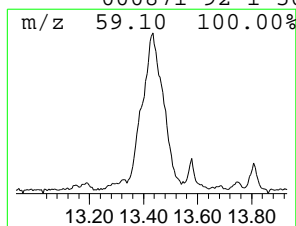
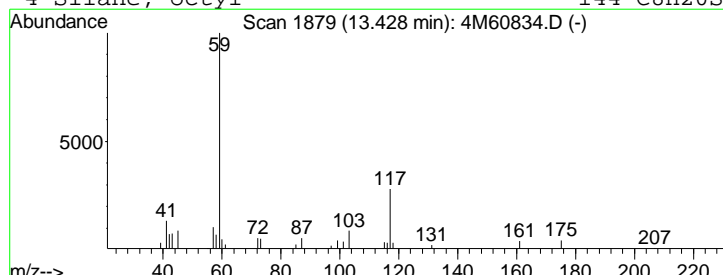
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 15 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	5.29 ug/ml	292284	Phenanthrene-d10	11.92

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	59
2		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	59
3		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
4		Silane, octyl-	144	C8H20Si	000871-92-1	50



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

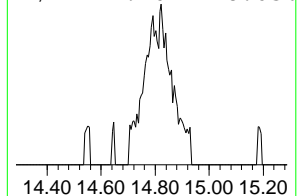
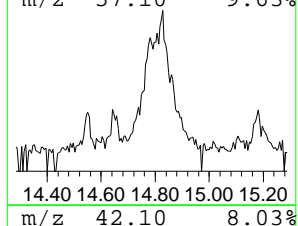
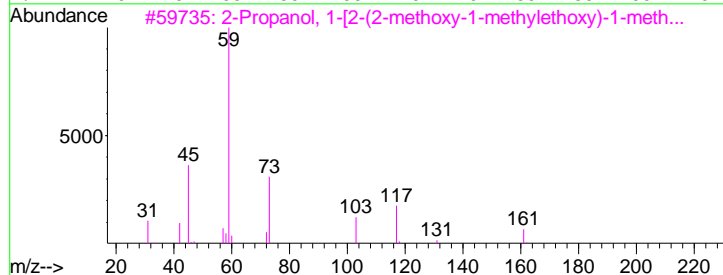
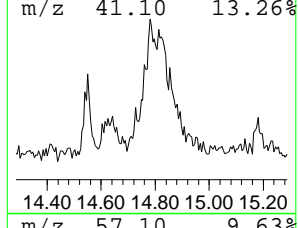
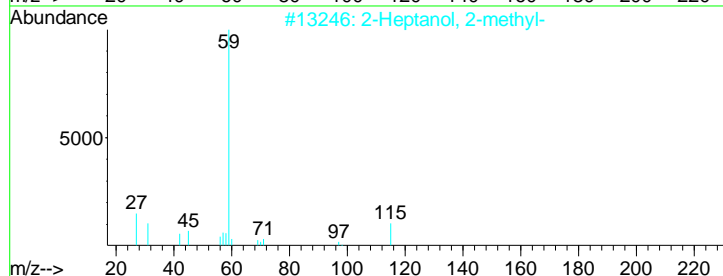
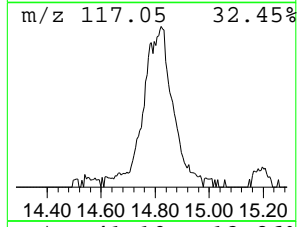
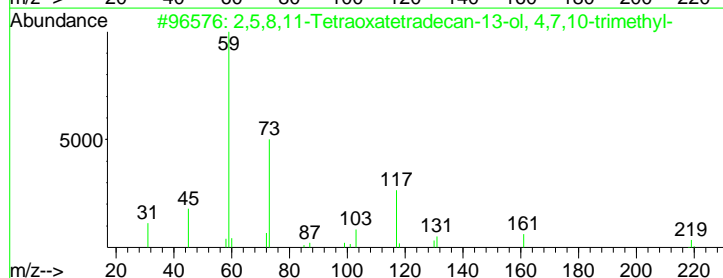
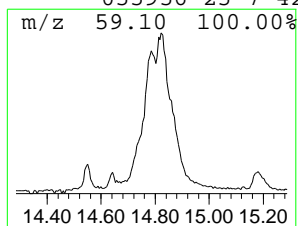
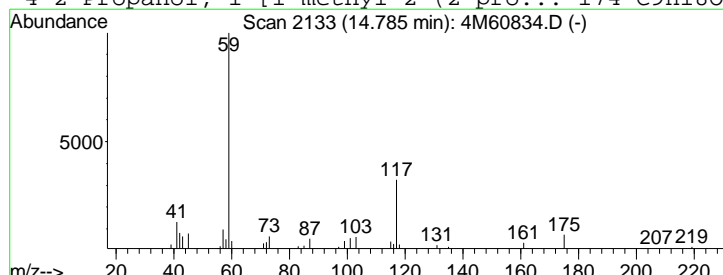
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 16 2,5,8,11-Tetraoxatetradecan... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.79	4.45 ug/ml	255488	Chrysene-d12	15.60

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	45
2			2-Heptanol, 2-methyl-	130	C8H18O	000625-25-2	43
3			2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42
4			2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	42



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

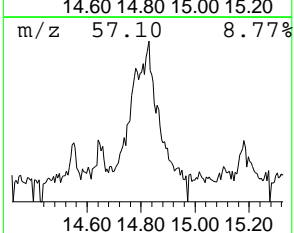
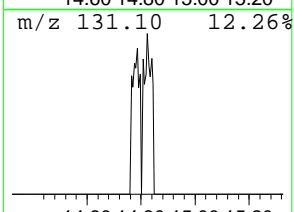
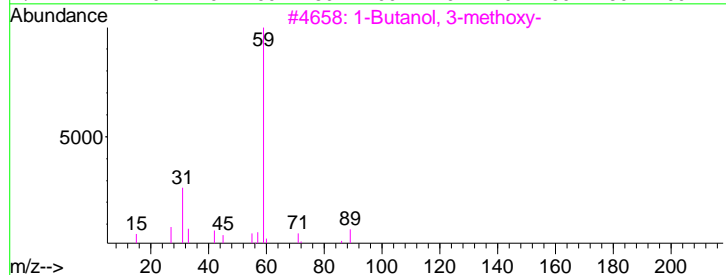
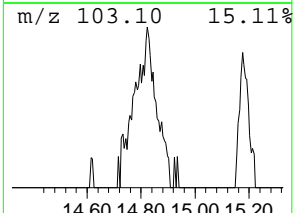
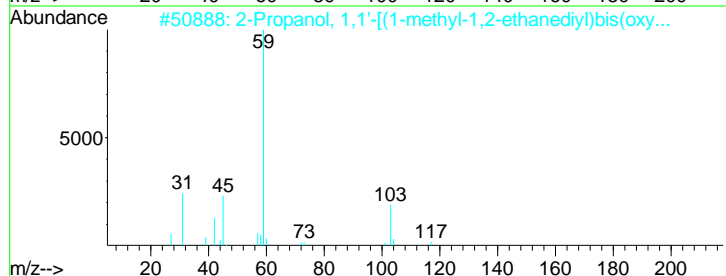
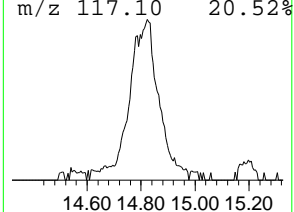
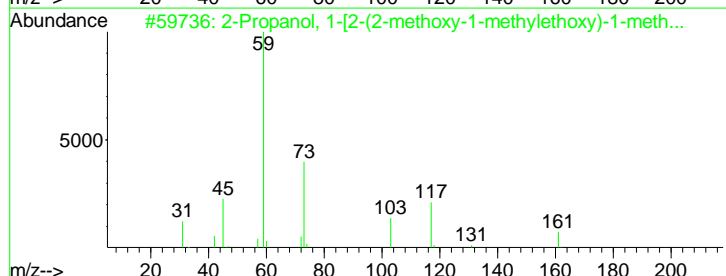
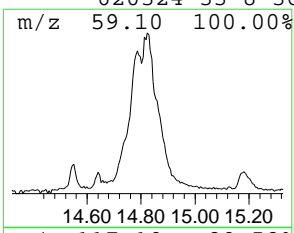
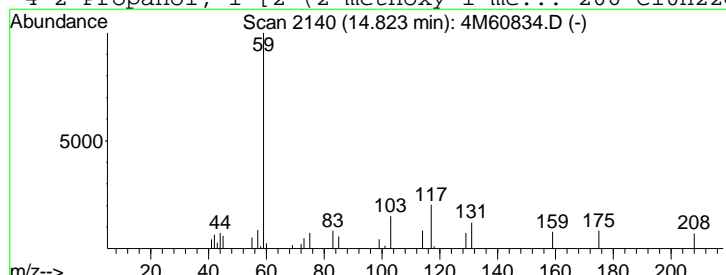
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 17 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	5.32 ug/ml	305769	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	38
2		2-Propanol, 1,1'-(1-methyl-1,2-...	192	C9H20O4	001638-16-0	38
3		1-Butanol, 3-methoxy-	104	C5H12O2	002517-43-3	38
4		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	36



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

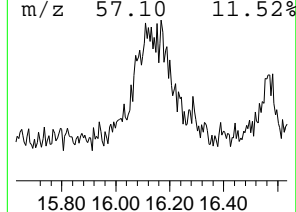
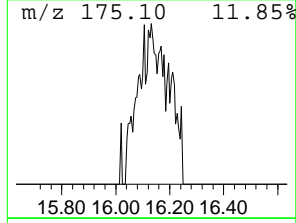
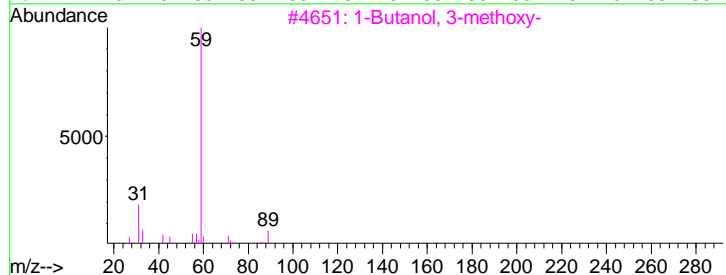
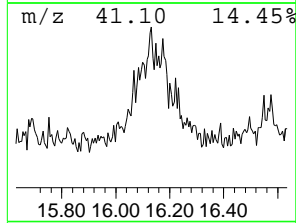
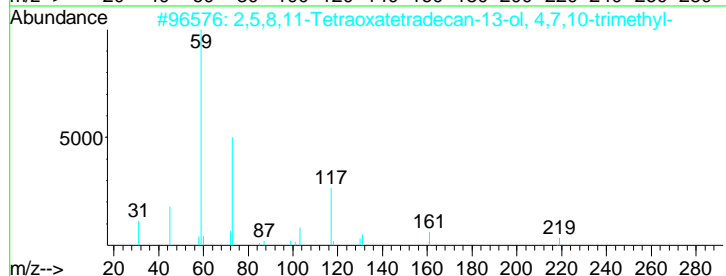
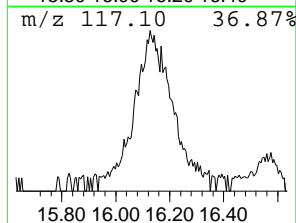
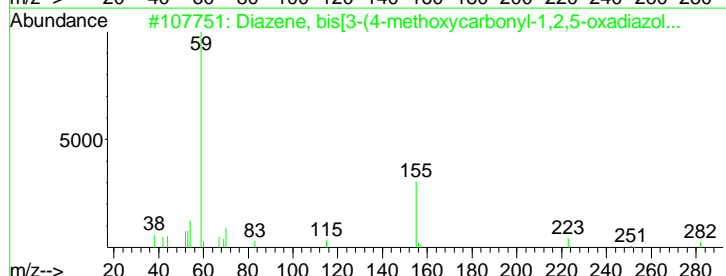
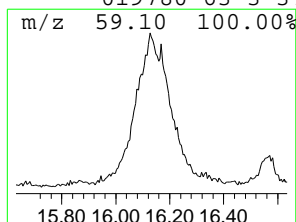
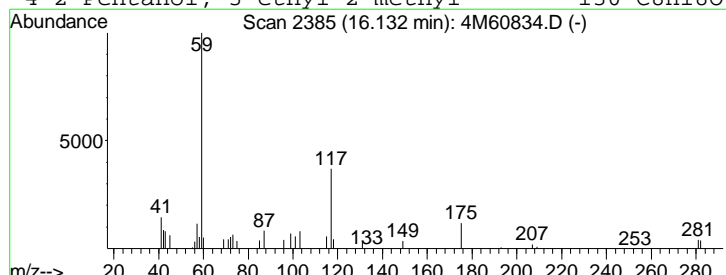
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 18 Diazene, bis[3-(4-methoxyca... Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.13	4.37 ug/ml	251038	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Diazene, bis[3-(4-methoxycarbony...	282	C8H6N6O6	339246-68-3	43
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		2-Pentanol, 3-ethyl-2-methyl-	130	C8H18O	019780-63-3	37



Data File : I:\MSDCHEM\1\DATA\051212\4M60834.D
 Acq On : 12 May 2012 21:15
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: LSCINT.P

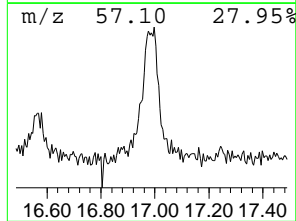
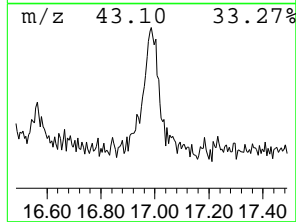
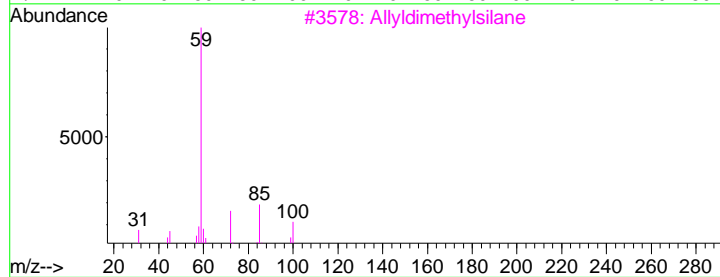
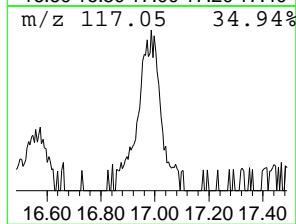
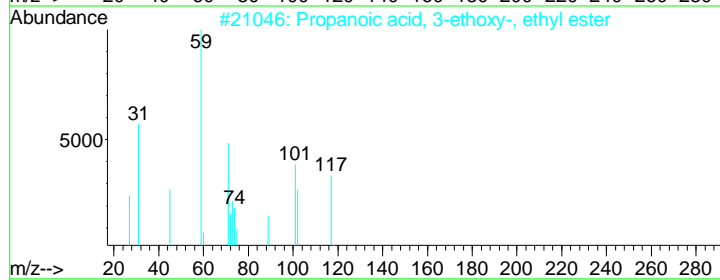
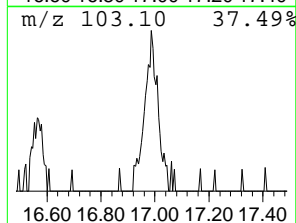
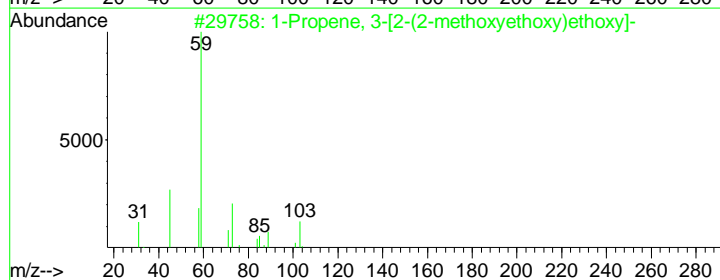
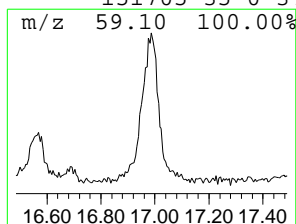
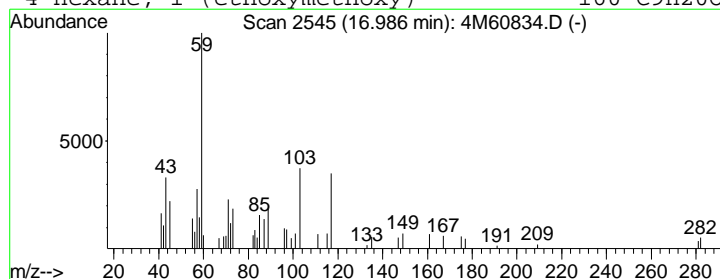
Vial: 19
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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 19 1-Propene, 3-[2-(2-methoxye... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.99	4.55 ug/ml	246629	Perylene-d12	18.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Propene, 3-[2-(2-methoxyethoxy...	160	C8H16O3	013752-97-1	40
2		Propanoic acid, 3-ethoxy-, ethyl...	146	C7H14O3	000763-69-9	38
3		Allyldimethylsilane	100	C5H12Si	003937-30-2	38
4		Hexane, 1-(ethoxymethoxy)-	160	C9H20O2	151705-35-0	37



Operator ID: CAA Date Acquired: 12 May 2012 21:15
 Data File: I:\MSDCHEM\1\DATA\051212\4M60834.D
 Name: L12050099-07
 Misc: 1,1
 Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
 Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
2-Pentanone, 4-hy...	5.69	5.3	ug/ml	182412	1	7.23	1374260	40.0
1-Propene, 3-prop...	5.81	8.9	ug/ml	307462	1	7.23	1374260	40.0
2-Butanone, 4-hyd...	6.47	15.4	ug/ml	528047	1	7.23	1374260	40.0
2-Oxetanone, 3,3-...	6.56	35.6	ug/ml	1222790	1	7.23	1374260	40.0
1,3-Propanediamin...	6.69	49.1	ug/ml	1687290	1	7.23	1374260	40.0
1,3-Propanediamin...	6.92	38.1	ug/ml	1308600	1	7.23	1374260	40.0
3-Methyl-4-amino-...	8.11	4.4	ug/ml	198685	2	8.51	1815450	40.0
Butanethioic acid...	8.16	25.8	ug/ml	1170380	2	8.51	1815450	40.0
.beta.-Methoxyeth...	8.65	7.0	ug/ml	319127	2	8.51	1815450	40.0
Allylchlorodimeth...	8.71	8.4	ug/ml	379240	2	8.51	1815450	40.0
d-Threo-O-methylt...	9.82	9.5	ug/ml	478961	3	10.32	2011500	40.0
Betahistine	9.99	6.2	ug/ml	313003	3	10.32	2011500	40.0
2,4-Diamino-6-(hy...	11.00	4.7	ug/ml	235334	3	10.32	2011500	40.0
Methylene diamine...	11.45	4.7	ug/ml	258975	4	11.92	2210270	40.0
2-Propanol, 1-[2-...	13.43	5.3	ug/ml	292284	4	11.92	2210270	40.0
2,5,8,11-Tetraoxa...	14.79	4.4	ug/ml	255488	5	15.60	2297700	40.0
2-Propanol, 1-[2-...	14.82	5.3	ug/ml	305769	5	15.60	2297700	40.0
Diazene, bis[3-(4...	16.13	4.4	ug/ml	251038	5	15.60	2297700	40.0
1-Propene, 3-[2-(...	16.99	4.6	ug/ml	246629	6	18.33	2165900	40.0

Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D Vial: 20
 Acq On : 12 May 2012 21:50 Operator: CAA
 Sample : L12050099-09 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40:53 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	248603	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	914573	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	514524	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	922502	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	865671	40.00	ug/ml	-0.01
128) Perylene-d12	18.33	264	851656	40.00	ug/ml	-0.01

System Monitoring Compounds

8) 2-Fluorophenol	6.00	112	620613	82.3366	ug/ml	0.00
Spiked Amount	100.000	Range	21 - 100	Recovery	=	82.34%
12) Phenol-d5	6.83	99	781253	88.5611	ug/ml	0.00
Spiked Amount	100.000	Range	10 - 94	Recovery	=	88.56%
31) Nitrobenzene-d5	7.79	82	364343	47.1012	ug/ml	0.00
Spiked Amount	50.000	Range	35 - 114	Recovery	=	94.20%
59) 2-Fluorobiphenyl	9.58	172	785103	45.6956	ug/ml	0.00
Spiked Amount	50.000	Range	43 - 116	Recovery	=	91.40%
86) 2,4,6-Tribromophenol	11.14	330	238111	103.7771	ug/ml	0.00
Spiked Amount	100.000	Range	10 - 123	Recovery	=	103.78%
117) p-Terphenyl-d14	13.95	244	941910	59.0343	ug/ml	-0.01
Spiked Amount	50.000	Range	33 - 141	Recovery	=	118.06%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
124) bis(2-Ethylhexyl)phthalate	15.47	149	29517	1.8366	ug/ml#	99

(#) = qualifier out of range (m) = manual integration
 4M60835.D MEGAMIX.M Mon May 14 11:46:35 2012

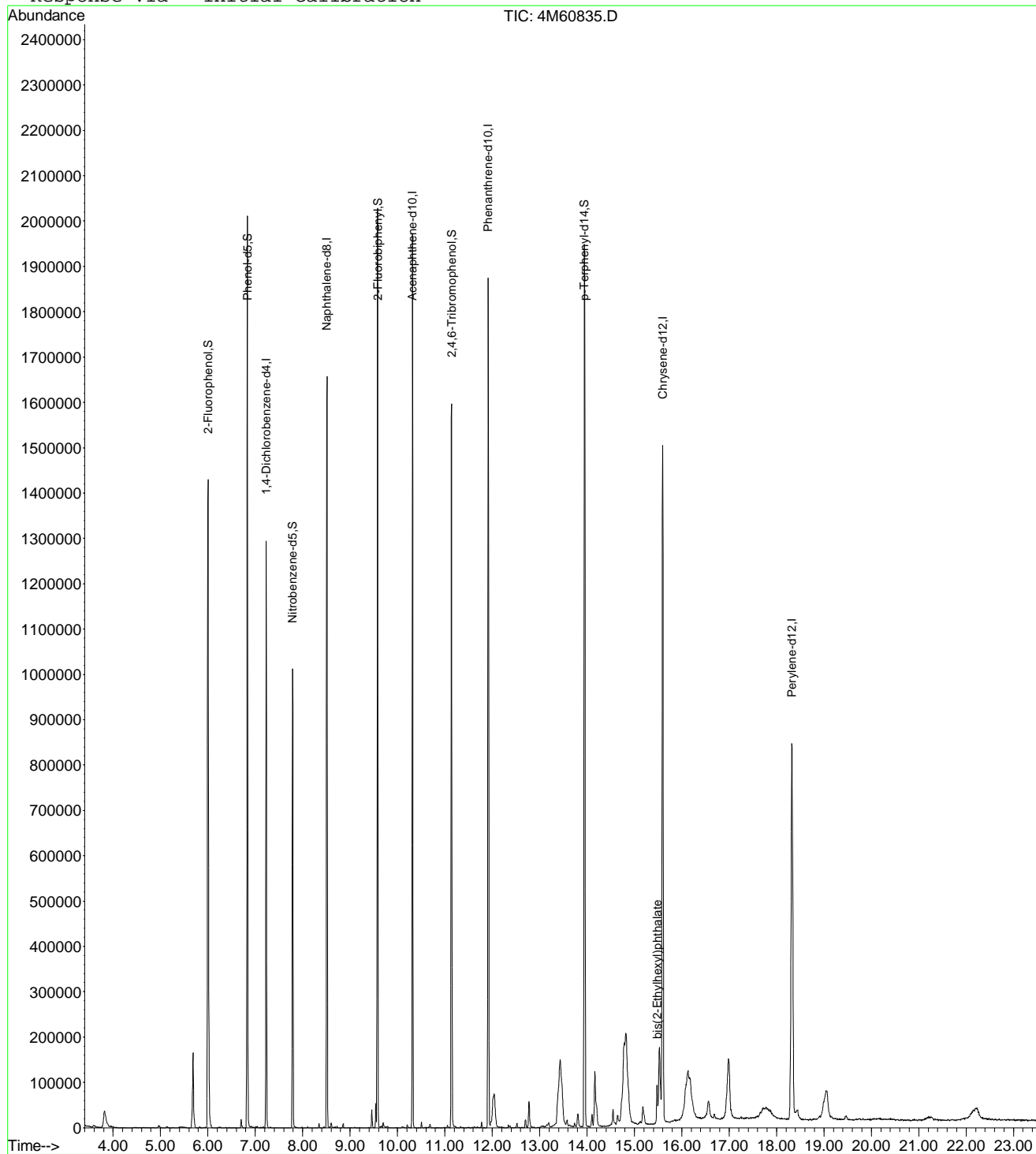
Page 1

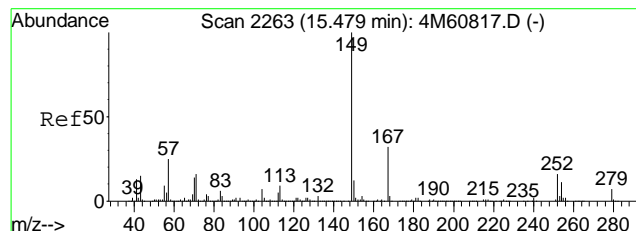
Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40 2012

Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: MEGAMIX.RES

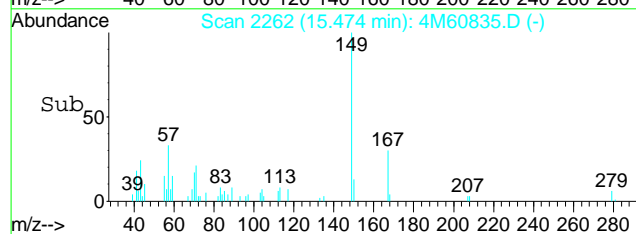
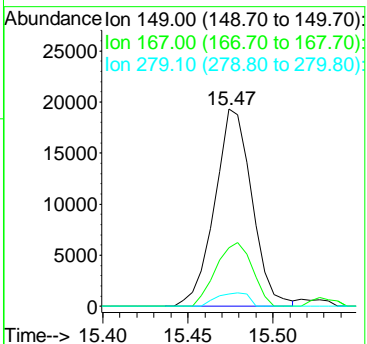
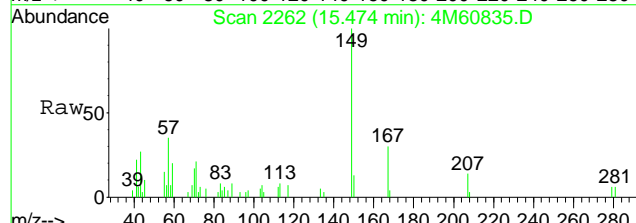
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration





#124
 bis(2-Ethylhexyl)phthalate
 Concen: 1.84 ug/ml
 RT: 15.47 min Scan# 2262
 Delta R.T. -0.01 min
 Lab File: 4M60835.D
 Acq: 12 May 2012 21:50

Tgt Ion	Ratio	Lower	Upper
149	100		
167	31.5	25.4	38.0
279	5.8	6.2	9.2#



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D Vial: 20
 Acq On : 12 May 2012 21:50 Operator: CAA
 Sample : L12050099-09 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54:31 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIOn	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	248603	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	914573	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	514524	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	922502	40.00	ug/mL	0.00

Target Compounds Qvalue

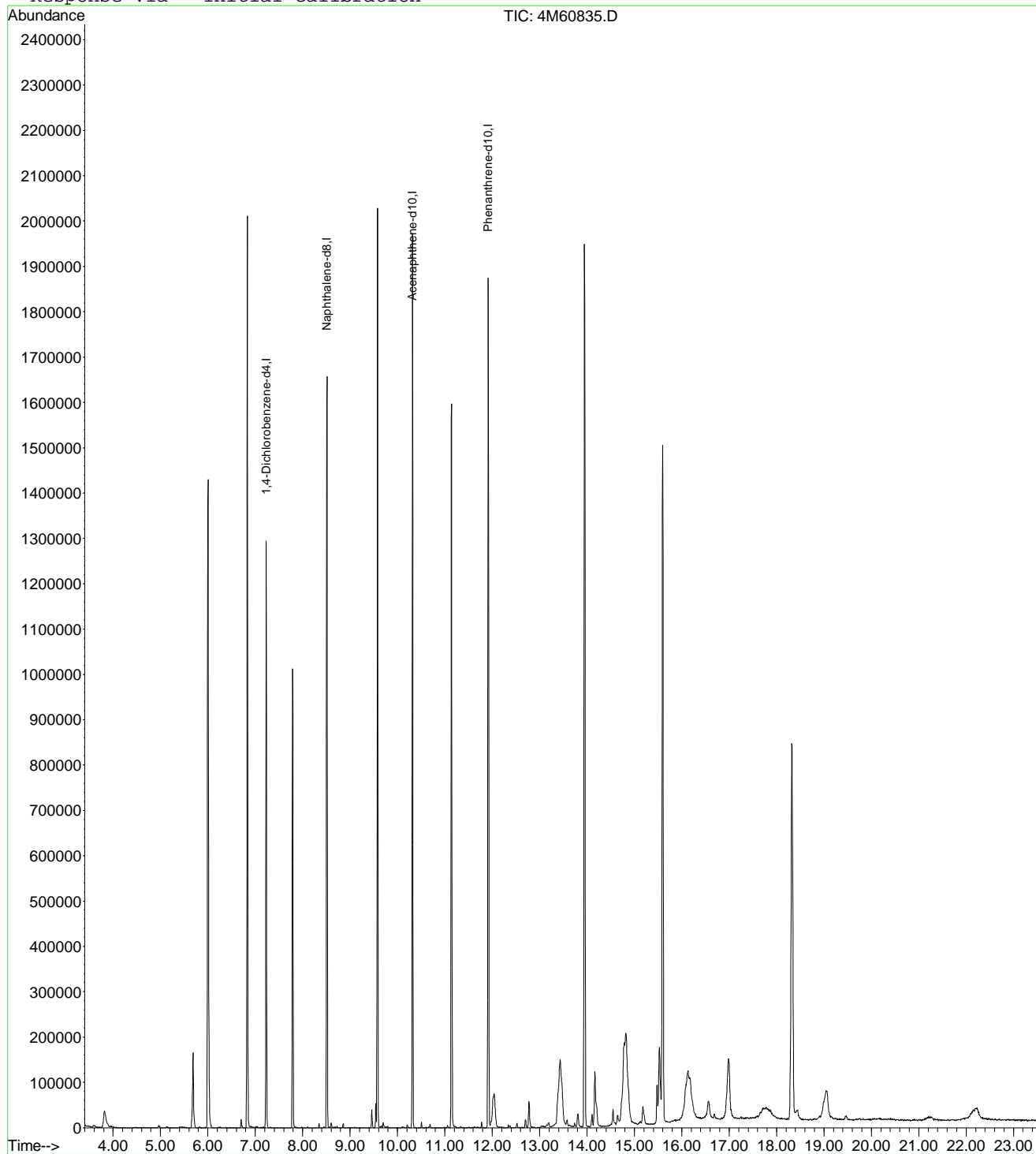
 (#) = qualifier out of range (m) = manual integration
 4M60835.D TCL.M Mon May 14 11:54:31 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:54 2012

Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D Vial: 20
 Acq On : 12 May 2012 21:50 Operator: CAA
 Sample : L12050099-09 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

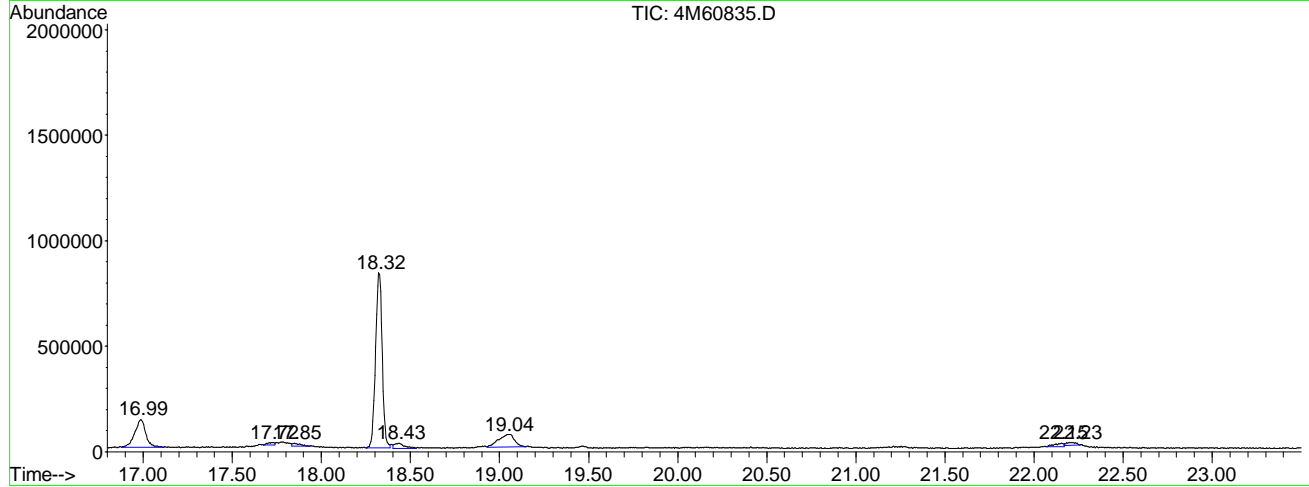
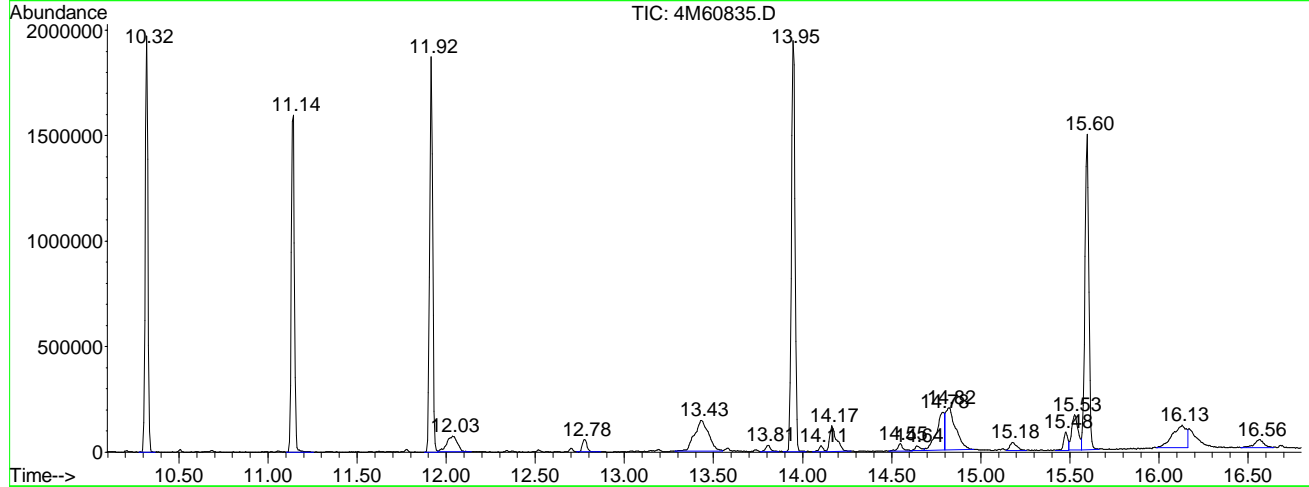
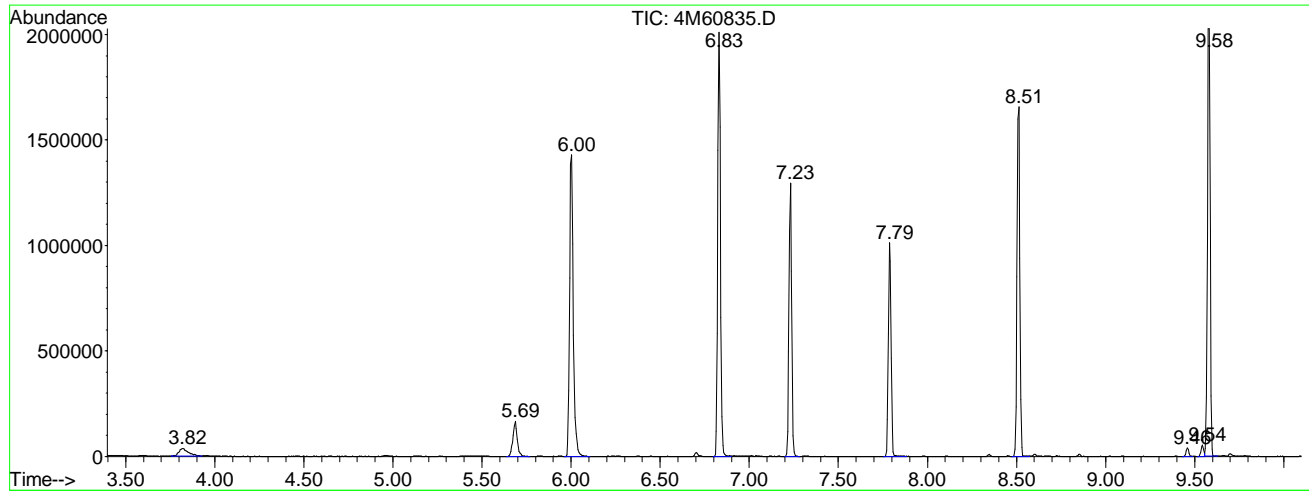
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.817	69	80	100	rBV2	36603	144644	5.33%	0.480%
2	5.687	421	430	444	rBB2	166051	279217	10.29%	0.927%
3	6.002	482	489	507	rBB	1429791	2038086	75.14%	6.767%
4	6.830	638	644	657	rBV	2012139	2141760	78.96%	7.111%
5	7.231	713	719	728	rBB	1294382	1394962	51.43%	4.631%
6	7.787	817	823	840	rBB	1012175	1074615	39.62%	3.568%
7	8.513	952	959	970	rBV	1657148	1807626	66.64%	6.001%
8	9.459	1131	1136	1141	rBB	39607	40673	1.50%	0.135%
9	9.544	1147	1152	1154	rBV	53717	53246	1.96%	0.177%
10	9.582	1154	1159	1167	rVB	2028151	2187680	80.65%	7.263%
11	10.319	1289	1297	1305	rBB	1972386	2009953	74.10%	6.673%
12	11.141	1444	1451	1471	rBB	1597292	1913432	70.54%	6.353%
13	11.916	1589	1596	1603	rBV	1874759	2211105	81.51%	7.341%
14	12.034	1603	1618	1637	rVB4	74447	314638	11.60%	1.045%
15	12.776	1749	1757	1773	rVB2	57781	108161	3.99%	0.359%
16	13.433	1852	1880	1902	rBV	146626	802341	29.58%	2.664%
17	13.807	1942	1950	1960	rVB3	29227	61449	2.27%	0.204%
18	13.946	1966	1976	1989	rBV	1947946	2712547	100.00%	9.006%
19	14.106	1997	2006	2011	rBV2	28476	46501	1.71%	0.154%
20	14.165	2011	2017	2036	rVB2	121225	313719	11.57%	1.042%
21	14.550	2077	2089	2101	rBV	35729	74557	2.75%	0.248%
22	14.641	2101	2106	2114	rBV8	21701	50813	1.87%	0.169%
23	14.785	2114	2133	2135	rVV	179447	555165	20.47%	1.843%
24	14.822	2136	2140	2165	rVB2	198709	748105	27.58%	2.484%
25	15.180	2200	2207	2220	rVB4	38921	100633	3.71%	0.334%
26	15.479	2252	2263	2266	rBV	86668	145334	5.36%	0.483%
27	15.527	2266	2272	2279	rVV2	168109	427463	15.76%	1.419%
28	15.597	2279	2285	2297	rVB	1493500	2258819	83.27%	7.499%
29	16.131	2358	2385	2391	rBV3	105298	584672	21.55%	1.941%
30	16.564	2447	2466	2480	rBV4	38449	147940	5.45%	0.491%
31	16.986	2525	2545	2569	rVB4	131522	552081	20.35%	1.833%
32	17.723	2674	2683	2686	rVV7	10911	29340	1.08%	0.097%
33	17.851	2704	2707	2722	rVB7	14162	43959	1.62%	0.146%
34	18.321	2782	2795	2807	rBV	830629	2170159	80.00%	7.205%
35	18.433	2810	2816	2834	rVB10	23063	88523	3.26%	0.294%
36	19.042	2909	2930	2949	rVB6	60463	378528	13.95%	1.257%
37	22.152	3497	3512	3515	rBV9	15571	58135	2.14%	0.193%
38	22.232	3515	3527	3531	rBV9	11248	49545	1.83%	0.164%

Sum of corrected areas: 30120126

File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Operator : CAA
 Acquired : 12 May 2012 21:50 using AcqMethod BNATEST
 Instrument : HPMS4
 Sample Name: L12050099-09
 Misc Info : 1,1
 Vial Number: 20
 Quant File :MEGAMIX.RES (RTE Integrator)



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
Acq On : 12 May 2012 21:50
Sample : L12050099-09
Misc : 1,1
MS Integration Params: LSCINT.P

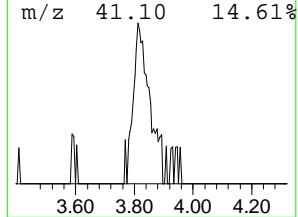
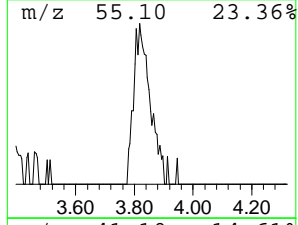
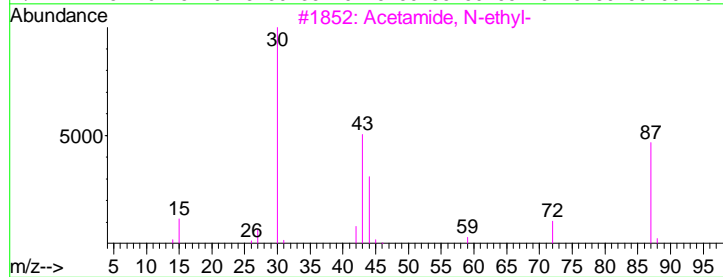
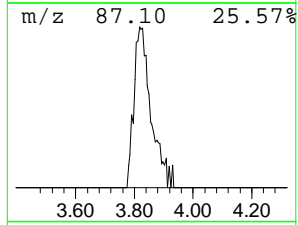
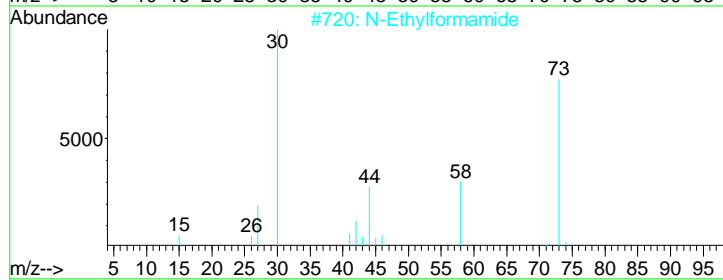
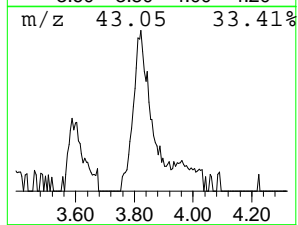
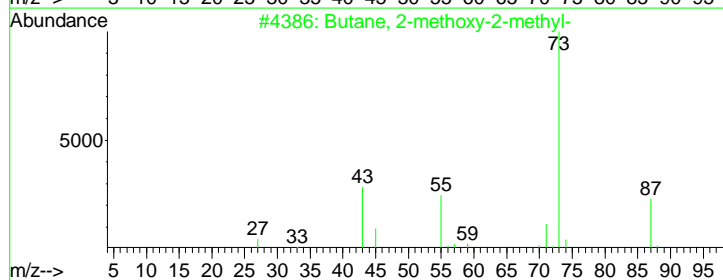
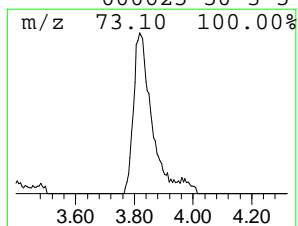
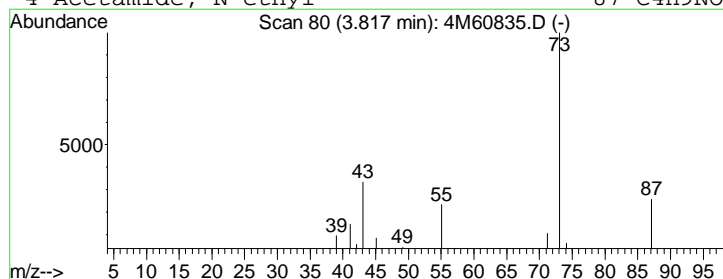
Vial: 20
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

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

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.82	4.15 ug/ml	144644	1,4-Dichlorobenzene-d4	7.23

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	78
2		N-Ethylformamide	73	C3H7NO	000627-45-2	5
3		Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5
4		Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

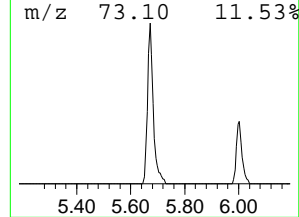
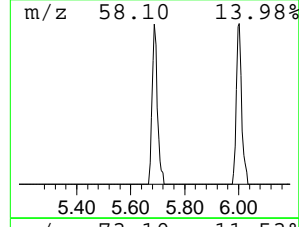
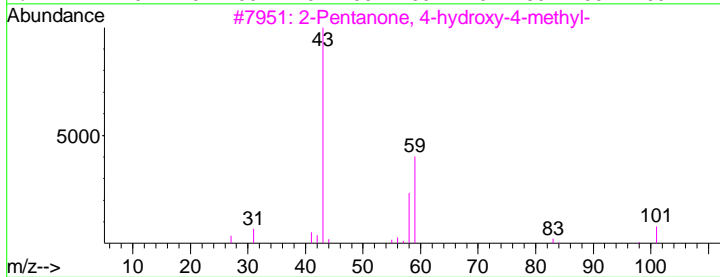
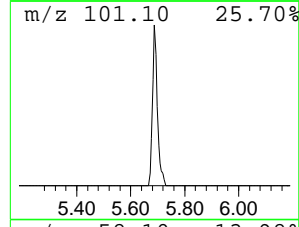
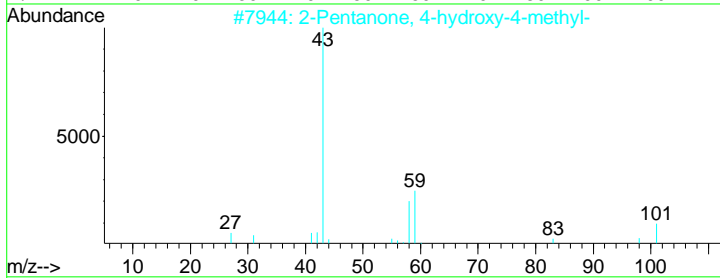
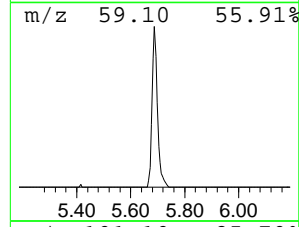
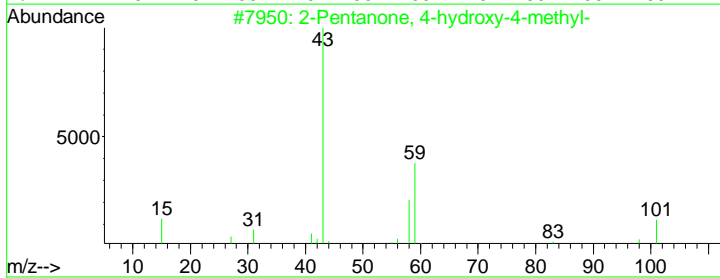
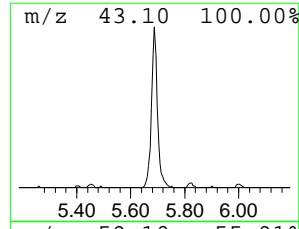
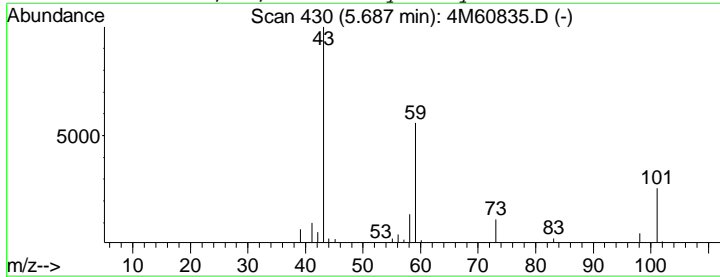
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	8.01 ug/ml	279217	1,4-Dichlorobenzene-d4	7.23

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	42
2			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	42
3			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
4			Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	36



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

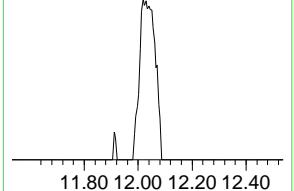
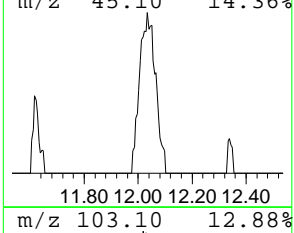
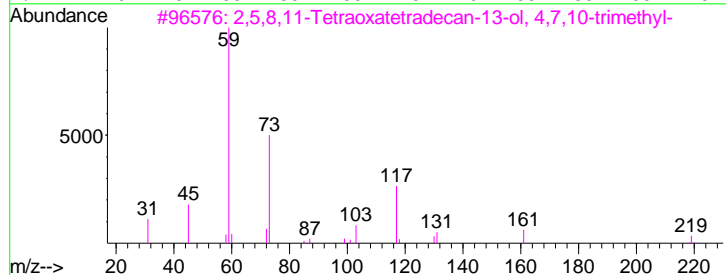
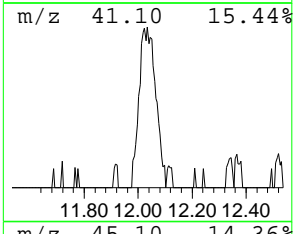
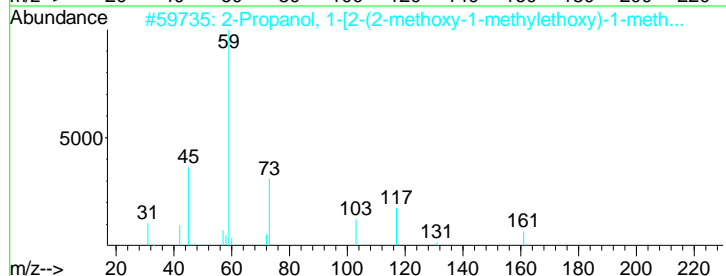
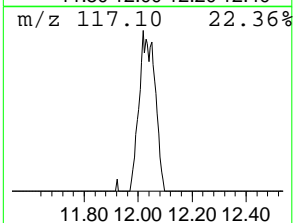
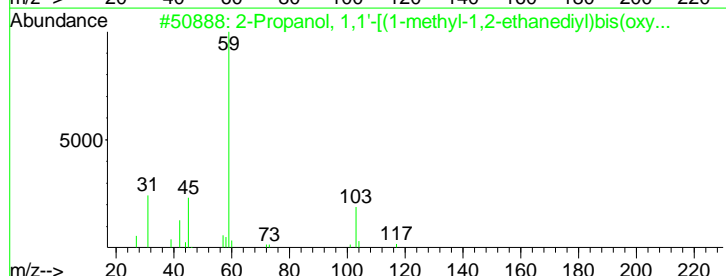
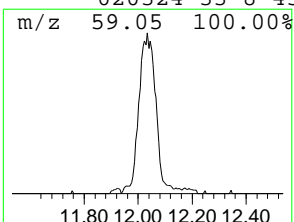
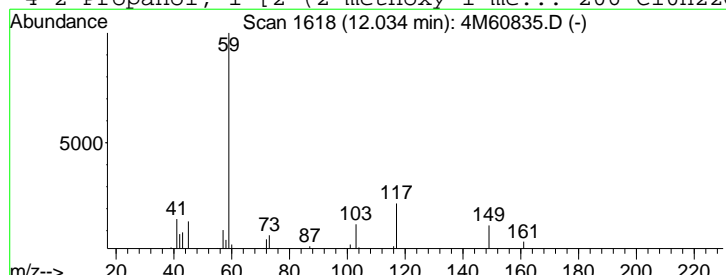
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 3 2-Propanol, 1,1'-[(1-methyl... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.03	5.69 ug/ml	314638	Phenanthrene-d10	11.92

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1,1'-[(1-methyl-1,2-...	192	C9H20O4	001638-16-0	53
2		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	50
3		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
4		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

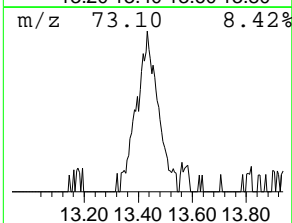
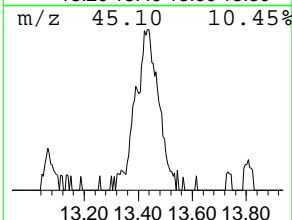
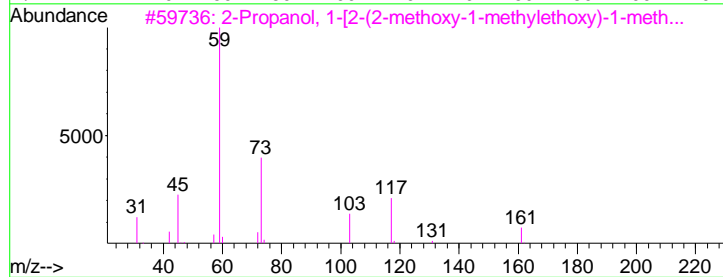
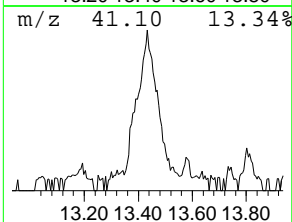
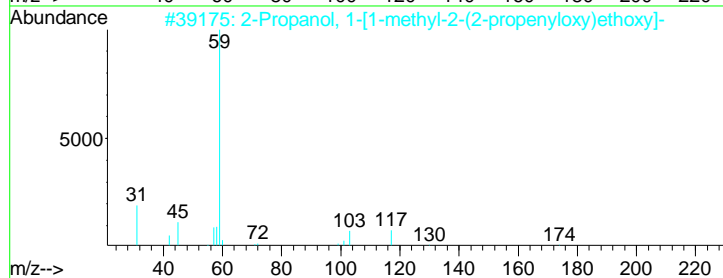
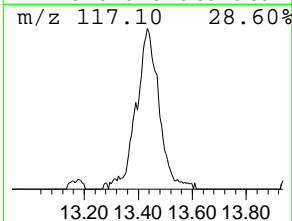
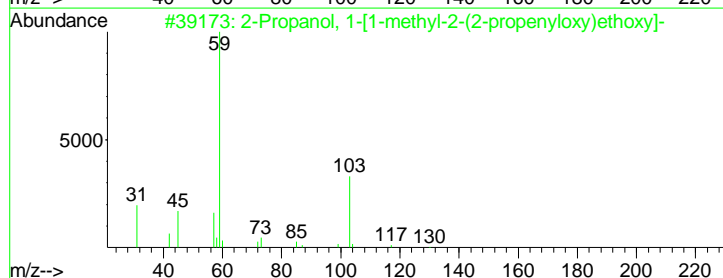
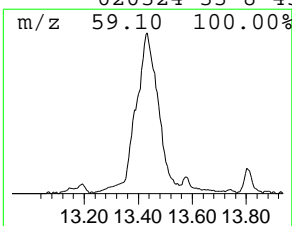
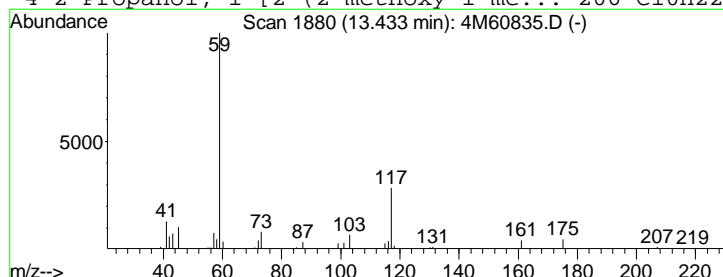
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	14.51 ug/ml	802341	Phenanthrene-d10	11.92

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	53
2		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	53
3		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45
4		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

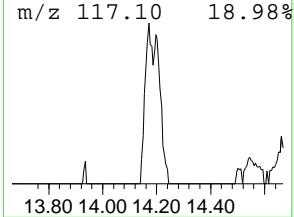
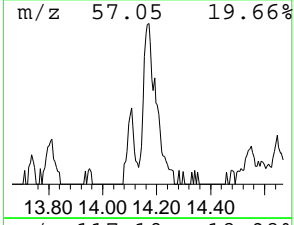
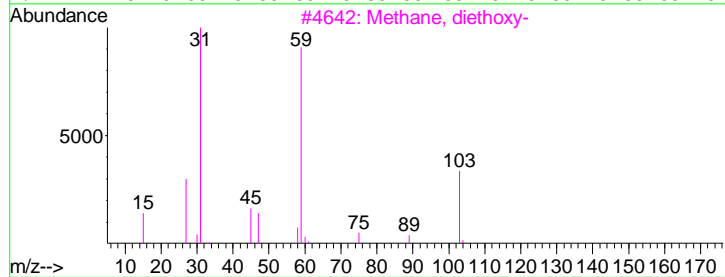
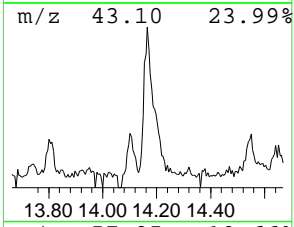
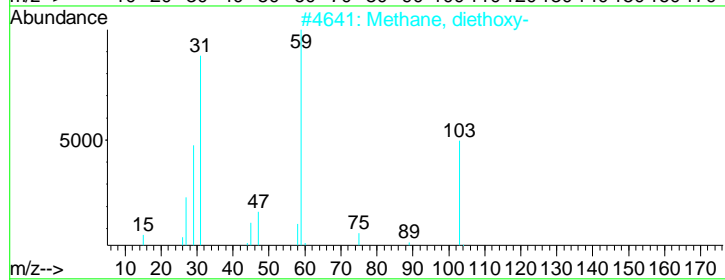
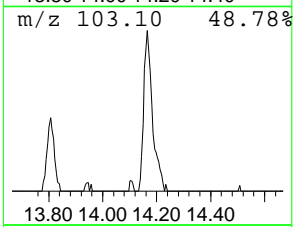
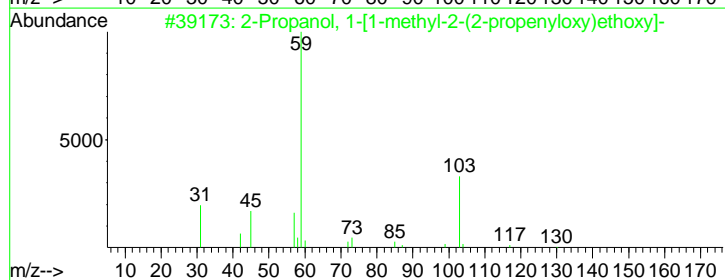
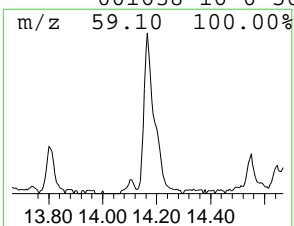
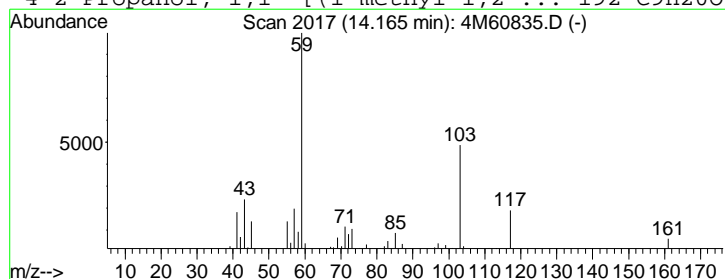
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 5 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.17	5.56 ug/ml	313719	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	72
2		Methane, diethoxy-	104	C5H12O2	000462-95-3	50
3		Methane, diethoxy-	104	C5H12O2	000462-95-3	50
4		2-Propanol, 1,1'-[(1-methyl-1,2-...	192	C9H20O4	001638-16-0	50



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
Acq On : 12 May 2012 21:50
Sample : L12050099-09
Misc : 1,1
MS Integration Params: LSCINT.P

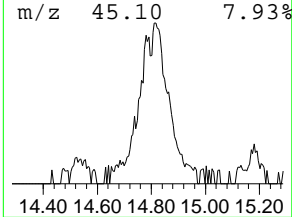
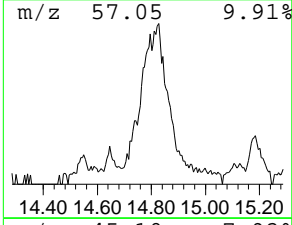
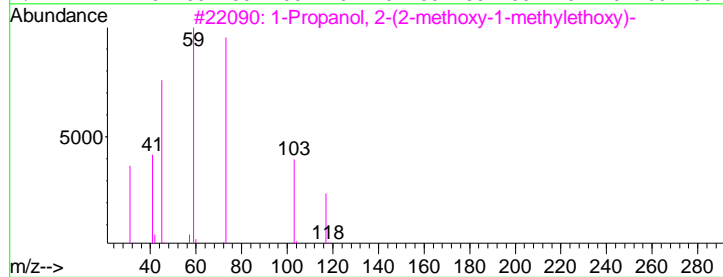
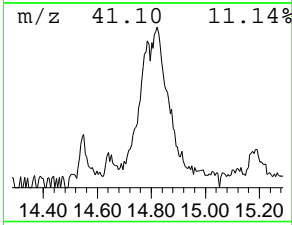
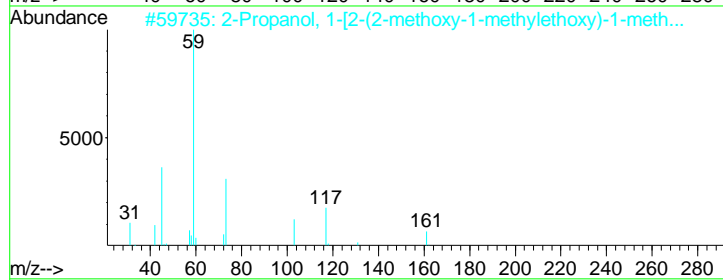
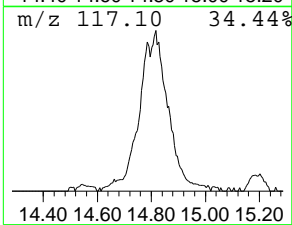
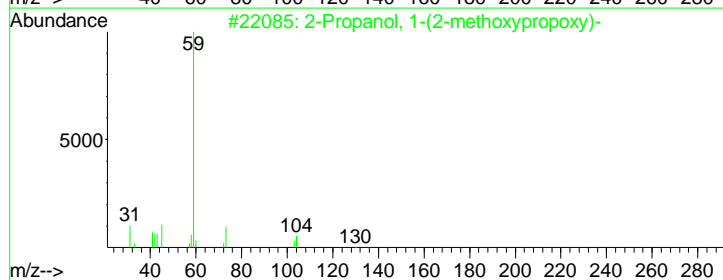
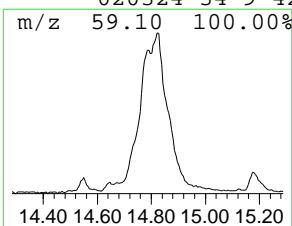
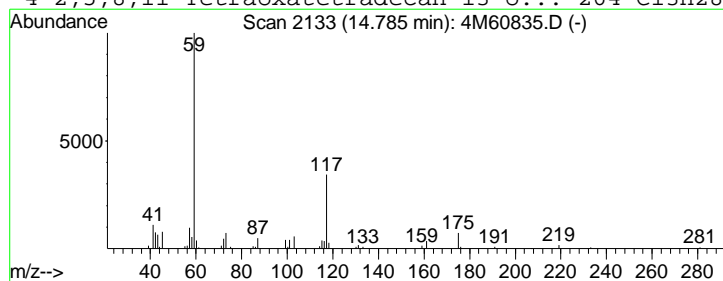
Vial: 20
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

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

Peak Number 6 2-Propanol, 1-(2-methoxypro... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.78	9.83 ug/ml	555165	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	47
2		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42
3		1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	42
4		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	42



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

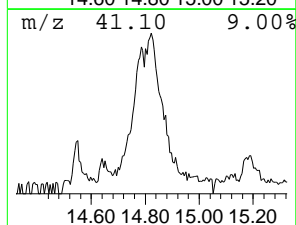
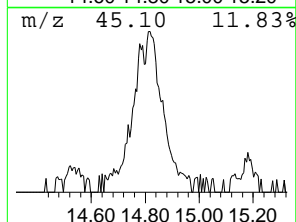
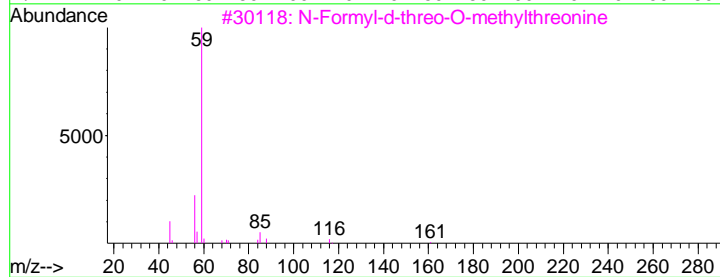
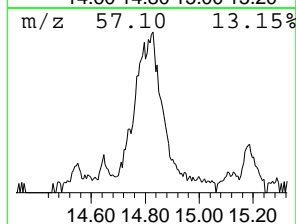
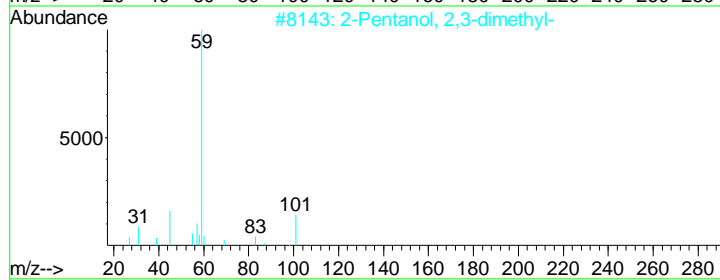
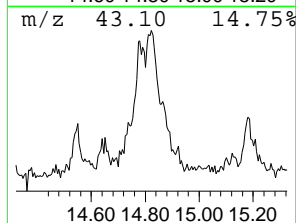
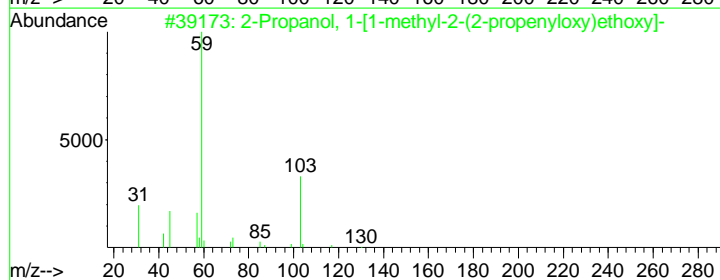
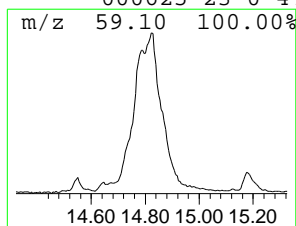
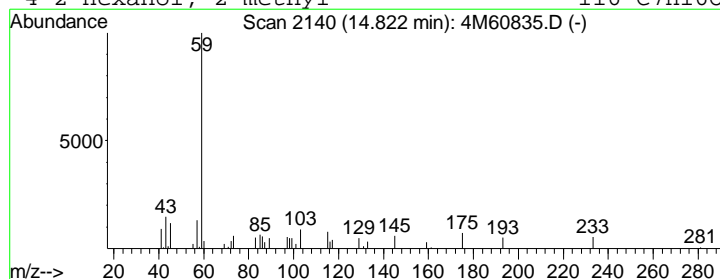
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 7 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	13.25 ug/ml	748105	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	50
2		2-Pentanol, 2,3-dimethyl-	116	C7H16O	004911-70-0	47
3		N-Formyl-d-threo-O-methylthreonine	161	C6H11NO4	1000214-69-5	47
4		2-Hexanol, 2-methyl-	116	C7H16O	000625-23-0	47



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

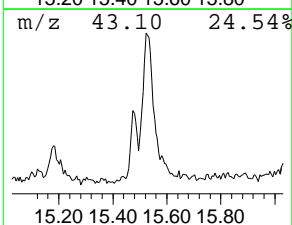
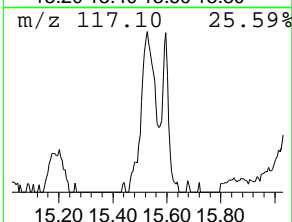
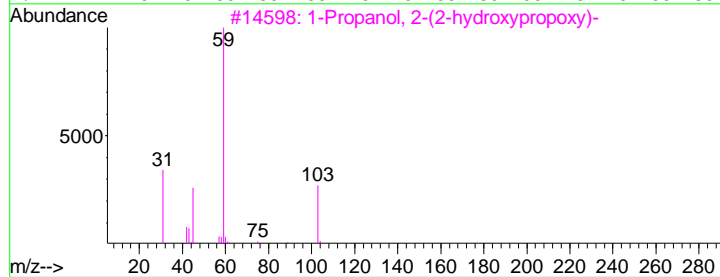
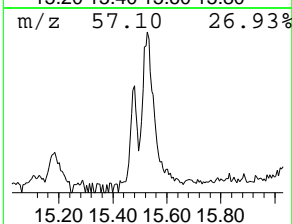
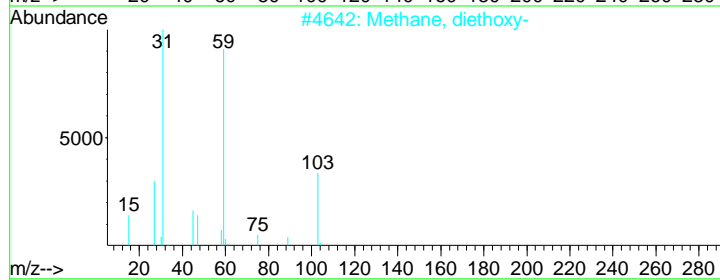
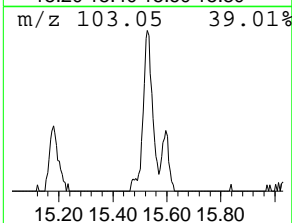
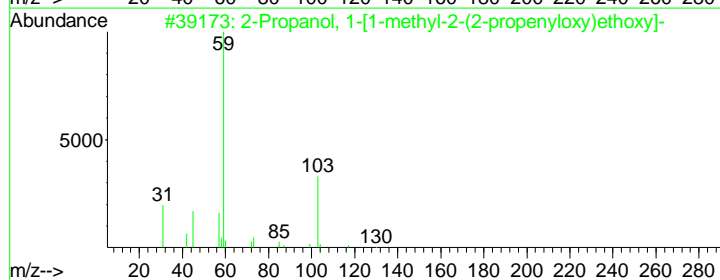
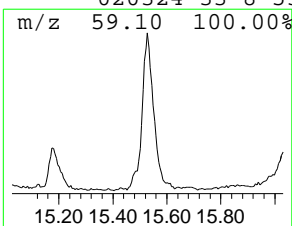
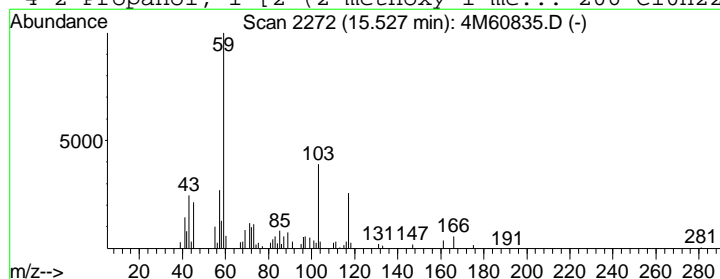
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 8 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.53	7.57 ug/ml	427463	Chrysene-d12	15.60

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	59
2			Methane, diethoxy-	104	C5H12O2	000462-95-3	58
3			1-Propanol, 2-(2-hydroxypropoxy)-	134	C6H14O3	000106-62-7	53
4			2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	53



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

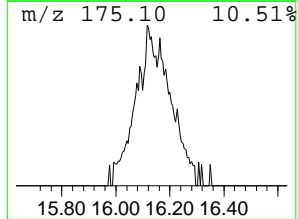
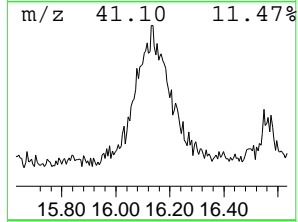
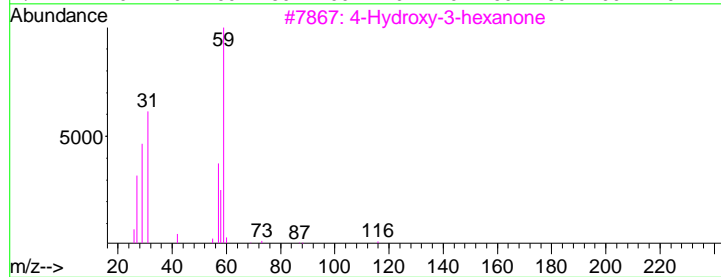
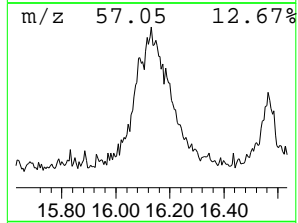
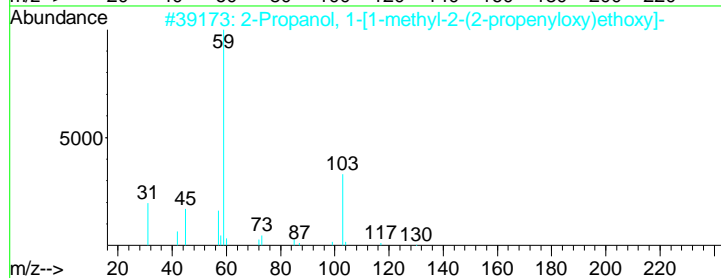
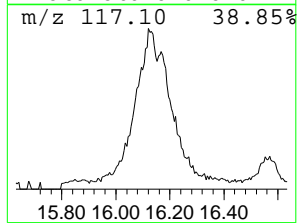
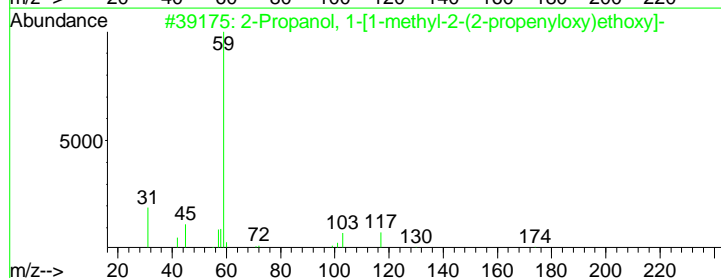
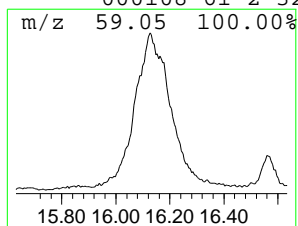
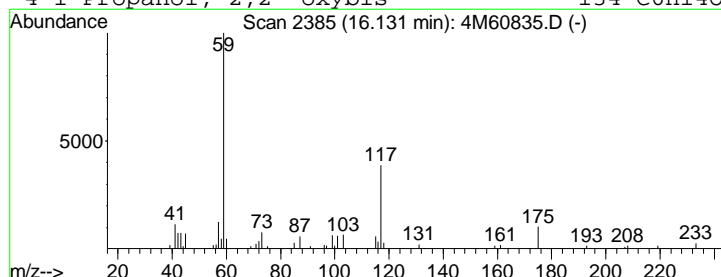
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 9 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.13	10.35 ug/ml	584672	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	38
2		2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	37
3		4-Hydroxy-3-hexanone	116	C6H12O2	004984-85-4	37
4		1-Propanol, 2,2'-oxybis-	134	C6H14O3	000108-61-2	32



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

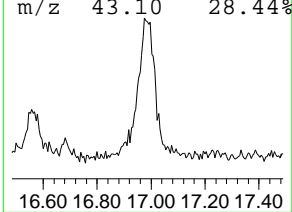
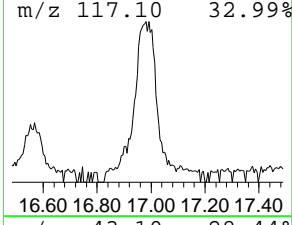
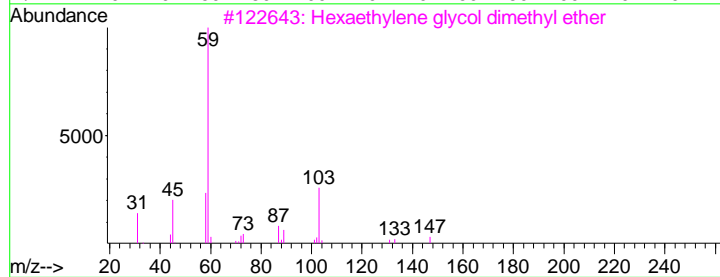
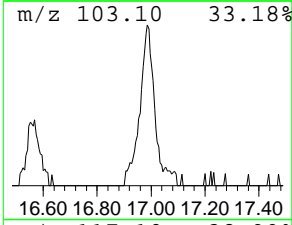
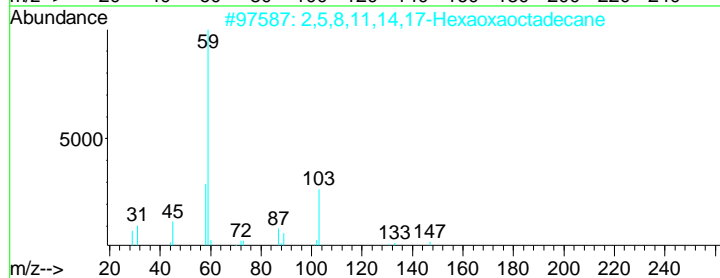
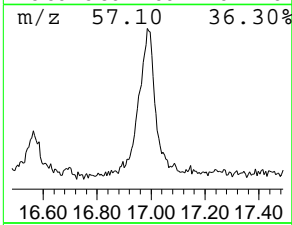
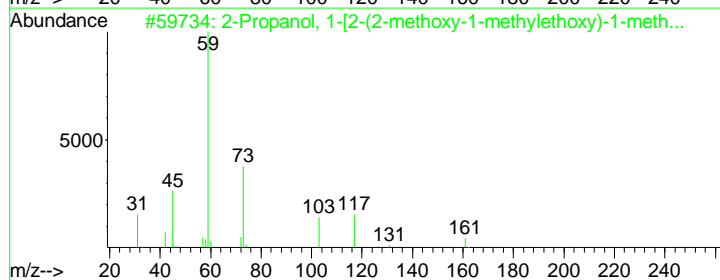
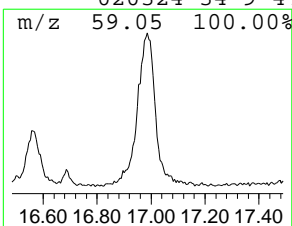
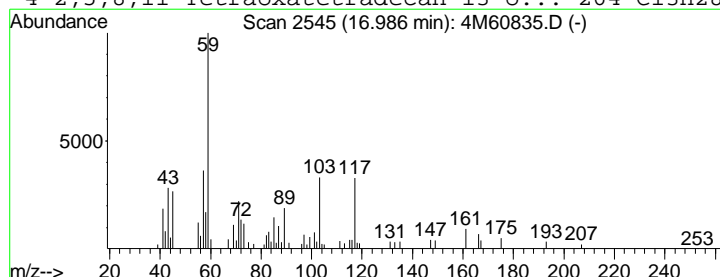
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 10 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.99	10.18 ug/ml	552081	Perylene-d12	18.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	47
2		2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	47
3		Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	47
4		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	47



Data File : I:\MSDCHEM\1\DATA\051212\4M60835.D
 Acq On : 12 May 2012 21:50
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: LSCINT.P

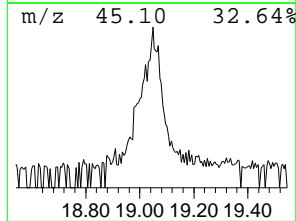
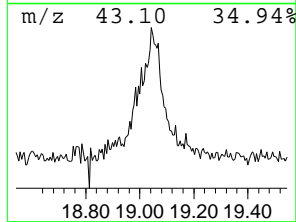
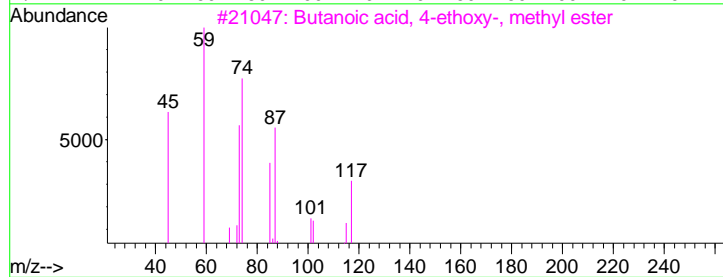
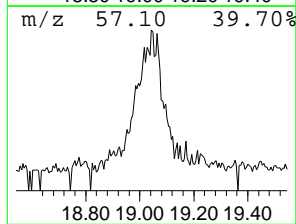
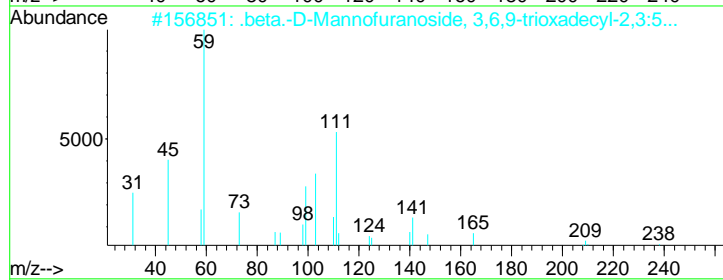
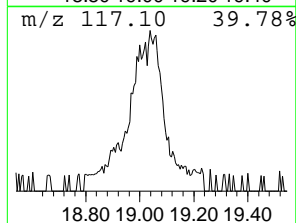
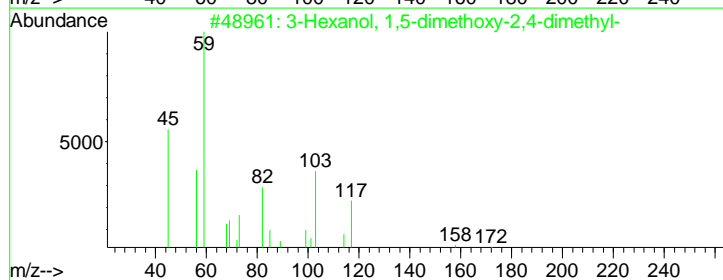
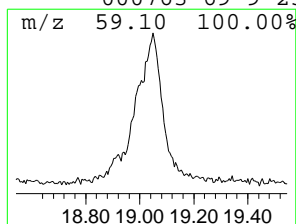
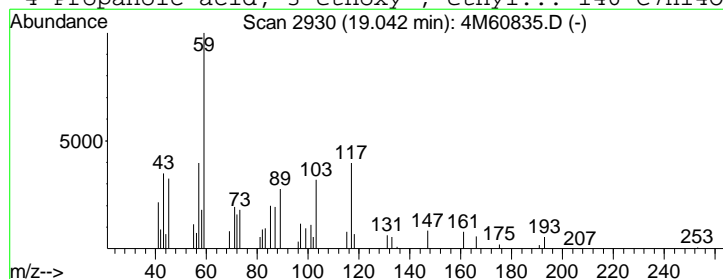
Vial: 20
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 11 3-Hexanol, 1,5-dimethoxy-2,... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.04	6.98 ug/ml	378528	Perylene-d12	18.33

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	33
2		.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	32
3		Butanoic acid, 4-ethoxy-, methyl...	146	C7H14O3	029006-04-0	25
4		Propanoic acid, 3-ethoxy-, ethyl...	146	C7H14O3	000763-69-9	25



Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 21:50
Data File: I:\MSDCHEM\1\DATA\051212\4M60835.D
Name: L12050099-09
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Butane, 2-methoxy...	3.82	4.1	ug/ml	144644	1	7.23	1394960	40.0
2-Pentanone, 4-hy...	5.69	8.0	ug/ml	279217	1	7.23	1394960	40.0
2-Propanol, 1,1'-...	12.03	5.7	ug/ml	314638	4	11.92	2211110	40.0
2-Propanol, 1-[1-...	13.43	14.5	ug/ml	802341	4	11.92	2211110	40.0
2-Propanol, 1-[1-...	14.17	5.6	ug/ml	313719	5	15.60	2258820	40.0
2-Propanol, 1-(2-...	14.78	9.8	ug/ml	555165	5	15.60	2258820	40.0
2-Propanol, 1-[1-...	14.82	13.2	ug/ml	748105	5	15.60	2258820	40.0
2-Propanol, 1-[1-...	15.53	7.6	ug/ml	427463	5	15.60	2258820	40.0
2-Propanol, 1-[1-...	16.13	10.4	ug/ml	584672	5	15.60	2258820	40.0
2-Propanol, 1-[2-...	16.99	10.2	ug/ml	552081	6	18.33	2170160	40.0
3-Hexanol, 1,5-di...	19.04	7.0	ug/ml	378528	6	18.33	2170160	40.0

2.2.1.4 Standards Data

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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)eth	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

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 Ether	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) Sulfolon	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

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
 Acq On : 19 Apr 2012 9:22 Operator: CAA
 Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
 Misc : 1,1 STD50886 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Thu Apr 19 14:19:39 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97) Dimethoate	11.56	87	339058	61.7901	ug/ml	100
98) 4-Aminobiphenyl	11.72	169	362625	53.7158	ug/ml	100
99) Pentachlorophenol	11.81	266	206843	60.4342	ug/ml	98
100) Pronamide	11.75	173	474797	52.5004	ug/ml	99
101) Pentachloronitrobenzene	11.90	237	112466	52.7533	ug/ml	98
102) Disulfoton	11.94	88	525023	51.7079	ug/ml	99
103) Phenanthrene	12.03	178	1519697	53.8500	ug/ml	100
104) Anthracene	12.08	178	1564112	53.9305	ug/ml	100
105) Carbazole	12.24	167	1383835	51.1066	ug/ml	100
106) Parathion Methyl	12.41	109	332197	61.4956	ug/ml	98
107) Di-n-Butyl Phthalate	12.60	149	1699050	53.3192	ug/ml	100
108) Parathion Ethyl	12.89	97	202803	51.9363	ug/ml	97
109) 4-Nitroquinoline 1-Oxide	12.99	190	164563	87.9970	ug/ml	99
110) Methapyrilene	13.05	58	313634	53.4102	ug/ml	99
111) Isodrin	13.40	193	164002	52.0160	ug/ml	99
112) Fluoranthene	13.58	202	1596911	54.0089	ug/ml	99
114) Benzidine	13.69	184	13235	391.6902	ug/ml	100
115) Pyrene	13.91	202	1618198	52.1353	ug/ml	100
116) Aramite	13.94	185	96625	51.3784	ug/ml	99
118) p-(Dimethylamino)azobenzen	14.25	225	344938	52.1731	ug/ml	96
119) Chlorobenzilate	14.29	251	452662	52.1067	ug/ml	98
120) Famphur	14.70	218	19662	24.2241	ug/ml#	52
121) Butyl Benzyl Phthalate	14.72	149	736908	49.5460	ug/ml	99
122) 3,3'-Dimethylbenzidine	14.73	212	265248	88.0533	ug/ml	97
123) 2-Acetylaminofluorene	15.15	181	672726	50.6242	ug/ml	99
124) bis(2-Ethylhexyl)phthalate	15.57	149	1020072	51.9755	ug/ml	100
125) 3,3'-Dichlorobenzidine	15.58	252	322552	62.1461	ug/ml	99
126) Benzo[a]anthracene	15.66	228	1436678	52.4916	ug/ml	100
127) Chrysene	15.73	228	1327816	51.8780	ug/ml	99
129) Di-n-Octyl Phthalate	16.55	149	1737436	49.8326	ug/ml	99
130) 7,12-Dimethylbenz[a]anthra	17.62	256	693312	52.0347	ug/ml	99
131) Benzo[b]fluoranthene	17.62	252	1510511	48.9916	ug/ml	99
132) Benzo[k]fluoranthene	17.67	252	1477424	55.0736	ug/ml	96
133) Benzo[a]pyrene	18.36	252	1420992	50.6605	ug/ml	100
134) 3-Methylcholanthrene	19.26	268	780637	51.2505	ug/ml	99
135) Indeno[1,2,3-cd]pyrene	21.62	276	1616295	49.1334	ug/ml	99
136) Dibenz[ah]anthracene	21.61	278	1352159	49.3321	ug/ml	100
137) Benzo[ghi]perylene	22.55	276	1336874	49.0395	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60439.D MEGAMIX.M Fri Apr 20 08:18:56 2012

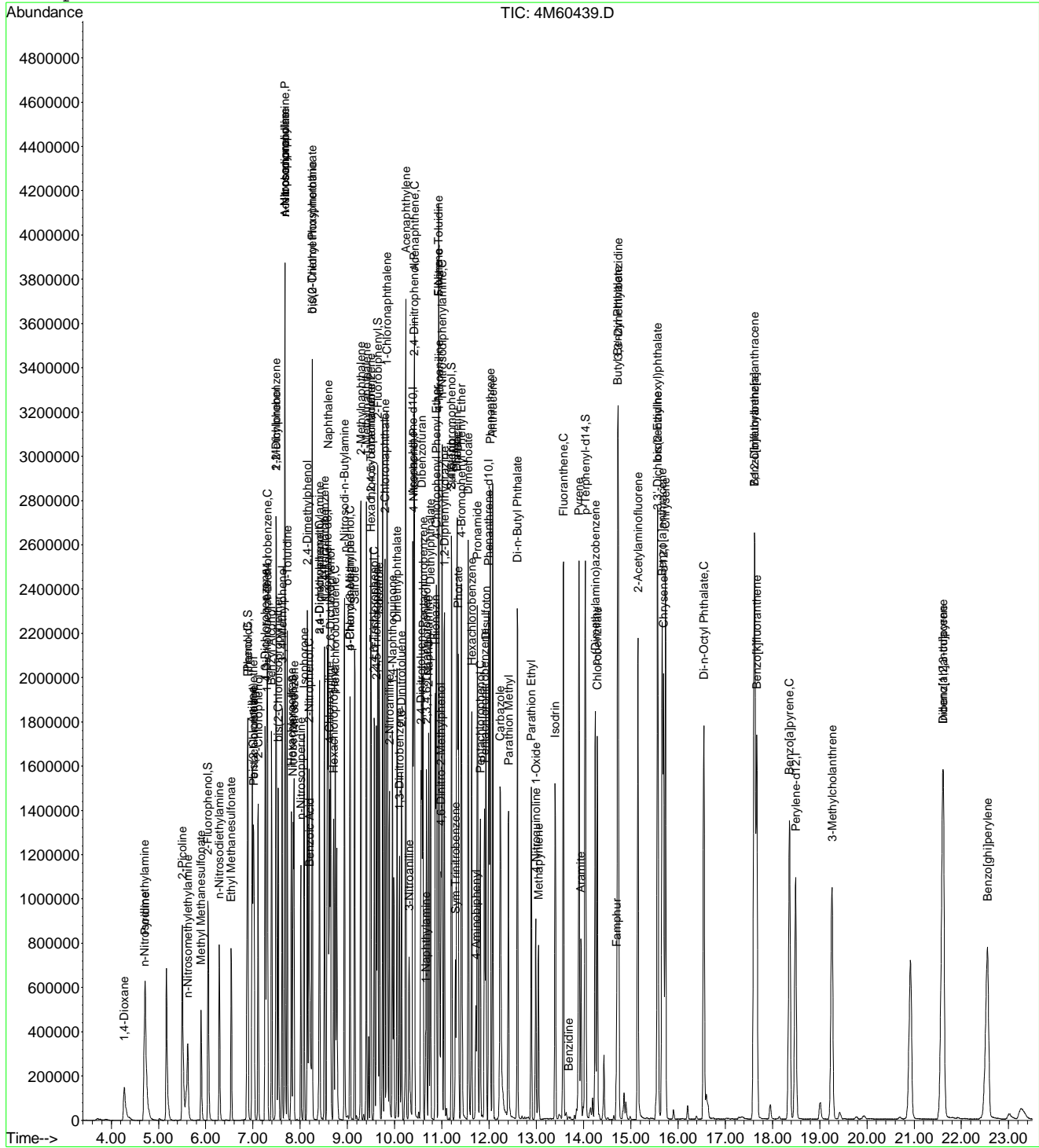
Page 3

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D
Acq On : 19 Apr 2012 9:22
Sample : WG395394-02 50PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012

Vial: 2
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

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

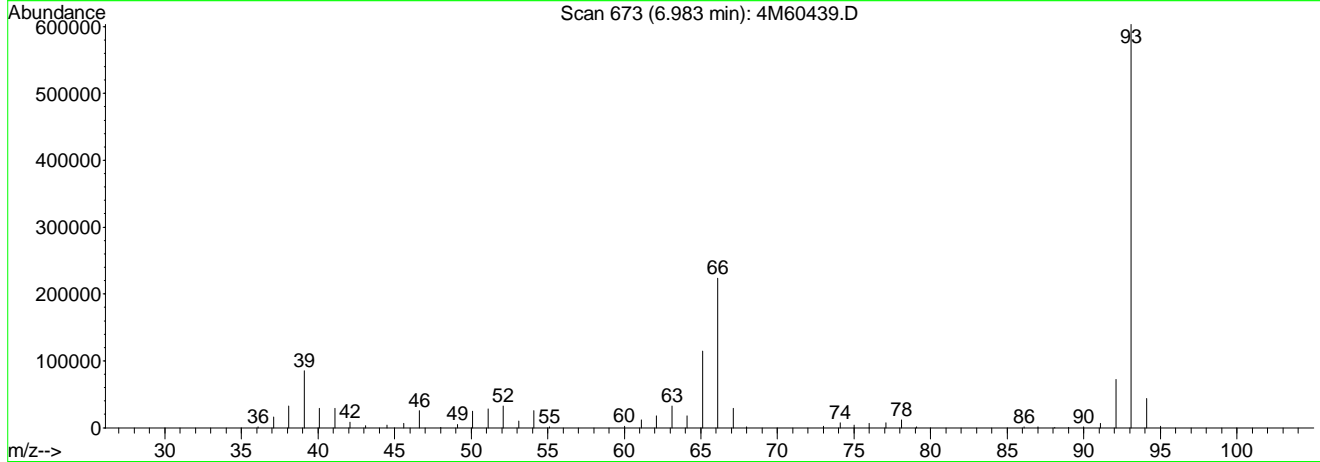
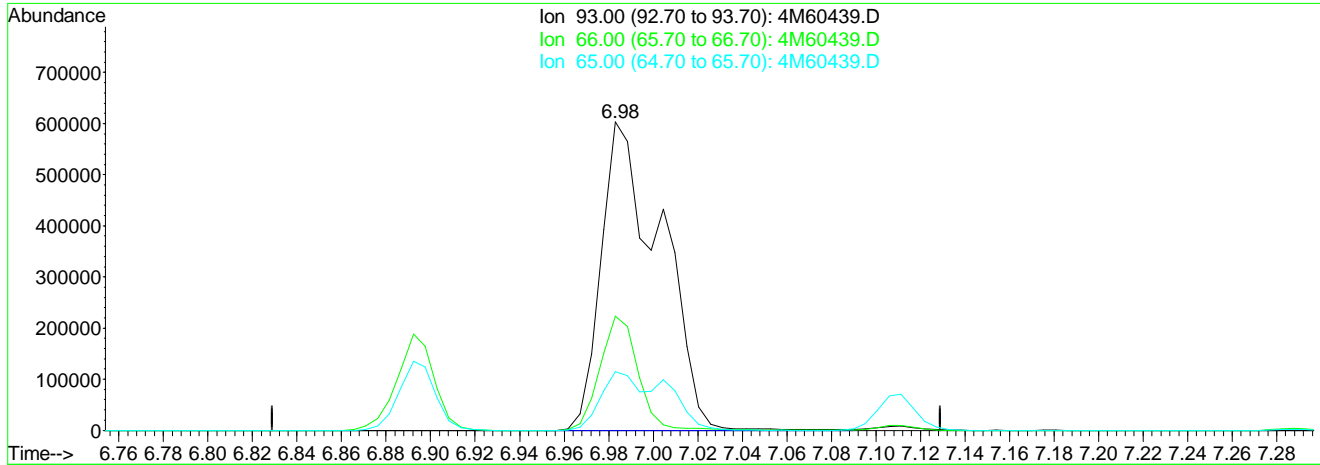


Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D
 Acq On : 19 Apr 2012 9:22
 Sample : WG395394-02 50PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:19 2012

Vial: 2
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

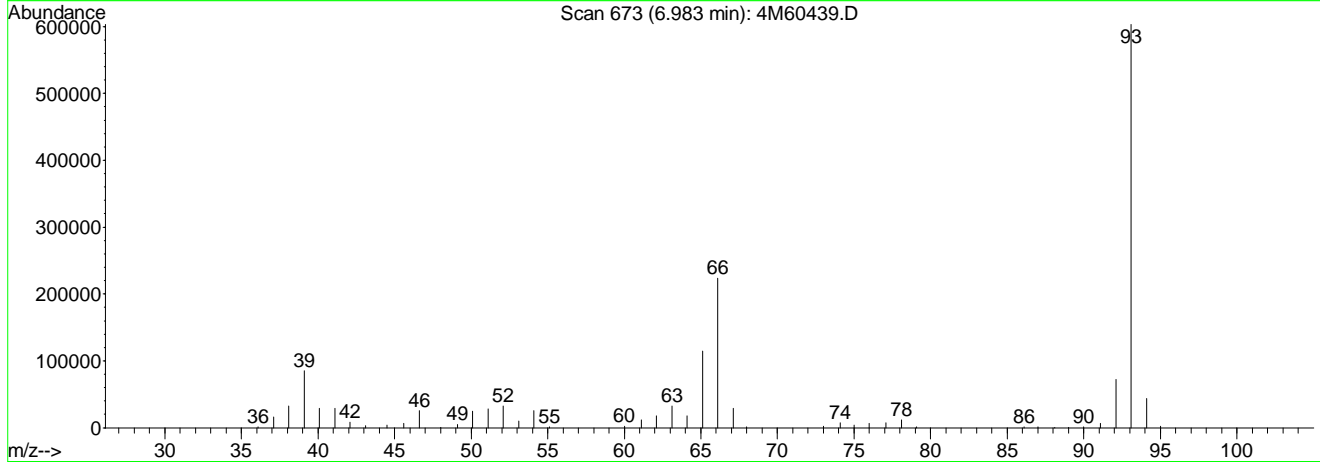
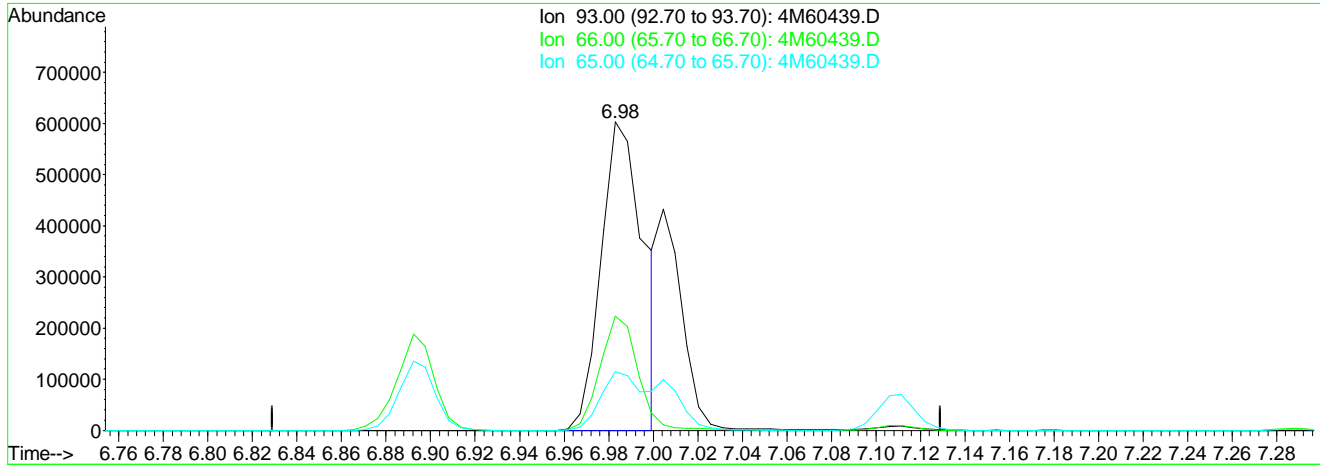
Ion	Exp%	Act%
93.00	100	100
66.00	42.70	23.58#
65.00	19.20	20.60
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D
 Acq On : 19 Apr 2012 9:22
 Sample : WG395394-02 50PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:19 2012

Vial: 2
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

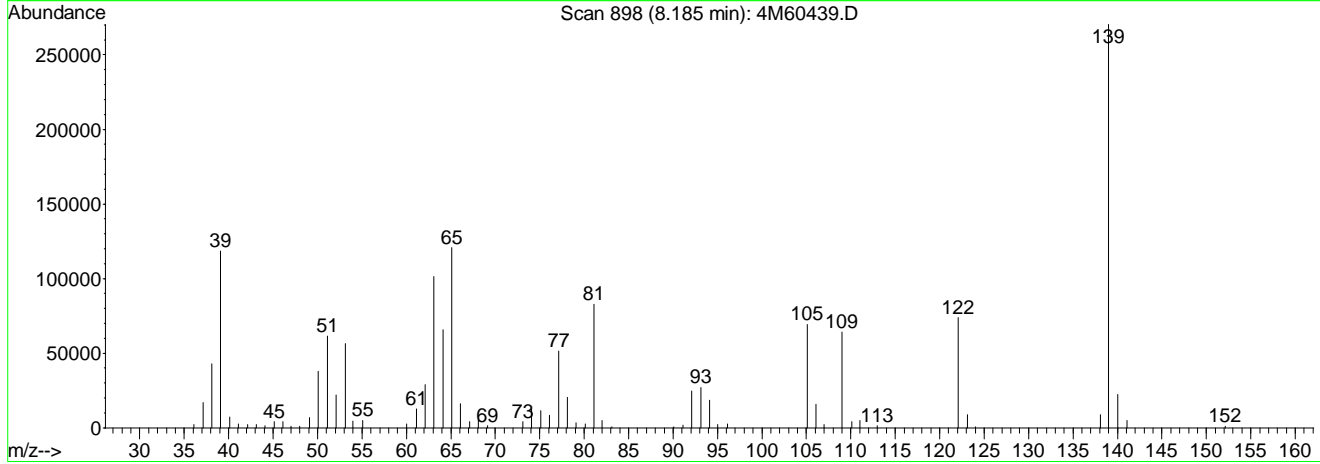
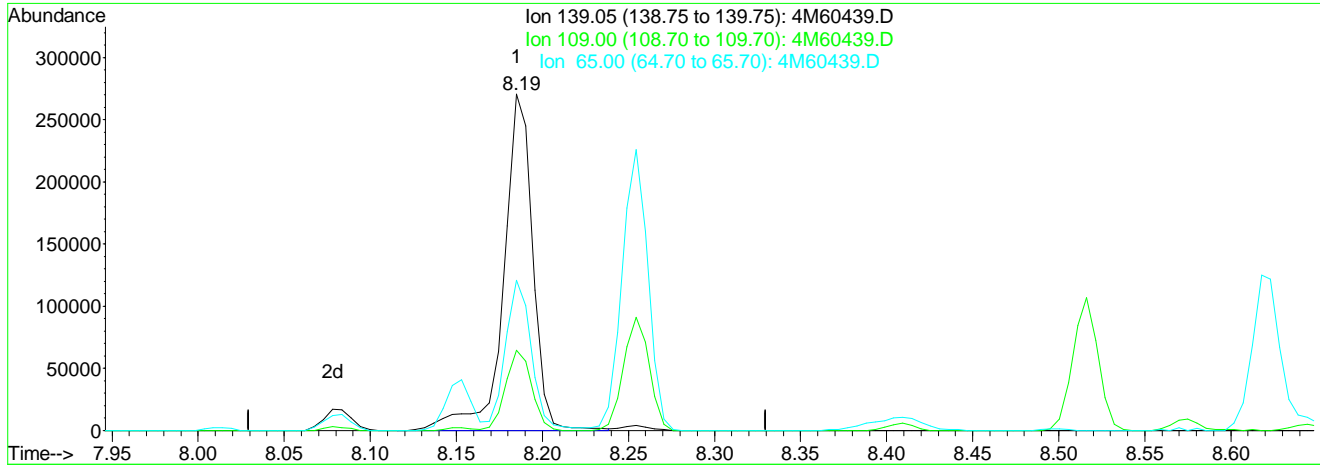
Analyst: 04/20/2012 09:30
 Supervisor: 04/20/2012 11:41
 #3 - Improperly integrated isomers and/or coeluting compounds

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D
 Acq On : 19 Apr 2012 9:22
 Sample : WG395394-02 50PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:19 2012

Vial: 2
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

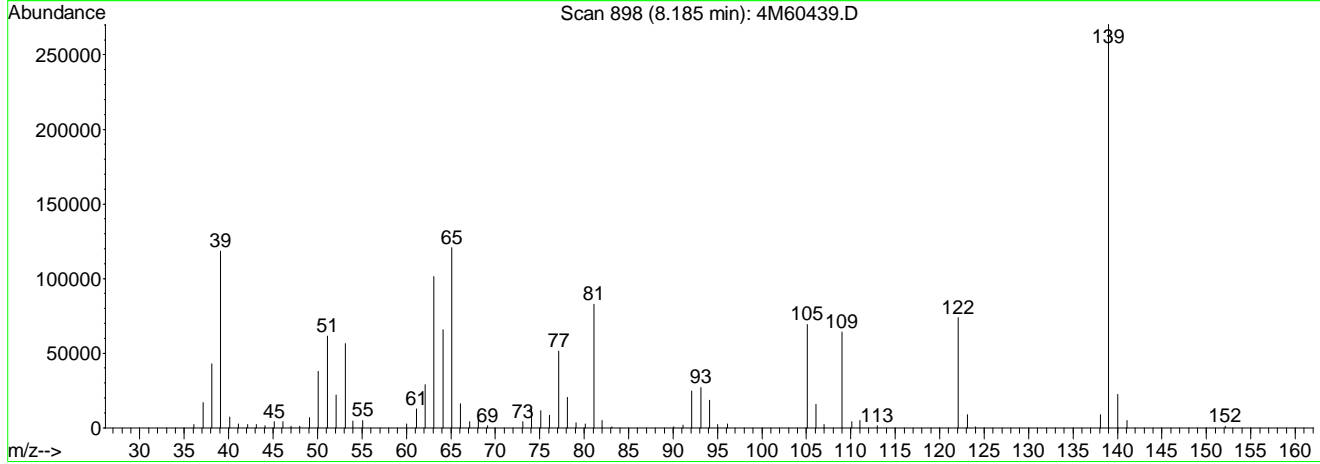
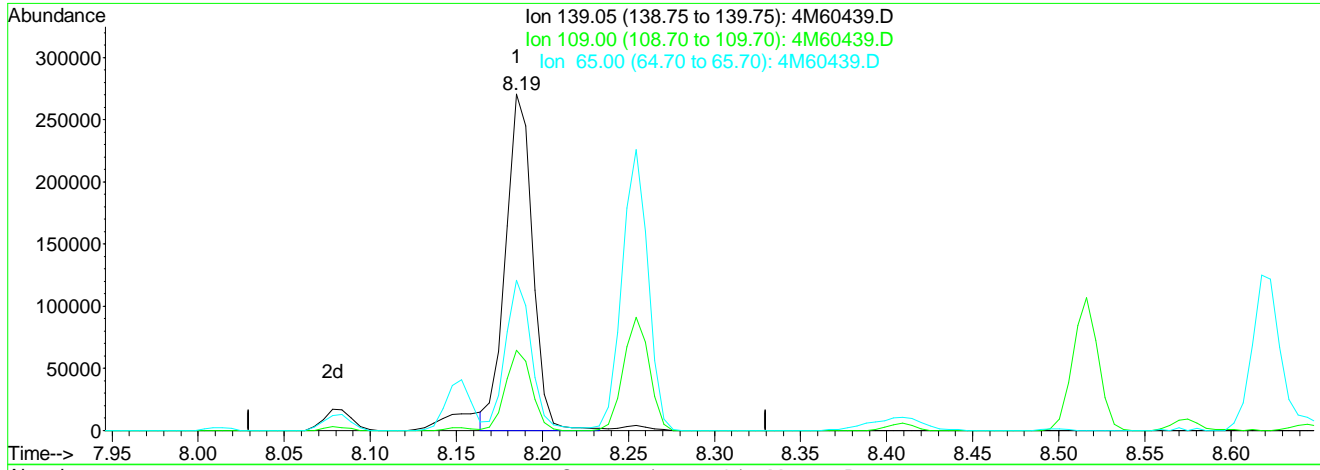
Ion	Exp%	Act%
139.05	100	100
109.00	16.10	21.09
65.00	37.90	40.29
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D
 Acq On : 19 Apr 2012 9:22
 Sample : WG395394-02 50PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:20 2012

Vial: 2
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41
 C. A. Augustin 2012
 #3 - Improperly integrated isomers and/or coeluting compounds

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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)eth	7.53	45	42714	3.5051	ug/ml	96
23) 3-,4-Methylphenol	7.61	107	29104	3.3376	ug/ml	98
24) n-Nitrosopyrrolidine	7.66	100	13086	3.5346	ug/ml	81
25) n-Nitrosodipropylamine	7.67	70	19190	4.0606	ug/ml	93
26) Acetophenone	7.68	105	38723	4.0393	ug/ml	99
27) n-Nitrosomorpholine	7.67	56	18655	4.1044	ug/ml	96
28) o-Toluidine	7.72	106	46596	3.5537	ug/ml	97
29) Hexachloroethane	7.81	117	11768	3.1652	ug/ml	97
32) Nitrobenzene	7.87	77	28033	3.4846	ug/ml	95
33) n-Nitrosopiperidine	8.01	114	14470	3.2997	ug/ml	96
34) Isophorone	8.08	82	51229	3.5834	ug/ml	98
35) 2-Nitrophenol	8.19	139	14686	2.7155	ug/ml	97
36) 2,4-Dimethylphenol	8.15	122	33490	4.3356	ug/ml	82
37) 0,0,0-Triethyl Phosphoroth	8.25	198	14464	3.8966	ug/ml	99
38) bis(2-Chloroethoxy)methane	8.25	93	39621	3.8831	ug/ml	97

(#) = qualifier out of range (m) = manual integration
 4M60440.D MEGAMIX.M Fri Apr 20 08:18:57 2012

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 Ether	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) Sulfofatep	11.20	322	9525	3.5392	ug/ml	97
91) Sym-Trinitrobenzene	11.27	75	9014	2.0672	ug/ml	95
92) Diallylate	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
 4M60440.D MEGAMIX.M Fri Apr 20 08:18:57 2012

Page 2

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

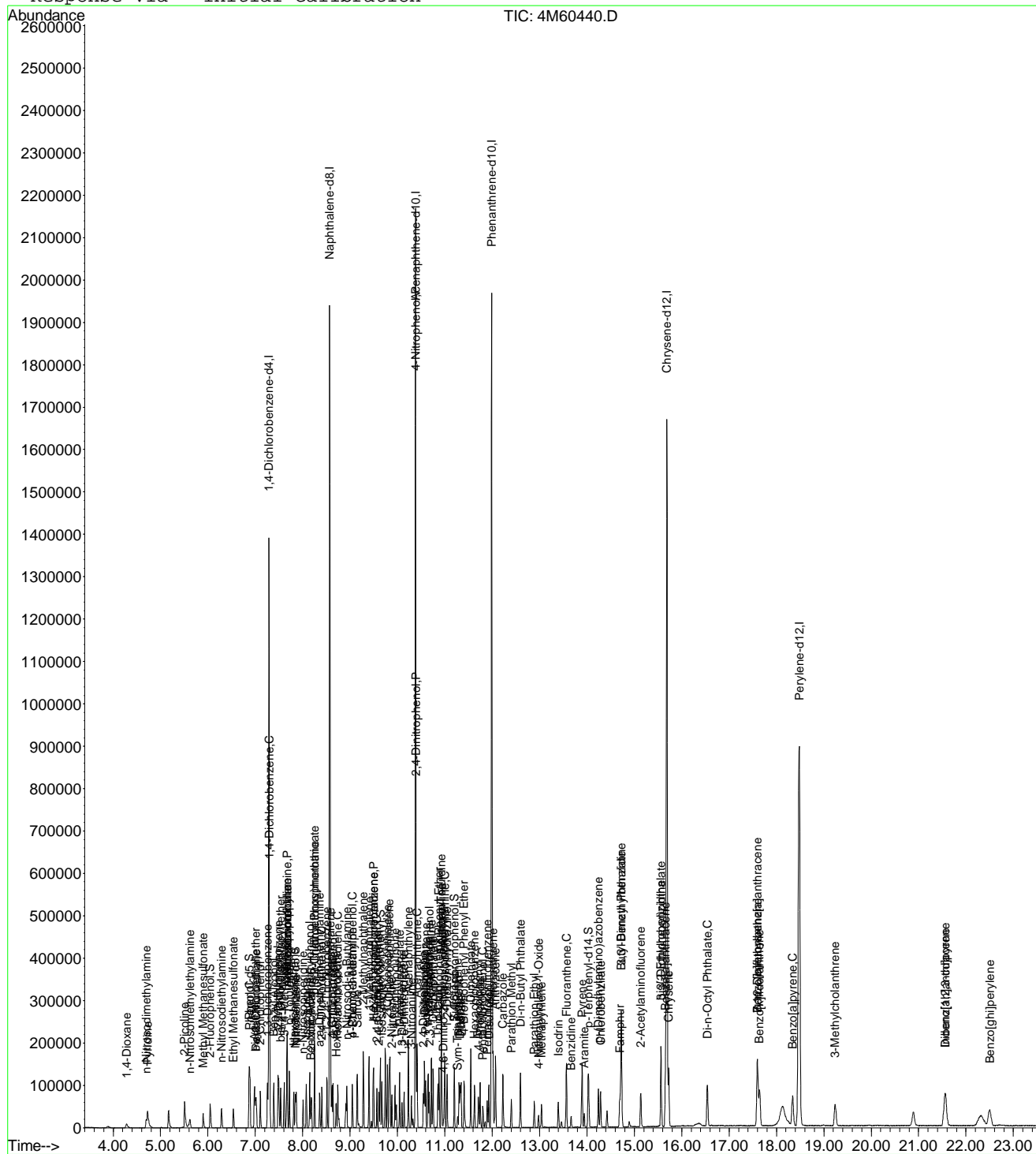
Page 3

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D
Acq On : 19 Apr 2012 9:56
Sample : WG395394-03 3PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012

Vial: 3
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

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



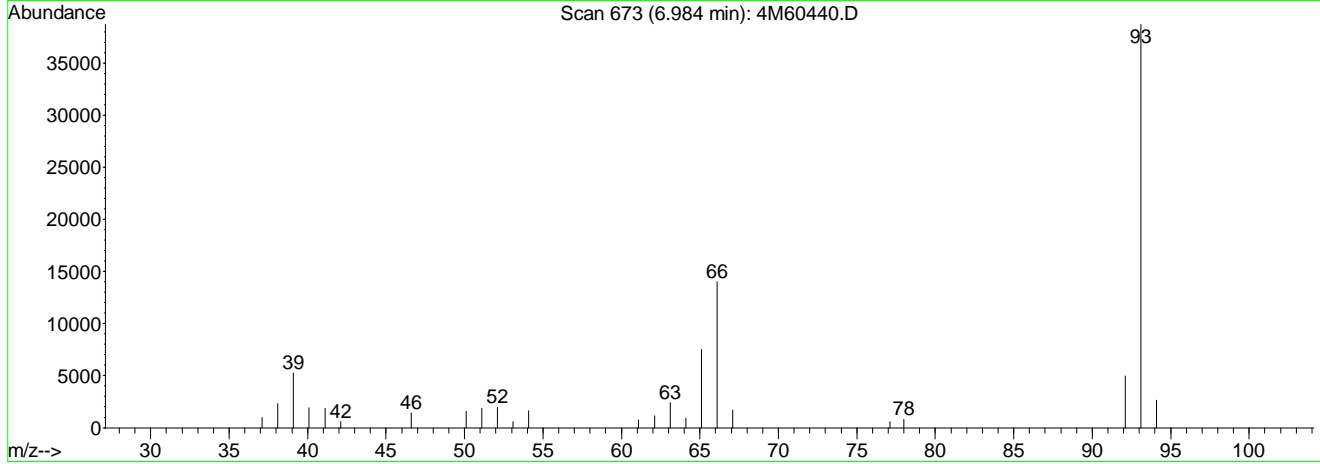
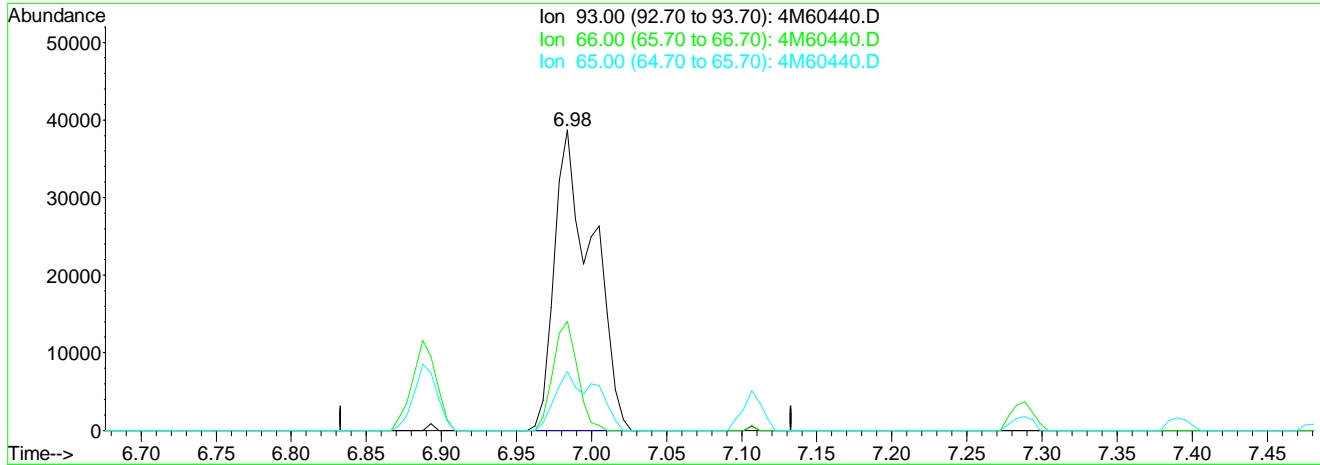
Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D
 Acq On : 19 Apr 2012 9:56
 Sample : WG395394-03 3PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:20 2012

Vial: 3
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

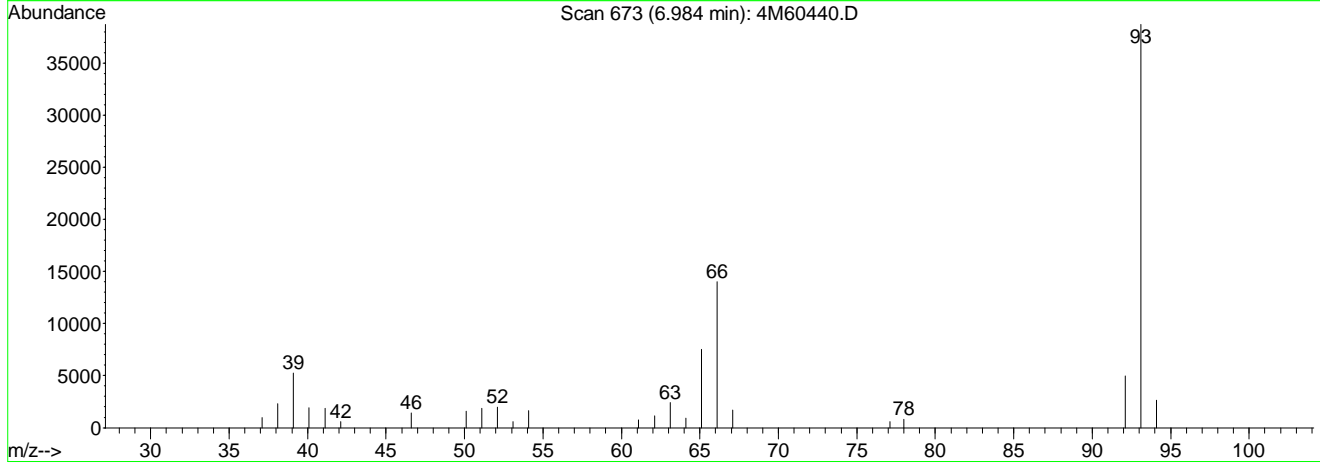
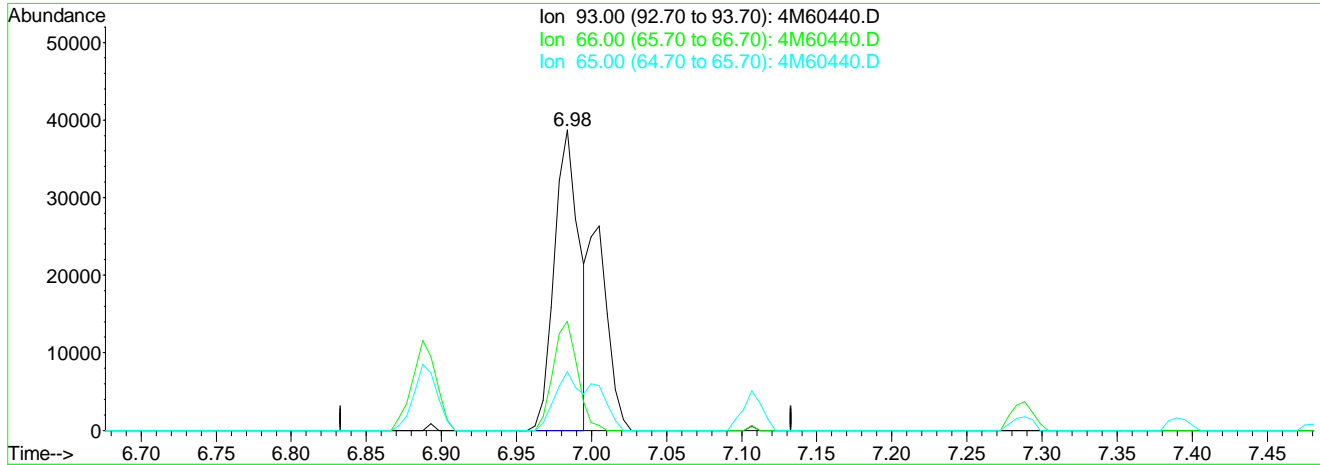
Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D
 Acq On : 19 Apr 2012 9:56
 Sample : WG395394-03 3PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:20 2012

Vial: 3
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30
 Supervisor: 04/20/2012 11:41
 2012
 #3 - Improperly integrated isomers and/or coeluting compounds

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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)eth	7.53	45	123081	11.3525	ug/ml	98
23) 3-,4-Methylphenol	7.61	107	83719	10.7913	ug/ml	99
24) n-Nitrosopyrrolidine	7.66	100	38063	11.5559	ug/ml	82
25) n-Nitrosodipropylamine	7.67	70	56111	13.3456	ug/ml	94
26) Acetophenone	7.68	105	108025	12.6657	ug/ml	100
27) n-Nitrosomorpholine	7.67	56	52883	13.0781	ug/ml	98
28) o-Toluidine	7.72	106	128542	11.0191	ug/ml	100
29) Hexachloroethane	7.81	117	35410	10.7053	ug/ml	99
32) Nitrobenzene	7.86	77	78736	10.9863	ug/ml	98
33) n-Nitrosopiperidine	8.01	114	42184	10.7982	ug/ml	96
34) Isophorone	8.08	82	147532	11.5841	ug/ml	99
35) 2-Nitrophenol	8.18	139	44266	9.1879	ug/ml	95
36) 2,4-Dimethylphenol	8.15	122	81553	11.8506	ug/ml	96
37) 0,0,0-Triethyl Phosphoroth	8.25	198	41424	12.5273	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	115030	12.6553	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60441.D MEGAMIX.M Fri Apr 20 08:18:57 2012

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 Ether	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) Sulfofatep	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
 4M60441.D MEGAMIX.M Fri Apr 20 08:18:58 2012

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

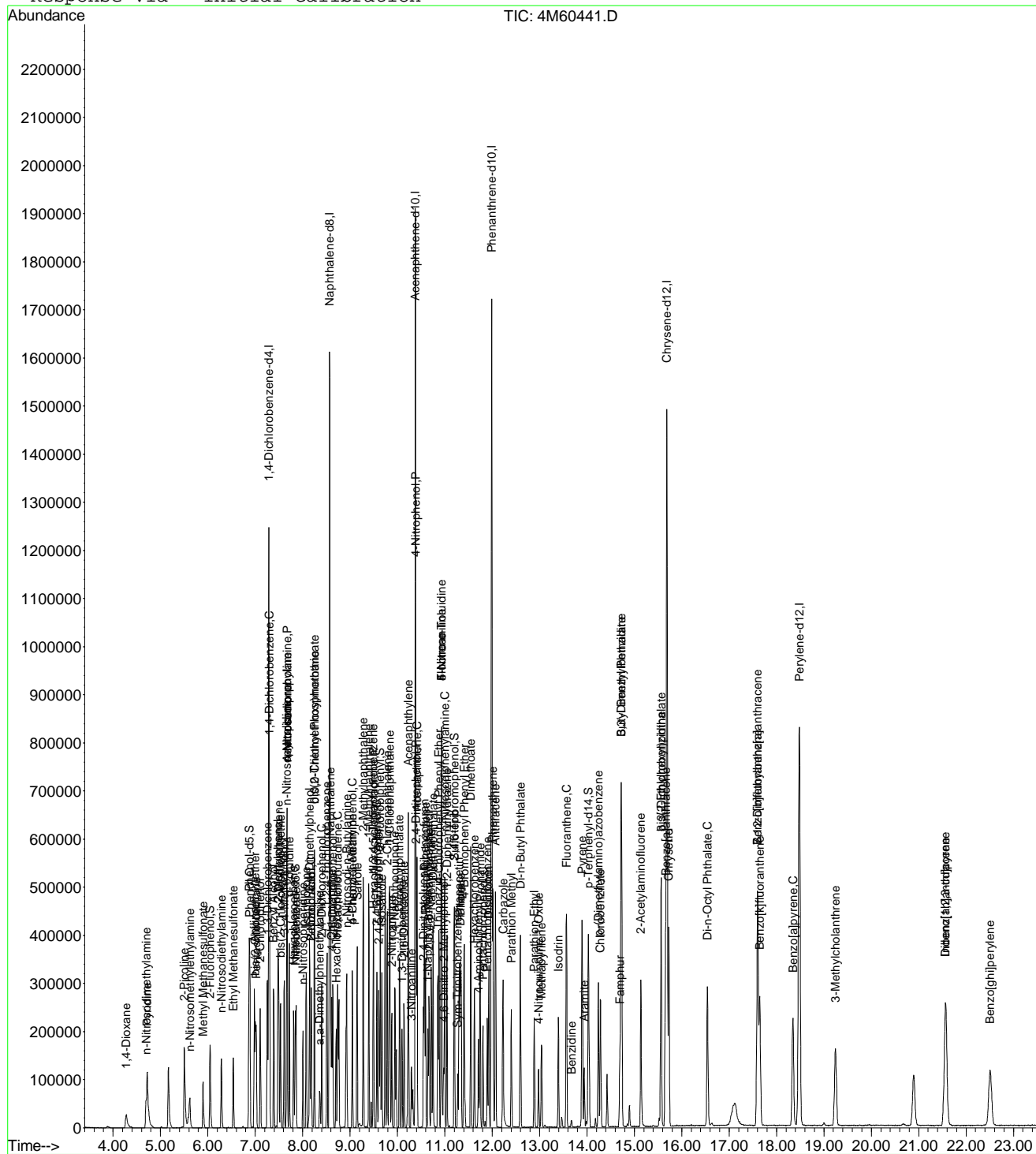
Page 3

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D
Acq On : 19 Apr 2012 10:30
Sample : WG395394-04 10PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21 2012

Vial: 4
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

Quant Results File: MEGAMIX.RES

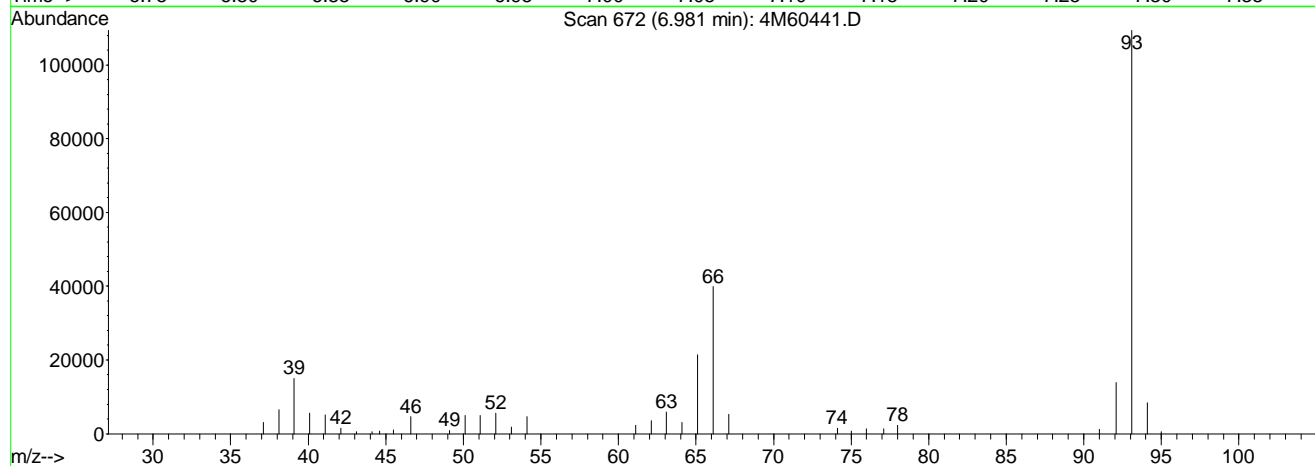
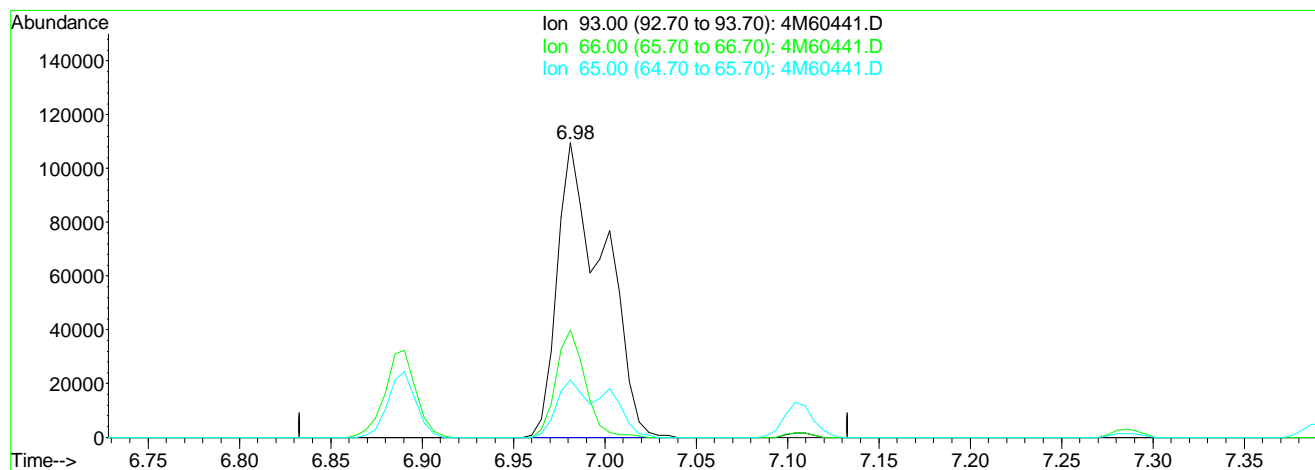
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D Vial: 4
 Acq On : 19 Apr 2012 10:30 Operator: CAA
 Sample : WG395394-04 10PPM Megamix STD Inst : HPMS4
 Misc : 1,1 STD50886 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Thu Apr 19 14:21:15 2012
 Response via : Multiple Level Calibration



TIC: 4M60441.D

(11) Aniline

6.98min 17.54ug/ml

response 194344

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.04
65.00	29.20	12.50#
0.00	0.00	0.00

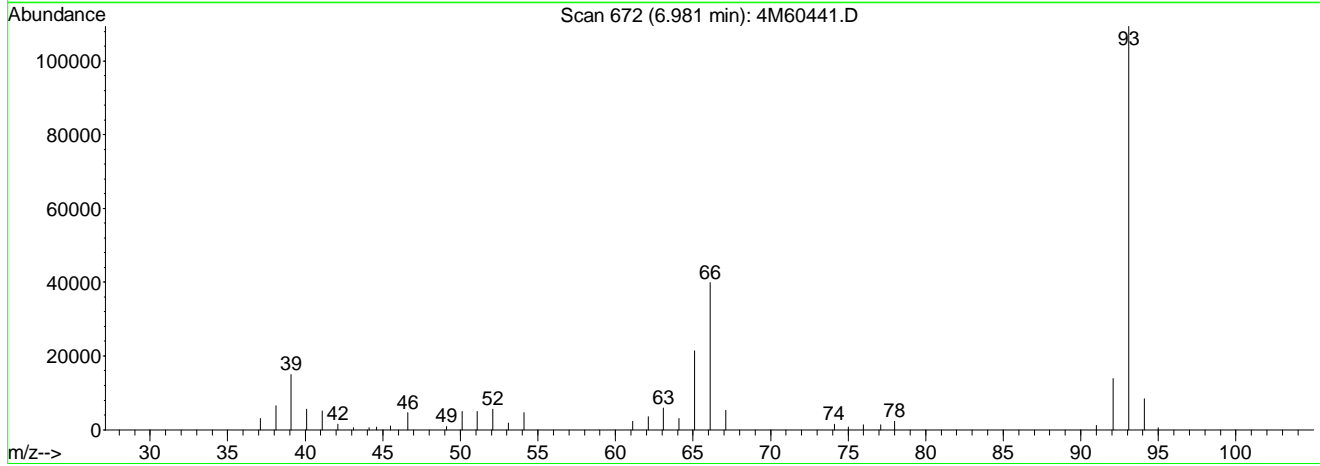
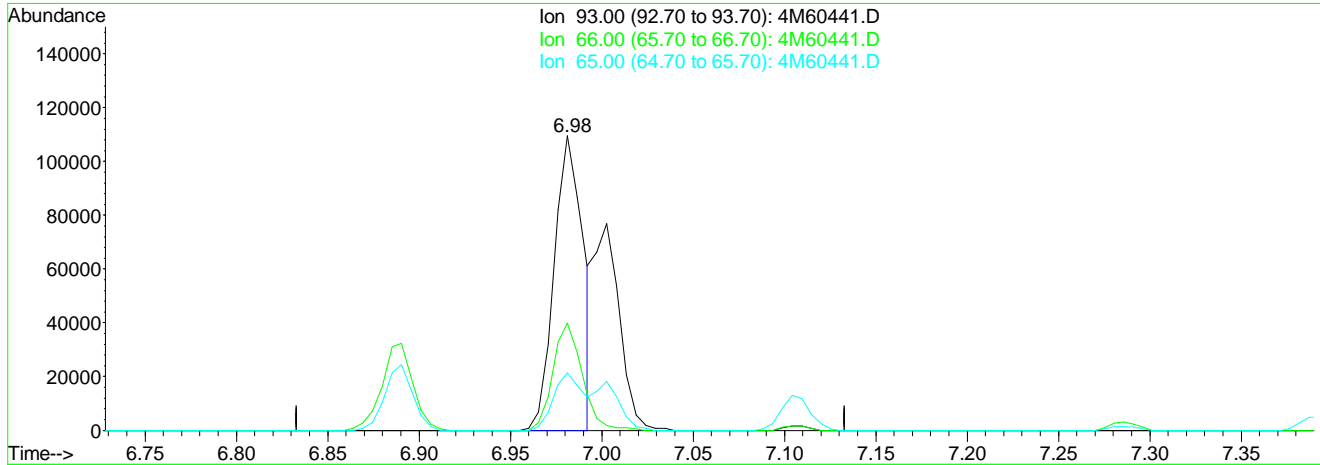
4M60441.D MEGAMIX.M Thu Apr 19 14:21:27 2012

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D
 Acq On : 19 Apr 2012 10:30
 Sample : WG395394-04 10PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:21 2012

Vial: 4
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41
 2012
 #3 - Improperly integrated isomers and/or coeluting compounds

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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)eth	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

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 Ether	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) Sulfoltepp	11.20	322	44742	16.7478	ug/ml	96
91) Sym-Trinitrobenzene	11.27	75	57944	13.3865	ug/ml	98
92) Diallate	11.33	86	101940	17.7602	ug/ml	94
93) Phenacetin	11.31	108	129651	16.8282	ug/ml	100
94) Phorate	11.34	75	162275	16.9952	ug/ml#	99
95) 4-Bromophenyl Phenyl Ether	11.41	248	77958	16.6955	ug/ml	99
96) Hexachlorobenzene	11.63	284	85076	16.9764	ug/ml	100

(#) = qualifier out of range (m) = manual integration
 4M60442.D MEGAMIX.M Fri Apr 20 08:18:58 2012

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

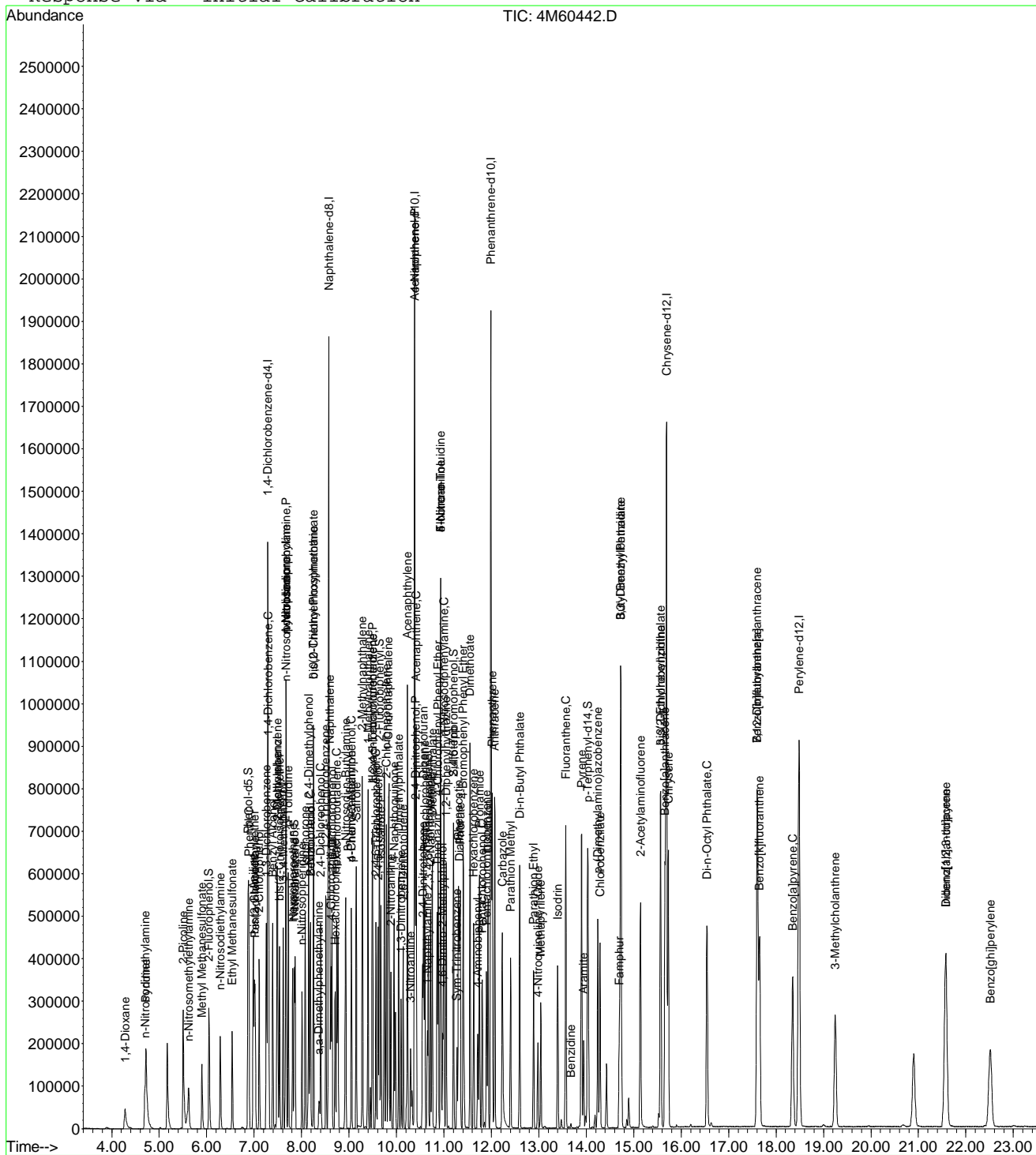
Page 3

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D
Acq On : 19 Apr 2012 11:05
Sample : WG395394-05 15PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012

Vial: 5
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

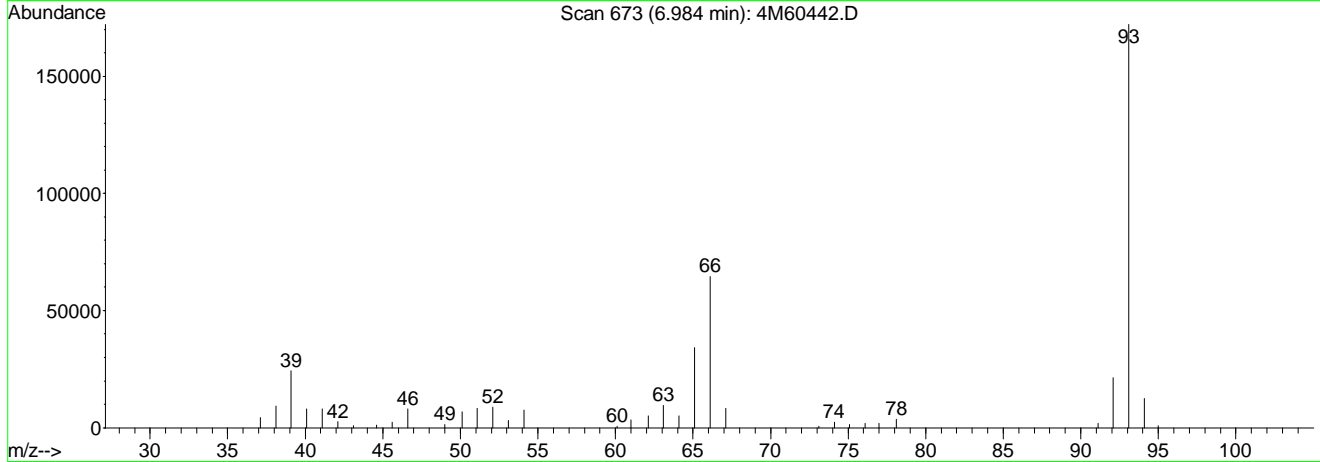
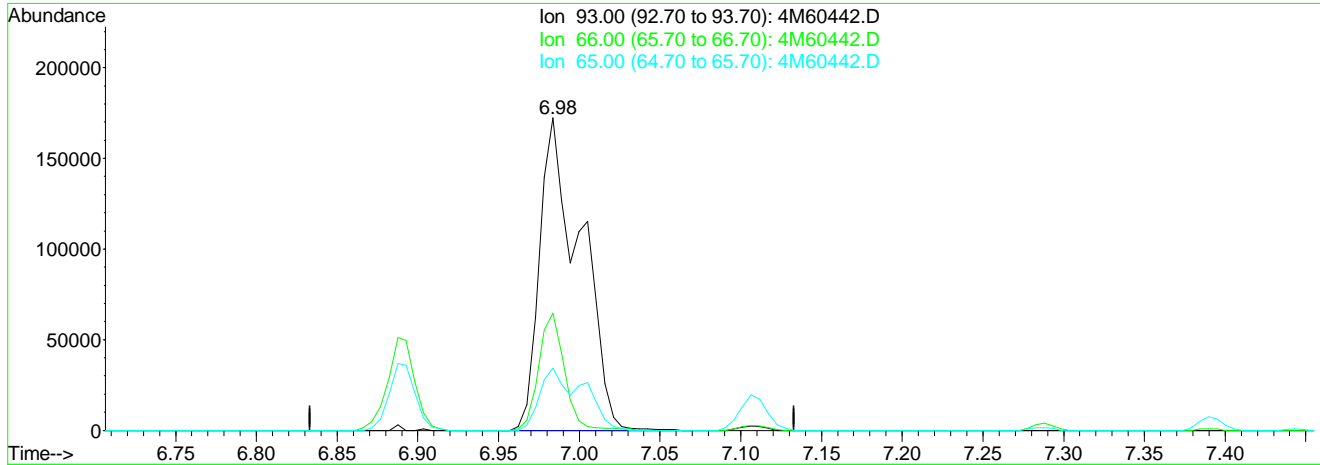
Quant Results File: MEGAMIX.RES

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



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

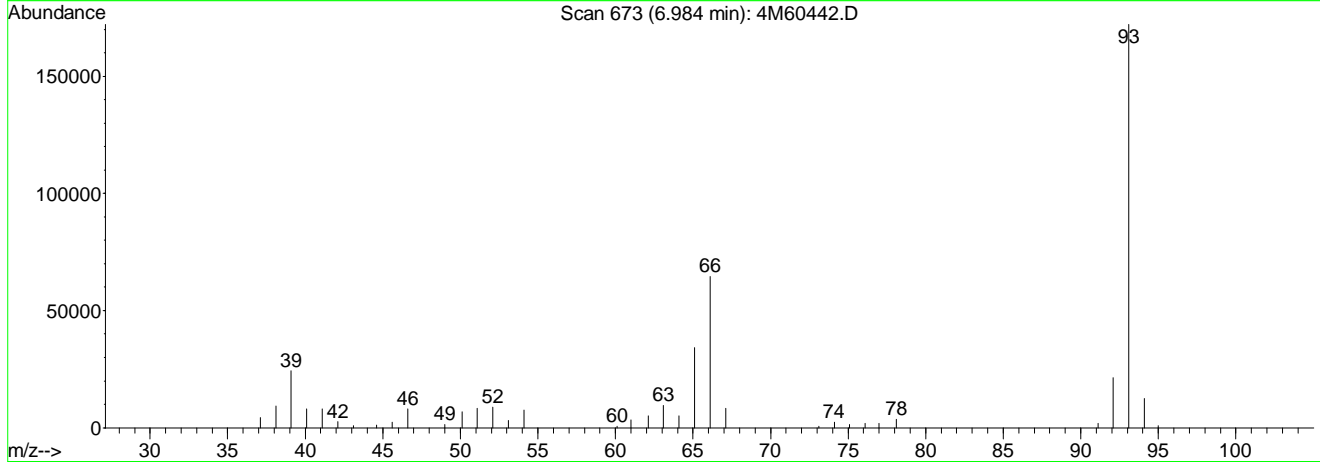
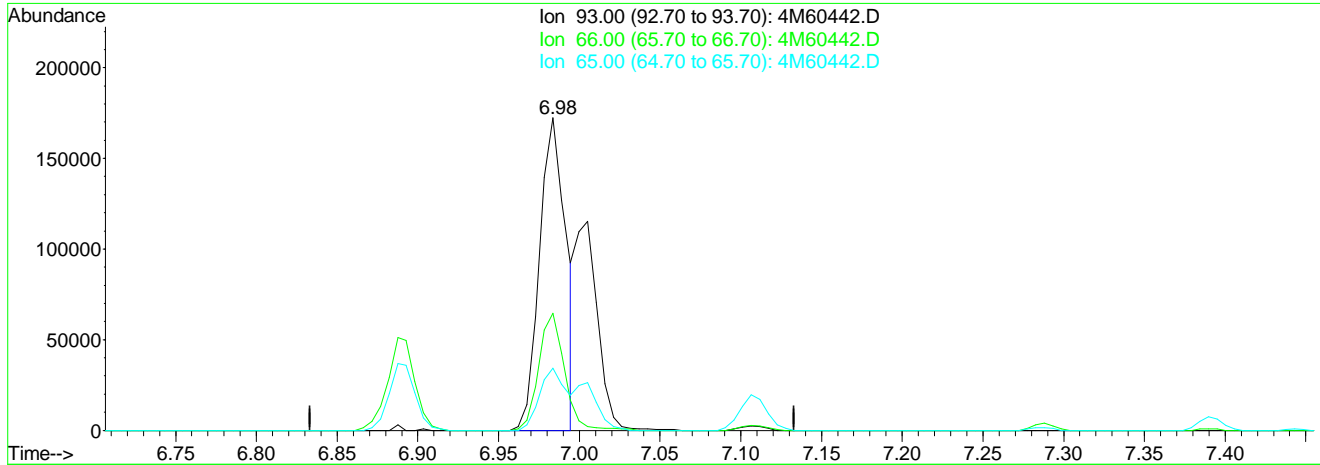
Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D
 Acq On : 19 Apr 2012 11:05
 Sample : WG395394-05 15PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:22 2012

Vial: 5
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41
 C. Casanova
 2012
 #3 - Improperly integrated isomers and/or coeluting compounds

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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)eth	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
 4M60443.D MEGAMIX.M Fri Apr 20 08:18:59 2012

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 Ether	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

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

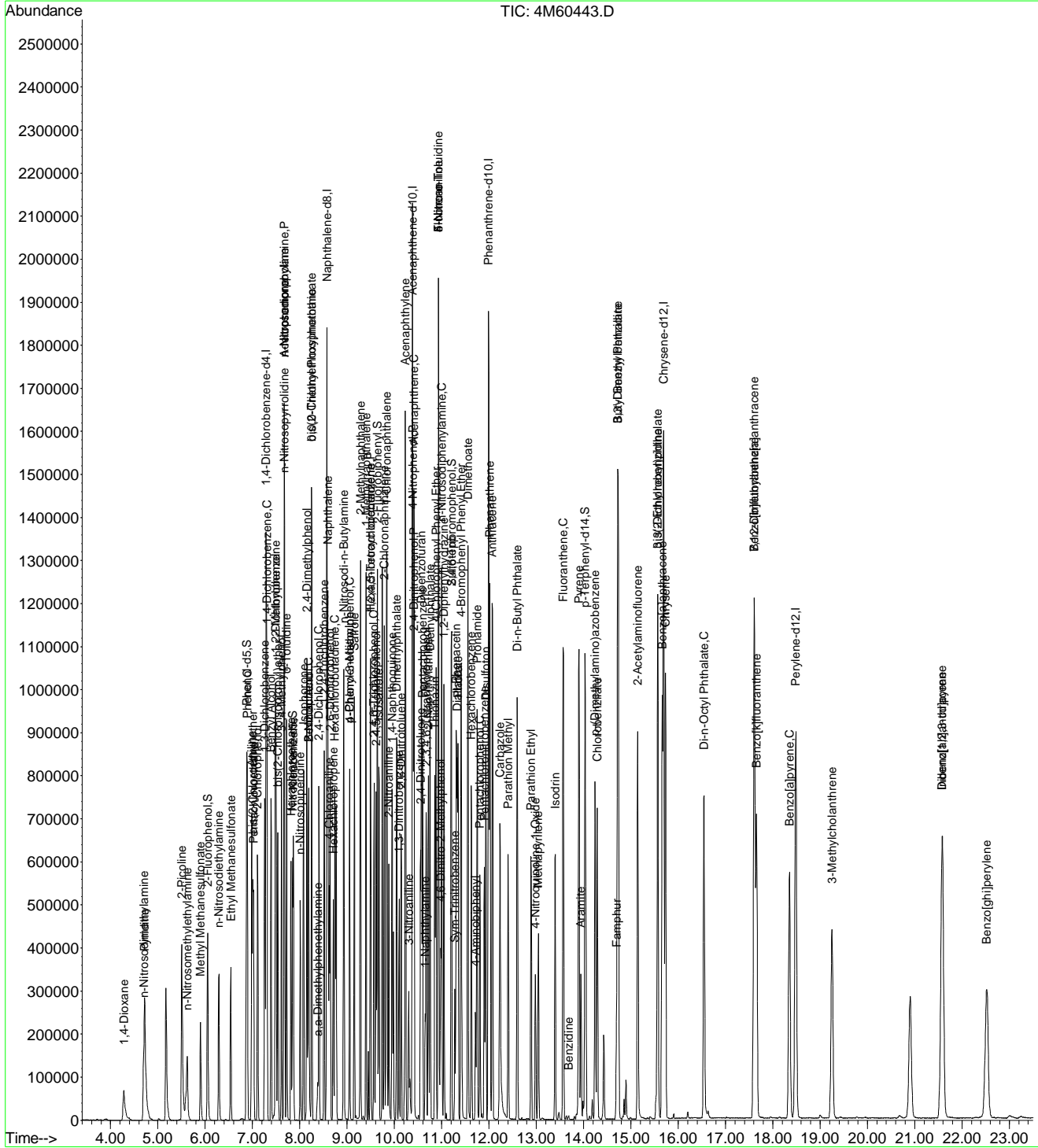
Page 3

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D
Acq On : 19 Apr 2012 11:40
Sample : WG395394-06 25PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012

Vial: 6
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

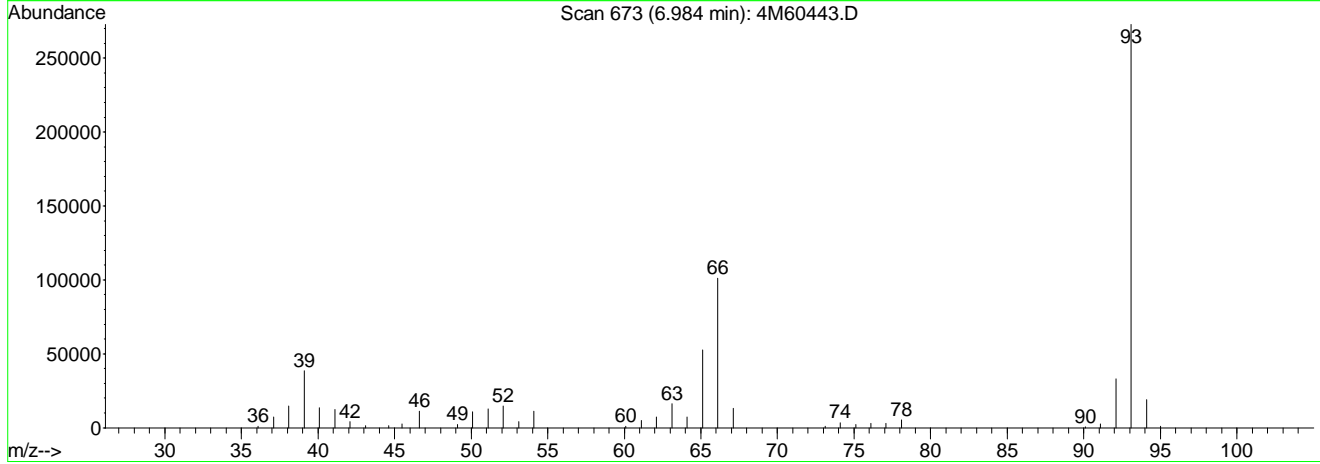
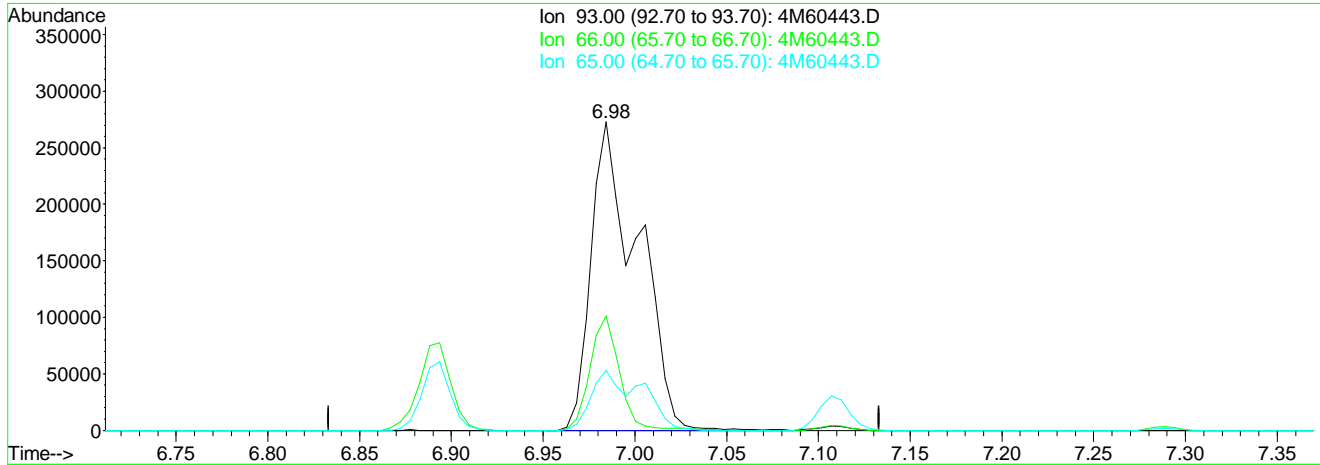
Quant Results File: MEGAMIX.RES

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



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

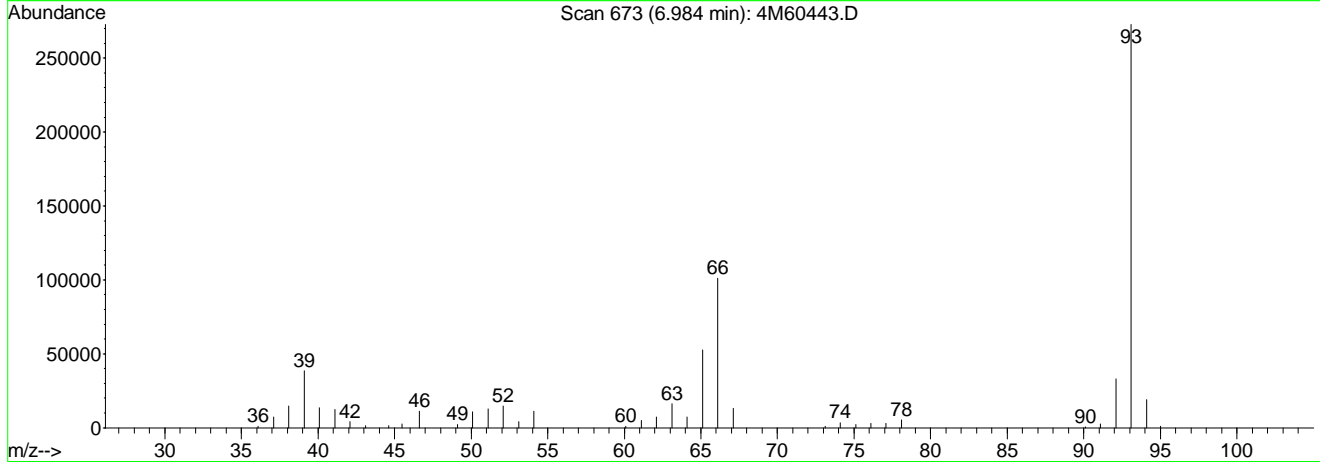
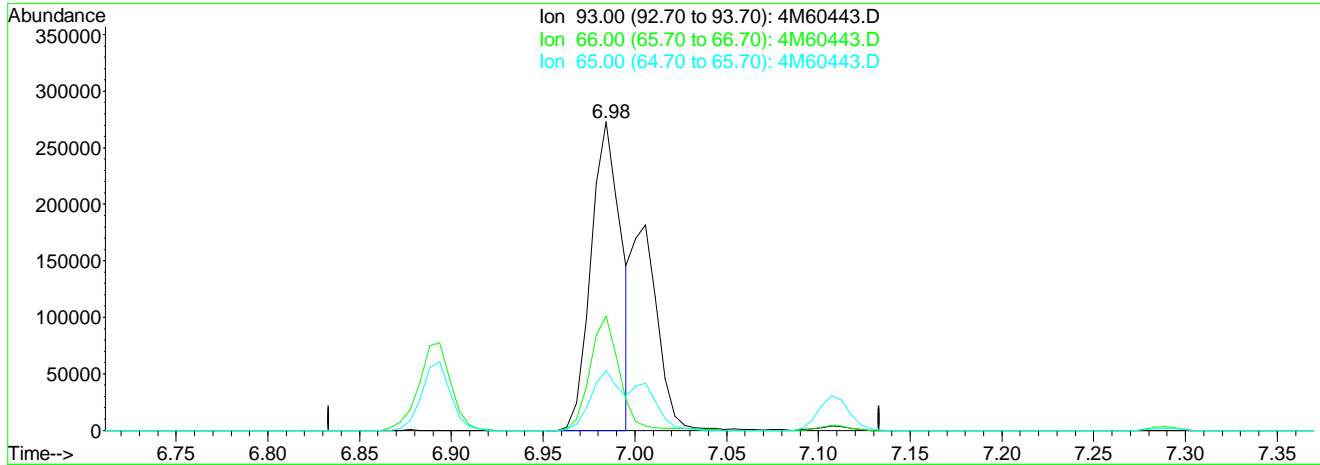
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.25
65.00	29.20	12.52#
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D
 Acq On : 19 Apr 2012 11:40
 Sample : WG395394-06 25PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:22 2012

Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41
 C. A. A. ; 2012
 #3 - Improperly integrated isomers and/or coeluting compounds

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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)eth	7.54	45	1032624	83.9235	ug/ml	99
23) 3-,4-Methylphenol	7.62	107	733181	83.2134	ug/ml	100
24) n-Nitrosopyrrolidine	7.68	100	327343	87.5230	ug/ml	95
25) n-Nitrosodipropylamine	7.68	70	435156	91.0943	ug/ml	99
26) Acetophenone	7.68	105	860801	88.8129	ug/ml	100
27) n-Nitrosomorpholine	7.68	56	397862	86.5753	ug/ml	99
28) o-Toluidine	7.73	106	1155789	87.1781	ug/ml	100
29) Hexachloroethane	7.81	117	310495	82.7247	ug/ml	98
32) Nitrobenzene	7.87	77	698206	82.2707	ug/ml	99
33) n-Nitrosopiperidine	8.01	114	377476	81.5355	ug/ml	99
34) Isophorone	8.08	82	1254518	83.1403	ug/ml	100
35) 2-Nitrophenol	8.19	139	428368	75.2069	ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	674316	82.6362	ug/ml	100
37) 0,0,0-Triethyl Phosphoroth	8.26	198	341314	87.0588	ug/ml	100
38) bis(2-Chloroethoxy)methane	8.26	93	937865	87.0855	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60444.D MEGAMIX.M Fri Apr 20 08:19:00 2012

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 Ether	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

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

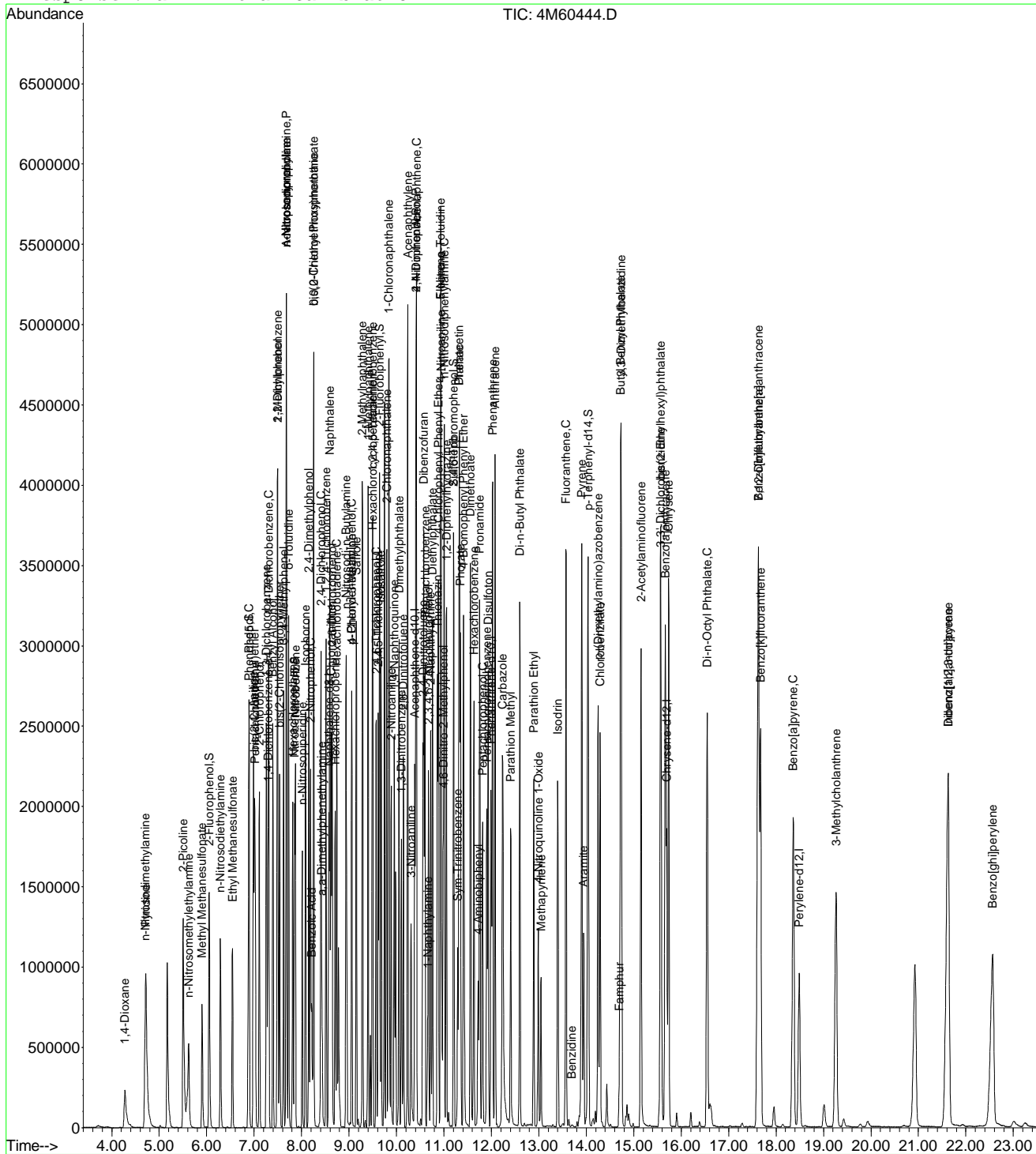
Page 3

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D
Acq On : 19 Apr 2012 12:14
Sample : WG395394-07 80PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012

Vial: 7
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

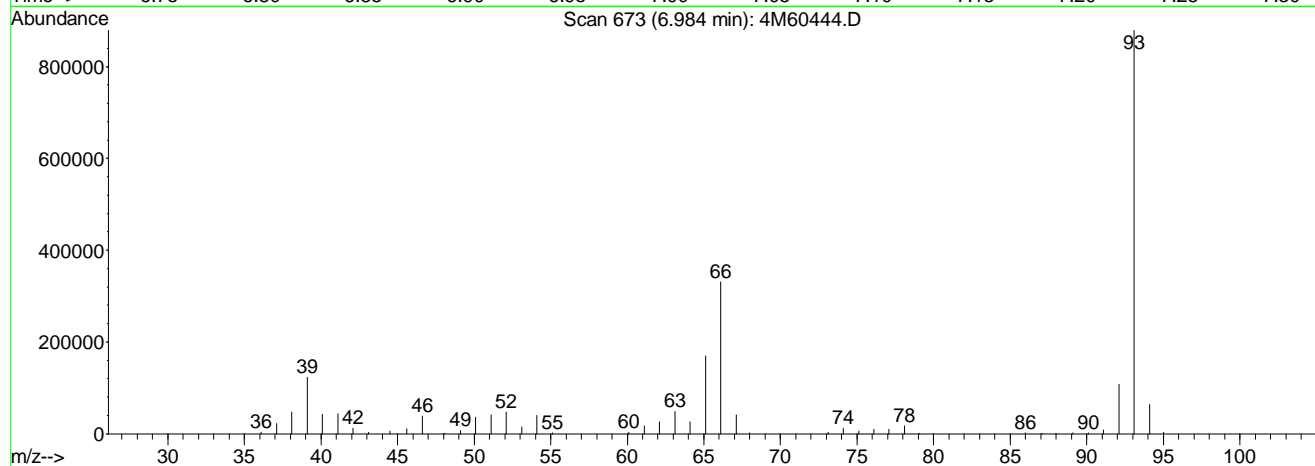
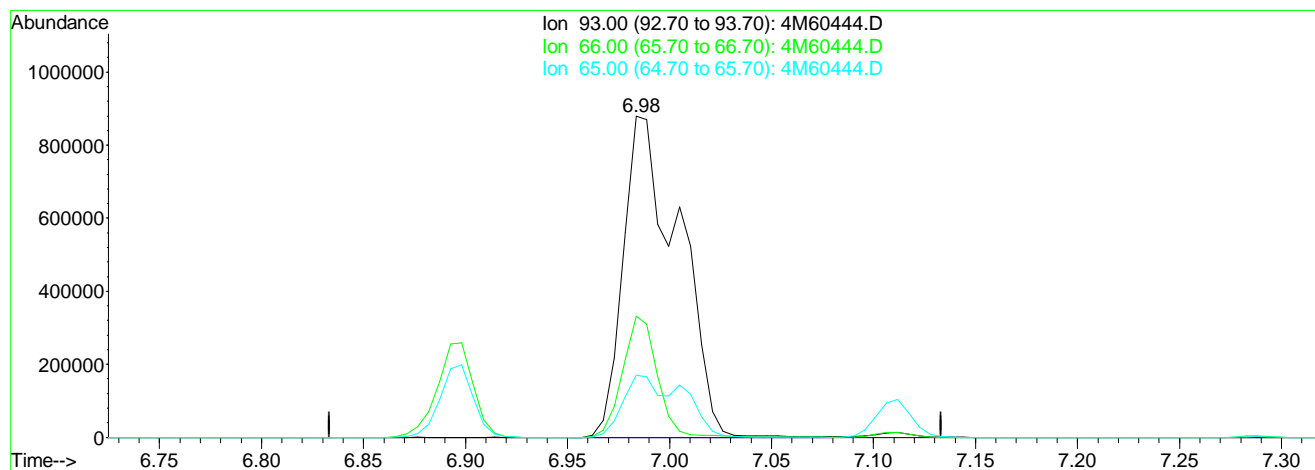
Quant Results File: MEGAMIX.RES

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



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

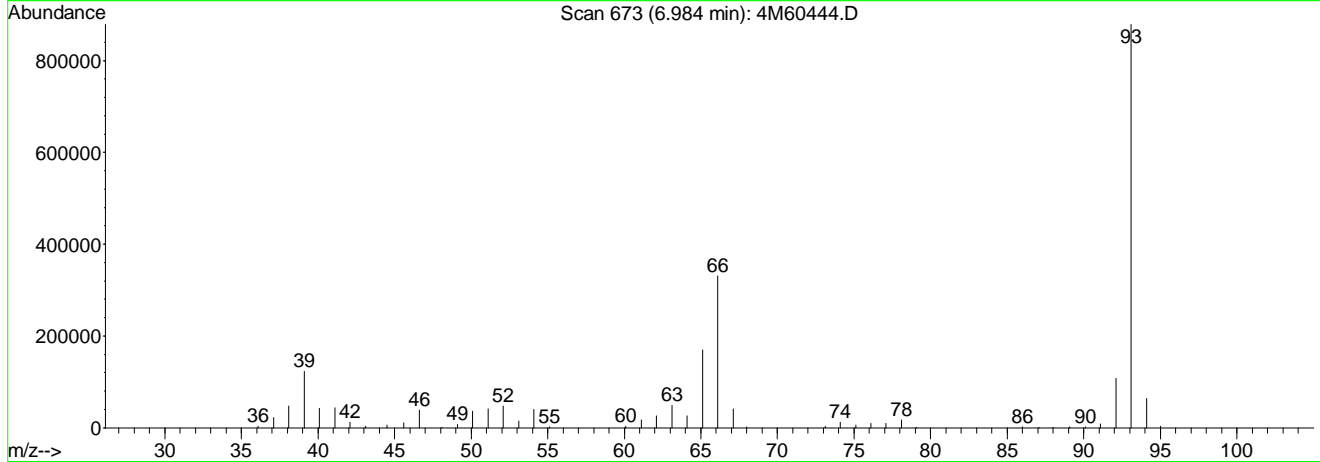
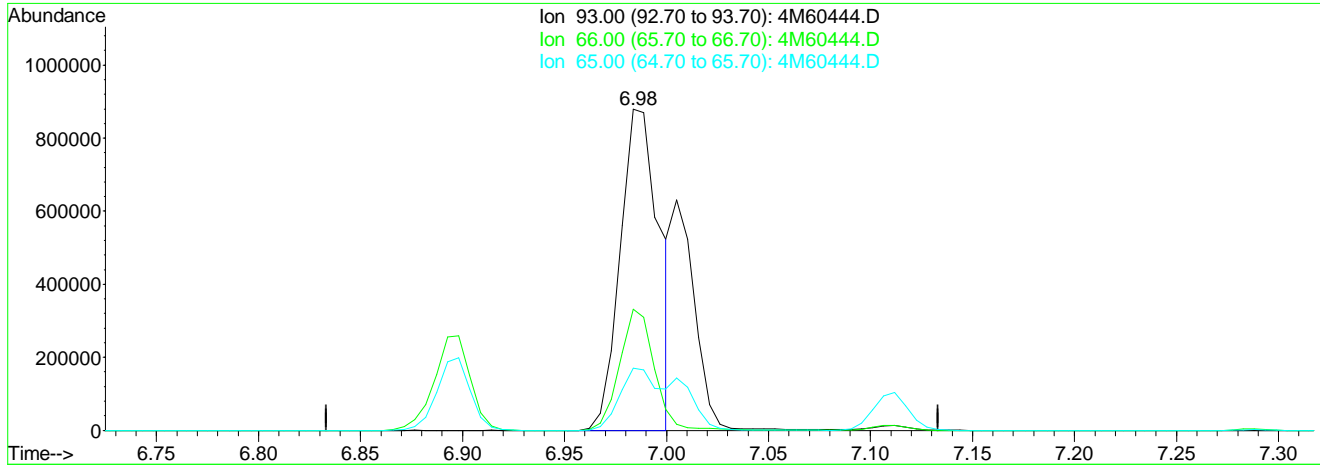
Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D
 Acq On : 19 Apr 2012 12:14
 Sample : WG395394-07 80PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:23 2012

Vial: 7
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30
 Supervisor: 04/20/2012 11:41
 2012
 #3 - Improperly integrated isomers and/or coeluting compounds

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

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	4.28	88	348759	104.6802	ug/ml#	98
3) n-Nitrosodimethylamine	4.70	74	499944	97.0836	ug/ml	100
4) Pyridine	4.72	79	880375	96.9922	ug/ml	99
5) 2-Picoline	5.50	93	952597	97.3185	ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	418420	96.7300	ug/ml	99
7) Methyl Methanesulfonate	5.90	80	448121	94.4502	ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	441347	98.2623	ug/ml	98
10) Ethyl Methanesulfonate	6.55	79	604359	98.0919	ug/ml	100
11) Aniline	6.98	93	1502899m	111.4042	ug/ml	
13) Phenol	6.90	94	991961	99.7934	ug/ml	100
14) bis(2-Chloroethyl)ether	7.01	63	615863	103.3093	ug/ml	99
15) Pentachloroethane	7.02	167	336576	102.9292	ug/ml	99
16) 2-Chlorophenol	7.11	128	903123	99.2327	ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	980717	99.8635	ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	997434	100.2398	ug/ml	100
19) Benzyl Alcohol	7.40	108	594299	100.4024	ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	918764	101.0157	ug/ml	99
21) 2-Methylphenol	7.49	107	686225	99.5164	ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.53	45	1273668	100.6058	ug/ml	99
23) 3-,4-Methylphenol	7.62	107	905262	99.5585	ug/ml	100
24) n-Nitrosopyrrolidine	7.68	100	400577	103.3389	ug/ml	92
25) n-Nitrosodipropylamine	7.68	70	522498	104.9775	ug/ml	99
26) Acetophenone	7.68	105	1037851	102.8813	ug/ml	99
27) n-Nitrosomorpholine	7.69	56	482861	99.9546	ug/ml	98
28) o-Toluidine	7.73	106	1417866	102.5014	ug/ml	99
29) Hexachloroethane	7.81	117	384708	99.7029	ug/ml	96
32) Nitrobenzene	7.87	77	854248	99.1471	ug/ml	100
33) n-Nitrosopiperidine	8.01	114	464532	98.8152	ug/ml	99
34) Isophorone	8.08	82	1546209	100.7548	ug/ml	100
35) 2-Nitrophenol	8.19	139	514984	93.0486	ug/ml	96
36) 2,4-Dimethylphenol	8.15	122	831386	100.0156	ug/ml	100
37) 0,0,0-Triethyl Phosphoroth	8.26	198	412901	102.5849	ug/ml	99
38) bis(2-Chloroethoxy)methane	8.26	93	1134885	103.0111	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60445.D MEGAMIX.M Fri Apr 20 08:19:00 2012

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 Ether	10.88	204	885933	104.8310	ug/ml	99
83) 4-Nitroaniline	10.95	138	432847	109.9973	ug/ml	98
84) 5-Nitro-o-Toluidine	10.94	152	465662	118.2046	ug/ml	98
85) 1,2-Diphenylhydrazine	11.05	77	1719707	102.3736	ug/ml	100
88) 4,6-Dinitro-2-Methylphenol	10.99	198	361668	97.7089	ug/ml	95
89) n-Nitrosodiphenylamine	11.01	169	1620487	102.3203	ug/ml	99
90) SulfoTEPP	11.20	322	282824	98.1810	ug/ml	99
91) Sym-Trinitrobenzene	11.29	75	450708	96.7069	ug/ml	99
92) Diallate	11.33	86	651475	104.3468	ug/ml	97
93) Phenacetin	11.32	108	873920	104.4740	ug/ml	99
94) Phorate	11.35	75	1057354	102.4913	ug/ml#	99
95) 4-Bromophenyl Phenyl Ether	11.41	248	505367	100.3772	ug/ml	100
96) Hexachlorobenzene	11.63	284	543444	100.1408	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60445.D MEGAMIX.M Fri Apr 20 08:19:01 2012

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
 4M60445.D MEGAMIX.M Fri Apr 20 08:19:01 2012

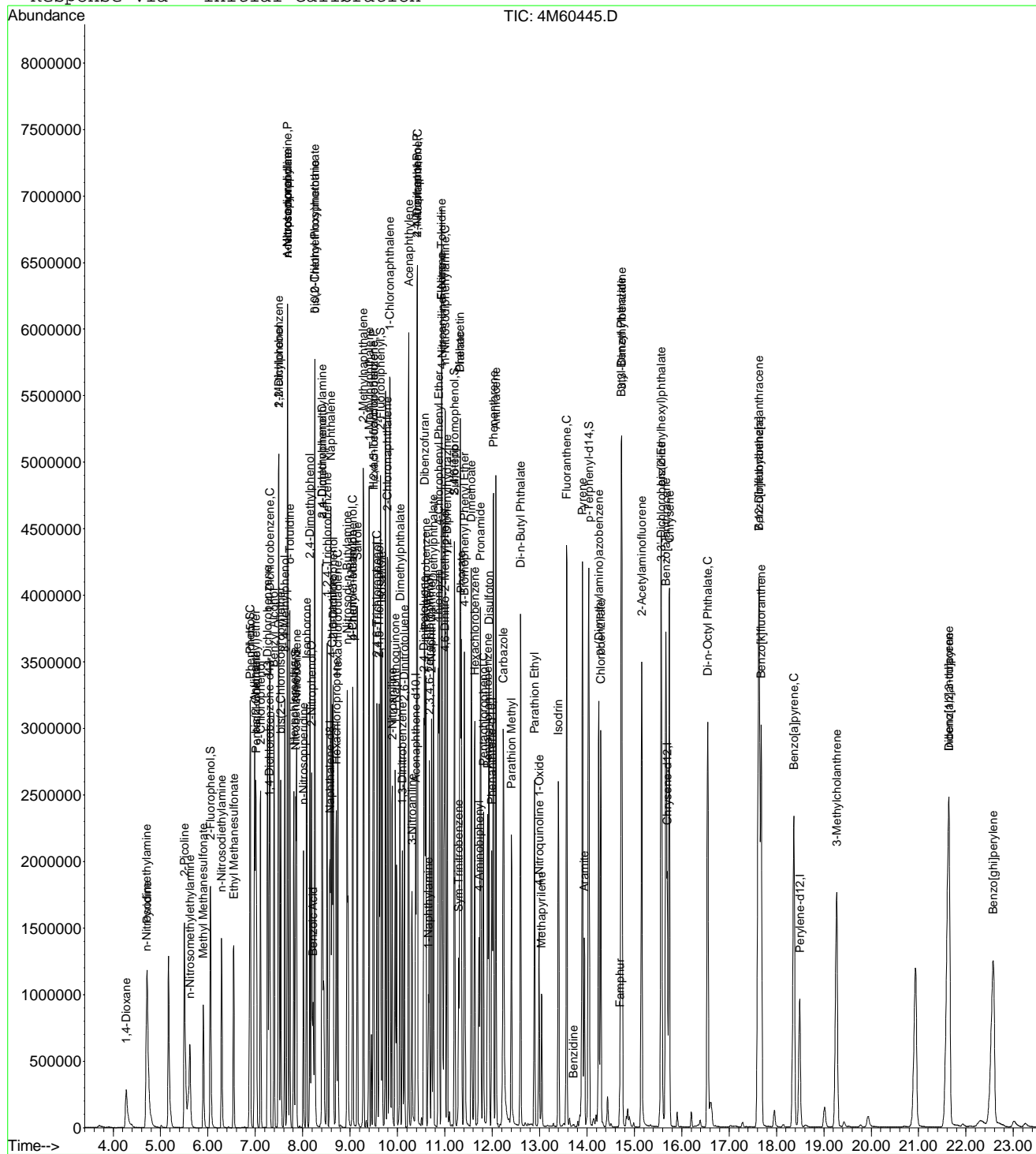
Page 3

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D
Acq On : 19 Apr 2012 12:48
Sample : WG395394-08 100PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012

Vial: 8
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

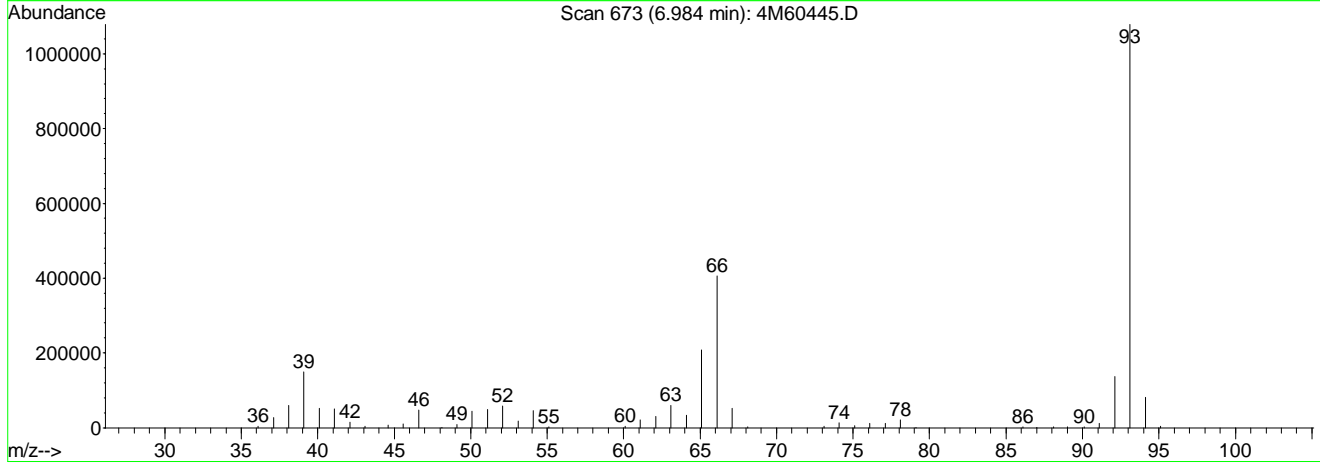
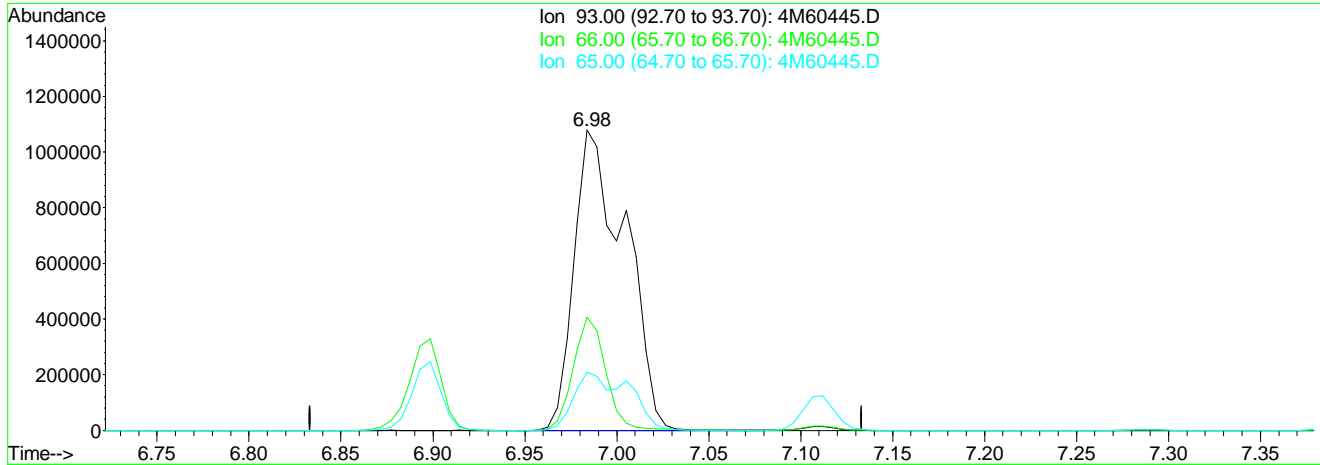
Quant Results File: MEGAMIX.RES

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



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

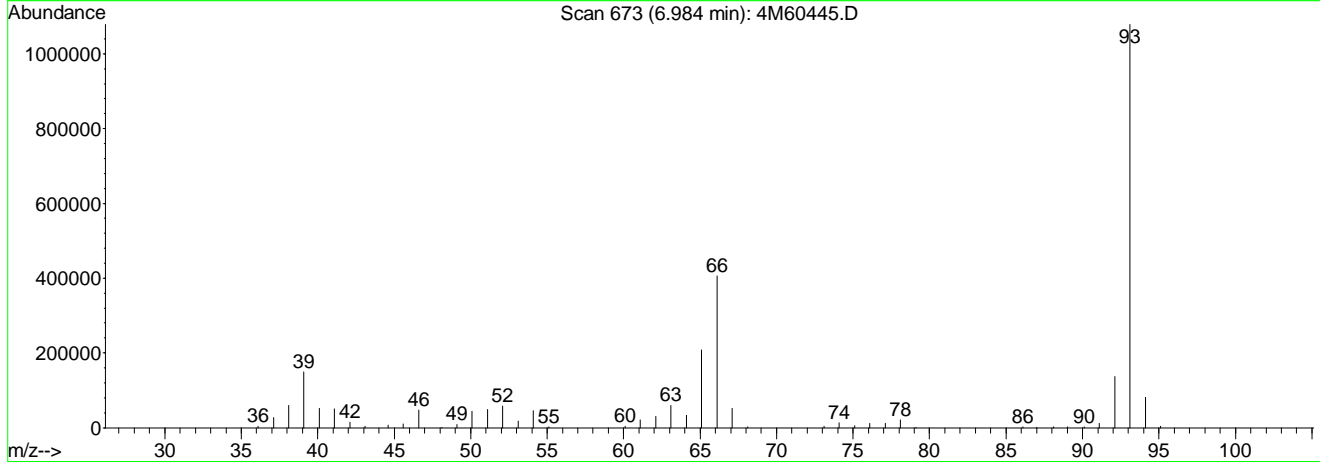
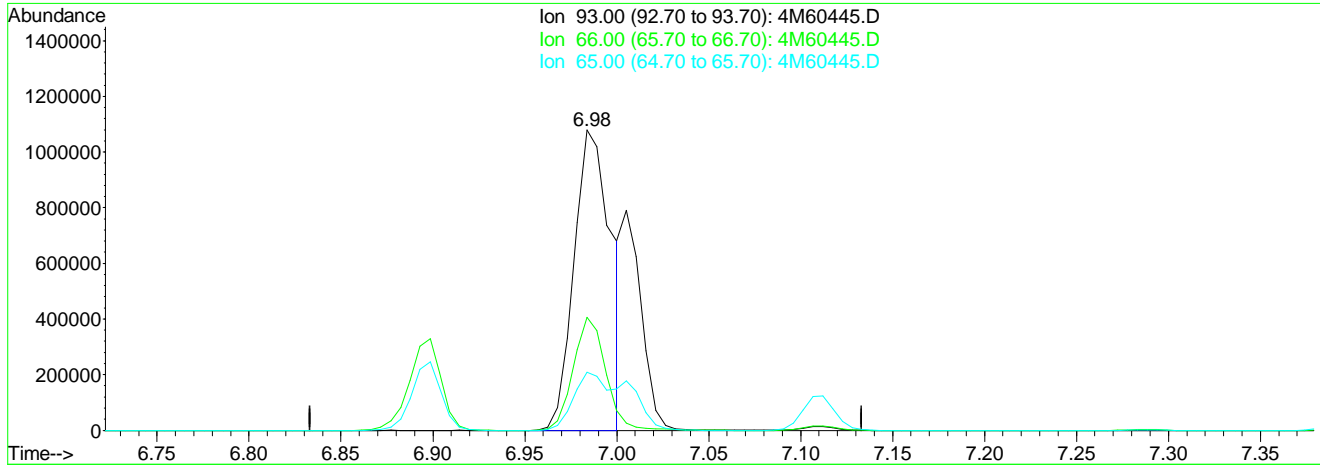
4M60445.D MEGAMIX.M Thu Apr 19 14:23:57 2012

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D
 Acq On : 19 Apr 2012 12:48
 Sample : WG395394-08 100PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:23 2012

Vial: 8
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30

Supervisor: 04/20/2012 11:41

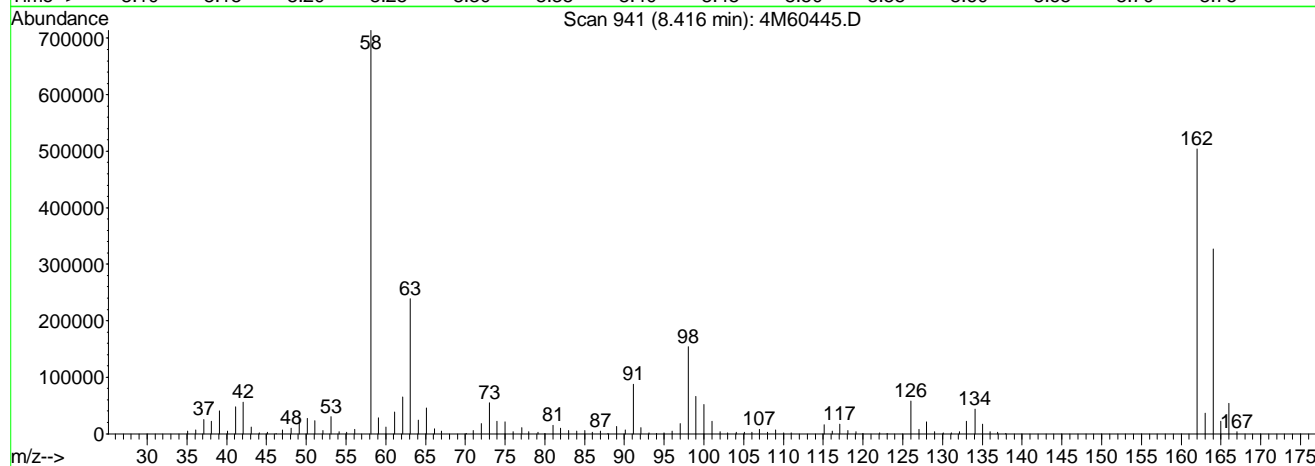
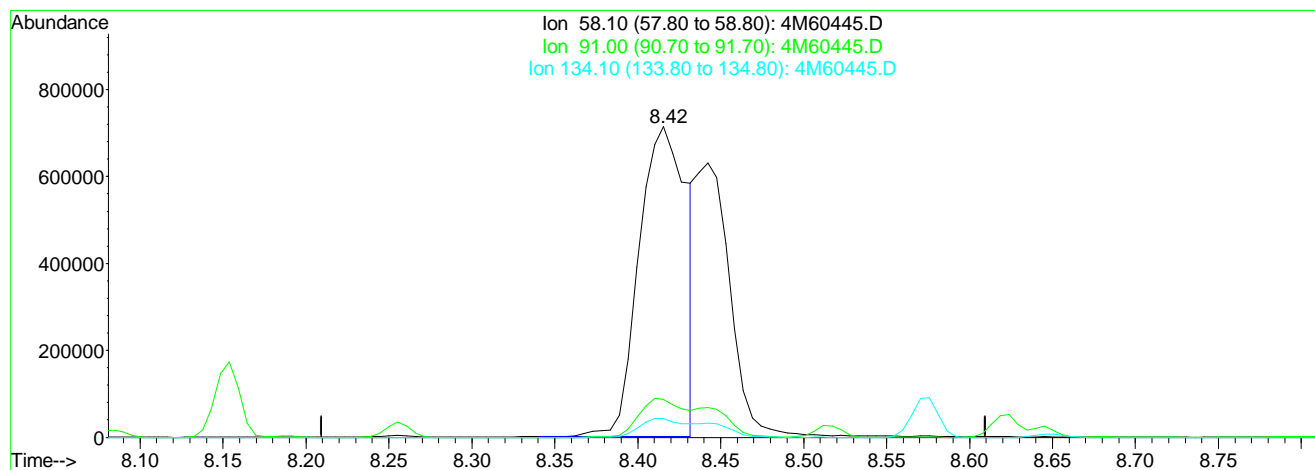
Carroll Augustan 2012

Michael Carlson

#3 - Improperly integrated isomers and/or coeluting compounds

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

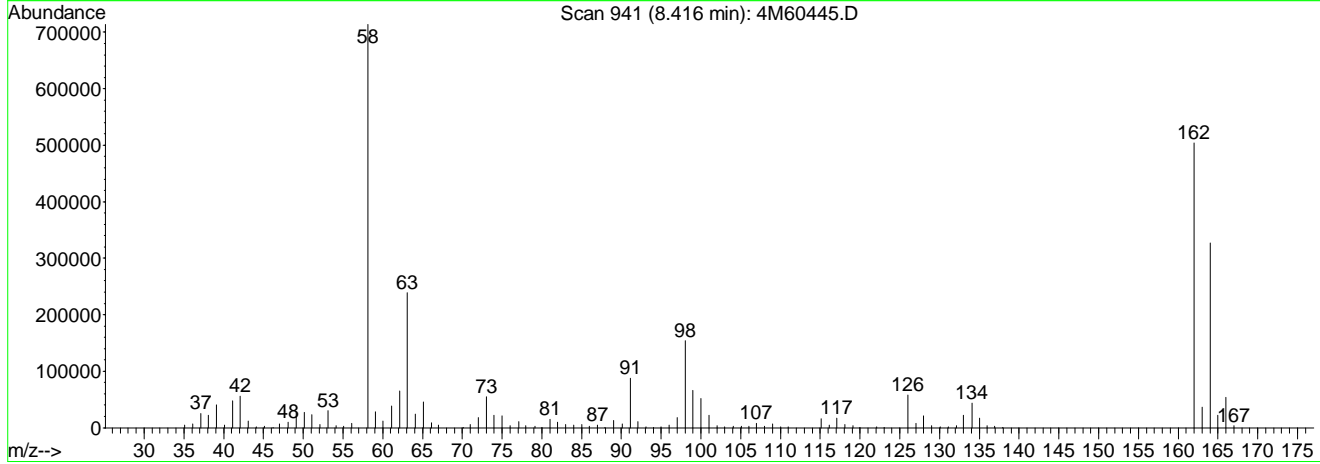
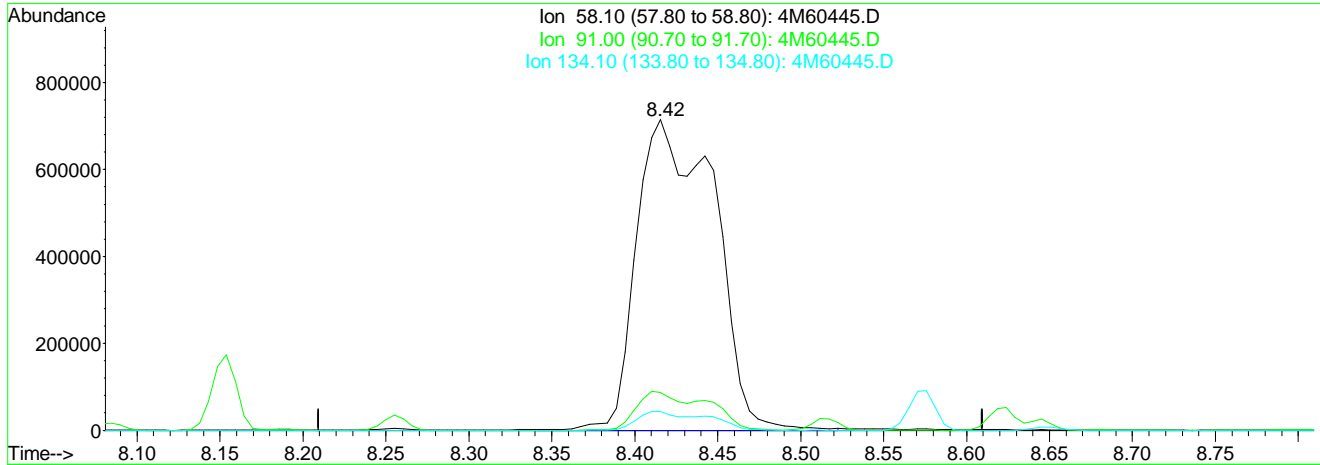
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.82
134.10	6.20	5.67
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D
 Acq On : 19 Apr 2012 12:48
 Sample : WG395394-08 100PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:24 2012

Vial: 8
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30

Supervisor: 04/20/2012 11:41

04/20/2012

Michael Carlson

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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)eth	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

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 Ether	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
 4M60446.D MEGAMIX.M Fri Apr 20 08:19:01 2012

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

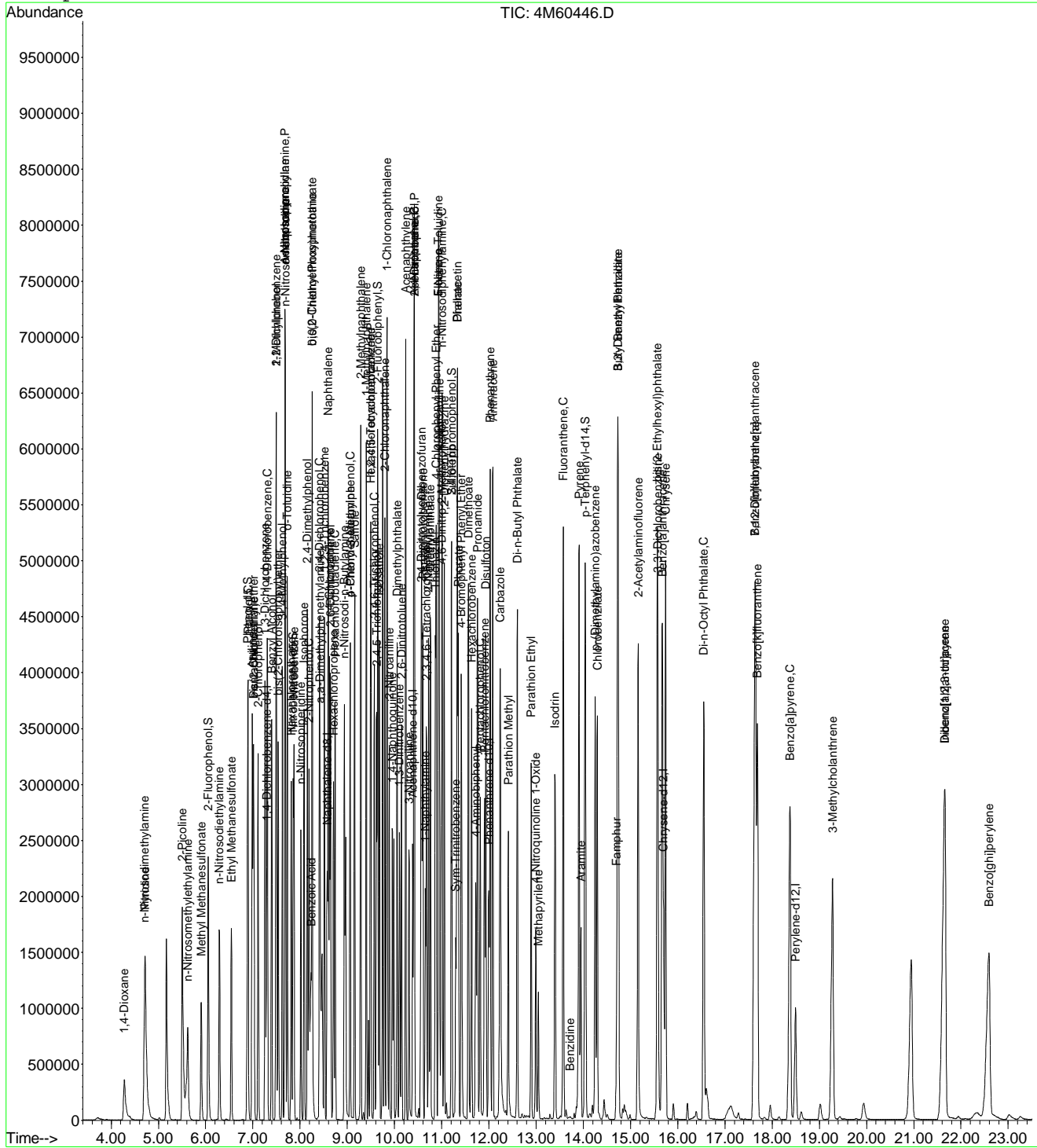
Page 3

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D
Acq On : 19 Apr 2012 13:23
Sample : WG395394-09 120PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:25 2012

Vial: 9
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

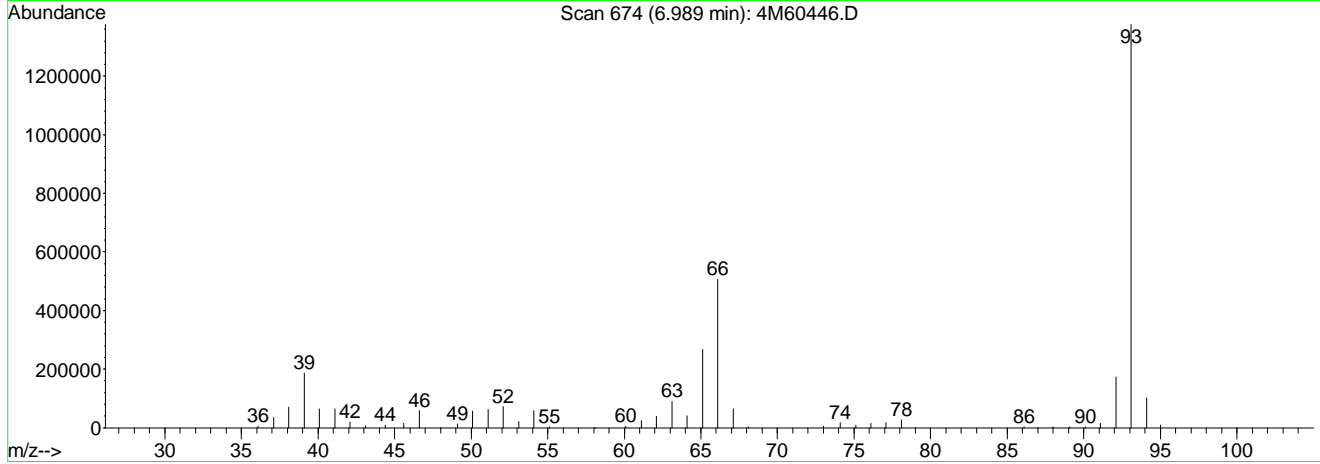
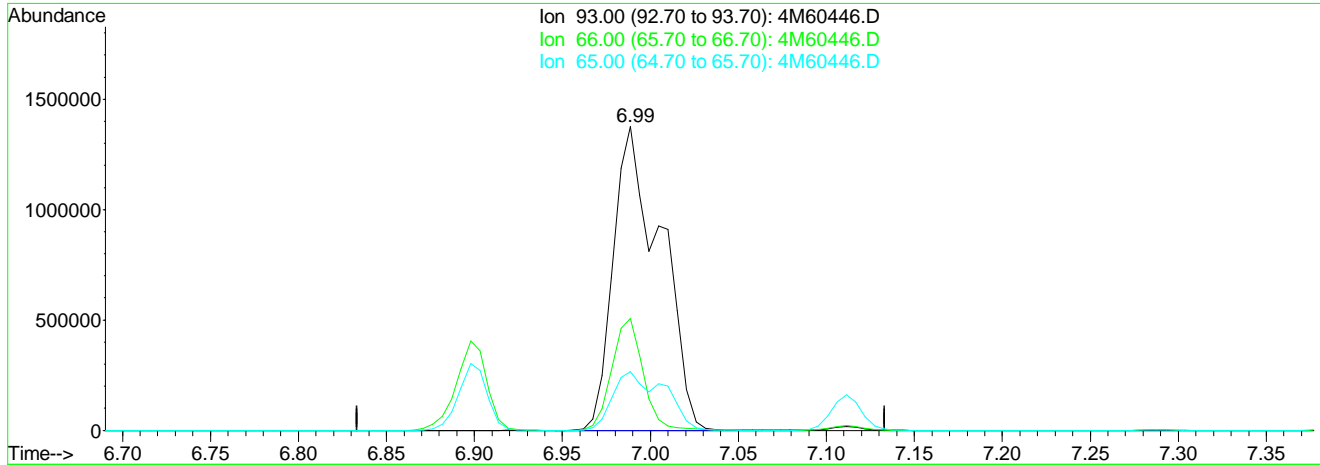
Quant Results File: MEGAMIX.RES

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



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

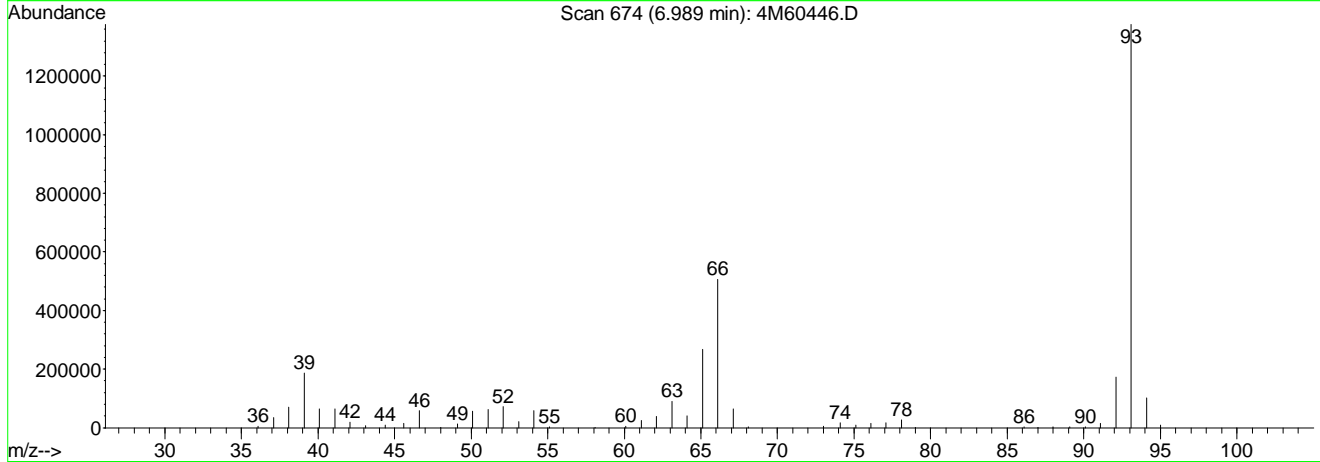
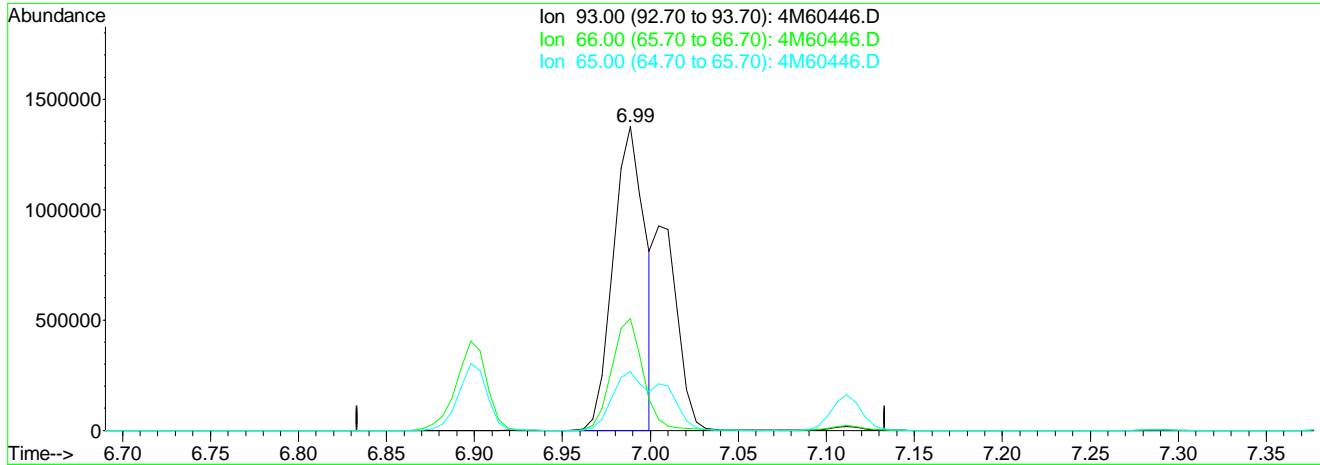
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	24.12
65.00	29.20	20.98
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D
 Acq On : 19 Apr 2012 13:23
 Sample : WG395394-09 120PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:24 2012

Vial: 9
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30

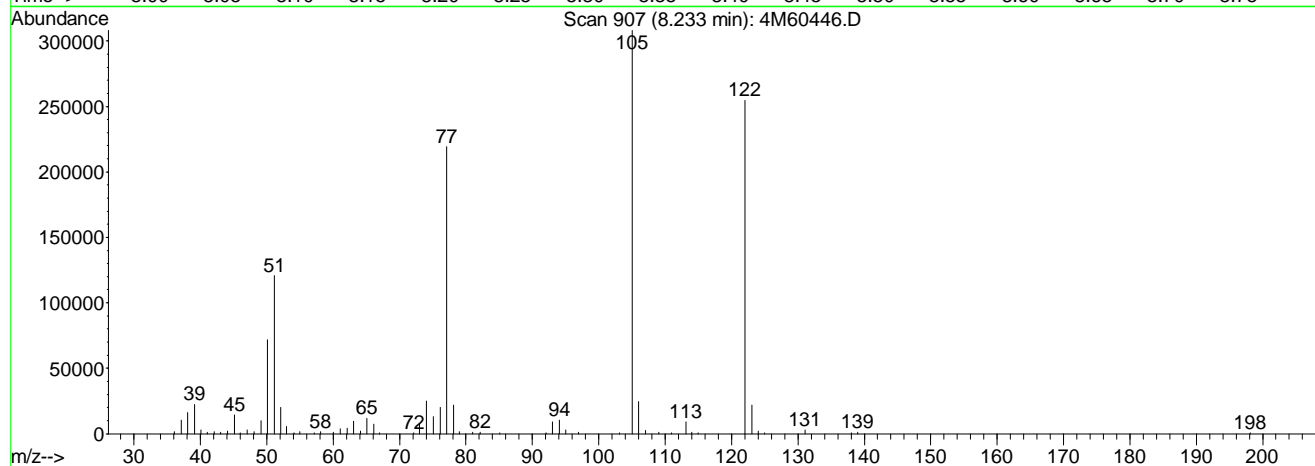
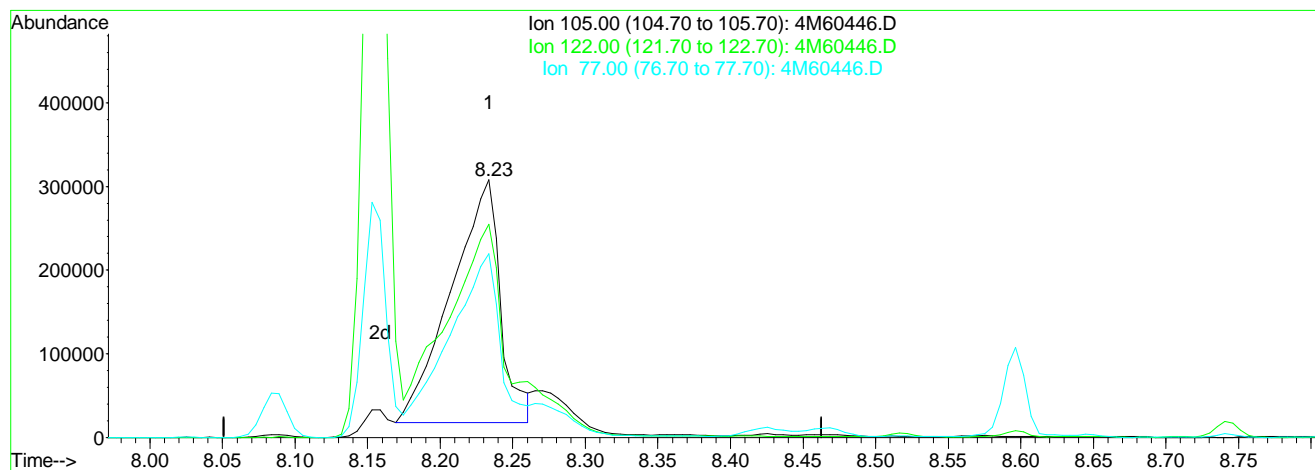
Supervisor: 04/20/2012 11:41

2012

#3 - Improperly integrated isomers and/or coeluting compounds

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

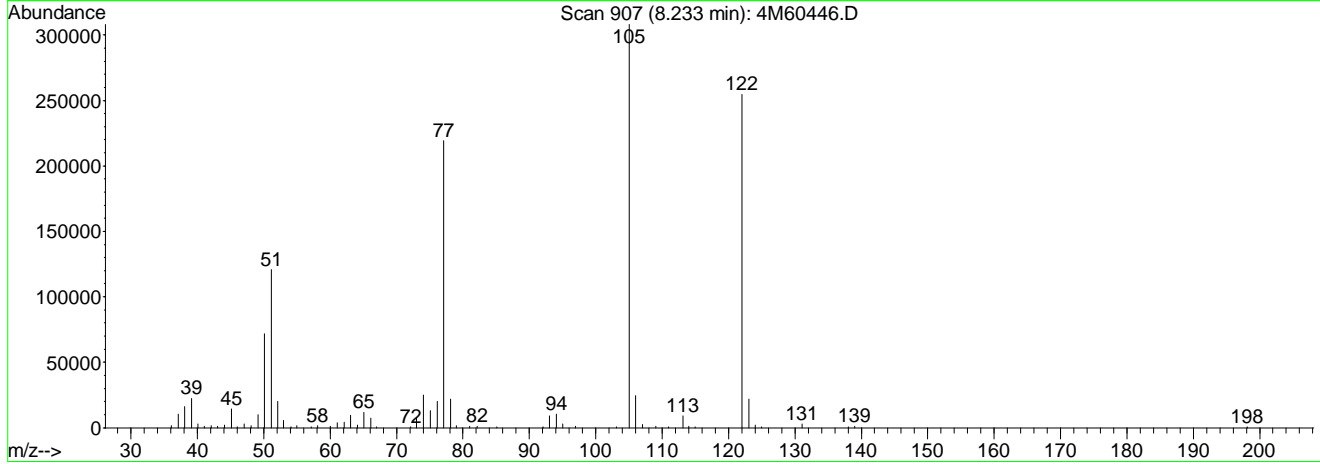
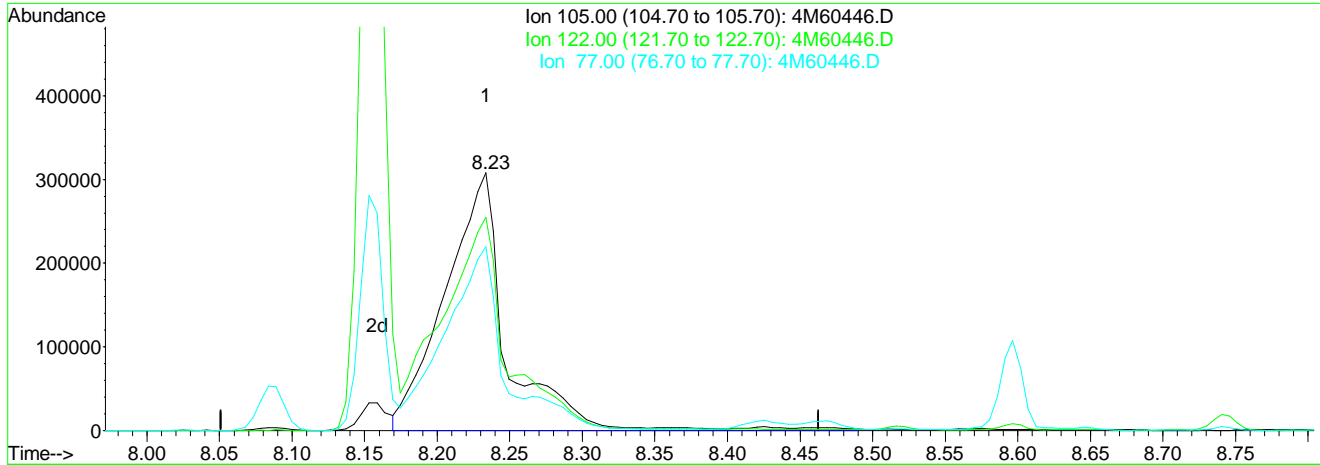
(39) Benzoic Acid		
8.23min	111.58ug/ml	
response	684707	
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	111.94
77.00	70.40	62.20
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D
 Acq On : 19 Apr 2012 13:23
 Sample : WG395394-09 120PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:24 2012

Vial: 9
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

Analyst: 04/20/2012 09:30

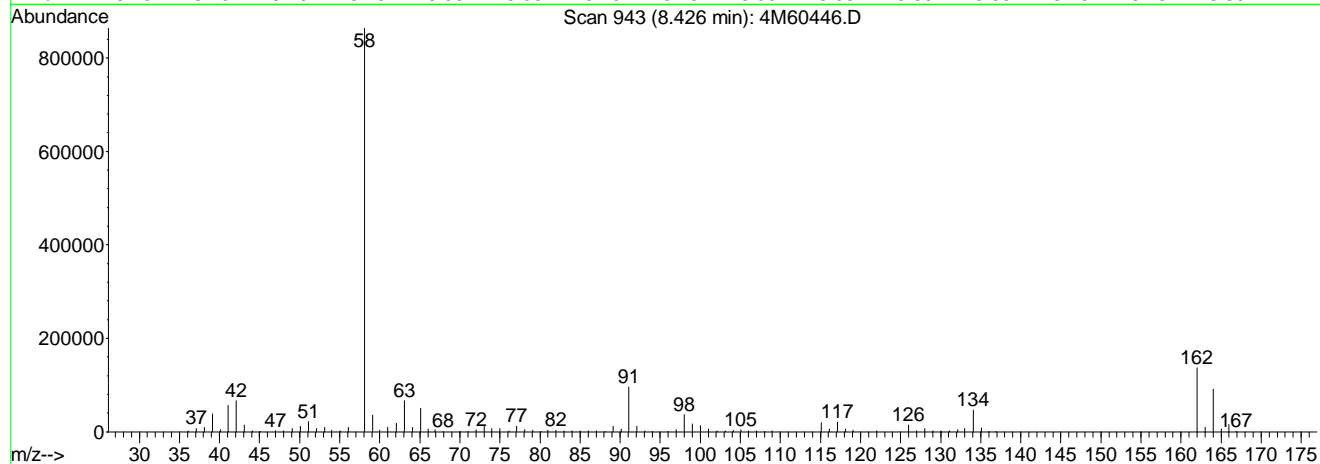
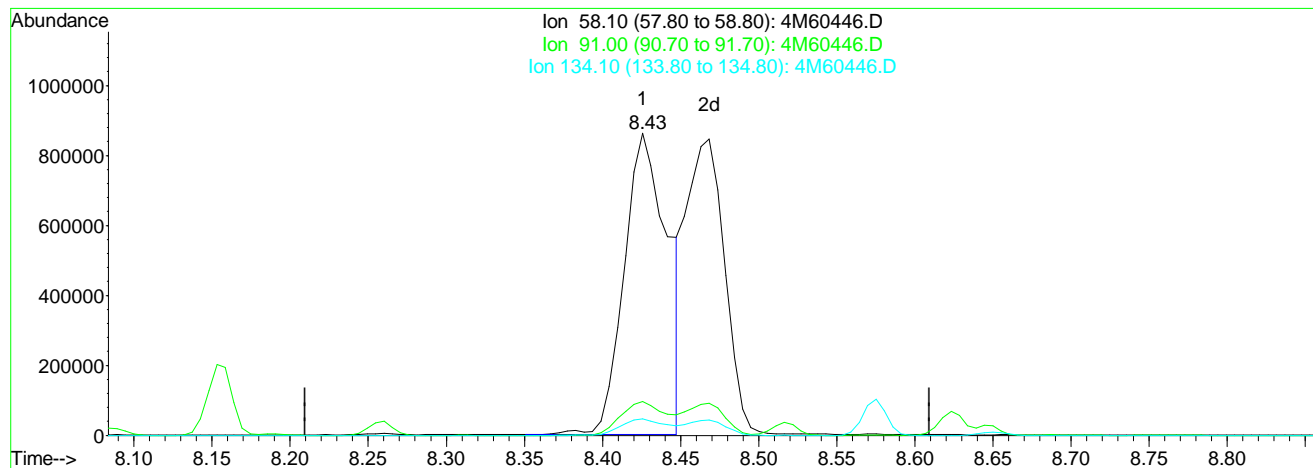
Supervisor: 04/20/2012 11:41

2012

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

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

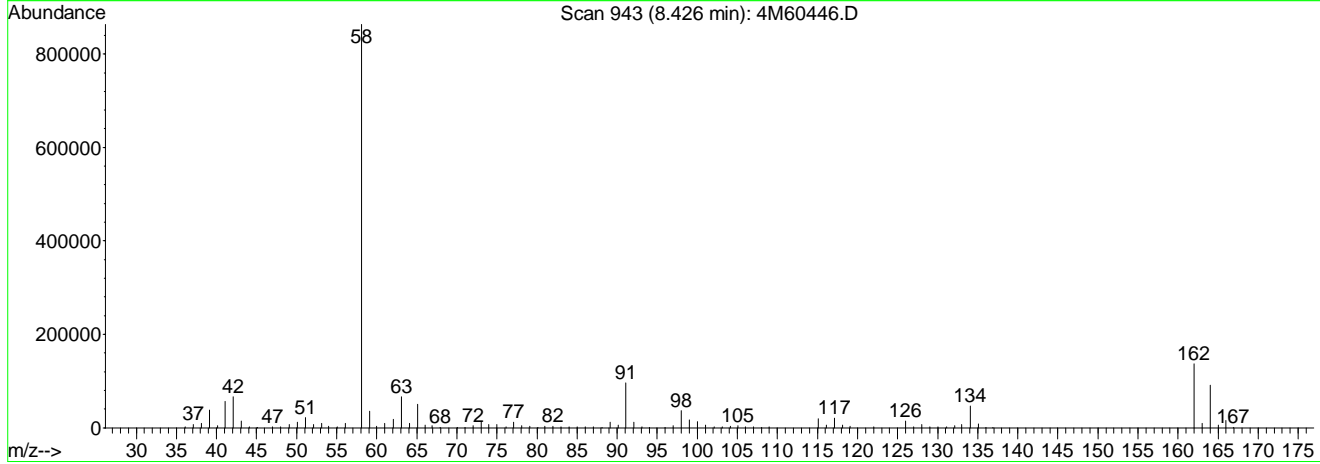
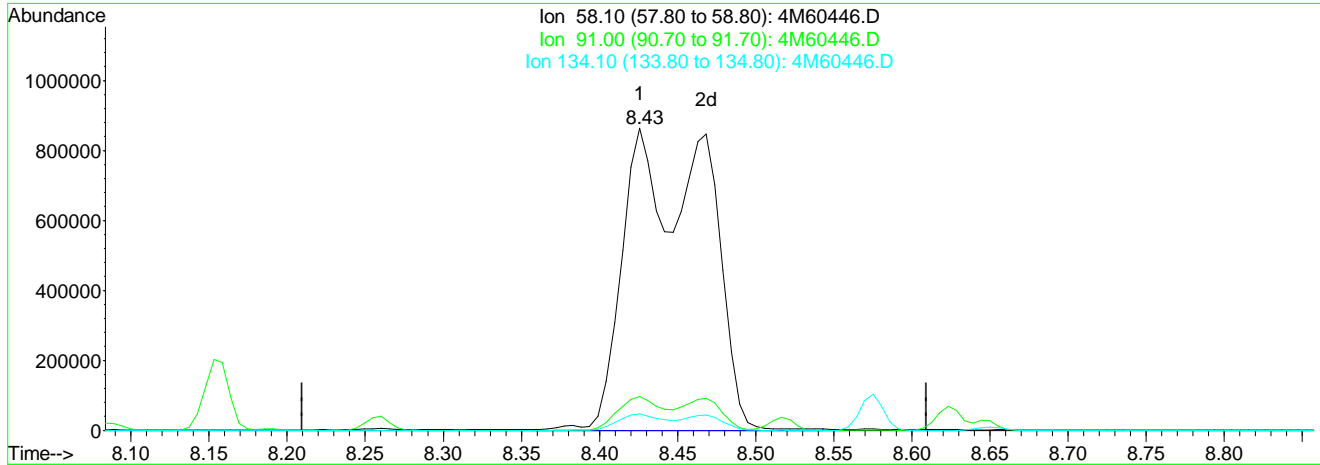
Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D
 Acq On : 19 Apr 2012 13:23
 Sample : WG395394-09 120PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:25 2012

Vial: 9
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Thu Apr 19 14:24:28 2012
 Response via : Multiple Level Calibration



TIC: 4M60446.D

(41) a,a-Dimethylphenethylamine

8.43min 175.94ug/ml mint

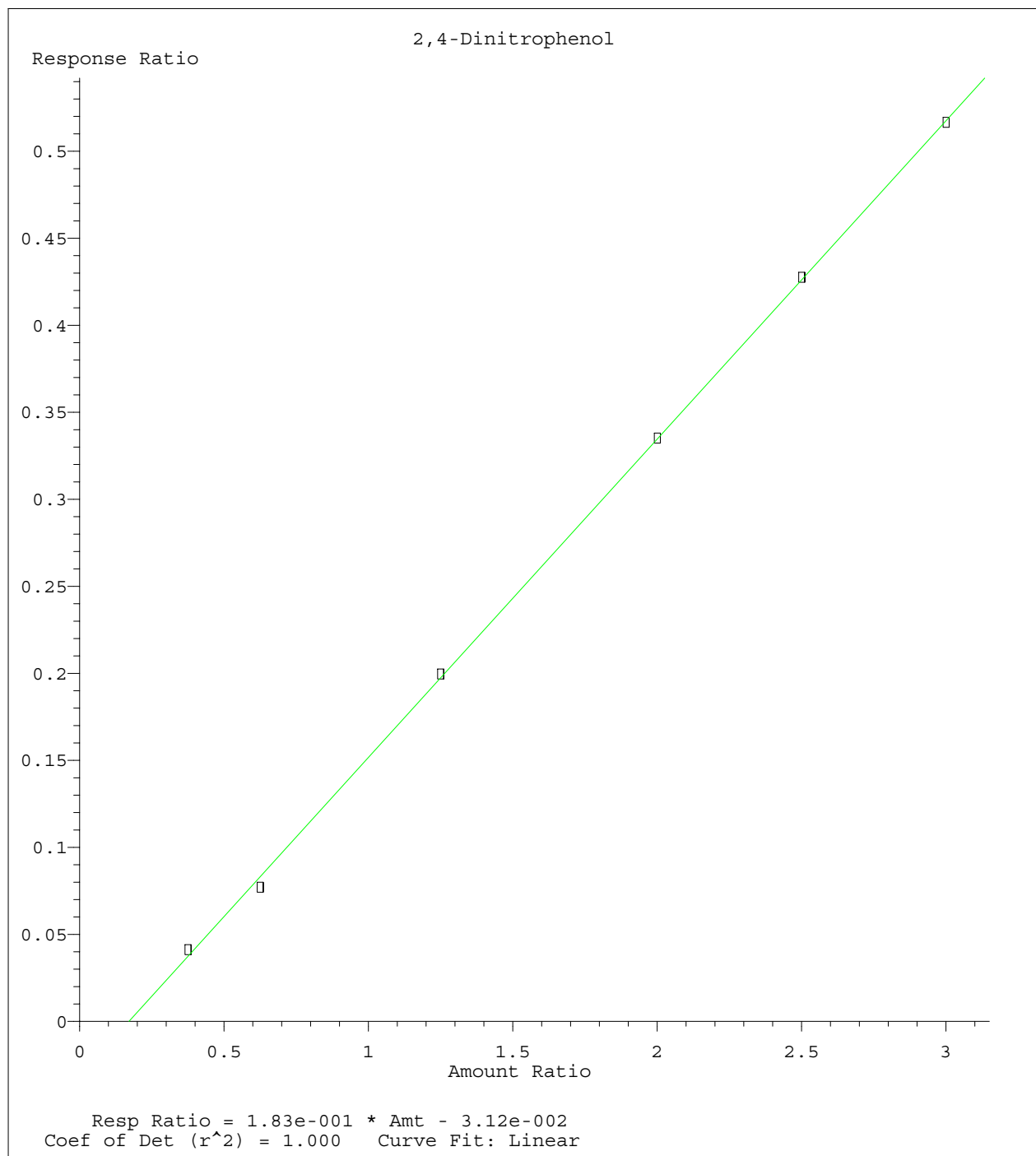
response 3126203

Ion	Exp%	Act%
58.10	100	100
91.00	12.60	6.25#
134.10	6.20	3.03#
0.00	0.00	0.00

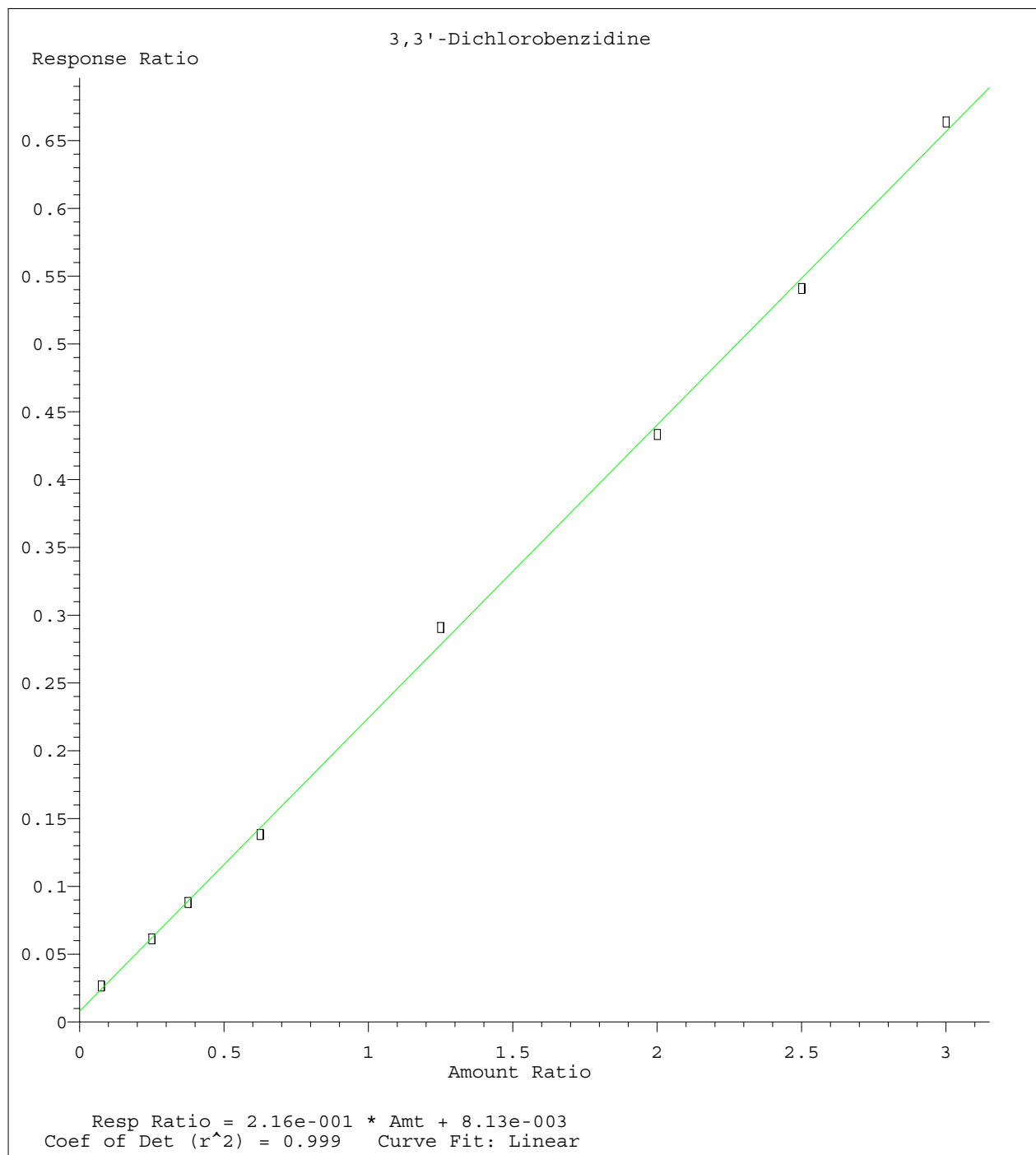
4M60446.D MEGAMIX.M

Thu Apr 19

Analyst: 04/20/2012 09:30
 Supervisor: 04/20/2012 11:41
 2012
 #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

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
 4M60447.D MEGAMIX.M Fri Apr 20 08:39:53 2012

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

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
 Acq On : 19 Apr 2012 13:58 Operator: CAA
 Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
 Misc : 1,1 STD50596 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Thu Apr 19 14:27:47 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 4-Aminobiphenyl	11.72	169	299707	53.6701	ug/ml	100
99) Pentachlorophenol	11.81	266	219981	65.8011	ug/ml	100
100) Pronamide	11.75	173	435376	56.0268	ug/ml	100
101) Pentachloronitrobenzene	11.90	237	100661	54.9377	ug/ml	99
102) Disulfoton	11.93	88	465671	53.8412	ug/ml	99
103) Phenanthrene	12.02	178	1403448	55.3523	ug/ml	100
104) Anthracene	12.08	178	1431854	55.0760	ug/ml	100
105) Carbazole	12.23	167	1222576	53.7063	ug/ml	99
106) Parathion Methyl	12.41	109	309666	58.5249	ug/ml	98
107) Di-n-Butyl Phthalate	12.60	149	1540149	54.4568	ug/ml	100
108) Parathion Ethyl	12.89	97	176185	54.6918	ug/ml	98
109) 4-Nitroquinoline 1-Oxide	12.99	190	144361	61.3308	ug/ml	98
110) Methapyrilene	13.05	58	407182	Below Cal		97
111) Isodrin	13.40	193	153389	56.3232	ug/ml	98
112) Fluoranthene	13.57	202	1432961	53.9334	ug/ml	99
114) Benzidine	13.68	184	3158	2.5513	ug/ml	100
115) Pyrene	13.91	202	1489985	56.0937	ug/ml	100
116) Aramite	13.95	185	79710	52.9951	ug/ml	99
118) p-(Dimethylamino)azobenzen	14.25	225	308031	56.1665	ug/ml	95
119) Chlorobenzilate	14.29	251	405945	56.1581	ug/ml	97
120) Famphur	14.70	218	32734	103.9507	ug/ml#	65
121) Butyl Benzyl Phthalate	14.72	149	707095	58.5249	ug/ml	99
122) 3,3'-Dimethylbenzidine	14.73	212	122499	14.5948	ug/ml#	90
123) 2-Acetylaminofluorene	15.15	181	590016	57.0856	ug/ml	99
124) bis(2-Ethylhexyl)phthalate	15.57	149	934893	56.7035	ug/ml	100
125) 3,3'-Dichlorobenzidine	15.58	252	256765	51.9984	ug/ml	99
126) Benzo[a]anthracene	15.67	228	1277312	54.2153	ug/ml	100
127) Chrysene	15.73	228	1248555	56.4561	ug/ml	99
129) Di-n-Octyl Phthalate	16.54	149	1590286	58.4774	ug/ml	99
130) 7,12-Dimethylbenz[a]anthra	17.62	256	644600	59.1079	ug/ml	99
131) Benzo[b]fluoranthene	17.62	252	1328651	54.5618	ug/ml	98
132) Benzo[k]fluoranthene	17.67	252	1162236	51.4888	ug/ml	95
133) Benzo[a]pyrene	18.36	252	1248294	56.1868	ug/ml	99
134) 3-Methylcholanthrene	19.26	268	701245	58.1339	ug/ml	99
135) Indeno[1,2,3-cd]pyrene	21.60	276	1375274	55.5825	ug/ml	97
136) Dibenz[ah]anthracene	21.60	278	1145050	55.4891	ug/ml	98
137) Benzo[ghi]perylene	22.55	276	1116722	54.5580	ug/ml	98

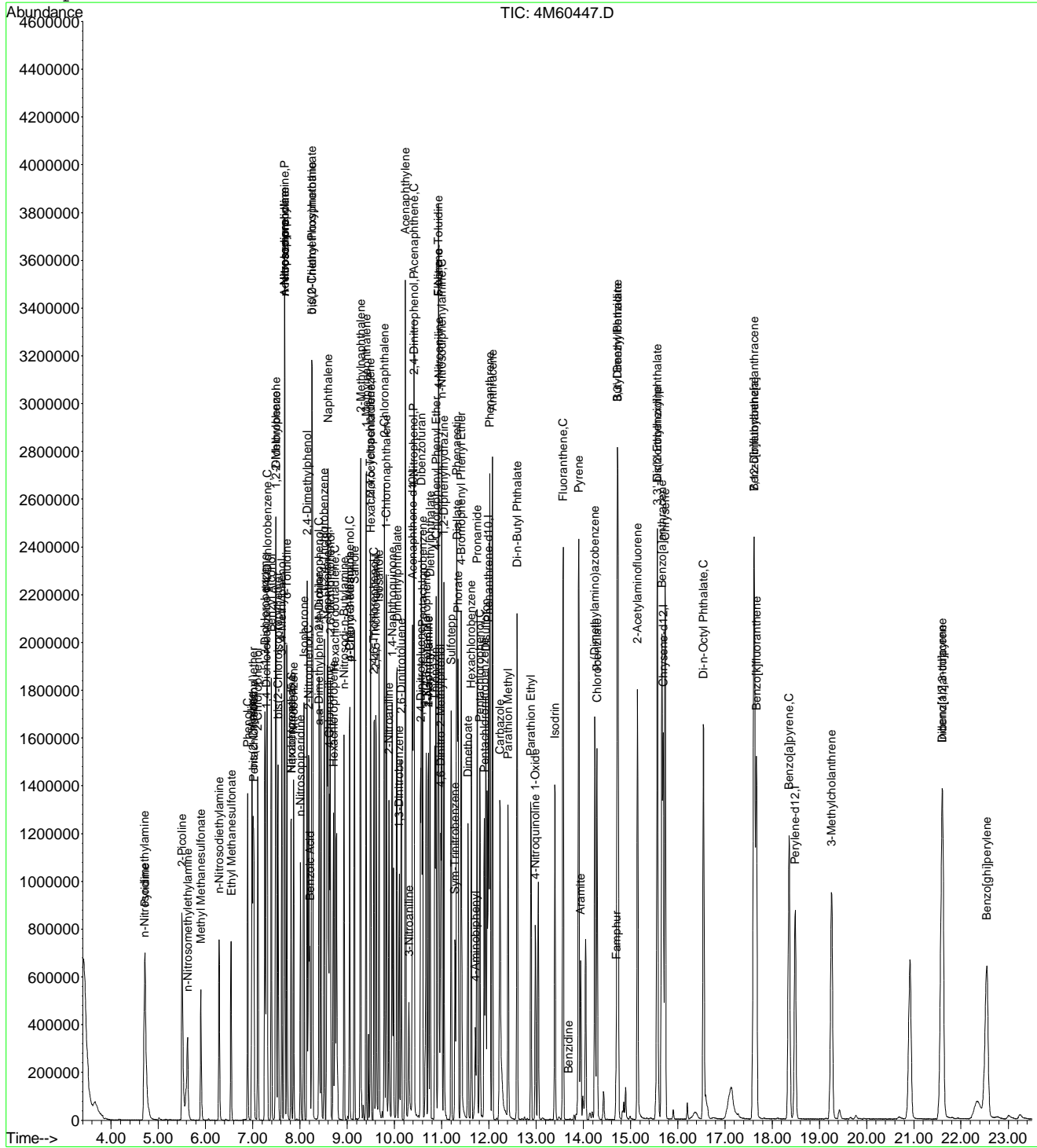
(#) = qualifier out of range (m) = manual integration
 4M60447.D MEGAMIX.M Fri Apr 20 08:39:54 2012

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D
Acq On : 19 Apr 2012 13:58
Sample : WG395394-10 50PPM Megamix Alt Src STD
Misc : 1,1 STD50596
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012

Vial: 10
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

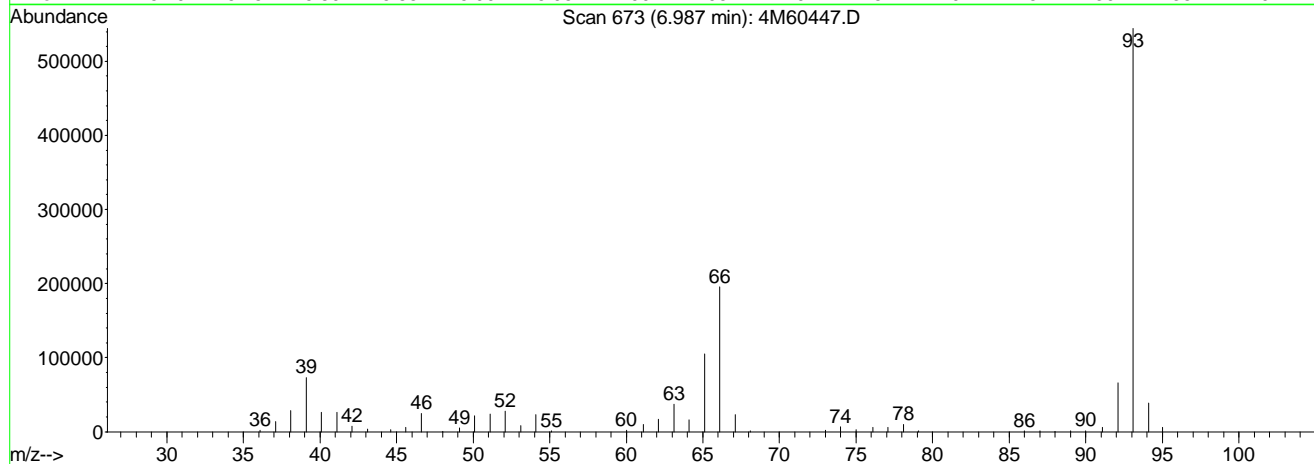
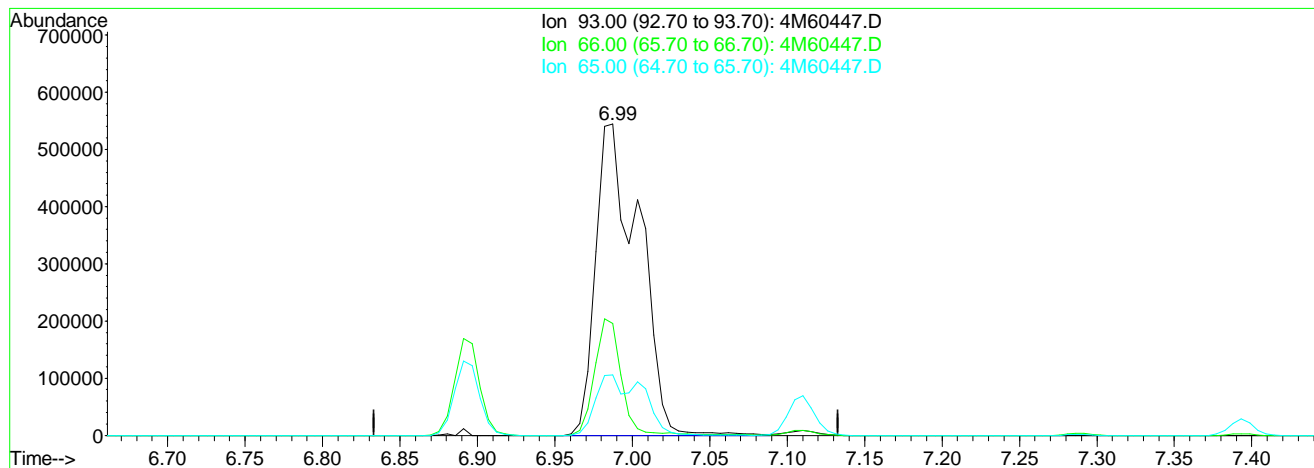
Quant Results File: MEGAMIX.RES

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



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

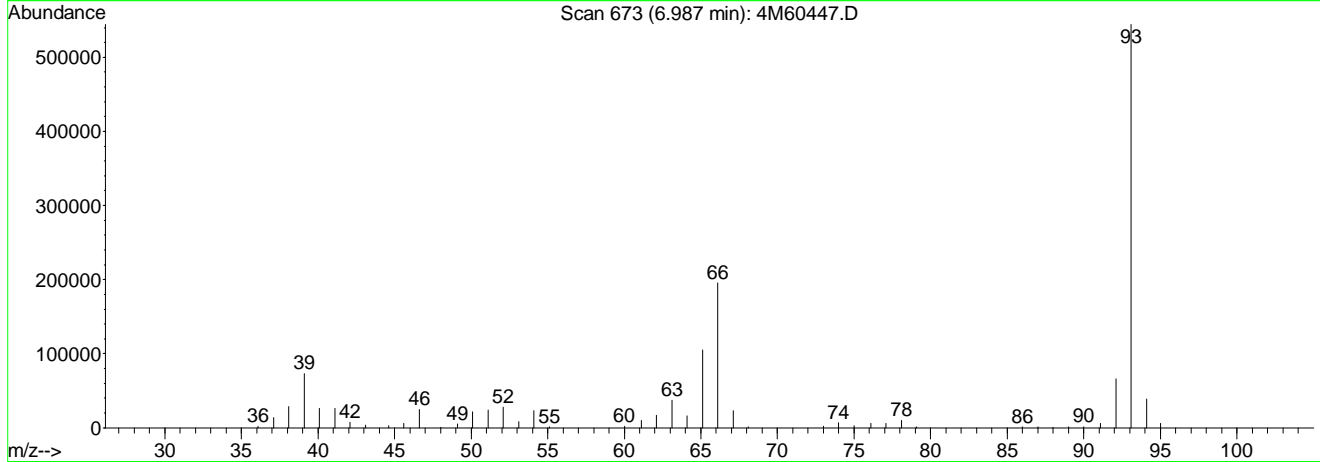
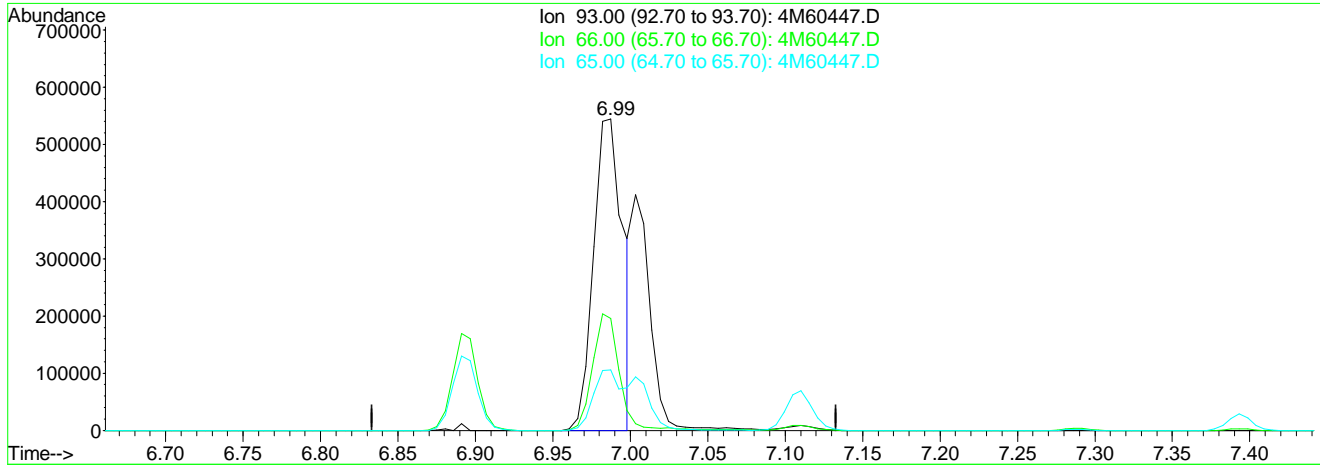
6.99min 79.16ug/ml

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

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

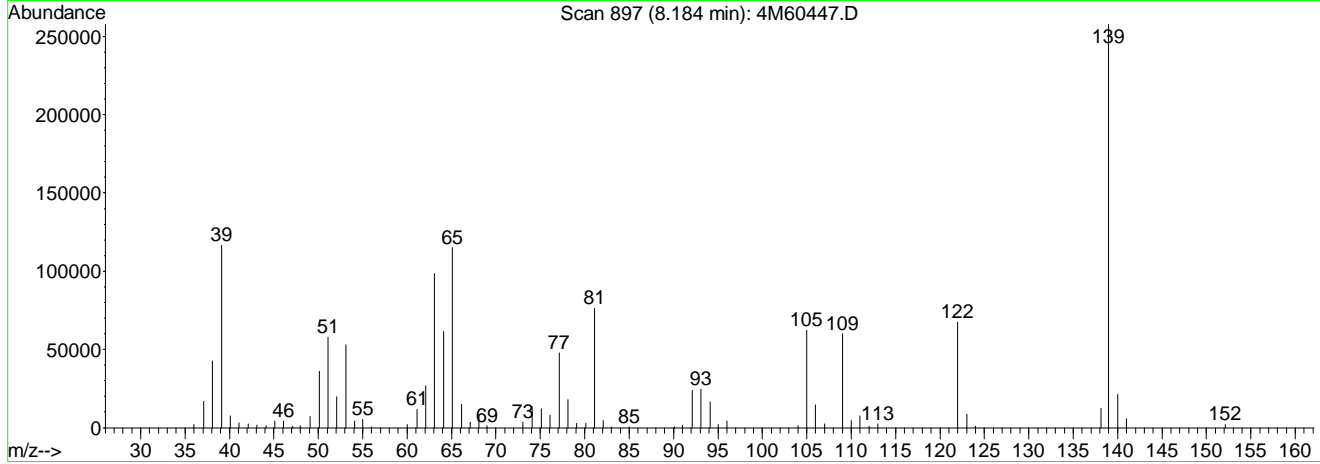
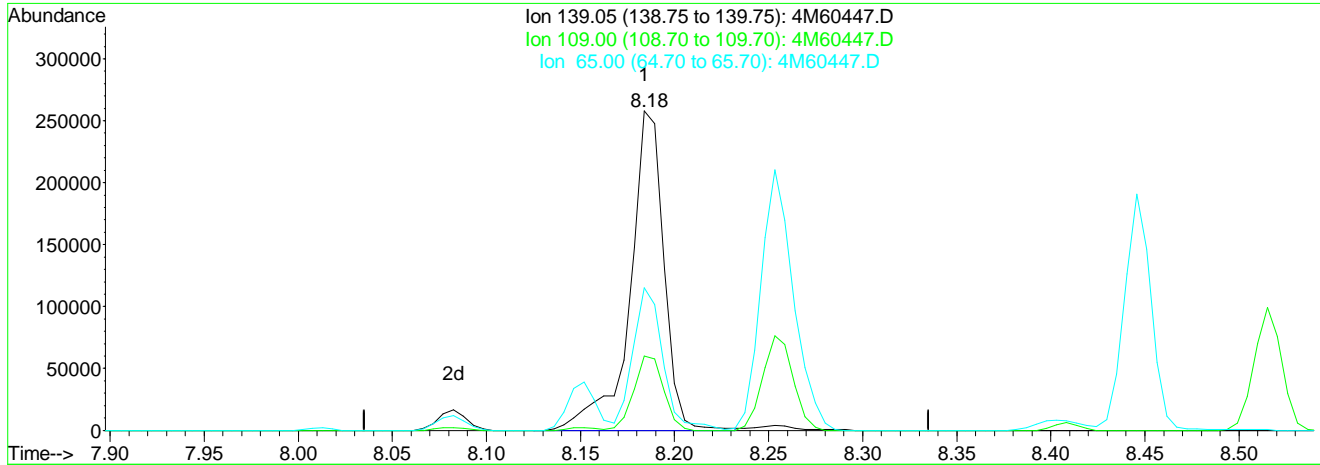
4M60447.D MEGAMIX.M

Thu Apr 19

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41
 C. Caswell-Augustin 2012 *Michael Caswell*
 #3 - Improperly integrated isomers and/or coeluting compounds

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)

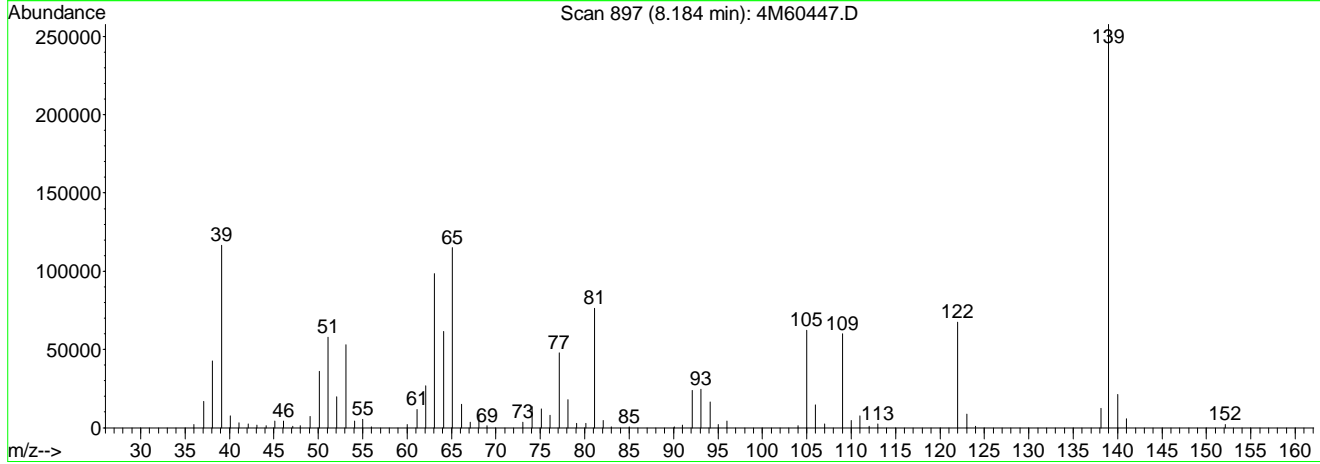
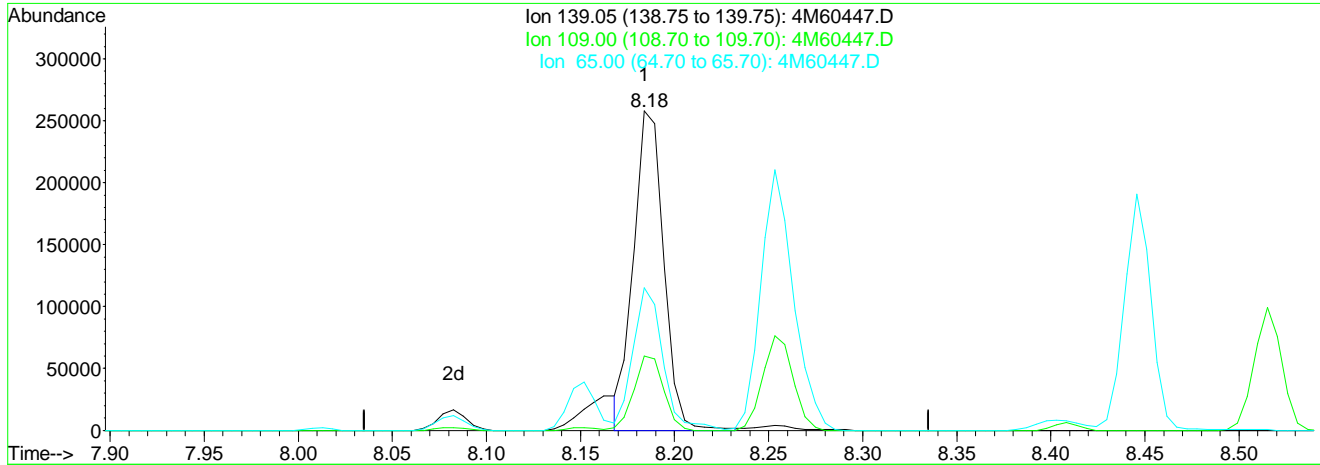
8.18min 65.94ug/ml

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

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

Analyst: 04/20/2012 09:31 Supervisor: 04/20/2012 11:41
 2012
 #3 - Improperly integrated isomers and/or coeluting compounds

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

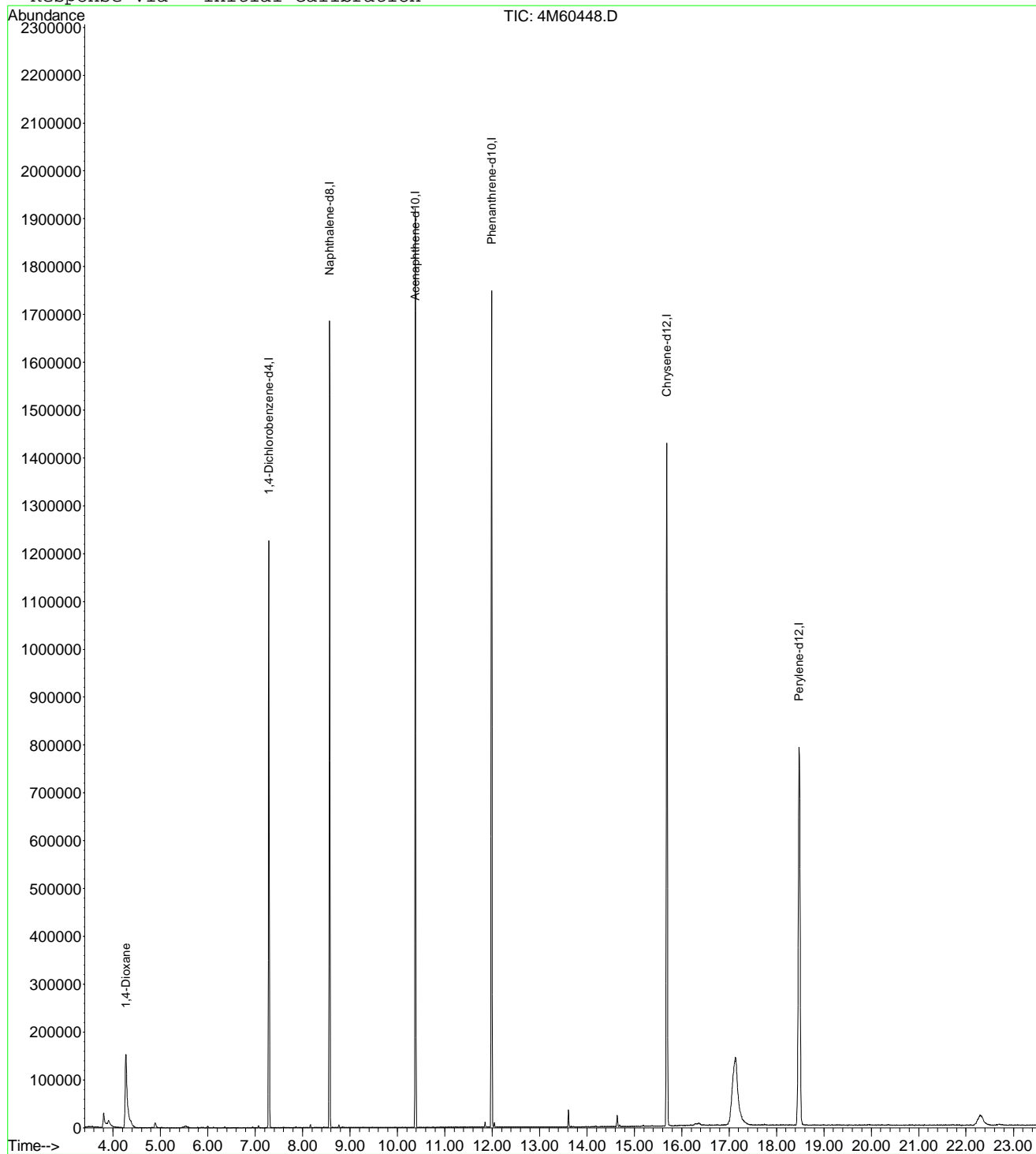
System Monitoring Compounds						
8) 2-Fluorophenol	0.00	112	0	0.0000	ug/ml	
Spiked Amount	100.000	Range 21 - 100	Recovery	=	0.00%#	
12) Phenol-d5	0.00	99	0	0.0000	ug/ml	
Spiked Amount	100.000	Range 10 - 94	Recovery	=	0.00%#	
31) Nitrobenzene-d5	0.00	82	0	0.0000	ug/ml	
Spiked Amount	50.000	Range 35 - 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

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



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

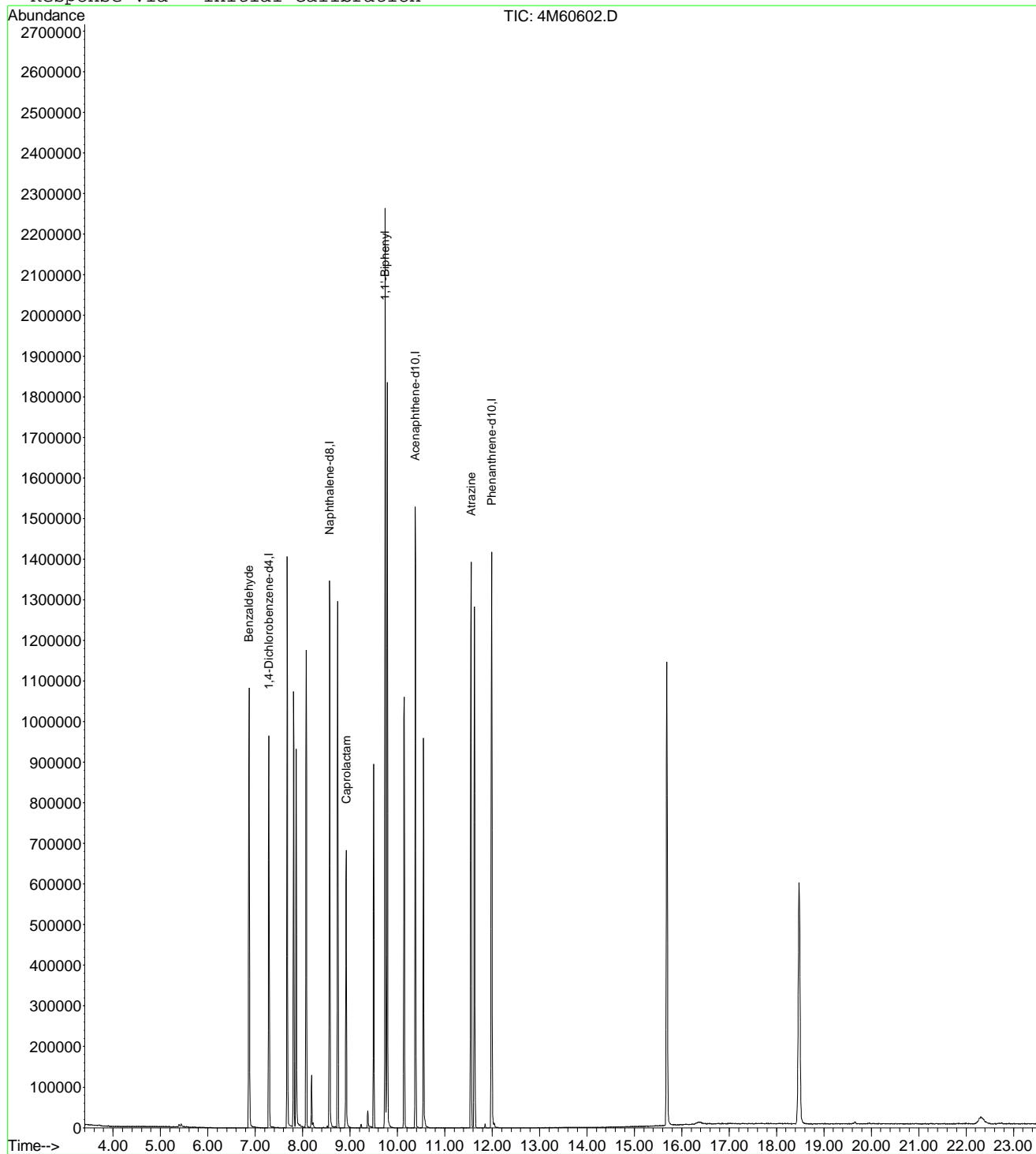
Page 1

Data File : I:\MSDCHEM\1\DATA\050112\4M60602.D
 Acq On : 1 May 2012 14:05
 Sample : WG396709-01 50PPM TCL STD
 Misc : 1,1 STD51428
 MS Integration Params: RTEINT.P
 Quant Time: May 2 13:30 2012

Vial: 3
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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



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.	QIion	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
						Qvalue
Target Compounds						
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

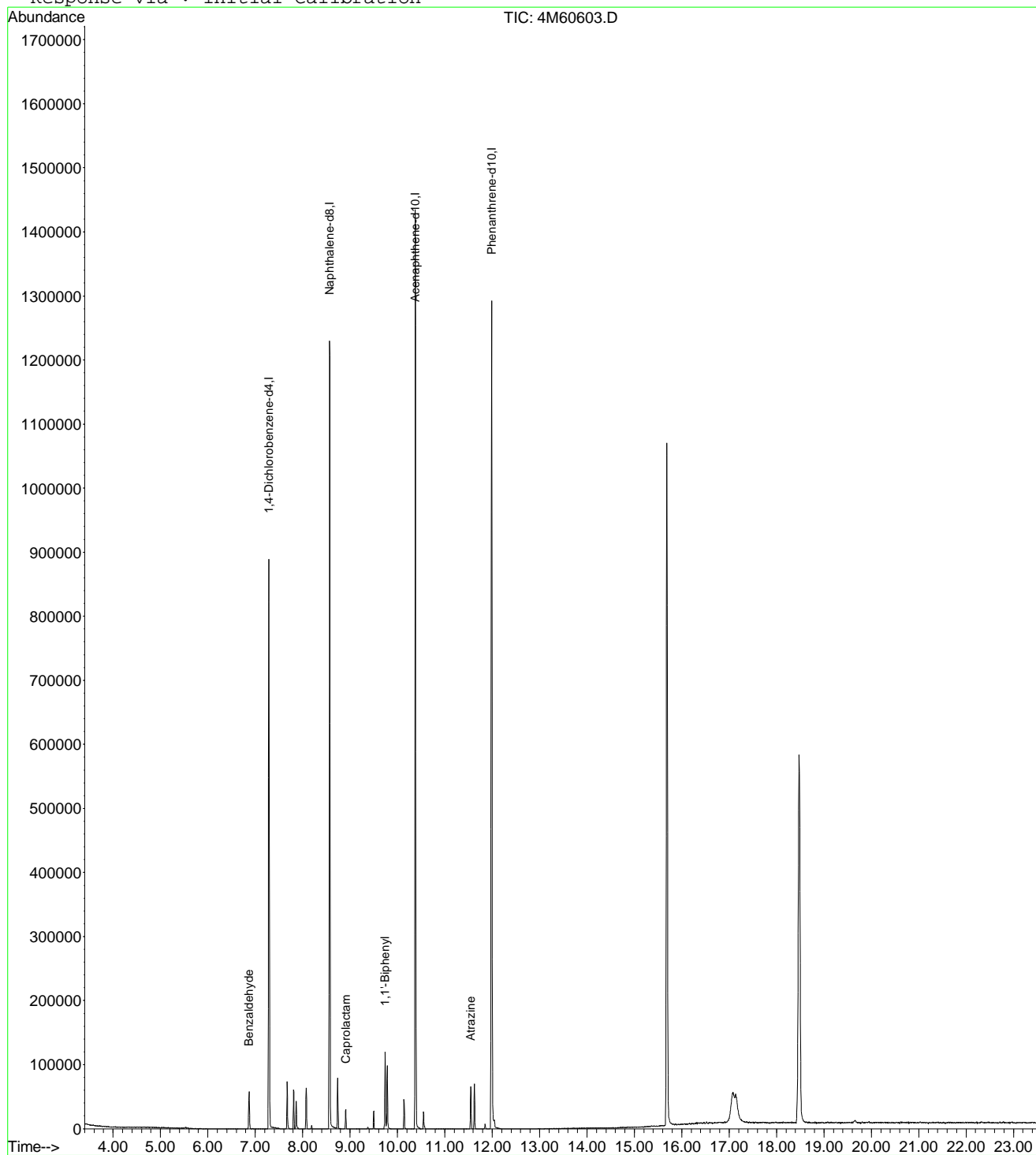
 (#) = qualifier out of range (m) = manual integration
 4M60603.D TCL.M Wed May 02 13:54:27 2012

Data File : I:\MSDCHEM\1\DATA\050112\4M60603.D
 Acq On : 1 May 2012 14:39
 Sample : WG396709-02 3PPM TCL STD
 Misc : 1,1 STD51428
 MS Integration Params: RTEINT.P
 Quant Time: May 2 13:30 2012

Vial: 4
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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



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.	QIion	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

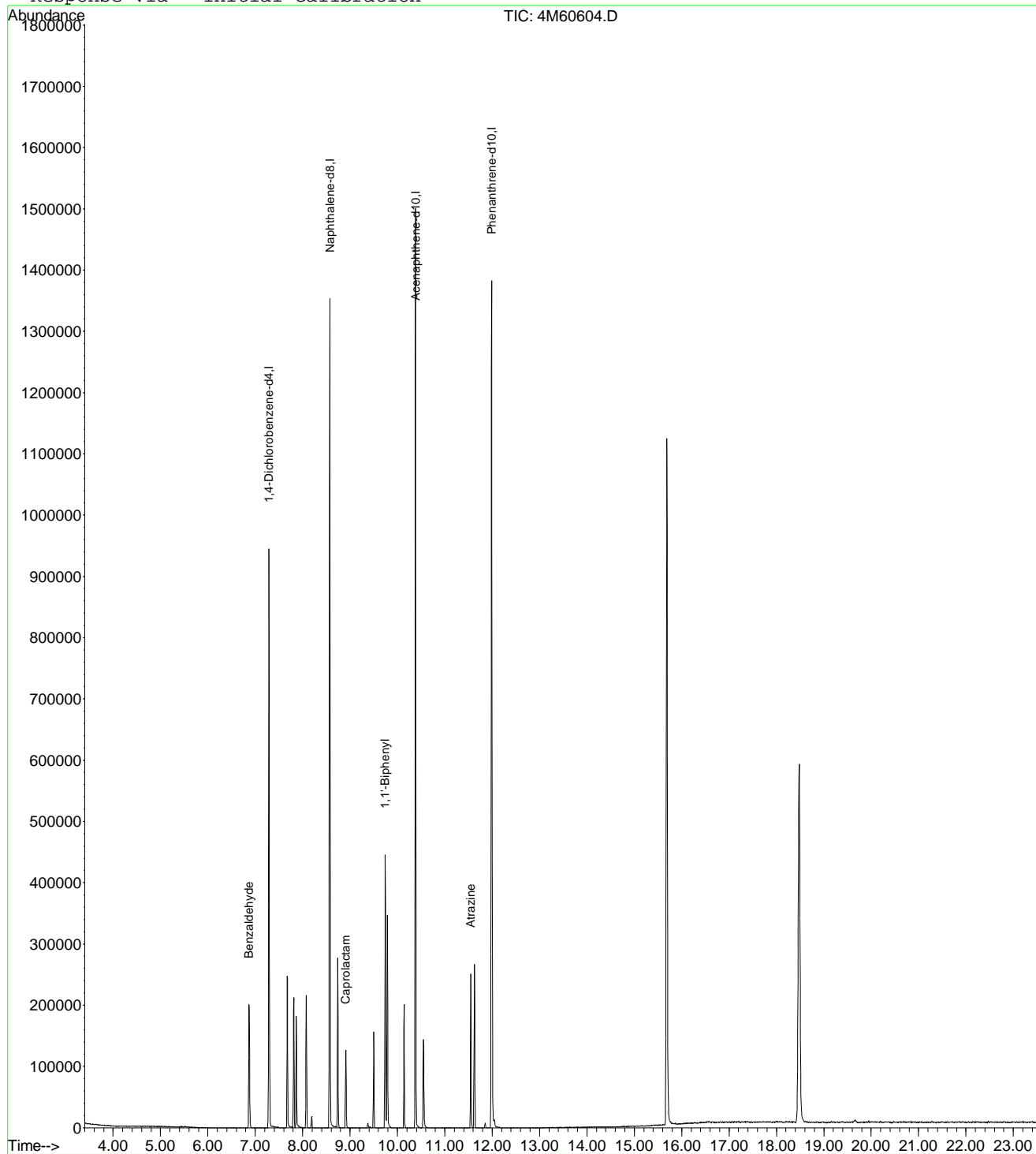
Page 1

Data File : I:\MSDCHEM\1\DATA\050112\4M60604.D
 Acq On : 1 May 2012 15:13
 Sample : WG396709-03 10PPM TCL STD
 Misc : 1,1 STD51428
 MS Integration Params: RTEINT.P
 Quant Time: May 2 13:30 2012

Vial: 5
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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



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
						Qvalue
Target Compounds						
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

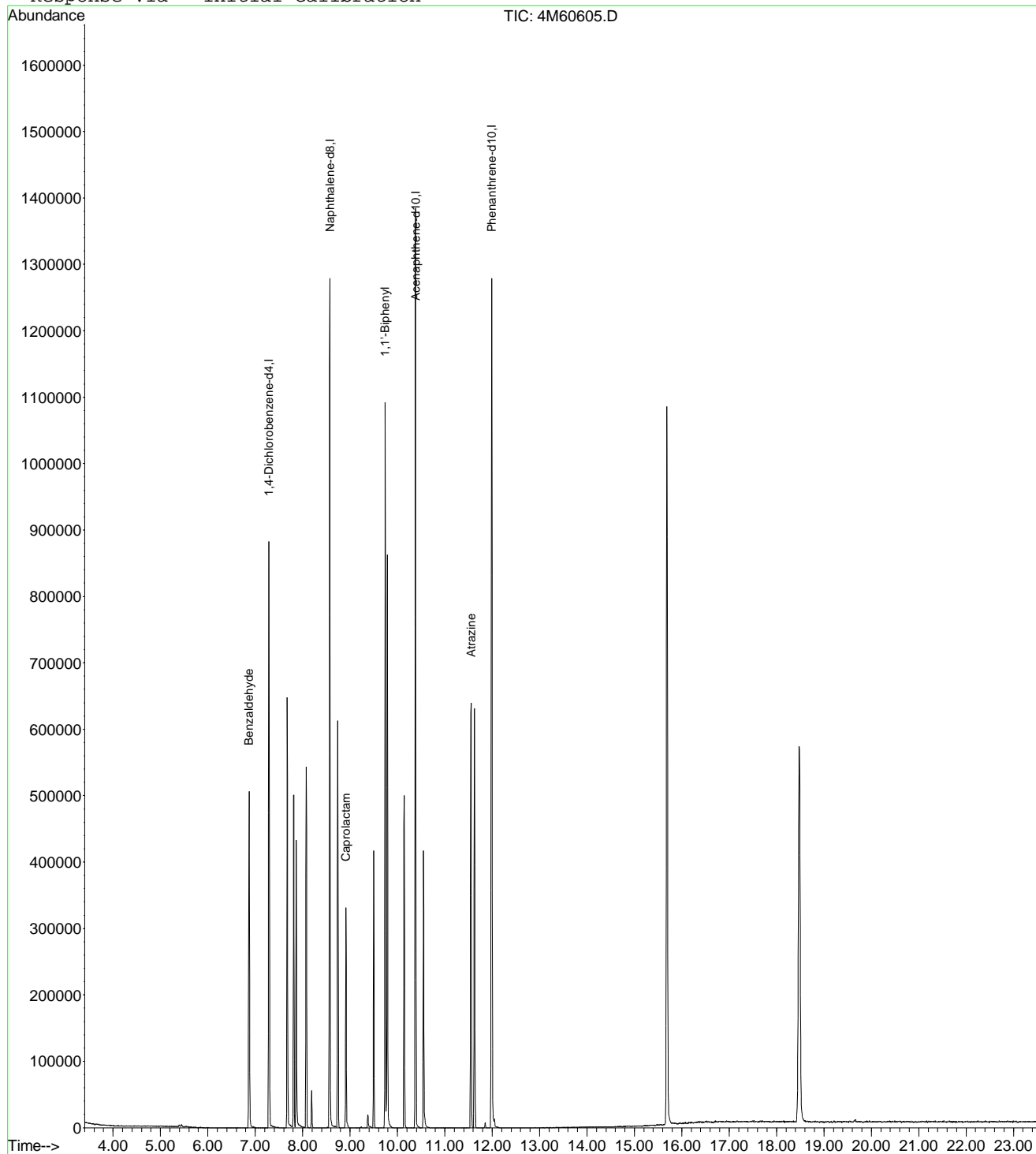
 (#) = qualifier out of range (m) = manual integration
 4M60605.D TCL.M Wed May 02 13:54:28 2012

Data File : I:\MSDCHEM\1\DATA\050112\4M60605.D
 Acq On : 1 May 2012 15:47
 Sample : WG396709-04 25PPM TCL STD
 Misc : 1,1 STD51428
 MS Integration Params: RTEINT.P
 Quant Time: May 2 13:30 2012

Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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



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.	QIion	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

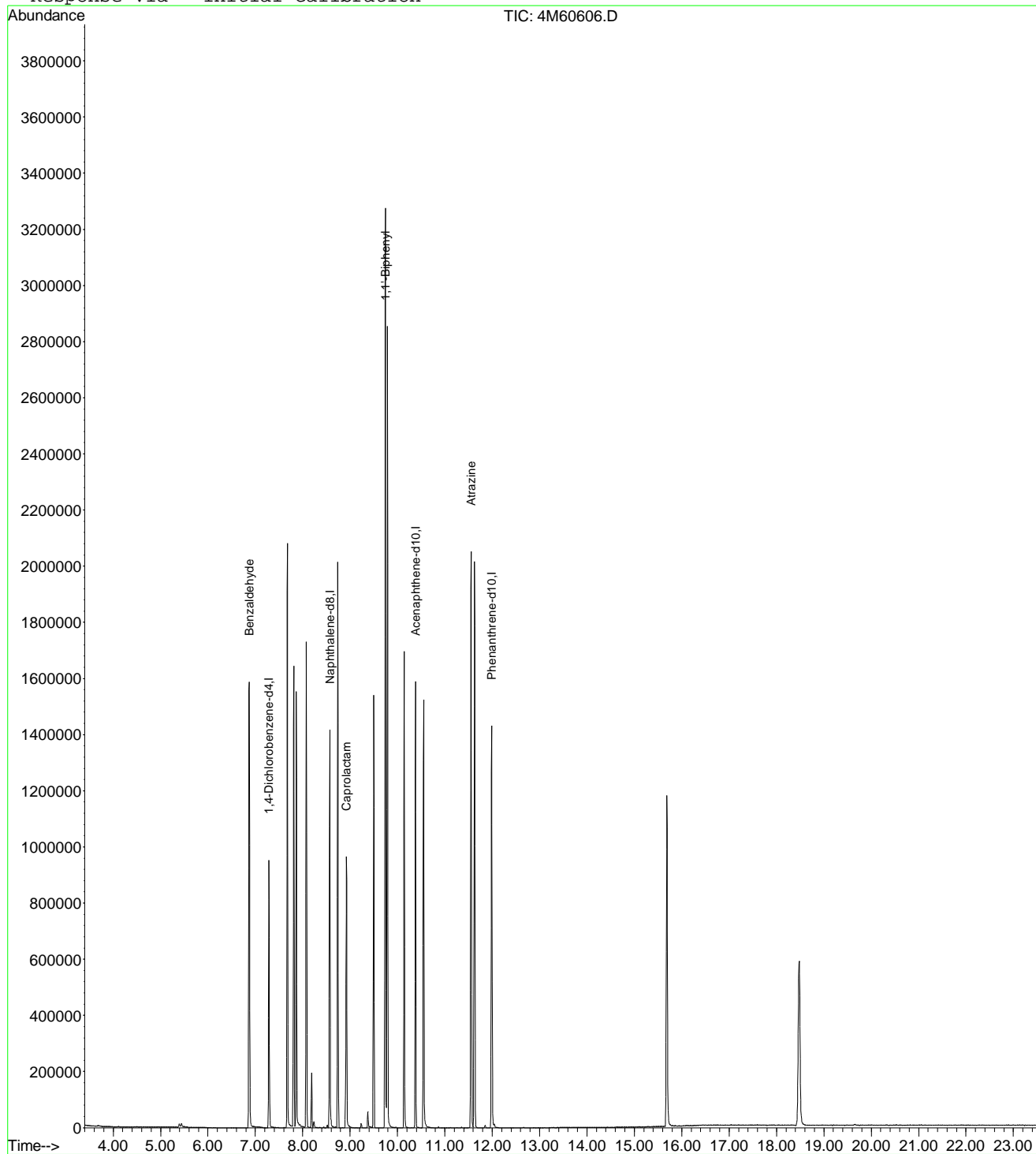
 (#) = qualifier out of range (m) = manual integration
 4M60606.D TCL.M Wed May 02 13:54:28 2012

Data File : I:\MSDCHEM\1\DATA\050112\4M60606.D
 Acq On : 1 May 2012 16:22
 Sample : WG396709-05 80PPM TCL STD
 Misc : 1,1 STD51428
 MS Integration Params: RTEINT.P
 Quant Time: May 2 13:31 2012

Vial: 7
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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



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

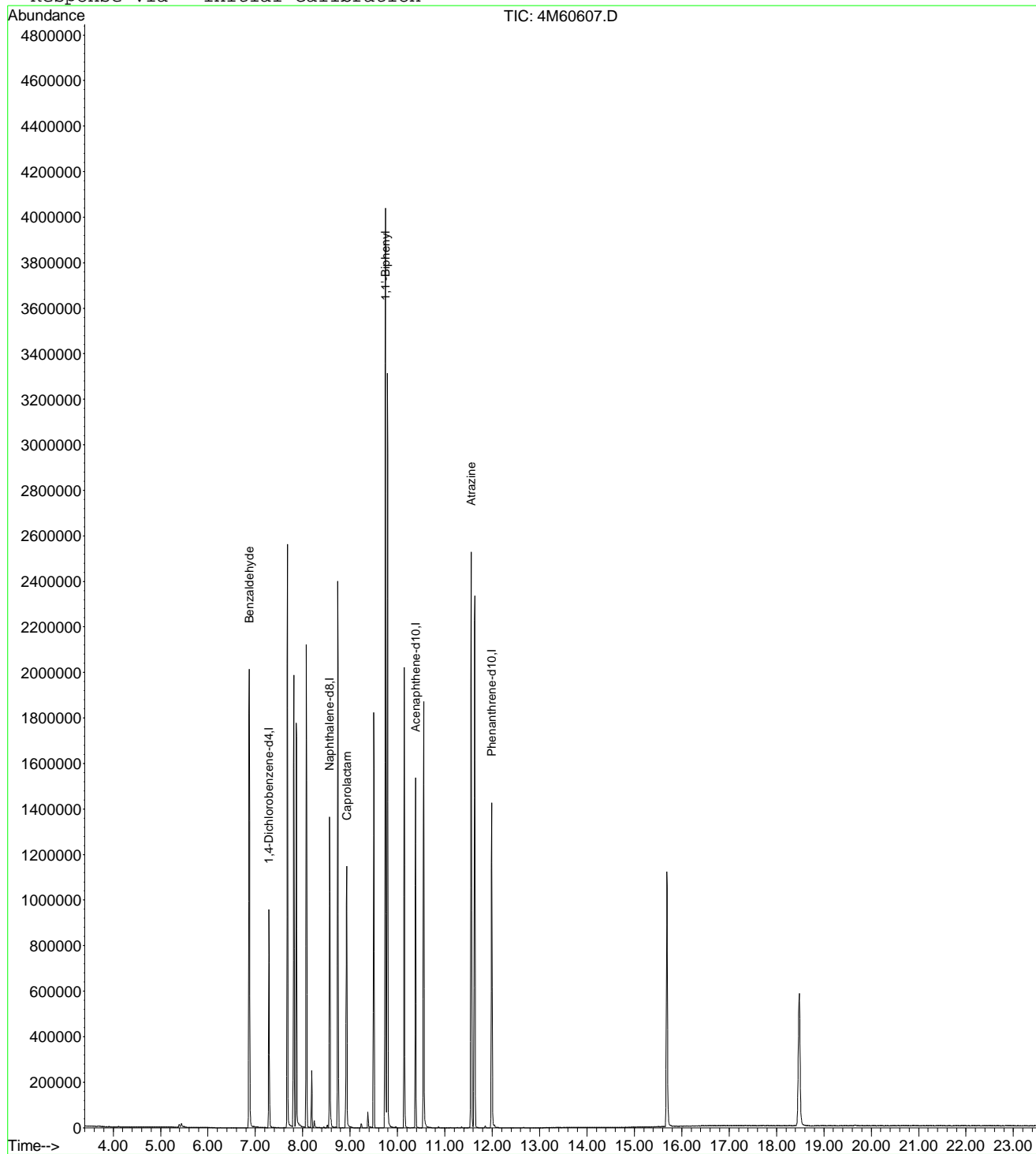
Page 1

Data File : I:\MSDCHEM\1\DATA\050112\4M60607.D
 Acq On : 1 May 2012 16:57
 Sample : WG396709-06 100PPM TCL STD
 Misc : 1,1 STD51428
 MS Integration Params: RTEINT.P
 Quant Time: May 2 13:31 2012

Vial: 8
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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



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.	QIion	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	209920	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	790964	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	444492	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	786510	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.87	105	244497	43.7269	ug/L	99
4) Caprolactam	8.92	55	129633	50.1859	ug/L	99
6) 1,1'-Biphenyl	9.74	154	864997	47.4149	ug/L	100
8) Atrazine	11.55	200	219418	50.4008	ug/L	100

 (#) = qualifier out of range (m) = manual integration
 4M60608.D TCL.M Wed May 02 13:54:37 2012

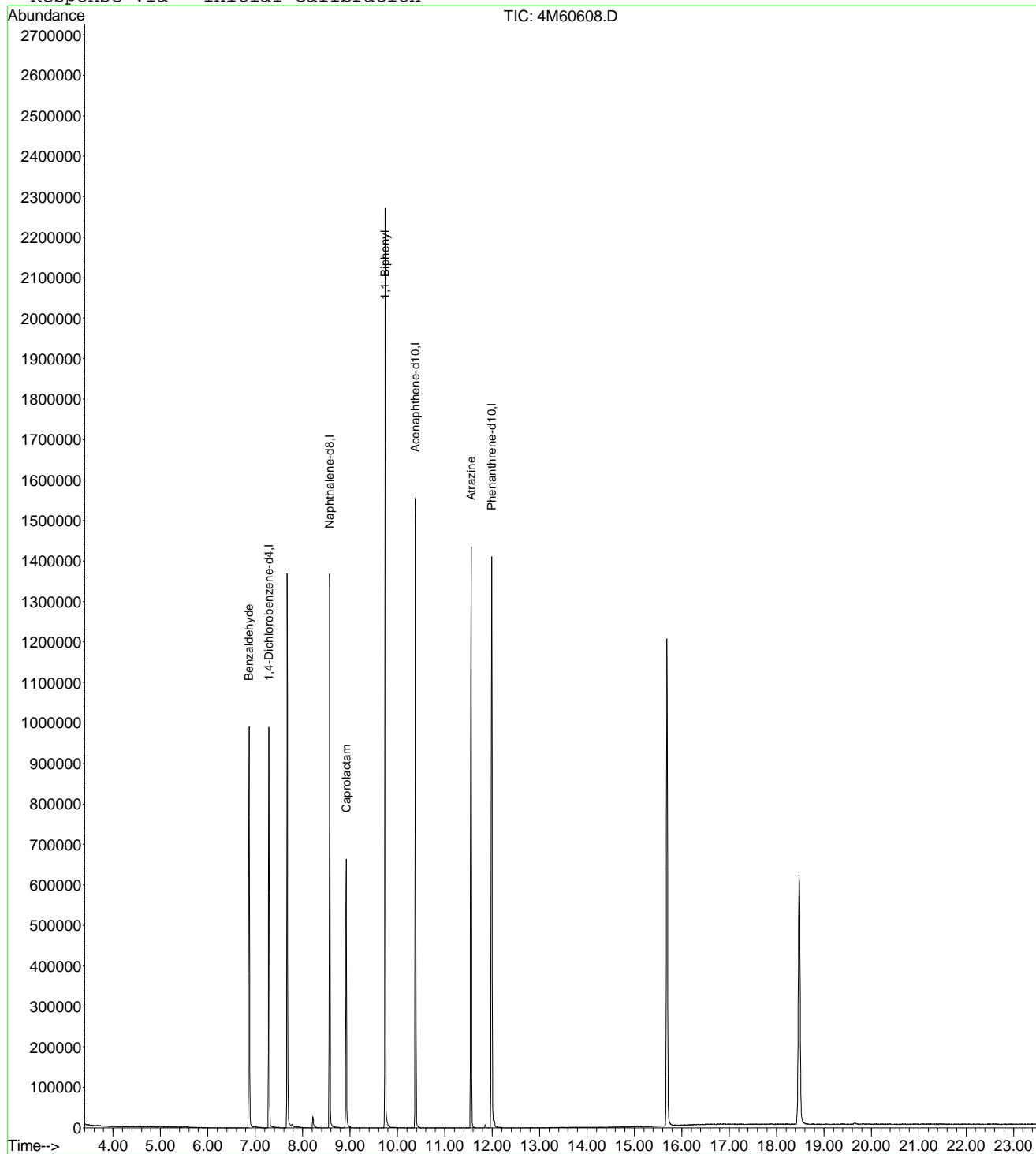
Page 1

Data File : I:\MSDCHEM\1\DATA\050112\4M60608.D
 Acq On : 1 May 2012 17:31
 Sample : WG396709-07 50PPM TCL Alt Src STD
 Misc : 1,1 STD51166
 MS Integration Params: RTEINT.P
 Quant Time: May 2 13:31 2012

Vial: 9
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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



Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
 Acq On : 12 May 2012 11:22 Operator: CAA
 Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
 Misc : 1,1 STD50886 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 12 11:49:23 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Fri May 11 08:14:43 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	379992	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	1412784	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	798531	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1443768	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	1334202	40.00	ug/ml	0.00
128) Perylene-d12	18.33	264	1243573	40.00	ug/ml	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
8) 2-Fluorophenol	6.00	112	555748	48.2372	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery =	48.24%		
12) Phenol-d5	6.84	99	668726	49.5943	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery =	49.59%		
31) Nitrobenzene-d5	7.79	82	619359	51.8330	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery =	103.66%		
59) 2-Fluorobiphenyl	9.58	172	1335874	50.0988	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery =	100.20%		
86) 2,4,6-Tribromophenol	11.14	330	191250	53.7078	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery =	53.71%		
117) p-Terphenyl-d14	13.95	244	1255295	51.0472	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery =	102.10%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	4.22	88	215082	45.4150	ug/ml#	93
3) n-Nitrosodimethylamine	4.64	74	332264	47.3804	ug/ml	95
4) Pyridine	4.66	79	576188	46.3440	ug/ml	89
5) 2-Picoline	5.45	93	643585	47.5725	ug/ml	98
6) n-Nitrosomethylethylamine	5.56	88	277896	47.6196	ug/ml	92
7) Methyl Methanesulfonate	5.85	80	331000	49.9579	ug/ml	96
9) n-Nitrosodiethylamine	6.23	102	290633	46.4533	ug/ml	94
10) Ethyl Methanesulfonate	6.49	79	418765	48.2564	ug/ml	98
11) Aniline	6.93	93	988079m	49.5877	ug/ml	
13) Phenol	6.85	94	703723	48.8774	ug/ml	99
14) bis(2-Chloroethyl)ether	6.95	63	421298	46.7317	ug/ml	96
15) Pentachloroethane	6.96	167	245273	50.5079	ug/ml	97
16) 2-Chlorophenol	7.05	128	632231	49.0365	ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	691533	48.1884	ug/ml	99
18) 1,4-Dichlorobenzene	7.25	146	716308	48.9395	ug/ml	100
19) Benzyl Alcohol	7.34	108	404925	48.5056	ug/ml	96
20) 1,2-Dichlorobenzene	7.44	146	652795	48.0251	ug/ml	100
21) 2-Methylphenol	7.43	107	468291	47.1685	ug/ml	97
22) bis(2-Chloroisopropyl)eth	7.48	45	734110	39.6628	ug/ml	92
23) 3-,4-Methylphenol	7.57	107	612726	47.4784	ug/ml	99
24) n-Nitrosopyrrolidine	7.61	100	290168	49.8022	ug/ml	92
25) n-Nitrosodipropylamine	7.62	70	402666	49.6016	ug/ml	95
26) Acetophenone	7.63	105	764448	47.8827	ug/ml	98
27) n-Nitrosomorpholine	7.63	56	328854	43.4218	ug/ml	93
28) o-Toluidine	7.67	106	956544	47.3927	ug/ml	99
29) Hexachloroethane	7.75	117	268639	49.5655	ug/ml	99
32) Nitrobenzene	7.81	77	612162	51.4014	ug/ml	98
33) n-Nitrosopiperidine	7.96	114	311881	48.9219	ug/ml	94
34) Isophorone	8.02	82	1080625	49.7112	ug/ml	100
35) 2-Nitrophenol	8.13	139	372198	53.0166	ug/ml	96
36) 2,4-Dimethylphenol	8.10	122	559250	46.3918	ug/ml	98
37) 0,0,0-Triethyl Phosphoroth	8.20	198	303821	50.4821	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.20	93	846228	51.2235	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60817.D MEGAMIX.M Mon May 14 11:40:33 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
 Acq On : 12 May 2012 11:22 Operator: CAA
 Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
 Misc : 1,1 STD50886 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 12 11:49:23 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Fri May 11 08:14:43 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Benzoic Acid	8.13	105	92948m	11.1877	ug/ml	
40) 2,4-Dichlorophenol	8.35	162	518862	51.4147	ug/ml	100
41) a,a-Dimethylphenethylamine	8.35	58	811053	47.5367	ug/ml	97
42) 1,2,4-Trichlorobenzene	8.45	180	594488	51.8791	ug/ml	99
43) Naphthalene	8.53	128	1833150	48.9942	ug/ml	97
44) 4-Chloroaniline	8.56	127	758246	55.0259	ug/ml	97
45) 2,6-Dichlorophenol	8.59	162	531803	51.0682	ug/ml	99
46) Hexachloropropene	8.65	213	362616	56.4618	ug/ml	99
47) Hexachlorobutadiene	8.68	225	308283	52.5492	ug/ml	100
48) n-Nitrosodi-n-Butylamine	8.88	84	503834	50.1456	ug/ml	94
49) p-Phenylenediamine	9.00	108	41408	47.6288	ug/ml	99
50) 4-Chloro-3-Methylphenol	9.00	107	514466	50.2371	ug/ml	98
51) Safrole	9.09	162	493322	50.6507	ug/ml	99
52) 2-Methylnaphthalene	9.22	142	1203293	49.5017	ug/ml	99
53) 1-Methylnaphthalene	9.34	142	1137074	49.4767	ug/ml	99
55) 1,2,4,5-Tetrachlorobenzene	9.43	216	541257	51.7239	ug/ml	100
56) Hexachlorocyclopentadiene	9.44	237	275977	50.9878	ug/ml	99
57) 2,4,6-Trichlorophenol	9.51	196	381818	52.0715	ug/ml	99
58) 2,4,5-Trichlorophenol	9.56	196	392581	52.0108	ug/ml	100
60) Isosafrole	9.62	162	507901	50.3323	ug/ml	100
61) 2-Chloronaphthalene	9.73	162	1156497	51.2892	ug/ml	99
62) 1-Chloronaphthalene	9.77	162	1077410	50.4620	ug/ml	99
63) 2-Nitroaniline	9.83	65	327994	50.7473	ug/ml	99
64) 1,4-Naphthoquinone	9.89	158	427631	48.0252	ug/ml	98
65) Dimethylphthalate	9.99	163	1275112	50.4707	ug/ml	100
66) 1,3-Dinitrobenzene	10.05	168	258644	53.3884	ug/ml	98
67) 2,6-Dinitrotoluene	10.09	165	328321	52.0228	ug/ml	99
68) Acenaphthylene	10.17	152	1791733	49.4895	ug/ml	100
69) 3-Nitroaniline	10.24	138	219101	47.0666	ug/ml	99
70) 2,4-Dinitrophenol	10.34	184	146582	46.9428	ug/ml	86
71) Acenaphthene	10.36	154	1158185	49.1146	ug/ml	100
72) 4-Nitrophenol	10.35	65	226740	48.7525	ug/ml	95
73) 2,4-Dinitrotoluene	10.49	165	420938	52.4193	ug/ml	97
74) Pentachlorobenzene	10.53	250	492718	52.2950	ug/ml	99
75) Dibenzofuran	10.51	168	1571815	49.7801	ug/ml	99
76) 2,3,4,6-Tetrachlorophenol	10.61	232	279476	48.0111	ug/ml	98
77) 1-Naphthylamine	10.59	143	130968	19.2862	ug/ml	97
78) 2-Naphthylamine	10.66	143	51181	12.3819	ug/ml#	75
79) Diethylphthalate	10.70	149	1282150	50.9568	ug/ml	100
80) Thionazin	10.79	107	208975	49.9144	ug/ml	94
81) Fluorene	10.87	166	1332546	49.6553	ug/ml	100
82) 4-Chlorophenyl Phenyl Ether	10.82	204	645654	51.2021	ug/ml	99
83) 4-Nitroaniline	10.88	138	300782	52.1980	ug/ml	99
84) 5-Nitro-o-Toluidine	10.87	152	318955	50.3425	ug/ml	99
85) 1,2-Diphenylhydrazine	10.99	77	1241940	50.7515	ug/ml	99
88) 4,6-Dinitro-2-Methylphenol	10.92	198	227714	50.6652	ug/ml	92
89) n-Nitrosodiphenylamine	10.94	169	1163164	49.7919	ug/ml	99
90) Sulfolon	11.14	322	223065	53.4466	ug/ml	99
91) Sym-Trinitrobenzene	11.23	75	320717	56.1573	ug/ml	97
92) Diethylphthalate	11.26	86	479895	50.3733	ug/ml	91
93) Phenacetin	11.25	108	633582	51.7696	ug/ml	99
94) Phorate	11.28	75	769905	50.6559	ug/ml#	98
95) 4-Bromophenyl Phenyl Ether	11.34	248	374163	51.2228	ug/ml	99
96) Hexachlorobenzene	11.56	284	419691	52.5600	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60817.D MEGAMIX.M Mon May 14 11:40:33 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
 Acq On : 12 May 2012 11:22 Operator: CAA
 Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
 Misc : 1,1 STD50886 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 12 11:49:23 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Fri May 11 08:14:43 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97) Dimethoate	11.49	87	437047	53.6795	ug/ml	98
98) 4-Aminobiphenyl	11.65	169	511029	58.4551	ug/ml	99
99) Pentachlorophenol	11.74	266	237796	47.0946	ug/ml	99
100) Pronamide	11.69	173	592669	50.4965	ug/ml	99
101) Pentachloronitrobenzene	11.83	237	153211	55.3627	ug/ml	97
102) Disulfoton	11.86	88	657063	50.2992	ug/ml	99
103) Phenanthrene	11.95	178	1848204	48.2622	ug/ml	99
104) Anthracene	12.00	178	1911460	48.6796	ug/ml	100
105) Carbazole	12.16	167	1714980	49.8801	ug/ml	98
106) Parathion Methyl	12.33	109	406561	50.8734	ug/ml	100
107) Di-n-Butyl Phthalate	12.52	149	2148058	50.2867	ug/ml	99
108) Parathion Ethyl	12.81	97	261632	53.7727	ug/ml	97
109) 4-Nitroquinoline 1-Oxide	12.91	190	76847	21.8802	ug/ml	93
110) Methapyrilene	12.96	58	337328	40.1830	ug/ml	88
111) Isodrin	13.32	193	198332	48.2174	ug/ml	99
112) Fluoranthene	13.49	202	1980305	49.3484	ug/ml	99
114) Benzidine	13.60	184	6067	3.2625	ug/ml	100
115) Pyrene	13.82	202	2014432	50.4796	ug/ml	100
116) Aramite	13.87	185	125542	55.5575	ug/ml	98
118) p-(Dimethylamino)azobenzen	14.16	225	426079	51.7136	ug/ml	97
119) Chlorobenzilate	14.21	251	580235	53.4294	ug/ml	99
120) Famphur	14.61	218	42802	90.4739	ug/ml#	68
121) Butyl Benzyl Phthalate	14.63	149	936083	51.5713	ug/ml	98
122) 3,3'-Dimethylbenzidine	14.65	212	415119	32.9207	ug/ml#	95
123) 2-Acetylaminofluorene	15.07	181	844119	54.3622	ug/ml	98
124) bis(2-Ethylhexyl)phthalate	15.48	149	1279905	51.6721	ug/ml	99
125) 3,3'-Dichlorobenzidine	15.49	252	424455	57.3669	ug/ml	99
126) Benzo[a]anthracene	15.57	228	1766595	49.9106	ug/ml	99
127) Chrysene	15.64	228	1638495	49.3151	ug/ml	100
129) Di-n-Octyl Phthalate	16.44	149	2160680	53.8016	ug/ml	97
130) 7,12-Dimethylbenz[a]anthra	17.49	256	865707	53.7549	ug/ml	99
131) Benzo[b]fluoranthene	17.49	252	1966827	54.6936	ug/ml	98
132) Benzo[k]fluoranthene	17.53	252	1662165	49.8637	ug/ml	97
133) Benzo[a]pyrene	18.21	252	1699125	51.7887	ug/ml	98
134) 3-Methylcholanthrene	19.08	268	922876	51.8078	ug/ml	99
135) Indeno[1,2,3-cd]pyrene	21.37	276	1992764	54.5377	ug/ml	97
136) Dibenz[ah]anthracene	21.37	278	1682296	55.2049	ug/ml	98
137) Benzo[ghi]perylene	22.28	276	1607558	53.1829	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60817.D MEGAMIX.M Mon May 14 11:40:33 2012

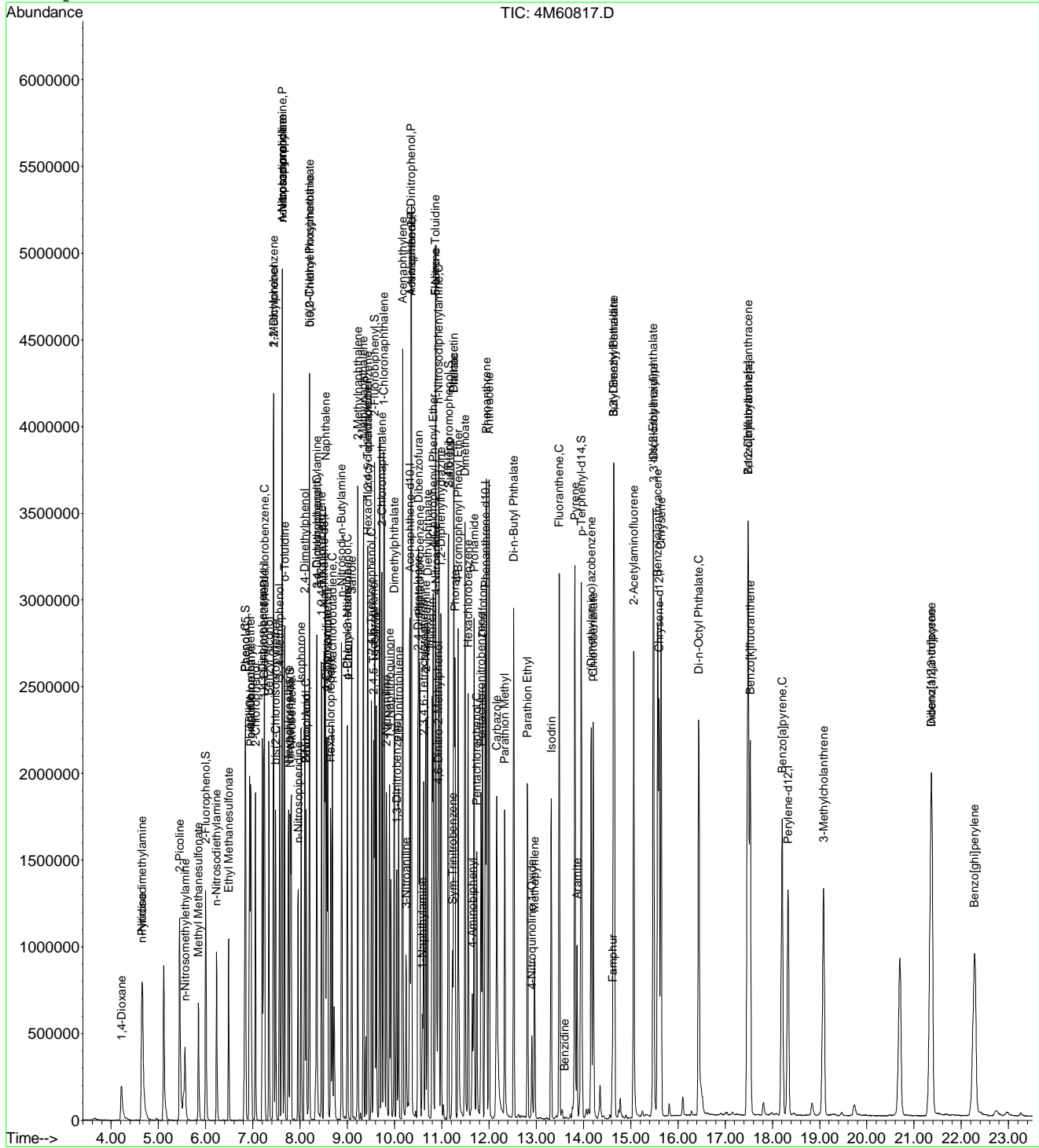
Page 3

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D
Acq On : 12 May 2012 11:22
Sample : WG397824-02 50PPM Megamix STD
Misc : 1,1 STD50886
MS Integration Params: RTEINT.P
Quant Time: May 13 11:44 2012

Vial: 2
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

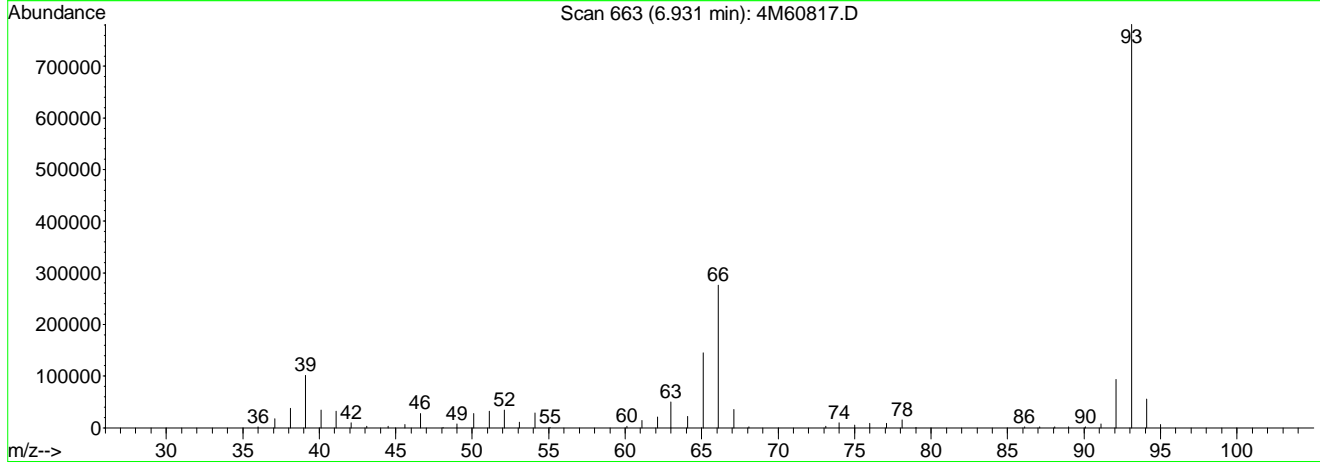
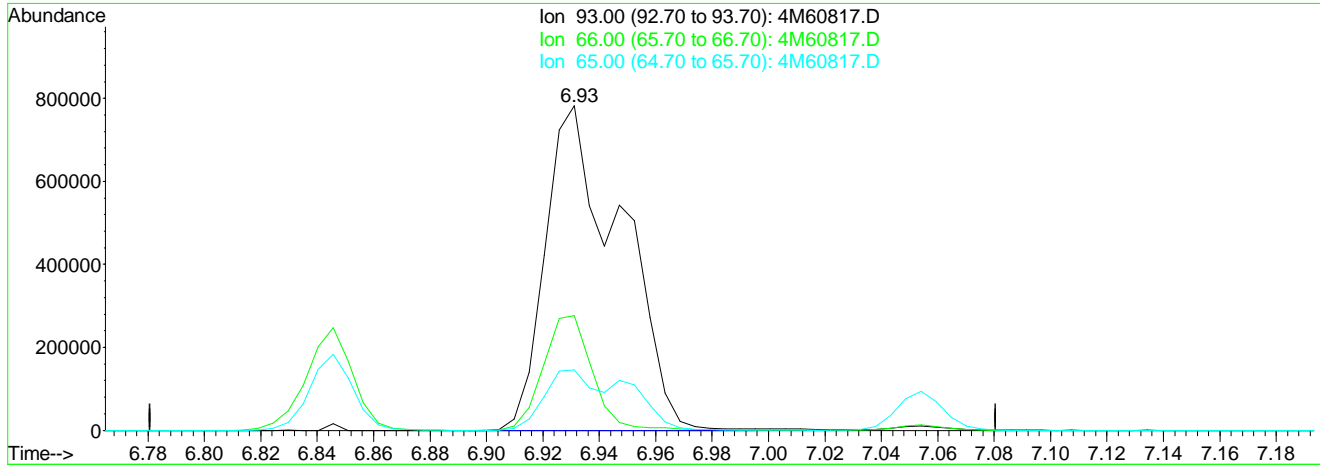
Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:21 2012
Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
 Acq On : 12 May 2012 11:22 Operator: CAA
 Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
 Misc : 1,1 STD50886 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 12 11:49 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Fri May 11 08:14:43 2012
 Response via : Multiple Level Calibration



TIC: 4M60817.D

(11) Aniline

6.93min 73.00ug/ml

response 1454568

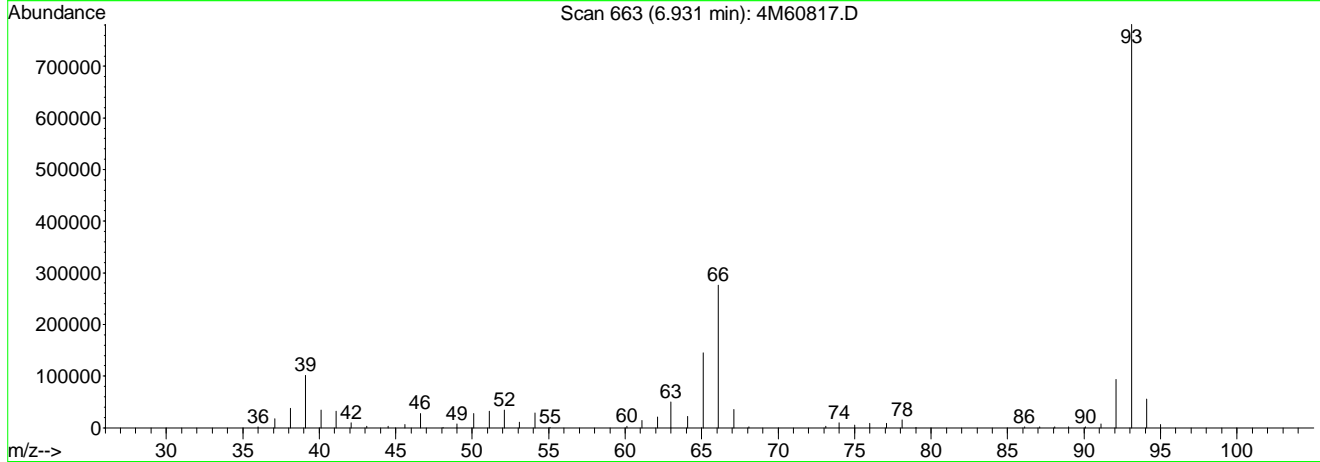
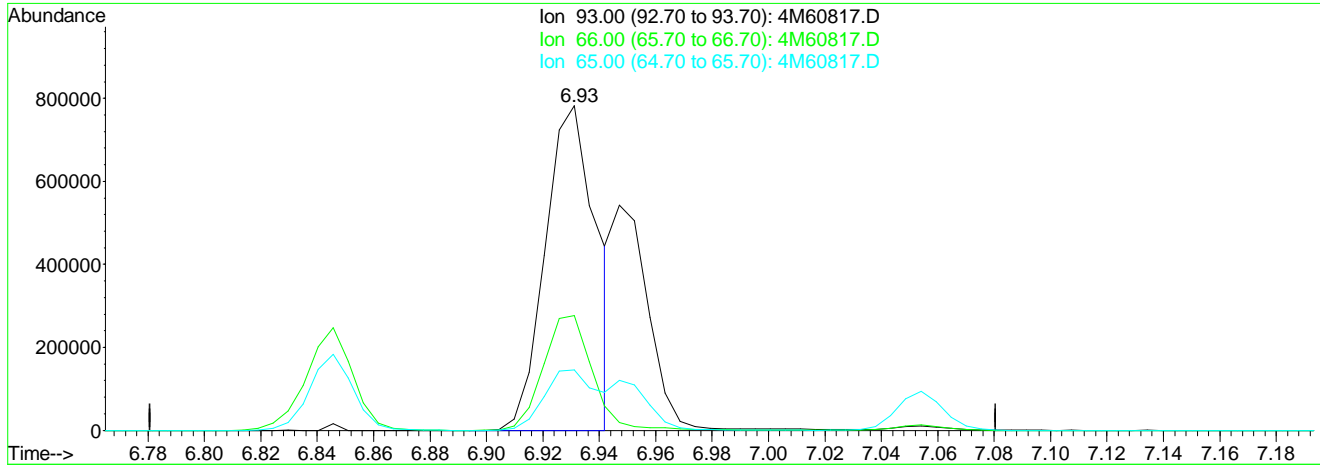
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.27
65.00	29.20	13.17#
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D
 Acq On : 12 May 2012 11:22
 Sample : WG397824-02 50PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: May 13 11:43 2012

Vial: 2
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Fri May 11 08:14:43 2012
 Response via : Multiple Level Calibration



TIC: 4M60817.D

(11) Aniline

6.93min 49.59ug/ml mint
 response 988079

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	34.26
65.00	29.20	19.39
0.00	0.00	0.00

4M60817.D MEGAMIX.M

Sun May 13

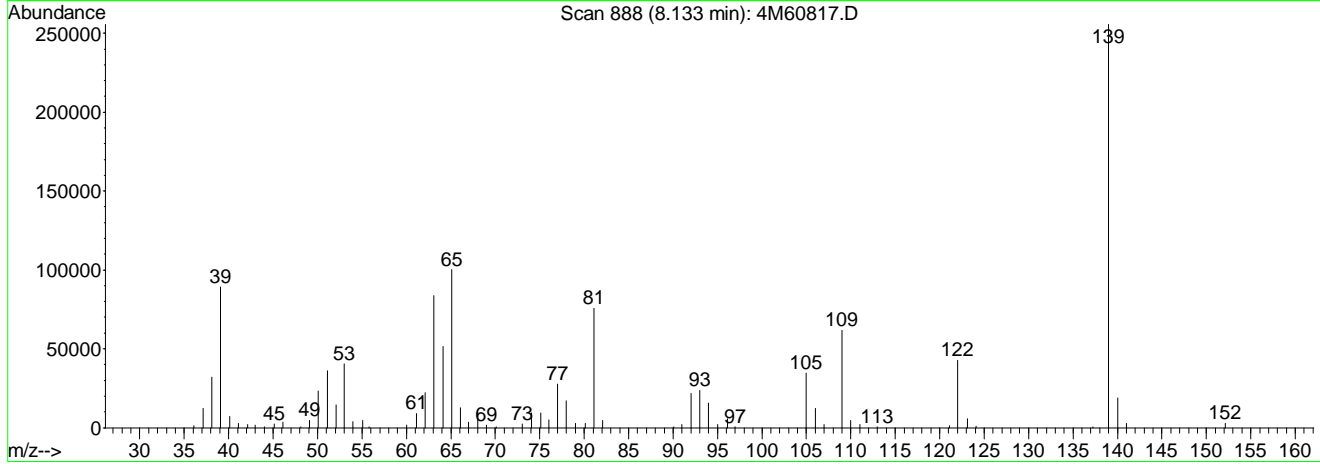
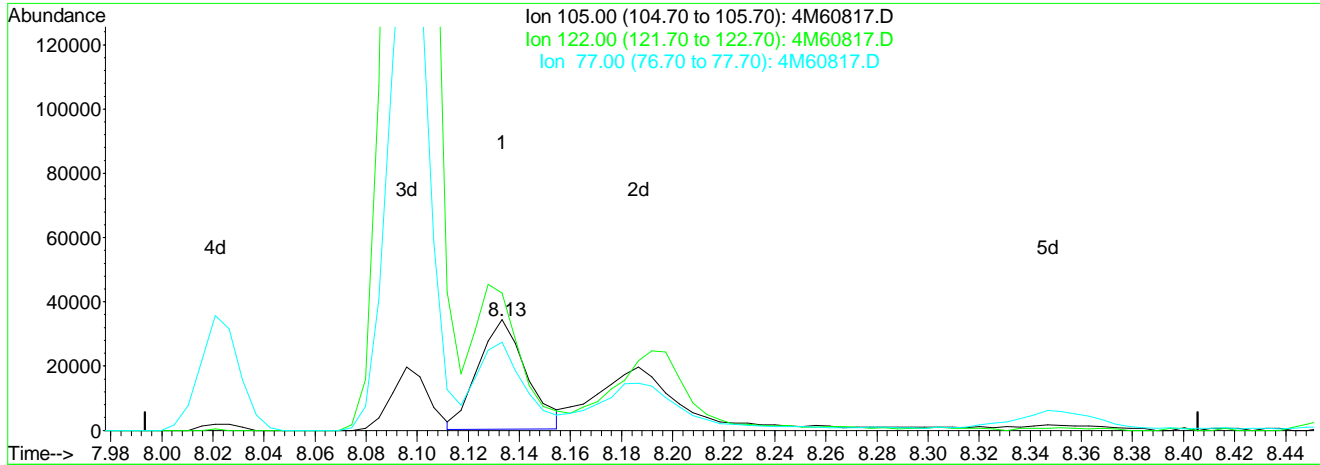
Analyst: 05/14/2012 13:56
 Supervisor: 05/14/2012 15:22
 2012
 #3 - Improperly integrated isomers and/or coeluting compounds

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D
 Acq On : 12 May 2012 11:22
 Sample : WG397824-02 50PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: May 13 11:43 2012

Vial: 2
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Fri May 11 08:14:43 2012
 Response via : Single Level Calibration



TIC: 4M60817.D

(39) Benzoic Acid

8.13min 5.40ug/ml

response 44882

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	126.40#
77.00	70.40	76.39
0.00	0.00	0.00

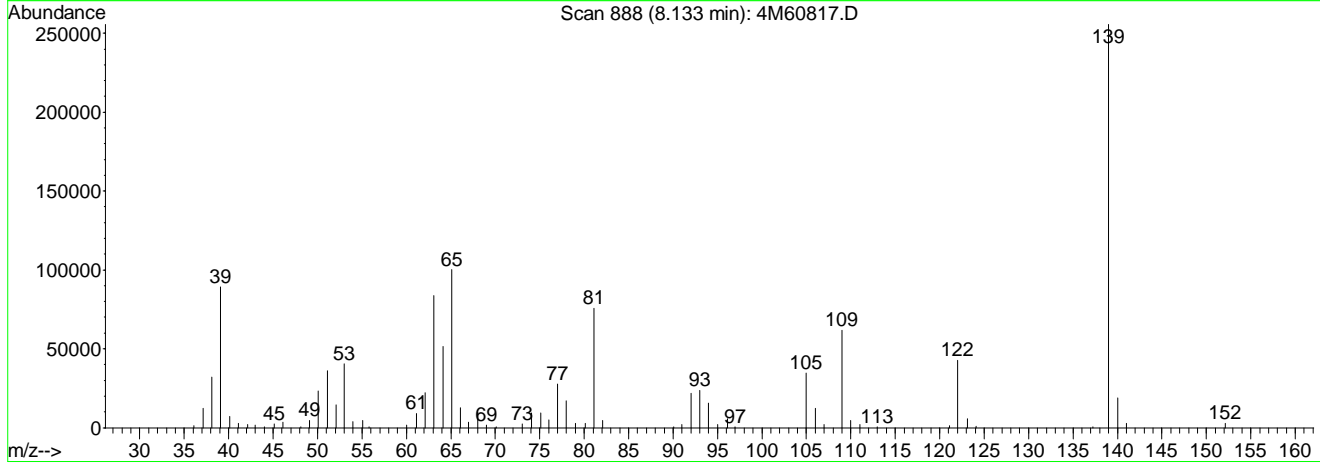
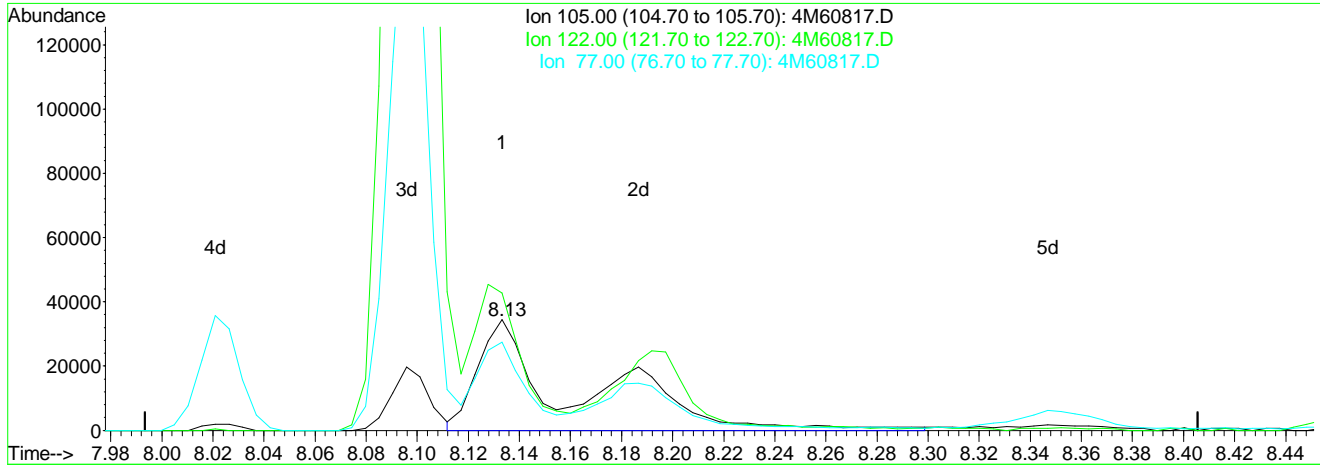
Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D
 Acq On : 12 May 2012 11:22
 Sample : WG397824-02 50PPM Megamix STD
 Misc : 1,1 STD50886
 MS Integration Params: RTEINT.P
 Quant Time: May 13 11:44 2012

Vial: 2
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Fri May 11 08:14:43 2012
 Response via : Single Level Calibration



TIC: 4M60817.D

(39) Benzoic Acid

8.13min 11.19ug/ml mint

response 92948

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	61.04
77.00	70.40	36.89#
0.00	0.00	0.00

4M60817.D MEGAMIX.M

Sun May 13

Analyst: 05/14/2012 13:56
 Supervisor: 05/14/2012 15:22
 2012
 #2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

Data File : I:\MSDCHEM\1\DATA\051212\4M60818.D Vial: 3
 Acq On : 12 May 2012 11:57 Operator: CAA
 Sample : WG397825-01 50PPM TCL STD Inst : HPMS4
 Misc : 1,1 STD51428 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 12 12:23:31 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Fri May 11 09:00:11 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	309271	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1134960	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	640791	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1155753	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.81	105	419864	50.9681	ug/L	99
4) Caprolactam	8.86	55	203636	54.9411	ug/L	99
6) 1,1'-Biphenyl	9.69	154	1301607	49.4912	ug/L	99
8) Atrazine	11.49	200	329914	51.5709	ug/L	99

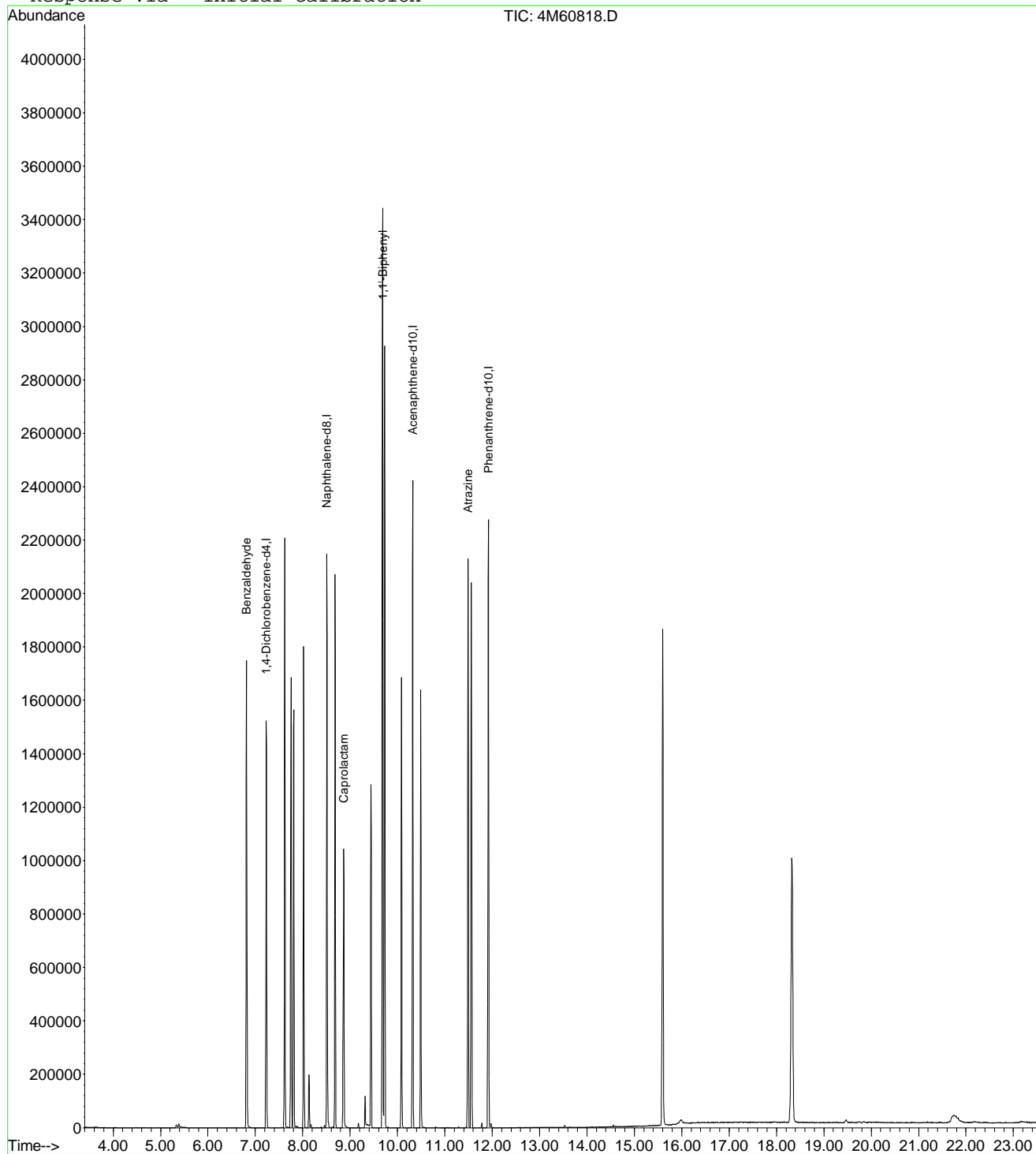
 (#) = qualifier out of range (m) = manual integration
 4M60818.D TCL.M Mon May 14 11:53:22 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60818.D
 Acq On : 12 May 2012 11:57
 Sample : WG397825-01 50PPM TCL STD
 Misc : 1,1 STD51428
 MS Integration Params: RTEINT.P
 Quant Time: May 12 12:23 2012

Vial: 3
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

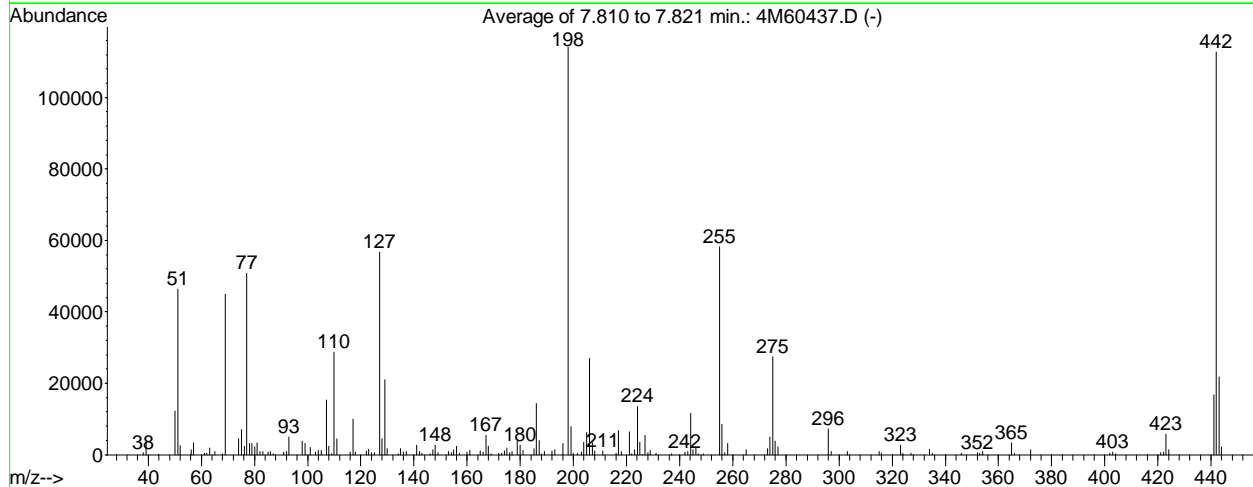
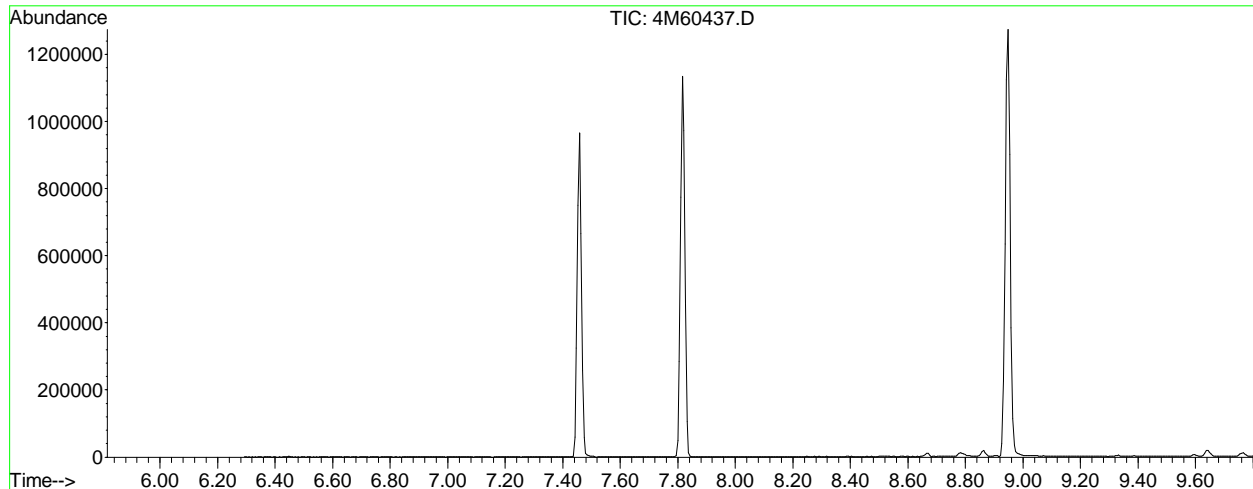
Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:14:52 2012
 Response via : Initial Calibration



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



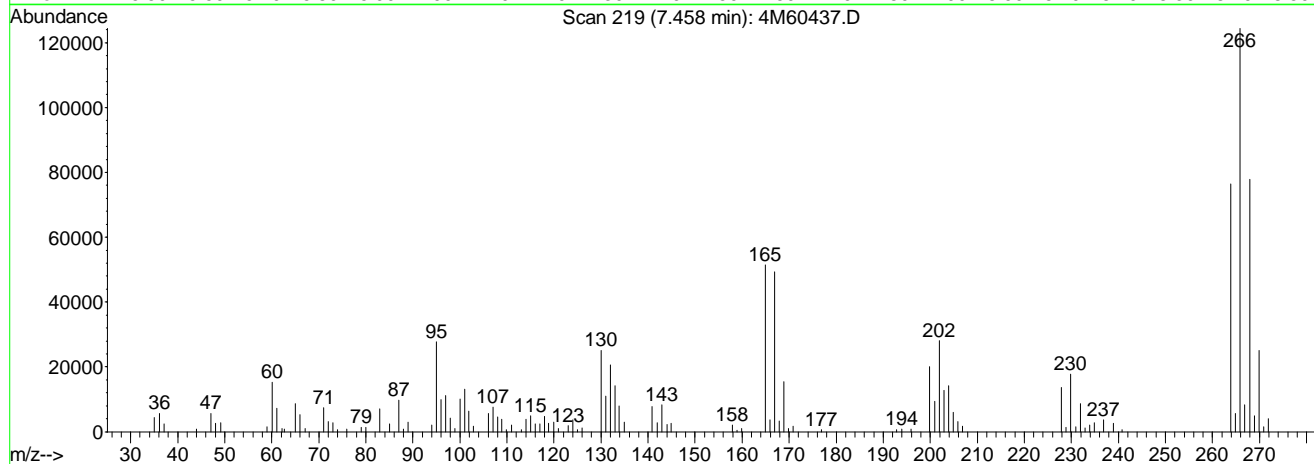
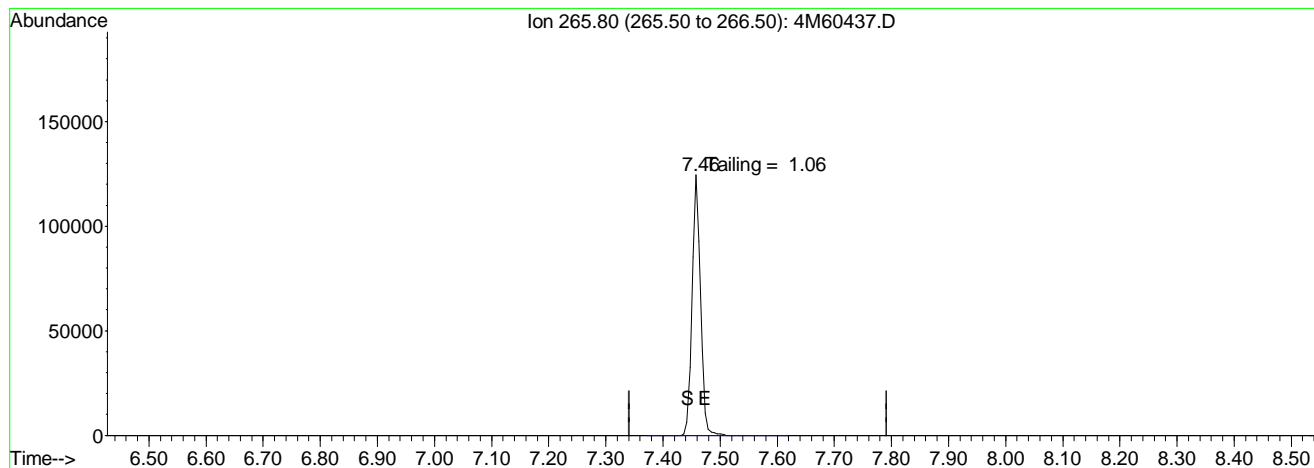
AutoFind: Scans 285, 286, 287; Background Corrected with Scan 279

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

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

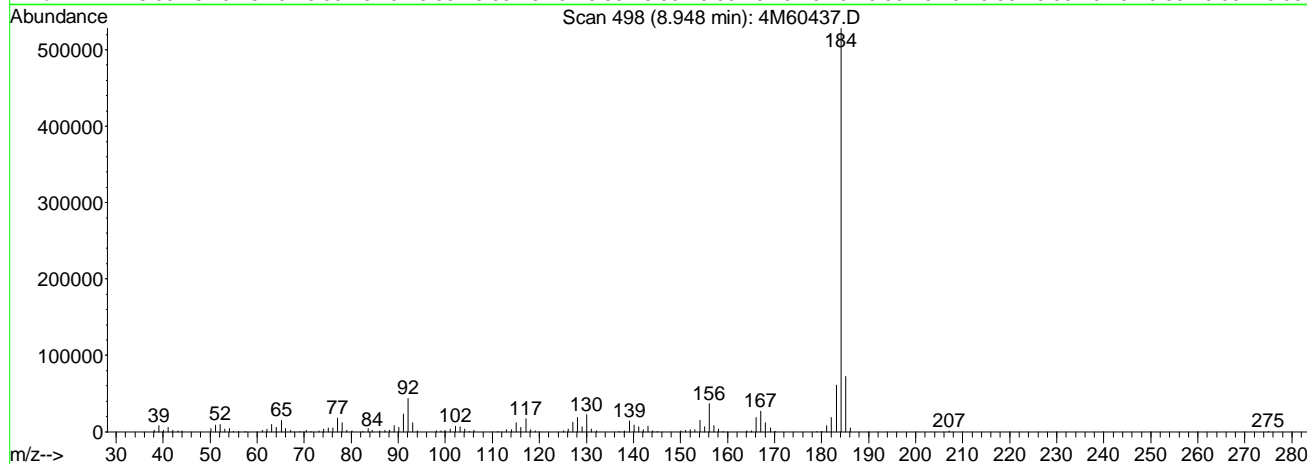
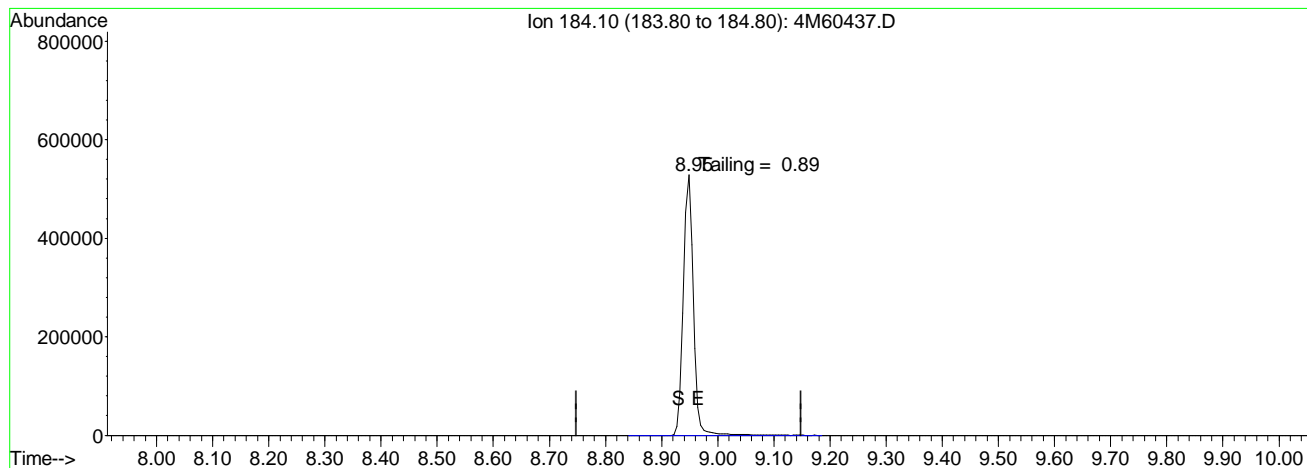
response 128509

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

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

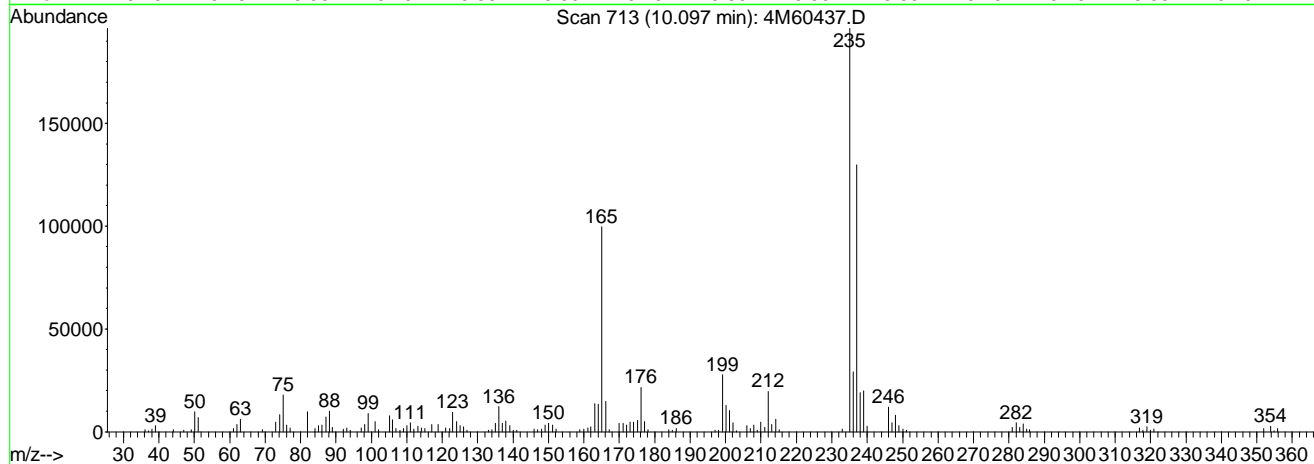
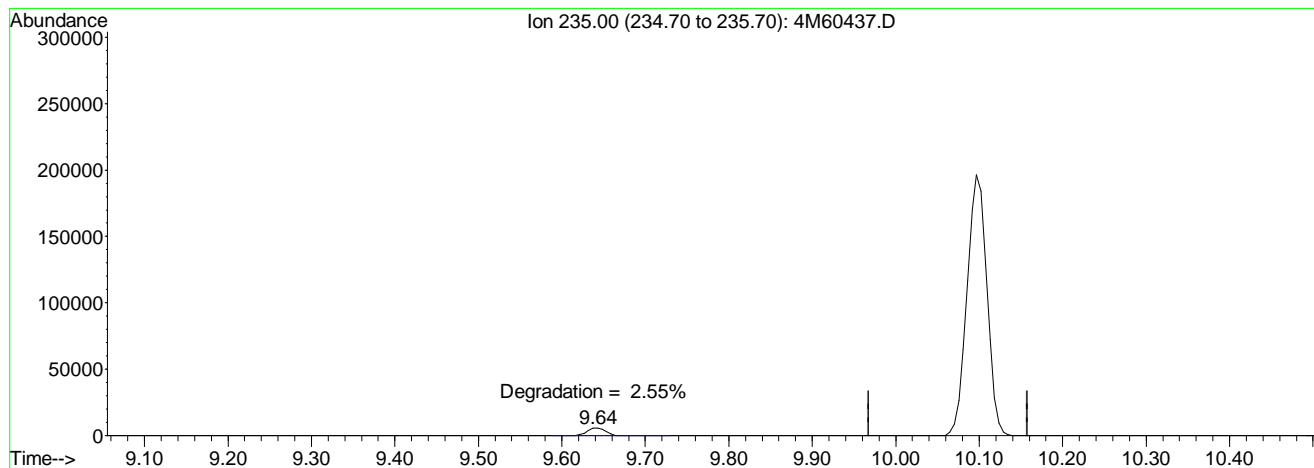
response 651083

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

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

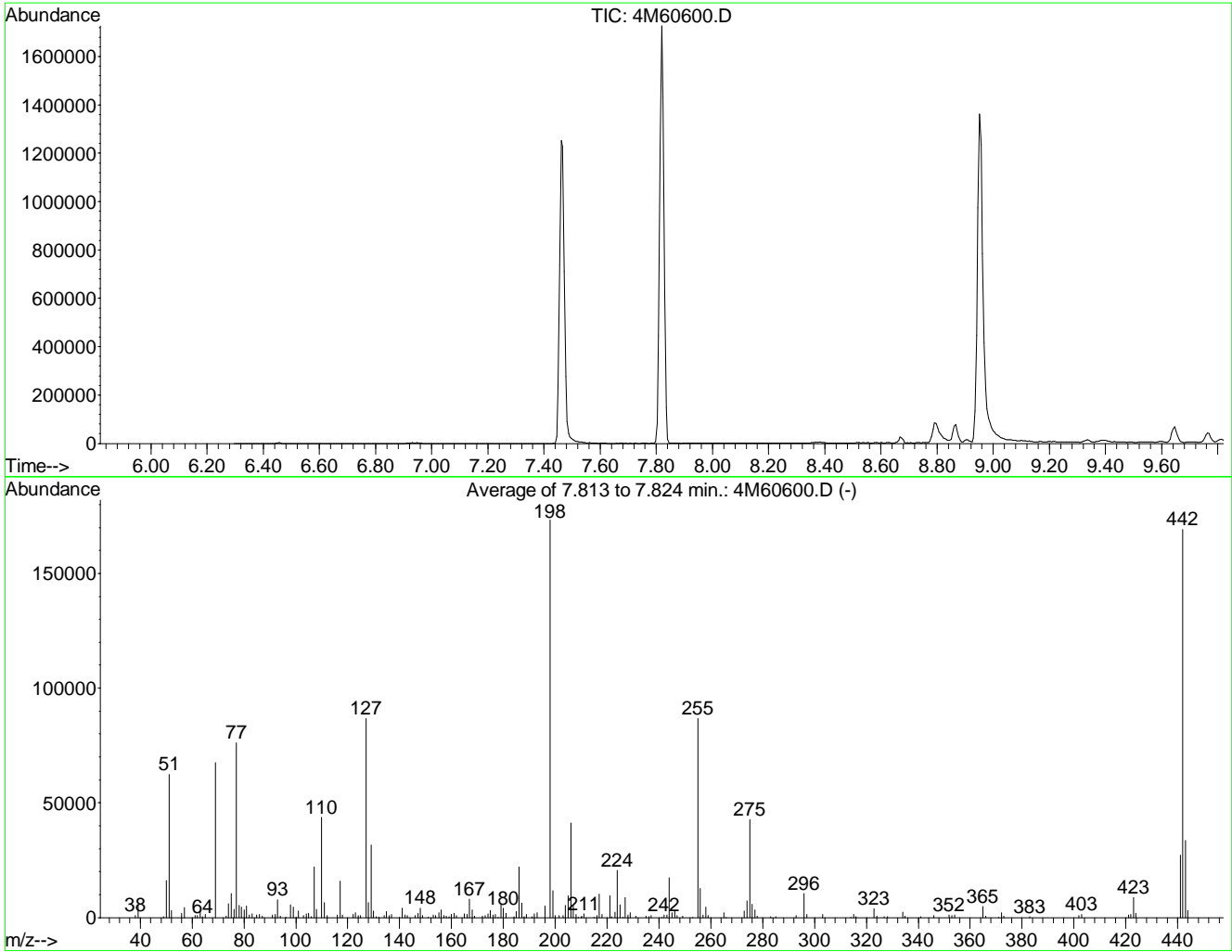


TIC: 4M60437.D

(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

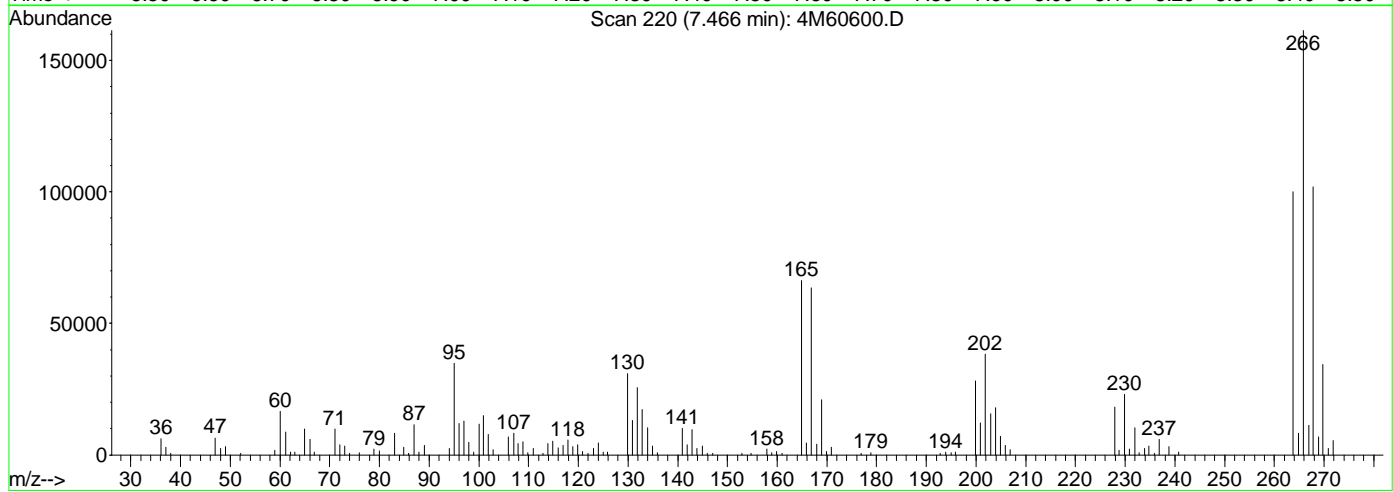
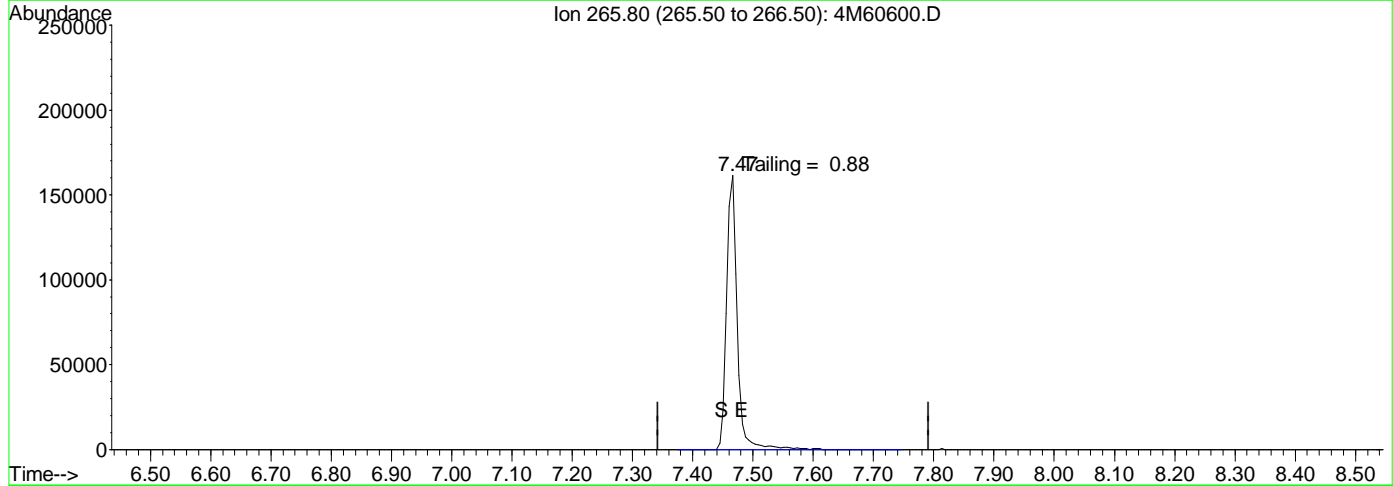
Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D
 Acq On : 1 May 2012 13:11
 Sample : WG396671-01 50PPM DFTPP STD
 Misc : 1,1 STD50659
 MS Integration Params: RTEINT.P
 Quant Time: May 1 13:24 2012

Vial: 1
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

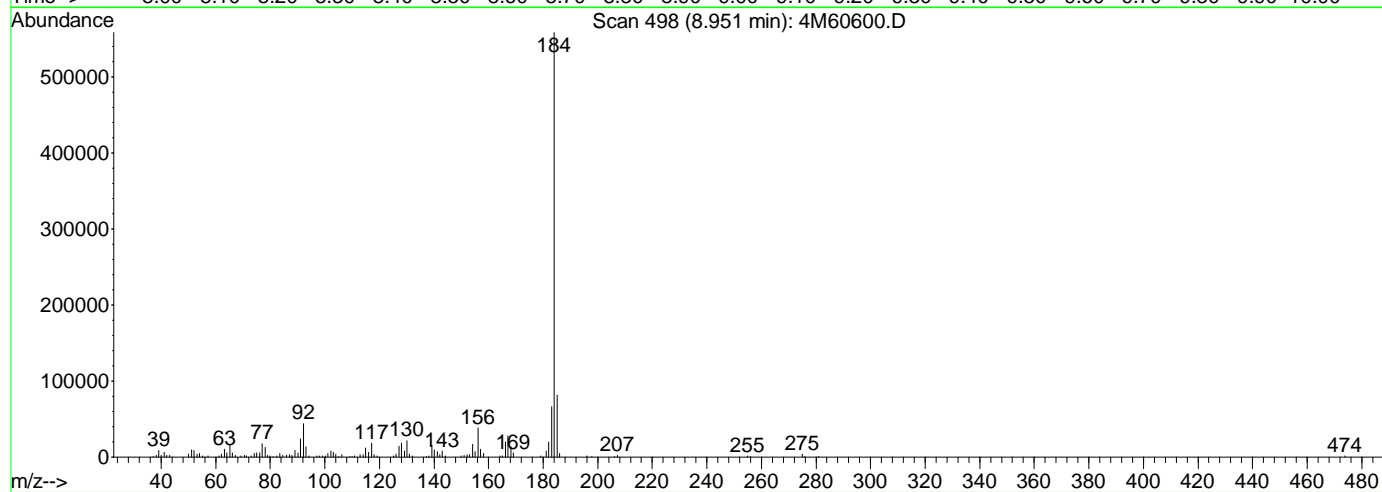
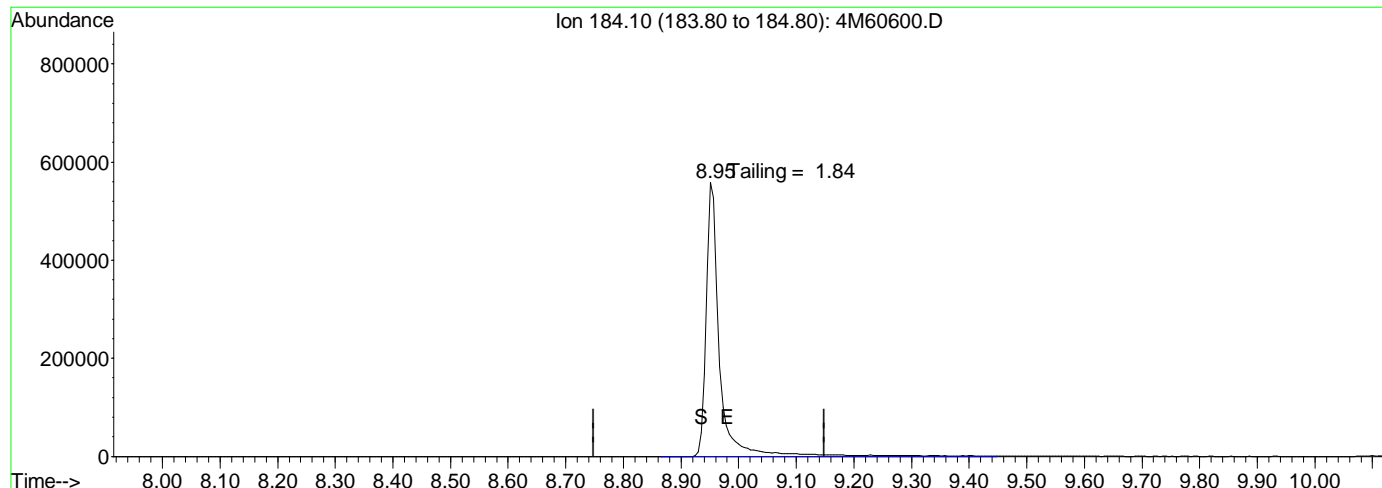
response 195050

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

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



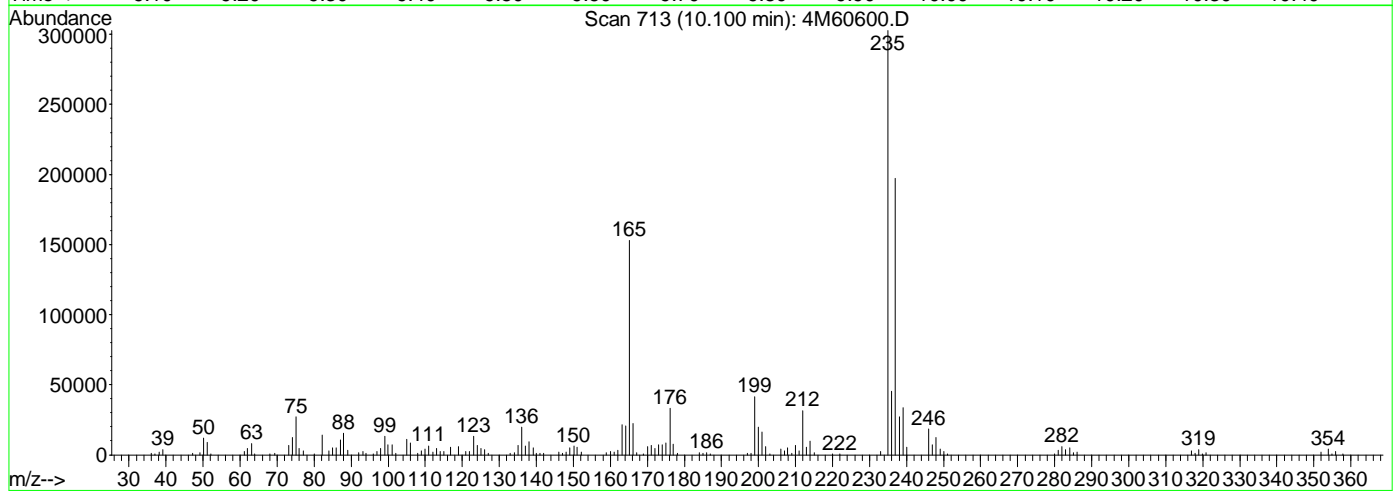
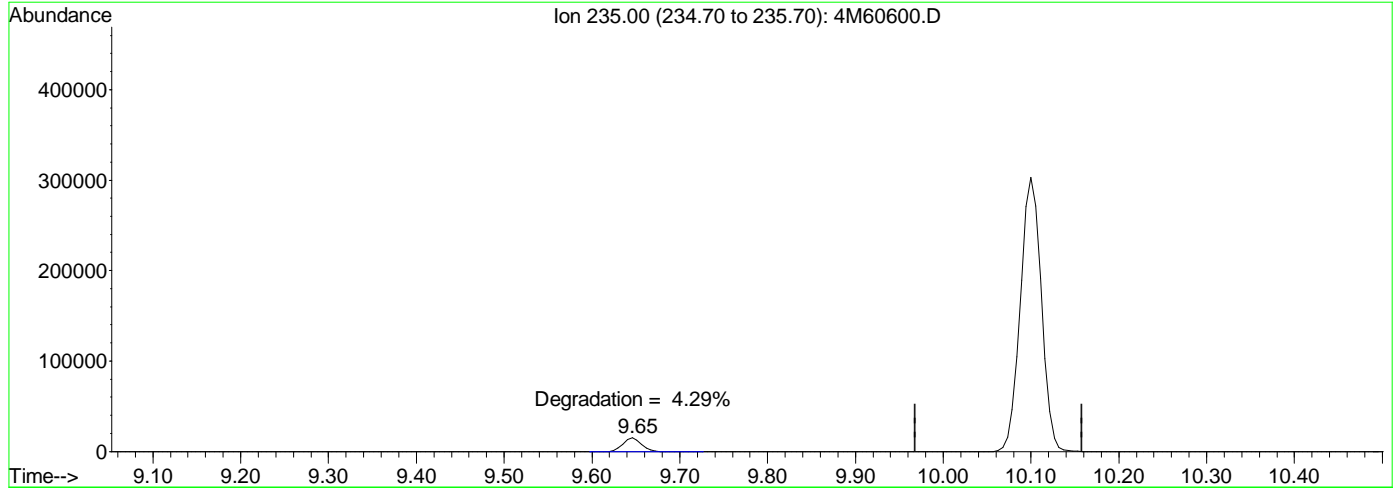
TIC: 4M60600.D

(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

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

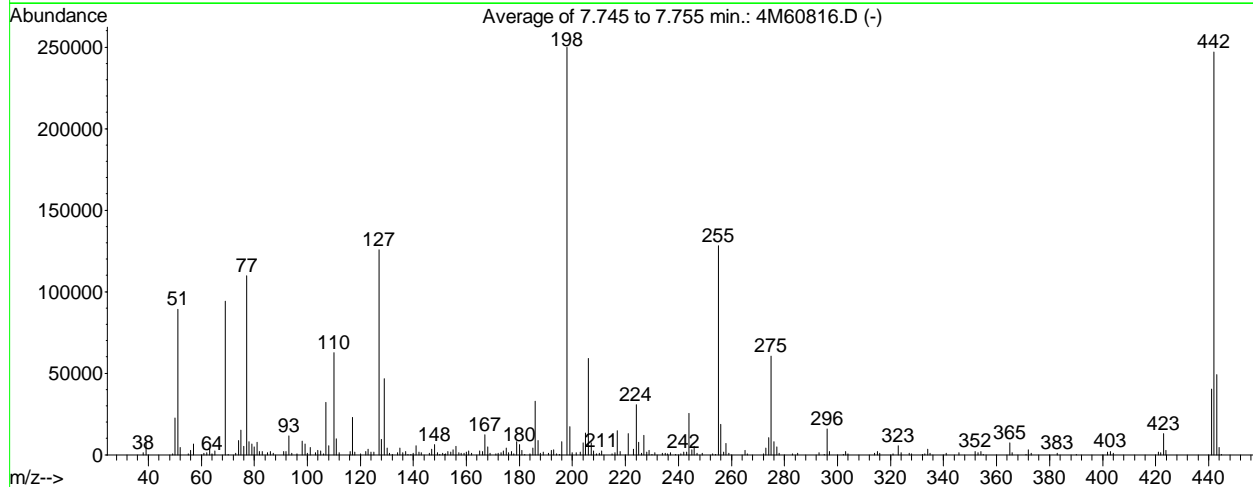
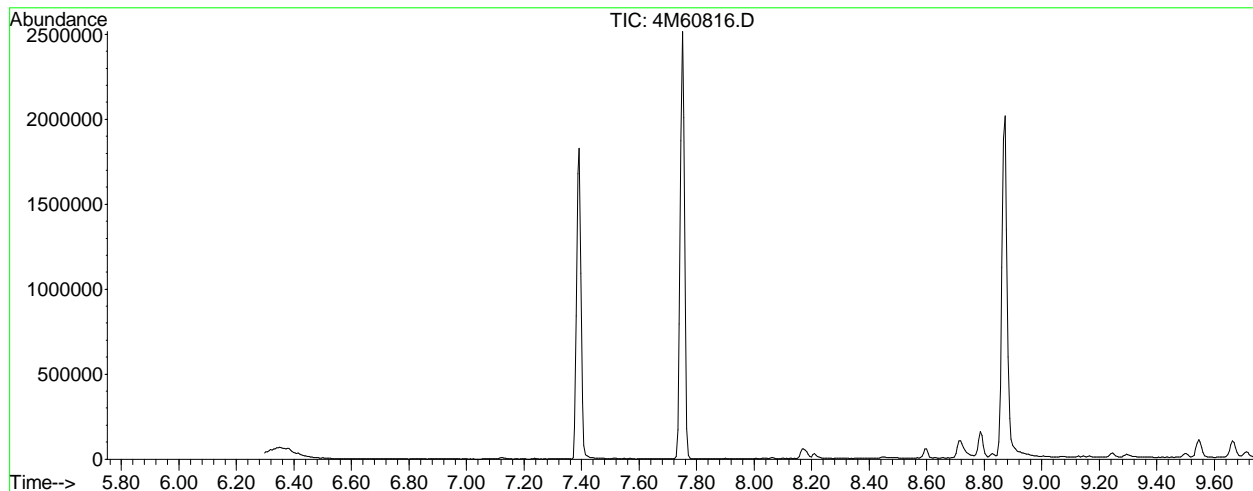
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
 Title : DFTPP
 Last Update : Fri Apr 20 08:18:06 2012
 Response via : Single Level Calibration



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

Data File : I:\MSDCHEM\1\DATA\051212\4M60816.D Vial: 1
 Acq On : 12 May 2012 11:02 Operator: CAA
 Sample : WG397824-01 50PPM DFTPP STD Inst : HPMS4
 Misc : 1,1 STD50659 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
 Title : DFTPP



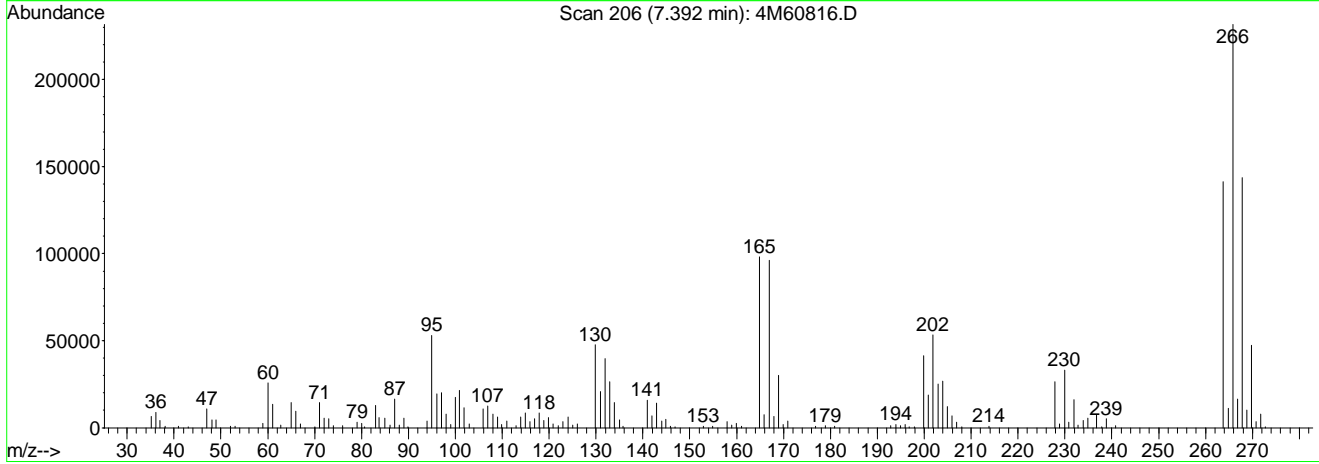
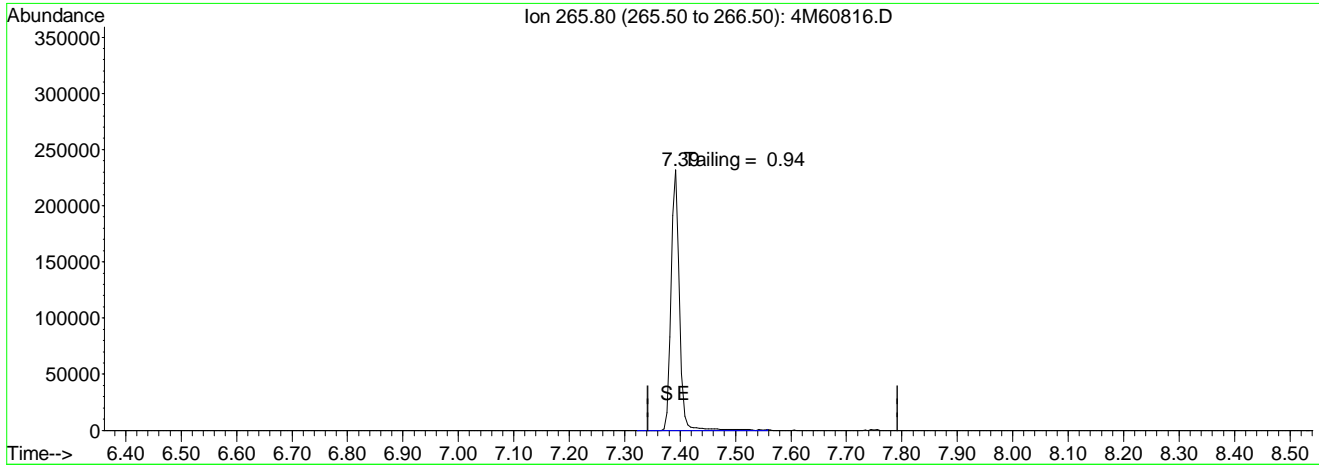
AutoFind: Scans 272, 273, 274; Background Corrected with Scan 266

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.7	89354	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.7	94325	PASS
70	69	0.00	2	0.4	367	PASS
127	198	40	60	50.3	125853	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	249962	PASS
199	198	5	9	6.8	17080	PASS
275	198	10	30	24.1	60320	PASS
365	198	1	100	2.9	7186	PASS
441	443	0.01	100	81.4	40104	PASS
442	198	40	100	98.9	247146	PASS
443	442	17	23	19.9	49288	PASS

4M60816.D DFTPP.M Mon May 14 11:39:55 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60816.D Vial: 1
 Acq On : 12 May 2012 11:02 Operator: CAA
 Sample : WG397824-01 50PPM DFTPP STD Inst : HPMS4
 Misc : 1,1 STD50659 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 12 11:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
 Title : DFTPP
 Last Update : Fri Apr 20 08:18:06 2012
 Response via : Single Level Calibration

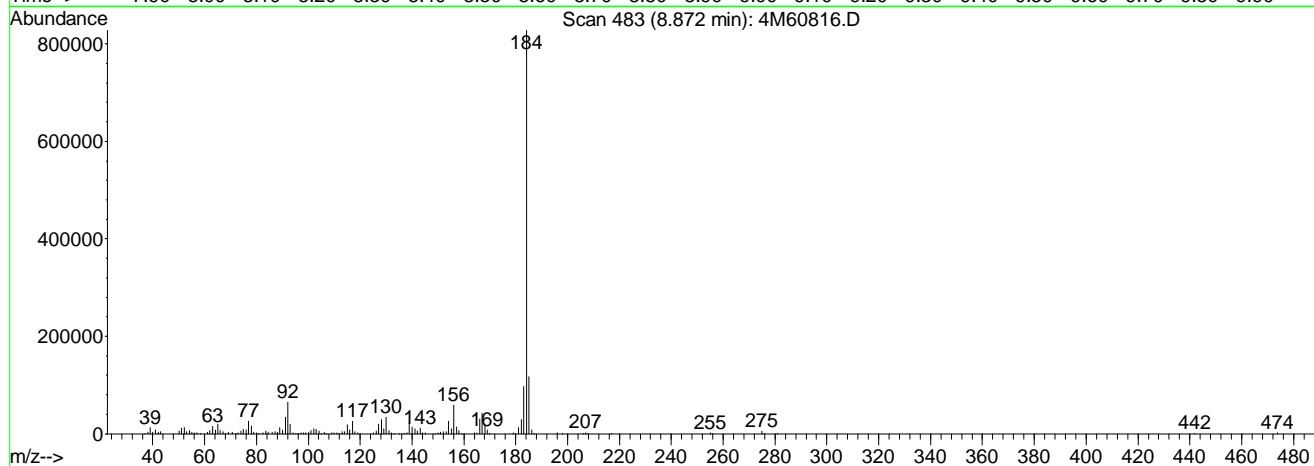
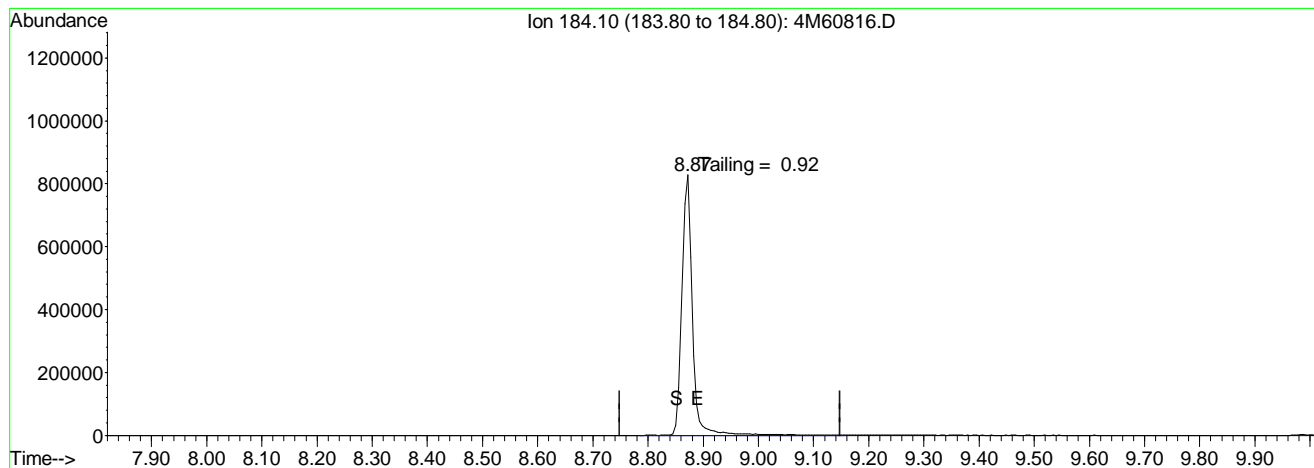


TIC: 4M60816.D

(1) Pentachlorophenol		
7.39min	0.00ug/ml	
response	243616	
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\051212\4M60816.D Vial: 1
 Acq On : 12 May 2012 11:02 Operator: CAA
 Sample : WG397824-01 50PPM DFTPP STD Inst : HPMS4
 Misc : 1,1 STD50659 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 12 11:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
 Title : DFTPP
 Last Update : Fri Apr 20 08:18:06 2012
 Response via : Single Level Calibration



TIC: 4M60816.D

(2) Benzidine

8.87min 0.00ug/ml

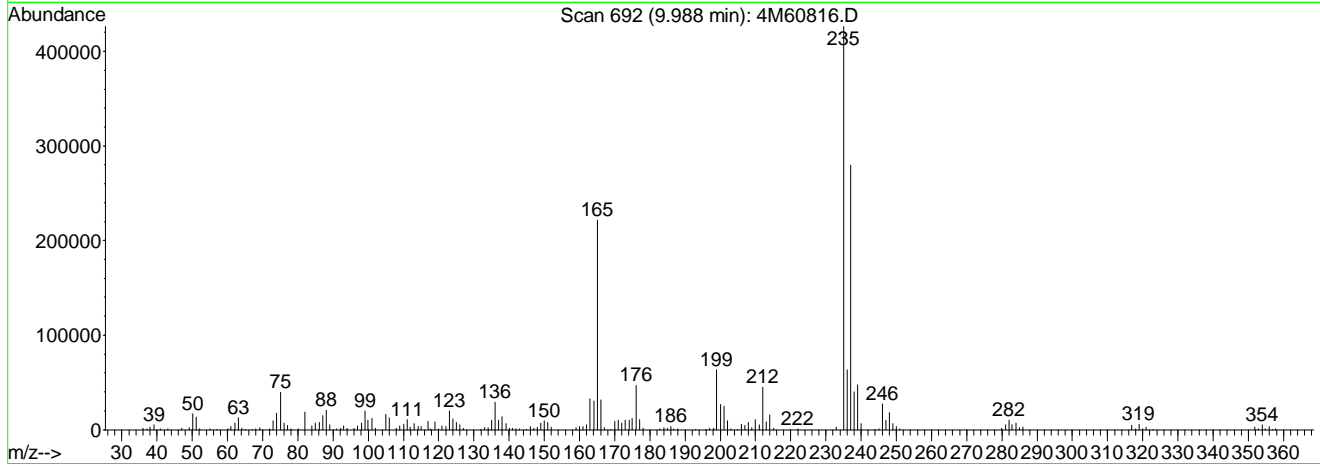
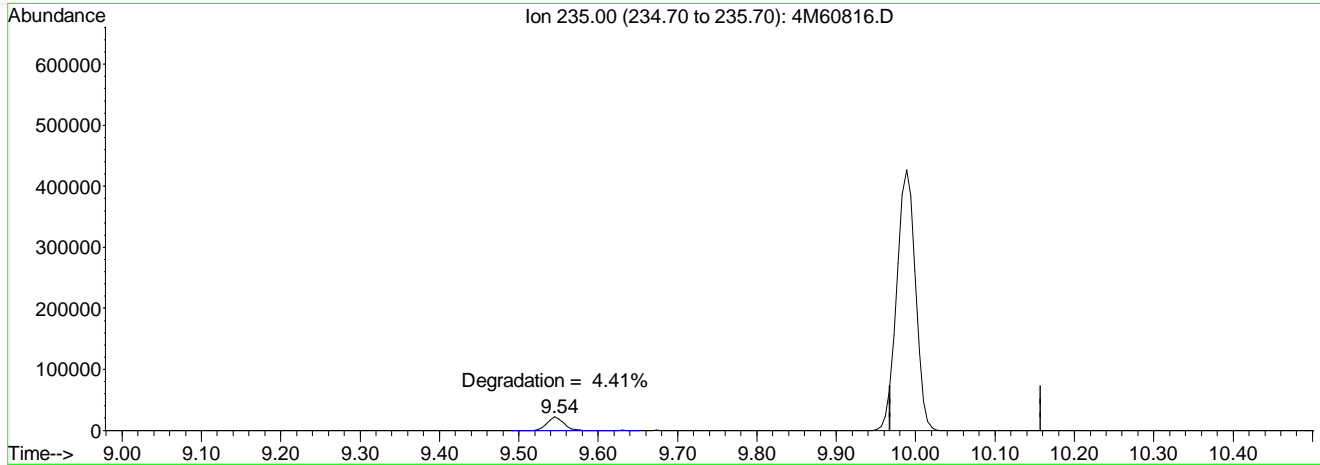
response 1070077

Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60816.D DFTPP.M Mon May 14 11:40:06 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60816.D Vial: 1
 Acq On : 12 May 2012 11:02 Operator: CAA
 Sample : WG397824-01 50PPM DFTPP STD Inst : HPMS4
 Misc : 1,1 STD50659 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 12 11:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
 Title : DFTPP
 Last Update : Fri Apr 20 08:18:06 2012
 Response via : Single Level Calibration



TIC: 4M60816.D

(3) DDT		
9.99min	0.00ug/ml	
response	530088	
Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
 Acq On : 12 May 2012 13:42 Operator: CAA
 Sample : WG397140-02 BLK 05/07 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40:47 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	270729	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	1008897	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	559392	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1005180	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	951577	40.00	ug/ml	-0.01
128) Perylene-d12	18.33	264	919790	40.00	ug/ml	-0.01

System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	700315	85.3173	ug/ml	0.00
Spiked Amount	100.000	Range 21 - 100	Recovery	=	85.32%	
12) Phenol-d5	6.83	99	872250	90.7954	ug/ml	0.00
Spiked Amount	100.000	Range 10 - 94	Recovery	=	90.80%	
31) Nitrobenzene-d5	7.79	82	413147	48.4170	ug/ml	0.00
Spiked Amount	50.000	Range 35 - 114	Recovery	=	96.84%	
59) 2-Fluorobiphenyl	9.58	172	856811	45.8693	ug/ml	0.00
Spiked Amount	50.000	Range 43 - 116	Recovery	=	91.74%	
86) 2,4,6-Tribromophenol	11.14	330	264800	106.1523	ug/ml	0.00
Spiked Amount	100.000	Range 10 - 123	Recovery	=	106.15%	
117) p-Terphenyl-d14	13.95	244	1096770	62.5345	ug/ml	0.00
Spiked Amount	50.000	Range 33 - 141	Recovery	=	125.06%	

Target Compounds Qvalue

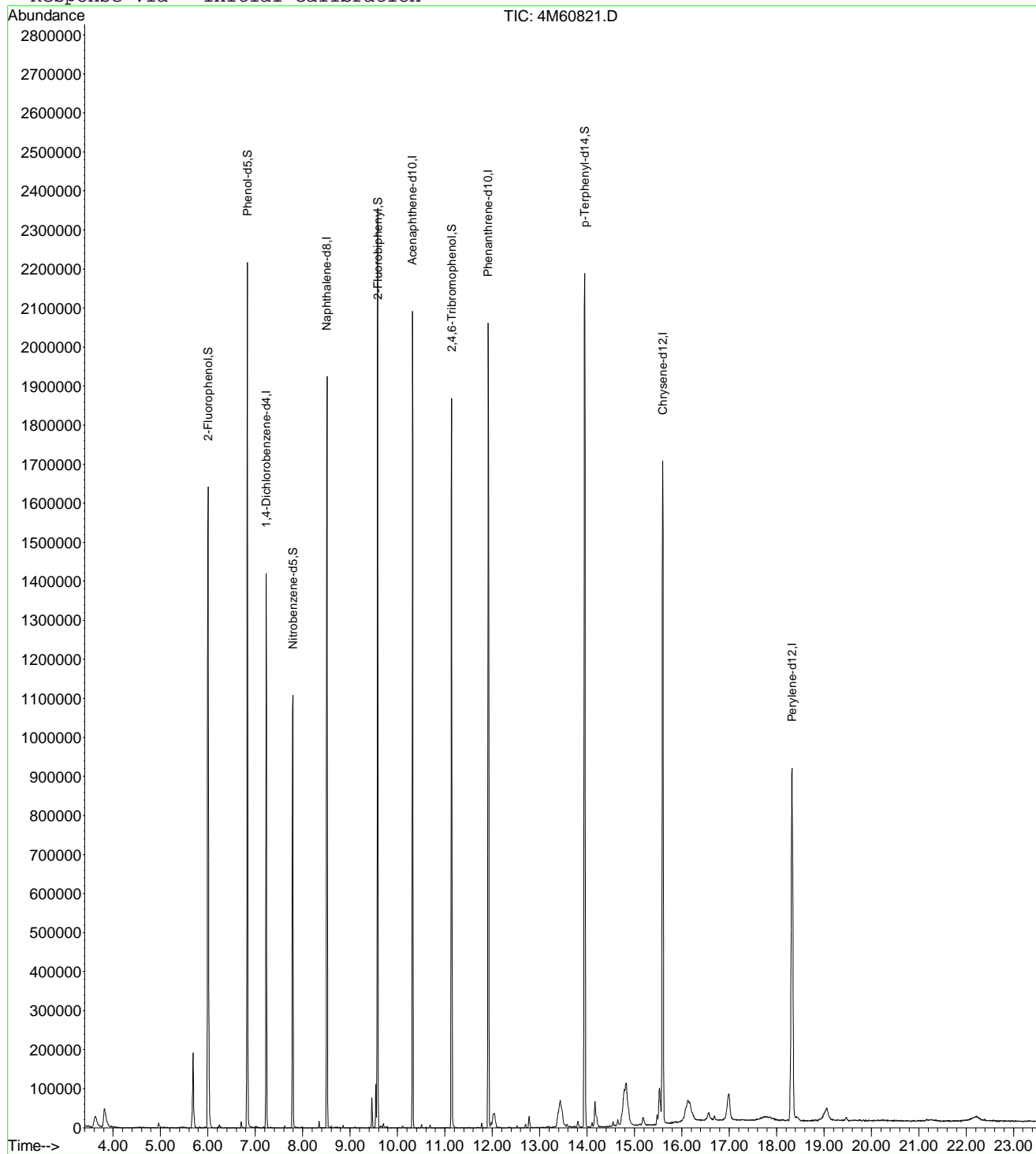
 (#) = qualifier out of range (m) = manual integration
 4M60821.D MEGAMIX.M Mon May 14 11:46:26 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40 2012

Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
Acq On : 12 May 2012 13:42 Operator: CAA
Sample : WG397140-02 BLK 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:53:47 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIion	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	270729	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1008897	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	559392	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1005180	40.00	ug/mL	0.00

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60821.D TCL.M Mon May 14 11:53:47 2012

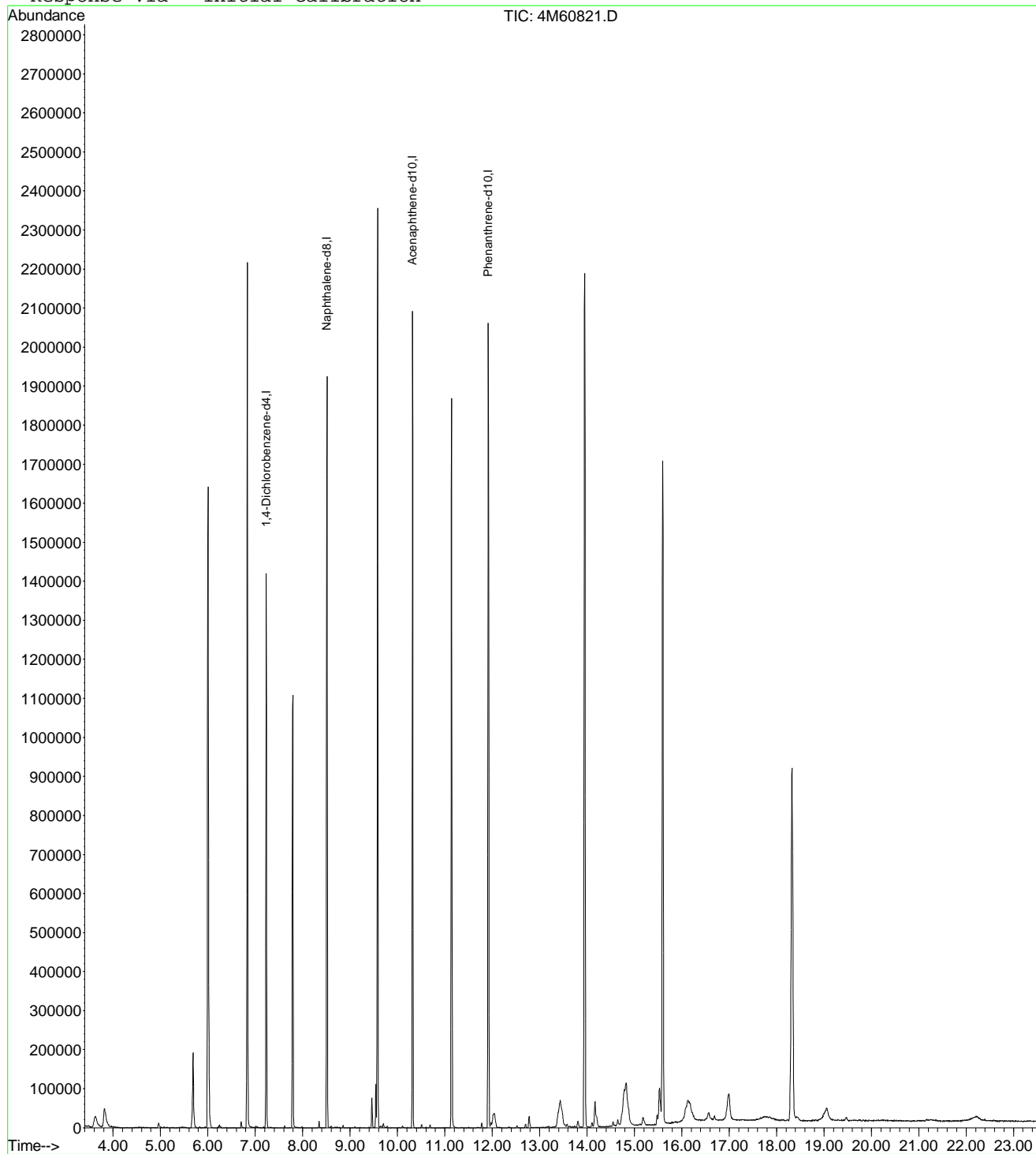
Page 1

Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:53 2012

Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
 Acq On : 12 May 2012 13:42 Operator: CAA
 Sample : WG397140-02 BLK 05/07 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 1 % of largest Peak
 Start Thrs: 0.05 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

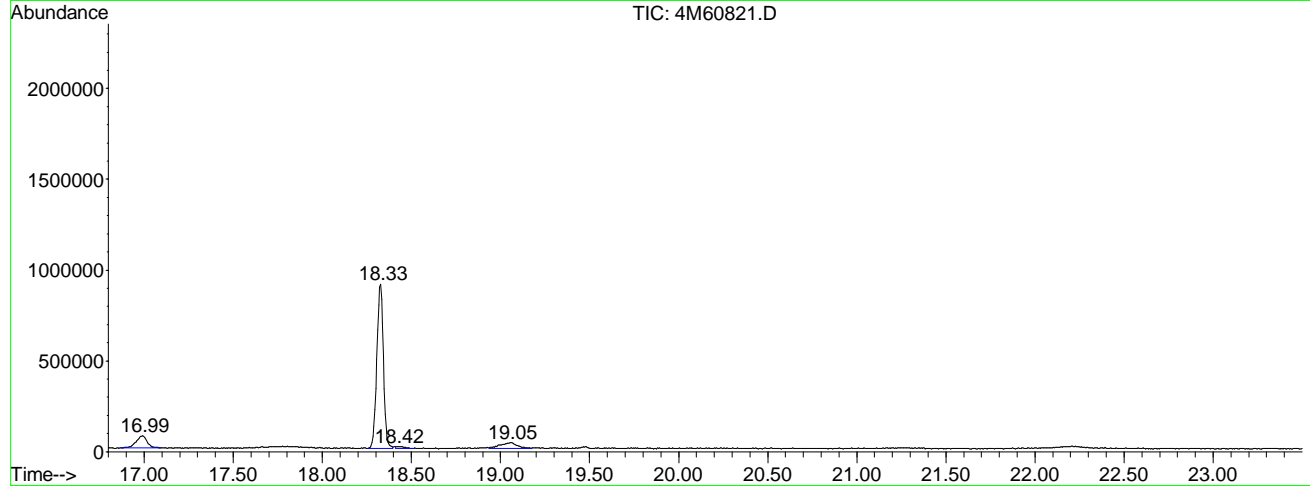
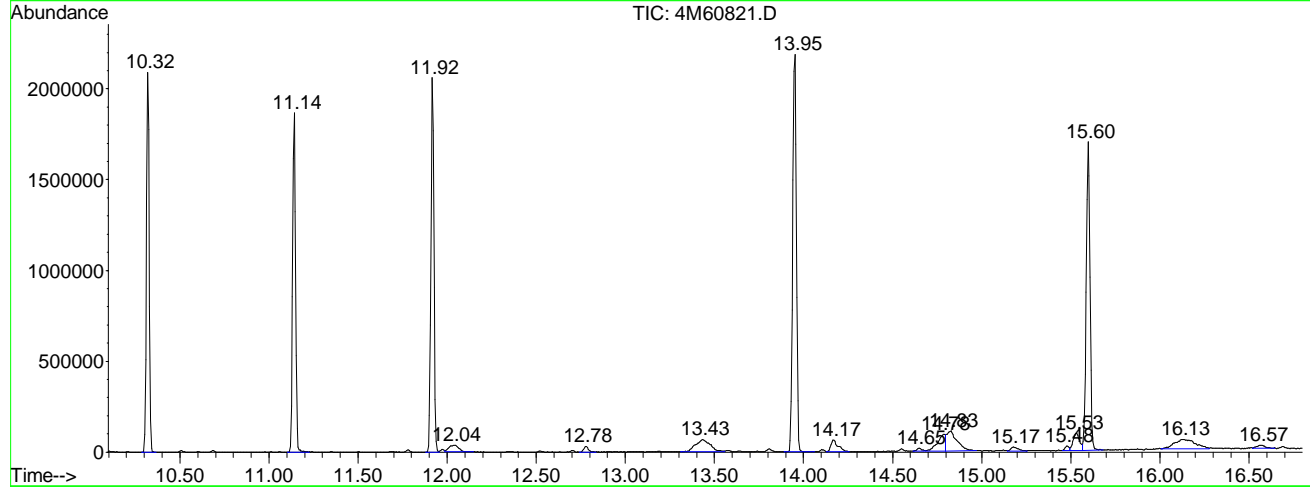
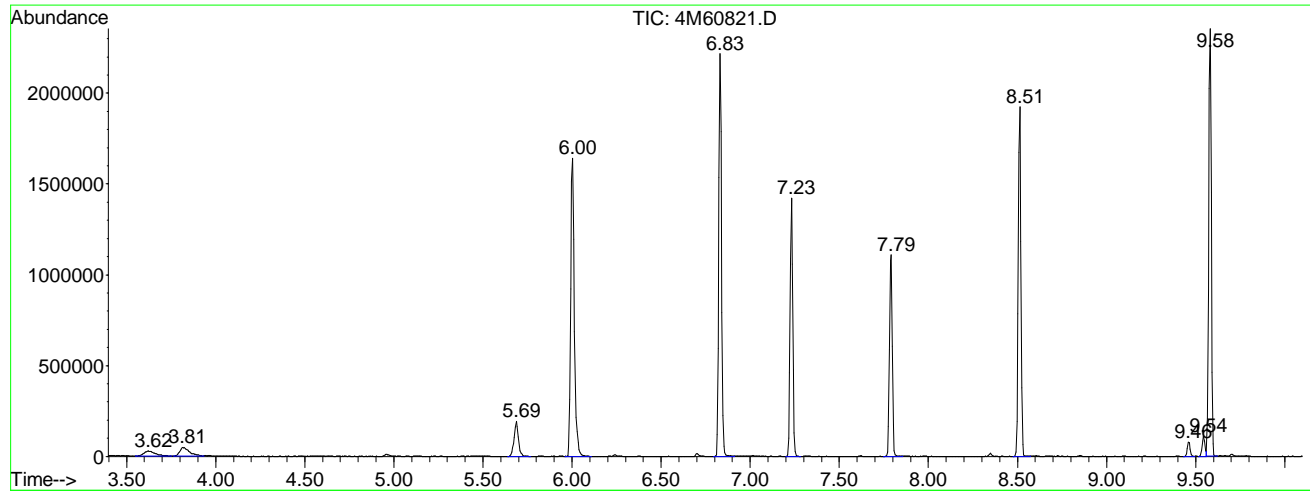
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.620	30	43	67	rBV4	28394	135908	4.31%	0.449%
2	3.812	70	79	101	rVV3	46339	176958	5.61%	0.585%
3	5.687	421	430	444	rBB2	191783	320520	10.17%	1.060%
4	6.002	481	489	508	rBB	1642481	2314010	73.40%	7.651%
5	6.830	637	644	659	rBV	2217083	2372285	75.25%	7.844%
6	7.231	713	719	728	rBB	1420476	1530003	48.53%	5.059%
7	7.792	816	824	836	rBV	1108486	1215823	38.57%	4.020%
8	8.513	952	959	970	rBV	1925398	2001396	63.48%	6.617%
9	9.459	1131	1136	1142	rBB	77052	84924	2.69%	0.281%
10	9.544	1147	1152	1155	rBV	111113	121028	3.84%	0.400%
11	9.582	1155	1159	1166	rVB	2355696	2404394	76.27%	7.950%
12	10.319	1291	1297	1305	rBB	2092005	2198715	69.74%	7.270%
13	11.142	1444	1451	1466	rBB	1868865	2139855	67.88%	7.075%
14	11.916	1589	1596	1603	rBV	2061713	2409635	76.43%	7.967%
15	12.039	1609	1619	1638	rVB3	36549	141945	4.50%	0.469%
16	12.776	1751	1757	1767	rBB3	28925	52032	1.65%	0.172%
17	13.433	1857	1880	1903	rBV	68365	376699	11.95%	1.246%
18	13.952	1966	1977	1997	rBV2	2188012	3152634	100.00%	10.424%
19	14.171	2010	2018	2033	rVB3	64953	173392	5.50%	0.573%
20	14.646	2101	2107	2113	rBV4	16993	32523	1.03%	0.108%
21	14.785	2114	2133	2135	rVV2	92687	278747	8.84%	0.922%
22	14.828	2135	2141	2167	rVB2	107876	439646	13.95%	1.454%
23	15.175	2200	2206	2220	rVB2	19752	56665	1.80%	0.187%
24	15.479	2258	2263	2266	rBV3	26366	42488	1.35%	0.140%
25	15.533	2266	2273	2279	rVV3	94226	241488	7.66%	0.798%
26	15.597	2279	2285	2300	rVB	1698765	2478124	78.60%	8.194%
27	16.131	2362	2385	2412	rBV3	52128	421618	13.37%	1.394%
28	16.569	2458	2467	2480	rVB6	17664	55281	1.75%	0.183%
29	16.991	2524	2546	2564	rBV5	67234	292519	9.28%	0.967%
30	18.327	2783	2796	2809	rBV	904718	2342842	74.31%	7.746%
31	18.418	2812	2813	2830	rVB10	10721	34606	1.10%	0.114%
32	19.053	2910	2932	2954	rVB9	32458	205724	6.53%	0.680%

Sum of corrected areas: 30244427

File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Operator : CAA
 Acquired : 12 May 2012 13:42 using AcqMethod BNATEST
 Instrument : HPMS4
 Sample Name : WG397140-02 BLK 05/07
 Misc Info : 1,1
 Vial Number: 6
 Quant File : MEGAMIX.RES (RTE Integrator)



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: LSCINT.P

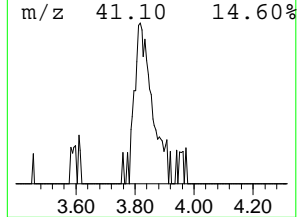
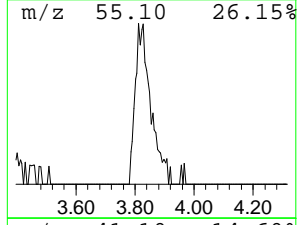
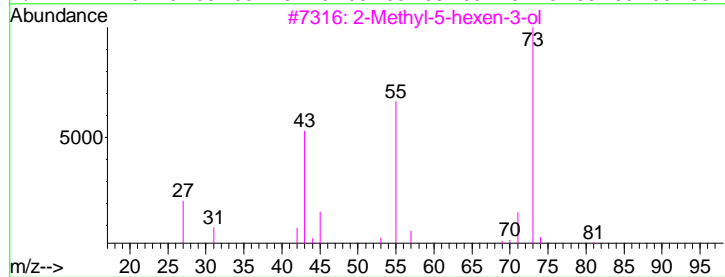
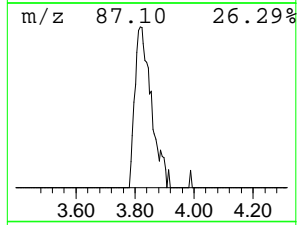
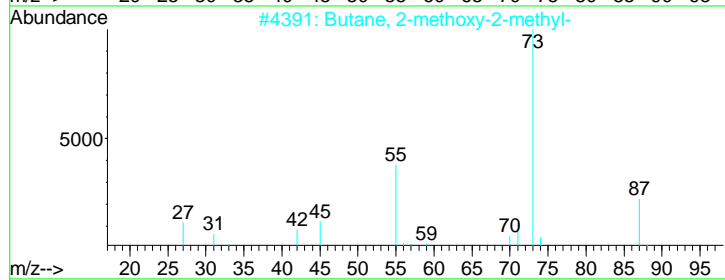
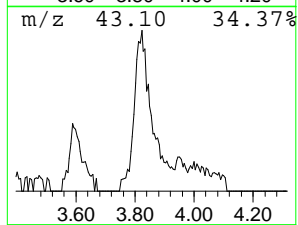
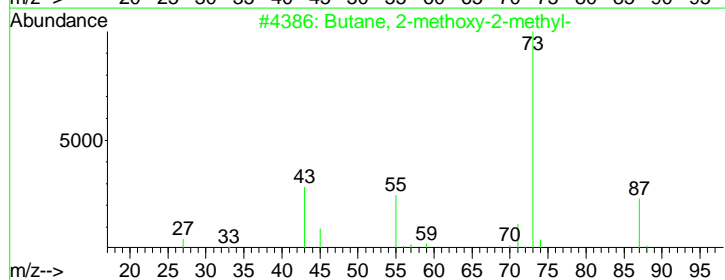
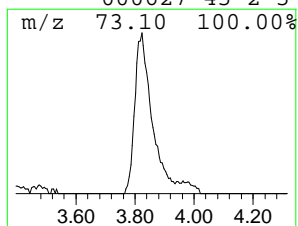
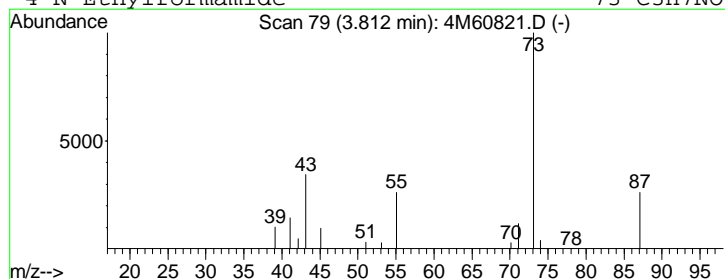
Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.81	4.63 ug/ml	176958	1,4-Dichlorobenzene-d4	7.23

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	64
2			Butane, 2-methoxy-2-methyl-	102	C6H14O	000994-05-8	9
3			2-Methyl-5-hexen-3-ol	114	C7H14O	032815-70-6	9
4			N-Ethylformamide	73	C3H7NO	000627-45-2	5



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: LSCINT.P

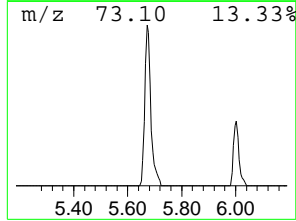
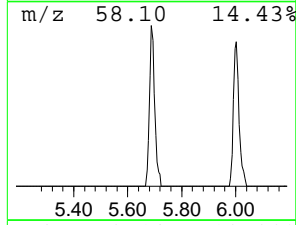
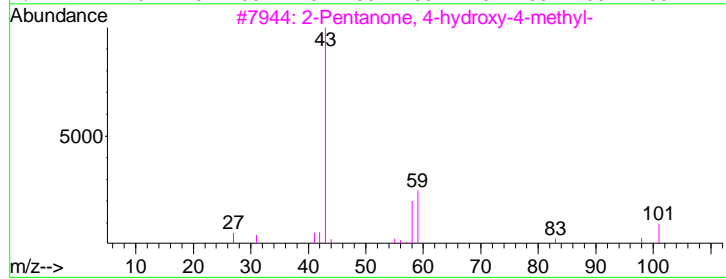
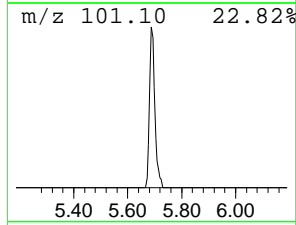
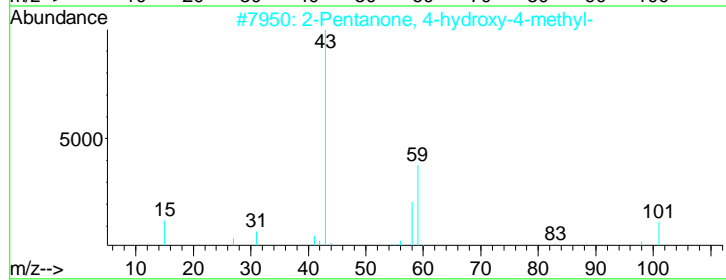
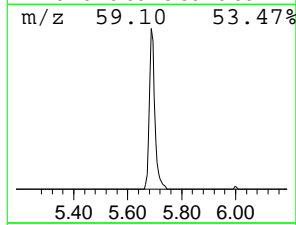
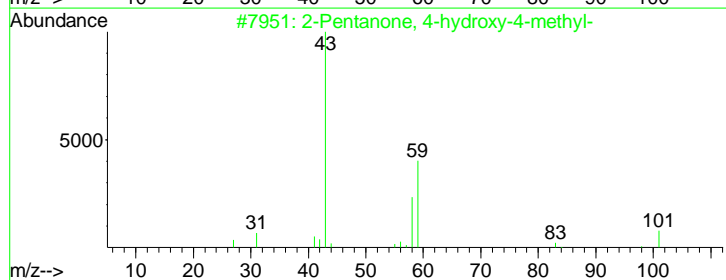
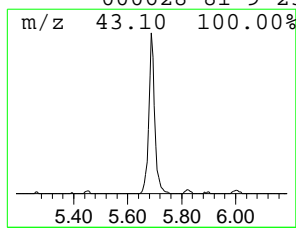
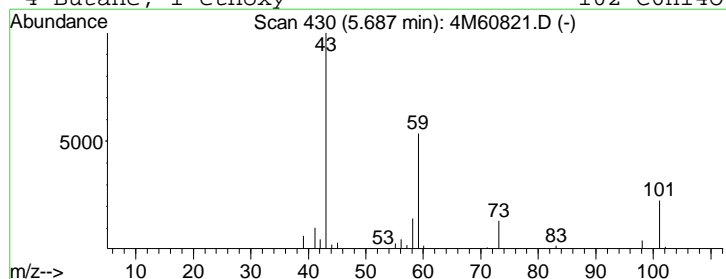
Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	8.38 ug/ml	320520	1,4-Dichlorobenzene-d4	7.23

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	42
3			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	36
4			Butane, 1-ethoxy-	102	C6H14O	000628-81-9	23



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: LSCINT.P

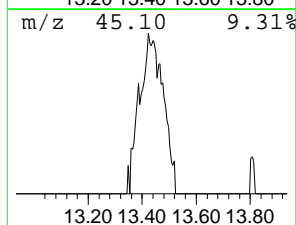
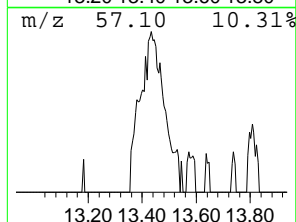
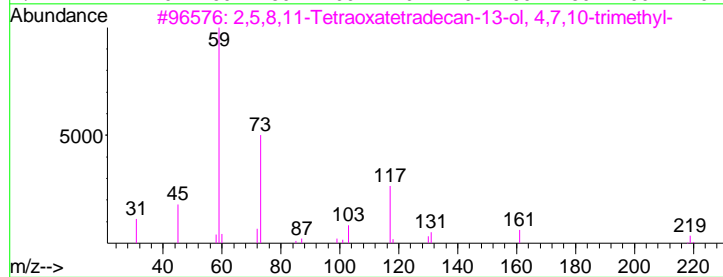
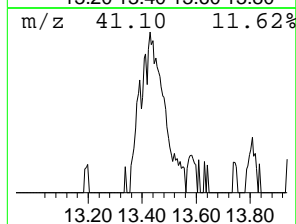
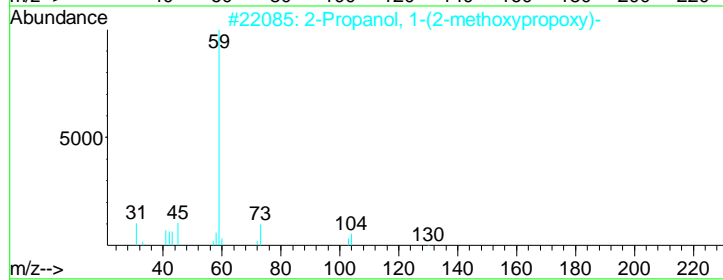
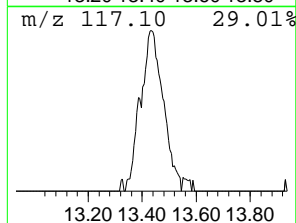
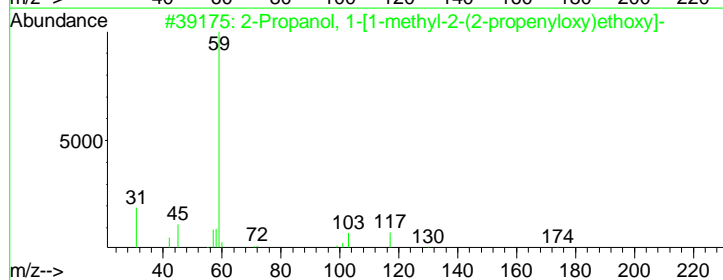
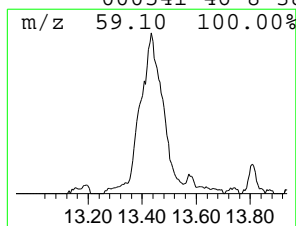
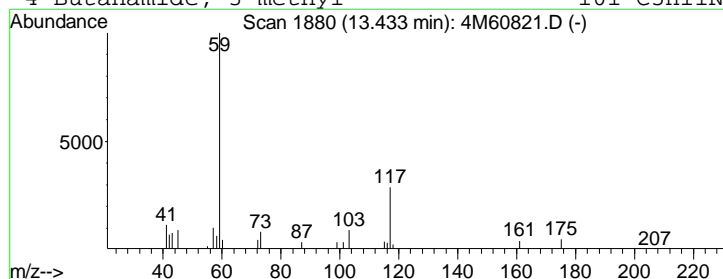
Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 3 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	6.25 ug/ml	376699	Phenanthrene-d10	11.92

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	53
2		2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	47
3		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	39
4		Butanamide, 3-methyl-	101	C5H11NO	000541-46-8	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: LSCINT.P

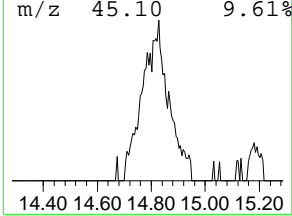
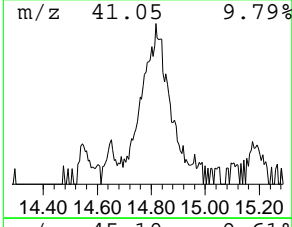
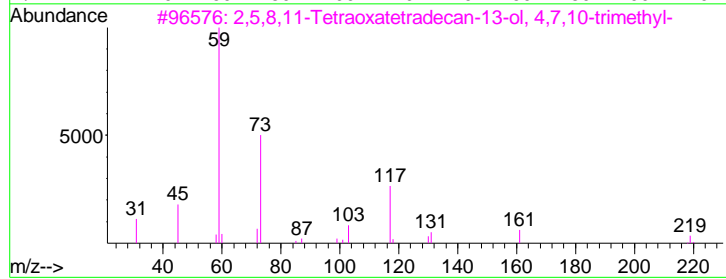
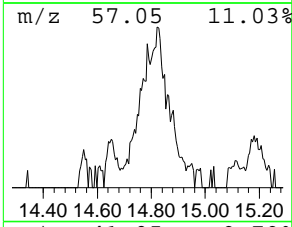
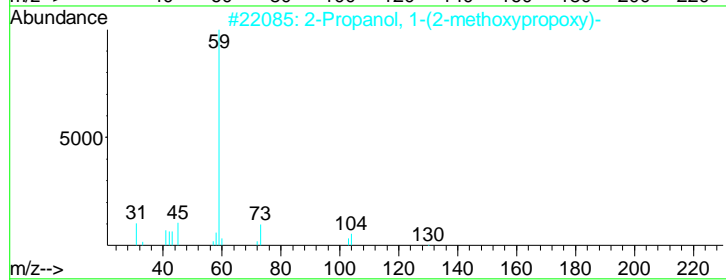
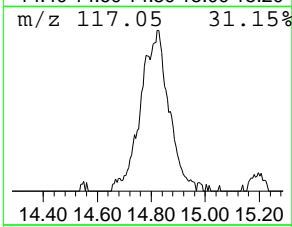
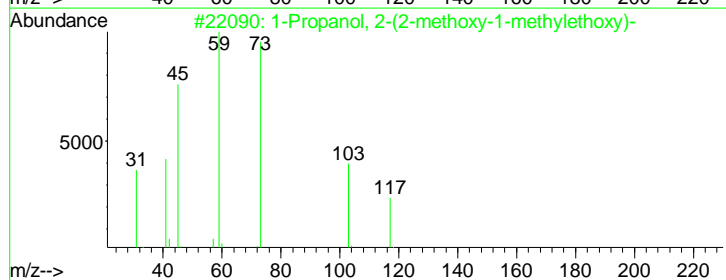
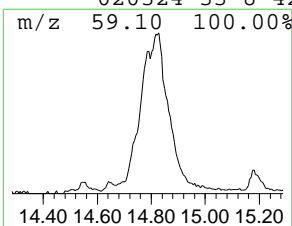
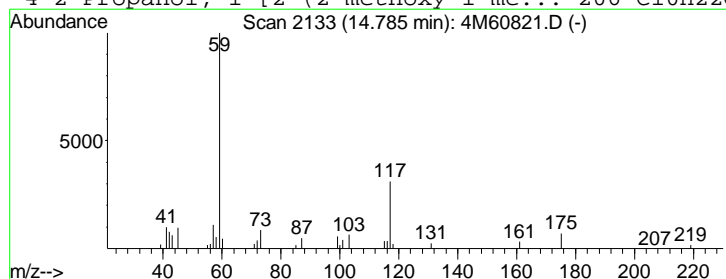
Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 4 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.78	4.50 ug/ml	278747	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	59
2		2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	50
3		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	45
4		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: LSCINT.P

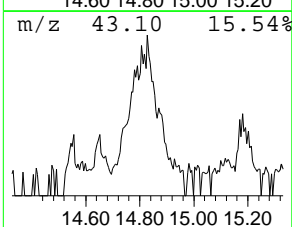
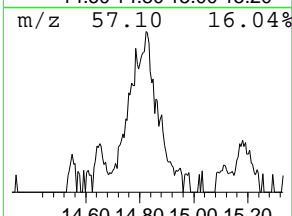
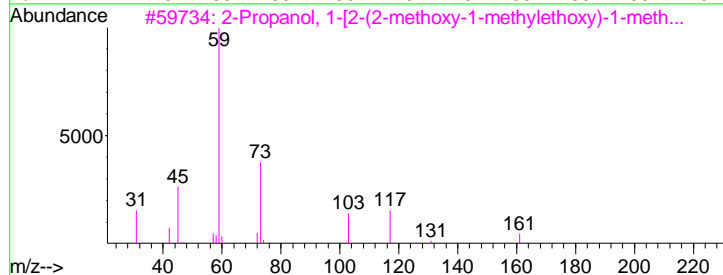
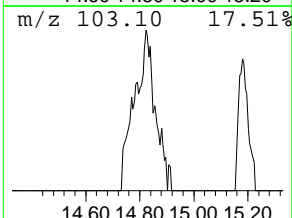
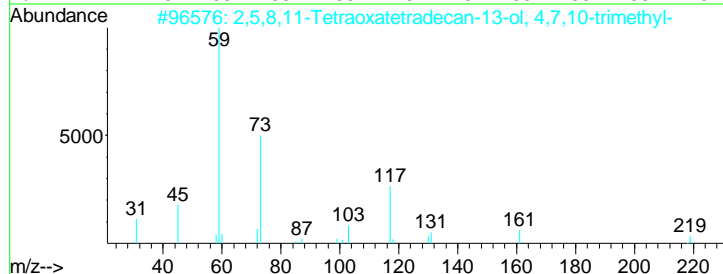
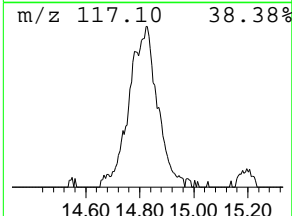
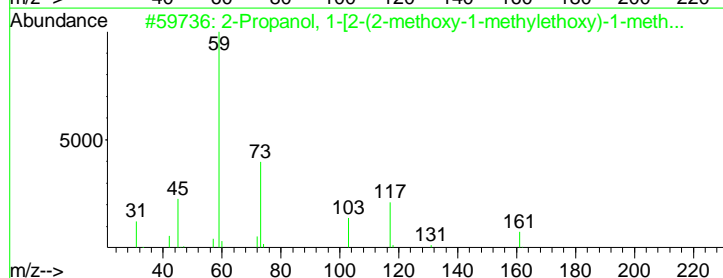
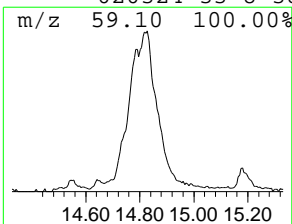
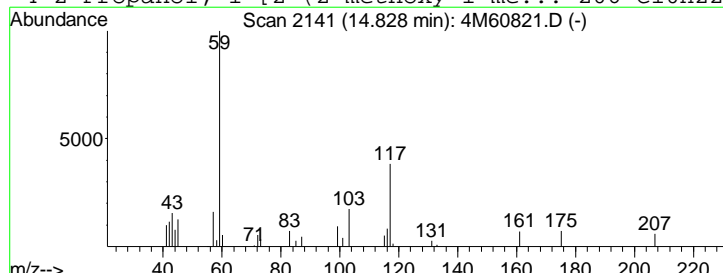
Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.83	7.10 ug/ml	439646	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	40
2		2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	40
3		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	38
4		2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: LSCINT.P

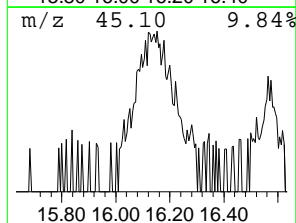
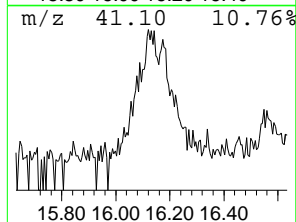
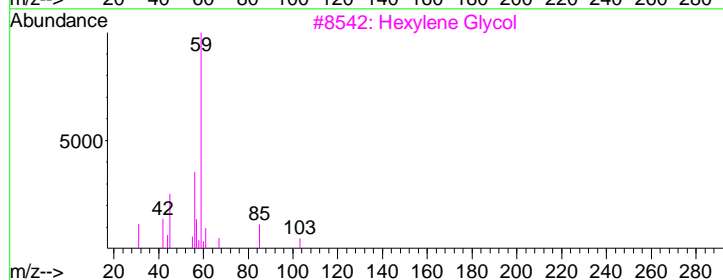
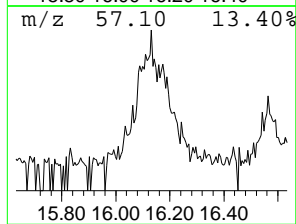
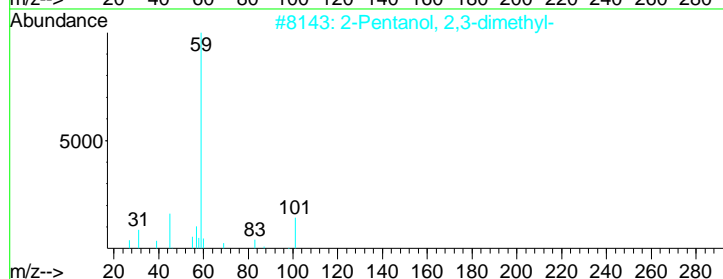
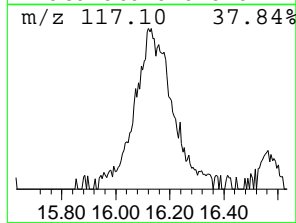
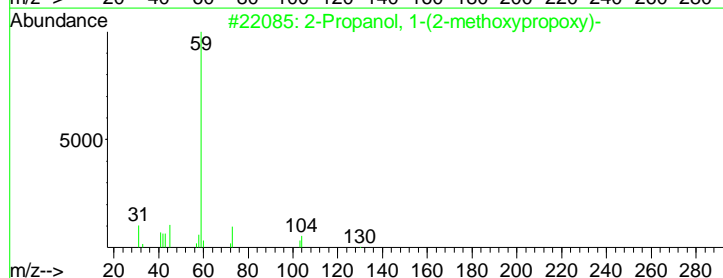
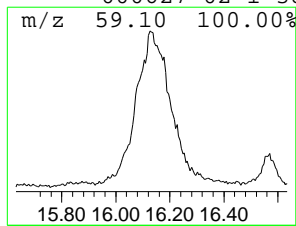
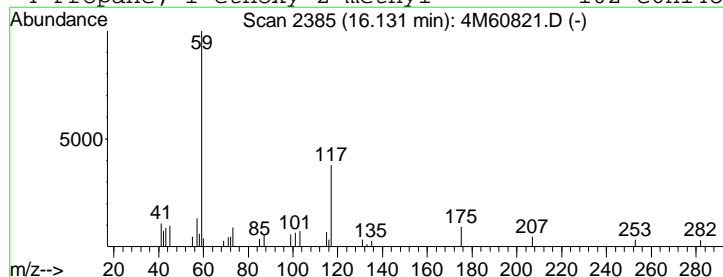
Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 6 2-Propanol, 1-(2-methoxypro... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.13	6.81 ug/ml	421618	Chrysene-d12	15.60

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Propanol, 1-(2-methoxyprooxy)-	148	C7H16O3	013429-07-7	47
2		2-Pentanol, 2,3-dimethyl-	116	C7H16O	004911-70-0	43
3		Hexylene Glycol	118	C6H14O2	000107-41-5	43
4		Propane, 1-ethoxy-2-methyl-	102	C6H14O	000627-02-1	38



Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D
 Acq On : 12 May 2012 13:42
 Sample : WG397140-02 BLK 05/07
 Misc : 1,1
 MS Integration Params: LSCINT.P

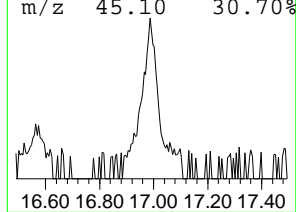
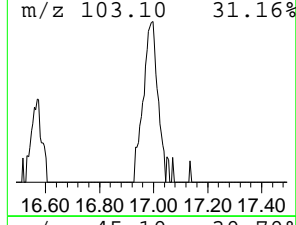
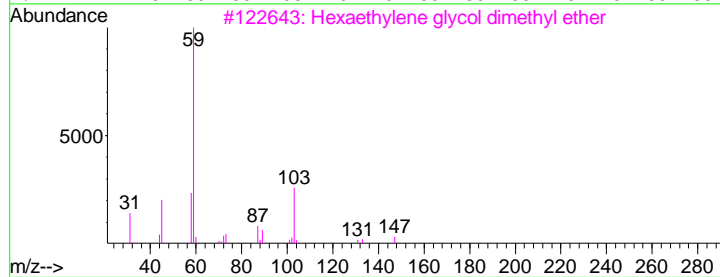
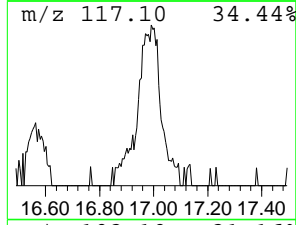
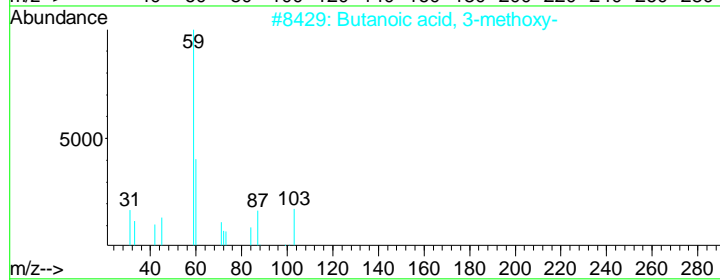
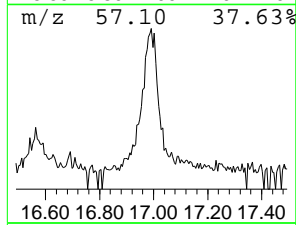
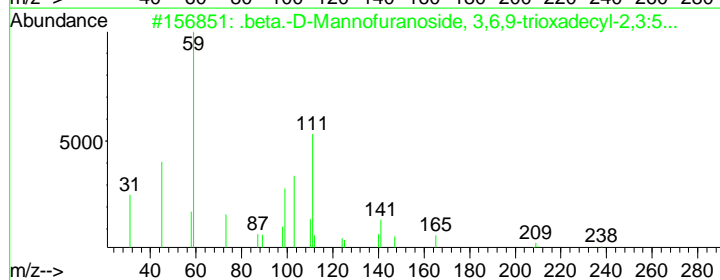
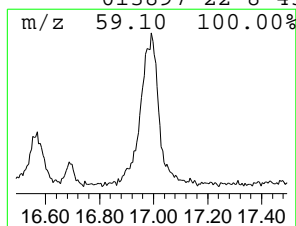
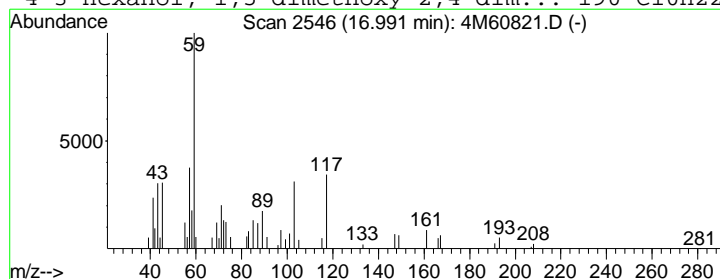
Vial: 6
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

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

 Peak Number 7 .beta.-D-Mannofuranoside, 3... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.99	4.99 ug/ml	292519	Perylene-d12	18.33

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	53
2		Butanoic acid, 3-methoxy-	118	C5H10O3	010024-70-1	53
3		Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	47
4		3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	43



Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 13:42
 Data File: I:\MSDCHEM\1\DATA\051212\4M60821.D
 Name: WG397140-02 BLK 05/07
 Misc: 1,1
 Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
 Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Butane, 2-methoxy...	3.81	4.6	ug/ml	176958	1	7.23	1530000	40.0
2-Pentanone, 4-hy...	5.69	8.4	ug/ml	320520	1	7.23	1530000	40.0
2-Propanol, 1-[1-...	13.43	6.3	ug/ml	376699	4	11.92	2409640	40.0
1-Propanol, 2-(2-...	14.78	4.5	ug/ml	278747	5	15.60	2478120	40.0
2-Propanol, 1-[2-...	14.83	7.1	ug/ml	439646	5	15.60	2478120	40.0
2-Propanol, 1-(2-...	16.13	6.8	ug/ml	421618	5	15.60	2478120	40.0
.beta.-D-Mannofur...	16.99	5.0	ug/ml	292519	6	18.33	2342840	40.0

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D Vial: 7
 Acq On : 12 May 2012 14:17 Operator: CAA
 Sample : WG397140-03 LCS 05/07 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:40:47 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	262198	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	999831	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	562715	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1021385	40.00	ug/ml	0.00
113) Chrysene-d12	15.61	240	959585	40.00	ug/ml	0.00
128) Perylene-d12	18.34	264	885225	40.00	ug/ml	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
8) 2-Fluorophenol	6.01	112	781447	98.2989	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery =	98.30%		
12) Phenol-d5	6.83	99	961393	103.3307	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery =	103.33%#		
31) Nitrobenzene-d5	7.79	82	446357	52.7832	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery =	105.56%		
59) 2-Fluorobiphenyl	9.58	172	999516	53.1931	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery =	106.38%		
86) 2,4,6-Tribromophenol	11.15	330	310740	123.8330	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery =	123.83%#		
117) p-Terphenyl-d14	13.95	244	1184471	66.9713	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery =	133.94%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	4.22	88	122177	37.3878	ug/ml#	97
3) n-Nitrosodimethylamine	4.64	74	233748	48.3069	ug/ml	96
4) Pyridine	4.66	79	311040	36.2569	ug/ml	88
5) 2-Picoline	5.45	93	380573	40.7693	ug/ml	99
6) n-Nitrosomethylethylamine	5.56	88	179595	44.6008	ug/ml	93
7) Methyl Methanesulfonate	5.85	80	214398	46.8967	ug/ml	96
9) n-Nitrosodiethylamine	6.24	102	195041	45.1797	ug/ml	97
10) Ethyl Methanesulfonate	6.49	79	266242	44.4637	ug/ml	98
11) Aniline	6.93	93	558354	40.6104	ug/ml	90
13) Phenol	6.85	94	493205	49.6453	ug/ml	93
14) bis(2-Chloroethyl)ether	6.95	63	301133	48.4090	ug/ml#	38
15) Pentachloroethane	6.96	167	118968	35.5046	ug/ml	98
16) 2-Chlorophenol	7.05	128	428905	48.2114	ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	340556	34.3925	ug/ml	100
18) 1,4-Dichlorobenzene	7.25	146	365107	36.1514	ug/ml	99
19) Benzyl Alcohol	7.34	108	293563	50.9641	ug/ml	93
20) 1,2-Dichlorobenzene	7.44	146	355063	37.8566	ug/ml	100
21) 2-Methylphenol	7.44	107	337550	49.2742	ug/ml	97
22) bis(2-Chloroisopropyl)ethe	7.48	45	529550	41.4643	ug/ml	92
23) 3-,4-Methylphenol	7.56	107	504484	56.6529	ug/ml	91
24) n-Nitrosopyrrolidine	7.61	100	212857	52.9458	ug/ml	97
25) n-Nitrosodipropylamine	7.62	70	312672	55.8194	ug/ml	94
26) Acetophenone	7.63	105	1060545	96.2731	ug/ml	98
27) n-Nitrosomorpholine	7.63	56	238434	45.6266	ug/ml	94
28) o-Toluidine	7.67	106	549410	39.4501	ug/ml	99
29) Hexachloroethane	7.75	117	112250	30.0152	ug/ml	98
32) Nitrobenzene	7.81	77	457842	54.3217	ug/ml	97
33) n-Nitrosopiperidine	7.96	114	214716	47.5914	ug/ml	98
34) Isophorone	8.02	82	829814	53.9397	ug/ml	99
35) 2-Nitrophenol	8.13	139	249970	50.3123	ug/ml	95
36) 2,4-Dimethylphenol	8.10	122	430743	50.4897	ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.20	198	228651	53.6837	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.20	93	678139	58.0029	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60822.D MEGAMIX.M Mon May 14 11:43:32 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D
 Acq On : 12 May 2012 14:17
 Sample : WG397140-03 LCS 05/07
 Misc : 1,1

Vial: 7
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 14 11:40:47 2012

Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) 2,4-Dichlorophenol	8.35	162	377474	52.8532	ug/ml	100
41) a,a-Dimethylphenethylamine	8.36	58	1009158	83.5773	ug/ml	98
42) 1,2,4-Trichlorobenzene	8.46	180	345566	42.6118	ug/ml	99
43) Naphthalene	8.53	128	1285360	48.5423	ug/ml	97
44) 4-Chloroaniline	8.56	127	537961	55.1642	ug/ml	97
45) 2,6-Dichlorophenol	8.59	162	380460	51.6248	ug/ml	99
46) Hexachloropropene	8.65	213	112648	24.7845	ug/ml	100
47) Hexachlorobutadiene	8.68	225	172124	41.4579	ug/ml	100
48) n-Nitrosodi-n-Butylamine	8.88	84	381110	53.5975	ug/ml	94
49) p-Phenylenediamine	9.00	108	38808	63.0747	ug/ml#	65
50) 4-Chloro-3-Methylphenol	9.00	107	413732	57.0868	ug/ml	99
51) Safrole	9.09	162	336425	48.8082	ug/ml	99
52) 2-Methylnaphthalene	9.22	142	864863	50.2742	ug/ml	99
53) 1-Methylnaphthalene	9.34	142	763206	46.9249	ug/ml	99
55) 1,2,4,5-Tetrachlorobenzene	9.43	216	374222	50.7481	ug/ml	100
56) Hexachlorocyclopentadiene	9.44	237	115480	30.2763	ug/ml	100
57) 2,4,6-Trichlorophenol	9.51	196	296420	57.3659	ug/ml	100
58) 2,4,5-Trichlorophenol	9.56	196	325821	61.2558	ug/ml	99
60) Isosafrole	9.62	162	622170	87.4943	ug/ml	100
61) 2-Chloronaphthalene	9.73	162	983580	61.9006	ug/ml	99
62) 1-Chloronaphthalene	9.77	162	759999	50.5126	ug/ml	99
63) 2-Nitroaniline	9.83	65	264886	58.1579	ug/ml	99
64) 1,4-Naphthoquinone	9.90	158	311774	49.6871	ug/ml	97
65) Dimethylphthalate	9.99	163	1123592	63.1107	ug/ml	100
66) 1,3-Dinitrobenzene	10.05	168	203715	59.6720	ug/ml	95
67) 2,6-Dinitrotoluene	10.09	165	273591	61.5177	ug/ml	97
68) Acenaphthylene	10.17	152	1471532	57.6783	ug/ml	100
69) 3-Nitroaniline	10.24	138	277931	84.7245	ug/ml	98
70) 2,4-Dinitrophenol	10.35	184	129496	57.1191	ug/ml	91
71) Acenaphthene	10.36	154	903573	54.3749	ug/ml	100
72) 4-Nitrophenol	10.36	65	188476	57.5079	ug/ml	97
73) 2,4-Dinitrotoluene	10.49	165	369248	65.2521	ug/ml	98
74) Pentachlorobenzene	10.54	250	368895	55.5607	ug/ml	99
75) Dibenzofuran	10.51	168	1278416	57.4552	ug/ml	99
76) 2,3,4,6-Tetrachlorophenol	10.66	232	233829	57.0031	ug/ml	96
77) 1-Naphthylamine	10.59	143	703642	147.0405	ug/ml#	66
78) 2-Naphthylamine	10.66	143	616273	211.5701	ug/ml#	58
79) Diethylphthalate	10.70	149	1148749	64.7876	ug/ml	100
80) Thionazin	10.80	107	187185	63.4462	ug/ml	93
81) Fluorene	10.87	166	1100317	58.1841	ug/ml	99
82) 4-Chlorophenyl Phenyl Ethe	10.82	204	532636	59.9407	ug/ml	100
83) 4-Nitroaniline	10.88	138	292523	72.0386	ug/ml	97
84) 5-Nitro-o-Toluidine	10.87	152	310617	69.5719	ug/ml	95
85) 1,2-Diphenylhydrazine	10.99	77	1028323	59.6323	ug/ml	98
88) 4,6-Dinitro-2-Methylphenol	10.92	198	209559	65.9075	ug/ml	79
89) n-Nitrosodiphenylamine	10.94	169	1743117	105.4756	ug/ml	99
90) Sulfotepp	11.14	322	178457	60.4407	ug/ml	96
91) Sym-Trinitrobenzene	11.23	75	274180	67.8622	ug/ml	97
92) Diallate	11.26	86	751016	111.4323	ug/ml#	80
93) Phenacetin	11.25	108	533536	61.6231	ug/ml	94
94) Phorate	11.28	75	668895	62.2097	ug/ml#	100
95) 4-Bromophenyl Phenyl Ether	11.35	248	323495	62.6006	ug/ml	99
96) Hexachlorobenzene	11.56	284	347930	61.5922	ug/ml	99
97) Dimethoate	11.49	87	418833	79.9348	ug/ml	98

(#) = qualifier out of range (m) = manual integration
 4M60822.D MEGAMIX.M Mon May 14 11:43:32 2012

Page 2

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D
 Acq On : 12 May 2012 14:17
 Sample : WG397140-03 LCS 05/07
 Misc : 1,1

Vial: 7
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 14 11:40:47 2012

Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
 Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
 Last Update : Mon May 14 11:40:35 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98) 4-Aminobiphenyl	11.64	169	803295	96.0106	ug/ml	100
99) Pentachlorophenol	11.74	266	219941	61.5716	ug/ml	99
100) Pronamide	11.69	173	500977	60.3358	ug/ml	100
101) Pentachloronitrobenzene	11.83	237	124379	63.5305	ug/ml	98
102) Disulfoton	11.86	88	570201	61.7006	ug/ml	98
103) Phenanthrene	11.95	178	1672748	61.7442	ug/ml	100
104) Anthracene	12.01	178	1554870	55.9737	ug/ml	100
105) Carbazole	12.16	167	1532512	63.0057	ug/ml	100
106) Parathion Methyl	12.34	109	383140	67.7689	ug/ml	99
107) Di-n-Butyl Phthalate	12.53	149	1956174	64.7326	ug/ml	100
108) Parathion Ethyl	12.82	97	237178	68.9055	ug/ml	96
109) 4-Nitroquinoline 1-Oxide	12.91	190	54995	22.1291	ug/ml	90
110) Methapyrilene	12.97	58	409635	99.0417	ug/ml	88
111) Isodrin	13.31	193	171258	58.8532	ug/ml	99
112) Fluoranthene	13.49	202	1750902	61.6753	ug/ml	99
114) Benzidine	13.59	184	298307	223.0401	ug/ml	100
115) Pyrene	13.82	202	1825422	63.6011	ug/ml	100
118) p-(Dimethylamino)azobenzen	14.16	225	362102	61.1059	ug/ml	98
119) Chlorobenzilate	14.21	251	488320	62.5200	ug/ml	96
120) Famphur	14.61	218	163719	481.1678	ug/ml#	32
121) Butyl Benzyl Phthalate	14.63	149	914517	70.0525	ug/ml	98
122) 3,3'-Dimethylbenzidine	14.65	212	459349	50.6497	ug/ml#	94
123) 2-Acetylaminofluorene	15.06	181	698716	62.5651	ug/ml	99
124) bis(2-Ethylhexyl)phthalate	15.48	149	1210773	67.9641	ug/ml	99
125) 3,3'-Dichlorobenzidine	15.49	252	470631	89.2553	ug/ml	100
126) Benzo[a]anthracene	15.57	228	1565479	61.4952	ug/ml	100
127) Chrysene	15.64	228	1518274	63.5364	ug/ml	100
129) Di-n-Octyl Phthalate	16.45	149	2041261	71.4037	ug/ml	97
130) 7,12-Dimethylbenz[a]anthra	17.49	256	693741	60.5149	ug/ml	99
131) Benzo[b]fluoranthene	17.48	252	1747524	68.2670	ug/ml	97
132) Benzo[k]fluoranthene	17.53	252	1502428	63.3172	ug/ml	97
133) Benzo[a]pyrene	18.21	252	1520893	65.1217	ug/ml	99
134) 3-Methylcholanthrene	19.08	268	746157	58.8436	ug/ml	99
135) Indeno[1,2,3-cd]pyrene	21.37	276	1758897	67.6237	ug/ml	98
136) Dibenz[ah]anthracene	21.37	278	1475632	68.0254	ug/ml	99
137) Benzo[ghi]perylene	22.28	276	1424989	66.2269	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 4M60822.D MEGAMIX.M Mon May 14 11:43:32 2012

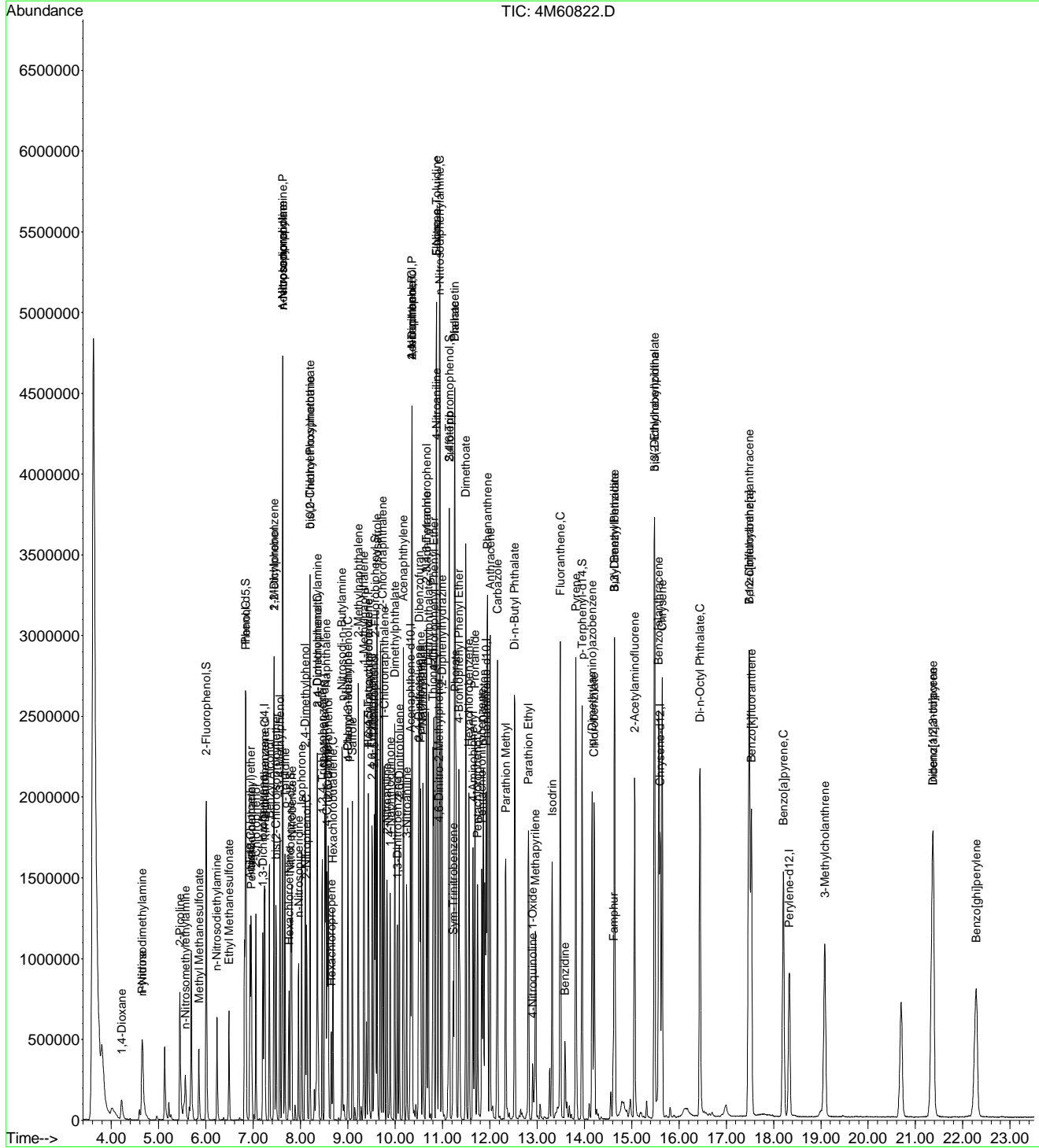
Page 3

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D
Acq On : 12 May 2012 14:17
Sample : WG397140-03 LCS 05/07
Misc : 1,1
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40 2012

Vial: 7
Operator: CAA
Inst : HPMS4
Multiplr: 1.00

Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration



Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D Vial: 7
 Acq On : 12 May 2012 14:17 Operator: CAA
 Sample : WG397140-03 LCS 05/07 Inst : HPMS4
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:53:51 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration
 DataAcq Meth : BNATEST

Internal Standards	R.T.	QIion	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	262198	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	999831	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	562715	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1021385	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.81	105	257318	36.8443	ug/L	98
4) Caprolactam	8.88	55	216871	66.4199	ug/L	90
6) 1,1'-Biphenyl	9.69	154	1083638	46.9202	ug/L	99
8) Atrazine	11.49	200	294810	52.1461	ug/L	99

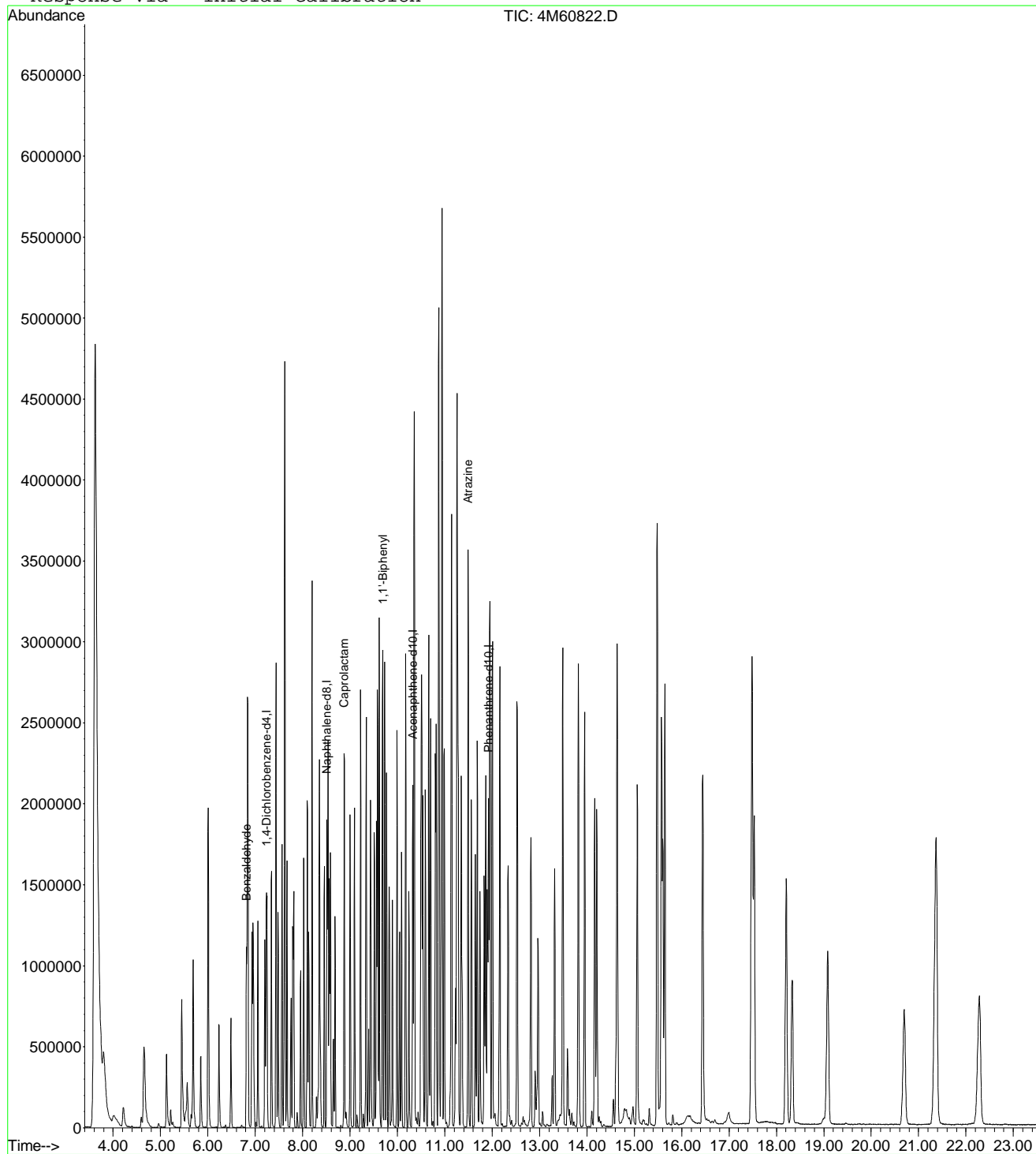
 (#) = qualifier out of range (m) = manual integration
 4M60822.D TCL.M Mon May 14 11:53:51 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D
 Acq On : 12 May 2012 14:17
 Sample : WG397140-03 LCS 05/07
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 14 11:53 2012

Vial: 7
 Operator: CAA
 Inst : HPMS4
 Multiplr: 1.00

Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
 Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
 Last Update : Mon May 14 11:53:23 2012
 Response via : Initial Calibration



2.2.2 Semivolatiles GC/MS Data (827-PAHL)

2.2.2.1 Summary Data



Login Number: L12050099
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3510C

Analysis SW-846 8270C

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

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

SAMPLES

Samples: All acceptance criteria were met.

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Manual Integration Reason Codes

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

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

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

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

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

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

Narrative ID: 46193

Approved By: Mike Cochran



Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HPMS7
Client ID: MW-13-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 10:58
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: 7M54956
Sample Tag: 01	Units: ug/L	

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	50.0	43	116	
Nitrobenzene-d5	56.1	35	114	
p-Terphenyl-d14	72.0	33	141	
U	Not detected at or above adjusted sample detection limit.			

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: HPMS7
Client ID: MW-26-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 11:26
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: 7M54957
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0562	0.0281
Acenaphthene	83-32-9		U	0.0562	0.0281
Acenaphthylene	208-96-8		U	0.0562	0.0281
Anthracene	120-12-7		U	0.0562	0.0281
Benzo(a)anthracene	56-55-3		U	0.0562	0.0281
Benzo(a)pyrene	50-32-8		U	0.0562	0.0281
Benzo(b)fluoranthene	205-99-2		U	0.0562	0.0281
Benzo(g,h,i)perylene	191-24-2		U	0.0562	0.0281
Benzo(k)fluoranthene	207-08-9		U	0.0562	0.0281
Chrysene	218-01-9		U	0.0562	0.0281
Dibenzo(a,h)anthracene	53-70-3		U	0.0562	0.0281
Fluoranthene	206-44-0		U	0.0562	0.0281
Fluorene	86-73-7		U	0.0562	0.0281
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0562	0.0281
Naphthalene	91-20-3		U	0.0562	0.0281
Phenanthrene	85-01-8		U	0.0562	0.0281
Pyrene	129-00-0		U	0.0562	0.0281

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	69.5	43	116	
Nitrobenzene-d5	77.9	35	114	
p-Terphenyl-d14	88.3	33	141	
U	Not detected at or above adjusted sample detection limit.			

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: HPMS7
Client ID: MW-25-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 11:54
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: 7M54958
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0595	0.0298
Acenaphthene	83-32-9		U	0.0595	0.0298
Acenaphthylene	208-96-8		U	0.0595	0.0298
Anthracene	120-12-7		U	0.0595	0.0298
Benzo(a)anthracene	56-55-3		U	0.0595	0.0298
Benzo(a)pyrene	50-32-8		U	0.0595	0.0298
Benzo(b)fluoranthene	205-99-2		U	0.0595	0.0298
Benzo(g,h,i)perylene	191-24-2		U	0.0595	0.0298
Benzo(k)fluoranthene	207-08-9		U	0.0595	0.0298
Chrysene	218-01-9		U	0.0595	0.0298
Dibenzo(a,h)anthracene	53-70-3		U	0.0595	0.0298
Fluoranthene	206-44-0		U	0.0595	0.0298
Fluorene	86-73-7		U	0.0595	0.0298
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0595	0.0298
Naphthalene	91-20-3		U	0.0595	0.0298
Phenanthrene	85-01-8		U	0.0595	0.0298
Pyrene	129-00-0		U	0.0595	0.0298

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	59.8	43	116	
Nitrobenzene-d5	66.6	35	114	
p-Terphenyl-d14	84.4	33	141	
U	Not detected at or above adjusted sample detection limit.			

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: HPMS7
Client ID: PZ-03-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 12:22
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: 7M54959
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	49.4	43	116	
Nitrobenzene-d5	55.9	35	114	
p-Terphenyl-d14	60.3	33	141	
U	Not detected at or above adjusted sample detection limit.			

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: HPMS7
Client ID: DUP-GW-050212	Prep Method: 3510C	Prep Date: 05/09/2012 11:00
Matrix: Water	Analytical Method: 8270C	Cal Date: 04/04/2012 12:53
Workgroup #: WG397601	Analyst: CAA	Run Date: 05/10/2012 12:49
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: 7M54960
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0602	0.0301
Acenaphthene	83-32-9		U	0.0602	0.0301
Acenaphthylene	208-96-8		U	0.0602	0.0301
Anthracene	120-12-7		U	0.0602	0.0301
Benzo(a)anthracene	56-55-3		U	0.0602	0.0301
Benzo(a)pyrene	50-32-8		U	0.0602	0.0301
Benzo(b)fluoranthene	205-99-2		U	0.0602	0.0301
Benzo(g,h,i)perylene	191-24-2		U	0.0602	0.0301
Benzo(k)fluoranthene	207-08-9		U	0.0602	0.0301
Chrysene	218-01-9		U	0.0602	0.0301
Dibenzo(a,h)anthracene	53-70-3		U	0.0602	0.0301
Fluoranthene	206-44-0		U	0.0602	0.0301
Fluorene	86-73-7		U	0.0602	0.0301
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0602	0.0301
Naphthalene	91-20-3		U	0.0602	0.0301
Phenanthrene	85-01-8		U	0.0602	0.0301
Pyrene	129-00-0		U	0.0602	0.0301

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	47.1	43	116	
Nitrobenzene-d5	52.2	35	114	
p-Terphenyl-d14	66.6	33	141	
U	Not detected at or above adjusted sample detection limit.			

2.2.2.2 QC Summary Data

Example 8270 Calculations

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

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

where:

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

Example

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:

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

Example

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:

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

Example

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

$$Cx = Cis (x) = (25.0)(0.829) = 20.72 \text{ ug/L}$$

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

$$Ax^2 + Bx + C - y = 0$$

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

Step 4: Solve for analyte concentration Cx

$$Cx = (Cis)(\text{Amount ratio})$$

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 quantitation report:	1425653
Response ratio, y:	0.142554
C - y:	-0.15905
Root 1 - Computed amount ratio, X1:	-3.88278
Root 2 - Computed amount ratio, X2:	1.581623 use this solution
Concentration of IS, Cis:	40.00
Concentration of analyte, Cx:	63.26 ug/L

Microbac Laboratories Inc.
Sample Extract Log

Workgroup: WG397431
Analyst: CAF
Spike Analyst: CAF
Method: 3510C
Run Date: 05/09/2012 11:00
SOP: EXA01 Revision 15
Spike Witness: CPD
Surr Solution: STD50786

Methylene Chloride Lot #: COA16058
Sodium Sulfate, Anhydrous, Granular (Lot #: COA15998

	SAMPLE #	Type	Reference	pH	Prod	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12050047-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
2	L12050099-01	SAMP		N	827-PAHL	980 mL	.25 mL			1 mL	Transparent
3	L12050099-03	SAMP		N	827-PAHL	890 mL	.25 mL			1 mL	Transparent
4	L12050099-05	SAMP		N	827-PAHL	840 mL	.25 mL			1 mL	Transparent
5	L12050099-07	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
6	L12050099-09	SAMP		N	827-PAHL	830 mL	.25 mL			1 mL	Transparent
7	L12050153-01	SAMP		N	827-PAHL	910 mL	.25 mL			1 mL	Transparent
8	L12050153-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
9	L12050153-05	SAMP		N	827-PAHL	900 mL	.25 mL			1 mL	Colored
10	L12050153-07	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
11	L12050171-01	RS01		N	827-PAHL	920 mL	.25 mL			1 mL	Transparent
12	L12050171-03	MS01	L12050171-01	N	827-PAHL	870 mL	.25 mL	1 mL	STD50386	1 mL	Colored
13	L12050171-05	SD01	L12050171-01	N	827-PAHL	870 mL	.25 mL	1 mL	STD50386	1 mL	Colored
14	L12050171-07	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
15	L12050223-05	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
16	L12050226-01	SAMP		N	827-PAHL	930 mL	.25 mL			1 mL	Colored
17	L12050226-03	SAMP		N	827-PAHL	730 mL	.25 mL			1 mL	Colored
18	L12050226-05	SAMP		N	827-PAHL	980 mL	.25 mL			1 mL	Transparent
19	L12050226-07	SAMP		N	827-PAHL	950 mL	.25 mL			1 mL	Colored
20	L12050226-10	SAMP		N	827-PAHL	950 mL	.25 mL			1 mL	Colored
21	WG397431-01	REF	L12050171-01	N	827-PAHL	920 mL	.25 mL			1 mL	Transparent
22	WG397431-02	BLANK		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
23	WG397431-03	LCS		N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
24	WG397431-04	MS	L12050171-01	N	827-PAHL	870 mL	.25 mL	1 mL	STD50386	1 mL	Colored
25	WG397431-05	MSD	L12050171-01	N	827-PAHL	870 mL	.25 mL	1 mL	STD50386	1 mL	Colored

L12050047-03 RE-EXT OUT OF HOLD

Analyst: Cheryl A. Flowers

Reviewer: Rebecca Davis



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#: _____

Workgroups: WG394108 Column 1 ID: RXI-5MS Column 2 ID: NA
 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

Michael Cohen



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS7 Dataset: 051012
 Analyst1: CAA Analyst2: NA
 Method: 8270L SOP: MSS03 Rev: 10

Maintenance Log ID: 41675 Syringe Filter Lot#: _____

Workgroups: WG397601 Column 1 ID: RXI-5MS Column 2 ID: NA
 Internal STD: STD51409 Surrogate STD: NA Calibration STD: _____
 CCV STD: _____ LCS STD: _____ MS/MSD STD: _____

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	7M54950	WG397598-01 5PPM DFTPP STD	1	1	STD50659	05/10/12 08:22
2	7M54951	WG397598-02 1PPM PAHL STD	1	1	STD49560	05/10/12 08:39
3	7M54952	WG397431-02 BLK 05/09	1	1		05/10/12 09:07
4	7M54953	WG397431-03 LCS 05/09	1	1		05/10/12 09:35
5	7M54954	L12050223-05	1	1		05/10/12 10:03
6	7M54955	L12050047-03 RE	1	1		05/10/12 10:31
7	7M54956	L12050099-01	1	1		05/10/12 10:58
8	7M54957	L12050099-03	1	1		05/10/12 11:26
9	7M54958	L12050099-05	1	1		05/10/12 11:54
10	7M54959	L12050099-07	1	1		05/10/12 12:22
11	7M54960	L12050099-09	1	1		05/10/12 12:49
12	7M54961	L12050153-01	1	1		05/10/12 13:18
13	7M54962	L12050153-03	1	1		05/10/12 13:46
14	7M54963	L12050153-05	1	1		05/10/12 14:14
15	7M54964	L12050153-07	1	1		05/10/12 14:42
16	7M54965	L12050171-01 REF	1	1		05/10/12 15:10
17	7M54966	L12050171-03 MS	1	1		05/10/12 15:37
18	7M54967	L12050171-05 MSD	1	1		05/10/12 16:06
19	7M54968	L12050171-07	1	1		05/10/12 16:34
20	7M54969	L12050226-01	1	1		05/10/12 17:02
21	7M54970	L12050226-05	1	1		05/10/12 17:30
22	7M54971	L12050226-10	1	1		05/10/12 17:57
23	7M54972	L12050226-07	1	1		05/10/12 18:25
24	7M54973	L12050226-03	1	1		05/10/12 18:53

Comments

Seq.	Rerun	Dil.	Reason	Analytes
20				
			L12050226-01 - Istd 1 high - SMI.	

Page: 1

Approved: 11-MAY-12

Michael Cohen



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

Cassio D. Augenstein

Secondary Reviewer:
09-APR-2012

Michael Cohen

CHECKLIST1 - Modified 03/05/2008

Generated: APR-09-2012 12:24:01



Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
 Analyst: CAA
 Analyst: NA
 Method: 8270L
 Instrument: HPMS7
 Curve Workgroup: NA
 Runlog ID: 46683
 Analytical Workgroups: L12050223, 050047, 050099, 050153, 050171, 050226

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

Primary Reviewer:
11-MAY-2012

Cassio D. Augenstein

Secondary Reviewer:
11-MAY-2012

Michael Cohen

CHECKLIST1 - Modified 03/05/2008

Generated: MAY-11-2012 09:18:02



Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method:8270C
 Login Number:L12050099

AAB#:WG397601

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-13-050212	01	05/02/12					05/09/12	7	7		05/10/12	1	40	
MW-26-050212	03	05/02/12					05/09/12	7	7		05/10/12	1	40	
MW-25-050212	05	05/02/12					05/09/12	6.9	7		05/10/12	1	40	
PZ-03-050212	07	05/02/12					05/09/12	6.9	7		05/10/12	1.1	40	
DUP-GW-050212	09	05/02/12					05/09/12	7	7		05/10/12	1.1	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2410448
 Report generated 05/11/2012 09:44



Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050099
Instrument Id: HPMS7
Workgroup (AAB#): WG397601

Method: 8270L
CAL ID: HPMS7-04-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3
L12050099-01	1.00	01	50.0	56.1	72.0
L12050099-03	1.00	01	69.5	77.9	88.3
L12050099-05	1.00	01	59.8	66.6	84.4
L12050099-07	1.00	01	49.4	55.9	60.3
L12050099-09	1.00	01	47.1	52.2	66.6
WG397431-02	1.00	01	73.0	79.5	94.1
WG397431-03	1.00	01	68.9	74.9	90.4

Surrogates	Surrogate Limits		
1 - 2-Fluorobiphenyl	43	-	116
2 - Nitrobenzene-d5	35	-	114
3 - p-Terphenyl-d14	33	-	141

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

SURROGATES - Modified 03/06/2008
PDF File ID: 2410457
Report generated: 05/11/2012 09:45



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397601
 Blank File ID: 7M54952 Blank Sample ID: WG397431-02
 Prep Date: 05/09/12 11:00 Instrument ID: HPMS7
 Analyzed Date: 05/10/12 09:07 Method: 8270C
 Analyst: CAA

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397431-03	7M54953	05/10/12 09:35	01
MW-13-050212	L12050099-01	7M54956	05/10/12 10:58	01
MW-26-050212	L12050099-03	7M54957	05/10/12 11:26	01
MW-25-050212	L12050099-05	7M54958	05/10/12 11:54	01
PZ-03-050212	L12050099-07	7M54959	05/10/12 12:22	01
DUP-GW-050212	L12050099-09	7M54960	05/10/12 12:49	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2410449
 Report generated 05/11/2012 09:44



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/09/12 11:00 Sample ID: WG397431-02
 Instrument ID: HPMS7 Run Date: 05/10/12 09:07 Prep Method: 3510C
 File ID: 7M54952 Analyst: CAA Method: 8270C
 Workgroup (AAB#): WG397601 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS7-04-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
2-Methylnaphthalene	0.0250	0.0500	0.0250	1	U
Acenaphthene	0.0250	0.0500	0.0250	1	U
Acenaphthylene	0.0250	0.0500	0.0250	1	U
Anthracene	0.0250	0.0500	0.0250	1	U
Benzo(a)anthracene	0.0250	0.0500	0.0250	1	U
Benzo(a)pyrene	0.0250	0.0500	0.0250	1	U
Benzo(b)fluoranthene	0.0250	0.0500	0.0250	1	U
Benzo(g,h,i)perylene	0.0250	0.0500	0.0250	1	U
Benzo(k)fluoranthene	0.0250	0.0500	0.0250	1	U
Chrysene	0.0250	0.0500	0.0250	1	U
Dibenzo(a,h)anthracene	0.0250	0.0500	0.0250	1	U
Fluoranthene	0.0250	0.0500	0.0250	1	U
Fluorene	0.0250	0.0500	0.0250	1	U
Indeno(1,2,3-cd)pyrene	0.0250	0.0500	0.0250	1	U
Naphthalene	0.0250	0.0500	0.0250	1	U
Phenanthrene	0.0250	0.0500	0.0250	1	U
Pyrene	0.0250	0.0500	0.0250	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2-Fluorobiphenyl	73.0	43 - 116	PASS
Nitrobenzene-d5	79.5	35 - 114	PASS
p-Terphenyl-d14	94.1	33 - 141	PASS

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

Report Name: BLANK
 PDF ID: 2410450
 11-MAY-2012 09:44



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397431-03
 Instrument ID: HPMS7 Run Time: 09:35 Prep Method: 3510C
 File ID: 7M54953 Analyst: CAA Method: 8270C
 Workgroup (AAB#): WG397601 Matrix: Water Units: ug/L
 QC Key: WATERLOO Lot#: STD50386 Cal ID: HPMS7-04-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
2-Methylnaphthalene	1.00	0.847	84.7	30 - 105	
Acenaphthene	1.00	0.727	72.7	30 - 110	
Acenaphthylene	1.00	0.761	76.1	30 - 115	
Anthracene	1.00	0.774	77.4	30 - 130	
Benzo(a)anthracene	1.00	0.801	80.1	50 - 150	
Benzo(a)pyrene	1.00	0.904	90.4	50 - 140	
Benzo(b)fluoranthene	1.00	0.830	83.0	40 - 150	
Benzo(g,h,i)perylene	1.00	0.824	82.4	30 - 150	
Benzo(k)fluoranthene	1.00	0.894	89.4	40 - 150	
Chrysene	1.00	0.884	88.4	45 - 145	
Dibenzo(a,h)anthracene	1.00	0.829	82.9	25 - 155	
Fluoranthene	1.00	0.881	88.1	40 - 150	
Fluorene	1.00	0.737	73.7	30 - 120	
Indeno(1,2,3-cd)pyrene	1.00	0.861	86.1	35 - 150	
Naphthalene	1.00	0.775	77.5	30 - 100	
Phenanthrene	1.00	0.719	71.9	30 - 130	
Pyrene	1.00	0.855	85.5	50 - 150	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2-Fluorobiphenyl	68.9	43 - 116	PASS
Nitrobenzene-d5	74.9	35 - 114	PASS
p-Terphenyl-d14	90.4	33 - 141	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
 PDF File ID: 2410451
 Report generated: 05/11/2012 09:44



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050099 Tune ID: WG394111-01
 Instrument: HPMS7 Run Date: 04/04/2012
 Analyst: CAA Run Time: 08:53
 Workgroup: WG394111 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



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050099 Tune ID: WG397598-01
 Instrument: HPMS7 Run Date: 05/10/2012
 Analyst: CAA Run Time: 08:22
 Workgroup: WG397598 File ID: 7M54950
 Cal ID: HPMS7-04-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	47.2	124912	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	48.0	127141	PASS
70.0	69.0	0	2.00	0	0	PASS
127	198	40.0	60.0	59.1	156453	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	264789	PASS
199	198	5.00	9.00	6.76	17904	PASS
275	198	10.0	30.0	22.3	58970	PASS
365	198	1.00	100	2.20	5832	PASS
441	443	0.0100	100	82.5	26460	PASS
442	198	40.0	100	63.0	166920	PASS
443	442	17.0	23.0	19.2	32073	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397598-02	CCV	01	05/10/2012 08:39	
WG397431-02	BLANK	01	05/10/2012 09:07	
WG397431-03	LCS	01	05/10/2012 09:35	
L12050099-01	MW-13-050212	01	05/10/2012 10:58	
L12050099-03	MW-26-050212	01	05/10/2012 11:26	
L12050099-05	MW-25-050212	01	05/10/2012 11:54	
L12050099-07	PZ-03-050212	01	05/10/2012 12:22	
L12050099-09	DUP-GW-050212	01	05/10/2012 12:49	

* Sample past 12 hour tune limit



Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050099
 Analytical Method: 8270C
 ICAL Workgroup: WG394111

Instrument ID: HPMS7
 Initial Calibration Date: 04-APR-12 12:53
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R ²)
Acenaphthene	CCC	1.265	8.40		
Benzo[a]pyrene	CCC	1.284	7.43		
Fluoranthene	CCC	1.303	11.3		
2-Methylnaphthalene		0.7214	6.62		
Acenaphthylene		2.211	7.32		
Anthracene		1.249	3.76		
Benzo[a]anthracene		1.297	7.77		
Benzo[b]fluoranthene		1.380	7.88		
Benzo[ghi]perylene		1.240	5.94		
Benzo[k]fluoranthene		1.305	10.2		
Chrysene		1.291	10.9		
Dibenz[ah]anthracene		1.190	4.82		
Fluorene		1.503	12.2		
Indeno[1,2,3-cd]pyrene		1.406	4.98		
Naphthalene		1.184	11.0		
Phenanthrene		1.244	7.24		
Pyrene		1.607	11.0		

R = Correlation coefficient; 0.995 minimum
 R² = 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: 2410452
 Report generated 05/11/2012 09:44



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
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	1081378.000	1.179	5.00	525392.000	1.241
Fluoranthene	1.00	183927.000	1.284	10.0	1136279.000	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	1359329.000	2.123	5.00	644671.000	2.192
Anthracene	1.00	177663.000	1.240	10.0	1226008.000	1.166	5.00	603655.000	1.244
Benzo[a]anthracene	1.00	151964.000	1.287	10.0	1071059.000	1.159	5.00	597051.000	1.276
Benzo[b]fluoranthene	1.00	153733.000	1.320	10.0	1150949.000	1.254	5.00	633809.000	1.496
Benzo[ghi]perylene	1.00	144004.000	1.236	10.0	1226855.000	1.337	5.00	511152.000	1.207
Benzo[k]fluoranthene	1.00	143781.000	1.234	10.0	1050437.000	1.145	5.00	559677.000	1.321
Chrysene	1.00	148985.000	1.261	10.0	1017304.000	1.101	5.00	566428.000	1.210
Dibenz[ah]anthracene	1.00	142338.000	1.222	10.0	1055300.000	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	1239153.000	1.351	5.00	591189.000	1.396
Naphthalene	1.00	174314.000	1.136	10.0	1299479.000	1.008	5.00	598766.000	1.102
Phenanthrene	1.00	174346.000	1.217	10.0	1204227.000	1.145	5.00	578333.000	1.192
Pyrene	1.00	208192.000	1.763	10.0	1269832.000	1.374	5.00	697024.000	1.489

INT_CAL - Modified 03/06/2008
PDF File ID: 2410452
Report generated 05/11/2012 09:44



Microbac Laboratories Inc.
INITIAL CALIBRATION DATA

Login Number: L12050099
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: 2410452
Report generated 05/11/2012 09:44



Login Number: L12050099
 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: 2410452
 Report generated 05/11/2012 09:44



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050099 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



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397598-02
Instrument ID: HPMS7 Run Time: 08:39 Method: 8270C
File ID: 7M54951 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397601 Cal ID: HPMS7 - 04-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Acenaphthene	CCC	1000	935	ug/L	1.18	6.50	20	
Benzo[a]pyrene	CCC	1000	991	ug/L	1.27	0.920	20	
Fluoranthene	CCC	1000	984	ug/L	1.28	1.63	20	
2-Methylnaphthalene		1000	1020	ug/L	0.735	1.87	20	
Acenaphthylene		1000	974	ug/L	2.15	2.58	20	
Anthracene		1000	957	ug/L	1.20	4.30	20	
Benzo[a]anthracene		1000	948	ug/L	1.23	5.20	20	
Benzo[b]fluoranthene		1000	898	ug/L	1.24	10.2	20	
Benzo[ghi]perylene		1000	955	ug/L	1.18	4.55	20	
Benzo[k]fluoranthene		1000	1010	ug/L	1.31	0.610	20	
Chrysene		1000	971	ug/L	1.25	2.90	20	
Dibenz[ah]anthracene		1000	1000	ug/L	1.19	0.280	20	
Fluorene		1000	930	ug/L	1.40	7.00	20	
Indeno[1,2,3-cd]pyrene		1000	997	ug/L	1.40	0.280	20	
Naphthalene		1000	972	ug/L	1.15	2.84	20	
Phenanthrene		1000	898	ug/L	1.12	10.2	20	
Pyrene		1000	922	ug/L	1.48	7.81	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2410455
Report generated 05/11/2012 09:45



Microbac Laboratories Inc.
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050099
Instrument ID: HPMS7
Workgroup (AAB#): WG397601

CCV Number: WG397598-02
CAL ID: HPMS7-04-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG397598-02	NA	NA	88860	141597	151009	133982	145629
Upper Limit	NA	NA	177720	283194	302018	267964	291258
Lower Limit	NA	NA	44430	70799	75505	66991	72815
<u>L12050099-01</u>	1.00	01	86971	134038	136124	122913	142147
L12050099-03	1.00	01	91683	142527	141653	130473	149750
L12050099-05	1.00	01	83608	132934	130734	121661	138016
L12050099-07	1.00	01	84985	130108	134038	118729	140009
L12050099-09	1.00	01	83171	130340	129999	120083	138087
WG397431-02	1.00	01	86687	139178	137435	129158	143904
WG397431-03	1.00	01	86699	141383	139544	131125	145577

- IS-1 - Acenaphthene-d10
- IS-2 - Chrysene-d12
- IS-3 - Naphthalene-d8
- IS-4 - Perylene-d12
- IS-5 - Phenanthrene-d10

Underline = Response outside limits



Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050099
Instrument ID: HPMS7
Workgroup (AAB#): WG397601

CCV Number: WG397598-02
CAL ID: HPMS7-04-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG397598-02	NA	NA	8.22	13.47	6.02	15.7	10.08
Upper Limit	NA	NA	8.72	13.97	6.52	16.2	10.58
Lower Limit	NA	NA	7.72	12.97	5.52	15.2	9.58
<u>L12050099-01</u>	1.00	01	8.21	13.47	6.02	15.7	10.08
L12050099-03	1.00	01	8.22	13.47	6.02	15.7	10.08
L12050099-05	1.00	01	8.22	13.47	6.02	15.7	10.08
L12050099-07	1.00	01	8.22	13.47	6.02	15.7	10.08
L12050099-09	1.00	01	8.21	13.47	6.02	15.7	10.08
WG397431-02	1.00	01	8.21	13.47	6.02	15.7	10.08
WG397431-03	1.00	01	8.22	13.47	6.02	15.7	10.08

- IS-1 - Acenaphthene-d10
- IS-2 - Chrysene-d12
- IS-3 - Naphthalene-d8
- IS-4 - Perylene-d12
- IS-5 - Phenanthrene-d10

Underline = Response outside limits



2.2.2.3 Sample Data

Data File : C:\MSDCHEM\1\DATA\051012\7M54956.D Vial: 7
 Acq On : 10 May 2012 10:58 am Operator: CAA
 Sample : L12050099-01 Inst : HPMS7
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 11 07:17:21 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration
 DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	136124	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.21	164	86971	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	142147	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	134038	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	122913	1.00	ug/ml	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Nitrobenzene-d5		5.18	82	79786	1.4034	ug/ml	0.00
Spiked Amount	2.500	Range	35 - 114	Recovery	=	56.00%	
7) 2-Fluorobiphenyl		7.33	172	179904	1.2507	ug/ml	-0.02
Spiked Amount	2.500	Range	43 - 116	Recovery	=	50.00%	
17) p-Terphenyl-d14		12.07	244	223698	1.7989	ug/ml	-0.02
Spiked Amount	2.500	Range	33 - 141	Recovery	=	72.00%	

Target Compounds Qvalue

 (#) = qualifier out of range (m) = manual integration
 7M54956.D SIMPAHL.M Fri May 11 07:24:02 2012

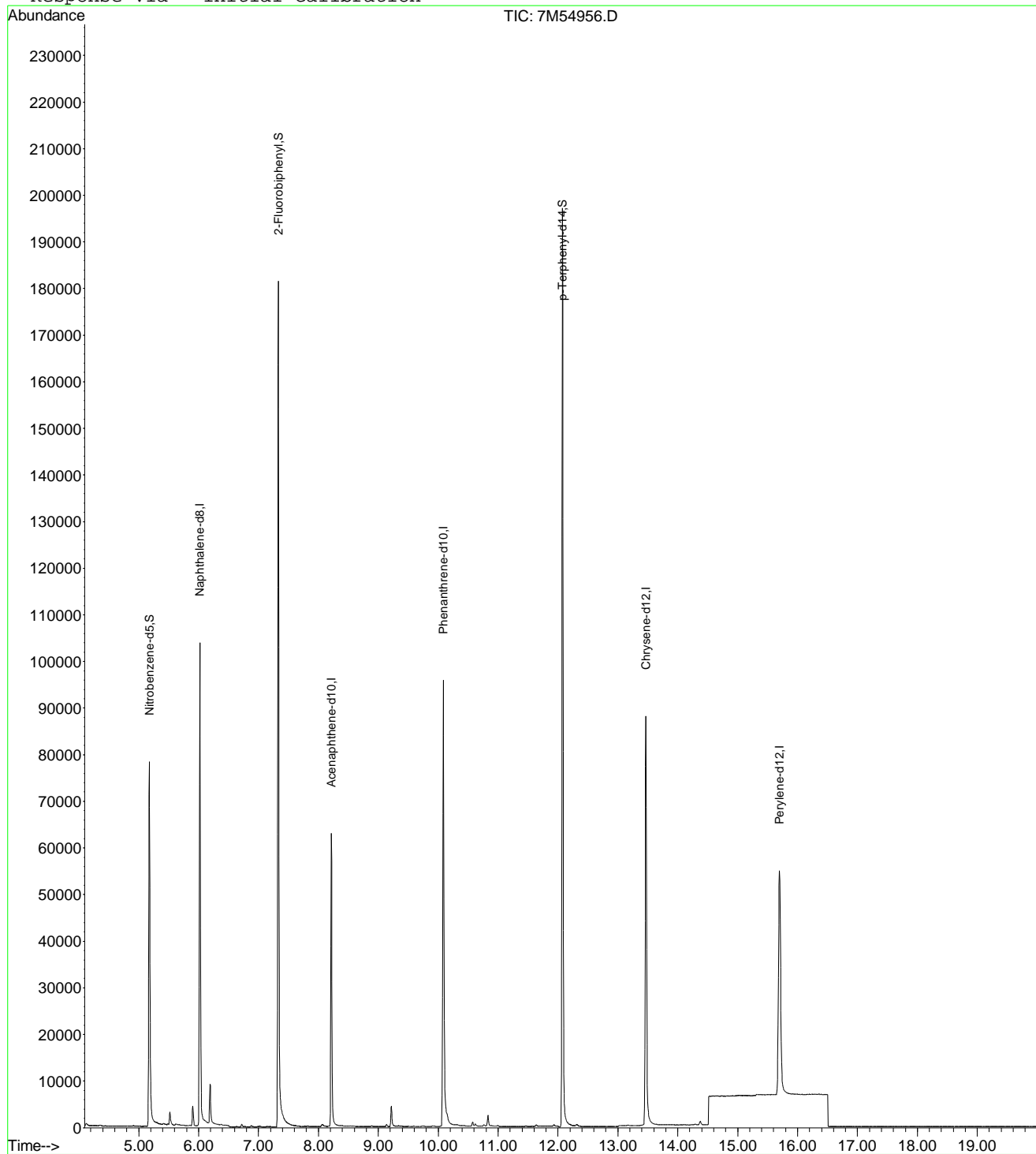
Page 1

Data File : C:\MSDCHEM\1\DATA\051012\7M54956.D
 Acq On : 10 May 2012 10:58 am
 Sample : L12050099-01
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 11 7:17 2012

Vial: 7
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\051012\7M54957.D Vial: 8
 Acq On : 10 May 2012 11:26 am Operator: CAA
 Sample : L12050099-03 Inst : HPMS7
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 11 07:17:21 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration
 DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	141653	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	91683	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	149750	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	142527	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	130473	1.00	ug/ml	-0.01

System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	115192	1.9471	ug/ml	0.00
Spiked Amount	2.500	Range	35 - 114	Recovery	=	78.00%
7) 2-Fluorobiphenyl	7.33	172	263515	1.7378	ug/ml	-0.01
Spiked Amount	2.500	Range	43 - 116	Recovery	=	69.60%
17) p-Terphenyl-d14	12.07	244	291877	2.2074	ug/ml	-0.02
Spiked Amount	2.500	Range	33 - 141	Recovery	=	88.40%

Target Compounds Qvalue

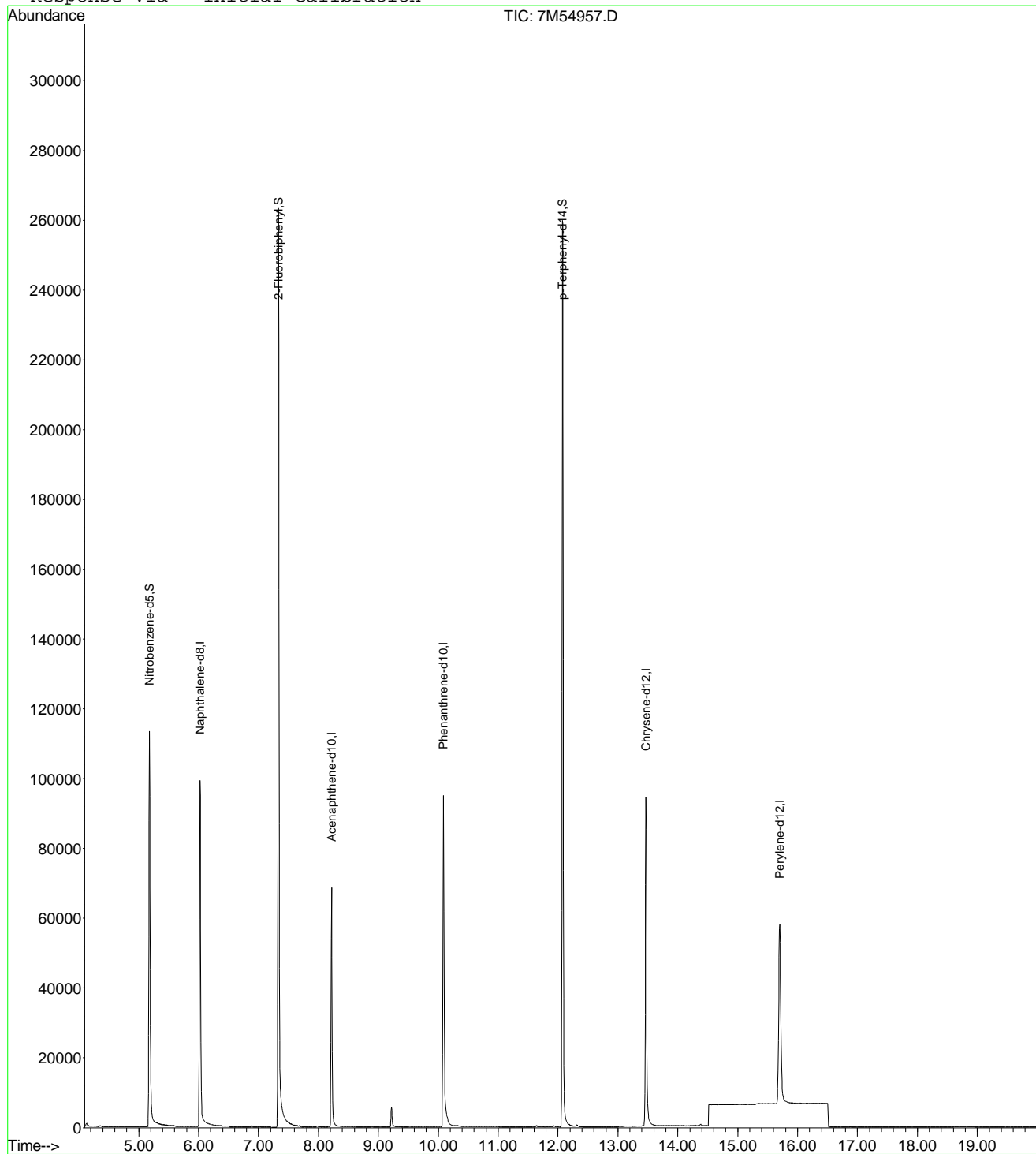
 (#) = qualifier out of range (m) = manual integration
 7M54957.D SIMPAHL.M Fri May 11 07:24:03 2012

Data File : C:\MSDCHEM\1\DATA\051012\7M54957.D
 Acq On : 10 May 2012 11:26 am
 Sample : L12050099-03
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 11 7:17 2012

Vial: 8
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\051012\7M54958.D Vial: 9
 Acq On : 10 May 2012 11:54 am Operator: CAA
 Sample : L12050099-05 Inst : HPMS7
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 11 07:17:21 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration
 DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	130734	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	83608	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	138016	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	132934	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	121661	1.00	ug/ml	-0.02

System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	90941	1.6656	ug/ml	0.00
Spiked Amount	2.500	Range	35 - 114	Recovery	=	66.80%
7) 2-Fluorobiphenyl	7.33	172	206861	1.4959	ug/ml	-0.01
Spiked Amount	2.500	Range	43 - 116	Recovery	=	60.00%
17) p-Terphenyl-d14	12.08	244	260252	2.1102	ug/ml	-0.01
Spiked Amount	2.500	Range	33 - 141	Recovery	=	84.40%

Target Compounds Qvalue

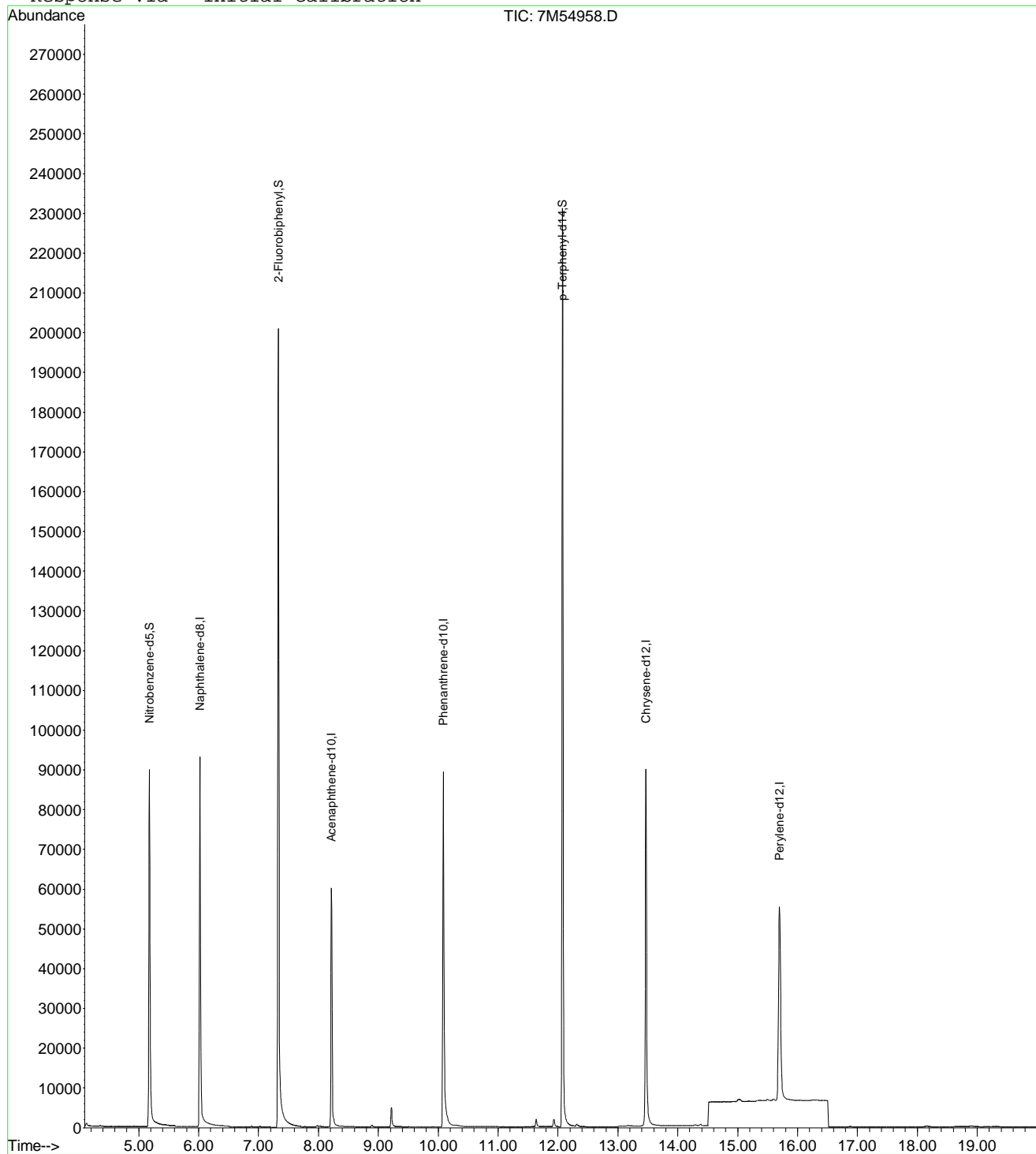
 (#) = qualifier out of range (m) = manual integration
 7M54958.D SIMPAHL.M Fri May 11 07:24:03 2012

Data File : C:\MSDCHEM\1\DATA\051012\7M54958.D
Acq On : 10 May 2012 11:54 am
Sample : L12050099-05
Misc : 1,1
MS Integration Params: RTEINT.P
Quant Time: May 11 7:17 2012

Vial: 9
Operator: CAA
Inst : HPMS7
Multiplr: 1.00

Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Fri May 11 07:17:07 2012
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\051012\7M54959.D Vial: 10
 Acq On : 10 May 2012 12:22 pm Operator: CAA
 Sample : L12050099-07 Inst : HPMS7
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 11 07:17:21 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration
 DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	134038	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	84985	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	140009	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	130108	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	118729	1.00	ug/ml	-0.02

System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	78297	1.3987	ug/ml	-0.01
Spiked Amount	2.500	Range	35 - 114	Recovery	=	56.00%
7) 2-Fluorobiphenyl	7.33	172	173721	1.2359	ug/ml	-0.02
Spiked Amount	2.500	Range	43 - 116	Recovery	=	49.60%
17) p-Terphenyl-d14	12.08	244	182061	1.5083	ug/ml	-0.01
Spiked Amount	2.500	Range	33 - 141	Recovery	=	60.40%

Target Compounds Qvalue

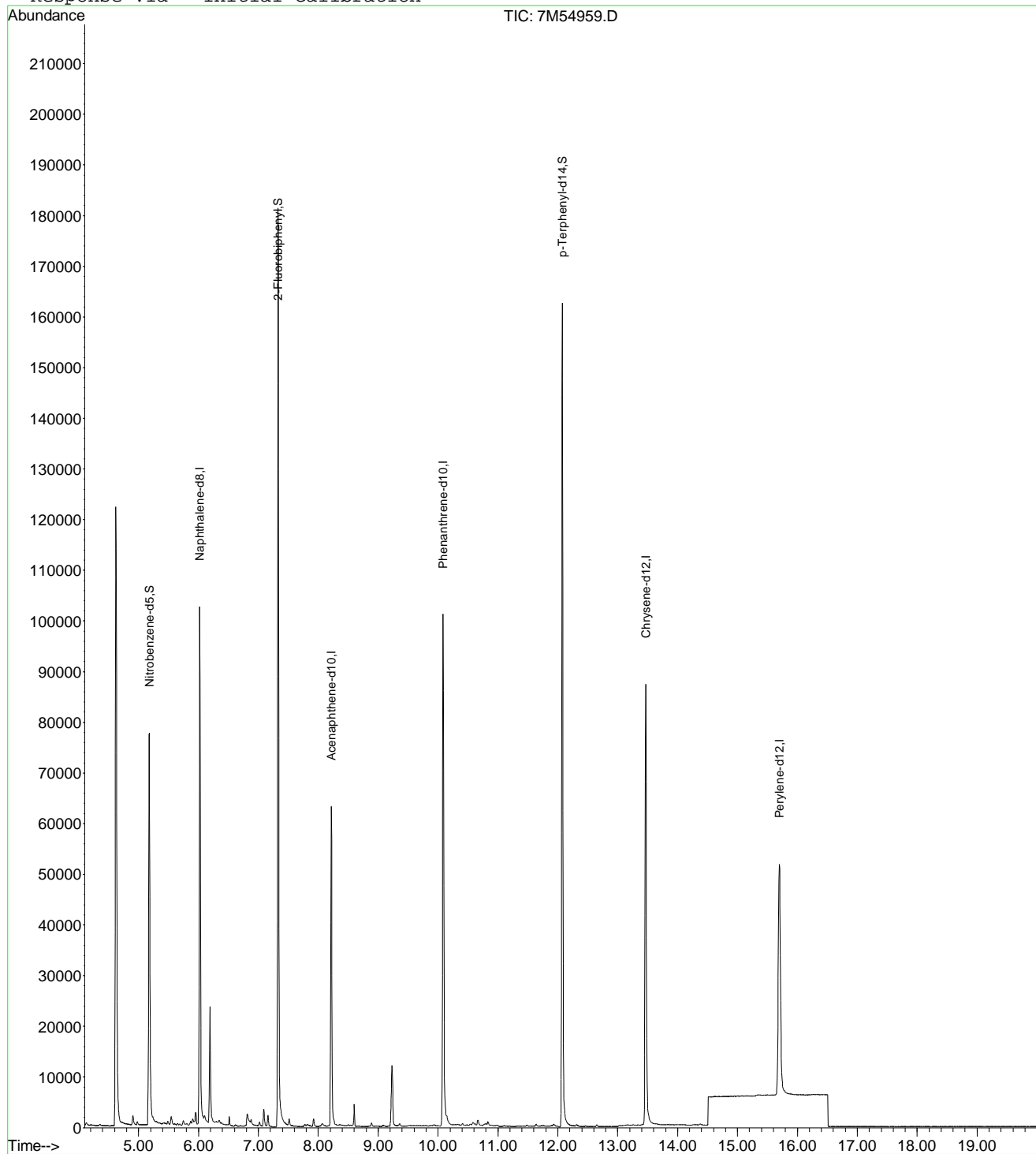
 (#) = qualifier out of range (m) = manual integration
 7M54959.D SIMPAHL.M Fri May 11 07:24:04 2012

Data File : C:\MSDCHEM\1\DATA\051012\7M54959.D
 Acq On : 10 May 2012 12:22 pm
 Sample : L12050099-07
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 11 7:17 2012

Vial: 10
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\051012\7M54960.D Vial: 11
 Acq On : 10 May 2012 12:49 pm Operator: CAA
 Sample : L12050099-09 Inst : HPMS7
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 11 07:17:22 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration
 DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIion	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	129999	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.21	164	83171	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	138087	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	130340	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	120083	1.00	ug/ml	-0.02

System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	70883	1.3056	ug/ml	0.00
Spiked Amount	2.500	Range 35 - 114	Recovery	=	52.40%	
7) 2-Fluorobiphenyl	7.33	172	161990	1.1776	ug/ml	-0.02
Spiked Amount	2.500	Range 43 - 116	Recovery	=	47.20%	
17) p-Terphenyl-d14	12.07	244	201239	1.6642	ug/ml	-0.02
Spiked Amount	2.500	Range 33 - 141	Recovery	=	66.40%	

Target Compounds Qvalue

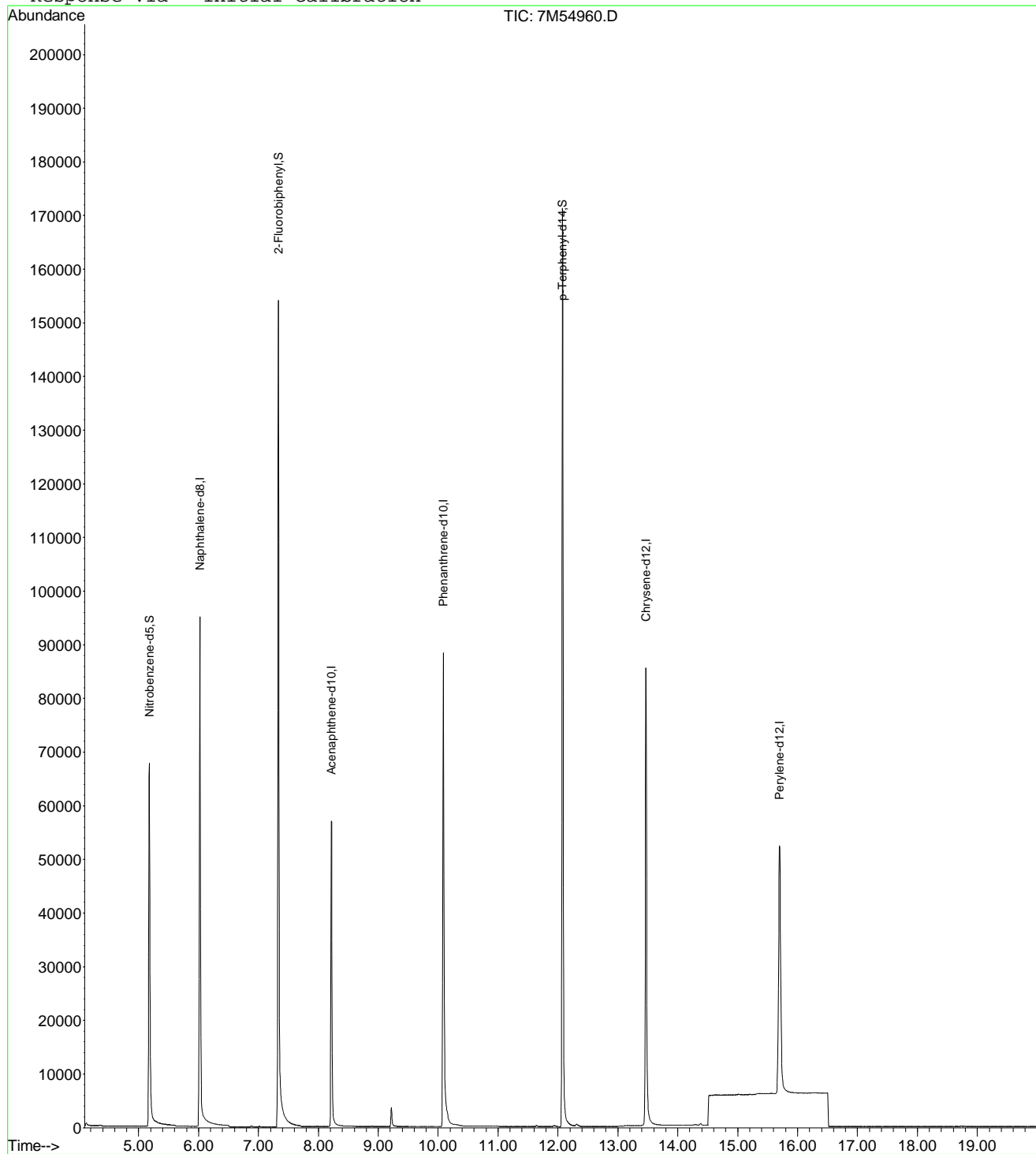
 (#) = qualifier out of range (m) = manual integration
 7M54960.D SIMPAHL.M Fri May 11 07:24:05 2012

Data File : C:\MSDCHEM\1\DATA\051012\7M54960.D
 Acq On : 10 May 2012 12:49 pm
 Sample : L12050099-09
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 11 7:17 2012

Vial: 11
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration



2.2.2.4 Standards Data

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	6.05	128	174314	0.9550	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	112240	1.0173	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	119453	1.0871	ug/ml	99
8) Acenaphthylene	8.04	152	169525	0.9990	ug/ml	100
9) Acenaphthene	8.27	154	101608	0.9584	ug/ml	100
10) Fluorene	8.90	166	126450	1.0464	ug/ml	100
12) Phenanthrene	10.13	178	174346	0.9841	ug/ml	100
13) Anthracene	10.18	178	177663	1.0067	ug/ml	100
14) Fluoranthene	11.65	202	183927	0.9372	ug/ml	100
16) Pyrene	11.94	202	208192	1.1119	ug/ml	100
18) Benzo[a]anthracene	13.46	228	151964	0.9952	ug/ml	100
19) Chrysene	13.51	228	148985	0.9748	ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	153733	0.9700	ug/ml	96
22) Benzo[k]fluoranthene	15.05	252	143781	0.9822	ug/ml	96
23) Benzo[a]pyrene	15.61	252	148527	0.9919	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.16	276	167498	0.9689	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	142338	0.9814	ug/ml	100
26) Benzo[ghi]perylene	18.91	276	144004	0.9548	ug/ml	100

 (#) = qualifier out of range (m) = manual integration
 7M54728.D SIMPAHL.M Thu Apr 05 13:50:13 2012

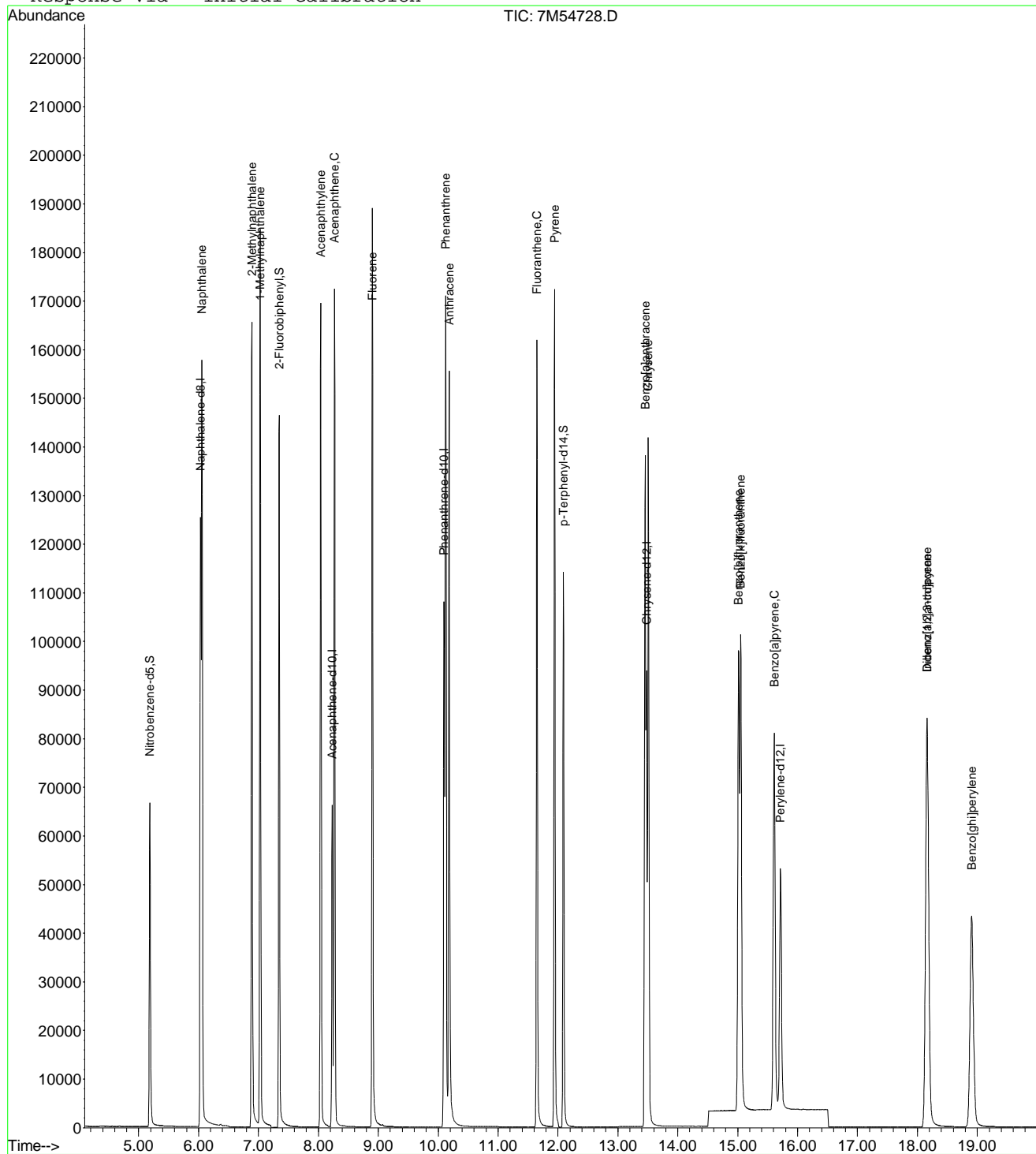
Page 1

Data File : C:\MSDCHEM\1\DATA\040412\7M54728.D
 Acq On : 4 Apr 2012 9:39 am
 Sample : WG394111-02 1PPM PAHL STD
 Misc : 1,1 STD49560
 MS Integration Params: RTEINT.P
 Quant Time: Apr 5 10:56 2012

Vial: 2
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

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



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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

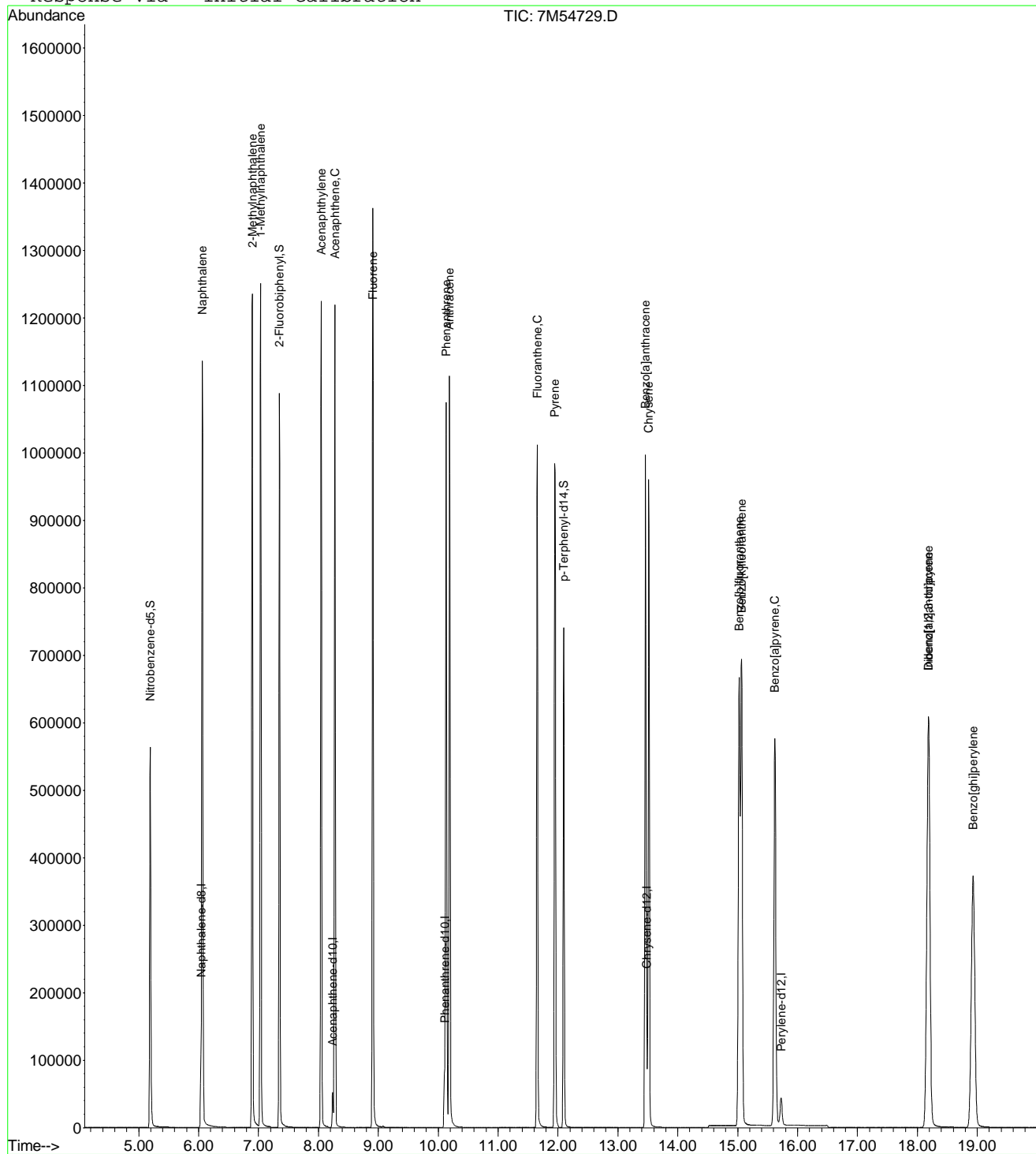
Page 1

Data File : C:\MSDCHEM\1\DATA\040412\7M54729.D
 Acq On : 4 Apr 2012 10:35 am
 Sample : WG394111-03 10PPM PAHL STD
 Misc : 1,1 STD49560
 MS Integration Params: RTEINT.P
 Quant Time: Apr 5 10:56 2012

Vial: 3
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

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



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		R.T.	QIon	Response	Conc	Units	Dev(Min)
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		R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene		6.06	128	598766	5.2004	ug/ml	99
4) 2-Methylnaphthalene		6.89	142	396960	5.6167	ug/ml	100
5) 1-Methylnaphthalene		7.03	142	401769	5.7396	ug/ml	100
8) Acenaphthylene		8.04	152	644671	6.1053	ug/ml	99
9) Acenaphthene		8.27	154	356386	5.5560	ug/ml	100
10) Fluorene		8.90	166	440591	5.9040	ug/ml	100
12) Phenanthrene		10.13	178	578333	5.3513	ug/ml	100
13) Anthracene		10.18	178	603655	5.6342	ug/ml	99
14) Fluoranthene		11.64	202	627208	5.3565	ug/ml	99
16) Pyrene		11.94	202	697024	5.0790	ug/ml	100
18) Benzo[a]anthracene		13.45	228	597051	5.5085	ug/ml	98
19) Chrysene		13.51	228	566428	5.2679	ug/ml	99
21) Benzo[b]fluoranthene		15.01	252	633809	6.1547	ug/ml	99
22) Benzo[k]fluoranthene		15.05	252	559677	5.8368	ug/ml	99
23) Benzo[a]pyrene		15.60	252	525392	5.3975	ug/ml	99
24) Indeno[1,2,3-cd]pyrene		18.16	276	591189	5.3721	ug/ml	100
25) Dibenz[ah]anthracene		18.16	278	503437	5.4570	ug/ml	100
26) Benzo[ghi]perylene		18.90	276	511152	5.2233	ug/ml	100

(#) = qualifier out of range (m) = manual integration
 7M54730.D SIMPAHL.M Thu Apr 05 13:50:25 2012

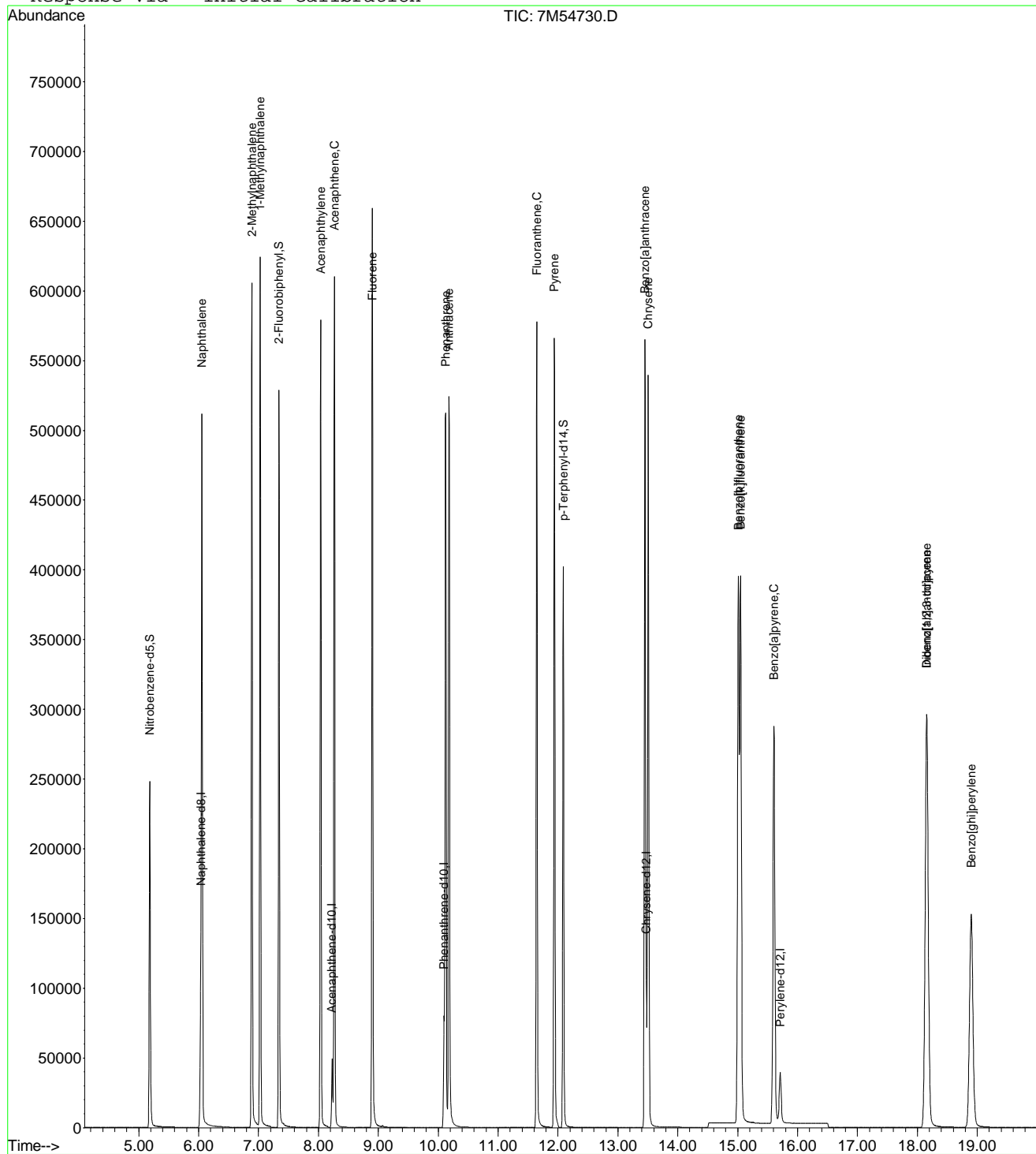
Page 1

Data File : C:\MSDCHEM\1\DATA\040412\7M54730.D
 Acq On : 4 Apr 2012 11:03 am
 Sample : WG394111-04 5PPM PAHL STD
 Misc : 1,1 STD49560
 MS Integration Params: RTEINT.P
 Quant Time: Apr 5 10:57 2012

Vial: 4
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

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



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

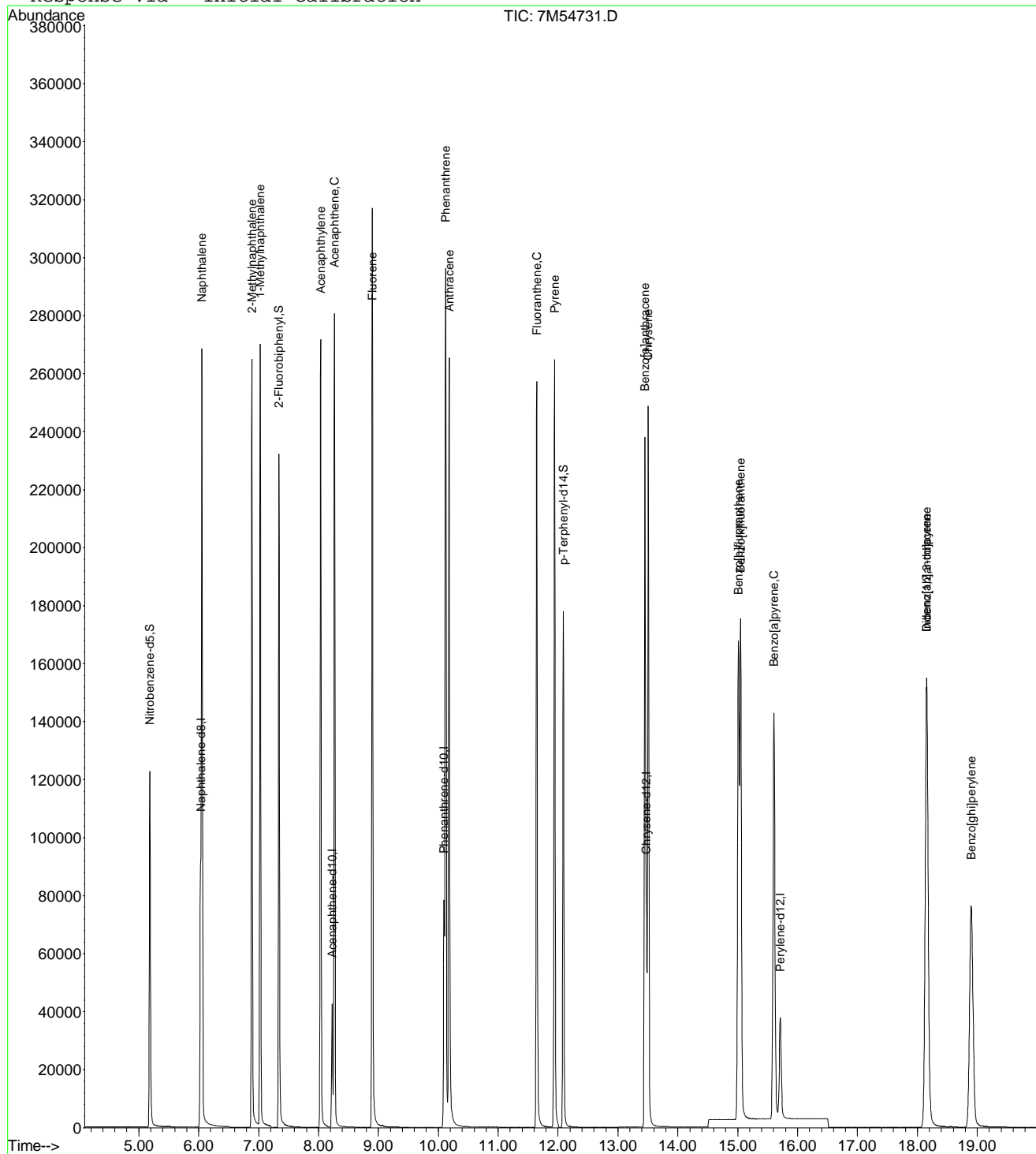
Page 1

Data File : C:\MSDCHEM\1\DATA\040412\7M54731.D
 Acq On : 4 Apr 2012 11:30 am
 Sample : WG394111-05 2.5PPM PAHL STD
 Misc : 1,1 STD49560
 MS Integration Params: RTEINT.P
 Quant Time: Apr 5 10:57 2012

Vial: 5
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

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



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		R.T.	QIon	Response	Conc	Units	Dev(Min)
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		R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene		6.05	128	75307	0.5106	ug/ml	100
4) 2-Methylnaphthalene		6.89	142	48164	0.5252	ug/ml	100
5) 1-Methylnaphthalene		7.03	142	49560	0.5450	ug/ml	100
8) Acenaphthylene		8.04	152	77288	0.5039	ug/ml	99
9) Acenaphthene		8.27	154	43592	0.4783	ug/ml	100
10) Fluorene		8.90	166	46685	0.4326	ug/ml	99
12) Phenanthrene		10.12	178	59636	0.4896	ug/ml	99
13) Anthracene		10.18	178	61358	0.5065	ug/ml	99
14) Fluoranthene		11.65	202	66304	0.5157	ug/ml	100
16) Pyrene		11.94	202	74252	0.4885	ug/ml	100
18) Benzo[a]anthracene		13.45	228	59958	0.4920	ug/ml	100
19) Chrysene		13.51	228	61514	0.5123	ug/ml	99
21) Benzo[b]fluoranthene		15.01	252	68495	0.4786	ug/ml	100
22) Benzo[k]fluoranthene		15.05	252	66287	0.5040	ug/ml	99
23) Benzo[a]pyrene		15.60	252	65422	0.4974	ug/ml	99
24) Indeno[1,2,3-cd]pyrene		18.16	276	65450	0.4291	ug/ml	100
25) Dibenz[ah]anthracene		18.16	278	55466	0.4329	ug/ml	100
26) Benzo[ghi]perylene		18.90	276	56433	0.4188	ug/ml	100

(#) = qualifier out of range (m) = manual integration
 7M54732.D SIMPAHL.M Thu Apr 05 13:50:26 2012

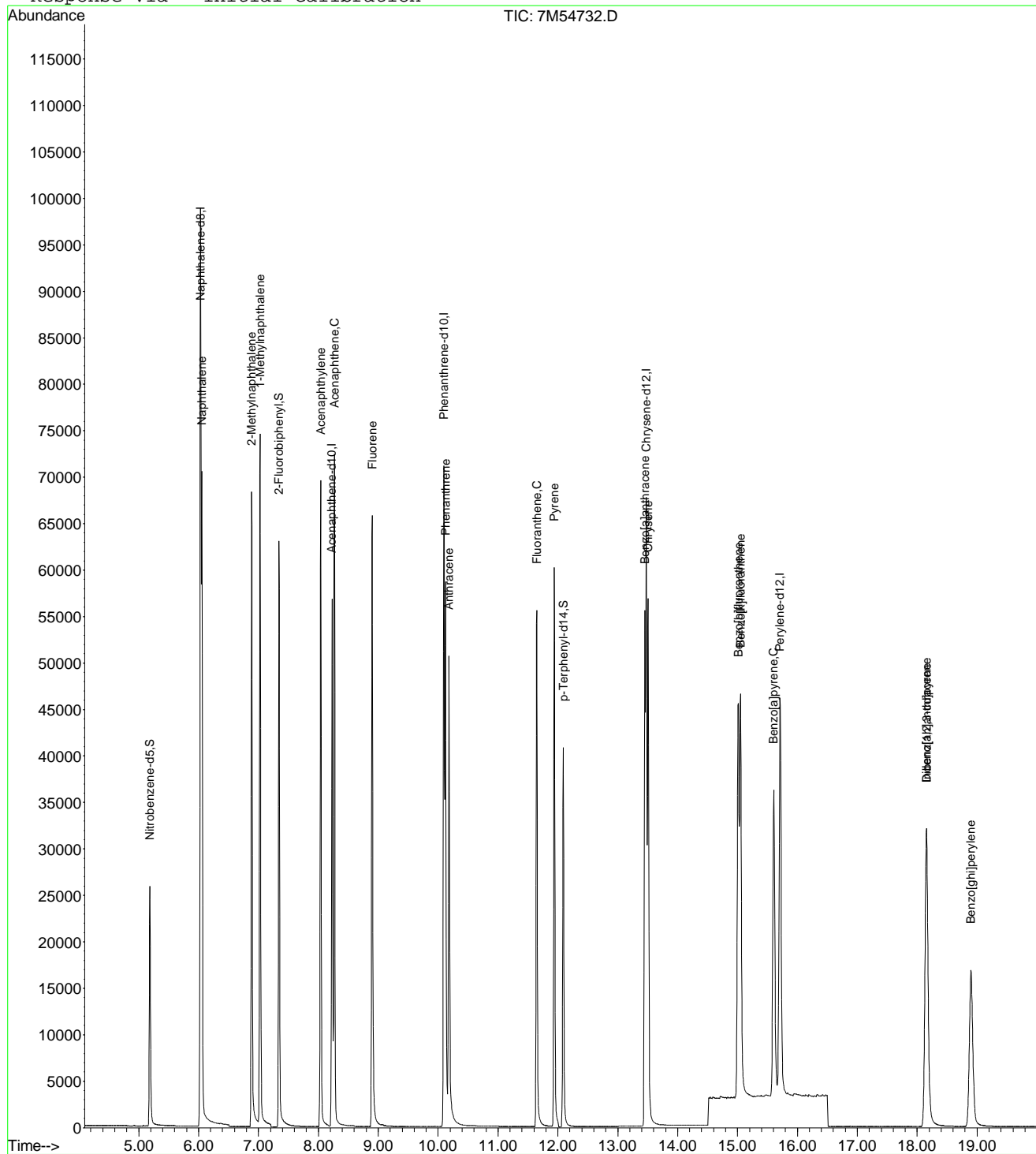
Page 1

Data File : C:\MSDCHEM\1\DATA\040412\7M54732.D
 Acq On : 4 Apr 2012 11:58 am
 Sample : WG394111-06 0.5PPM PAHL STD
 Misc : 1,1 STD49560
 MS Integration Params: RTEINT.P
 Quant Time: Apr 5 10:57 2012

Vial: 6
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

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



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		R.T.	QIon	Response	Conc	Units	Dev(Min)
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		R.T.	QIon	Response	Conc	Units	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

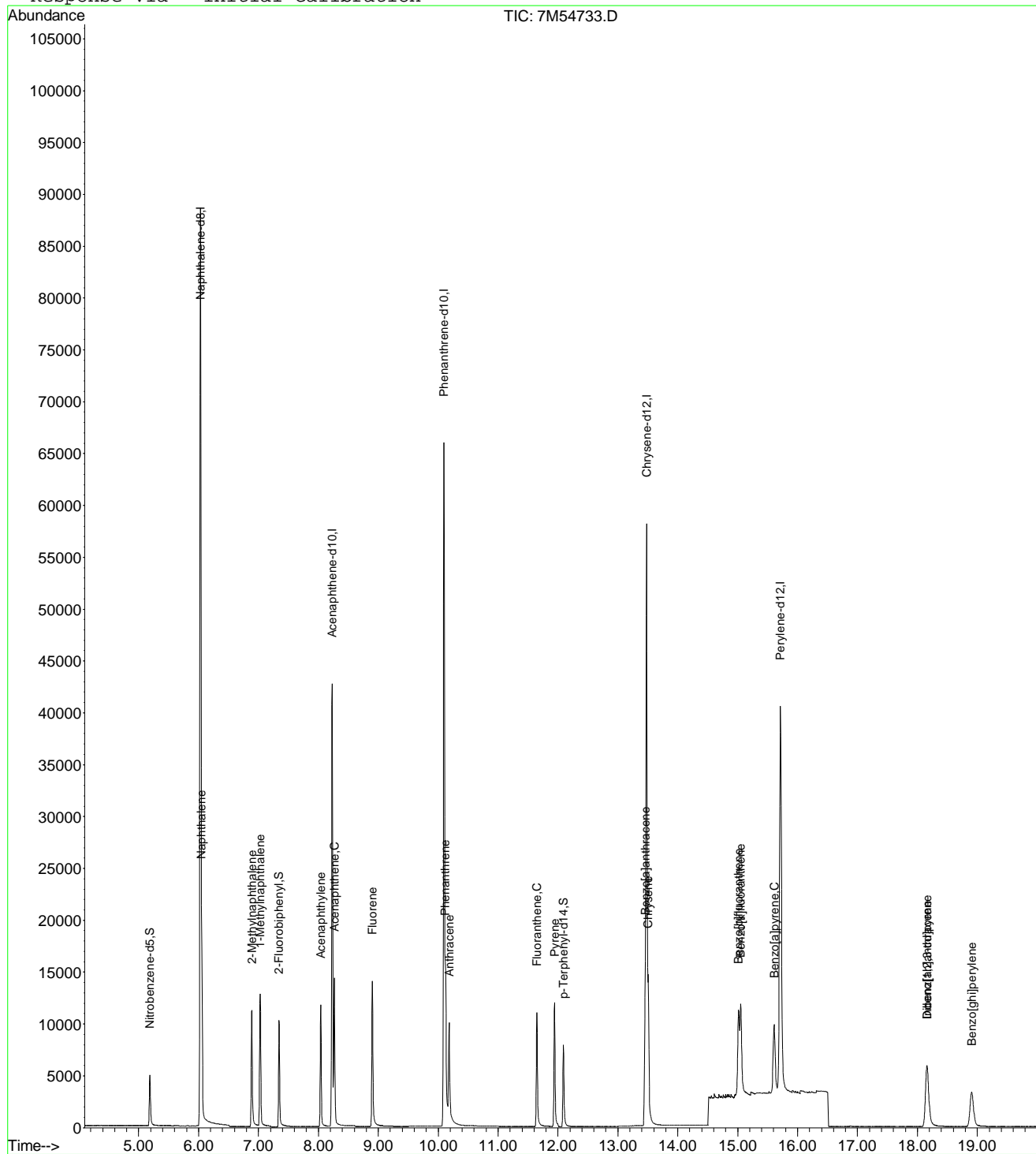
Page 1

Data File : C:\MSDCHEM\1\DATA\040412\7M54733.D
 Acq On : 4 Apr 2012 12:26 pm
 Sample : WG394111-07 0.1PPM PAHL STD
 Misc : 1,1 STD49560
 MS Integration Params: RTEINT.P
 Quant Time: Apr 5 10:57 2012

Vial: 7
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

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



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		R.T.	QIon	Response	Conc	Units	Dev(Min)
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		R.T.	QIon	Response	Conc	Units	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

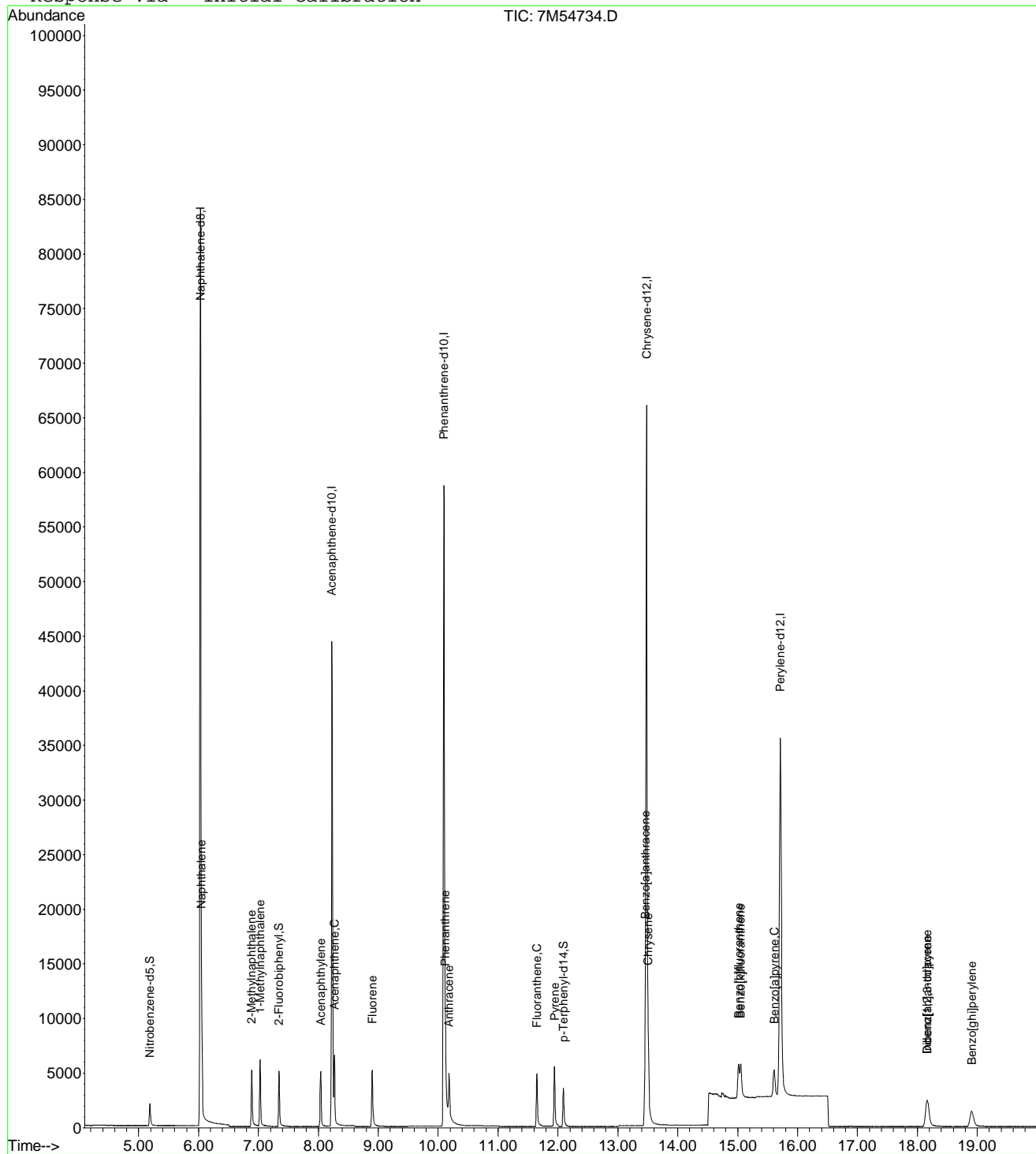
Page 1

Data File : C:\MSDCHEM\1\DATA\040412\7M54734.D
 Acq On : 4 Apr 2012 12:53 pm
 Sample : WG394111-08 0.05PPM PAHL STD
 Misc : 1,1 STD49560
 MS Integration Params: RTEINT.P
 Quant Time: Apr 5 10:58 2012

Vial: 8
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

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



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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

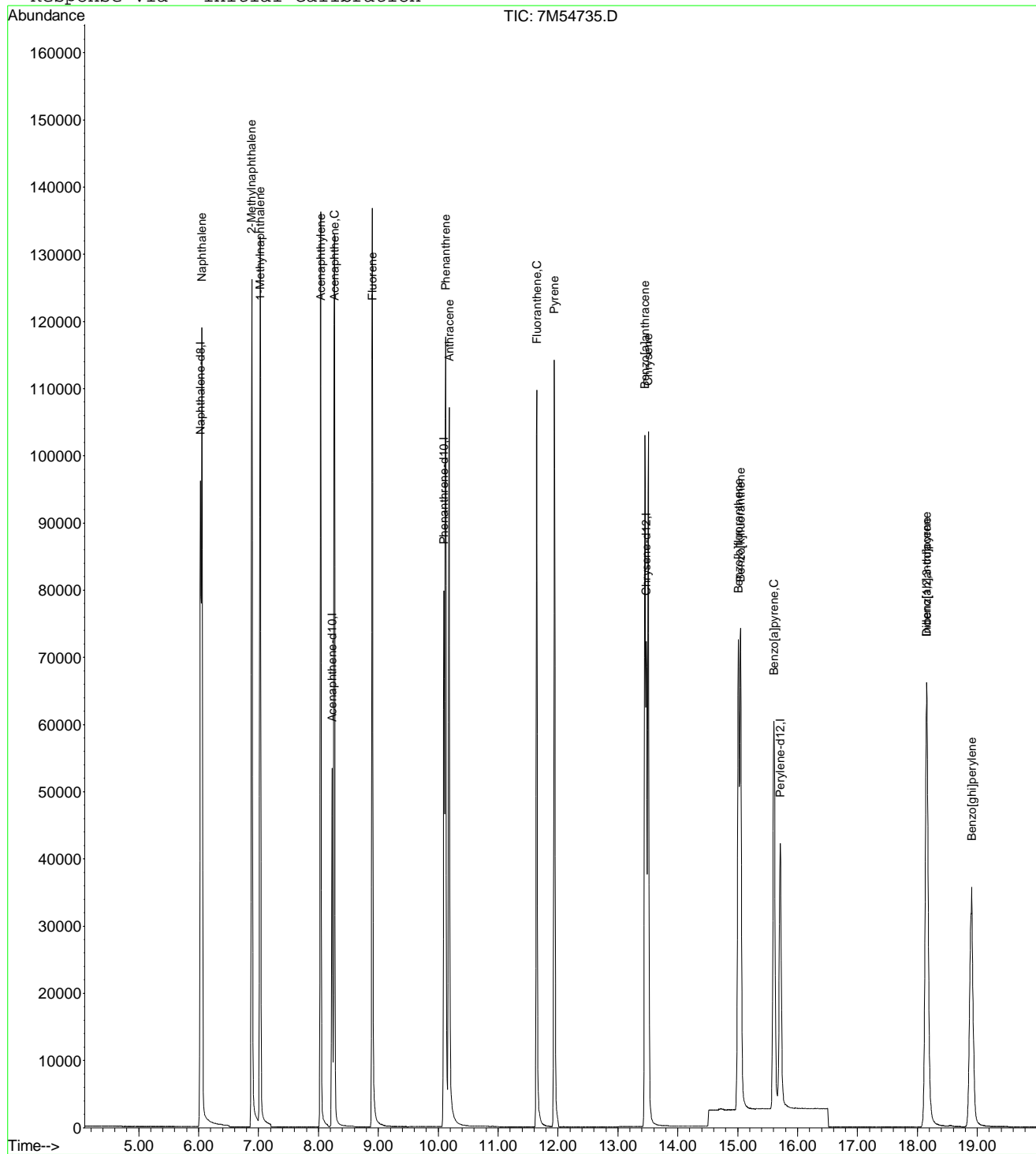
Page 1

Data File : C:\MSDCHEM\1\DATA\040412\7M54735.D
 Acq On : 4 Apr 2012 1:21 pm
 Sample : WG394111-09 1PPM PAHL Alt Src STD
 Misc : 1,1 STD49584
 MS Integration Params: RTEINT.P
 Quant Time: Apr 5 14:06 2012

Vial: 9
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

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



Data File : C:\MSDCHEM\1\DATA\051012\7M54951.D Vial: 2
 Acq On : 10 May 2012 8:39 am Operator: CAA
 Sample : WG397598-02 1PPM PAHL STD Inst : HPMS7
 Misc : 1,1 STD49560 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 10 09:00:20 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Thu May 10 07:59:35 2012
 Response via : Initial Calibration
 DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	151009	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	88860	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	145629	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	141597	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	133982	1.00	ug/ml	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Nitrobenzene-d5	5.18	82	60811	0.9642	ug/ml	0.00
Spiked Amount	2.500	Range	35 - 114	Recovery	=	38.40%
7) 2-Fluorobiphenyl	7.33	172	138327	0.9412	ug/ml	-0.01
Spiked Amount	2.500	Range	43 - 116	Recovery	=	37.60%#
17) p-Terphenyl-d14	12.08	244	119417	0.9090	ug/ml	-0.01
Spiked Amount	2.500	Range	33 - 141	Recovery	=	36.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	6.04	128	173712	0.9716	ug/ml	99
4) 2-Methylnaphthalene	6.88	142	110975	1.0187	ug/ml	99
5) 1-Methylnaphthalene	7.02	142	114425	1.0288	ug/ml	99
8) Acenaphthylene	8.03	152	191403	0.9742	ug/ml	100
9) Acenaphthene	8.26	154	105105	0.9350	ug/ml	99
10) Fluorene	8.89	166	124213	0.9300	ug/ml	100
12) Phenanthrene	10.11	178	162657	0.8979	ug/ml	100
13) Anthracene	10.17	178	174142	0.9570	ug/ml	100
14) Fluoranthene	11.63	202	186695	0.9837	ug/ml	100
16) Pyrene	11.93	202	209820	0.9219	ug/ml	99
18) Benzo[a]anthracene	13.44	228	174163	0.9480	ug/ml	99
19) Chrysene	13.50	228	177447	0.9710	ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	165918	0.8977	ug/ml	100
22) Benzo[k]fluoranthene	15.04	252	175964	1.0061	ug/ml	95
23) Benzo[a]pyrene	15.60	252	170497	0.9908	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.15	276	187797	0.9972	ug/ml	100
25) Dibenz[ah]anthracene	18.15	278	159844	1.0028	ug/ml	100
26) Benzo[ghi]perylene	18.90	276	158511	0.9545	ug/ml	100

(#) = qualifier out of range (m) = manual integration
 7M54951.D SIMPAHL.M Fri May 11 07:17:06 2012

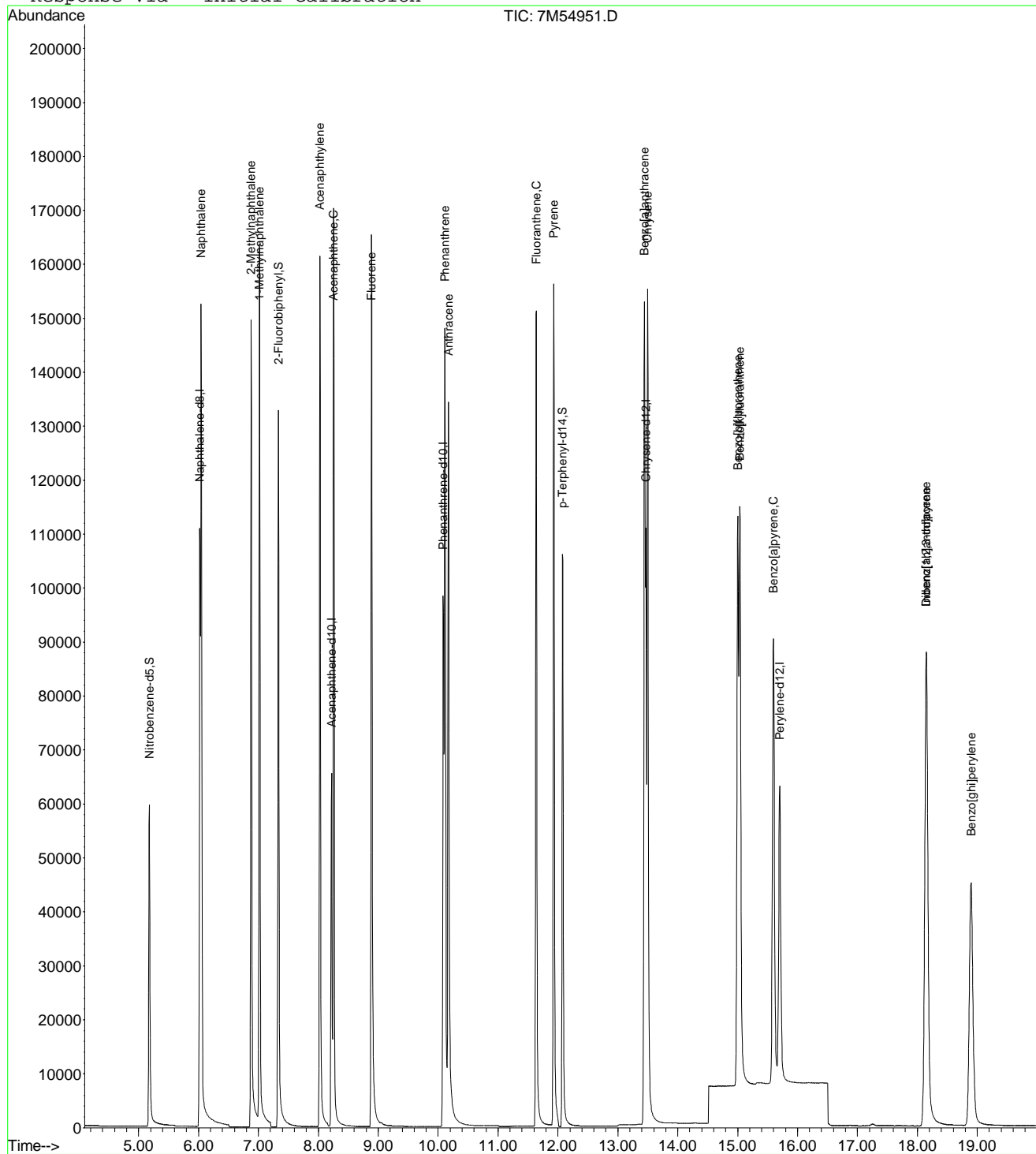
Page 1

Data File : C:\MSDCHEM\1\DATA\051012\7M54951.D
 Acq On : 10 May 2012 8:39 am
 Sample : WG397598-02 1PPM PAHL STD
 Misc : 1,1 STD49560
 MS Integration Params: RTEINT.P
 Quant Time: May 10 9:00 2012

Vial: 2
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

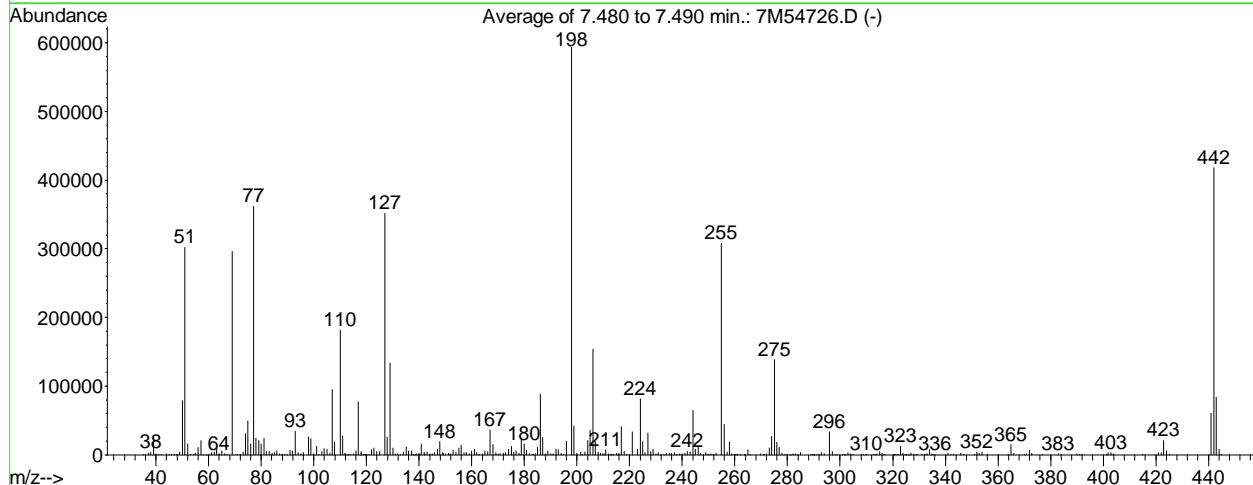
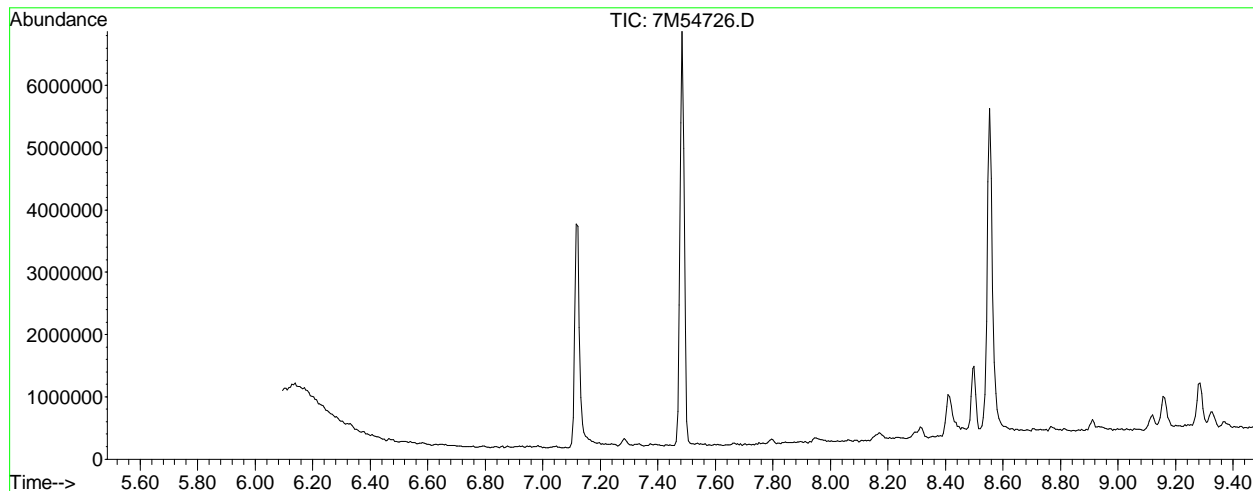
Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Thu May 10 07:59:35 2012
 Response via : Initial Calibration



2.2.2.5 Raw QC Data

Data File : C:\MSDCHEM\1\DATA\040412\7M54726.D Vial: 1
 Acq On : 4 Apr 2012 8:53 am Operator: CAA
 Sample : WG394111-01 5PPM DFTPP STD Inst : HPMS7
 Misc : 1,1 STD50659 Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
 Title : DFTPP

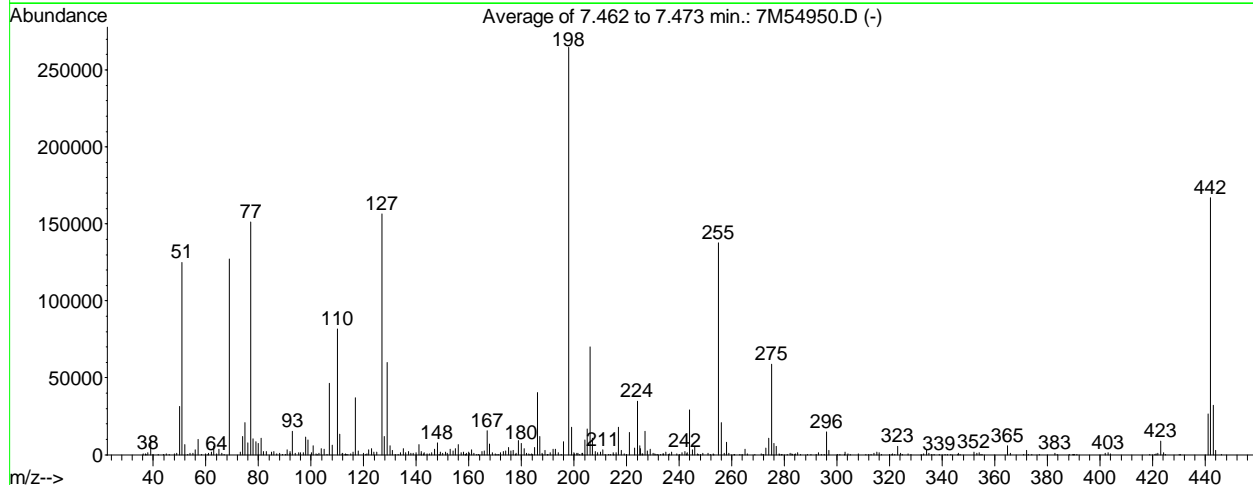
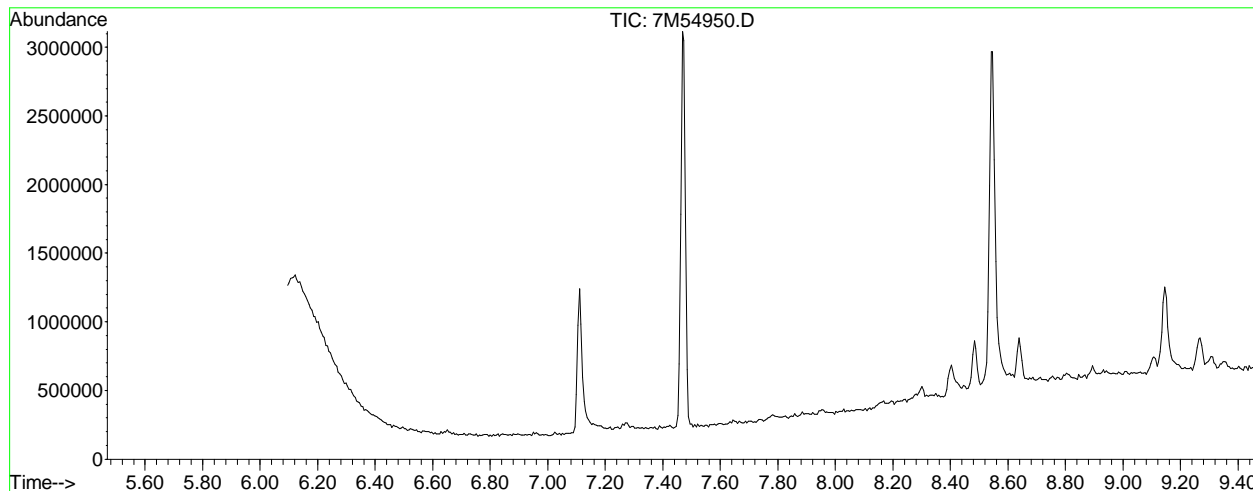


AutoFind: Scans 260, 261, 262; Background Corrected with Scan 254

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.9	302042	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.9	296108	PASS
70	69	0.00	2	0.2	512	PASS
127	198	40	60	59.2	351488	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	593642	PASS
199	198	5	9	7.1	42109	PASS
275	198	10	30	23.3	138533	PASS
365	198	1	100	2.5	14602	PASS
441	443	0.01	100	72.5	60485	PASS
442	198	40	100	70.5	418261	PASS
443	442	17	23	20.0	83453	PASS

7M54726.D DFTPP.M Thu Apr 05 13:50:01 2012

Data File : C:\MSDCHEM\1\DATA\051012\7M54950.D Vial: 1
 Acq On : 10 May 2012 8:22 am Operator: CAA
 Sample : WG397598-01 5PPM DFTPP STD Inst : HPMS7
 Misc : 1,1 STD50659 Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
 Title : DFTPP



AutoFind: Scans 257, 258, 259; Background Corrected with Scan 248

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.2	124912	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.0	127141	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	59.1	156453	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	264789	PASS
199	198	5	9	6.8	17904	PASS
275	198	10	30	22.3	58970	PASS
365	198	1	100	2.2	5832	PASS
441	443	0.01	100	82.5	26460	PASS
442	198	40	100	63.0	166920	PASS
443	442	17	23	19.2	32073	PASS

7M54950.D DFTPP.M Fri May 11 07:16:49 2012

Data File : C:\MSDCHEM\1\DATA\051012\7M54952.D Vial: 3
 Acq On : 10 May 2012 9:07 am Operator: CAA
 Sample : WG397431-02 BLK 05/09 Inst : HPMS7
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 11 07:17:20 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration
 DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	137435	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.21	164	86687	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	143904	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	139178	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	129158	1.00	ug/ml	-0.01

System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	114023	1.9865	ug/ml	-0.01
Spiked Amount	2.500	Range	35 - 114	Recovery	=	79.60%
7) 2-Fluorobiphenyl	7.33	172	261745	1.8256	ug/ml	-0.01
Spiked Amount	2.500	Range	43 - 116	Recovery	=	73.20%
17) p-Terphenyl-d14	12.07	244	303866	2.3533	ug/ml	-0.01
Spiked Amount	2.500	Range	33 - 141	Recovery	=	94.00%

Target Compounds Qvalue

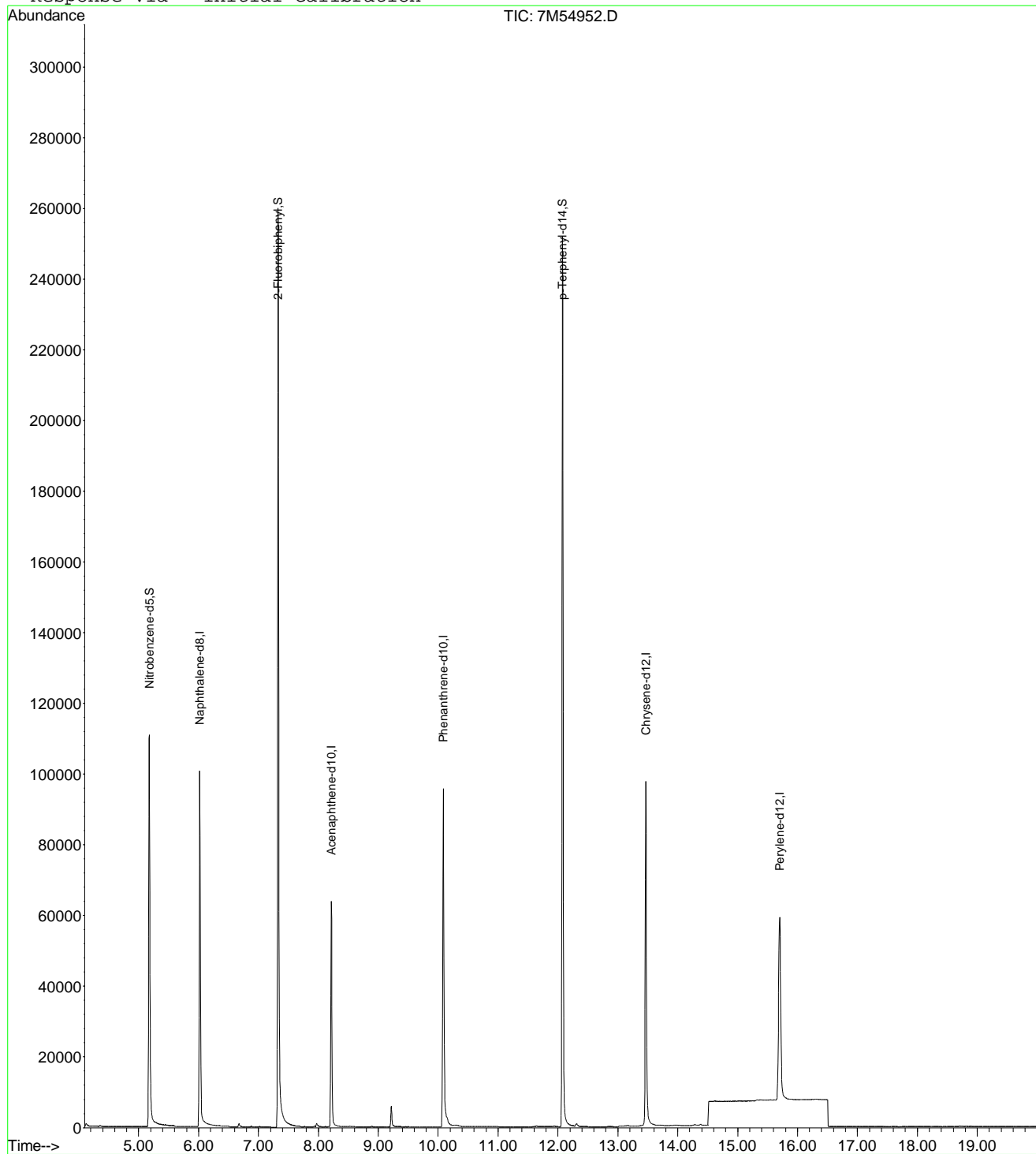
 (#) = qualifier out of range (m) = manual integration
 7M54952.D SIMPAHL.M Fri May 11 07:24:00 2012

Data File : C:\MSDCHEM\1\DATA\051012\7M54952.D
 Acq On : 10 May 2012 9:07 am
 Sample : WG397431-02 BLK 05/09
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 11 7:17 2012

Vial: 3
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\051012\7M54953.D
 Acq On : 10 May 2012 9:35 am
 Sample : WG397431-03 LCS 05/09
 Misc : 1,1

Vial: 4
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 11 07:17:20 2012

Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)

Title : OVD MSS03 SIMPAHL ICAL 04/04/12

Last Update : Fri May 11 07:17:07 2012

Response via : Initial Calibration

DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	139544	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	86699	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	145577	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	141383	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	131125	1.00	ug/ml	-0.01

System Monitoring Compounds

2) Nitrobenzene-d5		5.18	82	109055	1.8713	ug/ml	0.00
Spiked Amount	2.500	Range	35 - 114	Recovery	=	74.80%	
7) 2-Fluorobiphenyl		7.33	172	247068	1.7230	ug/ml	-0.02
Spiked Amount	2.500	Range	43 - 116	Recovery	=	68.80%	
17) p-Terphenyl-d14		12.07	244	296494	2.2604	ug/ml	-0.02
Spiked Amount	2.500	Range	33 - 141	Recovery	=	90.40%	

Target Compounds

						Qvalue
3) Naphthalene	6.04	128	127979	0.7747	ug/ml	100
4) 2-Methylnaphthalene	6.88	142	85302	0.8473	ug/ml	99
5) 1-Methylnaphthalene	7.02	142	81866	0.7965	ug/ml	99
8) Acenaphthylene	8.02	152	145882	0.7610	ug/ml	99
9) Acenaphthene	8.25	154	79697	0.7267	ug/ml	100
10) Fluorene	8.89	166	96057	0.7371	ug/ml	100
12) Phenanthrene	10.11	178	130276	0.7194	ug/ml	100
13) Anthracene	10.17	178	140875	0.7745	ug/ml	99
14) Fluoranthene	11.63	202	167109	0.8808	ug/ml	100
16) Pyrene	11.93	202	194396	0.8555	ug/ml	99
18) Benzo[a]anthracene	13.44	228	146883	0.8007	ug/ml	99
19) Chrysene	13.50	228	161289	0.8839	ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	150048	0.8295	ug/ml	100
22) Benzo[k]fluoranthene	15.04	252	152987	0.8938	ug/ml	99
23) Benzo[a]pyrene	15.59	252	152217	0.9038	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.15	276	158773	0.8614	ug/ml	100
25) Dibenz[ah]anthracene	18.14	278	129340	0.8291	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	133884	0.8237	ug/ml	99

(#) = qualifier out of range (m) = manual integration
 7M54953.D SIMPAHL.M Fri May 11 07:20:46 2012

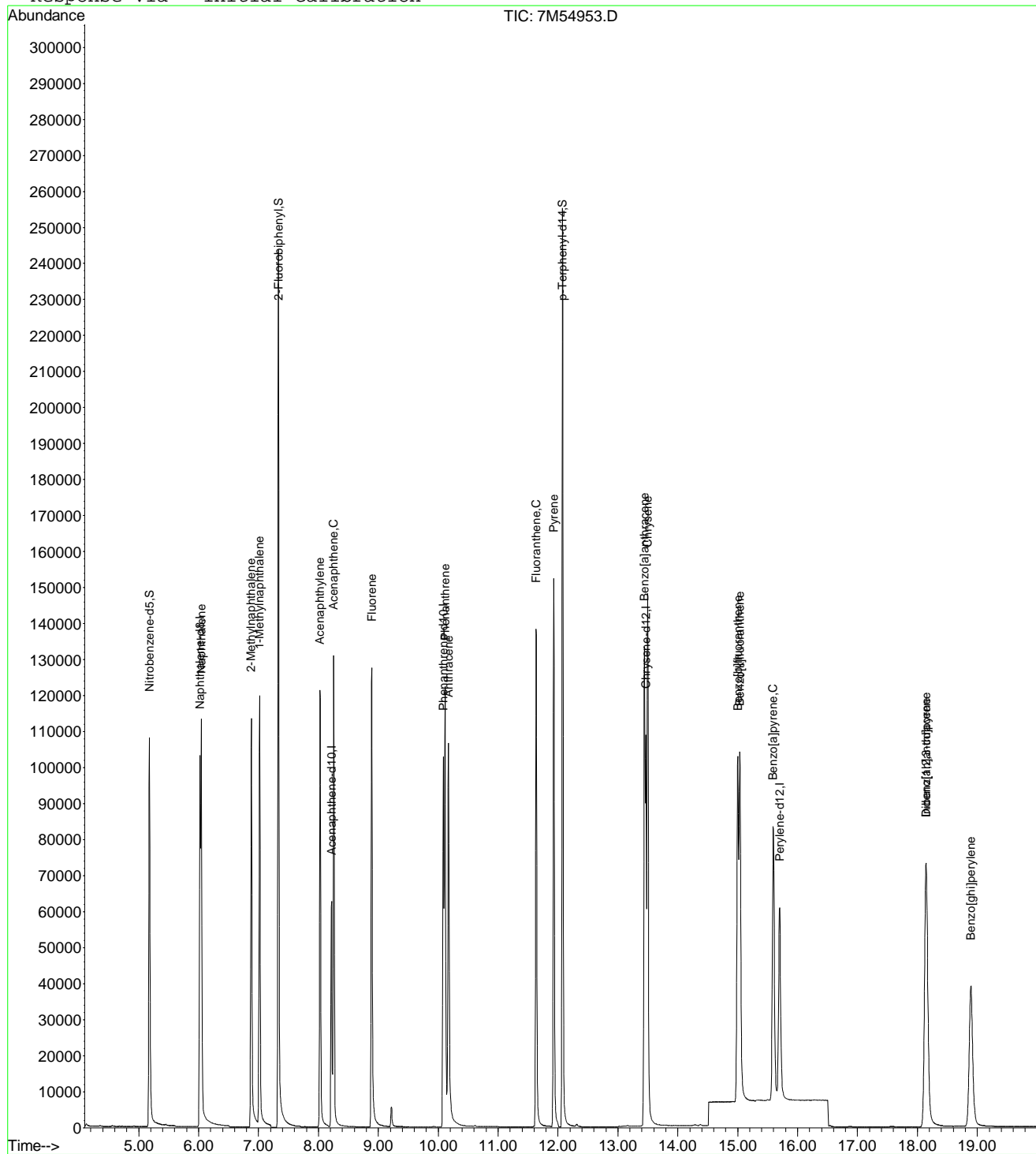
Page 1

Data File : C:\MSDCHEM\1\DATA\051012\7M54953.D
 Acq On : 10 May 2012 9:35 am
 Sample : WG397431-03 LCS 05/09
 Misc : 1,1
 MS Integration Params: RTEINT.P
 Quant Time: May 11 7:17 2012

Vial: 4
 Operator: CAA
 Inst : HPMS7
 Multiplr: 1.00

Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
 Title : OVD MSS03 SIMPAHL ICAL 04/04/12
 Last Update : Fri May 11 07:17:07 2012
 Response via : Initial Calibration



2.3 Metals Data

2.3.1 Metals I C P Data

2.3.1.1 Summary Data



Login Number: L12050099
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: WG397233 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG397233 - Client samples 07 and 08 required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 46045

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink that reads "Sheri L. Pfalzgraf".

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-13-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:02
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: P2.050812.200243
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	0.174		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00106		0.000500	0.000250
Calcium, Total	7440-70-2	118		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	7.58		0.100	0.0250
Magnesium, Total	7439-95-4	16.1		0.500	0.250
Manganese, Total	7439-96-5	0.244		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	4.32		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	67.0		0.500	0.250
Vanadium, Total	7440-62-2	0.00628		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 #: L12050099-02	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-13-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:08
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: P2.050812.200842
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	0.165		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000569		0.000500	0.000250
Calcium, Dissolved	7440-70-2	116		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250

Certificate of Analysis

Sample #: L12050099-02	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-13-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:08
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: P2.050812.200842
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	5.66		0.100	0.0250
Magnesium, Dissolved	7439-95-4	15.7		0.500	0.250
Manganese, Dissolved	7439-96-5	0.239		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.15		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	65.8		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00782		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 #: L12050099-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-26-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:14
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: P2.050812.201441
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	0.157		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000990		0.000500	0.000250
Calcium, Total	7440-70-2	101		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	0.619		0.100	0.0250
Magnesium, Total	7439-95-4	18.8		0.500	0.250
Manganese, Total	7439-96-5	0.248		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-26-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:14
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: P2.050812.201441
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Total	7440-09-7	3.60		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	65.8		0.500	0.250
Vanadium, Total	7440-62-2	0.00907		0.0100	0.00500
Zinc, Total	7440-66-6	0.123		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-04	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-26-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:20
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: P2.050812.202040
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	0.158		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000943		0.000500	0.000250
Calcium, Dissolved	7440-70-2	101		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	0.599		0.100	0.0250
Magnesium, Dissolved	7439-95-4	18.7		0.500	0.250
Manganese, Dissolved	7439-96-5	0.254		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	3.50		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	65.0		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00820		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.118		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-25-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:26
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: P2.050812.202639
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	0.101		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00122		0.000500	0.000250
Calcium, Total	7440-70-2	72.0		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8	0.0202		0.0200	0.00500
Iron, Total	7439-89-6	0.551		0.100	0.0250
Magnesium, Total	7439-95-4	13.0		0.500	0.250
Manganese, Total	7439-96-5	0.0275		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	2.87		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	55.0		0.500	0.250
Vanadium, Total	7440-62-2	0.00552		0.0100	0.00500
Zinc, Total	7440-66-6	0.306		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-06	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: MW-25-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:45
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: P2.050812.204532
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	0.102		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.00121		0.000500	0.000250
Calcium, Dissolved	7440-70-2	71.9		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8	0.0151		0.0200	0.00500
Iron, Dissolved	7439-89-6	0.378		0.100	0.0250
Magnesium, Dissolved	7439-95-4	13.2		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0270		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	2.87		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	56.4		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00649		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.290		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:51
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: P2.050812.205131
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	0.0300		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000993		0.000500	0.000250
Calcium, Total	7440-70-2	222		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250

Certificate of Analysis

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:51
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: P2.050812.205131
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
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	3.79		0.100	0.0250
Magnesium, Total	7439-95-4	99.9		0.500	0.250
Manganese, Total	7439-96-5	0.327		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	6.66		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.0122		0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.00500
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/09/2012 10:16
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/09/2012 13:09
Collect Date: 05/02/2012 14:30	Dilution: 100	File ID: P2.050912.130919
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	406		50.0	25.0
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-08	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 20:57
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: P2.050812.205736
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	0.0299		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.00111		0.000500	0.000250
Calcium, Dissolved	7440-70-2	206		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	3.03		0.100	0.0250
Magnesium, Dissolved	7439-95-4	100		0.500	0.250
Manganese, Dissolved	7439-96-5	0.282		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	5.75		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0110		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-08	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: PZ-03-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/09/2012 10:16
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/09/2012 13:16
Collect Date: 05/02/2012 14:30	Dilution: 100	File ID: P2.050912.131613
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	347		50.0	25.0
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 21:03
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: P2.050812.210340
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	0.152		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00109		0.000500	0.000250
Calcium, Total	7440-70-2	97.6		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	0.659		0.100	0.0250
Magnesium, Total	7439-95-4	18.1		0.500	0.250
Manganese, Total	7439-96-5	0.244		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	3.35		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	62.2		0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.114		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-10	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-050212	Prep Method: 3005A	Prep Date: 05/07/2012 08:07
Matrix: Water	Analytical Method: 6010B	Cal Date: 05/08/2012 09:08
Workgroup #: WG397233	Analyst: KHR	Run Date: 05/08/2012 21:09
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: P2.050812.210941
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Barium, Dissolved	7440-39-3	0.155		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.00103		0.000500	0.000250
Calcium, Dissolved	7440-70-2	98.7		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250

Certificate of Analysis

Sample #: L12050099-10

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: DUP-GW-050212

Prep Method: 3005A

Prep Date: 05/07/2012 08:07

Matrix: Water

Analytical Method: 6010B

Cal Date: 05/08/2012 09:08

Workgroup #: WG397233

Analyst: KHR

Run Date: 05/08/2012 21:09

Collect Date: 05/02/2012 10:05

Dilution: 1

File ID: P2.050812.210941

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	0.595		0.100	0.0250
Magnesium, Dissolved	7439-95-4	18.4		0.500	0.250
Manganese, Dissolved	7439-96-5	0.251		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	3.53		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	63.7		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.114		0.0200	0.00500
U	Not detected at or above adjusted sample detection limit.				

2.3.1.2 QC Summary Data

Example 6010 Calculations
Perkin Elmer Optima 4300 DV

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system in ug/mL (ppm)

Vf = Final volume (mL)

Vi = Initial volume (mL)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/mL (mg/L)

Example:

0.1

50

50

1

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:

Cs = Concentration computed by the data system (mg/L) (ppm)

Vf = Final volume (mL)

Vi = Initial weight (g)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/g (mg/kg)

Example:

0.1

50

1

1

5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (mg/kg)

Example:

5

80

6.25

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG397165

Analyst: REK

Spike Analyst: REK

Method: 3005A

Run Date: 05/07/2012 08:07

Hotblock Start Temp: 94.6 @ 06:45

Hotblock End Temp: 94.9 @ 10:45

SOP: ME401 Revision 14

Spike Solution: STD51357

Spike Witness: VC

ICP;WG377974 Filter Lot COA15714

HNO3 Lot #: COA16033

Digestion Tubes Lot #: COA16074

HCL Lot #: COA16113

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG397165-02	BLANK	1	50 mL	50 mL		
2	WG397165-03	LCS	1	50 mL	50 mL	5 mL	
3	WG397165-01	REF	1	50 mL	50 mL		
4	L12050050-01	SAMP	1	50 mL	50 mL		05/16/12
5	L12050050-02	SAMP	1	50 mL	50 mL		05/16/12
6	L12050050-03	SAMP	1	50 mL	50 mL		05/16/12
7	L12050050-04	SAMP	1	50 mL	50 mL		05/16/12
8	L12050050-05	SAMP	1	50 mL	50 mL		05/16/12
9	L12050050-06	SAMP	1	50 mL	50 mL		05/16/12
10	L12050050-07	SAMP	1	50 mL	50 mL		05/16/12
11	L12050050-08	SAMP	1	50 mL	50 mL		05/16/12
12	L12050099-01	SAMP	1	50 mL	50 mL		05/17/12
13	L12050099-02	SAMP	1	50 mL	50 mL		05/17/12
14	L12050099-03	SAMP	1	50 mL	50 mL		05/17/12
15	L12050099-04	SAMP	1	50 mL	50 mL		05/17/12
16	L12050099-05	SAMP	1	50 mL	50 mL		05/17/12
17	L12050099-06	SAMP	1	50 mL	50 mL		05/17/12
18	L12050099-07	SAMP	1	50 mL	50 mL		05/17/12
19	L12050099-08	SAMP	1	50 mL	50 mL		05/17/12
20	L12050099-09	SAMP	1	50 mL	50 mL		05/17/12
21	L12050099-10	SAMP	1	50 mL	50 mL		05/17/12
22	WG397165-04	MS	1	50 mL	50 mL	5 mL	
23	WG397165-05	MSD	1	50 mL	50 mL	5 mL	

L12050050-05 filtered digestate

Analyst: *REK*

Reviewer: *Brenda Gregory*



Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 050812H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010 SOP: ME600E Rev: 12
 Maintenance Log ID: 41636

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
 ICSA: STD51272 ICSAB: STD51413 Int. Std: RG17310
 CCV: STD51453 LLCCV: STD51542

396793, 396721, 397343, 397233

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.050812.084125	WG397368-01	Calibration Point		1		05/08/12 08:41
2	P2.050812.084819	WG397368-02	Calibration Point		1		05/08/12 08:48
3	P2.050812.085513	WG397368-03	Calibration Point		1		05/08/12 08:55
4	P2.050812.090208	WG397368-04	Calibration Point		1		05/08/12 09:02
5	P2.050812.090808	WG397368-05	Calibration Point		1		05/08/12 09:08
6	P2.050812.091408	WG397368-06	Initial Calibration Verification		1		05/08/12 09:14
7	P2.050812.092008	WG397368-07	Initial Calib Blank		1		05/08/12 09:20
8	P2.050812.092701	WG397368-08	LLICV		1		05/08/12 09:27
9	P2.050812.093445	WG397368-09	Low Level Initial Calibration V		1		05/08/12 09:34
10	P2.050812.094140	WG397368-10	Low Level Initial Calibration V		1		05/08/12 09:41
11	P2.050812.094835	WG397368-11	Interference Check		1		05/08/12 09:48
12	P2.050812.095431	WG397368-12	Interference Check		1		05/08/12 09:54
13	P2.050812.100027	WG397368-13	CCV		1		05/08/12 10:00
14	P2.050812.100628	WG397368-14	CCB		1		05/08/12 10:06
15	P2.050812.101321	WG396754-02	Method/Prep Blank	50/50	1		05/08/12 10:13
16	P2.050812.102016	WG396754-03	Laboratory Control S	50/50	1		05/08/12 10:20
17	P2.050812.102615	WG396754-01	Reference Sample		1	L12050011-01	05/08/12 10:26
18	P2.050812.103216	WG396754-04	Matrix Spike	50/50	1	L12050011-01	05/08/12 10:32
19	P2.050812.103817	WG396754-05	Matrix Spike Duplica	50/50	1	L12050011-01	05/08/12 10:38
20	P2.050812.104418	L12050013-01	CLAMW23-120429	50/50	1		05/08/12 10:44
21	P2.050812.105115	L12050013-02	CLAMW24-120429	50/50	1		05/08/12 10:51
22	P2.050812.105824	WG396793-03	Post Digestion Spike		1	L12050013-02	05/08/12 10:58
23	P2.050812.110422	WG396793-04	Serial Dilution		5	L12050013-02	05/08/12 11:04
24	P2.050812.111119	WG397368-15	CCV		1		05/08/12 11:11
25	P2.050812.111720	WG397368-16	CCB		1		05/08/12 11:17
26	P2.050812.112420	WG396793-03	Post Digestion Spike		1	L12050013-02	05/08/12 11:24
27	P2.050812.113024	L12050013-01	CLAMW23-120429	50/50	100		05/08/12 11:30
28	P2.050812.113719	L12050013-02	CLAMW24-120429	50/50	100		05/08/12 11:37
29	P2.050812.114413	WG396793-03	Post Digestion Spike		100	L12050013-02	05/08/12 11:44
30	P2.050812.115012	WG396793-04	Serial Dilution		500	L12050013-02	05/08/12 11:50
31	P2.050812.115707	WG397368-17	CCV		1		05/08/12 11:57
32	P2.050812.120308	WG397368-18	CCB		1		05/08/12 12:03
33	P2.050812.121001	WG397368-19	Low Level Continuing Calibra		1		05/08/12 12:10
34	P2.050812.121655	WG397368-20	Low Level Continuing Calibra		1		05/08/12 12:16

Page: 1 Approved: May 09, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 050812H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010 SOP: ME600E Rev: 12
 Maintenance Log ID: 41636

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
 ICSA: STD51272 ICSAB: STD51413 Int. Std: RG17310
 CCV: STD51453 LLCCV: STD51542

396793, 396721, 397343, 397233

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.050812.131202	WG396609-02	Method/Prep Blank	50/50	1		05/08/12 13:12
36	P2.050812.131858	WG396609-03	Laboratory Control S	50/50	1		05/08/12 13:18
37	P2.050812.132458	WG396609-01	Reference Sample		1	L12040898-03	05/08/12 13:24
38	P2.050812.133200	WG396609-04	Matrix Spike	50/50	1	L12040898-03	05/08/12 13:32
39	P2.050812.133805	WG396609-05	Matrix Spike Duplica	50/50	1	L12040898-03	05/08/12 13:38
40	P2.050812.134407	L12040898-04	MW-22-042512	50/50	1		05/08/12 13:44
41	P2.050812.135110	L12040898-05	MW-23-042512	50/50	1		05/08/12 13:51
42	P2.050812.135809	L12040898-06	MW-23-042512	50/50	1		05/08/12 13:58
43	P2.050812.140508	WG396721-01	Post Digestion Spike		1	L12040898-06	05/08/12 14:05
44	P2.050812.141108	WG396721-02	Serial Dilution		5	L12040898-06	05/08/12 14:11
45	P2.050812.141808	WG397368-21	CCV		1		05/08/12 14:18
46	P2.050812.142409	WG397368-22	CCB		1		05/08/12 14:24
47	P2.050812.143102	L12040898-08	MW-30-042512	50/50	1		05/08/12 14:31
48	P2.050812.143702	L12040898-09	MW-30-042512	50/50	1		05/08/12 14:37
49	P2.050812.144443	L12040898-10	MW-32-042512	50/50	1		05/08/12 14:44
50	P2.050812.145043	L12040898-11	MW-32-042512	50/50	1		05/08/12 14:50
51	P2.050812.145648	L12040898-12	DUP-GW-042512	50/50	1		05/08/12 14:56
52	P2.050812.150251	L12040898-13	DUP-GW-042512	50/50	1		05/08/12 15:02
53	P2.050812.150849	L12040898-14	EB-042512-GW	50/50	1		05/08/12 15:08
54	P2.050812.151543	WG396609-01	Reference Sample		100	L12040898-03	05/08/12 15:15
55	P2.050812.152237	WG396609-04	Matrix Spike	50/50	100	L12040898-03	05/08/12 15:22
56	P2.050812.152932	WG396609-05	Matrix Spike Duplica	50/50	100	L12040898-03	05/08/12 15:29
57	P2.050812.153626	WG397368-23	CCV		1		05/08/12 15:36
58	P2.050812.154227	WG397368-24	CCB		1		05/08/12 15:42
59	P2.050812.154920	L12040898-05	MW-23-042512	50/50	100		05/08/12 15:49
60	P2.050812.155615	L12040898-06	MW-23-042512	50/50	100		05/08/12 15:56
61	P2.050812.160310	WG396721-01	Post Digestion Spike		100	L12040898-06	05/08/12 16:03
62	P2.050812.160909	WG396721-02	Serial Dilution		500	L12040898-06	05/08/12 16:09
63	P2.050812.161604	L12040898-08	MW-30-042512	50/50	100		05/08/12 16:16
64	P2.050812.162300	L12040898-09	MW-30-042512	50/50	100		05/08/12 16:23
65	P2.050812.162957	L12040898-10	MW-32-042512	50/50	100		05/08/12 16:29
66	P2.050812.163654	L12040898-11	MW-32-042512	50/50	100		05/08/12 16:36
67	P2.050812.164349	L12040898-12	DUP-GW-042512	50/50	100		05/08/12 16:43
68	P2.050812.165043	L12040898-13	DUP-GW-042512	50/50	100		05/08/12 16:50

Page: 2 Approved: May 09, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 050812H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010 SOP: ME600E Rev: 12
 Maintenance Log ID: 41636

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
 ICSA: STD51272 ICSAB: STD51413 Int. Std: RG17310
 CCV: STD51453 LLCCV: STD51542

396793, 396721, 397343, 397233

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.050812.165737	WG397368-25	CCV		1		05/08/12 16:57
70	P2.050812.170338	WG397368-26	CCB		1		05/08/12 17:03
71	P2.050812.171031	WG397313-01	Method/Prep Blank	1/50	1		05/08/12 17:10
72	P2.050812.171726	WG397313-02	Laboratory Control S	1/50	1		05/08/12 17:17
73	P2.050812.172324	WG397313-03	Laboratory Control S	1/50	1		05/08/12 17:23
74	P2.050812.172923	L12050130-01	T1360	1/50	1		05/08/12 17:29
75	P2.050812.173521	L12050130-02	T1362	1/50	1		05/08/12 17:35
76	P2.050812.174119	L12050130-03	T1363	1/50	1		05/08/12 17:41
77	P2.050812.174718	L12050130-04	T1365	1/50	1		05/08/12 17:47
78	P2.050812.175318	WG397343-01	Post Digestion Spike		1	L12050130-04	05/08/12 17:53
79	P2.050812.175918	WG397343-02	Serial Dilution		5	L12050130-04	05/08/12 17:59
80	P2.050812.180644	WG397368-27	CCV		1		05/08/12 18:06
81	P2.050812.181245	WG397368-28	CCB		1		05/08/12 18:12
82	P2.050812.181938	WG397165-02	Method/Prep Blank	50/50	1		05/08/12 18:19
83	P2.050812.182633	WG397165-03	Laboratory Control S	50/50	1		05/08/12 18:26
84	P2.050812.183232	L12050050-01	MW-05I-050112		1	WG397165-01	05/08/12 18:32
85	P2.050812.183830	WG397165-04	Matrix Spike	50/50	1	L12050050-01	05/08/12 18:38
86	P2.050812.184428	WG397165-05	Matrix Spike Duplica	50/50	1	L12050050-01	05/08/12 18:44
87	P2.050812.185026	L12050050-02	MW-05I-050112	50/50	1		05/08/12 18:50
88	P2.050812.185624	L12050050-03	MW-05S-050112	50/50	1		05/08/12 18:56
89	P2.050812.190358	L12050050-04	MW-05S-050112	50/50	1		05/08/12 19:03
90	P2.050812.191058	WG397233-01	Post Digestion Spike		1	L12050050-04	05/08/12 19:10
91	P2.050812.191702	WG397233-02	Serial Dilution		5	L12050050-04	05/08/12 19:17
92	P2.050812.192401	WG397368-29	CCV		1		05/08/12 19:24
93	P2.050812.193003	WG397368-30	CCB		1		05/08/12 19:30
94	P2.050812.193656	L12050050-05	MW-24-050112	50/50	1		05/08/12 19:36
95	P2.050812.194253	L12050050-06	MW-24-050112	50/50	1		05/08/12 19:42
96	P2.050812.194852	L12050050-07	MW-01-050112	50/50	1		05/08/12 19:48
97	P2.050812.195547	L12050050-08	MW-01-050112	50/50	1		05/08/12 19:55
98	P2.050812.200243	L12050099-01	MW-13-050212	50/50	1		05/08/12 20:02
99	P2.050812.200842	L12050099-02	MW-13-050212	50/50	1		05/08/12 20:08
100	P2.050812.201441	L12050099-03	MW-26-050212	50/50	1		05/08/12 20:14
101	P2.050812.202040	L12050099-04	MW-26-050212	50/50	1		05/08/12 20:20
102	P2.050812.202639	L12050099-05	MW-25-050212	50/50	1		05/08/12 20:26

Page: 3 Approved: May 09, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 050812H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010 SOP: ME600E Rev: 12
 Maintenance Log ID: 41636

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
 ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17310
 CCV: STD51453 LLCCV: STD51542

396793, 396721, 397343, 397233

Workgroups:

Comments:

--

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.050812.203238	WG397368-31	CCV		1		05/08/12 20:32
104	P2.050812.203839	WG397368-32	CCB		1		05/08/12 20:38
105	P2.050812.204532	L12050099-06	MW-25-050212	50/50	1		05/08/12 20:45
106	P2.050812.205131	L12050099-07	PZ-03-050212	50/50	1		05/08/12 20:51
107	P2.050812.205736	L12050099-08	PZ-03-050212	50/50	1		05/08/12 20:57
108	P2.050812.210340	L12050099-09	DUP-GW-050212	50/50	1		05/08/12 21:03
109	P2.050812.210941	L12050099-10	DUP-GW-050212	50/50	1		05/08/12 21:09
110	P2.050812.211541	WG397368-33	CCV		1		05/08/12 21:15
111	P2.050812.212142	WG397368-34	CCB		1		05/08/12 21:21
112	P2.050812.212835	WG397368-35	Interference Check		1		05/08/12 21:28
113	P2.050812.213432	WG397368-36	Interference Check		1		05/08/12 21:34
114	P2.050812.214028	WG397368-37	CCV		1		05/08/12 21:40
115	P2.050812.214629	WG397368-38	CCB		1		05/08/12 21:46

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8			The LLICV was not loaded into the autosampler during the initial analysis and was reanalyzed at 09:34.	

Page: 4 Approved: May 09, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 050912H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010 SOP: ME600E Rev: 12
 Maintenance Log ID: 41651

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
 ICSA: STD51272 ICSAB: STD51413 Int. Std: RG17310
 CCV: STD51453 LLCCV: _____

396298, 396721, 397233, 397342, 397515, 397519

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.050912.094959	WG397533-01	Calibration Point		1		05/09/12 09:49
2	P2.050912.095653	WG397533-02	Calibration Point		1		05/09/12 09:56
3	P2.050912.100348	WG397533-03	Calibration Point		1		05/09/12 10:03
4	P2.050912.101043	WG397533-04	Calibration Point		1		05/09/12 10:10
5	P2.050912.101642	WG397533-05	Calibration Point		1		05/09/12 10:16
6	P2.050912.102243	WG397533-06	Initial Calibration Verification		1		05/09/12 10:22
7	P2.050912.102841	WG397533-07	Initial Calib Blank		1		05/09/12 10:28
8	P2.050912.103534	WG397533-08	Interference Check		1		05/09/12 10:35
9	P2.050912.104147	WG397533-09	Interference Check		1		05/09/12 10:41
10	P2.050912.104744	WG397533-10	CCV		1		05/09/12 10:47
11	P2.050912.105345	WG397533-11	CCB		1		05/09/12 10:53
12	P2.050912.110038	WG396210-02	Method/Prep Blank	50/50	1		05/09/12 11:00
13	P2.050912.110735	WG396210-03	Laboratory Control S	50/50	1		05/09/12 11:07
14	P2.050912.111332	WG396210-01	Reference Sample		1	L12040844-01	05/09/12 11:13
15	P2.050912.111930	WG396210-04	Matrix Spike	50/50	1	L12040844-01	05/09/12 11:19
16	P2.050912.112530	WG396210-05	Matrix Spike Duplica	50/50	1	L12040844-01	05/09/12 11:25
17	P2.050912.113130	L12040844-02	MW-16I-042412	50/50	1		05/09/12 11:31
18	P2.050912.113729	L12040844-03	MW-16S-042412	50/50	1		05/09/12 11:37
19	P2.050912.114329	WG396298-03	Post Digestion Spike		1	L12040844-03	05/09/12 11:43
20	P2.050912.114929	WG396298-04	Serial Dilution		5	L12040844-03	05/09/12 11:49
21	P2.050912.115527	WG397533-12	CCV		1		05/09/12 11:55
22	P2.050912.120128	WG397533-13	CCB		1		05/09/12 12:01
23	P2.050912.120822	L12040844-04	MW-16S-042412	50/50	1		05/09/12 12:08
24	P2.050912.122146	L12040844-05	MW-07-042412	50/50	1		05/09/12 12:21
25	P2.050912.122745	L12040844-06	MW-07-042412	50/50	1		05/09/12 12:27
26	P2.050912.123446	L12040844-05	MW-07-042412	50/50	100		05/09/12 12:34
27	P2.050912.124143	L12040844-06	MW-07-042412	50/50	100		05/09/12 12:41
28	P2.050912.124836	L12040898-04	MW-22-042512	50/50	100		05/09/12 12:48
29	P2.050912.125530	L12050050-05	MW-24-050112	50/50	100		05/09/12 12:55
30	P2.050912.130224	L12050050-06	MW-24-050112	50/50	100		05/09/12 13:02
31	P2.050912.130919	L12050099-07	PZ-03-050212	50/50	100		05/09/12 13:09
32	P2.050912.131613	L12050099-08	PZ-03-050212	50/50	100		05/09/12 13:16
33	P2.050912.132307	WG397533-14	CCV		1		05/09/12 13:23
34	P2.050912.132908	WG397533-15	CCB		1		05/09/12 13:29

Page: 1 Approved: May 10, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 050912H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010 SOP: ME600E Rev: 12
 Maintenance Log ID: 41651

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
 ICSA: STD51272 ICSAB: STD51413 Int. Std: RG17310
 CCV: STD51453 LLCCV: _____

396298, 396721, 397233, 397342, 397515, 397519

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.050912.133601	WG397533-16	Interference Check		1		05/09/12 13:36
36	P2.050912.134157	WG397533-17	Interference Check		1		05/09/12 13:41
37	P2.050912.134754	WG397533-18	CCV		1		05/09/12 13:47
38	P2.050912.135355	WG397533-19	CCB		1		05/09/12 13:53
39	P2.050912.140048	WG397293-02	Method/Prep Blank	50/50	1		05/09/12 14:00
40	P2.050912.140743	WG397293-03	Laboratory Control S	50/50	1		05/09/12 14:07
41	P2.050912.141342	WG397293-01	Reference Sample		10	L12050104-53	05/09/12 14:13
42	P2.050912.142039	WG397293-04	Matrix Spike	50/50	10	L12050104-53	05/09/12 14:20
43	P2.050912.142639	WG397293-05	Matrix Spike Duplica	50/50	10	L12050104-53	05/09/12 14:26
44	P2.050912.143241	L12050150-30	LEACHATE	50/50	5		05/09/12 14:32
45	P2.050912.143843	L12050220-01	001	50/50	100		05/09/12 14:38
46	P2.050912.144447	L12050104-47	SPE-G-MW-47-DIS	50/50	10		05/09/12 14:44
47	P2.050912.145147	WG397342-01	Post Digestion Spike		10	L12050104-47	05/09/12 14:51
48	P2.050912.145748	WG397342-02	Serial Dilution		50	L12050104-47	05/09/12 14:57
49	P2.050912.150441	WG397533-20	CCV		1		05/09/12 15:04
50	P2.050912.151042	WG397533-21	CCB		1		05/09/12 15:10
51	P2.050912.151735	L12050223-05	40BF05312FB		1		05/09/12 15:17
52	P2.050912.152341	L12050104-43	SPE-G-MW-46-DIS	50/50	10		05/09/12 15:23
53	P2.050912.152938	L12050104-44	SPE-G-MW-46D	50/50	10		05/09/12 15:29
54	P2.050912.153633	L12050104-45	SPE-G-MW-46D-DIS	50/50	10		05/09/12 15:36
55	P2.050912.154232	L12050104-46	SPE-G-MW-47	50/50	10		05/09/12 15:42
56	P2.050912.154831	L12050104-48	SPE-G-MW-60	50/50	10		05/09/12 15:48
57	P2.050912.155527	L12050104-49	SPE-G-MW-60-DIS	50/50	10		05/09/12 15:55
58	P2.050912.160256	L12050104-50	SPE-K-FB-1		10		05/09/12 16:02
59	P2.050912.160954	L12050104-54	SPE-K-FB-2		10		05/09/12 16:09
60	P2.050912.161650	L12050104-55	SPE-K-FB-2-DIS		10		05/09/12 16:16
61	P2.050912.162347	WG397533-22	CCV		1		05/09/12 16:23
62	P2.050912.162948	WG397533-23	CCB		1		05/09/12 16:29
63	P2.050912.163641	L12050220-01	001	50/50	500		05/09/12 16:36
64	P2.050912.164240	WG397463-02	Method/Prep Blank	5/50	1		05/09/12 16:42
65	P2.050912.164935	WG397463-03	Laboratory Control S	5/50	1		05/09/12 16:49
66	P2.050912.165535	WG397445-01	TCLP Fluid Blank 1		1		05/09/12 16:55
67	P2.050912.170235	WG397445-02	TCLP Fluid Blank 2		1		05/09/12 17:02
68	P2.050912.170931	L12050168-01	FLY ASH	5/50	1		05/09/12 17:09

Page: 2 Approved: May 10, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 050912H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010 SOP: ME600E Rev: 12
 Maintenance Log ID: 41651

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
 ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17310
 CCV: STD51453 LLCCV: _____

396298, 396721, 397233, 397342, 397515, 397519

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.050912.171532	L12050168-02	BOTTOM ASH	5/50	1		05/09/12 17:15
70	P2.050912.172230	L12050177-01	2050150-01	5/50	1		05/09/12 17:22
71	P2.050912.172928	WG397515-01	Post Digestion Spike		1	L12050177-02	05/09/12 17:29
72	P2.050912.173526	WG397515-02	Serial Dilution		5	L12050177-02	05/09/12 17:35
73	P2.050912.174220	WG397533-24	CCV		1		05/09/12 17:42
74	P2.050912.174821	WG397533-25	CCB		1		05/09/12 17:48
75	P2.050912.175514	L12050177-02	2050150-02	5/50	1		05/09/12 17:55
76	P2.050912.180125	L12050177-03	2050150-03	5/50	1		05/09/12 18:01
77	P2.050912.180820	WG397463-01	Reference Sample		1	L12050214-02	05/09/12 18:08
78	P2.050912.181419	WG397463-04	Matrix Spike	5/50	1	L12050214-02	05/09/12 18:14
79	P2.050912.182019	WG397463-05	Matrix Spike Duplica	5/50	1	L12050214-02	05/09/12 18:20
80	P2.050912.182619	L12050227-01	ARMSTRONG	5/50	1		05/09/12 18:26
81	P2.050912.183315	WG397533-26	CCV		1		05/09/12 18:33
82	P2.050912.183915	WG397533-27	CCB		1		05/09/12 18:39
83	P2.050912.184609	WG397432-03	Method/Prep Blank	50/50	1		05/09/12 18:46
84	P2.050912.185303	WG397432-04	Laboratory Control S	50/50	1		05/09/12 18:53
85	P2.050912.185902	L12050236-01	010	50/50	10		05/09/12 18:59
86	P2.050912.190556	L12050236-02	010	50/50	10		05/09/12 19:05
87	P2.050912.191250	L12050236-03	012	50/50	10		05/09/12 19:12
88	P2.050912.191945	L12050236-04	012	50/50	10		05/09/12 19:19
89	P2.050912.192640	L12050236-05	016	50/50	10		05/09/12 19:26
90	P2.050912.193335	L12050236-06	016	50/50	10		05/09/12 19:33
91	P2.050912.194031	WG397519-01	Post Digestion Spike		10	L12050236-06	05/09/12 19:40
92	P2.050912.194631	WG397519-02	Serial Dilution		5	L12050236-06	05/09/12 19:46
93	P2.050912.195326	WG397533-28	CCV		1		05/09/12 19:53
94	P2.050912.195928	WG397533-29	CCB		1		05/09/12 19:59
95	P2.050912.200621	L12050236-07	017	50/50	10		05/09/12 20:06
96	P2.050912.201318	L12050236-08	017	50/50	10		05/09/12 20:13
97	P2.050912.202040	L12050236-09	018	50/50	10		05/09/12 20:20
98	P2.050912.202735	L12050236-10	018		10	WG397432-01	05/09/12 20:27
99	P2.050912.203433	WG397432-06	Matrix Spike	50/50	10	L12050236-10	05/09/12 20:34
100	P2.050912.204031	WG397432-05	Duplicate	50/50	10	L12050236-10	05/09/12 20:40
101	P2.050912.204726	L12050253-01	C-004		1	WG397432-02	05/09/12 20:47
102	P2.050912.205422	WG397432-07	Matrix Spike	50/50	1	L12050253-01	05/09/12 20:54

Page: 3 Approved: May 10, 2012

Shari L. Bahgat



Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 050912H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010 SOP: ME600E Rev: 12
 Maintenance Log ID: 41651

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
 ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17310
 CCV: STD51453 LLCCV: _____

396298, 396721, 397233, 397342, 397515, 397519

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.050912.210021	L12050223-05	40BF05312FB	50/50	1		05/09/12 21:00
104	P2.050912.210716	WG397533-30	CCV		1		05/09/12 21:07
105	P2.050912.211317	WG397533-31	CCB		1		05/09/12 21:13

Comments

Seq.	Rerun	Dil.	Reason	Analytes
51			The wrong sample was analyzed at 15:17, therefore, L1205022305 was analyzed at 21:00.	

Page: 4 Approved: May 10, 2012

Shari L. Baharuf



Microbac Laboratories Inc.

Data Checklist

Date: 08-MAY-2012
 Analyst: KHR
 Analyst: NA
 Method: 6010
 Instrument: PE-ICP2
 Curve Workgroup: 397368
 Runlog ID: 46614
 Analytical Workgroups: 396793, 396721, 397343, 397233

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	X
Client Forms	X
Level X	
Level 3	
Level 4	013, 898, 050, 099
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:
09-MAY-2012

Secondary Reviewer:
09-MAY-2012

Kim H. Rhodes

Shari L. Bahgat



Microbac Laboratories Inc.

Data Checklist

Date: 09-MAY-2012
 Analyst: KHR
 Analyst: NA
 Method: 6010
 Instrument: PE-ICP2
 Curve Workgroup: 397533
 Runlog ID: 46645
 Analytical Workgroups: 396298, 396721, 397233, 397342, 397515, 397519

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	X
Client Forms	X
Level X	
Level 3	
Level 4	844, 898, 050, 099, 223
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:
10-MAY-2012

Secondary Reviewer:
10-MAY-2012

Kim H. Rhodes

Shari L. Bahgat



Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method:6010B
 Login Number:L12050099

AAB#:WG397233

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-13-050212	01	05/02/12					05/07/12	4.9	180		05/08/12	6.4	180	
MW-13-050212	02	05/02/12					05/07/12	4.9	180		05/08/12	6.4	180	
MW-26-050212	03	05/02/12					05/07/12	4.9	180		05/08/12	6.4	180	
MW-26-050212	04	05/02/12					05/07/12	4.9	180		05/08/12	6.4	180	
MW-25-050212	05	05/02/12					05/07/12	4.7	180		05/08/12	6.3	180	
MW-25-050212	06	05/02/12					05/07/12	4.7	180		05/08/12	6.3	180	
PZ-03-050212	07	05/02/12					05/07/12	4.7	180		05/08/12	6.3	180	
PZ-03-050212	07	05/02/12					05/07/12	4.7	180		05/09/12	6.9	180	
PZ-03-050212	08	05/02/12					05/07/12	4.7	180		05/09/12	6.9	180	
PZ-03-050212	08	05/02/12					05/07/12	4.7	180		05/08/12	6.3	180	
DUP-GW-050212	09	05/02/12					05/07/12	4.9	180		05/08/12	6.5	180	
DUP-GW-050212	10	05/02/12					05/07/12	4.9	180		05/08/12	6.5	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2407068
 Report generated 05/10/2012 08:00



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397233
 Blank File ID: P2.050812.181938 Blank Sample ID: WG397165-02
 Prep Date: 05/07/12 08:07 Instrument ID: PE-ICP2
 Analyzed Date: 05/08/12 18:19 Method: 6010B
 Analyst: KHR

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397165-03	P2.050812.182633	05/08/12 18:26	01
MW-13-050212	L12050099-01	P2.050812.200243	05/08/12 20:02	01
MW-13-050212	L12050099-02	P2.050812.200842	05/08/12 20:08	01
MW-26-050212	L12050099-03	P2.050812.201441	05/08/12 20:14	01
MW-26-050212	L12050099-04	P2.050812.202040	05/08/12 20:20	01
MW-25-050212	L12050099-05	P2.050812.202639	05/08/12 20:26	01
MW-25-050212	L12050099-06	P2.050812.204532	05/08/12 20:45	01
PZ-03-050212	L12050099-07	P2.050812.205131	05/08/12 20:51	01
PZ-03-050212	L12050099-08	P2.050812.205736	05/08/12 20:57	01
DUP-GW-050212	L12050099-09	P2.050812.210340	05/08/12 21:03	01
DUP-GW-050212	L12050099-10	P2.050812.210941	05/08/12 21:09	01
PZ-03-050212	L12050099-07	P2.050912.130919	05/09/12 13:09	DL01
PZ-03-050212	L12050099-08	P2.050912.131613	05/09/12 13:16	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2407069
 Report generated 05/10/2012 08:00



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/07/12 08:07 Sample ID: WG397165-02
 Instrument ID: PE-ICP2 Run Date: 05/08/12 18:19 Prep Method: 3005A
 File ID: P2.050812.181938 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG397233 Matrix: Water Units: mg/L
 Contract #: _____ Cal ID: PE-ICP-08-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Barium, Total	0.00250	0.0100	-0.00299	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: 2407070
 09-MAY-2012 11:49



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397165-03
 Instrument ID: PE-ICP2 Run Time: 18:26 Prep Method: 3005A
 File ID: P2.050812.182633 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG397233 Matrix: Water Units: mg/L
 QC Key: WATERLOO Lot#: STD51357 Cal ID: PE-ICP-08-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	5.00	100	85 - 115	
Barium, Total	0.500	0.496	99.2	85 - 115	
Beryllium, Total	0.0250	0.0241	96.5	85 - 115	
Cadmium, Total	0.0250	0.0236	94.5	85 - 115	
Calcium, Total	5.00	5.03	101	85 - 115	
Chromium, Total	0.250	0.249	99.7	85 - 115	
Cobalt, Total	0.100	0.0993	99.3	85 - 115	
Copper, Total	0.250	0.255	102	85 - 115	
Iron, Total	2.00	1.91	95.5	85 - 115	
Magnesium, Total	5.00	4.86	97.1	85 - 115	
Manganese, Total	0.250	0.251	100	85 - 115	
Nickel, Total	0.250	0.252	101	85 - 115	
Potassium, Total	25.0	24.8	99.2	85 - 115	
Silver, Total	0.200	0.199	99.3	85 - 115	
Sodium, Total	25.0	25.4	102	85 - 115	
Vanadium, Total	0.500	0.510	102	85 - 115	
Zinc, Total	0.500	0.494	98.8	85 - 115	

LCS - Modified 03/06/2008
 PDF File ID: 2407071
 Report generated: 05/09/2012 11:49



MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050099 Cal ID: PE-ICP2- Worknum: WG397233
 Instrument ID: PE-ICP2 Contract #: _____ Method: 6010B
 Parent ID: WG397165-01 File ID: P2.050812.183232 Dil: 1 Matrix: WATER
 Sample ID: WG397165-04 MS File ID: P2.050812.183830 Dil: 1 Units: mg/L
 Sample ID: WG397165-05 MSD File ID: P2.050812.184428 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	ND	5.00	5.31	106	5.00	5.16	103	2.72	85 - 115	20	
Barium, Total	0.164	0.500	0.695	106	0.500	0.675	102	2.84	85 - 115	20	
Beryllium, Total	ND	0.0250	0.0254	102	0.0250	0.0244	97.5	4.11	85 - 115	20	
Cadmium, Total	0.000862	0.0250	0.0248	95.7	0.0250	0.0238	91.6	4.18	85 - 115	20	
Calcium, Total	101	5.00	119	352	5.00	115	281	3.06	85 - 115	20	*
Chromium, Total	ND	0.250	0.261	104	0.250	0.252	101	3.39	85 - 115	20	
Cobalt, Total	ND	0.100	0.100	100	0.100	0.0982	98.2	2.27	85 - 115	20	
Copper, Total	ND	0.250	0.261	104	0.250	0.250	99.9	4.42	85 - 115	20	
Iron, Total	0.207	2.00	2.22	101	2.00	2.15	97.0	3.55	85 - 115	20	
Magnesium, Total	42.5	5.00	51.1	174	5.00	50.3	156	1.71	85 - 115	20	*
Manganese, Total	0.0359	0.250	0.302	107	0.250	0.294	103	2.89	85 - 115	20	
Nickel, Total	ND	0.250	0.254	102	0.250	0.247	98.7	2.92	85 - 115	20	
Potassium, Total	3.45	25.0	29.9	106	25.0	29.3	103	2.06	85 - 115	20	
Silver, Total	ND	0.200	0.210	105	0.200	0.201	101	4.27	85 - 115	20	
Sodium, Total	58.5	25.0	94.0	142	25.0	92.6	137	1.43	85 - 115	20	*
Vanadium, Total	0.00920	0.500	0.544	107	0.500	0.528	104	3.02	85 - 115	20	
Zinc, Total	ND	0.500	0.493	98.6	0.500	0.478	95.6	3.09	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12050099 **Worknum:** WG397233
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG397233-02 **File ID:** P2.050812.191702 **Dil:** 5 **Units:** mg/L
Sample: L12050050-04 **File ID:** P2.050812.190358 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	ND	U	ND	U		
Barium	0.0529	X	0.0431	F	18.60	
Beryllium	ND	U	ND	U		
Cadmium	0.000267	F	0.00153	F	472.00	
Calcium	127		126		0.67	
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	ND	U	ND	U		
Iron	0.111	X	ND	U		
Magnesium	35.0		35.4		1.21	
Manganese	0.0501	X	0.0405	F	19.20	
Nickel	ND	U	ND	U		
Potassium	2.88	X	2.68	F	6.77	
Silver	ND	U	ND	U		
Sodium	40.8		40.8		0.06	
Vanadium	0.00509	F	ND	U		
Zinc	0.00696	F	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 2407066
05/09/2012 11:49



Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050099

Worknum: WG397233

Instrument ID: PE-ICP2

Method: 6010B

Post Spike ID: WG397233-01

File ID: P2.050812.191058

Dil: 1

Units: mg/L

Sample ID: L12050050-04

File ID: P2.050812.190358

Dil: 1

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	5.07		0	U	5	101.3	75 - 125	
BARIUM	0.541		0.0529		.5	98.6	75 - 125	
BERYLLIUM	0.0240		0	U	.025	96.2	75 - 125	
CADMIUM	0.0235		0.000267	F	.025	93.0	75 - 125	
CALCIUM	132		127		5	341.4	75 - 125	N
CHROMIUM	0.247		0	U	.25	98.8	75 - 125	
COBALT	0.0964		0	U	.1	96.4	75 - 125	
COPPER	0.245		0	U	.25	98.1	75 - 125	
IRON	2.01		0.111		2	95.5	75 - 125	
MAGNESIUM	36.8		35.0		5	106.4	75 - 125	
MANGANESE	0.298		0.0501		.25	101.0	75 - 125	
NICKEL	0.252		0	U	.25	100.7	75 - 125	
POTASSIUM	27.9		2.88		25	101.1	75 - 125	
SILVER	0.199		0	U	.2	99.3	75 - 125	
SODIUM	65.1		40.8		25	113.6	75 - 125	
VANADIUM	0.517		0.00509	F	.5	102.4	75 - 125	
ZINC	0.491		0.00696	F	.5	96.9	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: 2407067
Report generated: 05/09/2012 11:49



Microbac Laboratories Inc.
Initial Calibration Summary

Login: L12050099 Workgroup (AAB#): WG397233
Analytical Method: 6010B Instrument ID: PE-ICP2
ICAL Worknum: WG397368 Initial Calibration Date: 08-MAY-2012 09:08

	WG397368-01		WG397368-02		WG397368-03		WG397368-04		WG397368-05		R	Q
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT		
ALUMINUM	0	12.7	.1	756	.2	1530	10	75900	20	148000	.999931	
BARIUM	0	-185	.01	1600	.02	3230	1	160000	2	313000	.999933	
BERYLLIUM	0	-1730	.0005	634	.001	1240	.05	62500	.1	127000	.999979	
CADMIUM	0	75.8	.0005	19.1	.001	40.4	.05	2750	.1	5560	.999999	
CALCIUM	0	-68.2	NA	NA	.2	90.3	10	4600	20	9440	.999917	
CHROMIUM	0	190	.005	548	.01	1120	5	56000	1	109000	.999894	
COBALT	0	-0.202	.002	73.1	.004	157	.1	7920	.4	15400	.999899	
COPPER	0	-696	.005	1310	.01	2680	.5	135000	1	269000	.999992	
IRON	0	59.5	.04	634	.08	1280	4	64800	8	127000	.999951	
MAGNESIUM	0	27.6	.1	361	.2	733	10	36100	20	70900	.999963	
MANGANESE	0	399	.005	4420	.01	8620	.5	436000	1	836000	.999774	
NICKEL	0	-183	.005	349	.01	729	.5	34800	1	67800	.999909	
POTASSIUM	0	-31.7	.5	1890	1	3600	50	166000	100	326000	1	
SILVER	0	-195	.004	1240	.008	2430	.4	126000	.8	251000	.999996	
SODIUM	0	1370	.5	10000	1	19700	50	990000	100	1880000	1	
VANADIUM	0	15000	.01	2260	.02	4120	1	199000	2	385000	.999873	
ZINC	0	48.7	.01	427	.02	848	1	42700	2	84100	.999997	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
Initial Calibration Summary

Login: L12050099 Workgroup (AAB#): WG397233
Analytical Method: 6010B Instrument ID: PE-ICP2
ICAL Worknum: WG397533 Initial Calibration Date: 09-MAY-2012 10:16

	WG397533-01		WG397533-02		WG397533-03		WG397533-04		WG397533-05		R	Q
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT		
ALUMINUM	0	-5.02	.1	815	.2	1640	10	80200	20	159000	.99999	
BARIUM	0	-154	.01	1530	.02	3070	1	154000	2	299000	.999904	
BERYLLIUM	0	-1630	.0005	570	.001	1220	.05	64100	.1	124000	.999892	
CADMIUM	0	82.2	.0005	33.7	.001	52.7	.05	2830	.1	5500	.999902	
CALCIUM	0	-77.6	NA	NA	.2	91.0	10	4910	20	9790	.999999	
CHROMIUM	0	169	.005	542	.01	1090	5	54600	1	106000	.999893	
COBALT	0	3.68	.002	77.3	.004	150	.1	7660	.4	14900	.999929	
COPPER	0	-714	.005	1350	.01	2730	.5	144000	1	281000	.999941	
IRON	0	29.8	.04	625	.08	1290	4	64200	8	130000	.999991	
MAGNESIUM	0	22.9	.1	364	.2	722	10	35900	20	72300	.999994	
MANGANESE	0	362	.005	4350	.01	8290	.5	425000	1	815000	.99979	
NICKEL	0	-184	.005	350	.01	694	.5	33900	1	65700	.999877	
POTASSIUM	0	28.0	.5	1900	1	3670	50	174000	100	340000	1	
SILVER	0	-92.8	.004	1300	.008	2500	.4	131000	.8	252000	.999836	
SODIUM	0	1140	.5	10500	1	21100	50	1050000	100	2050000	1	
VANADIUM	0	15700	.01	1880	.02	3890	1	196000	2	382000	.999913	
ZINC	0	4.94	.01	410	.02	813	1	40600	2	77800	.999779	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-07
 Instrument ID: PE-ICP2 Run Time: 09:20 Method: 6010B
 File ID: P2.050812.092008 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP2 - 08-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: 2407077
 Report generated 05/10/2012 08:00



Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-07
 Instrument ID: PE-ICP2 Run Time: 10:28 Method: 6010B
 File ID: P2.050912.102841 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP2 - 09-MAY-12
 Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
BARIUM	.0025	.01	.0025	U
BERYLLIUM	.0005	.002	.0005	U
CADMIUM	.00025	.0005	.00025	U
CALCIUM	.1	.2	.1	U
CHROMIUM	.0025	.005	.0025	U
COBALT	.0025	.02	.0025	U
COPPER	.005	.02	.005	U
IRON	.025	.1	.025	U
MAGNESIUM	.25	.5	.25	U
MANGANESE	.005	.01	.005	U
NICKEL	.005	.04	.005	U
POTASSIUM	.25	1	.25	U
SILVER	.005	.01	.005	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.005	.02	.005	U

ICB - Modified 07/14/2009
 PDF File ID: 2407077
 Report generated 05/10/2012 08:00



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-14
 Instrument ID: PE-ICP2 Run Time: 10:06 Method: 6010B
 File ID: P2.050812.100628 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00315	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-28
 Instrument ID: PE-ICP2 Run Time: 18:12 Method: 6010B
 File ID: P2.050812.181245 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00310	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000272	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-30
 Instrument ID: PE-ICP2 Run Time: 19:30 Method: 6010B
 File ID: P2.050812.193003 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00302	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-32
 Instrument ID: PE-ICP2 Run Time: 20:38 Method: 6010B
 File ID: P2.050812.203839 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00296	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000346	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-34
 Instrument ID: PE-ICP2 Run Time: 21:21 Method: 6010B
 File ID: P2.050812.212142 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00295	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000365	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-38
 Instrument ID: PE-ICP2 Run Time: 21:46 Method: 6010B
 File ID: P2.050812.214629 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00295	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000311	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-11
 Instrument ID: PE-ICP2 Run Time: 10:53 Method: 6010B
 File ID: P2.050912.105345 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00369	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	-0.000315	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	-0.00552	F

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-13
 Instrument ID: PE-ICP2 Run Time: 12:01 Method: 6010B
 File ID: P2.050912.120128 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00365	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	-0.00571	F

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-15
 Instrument ID: PE-ICP2 Run Time: 13:29 Method: 6010B
 File ID: P2.050912.132908 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00375	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	-0.000297	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	-0.00568	F

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-19
 Instrument ID: PE-ICP2 Run Time: 13:53 Method: 6010B
 File ID: P2.050912.135355 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00369	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	-0.00558	F

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2407080
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
 INITIAL CALIBRATION VERIFICATION (ICV)
 (Alternate Source)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-06
 Instrument ID: PE-ICP2 Run Time: 09:14 Method: 6010B
 File ID: P2.050812.091408 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 QC Key: WATERLOO

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	9.86	98.6	90 - 110	
Barium	1	0.992	99.2	90 - 110	
Beryllium	.05	0.0487	97.5	90 - 110	
Cadmium	.05	0.0476	95.1	90 - 110	
Calcium	10	9.94	99.4	90 - 110	
Chromium	.5	0.498	99.6	90 - 110	
Cobalt	.2	0.197	98.4	90 - 110	
Copper	.5	0.493	98.5	90 - 110	
Iron	4	3.97	99.4	90 - 110	
Magnesium	10	9.88	98.8	90 - 110	
Manganese	.5	0.495	98.9	90 - 110	
Nickel	.5	0.515	103	90 - 110	
Potassium	50	48.7	97.4	90 - 110	
Silver	.4	0.384	95.9	90 - 110	
Sodium	50	48.9	97.8	90 - 110	
Vanadium	1	0.970	97.0	90 - 110	
Zinc	1	0.996	99.6	90 - 110	

* Exceeds LIMITS Limit



Microbac Laboratories Inc.
 INITIAL CALIBRATION VERIFICATION (ICV)
 (Alternate Source)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-06
 Instrument ID: PE-ICP2 Run Time: 10:22 Method: 6010B
 File ID: P2.050912.102243 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
 QC Key: WATERLOO

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	9.81	98.1	90 - 110	
Barium	1	1.00	100	90 - 110	
Beryllium	.05	0.0490	98.0	90 - 110	
Cadmium	.05	0.0484	96.8	90 - 110	
Calcium	10	10.2	102	90 - 110	
Chromium	.5	0.498	99.6	90 - 110	
Cobalt	.2	0.197	98.3	90 - 110	
Copper	.5	0.503	101	90 - 110	
Iron	4	3.92	98.1	90 - 110	
Magnesium	10	9.71	97.1	90 - 110	
Manganese	.5	0.505	101	90 - 110	
Nickel	.5	0.503	101	90 - 110	
Potassium	50	48.4	96.8	90 - 110	
Silver	.4	0.396	98.9	90 - 110	
Sodium	50	48.5	97.0	90 - 110	
Vanadium	1	0.981	98.1	90 - 110	
Zinc	1	1.01	101	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
 PDF File ID: 2407076
 Report generated 05/10/2012 08:00



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-13
Instrument ID: PE-ICP2 Run Time: 10:00 Method: 6010B
File ID: P2.050812.100027 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	9.91	mg/L	99.1	90 - 110	
Barium	1.00	1.00	mg/L	100	90 - 110	
Beryllium	0.0500	0.0498	mg/L	99.6	90 - 110	
Cadmium	0.0500	0.0489	mg/L	97.8	90 - 110	
Calcium	10.0	10.4	mg/L	104	90 - 110	
Chromium	0.500	0.503	mg/L	101	90 - 110	
Cobalt	0.200	0.198	mg/L	99.2	90 - 110	
Copper	0.500	0.511	mg/L	102	90 - 110	
Iron	4.00	3.96	mg/L	99.1	90 - 110	
Magnesium	10.0	9.84	mg/L	98.4	90 - 110	
Manganese	0.500	0.510	mg/L	102	90 - 110	
Nickel	0.500	0.505	mg/L	101	90 - 110	
Potassium	50.0	48.6	mg/L	97.3	90 - 110	
Silver	0.400	0.409	mg/L	102	90 - 110	
Sodium	50.0	48.9	mg/L	97.8	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

CCV - Modified 03/05/2008
PDF File ID: 2407079
Report generated 05/10/2012 08:02



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-27
Instrument ID: PE-ICP2 Run Time: 18:06 Method: 6010B
File ID: P2.050812.180644 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.1	mg/L	101	90 - 110	
Barium	1.00	1.01	mg/L	101	90 - 110	
Beryllium	0.0500	0.0502	mg/L	100	90 - 110	
Cadmium	0.0500	0.0492	mg/L	98.4	90 - 110	
Calcium	10.0	10.7	mg/L	107	90 - 110	
Chromium	0.500	0.507	mg/L	101	90 - 110	
Cobalt	0.200	0.200	mg/L	100	90 - 110	
Copper	0.500	0.527	mg/L	105	90 - 110	
Iron	4.00	3.94	mg/L	98.5	90 - 110	
Magnesium	10.0	9.79	mg/L	97.9	90 - 110	
Manganese	0.500	0.517	mg/L	103	90 - 110	
Nickel	0.500	0.510	mg/L	102	90 - 110	
Potassium	50.0	49.4	mg/L	98.8	90 - 110	
Silver	0.400	0.413	mg/L	103	90 - 110	
Sodium	50.0	50.0	mg/L	100	90 - 110	
Vanadium	1.00	1.04	mg/L	104	90 - 110	
Zinc	1.00	0.996	mg/L	99.6	90 - 110	

* Exceeds LIMITS Criteria



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-29
Instrument ID: PE-ICP2 Run Time: 19:24 Method: 6010B
File ID: P2.050812.192401 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.1	mg/L	101	90 - 110	
Barium	1.00	1.01	mg/L	101	90 - 110	
Beryllium	0.0500	0.0493	mg/L	98.5	90 - 110	
Cadmium	0.0500	0.0483	mg/L	96.7	90 - 110	
Calcium	10.0	10.5	mg/L	105	90 - 110	
Chromium	0.500	0.507	mg/L	101	90 - 110	
Cobalt	0.200	0.199	mg/L	99.4	90 - 110	
Copper	0.500	0.518	mg/L	104	90 - 110	
Iron	4.00	3.92	mg/L	98.1	90 - 110	
Magnesium	10.0	9.76	mg/L	97.6	90 - 110	
Manganese	0.500	0.514	mg/L	103	90 - 110	
Nickel	0.500	0.509	mg/L	102	90 - 110	
Potassium	50.0	49.4	mg/L	98.8	90 - 110	
Silver	0.400	0.407	mg/L	102	90 - 110	
Sodium	50.0	49.8	mg/L	99.5	90 - 110	
Vanadium	1.00	1.03	mg/L	103	90 - 110	
Zinc	1.00	0.996	mg/L	99.6	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2407079
Report generated 05/10/2012 08:02



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-31
 Instrument ID: PE-ICP2 Run Time: 20:32 Method: 6010B
 File ID: P2.050812.203238 Analyst: KHR QC Key: WATERLOO
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.0	mg/L	100	90 - 110	
Barium	1.00	1.01	mg/L	101	90 - 110	
Beryllium	0.0500	0.0504	mg/L	101	90 - 110	
Cadmium	0.0500	0.0502	mg/L	100	90 - 110	
Calcium	10.0	10.6	mg/L	106	90 - 110	
Chromium	0.500	0.509	mg/L	102	90 - 110	
Cobalt	0.200	0.200	mg/L	100	90 - 110	
Copper	0.500	0.516	mg/L	103	90 - 110	
Iron	4.00	4.00	mg/L	99.9	90 - 110	
Magnesium	10.0	9.91	mg/L	99.1	90 - 110	
Manganese	0.500	0.513	mg/L	103	90 - 110	
Nickel	0.500	0.505	mg/L	101	90 - 110	
Potassium	50.0	49.1	mg/L	98.3	90 - 110	
Silver	0.400	0.414	mg/L	104	90 - 110	
Sodium	50.0	49.8	mg/L	99.5	90 - 110	
Vanadium	1.00	1.02	mg/L	102	90 - 110	
Zinc	1.00	1.02	mg/L	102	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2407079
 Report generated 05/10/2012 08:02



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-33
Instrument ID: PE-ICP2 Run Time: 21:15 Method: 6010B
File ID: P2.050812.211541 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.2	mg/L	102	90 - 110	
Barium	1.00	1.03	mg/L	103	90 - 110	
Beryllium	0.0500	0.0520	mg/L	104	90 - 110	
Cadmium	0.0500	0.0512	mg/L	102	90 - 110	
Calcium	10.0	10.8	mg/L	108	90 - 110	
Chromium	0.500	0.519	mg/L	104	90 - 110	
Cobalt	0.200	0.201	mg/L	101	90 - 110	
Copper	0.500	0.533	mg/L	107	90 - 110	
Iron	4.00	4.08	mg/L	102	90 - 110	
Magnesium	10.0	10.1	mg/L	101	90 - 110	
Manganese	0.500	0.522	mg/L	104	90 - 110	
Nickel	0.500	0.514	mg/L	103	90 - 110	
Potassium	50.0	49.6	mg/L	99.2	90 - 110	
Silver	0.400	0.426	mg/L	107	90 - 110	
Sodium	50.0	50.9	mg/L	102	90 - 110	
Vanadium	1.00	1.04	mg/L	104	90 - 110	
Zinc	1.00	1.04	mg/L	104	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2407079
Report generated 05/10/2012 08:02



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/08/2012 Sample ID: WG397368-37
 Instrument ID: PE-ICP2 Run Time: 21:40 Method: 6010B
 File ID: P2.050812.214028 Analyst: KHR QC Key: WATERLOO
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 08-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	9.76	mg/L	97.6	90 - 110	
Barium	1.00	0.979	mg/L	97.9	90 - 110	
Beryllium	0.0500	0.0494	mg/L	98.7	90 - 110	
Cadmium	0.0500	0.0491	mg/L	98.2	90 - 110	
Calcium	10.0	10.3	mg/L	103	90 - 110	
Chromium	0.500	0.492	mg/L	98.4	90 - 110	
Cobalt	0.200	0.194	mg/L	97.0	90 - 110	
Copper	0.500	0.503	mg/L	101	90 - 110	
Iron	4.00	3.90	mg/L	97.6	90 - 110	
Magnesium	10.0	9.67	mg/L	96.7	90 - 110	
Manganese	0.500	0.497	mg/L	99.4	90 - 110	
Nickel	0.500	0.491	mg/L	98.2	90 - 110	
Potassium	50.0	47.8	mg/L	95.5	90 - 110	
Silver	0.400	0.405	mg/L	101	90 - 110	
Sodium	50.0	48.4	mg/L	96.7	90 - 110	
Vanadium	1.00	0.987	mg/L	98.7	90 - 110	
Zinc	1.00	0.987	mg/L	98.7	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2407079
 Report generated 05/10/2012 08:02



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-10
Instrument ID: PE-ICP2 Run Time: 10:47 Method: 6010B
File ID: P2.050912.104744 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	9.68	mg/L	96.8	90 - 110	
Barium	1.00	1.00	mg/L	100	90 - 110	
Beryllium	0.0500	0.0486	mg/L	97.2	90 - 110	
Cadmium	0.0500	0.0479	mg/L	95.8	90 - 110	
Calcium	10.0	10.1	mg/L	101	90 - 110	
Chromium	0.500	0.497	mg/L	99.4	90 - 110	
Cobalt	0.200	0.196	mg/L	98.1	90 - 110	
Copper	0.500	0.489	mg/L	97.7	90 - 110	
Iron	4.00	3.89	mg/L	97.3	90 - 110	
Magnesium	10.0	9.68	mg/L	96.8	90 - 110	
Manganese	0.500	0.504	mg/L	101	90 - 110	
Nickel	0.500	0.498	mg/L	99.7	90 - 110	
Potassium	50.0	47.7	mg/L	95.4	90 - 110	
Silver	0.400	0.397	mg/L	99.3	90 - 110	
Sodium	50.0	48.3	mg/L	96.5	90 - 110	
Vanadium	1.00	0.988	mg/L	98.8	90 - 110	
Zinc	1.00	1.01	mg/L	101	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2407079
Report generated 05/10/2012 08:02



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-12
Instrument ID: PE-ICP2 Run Time: 11:55 Method: 6010B
File ID: P2.050912.115527 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	9.77	mg/L	97.7	90 - 110	
Barium	1.00	1.00	mg/L	100	90 - 110	
Beryllium	0.0500	0.0503	mg/L	101	90 - 110	
Cadmium	0.0500	0.0496	mg/L	99.3	90 - 110	
Calcium	10.0	10.3	mg/L	103	90 - 110	
Chromium	0.500	0.500	mg/L	100	90 - 110	
Cobalt	0.200	0.197	mg/L	98.4	90 - 110	
Copper	0.500	0.499	mg/L	99.9	90 - 110	
Iron	4.00	3.98	mg/L	99.5	90 - 110	
Magnesium	10.0	9.91	mg/L	99.1	90 - 110	
Manganese	0.500	0.503	mg/L	101	90 - 110	
Nickel	0.500	0.499	mg/L	99.8	90 - 110	
Potassium	50.0	47.9	mg/L	95.8	90 - 110	
Silver	0.400	0.410	mg/L	103	90 - 110	
Sodium	50.0	48.2	mg/L	96.3	90 - 110	
Vanadium	1.00	0.986	mg/L	98.6	90 - 110	
Zinc	1.00	1.02	mg/L	102	90 - 110	

* Exceeds LIMITS Criteria



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-14
Instrument ID: PE-ICP2 Run Time: 13:23 Method: 6010B
File ID: P2.050912.132307 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	9.70	mg/L	97.0	90 - 110	
Barium	1.00	1.01	mg/L	101	90 - 110	
Beryllium	0.0500	0.0495	mg/L	98.9	90 - 110	
Cadmium	0.0500	0.0490	mg/L	97.9	90 - 110	
Calcium	10.0	10.1	mg/L	101	90 - 110	
Chromium	0.500	0.498	mg/L	99.6	90 - 110	
Cobalt	0.200	0.199	mg/L	99.5	90 - 110	
Copper	0.500	0.490	mg/L	98.0	90 - 110	
Iron	4.00	3.96	mg/L	99.0	90 - 110	
Magnesium	10.0	9.87	mg/L	98.7	90 - 110	
Manganese	0.500	0.507	mg/L	101	90 - 110	
Nickel	0.500	0.502	mg/L	100	90 - 110	
Potassium	50.0	48.5	mg/L	97.0	90 - 110	
Silver	0.400	0.401	mg/L	100	90 - 110	
Sodium	50.0	47.4	mg/L	94.9	90 - 110	
Vanadium	1.00	0.995	mg/L	99.5	90 - 110	
Zinc	1.00	1.02	mg/L	102	90 - 110	

* Exceeds LIMITS Criteria



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/09/2012 Sample ID: WG397533-18
 Instrument ID: PE-ICP2 Run Time: 13:47 Method: 6010B
 File ID: P2.050912.134754 Analyst: KHR QC Key: WATERLOO
 Workgroup (AAB#): WG397233 Cal ID: PE-ICP - 09-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.1	mg/L	101	90 - 110	
Barium	1.00	1.05	mg/L	105	90 - 110	
Beryllium	0.0500	0.0521	mg/L	104	90 - 110	
Cadmium	0.0500	0.0509	mg/L	102	90 - 110	
Calcium	10.0	10.5	mg/L	105	90 - 110	
Chromium	0.500	0.524	mg/L	105	90 - 110	
Cobalt	0.200	0.205	mg/L	102	90 - 110	
Copper	0.500	0.514	mg/L	103	90 - 110	
Iron	4.00	4.18	mg/L	105	90 - 110	
Magnesium	10.0	10.4	mg/L	104	90 - 110	
Manganese	0.500	0.529	mg/L	106	90 - 110	
Nickel	0.500	0.525	mg/L	105	90 - 110	
Potassium	50.0	49.7	mg/L	99.5	90 - 110	
Silver	0.400	0.424	mg/L	106	90 - 110	
Sodium	50.0	50.0	mg/L	100	90 - 110	
Vanadium	1.00	1.03	mg/L	103	90 - 110	
Zinc	1.00	1.08	mg/L	108	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2407079
 Report generated 05/10/2012 08:02



Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050099
Instrument ID: PE-ICP2
Sol. A: WG397368-11
Sol. AB: WG397368-12

File ID: P2.050812.094835
File ID: P2.050812.095431

Workgroup (AAB#): WG397233
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	243	97.2	250	249	99.6	
Barium	NS	-0.000680	NS	0.250	0.241	96.4	
Beryllium	NS	-0.000920	NS	0.250	0.237	94.8	
Cadmium	NS	0.0000800	NS	0.500	0.401	80.2	
Calcium	250	250	100	250	255	102	
Chromium	NS	-0.00261	NS	0.250	0.242	96.8	
Cobalt	NS	-0.00234	NS	0.250	0.226	90.4	
Copper	NS	0.00237	NS	0.250	0.243	97.2	
Iron	100	90.9	90.9	100	92.6	92.6	
Magnesium	250	244	97.6	250	249	99.6	
Manganese	NS	-0.00319	NS	0.250	0.234	93.6	
Nickel	NS	-0.00127	NS	0.500	0.464	92.8	
Potassium	NS	-0.0611	NS	5.00	4.68	93.6	
Silver	NS	-0.000480	NS	0.500	0.489	97.8	
Sodium	NS	0.0371	NS	5.00	4.74	94.8	
Vanadium	NS	-0.00294	NS	0.250	0.238	95.2	
Zinc	NS	0.00142	NS	0.500	0.456	91.2	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050099
Instrument ID: PE-ICP2
Sol. A: WG397368-35
Sol. AB: WG397368-36

File ID: P2.050812.212835
File ID: P2.050812.213432

Workgroup (AAB#): WG397233
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	248	99.2	250	253	101	
Barium	NS	-0.000570	NS	0.250	0.245	98.0	
Beryllium	NS	-0.000910	NS	0.250	0.251	100	
Cadmium	NS	0.000340	NS	0.500	0.422	84.4	
Calcium	250	259	104	250	269	108	
Chromium	NS	-0.00297	NS	0.250	0.246	98.4	
Cobalt	NS	-0.00242	NS	0.250	0.230	92.0	
Copper	NS	0.00213	NS	0.250	0.255	102	
Iron	100	92.9	92.9	100	93.5	93.5	
Magnesium	250	248	99.2	250	251	100	
Manganese	NS	-0.00277	NS	0.250	0.238	95.2	
Nickel	NS	-0.00127	NS	0.500	0.471	94.2	
Potassium	NS	-0.0527	NS	5.00	4.74	94.8	
Silver	NS	-0.0000900	NS	0.500	0.515	103	
Sodium	NS	0.0238	NS	5.00	4.87	97.4	
Vanadium	NS	0.00113	NS	0.250	0.244	97.6	
Zinc	NS	0.00117	NS	0.500	0.467	93.4	

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.



Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050099
Instrument ID: PE-ICP2
Sol. A: WG397533-08
Sol. AB: WG397533-09

File ID: P2.050912.103534
File ID: P2.050912.104147

Workgroup (AAB#): WG397233
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	252	101	250	254	102	
Barium	NS	-0.00120	NS	0.250	0.247	98.8	
Beryllium	NS	-0.000990	NS	0.250	0.247	98.8	
Cadmium	NS	-0.000250	NS	0.500	0.414	82.8	
Calcium	250	262	105	250	263	105	
Chromium	NS	-0.00295	NS	0.250	0.248	99.2	
Cobalt	NS	-0.00265	NS	0.250	0.231	92.4	
Copper	NS	0.00141	NS	0.250	0.247	98.8	
Iron	100	94.3	94.3	100	94.7	94.7	
Magnesium	250	255	102	250	256	102	
Manganese	NS	-0.00269	NS	0.250	0.240	96.0	
Nickel	NS	-0.00139	NS	0.500	0.476	95.2	
Potassium	NS	-0.0504	NS	5.00	4.71	94.2	
Silver	NS	-0.00288	NS	0.500	0.506	101	
Sodium	NS	0.00897	NS	5.00	4.99	99.8	
Vanadium	NS	0.00196	NS	0.250	0.245	98.0	
Zinc	NS	-0.00270	NS	0.500	0.473	94.6	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050099
Instrument ID: PE-ICP2
Sol. A: WG397533-16
Sol. AB: WG397533-17

File ID: P2.050912.133601
File ID: P2.050912.134157

Workgroup (AAB#): WG397233
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	241	96.4	250	252	101	
Barium	NS	-0.00136	NS	0.250	0.251	100	
Beryllium	NS	-0.000730	NS	0.250	0.249	99.6	
Cadmium	NS	-0.000260	NS	0.500	0.420	84.0	
Calcium	250	255	102	250	261	104	
Chromium	NS	-0.00261	NS	0.250	0.252	101	
Cobalt	NS	-0.00246	NS	0.250	0.236	94.4	
Copper	NS	0.00142	NS	0.250	0.246	98.4	
Iron	100	93.1	93.1	100	95.5	95.5	
Magnesium	250	250	100	250	258	103	
Manganese	NS	-0.00269	NS	0.250	0.243	97.2	
Nickel	NS	-0.00142	NS	0.500	0.483	96.6	
Potassium	NS	-0.0601	NS	5.00	4.71	94.2	
Silver	NS	-0.00300	NS	0.500	0.508	102	
Sodium	NS	-0.000440	NS	5.00	4.96	99.2	
Vanadium	NS	-0.00284	NS	0.250	0.245	98.0	
Zinc	NS	-0.00261	NS	0.500	0.489	97.8	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



Microbac Laboratories Inc.
 INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050099

Date: 12/30/2011

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	-0.740	0	0
ARSENIC	188.98	0	0.0776	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	1.12	0	0	0
CADMIUM	228.80	0	0	3.00	0	0
CALCIUM	227.55	0	0.195	10.0	0	0
CHROMIUM	267.72	0	-0.00252	0	0	0
COBALT	228.62	0	0	0	0	0.337
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.0265	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	0	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.147	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0.200	0	0.0400
ZINC	206.20	0	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
 PDF File ID: 2407074
 Report generated: 05/10/2012 08:00



Microbac Laboratories Inc.
 INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050099

Date: 12/30/2011

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	6.33
ARSENIC	188.98	0	0.0200	0	0	-6.59
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	-0.0733
BORON	249.68	0	0	24.1	5.90	1.50
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	0	300	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	-0.244
COPPER	327.39	0	0	0	0.380	-0.0400
IRON	239.56	0	0	0	1.91	0
LEAD	220.35	0	-0.0480	0	0.116	-0.0700
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-1.04	0	-0.755	-0.0418	-0.110
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	-0.566	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.300	0	-1.52	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0.400	0	3.48	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0100	0	0	0.297
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	0	0	0	0	-3.64

CORR_FACTORS - Modified 03/05/2008
 PDF File ID: 2407074
 Report generated: 05/10/2012 08:00



Microbac Laboratories Inc.
 INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050099

Date: 12/30/2011

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	0.0192	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	-0.00250	0	0	0
BARIUM	233.53	0	-0.0187	0	0	0
BERYLLIUM	234.86	0	0.210	0	0	0
BORON	249.68	0	-4.66	0	0	0
CADMIUM	228.80	0	-0.00420	0	0	0
CALCIUM	227.55	-2.00	100	0	0	0.104
CHROMIUM	267.72	0	0.0391	0	0	0
COBALT	228.62	0	0.0262	0	0	0
COPPER	327.39	0	-0.0688	0	0.154	0
IRON	239.56	0	0	0	0	0.0276
LEAD	220.35	0.740	0.0440	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.540	0	0	0
MANGANESE	257.61	-0.0457	-0.0580	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	-0.0494	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.465	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0717	0.0240	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0.120	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.134	0	0	0
ZINC	206.20	-0.200	0.0198	0	0	0

CORR_FACTORS - Modified 03/05/2008
 PDF File ID: 2407074
 Report generated: 05/10/2012 08:00



Microbac Laboratories Inc.
 INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050099

Date: 12/30/2011

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	13.5	0	0	0
ANTIMONY	206.84	0	-7.69	0	0	0
ARSENIC	188.98	0	6.00	0	0	0
BARIUM	233.53	0	-0.548	0	0	0
BERYLLIUM	234.86	-0.131	-1.50	0	-0.00974	0
BORON	249.68	0	-2.20	0	0	0
CADMIUM	228.80	0	-0.00900	0	-0.398	0
CALCIUM	227.55	0	-8.00	0	-900	0
CHROMIUM	267.72	0.434	-0.00100	0	0	0
COBALT	228.62	0	-0.125	0	0.129	0
COPPER	327.39	0	-0.0774	0	0.150	0.257
IRON	239.56	0.480	0	0	0	0.407
LEAD	220.35	0.100	-5.00	0	0.100	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.00	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0340	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.120	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.00	0	0
SELENIUM	196.03	0.451	0.300	0	0.0940	0
SILICON	251.61	0	15.0	0	0	0
SILVER	328.07	0.130	0.100	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	-1.50	1.20	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.578	0	0	0
ZINC	206.20	0	0.180	0	-0.200	-0.100

CORR_FACTORS - Modified 03/05/2008
 PDF File ID: 2407074
 Report generated: 05/10/2012 08:00



Microbac Laboratories Inc.
 INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050099

Date: 12/30/2011

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	0	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0.148	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.0100	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.0500	-0.0100	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0.200
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	-0.300	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
 PDF File ID: 2407074
 Report generated: 05/10/2012 08:00



Microbac Laboratories Inc.
 INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050099
 Instrument ID: PE-ICP2

Date: 12/30/2011
 Method: 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	0.000100	0
ARSENIC	188.98	0	0	0.0930	0
BARIUM	233.53	0	0	-2.29	0
BERYLLIUM	234.86	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0800	0
CALCIUM	227.55	3.00	0	60.0	0
CHROMIUM	267.72	0	0	-0.567	-0.0400
COBALT	228.62	2.21	0	0	0
COPPER	327.39	-1.05	0	-0.700	-0.0613
IRON	239.56	0	0	0	0
LEAD	220.35	0	0	0.0560	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	0	0
MANGANESE	257.61	-0.00931	-0.0414	-0.0601	-0.0552
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.617	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	-0.220	0	-0.126	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-1.67	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	-12.0	0	-1.41	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	-0.100	0

CORR_FACTORS - Modified 03/05/2008
 PDF File ID: 2407074
 Report generated: 05/10/2012 08:00



Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12050099

Date: 03/27/2012

Instrument 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: 2407073
Report generated: 05/10/2012 08:00



2.3.1.3 Raw Data

=====
 Analysis Begun

Start Time: 5/8/2012 8:41:22 AM Plasma On Time: 5/8/2012 6:43:32 AM
 Logged In Analyst: peicp2 Technique: ICP Continuous
 Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
 Batch ID:
 Results Data Set: 050812H
 Results Library: C:\pe\peicp2\Results\Results.mdb

=====
 Method Loaded
 Method Name: 200.7-6010 PE-ICP2.1 Method Last Saved: 5/7/2012 8:30:37 AM
 IEC File: CA227_LiBeMOD.iec SM File:
 Method Description: STANDARD

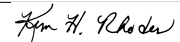
=====
 Sequence No.: 1 Autosampler Location: 1
 Sample ID: S0 Date Collected: 5/8/2012 8:41:25 AM
 Analyst: Sample Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

=====
 Nebulizer Parameters: S0
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

=====
 Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2353736.5	16742.70	0.71%	
YRADIAL	305679.3	8183.48	2.68%	
Ga 417.206	1381118.2	14609.83	1.06%	
GaRADIAL	91957.9	886.99	0.96%	
Ag 328.068†	-195.4	74.44	38.09%	[0.00] mg/L
Al 396.153†	12.7	4.21	33.24%	[0.00] mg/L
As 188.979†	-26.1	2.95	11.33%	[0.00] mg/L
Ba 233.527†	-184.9	17.45	9.44%	[0.00] mg/L
Be 234.861†	-1730.6	29.41	1.70%	[0.00] mg/L
B 249.677†	77.3	2.88	3.73%	[0.00] mg/L
Ca 227.546†	-68.2	5.13	7.51%	[0.00] mg/L
Cd 228.802†	75.8	6.06	8.00%	[0.00] mg/L
Co 228.616†	-0.2	10.01	>999.9%	[0.00] mg/L
Cr 267.716†	189.5	11.16	5.89%	[0.00] mg/L
Cu 327.393†	-696.1	160.99	23.13%	[0.00] mg/L
Fe 239.562†	59.5	1.33	2.23%	[0.00] mg/L
Mg 279.077†	27.6	1.87	6.78%	[0.00] mg/L
Mn 257.610†	399.2	2.51	0.63%	[0.00] mg/L
Mo 202.031†	81.9	6.27	7.65%	[0.00] mg/L
Ni 231.604†	-183.3	11.32	6.17%	[0.00] mg/L
Pb 220.353†	-90.1	9.35	10.39%	[0.00] mg/L
Sb 206.836†	4.1	1.49	36.46%	[0.00] mg/L
Se 196.026†	20.0	4.35	21.81%	[0.00] mg/L
Si 251.611†	574.3	19.16	3.34%	[0.00] mg/L
Sn 189.927†	173.0	5.50	3.18%	[0.00] mg/L
Ti 334.940†	729.9	120.36	16.49%	[0.00] mg/L
Tl 190.801†	-72.5	5.78	7.97%	[0.00] mg/L
V 290.880†	15024.7	192.65	1.28%	[0.00] mg/L
Zn 206.200†	48.7	4.76	9.79%	[0.00] mg/L
K 766.490†	-31.7	51.34	161.81%	[0.00] mg/L
Na 589.592†	1366.7	412.66	30.19%	[0.00] mg/L
Sr 407.771†	-882.6	15.33	1.74%	[0.00] mg/L
Li 670.784†	6.2	24.20	393.50%	[0.00] mg/L

=====
 Sequence No.: 2 Autosampler Location: 2
 Sample ID: S1 Date Collected: 5/8/2012 8:48:19 AM

Approved: May 09, 2012


Analyst:
Initial Sample Wt:
Dilution:

Sample Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: S1

Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2338551.6	17403.59	0.74%	
YRADIAL	311098.1	4477.83	1.44%	
Ga 417.206	1401595.1	7841.92	0.56%	
GaRADIAL	93419.8	1095.67	1.17%	
Ag 328.068†	1237.2	43.97	3.55%	[0.0040] mg/L
Al 396.153†	755.7	6.65	0.88%	[0.10] mg/L
Ba 233.527†	1598.3	22.70	1.42%	[0.010] mg/L
Be 234.861†	634.3	14.60	2.30%	[0.0005] mg/L
Cd 228.802†	19.1	11.79	61.74%	[0.00050] mg/L
Co 228.616†	73.1	3.00	4.10%	[0.0020] mg/L
Cr 267.716†	548.3	6.10	1.11%	[0.0050] mg/L
Cu 327.393†	1305.5	77.95	5.97%	[0.0050] mg/L
Fe 239.562†	633.9	6.86	1.08%	[0.040] mg/L
Mg 279.077†	360.6	10.36	2.87%	[0.10] mg/L
Mn 257.610†	4415.1	32.48	0.74%	[0.0050] mg/L
Mo 202.031†	379.8	4.88	1.29%	[0.010] mg/L
Ni 231.604†	349.4	15.25	4.36%	[0.0050] mg/L
Pb 220.353†	41.1	12.06	29.35%	[0.0050] mg/L
Sb 206.836†	51.0	2.18	4.28%	[0.012] mg/L
Si 251.611†	2079.2	13.12	0.63%	[0.050] mg/L
Sn 189.927†	107.0	9.49	8.88%	[0.010] mg/L
Ti 334.940†	10146.1	275.84	2.72%	[0.010] mg/L
V 290.880†	2259.7	597.60	26.45%	[0.010] mg/L
Zn 206.200†	426.6	2.43	0.57%	[0.010] mg/L
K 766.490†	1888.0	32.52	1.72%	[0.50] mg/L
Na 589.592†	10011.3	201.03	2.01%	[0.50] mg/L
Sr 407.771†	27496.7	299.53	1.09%	[0.010] mg/L
Li 670.784†	1715.2	29.98	1.75%	[0.010] mg/L

Sequence No.: 3

Sampler Location: 3

Sample ID: S2

Sample Collected: 5/8/2012 8:55:13 AM

Analyst:

Sample Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: S2

Analyte Back Pressure Flow
All 153.0 kPa 0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2323641.9	19225.65	0.83%	
YRADIAL	305349.8	2245.99	0.74%	
Ga 417.206	1400861.3	21733.18	1.55%	
GaRADIAL	92400.2	2223.90	2.41%	
Ag 328.068†	2430.3	80.40	3.31%	[0.0080] mg/L
Al 396.153†	1533.5	19.55	1.27%	[0.20] mg/L
As 188.979†	22.6	2.86	12.67%	[0.0080] mg/L
Ba 233.527†	3229.6	9.27	0.29%	[0.020] mg/L
Be 234.861†	1236.4	5.95	0.48%	[0.0010] mg/L
B 249.677†	797.8	21.95	2.75%	[0.010] mg/L
Ca 227.546†	90.3	0.64	0.70%	[0.20] mg/L
Cd 228.802†	40.4	12.25	30.35%	[0.0010] mg/L
Co 228.616†	156.5	9.13	5.84%	[0.0040] mg/L
Cr 267.716†	1123.0	6.37	0.57%	[0.010] mg/L

Approved: May 09, 2012

John H. Rhodes

Cu 327.393†	2677.4	82.07	3.07%	[0.010]	mg/L
Fe 239.562†	1281.8	23.45	1.83%	[0.080]	mg/L
Mg 279.077†	732.7	16.81	2.29%	[0.20]	mg/L
Mn 257.610†	8620.2	137.90	1.60%	[0.010]	mg/L
Mo 202.031†	743.1	0.66	0.09%	[0.020]	mg/L
Ni 231.604†	728.9	22.19	3.04%	[0.010]	mg/L
Pb 220.353†	104.4	9.83	9.41%	[0.010]	mg/L
Sb 206.836†	94.6	3.13	3.30%	[0.024]	mg/L
Se 196.026†	8.9	3.68	41.43%	[0.0080]	mg/L
Si 251.611†	4233.6	94.58	2.23%	[0.10]	mg/L
Sn 189.927†	214.8	7.14	3.32%	[0.020]	mg/L
Ti 334.940†	19914.6	115.15	0.58%	[0.020]	mg/L
Tl 190.801†	32.1	13.12	40.83%	[0.010]	mg/L
V 290.880†	4120.6	154.92	3.76%	[0.020]	mg/L
Zn 206.200†	848.0	2.45	0.29%	[0.020]	mg/L
K 766.490†	3596.1	38.23	1.06%	[1.00]	mg/L
Na 589.592†	19740.1	629.78	3.19%	[1.00]	mg/L
Sr 407.771†	55599.5	1199.84	2.16%	[0.020]	mg/L
Li 670.784†	3337.8	101.24	3.03%	[0.020]	mg/L

Sequence No.: 4
Sample ID: S3
Analyst:
Initial Sample Wt:
Dilution:

Sampler Location: 4
Date Collected: 5/8/2012 9:02:08 AM
Sample Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: S3

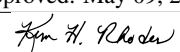
Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2220154.0	25301.70	1.14%	
YRADIAL	299520.1	553.77	0.18%	
Ga 417.206	1355905.3	24066.79	1.77%	
GaRADIAL	90114.0	704.92	0.78%	
Ag 328.068†	126162.5	3677.15	2.91%	[0.40] mg/L
Al 396.153†	75903.0	265.10	0.35%	[10.00] mg/L
As 188.979†	1119.5	27.19	2.43%	[0.40] mg/L
Ba 233.527†	160004.4	207.60	0.13%	[1.00] mg/L
Be 234.861†	62466.0	1933.21	3.09%	[0.05] mg/L
B 249.677†	41959.7	1208.94	2.88%	[0.50] mg/L
Ca 227.546†	4603.0	138.71	3.01%	[10.00] mg/L
Cd 228.802†	2754.6	110.10	4.00%	[0.05] mg/L
Co 228.616†	7920.2	77.54	0.98%	[0.20] mg/L
Cr 267.716†	55962.0	333.96	0.60%	[0.50] mg/L
Cu 327.393†	135365.1	4442.79	3.28%	[0.50] mg/L
Fe 239.562†	64833.9	593.02	0.91%	[4.00] mg/L
Mg 279.077†	36068.8	234.45	0.65%	[10.00] mg/L
Mn 257.610†	436291.2	2294.48	0.53%	[0.50] mg/L
Mo 202.031†	37547.9	47.48	0.13%	[1.00] mg/L
Ni 231.604†	34839.6	265.51	0.76%	[0.50] mg/L
Pb 220.353†	5689.3	50.63	0.89%	[0.50] mg/L
Sb 206.836†	4958.1	140.24	2.83%	[1.20] mg/L
Se 196.026†	711.5	24.52	3.45%	[0.40] mg/L
Si 251.611†	210409.8	5335.92	2.54%	[5.00] mg/L
Sn 189.927†	10659.8	94.97	0.89%	[1.00] mg/L
Ti 334.940†	1016158.8	2607.59	0.26%	[1.00] mg/L
Tl 190.801†	1995.2	12.38	0.62%	[0.50] mg/L
V 290.880†	199076.2	2270.80	1.14%	[1.00] mg/L
Zn 206.200†	42700.2	171.93	0.40%	[1.00] mg/L
K 766.490†	165931.5	647.28	0.39%	[50.00] mg/L
Na 589.592†	990385.3	15503.64	1.57%	[50.00] mg/L
Sr 407.771†	2769281.1	26844.54	0.97%	[1.00] mg/L
Li 670.784†	157996.5	645.73	0.41%	[1.00] mg/L

Sequence No.: 5

Sampler Location: 5

Approved: May 09, 2012


Sample ID: S4
 Analyst:
 Initial Sample Wt:
 Dilution:

Time Collected: 5/8/2012 9:08:08 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: S4

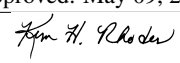
Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2207096.7	8253.97	0.37%	
YRADIAL	301792.2	1308.04	0.43%	
Ga 417.206	1328170.7	28902.14	2.18%	
GaRADIAL	92294.3	858.99	0.93%	
Ag 328.068†	250875.9	6684.74	2.66%	[0.80] mg/L
Al 396.153†	148200.6	307.08	0.21%	[20.00] mg/L
As 188.979†	2262.9	43.50	1.92%	[0.80] mg/L
Ba 233.527†	312527.3	409.30	0.13%	[2.00] mg/L
Be 234.861†	126639.8	3051.58	2.41%	[0.10] mg/L
B 249.677†	85166.0	2281.02	2.68%	[1.00] mg/L
Ca 227.546†	9443.1	258.71	2.74%	[20.00] mg/L
Cd 228.802†	5563.0	222.20	3.99%	[0.10] mg/L
Co 228.616†	15390.8	103.25	0.67%	[0.40] mg/L
Cr 267.716†	108644.1	414.01	0.38%	[1.00] mg/L
Cu 327.393†	268579.5	5871.68	2.19%	[1.00] mg/L
Fe 239.562†	127067.1	160.63	0.13%	[8.00] mg/L
Mg 279.077†	70867.0	283.18	0.40%	[20.00] mg/L
Mn 257.610†	835764.5	4674.20	0.56%	[1.00] mg/L
Mo 202.031†	73914.7	236.56	0.32%	[2.00] mg/L
Ni 231.604†	67775.7	363.60	0.54%	[1.00] mg/L
Pb 220.353†	11059.5	46.70	0.42%	[1.00] mg/L
Sb 206.836†	9967.5	269.29	2.70%	[2.40] mg/L
Se 196.026†	1440.1	45.79	3.18%	[0.80] mg/L
Si 251.611†	416899.9	8345.07	2.00%	[10.00] mg/L
Sn 189.927†	20792.9	105.23	0.51%	[2.00] mg/L
Ti 334.940†	2003396.4	2239.59	0.11%	[2.00] mg/L
Tl 190.801†	3867.8	6.74	0.17%	[1.00] mg/L
V 290.880†	385301.1	2711.79	0.70%	[2.00] mg/L
Zn 206.200†	84050.9	337.96	0.40%	[2.00] mg/L
K 766.490†	326066.5	2989.36	0.92%	[100.00] mg/L
Na 589.592†	1884180.1	10120.29	0.54%	[100.00] mg/L
Sr 407.771†	5301346.9	6796.61	0.13%	[2.00] mg/L
Li 670.784†	308947.3	2804.24	0.91%	[2.00] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin, Calc Int	60.3	313900	0.00000	0.999996	
Al 396.153	4	Lin, Calc Int	245.2	7431	0.00000	0.999931	
As 188.979	3	Wt. Lin	0.0	2814	0.00000	0.999985	
Ba 233.527	4	Lin, Calc Int	509.7	156700	0.00000	0.999933	
Be 234.861	4	Lin, Calc Int	-115.4	1264000	0.00000	0.999979	
B 249.677	3	Lin, Calc Int	-137.9	85080	0.00000	0.999972	
Ca 227.546	3	Lin, Calc Int	-23.5	471.2	0.00000	0.999917	
Cd 228.802	4	Lin, Calc Int	-10.8	55650	0.00000	0.999990	
Co 228.616	4	Lin, Calc Int	27.6	38620	0.00000	0.999899	
Cr 267.716	4	Lin, Calc Int	217.3	109000	0.00000	0.999894	
Cu 327.393	4	Lin, Calc Int	119.6	268900	0.00000	0.999992	
Fe 239.562	4	Lin, Calc Int	165.0	15920	0.00000	0.999951	
Mg 279.077	4	Lin, Calc Int	88.6	3551	0.00000	0.999963	
Mn 257.610	4	Lin, Calc Int	2448.9	840200	0.00000	0.999774	
Mo 202.031	4	Lin, Calc Int	78.0	37030	0.00000	0.999970	
Ni 231.604	4	Lin, Calc Int	137.8	67990	0.00000	0.999909	
Pb 220.353	4	Lin, Calc Int	13.5	11110	0.00000	0.999897	
Sb 206.836	4	Lin, Calc Int	-4.4	4151	0.00000	0.999997	
Se 196.026	3	Wt. Lin	-5.5	1800	0.00000	0.999992	
Si 251.611	4	Lin, Calc Int	262.6	41740	0.00000	0.999990	

Approved: May 09, 2012


Sn 189.927	4	Lin, Calc Int	35.9	10430	0.00000	0.999925
Ti 334.940	4	Lin, Calc Int	1804.3	1003000	0.00000	0.999975
Tl 190.801	3	Lin, Calc Int	8.2	3882	0.00000	0.999858
V 290.880	4	Lin, Calc Int	988.5	193300	0.00000	0.999873
Zn 206.200	4	Lin, Calc Int	88.4	42110	0.00000	0.999970
K 766.490	4	Non Lin, Calc Int	141.1	3373	-1.13312	1.000000
Na 589.592	4	Non Lin, Calc Int	-462.9	20790	-19.40140	1.000000
Sr 407.771	4	Lin, Calc Int	15890.4	2665000	0.00000	0.999767
Li 670.784	4	Lin, Calc Int	569.8	154800	0.00000	0.999941

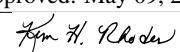
Sequence No.: 6
 Sample ID: ICV 2nd Vendor
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 11
 ame Collected: 5/8/2012 9:14:08 AM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: ICV 2nd Vendor
 Analyte Back Pressure Flow
 All 152.0 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	2278962.6				29776.63	1.31%
YRADIAL	304127.0				2940.19	0.97%
Ga 417.206	1387164.6				13187.50	0.95%
GaRADIAL	91994.2				134.24	0.15%
Ag 328.068†	119372.2	0.384 mg/L	0.0071	0.384 mg/L	0.0071	1.86%
QC value within limits for Ag		328.068	Recovery = 95.90%			
Al 396.153†	74038.5	9.86 mg/L	0.009	9.86 mg/L	0.009	0.10%
QC value within limits for Al		396.153	Recovery = 98.63%			
As 188.979†	1095.7	0.385 mg/L	0.0023	0.385 mg/L	0.0023	0.59%
QC value within limits for As		188.979	Recovery = 96.14%			
Ba 233.527†	155898.2	0.992 mg/L	0.0117	0.992 mg/L	0.0117	1.18%
QC value within limits for Ba		233.527	Recovery = 99.19%			
Be 234.861†	62082.8	0.0487 mg/L	0.00070	0.0487 mg/L	0.00070	1.44%
QC value within limits for Be		234.861	Recovery = 97.48%			
B 249.677†	42064.4	0.492 mg/L	0.0112	0.492 mg/L	0.0112	2.27%
QC value within limits for B		249.677	Recovery = 98.44%			
Ca 227.546†	4440.3	9.94 mg/L	0.119	9.94 mg/L	0.119	1.20%
QC value within limits for Ca		227.546	Recovery = 99.45%			
Cd 228.802†	2710.8	0.0476 mg/L	0.00133	0.0476 mg/L	0.00133	2.81%
QC value within limits for Cd		228.802	Recovery = 95.14%			
Co 228.616†	7659.4	0.197 mg/L	0.0029	0.197 mg/L	0.0029	1.45%
QC value within limits for Co		228.616	Recovery = 98.40%			
Cr 267.716†	54459.5	0.498 mg/L	0.0044	0.498 mg/L	0.0044	0.89%
QC value within limits for Cr		267.716	Recovery = 99.57%			
Cu 327.393†	132110.2	0.493 mg/L	0.0096	0.493 mg/L	0.0096	1.95%
QC value within limits for Cu		327.393	Recovery = 98.51%			
Fe 239.562†	63467.0	3.97 mg/L	0.007	3.97 mg/L	0.007	0.18%
QC value within limits for Fe		239.562	Recovery = 99.37%			
Mg 279.077†	35127.4	9.88 mg/L	0.026	9.88 mg/L	0.026	0.26%
QC value within limits for Mg		279.077	Recovery = 98.84%			
Mn 257.610†	417572.2	0.495 mg/L	0.0063	0.495 mg/L	0.0063	1.27%
QC value within limits for Mn		257.610	Recovery = 98.94%			
Mo 202.031†	36561.4	0.986 mg/L	0.0111	0.986 mg/L	0.0111	1.13%
QC value within limits for Mo		202.031	Recovery = 98.60%			
Ni 231.604†	35200.1	0.515 mg/L	0.0075	0.515 mg/L	0.0075	1.46%
QC value within limits for Ni		231.604	Recovery = 103.07%			
Pb 220.353†	5499.8	0.495 mg/L	0.0050	0.495 mg/L	0.0050	1.01%
QC value within limits for Pb		220.353	Recovery = 99.05%			
Sb 206.836†	4943.3	1.19 mg/L	0.016	1.19 mg/L	0.016	1.32%
QC value within limits for Sb		206.836	Recovery = 99.23%			
Se 196.026†	703.6	0.395 mg/L	0.0082	0.395 mg/L	0.0082	2.07%
QC value within limits for Se		196.026	Recovery = 98.87%			
Si 251.611†	203786.5	4.87 mg/L	0.050	4.87 mg/L	0.050	1.04%
QC value within limits for Si		251.611	Recovery = 97.31%			
Sn 189.927†	10655.1	1.02 mg/L	0.015	1.02 mg/L	0.015	1.43%
QC value within limits for Sn		189.927	Recovery = 101.84%			

Approved: May 09, 2012


Ti 334.940†	998801.9	0.995 mg/L	0.0058	0.995 mg/L	0.0058	0.58%
QC value within limits for Ti 334.940 Recovery = 99.48%						
Tl 190.801†	1959.9	0.517 mg/L	0.0028	0.517 mg/L	0.0028	0.55%
QC value within limits for Tl 190.801 Recovery = 103.40%						
V 290.880†	188690.3	0.970 mg/L	0.0031	0.970 mg/L	0.0031	0.32%
QC value within limits for V 290.880 Recovery = 96.97%						
Zn 206.200†	41822.7	0.996 mg/L	0.0108	0.996 mg/L	0.0108	1.08%
QC value within limits for Zn 206.200 Recovery = 99.58%						
K 766.490†	161804.4	48.7 mg/L	0.04	48.7 mg/L	0.04	0.09%
QC value within limits for K 766.490 Recovery = 97.37%						
Na 589.592†	969386.7	48.9 mg/L	0.49	48.9 mg/L	0.49	1.01%
QC value within limits for Na 589.592 Recovery = 97.78%						
Sr 407.771†	2708767.0	1.01 mg/L	0.020	1.01 mg/L	0.020	1.98%
QC value within limits for Sr 407.771 Recovery = 101.03%						
Li 670.784†	154783.4	0.996 mg/L	0.0099	0.996 mg/L	0.0099	0.99%
QC value within limits for Li 670.784 Recovery = 99.60%						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Sampler Location: 1

Time Collected: 5/8/2012 9:20:08 AM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	152.0 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	2338127.6				6092.32	0.26%
YRADIAL	306324.6				7645.21	2.50%
Ga 417.206	1396204.5				36870.25	2.64%
GaRADIAL	92622.1				796.64	0.86%
Ag 328.068†	3.4	-0.00019 mg/L	0.000147	-0.00019 mg/L	0.000147	78.02%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	-1.1	-0.0330 mg/L	0.00228	-0.0330 mg/L	0.00228	6.92%
QC value within limits for Al 396.153 Recovery = Not calculated						
As 188.979†	1.7	0.00061 mg/L	0.002013	0.00061 mg/L	0.002013	331.14%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	4.4	-0.00323 mg/L	0.000137	-0.00323 mg/L	0.000137	4.26%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 234.861†	28.3	0.00011 mg/L	0.000020	0.00011 mg/L	0.000020	17.72%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	555.1	0.00815 mg/L	0.000386	0.00815 mg/L	0.000386	4.73%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	-3.5	0.0405 mg/L	0.03618	0.0405 mg/L	0.03618	89.24%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	2.1	0.00023 mg/L	0.000137	0.00023 mg/L	0.000137	60.27%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	-2.0	-0.00076 mg/L	0.000244	-0.00076 mg/L	0.000244	31.94%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	0.8	-0.00199 mg/L	0.000146	-0.00199 mg/L	0.000146	7.35%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	11.2	-0.00041 mg/L	0.000135	-0.00041 mg/L	0.000135	33.36%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	11.0	-0.00967 mg/L	0.000201	-0.00967 mg/L	0.000201	2.08%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	-6.6	-0.0268 mg/L	0.00220	-0.0268 mg/L	0.00220	8.20%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	15.7	-0.00290 mg/L	0.000002	-0.00290 mg/L	0.000002	0.08%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	14.7	-0.00171 mg/L	0.000293	-0.00171 mg/L	0.000293	17.14%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	0.3	-0.00202 mg/L	0.000299	-0.00202 mg/L	0.000299	14.78%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-12.5	-0.00234 mg/L	0.001785	-0.00234 mg/L	0.001785	76.32%
QC value within limits for Pb 220.353 Recovery = Not calculated						

Approved: May 09, 2012

John H. Rhodes

Sb 206.836†	-6.8	-0.00057 mg/L	0.000990	-0.00057 mg/L	0.000990	172.79%
QC value within limits for Sb 206.836		Recovery = Not calculated				
Se 196.026†	-3.0	0.00139 mg/L	0.000947	0.00139 mg/L	0.000947	68.27%
QC value within limits for Se 196.026		Recovery = Not calculated				
Si 251.611†	27.2	-0.00562 mg/L	0.000653	-0.00562 mg/L	0.000653	11.61%
QC value within limits for Si 251.611		Recovery = Not calculated				
Sn 189.927†	27.0	-0.00086 mg/L	0.000105	-0.00086 mg/L	0.000105	12.24%
QC value within limits for Sn 189.927		Recovery = Not calculated				
Ti 334.940†	162.5	-0.00163 mg/L	0.000186	-0.00163 mg/L	0.000186	11.43%
QC value within limits for Ti 334.940		Recovery = Not calculated				
Tl 190.801†	-6.1	-0.00370 mg/L	0.002120	-0.00370 mg/L	0.002120	57.26%
QC value within limits for Tl 190.801		Recovery = Not calculated				
V 290.880†	637.3	-0.00181 mg/L	0.002274	-0.00181 mg/L	0.002274	125.38%
QC value within limits for V 290.880		Recovery = Not calculated				
Zn 206.200†	-3.8	-0.00221 mg/L	0.000048	-0.00221 mg/L	0.000048	2.20%
QC value within limits for Zn 206.200		Recovery = Not calculated				
K 766.490†	68.8	-0.0215 mg/L	0.01843	-0.0215 mg/L	0.01843	85.90%
QC value within limits for K 766.490		Recovery = Not calculated				
Na 589.592†	-197.3	0.0128 mg/L	0.01000	0.0128 mg/L	0.01000	78.22%
QC value within limits for Na 589.592		Recovery = Not calculated				
Sr 407.771†	22.5	-0.00596 mg/L	0.000052	-0.00596 mg/L	0.000052	0.87%
QC value within limits for Sr 407.771		Recovery = Not calculated				
Li 670.784†	1.7	-0.00367 mg/L	0.000077	-0.00367 mg/L	0.000077	2.10%
QC value within limits for Li 670.784		Recovery = Not calculated				

All analyte(s) passed QC.

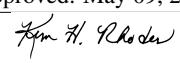
Sequence No.: 8
 Sample ID: LLICV
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 14
 a&e Collected: 5/8/2012 9:27:01 AM
 a&a Type: Original
 n&tial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: LLICV
 Analyte Back Pressure Flow
 All 151.0 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	5734563.6				333258.49	5.81%
YRADIAL	657217.4				57685.49	8.78%
Ga 417.206	2734238.6				157171.49	5.75%
GaRADIAL	192742.7				19726.31	10.23%
Ag 328.068†	164.2	0.00021 mg/L	0.000050	0.00021 mg/L	0.000050	23.77%
Al 396.153†	-16.7	-0.0351 mg/L	0.00073	-0.0351 mg/L	0.00073	2.07%
As 188.979†	4.6	0.00165 mg/L	0.000774	0.00165 mg/L	0.000774	47.03%
Ba 233.527†	60.0	-0.00285 mg/L	0.000096	-0.00285 mg/L	0.000096	3.37%
Be 234.861†	438.0	0.00044 mg/L	0.000068	0.00044 mg/L	0.000068	15.43%
B 249.677†	125.5	0.00311 mg/L	0.000144	0.00311 mg/L	0.000144	4.63%
Ca 227.546†	7.4	0.0644 mg/L	0.00593	0.0644 mg/L	0.00593	9.22%
Cd 228.802†	-24.3	-0.00025 mg/L	0.000038	-0.00025 mg/L	0.000038	15.42%
Co 228.616†	0.1	-0.00071 mg/L	0.000125	-0.00071 mg/L	0.000125	17.54%
Cr 267.716†	-92.2	-0.00287 mg/L	0.000073	-0.00287 mg/L	0.000073	2.55%
Cu 327.393†	489.1	0.00135 mg/L	0.000379	0.00135 mg/L	0.000379	28.16%
Fe 239.562†	-46.5	-0.0133 mg/L	0.00036	-0.0133 mg/L	0.00036	2.70%
Mg 279.077†	-21.3	-0.0310 mg/L	0.00126	-0.0310 mg/L	0.00126	4.07%
Mn 257.610†	-190.4	-0.00315 mg/L	0.000015	-0.00315 mg/L	0.000015	0.46%
Mo 202.031†	-25.4	-0.00282 mg/L	0.000062	-0.00282 mg/L	0.000062	2.20%
Ni 231.604†	67.1	-0.00104 mg/L	0.000239	-0.00104 mg/L	0.000239	22.94%
Pb 220.353†	44.4	0.00277 mg/L	0.000290	0.00277 mg/L	0.000290	10.47%
Sb 206.836†	6.6	0.00262 mg/L	0.000757	0.00262 mg/L	0.000757	28.93%
Se 196.026†	-1.7	0.00214 mg/L	0.002418	0.00214 mg/L	0.002418	113.20%
Si 251.611†	-260.2	-0.0125 mg/L	0.00053	-0.0125 mg/L	0.00053	4.23%
Sn 189.927†	-65.0	-0.00968 mg/L	0.000870	-0.00968 mg/L	0.000870	8.99%
Ti 334.940†	-82.4	-0.00187 mg/L	0.000017	-0.00187 mg/L	0.000017	0.88%
Tl 190.801†	22.9	0.00361 mg/L	0.001793	0.00361 mg/L	0.001793	49.65%
V 290.880†	-10104.2	-0.0574 mg/L	0.00214	-0.0574 mg/L	0.00214	3.74%
Zn 206.200†	-44.3	-0.00318 mg/L	0.000012	-0.00318 mg/L	0.000012	0.37%
K 766.490†	106.9	-0.0101 mg/L	0.01224	-0.0101 mg/L	0.01224	120.83%

Approved: May 09, 2012


Na 589.592† -1082.1 -0.0298 mg/L 0.00301 -0.0298 mg/L 0.00301 10.11%
Sr 407.771† -259.2 -0.00606 mg/L 0.000011 -0.00606 mg/L 0.000011 0.18%
Li 670.784† -32.6 -0.00389 mg/L 0.000234 -0.00389 mg/L 0.000234 6.02%
User canceled analysis.

Analysis Begun

Start Time: 5/8/2012 9:34:44 AM IASMA On Time: 5/8/2012 6:43:32 AM
Logged In Analyst: peicp2 eTechnique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
Batch ID:
Results Data Set: 050812H
Results Library: C:\pe\peicp2\Results\Results.mdb

Sequence No.: 8 uosampler Location: 14
Sample ID: LLICV ame Collected: 5/8/2012 9:34:45 AM
Analyst: KHR ana Type: Original
Initial Sample Wt: nitial Sample Vol:
Dilution: ample Prep Vol:

Nebulizer Parameters: LLICV
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: LLICV

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 9 uosampler Location: 15
Sample ID: LLICV ame Collected: 5/8/2012 9:41:40 AM
Analyst: KHR ana Type: Original
Initial Sample Wt: nitial Sample Vol:

Approved: May 09, 2012
[Signature]

Dilution: sample Prep Vol:

Nebulizer Parameters: LLICV

Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2322377.8					25713.69	1.11%
YRADIAL	312115.3					2204.41	0.71%
Ga 417.206	1437315.7					1948.98	0.14%
GaRADIAL	93083.8					1935.24	2.08%
Ag 328.068†	2489.2	0.00780 mg/L		0.000300	0.00780 mg/L	0.000300	3.85%
Al 396.153†	1512.6	0.169 mg/L		0.0010	0.169 mg/L	0.0010	0.61%
As 188.979†	18.6	0.00651 mg/L		0.000872	0.00651 mg/L	0.000872	13.40%
Ba 233.527†	3271.7	0.0176 mg/L		0.00007	0.0176 mg/L	0.00007	0.40%
Be 234.861†	1247.4	0.00107 mg/L		0.000044	0.00107 mg/L	0.000044	4.07%
B 249.677†	1058.3	0.0140 mg/L		0.00038	0.0140 mg/L	0.00038	2.73%
Ca 227.546†	82.1	0.232 mg/L		0.0105	0.232 mg/L	0.0105	4.52%
Cd 228.802†	52.0	0.00111 mg/L		0.000107	0.00111 mg/L	0.000107	9.65%
Co 228.616†	158.4	0.00337 mg/L		0.000144	0.00337 mg/L	0.000144	4.27%
Cr 267.716†	1128.6	0.00837 mg/L		0.000042	0.00837 mg/L	0.000042	0.50%
Cu 327.393†	2726.7	0.00973 mg/L		0.000336	0.00973 mg/L	0.000336	3.46%
Fe 239.562†	1255.6	0.0685 mg/L		0.00033	0.0685 mg/L	0.00033	0.48%
Mg 279.077†	711.6	0.176 mg/L		0.0020	0.176 mg/L	0.0020	1.12%
Mn 257.610†	8705.5	0.00746 mg/L		0.000106	0.00746 mg/L	0.000106	1.43%
Mo 202.031†	760.4	0.0184 mg/L		0.00016	0.0184 mg/L	0.00016	0.85%
Ni 231.604†	722.1	0.00859 mg/L		0.000017	0.00859 mg/L	0.000017	0.19%
Pb 220.353†	105.3	0.00829 mg/L		0.001279	0.00829 mg/L	0.001279	15.43%
Sb 206.836†	92.4	0.0233 mg/L		0.00112	0.0233 mg/L	0.00112	4.79%
Se 196.026†	12.6	0.0101 mg/L		0.00190	0.0101 mg/L	0.00190	18.80%
Si 251.611†	4153.7	0.0930 mg/L		0.00094	0.0930 mg/L	0.00094	1.01%
Sn 189.927†	218.1	0.0175 mg/L		0.00087	0.0175 mg/L	0.00087	4.97%
Ti 334.940†	20140.3	0.0183 mg/L		0.00025	0.0183 mg/L	0.00025	1.39%
Tl 190.801†	34.1	0.00694 mg/L		0.001795	0.00694 mg/L	0.001795	25.88%
V 290.880†	4399.1	0.0176 mg/L		0.00177	0.0176 mg/L	0.00177	10.05%
Zn 206.200†	965.9	0.0209 mg/L		0.00024	0.0209 mg/L	0.00024	1.15%
K 766.490†	3532.9	1.01 mg/L		0.005	1.01 mg/L	0.005	0.46%
Na 589.592†	19572.2	0.965 mg/L		0.0297	0.965 mg/L	0.0297	3.08%
Sr 407.771†	54446.8	0.0145 mg/L		0.00026	0.0145 mg/L	0.00026	1.83%
Li 670.784†	3323.0	0.0178 mg/L		0.00053	0.0178 mg/L	0.00053	2.99%

Sequence No.: 10
 Sample ID: ICSA
 Analyst:
 Initial Sample Wt:
 Dilution:

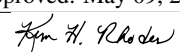
autosampler Location: 12
 Date Collected: 5/8/2012 9:48:35 AM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2154479.3					17834.27	0.83%
YRADIAL	301702.3					4337.51	1.44%
Ga 417.206	1350628.6					30801.05	2.28%
GaRADIAL	91862.3					1031.36	1.12%
Ag 328.068†	-12734.7	-0.00048 mg/L		0.000546	-0.00048 mg/L	0.000546	114.75%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153†	1807304.7	243 mg/L		2.8	243 mg/L	2.8	1.14%
QC value within limits for Al 396.153 Recovery = 97.27%							
As 188.979†	-21.0	-0.00148 mg/L		0.002505	-0.00148 mg/L	0.002505	169.52%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	759.8	-0.00068 mg/L		0.000171	-0.00068 mg/L	0.000171	24.93%

Approved: May 09, 2012


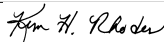
Be	234.861†	24348.5	-0.00092 mg/L	0.000550	-0.00092 mg/L	0.000550	60.07%
B	249.677†	3937.1	0.00882 mg/L	0.001527	0.00882 mg/L	0.001527	17.32%
Ca	227.546†	116967.6	250 mg/L	8.1	250 mg/L	8.1	3.23%
Cd	228.802†	1.3	0.00008 mg/L	0.000186	0.00008 mg/L	0.000186	223.24%
Co	228.616†	26.1	-0.00234 mg/L	0.000248	-0.00234 mg/L	0.000248	10.62%
Cr	267.716†	85.5	-0.00261 mg/L	0.000195	-0.00261 mg/L	0.000195	7.46%
Cu	327.393†	-1290.0	0.00237 mg/L	0.000286	0.00237 mg/L	0.000286	12.03%
Fe	239.562†	1447005.9	90.9 mg/L	2.29	90.9 mg/L	2.29	2.52%
Mg	279.077†	866423.1	244 mg/L	5.6	244 mg/L	5.6	2.30%
Mn	257.610†	-2367.1	-0.00319 mg/L	0.000379	-0.00319 mg/L	0.000379	11.91%
Mo	202.031†	-55.8	0.00085 mg/L	0.000614	0.00085 mg/L	0.000614	72.60%
Ni	231.604†	50.9	-0.00127 mg/L	0.000329	-0.00127 mg/L	0.000329	25.85%
Pb	220.353†	-384.3	-0.00157 mg/L	0.002690	-0.00157 mg/L	0.002690	171.49%
Sb	206.836†	-29.8	-0.00278 mg/L	0.000981	-0.00278 mg/L	0.000981	35.24%
Se	196.026†	-55.1	-0.00342 mg/L	0.001411	-0.00342 mg/L	0.001411	41.31%
Si	251.611†	-415.0	-0.0162 mg/L	0.00031	-0.0162 mg/L	0.00031	1.90%
Sn	189.927†	-363.3	-0.0383 mg/L	0.00104	-0.0383 mg/L	0.00104	2.71%
Ti	334.940†	-39686.4	-0.00410 mg/L	0.003721	-0.00410 mg/L	0.003721	90.68%
Tl	190.801†	-47.1	-0.00812 mg/L	0.004836	-0.00812 mg/L	0.004836	59.54%
V	290.880†	4422.0	-0.00294 mg/L	0.003783	-0.00294 mg/L	0.003783	128.74%
Zn	206.200†	221.3	0.00142 mg/L	0.000463	0.00142 mg/L	0.000463	32.70%
K	766.490†	-64.9	-0.0611 mg/L	0.01901	-0.0611 mg/L	0.01901	31.10%
Na	589.592†	307.7	0.0371 mg/L	0.01064	0.0371 mg/L	0.01064	28.70%
Sr	407.771†	2745.3	-0.0104 mg/L	0.00023	-0.0104 mg/L	0.00023	2.18%
Li	670.784†	293.6	-0.00178 mg/L	0.000327	-0.00178 mg/L	0.000327	18.33%
QC Failed. Continue with analysis.							

Sequence No.: 11 u&osampler Location: 13
Sample ID: ICSAB a&e Collected: 5/8/2012 9:54:31 AM
Analyst: a&a Type: Original
Initial Sample Wt: n&i&tial Sample Vol:
Dilution: a&mple Prep Vol:

Nebulizer Parameters: ICSAB
Analyte Back Pressure Flow
All 153.0 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	2148087.3				31061.54	1.45%
YRADIAL	306061.8				3097.57	1.01%
Ga 417.206	1356956.2				33219.28	2.45%

Approved: May 09, 2012


GarADIAL	93038.9					413.06	0.44%
Ag 328.068†	140474.6	0.489 mg/L	0.0160	0.489 mg/L		0.0160	3.27%
QC value within limits for Ag	328.068	Recovery = 97.77%					
Al 396.153†	1854239.1	249 mg/L	2.5	249 mg/L		2.5	0.99%
QC value within limits for Al	396.153	Recovery = 99.80%					
As 188.979†	624.9	0.228 mg/L	0.0049	0.228 mg/L		0.0049	2.15%
QC value within limits for As	188.979	Recovery = 91.30%					
Ba 233.527†	38670.0	0.241 mg/L	0.0008	0.241 mg/L		0.0008	0.32%
QC value within limits for Ba	233.527	Recovery = 96.46%					
Be 234.861†	325869.9	0.237 mg/L	0.0081	0.237 mg/L		0.0081	3.40%
QC value within limits for Be	234.861	Recovery = 94.88%					
B 249.677†	4338.2	0.00139 mg/L	0.002443	0.00139 mg/L		0.002443	175.30%
QC value within limits for B	249.677	Recovery = Not calculated					
Ca 227.546†	119036.7	255 mg/L	7.0	255 mg/L		7.0	2.75%
QC value within limits for Ca	227.546	Recovery = 102.10%					
Cd 228.802†	22357.6	0.401 mg/L	0.0113	0.401 mg/L		0.0113	2.81%
QC value within limits for Cd	228.802	Recovery = 80.30%					
Co 228.616†	8866.3	0.226 mg/L	0.0039	0.226 mg/L		0.0039	1.71%
QC value within limits for Co	228.616	Recovery = 90.58%					
Cr 267.716†	26761.0	0.242 mg/L	0.0023	0.242 mg/L		0.0023	0.93%
QC value within limits for Cr	267.716	Recovery = 96.85%					
Cu 327.393†	63483.3	0.243 mg/L	0.0062	0.243 mg/L		0.0062	2.56%
QC value within limits for Cu	327.393	Recovery = 97.37%					
Fe 239.562†	1474351.3	92.6 mg/L	0.38	92.6 mg/L		0.38	0.41%
QC value within limits for Fe	239.562	Recovery = 92.57%					
Mg 279.077†	883480.1	249 mg/L	0.9	249 mg/L		0.9	0.36%
QC value within limits for Mg	279.077	Recovery = 99.50%					
Mn 257.610†	196850.3	0.234 mg/L	0.0016	0.234 mg/L		0.0016	0.68%
QC value within limits for Mn	257.610	Recovery = 93.63%					
Mo 202.031†	-72.4	0.00065 mg/L	0.000486	0.00065 mg/L		0.000486	75.01%
QC value within limits for Mo	202.031	Recovery = Not calculated					
Ni 231.604†	31716.0	0.464 mg/L	0.0060	0.464 mg/L		0.0060	1.29%
QC value within limits for Ni	231.604	Recovery = 92.81%					
Pb 220.353†	4825.5	0.468 mg/L	0.0061	0.468 mg/L		0.0061	1.31%
QC value within limits for Pb	220.353	Recovery = 93.61%					
Sb 206.836†	1956.8	0.474 mg/L	0.0168	0.474 mg/L		0.0168	3.54%
QC value within limits for Sb	206.836	Recovery = 94.87%					
Se 196.026†	369.0	0.233 mg/L	0.0068	0.233 mg/L		0.0068	2.91%
QC value within limits for Se	196.026	Recovery = 93.14%					
Si 251.611†	-280.8	-0.0130 mg/L	0.00042	-0.0130 mg/L		0.00042	3.23%
QC value within limits for Si	251.611	Recovery = Not calculated					
Sn 189.927†	-371.0	-0.0390 mg/L	0.00133	-0.0390 mg/L		0.00133	3.41%
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	-40300.7	-0.00413 mg/L	0.003431	-0.00413 mg/L		0.003431	83.08%
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	1803.4	0.469 mg/L	0.0082	0.469 mg/L		0.0082	1.74%
QC value within limits for Tl	190.801	Recovery = 93.78%					
V 290.880†	51060.3	0.238 mg/L	0.0031	0.238 mg/L		0.0031	1.29%
QC value within limits for V	290.880	Recovery = 95.13%					
Zn 206.200†	19279.7	0.456 mg/L	0.0054	0.456 mg/L		0.0054	1.18%
QC value within limits for Zn	206.200	Recovery = 91.27%					
K 766.490†	15907.4	4.68 mg/L	0.046	4.68 mg/L		0.046	0.99%
QC value within limits for K	766.490	Recovery = 93.55%					
Na 589.592†	97609.7	4.74 mg/L	0.040	4.74 mg/L		0.040	0.84%
QC value within limits for Na	589.592	Recovery = 94.78%					
Sr 407.771†	2723.3	-0.0105 mg/L	0.00016	-0.0105 mg/L		0.00016	1.48%
QC value less than the lower limit for Sr	407.771	Recovery = Not calculated					
Li 670.784†	269.0	-0.00194 mg/L	0.000418	-0.00194 mg/L		0.000418	21.49%
QC value within limits for Li	670.784	Recovery = Not calculated					
QC Failed. Continue with analysis.							

Sequence No.: 12
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 6
 a&e Collected: 5/8/2012 10:00:27 AM
 a&a Type: Original
 nitial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Approved: May 09, 2012

John H. Rhodes

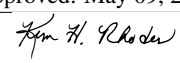
 Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2249884.0				36979.83	1.64%
YRADIAL	311110.3				3408.06	1.10%
Ga 417.206	1340089.5				39666.13	2.96%
GaRADIAL	92270.0				590.58	0.64%
Ag 328.068†	127289.9	0.409 mg/L	0.0154	0.409 mg/L	0.0154	3.77%
QC value within limits for Ag		328.068	Recovery = 102.22%			
Al 396.153†	74424.0	9.91 mg/L	0.012	9.91 mg/L	0.012	0.12%
QC value within limits for Al		396.153	Recovery = 99.13%			
As 188.979†	1122.0	0.394 mg/L	0.0102	0.394 mg/L	0.0102	2.59%
QC value within limits for As		188.979	Recovery = 98.46%			
Ba 233.527†	157483.4	1.00 mg/L	0.016	1.00 mg/L	0.016	1.57%
QC value within limits for Ba		233.527	Recovery = 100.20%			
Be 234.861†	63433.8	0.0498 mg/L	0.00175	0.0498 mg/L	0.00175	3.51%
QC value within limits for Be		234.861	Recovery = 99.64%			
B 249.677†	42611.7	0.499 mg/L	0.0199	0.499 mg/L	0.0199	4.00%
QC value within limits for B		249.677	Recovery = 99.72%			
Ca 227.546†	4678.1	10.4 mg/L	0.33	10.4 mg/L	0.33	3.19%
QC value within limits for Ca		227.546	Recovery = 104.40%			
Cd 228.802†	2788.6	0.0489 mg/L	0.00232	0.0489 mg/L	0.00232	4.75%
QC value within limits for Cd		228.802	Recovery = 97.85%			
Co 228.616†	7722.4	0.198 mg/L	0.0036	0.198 mg/L	0.0036	1.81%
QC value within limits for Co		228.616	Recovery = 99.23%			
Cr 267.716†	55004.3	0.503 mg/L	0.0056	0.503 mg/L	0.0056	1.11%
QC value within limits for Cr		267.716	Recovery = 100.57%			
Cu 327.393†	137125.8	0.511 mg/L	0.0199	0.511 mg/L	0.0199	3.90%
QC value within limits for Cu		327.393	Recovery = 102.25%			
Fe 239.562†	63281.1	3.96 mg/L	0.003	3.96 mg/L	0.003	0.08%
QC value within limits for Fe		239.562	Recovery = 99.07%			
Mg 279.077†	34986.6	9.84 mg/L	0.050	9.84 mg/L	0.050	0.50%
QC value within limits for Mg		279.077	Recovery = 98.44%			
Mn 257.610†	430006.9	0.510 mg/L	0.0103	0.510 mg/L	0.0103	2.02%
QC value within limits for Mn		257.610	Recovery = 101.90%			
Mo 202.031†	37082.6	1.00 mg/L	0.018	1.00 mg/L	0.018	1.75%
QC value within limits for Mo		202.031	Recovery = 100.02%			
Ni 231.604†	34513.0	0.505 mg/L	0.0094	0.505 mg/L	0.0094	1.87%
QC value within limits for Ni		231.604	Recovery = 101.05%			
Pb 220.353†	5579.6	0.502 mg/L	0.0077	0.502 mg/L	0.0077	1.53%
QC value within limits for Pb		220.353	Recovery = 100.48%			
Sb 206.836†	5040.9	1.21 mg/L	0.041	1.21 mg/L	0.041	3.37%
QC value within limits for Sb		206.836	Recovery = 101.19%			
Se 196.026†	721.4	0.405 mg/L	0.0161	0.405 mg/L	0.0161	3.98%
QC value within limits for Se		196.026	Recovery = 101.34%			
Si 251.611†	212325.1	5.07 mg/L	0.158	5.07 mg/L	0.158	3.11%
QC value within limits for Si		251.611	Recovery = 101.40%			
Sn 189.927†	10281.3	0.983 mg/L	0.0162	0.983 mg/L	0.0162	1.65%
QC value within limits for Sn		189.927	Recovery = 98.25%			
Ti 334.940†	998005.3	0.994 mg/L	0.0039	0.994 mg/L	0.0039	0.39%
QC value within limits for Ti		334.940	Recovery = 99.41%			
Tl 190.801†	1967.9	0.519 mg/L	0.0046	0.519 mg/L	0.0046	0.89%
QC value within limits for Tl		190.801	Recovery = 103.83%			
V 290.880†	197075.9	1.01 mg/L	0.009	1.01 mg/L	0.009	0.88%
QC value within limits for V		290.880	Recovery = 101.30%			
Zn 206.200†	42204.4	1.00 mg/L	0.015	1.00 mg/L	0.015	1.45%
QC value within limits for Zn		206.200	Recovery = 100.50%			
K 766.490†	161674.5	48.6 mg/L	0.48	48.6 mg/L	0.48	0.99%
QC value within limits for K		766.490	Recovery = 97.29%			
Na 589.592†	969977.5	48.9 mg/L	0.46	48.9 mg/L	0.46	0.93%
QC value within limits for Na		589.592	Recovery = 97.84%			
Sr 407.771†	2652961.4	0.989 mg/L	0.0180	0.989 mg/L	0.0180	1.82%
QC value within limits for Sr		407.771	Recovery = 98.94%			
Li 670.784†	159701.8	1.03 mg/L	0.009	1.03 mg/L	0.009	0.88%
QC value within limits for Li		670.784	Recovery = 102.78%			

All analyte(s) passed QC.

Sequence No.: 13
 Sample ID: CCB

u&osampler Location: 1
 a&e Collected: 5/8/2012 10:06:28 AM

Approved: May 09, 2012


Analyst:
Initial Sample Wt:
Dilution:

ama Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
All 153.0 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	2320447.3				14623.29	0.63%
YRADIAL	306081.3				1552.90	0.51%
Ga 417.206	1389322.2				2456.05	0.18%
GaRADIAL	91757.8				2049.91	2.23%
Ag 328.068†	88.8	0.00009 mg/L	0.000248	0.00009 mg/L	0.000248	291.74%
QC value within limits for Ag	328.068	Recovery =	Not calculated			
Al 396.153†	2.8	-0.0325 mg/L	0.00179	-0.0325 mg/L	0.00179	5.50%
QC value within limits for Al	396.153	Recovery =	Not calculated			
As 188.979†	-4.4	-0.00157 mg/L	0.001227	-0.00157 mg/L	0.001227	78.17%
QC value within limits for As	188.979	Recovery =	Not calculated			
Ba 233.527†	16.4	-0.00315 mg/L	0.000109	-0.00315 mg/L	0.000109	3.46%
QC value within limits for Ba	233.527	Recovery =	Not calculated			
Be 234.861†	23.0	0.00011 mg/L	0.000035	0.00011 mg/L	0.000035	31.94%
QC value within limits for Be	234.861	Recovery =	Not calculated			
B 249.677†	271.5	0.00481 mg/L	0.000094	0.00481 mg/L	0.000094	1.96%
QC value within limits for B	249.677	Recovery =	Not calculated			
Ca 227.546†	-9.2	0.0286 mg/L	0.02903	0.0286 mg/L	0.02903	101.48%
QC value within limits for Ca	227.546	Recovery =	Not calculated			
Cd 228.802†	2.6	0.00025 mg/L	0.000172	0.00025 mg/L	0.000172	69.40%
QC value within limits for Cd	228.802	Recovery =	Not calculated			
Co 228.616†	5.3	-0.00058 mg/L	0.000220	-0.00058 mg/L	0.000220	38.13%
QC value within limits for Co	228.616	Recovery =	Not calculated			
Cr 267.716†	0.5	-0.00199 mg/L	0.000157	-0.00199 mg/L	0.000157	7.92%
QC value within limits for Cr	267.716	Recovery =	Not calculated			
Cu 327.393†	61.8	-0.00022 mg/L	0.000318	-0.00022 mg/L	0.000318	145.99%
QC value within limits for Cu	327.393	Recovery =	Not calculated			
Fe 239.562†	65.3	-0.00625 mg/L	0.000606	-0.00625 mg/L	0.000606	9.68%
QC value within limits for Fe	239.562	Recovery =	Not calculated			
Mg 279.077†	35.7	-0.0149 mg/L	0.00142	-0.0149 mg/L	0.00142	9.54%
QC value within limits for Mg	279.077	Recovery =	Not calculated			
Mn 257.610†	13.6	-0.00290 mg/L	0.000012	-0.00290 mg/L	0.000012	0.41%
QC value within limits for Mn	257.610	Recovery =	Not calculated			
Mo 202.031†	11.0	-0.00181 mg/L	0.000038	-0.00181 mg/L	0.000038	2.11%
QC value within limits for Mo	202.031	Recovery =	Not calculated			
Ni 231.604†	-0.5	-0.00203 mg/L	0.000232	-0.00203 mg/L	0.000232	11.40%
QC value within limits for Ni	231.604	Recovery =	Not calculated			
Pb 220.353†	-17.8	-0.00282 mg/L	0.000792	-0.00282 mg/L	0.000792	28.05%
QC value within limits for Pb	220.353	Recovery =	Not calculated			
Sb 206.836†	0.5	0.00120 mg/L	0.000164	0.00120 mg/L	0.000164	13.65%
QC value within limits for Sb	206.836	Recovery =	Not calculated			
Se 196.026†	-0.3	0.00288 mg/L	0.002042	0.00288 mg/L	0.002042	70.80%
QC value within limits for Se	196.026	Recovery =	Not calculated			
Si 251.611†	-8.3	-0.00647 mg/L	0.000136	-0.00647 mg/L	0.000136	2.10%
QC value within limits for Si	251.611	Recovery =	Not calculated			
Sn 189.927†	13.7	-0.00213 mg/L	0.000526	-0.00213 mg/L	0.000526	24.69%
QC value within limits for Sn	189.927	Recovery =	Not calculated			
Ti 334.940†	84.3	-0.00171 mg/L	0.000087	-0.00171 mg/L	0.000087	5.08%
QC value within limits for Ti	334.940	Recovery =	Not calculated			
Tl 190.801†	-5.7	-0.00359 mg/L	0.001216	-0.00359 mg/L	0.001216	33.83%
QC value within limits for Tl	190.801	Recovery =	Not calculated			
V 290.880†	580.1	-0.00211 mg/L	0.000950	-0.00211 mg/L	0.000950	45.04%
QC value within limits for V	290.880	Recovery =	Not calculated			
Zn 206.200†	-4.8	-0.00223 mg/L	0.000152	-0.00223 mg/L	0.000152	6.83%
QC value within limits for Zn	206.200	Recovery =	Not calculated			
K 766.490†	50.1	-0.0270 mg/L	0.00385	-0.0270 mg/L	0.00385	14.25%
QC value within limits for K	766.490	Recovery =	Not calculated			
Na 589.592†	-61.8	0.0193 mg/L	0.01724	0.0193 mg/L	0.01724	89.36%
QC value within limits for Na	589.592	Recovery =	Not calculated			
Sr 407.771†	205.5	-0.00589 mg/L	0.000073	-0.00589 mg/L	0.000073	1.24%

Approved: May 09, 2012

Tom H. Rhodes

QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 74.1 -0.00320 mg/L 0.000219 -0.00320 mg/L 0.000219 6.85%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 14
Sample ID: PBW 2T WG396754-02
Analyst: KHR
Initial Sample Wt:
Dilution:
autosampler Location: 16
Date Collected: 5/8/2012 10:13:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: PBW 2T WG396754-02
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc. Units, Calib. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 15
Sample ID: LCSW 2T WG396754-03
Analyst: KHR
Initial Sample Wt:
Dilution:
autosampler Location: 17
Date Collected: 5/8/2012 10:20:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LCSW 2T WG396754-03
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc. Units, Calib. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Shows data for Y 371.029.

Approved: May 09, 2012
[Signature]

YRADIAL	313386.2					4313.62	1.38%
Ga 417.206	1408598.4					40880.76	2.90%
GarADIAL	93574.4					1086.77	1.16%
Ag 328.068†	63589.6	0.204 mg/L	0.0082	0.204 mg/L	0.0082	4.00%	
Al 396.153†	38417.7	5.10 mg/L	0.023	5.10 mg/L	0.023	0.44%	
As 188.979†	554.5	0.195 mg/L	0.0051	0.195 mg/L	0.0051	2.64%	
Ba 233.527†	80702.7	0.512 mg/L	0.0048	0.512 mg/L	0.0048	0.94%	
Be 234.861†	31573.2	0.0248 mg/L	0.00097	0.0248 mg/L	0.00097	3.89%	
B 249.677†	84711.6	0.995 mg/L	0.0396	0.995 mg/L	0.0396	3.98%	
Ca 227.546†	2254.2	5.07 mg/L	0.172	5.07 mg/L	0.172	3.39%	
Cd 228.802†	1376.1	0.0242 mg/L	0.00122	0.0242 mg/L	0.00122	5.03%	
Co 228.616†	3933.0	0.101 mg/L	0.0001	0.101 mg/L	0.0001	0.13%	
Cr 267.716†	28143.2	0.256 mg/L	0.0030	0.256 mg/L	0.0030	1.19%	
Cu 327.393†	68484.4	0.255 mg/L	0.0097	0.255 mg/L	0.0097	3.80%	
Fe 239.562†	32005.9	2.00 mg/L	0.009	2.00 mg/L	0.009	0.47%	
Mg 279.077†	18097.3	5.08 mg/L	0.066	5.08 mg/L	0.066	1.29%	
Mn 257.610†	217701.7	0.257 mg/L	0.0029	0.257 mg/L	0.0029	1.14%	
Mo 202.031†	19123.2	0.515 mg/L	0.0061	0.515 mg/L	0.0061	1.18%	
Ni 231.604†	17740.7	0.259 mg/L	0.0017	0.259 mg/L	0.0017	0.67%	
Pb 220.353†	2827.1	0.254 mg/L	0.0017	0.254 mg/L	0.0017	0.67%	
Sb 206.836†	2492.7	0.601 mg/L	0.0213	0.601 mg/L	0.0213	3.55%	
Se 196.026†	358.7	0.203 mg/L	0.0093	0.203 mg/L	0.0093	4.58%	
Si 251.611†	107983.6	2.58 mg/L	0.088	2.58 mg/L	0.088	3.42%	
Sn 189.927†	5708.7	0.544 mg/L	0.0014	0.544 mg/L	0.0014	0.25%	
Ti 334.940†	513312.5	0.510 mg/L	0.0016	0.510 mg/L	0.0016	0.31%	
Tl 190.801†	1024.0	0.269 mg/L	0.0023	0.269 mg/L	0.0023	0.87%	
V 290.880†	101148.2	0.517 mg/L	0.0046	0.517 mg/L	0.0046	0.89%	
Zn 206.200†	21859.1	0.519 mg/L	0.0073	0.519 mg/L	0.0073	1.41%	
K 766.490†	84436.0	25.2 mg/L	0.14	25.2 mg/L	0.14	0.56%	
Na 589.592†	511175.8	25.2 mg/L	0.52	25.2 mg/L	0.52	2.05%	
Sr 407.771†	1369994.4	0.508 mg/L	0.0144	0.508 mg/L	0.0144	2.84%	
Li 670.784†	84442.6	0.542 mg/L	0.0032	0.542 mg/L	0.0032	0.59%	

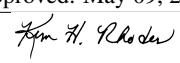
Sequence No.: 16
 Sample ID: L1205001101 WG396754-01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u\osampler Location: 18
 a\ne Collected: 5/8/2012 10:26:15 AM
 a\ne Type: Original
 n\itial Sample Vol:
 a\mple Prep Vol:

Nebulizer Parameters: L1205001101 WG396754-01
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205001101 WG396754-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	1983283.6				14272.80	0.72%
YRADIAL	299121.2				3929.79	1.31%
Ga 417.206	1380511.0				40014.98	2.90%
GarADIAL	93251.9				1097.35	1.18%
Ag 328.068†	988.3	0.00339 mg/L	0.000277	0.00339 mg/L	0.000277	8.18%
Al 396.153†	2037.5	0.241 mg/L	0.0032	0.241 mg/L	0.0032	1.33%
As 188.979†	-5.6	-0.00184 mg/L	0.002622	-0.00184 mg/L	0.002622	142.80%
Ba 233.527†	17346.9	0.107 mg/L	0.0003	0.107 mg/L	0.0003	0.30%
Be 234.861†	856.9	0.00045 mg/L	0.000048	0.00045 mg/L	0.000048	10.75%
B 249.677†	15313.8	0.181 mg/L	0.0067	0.181 mg/L	0.0067	3.69%
Ca 227.546†	128208.8	272 mg/L	11.2	272 mg/L	11.2	4.11%
Cd 228.802†	17.9	0.00052 mg/L	0.000162	0.00052 mg/L	0.000162	31.20%
Co 228.616†	20.5	-0.00017 mg/L	0.000599	-0.00017 mg/L	0.000599	353.01%
Cr 267.716†	209.1	-0.00001 mg/L	0.000076	-0.00001 mg/L	0.000076	598.58%
Cu 327.393†	-144.3	-0.00088 mg/L	0.000340	-0.00088 mg/L	0.000340	38.48%
Fe 239.562†	25565.2	1.59 mg/L	0.012	1.59 mg/L	0.012	0.78%
Mg 279.077†	157796.1	44.4 mg/L	0.41	44.4 mg/L	0.41	0.92%
Mn 257.610†	278290.9	0.328 mg/L	0.0012	0.328 mg/L	0.0012	0.35%
Mo 202.031†	116.9	0.00121 mg/L	0.000121	0.00121 mg/L	0.000121	10.04%
Ni 231.604†	177.1	0.00058 mg/L	0.000515	0.00058 mg/L	0.000515	88.37%
Pb 220.353†	-18.9	-0.00103 mg/L	0.001413	-0.00103 mg/L	0.001413	137.64%
Sb 206.836†	-4.7	0.00000 mg/L	0.000364	0.00000 mg/L	0.000364	>999.9%
Se 196.026†	-0.1	0.00336 mg/L	0.004142	0.00336 mg/L	0.004142	123.25%

Approved: May 09, 2012


Si 251.611†	352863.5	8.45 mg/L	0.267	8.45 mg/L	0.267	3.16%
Sn 189.927†	-408.7	-0.0426 mg/L	0.00122	-0.0426 mg/L	0.00122	2.86%
Ti 334.940†	-39527.4	-0.00037 mg/L	0.003837	-0.00037 mg/L	0.003837	>999.9%
Tl 190.801†	-36.9	-0.0124 mg/L	0.00086	-0.0124 mg/L	0.00086	6.96%
V 290.880†	5105.5	0.0199 mg/L	0.00129	0.0199 mg/L	0.00129	6.49%
Zn 206.200†	484.2	0.00937 mg/L	0.000268	0.00937 mg/L	0.000268	2.86%
K 766.490†	47235.1	14.0 mg/L	0.12	14.0 mg/L	0.12	0.88%
Na 589.592†	Saturated2					
Sr 407.771†	3629627.5	1.35 mg/L	0.018	1.35 mg/L	0.018	1.35%
Li 670.784†	4863.6	0.0277 mg/L	0.00044	0.0277 mg/L	0.00044	1.60%

Sequence No.: 17

Sample ID: L1205001101S WG396754-04
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 19

Time Collected: 5/8/2012 10:32:16 AM
 ana Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: L1205001101S WG396754-04

Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205001101S WG396754-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	1942287.9					29016.22	1.49%
YRADIAL	285350.2					1510.16	0.53%
Ga 417.206	1329498.0					18004.29	1.35%
GaRADIAL	90018.5					905.52	1.01%
Ag 328.068†	63356.0	0.204 mg/L	0.0056	0.204 mg/L	0.0056	2.72%	
Al 396.153†	40516.7	5.38 mg/L	0.034	5.38 mg/L	0.034	0.63%	
As 188.979†	535.3	0.188 mg/L	0.0014	0.188 mg/L	0.0014	0.76%	
Ba 233.527†	96142.4	0.610 mg/L	0.0040	0.610 mg/L	0.0040	0.66%	
Be 234.861†	31365.4	0.0243 mg/L	0.00060	0.0243 mg/L	0.00060	2.47%	
B 249.677†	97366.2	1.14 mg/L	0.034	1.14 mg/L	0.034	2.96%	
Ca 227.546†	137778.9	293 mg/L	8.4	293 mg/L	8.4	2.85%	
Cd 228.802†	1322.7	0.0233 mg/L	0.00088	0.0233 mg/L	0.00088	3.77%	
Co 228.616†	3728.1	0.0954 mg/L	0.00204	0.0954 mg/L	0.00204	2.13%	
Cr 267.716†	27429.8	0.250 mg/L	0.0012	0.250 mg/L	0.0012	0.50%	
Cu 327.393†	65769.2	0.245 mg/L	0.0064	0.245 mg/L	0.0064	2.61%	
Fe 239.562†	57949.8	3.63 mg/L	0.028	3.63 mg/L	0.028	0.77%	
Mg 279.077†	184532.5	52.0 mg/L	0.07	52.0 mg/L	0.07	0.13%	
Mn 257.610†	503644.4	0.597 mg/L	0.0069	0.597 mg/L	0.0069	1.15%	
Mo 202.031†	18726.8	0.504 mg/L	0.0083	0.504 mg/L	0.0083	1.65%	
Ni 231.604†	16876.7	0.246 mg/L	0.0038	0.246 mg/L	0.0038	1.54%	
Pb 220.353†	2627.3	0.238 mg/L	0.0043	0.238 mg/L	0.0043	1.80%	
Sb 206.836†	2362.6	0.570 mg/L	0.0112	0.570 mg/L	0.0112	1.96%	
Se 196.026†	340.4	0.193 mg/L	0.0014	0.193 mg/L	0.0014	0.74%	
Si 251.611†	503079.5	12.0 mg/L	0.17	12.0 mg/L	0.17	1.39%	
Sn 189.927†	4919.8	0.468 mg/L	0.0066	0.468 mg/L	0.0066	1.41%	
Ti 334.940†	468521.6	0.509 mg/L	0.0020	0.509 mg/L	0.0020	0.39%	
Tl 190.801†	674.8	0.178 mg/L	0.0015	0.178 mg/L	0.0015	0.85%	
V 290.880†	105092.3	0.536 mg/L	0.0016	0.536 mg/L	0.0016	0.30%	
Zn 206.200†	20759.5	0.493 mg/L	0.0033	0.493 mg/L	0.0033	0.67%	
K 766.490†	131653.1	39.5 mg/L	0.30	39.5 mg/L	0.30	0.75%	
Na 589.592†	Saturated2						
Sr 407.771†	5234941.9	1.95 mg/L	0.006	1.95 mg/L	0.006	0.29%	
Li 670.784†	82736.1	0.531 mg/L	0.0038	0.531 mg/L	0.0038	0.71%	

Sequence No.: 18

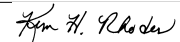
Sample ID: L1205001101SD WG396754-05
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 20

Time Collected: 5/8/2012 10:38:17 AM
 ana Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: L1205001101SD WG396754-05

Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Approved: May 09, 2012


 Mean Data: L1205001101SD WG396754-05

Analyte	Mean Corrected		Calib.		Sample		Std.Dev.	RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units		
Y 371.029	1984654.1						15366.78	0.77%
YRADIAL	289021.9						6065.52	2.10%
Ga 417.206	1351500.8						42802.55	3.17%
GaRADIAL	91042.8						598.41	0.66%
Ag 328.068†	62369.5	0.201	mg/L	0.0077	0.201	mg/L	0.0077	3.84%
Al 396.153†	39865.0	5.30	mg/L	0.021	5.30	mg/L	0.021	0.40%
As 188.979†	531.8	0.187	mg/L	0.0045	0.187	mg/L	0.0045	2.42%
Ba 233.527†	93735.4	0.595	mg/L	0.0054	0.595	mg/L	0.0054	0.92%
Be 234.861†	30828.1	0.0239	mg/L	0.00096	0.0239	mg/L	0.00096	4.01%
B 249.677†	96231.2	1.13	mg/L	0.038	1.13	mg/L	0.038	3.37%
Ca 227.546†	131191.2	279	mg/L	7.9	279	mg/L	7.9	2.82%
Cd 228.802†	1299.3	0.0229	mg/L	0.00133	0.0229	mg/L	0.00133	5.82%
Co 228.616†	3636.5	0.0931	mg/L	0.00086	0.0931	mg/L	0.00086	0.93%
Cr 267.716†	26967.5	0.246	mg/L	0.0011	0.246	mg/L	0.0011	0.44%
Cu 327.393†	65053.1	0.242	mg/L	0.0070	0.242	mg/L	0.0070	2.88%
Fe 239.562†	56469.9	3.53	mg/L	0.020	3.53	mg/L	0.020	0.58%
Mg 279.077†	176388.4	49.7	mg/L	0.68	49.7	mg/L	0.68	1.36%
Mn 257.610†	484722.5	0.574	mg/L	0.0058	0.574	mg/L	0.0058	1.02%
Mo 202.031†	18354.4	0.494	mg/L	0.0020	0.494	mg/L	0.0020	0.40%
Ni 231.604†	16583.0	0.242	mg/L	0.0008	0.242	mg/L	0.0008	0.33%
Pb 220.353†	2547.6	0.231	mg/L	0.0024	0.231	mg/L	0.0024	1.05%
Sb 206.836†	2333.8	0.563	mg/L	0.0234	0.563	mg/L	0.0234	4.16%
Se 196.026†	333.1	0.189	mg/L	0.0063	0.189	mg/L	0.0063	3.36%
Si 251.611†	483968.0	11.6	mg/L	0.31	11.6	mg/L	0.31	2.66%
Sn 189.927†	4874.5	0.464	mg/L	0.0032	0.464	mg/L	0.0032	0.68%
Ti 334.940†	458737.9	0.497	mg/L	0.0055	0.497	mg/L	0.0055	1.11%
Tl 190.801†	666.6	0.176	mg/L	0.0016	0.176	mg/L	0.0016	0.91%
V 290.880†	102308.0	0.522	mg/L	0.0024	0.522	mg/L	0.0024	0.45%
Zn 206.200†	20681.8	0.491	mg/L	0.0047	0.491	mg/L	0.0047	0.95%
K 766.490†	127898.6	38.4	mg/L	0.29	38.4	mg/L	0.29	0.75%
Na 589.592†	Saturated2							
Sr 407.771†	4969343.2	1.85	mg/L	0.070	1.85	mg/L	0.070	3.78%
Li 670.784†	81013.1	0.520	mg/L	0.0003	0.520	mg/L	0.0003	0.05%

=====
 Sequence No.: 19
 Sample ID: L1205001301
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

=====
 uosampler Location: 21
 Date Collected: 5/8/2012 10:44:18 AM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Nebulizer Parameters: L1205001301

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

 Mean Data: L1205001301

Analyte	Mean Corrected		Calib.		Sample		Std.Dev.	RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units		
Y 371.029	1877477.1						12495.60	0.67%
YRADIAL	278773.7						4530.67	1.63%
Ga 417.206	1357374.5						13139.59	0.97%
GaRADIAL	90453.0						1407.56	1.56%
Ag 328.068†	1430.8	0.00441	mg/L	0.000317	0.00441	mg/L	0.000317	7.18%
Al 396.153†	-90.3	-0.0453	mg/L	0.00128	-0.0453	mg/L	0.00128	2.82%
As 188.979†	18.7	0.00662	mg/L	0.000845	0.00662	mg/L	0.000845	12.76%
Ba 233.527†	2310.0	0.0115	mg/L	0.00006	0.0115	mg/L	0.00006	0.50%
Be 234.861†	256.5	0.00030	mg/L	0.000021	0.00030	mg/L	0.000021	7.06%
B 249.677†	39642.8	0.468	mg/L	0.0017	0.468	mg/L	0.0017	0.36%
Ca 227.546†	162431.2	345	mg/L	0.2	345	mg/L	0.2	0.06%
Cd 228.802†	35.0	0.00079	mg/L	0.000226	0.00079	mg/L	0.000226	28.71%
Co 228.616†	18.9	-0.00007	mg/L	0.000198	-0.00007	mg/L	0.000198	268.70%
Cr 267.716†	481.7	0.00244	mg/L	0.000187	0.00244	mg/L	0.000187	7.66%
Cu 327.393†	-149.7	-0.00109	mg/L	0.000667	-0.00109	mg/L	0.000667	61.08%
Fe 239.562†	42.4	-0.0122	mg/L	0.00015	-0.0122	mg/L	0.00015	1.21%
Mg 279.077†	791468.2	223	mg/L	0.9	223	mg/L	0.9	0.42%

Approved: May 09, 2012

John H. Rhodes

Table with 7 columns: Element, Value, Unit, Sample 1, Unit, Sample 2, Unit, RSD. Rows include Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li.

Sequence No.: 20 u\osampler Location: 22
Sample ID: L1205001302 a\ne Collected: 5/8/2012 10:51:15 AM
Analyst: KHR a\ne Type: Original
Initial Sample Wt: n\itial Sample Vol:
Dilution: a\msple Prep Vol:

Nebulizer Parameters: L1205001302
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Rows include Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li.

Sequence No.: 21 u\osampler Location: 23
Sample ID: L1205001302PS WG396793-03 a\ne Collected: 5/8/2012 10:58:24 AM
Analyst: KHR a\ne Type: Original
Initial Sample Wt: n\itial Sample Vol:

Approved: May 09, 2012
[Signature]

Dilution:

sample Prep Vol:

Nebulizer Parameters: L1205001302PS WG396793-03

Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: L1205001302PS WG396793-03

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2108234.2					33786.14	1.60%
YRADIAL	303264.8					2378.40	0.78%
Ga 417.206	1415210.5					19913.36	1.41%
GaRADIAL	93505.9					178.73	0.19%
Ag 328.068†	59530.8	0.191 mg/L		0.0049	0.191 mg/L	0.0049	2.56%
Al 396.153†	36574.7	4.85 mg/L		0.021	4.85 mg/L	0.021	0.44%
As 188.979†	521.9	0.183 mg/L		0.0031	0.183 mg/L	0.0031	1.72%
Ba 233.527†	80208.4	0.509 mg/L		0.0041	0.509 mg/L	0.0041	0.81%
Be 234.861†	29246.7	0.0230 mg/L		0.00054	0.0230 mg/L	0.00054	2.34%
B 249.677†	115516.0	1.36 mg/L		0.038	1.36 mg/L	0.038	2.81%
Ca 227.546†	99801.9	212 mg/L		5.3	212 mg/L	5.3	2.48%
Cd 228.802†	1330.7	0.0235 mg/L		0.00076	0.0235 mg/L	0.00076	3.25%
Co 228.616†	3676.6	0.0942 mg/L		0.00163	0.0942 mg/L	0.00163	1.73%
Cr 267.716†	26877.1	0.245 mg/L		0.0008	0.245 mg/L	0.0008	0.31%
Cu 327.393†	62838.7	0.234 mg/L		0.0057	0.234 mg/L	0.0057	2.42%
Fe 239.562†	30528.7	1.90 mg/L		0.012	1.90 mg/L	0.012	0.64%
Mg 279.077†	415302.1	117 mg/L		0.7	117 mg/L	0.7	0.58%
Mn 257.610†	208915.5	0.246 mg/L		0.0022	0.246 mg/L	0.0022	0.90%
Mo 202.031†	18366.6	0.494 mg/L		0.0031	0.494 mg/L	0.0031	0.62%
Ni 231.604†	16797.2	0.245 mg/L		0.0041	0.245 mg/L	0.0041	1.69%
Pb 220.353†	2649.5	0.240 mg/L		0.0045	0.240 mg/L	0.0045	1.86%
Sb 206.836†	2324.2	0.560 mg/L		0.0100	0.560 mg/L	0.0100	1.78%
Se 196.026†	372.8	0.211 mg/L		0.0042	0.211 mg/L	0.0042	2.01%
Si 251.611†	287921.7	6.89 mg/L		0.134	6.89 mg/L	0.134	1.94%
Sn 189.927†	-389.7	-0.0408 mg/L		0.00310	-0.0408 mg/L	0.00310	7.60%
Ti 334.940†	465019.4	0.493 mg/L		0.0027	0.493 mg/L	0.0027	0.54%
Tl 190.801†	856.3	0.225 mg/L		0.0039	0.225 mg/L	0.0039	1.72%
V 290.880†	101457.9	0.516 mg/L		0.0020	0.516 mg/L	0.0020	0.39%
Zn 206.200†	19708.0	0.468 mg/L		0.0009	0.468 mg/L	0.0009	0.20%
K 766.490†	84482.1	24.9 mg/L		0.15	24.9 mg/L	0.15	0.60%
Na 589.592†	4651993.1	319 mg/L		1.0	319 mg/L	1.0	0.30%
Sr 407.771†	7119189.8	2.66 mg/L		0.025	2.66 mg/L	0.025	0.93%
Li 670.784†	91048.3	0.584 mg/L		0.0063	0.584 mg/L	0.0063	1.07%

Sequence No.: 22

Sample ID: L1205001302DL WG396793-04

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 24

Sample Collected: 5/8/2012 11:04:22 AM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1205001302DL WG396793-04

Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: L1205001302DL WG396793-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2247826.6					5022.95	0.22%
YRADIAL	306778.2					8676.72	2.83%
Ga 417.206	1488310.0					17003.25	1.14%
GaRADIAL	94728.1					2254.79	2.38%
Ag 328.068†	281.8	0.00061 mg/L		0.000378	0.00061 mg/L	0.000378	61.89%
Al 396.153†	-4.9	-0.0336 mg/L		0.00156	-0.0336 mg/L	0.00156	4.66%
As 188.979†	-9.1	-0.00323 mg/L		0.001381	-0.00323 mg/L	0.001381	42.74%
Ba 233.527†	854.9	0.00220 mg/L		0.000096	0.00220 mg/L	0.000096	4.35%
Be 234.861†	173.4	0.00023 mg/L		0.000013	0.00023 mg/L	0.000013	5.83%
B 249.677†	8410.1	0.100 mg/L		0.0027	0.100 mg/L	0.0027	2.68%
Ca 227.546†	19483.3	41.4 mg/L		0.76	41.4 mg/L	0.76	1.85%

Approved: May 09, 2012

John H. Rhodes

Table with columns for element symbols (Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li), values, and units (mg/L, %).

Sequence No.: 23 u&osampler Location: 6
Sample ID: CCV a&e Collected: 5/8/2012 11:11:19 AM
Analyst: a&a Type: Original
Initial Sample Wt: nitial Sample Vol:
Dilution: a&mple Prep Vol:

Nebulizer Parameters: CCV
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: CCV

Table with columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Includes recovery percentages for various elements.

Approved: May 09, 2012
[Signature]

Analyte	Conc.	Recovery	QC Value	Limit	Recovery	Conc.	Recovery
Ni	0.508 mg/L	100.97%	34676.5	231.604	0.0046	0.508 mg/L	0.90%
Pb	0.509 mg/L	101.53%	5657.3	220.353	0.0047	0.509 mg/L	0.92%
Sb	1.22 mg/L	101.89%	5063.9	206.836	0.027	1.22 mg/L	2.19%
Se	0.408 mg/L	101.65%	726.7	196.026	0.0097	0.408 mg/L	2.37%
Si	5.11 mg/L	102.07%	213907.1	251.611	0.128	5.11 mg/L	2.51%
Sn	1.00 mg/L	102.15%	10469.7	189.927	0.012	1.00 mg/L	1.16%
Ti	0.995 mg/L	100.06%	998538.7	334.940	0.0018	0.995 mg/L	0.18%
Tl	0.526 mg/L	99.46%	1994.9	190.801	0.0040	0.526 mg/L	0.77%
V	1.03 mg/L	105.23%	199955.0	290.880	0.011	1.03 mg/L	1.10%
Zn	1.02 mg/L	102.79%	42707.6	206.200	0.009	1.02 mg/L	0.91%
K	48.7 mg/L	101.70%	161729.5	766.490	0.21	48.7 mg/L	0.44%
Na	48.2 mg/L	97.32%	957154.5	589.592	1.02	48.2 mg/L	2.12%
Sr	0.984 mg/L	96.48%	2639341.1	407.771	0.0156	0.984 mg/L	1.59%
Li	1.02 mg/L	98.43%	158069.2	670.784	0.006	1.02 mg/L	0.57%

All analyte(s) passed QC.

Sequence No.: 24 autosampler Location: 1
Sample ID: CCB Date Collected: 5/8/2012 11:17:20 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: CCB
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2329073.2				27470.80	1.18%
YRADIAL	307999.7				1881.95	0.61%
Ga 417.206	1377345.8				19364.46	1.41%
GaRADIAL	92144.5				2396.90	2.60%
Ag 328.068†	138.8	0.00024 mg/L	0.000155	0.00024 mg/L	0.000155	63.67%
QC value within limits for Ag		328.068	Recovery =	Not calculated		
Al 396.153†	19.4	-0.0303 mg/L	0.00130	-0.0303 mg/L	0.00130	4.29%
QC value within limits for Al		396.153	Recovery =	Not calculated		
As 188.979†	0.1	0.00002 mg/L	0.000306	0.00002 mg/L	0.000306	>999.9%
QC value within limits for As		188.979	Recovery =	Not calculated		
Ba 233.527†	34.5	-0.00303 mg/L	0.000162	-0.00303 mg/L	0.000162	5.34%
QC value within limits for Ba		233.527	Recovery =	Not calculated		
Be 234.861†	35.6	0.00012 mg/L	0.000011	0.00012 mg/L	0.000011	9.19%
QC value within limits for Be		234.861	Recovery =	Not calculated		
B 249.677†	1040.0	0.0138 mg/L	0.00032	0.0138 mg/L	0.00032	2.34%
QC value within limits for B		249.677	Recovery =	Not calculated		
Ca 227.546†	-2.4	0.0431 mg/L	0.00397	0.0431 mg/L	0.00397	9.22%
QC value within limits for Ca		227.546	Recovery =	Not calculated		
Cd 228.802†	5.6	0.00029 mg/L	0.000152	0.00029 mg/L	0.000152	51.67%
QC value within limits for Cd		228.802	Recovery =	Not calculated		
Co 228.616†	7.6	-0.00052 mg/L	0.000247	-0.00052 mg/L	0.000247	47.64%
QC value within limits for Co		228.616	Recovery =	Not calculated		
Cr 267.716†	-3.6	-0.00203 mg/L	0.000041	-0.00203 mg/L	0.000041	2.04%
QC value within limits for Cr		267.716	Recovery =	Not calculated		
Cu 327.393†	58.3	-0.00023 mg/L	0.000212	-0.00023 mg/L	0.000212	91.95%

Approved: May 09, 2012
Tom H. Rhodes

QC value within limits for Cu	327.393	Recovery = Not calculated			
Fe 239.562†	13.6	-0.00951 mg/L	0.000034	-0.00951 mg/L	0.000034 0.36%
QC value within limits for Fe	239.562	Recovery = Not calculated			
Mg 279.077†	9.6	-0.0223 mg/L	0.00459	-0.0223 mg/L	0.00459 20.62%
QC value within limits for Mg	279.077	Recovery = Not calculated			
Mn 257.610†	13.5	-0.00290 mg/L	0.000020	-0.00290 mg/L	0.000020 0.69%
QC value within limits for Mn	257.610	Recovery = Not calculated			
Mo 202.031†	11.4	-0.00180 mg/L	0.000128	-0.00180 mg/L	0.000128 7.11%
QC value within limits for Mo	202.031	Recovery = Not calculated			
Ni 231.604†	11.1	-0.00186 mg/L	0.000153	-0.00186 mg/L	0.000153 8.22%
QC value within limits for Ni	231.604	Recovery = Not calculated			
Pb 220.353†	-16.3	-0.00268 mg/L	0.000236	-0.00268 mg/L	0.000236 8.79%
QC value within limits for Pb	220.353	Recovery = Not calculated			
Sb 206.836†	-1.7	0.00066 mg/L	0.001353	0.00066 mg/L	0.001353 205.44%
QC value within limits for Sb	206.836	Recovery = Not calculated			
Se 196.026†	-5.1	0.00023 mg/L	0.004022	0.00023 mg/L	0.004022 >999.9%
QC value within limits for Se	196.026	Recovery = Not calculated			
Si 251.611†	194.7	-0.00161 mg/L	0.000828	-0.00161 mg/L	0.000828 51.53%
QC value within limits for Si	251.611	Recovery = Not calculated			
Sn 189.927†	18.8	-0.00164 mg/L	0.000612	-0.00164 mg/L	0.000612 37.37%
QC value within limits for Sn	189.927	Recovery = Not calculated			
Ti 334.940†	260.2	-0.00153 mg/L	0.000010	-0.00153 mg/L	0.000010 0.66%
QC value within limits for Ti	334.940	Recovery = Not calculated			
Tl 190.801†	-1.5	-0.00252 mg/L	0.001089	-0.00252 mg/L	0.001089 43.28%
QC value within limits for Tl	190.801	Recovery = Not calculated			
V 290.880†	565.6	-0.00218 mg/L	0.001014	-0.00218 mg/L	0.001014 46.42%
QC value within limits for V	290.880	Recovery = Not calculated			
Zn 206.200†	-12.4	-0.00241 mg/L	0.000071	-0.00241 mg/L	0.000071 2.95%
QC value within limits for Zn	206.200	Recovery = Not calculated			
K 766.490†	99.0	-0.0125 mg/L	0.01231	-0.0125 mg/L	0.01231 98.29%
QC value within limits for K	766.490	Recovery = Not calculated			
Na 589.592†	468.1	0.0448 mg/L	0.00687	0.0448 mg/L	0.00687 15.35%
QC value within limits for Na	589.592	Recovery = Not calculated			
Sr 407.771†	262.6	-0.00587 mg/L	0.000032	-0.00587 mg/L	0.000032 0.54%
QC value within limits for Sr	407.771	Recovery = Not calculated			
Li 670.784†	55.1	-0.00332 mg/L	0.000530	-0.00332 mg/L	0.000530 15.95%
QC value within limits for Li	670.784	Recovery = Not calculated			

All analyte(s) passed QC.
User canceled analysis.

Approved: May 09, 2012

Tom H. Rhodes

=====
Analysis Begun

Start Time: 5/8/2012 11:24:18 AM Plasma On Time: 5/8/2012 6:43:32 AM
Logged In Analyst: peicp2 eTechnique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
Batch ID:
Results Data Set: 050812H
Results Library: C:\pe\peicp2\Results\Results.mdb

=====
Sequence No.: 1 Autosampler Location: 31
Sample ID: L1205001302PS WG396793-03 Date Collected: 5/8/2012 11:24:20 AM
Analyst: KHR Sample Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1205001302PS WG396793-03
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: L1205001302PS WG396793-03

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2079126.6				14545.02	0.70%
YRADIAL	293931.4				4379.22	1.49%
Ga 417.206	1353689.2				45818.21	3.38%
GaRADIAL	91193.9				1342.39	1.47%
Ag 328.068†	62683.2	0.201 mg/L	0.0091	0.201 mg/L	0.0091	4.55%
Al 396.153†	37804.5	5.02 mg/L	0.029	5.02 mg/L	0.029	0.59%
As 188.979†	551.4	0.193 mg/L	0.0059	0.193 mg/L	0.0059	3.04%
Ba 233.527†	82261.1	0.522 mg/L	0.0037	0.522 mg/L	0.0037	0.70%
Be 234.861†	30735.2	0.0242 mg/L	0.00110	0.0242 mg/L	0.00110	4.54%
B 249.677†	121440.6	1.43 mg/L	0.065	1.43 mg/L	0.065	4.55%
Ca 227.546†	104798.9	223 mg/L	8.4	223 mg/L	8.4	3.75%
Cd 228.802†	1414.5	0.0249 mg/L	0.00131	0.0249 mg/L	0.00131	5.24%
Co 228.616†	3784.7	0.0969 mg/L	0.00079	0.0969 mg/L	0.00079	0.81%
Cr 267.716†	27633.0	0.252 mg/L	0.0040	0.252 mg/L	0.0040	1.59%
Cu 327.393†	65564.3	0.244 mg/L	0.0085	0.244 mg/L	0.0085	3.50%
Fe 239.562†	31549.8	1.97 mg/L	0.020	1.97 mg/L	0.020	1.00%
Mg 279.077†	432626.0	122 mg/L	1.0	122 mg/L	1.0	0.79%
Mn 257.610†	214416.6	0.253 mg/L	0.0008	0.253 mg/L	0.0008	0.31%
Mo 202.031†	18876.3	0.508 mg/L	0.0035	0.508 mg/L	0.0035	0.69%
Ni 231.604†	17286.1	0.252 mg/L	0.0016	0.252 mg/L	0.0016	0.62%
Pb 220.353†	2718.4	0.246 mg/L	0.0028	0.246 mg/L	0.0028	1.14%
Sb 206.836†	2437.2	0.588 mg/L	0.0251	0.588 mg/L	0.0251	4.28%
Se 196.026†	404.9	0.229 mg/L	0.0052	0.229 mg/L	0.0052	2.26%
Si 251.611†	302989.4	7.25 mg/L	0.256	7.25 mg/L	0.256	3.54%
Sn 189.927†	4950.9	0.471 mg/L	0.0051	0.471 mg/L	0.0051	1.07%
Ti 334.940†	476978.5	0.507 mg/L	0.0054	0.507 mg/L	0.0054	1.07%
Tl 190.801†	886.3	0.233 mg/L	0.0029	0.233 mg/L	0.0029	1.24%
V 290.880†	103895.6	0.529 mg/L	0.0059	0.529 mg/L	0.0059	1.12%
Zn 206.200†	20634.4	0.490 mg/L	0.0086	0.490 mg/L	0.0086	1.76%
K 766.490†	86576.8	25.5 mg/L	0.12	25.5 mg/L	0.12	0.45%
Na 589.592†	4765504.6	333 mg/L	10.1	333 mg/L	10.1	3.04%
Sr 407.771†	7380804.5	2.76 mg/L	0.061	2.76 mg/L	0.061	2.21%
Li 670.784†	93535.8	0.600 mg/L	0.0062	0.600 mg/L	0.0062	1.04%

=====
Sequence No.: 2 Autosampler Location: 27
Sample ID: L1205001301 0.01 Date Collected: 5/8/2012 11:30:24 AM
Analyst: KHR Sample Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1205001301 0.01

Approved: May 09, 2012

Tom H. Rhodes

Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205001301 0.01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD	
Y 371.029	2279509.5					16833.06	0.74%	
YRADIAL	302822.5					7434.59	2.46%	
Ga 417.206	1447738.0					12148.04	0.84%	
GaRADIAL	92995.7					809.63	0.87%	
Ag 328.068†	80.1	0.00005	mg/L	0.000285	0.00005	mg/L	0.000285	519.60%
Al 396.153†	10.9	-0.0314	mg/L	0.00171	-0.0314	mg/L	0.00171	5.45%
As 188.979†	3.1	0.00111	mg/L	0.001097	0.00111	mg/L	0.001097	98.85%
Ba 233.527†	85.1	-0.00271	mg/L	0.000084	-0.00271	mg/L	0.000084	3.10%
Be 234.861†	296.2	0.00033	mg/L	0.000025	0.00033	mg/L	0.000025	7.73%
B 249.677†	1494.5	0.0192	mg/L	0.00065	0.0192	mg/L	0.00065	3.38%
Ca 227.546†	1485.6	3.20	mg/L	0.108	3.20	mg/L	0.108	3.38%
Cd 228.802†	-4.6	0.00010	mg/L	0.000036	0.00010	mg/L	0.000036	33.89%
Co 228.616†	9.9	-0.00046	mg/L	0.000089	-0.00046	mg/L	0.000089	19.49%
Cr 267.716†	-7.5	-0.00206	mg/L	0.000068	-0.00206	mg/L	0.000068	3.29%
Cu 327.393†	169.1	0.00018	mg/L	0.000300	0.00018	mg/L	0.000300	164.45%
Fe 239.562†	-3.5	-0.0106	mg/L	0.00043	-0.0106	mg/L	0.00043	4.07%
Mg 279.077†	8646.8	2.41	mg/L	0.060	2.41	mg/L	0.060	2.48%
Mn 257.610†	84.4	-0.00281	mg/L	0.000007	-0.00281	mg/L	0.000007	0.24%
Mo 202.031†	-2.3	-0.00217	mg/L	0.000102	-0.00217	mg/L	0.000102	4.68%
Ni 231.604†	-14.5	-0.00224	mg/L	0.000160	-0.00224	mg/L	0.000160	7.12%
Pb 220.353†	-12.2	-0.00229	mg/L	0.000345	-0.00229	mg/L	0.000345	15.07%
Sb 206.836†	-3.7	0.00019	mg/L	0.001294	0.00019	mg/L	0.001294	664.38%
Se 196.026†	-4.8	0.00038	mg/L	0.001769	0.00038	mg/L	0.001769	465.43%
Si 251.611†	1938.0	0.0402	mg/L	0.00215	0.0402	mg/L	0.00215	5.34%
Sn 189.927†	-99.3	-0.0130	mg/L	0.00015	-0.0130	mg/L	0.00015	1.14%
Ti 334.940†	-557.5	-0.00187	mg/L	0.000073	-0.00187	mg/L	0.000073	3.90%
Tl 190.801†	8.3	0.00001	mg/L	0.001863	0.00001	mg/L	0.001863	>999.9%
V 290.880†	1539.3	0.00279	mg/L	0.001097	0.00279	mg/L	0.001097	39.34%
Zn 206.200†	34.8	-0.00129	mg/L	0.000119	-0.00129	mg/L	0.000119	9.26%
K 766.490†	556.0	0.111	mg/L	0.0137	0.111	mg/L	0.0137	12.39%
Na 589.592†	254285.8	12.4	mg/L	0.84	12.4	mg/L	0.84	6.76%
Sr 407.771†	145758.3	0.0487	mg/L	0.00150	0.0487	mg/L	0.00150	3.07%
Li 670.784†	395.8	-0.00112	mg/L	0.000816	-0.00112	mg/L	0.000816	72.61%

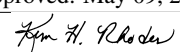
Sequence No.: 3
 Sample ID: L1205001302 0.01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

uSampler Location: 28
 Date Collected: 5/8/2012 11:37:19 AM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1205001302 0.01
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205001302 0.01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD	
Y 371.029	2263697.1					21885.44	0.97%	
YRADIAL	298513.8					6411.97	2.15%	
Ga 417.206	1417830.1					13733.89	0.97%	
GaRADIAL	90326.6					803.56	0.89%	
Ag 328.068†	144.0	0.00026	mg/L	0.000156	0.00026	mg/L	0.000156	59.39%
Al 396.153†	-2.2	-0.0332	mg/L	0.00057	-0.0332	mg/L	0.00057	1.73%
As 188.979†	5.4	0.00190	mg/L	0.001942	0.00190	mg/L	0.001942	102.08%
Ba 233.527†	99.4	-0.00262	mg/L	0.000040	-0.00262	mg/L	0.000040	1.53%
Be 234.861†	280.1	0.00031	mg/L	0.000011	0.00031	mg/L	0.000011	3.39%
B 249.677†	1261.9	0.0165	mg/L	0.00046	0.0165	mg/L	0.00046	2.77%
Ca 227.546†	1020.1	2.21	mg/L	0.087	2.21	mg/L	0.087	3.93%
Cd 228.802†	-3.0	0.00013	mg/L	0.000039	0.00013	mg/L	0.000039	30.42%
Co 228.616†	11.3	-0.00042	mg/L	0.000115	-0.00042	mg/L	0.000115	27.34%
Cr 267.716†	-17.6	-0.00215	mg/L	0.000105	-0.00215	mg/L	0.000105	4.86%
Cu 327.393†	-48.0	-0.00062	mg/L	0.000145	-0.00062	mg/L	0.000145	23.28%

Approved: May 09, 2012


Fe 239.562†	-19.8	-0.0116	mg/L	0.00027	-0.0116	mg/L	0.00027	2.35%
Mg 279.077†	5589.3	1.55	mg/L	0.037	1.55	mg/L	0.037	2.39%
Mn 257.610†	56.2	-0.00285	mg/L	0.000009	-0.00285	mg/L	0.000009	0.33%
Mo 202.031†	4.6	-0.00198	mg/L	0.000104	-0.00198	mg/L	0.000104	5.26%
Ni 231.604†	-6.6	-0.00212	mg/L	0.000340	-0.00212	mg/L	0.000340	16.03%
Pb 220.353†	-2.3	-0.00141	mg/L	0.002108	-0.00141	mg/L	0.002108	149.70%
Sb 206.836†	-4.2	0.00006	mg/L	0.000742	0.00006	mg/L	0.000742	>999.9%
Se 196.026†	-6.4	-0.00050	mg/L	0.000936	-0.00050	mg/L	0.000936	185.94%
Si 251.611†	2202.5	0.0465	mg/L	0.00265	0.0465	mg/L	0.00265	5.71%
Sn 189.927†	-92.9	-0.0123	mg/L	0.00060	-0.0123	mg/L	0.00060	4.89%
Ti 334.940†	-456.6	-0.00192	mg/L	0.000184	-0.00192	mg/L	0.000184	9.59%
Tl 190.801†	12.9	0.00120	mg/L	0.000253	0.00120	mg/L	0.000253	21.01%
V 290.880†	1518.8	0.00270	mg/L	0.000454	0.00270	mg/L	0.000454	16.78%
Zn 206.200†	29.6	-0.00141	mg/L	0.000023	-0.00141	mg/L	0.000023	1.63%
K 766.490†	116.1	-0.0103	mg/L	0.02065	-0.0103	mg/L	0.02065	199.98%
Na 589.592†	59983.0	2.92	mg/L	0.109	2.92	mg/L	0.109	3.74%
Sr 407.771†	83744.9	0.0254	mg/L	0.00042	0.0254	mg/L	0.00042	1.64%
Li 670.784†	164.3	-0.00262	mg/L	0.000320	-0.00262	mg/L	0.000320	12.21%

Sequence No.: 4
 Sample ID: L1205001302PS WG396793-03
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 29
 a&e Collected: 5/8/2012 11:44:13 AM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

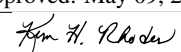
Nebulizer Parameters: L1205001302PS WG396793-03
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205001302PS WG396793-03

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2209592.3					24939.98	1.13%
YRADIAL	301113.7					4260.16	1.41%
Ga 417.206	1345746.4					24221.99	1.80%
GaRADIAL	89956.4					1001.77	1.11%
Ag 328.068†	68507.4	0.220	mg/L	0.0069	0.220	0.0069	3.12%
Al 396.153†	39531.3	5.25	mg/L	0.015	5.25	0.015	0.28%
As 188.979†	605.9	0.213	mg/L	0.0046	0.213	0.0046	2.16%
Ba 233.527†	84408.0	0.536	mg/L	0.0076	0.536	0.0076	1.41%
Be 234.861†	34989.6	0.0275	mg/L	0.00065	0.0275	0.00065	2.37%
B 249.677†	92852.0	1.09	mg/L	0.037	1.09	0.037	3.40%
Ca 227.546†	3555.3	7.84	mg/L	0.159	7.84	0.159	2.03%
Cd 228.802†	1511.1	0.0266	mg/L	0.00093	0.0266	0.00093	3.50%
Co 228.616†	4155.2	0.106	mg/L	0.0012	0.106	0.0012	1.10%
Cr 267.716†	29427.3	0.268	mg/L	0.0027	0.268	0.0027	1.02%
Cu 327.393†	71157.2	0.265	mg/L	0.0083	0.265	0.0083	3.14%
Fe 239.562†	33217.4	2.08	mg/L	0.010	2.08	0.010	0.49%
Mg 279.077†	23524.9	6.61	mg/L	0.032	6.61	0.032	0.49%
Mn 257.610†	227271.1	0.268	mg/L	0.0044	0.268	0.0044	1.64%
Mo 202.031†	19822.3	0.534	mg/L	0.0085	0.534	0.0085	1.60%
Ni 231.604†	18654.1	0.272	mg/L	0.0041	0.272	0.0041	1.50%
Pb 220.353†	3012.2	0.271	mg/L	0.0026	0.271	0.0026	0.97%
Sb 206.836†	2716.0	0.655	mg/L	0.0113	0.655	0.0113	1.73%
Se 196.026†	410.9	0.232	mg/L	0.0087	0.232	0.0087	3.73%
Si 251.611†	117656.2	2.81	mg/L	0.077	2.81	0.077	2.74%
Sn 189.927†	-142.1	-0.0171	mg/L	0.00059	-0.0171	0.00059	3.45%
Ti 334.940†	529574.2	0.527	mg/L	0.0032	0.527	0.0032	0.60%
Tl 190.801†	1089.6	0.286	mg/L	0.0039	0.286	0.0039	1.35%
V 290.880†	106387.5	0.544	mg/L	0.0058	0.544	0.0058	1.06%
Zn 206.200†	23676.1	0.563	mg/L	0.0042	0.563	0.0042	0.75%
K 766.490†	86114.5	25.7	mg/L	0.27	25.7	0.27	1.03%
Na 589.592†	587834.9	29.1	mg/L	0.58	29.1	0.58	1.98%
Sr 407.771†	1496353.6	0.555	mg/L	0.0169	0.555	0.0169	3.04%
Li 670.784†	85875.1	0.551	mg/L	0.0045	0.551	0.0045	0.82%

Sequence No.: 5
 Sample ID: L1205001302DL WG396793-04

u&osampler Location: 30
 a&e Collected: 5/8/2012 11:50:12 AM

Approved: May 09, 2012


Analyst: KHR
Initial Sample Wt:
Dilution:

ama Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205001302DL WG396793-04
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: L1205001302DL WG396793-04

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 6
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

autosampler Location: 6
Sample Collected: 5/8/2012 11:57:07 AM
ama Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: CCV

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Includes QC values for Ag and Al.

Approved: May 09, 2012
[Signature]

QC value within limits for As	188.979	Recovery = 101.13%					
Ba 233.527†	160994.1	1.02 mg/L	0.012	1.02 mg/L	0.012	1.16%	
QC value within limits for Ba	233.527	Recovery = 102.45%					
Be 234.861†	65789.6	0.0517 mg/L	0.00111	0.0517 mg/L	0.00111	2.15%	
QC value within limits for Be	234.861	Recovery = 103.33%					
B 249.677†	44939.7	0.526 mg/L	0.0135	0.526 mg/L	0.0135	2.57%	
QC value within limits for B	249.677	Recovery = 105.17%					
Ca 227.546†	4780.8	10.7 mg/L	0.33	10.7 mg/L	0.33	3.07%	
QC value within limits for Ca	227.546	Recovery = 106.68%					
Cd 228.802†	2898.2	0.0508 mg/L	0.00212	0.0508 mg/L	0.00212	4.17%	
QC value within limits for Cd	228.802	Recovery = 101.69%					
Co 228.616†	7825.4	0.201 mg/L	0.0020	0.201 mg/L	0.0020	0.98%	
QC value within limits for Co	228.616	Recovery = 100.54%					
Cr 267.716†	56364.1	0.515 mg/L	0.0026	0.515 mg/L	0.0026	0.50%	
QC value within limits for Cr	267.716	Recovery = 103.07%					
Cu 327.393†	140396.3	0.523 mg/L	0.0121	0.523 mg/L	0.0121	2.31%	
QC value within limits for Cu	327.393	Recovery = 104.69%					
Fe 239.562†	65247.7	4.09 mg/L	0.077	4.09 mg/L	0.077	1.88%	
QC value within limits for Fe	239.562	Recovery = 102.16%					
Mg 279.077†	36067.3	10.1 mg/L	0.19	10.1 mg/L	0.19	1.87%	
QC value within limits for Mg	279.077	Recovery = 101.49%					
Mn 257.610†	438497.4	0.520 mg/L	0.0077	0.520 mg/L	0.0077	1.47%	
QC value within limits for Mn	257.610	Recovery = 103.93%					
Mo 202.031†	37806.8	1.02 mg/L	0.011	1.02 mg/L	0.011	1.08%	
QC value within limits for Mo	202.031	Recovery = 101.97%					
Ni 231.604†	35099.2	0.514 mg/L	0.0077	0.514 mg/L	0.0077	1.49%	
QC value within limits for Ni	231.604	Recovery = 102.77%					
Pb 220.353†	5649.3	0.509 mg/L	0.0015	0.509 mg/L	0.0015	0.30%	
QC value within limits for Pb	220.353	Recovery = 101.75%					
Sb 206.836†	5176.8	1.25 mg/L	0.032	1.25 mg/L	0.032	2.59%	
QC value within limits for Sb	206.836	Recovery = 103.91%					
Se 196.026†	737.7	0.414 mg/L	0.0132	0.414 mg/L	0.0132	3.17%	
QC value within limits for Se	196.026	Recovery = 103.61%					
Si 251.611†	218907.1	5.23 mg/L	0.070	5.23 mg/L	0.070	1.33%	
QC value within limits for Si	251.611	Recovery = 104.55%					
Sn 189.927†	10482.7	1.00 mg/L	0.006	1.00 mg/L	0.006	0.59%	
QC value within limits for Sn	189.927	Recovery = 100.19%					
Ti 334.940†	1022876.9	1.02 mg/L	0.005	1.02 mg/L	0.005	0.49%	
QC value within limits for Ti	334.940	Recovery = 101.89%					
Tl 190.801†	1992.4	0.526 mg/L	0.0020	0.526 mg/L	0.0020	0.37%	
QC value within limits for Tl	190.801	Recovery = 105.16%					
V 290.880†	200757.7	1.03 mg/L	0.003	1.03 mg/L	0.003	0.33%	
QC value within limits for V	290.880	Recovery = 103.20%					
Zn 206.200†	43534.9	1.04 mg/L	0.004	1.04 mg/L	0.004	0.37%	
QC value within limits for Zn	206.200	Recovery = 103.67%					
K 766.490†	166349.0	50.1 mg/L	0.23	50.1 mg/L	0.23	0.45%	
QC value within limits for K	766.490	Recovery = 100.15%					
Na 589.592†	997947.7	50.4 mg/L	0.88	50.4 mg/L	0.88	1.76%	
QC value within limits for Na	589.592	Recovery = 100.81%					
Sr 407.771†	2704930.1	1.01 mg/L	0.028	1.01 mg/L	0.028	2.76%	
QC value within limits for Sr	407.771	Recovery = 100.89%					
Li 670.784†	163562.5	1.05 mg/L	0.005	1.05 mg/L	0.005	0.51%	
QC value within limits for Li	670.784	Recovery = 105.27%					

All analyte(s) passed QC.

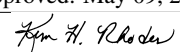
```

=====
Sequence No.: 7                               u&osampler Location: 1
Sample ID: CCB                               a&me Collected: 5/8/2012 12:03:08 PM
Analyst:                                     a&na Type: Original
Initial Sample Wt:                           n&itial Sample Vol:
Dilution:                                    a&mp;le Prep Vol:
=====
    
```

```

-----
Nebulizer Parameters: CCB
Analyte      Back Pressure  Flow
All          152.0 kPa     0.50 L/min
=====
    
```

Mean Data: CCB	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
Analyte	Intensity	Conc. Units		Conc. Units		
Y 371.029	2295220.6				15583.99	0.68%

Approved: May 09, 2012


YRADIAL	306906.7					5870.54	1.91%
Ga 417.206	1370387.3					7733.16	0.56%
GaRADIAL	91553.1					1420.33	1.55%
Ag 328.068†	64.5	0.00001 mg/L	0.000496	0.00001 mg/L		0.000496	>999.9%
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 396.153†	17.4	-0.0305 mg/L	0.00062	-0.0305 mg/L		0.00062	2.03%
QC value within limits for Al	396.153	Recovery = Not calculated					
As 188.979†	-2.7	-0.00096 mg/L	0.001305	-0.00096 mg/L		0.001305	135.22%
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	27.4	-0.00308 mg/L	0.000060	-0.00308 mg/L		0.000060	1.96%
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 234.861†	56.5	0.00014 mg/L	0.000009	0.00014 mg/L		0.000009	6.69%
QC value within limits for Be	234.861	Recovery = Not calculated					
B 249.677†	1060.8	0.0141 mg/L	0.00043	0.0141 mg/L		0.00043	3.06%
QC value within limits for B	249.677	Recovery = Not calculated					
Ca 227.546†	-11.2	0.0245 mg/L	0.01976	0.0245 mg/L		0.01976	80.67%
QC value within limits for Ca	227.546	Recovery = Not calculated					
Cd 228.802†	4.4	0.00028 mg/L	0.000217	0.00028 mg/L		0.000217	78.56%
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	2.5	-0.00065 mg/L	0.000151	-0.00065 mg/L		0.000151	23.26%
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	-8.1	-0.00207 mg/L	0.000067	-0.00207 mg/L		0.000067	3.23%
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	0.8	-0.00044 mg/L	0.000295	-0.00044 mg/L		0.000295	66.62%
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 239.562†	18.1	-0.00922 mg/L	0.000281	-0.00922 mg/L		0.000281	3.05%
QC value within limits for Fe	239.562	Recovery = Not calculated					
Mg 279.077†	12.4	-0.0215 mg/L	0.00176	-0.0215 mg/L		0.00176	8.17%
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	10.4	-0.00290 mg/L	0.000014	-0.00290 mg/L		0.000014	0.47%
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	10.7	-0.00182 mg/L	0.000314	-0.00182 mg/L		0.000314	17.26%
QC value within limits for Mo	202.031	Recovery = Not calculated					
Ni 231.604†	11.8	-0.00185 mg/L	0.000185	-0.00185 mg/L		0.000185	9.99%
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	-22.9	-0.00327 mg/L	0.001740	-0.00327 mg/L		0.001740	53.13%
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	-2.6	0.00045 mg/L	0.000945	0.00045 mg/L		0.000945	211.77%
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	-0.3	0.00289 mg/L	0.001314	0.00289 mg/L		0.001314	45.39%
QC value within limits for Se	196.026	Recovery = Not calculated					
Si 251.611†	84.0	-0.00426 mg/L	0.000306	-0.00426 mg/L		0.000306	7.19%
QC value within limits for Si	251.611	Recovery = Not calculated					
Sn 189.927†	16.3	-0.00188 mg/L	0.000865	-0.00188 mg/L		0.000865	46.03%
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	151.1	-0.00164 mg/L	0.000022	-0.00164 mg/L		0.000022	1.36%
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	-5.4	-0.00352 mg/L	0.001167	-0.00352 mg/L		0.001167	33.16%
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	1103.8	0.00060 mg/L	0.002390	0.00060 mg/L		0.002390	398.86%
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	-9.5	-0.00234 mg/L	0.000134	-0.00234 mg/L		0.000134	5.73%
QC value within limits for Zn	206.200	Recovery = Not calculated					
K 766.490†	48.4	-0.0275 mg/L	0.03435	-0.0275 mg/L		0.03435	124.86%
QC value within limits for K	766.490	Recovery = Not calculated					
Na 589.592†	-38.2	0.0204 mg/L	0.00240	0.0204 mg/L		0.00240	11.73%
QC value within limits for Na	589.592	Recovery = Not calculated					
Sr 407.771†	162.7	-0.00590 mg/L	0.000008	-0.00590 mg/L		0.000008	0.14%
QC value within limits for Sr	407.771	Recovery = Not calculated					
Li 670.784†	-78.6	-0.00419 mg/L	0.000852	-0.00419 mg/L		0.000852	20.34%
QC value within limits for Li	670.784	Recovery = Not calculated					

All analyte(s) passed QC.

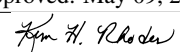
```

=====
Sequence No.: 8                               u&osampler Location: 25
Sample ID: LLCCV                             a&e Collected: 5/8/2012 12:10:01 PM
Analyst: KHR                                 a&a Type: Original
Initial Sample Wt:                           nitial Sample Vol:
Dilution:                                   a&ple Prep Vol:
=====

```

Nebulizer Parameters: LLCCV

Approved: May 09, 2012



Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2312793.8						1492.33	0.06%
YRADIAL	308190.3						4027.14	1.31%
Ga 417.206	1384848.5						43358.93	3.13%
GaRADIAL	91280.6						938.29	1.03%
Ag 328.068†	1388.5	0.00426	mg/L	0.000208	0.00426	mg/L	0.000208	4.88%
Al 396.153†	779.6	0.0713	mg/L	0.00275	0.0713	mg/L	0.00275	3.85%
As 188.979†	12.0	0.00422	mg/L	0.000952	0.00422	mg/L	0.000952	22.56%
Ba 233.527†	1658.8	0.00734	mg/L	0.000084	0.00734	mg/L	0.000084	1.14%
Be 234.861†	654.4	0.00061	mg/L	0.000003	0.00061	mg/L	0.000003	0.45%
B 249.677†	1290.8	0.0168	mg/L	0.000073	0.0168	mg/L	0.000073	4.34%
Ca 227.546†	45.1	0.149	mg/L	0.0193	0.149	mg/L	0.0193	12.98%
Cd 228.802†	37.4	0.00085	mg/L	0.000165	0.00085	mg/L	0.000165	19.43%
Co 228.616†	83.9	0.00145	mg/L	0.000058	0.00145	mg/L	0.000058	3.96%
Cr 267.716†	564.8	0.00319	mg/L	0.000112	0.00319	mg/L	0.000112	3.51%
Cu 327.393†	1486.4	0.00510	mg/L	0.000369	0.00510	mg/L	0.000369	7.24%
Fe 239.562†	641.0	0.0299	mg/L	0.00060	0.0299	mg/L	0.00060	2.02%
Mg 279.077†	367.8	0.0788	mg/L	0.00202	0.0788	mg/L	0.00202	2.56%
Mn 257.610†	4581.0	0.00254	mg/L	0.000030	0.00254	mg/L	0.000030	1.18%
Mo 202.031†	393.2	0.00852	mg/L	0.000165	0.00852	mg/L	0.000165	1.94%
Ni 231.604†	371.2	0.00343	mg/L	0.000219	0.00343	mg/L	0.000219	6.39%
Pb 220.353†	28.4	0.00135	mg/L	0.001264	0.00135	mg/L	0.001264	93.68%
Sb 206.836†	48.1	0.0126	mg/L	0.00163	0.0126	mg/L	0.00163	12.88%
Se 196.026†	7.8	0.00741	mg/L	0.003992	0.00741	mg/L	0.003992	53.87%
Si 251.611†	2239.4	0.0473	mg/L	0.00201	0.0473	mg/L	0.00201	4.25%
Sn 189.927†	120.0	0.00807	mg/L	0.000647	0.00807	mg/L	0.000647	8.02%
Ti 334.940†	10181.6	0.00837	mg/L	0.000077	0.00837	mg/L	0.000077	0.92%
Tl 190.801†	18.8	0.00285	mg/L	0.001483	0.00285	mg/L	0.001483	51.95%
V 290.880†	2767.0	0.00919	mg/L	0.003011	0.00919	mg/L	0.003011	32.76%
Zn 206.200†	980.4	0.0212	mg/L	0.00013	0.0212	mg/L	0.00013	0.60%
K 766.490†	1932.4	0.531	mg/L	0.0083	0.531	mg/L	0.0083	1.56%
Na 589.592†	10086.9	0.508	mg/L	0.0078	0.508	mg/L	0.0078	1.53%
Sr 407.771†	27595.3	0.00439	mg/L	0.000148	0.00439	mg/L	0.000148	3.36%
Li 670.784†	1771.6	0.00776	mg/L	0.000124	0.00776	mg/L	0.000124	1.59%

Sequence No.: 9
Sample ID: LLCCV
Analyst: KHR
Initial Sample Wt:
Dilution:

autosampler Location: 26
Date Collected: 5/8/2012 12:16:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LLCCV

Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: LLCCV

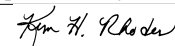
Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2322369.5						28700.64	1.24%
YRADIAL	309759.7						7149.39	2.31%
Ga 417.206	1408270.3						15487.79	1.10%
GaRADIAL	92312.3						651.47	0.71%
Ag 328.068†	2524.4	0.00792	mg/L	0.000265	0.00792	mg/L	0.000265	3.35%
Al 396.153†	1550.4	0.174	mg/L	0.0021	0.174	mg/L	0.0021	1.19%
As 188.979†	20.1	0.00703	mg/L	0.002260	0.00703	mg/L	0.002260	32.15%
Ba 233.527†	3289.2	0.0177	mg/L	0.00029	0.0177	mg/L	0.00029	1.62%
Be 234.861†	1324.3	0.00113	mg/L	0.000032	0.00113	mg/L	0.000032	2.86%
B 249.677†	1553.3	0.0198	mg/L	0.00002	0.0198	mg/L	0.00002	0.12%
Ca 227.546†	89.7	0.248	mg/L	0.0161	0.248	mg/L	0.0161	6.47%
Cd 228.802†	67.3	0.00138	mg/L	0.000178	0.00138	mg/L	0.000178	12.92%
Co 228.616†	162.5	0.00348	mg/L	0.000051	0.00348	mg/L	0.000051	1.47%
Cr 267.716†	1119.5	0.00828	mg/L	0.000217	0.00828	mg/L	0.000217	2.62%
Cu 327.393†	2779.9	0.00993	mg/L	0.000117	0.00993	mg/L	0.000117	1.18%

Approved: May 09, 2012

John H. Rhodes

Fe 239.562†	1280.9	0.0701 mg/L	0.00083	0.0701 mg/L	0.00083	1.18%
Mg 279.077†	731.3	0.181 mg/L	0.0058	0.181 mg/L	0.0058	3.23%
Mn 257.610†	8721.4	0.00748 mg/L	0.000109	0.00748 mg/L	0.000109	1.46%
Mo 202.031†	765.2	0.0186 mg/L	0.00005	0.0186 mg/L	0.00005	0.27%
Ni 231.604†	743.5	0.00890 mg/L	0.000236	0.00890 mg/L	0.000236	2.65%
Pb 220.353†	92.9	0.00717 mg/L	0.000139	0.00717 mg/L	0.000139	1.94%
Sb 206.836†	94.4	0.0238 mg/L	0.00256	0.0238 mg/L	0.00256	10.77%
Se 196.026†	10.7	0.00905 mg/L	0.001995	0.00905 mg/L	0.001995	22.05%
Si 251.611†	4308.2	0.0967 mg/L	0.00103	0.0967 mg/L	0.00103	1.07%
Sn 189.927†	228.7	0.0185 mg/L	0.00081	0.0185 mg/L	0.00081	4.37%
Ti 334.940†	20259.6	0.0184 mg/L	0.00019	0.0184 mg/L	0.00019	1.05%
Tl 190.801†	43.4	0.00934 mg/L	0.001549	0.00934 mg/L	0.001549	16.58%
V 290.880†	4686.4	0.0191 mg/L	0.00240	0.0191 mg/L	0.00240	12.55%
Zn 206.200†	962.0	0.0208 mg/L	0.00031	0.0208 mg/L	0.00031	1.47%
K 766.490†	3618.1	1.03 mg/L	0.006	1.03 mg/L	0.006	0.61%
Na 589.592†	19907.8	0.981 mg/L	0.0112	0.981 mg/L	0.0112	1.14%
Sr 407.771†	54974.3	0.0147 mg/L	0.00042	0.0147 mg/L	0.00042	2.86%
Li 670.784†	3410.6	0.0183 mg/L	0.00054	0.0183 mg/L	0.00054	2.95%

Approved: May 09, 2012



=====
 Analysis Begun

Start Time: 5/8/2012 1:12:00 PM Plasma On Time: 5/8/2012 6:43:32 AM
 Logged In Analyst: peicp2 Ethnique: ICP Continuous
 Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
 Batch ID:
 Results Data Set: 050812H
 Results Library: C:\pe\peicp2\Results\Results.mdb

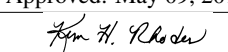
=====
 Method Loaded Method Last Saved: 5/8/2012 8:44:51 AM
 Method Name: 200.7-6010 PE-ICP2.1 SW File:
 IEC File: CA227_LiBeMOD.iec
 Method Description: STANDARD

=====
 Sequence No.: 1 Autosampler Location: 32
 Sample ID: PBW 94 WG396609-02 Date Collected: 5/8/2012 1:12:02 PM
 Analyst: KHR Date Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

 Nebulizer Parameters: PBW 94 WG396609-02
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: PBW 94 WG396609-02							
Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	2358098.1					5529.63	0.23%
YRADIAL	319105.0					4971.56	1.56%
Ga 417.206	1495076.9					32890.27	2.20%
GaRADIAL	97209.7					1512.85	1.56%
Ag 328.068†	25.4	-0.00012	mg/L	0.000401	-0.00012	0.000401	347.64%
Al 396.153†	7.2	-0.0319	mg/L	0.00101	-0.0319	0.00101	3.16%
As 188.979†	0.6	0.00021	mg/L	0.002376	0.00021	0.002376	>999.9%
Ba 233.527†	75.1	-0.00277	mg/L	0.000033	-0.00277	0.000033	1.20%
Be 234.861†	202.9	0.00025	mg/L	0.000033	0.00025	0.000033	12.88%
B 249.677†	194.3	0.00391	mg/L	0.000149	0.00391	0.000149	3.80%
Ca 227.546†	9.7	0.0687	mg/L	0.01569	0.0687	0.01569	22.85%
Cd 228.802†	0.7	0.00020	mg/L	0.000169	0.00020	0.000169	82.72%
Co 228.616†	0.9	-0.00069	mg/L	0.000101	-0.00069	0.000101	14.59%
Cr 267.716†	-19.5	-0.00217	mg/L	0.000099	-0.00217	0.000099	4.56%
Cu 327.393†	-3.0	-0.00046	mg/L	0.000295	-0.00046	0.000295	64.33%
Fe 239.562†	22.0	-0.00898	mg/L	0.000150	-0.00898	0.000150	1.67%
Mg 279.077†	5.0	-0.0236	mg/L	0.00157	-0.0236	0.00157	6.66%
Mn 257.610†	747.3	-0.00203	mg/L	0.000016	-0.00203	0.000016	0.79%
Mo 202.031†	-0.9	-0.00213	mg/L	0.000247	-0.00213	0.000247	11.59%
Ni 231.604†	2.8	-0.00198	mg/L	0.000407	-0.00198	0.000407	20.50%
Pb 220.353†	-8.6	-0.00199	mg/L	0.001192	-0.00199	0.001192	59.77%
Sb 206.836†	-0.6	0.00093	mg/L	0.000343	0.00093	0.000343	36.97%
Se 196.026†	-4.1	0.00078	mg/L	0.000892	0.00078	0.000892	114.38%
Si 251.611†	-26.5	-0.00690	mg/L	0.000725	-0.00690	0.000725	10.51%
Sn 189.927†	-62.7	-0.00946	mg/L	0.000141	-0.00946	0.000141	1.49%
Ti 334.940†	138.3	-0.00165	mg/L	0.000146	-0.00165	0.000146	8.88%
Tl 190.801†	9.3	0.00026	mg/L	0.001705	0.00026	0.001705	649.55%
V 290.880†	840.4	-0.00076	mg/L	0.001782	-0.00076	0.001782	233.49%
Zn 206.200†	14.8	-0.00176	mg/L	0.000040	-0.00176	0.000040	2.26%
K 766.490†	160.4	0.00571	mg/L	0.019253	0.00571	0.019253	337.30%
Na 589.592†	-74.1	0.0187	mg/L	0.02074	0.0187	0.02074	110.87%
Sr 407.771†	44.0	-0.00595	mg/L	0.000006	-0.00595	0.000006	0.10%
Li 670.784†	-2.5	-0.00370	mg/L	0.000612	-0.00370	0.000612	16.55%

=====
 Sequence No.: 2 Autosampler Location: 33
 Sample ID: LCSW 94 WG396609-03 Date Collected: 5/8/2012 1:18:58 PM

Approved: May 09, 2012 

Analyst: KHR
Initial Sample Wt:
Dilution:

ama Type: Original
nitial Sample Vol:
aample Prep Vol:

Nebulizer Parameters: LCSW 94 WG396609-03
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: LCSW 94 WG396609-03

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective intensity and RSD values.

Sequence No.: 3
Sample ID: L1204089803 WG396609-01
Analyst: KHR
Initial Sample Wt:
Dilution:

uikosampler Location: 34
ame Collected: 5/8/2012 1:24:58 PM
ama Type: Original
nitial Sample Vol:
aample Prep Vol:

Nebulizer Parameters: L1204089803 WG396609-01
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1204089803 WG396609-01

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be with their respective intensity and RSD values.

Approved: May 09, 2012
[Signature]

B 249.677†	12517.4	0.148 mg/L	0.0018	0.148 mg/L	0.0018	1.21%
Ca 227.546†	71509.5	152 mg/L	2.2	152 mg/L	2.2	1.45%
Cd 228.802†	1212.7	0.0220 mg/L	0.00029	0.0220 mg/L	0.00029	1.34%
Co 228.616†	15.7	-0.00026 mg/L	0.000336	-0.00026 mg/L	0.000336	128.16%
Cr 267.716†	554.9	0.00314 mg/L	0.000128	0.00314 mg/L	0.000128	4.07%
Cu 327.393†	3294.1	0.0118 mg/L	0.00039	0.0118 mg/L	0.00039	3.28%
Fe 239.562†	1361.5	0.0742 mg/L	0.00090	0.0742 mg/L	0.00090	1.21%
Mg 279.077†	165658.4	46.6 mg/L	0.61	46.6 mg/L	0.61	1.31%
Mn 257.610†	26453.3	0.0286 mg/L	0.00006	0.0286 mg/L	0.00006	0.20%
Mo 202.031†	281.6	0.00551 mg/L	0.000500	0.00551 mg/L	0.000500	9.07%
Ni 231.604†	255.0	0.00173 mg/L	0.000378	0.00173 mg/L	0.000378	21.88%
Pb 220.353†	2.2	0.00017 mg/L	0.001829	0.00017 mg/L	0.001829	>999.9%
Sb 206.836†	-2.4	0.00048 mg/L	0.000335	0.00048 mg/L	0.000335	69.23%
Se 196.026†	22.0	0.0153 mg/L	0.00313	0.0153 mg/L	0.00313	20.47%
Si 251.611†	223386.3	5.35 mg/L	0.017	5.35 mg/L	0.017	0.32%
Sn 189.927†	-364.0	-0.0384 mg/L	0.00038	-0.0384 mg/L	0.00038	1.00%
Ti 334.940†	-29787.4	-0.00871 mg/L	0.000927	-0.00871 mg/L	0.000927	10.64%
Tl 190.801†	-45.8	-0.0143 mg/L	0.00236	-0.0143 mg/L	0.00236	16.50%
V 290.880†	3538.5	0.0120 mg/L	0.00441	0.0120 mg/L	0.00441	36.85%
Zn 206.200†	34489.3	0.817 mg/L	0.0017	0.817 mg/L	0.0017	0.21%
K 766.490†	44287.9	12.6 mg/L	0.07	12.6 mg/L	0.07	0.58%
Na 589.592†	6760939.8	536 mg/L	0.0	536 mg/L	0.0	0.00%
Sr 407.771†	4164841.1	1.55 mg/L	0.039	1.55 mg/L	0.039	2.50%
Li 670.784†	5555.2	0.0322 mg/L	0.00097	0.0322 mg/L	0.00097	3.02%

Sequence No.: 4

Sample ID: L1204089803S WG396609-04

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 35

Date Collected: 5/8/2012 1:32:00 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1204089803S WG396609-04

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: L1204089803S WG396609-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2043188.2				5737.62		0.28%
YRADIAL	293741.7				6616.94		2.25%
Ga 417.206	1364401.1				35804.76		2.62%
GaRADIAL	92014.0				2749.35		2.99%
Ag 328.068†	62036.2	0.199 mg/L		0.0072	0.199 mg/L	0.0072	3.61%
Al 396.153†	39460.8	5.24 mg/L		0.040	5.24 mg/L	0.040	0.77%
As 188.979†	549.9	0.193 mg/L		0.0037	0.193 mg/L	0.0037	1.93%
Ba 233.527†	93828.9	0.596 mg/L		0.0030	0.596 mg/L	0.0030	0.51%
Be 234.861†	30301.0	0.0238 mg/L		0.00087	0.0238 mg/L	0.00087	3.67%
B 249.677†	96944.7	1.14 mg/L		0.044	1.14 mg/L	0.044	3.88%
Ca 227.546†	78659.3	167 mg/L		6.1	167 mg/L	6.1	3.65%
Cd 228.802†	2597.0	0.0462 mg/L		0.00159	0.0462 mg/L	0.00159	3.44%
Co 228.616†	3842.7	0.0984 mg/L		0.00051	0.0984 mg/L	0.00051	0.52%
Cr 267.716†	28040.5	0.255 mg/L		0.0028	0.255 mg/L	0.0028	1.09%
Cu 327.393†	70435.8	0.262 mg/L		0.0096	0.262 mg/L	0.0096	3.67%
Fe 239.562†	32627.8	2.04 mg/L		0.031	2.04 mg/L	0.031	1.52%
Mg 279.077†	184602.3	52.0 mg/L		0.58	52.0 mg/L	0.58	1.12%
Mn 257.610†	240814.4	0.284 mg/L		0.0015	0.284 mg/L	0.0015	0.54%
Mo 202.031†	19328.1	0.520 mg/L		0.0050	0.520 mg/L	0.0050	0.96%
Ni 231.604†	17696.9	0.258 mg/L		0.0013	0.258 mg/L	0.0013	0.50%
Pb 220.353†	2755.0	0.249 mg/L		0.0010	0.249 mg/L	0.0010	0.38%
Sb 206.836†	2422.3	0.584 mg/L		0.0156	0.584 mg/L	0.0156	2.67%
Se 196.026†	373.2	0.211 mg/L		0.0066	0.211 mg/L	0.0066	3.11%
Si 251.611†	345800.9	8.27 mg/L		0.253	8.27 mg/L	0.253	3.05%
Sn 189.927†	5336.5	0.508 mg/L		0.0044	0.508 mg/L	0.0044	0.87%
Ti 334.940†	496609.0	0.518 mg/L		0.0014	0.518 mg/L	0.0014	0.27%
Tl 190.801†	915.5	0.241 mg/L		0.0021	0.241 mg/L	0.0021	0.87%
V 290.880†	105082.2	0.537 mg/L		0.0059	0.537 mg/L	0.0059	1.10%
Zn 206.200†	53935.5	1.28 mg/L		0.007	1.28 mg/L	0.007	0.52%
K 766.490†	129072.3	38.2 mg/L		0.24	38.2 mg/L	0.24	0.64%
Na 589.592†	7452152.9	536 mg/L		0.0	536 mg/L	0.0	0.00%

Approved: May 09, 2012

John H. Rhodes

Sr 407.771†	5618146.7	2.10 mg/L	0.052	2.10 mg/L	0.052	2.47%
Li 670.784†	89247.5	0.573 mg/L	0.0045	0.573 mg/L	0.0045	0.79%

```

Sequence No.: 5                               u&osampler Location: 36
Sample ID: L1204089803SD WG396609-05       ame Collected: 5/8/2012 1:38:05 PM
Analyst: KHR                                ama Type: Original
Initial Sample Wt:                          nitial Sample Vol:
Dilution:                                  ample Prep Vol:

```

```

Nebulizer Parameters: L1204089803SD WG396609-05
Analyte      Back Pressure   Flow
All          154.0 kPa        0.50 L/min

```

Mean Data: L1204089803SD WG396609-05

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2037421.4				28810.52	1.41%
YRADIAL	295806.6				2913.09	0.98%
Ga 417.206	1354048.5				19352.66	1.43%
GaRADIAL	91646.1				1072.23	1.17%
Ag 328.068†	62152.3	0.199 mg/L	0.0031	0.199 mg/L	0.0031	1.53%
Al 396.153†	39284.7	5.22 mg/L	0.017	5.22 mg/L	0.017	0.32%
As 188.979†	550.3	0.193 mg/L	0.0028	0.193 mg/L	0.0028	1.44%
Ba 233.527†	92772.1	0.589 mg/L	0.0143	0.589 mg/L	0.0143	2.43%
Be 234.861†	30234.9	0.0238 mg/L	0.00035	0.0238 mg/L	0.00035	1.48%
B 249.677†	96726.6	1.14 mg/L	0.021	1.14 mg/L	0.021	1.86%
Ca 227.546†	76222.8	162 mg/L	3.8	162 mg/L	3.8	2.34%
Cd 228.802†	2561.8	0.0456 mg/L	0.00094	0.0456 mg/L	0.00094	2.07%
Co 228.616†	3848.8	0.0985 mg/L	0.00186	0.0985 mg/L	0.00186	1.89%
Cr 267.716†	27693.3	0.252 mg/L	0.0039	0.252 mg/L	0.0039	1.54%
Cu 327.393†	70837.1	0.264 mg/L	0.0051	0.264 mg/L	0.0051	1.94%
Fe 239.562†	32263.0	2.01 mg/L	0.024	2.01 mg/L	0.024	1.22%
Mg 279.077†	177054.7	49.8 mg/L	0.51	49.8 mg/L	0.51	1.03%
Mn 257.610†	238429.4	0.281 mg/L	0.0070	0.281 mg/L	0.0070	2.50%
Mo 202.031†	19163.7	0.516 mg/L	0.0065	0.516 mg/L	0.0065	1.26%
Ni 231.604†	17715.6	0.258 mg/L	0.0042	0.258 mg/L	0.0042	1.61%
Pb 220.353†	2746.3	0.248 mg/L	0.0028	0.248 mg/L	0.0028	1.13%
Sb 206.836†	2436.3	0.587 mg/L	0.0108	0.587 mg/L	0.0108	1.84%
Se 196.026†	374.9	0.212 mg/L	0.0065	0.212 mg/L	0.0065	3.06%
Si 251.611†	337276.4	8.07 mg/L	0.101	8.07 mg/L	0.101	1.25%
Sn 189.927†	5389.8	0.513 mg/L	0.0103	0.513 mg/L	0.0103	2.00%
Ti 334.940†	499319.5	0.520 mg/L	0.0031	0.520 mg/L	0.0031	0.60%
Tl 190.801†	920.1	0.242 mg/L	0.0015	0.242 mg/L	0.0015	0.62%
V 290.880†	105035.1	0.536 mg/L	0.0064	0.536 mg/L	0.0064	1.19%
Zn 206.200†	52257.6	1.24 mg/L	0.028	1.24 mg/L	0.028	2.26%
K 766.490†	128048.1	37.9 mg/L	0.57	37.9 mg/L	0.57	1.51%
Na 589.592†	7264064.2	536 mg/L	0.0	536 mg/L	0.0	0.00%
Sr 407.771†	5428325.3	2.03 mg/L	0.025	2.03 mg/L	0.025	1.23%
Li 670.784†	89990.3	0.578 mg/L	0.0125	0.578 mg/L	0.0125	2.16%

```

Sequence No.: 6                               u&osampler Location: 37
Sample ID: L1204089804                       ame Collected: 5/8/2012 1:44:07 PM
Analyst: KHR                                ama Type: Original
Initial Sample Wt:                          nitial Sample Vol:
Dilution:                                  ample Prep Vol:

```

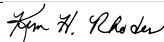
```

Nebulizer Parameters: L1204089804
Analyte      Back Pressure   Flow
All          155.0 kPa        0.50 L/min

```

Mean Data: L1204089804

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2050728.1				29050.47	1.42%
YRADIAL	302105.6				4668.30	1.55%
Ga 417.206	1465159.8				9889.48	0.67%

Approved: May 09, 2012


GarADIAL	95648.7					1733.44	1.81%
Ag 328.068†	579.9	0.00133	mg/L	0.000484	0.00133	mg/L	0.000484 36.40%
Al 396.153†	-4.9	-0.0340	mg/L	0.00116	-0.0340	mg/L	0.00116 3.42%
As 188.979†	9.4	0.00332	mg/L	0.002234	0.00332	mg/L	0.002234 67.37%
Ba 233.527†	16588.0	0.103	mg/L	0.0012	0.103	mg/L	0.0012 1.14%
Be 234.861†	300.4	0.00031	mg/L	0.000004	0.00031	mg/L	0.000004 1.40%
B 249.677†	13822.9	0.164	mg/L	0.0013	0.164	mg/L	0.0013 0.82%
Ca 227.546†	63636.5	135	mg/L	1.8	135	mg/L	1.8 1.34%
Cd 228.802†	5.1	0.00027	mg/L	0.000055	0.00027	mg/L	0.000055 20.45%
Co 228.616†	9.6	-0.00043	mg/L	0.000264	-0.00043	mg/L	0.000264 60.95%
Cr 267.716†	443.0	0.00208	mg/L	0.000223	0.00208	mg/L	0.000223 10.69%
Cu 327.393†	-218.6	-0.00128	mg/L	0.000620	-0.00128	mg/L	0.000620 48.56%
Fe 239.562†	2056.1	0.118	mg/L	0.0010	0.118	mg/L	0.0010 0.87%
Mg 279.077†	171187.1	48.2	mg/L	0.62	48.2	mg/L	0.62 1.29%
Mn 257.610†	45506.1	0.0513	mg/L	0.00076	0.0513	mg/L	0.00076 1.49%
Mo 202.031†	249.8	0.00466	mg/L	0.000259	0.00466	mg/L	0.000259 5.56%
Ni 231.604†	347.1	0.00308	mg/L	0.000199	0.00308	mg/L	0.000199 6.45%
Pb 220.353†	2.0	0.00001	mg/L	0.001273	0.00001	mg/L	0.001273 >999.9%
Sb 206.836†	-0.9	0.00085	mg/L	0.001277	0.00085	mg/L	0.001277 149.85%
Se 196.026†	14.1	0.0109	mg/L	0.00074	0.0109	mg/L	0.00074 6.77%
Si 251.611†	242688.3	5.81	mg/L	0.027	5.81	mg/L	0.027 0.47%
Sn 189.927†	-351.6	-0.0372	mg/L	0.00056	-0.0372	mg/L	0.00056 1.51%
Ti 334.940†	-27499.4	-0.00894	mg/L	0.001104	-0.00894	mg/L	0.001104 12.36%
Tl 190.801†	-43.3	-0.0136	mg/L	0.00349	-0.0136	mg/L	0.00349 25.65%
V 290.880†	3460.8	0.0115	mg/L	0.00249	0.0115	mg/L	0.00249 21.60%
Zn 206.200†	128.7	0.00098	mg/L	0.000173	0.00098	mg/L	0.000173 17.79%
K 766.490†	45222.0	12.9	mg/L	0.05	12.9	mg/L	0.05 0.42%
Na 589.592†	6802141.9	536	mg/L	0.0	536	mg/L	0.0 0.00%
Sr 407.771†	5330677.1	1.99	mg/L	0.036	1.99	mg/L	0.036 1.82%
Li 670.784†	5128.8	0.0294	mg/L	0.00064	0.0294	mg/L	0.00064 2.17%

Sequence No.: 7

Sample ID: L1204089805

Analyst: KHR

Initial Sample Wt:

Dilution:

uakosampler Location: 38

ahe Collected: 5/8/2012 1:51:10 PM

ama Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: L1204089805

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: L1204089805

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 371.029	1884506.9					11399.98	0.60%	
YRADIAL	284024.9					2869.43	1.01%	
Ga 417.206	1387381.8					10018.65	0.72%	
GarADIAL	92787.9					2117.62	2.28%	
Ag 328.068†	947.9	0.00271	mg/L	0.000183	0.00271	mg/L	0.000183 6.75%	
Al 396.153†	137.6	-0.0149	mg/L	0.00138	-0.0149	mg/L	0.00138 9.26%	
As 188.979†	114.0	0.0405	mg/L	0.00198	0.0405	mg/L	0.00198 4.89%	
Ba 233.527†	13291.4	0.0816	mg/L	0.00043	0.0816	mg/L	0.00043 0.53%	
Be 234.861†	283.7	0.00031	mg/L	0.000017	0.00031	mg/L	0.000017 5.51%	
B 249.677†	14641.3	0.174	mg/L	0.0020	0.174	mg/L	0.0020 1.16%	
Ca 227.546†	99900.0	212	mg/L	2.0	212	mg/L	2.0 0.93%	
Cd 228.802†	28.9	0.00051	mg/L	0.000106	0.00051	mg/L	0.000106 20.92%	
Co 228.616†	15.4	-0.00040	mg/L	0.000373	-0.00040	mg/L	0.000373 94.25%	
Cr 267.716†	1586.8	0.0126	mg/L	0.00011	0.0126	mg/L	0.00011 0.85%	
Cu 327.393†	-337.6	-0.00165	mg/L	0.000219	-0.00165	mg/L	0.000219 13.24%	
Fe 239.562†	1294.2	0.0706	mg/L	0.00065	0.0706	mg/L	0.00065 0.92%	
Mg 279.077†	61864.8	17.4	mg/L	0.16	17.4	mg/L	0.16 0.92%	
Mn 257.610†	74733.1	0.0860	mg/L	0.00045	0.0860	mg/L	0.00045 0.53%	
Mo 202.031†	307.8	0.00625	mg/L	0.000203	0.00625	mg/L	0.000203 3.25%	
Ni 231.604†	333.7	0.00289	mg/L	0.000153	0.00289	mg/L	0.000153 5.29%	
Pb 220.353†	3.9	0.00079	mg/L	0.000937	0.00079	mg/L	0.000937 118.17%	
Sb 206.836†	-8.0	-0.00088	mg/L	0.000545	-0.00088	mg/L	0.000545 61.68%	
Se 196.026†	-6.5	-0.00052	mg/L	0.003987	-0.00052	mg/L	0.003987 768.90%	
Si 251.611†	753118.2	18.0	mg/L	0.06	18.0	mg/L	0.06 0.33%	
Sn 189.927†	-408.5	-0.0426	mg/L	0.00068	-0.0426	mg/L	0.00068 1.59%	

Approved: May 09, 2012

Tom H. Rhodes

Ti 334.940†	30991.5	0.0609 mg/L	0.00141	0.0609 mg/L	0.00141	2.31%
Tl 190.801†	-67.6	-0.0191 mg/L	0.00142	-0.0191 mg/L	0.00142	7.39%
V 290.880†	8941.8	0.0407 mg/L	0.00091	0.0407 mg/L	0.00091	2.24%
Zn 206.200†	57.0	-0.00064 mg/L	0.000204	-0.00064 mg/L	0.000204	31.99%
K 766.490†	35041.7	10.4 mg/L	0.05	10.4 mg/L	0.05	0.49%
Na 589.592†	Saturated2					
Sr 407.771†	2924518.0	1.09 mg/L	0.012	1.09 mg/L	0.012	1.10%
Li 670.784†	7367.2	0.0439 mg/L	0.00166	0.0439 mg/L	0.00166	3.77%

Sequence No.: 8
 Sample ID: L1204089806
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 39
 a&e Collected: 5/8/2012 1:58:09 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: L1204089806
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

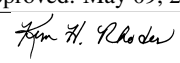
Mean Data: L1204089806

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	1889191.4				14963.29	0.79%
YRADIAL	284104.1				4384.38	1.54%
Ga 417.206	1398634.1				17246.32	1.23%
GaRADIAL	92379.9				3070.15	3.32%
Ag 328.068†	785.7	0.00217 mg/L	0.000133	0.00217 mg/L	0.000133	6.13%
Al 396.153†	14.9	-0.0314 mg/L	0.00110	-0.0314 mg/L	0.00110	3.50%
As 188.979†	115.3	0.0409 mg/L	0.00256	0.0409 mg/L	0.00256	6.26%
Ba 233.527†	13522.7	0.0830 mg/L	0.00075	0.0830 mg/L	0.00075	0.91%
Be 234.861†	304.4	0.00034 mg/L	0.000015	0.00034 mg/L	0.000015	4.33%
B 249.677†	14699.9	0.174 mg/L	0.0025	0.174 mg/L	0.0025	1.43%
Ca 227.546†	101110.5	215 mg/L	2.2	215 mg/L	2.2	1.02%
Cd 228.802†	30.1	0.00053 mg/L	0.000229	0.00053 mg/L	0.000229	43.42%
Co 228.616†	10.4	-0.00046 mg/L	0.000200	-0.00046 mg/L	0.000200	43.25%
Cr 267.716†	1279.0	0.00976 mg/L	0.000211	0.00976 mg/L	0.000211	2.16%
Cu 327.393†	-442.0	-0.00208 mg/L	0.000499	-0.00208 mg/L	0.000499	24.05%
Fe 239.562†	646.2	0.0299 mg/L	0.00032	0.0299 mg/L	0.00032	1.06%
Mg 279.077†	62245.8	17.5 mg/L	0.13	17.5 mg/L	0.13	0.72%
Mn 257.610†	76653.2	0.0883 mg/L	0.00103	0.0883 mg/L	0.00103	1.16%
Mo 202.031†	295.3	0.00591 mg/L	0.000237	0.00591 mg/L	0.000237	4.01%
Ni 231.604†	328.0	0.00280 mg/L	0.000101	0.00280 mg/L	0.000101	3.61%
Pb 220.353†	-16.6	-0.00104 mg/L	0.001770	-0.00104 mg/L	0.001770	170.60%
Sb 206.836†	-5.5	-0.00028 mg/L	0.000716	-0.00028 mg/L	0.000716	254.71%
Se 196.026†	-0.2	0.00297 mg/L	0.002216	0.00297 mg/L	0.002216	74.58%
Si 251.611†	772043.3	18.5 mg/L	0.29	18.5 mg/L	0.29	1.57%
Sn 189.927†	-405.5	-0.0423 mg/L	0.00071	-0.0423 mg/L	0.00071	1.67%
Ti 334.940†	2239.7	0.0326 mg/L	0.00153	0.0326 mg/L	0.00153	4.69%
Tl 190.801†	-54.7	-0.0162 mg/L	0.00227	-0.0162 mg/L	0.00227	14.01%
V 290.880†	7915.6	0.0354 mg/L	0.00261	0.0354 mg/L	0.00261	7.38%
Zn 206.200†	57.4	-0.00065 mg/L	0.000120	-0.00065 mg/L	0.000120	18.39%
K 766.490†	35531.7	10.5 mg/L	0.09	10.5 mg/L	0.09	0.87%
Na 589.592†	Saturated2					
Sr 407.771†	2917271.6	1.08 mg/L	0.024	1.08 mg/L	0.024	2.26%
Li 670.784†	7482.4	0.0446 mg/L	0.00206	0.0446 mg/L	0.00206	4.60%

Sequence No.: 9
 Sample ID: L1204089806PS WG396721-03
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 40
 a&e Collected: 5/8/2012 2:05:08 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: L1204089806PS WG396721-03
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Approved: May 09, 2012


Mean Data: L1204089806PS WG396721-03

Table with columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective intensity and concentration values.

Sequence No.: 10 Sample ID: L1204089806DL WG396721-04 Analyst: KHR Initial Sample Wt: Dilution: uosampler Location: 41 ame Collected: 5/8/2012 2:11:08 PM ama Type: Original nitial Sample Vol: ample Prep Vol:

Nebulizer Parameters: L1204089806DL WG396721-04

Table with columns: Analyte, Back Pressure, Flow. Row: All, 155.0 kPa, 0.50 L/min

Mean Data: L1204089806DL WG396721-04

Table with columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo with their respective intensity and concentration values.

Approved: May 09, 2012 [Signature]

Ni 231.604†	62.3	-0.00111 mg/L	0.000182	-0.00111 mg/L	0.000182	16.45%
Pb 220.353†	-2.8	-0.00114 mg/L	0.000712	-0.00114 mg/L	0.000712	62.32%
Sb 206.836†	-0.0	0.00106 mg/L	0.001345	0.00106 mg/L	0.001345	126.43%
Se 196.026†	-0.6	0.00276 mg/L	0.001680	0.00276 mg/L	0.001680	60.95%
Si 251.611†	170510.1	4.08 mg/L	0.038	4.08 mg/L	0.038	0.94%
Sn 189.927†	-226.4	-0.0252 mg/L	0.00118	-0.0252 mg/L	0.00118	4.68%
Ti 334.940†	984.2	0.00547 mg/L	0.000440	0.00547 mg/L	0.000440	8.04%
Tl 190.801†	-22.5	-0.00788 mg/L	0.000518	-0.00788 mg/L	0.000518	6.57%
V 290.880†	3286.4	0.0118 mg/L	0.00037	0.0118 mg/L	0.00037	3.17%
Zn 206.200†	29.2	-0.00140 mg/L	0.000191	-0.00140 mg/L	0.000191	13.67%
K 766.490†	7407.4	1.62 mg/L	0.042	1.62 mg/L	0.042	2.59%
Na 589.592†	5739211.6	536 mg/L	0.0	536 mg/L	0.0	0.00%
Sr 407.771†	597951.1	0.218 mg/L	0.0042	0.218 mg/L	0.0042	1.93%
Li 670.784†	1640.3	0.00691 mg/L	0.000674	0.00691 mg/L	0.000674	9.75%

Sequence No.: 11
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 6
 a&e Collected: 5/8/2012 2:18:08 PM
 a&a Type: Original
 nitial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2218090.6				31771.64	1.43%
YRADIAL	313655.6				3073.92	0.98%
Ga 417.206	1344500.5				36587.76	2.72%
GA RADIAL	93481.5				573.20	0.61%
Ag 328.068†	125821.2	0.404 mg/L	0.0094	0.404 mg/L	0.0094	2.31%
QC value within limits for Ag		328.068 Recovery = 101.06%				
Al 396.153†	75600.4	10.1 mg/L	0.03	10.1 mg/L	0.03	0.28%
QC value within limits for Al		396.153 Recovery = 100.72%				
As 188.979†	1117.3	0.392 mg/L	0.0096	0.392 mg/L	0.0096	2.45%
QC value within limits for As		188.979 Recovery = 98.05%				
Ba 233.527†	157385.7	1.00 mg/L	0.028	1.00 mg/L	0.028	2.81%
QC value within limits for Ba		233.527 Recovery = 100.14%				
Be 234.861†	62295.7	0.0489 mg/L	0.00107	0.0489 mg/L	0.00107	2.19%
QC value within limits for Be		234.861 Recovery = 97.85%				
B 249.677†	43197.7	0.506 mg/L	0.0153	0.506 mg/L	0.0153	3.02%
QC value within limits for B		249.677 Recovery = 101.10%				
Ca 227.546†	4738.9	10.6 mg/L	0.35	10.6 mg/L	0.35	3.33%
QC value within limits for Ca		227.546 Recovery = 105.66%				
Cd 228.802†	2756.4	0.0484 mg/L	0.00220	0.0484 mg/L	0.00220	4.54%
QC value within limits for Cd		228.802 Recovery = 96.71%				
Co 228.616†	7756.8	0.199 mg/L	0.0034	0.199 mg/L	0.0034	1.69%
QC value within limits for Co		228.616 Recovery = 99.65%				
Cr 267.716†	54711.8	0.500 mg/L	0.0110	0.500 mg/L	0.0110	2.21%
QC value within limits for Cr		267.716 Recovery = 100.04%				
Cu 327.393†	138613.5	0.517 mg/L	0.0136	0.517 mg/L	0.0136	2.62%
QC value within limits for Cu		327.393 Recovery = 103.36%				
Fe 239.562†	62746.7	3.93 mg/L	0.025	3.93 mg/L	0.025	0.63%
QC value within limits for Fe		239.562 Recovery = 98.24%				
Mg 279.077†	34826.5	9.80 mg/L	0.059	9.80 mg/L	0.059	0.60%
QC value within limits for Mg		279.077 Recovery = 97.99%				
Mn 257.610†	431436.0	0.511 mg/L	0.0142	0.511 mg/L	0.0142	2.77%
QC value within limits for Mn		257.610 Recovery = 102.24%				
Mo 202.031†	36993.7	0.998 mg/L	0.0234	0.998 mg/L	0.0234	2.34%
QC value within limits for Mo		202.031 Recovery = 99.78%				
Ni 231.604†	34322.6	0.502 mg/L	0.0134	0.502 mg/L	0.0134	2.68%
QC value within limits for Ni		231.604 Recovery = 100.49%				
Pb 220.353†	5634.7	0.507 mg/L	0.0070	0.507 mg/L	0.0070	1.39%
QC value within limits for Pb		220.353 Recovery = 101.48%				
Sb 206.836†	5032.0	1.21 mg/L	0.038	1.21 mg/L	0.038	3.11%
QC value within limits for Sb		206.836 Recovery = 101.01%				
Se 196.026†	717.5	0.403 mg/L	0.0095	0.403 mg/L	0.0095	2.35%

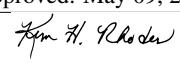
Approved: May 09, 2012


Table with columns for element symbol, concentration, recovery percentage, and units. Elements include Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li. All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:
u&osampler Location: 1
Date Collected: 5/8/2012 2:24:09 PM
Sample Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCB
Analyte Back Pressure Flow
All 155.0 kPa 0.50 L/min

Mean Data: CCB

Table with columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo with their respective values.

Approved: May 09, 2012
[Signature]

Ni	231.604†	QC value within limits for Ni	231.604	Recovery = Not calculated				
Pb	220.353†	QC value within limits for Pb	220.353	Recovery = Not calculated				
Sb	206.836†	QC value within limits for Sb	206.836	Recovery = Not calculated				
Se	196.026†	QC value within limits for Se	196.026	Recovery = Not calculated				
Si	251.611†	QC value within limits for Si	251.611	Recovery = Not calculated				
Sn	189.927†	QC value within limits for Sn	189.927	Recovery = Not calculated				
Ti	334.940†	QC value within limits for Ti	334.940	Recovery = Not calculated				
Tl	190.801†	QC value within limits for Tl	190.801	Recovery = Not calculated				
V	290.880†	QC value within limits for V	290.880	Recovery = Not calculated				
Zn	206.200†	QC value within limits for Zn	206.200	Recovery = Not calculated				
K	766.490†	QC value within limits for K	766.490	Recovery = Not calculated				
Na	589.592†	QC value within limits for Na	589.592	Recovery = Not calculated				
Sr	407.771†	QC value within limits for Sr	407.771	Recovery = Not calculated				
Li	670.784†	QC value within limits for Li	670.784	Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 13	autosampler Location: 42
Sample ID: L1204089808	Sample Collected: 5/8/2012 2:31:02 PM
Analyst: KHR	Sample Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Nebulizer Parameters: L1204089808

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: L1204089808

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2061670.9				18672.26	0.91%
YRADIAL	296340.5				1396.42	0.47%
Ga 417.206	1372021.8				49663.97	3.62%
GaRADIAL	93368.4				82.80	0.09%
Ag 328.068†	460.1	0.00136 mg/L	0.000704	0.00136 mg/L	0.000704	51.66%
Al 396.153†	652.4	0.0548 mg/L	0.00831	0.0548 mg/L	0.00831	15.16%
As 188.979†	10.2	0.00366 mg/L	0.001974	0.00366 mg/L	0.001974	53.97%
Ba 233.527†	6851.1	0.0404 mg/L	0.00025	0.0404 mg/L	0.00025	0.62%
Be 234.861†	462.6	0.00036 mg/L	0.000015	0.00036 mg/L	0.000015	4.27%
B 249.677†	12328.8	0.146 mg/L	0.0076	0.146 mg/L	0.0076	5.20%
Ca 227.546†	38460.1	81.7 mg/L	3.98	81.7 mg/L	3.98	4.88%
Cd 228.802†	32.7	0.00076 mg/L	0.000150	0.00076 mg/L	0.000150	19.74%
Co 228.616†	16.1	-0.00041 mg/L	0.000286	-0.00041 mg/L	0.000286	69.07%
Cr 267.716†	994.1	0.00715 mg/L	0.000140	0.00715 mg/L	0.000140	1.96%
Cu 327.393†	89.4	-0.00002 mg/L	0.000316	-0.00002 mg/L	0.000316	>999.9%
Fe 239.562†	8091.6	0.498 mg/L	0.0076	0.498 mg/L	0.0076	1.53%
Mg 279.077†	52593.0	14.8 mg/L	0.21	14.8 mg/L	0.21	1.45%
Mn 257.610†	94318.3	0.109 mg/L	0.0022	0.109 mg/L	0.0022	1.99%
Mo 202.031†	117.8	0.00113 mg/L	0.000218	0.00113 mg/L	0.000218	19.26%
Ni 231.604†	141.5	0.00006 mg/L	0.000465	0.00006 mg/L	0.000465	810.48%
Pb 220.353†	-6.0	-0.00119 mg/L	0.001452	-0.00119 mg/L	0.001452	121.54%
Sb 206.836†	-6.8	-0.00060 mg/L	0.001912	-0.00060 mg/L	0.001912	316.54%
Se 196.026†	-5.6	0.00010 mg/L	0.002329	0.00010 mg/L	0.002329	>999.9%
Si 251.611†	409218.4	9.80 mg/L	0.320	9.80 mg/L	0.320	3.27%
Sn 189.927†	-313.2	-0.0335 mg/L	0.00186	-0.0335 mg/L	0.00186	5.55%

Approved: May 09, 2012
John H. Rhodes

Ti 334.940†	43319.0	0.0536 mg/L	0.00142	0.0536 mg/L	0.00142	2.65%
Tl 190.801†	-14.1	-0.00528 mg/L	0.002443	-0.00528 mg/L	0.002443	46.29%
V 290.880†	5701.6	0.0239 mg/L	0.00208	0.0239 mg/L	0.00208	8.69%
Zn 206.200†	271.1	0.00439 mg/L	0.000299	0.00439 mg/L	0.000299	6.82%
K 766.490†	27391.9	8.10 mg/L	0.144	8.10 mg/L	0.144	1.78%
Na 589.592†	Saturated2					
Sr 407.771†	2232517.8	0.830 mg/L	0.0043	0.830 mg/L	0.0043	0.52%
Li 670.784†	2779.3	0.0143 mg/L	0.00025	0.0143 mg/L	0.00025	1.74%

Sequence No.: 14

Sample ID: L1204089809

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 43

Date Collected: 5/8/2012 2:37:02 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

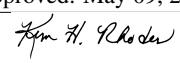
Nebulizer Parameters: L1204089809

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: L1204089809

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2040850.7				28522.73	1.40%
YRADIAL	297527.7				3700.99	1.24%
Ga 417.206	1355396.4				19216.49	1.42%
GaRADIAL	93054.7				693.59	0.75%
Ag 328.068†	507.6	0.00147 mg/L	0.000219	0.00147 mg/L	0.000219	14.93%
Al 396.153†	147.3	-0.0132 mg/L	0.00825	-0.0132 mg/L	0.00825	62.47%
As 188.979†	10.7	0.00384 mg/L	0.003190	0.00384 mg/L	0.003190	83.07%
Ba 233.527†	7222.9	0.0428 mg/L	0.00138	0.0428 mg/L	0.00138	3.23%
Be 234.861†	530.2	0.00043 mg/L	0.000117	0.00043 mg/L	0.000117	27.17%
B 249.677†	12645.2	0.150 mg/L	0.0034	0.150 mg/L	0.0034	2.25%
Ca 227.546†	41495.9	88.1 mg/L	2.44	88.1 mg/L	2.44	2.77%
Cd 228.802†	27.9	0.00067 mg/L	0.000300	0.00067 mg/L	0.000300	44.53%
Co 228.616†	23.7	-0.00014 mg/L	0.000337	-0.00014 mg/L	0.000337	241.64%
Cr 267.716†	634.4	0.00385 mg/L	0.000118	0.00385 mg/L	0.000118	3.07%
Cu 327.393†	-57.8	-0.00061 mg/L	0.000272	-0.00061 mg/L	0.000272	44.54%
Fe 239.562†	6704.1	0.410 mg/L	0.0091	0.410 mg/L	0.0091	2.22%
Mg 279.077†	55173.1	15.5 mg/L	0.18	15.5 mg/L	0.18	1.18%
Mn 257.610†	102458.3	0.119 mg/L	0.0022	0.119 mg/L	0.0022	1.84%
Mo 202.031†	122.7	0.00126 mg/L	0.000109	0.00126 mg/L	0.000109	8.67%
Ni 231.604†	91.6	-0.00068 mg/L	0.000523	-0.00068 mg/L	0.000523	77.45%
Pb 220.353†	-22.7	-0.00266 mg/L	0.002011	-0.00266 mg/L	0.002011	75.63%
Sb 206.836†	-5.1	-0.00016 mg/L	0.000923	-0.00016 mg/L	0.000923	585.72%
Se 196.026†	-0.8	0.00269 mg/L	0.001748	0.00269 mg/L	0.001748	64.97%
Si 251.611†	409807.4	9.81 mg/L	0.163	9.81 mg/L	0.163	1.66%
Sn 189.927†	-329.9	-0.0351 mg/L	0.00068	-0.0351 mg/L	0.00068	1.95%
Ti 334.940†	8943.0	0.0203 mg/L	0.00124	0.0203 mg/L	0.00124	6.08%
Tl 190.801†	-33.5	-0.0107 mg/L	0.00195	-0.0107 mg/L	0.00195	18.22%
V 290.880†	5295.6	0.0218 mg/L	0.00077	0.0218 mg/L	0.00077	3.55%
Zn 206.200†	17.3	-0.00166 mg/L	0.000381	-0.00166 mg/L	0.000381	22.88%
K 766.490†	28600.6	8.46 mg/L	0.074	8.46 mg/L	0.074	0.87%
Na 589.592†	Saturated2					
Sr 407.771†	2252998.8	0.838 mg/L	0.0060	0.838 mg/L	0.0060	0.71%
Li 670.784†	3065.4	0.0161 mg/L	0.00015	0.0161 mg/L	0.00015	0.92%

User canceled analysis.

Approved: May 09, 2012


=====
 Analysis Begun

Start Time: 5/8/2012 2:44:41 PM Plasma On Time: 5/8/2012 6:43:32 AM
 Logged In Analyst: peicp2 eTechnique: ICP Continuous
 Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
 Batch ID:
 Results Data Set: 050812H
 Results Library: C:\pe\peicp2\Results\Results.mdb

=====
 Sequence No.: 1 Autosampler Location: 44
 Sample ID: L1204089810 Date Collected: 5/8/2012 2:44:43 PM
 Analyst: KHR Sample Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

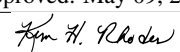
 Nebulizer Parameters: L1204089810
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

 Mean Data: L1204089810

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	1925015.7				17421.06	0.90%
YRADIAL	292696.8				2265.26	0.77%
Ga 417.206	1314538.2				27297.93	2.08%
GaRADIAL	88017.3				1830.79	2.08%
Ag 328.068†	78.6	0.00045 mg/L	0.000489	0.00045 mg/L	0.000489	107.56%
Al 396.153†	16803.8	2.23 mg/L	0.011	2.23 mg/L	0.011	0.50%
As 188.979†	75.6	0.0268 mg/L	0.00391	0.0268 mg/L	0.00391	14.60%
Ba 233.527†	14435.6	0.0888 mg/L	0.00142	0.0888 mg/L	0.00142	1.60%
Be 234.861†	908.8	0.00059 mg/L	0.000144	0.00059 mg/L	0.000144	24.30%
B 249.677†	20002.6	0.236 mg/L	0.0085	0.236 mg/L	0.0085	3.60%
Ca 227.546†	5220.8	11.2 mg/L	0.29	11.2 mg/L	0.29	2.59%
Cd 228.802†	56.1	0.00107 mg/L	0.000228	0.00107 mg/L	0.000228	21.37%
Co 228.616†	136.3	0.00147 mg/L	0.000564	0.00147 mg/L	0.000564	38.37%
Cr 267.716†	13963.5	0.126 mg/L	0.0018	0.126 mg/L	0.0018	1.46%
Cu 327.393†	346.5	0.00167 mg/L	0.000728	0.00167 mg/L	0.000728	43.53%
Fe 239.562†	17070.6	1.06 mg/L	0.007	1.06 mg/L	0.007	0.67%
Mg 279.077†	61330.1	17.2 mg/L	0.14	17.2 mg/L	0.14	0.80%
Mn 257.610†	16649.1	0.0170 mg/L	0.00012	0.0170 mg/L	0.00012	0.69%
Mo 202.031†	1599.3	0.0412 mg/L	0.00023	0.0412 mg/L	0.00023	0.57%
Ni 231.604†	1979.8	0.0271 mg/L	0.00012	0.0271 mg/L	0.00012	0.45%
Pb 220.353†	11.3	0.00020 mg/L	0.002749	0.00020 mg/L	0.002749	>999.9%
Sb 206.836†	-0.9	0.00002 mg/L	0.001395	0.00002 mg/L	0.001395	>999.9%
Se 196.026†	3.1	0.00522 mg/L	0.003462	0.00522 mg/L	0.003462	66.32%
Si 251.611†	394495.6	9.45 mg/L	0.167	9.45 mg/L	0.167	1.76%
Sn 189.927†	130.0	0.00902 mg/L	0.001037	0.00902 mg/L	0.001037	11.49%
Ti 334.940†	629734.4	0.627 mg/L	0.0014	0.627 mg/L	0.0014	0.23%
Tl 190.801†	-45.7	-0.00601 mg/L	0.002112	-0.00601 mg/L	0.002112	35.14%
V 290.880†	23042.6	0.113 mg/L	0.0016	0.113 mg/L	0.0016	1.43%
Zn 206.200†	19329.0	0.458 mg/L	0.0087	0.458 mg/L	0.0087	1.90%
K 766.490†	51163.6	15.2 mg/L	0.22	15.2 mg/L	0.22	1.42%
Na 589.592†	Saturated2					
Sr 407.771†	4081023.0	1.53 mg/L	0.016	1.53 mg/L	0.016	1.07%
Li 670.784†	705.9	0.00088 mg/L	0.000140	0.00088 mg/L	0.000140	15.88%

=====
 Sequence No.: 2 Autosampler Location: 45
 Sample ID: L1204089811 Date Collected: 5/8/2012 2:50:43 PM
 Analyst: KHR Sample Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

 Nebulizer Parameters: L1204089811

Approved: May 09, 2012


Analyte Back Pressure Flow
All 155.0 kPa 0.50 L/min

Mean Data: L1204089811

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 3 Sample ID: L1204089812 Analyst: KHR Initial Sample Wt: Dilution: autosampler Location: 46 Date Collected: 5/8/2012 2:56:48 PM Data Type: Original Initial Sample Vol: Sample Prep Vol:

Nebulizer Parameters: L1204089812 Analyte Back Pressure Flow All 154.0 kPa 0.50 L/min

Mean Data: L1204089812

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu with their respective values.

Approved: May 09, 2012 [Signature]

Table with 8 columns: Element, Concentration, Unit, Value, Unit, Value, Value, Percentage. Lists elements like Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective measurements.

Sequence No.: 4 Sample ID: L1204089813 Analyst: KHR Initial Sample Wt: Dilution: u&osampler Location: 47 a&e Collected: 5/8/2012 3:02:51 PM a&a Type: Original n&tial Sample Vol: a&ple Prep Vol:

Nebulizer Parameters: L1204089813 Analyte Back Pressure Flow All 154.0 kPa 0.50 L/min

Mean Data: L1204089813 Table with 8 columns: Analyte, Mean Corrected Intensity, Conc., Units, Std.Dev., Sample Conc., Units, Std.Dev., RSD. Lists elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their mean corrected intensities and concentrations.

Sequence No.: 5 Sample ID: L1204089814 u&osampler Location: 48 a&e Collected: 5/8/2012 3:08:49 PM

Approved: May 09, 2012 [Signature]

Analyst: KHR
Initial Sample Wt:
Dilution:

ama Type: Original
nitial Sample Vol:
aample Prep Vol:

Nebulizer Parameters: L1204089814

Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1204089814

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 6
Sample ID: L1204089803 WG396609-01
Analyst: KHR
Initial Sample Wt:
Dilution:

autosampler Location: 49
Time Collected: 5/8/2012 3:15:43 PM
ama Type: Original
nitial Sample Vol:
aample Prep Vol:

Nebulizer Parameters: L1204089803 WG396609-01

Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1204089803 WG396609-01

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be with their respective values.

Approved: May 09, 2012
[Signature]

B 249.677†	463.3	0.00707	mg/L	0.000112	0.00707	mg/L	0.000112	1.58%
Ca 227.546†	738.8	1.62	mg/L	0.030	1.62	mg/L	0.030	1.84%
Cd 228.802†	8.1	0.00033	mg/L	0.000079	0.00033	mg/L	0.000079	23.63%
Co 228.616†	10.6	-0.00044	mg/L	0.000369	-0.00044	mg/L	0.000369	83.75%
Cr 267.716†	-20.6	-0.00218	mg/L	0.000090	-0.00218	mg/L	0.000090	4.13%
Cu 327.393†	-19.0	-0.00052	mg/L	0.000311	-0.00052	mg/L	0.000311	60.14%
Fe 239.562†	-24.2	-0.0119	mg/L	0.00009	-0.0119	mg/L	0.00009	0.75%
Mg 279.077†	1768.4	0.473	mg/L	0.0075	0.473	mg/L	0.0075	1.58%
Mn 257.610†	337.8	-0.00251	mg/L	0.000022	-0.00251	mg/L	0.000022	0.89%
Mo 202.031†	-3.2	-0.00219	mg/L	0.000263	-0.00219	mg/L	0.000263	11.99%
Ni 231.604†	-4.2	-0.00209	mg/L	0.000443	-0.00209	mg/L	0.000443	21.23%
Pb 220.353†	-8.2	-0.00194	mg/L	0.001648	-0.00194	mg/L	0.001648	84.84%
Sb 206.836†	-7.7	-0.00077	mg/L	0.001220	-0.00077	mg/L	0.001220	157.67%
Se 196.026†	-4.1	0.00078	mg/L	0.002509	0.00078	mg/L	0.002509	323.06%
Si 251.611†	3075.9	0.0674	mg/L	0.00045	0.0674	mg/L	0.00045	0.66%
Sn 189.927†	-83.7	-0.0115	mg/L	0.00074	-0.0115	mg/L	0.00074	6.46%
Ti 334.940†	-208.7	-0.00176	mg/L	0.000090	-0.00176	mg/L	0.000090	5.09%
Tl 190.801†	8.2	-0.00001	mg/L	0.003039	-0.00001	mg/L	0.003039	>999.9%
V 290.880†	1116.5	0.00065	mg/L	0.001370	0.00065	mg/L	0.001370	210.20%
Zn 206.200†	553.8	0.0110	mg/L	0.00036	0.0110	mg/L	0.00036	3.30%
K 766.490†	559.0	0.120	mg/L	0.0040	0.120	mg/L	0.0040	3.34%
Na 589.592†	75441.1	3.66	mg/L	0.046	3.66	mg/L	0.046	1.25%
Sr 407.771†	43505.0	0.0103	mg/L	0.00051	0.0103	mg/L	0.00051	4.89%
Li 670.784†	46.2	-0.00338	mg/L	0.000197	-0.00338	mg/L	0.000197	5.82%

Sequence No.: 7

Sample ID: L1204089803S WG396609-04

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 50

a&e Collected: 5/8/2012 3:22:37 PM

a&a Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: L1204089803S WG396609-04

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1204089803S WG396609-04

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2301233.8				16373.66	0.71%
YRADIAL	312629.5				6554.13	2.10%
Ga 417.206	1431038.6				19956.30	1.39%
GaRADIAL	94544.7				969.22	1.03%
Ag 328.068†	704.2	0.00207 mg/L	0.000063	0.00207 mg/L	0.000063	3.06%
Al 396.153†	404.5	0.0212 mg/L	0.00086	0.0212 mg/L	0.00086	4.06%
As 188.979†	10.8	0.00382 mg/L	0.001865	0.00382 mg/L	0.001865	48.77%
Ba 233.527†	1063.1	0.00353 mg/L	0.000010	0.00353 mg/L	0.000010	0.29%
Be 234.861†	631.1	0.00059 mg/L	0.000023	0.00059 mg/L	0.000023	3.94%
B 249.677†	1292.2	0.0168 mg/L	0.00045	0.0168 mg/L	0.00045	2.70%
Ca 227.546†	727.8	1.60 mg/L	0.012	1.60 mg/L	0.012	0.73%
Cd 228.802†	24.7	0.00062 mg/L	0.000139	0.00062 mg/L	0.000139	22.29%
Co 228.616†	51.1	0.00060 mg/L	0.000062	0.00060 mg/L	0.000062	10.22%
Cr 267.716†	275.1	0.00053 mg/L	0.000053	0.00053 mg/L	0.000053	9.93%
Cu 327.393†	653.1	0.00199 mg/L	0.000220	0.00199 mg/L	0.000220	11.04%
Fe 239.562†	285.4	0.00755 mg/L	0.000611	0.00755 mg/L	0.000611	8.09%
Mg 279.077†	1962.7	0.528 mg/L	0.0123	0.528 mg/L	0.0123	2.32%
Mn 257.610†	2642.4	0.00023 mg/L	0.000027	0.00023 mg/L	0.000027	11.37%
Mo 202.031†	188.4	0.00299 mg/L	0.000200	0.00299 mg/L	0.000200	6.70%
Ni 231.604†	196.4	0.00086 mg/L	0.000098	0.00086 mg/L	0.000098	11.42%
Pb 220.353†	20.6	0.00066 mg/L	0.000582	0.00066 mg/L	0.000582	88.58%
Sb 206.836†	22.1	0.00639 mg/L	0.001218	0.00639 mg/L	0.001218	19.06%
Se 196.026†	-6.4	-0.00050 mg/L	0.001941	-0.00050 mg/L	0.001941	387.40%
Si 251.611†	4066.8	0.0911 mg/L	0.00157	0.0911 mg/L	0.00157	1.73%
Sn 189.927†	-16.5	-0.00503 mg/L	0.000803	-0.00503 mg/L	0.000803	15.97%
Ti 334.940†	4932.0	0.00336 mg/L	0.000111	0.00336 mg/L	0.000111	3.32%
Tl 190.801†	15.1	0.00183 mg/L	0.001837	0.00183 mg/L	0.001837	100.49%
V 290.880†	2383.7	0.00720 mg/L	0.000776	0.00720 mg/L	0.000776	10.77%
Zn 206.200†	646.2	0.0133 mg/L	0.00016	0.0133 mg/L	0.00016	1.21%
K 766.490†	1425.8	0.377 mg/L	0.0144	0.377 mg/L	0.0144	3.81%
Na 589.592†	79055.3	3.84 mg/L	0.022	3.84 mg/L	0.022	0.57%

Approved: May 09, 2012

John H. Rhodes

Sr 407.771†	57327.0	0.0155 mg/L	0.00043	0.0155 mg/L	0.00043	2.76%
Li 670.784†	927.9	0.00231 mg/L	0.000297	0.00231 mg/L	0.000297	12.84%

Sequence No.: 8
 Sample ID: L1204089803SD WG396609-05
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 51
 ame Collected: 5/8/2012 3:29:32 PM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: L1204089803SD WG396609-05
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1204089803SD WG396609-05

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2369444.5					2082.26	0.09%
YRADIAL	317351.4					7026.72	2.21%
Ga 417.206	1497456.8					15871.57	1.06%
GaRADIAL	95642.3					1202.42	1.26%
Ag 328.068†	725.1	0.00212 mg/L		0.000299	0.00212 mg/L	0.000299	14.07%
Al 396.153†	386.6	0.0188 mg/L		0.00054	0.0188 mg/L	0.00054	2.86%
As 188.979†	12.2	0.00432 mg/L		0.000653	0.00432 mg/L	0.000653	15.10%
Ba 233.527†	1016.1	0.00323 mg/L		0.000058	0.00323 mg/L	0.000058	1.80%
Be 234.861†	681.0	0.00063 mg/L		0.000031	0.00063 mg/L	0.000031	4.86%
B 249.677†	1208.4	0.0158 mg/L		0.00012	0.0158 mg/L	0.00012	0.74%
Ca 227.546†	677.1	1.49 mg/L		0.018	1.49 mg/L	0.018	1.19%
Cd 228.802†	12.5	0.00040 mg/L		0.000145	0.00040 mg/L	0.000145	36.44%
Co 228.616†	46.4	0.00048 mg/L		0.000159	0.00048 mg/L	0.000159	32.72%
Cr 267.716†	244.5	0.00025 mg/L		0.000084	0.00025 mg/L	0.000084	33.39%
Cu 327.393†	803.1	0.00255 mg/L		0.000477	0.00255 mg/L	0.000477	18.74%
Fe 239.562†	279.7	0.00719 mg/L		0.000325	0.00719 mg/L	0.000325	4.52%
Mg 279.077†	1838.9	0.493 mg/L		0.0020	0.493 mg/L	0.0020	0.41%
Mn 257.610†	2513.2	0.00008 mg/L		0.000027	0.00008 mg/L	0.000027	34.74%
Mo 202.031†	179.0	0.00273 mg/L		0.000123	0.00273 mg/L	0.000123	4.52%
Ni 231.604†	187.5	0.00073 mg/L		0.000190	0.00073 mg/L	0.000190	26.07%
Pb 220.353†	25.4	0.00109 mg/L		0.000632	0.00109 mg/L	0.000632	57.98%
Sb 206.836†	17.3	0.00522 mg/L		0.000775	0.00522 mg/L	0.000775	14.84%
Se 196.026†	-2.2	0.00182 mg/L		0.002607	0.00182 mg/L	0.002607	142.89%
Si 251.611†	3661.9	0.0814 mg/L		0.00153	0.0814 mg/L	0.00153	1.88%
Sn 189.927†	-31.6	-0.00647 mg/L		0.000580	-0.00647 mg/L	0.000580	8.97%
Ti 334.940†	4737.9	0.00315 mg/L		0.000052	0.00315 mg/L	0.000052	1.65%
Tl 190.801†	25.1	0.00441 mg/L		0.000473	0.00441 mg/L	0.000473	10.72%
V 290.880†	1618.3	0.00324 mg/L		0.000584	0.00324 mg/L	0.000584	18.02%
Zn 206.200†	606.5	0.0123 mg/L		0.00026	0.0123 mg/L	0.00026	2.08%
K 766.490†	1315.5	0.345 mg/L		0.0169	0.345 mg/L	0.0169	4.89%
Na 589.592†	73843.3	3.59 mg/L		0.123	3.59 mg/L	0.123	3.43%
Sr 407.771†	54150.6	0.0143 mg/L		0.00016	0.0143 mg/L	0.00016	1.11%
Li 670.784†	841.4	0.00175 mg/L		0.000294	0.00175 mg/L	0.000294	16.75%

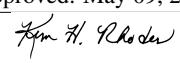
Sequence No.: 9
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 6
 ame Collected: 5/8/2012 3:36:26 PM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: CCV
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2308542.2					3318.64	0.14%
YRADIAL	312068.3					3469.75	1.11%
Ga 417.206	1392739.1					24204.13	1.74%

Approved: May 09, 2012


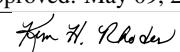
Ag	328.068†	122386.2	0.393 mg/L	0.0132	0.393 mg/L	0.0132	0.81%
	QC value within limits for Ag	328.068	Recovery = 98.30%				3.35%
Al	396.153†	74791.3	9.96 mg/L	0.031	9.96 mg/L	0.031	0.31%
	QC value within limits for Al	396.153	Recovery = 99.65%				
As	188.979†	1082.7	0.380 mg/L	0.0057	0.380 mg/L	0.0057	1.50%
	QC value within limits for As	188.979	Recovery = 95.00%				
Ba	233.527†	153489.9	0.977 mg/L	0.0050	0.977 mg/L	0.0050	0.51%
	QC value within limits for Ba	233.527	Recovery = 97.66%				
Be	234.861†	60929.9	0.0478 mg/L	0.00127	0.0478 mg/L	0.00127	2.65%
	QC value within limits for Be	234.861	Recovery = 95.68%				
B	249.677†	41581.6	0.487 mg/L	0.0189	0.487 mg/L	0.0189	3.88%
	QC value within limits for B	249.677	Recovery = 97.32%				
Ca	227.546†	4537.3	10.1 mg/L	0.21	10.1 mg/L	0.21	2.07%
	QC value within limits for Ca	227.546	Recovery = 101.31%				
Cd	228.802†	2691.8	0.0472 mg/L	0.00162	0.0472 mg/L	0.00162	3.42%
	QC value within limits for Cd	228.802	Recovery = 94.47%				
Co	228.616†	7511.8	0.193 mg/L	0.0004	0.193 mg/L	0.0004	0.19%
	QC value within limits for Co	228.616	Recovery = 96.50%				
Cr	267.716†	53546.6	0.489 mg/L	0.0060	0.489 mg/L	0.0060	1.22%
	QC value within limits for Cr	267.716	Recovery = 97.89%				
Cu	327.393†	132536.5	0.494 mg/L	0.0207	0.494 mg/L	0.0207	4.18%
	QC value within limits for Cu	327.393	Recovery = 98.83%				
Fe	239.562†	62548.6	3.92 mg/L	0.018	3.92 mg/L	0.018	0.47%
	QC value within limits for Fe	239.562	Recovery = 97.92%				
Mg	279.077†	34703.2	9.76 mg/L	0.041	9.76 mg/L	0.041	0.42%
	QC value within limits for Mg	279.077	Recovery = 97.64%				
Mn	257.610†	419094.9	0.497 mg/L	0.0025	0.497 mg/L	0.0025	0.51%
	QC value within limits for Mn	257.610	Recovery = 99.30%				
Mo	202.031†	36173.8	0.976 mg/L	0.0109	0.976 mg/L	0.0109	1.12%
	QC value within limits for Mo	202.031	Recovery = 97.56%				
Ni	231.604†	33625.6	0.492 mg/L	0.0026	0.492 mg/L	0.0026	0.53%
	QC value within limits for Ni	231.604	Recovery = 98.44%				
Pb	220.353†	5457.6	0.491 mg/L	0.0010	0.491 mg/L	0.0010	0.20%
	QC value within limits for Pb	220.353	Recovery = 98.29%				
Sb	206.836†	4846.6	1.17 mg/L	0.027	1.17 mg/L	0.027	2.30%
	QC value within limits for Sb	206.836	Recovery = 97.29%				
Se	196.026†	689.1	0.387 mg/L	0.0096	0.387 mg/L	0.0096	2.48%
	QC value within limits for Se	196.026	Recovery = 96.85%				
Si	251.611†	205085.4	4.90 mg/L	0.112	4.90 mg/L	0.112	2.28%
	QC value within limits for Si	251.611	Recovery = 97.93%				
Sn	189.927†	10175.4	0.972 mg/L	0.0017	0.972 mg/L	0.0017	0.18%
	QC value within limits for Sn	189.927	Recovery = 97.24%				
Ti	334.940†	978316.3	0.974 mg/L	0.0197	0.974 mg/L	0.0197	2.03%
	QC value within limits for Ti	334.940	Recovery = 97.44%				
Tl	190.801†	1924.0	0.508 mg/L	0.0059	0.508 mg/L	0.0059	1.16%
	QC value within limits for Tl	190.801	Recovery = 101.51%				
V	290.880†	191833.7	0.986 mg/L	0.0128	0.986 mg/L	0.0128	1.30%
	QC value within limits for V	290.880	Recovery = 98.59%				
Zn	206.200†	41067.1	0.978 mg/L	0.0090	0.978 mg/L	0.0090	0.92%
	QC value within limits for Zn	206.200	Recovery = 97.78%				
K	766.490†	162037.7	48.8 mg/L	0.26	48.8 mg/L	0.26	0.54%
	QC value within limits for K	766.490	Recovery = 97.51%				
Na	589.592†	974716.9	49.2 mg/L	0.28	49.2 mg/L	0.28	0.57%
	QC value within limits for Na	589.592	Recovery = 98.34%				
Sr	407.771†	2687967.4	1.00 mg/L	0.017	1.00 mg/L	0.017	1.74%
	QC value within limits for Sr	407.771	Recovery = 100.25%				
Li	670.784†	161061.2	1.04 mg/L	0.017	1.04 mg/L	0.017	1.63%
	QC value within limits for Li	670.784	Recovery = 103.65%				

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 1
 a&e Collected: 5/8/2012 3:42:27 PM
 a&a Type: Original
 nitial Sample Vol:
 a∓e Prep Vol:

Nebulizer Parameters: CCB
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Approved: May 09, 2012


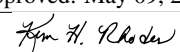
 Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2361693.4				22243.15	0.94%
YRADIAL	314455.1				4352.46	1.38%
Ga 417.206	1442029.0				15532.60	1.08%
GaRADIAL	94502.8				2916.29	3.09%
Ag 328.068†	30.2	-0.00010 mg/L	0.000097	-0.00010 mg/L	0.000097	94.23%
QC value within limits for Ag		328.068	Recovery =	Not calculated		
Al 396.153†	2.9	-0.0325 mg/L	0.00075	-0.0325 mg/L	0.00075	2.31%
QC value within limits for Al		396.153	Recovery =	Not calculated		
As 188.979†	4.2	0.00147 mg/L	0.001942	0.00147 mg/L	0.001942	131.88%
QC value within limits for As		188.979	Recovery =	Not calculated		
Ba 233.527†	20.3	-0.00312 mg/L	0.000084	-0.00312 mg/L	0.000084	2.68%
QC value within limits for Ba		233.527	Recovery =	Not calculated		
Be 234.861†	107.7	0.00018 mg/L	0.000003	0.00018 mg/L	0.000003	1.65%
QC value within limits for Be		234.861	Recovery =	Not calculated		
B 249.677†	411.1	0.00646 mg/L	0.000468	0.00646 mg/L	0.000468	7.24%
QC value within limits for B		249.677	Recovery =	Not calculated		
Ca 227.546†	-3.0	0.0419 mg/L	0.03247	0.0419 mg/L	0.03247	77.57%
QC value within limits for Ca		227.546	Recovery =	Not calculated		
Cd 228.802†	-1.3	0.00016 mg/L	0.000066	0.00016 mg/L	0.000066	41.01%
QC value within limits for Cd		228.802	Recovery =	Not calculated		
Co 228.616†	4.4	-0.00060 mg/L	0.000102	-0.00060 mg/L	0.000102	16.93%
QC value within limits for Co		228.616	Recovery =	Not calculated		
Cr 267.716†	-18.7	-0.00216 mg/L	0.000067	-0.00216 mg/L	0.000067	3.10%
QC value within limits for Cr		267.716	Recovery =	Not calculated		
Cu 327.393†	3.4	-0.00044 mg/L	0.000272	-0.00044 mg/L	0.000272	62.42%
QC value within limits for Cu		327.393	Recovery =	Not calculated		
Fe 239.562†	-9.8	-0.0110 mg/L	0.00041	-0.0110 mg/L	0.00041	3.71%
QC value within limits for Fe		239.562	Recovery =	Not calculated		
Mg 279.077†	12.1	-0.0216 mg/L	0.00103	-0.0216 mg/L	0.00103	4.76%
QC value within limits for Mg		279.077	Recovery =	Not calculated		
Mn 257.610†	14.8	-0.00290 mg/L	0.000005	-0.00290 mg/L	0.000005	0.16%
QC value within limits for Mn		257.610	Recovery =	Not calculated		
Mo 202.031†	7.1	-0.00192 mg/L	0.000355	-0.00192 mg/L	0.000355	18.52%
QC value within limits for Mo		202.031	Recovery =	Not calculated		
Ni 231.604†	15.5	-0.00180 mg/L	0.000267	-0.00180 mg/L	0.000267	14.87%
QC value within limits for Ni		231.604	Recovery =	Not calculated		
Pb 220.353†	-18.3	-0.00287 mg/L	0.001163	-0.00287 mg/L	0.001163	40.57%
QC value within limits for Pb		220.353	Recovery =	Not calculated		
Sb 206.836†	-2.2	0.00053 mg/L	0.000686	0.00053 mg/L	0.000686	128.62%
QC value within limits for Sb		206.836	Recovery =	Not calculated		
Se 196.026†	3.2	0.00485 mg/L	0.003714	0.00485 mg/L	0.003714	76.62%
QC value within limits for Se		196.026	Recovery =	Not calculated		
Si 251.611†	321.9	0.00144 mg/L	0.000572	0.00144 mg/L	0.000572	39.72%
QC value within limits for Si		251.611	Recovery =	Not calculated		
Sn 189.927†	4.6	-0.00300 mg/L	0.001106	-0.00300 mg/L	0.001106	36.84%
QC value within limits for Sn		189.927	Recovery =	Not calculated		
Ti 334.940†	-23.9	-0.00181 mg/L	0.000034	-0.00181 mg/L	0.000034	1.87%
QC value within limits for Ti		334.940	Recovery =	Not calculated		
Tl 190.801†	-2.1	-0.00268 mg/L	0.002064	-0.00268 mg/L	0.002064	77.02%
QC value within limits for Tl		190.801	Recovery =	Not calculated		
V 290.880†	648.9	-0.00175 mg/L	0.000301	-0.00175 mg/L	0.000301	17.15%
QC value within limits for V		290.880	Recovery =	Not calculated		
Zn 206.200†	-31.5	-0.00286 mg/L	0.000068	-0.00286 mg/L	0.000068	2.38%
QC value within limits for Zn		206.200	Recovery =	Not calculated		
K 766.490†	83.3	-0.0172 mg/L	0.03130	-0.0172 mg/L	0.03130	182.14%
QC value within limits for K		766.490	Recovery =	Not calculated		
Na 589.592†	597.9	0.0510 mg/L	0.00705	0.0510 mg/L	0.00705	13.80%
QC value within limits for Na		589.592	Recovery =	Not calculated		
Sr 407.771†	155.4	-0.00591 mg/L	0.000035	-0.00591 mg/L	0.000035	0.59%
QC value within limits for Sr		407.771	Recovery =	Not calculated		
Li 670.784†	45.0	-0.00339 mg/L	0.000240	-0.00339 mg/L	0.000240	7.09%
QC value within limits for Li		670.784	Recovery =	Not calculated		

All analyte(s) passed QC.

=====
 Sequence No.: 11
 Sample ID: L1204089805 0.01

=====
 u&osampler Location: 52
 a&e Collected: 5/8/2012 3:49:20 PM

Approved: May 09, 2012


Analyst: KHR
Initial Sample Wt:
Dilution:

ama Type: Original
nitial Sample Vol:
aample Prep Vol:

Nebulizer Parameters: L1204089805 0.01

Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1204089805 0.01

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 12

Sample ID: L1204089806 0.01

Analyst: KHR
Initial Sample Wt:
Dilution:

u@sampler Location: 53
ame Collected: 5/8/2012 3:56:15 PM
ama Type: Original
nitial Sample Vol:
aample Prep Vol:

Nebulizer Parameters: L1204089806 0.01

Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1204089806 0.01

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be with their respective values.

Approved: May 09, 2012
[Signature]

B 249.677†	349.9	0.00574	mg/L	0.000248	0.00574	mg/L	0.000248	4.32%
Ca 227.546†	1002.9	2.18	mg/L	0.025	2.18	mg/L	0.025	1.16%
Cd 228.802†	-12.6	-0.00005	mg/L	0.000159	-0.00005	mg/L	0.000159	339.54%
Co 228.616†	9.0	-0.00048	mg/L	0.000049	-0.00048	mg/L	0.000049	10.10%
Cr 267.716†	-21.9	-0.00219	mg/L	0.000027	-0.00219	mg/L	0.000027	1.23%
Cu 327.393†	-58.6	-0.00066	mg/L	0.000363	-0.00066	mg/L	0.000363	54.79%
Fe 239.562†	-34.1	-0.0125	mg/L	0.00081	-0.0125	mg/L	0.00081	6.50%
Mg 279.077†	707.5	0.174	mg/L	0.0015	0.174	mg/L	0.0015	0.84%
Mn 257.610†	929.3	-0.00181	mg/L	0.000038	-0.00181	mg/L	0.000038	2.08%
Mo 202.031†	-5.3	-0.00225	mg/L	0.000025	-0.00225	mg/L	0.000025	1.09%
Ni 231.604†	-1.2	-0.00204	mg/L	0.000076	-0.00204	mg/L	0.000076	3.71%
Pb 220.353†	-1.4	-0.00133	mg/L	0.000744	-0.00133	mg/L	0.000744	56.01%
Sb 206.836†	-13.3	-0.00212	mg/L	0.000402	-0.00212	mg/L	0.000402	19.00%
Se 196.026†	-10.7	-0.00289	mg/L	0.000499	-0.00289	mg/L	0.000499	17.27%
Si 251.611†	9003.9	0.209	mg/L	0.0056	0.209	mg/L	0.0056	2.69%
Sn 189.927†	-100.3	-0.0131	mg/L	0.00066	-0.0131	mg/L	0.00066	5.09%
Ti 334.940†	37.7	-0.00143	mg/L	0.000065	-0.00143	mg/L	0.000065	4.57%
Tl 190.801†	13.5	0.00136	mg/L	0.002200	0.00136	mg/L	0.002200	162.06%
V 290.880†	1735.8	0.00386	mg/L	0.001157	0.00386	mg/L	0.001157	29.96%
Zn 206.200†	16.6	-0.00172	mg/L	0.000187	-0.00172	mg/L	0.000187	10.86%
K 766.490†	675.5	0.144	mg/L	0.0249	0.144	mg/L	0.0249	17.27%
Na 589.592†	290036.5	14.2	mg/L	0.35	14.2	mg/L	0.35	2.47%
Sr 407.771†	30522.3	0.00544	mg/L	0.000196	0.00544	mg/L	0.000196	3.60%
Li 670.784†	124.6	-0.00288	mg/L	0.000570	-0.00288	mg/L	0.000570	19.82%

Sequence No.: 13

Sample ID: L1204089806PS WG396721-03

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 54

Date Collected: 5/8/2012 4:03:10 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1204089806PS WG396721-03

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1204089806PS WG396721-03

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD	
Y 371.029	2236556.9					12230.34	0.55%	
YRADIAL	310581.6					5363.09	1.73%	
Ga 417.206	1351149.3					21018.01	1.56%	
GaRADIAL	92314.4					1379.68	1.49%	
Ag 328.068†	66671.1	0.214	mg/L	0.0060	0.214	mg/L	0.0060	2.80%
Al 396.153†	38950.9	5.17	mg/L	0.008	5.17	mg/L	0.008	0.16%
As 188.979†	590.8	0.207	mg/L	0.0048	0.207	mg/L	0.0048	2.31%
Ba 233.527†	81478.8	0.517	mg/L	0.0061	0.517	mg/L	0.0061	1.17%
Be 234.861†	34013.3	0.0268	mg/L	0.00062	0.0268	mg/L	0.00062	2.33%
B 249.677†	89993.4	1.06	mg/L	0.028	1.06	mg/L	0.028	2.61%
Ca 227.546†	3468.2	7.65	mg/L	0.175	7.65	mg/L	0.175	2.29%
Cd 228.802†	1449.7	0.0255	mg/L	0.00093	0.0255	mg/L	0.00093	3.63%
Co 228.616†	4017.7	0.103	mg/L	0.0010	0.103	mg/L	0.0010	1.00%
Cr 267.716†	28305.8	0.258	mg/L	0.0039	0.258	mg/L	0.0039	1.50%
Cu 327.393†	70156.9	0.261	mg/L	0.0061	0.261	mg/L	0.0061	2.32%
Fe 239.562†	32059.1	2.00	mg/L	0.004	2.00	mg/L	0.004	0.18%
Mg 279.077†	18920.1	5.31	mg/L	0.015	5.31	mg/L	0.015	0.28%
Mn 257.610†	221006.1	0.260	mg/L	0.0023	0.260	mg/L	0.0023	0.90%
Mo 202.031†	19178.0	0.516	mg/L	0.0012	0.516	mg/L	0.0012	0.23%
Ni 231.604†	18106.2	0.264	mg/L	0.0020	0.264	mg/L	0.0020	0.77%
Pb 220.353†	2909.1	0.261	mg/L	0.0010	0.261	mg/L	0.0010	0.39%
Sb 206.836†	2648.5	0.639	mg/L	0.0158	0.639	mg/L	0.0158	2.48%
Se 196.026†	402.2	0.227	mg/L	0.0082	0.227	mg/L	0.0082	3.61%
Si 251.611†	122774.4	2.93	mg/L	0.063	2.93	mg/L	0.063	2.14%
Sn 189.927†	-141.5	-0.0170	mg/L	0.00029	-0.0170	mg/L	0.00029	1.70%
Ti 334.940†	520153.0	0.518	mg/L	0.0008	0.518	mg/L	0.0008	0.15%
Tl 190.801†	1061.7	0.279	mg/L	0.0054	0.279	mg/L	0.0054	1.94%
V 290.880†	102935.1	0.527	mg/L	0.0103	0.527	mg/L	0.0103	1.95%
Zn 206.200†	22769.8	0.541	mg/L	0.0081	0.541	mg/L	0.0081	1.49%
K 766.490†	85552.9	25.5	mg/L	0.23	25.5	mg/L	0.23	0.89%
Na 589.592†	807959.4	40.4	mg/L	1.02	40.4	mg/L	1.02	2.53%

Approved: May 09, 2012

John H. Rhodes

Sr 407.771†	1399009.8	0.519 mg/L	0.0131	0.519 mg/L	0.0131	2.52%
Li 670.784†	85967.2	0.552 mg/L	0.0022	0.552 mg/L	0.0022	0.41%

Sequence No.: 14
 Sample ID: L1204089806DL WG396721-04
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 55
 a&e Collected: 5/8/2012 4:09:09 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: L1204089806DL WG396721-04
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1204089806DL WG396721-04

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2293511.2				16546.04	0.72%
YRADIAL	311962.5				7222.84	2.32%
Ga 417.206	1428336.9				26562.86	1.86%
GaRADIAL	95106.6				2679.83	2.82%
Ag 328.068†	101.5	0.00013 mg/L	0.000237	0.00013 mg/L	0.000237	180.37%
Al 396.153†	-14.3	-0.0348 mg/L	0.00134	-0.0348 mg/L	0.00134	3.85%
As 188.979†	2.8	0.00099 mg/L	0.000954	0.00099 mg/L	0.000954	95.94%
Ba 233.527†	72.2	-0.00279 mg/L	0.000096	-0.00279 mg/L	0.000096	3.44%
Be 234.861†	295.0	0.00033 mg/L	0.000038	0.00033 mg/L	0.000038	11.76%
B 249.677†	503.2	0.00755 mg/L	0.000307	0.00755 mg/L	0.000307	4.07%
Ca 227.546†	202.7	0.478 mg/L	0.0091	0.478 mg/L	0.0091	1.90%
Cd 228.802†	-10.1	0.00001 mg/L	0.000105	0.00001 mg/L	0.000105	>999.9%
Co 228.616†	3.7	-0.00062 mg/L	0.000194	-0.00062 mg/L	0.000194	31.37%
Cr 267.716†	-29.7	-0.00226 mg/L	0.000044	-0.00226 mg/L	0.000044	1.93%
Cu 327.393†	9.9	-0.00041 mg/L	0.000248	-0.00041 mg/L	0.000248	60.60%
Fe 239.562†	-53.0	-0.0137 mg/L	0.00036	-0.0137 mg/L	0.00036	2.59%
Mg 279.077†	142.3	0.0151 mg/L	0.00368	0.0151 mg/L	0.00368	24.42%
Mn 257.610†	179.0	-0.00270 mg/L	0.000040	-0.00270 mg/L	0.000040	1.46%
Mo 202.031†	-4.0	-0.00222 mg/L	0.000222	-0.00222 mg/L	0.000222	10.04%
Ni 231.604†	-8.2	-0.00215 mg/L	0.000376	-0.00215 mg/L	0.000376	17.51%
Pb 220.353†	8.0	-0.00049 mg/L	0.000728	-0.00049 mg/L	0.000728	149.16%
Sb 206.836†	-8.8	-0.00103 mg/L	0.001059	-0.00103 mg/L	0.001059	102.62%
Se 196.026†	-1.3	0.00233 mg/L	0.003461	0.00233 mg/L	0.003461	148.39%
Si 251.611†	1917.9	0.0397 mg/L	0.00132	0.0397 mg/L	0.00132	3.33%
Sn 189.927†	-81.2	-0.0112 mg/L	0.00047	-0.0112 mg/L	0.00047	4.18%
Ti 334.940†	29.7	-0.00170 mg/L	0.000072	-0.00170 mg/L	0.000072	4.23%
Tl 190.801†	14.4	0.00158 mg/L	0.001273	0.00158 mg/L	0.001273	80.42%
V 290.880†	1455.1	0.00242 mg/L	0.000569	0.00242 mg/L	0.000569	23.55%
Zn 206.200†	0.3	-0.00211 mg/L	0.000075	-0.00211 mg/L	0.000075	3.55%
K 766.490†	95.6	-0.0164 mg/L	0.01914	-0.0164 mg/L	0.01914	116.97%
Na 589.592†	59118.1	2.87 mg/L	0.073	2.87 mg/L	0.073	2.54%
Sr 407.771†	6083.1	-0.00369 mg/L	0.000012	-0.00369 mg/L	0.000012	0.32%
Li 670.784†	-5.2	-0.00371 mg/L	0.000203	-0.00371 mg/L	0.000203	5.47%

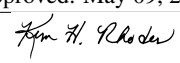
Sequence No.: 15
 Sample ID: L1204089808 0.01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 56
 a&e Collected: 5/8/2012 4:16:04 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: L1204089808 0.01
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: L1204089808 0.01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2309815.0				19100.68	0.83%
YRADIAL	318014.4				5131.47	1.61%
Ga 417.206	1459047.2				17866.30	1.22%

Approved: May 09, 2012


GarADIAL	97029.4					1336.43	1.38%
Ag 328.068†	115.3	0.00017	mg/L	0.000448	0.00017	mg/L	0.000448 256.45%
Al 396.153†	-4.6	-0.0335	mg/L	0.00066	-0.0335	mg/L	0.00066 1.96%
As 188.979†	6.1	0.00215	mg/L	0.001560	0.00215	mg/L	0.001560 72.54%
Ba 233.527†	115.8	-0.00252	mg/L	0.000098	-0.00252	mg/L	0.000098 3.89%
Be 234.861†	353.0	0.00037	mg/L	0.000004	0.00037	mg/L	0.000004 1.18%
B 249.677†	452.5	0.00695	mg/L	0.000183	0.00695	mg/L	0.000183 2.64%
Ca 227.546†	361.6	0.815	mg/L	0.0130	0.815	mg/L	0.0130 1.60%
Cd 228.802†	-14.5	-0.00008	mg/L	0.000154	-0.00008	mg/L	0.000154 197.66%
Co 228.616†	10.2	-0.00045	mg/L	0.000082	-0.00045	mg/L	0.000082 18.14%
Cr 267.716†	-36.0	-0.00232	mg/L	0.000029	-0.00232	mg/L	0.000029 1.23%
Cu 327.393†	-58.2	-0.00066	mg/L	0.000142	-0.00066	mg/L	0.000142 21.51%
Fe 239.562†	35.7	-0.00812	mg/L	0.000459	-0.00812	mg/L	0.000459 5.66%
Mg 279.077†	557.4	0.132	mg/L	0.0034	0.132	mg/L	0.0034 2.55%
Mn 257.610†	1062.0	-0.00165	mg/L	0.000012	-0.00165	mg/L	0.000012 0.71%
Mo 202.031†	-3.0	-0.00219	mg/L	0.000332	-0.00219	mg/L	0.000332 15.19%
Ni 231.604†	1.2	-0.00201	mg/L	0.000372	-0.00201	mg/L	0.000372 18.51%
Pb 220.353†	0.7	-0.00115	mg/L	0.000411	-0.00115	mg/L	0.000411 35.79%
Sb 206.836†	-12.1	-0.00183	mg/L	0.000756	-0.00183	mg/L	0.000756 41.35%
Se 196.026†	-8.6	-0.00169	mg/L	0.002879	-0.00169	mg/L	0.002879 170.38%
Si 251.611†	4502.4	0.102	mg/L	0.0013	0.102	mg/L	0.0013 1.27%
Sn 189.927†	-79.9	-0.0111	mg/L	0.00105	-0.0111	mg/L	0.00105 9.48%
Ti 334.940†	389.4	-0.00129	mg/L	0.000043	-0.00129	mg/L	0.000043 3.37%
Tl 190.801†	12.7	0.00115	mg/L	0.002563	0.00115	mg/L	0.002563 223.31%
V 290.880†	1340.5	0.00182	mg/L	0.002268	0.00182	mg/L	0.002268 124.73%
Zn 206.200†	19.3	-0.00166	mg/L	0.000105	-0.00166	mg/L	0.000105 6.31%
K 766.490†	402.7	0.0710	mg/L	0.02100	0.0710	mg/L	0.02100 29.58%
Na 589.592†	135856.9	6.60	mg/L	0.144	6.60	mg/L	0.144 2.19%
Sr 407.771†	23125.7	0.00270	mg/L	0.000169	0.00270	mg/L	0.000169 6.27%
Li 670.784†	1.4	-0.00367	mg/L	0.001012	-0.00367	mg/L	0.001012 27.57%

Sequence No.: 16

Sample ID: L1204089809 0.01

Analyst: KHR

Initial Sample Wt:

Dilution:

u@sampler Location: 57

a@e Collected: 5/8/2012 4:23:00 PM

a@a Type: Original

n@tial Sample Vol:

a@mple Prep Vol:

Nebulizer Parameters: L1204089809 0.01

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1204089809 0.01

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Std.Dev.	RSD
Y 371.029	2266712.0					12325.17	0.54%
YRADIAL	312154.3					3678.26	1.18%
Ga 417.206	1448826.4					3198.32	0.22%
GarADIAL	95371.6					2033.47	2.13%
Ag 328.068†	77.5	0.00005	mg/L	0.000121	0.00005	mg/L	0.000121 224.54%
Al 396.153†	-16.4	-0.0350	mg/L	0.00100	-0.0350	mg/L	0.00100 2.85%
As 188.979†	5.6	0.00199	mg/L	0.002329	0.00199	mg/L	0.002329 117.03%
Ba 233.527†	110.0	-0.00255	mg/L	0.000103	-0.00255	mg/L	0.000103 4.05%
Be 234.861†	322.2	0.00035	mg/L	0.000019	0.00035	mg/L	0.000019 5.34%
B 249.677†	405.6	0.00640	mg/L	0.000076	0.00640	mg/L	0.000076 1.19%
Ca 227.546†	387.5	0.870	mg/L	0.0013	0.870	mg/L	0.0013 0.14%
Cd 228.802†	-9.4	0.00001	mg/L	0.000114	0.00001	mg/L	0.000114 776.39%
Co 228.616†	3.5	-0.00062	mg/L	0.000106	-0.00062	mg/L	0.000106 17.02%
Cr 267.716†	-36.2	-0.00232	mg/L	0.000067	-0.00232	mg/L	0.000067 2.89%
Cu 327.393†	34.7	-0.00032	mg/L	0.000120	-0.00032	mg/L	0.000120 37.83%
Fe 239.562†	14.3	-0.00946	mg/L	0.000214	-0.00946	mg/L	0.000214 2.26%
Mg 279.077†	592.7	0.142	mg/L	0.0009	0.142	mg/L	0.0009 0.66%
Mn 257.610†	1130.0	-0.00157	mg/L	0.000023	-0.00157	mg/L	0.000023 1.47%
Mo 202.031†	-10.1	-0.00238	mg/L	0.000222	-0.00238	mg/L	0.000222 9.33%
Ni 231.604†	-3.9	-0.00208	mg/L	0.000104	-0.00208	mg/L	0.000104 4.97%
Pb 220.353†	-2.4	-0.00143	mg/L	0.000969	-0.00143	mg/L	0.000969 67.92%
Sb 206.836†	-8.2	-0.00089	mg/L	0.001030	-0.00089	mg/L	0.001030 115.49%
Se 196.026†	-12.4	-0.00383	mg/L	0.002530	-0.00383	mg/L	0.002530 66.04%
Si 251.611†	4614.7	0.104	mg/L	0.0003	0.104	mg/L	0.0003 0.25%
Sn 189.927†	-83.2	-0.0114	mg/L	0.00034	-0.0114	mg/L	0.00034 2.95%

Approved: May 09, 2012

Tom H. Rhodes

Ti 334.940†	-12.8	-0.00168	mg/L	0.000038	-0.00168	mg/L	0.000038	2.27%
Tl 190.801†	8.8	0.00014	mg/L	0.002266	0.00014	mg/L	0.002266	>999.9%
V 290.880†	1316.0	0.00169	mg/L	0.001033	0.00169	mg/L	0.001033	61.05%
Zn 206.200†	10.2	-0.00188	mg/L	0.000100	-0.00188	mg/L	0.000100	5.36%
K 766.490†	429.9	0.0787	mg/L	0.02351	0.0787	mg/L	0.02351	29.86%
Na 589.592†	142297.0	6.91	mg/L	0.157	6.91	mg/L	0.157	2.27%
Sr 407.771†	23424.6	0.00281	mg/L	0.000236	0.00281	mg/L	0.000236	8.40%
Li 670.784†	16.2	-0.00358	mg/L	0.000026	-0.00358	mg/L	0.000026	0.72%

Sequence No.: 17
 Sample ID: L1204089810 0.01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 58
 a&e Collected: 5/8/2012 4:29:57 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: L1204089810 0.01
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

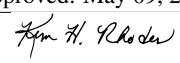
Mean Data: L1204089810 0.01

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2318873.7						23991.51	1.03%
YRADIAL	312095.8						4310.66	1.38%
Ga 417.206	1521558.5						3883.89	0.26%
GaRADIAL	97141.3						1615.81	1.66%
Ag 328.068†	29.2	-0.00010	mg/L	0.000262	-0.00010	mg/L	0.000262	270.64%
Al 396.153†	152.5	-0.0123	mg/L	0.00231	-0.0123	mg/L	0.00231	18.75%
As 188.979†	3.2	0.00114	mg/L	0.001192	0.00114	mg/L	0.001192	104.33%
Ba 233.527†	186.6	-0.00206	mg/L	0.000111	-0.00206	mg/L	0.000111	5.37%
Be 234.861†	388.6	0.00040	mg/L	0.000011	0.00040	mg/L	0.000011	2.77%
B 249.677†	406.4	0.00640	mg/L	0.000170	0.00640	mg/L	0.000170	2.66%
Ca 227.546†	54.4	0.164	mg/L	0.0086	0.164	mg/L	0.0086	5.27%
Cd 228.802†	-16.9	-0.00012	mg/L	0.000177	-0.00012	mg/L	0.000177	151.35%
Co 228.616†	7.5	-0.00053	mg/L	0.000084	-0.00053	mg/L	0.000084	15.75%
Cr 267.716†	109.4	-0.00099	mg/L	0.000161	-0.00099	mg/L	0.000161	16.33%
Cu 327.393†	-4.7	-0.00046	mg/L	0.000400	-0.00046	mg/L	0.000400	87.77%
Fe 239.562†	118.5	-0.00292	mg/L	0.000819	-0.00292	mg/L	0.000819	28.03%
Mg 279.077†	660.1	0.161	mg/L	0.0035	0.161	mg/L	0.0035	2.20%
Mn 257.610†	159.4	-0.00273	mg/L	0.000013	-0.00273	mg/L	0.000013	0.48%
Mo 202.031†	1.2	-0.00207	mg/L	0.000099	-0.00207	mg/L	0.000099	4.76%
Ni 231.604†	8.1	-0.00191	mg/L	0.000159	-0.00191	mg/L	0.000159	8.32%
Pb 220.353†	-5.3	-0.00169	mg/L	0.000442	-0.00169	mg/L	0.000442	26.13%
Sb 206.836†	-4.8	-0.00008	mg/L	0.000044	-0.00008	mg/L	0.000044	55.21%
Se 196.026†	-5.2	0.00020	mg/L	0.001351	0.00020	mg/L	0.001351	666.86%
Si 251.611†	4009.5	0.0898	mg/L	0.00059	0.0898	mg/L	0.00059	0.66%
Sn 189.927†	-71.7	-0.0103	mg/L	0.00072	-0.0103	mg/L	0.00072	7.00%
Ti 334.940†	6194.9	0.00440	mg/L	0.000085	0.00440	mg/L	0.000085	1.93%
Tl 190.801†	16.6	0.00224	mg/L	0.002970	0.00224	mg/L	0.002970	132.58%
V 290.880†	1463.2	0.00245	mg/L	0.002360	0.00245	mg/L	0.002360	96.24%
Zn 206.200†	208.6	0.00285	mg/L	0.000145	0.00285	mg/L	0.000145	5.11%
K 766.490†	837.6	0.188	mg/L	0.0196	0.188	mg/L	0.0196	10.41%
Na 589.592†	374834.7	18.4	mg/L	0.34	18.4	mg/L	0.34	1.85%
Sr 407.771†	42711.8	0.0101	mg/L	0.00031	0.0101	mg/L	0.00031	3.08%
Li 670.784†	72.1	-0.00321	mg/L	0.000494	-0.00321	mg/L	0.000494	15.36%

Sequence No.: 18
 Sample ID: L1204089811 0.01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 59
 a&e Collected: 5/8/2012 4:36:54 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: L1204089811 0.01
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Approved: May 09, 2012


Mean Data: L1204089811 0.01

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li.

Sequence No.: 19
Sample ID: L1204089812 0.01
Analyst: KHR
Initial Sample Wt:
Dilution:
uSampler Location: 60
Date Collected: 5/8/2012 4:43:49 PM
Sample Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1204089812 0.01
Analyte Back Pressure Flow
All 155.0 kPa 0.50 L/min

Mean Data: L1204089812 0.01

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo.

Approved: May 09, 2012
[Signature]

Ni 231.604†	-18.7	-0.00230	mg/L	0.000312	-0.00230	mg/L	0.000312	13.54%
Pb 220.353†	-8.2	-0.00194	mg/L	0.000887	-0.00194	mg/L	0.000887	45.61%
Sb 206.836†	-7.3	-0.00067	mg/L	0.001373	-0.00067	mg/L	0.001373	203.51%
Se 196.026†	-8.0	-0.00138	mg/L	0.001267	-0.00138	mg/L	0.001267	91.67%
Si 251.611†	4423.8	0.0997	mg/L	0.00290	0.0997	mg/L	0.00290	2.91%
Sn 189.927†	-80.1	-0.0111	mg/L	0.00039	-0.0111	mg/L	0.00039	3.50%
Ti 334.940†	293.2	-0.00138	mg/L	0.000180	-0.00138	mg/L	0.000180	13.02%
Tl 190.801†	12.0	0.00096	mg/L	0.000257	0.00096	mg/L	0.000257	26.77%
V 290.880†	1359.5	0.00192	mg/L	0.001465	0.00192	mg/L	0.001465	76.44%
Zn 206.200†	-2.2	-0.00217	mg/L	0.000249	-0.00217	mg/L	0.000249	11.47%
K 766.490†	397.1	0.0693	mg/L	0.01575	0.0693	mg/L	0.01575	22.74%
Na 589.592†	136701.1	6.64	mg/L	0.234	6.64	mg/L	0.234	3.52%
Sr 407.771†	22690.7	0.00253	mg/L	0.000082	0.00253	mg/L	0.000082	3.24%
Li 670.784†	38.1	-0.00343	mg/L	0.000469	-0.00343	mg/L	0.000469	13.65%

Sequence No.: 20

Sample ID: L1204089813 0.01

Analyst: KHR

Initial Sample Wt:

Dilution:

u@sampler Location: 61

a@e Collected: 5/8/2012 4:50:43 PM

a@a Type: Original

n@tial Sample Vol:

a@ple Prep Vol:

Nebulizer Parameters: L1204089813 0.01

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: L1204089813 0.01

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2250401.3					37309.51	1.66%
YRADIAL	309778.2					1924.04	0.62%
Ga 417.206	1424537.9					21910.89	1.54%
GaRADIAL	95212.7					2677.39	2.81%
Ag 328.068†	62.4	0.00001	mg/L	0.000196	0.00001	0.000196	>999.9%
Al 396.153†	-23.3	-0.0360	mg/L	0.00067	-0.0360	0.00067	1.85%
As 188.979†	2.8	0.00098	mg/L	0.000387	0.00098	0.000387	39.34%
Ba 233.527†	103.7	-0.00259	mg/L	0.000057	-0.00259	0.000057	2.21%
Be 234.861†	318.3	0.00034	mg/L	0.000020	0.00034	0.000020	5.75%
B 249.677†	273.0	0.00484	mg/L	0.000154	0.00484	0.000154	3.19%
Ca 227.546†	388.2	0.872	mg/L	0.0254	0.872	0.0254	2.92%
Cd 228.802†	-11.1	-0.00001	mg/L	0.000125	-0.00001	0.000125	>999.9%
Co 228.616†	8.8	-0.00049	mg/L	0.000200	-0.00049	0.000200	41.22%
Cr 267.716†	-39.0	-0.00235	mg/L	0.000116	-0.00235	0.000116	4.96%
Cu 327.393†	-79.9	-0.00074	mg/L	0.000443	-0.00074	0.000443	59.74%
Fe 239.562†	10.7	-0.00969	mg/L	0.000337	-0.00969	0.000337	3.48%
Mg 279.077†	594.2	0.142	mg/L	0.0033	0.142	0.0033	2.30%
Mn 257.610†	1107.2	-0.00160	mg/L	0.000007	-0.00160	0.000007	0.45%
Mo 202.031†	-16.3	-0.00254	mg/L	0.000084	-0.00254	0.000084	3.31%
Ni 231.604†	-16.8	-0.00227	mg/L	0.000143	-0.00227	0.000143	6.29%
Pb 220.353†	-14.0	-0.00247	mg/L	0.000758	-0.00247	0.000758	30.72%
Sb 206.836†	-8.6	-0.00099	mg/L	0.000112	-0.00099	0.000112	11.30%
Se 196.026†	-5.6	-0.00003	mg/L	0.001306	-0.00003	0.001306	>999.9%
Si 251.611†	4593.2	0.104	mg/L	0.0016	0.104	0.0016	1.58%
Sn 189.927†	-80.8	-0.0112	mg/L	0.00075	-0.0112	0.00075	6.71%
Ti 334.940†	-55.6	-0.00172	mg/L	0.000120	-0.00172	0.000120	6.97%
Tl 190.801†	13.5	0.00136	mg/L	0.001313	0.00136	0.001313	96.69%
V 290.880†	1727.9	0.00382	mg/L	0.000243	0.00382	0.000243	6.36%
Zn 206.200†	-10.0	-0.00236	mg/L	0.000016	-0.00236	0.000016	0.66%
K 766.490†	398.2	0.0693	mg/L	0.01775	0.0693	0.01775	25.63%
Na 589.592†	143330.0	6.96	mg/L	0.199	6.96	0.199	2.86%
Sr 407.771†	23819.1	0.00296	mg/L	0.000104	0.00296	0.000104	3.51%
Li 670.784†	35.6	-0.00345	mg/L	0.000230	-0.00345	0.000230	6.66%

Sequence No.: 21

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

u@sampler Location: 6

a@e Collected: 5/8/2012 4:57:37 PM

a@a Type: Original

n@tial Sample Vol:

a@ple Prep Vol:

Approved: May 09, 2012

John H. Rhodes

Nebulizer Parameters: CCV

Analyte Back Pressure Flow
 All 156.0 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	2258793.4				15788.64	0.70%
YRADIAL	315921.7				3977.51	1.26%
Ga 417.206	1376251.7				26204.99	1.90%
GaRADIAL	94408.3				1622.01	1.72%
Ag 328.068†	122129.7	0.392 mg/L	0.0103	0.392 mg/L	0.0103	2.62%
QC value within limits for Ag		328.068	Recovery = 98.08%			
Al 396.153†	73022.3	9.73 mg/L	0.043	9.73 mg/L	0.043	0.44%
QC value within limits for Al		396.153	Recovery = 97.27%			
As 188.979†	1076.6	0.378 mg/L	0.0054	0.378 mg/L	0.0054	1.44%
QC value within limits for As		188.979	Recovery = 94.46%			
Ba 233.527†	152295.0	0.969 mg/L	0.0064	0.969 mg/L	0.0064	0.66%
QC value within limits for Ba		233.527	Recovery = 96.89%			
Be 234.861†	60032.4	0.0472 mg/L	0.00088	0.0472 mg/L	0.00088	1.87%
QC value within limits for Be		234.861	Recovery = 94.31%			
B 249.677†	41481.5	0.485 mg/L	0.0132	0.485 mg/L	0.0132	2.72%
QC value within limits for B		249.677	Recovery = 97.10%			
Ca 227.546†	4565.0	10.2 mg/L	0.24	10.2 mg/L	0.24	2.39%
QC value within limits for Ca		227.546	Recovery = 101.84%			
Cd 228.802†	2655.0	0.0466 mg/L	0.00151	0.0466 mg/L	0.00151	3.24%
QC value within limits for Cd		228.802	Recovery = 93.17%			
Co 228.616†	7475.8	0.192 mg/L	0.0014	0.192 mg/L	0.0014	0.73%
QC value within limits for Co		228.616	Recovery = 96.03%			
Cr 267.716†	53235.1	0.487 mg/L	0.0038	0.487 mg/L	0.0038	0.79%
QC value within limits for Cr		267.716	Recovery = 97.32%			
Cu 327.393†	134285.4	0.501 mg/L	0.0136	0.501 mg/L	0.0136	2.71%
QC value within limits for Cu		327.393	Recovery = 100.13%			
Fe 239.562†	60559.2	3.79 mg/L	0.051	3.79 mg/L	0.051	1.34%
QC value within limits for Fe		239.562	Recovery = 94.80%			
Mg 279.077†	33746.8	9.49 mg/L	0.128	9.49 mg/L	0.128	1.34%
QC value within limits for Mg		279.077	Recovery = 94.95%			
Mn 257.610†	417804.2	0.495 mg/L	0.0030	0.495 mg/L	0.0030	0.61%
QC value within limits for Mn		257.610	Recovery = 99.00%			
Mo 202.031†	35955.4	0.970 mg/L	0.0051	0.970 mg/L	0.0051	0.53%
QC value within limits for Mo		202.031	Recovery = 96.97%			
Ni 231.604†	33387.9	0.489 mg/L	0.0010	0.489 mg/L	0.0010	0.21%
QC value within limits for Ni		231.604	Recovery = 97.74%			
Pb 220.353†	5438.6	0.490 mg/L	0.0036	0.490 mg/L	0.0036	0.73%
QC value within limits for Pb		220.353	Recovery = 97.94%			
Sb 206.836†	4816.5	1.16 mg/L	0.022	1.16 mg/L	0.022	1.87%
QC value within limits for Sb		206.836	Recovery = 96.69%			
Se 196.026†	687.7	0.387 mg/L	0.0047	0.387 mg/L	0.0047	1.21%
QC value within limits for Se		196.026	Recovery = 96.64%			
Si 251.611†	204367.9	4.88 mg/L	0.075	4.88 mg/L	0.075	1.54%
QC value within limits for Si		251.611	Recovery = 97.59%			
Sn 189.927†	10070.1	0.962 mg/L	0.0074	0.962 mg/L	0.0074	0.76%
QC value within limits for Sn		189.927	Recovery = 96.23%			
Ti 334.940†	982777.7	0.979 mg/L	0.0027	0.979 mg/L	0.0027	0.28%
QC value within limits for Ti		334.940	Recovery = 97.89%			
Tl 190.801†	1929.4	0.509 mg/L	0.0043	0.509 mg/L	0.0043	0.85%
QC value within limits for Tl		190.801	Recovery = 101.80%			
V 290.880†	192180.1	0.988 mg/L	0.0062	0.988 mg/L	0.0062	0.62%
QC value within limits for V		290.880	Recovery = 98.78%			
Zn 206.200†	39839.3	0.949 mg/L	0.0076	0.949 mg/L	0.0076	0.80%
QC value within limits for Zn		206.200	Recovery = 94.86%			
K 766.490†	159819.5	48.1 mg/L	0.30	48.1 mg/L	0.30	0.62%
QC value within limits for K		766.490	Recovery = 96.15%			
Na 589.592†	957143.0	48.2 mg/L	0.79	48.2 mg/L	0.79	1.63%
QC value within limits for Na		589.592	Recovery = 96.48%			
Sr 407.771†	2625811.3	0.979 mg/L	0.0172	0.979 mg/L	0.0172	1.76%
QC value within limits for Sr		407.771	Recovery = 97.92%			
Li 670.784†	160516.0	1.03 mg/L	0.001	1.03 mg/L	0.001	0.11%
QC value within limits for Li		670.784	Recovery = 103.30%			

All analyte(s) passed QC.

Approved: May 09, 2012

Tom H. Rhodes

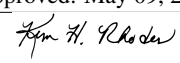
```

=====
Sequence No.: 22                               u&osampler Location: 1
Sample ID: CCB                                 ame Collected: 5/8/2012 5:03:38 PM
Analyst:                                       ama Type: Original
Initial Sample Wt:                             nitial Sample Vol:
Dilution:                                     ample Prep Vol:
=====
    
```

```

-----
Nebulizer Parameters: CCB
Analyte      Back Pressure      Flow
All          156.0 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	2283172.0				23663.14	1.04%	
YRADIAL	311977.8				2070.53	0.66%	
Ga 417.206	1399112.0				5055.98	0.36%	
GarADIAL	94088.4				3866.19	4.11%	
Ag 328.068†	59.0	-0.00001 mg/L	0.000199	-0.00001 mg/L	0.000199	>999.9%	
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 396.153†	2.6	-0.0325 mg/L	0.00093	-0.0325 mg/L	0.00093	2.87%	
QC value within limits for Al	396.153	Recovery = Not calculated					
As 188.979†	2.5	0.00087 mg/L	0.001219	0.00087 mg/L	0.001219	140.79%	
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	15.7	-0.00315 mg/L	0.000057	-0.00315 mg/L	0.000057	1.79%	
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 234.861†	75.0	0.00015 mg/L	0.000011	0.00015 mg/L	0.000011	7.21%	
QC value within limits for Be	234.861	Recovery = Not calculated					
B 249.677†	327.7	0.00548 mg/L	0.000237	0.00548 mg/L	0.000237	4.32%	
QC value within limits for B	249.677	Recovery = Not calculated					
Ca 227.546†	-10.8	0.0252 mg/L	0.01954	0.0252 mg/L	0.01954	77.64%	
QC value within limits for Ca	227.546	Recovery = Not calculated					
Cd 228.802†	0.1	0.00019 mg/L	0.000252	0.00019 mg/L	0.000252	132.02%	
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	0.9	-0.00069 mg/L	0.000238	-0.00069 mg/L	0.000238	34.39%	
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	-17.7	-0.00215 mg/L	0.000060	-0.00215 mg/L	0.000060	2.76%	
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	-138.0	-0.00096 mg/L	0.000272	-0.00096 mg/L	0.000272	28.36%	
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 239.562†	-13.9	-0.0112 mg/L	0.00013	-0.0112 mg/L	0.00013	1.12%	
QC value within limits for Fe	239.562	Recovery = Not calculated					
Mg 279.077†	-1.9	-0.0255 mg/L	0.00099	-0.0255 mg/L	0.00099	3.88%	
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	16.4	-0.00290 mg/L	0.000033	-0.00290 mg/L	0.000033	1.15%	
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	8.6	-0.00188 mg/L	0.000319	-0.00188 mg/L	0.000319	16.99%	
QC value within limits for Mo	202.031	Recovery = Not calculated					
Ni 231.604†	1.8	-0.00200 mg/L	0.000117	-0.00200 mg/L	0.000117	5.85%	
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	-10.8	-0.00219 mg/L	0.000718	-0.00219 mg/L	0.000718	32.82%	
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	2.2	0.00161 mg/L	0.001438	0.00161 mg/L	0.001438	89.12%	
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	-6.4	-0.00051 mg/L	0.002708	-0.00051 mg/L	0.002708	532.60%	
QC value within limits for Se	196.026	Recovery = Not calculated					
Si 251.611†	151.4	-0.00264 mg/L	0.000686	-0.00264 mg/L	0.000686	25.94%	
QC value within limits for Si	251.611	Recovery = Not calculated					
Sn 189.927†	-4.7	-0.00389 mg/L	0.000675	-0.00389 mg/L	0.000675	17.34%	
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	81.9	-0.00171 mg/L	0.000108	-0.00171 mg/L	0.000108	6.31%	
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	-0.5	-0.00227 mg/L	0.001903	-0.00227 mg/L	0.001903	83.99%	
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	967.4	-0.00011 mg/L	0.000906	-0.00011 mg/L	0.000906	852.20%	
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	-29.1	-0.00281 mg/L	0.000226	-0.00281 mg/L	0.000226	8.05%	
QC value within limits for Zn	206.200	Recovery = Not calculated					
K 766.490†	89.9	-0.0152 mg/L	0.02108	-0.0152 mg/L	0.02108	138.55%	

Approved: May 09, 2012


QC value within limits for K 766.490 Recovery = Not calculated
 Na 589.592† -40.2 0.0203 mg/L 0.00725 0.0203 mg/L 0.00725 35.64%
 QC value within limits for Na 589.592 Recovery = Not calculated
 Sr 407.771† 66.5 -0.00594 mg/L 0.000022 -0.00594 mg/L 0.000022 0.38%
 QC value within limits for Sr 407.771 Recovery = Not calculated
 Li 670.784† -2.6 -0.00370 mg/L 0.000556 -0.00370 mg/L 0.000556 15.04%
 QC value within limits for Li 670.784 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 23 u&osampler Location: 62
 Sample ID: PBW 32 WG397313-01 a&e Collected: 5/8/2012 5:10:31 PM
 Analyst: KHR a&a Type: Original
 Initial Sample Wt: n&tial Sample Vol:
 Dilution: a&ple Prep Vol:

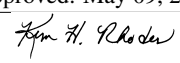
Nebulizer Parameters: PBW 32 WG397313-01
 Analyte Back Pressure Flow
 All 156.0 kPa 0.50 L/min

Mean Data: PBW 32 WG397313-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2347174.6				10144.59	0.43%
YRADIAL	318701.4				6125.87	1.92%
Ga 417.206	1390841.3				27707.67	1.99%
GaRADIAL	96304.6				1581.78	1.64%
Ag 328.068†	-52.6	-0.00036 mg/L	0.000066	-0.00036 mg/L	0.000066	18.13%
Al 396.153†	32.2	-0.0286 mg/L	0.00137	-0.0286 mg/L	0.00137	4.78%
As 188.979†	-11.9	-0.00424 mg/L	0.001480	-0.00424 mg/L	0.001480	34.90%
Ba 233.527†	-17.4	-0.00336 mg/L	0.000131	-0.00336 mg/L	0.000131	3.90%
Be 234.861†	-391.0	-0.00022 mg/L	0.000013	-0.00022 mg/L	0.000013	6.20%
B 249.677†	221.9	0.00422 mg/L	0.000028	0.00422 mg/L	0.000028	0.67%
Ca 227.546†	-31.9	-0.0203 mg/L	0.01489	-0.0203 mg/L	0.01489	73.50%
Cd 228.802†	24.2	0.00065 mg/L	0.000205	0.00065 mg/L	0.000205	31.55%
Co 228.616†	-2.3	-0.00077 mg/L	0.000232	-0.00077 mg/L	0.000232	30.00%
Cr 267.716†	21.8	-0.00179 mg/L	0.000035	-0.00179 mg/L	0.000035	1.96%
Cu 327.393†	784.3	0.00247 mg/L	0.000156	0.00247 mg/L	0.000156	6.33%
Fe 239.562†	44.9	-0.00754 mg/L	0.000375	-0.00754 mg/L	0.000375	4.97%
Mg 279.077†	11.9	-0.0216 mg/L	0.00233	-0.0216 mg/L	0.00233	10.76%
Mn 257.610†	999.7	-0.00173 mg/L	0.000024	-0.00173 mg/L	0.000024	1.39%
Mo 202.031†	40.8	-0.00101 mg/L	0.000396	-0.00101 mg/L	0.000396	39.38%
Ni 231.604†	-58.4	-0.00288 mg/L	0.000301	-0.00288 mg/L	0.000301	10.43%
Pb 220.353†	-17.6	-0.00280 mg/L	0.000607	-0.00280 mg/L	0.000607	21.65%
Sb 206.836†	1.0	0.00130 mg/L	0.000452	0.00130 mg/L	0.000452	34.72%
Se 196.026†	4.6	0.00564 mg/L	0.002105	0.00564 mg/L	0.002105	37.32%
Si 251.611†	114.5	-0.00354 mg/L	0.000482	-0.00354 mg/L	0.000482	13.61%
Sn 189.927†	-36.7	-0.00696 mg/L	0.000131	-0.00696 mg/L	0.000131	1.88%
Ti 334.940†	350.6	-0.00145 mg/L	0.000223	-0.00145 mg/L	0.000223	15.35%
Tl 190.801†	-19.8	-0.00723 mg/L	0.003367	-0.00723 mg/L	0.003367	46.60%
V 290.880†	710.2	-0.00144 mg/L	0.001915	-0.00144 mg/L	0.001915	133.30%
Zn 206.200†	71.0	-0.00043 mg/L	0.000084	-0.00043 mg/L	0.000084	19.70%
K 766.490†	133.7	-0.00224 mg/L	0.013168	-0.00224 mg/L	0.013168	588.81%
Na 589.592†	376.0	0.0404 mg/L	0.00870	0.0404 mg/L	0.00870	21.55%
Sr 407.771†	297.2	-0.00585 mg/L	0.000006	-0.00585 mg/L	0.000006	0.10%
Li 670.784†	-39.9	-0.00394 mg/L	0.000313	-0.00394 mg/L	0.000313	7.95%

Sequence No.: 24 u&osampler Location: 63
 Sample ID: LCSW 32 WG397313-02 a&e Collected: 5/8/2012 5:17:26 PM
 Analyst: KHR a&a Type: Original
 Initial Sample Wt: n&tial Sample Vol:
 Dilution: a&ple Prep Vol:

Nebulizer Parameters: LCSW 32 WG397313-02
 Analyte Back Pressure Flow
 All 156.0 kPa 0.50 L/min

Approved: May 09, 2012


Mean Data: LCSW 32 WG397313-02

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Y 371.029	2278052.5					11573.61	0.51%
YRADIAL	319939.4					1175.24	0.37%
Ga 417.206	1362811.6					22145.87	1.63%
GarADIAL	93813.5					398.20	0.42%
Ag 328.068†	60219.3	0.193 mg/L	0.0063	0.193 mg/L	0.0063	0.0063	3.24%
Al 396.153†	36899.0	4.90 mg/L	0.017	4.90 mg/L	0.017	0.017	0.34%
As 188.979†	497.7	0.174 mg/L	0.0018	0.174 mg/L	0.0018	0.0018	1.05%
Ba 233.527†	75098.5	0.476 mg/L	0.0051	0.476 mg/L	0.0051	0.0051	1.08%
Be 234.861†	28145.5	0.0222 mg/L	0.00056	0.0222 mg/L	0.00056	0.00056	2.51%
B 249.677†	77261.1	0.908 mg/L	0.0324	0.908 mg/L	0.0324	0.0324	3.57%
Ca 227.546†	2108.1	4.74 mg/L	0.107	4.74 mg/L	0.107	0.107	2.26%
Cd 228.802†	1316.9	0.0233 mg/L	0.00077	0.0233 mg/L	0.00077	0.00077	3.30%
Co 228.616†	3709.7	0.0949 mg/L	0.00043	0.0949 mg/L	0.00043	0.00043	0.46%
Cr 267.716†	26735.3	0.243 mg/L	0.0050	0.243 mg/L	0.0050	0.0050	2.05%
Cu 327.393†	67254.9	0.251 mg/L	0.0078	0.251 mg/L	0.0078	0.0078	3.12%
Fe 239.562†	29777.8	1.86 mg/L	0.014	1.86 mg/L	0.014	0.014	0.77%
Mg 279.077†	16654.1	4.67 mg/L	0.048	4.67 mg/L	0.048	0.048	1.02%
Mn 257.610†	205508.6	0.242 mg/L	0.0014	0.242 mg/L	0.0014	0.0014	0.59%
Mo 202.031†	18197.9	0.490 mg/L	0.0048	0.490 mg/L	0.0048	0.0048	0.98%
Ni 231.604†	16262.7	0.237 mg/L	0.0013	0.237 mg/L	0.0013	0.0013	0.54%
Pb 220.353†	2552.8	0.229 mg/L	0.0017	0.229 mg/L	0.0017	0.0017	0.75%
Sb 206.836†	2360.6	0.569 mg/L	0.0116	0.569 mg/L	0.0116	0.0116	2.05%
Se 196.026†	319.6	0.181 mg/L	0.0019	0.181 mg/L	0.0019	0.0019	1.07%
Si 251.611†	100659.5	2.40 mg/L	0.053	2.40 mg/L	0.053	0.053	2.22%
Sn 189.927†	5335.2	0.508 mg/L	0.0020	0.508 mg/L	0.0020	0.0020	0.40%
Ti 334.940†	496228.1	0.493 mg/L	0.0028	0.493 mg/L	0.0028	0.0028	0.56%
Tl 190.801†	906.0	0.238 mg/L	0.0081	0.238 mg/L	0.0081	0.0081	3.42%
V 290.880†	96671.4	0.494 mg/L	0.0107	0.494 mg/L	0.0107	0.0107	2.16%
Zn 206.200†	19194.2	0.456 mg/L	0.0081	0.456 mg/L	0.0081	0.0081	1.77%
K 766.490†	80665.0	24.0 mg/L	0.19	24.0 mg/L	0.19	0.19	0.80%
Na 589.592†	492025.2	24.2 mg/L	0.28	24.2 mg/L	0.28	0.28	1.16%
Sr 407.771†	1308206.8	0.485 mg/L	0.0080	0.485 mg/L	0.0080	0.0080	1.65%
Li 670.784†	84223.7	0.540 mg/L	0.0075	0.540 mg/L	0.0075	0.0075	1.38%

Sequence No.: 25

Sample ID: LCSW 32 WG397313-03

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 64

Time Collected: 5/8/2012 5:23:24 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: LCSW 32 WG397313-03

Analyte	Back Pressure	Flow
All	156.0 kPa	0.50 L/min

Mean Data: LCSW 32 WG397313-03

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Y 371.029	2282729.7					10054.46	0.44%
YRADIAL	317112.2					749.44	0.24%
Ga 417.206	1319009.1					39986.27	3.03%
GarADIAL	93468.0					1181.60	1.26%
Ag 328.068†	62894.2	0.202 mg/L	0.0065	0.202 mg/L	0.0065	0.0065	3.24%
Al 396.153†	37281.8	4.95 mg/L	0.030	4.95 mg/L	0.030	0.030	0.61%
As 188.979†	516.5	0.181 mg/L	0.0083	0.181 mg/L	0.0083	0.0083	4.58%
Ba 233.527†	76249.2	0.483 mg/L	0.0047	0.483 mg/L	0.0047	0.0047	0.97%
Be 234.861†	29638.1	0.0233 mg/L	0.00086	0.0233 mg/L	0.00086	0.00086	3.69%
B 249.677†	81238.7	0.955 mg/L	0.0383	0.955 mg/L	0.0383	0.0383	4.01%
Ca 227.546†	2173.5	4.88 mg/L	0.147	4.88 mg/L	0.147	0.147	3.01%
Cd 228.802†	1368.9	0.0242 mg/L	0.00128	0.0242 mg/L	0.00128	0.00128	5.29%
Co 228.616†	3713.9	0.0951 mg/L	0.00055	0.0951 mg/L	0.00055	0.00055	0.58%
Cr 267.716†	27181.1	0.247 mg/L	0.0026	0.247 mg/L	0.0026	0.0026	1.06%
Cu 327.393†	70304.6	0.262 mg/L	0.0086	0.262 mg/L	0.0086	0.0086	3.28%
Fe 239.562†	30296.7	1.89 mg/L	0.011	1.89 mg/L	0.011	0.011	0.59%
Mg 279.077†	16987.7	4.77 mg/L	0.077	4.77 mg/L	0.077	0.077	1.61%
Mn 257.610†	208408.7	0.245 mg/L	0.0033	0.245 mg/L	0.0033	0.0033	1.33%
Mo 202.031†	18430.0	0.496 mg/L	0.0060	0.496 mg/L	0.0060	0.0060	1.22%

Approved: May 09, 2012

John H. Rhodes

Ni 231.604†	16572.6	0.242 mg/L	0.0018	0.242 mg/L	0.0018	0.74%
Pb 220.353†	2570.3	0.231 mg/L	0.0025	0.231 mg/L	0.0025	1.10%
Sb 206.836†	2439.9	0.588 mg/L	0.0200	0.588 mg/L	0.0200	3.40%
Se 196.026†	338.1	0.192 mg/L	0.0084	0.192 mg/L	0.0084	4.38%
Si 251.611†	105242.0	2.51 mg/L	0.062	2.51 mg/L	0.062	2.48%
Sn 189.927†	5405.4	0.515 mg/L	0.0035	0.515 mg/L	0.0035	0.67%
Ti 334.940†	500191.6	0.497 mg/L	0.0022	0.497 mg/L	0.0022	0.44%
Tl 190.801†	899.9	0.237 mg/L	0.0028	0.237 mg/L	0.0028	1.17%
V 290.880†	98173.6	0.502 mg/L	0.0065	0.502 mg/L	0.0065	1.29%
Zn 206.200†	19509.7	0.464 mg/L	0.0026	0.464 mg/L	0.0026	0.55%
K 766.490†	81297.3	24.2 mg/L	0.10	24.2 mg/L	0.10	0.42%
Na 589.592†	496713.7	24.5 mg/L	0.35	24.5 mg/L	0.35	1.44%
Sr 407.771†	1323568.0	0.491 mg/L	0.0064	0.491 mg/L	0.0064	1.30%
Li 670.784†	84270.6	0.541 mg/L	0.0052	0.541 mg/L	0.0052	0.96%

Sequence No.: 26

Sample ID: L1205013001

Analyst: KHR

Initial Sample Wt:

Dilution:

u@sampler Location: 65

Time Collected: 5/8/2012 5:29:23 PM

Time Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1205013001

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: L1205013001

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2330090.6					28626.00	1.23%
YRADIAL	317646.0					3284.43	1.03%
Ga 417.206	1406304.8					47786.58	3.40%
GaRADIAL	94829.0					1029.26	1.09%
Ag 328.068†	126.3	0.00034 mg/L	0.000332	0.00034 mg/L	0.000332	96.99%	
Al 396.153†	14439.7	1.91 mg/L	0.047	1.91 mg/L	0.047	2.48%	
As 188.979†	-14.2	-0.00507 mg/L	0.000613	-0.00507 mg/L	0.000613	12.10%	
Ba 233.527†	1852.1	0.00858 mg/L	0.000080	0.00858 mg/L	0.000080	0.93%	
Be 234.861†	34.6	0.00006 mg/L	0.000092	0.00006 mg/L	0.000092	155.32%	
B 249.677†	1626.3	0.0198 mg/L	0.00148	0.0198 mg/L	0.00148	7.46%	
Ca 227.546†	741.4	1.99 mg/L	0.044	1.99 mg/L	0.044	2.20%	
Cd 228.802†	18.0	0.00105 mg/L	0.000248	0.00105 mg/L	0.000248	23.69%	
Co 228.616†	5163.0	0.133 mg/L	0.0018	0.133 mg/L	0.0018	1.37%	
Cr 267.716†	185.9	-0.00031 mg/L	0.000116	-0.00031 mg/L	0.000116	37.55%	
Cu 327.393†	1201.7	0.00391 mg/L	0.000644	0.00391 mg/L	0.000644	16.46%	
Fe 239.562†	4802.1	0.291 mg/L	0.0058	0.291 mg/L	0.0058	2.01%	
Mg 279.077†	2266.0	0.613 mg/L	0.0174	0.613 mg/L	0.0174	2.83%	
Mn 257.610†	8609.7	0.00734 mg/L	0.000127	0.00734 mg/L	0.000127	1.73%	
Mo 202.031†	98.9	0.00058 mg/L	0.000353	0.00058 mg/L	0.000353	60.50%	
Ni 231.604†	31700.4	0.464 mg/L	0.0024	0.464 mg/L	0.0024	0.52%	
Pb 220.353†	-39.2	-0.00442 mg/L	0.001897	-0.00442 mg/L	0.001897	42.89%	
Sb 206.836†	-6.7	-0.00030 mg/L	0.000877	-0.00030 mg/L	0.000877	296.64%	
Se 196.026†	5.0	0.00613 mg/L	0.003222	0.00613 mg/L	0.003222	52.56%	
Si 251.611†	14996.6	0.353 mg/L	0.0439	0.353 mg/L	0.0439	12.44%	
Sn 189.927†	-67.0	-0.00987 mg/L	0.000550	-0.00987 mg/L	0.000550	5.57%	
Ti 334.940†	4336.9	0.00277 mg/L	0.000718	0.00277 mg/L	0.000718	25.96%	
Tl 190.801†	-10.3	-0.00482 mg/L	0.002557	-0.00482 mg/L	0.002557	53.05%	
V 290.880†	1620.0	0.00320 mg/L	0.001016	0.00320 mg/L	0.001016	31.69%	
Zn 206.200†	2250.6	0.0514 mg/L	0.00060	0.0514 mg/L	0.00060	1.16%	
K 766.490†	1102.0	0.262 mg/L	0.0281	0.262 mg/L	0.0281	10.75%	
Na 589.592†	473117.0	23.3 mg/L	0.03	23.3 mg/L	0.03	0.12%	
Sr 407.771†	48579.4	0.0122 mg/L	0.00018	0.0122 mg/L	0.00018	1.45%	
Li 670.784†	40387.2	0.257 mg/L	0.0015	0.257 mg/L	0.0015	0.57%	

Sequence No.: 27

Sample ID: L1205013002

Analyst: KHR

Initial Sample Wt:

Dilution:

u@sampler Location: 66

Time Collected: 5/8/2012 5:35:21 PM

Time Type: Original

Initial Sample Vol:

Sample Prep Vol:

Approved: May 09, 2012

John H. Rhodes

Nebulizer Parameters: L1205013002

Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: L1205013002

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2296859.8					38420.56	1.67%
YRADIAL	313712.6					2468.46	0.79%
Ga 417.206	1385236.0					37441.99	2.70%
GaRADIAL	95346.4					1542.55	1.62%
Ag 328.068†	48.2	0.00008	mg/L	0.000117	0.00008	0.000117	138.95%
Al 396.153†	14230.7	1.88	mg/L	0.025	1.88	0.025	1.35%
As 188.979†	-11.3	-0.00405	mg/L	0.000995	-0.00405	0.000995	24.55%
Ba 233.527†	2186.5	0.0107	mg/L	0.00011	0.0107	0.00011	1.04%
Be 234.861†	-111.7	-0.00005	mg/L	0.000078	-0.00005	0.000078	154.56%
B 249.677†	1326.0	0.0163	mg/L	0.00080	0.0163	0.00080	4.90%
Ca 227.546†	835.4	2.17	mg/L	0.027	2.17	0.027	1.25%
Cd 228.802†	32.8	0.00128	mg/L	0.000255	0.00128	0.000255	19.87%
Co 228.616†	4926.3	0.127	mg/L	0.0026	0.127	0.0026	2.04%
Cr 267.716†	183.9	-0.00033	mg/L	0.000197	-0.00033	0.000197	60.42%
Cu 327.393†	1113.8	0.00359	mg/L	0.000445	0.00359	0.000445	12.40%
Fe 239.562†	4390.5	0.265	mg/L	0.0032	0.265	0.0032	1.20%
Mg 279.077†	2292.7	0.621	mg/L	0.0049	0.621	0.0049	0.79%
Mn 257.610†	10254.2	0.00930	mg/L	0.000334	0.00930	0.000334	3.59%
Mo 202.031†	106.4	0.00078	mg/L	0.000279	0.00078	0.000279	35.57%
Ni 231.604†	30062.0	0.440	mg/L	0.0102	0.440	0.0102	2.31%
Pb 220.353†	-48.1	-0.00523	mg/L	0.000609	-0.00523	0.000609	11.64%
Sb 206.836†	-7.5	-0.00049	mg/L	0.001007	-0.00049	0.001007	207.15%
Se 196.026†	7.6	0.00755	mg/L	0.001013	0.00755	0.001013	13.42%
Si 251.611†	47990.7	1.14	mg/L	0.028	1.14	0.028	2.49%
Sn 189.927†	-67.6	-0.00992	mg/L	0.000756	-0.00992	0.000756	7.62%
Ti 334.940†	6718.2	0.00517	mg/L	0.000112	0.00517	0.000112	2.16%
Tl 190.801†	-14.7	-0.00591	mg/L	0.000843	-0.00591	0.000843	14.26%
V 290.880†	1873.4	0.00452	mg/L	0.001499	0.00452	0.001499	33.16%
Zn 206.200†	2711.7	0.0624	mg/L	0.00102	0.0624	0.00102	1.63%
K 766.490†	1493.0	0.375	mg/L	0.0211	0.375	0.0211	5.63%
Na 589.592†	517073.8	25.5	mg/L	0.21	25.5	0.21	0.81%
Sr 407.771†	53047.7	0.0139	mg/L	0.00015	0.0139	0.00015	1.10%
Li 670.784†	43281.9	0.276	mg/L	0.0029	0.276	0.0029	1.04%

Sequence No.: 28

Sample ID: L1205013003

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 67

ame Collected: 5/8/2012 5:41:19 PM

ama Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: L1205013003

Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: L1205013003

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2319060.7					47598.27	2.05%
YRADIAL	323054.9					1031.85	0.32%
Ga 417.206	1447380.0					30107.15	2.08%
GaRADIAL	97157.4					503.46	0.52%
Ag 328.068†	25.5	0.00027	mg/L	0.000406	0.00027	0.000406	152.37%
Al 396.153†	46246.1	6.19	mg/L	0.036	6.19	0.036	0.58%
As 188.979†	-11.2	-0.00401	mg/L	0.000501	-0.00401	0.000501	12.48%
Ba 233.527†	7253.6	0.0431	mg/L	0.00055	0.0431	0.00055	1.28%
Be 234.861†	233.0	0.00010	mg/L	0.000081	0.00010	0.000081	80.33%
B 249.677†	3055.2	0.0344	mg/L	0.00225	0.0344	0.00225	6.54%
Ca 227.546†	1807.1	5.17	mg/L	0.073	5.17	0.073	1.42%
Cd 228.802†	-55.5	0.00100	mg/L	0.000432	0.00100	0.000432	43.15%
Co 228.616†	18297.7	0.473	mg/L	0.0092	0.473	0.0092	1.94%

Approved: May 09, 2012

Kym H. Rhodes

Cr 267.716†	536.6	0.00285 mg/L	0.000245	0.00285 mg/L	0.000245	8.59%
Cu 327.393†	3037.8	0.0105 mg/L	0.00030	0.0105 mg/L	0.00030	2.85%
Fe 239.562†	14036.2	0.870 mg/L	0.0018	0.870 mg/L	0.0018	0.21%
Mg 279.077†	5713.6	1.58 mg/L	0.005	1.58 mg/L	0.005	0.34%
Mn 257.610†	30155.4	0.0330 mg/L	0.00059	0.0330 mg/L	0.00059	1.78%
Mo 202.031†	154.8	0.00212 mg/L	0.000104	0.00212 mg/L	0.000104	4.90%
Ni 231.604†	110308.2	1.62 mg/L	0.022	1.62 mg/L	0.022	1.36%
Pb 220.353†	-39.4	-0.00372 mg/L	0.000369	-0.00372 mg/L	0.000369	9.92%
Sb 206.836†	-8.9	-0.00021 mg/L	0.001783	-0.00021 mg/L	0.001783	842.28%
Se 196.026†	5.6	0.00708 mg/L	0.002432	0.00708 mg/L	0.002432	34.35%
Si 251.611†	34022.8	0.809 mg/L	0.0146	0.809 mg/L	0.0146	1.81%
Sn 189.927†	-96.9	-0.0127 mg/L	0.00040	-0.0127 mg/L	0.00040	3.12%
Ti 334.940†	4205.8	0.00297 mg/L	0.000193	0.00297 mg/L	0.000193	6.48%
Tl 190.801†	-12.5	-0.00563 mg/L	0.001248	-0.00563 mg/L	0.001248	22.16%
V 290.880†	1559.5	0.00277 mg/L	0.001887	0.00277 mg/L	0.001887	68.03%
Zn 206.200†	8208.5	0.193 mg/L	0.0020	0.193 mg/L	0.0020	1.04%
K 766.490†	2995.5	0.822 mg/L	0.0143	0.822 mg/L	0.0143	1.74%
Na 589.592†	504070.9	24.8 mg/L	0.21	24.8 mg/L	0.21	0.83%
Sr 407.771†	140608.4	0.0467 mg/L	0.00041	0.0467 mg/L	0.00041	0.88%
Li 670.784†	55491.4	0.355 mg/L	0.0035	0.355 mg/L	0.0035	0.98%

Sequence No.: 29

Sample ID: L1205013004

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 68

ame Collected: 5/8/2012 5:47:18 PM

ama Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: L1205013004

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: L1205013004

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2307601.0				19856.74	0.86%
YRADIAL	317355.0				1146.50	0.36%
Ga 417.206	1388422.4				10570.51	0.76%
GaRADIAL	95825.0				1159.83	1.21%
Ag 328.068†	46.3	0.00030 mg/L	0.000339	0.00030 mg/L	0.000339	112.05%
Al 396.153†	42035.7	5.62 mg/L	0.010	5.62 mg/L	0.010	0.19%
As 188.979†	-16.3	-0.00581 mg/L	0.001401	-0.00581 mg/L	0.001401	24.10%
Ba 233.527†	6152.6	0.0361 mg/L	0.00081	0.0361 mg/L	0.00081	2.25%
Be 234.861†	110.4	0.00002 mg/L	0.000125	0.00002 mg/L	0.000125	646.63%
B 249.677†	2536.4	0.0288 mg/L	0.00085	0.0288 mg/L	0.00085	2.94%
Ca 227.546†	1631.9	4.61 mg/L	0.038	4.61 mg/L	0.038	0.83%
Cd 228.802†	-32.5	0.00108 mg/L	0.000355	0.00108 mg/L	0.000355	32.77%
Co 228.616†	14791.1	0.382 mg/L	0.0047	0.382 mg/L	0.0047	1.23%
Cr 267.716†	470.2	0.00225 mg/L	0.000046	0.00225 mg/L	0.000046	2.06%
Cu 327.393†	2796.6	0.00967 mg/L	0.000285	0.00967 mg/L	0.000285	2.94%
Fe 239.562†	12732.2	0.788 mg/L	0.0045	0.788 mg/L	0.0045	0.58%
Mg 279.077†	4712.3	1.30 mg/L	0.013	1.30 mg/L	0.013	1.03%
Mn 257.610†	24605.7	0.0264 mg/L	0.00053	0.0264 mg/L	0.00053	2.01%
Mo 202.031†	149.8	0.00199 mg/L	0.000229	0.00199 mg/L	0.000229	11.56%
Ni 231.604†	93690.0	1.38 mg/L	0.029	1.38 mg/L	0.029	2.09%
Pb 220.353†	-45.7	-0.00438 mg/L	0.001896	-0.00438 mg/L	0.001896	43.30%
Sb 206.836†	-7.1	0.00010 mg/L	0.000350	0.00010 mg/L	0.000350	346.95%
Se 196.026†	3.2	0.00560 mg/L	0.002175	0.00560 mg/L	0.002175	38.86%
Si 251.611†	35113.9	0.835 mg/L	0.0134	0.835 mg/L	0.0134	1.60%
Sn 189.927†	-95.4	-0.0126 mg/L	0.00058	-0.0126 mg/L	0.00058	4.63%
Ti 334.940†	4302.8	0.00302 mg/L	0.000165	0.00302 mg/L	0.000165	5.48%
Tl 190.801†	-5.3	-0.00368 mg/L	0.001833	-0.00368 mg/L	0.001833	49.79%
V 290.880†	1920.9	0.00466 mg/L	0.001843	0.00466 mg/L	0.001843	39.53%
Zn 206.200†	6857.8	0.161 mg/L	0.0054	0.161 mg/L	0.0054	3.36%
K 766.490†	2726.6	0.741 mg/L	0.0257	0.741 mg/L	0.0257	3.47%
Na 589.592†	517095.1	25.5 mg/L	0.21	25.5 mg/L	0.21	0.82%
Sr 407.771†	124032.4	0.0405 mg/L	0.00030	0.0405 mg/L	0.00030	0.75%
Li 670.784†	54781.7	0.350 mg/L	0.0032	0.350 mg/L	0.0032	0.90%

Approved: May 09, 2012

John H. Rhodes

Sequence No.: 30
 Sample ID: L1205013004PS WG397343-01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 69
 a&e Collected: 5/8/2012 5:53:18 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

 Nebulizer Parameters: L1205013004PS WG397343-01
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

 Mean Data: L1205013004PS WG397343-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2286879.9					19242.13	0.84%
YRADIAL	319005.6					4101.10	1.29%
Ga 417.206	1391988.1					42517.85	3.05%
GaRADIAL	94166.5					1170.73	1.24%
Ag 328.068†	59993.8	0.193 mg/L		0.0079	0.193 mg/L	0.0079	4.11%
Al 396.153†	75412.3	10.1 mg/L		0.15	10.1 mg/L	0.15	1.44%
As 188.979†	502.4	0.176 mg/L		0.0069	0.176 mg/L	0.0069	3.90%
Ba 233.527†	80935.0	0.513 mg/L		0.0042	0.513 mg/L	0.0042	0.81%
Be 234.861†	28870.7	0.0226 mg/L		0.00096	0.0226 mg/L	0.00096	4.24%
B 249.677†	80201.9	0.940 mg/L		0.0404	0.940 mg/L	0.0404	4.29%
Ca 227.546†	3706.1	9.09 mg/L		0.320	9.09 mg/L	0.320	3.52%
Cd 228.802†	1234.1	0.0231 mg/L		0.00159	0.0231 mg/L	0.00159	6.90%
Co 228.616†	17331.2	0.447 mg/L		0.0026	0.447 mg/L	0.0026	0.59%
Cr 267.716†	27053.0	0.246 mg/L		0.0035	0.246 mg/L	0.0035	1.42%
Cu 327.393†	71625.9	0.267 mg/L		0.0084	0.267 mg/L	0.0084	3.14%
Fe 239.562†	41458.3	2.59 mg/L		0.051	2.59 mg/L	0.051	1.97%
Mg 279.077†	21111.3	5.93 mg/L		0.113	5.93 mg/L	0.113	1.91%
Mn 257.610†	228627.1	0.270 mg/L		0.0029	0.270 mg/L	0.0029	1.06%
Mo 202.031†	18285.1	0.492 mg/L		0.0042	0.492 mg/L	0.0042	0.85%
Ni 231.604†	98219.2	1.44 mg/L		0.015	1.44 mg/L	0.015	1.04%
Pb 220.353†	2596.8	0.234 mg/L		0.0024	0.234 mg/L	0.0024	1.03%
Sb 206.836†	2371.6	0.572 mg/L		0.0202	0.572 mg/L	0.0202	3.54%
Se 196.026†	319.7	0.182 mg/L		0.0101	0.182 mg/L	0.0101	5.53%
Si 251.611†	145006.6	3.46 mg/L		0.093	3.46 mg/L	0.093	2.69%
Sn 189.927†	-128.0	-0.0157 mg/L		0.00055	-0.0157 mg/L	0.00055	3.47%
Ti 334.940†	510281.9	0.508 mg/L		0.0022	0.508 mg/L	0.0022	0.44%
Tl 190.801†	916.4	0.241 mg/L		0.0026	0.241 mg/L	0.0026	1.06%
V 290.880†	97974.4	0.501 mg/L		0.0071	0.501 mg/L	0.0071	1.42%
Zn 206.200†	25493.8	0.606 mg/L		0.0083	0.606 mg/L	0.0083	1.37%
K 766.490†	84625.4	25.2 mg/L		0.19	25.2 mg/L	0.19	0.77%
Na 589.592†	983343.0	49.6 mg/L		1.32	49.6 mg/L	1.32	2.66%
Sr 407.771†	1481324.1	0.550 mg/L		0.0161	0.550 mg/L	0.0161	2.94%
Li 670.784†	135675.6	0.873 mg/L		0.0094	0.873 mg/L	0.0094	1.08%

=====

Sequence No.: 31
 Sample ID: L1205013004DL WG397343-02
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 70
 a&e Collected: 5/8/2012 5:59:18 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

 Nebulizer Parameters: L1205013004DL WG397343-02
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

 Mean Data: L1205013004DL WG397343-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2336177.8					1261.36	0.05%
YRADIAL	319450.1					5355.67	1.68%
Ga 417.206	1502251.6					21303.58	1.42%
GaRADIAL	97780.0					3976.03	4.07%
Ag 328.068†	11.3	-0.00009 mg/L		0.000374	-0.00009 mg/L	0.000374	407.62%
Al 396.153†	8515.3	1.11 mg/L		0.041	1.11 mg/L	0.041	3.65%
As 188.979†	-2.7	-0.00096 mg/L		0.001872	-0.00096 mg/L	0.001872	195.13%

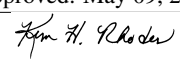
Approved: May 09, 2012


Table with 8 columns: Element, Concentration, Unit, and three additional columns. Lists elements like Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 32 Sample ID: CCV Analyst: Initial Sample Wt: Dilution: ukosampler Location: 6 Date Collected: 5/8/2012 6:06:44 PM Sample Type: Original Initial Sample Vol: Sample Prep Vol:

Nebulizer Parameters: CCV Analyte Back Pressure Flow All 155.0 kPa 0.50 L/min

Mean Data: CCV Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Includes QC values and recovery percentages for various elements.

Approved: May 09, 2012 [Signature]

Mn	257.610†	436147.8	0.517 mg/L	0.0062	1.19%
QC value within limits for Mg 279.077 Recovery = 97.88%					
Mo	202.031†	37557.8	1.01 mg/L	0.012	1.21%
QC value within limits for Mn 257.610 Recovery = 103.37%					
Ni	231.604†	34845.4	0.510 mg/L	0.0057	1.13%
QC value within limits for Mo 202.031 Recovery = 101.30%					
Pb	220.353†	5628.8	0.507 mg/L	0.0030	0.59%
QC value within limits for Ni 231.604 Recovery = 102.03%					
Sb	206.836†	5103.2	1.23 mg/L	0.023	1.83%
QC value within limits for Pb 220.353 Recovery = 101.38%					
Se	196.026†	731.0	0.411 mg/L	0.0070	1.71%
QC value within limits for Sb 206.836 Recovery = 102.44%					
Si	251.611†	216154.4	5.16 mg/L	0.105	2.03%
QC value within limits for Se 196.026 Recovery = 102.68%					
Sn	189.927†	10490.5	1.00 mg/L	0.007	0.67%
QC value within limits for Si 251.611 Recovery = 103.23%					
Ti	334.940†	1022541.6	1.02 mg/L	0.005	0.52%
QC value within limits for Sn 189.927 Recovery = 100.26%					
Tl	190.801†	1988.6	0.525 mg/L	0.0008	0.15%
QC value within limits for Ti 334.940 Recovery = 101.86%					
V	290.880†	201332.2	1.04 mg/L	0.004	0.43%
QC value within limits for Tl 190.801 Recovery = 104.97%					
Zn	206.200†	41820.8	0.996 mg/L	0.0149	1.50%
QC value within limits for V 290.880 Recovery = 103.51%					
K	766.490†	164067.9	49.4 mg/L	0.12	0.25%
QC value within limits for Zn 206.200 Recovery = 99.59%					
Na	589.592†	990353.1	50.0 mg/L	1.11	2.22%
QC value within limits for K 766.490 Recovery = 98.75%					
Sr	407.771†	2713804.9	1.01 mg/L	0.014	1.35%
QC value within limits for Na 589.592 Recovery = 100.00%					
Li	670.784†	164946.3	1.06 mg/L	0.009	0.89%
QC value within limits for Sr 407.771 Recovery = 101.22%					
QC value within limits for Li 670.784 Recovery = 106.16%					

All analyte(s) passed QC.

Sequence No.: 33
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

u&osampler Location: 1
Date Collected: 5/8/2012 6:12:45 PM
Date Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2324661.3				16995.03	0.73%
YRADIAL	314559.4				8225.09	2.61%
Ga 417.206	1431229.6				25932.16	1.81%
GaRADIAL	94339.7				121.87	0.13%
Ag 328.068†	19.1	-0.00014 mg/L	0.000193	-0.00014 mg/L	0.000193	139.98%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	-1.7	-0.0331 mg/L	0.00069	-0.0331 mg/L	0.00069	2.09%
QC value within limits for Al 396.153 Recovery = Not calculated						
As 188.979†	-3.8	-0.00137 mg/L	0.001952	-0.00137 mg/L	0.001952	142.72%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	23.8	-0.00310 mg/L	0.000158	-0.00310 mg/L	0.000158	5.09%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 234.861†	121.7	0.00019 mg/L	0.000019	0.00019 mg/L	0.000019	9.93%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	520.6	0.00774 mg/L	0.000338	0.00774 mg/L	0.000338	4.37%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	-3.1	0.0415 mg/L	0.02788	0.0415 mg/L	0.02788	67.23%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	4.0	0.00027 mg/L	0.000072	0.00027 mg/L	0.000072	26.47%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	0.9	-0.00069 mg/L	0.000264	-0.00069 mg/L	0.000264	38.22%

Approved: May 09, 2012
[Signature]

Cr	267.716†	QC value within limits for Cr	267.716	Recovery = Not calculated	0.000098	-0.00210 mg/L	0.000098	4.67%
Cu	327.393†	QC value within limits for Cu	327.393	Recovery = Not calculated	0.000042	-0.00026 mg/L	0.000042	16.25%
Fe	239.562†	QC value within limits for Fe	239.562	Recovery = Not calculated	0.00038	-0.0114 mg/L	0.00038	3.34%
Mg	279.077†	QC value within limits for Mg	279.077	Recovery = Not calculated	0.00360	-0.0242 mg/L	0.00360	14.86%
Mn	257.610†	QC value within limits for Mn	257.610	Recovery = Not calculated	0.000011	-0.00290 mg/L	0.000011	0.39%
Mo	202.031†	QC value within limits for Mo	202.031	Recovery = Not calculated	0.000082	-0.00171 mg/L	0.000082	4.82%
Ni	231.604†	QC value within limits for Ni	231.604	Recovery = Not calculated	0.000229	-0.00195 mg/L	0.000229	11.75%
Pb	220.353†	QC value within limits for Pb	220.353	Recovery = Not calculated	0.001085	-0.00265 mg/L	0.001085	40.95%
Sb	206.836†	QC value within limits for Sb	206.836	Recovery = Not calculated	0.001311	0.00153 mg/L	0.001311	85.77%
Se	196.026†	QC value within limits for Se	196.026	Recovery = Not calculated	0.001734	0.00270 mg/L	0.001734	64.29%
Si	251.611†	QC value within limits for Si	251.611	Recovery = Not calculated	0.000610	-0.00128 mg/L	0.000610	47.63%
Sn	189.927†	QC value within limits for Sn	189.927	Recovery = Not calculated	0.000248	-0.00393 mg/L	0.000248	6.32%
Ti	334.940†	QC value within limits for Ti	334.940	Recovery = Not calculated	0.000061	-0.00161 mg/L	0.000061	3.82%
Tl	190.801†	QC value within limits for Tl	190.801	Recovery = Not calculated	0.002349	-0.00198 mg/L	0.002349	118.71%
V	290.880†	QC value within limits for V	290.880	Recovery = Not calculated	0.001580	-0.00136 mg/L	0.001580	116.41%
Zn	206.200†	QC value within limits for Zn	206.200	Recovery = Not calculated	0.000122	-0.00303 mg/L	0.000122	4.03%
K	766.490†	QC value within limits for K	766.490	Recovery = Not calculated	0.01153	-0.0185 mg/L	0.01153	62.23%
Na	589.592†	QC value within limits for Na	589.592	Recovery = Not calculated	0.02717	0.0401 mg/L	0.02717	67.77%
Sr	407.771†	QC value within limits for Sr	407.771	Recovery = Not calculated	0.000068	-0.00586 mg/L	0.000068	1.15%
Li	670.784†	QC value within limits for Li	670.784	Recovery = Not calculated	0.000239	-0.00346 mg/L	0.000239	6.90%

All analyte(s) passed QC.

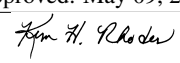
Sequence No.: 34
 Sample ID: PBW AF WG397165-02
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 71
 ame Collected: 5/8/2012 6:19:38 PM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: PBW AF WG397165-02
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: PBW AF WG397165-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2341256.0				27814.91	1.19%
YRADIAL	325531.0				1366.82	0.42%
Ga 417.206	1491538.3				34733.19	2.33%
GarADIAL	98688.7				2956.09	3.00%
Ag 328.068†	57.1	-0.00001 mg/L	0.000117	-0.00001 mg/L	0.000117	814.71%
Al 396.153†	-9.8	-0.0342 mg/L	0.00141	-0.0342 mg/L	0.00141	4.14%
As 188.979†	1.0	0.00034 mg/L	0.001576	0.00034 mg/L	0.001576	467.60%
Ba 233.527†	40.7	-0.00299 mg/L	0.000122	-0.00299 mg/L	0.000122	4.07%
Be 234.861†	209.8	0.00026 mg/L	0.000031	0.00026 mg/L	0.000031	11.82%
B 249.677†	387.1	0.00618 mg/L	0.000166	0.00618 mg/L	0.000166	2.69%
Ca 227.546†	-0.9	0.0462 mg/L	0.00781	0.0462 mg/L	0.00781	16.91%
Cd 228.802†	-6.6	0.00007 mg/L	0.000199	0.00007 mg/L	0.000199	278.52%
Co 228.616†	2.5	-0.00065 mg/L	0.000185	-0.00065 mg/L	0.000185	28.58%

Approved: May 09, 2012


Cr 267.716†	-27.2	-0.00224	mg/L	0.000087	-0.00224	mg/L	0.000087	3.88%
Cu 327.393†	27.9	-0.00034	mg/L	0.000412	-0.00034	mg/L	0.000412	120.19%
Fe 239.562†	-19.0	-0.0115	mg/L	0.00028	-0.0115	mg/L	0.00028	2.46%
Mg 279.077†	2.0	-0.0244	mg/L	0.00075	-0.0244	mg/L	0.00075	3.06%
Mn 257.610†	75.2	-0.00283	mg/L	0.00018	-0.00283	mg/L	0.00018	0.64%
Mo 202.031†	5.8	-0.00195	mg/L	0.000286	-0.00195	mg/L	0.000286	14.68%
Ni 231.604†	9.9	-0.00188	mg/L	0.000212	-0.00188	mg/L	0.000212	11.28%
Pb 220.353†	-11.9	-0.00229	mg/L	0.000839	-0.00229	mg/L	0.000839	36.67%
Sb 206.836†	-4.1	0.00009	mg/L	0.001564	0.00009	mg/L	0.001564	>999.9%
Se 196.026†	-1.4	0.00229	mg/L	0.002969	0.00229	mg/L	0.002969	129.57%
Si 251.611†	210.9	-0.00122	mg/L	0.000790	-0.00122	mg/L	0.000790	64.96%
Sn 189.927†	-63.0	-0.00948	mg/L	0.000091	-0.00948	mg/L	0.000091	0.96%
Ti 334.940†	130.6	-0.00166	mg/L	0.000122	-0.00166	mg/L	0.000122	7.37%
Tl 190.801†	1.9	-0.00164	mg/L	0.002238	-0.00164	mg/L	0.002238	136.10%
V 290.880†	946.0	-0.00022	mg/L	0.000557	-0.00022	mg/L	0.000557	257.17%
Zn 206.200†	63.2	-0.00062	mg/L	0.000218	-0.00062	mg/L	0.000218	35.38%
K 766.490†	27.2	-0.0338	mg/L	0.01511	-0.0338	mg/L	0.01511	44.72%
Na 589.592†	-51.8	0.0198	mg/L	0.01006	0.0198	mg/L	0.01006	50.87%
Sr 407.771†	28.1	-0.00595	mg/L	0.000032	-0.00595	mg/L	0.000032	0.53%
Li 670.784†	28.2	-0.00350	mg/L	0.000509	-0.00350	mg/L	0.000509	14.56%

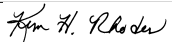
Sequence No.: 35
 Sample ID: LCSW AF WG397165-03
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 72
 a&e Collected: 5/8/2012 6:26:33 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: LCSW AF WG397165-03
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: LCSW AF WG397165-03

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2240401.8				13848.62	0.62%
YRADIAL	311713.1				2517.50	0.81%
Ga 417.206	1391428.1				30686.53	2.21%
GaRADIAL	92923.8				141.91	0.15%
Ag 328.068†	61867.2	0.199 mg/L	0.0067	0.199 mg/L	0.0067	3.35%
Al 396.153†	37679.2	5.00 mg/L	0.016	5.00 mg/L	0.016	0.32%
As 188.979†	537.0	0.188 mg/L	0.0049	0.188 mg/L	0.0049	2.59%
Ba 233.527†	78237.9	0.496 mg/L	0.0052	0.496 mg/L	0.0052	1.04%
Be 234.861†	30639.5	0.0241 mg/L	0.00064	0.0241 mg/L	0.00064	2.66%
B 249.677†	83611.8	0.982 mg/L	0.0344	0.982 mg/L	0.0344	3.50%
Ca 227.546†	2238.3	5.03 mg/L	0.141	5.03 mg/L	0.141	2.81%
Cd 228.802†	1339.8	0.0236 mg/L	0.00111	0.0236 mg/L	0.00111	4.69%
Co 228.616†	3878.3	0.0993 mg/L	0.00095	0.0993 mg/L	0.00095	0.95%
Cr 267.716†	27367.3	0.249 mg/L	0.0016	0.249 mg/L	0.0016	0.63%
Cu 327.393†	68391.8	0.255 mg/L	0.0088	0.255 mg/L	0.0088	3.45%
Fe 239.562†	30581.9	1.91 mg/L	0.010	1.91 mg/L	0.010	0.54%
Mg 279.077†	17304.9	4.86 mg/L	0.049	4.86 mg/L	0.049	1.01%
Mn 257.610†	212972.2	0.251 mg/L	0.0029	0.251 mg/L	0.0029	1.17%
Mo 202.031†	18546.9	0.499 mg/L	0.0041	0.499 mg/L	0.0041	0.83%
Ni 231.604†	17278.5	0.252 mg/L	0.0036	0.252 mg/L	0.0036	1.43%
Pb 220.353†	2784.0	0.250 mg/L	0.0033	0.250 mg/L	0.0033	1.31%
Sb 206.836†	2442.8	0.589 mg/L	0.0181	0.589 mg/L	0.0181	3.07%
Se 196.026†	350.0	0.198 mg/L	0.0079	0.198 mg/L	0.0079	3.99%
Si 251.611†	105852.2	2.52 mg/L	0.055	2.52 mg/L	0.055	2.17%
Sn 189.927†	5629.6	0.536 mg/L	0.0041	0.536 mg/L	0.0041	0.76%
Ti 334.940†	506192.7	0.503 mg/L	0.0011	0.503 mg/L	0.0011	0.22%
Tl 190.801†	1016.4	0.267 mg/L	0.0024	0.267 mg/L	0.0024	0.91%
V 290.880†	99755.3	0.510 mg/L	0.0017	0.510 mg/L	0.0017	0.34%
Zn 206.200†	20792.0	0.494 mg/L	0.0046	0.494 mg/L	0.0046	0.93%
K 766.490†	83169.1	24.8 mg/L	0.17	24.8 mg/L	0.17	0.68%
Na 589.592†	514940.9	25.4 mg/L	0.19	25.4 mg/L	0.19	0.76%
Sr 407.771†	1373184.8	0.509 mg/L	0.0033	0.509 mg/L	0.0033	0.65%
Li 670.784†	85680.2	0.550 mg/L	0.0065	0.550 mg/L	0.0065	1.19%

Approved: May 09, 2012


Sequence No.: 36
 Sample ID: L1205005001 WG397165-01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 73
 a&e Collected: 5/8/2012 6:32:32 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

 Nebulizer Parameters: L1205005001 WG397165-01
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: L1205005001 WG397165-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2180090.4				9139.05	0.42%
YRADIAL	306397.9				322.68	0.11%
Ga 417.206	1420028.7				49090.17	3.46%
GaRADIAL	94260.5				940.61	1.00%
Ag 328.068†	601.7	0.00183 mg/L	0.000354	0.00183 mg/L	0.000354	19.33%
Al 396.153†	152.8	-0.0125 mg/L	0.00434	-0.0125 mg/L	0.00434	34.72%
As 188.979†	-4.1	-0.00146 mg/L	0.001110	-0.00146 mg/L	0.001110	75.98%
Ba 233.527†	26173.9	0.164 mg/L	0.0017	0.164 mg/L	0.0017	1.04%
Be 234.861†	389.9	0.00036 mg/L	0.000016	0.00036 mg/L	0.000016	4.60%
B 249.677†	9633.0	0.115 mg/L	0.0052	0.115 mg/L	0.0052	4.53%
Ca 227.546†	47680.3	101 mg/L	4.8	101 mg/L	4.8	4.71%
Cd 228.802†	36.6	0.00086 mg/L	0.000251	0.00086 mg/L	0.000251	29.09%
Co 228.616†	60.8	0.00084 mg/L	0.000294	0.00084 mg/L	0.000294	35.00%
Cr 267.716†	164.1	-0.00047 mg/L	0.000045	-0.00047 mg/L	0.000045	9.54%
Cu 327.393†	42.5	-0.00029 mg/L	0.000601	-0.00029 mg/L	0.000601	208.89%
Fe 239.562†	3467.9	0.207 mg/L	0.0054	0.207 mg/L	0.0054	2.62%
Mg 279.077†	150854.4	42.5 mg/L	0.13	42.5 mg/L	0.13	0.31%
Mn 257.610†	32577.5	0.0359 mg/L	0.00050	0.0359 mg/L	0.00050	1.38%
Mo 202.031†	131.3	0.00146 mg/L	0.000241	0.00146 mg/L	0.000241	16.49%
Ni 231.604†	217.3	0.00117 mg/L	0.000521	0.00117 mg/L	0.000521	44.49%
Pb 220.353†	-16.0	-0.00189 mg/L	0.001337	-0.00189 mg/L	0.001337	70.94%
Sb 206.836†	-7.7	-0.00076 mg/L	0.001313	-0.00076 mg/L	0.001313	171.93%
Se 196.026†	1.3	0.00387 mg/L	0.001006	0.00387 mg/L	0.001006	26.00%
Si 251.611†	263225.9	6.30 mg/L	0.203	6.30 mg/L	0.203	3.22%
Sn 189.927†	-320.1	-0.0341 mg/L	0.00047	-0.0341 mg/L	0.00047	1.38%
Ti 334.940†	-16012.7	-0.00257 mg/L	0.001474	-0.00257 mg/L	0.001474	57.37%
Tl 190.801†	-19.3	-0.00731 mg/L	0.002881	-0.00731 mg/L	0.002881	39.41%
V 290.880†	2987.9	0.00920 mg/L	0.000946	0.00920 mg/L	0.000946	10.29%
Zn 206.200†	126.0	0.00089 mg/L	0.000314	0.00089 mg/L	0.000314	35.51%
K 766.490†	11945.0	3.45 mg/L	0.044	3.45 mg/L	0.044	1.28%
Na 589.592†	1149470.7	58.5 mg/L	0.52	58.5 mg/L	0.52	0.88%
Sr 407.771†	Saturated2					
Li 670.784†	4693.7	0.0266 mg/L	0.00065	0.0266 mg/L	0.00065	2.45%

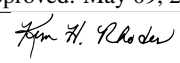
=====
 Sequence No.: 37
 Sample ID: L1205005001S WG397165-04
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 74
 a&e Collected: 5/8/2012 6:38:30 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

 Nebulizer Parameters: L1205005001S WG397165-04
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: L1205005001S WG397165-04

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2135256.5				27477.76	1.29%
YRADIAL	300031.9				3361.79	1.12%
Ga 417.206	1345133.8				23835.04	1.77%
GaRADIAL	91617.3				1652.63	1.80%
Ag 328.068†	65376.6	0.210 mg/L	0.0049	0.210 mg/L	0.0049	2.31%
Al 396.153†	39937.4	5.31 mg/L	0.025	5.31 mg/L	0.025	0.46%
As 188.979†	564.3	0.198 mg/L	0.0037	0.198 mg/L	0.0037	1.85%

Approved: May 09, 2012


Ba 233.527†	109354.1	0.695 mg/L	0.0110	0.695 mg/L	0.0110	1.58%
Be 234.861†	32317.3	0.0254 mg/L	0.00058	0.0254 mg/L	0.00058	2.30%
B 249.677†	99778.3	1.17 mg/L	0.032	1.17 mg/L	0.032	2.72%
Ca 227.546†	55871.4	119 mg/L	2.7	119 mg/L	2.7	2.26%
Cd 228.802†	1406.9	0.0248 mg/L	0.00105	0.0248 mg/L	0.00105	4.23%
Co 228.616†	3924.1	0.100 mg/L	0.0016	0.100 mg/L	0.0016	1.54%
Cr 267.716†	28654.4	0.261 mg/L	0.0032	0.261 mg/L	0.0032	1.22%
Cu 327.393†	70060.9	0.261 mg/L	0.0057	0.261 mg/L	0.0057	2.19%
Fe 239.562†	35602.8	2.22 mg/L	0.010	2.22 mg/L	0.010	0.45%
Mg 279.077†	181649.1	51.1 mg/L	0.12	51.1 mg/L	0.12	0.23%
Mn 257.610†	256073.2	0.302 mg/L	0.0061	0.302 mg/L	0.0061	2.00%
Mo 202.031†	19640.3	0.529 mg/L	0.0058	0.529 mg/L	0.0058	1.11%
Ni 231.604†	17425.1	0.254 mg/L	0.0056	0.254 mg/L	0.0056	2.21%
Pb 220.353†	2853.2	0.257 mg/L	0.0043	0.257 mg/L	0.0043	1.68%
Sb 206.836†	2565.7	0.619 mg/L	0.0121	0.619 mg/L	0.0121	1.96%
Se 196.026†	366.9	0.208 mg/L	0.0050	0.208 mg/L	0.0050	2.42%
Si 251.611†	407170.4	9.74 mg/L	0.183	9.74 mg/L	0.183	1.88%
Sn 189.927†	5525.3	0.526 mg/L	0.0074	0.526 mg/L	0.0074	1.40%
Ti 334.940†	516542.4	0.531 mg/L	0.0023	0.531 mg/L	0.0023	0.44%
Tl 190.801†	985.5	0.259 mg/L	0.0006	0.259 mg/L	0.0006	0.22%
V 290.880†	106530.2	0.544 mg/L	0.0035	0.544 mg/L	0.0035	0.65%
Zn 206.200†	20743.3	0.493 mg/L	0.0069	0.493 mg/L	0.0069	1.40%
K 766.490†	100279.7	29.9 mg/L	0.24	29.9 mg/L	0.24	0.81%
Na 589.592†	1781530.1	94.0 mg/L	3.47	94.0 mg/L	3.47	3.69%
Sr 407.771†	Saturated2					
Li 670.784†	93016.4	0.597 mg/L	0.0069	0.597 mg/L	0.0069	1.16%

Sequence No.: 38

Sample ID: L1205005001SD WG397165-05

Analyst: KHR

Initial Sample Wt:

Dilution:

uSampler Location: 75

Date Collected: 5/8/2012 6:44:28 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1205005001SD WG397165-05

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: L1205005001SD WG397165-05

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 371.029	2125810.6					35980.33	1.69%
YRADIAL	300745.9					3765.08	1.25%
Ga 417.206	1360529.7					32531.82	2.39%
GARADIAL	91291.5					1508.89	1.65%
Ag 328.068†	62642.7	0.201 mg/L	0.0062	0.201 mg/L	0.0062	3.10%	
Al 396.153†	38873.0	5.16 mg/L	0.049	5.16 mg/L	0.049	0.95%	
As 188.979†	548.1	0.192 mg/L	0.0030	0.192 mg/L	0.0030	1.58%	
Ba 233.527†	106304.6	0.675 mg/L	0.0074	0.675 mg/L	0.0074	1.09%	
Be 234.861†	31012.3	0.0244 mg/L	0.00091	0.0244 mg/L	0.00091	3.73%	
B 249.677†	95884.1	1.13 mg/L	0.041	1.13 mg/L	0.041	3.66%	
Ca 227.546†	54187.5	115 mg/L	3.9	115 mg/L	3.9	3.38%	
Cd 228.802†	1349.1	0.0238 mg/L	0.00123	0.0238 mg/L	0.00123	5.19%	
Co 228.616†	3836.3	0.0982 mg/L	0.00164	0.0982 mg/L	0.00164	1.67%	
Cr 267.716†	27705.1	0.252 mg/L	0.0046	0.252 mg/L	0.0046	1.81%	
Cu 327.393†	67035.4	0.250 mg/L	0.0064	0.250 mg/L	0.0064	2.56%	
Fe 239.562†	34368.4	2.15 mg/L	0.025	2.15 mg/L	0.025	1.17%	
Mg 279.077†	178570.4	50.3 mg/L	0.45	50.3 mg/L	0.45	0.89%	
Mn 257.610†	248857.8	0.294 mg/L	0.0045	0.294 mg/L	0.0045	1.55%	
Mo 202.031†	19047.2	0.513 mg/L	0.0069	0.513 mg/L	0.0069	1.34%	
Ni 231.604†	16926.9	0.247 mg/L	0.0039	0.247 mg/L	0.0039	1.57%	
Pb 220.353†	2785.3	0.251 mg/L	0.0050	0.251 mg/L	0.0050	1.99%	
Sb 206.836†	2458.5	0.593 mg/L	0.0151	0.593 mg/L	0.0151	2.56%	
Se 196.026†	351.0	0.199 mg/L	0.0070	0.199 mg/L	0.0070	3.50%	
Si 251.611†	394810.8	9.45 mg/L	0.230	9.45 mg/L	0.230	2.43%	
Sn 189.927†	5474.5	0.522 mg/L	0.0093	0.522 mg/L	0.0093	1.78%	
Ti 334.940†	498838.1	0.512 mg/L	0.0035	0.512 mg/L	0.0035	0.69%	
Tl 190.801†	959.3	0.252 mg/L	0.0051	0.252 mg/L	0.0051	2.03%	
V 290.880†	103393.4	0.528 mg/L	0.0050	0.528 mg/L	0.0050	0.94%	
Zn 206.200†	20115.3	0.478 mg/L	0.0023	0.478 mg/L	0.0023	0.49%	

Approved: May 09, 2012

John H. Rhodes

YRADIAL	298942.9					5786.81	1.94%
Ga 417.206	1473076.0					26741.01	1.82%
GarADIAL	95933.1					1654.89	1.73%
Ag 328.068†	654.1	0.00169 mg/L	0.000137	0.00169 mg/L	0.000137	8.09%	
Al 396.153†	-6.7	-0.0339 mg/L	0.00085	-0.0339 mg/L	0.00085	2.52%	
As 188.979†	3.0	0.00105 mg/L	0.001012	0.00105 mg/L	0.001012	96.14%	
Ba 233.527†	9164.6	0.0552 mg/L	0.00084	0.0552 mg/L	0.00084	1.51%	
Be 234.861†	271.1	0.00028 mg/L	0.000021	0.00028 mg/L	0.000021	7.28%	
B 249.677†	5086.0	0.0613 mg/L	0.00166	0.0613 mg/L	0.00166	2.71%	
Ca 227.546†	58891.9	125 mg/L	2.2	125 mg/L	2.2	1.77%	
Cd 228.802†	10.8	0.00038 mg/L	0.000138	0.00038 mg/L	0.000138	36.09%	
Co 228.616†	0.6	-0.00066 mg/L	0.000122	-0.00066 mg/L	0.000122	18.32%	
Cr 267.716†	169.4	-0.00043 mg/L	0.000186	-0.00043 mg/L	0.000186	43.34%	
Cu 327.393†	-99.4	-0.00083 mg/L	0.000366	-0.00083 mg/L	0.000366	43.94%	
Fe 239.562†	2152.7	0.124 mg/L	0.0020	0.124 mg/L	0.0020	1.63%	
Mg 279.077†	123065.5	34.6 mg/L	0.48	34.6 mg/L	0.48	1.37%	
Mn 257.610†	42449.7	0.0476 mg/L	0.00090	0.0476 mg/L	0.00090	1.89%	
Mo 202.031†	86.6	0.00025 mg/L	0.000243	0.00025 mg/L	0.000243	96.96%	
Ni 231.604†	65.1	-0.00106 mg/L	0.000196	-0.00106 mg/L	0.000196	18.45%	
Pb 220.353†	6.2	0.00030 mg/L	0.001056	0.00030 mg/L	0.001056	350.74%	
Sb 206.836†	-5.3	-0.00019 mg/L	0.000438	-0.00019 mg/L	0.000438	226.34%	
Se 196.026†	0.2	0.00322 mg/L	0.003111	0.00322 mg/L	0.003111	96.61%	
Si 251.611†	308601.1	7.39 mg/L	0.072	7.39 mg/L	0.072	0.98%	
Sn 189.927†	-336.3	-0.0357 mg/L	0.00077	-0.0357 mg/L	0.00077	2.15%	
Ti 334.940†	-24250.4	-0.00721 mg/L	0.001541	-0.00721 mg/L	0.001541	21.38%	
Tl 190.801†	-44.3	-0.0138 mg/L	0.00418	-0.0138 mg/L	0.00418	30.16%	
V 290.880†	2387.5	0.00631 mg/L	0.000264	0.00631 mg/L	0.000264	4.18%	
Zn 206.200†	126.0	0.00089 mg/L	0.000155	0.00089 mg/L	0.000155	17.52%	
K 766.490†	9902.8	2.86 mg/L	0.046	2.86 mg/L	0.046	1.61%	
Na 589.592†	803685.2	40.2 mg/L	0.66	40.2 mg/L	0.66	1.63%	
Sr 407.771†	3579218.6	1.33 mg/L	0.020	1.33 mg/L	0.020	1.50%	
Li 670.784†	6032.5	0.0353 mg/L	0.00077	0.0353 mg/L	0.00077	2.18%	

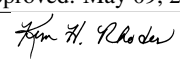
Sequence No.: 41
 Sample ID: L1205005004
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 78
 a&e Collected: 5/8/2012 7:03:58 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: L1205005004
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: L1205005004

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2183075.9				29417.25	1.35%
YRADIAL	301617.5				4324.75	1.43%
Ga 417.206	1476997.4				8775.87	0.59%
GarADIAL	96212.7				2412.97	2.51%
Ag 328.068†	561.7	0.00138 mg/L	0.000120	0.00138 mg/L	0.000120	8.69%
Al 396.153†	25.5	-0.0296 mg/L	0.00142	-0.0296 mg/L	0.00142	4.81%
As 188.979†	-4.2	-0.00149 mg/L	0.001221	-0.00149 mg/L	0.001221	81.96%
Ba 233.527†	8806.0	0.0529 mg/L	0.00066	0.0529 mg/L	0.00066	1.24%
Be 234.861†	301.6	0.00031 mg/L	0.000022	0.00031 mg/L	0.000022	7.07%
B 249.677†	5025.3	0.0606 mg/L	0.00083	0.0606 mg/L	0.00083	1.36%
Ca 227.546†	59955.5	127 mg/L	0.0	127 mg/L	0.0	0.04%
Cd 228.802†	3.8	0.00027 mg/L	0.000125	0.00027 mg/L	0.000125	46.75%
Co 228.616†	-0.2	-0.00068 mg/L	0.000128	-0.00068 mg/L	0.000128	18.78%
Cr 267.716†	123.9	-0.00085 mg/L	0.000145	-0.00085 mg/L	0.000145	17.06%
Cu 327.393†	77.2	-0.00018 mg/L	0.000275	-0.00018 mg/L	0.000275	154.52%
Fe 239.562†	1947.1	0.111 mg/L	0.0024	0.111 mg/L	0.0024	2.13%
Mg 279.077†	124339.8	35.0 mg/L	0.42	35.0 mg/L	0.42	1.20%
Mn 257.610†	44504.7	0.0501 mg/L	0.00110	0.0501 mg/L	0.00110	2.20%
Mo 202.031†	84.2	0.00019 mg/L	0.000575	0.00019 mg/L	0.000575	309.82%
Ni 231.604†	73.1	-0.00095 mg/L	0.000064	-0.00095 mg/L	0.000064	6.78%
Pb 220.353†	4.0	0.00012 mg/L	0.002327	0.00012 mg/L	0.002327	>999.9%
Sb 206.836†	-1.4	0.00073 mg/L	0.000750	0.00073 mg/L	0.000750	102.81%
Se 196.026†	0.4	0.00328 mg/L	0.004893	0.00328 mg/L	0.004893	149.08%

Approved: May 09, 2012


Si 251.611†	311547.2	7.46 mg/L	0.059	7.46 mg/L	0.059	0.79%
Sn 189.927†	-338.7	-0.0359 mg/L	0.00071	-0.0359 mg/L	0.00071	1.97%
Ti 334.940†	-24555.4	-0.00717 mg/L	0.000786	-0.00717 mg/L	0.000786	10.96%
Tl 190.801†	-36.2	-0.0118 mg/L	0.00190	-0.0118 mg/L	0.00190	16.11%
V 290.880†	2152.6	0.00509 mg/L	0.002110	0.00509 mg/L	0.002110	41.44%
Zn 206.200†	381.6	0.00696 mg/L	0.000128	0.00696 mg/L	0.000128	1.84%
K 766.490†	9971.3	2.88 mg/L	0.048	2.88 mg/L	0.048	1.66%
Na 589.592†	815660.4	40.8 mg/L	1.10	40.8 mg/L	1.10	2.70%
Sr 407.771†	3649702.2	1.36 mg/L	0.014	1.36 mg/L	0.014	1.05%
Li 670.784†	5804.3	0.0338 mg/L	0.00125	0.0338 mg/L	0.00125	3.71%

Sequence No.: 42

Sample ID: L1205005004PS WG397233-01

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 79

a&e Collected: 5/8/2012 7:10:58 PM

a&a Type: Original

n&i&tial Sample Vol:

a&mple Prep Vol:

Nebulizer Parameters: L1205005004PS WG397233-01

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1205005004PS WG397233-01

Analyte	Mean Corrected		Calib.		Sample		RSD	
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units		
Y 371.029	2138927.8						9226.08	0.43%
YRADIAL	306148.6						665.28	0.22%
Ga 417.206	1363228.3						36466.68	2.68%
GaRADIAL	92877.1						657.49	0.71%
Ag 328.068†	61888.5	0.199 mg/L	0.0078	0.199 mg/L	0.0078	3.94%		
Al 396.153†	38151.2	5.07 mg/L	0.007	5.07 mg/L	0.007	0.14%		
As 188.979†	541.1	0.190 mg/L	0.0092	0.190 mg/L	0.0092	4.85%		
Ba 233.527†	85198.5	0.541 mg/L	0.0034	0.541 mg/L	0.0034	0.63%		
Be 234.861†	30564.6	0.0240 mg/L	0.00096	0.0240 mg/L	0.00096	3.97%		
B 249.677†	89073.6	1.05 mg/L	0.045	1.05 mg/L	0.045	4.27%		
Ca 227.546†	61893.1	132 mg/L	4.5	132 mg/L	4.5	3.43%		
Cd 228.802†	1333.5	0.0235 mg/L	0.00100	0.0235 mg/L	0.00100	4.24%		
Co 228.616†	3766.8	0.0964 mg/L	0.00071	0.0964 mg/L	0.00071	0.73%		
Cr 267.716†	27124.0	0.247 mg/L	0.0031	0.247 mg/L	0.0031	1.26%		
Cu 327.393†	65815.7	0.245 mg/L	0.0084	0.245 mg/L	0.0084	3.42%		
Fe 239.562†	32174.7	2.01 mg/L	0.014	2.01 mg/L	0.014	0.71%		
Mg 279.077†	130769.1	36.8 mg/L	0.11	36.8 mg/L	0.11	0.30%		
Mn 257.610†	252243.7	0.298 mg/L	0.0012	0.298 mg/L	0.0012	0.40%		
Mo 202.031†	18658.8	0.502 mg/L	0.0054	0.502 mg/L	0.0054	1.07%		
Ni 231.604†	17264.6	0.252 mg/L	0.0013	0.252 mg/L	0.0013	0.51%		
Pb 220.353†	2745.4	0.248 mg/L	0.0009	0.248 mg/L	0.0009	0.37%		
Sb 206.836†	2479.8	0.598 mg/L	0.0174	0.598 mg/L	0.0174	2.91%		
Se 196.026†	364.7	0.206 mg/L	0.0085	0.206 mg/L	0.0085	4.10%		
Si 251.611†	409044.2	9.79 mg/L	0.290	9.79 mg/L	0.290	2.96%		
Sn 189.927†	-334.6	-0.0355 mg/L	0.00061	-0.0355 mg/L	0.00061	1.72%		
Ti 334.940†	491036.0	0.507 mg/L	0.0021	0.507 mg/L	0.0021	0.42%		
Tl 190.801†	919.2	0.242 mg/L	0.0025	0.242 mg/L	0.0025	1.03%		
V 290.880†	101139.7	0.517 mg/L	0.0050	0.517 mg/L	0.0050	0.97%		
Zn 206.200†	20647.9	0.491 mg/L	0.0050	0.491 mg/L	0.0050	1.02%		
K 766.490†	93441.2	27.9 mg/L	0.05	27.9 mg/L	0.05	0.17%		
Na 589.592†	1271111.2	65.1 mg/L	0.45	65.1 mg/L	0.45	0.70%		
Sr 407.771†	4606118.5	1.72 mg/L	0.021	1.72 mg/L	0.021	1.25%		
Li 670.784†	90588.1	0.581 mg/L	0.0032	0.581 mg/L	0.0032	0.55%		

Sequence No.: 43

Sample ID: L1205005004DL WG397233-02

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 80

a&e Collected: 5/8/2012 7:17:02 PM

a&a Type: Original

n&i&tial Sample Vol:

a&mple Prep Vol:

Nebulizer Parameters: L1205005004DL WG397233-02

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Approved: May 09, 2012

Mean Data: L1205005004DL WG397233-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2256004.2				24318.33	1.08%
YRADIAL	308031.5				7414.85	2.41%
Ga 417.206	1450816.2				19869.48	1.37%
GaRADIAL	94058.3				1614.25	1.72%
Ag 328.068†	273.7	0.00064 mg/L	0.000273	0.00064 mg/L	0.000273	42.82%
Al 396.153†	14.2	-0.0310 mg/L	0.00053	-0.0310 mg/L	0.00053	1.71%
As 188.979†	-1.1	-0.00041 mg/L	0.000945	-0.00041 mg/L	0.000945	228.49%
Ba 233.527†	1860.6	0.00862 mg/L	0.000067	0.00862 mg/L	0.000067	0.77%
Be 234.861†	147.5	0.00021 mg/L	0.000019	0.00021 mg/L	0.000019	9.16%
B 249.677†	1690.6	0.0215 mg/L	0.00089	0.0215 mg/L	0.00089	4.14%
Ca 227.546†	11892.3	25.3 mg/L	0.45	25.3 mg/L	0.45	1.77%
Cd 228.802†	6.1	0.00031 mg/L	0.000049	0.00031 mg/L	0.000049	16.11%
Co 228.616†	10.2	-0.00044 mg/L	0.000108	-0.00044 mg/L	0.000108	24.46%
Cr 267.716†	45.9	-0.00157 mg/L	0.000062	-0.00157 mg/L	0.000062	3.93%
Cu 327.393†	137.5	0.00006 mg/L	0.000099	0.00006 mg/L	0.000099	160.49%
Fe 239.562†	390.9	0.0140 mg/L	0.00078	0.0140 mg/L	0.00078	5.57%
Mg 279.077†	25239.0	7.08 mg/L	0.141	7.08 mg/L	0.141	1.99%
Mn 257.610†	9246.1	0.00809 mg/L	0.000186	0.00809 mg/L	0.000186	2.30%
Mo 202.031†	45.6	-0.00087 mg/L	0.000064	-0.00087 mg/L	0.000064	7.36%
Ni 231.604†	13.3	-0.00183 mg/L	0.000258	-0.00183 mg/L	0.000258	14.13%
Pb 220.353†	-2.3	-0.00123 mg/L	0.000956	-0.00123 mg/L	0.000956	77.92%
Sb 206.836†	-3.5	0.00023 mg/L	0.000993	0.00023 mg/L	0.000993	425.09%
Se 196.026†	-2.2	0.00185 mg/L	0.002080	0.00185 mg/L	0.002080	112.25%
Si 251.611†	65138.7	1.55 mg/L	0.022	1.55 mg/L	0.022	1.39%
Sn 189.927†	-175.3	-0.0203 mg/L	0.00010	-0.0203 mg/L	0.00010	0.47%
Ti 334.940†	-4843.8	-0.00283 mg/L	0.000216	-0.00283 mg/L	0.000216	7.64%
Tl 190.801†	-16.2	-0.00635 mg/L	0.001734	-0.00635 mg/L	0.001734	27.30%
V 290.880†	1596.7	0.00296 mg/L	0.000489	0.00296 mg/L	0.000489	16.51%
Zn 206.200†	117.9	0.00069 mg/L	0.000277	0.00069 mg/L	0.000277	40.26%
K 766.490†	1977.3	0.536 mg/L	0.0139	0.536 mg/L	0.0139	2.60%
Na 589.592†	167842.5	8.16 mg/L	0.144	8.16 mg/L	0.144	1.77%
Sr 407.771†	735949.8	0.270 mg/L	0.0096	0.270 mg/L	0.0096	3.55%
Li 670.784†	1144.1	0.00371 mg/L	0.000400	0.00371 mg/L	0.000400	10.79%

Sequence No.: 44
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 6
 a&e Collected: 5/8/2012 7:24:01 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	154.0 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	2235377.5				13562.86	0.61%
YRADIAL	310792.1				3123.35	1.00%
Ga 417.206	1360191.3				26098.47	1.92%
GaRADIAL	92953.0				1315.74	1.42%
Ag 328.068†	126842.8	0.407 mg/L	0.0075	0.407 mg/L	0.0075	1.84%
QC value within limits for Ag 328.068		Recovery = 101.87%				
Al 396.153†	75575.9	10.1 mg/L	0.02	10.1 mg/L	0.02	0.17%
QC value within limits for Al 396.153		Recovery = 100.68%				
As 188.979†	1104.6	0.388 mg/L	0.0059	0.388 mg/L	0.0059	1.51%
QC value within limits for As 188.979		Recovery = 96.89%				
Ba 233.527†	158563.9	1.01 mg/L	0.015	1.01 mg/L	0.015	1.47%
QC value within limits for Ba 233.527		Recovery = 100.89%				
Be 234.861†	62715.8	0.0493 mg/L	0.00076	0.0493 mg/L	0.00076	1.54%
QC value within limits for Be 234.861		Recovery = 98.53%				
B 249.677†	43441.8	0.508 mg/L	0.0124	0.508 mg/L	0.0124	2.44%
QC value within limits for B 249.677		Recovery = 101.68%				
Ca 227.546†	4702.4	10.5 mg/L	0.26	10.5 mg/L	0.26	2.48%

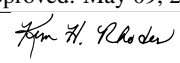
Approved: May 09, 2012


Table with columns for element, QC value, within limits, concentration, recovery, and units. Includes elements like Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li.

Sequence No.: 45
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:
u&osampler Location: 1
ame Collected: 5/8/2012 7:30:03 PM
ama Type: Original
nitial Sample Vol:
ample Prep Vol:

Nebulizer Parameters: CCB
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: CCB
Table with columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD.

Approved: May 09, 2012
[Signature]

QC value within limits for As	188.979	Recovery = Not calculated		
Ba 233.527†	36.5	-0.00302 mg/L	0.000091	-0.00302 mg/L 0.000091 3.02%
QC value within limits for Ba	233.527	Recovery = Not calculated		
Be 234.861†	87.9	0.00016 mg/L	0.000025	0.00016 mg/L 0.000025 15.50%
QC value within limits for Be	234.861	Recovery = Not calculated		
B 249.677†	780.8	0.0108 mg/L	0.00019	0.0108 mg/L 0.00019 1.72%
QC value within limits for B	249.677	Recovery = Not calculated		
Ca 227.546†	-1.2	0.0456 mg/L	0.01457	0.0456 mg/L 0.01457 31.98%
QC value within limits for Ca	227.546	Recovery = Not calculated		
Cd 228.802†	3.0	0.00025 mg/L	0.000153	0.00025 mg/L 0.000153 62.51%
QC value within limits for Cd	228.802	Recovery = Not calculated		
Co 228.616†	7.2	-0.00053 mg/L	0.000158	-0.00053 mg/L 0.000158 29.95%
QC value within limits for Co	228.616	Recovery = Not calculated		
Cr 267.716†	-11.3	-0.00210 mg/L	0.000041	-0.00210 mg/L 0.000041 1.94%
QC value within limits for Cr	267.716	Recovery = Not calculated		
Cu 327.393†	38.3	-0.00030 mg/L	0.000464	-0.00030 mg/L 0.000464 152.24%
QC value within limits for Cu	327.393	Recovery = Not calculated		
Fe 239.562†	-13.2	-0.0112 mg/L	0.00040	-0.0112 mg/L 0.00040 3.61%
QC value within limits for Fe	239.562	Recovery = Not calculated		
Mg 279.077†	4.3	-0.0238 mg/L	0.00187	-0.0238 mg/L 0.00187 7.86%
QC value within limits for Mg	279.077	Recovery = Not calculated		
Mn 257.610†	31.3	-0.00288 mg/L	0.000013	-0.00288 mg/L 0.000013 0.45%
QC value within limits for Mn	257.610	Recovery = Not calculated		
Mo 202.031†	10.6	-0.00182 mg/L	0.000265	-0.00182 mg/L 0.000265 14.57%
QC value within limits for Mo	202.031	Recovery = Not calculated		
Ni 231.604†	6.1	-0.00194 mg/L	0.000221	-0.00194 mg/L 0.000221 11.42%
QC value within limits for Ni	231.604	Recovery = Not calculated		
Pb 220.353†	-12.1	-0.00230 mg/L	0.001011	-0.00230 mg/L 0.001011 43.90%
QC value within limits for Pb	220.353	Recovery = Not calculated		
Sb 206.836†	-3.7	0.00018 mg/L	0.000813	0.00018 mg/L 0.000813 463.05%
QC value within limits for Sb	206.836	Recovery = Not calculated		
Se 196.026†	-5.3	0.00012 mg/L	0.002372	0.00012 mg/L 0.002372 >999.9%
QC value within limits for Se	196.026	Recovery = Not calculated		
Si 251.611†	115.4	-0.00351 mg/L	0.000291	-0.00351 mg/L 0.000291 8.30%
QC value within limits for Si	251.611	Recovery = Not calculated		
Sn 189.927†	-1.2	-0.00356 mg/L	0.001184	-0.00356 mg/L 0.001184 33.25%
QC value within limits for Sn	189.927	Recovery = Not calculated		
Ti 334.940†	84.6	-0.00171 mg/L	0.000092	-0.00171 mg/L 0.000092 5.38%
QC value within limits for Ti	334.940	Recovery = Not calculated		
Tl 190.801†	-1.3	-0.00246 mg/L	0.001604	-0.00246 mg/L 0.001604 65.12%
QC value within limits for Tl	190.801	Recovery = Not calculated		
V 290.880†	948.2	-0.00021 mg/L	0.000721	-0.00021 mg/L 0.000721 350.77%
QC value within limits for V	290.880	Recovery = Not calculated		
Zn 206.200†	-29.7	-0.00282 mg/L	0.000150	-0.00282 mg/L 0.000150 5.33%
QC value within limits for Zn	206.200	Recovery = Not calculated		
K 766.490†	112.5	-0.00851 mg/L	0.016200	-0.00851 mg/L 0.016200 190.26%
QC value within limits for K	766.490	Recovery = Not calculated		
Na 589.592†	222.4	0.0330 mg/L	0.00410	0.0330 mg/L 0.00410 12.45%
QC value within limits for Na	589.592	Recovery = Not calculated		
Sr 407.771†	411.7	-0.00581 mg/L	0.000017	-0.00581 mg/L 0.000017 0.30%
QC value within limits for Sr	407.771	Recovery = Not calculated		
Li 670.784†	7.8	-0.00363 mg/L	0.000429	-0.00363 mg/L 0.000429 11.81%
QC value within limits for Li	670.784	Recovery = Not calculated		

All analyte(s) passed QC.

```

=====
Sequence No.: 46                               u&osampler Location: 81
Sample ID: L1205005005                       a&me Collected: 5/8/2012 7:36:56 PM
Analyst: KHR                                 a&na Type: Original
Initial Sample Wt:                             n&itial Sample Vol:
Dilution:                                     a&nple Prep Vol:
=====

```

```

-----
Nebulizer Parameters: L1205005005
Analyte          Back Pressure   Flow
All              154.0 kPa       0.50 L/min
-----

```

```

-----
Mean Data: L1205005005
Analyte          Mean Corrected   Calib.          Sample
Intensivity      Conc. Units      Std.Dev.        Conc. Units     Std.Dev.     RSD
Y 371.029       2059919.9        21089.28        1.02%
-----

```

Approved: May 09, 2012
John H. Rhodes

YRADIAL	302101.9				1866.78	0.62%
Ga 417.206	1403206.7				28660.34	2.04%
GarADIAL	92352.0				1076.18	1.17%
Ag 328.068†	-567.9	0.00317 mg/L	0.000822	0.00317 mg/L	0.000822	25.97%
Al 396.153†	17755.7	2.36 mg/L	0.014	2.36 mg/L	0.014	0.59%
As 188.979†	11.5	0.00530 mg/L	0.001492	0.00530 mg/L	0.001492	28.15%
Ba 233.527†	19862.2	0.123 mg/L	0.0023	0.123 mg/L	0.0023	1.87%
Be 234.861†	3301.1	0.00015 mg/L	0.000114	0.00015 mg/L	0.000114	78.29%
B 249.677†	8972.7	0.102 mg/L	0.0021	0.102 mg/L	0.0021	2.06%
Ca 227.546†	89346.4	190 mg/L	5.0	190 mg/L	5.0	2.61%
Cd 228.802†	73.2	0.00148 mg/L	0.000155	0.00148 mg/L	0.000155	10.52%
Co 228.616†	129.9	0.00228 mg/L	0.000073	0.00228 mg/L	0.000073	3.23%
Cr 267.716†	773.5	0.00547 mg/L	0.000304	0.00547 mg/L	0.000304	5.56%
Cu 327.393†	2842.5	0.0111 mg/L	0.00045	0.0111 mg/L	0.00045	4.08%
Fe 239.562†	187366.3	11.8 mg/L	0.12	11.8 mg/L	0.12	1.03%
Mg 279.077†	205511.5	57.8 mg/L	0.55	57.8 mg/L	0.55	0.96%
Mn 257.610†	536864.9	0.636 mg/L	0.0093	0.636 mg/L	0.0093	1.47%
Mo 202.031†	229.2	0.00480 mg/L	0.000392	0.00480 mg/L	0.000392	8.17%
Ni 231.604†	529.7	0.00577 mg/L	0.000540	0.00577 mg/L	0.000540	9.36%
Pb 220.353†	42.6	0.00312 mg/L	0.001429	0.00312 mg/L	0.001429	45.76%
Sb 206.836†	-7.4	-0.00030 mg/L	0.001446	-0.00030 mg/L	0.001446	475.49%
Se 196.026†	-4.2	0.00404 mg/L	0.005091	0.00404 mg/L	0.005091	126.09%
Si 251.611†	573961.7	13.7 mg/L	0.18	13.7 mg/L	0.18	1.31%
Sn 189.927†	-364.6	-0.0384 mg/L	0.00066	-0.0384 mg/L	0.00066	1.72%
Ti 334.940†	14778.2	0.0414 mg/L	0.00388	0.0414 mg/L	0.00388	9.39%
Tl 190.801†	-39.9	-0.0127 mg/L	0.00200	-0.0127 mg/L	0.00200	15.67%
V 290.880†	4943.9	0.0171 mg/L	0.00108	0.0171 mg/L	0.00108	6.35%
Zn 206.200†	4382.5	0.102 mg/L	0.0015	0.102 mg/L	0.0015	1.50%
K 766.490†	29511.1	8.73 mg/L	0.013	8.73 mg/L	0.013	0.15%
Na 589.592†	Saturated2					
Sr 407.771†	Saturated2					
Li 670.784†	4110.1	0.0229 mg/L	0.00033	0.0229 mg/L	0.00033	1.46%

Sequence No.: 47
Sample ID: L1205005006
Analyst: KHR
Initial Sample Wt:
Dilution:

u&osampler Location: 82
a&e Collected: 5/8/2012 7:42:53 PM
a&a Type: Original
n&tial Sample Vol:
a&mple Prep Vol:

Nebulizer Parameters: L1205005006
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1205005006

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2038970.1				12725.21	0.62%
YRADIAL	295698.9				5474.08	1.85%
Ga 417.206	1346735.5				34485.28	2.56%
GarADIAL	90685.4				1084.79	1.20%
Ag 328.068†	33.1	0.00288 mg/L	0.000467	0.00288 mg/L	0.000467	16.20%
Al 396.153†	-23.7	-0.0357 mg/L	0.00312	-0.0357 mg/L	0.00312	8.74%
As 188.979†	7.9	0.00351 mg/L	0.000571	0.00351 mg/L	0.000571	16.28%
Ba 233.527†	15834.6	0.0976 mg/L	0.00094	0.0976 mg/L	0.00094	0.96%
Be 234.861†	1937.6	0.00017 mg/L	0.000102	0.00017 mg/L	0.000102	58.79%
B 249.677†	8230.9	0.0954 mg/L	0.00235	0.0954 mg/L	0.00235	2.46%
Ca 227.546†	87546.2	186 mg/L	5.2	186 mg/L	5.2	2.80%
Cd 228.802†	35.6	0.00081 mg/L	0.000280	0.00081 mg/L	0.000280	34.48%
Co 228.616†	75.3	0.00110 mg/L	0.000761	0.00110 mg/L	0.000761	69.22%
Cr 267.716†	217.1	0.00024 mg/L	0.000292	0.00024 mg/L	0.000292	120.96%
Cu 327.393†	-223.1	-0.00073 mg/L	0.000313	-0.00073 mg/L	0.000313	43.02%
Fe 239.562†	108255.6	6.79 mg/L	0.127	6.79 mg/L	0.127	1.86%
Mg 279.077†	186623.3	52.5 mg/L	0.30	52.5 mg/L	0.30	0.58%
Mn 257.610†	522397.6	0.619 mg/L	0.0119	0.619 mg/L	0.0119	1.93%
Mo 202.031†	247.5	0.00505 mg/L	0.000648	0.00505 mg/L	0.000648	12.83%
Ni 231.604†	212.3	0.00110 mg/L	0.000232	0.00110 mg/L	0.000232	21.13%
Pb 220.353†	-21.4	-0.00261 mg/L	0.000336	-0.00261 mg/L	0.000336	12.86%
Sb 206.836†	-3.9	0.00039 mg/L	0.001345	0.00039 mg/L	0.001345	344.86%
Se 196.026†	-10.5	-0.00090 mg/L	0.000918	-0.00090 mg/L	0.000918	102.51%

Approved: May 09, 2012
John H. Rhodes

Table with 8 columns: Element, Value, Unit, Value, Unit, Value, Unit, Value. Rows include Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li.

Sequence No.: 48
Sample ID: L1205005007
Analyst: KHR
Initial Sample Wt:
Dilution:
uikosampler Location: 83
Date Collected: 5/8/2012 7:48:52 PM
alpha Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205005007
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Rows include Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li.

Sequence No.: 49
Sample ID: L1205005008
Analyst: KHR
Initial Sample Wt:
Dilution:
uikosampler Location: 84
Date Collected: 5/8/2012 7:55:47 PM
alpha Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205005008
Analyte Back Pressure Flow
All 153.0 kPa 0.50 L/min

Approved: May 09, 2012
[Signature]

Mean Data: L1205005008

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2199891.7						42419.96	1.93%
YRADIAL	302832.2						1230.32	0.41%
Ga 417.206	1475329.8						17438.68	1.18%
GaRADIAL	95561.2						2612.81	2.73%
Ag 328.068†	468.2	0.00124	mg/L	0.000094	0.00124	mg/L	0.000094	7.54%
Al 396.153†	-8.4	-0.0342	mg/L	0.00263	-0.0342	mg/L	0.00263	7.69%
As 188.979†	-4.4	-0.00159	mg/L	0.000764	-0.00159	mg/L	0.000764	47.93%
Ba 233.527†	11189.8	0.0682	mg/L	0.00119	0.0682	mg/L	0.00119	1.75%
Be 234.861†	219.0	0.00027	mg/L	0.000033	0.00027	mg/L	0.000033	12.26%
B 249.677†	2677.5	0.0331	mg/L	0.00028	0.0331	mg/L	0.00028	0.84%
Ca 227.546†	31879.8	67.7	mg/L	1.26	67.7	mg/L	1.26	1.86%
Cd 228.802†	4.5	0.00028	mg/L	0.000142	0.00028	mg/L	0.000142	50.38%
Co 228.616†	9.8	-0.00045	mg/L	0.000127	-0.00045	mg/L	0.000127	28.04%
Cr 267.716†	86.4	-0.00119	mg/L	0.000063	-0.00119	mg/L	0.000063	5.27%
Cu 327.393†	730.0	0.00226	mg/L	0.000424	0.00226	mg/L	0.000424	18.77%
Fe 239.562†	450.3	0.0178	mg/L	0.00041	0.0178	mg/L	0.00041	2.32%
Mg 279.077†	28497.3	8.00	mg/L	0.026	8.00	mg/L	0.026	0.33%
Mn 257.610†	61645.6	0.0705	mg/L	0.00182	0.0705	mg/L	0.00182	2.59%
Mo 202.031†	100.5	0.00063	mg/L	0.000103	0.00063	mg/L	0.000103	16.35%
Ni 231.604†	138.3	0.00001	mg/L	0.000131	0.00001	mg/L	0.000131	>999.9%
Pb 220.353†	117.1	0.00982	mg/L	0.000820	0.00982	mg/L	0.000820	8.35%
Sb 206.836†	0.1	0.00109	mg/L	0.000641	0.00109	mg/L	0.000641	58.57%
Se 196.026†	-0.1	0.00299	mg/L	0.002945	0.00299	mg/L	0.002945	98.52%
Si 251.611†	153036.0	3.66	mg/L	0.075	3.66	mg/L	0.075	2.06%
Sn 189.927†	-309.9	-0.0332	mg/L	0.00040	-0.0332	mg/L	0.00040	1.21%
Ti 334.940†	-13081.4	-0.00468	mg/L	0.000453	-0.00468	mg/L	0.000453	9.68%
Tl 190.801†	-30.9	-0.0103	mg/L	0.00219	-0.0103	mg/L	0.00219	21.23%
V 290.880†	2660.5	0.00843	mg/L	0.000198	0.00843	mg/L	0.000198	2.34%
Zn 206.200†	815.2	0.0173	mg/L	0.00060	0.0173	mg/L	0.00060	3.47%
K 766.490†	11389.8	3.29	mg/L	0.034	3.29	mg/L	0.034	1.03%
Na 589.592†	950952.5	47.9	mg/L	0.90	47.9	mg/L	0.90	1.88%
Sr 407.771†	994103.5	0.366	mg/L	0.0073	0.366	mg/L	0.0073	1.98%
Li 670.784†	1853.1	0.00829	mg/L	0.000359	0.00829	mg/L	0.000359	4.33%

Sequence No.: 50 u&osampler Location: 85
 Sample ID: L1205009901 a&e Collected: 5/8/2012 8:02:43 PM
 Analyst: KHR a&a Type: Original
 Initial Sample Wt: n&tial Sample Vol:
 Dilution: a&ple Prep Vol:

Nebulizer Parameters: L1205009901

Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205009901

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2219085.7						30393.24	1.37%
YRADIAL	302759.1						3957.77	1.31%
Ga 417.206	1409074.4						34641.07	2.46%
GaRADIAL	94530.2						1217.66	1.29%
Ag 328.068†	-155.8	0.00250	mg/L	0.000589	0.00250	mg/L	0.000589	23.59%
Al 396.153†	357.4	0.0158	mg/L	0.01515	0.0158	mg/L	0.01515	95.74%
As 188.979†	6.9	0.00324	mg/L	0.002505	0.00324	mg/L	0.002505	77.22%
Ba 233.527†	27743.6	0.174	mg/L	0.0025	0.174	mg/L	0.0025	1.46%
Be 234.861†	2347.5	0.00028	mg/L	0.000105	0.00028	mg/L	0.000105	37.10%
B 249.677†	4427.9	0.0504	mg/L	0.00169	0.0504	mg/L	0.00169	3.35%
Ca 227.546†	55568.0	118	mg/L	3.4	118	mg/L	3.4	2.90%
Cd 228.802†	49.8	0.00106	mg/L	0.000195	0.00106	mg/L	0.000195	18.38%
Co 228.616†	41.4	0.00015	mg/L	0.000281	0.00015	mg/L	0.000281	191.08%
Cr 267.716†	239.5	0.00047	mg/L	0.000108	0.00047	mg/L	0.000108	23.22%
Cu 327.393†	17.9	0.00024	mg/L	0.000327	0.00024	mg/L	0.000327	135.33%
Fe 239.562†	120858.5	7.58	mg/L	0.037	7.58	mg/L	0.037	0.49%
Mg 279.077†	57167.9	16.1	mg/L	0.07	16.1	mg/L	0.07	0.43%

Approved: May 09, 2012
John H. Rho

Mn 257.610†	207530.8	0.244 mg/L	0.0045	0.244 mg/L	0.0045	1.83%
Mo 202.031†	171.2	0.00294 mg/L	0.000170	0.00294 mg/L	0.000170	5.76%
Ni 231.604†	140.6	0.00004 mg/L	0.000386	0.00004 mg/L	0.000386	871.95%
Pb 220.353†	5.1	-0.00060 mg/L	0.000583	-0.00060 mg/L	0.000583	96.46%
Sb 206.836†	-11.0	-0.00130 mg/L	0.001867	-0.00130 mg/L	0.001867	143.49%
Se 196.026†	-7.0	0.00135 mg/L	0.001587	0.00135 mg/L	0.001587	117.25%
Si 251.611†	305304.0	7.31 mg/L	0.155	7.31 mg/L	0.155	2.12%
Sn 189.927†	-333.0	-0.0354 mg/L	0.00036	-0.0354 mg/L	0.00036	1.02%
Ti 334.940†	-17299.8	-0.00134 mg/L	0.001920	-0.00134 mg/L	0.001920	143.22%
Tl 190.801†	-28.5	-0.00989 mg/L	0.001326	-0.00989 mg/L	0.001326	13.41%
V 290.880†	2516.7	0.00628 mg/L	0.001125	0.00628 mg/L	0.001125	17.92%
Zn 206.200†	253.6	0.00378 mg/L	0.000198	0.00378 mg/L	0.000198	5.23%
K 766.490†	14910.0	4.32 mg/L	0.048	4.32 mg/L	0.048	1.11%
Na 589.592†	1305945.5	67.0 mg/L	0.09	67.0 mg/L	0.09	0.13%
Sr 407.771†	2124495.5	0.789 mg/L	0.0045	0.789 mg/L	0.0045	0.57%
Li 670.784†	2731.7	0.0140 mg/L	0.00068	0.0140 mg/L	0.00068	4.84%

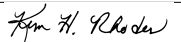
Sequence No.: 51 u@sampler Location: 86
 Sample ID: L1205009902 a@e Collected: 5/8/2012 8:08:42 PM
 Analyst: KHR a@a Type: Original
 Initial Sample Wt: n@tial Sample Vol:
 Dilution: a@sple Prep Vol:

Nebulizer Parameters: L1205009902
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205009902

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2219054.0				6082.11	0.27%
YRADIAL	303441.2				2493.54	0.82%
Ga 417.206	1425599.5				35222.47	2.47%
GarADIAL	94311.1				469.41	0.50%
Ag 328.068†	32.5	0.00225 mg/L	0.000057	0.00225 mg/L	0.000057	2.54%
Al 396.153†	-12.7	-0.0342 mg/L	0.00353	-0.0342 mg/L	0.00353	10.32%
As 188.979†	2.6	0.00152 mg/L	0.000913	0.00152 mg/L	0.000913	59.89%
Ba 233.527†	26349.3	0.165 mg/L	0.0010	0.165 mg/L	0.0010	0.58%
Be 234.861†	1887.0	0.00035 mg/L	0.000075	0.00035 mg/L	0.000075	21.57%
B 249.677†	4182.5	0.0483 mg/L	0.00130	0.0483 mg/L	0.00130	2.69%
Ca 227.546†	54408.1	116 mg/L	3.6	116 mg/L	3.6	3.09%
Cd 228.802†	21.6	0.00057 mg/L	0.000239	0.00057 mg/L	0.000239	41.99%
Co 228.616†	41.2	0.00020 mg/L	0.000492	0.00020 mg/L	0.000492	248.32%
Cr 267.716†	135.4	-0.00055 mg/L	0.000162	-0.00055 mg/L	0.000162	29.24%
Cu 327.393†	-185.1	-0.00068 mg/L	0.000254	-0.00068 mg/L	0.000254	37.66%
Fe 239.562†	90343.4	5.66 mg/L	0.075	5.66 mg/L	0.075	1.33%
Mg 279.077†	55867.8	15.7 mg/L	0.15	15.7 mg/L	0.15	0.93%
Mn 257.610†	202713.5	0.239 mg/L	0.0023	0.239 mg/L	0.0023	0.98%
Mo 202.031†	178.3	0.00304 mg/L	0.000372	0.00304 mg/L	0.000372	12.23%
Ni 231.604†	103.0	-0.00051 mg/L	0.000422	-0.00051 mg/L	0.000422	82.85%
Pb 220.353†	-4.2	-0.00130 mg/L	0.002415	-0.00130 mg/L	0.002415	185.20%
Sb 206.836†	-7.5	-0.00052 mg/L	0.000678	-0.00052 mg/L	0.000678	130.83%
Se 196.026†	-9.1	-0.00035 mg/L	0.004695	-0.00035 mg/L	0.004695	>999.9%
Si 251.611†	292723.8	7.01 mg/L	0.142	7.01 mg/L	0.142	2.02%
Sn 189.927†	-337.9	-0.0358 mg/L	0.00014	-0.0358 mg/L	0.00014	0.40%
Ti 334.940†	-18442.0	-0.00285 mg/L	0.001387	-0.00285 mg/L	0.001387	48.72%
Tl 190.801†	-20.4	-0.00782 mg/L	0.001030	-0.00782 mg/L	0.001030	13.18%
V 290.880†	2754.6	0.00782 mg/L	0.001571	0.00782 mg/L	0.001571	20.08%
Zn 206.200†	22.8	-0.00167 mg/L	0.000181	-0.00167 mg/L	0.000181	10.85%
K 766.490†	14352.1	4.15 mg/L	0.031	4.15 mg/L	0.031	0.74%
Na 589.592†	1282646.8	65.8 mg/L	0.56	65.8 mg/L	0.56	0.84%
Sr 407.771†	2069304.6	0.768 mg/L	0.0064	0.768 mg/L	0.0064	0.83%
Li 670.784†	2688.7	0.0137 mg/L	0.00088	0.0137 mg/L	0.00088	6.42%

Sequence No.: 52 u@sampler Location: 87
 Sample ID: L1205009903 a@e Collected: 5/8/2012 8:14:41 PM
 Analyst: KHR a@a Type: Original
 Initial Sample Wt: n@tial Sample Vol:

Approved: May 09, 2012


Dilution: sample Prep Vol:

Nebulizer Parameters: L1205009903

Analyte Back Pressure Flow
All 153.0 kPa 0.50 L/min

Mean Data: L1205009903

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, V, Zn, K, Na, Sr, Li.

Sequence No.: 53
Sample ID: L1205009904
Analyst: KHR
Initial Sample Wt:
Dilution:

autosampler Location: 88
Date Collected: 5/8/2012 8:20:40 PM
Sample Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205009904

Analyte Back Pressure Flow
All 153.0 kPa 0.50 L/min

Mean Data: L1205009904

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca.

Approved: May 09, 2012

Signature: Ryan H. Rhodes

Sequence No.: 55
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Sampler Location: 6
Date Collected: 5/8/2012 8:32:38 PM
Sample Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2270190.6				23386.74	1.03%
YRADIAL	309718.3				4254.96	1.37%
Ga 417.206	1346183.0				38753.89	2.88%
GaRADIAL	91252.9				990.98	1.09%
Ag 328.068†	128879.8	0.414 mg/L	0.0133	0.414 mg/L	0.0133	3.20%
QC value within limits for Ag 328.068 Recovery = 103.50%						
Al 396.153†	75414.0	10.0 mg/L	0.01	10.0 mg/L	0.01	0.06%
QC value within limits for Al 396.153 Recovery = 100.46%						
As 188.979†	1139.5	0.400 mg/L	0.0116	0.400 mg/L	0.0116	2.89%
QC value within limits for As 188.979 Recovery = 100.01%						
Ba 233.527†	159121.8	1.01 mg/L	0.006	1.01 mg/L	0.006	0.57%
QC value within limits for Ba 233.527 Recovery = 101.25%						
Be 234.861†	64142.7	0.0504 mg/L	0.00168	0.0504 mg/L	0.00168	3.33%
QC value within limits for Be 234.861 Recovery = 100.75%						
B 249.677†	43621.2	0.510 mg/L	0.0166	0.510 mg/L	0.0166	3.25%
QC value within limits for B 249.677 Recovery = 102.08%						
Ca 227.546†	4745.5	10.6 mg/L	0.37	10.6 mg/L	0.37	3.48%
QC value within limits for Ca 227.546 Recovery = 105.84%						
Cd 228.802†	2860.7	0.0502 mg/L	0.00188	0.0502 mg/L	0.00188	3.74%
QC value within limits for Cd 228.802 Recovery = 100.38%						
Co 228.616†	7779.8	0.200 mg/L	0.0032	0.200 mg/L	0.0032	1.59%
QC value within limits for Co 228.616 Recovery = 99.96%						
Cr 267.716†	55636.6	0.509 mg/L	0.0006	0.509 mg/L	0.0006	0.11%
QC value within limits for Cr 267.716 Recovery = 101.73%						
Cu 327.393†	138307.2	0.516 mg/L	0.0165	0.516 mg/L	0.0165	3.20%
QC value within limits for Cu 327.393 Recovery = 103.13%						
Fe 239.562†	63798.8	4.00 mg/L	0.009	4.00 mg/L	0.009	0.22%
QC value within limits for Fe 239.562 Recovery = 99.89%						
Mg 279.077†	35203.1	9.91 mg/L	0.035	9.91 mg/L	0.035	0.36%
QC value within limits for Mg 279.077 Recovery = 99.05%						
Mn 257.610†	432767.2	0.513 mg/L	0.0040	0.513 mg/L	0.0040	0.78%
QC value within limits for Mn 257.610 Recovery = 102.56%						
Mo 202.031†	37361.8	1.01 mg/L	0.006	1.01 mg/L	0.006	0.61%
QC value within limits for Mo 202.031 Recovery = 100.77%						
Ni 231.604†	34503.9	0.505 mg/L	0.0046	0.505 mg/L	0.0046	0.90%
QC value within limits for Ni 231.604 Recovery = 101.02%						
Pb 220.353†	5640.7	0.508 mg/L	0.0073	0.508 mg/L	0.0073	1.43%
QC value within limits for Pb 220.353 Recovery = 101.59%						
Sb 206.836†	5104.0	1.23 mg/L	0.034	1.23 mg/L	0.034	2.73%
QC value within limits for Sb 206.836 Recovery = 102.45%						
Se 196.026†	730.6	0.410 mg/L	0.0123	0.410 mg/L	0.0123	2.99%
QC value within limits for Se 196.026 Recovery = 102.62%						
Si 251.611†	213789.2	5.10 mg/L	0.130	5.10 mg/L	0.130	2.55%
QC value within limits for Si 251.611 Recovery = 102.10%						
Sn 189.927†	10496.2	1.00 mg/L	0.013	1.00 mg/L	0.013	1.27%
QC value within limits for Sn 189.927 Recovery = 100.32%						
Ti 334.940†	1013019.4	1.01 mg/L	0.009	1.01 mg/L	0.009	0.92%
QC value within limits for Ti 334.940 Recovery = 100.91%						
Tl 190.801†	1990.6	0.525 mg/L	0.0052	0.525 mg/L	0.0052	1.00%
QC value within limits for Tl 190.801 Recovery = 105.04%						
V 290.880†	199336.2	1.02 mg/L	0.008	1.02 mg/L	0.008	0.81%
QC value within limits for V 290.880 Recovery = 102.47%						
Zn 206.200†	42683.8	1.02 mg/L	0.002	1.02 mg/L	0.002	0.19%
QC value within limits for Zn 206.200 Recovery = 101.64%						
K 766.490†	163282.2	49.1 mg/L	0.46	49.1 mg/L	0.46	0.93%

Approved: May 09, 2012
Tom H. Rhodes

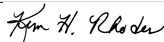
QC value within limits for K 766.490 Recovery = 98.27%
 Na 589.592† 985674.7 49.8 mg/L 0.77 49.8 mg/L 0.77 1.55%
 QC value within limits for Na 589.592 Recovery = 99.50%
 Sr 407.771† 2659505.1 0.992 mg/L 0.0150 0.992 mg/L 0.0150 1.52%
 QC value within limits for Sr 407.771 Recovery = 99.18%
 Li 670.784† 162601.2 1.05 mg/L 0.007 1.05 mg/L 0.007 0.67%
 QC value within limits for Li 670.784 Recovery = 104.65%
 All analyte(s) passed QC.

Sequence No.: 56 u&osampler Location: 1
 Sample ID: CCB Date Collected: 5/8/2012 8:38:39 PM
 Analyst: Date Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

Nebulizer Parameters: CCB
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2363646.2				45192.01	1.91%
YRADIAL	312809.0				5485.90	1.75%
Ga 417.206	1403920.5				4075.80	0.29%
GaRADIAL	92961.5				1292.75	1.39%
Ag 328.068†	134.2	0.00023 mg/L	0.000355	0.00023 mg/L	0.000355	155.14%
QC value within limits for Ag 328.068		Recovery = Not calculated				
Al 396.153†	17.2	-0.0306 mg/L	0.00075	-0.0306 mg/L	0.00075	2.45%
QC value within limits for Al 396.153		Recovery = Not calculated				
As 188.979†	-0.4	-0.00014 mg/L	0.001732	-0.00014 mg/L	0.001732	>999.9%
QC value within limits for As 188.979		Recovery = Not calculated				
Ba 233.527†	45.1	-0.00296 mg/L	0.000124	-0.00296 mg/L	0.000124	4.18%
QC value within limits for Ba 233.527		Recovery = Not calculated				
Be 234.861†	55.4	0.00014 mg/L	0.000032	0.00014 mg/L	0.000032	23.37%
QC value within limits for Be 234.861		Recovery = Not calculated				
B 249.677†	405.9	0.00639 mg/L	0.000189	0.00639 mg/L	0.000189	2.96%
QC value within limits for B 249.677		Recovery = Not calculated				
Ca 227.546†	-11.0	0.0247 mg/L	0.00613	0.0247 mg/L	0.00613	24.80%
QC value within limits for Ca 227.546		Recovery = Not calculated				
Cd 228.802†	8.4	0.00035 mg/L	0.000217	0.00035 mg/L	0.000217	62.68%
QC value within limits for Cd 228.802		Recovery = Not calculated				
Co 228.616†	13.5	-0.00037 mg/L	0.000221	-0.00037 mg/L	0.000221	60.48%
QC value within limits for Co 228.616		Recovery = Not calculated				
Cr 267.716†	-7.2	-0.00206 mg/L	0.000131	-0.00206 mg/L	0.000131	6.38%
QC value within limits for Cr 267.716		Recovery = Not calculated				
Cu 327.393†	65.7	-0.00020 mg/L	0.000338	-0.00020 mg/L	0.000338	166.48%
QC value within limits for Cu 327.393		Recovery = Not calculated				
Fe 239.562†	-9.8	-0.0110 mg/L	0.00037	-0.0110 mg/L	0.00037	3.41%
QC value within limits for Fe 239.562		Recovery = Not calculated				
Mg 279.077†	1.6	-0.0245 mg/L	0.00356	-0.0245 mg/L	0.00356	14.52%
QC value within limits for Mg 279.077		Recovery = Not calculated				
Mn 257.610†	17.9	-0.00289 mg/L	0.000010	-0.00289 mg/L	0.000010	0.36%
QC value within limits for Mn 257.610		Recovery = Not calculated				
Mo 202.031†	17.3	-0.00164 mg/L	0.000047	-0.00164 mg/L	0.000047	2.88%
QC value within limits for Mo 202.031		Recovery = Not calculated				
Ni 231.604†	7.9	-0.00191 mg/L	0.000240	-0.00191 mg/L	0.000240	12.59%
QC value within limits for Ni 231.604		Recovery = Not calculated				
Pb 220.353†	-25.0	-0.00347 mg/L	0.000261	-0.00347 mg/L	0.000261	7.53%
QC value within limits for Pb 220.353		Recovery = Not calculated				
Sb 206.836†	-5.5	-0.00024 mg/L	0.000780	-0.00024 mg/L	0.000780	318.69%
QC value within limits for Sb 206.836		Recovery = Not calculated				
Se 196.026†	-3.5	0.00112 mg/L	0.003923	0.00112 mg/L	0.003923	350.77%
QC value within limits for Se 196.026		Recovery = Not calculated				
Si 251.611†	141.2	-0.00289 mg/L	0.000158	-0.00289 mg/L	0.000158	5.48%
QC value within limits for Si 251.611		Recovery = Not calculated				
Sn 189.927†	0.6	-0.00339 mg/L	0.000899	-0.00339 mg/L	0.000899	26.54%
QC value within limits for Sn 189.927		Recovery = Not calculated				
Ti 334.940†	236.2	-0.00156 mg/L	0.000017	-0.00156 mg/L	0.000017	1.06%

Approved: May 09, 2012


QC value within limits for Ti 334.940 Recovery = Not calculated
 Tl 190.801† 1.6 -0.00173 mg/L 0.003033 -0.00173 mg/L 0.003033 175.70%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 290.880† 719.4 -0.00139 mg/L 0.001555 -0.00139 mg/L 0.001555 111.96%
 QC value within limits for V 290.880 Recovery = Not calculated
 Zn 206.200† -32.5 -0.00289 mg/L 0.000062 -0.00289 mg/L 0.000062 2.15%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 K 766.490† 75.4 -0.0195 mg/L 0.01097 -0.0195 mg/L 0.01097 56.22%
 QC value within limits for K 766.490 Recovery = Not calculated
 Na 589.592† 145.6 0.0293 mg/L 0.00348 0.0293 mg/L 0.00348 11.88%
 QC value within limits for Na 589.592 Recovery = Not calculated
 Sr 407.771† 469.1 -0.00579 mg/L 0.000020 -0.00579 mg/L 0.000020 0.34%
 QC value within limits for Sr 407.771 Recovery = Not calculated
 Li 670.784† 60.7 -0.00329 mg/L 0.000103 -0.00329 mg/L 0.000103 3.14%
 QC value within limits for Li 670.784 Recovery = Not calculated
 All analyte(s) passed QC.

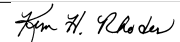
Sequence No.: 57 u\osampler Location: 90
 Sample ID: L1205009906 a\ne Collected: 5/8/2012 8:45:32 PM
 Analyst: KHR a\na Type: Original
 Initial Sample Wt: n\itial Sample Vol:
 Dilution: a\msple Prep Vol:

Nebulizer Parameters: L1205009906
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205009906

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2218689.1				9440.02	0.43%
YRADIAL	305051.5				4365.99	1.43%
Ga 417.206	1414100.6				33643.00	2.38%
GaRADIAL	93260.3				378.50	0.41%
Ag 328.068†	473.1	0.00143 mg/L	0.000561	0.00143 mg/L	0.000561	39.25%
Al 396.153†	-98.9	-0.0463 mg/L	0.00540	-0.0463 mg/L	0.00540	11.66%
As 188.979†	-4.6	-0.00162 mg/L	0.002555	-0.00162 mg/L	0.002555	157.81%
Ba 233.527†	16505.2	0.102 mg/L	0.0011	0.102 mg/L	0.0011	1.07%
Be 234.861†	448.3	0.00036 mg/L	0.000094	0.00036 mg/L	0.000094	25.70%
B 249.677†	3046.1	0.0372 mg/L	0.00074	0.0372 mg/L	0.00074	1.99%
Ca 227.546†	33848.0	71.9 mg/L	2.16	71.9 mg/L	2.16	3.01%
Cd 228.802†	56.1	0.00121 mg/L	0.000250	0.00121 mg/L	0.000250	20.69%
Co 228.616†	17.1	-0.00029 mg/L	0.000150	-0.00029 mg/L	0.000150	51.75%
Cr 267.716†	92.6	-0.00111 mg/L	0.000245	-0.00111 mg/L	0.000245	22.02%
Cu 327.393†	4156.7	0.0151 mg/L	0.00080	0.0151 mg/L	0.00080	5.30%
Fe 239.562†	6195.3	0.378 mg/L	0.0081	0.378 mg/L	0.0081	2.13%
Mg 279.077†	46947.2	13.2 mg/L	0.33	13.2 mg/L	0.33	2.48%
Mn 257.610†	25111.5	0.0270 mg/L	0.00014	0.0270 mg/L	0.00014	0.53%
Mo 202.031†	77.0	0.00000 mg/L	0.000098	0.00000 mg/L	0.000098	>999.9%
Ni 231.604†	324.7	0.00275 mg/L	0.000428	0.00275 mg/L	0.000428	15.53%
Pb 220.353†	16.3	0.00076 mg/L	0.002232	0.00076 mg/L	0.002232	294.27%
Sb 206.836†	-4.9	-0.00009 mg/L	0.000802	-0.00009 mg/L	0.000802	892.94%
Se 196.026†	-0.3	0.00300 mg/L	0.002268	0.00300 mg/L	0.002268	75.58%
Si 251.611†	120219.1	2.87 mg/L	0.070	2.87 mg/L	0.070	2.42%
Sn 189.927†	-299.7	-0.0322 mg/L	0.00100	-0.0322 mg/L	0.00100	3.10%
Ti 334.940†	-11326.3	-0.00230 mg/L	0.000935	-0.00230 mg/L	0.000935	40.61%
Tl 190.801†	-34.0	-0.0110 mg/L	0.00265	-0.0110 mg/L	0.00265	24.00%
V 290.880†	2321.5	0.00649 mg/L	0.000680	0.00649 mg/L	0.000680	10.48%
Zn 206.200†	12283.1	0.290 mg/L	0.0073	0.290 mg/L	0.0073	2.53%
K 766.490†	10001.2	2.87 mg/L	0.047	2.87 mg/L	0.047	1.63%
Na 589.592†	1110841.5	56.4 mg/L	0.19	56.4 mg/L	0.19	0.34%
Sr 407.771†	851646.5	0.312 mg/L	0.0042	0.312 mg/L	0.0042	1.36%
Li 670.784†	2235.6	0.0108 mg/L	0.00022	0.0108 mg/L	0.00022	2.05%

Sequence No.: 58 u\osampler Location: 91
 Sample ID: L1205009907 a\ne Collected: 5/8/2012 8:51:31 PM
 Analyst: KHR a\na Type: Original
 Initial Sample Wt: n\itial Sample Vol:

Approved: May 09, 2012


Dilution: sample Prep Vol:

Nebulizer Parameters: L1205009907

Analyte Back Pressure Flow
All 151.0 kPa 0.50 L/min

Mean Data: L1205009907

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, V, Zn, K, Na, Sr, Li.

Sequence No.: 59

Sample ID: L1205009908

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 92

Time Collected: 5/8/2012 8:57:36 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1205009908

Analyte Back Pressure Flow
All 153.0 kPa 0.50 L/min

Mean Data: L1205009908

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca.

Approved: May 09, 2012
[Signature]

Cd 228.802†	56.7	0.00111 mg/L	0.000340	0.00111 mg/L	0.000340	30.50%
Co 228.616†	39.3	0.00029 mg/L	0.000392	0.00029 mg/L	0.000392	136.39%
Cr 267.716†	271.9	0.00061 mg/L	0.000111	0.00061 mg/L	0.000111	18.04%
Cu 327.393†	-248.8	-0.00115 mg/L	0.000384	-0.00115 mg/L	0.000384	33.32%
Fe 239.562†	48524.2	3.03 mg/L	0.046	3.03 mg/L	0.046	1.50%
Mg 279.077†	355850.6	100 mg/L	1.0	100 mg/L	1.0	0.97%
Mn 257.610†	239661.4	0.282 mg/L	0.0071	0.282 mg/L	0.0071	2.53%
Mo 202.031†	102.7	0.00088 mg/L	0.000177	0.00088 mg/L	0.000177	20.03%
Ni 231.604†	170.9	0.00049 mg/L	0.000623	0.00049 mg/L	0.000623	127.19%
Pb 220.353†	-33.3	-0.00300 mg/L	0.001419	-0.00300 mg/L	0.001419	47.35%
Sb 206.836†	-7.9	-0.00071 mg/L	0.000674	-0.00071 mg/L	0.000674	94.51%
Se 196.026†	-4.7	0.00126 mg/L	0.004665	0.00126 mg/L	0.004665	370.86%
Si 251.611†	487497.5	11.7 mg/L	0.20	11.7 mg/L	0.20	1.69%
Sn 189.927†	-384.7	-0.0403 mg/L	0.00130	-0.0403 mg/L	0.00130	3.21%
Ti 334.940†	-31889.6	-0.00266 mg/L	0.002877	-0.00266 mg/L	0.002877	108.26%
Tl 190.801†	-35.8	-0.0120 mg/L	0.00234	-0.0120 mg/L	0.00234	19.55%
V 290.880†	3707.7	0.0110 mg/L	0.00229	0.0110 mg/L	0.00229	20.83%
Zn 206.200†	34.0	-0.00134 mg/L	0.000293	-0.00134 mg/L	0.000293	21.81%
K 766.490†	21279.7	5.75 mg/L	0.092	5.75 mg/L	0.092	1.60%
Na 589.592†	6360954.6	536 mg/L	0.0	536 mg/L	0.0	0.00%
Sr 407.771†	Saturated2					
Li 670.784†	9558.1	0.0581 mg/L	0.00218	0.0581 mg/L	0.00218	3.76%

Sequence No.: 60

Sample ID: L1205009909

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 93

a&e Collected: 5/8/2012 9:03:40 PM

a&a Type: Original

n&itial Sample Vol:

a&mple Prep Vol:

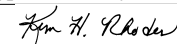
Nebulizer Parameters: L1205009909

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205009909

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2263186.4					38166.64	1.69%
YRADIAL	303531.1					1392.49	0.46%
Ga 417.206	1387789.7					32043.24	2.31%
GaRADIAL	93288.6					331.35	0.36%
Ag 328.068†	764.2	0.00243 mg/L	0.000551	0.00243 mg/L	0.000551	22.70%	
Al 396.153†	15.7	-0.0308 mg/L	0.00615	-0.0308 mg/L	0.00615	19.99%	
As 188.979†	-7.3	-0.00254 mg/L	0.002075	-0.00254 mg/L	0.002075	81.57%	
Ba 233.527†	24354.0	0.152 mg/L	0.0018	0.152 mg/L	0.0018	1.19%	
Be 234.861†	581.9	0.00043 mg/L	0.000068	0.00043 mg/L	0.000068	15.79%	
B 249.677†	4028.6	0.0487 mg/L	0.00206	0.0487 mg/L	0.00206	4.23%	
Ca 227.546†	45976.2	97.6 mg/L	3.50	97.6 mg/L	3.50	3.58%	
Cd 228.802†	48.9	0.00109 mg/L	0.000278	0.00109 mg/L	0.000278	25.63%	
Co 228.616†	44.5	0.00040 mg/L	0.000069	0.00040 mg/L	0.000069	17.04%	
Cr 267.716†	87.8	-0.00116 mg/L	0.000103	-0.00116 mg/L	0.000103	8.90%	
Cu 327.393†	702.5	0.00221 mg/L	0.000211	0.00221 mg/L	0.000211	9.53%	
Fe 239.562†	10660.3	0.659 mg/L	0.0092	0.659 mg/L	0.0092	1.40%	
Mg 279.077†	64191.6	18.1 mg/L	0.07	18.1 mg/L	0.07	0.41%	
Mn 257.610†	207403.1	0.244 mg/L	0.0043	0.244 mg/L	0.0043	1.77%	
Mo 202.031†	69.7	-0.00014 mg/L	0.000091	-0.00014 mg/L	0.000091	65.87%	
Ni 231.604†	309.8	0.00253 mg/L	0.000629	0.00253 mg/L	0.000629	24.85%	
Pb 220.353†	-2.9	-0.00090 mg/L	0.001943	-0.00090 mg/L	0.001943	215.49%	
Sb 206.836†	-6.0	-0.00034 mg/L	0.001533	-0.00034 mg/L	0.001533	445.55%	
Se 196.026†	0.2	0.00330 mg/L	0.002092	0.00330 mg/L	0.002092	63.40%	
Si 251.611†	167121.3	4.00 mg/L	0.090	4.00 mg/L	0.090	2.24%	
Sn 189.927†	-318.2	-0.0340 mg/L	0.00019	-0.0340 mg/L	0.00019	0.56%	
Ti 334.940†	-14664.7	-0.00177 mg/L	0.001411	-0.00177 mg/L	0.001411	79.82%	
Tl 190.801†	-25.7	-0.00916 mg/L	0.004255	-0.00916 mg/L	0.004255	46.45%	
V 290.880†	1806.5	0.00365 mg/L	0.000181	0.00365 mg/L	0.000181	4.94%	
Zn 206.200†	4900.1	0.114 mg/L	0.0005	0.114 mg/L	0.0005	0.42%	
K 766.490†	11650.3	3.35 mg/L	0.059	3.35 mg/L	0.059	1.77%	
Na 589.592†	1217354.3	62.2 mg/L	0.15	62.2 mg/L	0.15	0.25%	
Sr 407.771†	1149735.3	0.423 mg/L	0.0034	0.423 mg/L	0.0034	0.80%	
Li 670.784†	3193.5	0.0169 mg/L	0.00104	0.0169 mg/L	0.00104	6.13%	

Approved: May 09, 2012



```

=====
Sequence No.: 61                               autosampler Location: 94
Sample ID: L1205009910                         Date Collected: 5/8/2012 9:09:41 PM
Analyst: KHR                                   Sample Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Nebulizer Parameters: L1205009910

```

-----
Analyte      Back Pressure   Flow
All          152.0 kPa       0.50 L/min
-----

```

Mean Data: L1205009910

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2250797.5				10705.58	0.48%
YRADIAL	302884.4				1690.11	0.56%
Ga 417.206	1386969.0				15306.79	1.10%
GarADIAL	91659.6				235.95	0.26%
Ag 328.068†	785.0	0.00246 mg/L	0.000246	0.00246 mg/L	0.000246	9.99%
Al 396.153†	-43.4	-0.0388 mg/L	0.00493	-0.0388 mg/L	0.00493	12.72%
As 188.979†	-3.9	-0.00132 mg/L	0.001907	-0.00132 mg/L	0.001907	144.40%
Ba 233.527†	24767.7	0.155 mg/L	0.0005	0.155 mg/L	0.0005	0.33%
Be 234.861†	482.1	0.00036 mg/L	0.000094	0.00036 mg/L	0.000094	25.64%
B 249.677†	4072.5	0.0492 mg/L	0.00114	0.0492 mg/L	0.00114	2.32%
Ca 227.546†	46487.2	98.7 mg/L	1.69	98.7 mg/L	1.69	1.72%
Cd 228.802†	46.1	0.00103 mg/L	0.000058	0.00103 mg/L	0.000058	5.58%
Co 228.616†	44.1	0.00039 mg/L	0.000114	0.00039 mg/L	0.000114	28.97%
Cr 267.716†	69.8	-0.00132 mg/L	0.000082	-0.00132 mg/L	0.000082	6.19%
Cu 327.393†	368.0	0.00096 mg/L	0.000344	0.00096 mg/L	0.000344	35.72%
Fe 239.562†	9645.8	0.595 mg/L	0.0069	0.595 mg/L	0.0069	1.17%
Mg 279.077†	65534.3	18.4 mg/L	0.17	18.4 mg/L	0.17	0.92%
Mn 257.610†	213147.0	0.251 mg/L	0.0018	0.251 mg/L	0.0018	0.73%
Mo 202.031†	74.6	-0.00001 mg/L	0.000276	-0.00001 mg/L	0.000276	>999.9%
Ni 231.604†	309.0	0.00252 mg/L	0.000458	0.00252 mg/L	0.000458	18.17%
Nb 220.353†	-9.1	-0.00145 mg/L	0.002685	-0.00145 mg/L	0.002685	184.81%
Pb 206.836†	-5.0	-0.00010 mg/L	0.000606	-0.00010 mg/L	0.000606	611.27%
Se 196.026†	-3.6	0.00116 mg/L	0.003011	0.00116 mg/L	0.003011	259.42%
Si 251.611†	168733.3	4.04 mg/L	0.035	4.04 mg/L	0.035	0.87%
Sn 189.927†	-334.1	-0.0355 mg/L	0.00004	-0.0355 mg/L	0.00004	0.12%
Ti 334.940†	-15124.4	-0.00206 mg/L	0.000859	-0.00206 mg/L	0.000859	41.62%
Tl 190.801†	-18.7	-0.00737 mg/L	0.003386	-0.00737 mg/L	0.003386	45.95%
V 290.880†	1944.7	0.00437 mg/L	0.001334	0.00437 mg/L	0.001334	30.54%
Zn 206.200†	4902.8	0.114 mg/L	0.0003	0.114 mg/L	0.0003	0.24%
K 766.490†	12241.4	3.53 mg/L	0.029	3.53 mg/L	0.029	0.83%
Na 589.592†	1245719.6	63.7 mg/L	0.40	63.7 mg/L	0.40	0.63%
Sr 407.771†	1157289.3	0.426 mg/L	0.0035	0.426 mg/L	0.0035	0.83%
Li 670.784†	3341.6	0.0179 mg/L	0.00046	0.0179 mg/L	0.00046	2.57%

```

=====
Sequence No.: 62                               autosampler Location: 6
Sample ID: CCV                                 Date Collected: 5/8/2012 9:15:41 PM
Analyst:                                       Sample Type: Original
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
=====

```

Nebulizer Parameters: CCV

```

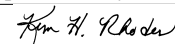
-----
Analyte      Back Pressure   Flow
All          152.0 kPa       0.50 L/min
-----

```

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2276129.6				25812.14	1.13%
YRADIAL	308939.5				3081.59	1.00%
Ga 417.206	1329770.6				26700.80	2.01%
GarADIAL	90962.1				1453.19	1.60%
Ag 328.068†	132693.0	0.426 mg/L	0.0141	0.426 mg/L	0.0141	3.30%

Approved: May 09, 2012



Al	396.153†	76280.4	10.2 mg/L	0.02	0.22%
As	188.979†	1160.2	0.407 mg/L	0.0076	1.86%
Ba	233.527†	161392.2	1.03 mg/L	0.012	1.21%
Be	234.861†	66224.8	0.0520 mg/L	0.00146	2.82%
B	249.677†	45114.9	0.528 mg/L	0.0173	3.28%
Ca	227.546†	4853.0	10.8 mg/L	0.29	2.68%
Cd	228.802†	2919.1	0.0512 mg/L	0.00170	3.32%
Co	228.616†	7823.6	0.201 mg/L	0.0017	0.85%
Cr	267.716†	56779.2	0.519 mg/L	0.0108	2.08%
Cu	327.393†	143040.4	0.533 mg/L	0.0157	2.94%
Fe	239.562†	65189.6	4.08 mg/L	0.007	0.17%
Mg	279.077†	35885.4	10.1 mg/L	0.06	0.64%
Mn	257.610†	440258.7	0.522 mg/L	0.0063	1.21%
Mo	202.031†	37973.0	1.02 mg/L	0.017	1.66%
Ni	231.604†	35085.2	0.514 mg/L	0.0048	0.93%
Pb	220.353†	5675.8	0.511 mg/L	0.0065	1.28%
Sb	206.836†	5219.6	1.26 mg/L	0.031	2.47%
Se	196.026†	749.0	0.421 mg/L	0.0118	2.81%
Si	251.611†	221163.6	5.28 mg/L	0.128	2.42%
Sn	189.927†	10573.7	1.01 mg/L	0.010	1.02%
Ti	334.940†	1022303.8	1.02 mg/L	0.008	0.82%
Tl	190.801†	1999.7	0.528 mg/L	0.0071	1.35%
V	290.880†	202897.4	1.04 mg/L	0.025	2.36%
Zn	206.200†	43480.4	1.04 mg/L	0.017	1.60%
K	766.490†	164856.7	49.6 mg/L	0.38	0.76%
Na	589.592†	1006928.9	50.9 mg/L	0.43	0.85%
Sr	407.771†	2704456.5	1.01 mg/L	0.001	0.13%
Li	670.784†	163362.1	1.05 mg/L	0.006	0.56%

All analyte(s) passed QC.

```

Sequence No.: 63
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:
=====
uSampler Location: 1
Date Collected: 5/8/2012 9:21:42 PM
Sample Type: Original
Initial Sample Vol:
Sample Prep Vol:

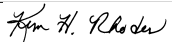
```

```

-----
Nebulizer Parameters: CCB
Analyte      Back Pressure  Flow
All          152.0 kPa     0.50 L/min
-----

```

Approved: May 09, 2012



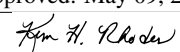
Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2314880.2				15803.84	0.68%
YRADIAL	305279.0				7690.63	2.52%
Ga 417.206	1397030.1				22609.88	1.62%
GaRADIAL	90884.1				4107.67	4.52%
Ag 328.068†	166.3	0.00034 mg/L	0.000279	0.00034 mg/L	0.000279	83.11%
QC value within limits for Ag	328.068	Recovery =	Not calculated			
Al 396.153†	19.4	-0.0303 mg/L	0.00042	-0.0303 mg/L	0.00042	1.38%
QC value within limits for Al	396.153	Recovery =	Not calculated			
As 188.979†	-2.9	-0.00103 mg/L	0.002087	-0.00103 mg/L	0.002087	203.28%
QC value within limits for As	188.979	Recovery =	Not calculated			
Ba 233.527†	48.2	-0.00295 mg/L	0.000127	-0.00295 mg/L	0.000127	4.31%
QC value within limits for Ba	233.527	Recovery =	Not calculated			
Be 234.861†	26.3	0.00011 mg/L	0.000028	0.00011 mg/L	0.000028	24.61%
QC value within limits for Be	234.861	Recovery =	Not calculated			
B 249.677†	388.3	0.00618 mg/L	0.000250	0.00618 mg/L	0.000250	4.04%
QC value within limits for B	249.677	Recovery =	Not calculated			
Ca 227.546†	-9.1	0.0286 mg/L	0.00886	0.0286 mg/L	0.00886	30.95%
QC value within limits for Ca	227.546	Recovery =	Not calculated			
Cd 228.802†	9.2	0.00036 mg/L	0.000177	0.00036 mg/L	0.000177	48.56%
QC value within limits for Cd	228.802	Recovery =	Not calculated			
Co 228.616†	10.5	-0.00044 mg/L	0.000017	-0.00044 mg/L	0.000017	3.78%
QC value within limits for Co	228.616	Recovery =	Not calculated			
Cr 267.716†	-5.2	-0.00204 mg/L	0.000185	-0.00204 mg/L	0.000185	9.05%
QC value within limits for Cr	267.716	Recovery =	Not calculated			
Cu 327.393†	54.2	-0.00024 mg/L	0.000532	-0.00024 mg/L	0.000532	217.28%
QC value within limits for Cu	327.393	Recovery =	Not calculated			
Fe 239.562†	0.9	-0.0103 mg/L	0.00044	-0.0103 mg/L	0.00044	4.24%
QC value within limits for Fe	239.562	Recovery =	Not calculated			
Mg 279.077†	5.8	-0.0233 mg/L	0.00177	-0.0233 mg/L	0.00177	7.60%
QC value within limits for Mg	279.077	Recovery =	Not calculated			
Mn 257.610†	42.9	-0.00286 mg/L	0.000012	-0.00286 mg/L	0.000012	0.41%
QC value within limits for Mn	257.610	Recovery =	Not calculated			
Mo 202.031†	26.1	-0.00140 mg/L	0.000166	-0.00140 mg/L	0.000166	11.84%
QC value within limits for Mo	202.031	Recovery =	Not calculated			
Ni 231.604†	6.7	-0.00193 mg/L	0.000328	-0.00193 mg/L	0.000328	17.03%
QC value within limits for Ni	231.604	Recovery =	Not calculated			
Pb 220.353†	-20.7	-0.00308 mg/L	0.002401	-0.00308 mg/L	0.002401	77.99%
QC value within limits for Pb	220.353	Recovery =	Not calculated			
Sb 206.836†	-1.8	0.00063 mg/L	0.000651	0.00063 mg/L	0.000651	102.68%
QC value within limits for Sb	206.836	Recovery =	Not calculated			
Se 196.026†	0.5	0.00333 mg/L	0.001009	0.00333 mg/L	0.001009	30.33%
QC value within limits for Se	196.026	Recovery =	Not calculated			
Si 251.611†	168.9	-0.00223 mg/L	0.000314	-0.00223 mg/L	0.000314	14.07%
QC value within limits for Si	251.611	Recovery =	Not calculated			
Sn 189.927†	-7.5	-0.00416 mg/L	0.000188	-0.00416 mg/L	0.000188	4.53%
QC value within limits for Sn	189.927	Recovery =	Not calculated			
Ti 334.940†	289.0	-0.00150 mg/L	0.000094	-0.00150 mg/L	0.000094	6.28%
QC value within limits for Ti	334.940	Recovery =	Not calculated			
Tl 190.801†	1.4	-0.00176 mg/L	0.001340	-0.00176 mg/L	0.001340	76.20%
QC value within limits for Tl	190.801	Recovery =	Not calculated			
V 290.880†	1084.4	0.00050 mg/L	0.001260	0.00050 mg/L	0.001260	252.55%
QC value within limits for V	290.880	Recovery =	Not calculated			
Zn 206.200†	-22.2	-0.00264 mg/L	0.000175	-0.00264 mg/L	0.000175	6.61%
QC value within limits for Zn	206.200	Recovery =	Not calculated			
K 766.490†	117.2	-0.00712 mg/L	0.014767	-0.00712 mg/L	0.014767	207.42%
QC value within limits for K	766.490	Recovery =	Not calculated			
Na 589.592†	295.0	0.0365 mg/L	0.01220	0.0365 mg/L	0.01220	33.47%
QC value within limits for Na	589.592	Recovery =	Not calculated			
Sr 407.771†	674.5	-0.00571 mg/L	0.000075	-0.00571 mg/L	0.000075	1.31%
QC value within limits for Sr	407.771	Recovery =	Not calculated			
Li 670.784†	-3.0	-0.00370 mg/L	0.000214	-0.00370 mg/L	0.000214	5.79%
QC value within limits for Li	670.784	Recovery =	Not calculated			

All analyte(s) passed QC.

Sequence No.: 64
 Sample ID: ICSA
 Analyst:
 Initial Sample Wt:

Sampler Location: 12
 Date Collected: 5/8/2012 9:28:35 PM
 Data Type: Original
 Initial Sample Vol:

Approved: May 09, 2012


Dilution:

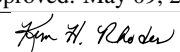
Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte Back Pressure Flow
 All 152.0 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	2118841.4				6196.89	0.29%
YRADIAL	299811.2				4347.41	1.45%
Ga 417.206	1319911.2				20353.46	1.54%
GaRADIAL	90559.4				706.89	0.78%
Ag 328.068†	-12901.8	-0.00009 mg/L	0.000432	-0.00009 mg/L	0.000432	485.77%
QC value within limits for Ag		328.068	Recovery =	Not calculated		
Al 396.153†	1845230.4	248 mg/L	2.8	248 mg/L	2.8	1.11%
QC value within limits for Al		396.153	Recovery =	99.31%		
As 188.979†	-20.7	-0.00123 mg/L	0.003181	-0.00123 mg/L	0.003181	259.28%
QC value within limits for As		188.979	Recovery =	Not calculated		
Ba 233.527†	785.7	-0.00057 mg/L	0.000272	-0.00057 mg/L	0.000272	47.48%
QC value within limits for Ba		233.527	Recovery =	Not calculated		
Be 234.861†	24930.5	-0.00091 mg/L	0.000188	-0.00091 mg/L	0.000188	20.56%
QC value within limits for Be		234.861	Recovery =	Not calculated		
B 249.677†	4454.7	0.0140 mg/L	0.00197	0.0140 mg/L	0.00197	14.04%
QC value within limits for B		249.677	Recovery =	Not calculated		
Ca 227.546†	120826.2	259 mg/L	6.0	259 mg/L	6.0	2.32%
QC value within limits for Ca		227.546	Recovery =	103.49%		
Cd 228.802†	15.8	0.00034 mg/L	0.000169	0.00034 mg/L	0.000169	49.76%
QC value within limits for Cd		228.802	Recovery =	Not calculated		
Co 228.616†	25.1	-0.00242 mg/L	0.000153	-0.00242 mg/L	0.000153	6.32%
QC value within limits for Co		228.616	Recovery =	Not calculated		
Cr 267.716†	48.4	-0.00297 mg/L	0.000137	-0.00297 mg/L	0.000137	4.60%
QC value within limits for Cr		267.716	Recovery =	Not calculated		
Cu 327.393†	-1402.2	0.00213 mg/L	0.000204	0.00213 mg/L	0.000204	9.57%
QC value within limits for Cu		327.393	Recovery =	Not calculated		
Fe 239.562†	1479704.1	92.9 mg/L	1.21	92.9 mg/L	1.21	1.30%
QC value within limits for Fe		239.562	Recovery =	92.91%		
Mg 279.077†	880842.0	248 mg/L	3.4	248 mg/L	3.4	1.39%
QC value within limits for Mg		279.077	Recovery =	99.20%		
Mn 257.610†	-2063.3	-0.00277 mg/L	0.000365	-0.00277 mg/L	0.000365	13.21%
QC value within limits for Mn		257.610	Recovery =	Not calculated		
Mo 202.031†	-56.3	0.00094 mg/L	0.000201	0.00094 mg/L	0.000201	21.52%
QC value within limits for Mo		202.031	Recovery =	Not calculated		
Ni 231.604†	50.8	-0.00127 mg/L	0.000792	-0.00127 mg/L	0.000792	62.16%
QC value within limits for Ni		231.604	Recovery =	Not calculated		
Pb 220.353†	-412.6	-0.00339 mg/L	0.001377	-0.00339 mg/L	0.001377	40.62%
QC value within limits for Pb		220.353	Recovery =	Not calculated		
Sb 206.836†	-29.6	-0.00265 mg/L	0.002098	-0.00265 mg/L	0.002098	79.17%
QC value within limits for Sb		206.836	Recovery =	Not calculated		
Se 196.026†	-52.0	-0.00114 mg/L	0.004519	-0.00114 mg/L	0.004519	396.41%
QC value within limits for Se		196.026	Recovery =	Not calculated		
Si 251.611†	-182.0	-0.0106 mg/L	0.00039	-0.0106 mg/L	0.00039	3.68%
QC value within limits for Si		251.611	Recovery =	Not calculated		
Sn 189.927†	-387.3	-0.0406 mg/L	0.00109	-0.0406 mg/L	0.00109	2.68%
QC value within limits for Sn		189.927	Recovery =	Not calculated		
Ti 334.940†	-38719.6	-0.00191 mg/L	0.002621	-0.00191 mg/L	0.002621	137.12%
QC value within limits for Ti		334.940	Recovery =	Not calculated		
Tl 190.801†	-57.7	-0.0107 mg/L	0.00288	-0.0107 mg/L	0.00288	26.94%
QC value within limits for Tl		190.801	Recovery =	Not calculated		
V 290.880†	5292.5	0.00113 mg/L	0.003680	0.00113 mg/L	0.003680	324.57%
QC value within limits for V		290.880	Recovery =	Not calculated		
Zn 206.200†	212.6	0.00117 mg/L	0.000582	0.00117 mg/L	0.000582	49.88%
QC value within limits for Zn		206.200	Recovery =	Not calculated		
K 766.490†	-36.6	-0.0527 mg/L	0.02891	-0.0527 mg/L	0.02891	54.86%
QC value within limits for K		766.490	Recovery =	Not calculated		
Na 589.592†	31.4	0.0238 mg/L	0.01091	0.0238 mg/L	0.01091	45.87%
QC value within limits for Na		589.592	Recovery =	Not calculated		
Sr 407.771†	2823.8	-0.0105 mg/L	0.00015	-0.0105 mg/L	0.00015	1.46%
QC value less than the lower limit for Sr		407.771	Recovery =	Not calculated		
Li 670.784†	250.7	-0.00206 mg/L	0.000341	-0.00206 mg/L	0.000341	16.54%

Approved: May 09, 2012


QC value within limits for Li 670.784 Recovery = Not calculated
 QC Failed. Continue with analysis.

Sequence No.: 65
 Sample ID: ICSAB
 Analyst:
 Initial Sample Wt:
 Dilution:

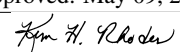
u&osampler Location: 13
 ame Collected: 5/8/2012 9:34:32 PM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: ICSAB

Analyte Back Pressure Flow
 All 153.0 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	2147249.0				15664.75	0.73%
YRADIAL	302734.2				1209.09	0.40%
Ga 417.206	1302758.1				25787.38	1.98%
GaRADIAL	91333.2				582.24	0.64%
Ag 328.068†	148429.2	0.515 mg/L	0.0118	0.515 mg/L	0.0118	2.29%
QC value within limits for Ag	328.068	253 mg/L	102.93%			
Al 396.153†	1883251.0	253 mg/L	2.3	253 mg/L	2.3	0.92%
QC value within limits for Al	396.153	0.243 mg/L	101.36%			
As 188.979†	665.5	0.243 mg/L	0.0029	0.243 mg/L	0.0029	1.19%
QC value within limits for As	188.979	0.245 mg/L	97.10%			
Ba 233.527†	39338.2	0.245 mg/L	0.0034	0.245 mg/L	0.0034	1.37%
QC value within limits for Ba	233.527	0.251 mg/L	98.16%			
Be 234.861†	343937.5	0.251 mg/L	0.0040	0.251 mg/L	0.0040	1.58%
QC value within limits for Be	234.861	0.003675	100.51%			
B 249.677†	4281.0	-0.00021 mg/L	0.003675	-0.00021 mg/L	0.003675	>999.9%
QC value within limits for B	249.677	269 mg/L	Not calculated			
Ca 227.546†	125279.5	269 mg/L	6.0	269 mg/L	6.0	2.23%
QC value within limits for Ca	227.546	0.422 mg/L	107.41%			
Cd 228.802†	23494.3	0.422 mg/L	0.0096	0.422 mg/L	0.0096	2.28%
QC value within limits for Cd	228.802	0.246 mg/L	84.37%			
Co 228.616†	8997.0	0.230 mg/L	0.0022	0.230 mg/L	0.0022	0.94%
QC value within limits for Co	228.616	0.246 mg/L	91.92%			
Cr 267.716†	27215.5	0.246 mg/L	0.0007	0.246 mg/L	0.0007	0.29%
QC value within limits for Cr	267.716	0.255 mg/L	98.51%			
Cu 327.393†	66610.2	0.255 mg/L	0.0037	0.255 mg/L	0.0037	1.46%
QC value within limits for Cu	327.393	93.5 mg/L	102.06%			
Fe 239.562†	1489641.7	93.5 mg/L	1.10	93.5 mg/L	1.10	1.17%
QC value within limits for Fe	239.562	251 mg/L	93.53%			
Mg 279.077†	892161.3	251 mg/L	2.6	251 mg/L	2.6	1.04%
QC value within limits for Mg	279.077	0.238 mg/L	100.48%			
Mn 257.610†	200467.2	0.238 mg/L	0.0021	0.238 mg/L	0.0021	0.86%
QC value within limits for Mn	257.610	0.00099 mg/L	95.37%			
Mo 202.031†	-61.6	0.00099 mg/L	0.000307	0.00099 mg/L	0.000307	30.95%
QC value within limits for Mo	202.031	0.471 mg/L	Not calculated			
Ni 231.604†	32159.3	0.471 mg/L	0.0038	0.471 mg/L	0.0038	0.81%
QC value within limits for Ni	231.604	0.471 mg/L	94.11%			
Pb 220.353†	4855.3	0.471 mg/L	0.0050	0.471 mg/L	0.0050	1.05%
QC value within limits for Pb	220.353	0.498 mg/L	94.28%			
Sb 206.836†	2055.3	0.498 mg/L	0.0144	0.498 mg/L	0.0144	2.90%
QC value within limits for Sb	206.836	0.244 mg/L	99.62%			
Se 196.026†	388.8	0.244 mg/L	0.0101	0.244 mg/L	0.0101	4.12%
QC value within limits for Se	196.026	-0.0116 mg/L	97.64%			
Si 251.611†	-222.2	-0.0116 mg/L	0.00068	-0.0116 mg/L	0.00068	5.89%
QC value within limits for Si	251.611	-0.0406 mg/L	Not calculated			
Sn 189.927†	-387.4	-0.0406 mg/L	0.00121	-0.0406 mg/L	0.00121	2.97%
QC value within limits for Sn	189.927	0.475 mg/L	Not calculated			
Ti 334.940†	-39224.4	-0.00107 mg/L	0.003560	-0.00107 mg/L	0.003560	332.46%
QC value within limits for Ti	334.940	0.475 mg/L	Not calculated			
Tl 190.801†	1826.7	0.475 mg/L	0.0026	0.475 mg/L	0.0026	0.55%
QC value within limits for Tl	190.801	0.244 mg/L	95.00%			
V 290.880†	52249.7	0.244 mg/L	0.0013	0.244 mg/L	0.0013	0.51%
QC value within limits for V	290.880	0.467 mg/L	97.51%			
Zn 206.200†	19722.7	0.467 mg/L	0.0005	0.467 mg/L	0.0005	0.11%

Approved: May 09, 2012


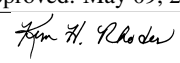
QC value within limits for Zn 206.200 Recovery = 93.38%
 K 766.490† 16128.4 4.74 mg/L 0.045 4.74 mg/L 0.045 0.95%
 QC value within limits for K 766.490 Recovery = 94.86%
 Na 589.592† 100230.5 4.87 mg/L 0.003 4.87 mg/L 0.003 0.05%
 QC value within limits for Na 589.592 Recovery = 97.32%
 Sr 407.771† 2983.5 -0.0107 mg/L 0.00014 -0.0107 mg/L 0.00014 1.36%
 QC value less than the lower limit for Sr 407.771 Recovery = Not calculated
 Li 670.784† 268.8 -0.00194 mg/L 0.000311 -0.00194 mg/L 0.000311 15.99%
 QC value within limits for Li 670.784 Recovery = Not calculated
 QC Failed. Continue with analysis.

Sequence No.: 66 ukosampler Location: 6
 Sample ID: CCV ana Collected: 5/8/2012 9:40:28 PM
 Analyst: ana Type: Original
 Initial Sample Wt: nitial Sample Vol:
 Dilution: ample Prep Vol:

Nebulizer Parameters: CCV
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2316871.5				24923.46	1.08%
YRADIAL	313588.7				1362.07	0.43%
Ga 417.206	1362264.4				31208.13	2.29%
GaRADIAL	93038.0				479.58	0.52%
Ag 328.068†	126112.3	0.405 mg/L	0.0128	0.405 mg/L	0.0128	3.15%
QC value within limits for Ag 328.068			Recovery = 101.27%			
Al 396.153†	73270.3	9.76 mg/L	0.054	9.76 mg/L	0.054	0.55%
QC value within limits for Al 396.153			Recovery = 97.60%			
As 188.979†	1112.5	0.391 mg/L	0.0095	0.391 mg/L	0.0095	2.44%
QC value within limits for As 188.979			Recovery = 97.65%			
Ba 233.527†	153934.4	0.979 mg/L	0.0070	0.979 mg/L	0.0070	0.71%
QC value within limits for Ba 233.527			Recovery = 97.94%			
Be 234.861†	62860.2	0.0494 mg/L	0.00141	0.0494 mg/L	0.00141	2.86%
QC value within limits for Be 234.861			Recovery = 98.74%			
B 249.677†	42448.7	0.497 mg/L	0.0169	0.497 mg/L	0.0169	3.40%
QC value within limits for B 249.677			Recovery = 99.34%			
Ca 227.546†	4623.1	10.3 mg/L	0.29	10.3 mg/L	0.29	2.80%
QC value within limits for Ca 227.546			Recovery = 103.11%			
Cd 228.802†	2797.9	0.0491 mg/L	0.00194	0.0491 mg/L	0.00194	3.95%
QC value within limits for Cd 228.802			Recovery = 98.19%			
Co 228.616†	7554.3	0.194 mg/L	0.0028	0.194 mg/L	0.0028	1.43%
QC value within limits for Co 228.616			Recovery = 97.04%			
Cr 267.716†	53847.0	0.492 mg/L	0.0050	0.492 mg/L	0.0050	1.02%
QC value within limits for Cr 267.716			Recovery = 98.45%			
Cu 327.393†	135042.2	0.503 mg/L	0.0141	0.503 mg/L	0.0141	2.80%
QC value within limits for Cu 327.393			Recovery = 100.69%			
Fe 239.562†	62316.0	3.90 mg/L	0.025	3.90 mg/L	0.025	0.65%
QC value within limits for Fe 239.562			Recovery = 97.56%			
Mg 279.077†	34376.1	9.67 mg/L	0.036	9.67 mg/L	0.036	0.38%
QC value within limits for Mg 279.077			Recovery = 96.72%			
Mn 257.610†	419478.4	0.497 mg/L	0.0047	0.497 mg/L	0.0047	0.94%
QC value within limits for Mn 257.610			Recovery = 99.39%			
Mo 202.031†	36073.4	0.973 mg/L	0.0080	0.973 mg/L	0.0080	0.82%
QC value within limits for Mo 202.031			Recovery = 97.29%			
Ni 231.604†	33542.7	0.491 mg/L	0.0053	0.491 mg/L	0.0053	1.07%
QC value within limits for Ni 231.604			Recovery = 98.20%			
Pb 220.353†	5464.9	0.492 mg/L	0.0062	0.492 mg/L	0.0062	1.25%
QC value within limits for Pb 220.353			Recovery = 98.41%			
Sb 206.836†	4999.2	1.20 mg/L	0.032	1.20 mg/L	0.032	2.64%
QC value within limits for Sb 206.836			Recovery = 100.35%			
Se 196.026†	715.0	0.402 mg/L	0.0072	0.402 mg/L	0.0072	1.80%
QC value within limits for Se 196.026			Recovery = 100.45%			
Si 251.611†	209427.4	5.00 mg/L	0.093	5.00 mg/L	0.093	1.86%
QC value within limits for Si 251.611			Recovery = 100.02%			
Sn 189.927†	10112.8	0.966 mg/L	0.0126	0.966 mg/L	0.0126	1.31%

Approved: May 09, 2012


QC value within limits for Sn	189.927	Recovery = 96.64%				
Ti 334.940†	985121.9	0.981 mg/L	0.0042	0.981 mg/L	0.0042	0.42%
QC value within limits for Ti	334.940	Recovery = 98.12%				
Tl 190.801†	1923.6	0.508 mg/L	0.0065	0.508 mg/L	0.0065	1.29%
QC value within limits for Tl	190.801	Recovery = 101.51%				
V 290.880†	192074.4	0.987 mg/L	0.0109	0.987 mg/L	0.0109	1.10%
QC value within limits for V	290.880	Recovery = 98.72%				
Zn 206.200†	41469.1	0.987 mg/L	0.0040	0.987 mg/L	0.0040	0.40%
QC value within limits for Zn	206.200	Recovery = 98.74%				
K 766.490†	158769.3	47.8 mg/L	0.80	47.8 mg/L	0.80	1.68%
QC value within limits for K	766.490	Recovery = 95.51%				
Na 589.592†	959445.1	48.4 mg/L	0.41	48.4 mg/L	0.41	0.86%
QC value within limits for Na	589.592	Recovery = 96.72%				
Sr 407.771†	2596140.3	0.968 mg/L	0.0168	0.968 mg/L	0.0168	1.74%
QC value within limits for Sr	407.771	Recovery = 96.81%				
Li 670.784†	157205.0	1.01 mg/L	0.022	1.01 mg/L	0.022	2.18%
QC value within limits for Li	670.784	Recovery = 101.16%				

All analyte(s) passed QC.

Sequence No.: 67
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 1
 ame Collected: 5/8/2012 9:46:29 PM
 ana Type: Original
 nitial Sample Vol:
 aSample Prep Vol:

Nebulizer Parameters: CCB
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2349778.4				15778.62	0.67%
YRADIAL	308485.4				4124.55	1.34%
Ga 417.206	1399162.2				9342.95	0.67%
GaRADIAL	91570.2				2470.52	2.70%
Ag 328.068†	120.0	0.00018 mg/L	0.000655	0.00018 mg/L	0.000655	354.43%
QC value within limits for Ag	328.068	Recovery = Not calculated				
Al 396.153†	14.9	-0.0309 mg/L	0.00019	-0.0309 mg/L	0.00019	0.63%
QC value within limits for Al	396.153	Recovery = Not calculated				
As 188.979†	-2.9	-0.00103 mg/L	0.000591	-0.00103 mg/L	0.000591	57.25%
QC value within limits for As	188.979	Recovery = Not calculated				
Ba 233.527†	47.9	-0.00295 mg/L	0.000130	-0.00295 mg/L	0.000130	4.41%
QC value within limits for Ba	233.527	Recovery = Not calculated				
Be 234.861†	63.6	0.00014 mg/L	0.000008	0.00014 mg/L	0.000008	5.72%
QC value within limits for Be	234.861	Recovery = Not calculated				
B 249.677†	421.5	0.00657 mg/L	0.000236	0.00657 mg/L	0.000236	3.59%
QC value within limits for B	249.677	Recovery = Not calculated				
Ca 227.546†	-11.3	0.0243 mg/L	0.03139	0.0243 mg/L	0.03139	129.09%
QC value within limits for Ca	227.546	Recovery = Not calculated				
Cd 228.802†	6.2	0.00031 mg/L	0.000248	0.00031 mg/L	0.000248	79.77%
QC value within limits for Cd	228.802	Recovery = Not calculated				
Co 228.616†	12.1	-0.00040 mg/L	0.000228	-0.00040 mg/L	0.000228	56.79%
QC value within limits for Co	228.616	Recovery = Not calculated				
Cr 267.716†	-2.6	-0.00202 mg/L	0.000057	-0.00202 mg/L	0.000057	2.84%
QC value within limits for Cr	267.716	Recovery = Not calculated				
Cu 327.393†	189.3	0.00026 mg/L	0.000083	0.00026 mg/L	0.000083	32.40%
QC value within limits for Cu	327.393	Recovery = Not calculated				
Fe 239.562†	49.1	-0.00728 mg/L	0.000064	-0.00728 mg/L	0.000064	0.88%
QC value within limits for Fe	239.562	Recovery = Not calculated				
Mg 279.077†	30.8	-0.0163 mg/L	0.00104	-0.0163 mg/L	0.00104	6.40%
QC value within limits for Mg	279.077	Recovery = Not calculated				
Mn 257.610†	42.4	-0.00287 mg/L	0.000015	-0.00287 mg/L	0.000015	0.53%
QC value within limits for Mn	257.610	Recovery = Not calculated				
Mo 202.031†	12.7	-0.00177 mg/L	0.000243	-0.00177 mg/L	0.000243	13.76%
QC value within limits for Mo	202.031	Recovery = Not calculated				
Ni 231.604†	16.8	-0.00178 mg/L	0.000275	-0.00178 mg/L	0.000275	15.47%
QC value within limits for Ni	231.604	Recovery = Not calculated				
Pb 220.353†	-24.3	-0.00340 mg/L	0.000110	-0.00340 mg/L	0.000110	3.25%

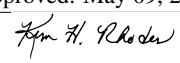
Approved: May 09, 2012


Table with columns for element, QC value, limits, recovery, and concentration. Elements include Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, and Li.

Sequence No.: 68 Sample ID: BLANK Analyst: KHR Initial Sample Wt: Dilution: u\osampler Location: 95 a\ne Collected: 5/8/2012 9:53:22 PM a\ne Type: Original nitial Sample Vol: a\mple Prep Vol:

Nebulizer Parameters: BLANK Analyte Back Pressure Flow All 152.0 kPa 0.50 L/min

Mean Data: BLANK

Table with columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn.

Approved: May 09, 2012 [Signature]

Analysis Begun

Start Time: 5/9/2012 9:49:56 AM Plasma On Time: 12:00:00 AM
Logged In Analyst: peicp2 Ethnique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
Batch ID:
Results Data Set: 050912H
Results Library: C:\pe\peicp2\Results\Results.mdb

Method Loaded Method Name: 200.7-6010 PE-ICP2.1 Method Last Saved: 5/7/2012 8:30:37 AM
IEC File: CA227_LiBeMOD.iec SM File:
Method Description: STANDARD

Sequence No.: 1 Autosampler Location: 1
Sample ID: S0 Date Collected: 5/9/2012 9:49:59 AM
Analyst: Date Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: S0
Analyte Back Pressure Flow
All 156.0 kPa 0.50 L/min

Mean Data: S0

Table with columns: Analyte, Mean Corrected Intensity, Std.Dev., RSD, and Calib Conc. Units. Lists various elements like Y, YRADIAL, Ga, GaRADIAL, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective intensity, standard deviation, and relative standard deviation values.

Sequence No.: 2 Autosampler Location: 2
Sample ID: S1 Date Collected: 5/9/2012 9:56:53 AM

Approved: May 10, 2012
[Signature]

Analyst:
Initial Sample Wt:
Dilution:

ama Type: Original
nitial Sample Vol:
aample Prep Vol:

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow
All	156.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2319637.9	21016.60	0.91%	
YRADIAL	319217.0	2254.94	0.71%	
Ga 417.206	1395199.3	20198.91	1.45%	
GaRADIAL	95535.2	2320.20	2.43%	
Ag 328.068†	1304.3	25.75	1.97%	[0.0040] mg/L
Al 396.153†	814.8	5.77	0.71%	[0.10] mg/L
Ba 233.527†	1525.0	11.47	0.75%	[0.010] mg/L
Be 234.861†	569.8	34.40	6.04%	[0.0005] mg/L
Cd 228.802†	33.7	7.29	21.62%	[0.00050] mg/L
Co 228.616†	77.3	6.03	7.80%	[0.0020] mg/L
Cr 267.716†	542.2	13.25	2.44%	[0.0050] mg/L
Cu 327.393†	1351.6	77.92	5.76%	[0.0050] mg/L
Fe 239.562†	624.8	4.24	0.68%	[0.040] mg/L
Mg 279.077†	364.1	6.84	1.88%	[0.10] mg/L
Mn 257.610†	4350.7	50.56	1.16%	[0.0050] mg/L
Mo 202.031†	357.8	10.50	2.94%	[0.010] mg/L
Ni 231.604†	349.7	8.80	2.52%	[0.0050] mg/L
Pb 220.353†	51.8	3.97	7.68%	[0.0050] mg/L
Sb 206.836†	57.3	2.56	4.47%	[0.012] mg/L
Si 251.611†	2187.8	34.67	1.58%	[0.050] mg/L
Sn 189.927†	104.1	10.28	9.88%	[0.010] mg/L
Ti 334.940†	9985.5	63.41	0.63%	[0.010] mg/L
V 290.880†	1877.5	258.57	13.77%	[0.010] mg/L
Zn 206.200†	409.5	5.53	1.35%	[0.010] mg/L
K 766.490†	1902.1	12.73	0.67%	[0.50] mg/L
Na 589.592†	10523.3	185.63	1.76%	[0.50] mg/L
Sr 407.771†	28711.3	763.81	2.66%	[0.010] mg/L
Li 670.784†	1836.9	53.24	2.90%	[0.010] mg/L

=====

Sequence No.: 3
Sample ID: S2
Analyst:
Initial Sample Wt:
Dilution:

utosampler Location: 3
ame Collected: 5/9/2012 10:03:48 AM
ama Type: Original
nitial Sample Vol:
aample Prep Vol:

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	157.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2323531.4	10343.72	0.45%	
YRADIAL	319233.7	9560.64	2.99%	
Ga 417.206	1441366.8	15226.61	1.06%	
GaRADIAL	96389.2	391.68	0.41%	
Ag 328.068†	2503.2	104.89	4.19%	[0.0080] mg/L
Al 396.153†	1644.5	29.78	1.81%	[0.20] mg/L
As 188.979†	18.3	4.69	25.58%	[0.0080] mg/L
Ba 233.527†	3071.2	10.94	0.36%	[0.020] mg/L
Be 234.861†	1215.7	30.53	2.51%	[0.0010] mg/L
B 249.677†	854.5	16.47	1.93%	[0.010] mg/L
Ca 227.546†	91.0	1.88	2.07%	[0.20] mg/L
Cd 228.802†	52.7	6.47	12.28%	[0.0010] mg/L
Co 228.616†	149.9	2.08	1.39%	[0.0040] mg/L
Cr 267.716†	1085.3	11.77	1.08%	[0.010] mg/L

Approved: May 10, 2012

John H. Rhodes

Cu 327.393†	2725.7	95.34	3.50%	[0.010]	mg/L
Fe 239.562†	1294.3	33.29	2.57%	[0.080]	mg/L
Mg 279.077†	722.2	24.39	3.38%	[0.20]	mg/L
Mn 257.610†	8294.4	134.78	1.62%	[0.010]	mg/L
Mo 202.031†	718.5	3.02	0.42%	[0.020]	mg/L
Ni 231.604†	693.8	17.03	2.46%	[0.010]	mg/L
Pb 220.353†	113.4	13.17	11.62%	[0.010]	mg/L
Sb 206.836†	100.8	4.33	4.29%	[0.024]	mg/L
Se 196.026†	10.0	3.91	39.13%	[0.0080]	mg/L
Si 251.611†	4258.9	46.86	1.10%	[0.10]	mg/L
Sn 189.927†	202.6	5.30	2.62%	[0.020]	mg/L
Ti 334.940†	19775.4	372.76	1.88%	[0.020]	mg/L
Tl 190.801†	38.7	2.74	7.08%	[0.010]	mg/L
V 290.880†	3891.6	326.31	8.38%	[0.020]	mg/L
Zn 206.200†	813.5	7.88	0.97%	[0.020]	mg/L
K 766.490†	3668.7	80.22	2.19%	[1.00]	mg/L
Na 589.592†	21147.8	197.81	0.94%	[1.00]	mg/L
Sr 407.771†	58453.6	2447.85	4.19%	[0.020]	mg/L
Li 670.784†	3709.7	1.30	0.04%	[0.020]	mg/L

Sequence No.: 4
 Sample ID: S3
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 4
 ame Collected: 5/9/2012 10:10:43 AM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: S3

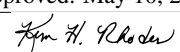
Analyte	Back Pressure	Flow
All	156.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2179896.4	49263.45	2.26%	
YRADIAL	312410.8	2107.12	0.67%	
Ga 417.206	1340297.8	26590.60	1.98%	
GaRADIAL	93537.5	679.71	0.73%	
Ag 328.068†	130716.8	2433.88	1.86%	[0.40] mg/L
Al 396.153†	80155.5	195.02	0.24%	[10.00] mg/L
As 188.979†	1140.1	17.61	1.54%	[0.40] mg/L
Ba 233.527†	153925.7	4564.68	2.97%	[1.00] mg/L
Be 234.861†	64102.3	835.94	1.30%	[0.05] mg/L
B 249.677†	43962.7	783.51	1.78%	[0.50] mg/L
Ca 227.546†	4905.7	114.60	2.34%	[10.00] mg/L
Cd 228.802†	2831.9	88.78	3.13%	[0.05] mg/L
Co 228.616†	7656.5	231.77	3.03%	[0.20] mg/L
Cr 267.716†	54644.3	1459.88	2.67%	[0.50] mg/L
Cu 327.393†	143837.7	2496.74	1.74%	[0.50] mg/L
Fe 239.562†	64237.6	170.77	0.27%	[4.00] mg/L
Mg 279.077†	35880.9	8.96	0.02%	[10.00] mg/L
Mn 257.610†	424973.2	12869.30	3.03%	[0.50] mg/L
Mo 202.031†	36668.5	1030.72	2.81%	[1.00] mg/L
Ni 231.604†	33929.5	1086.04	3.20%	[0.50] mg/L
Pb 220.353†	5525.4	137.66	2.49%	[0.50] mg/L
Sb 206.836†	5141.9	90.87	1.77%	[1.20] mg/L
Se 196.026†	735.7	22.09	3.00%	[0.40] mg/L
Si 251.611†	216031.4	2227.53	1.03%	[5.00] mg/L
Sn 189.927†	10329.2	297.58	2.88%	[1.00] mg/L
Ti 334.940†	1011845.2	7976.66	0.79%	[1.00] mg/L
Tl 190.801†	1968.3	48.40	2.46%	[0.50] mg/L
V 290.880†	196323.3	5555.81	2.83%	[1.00] mg/L
Zn 206.200†	40587.0	1246.56	3.07%	[1.00] mg/L
K 766.490†	174421.4	1908.05	1.09%	[50.00] mg/L
Na 589.592†	1046426.0	16747.27	1.60%	[50.00] mg/L
Sr 407.771†	2835236.4	8295.72	0.29%	[1.00] mg/L
Li 670.784†	180760.9	743.29	0.41%	[1.00] mg/L

Sequence No.: 5

u&osampler Location: 5

Approved: May 10, 2012


Sample ID: S4
 Analyst:
 Initial Sample Wt:
 Dilution:

Sample Collected: 5/9/2012 10:16:42 AM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: S4

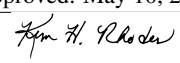
Analyte Back Pressure Flow
 All 156.0 kPa 0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2152947.7	15996.61	0.74%	
YRADIAL	308088.6	2807.88	0.91%	
Ga 417.206	1354577.5	22985.11	1.70%	
GaRADIAL	93984.5	948.53	1.01%	
Ag 328.068†	252017.6	4842.26	1.92%	[0.80] mg/L
Al 396.153†	158854.7	461.74	0.29%	[20.00] mg/L
As 188.979†	2221.8	48.17	2.17%	[0.80] mg/L
Ba 233.527†	299255.2	4226.62	1.41%	[2.00] mg/L
Be 234.861†	124458.4	2419.28	1.94%	[0.10] mg/L
B 249.677†	86713.5	1828.84	2.11%	[1.00] mg/L
Ca 227.546†	9789.0	246.39	2.52%	[20.00] mg/L
Cd 228.802†	5504.1	173.39	3.15%	[0.10] mg/L
Co 228.616†	14946.4	74.11	0.50%	[0.40] mg/L
Cr 267.716†	106074.4	918.52	0.87%	[1.00] mg/L
Cu 327.393†	281454.2	5228.86	1.86%	[1.00] mg/L
Fe 239.562†	129640.6	1294.39	1.00%	[8.00] mg/L
Mg 279.077†	72258.6	586.19	0.81%	[20.00] mg/L
Mn 257.610†	815336.3	13348.12	1.64%	[1.00] mg/L
Mo 202.031†	72344.4	795.28	1.10%	[2.00] mg/L
Ni 231.604†	65714.8	1106.43	1.68%	[1.00] mg/L
Pb 220.353†	10817.7	51.18	0.47%	[1.00] mg/L
Sb 206.836†	10007.5	204.83	2.05%	[2.40] mg/L
Se 196.026†	1436.7	30.90	2.15%	[0.80] mg/L
Si 251.611†	417178.0	6555.96	1.57%	[10.00] mg/L
Sn 189.927†	20232.0	56.82	0.28%	[2.00] mg/L
Ti 334.940†	2015448.3	11210.62	0.56%	[2.00] mg/L
Tl 190.801†	3827.3	55.87	1.46%	[1.00] mg/L
V 290.880†	382236.3	1763.59	0.46%	[2.00] mg/L
Zn 206.200†	77780.8	1594.81	2.05%	[2.00] mg/L
K 766.490†	340297.8	2243.64	0.66%	[100.00] mg/L
Na 589.592†	2054363.1	15159.66	0.74%	[100.00] mg/L
Sr 407.771†	5669951.1	69216.30	1.22%	[2.00] mg/L
Li 670.784†	344234.8	5142.67	1.49%	[2.00] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin, Calc Int	594.9	316500	0.00000	0.999836	
Al 396.153	4	Lin, Calc Int	114.6	7950	0.00000	0.999990	
As 188.979	3	Wt. Lin	-4.2	2821	0.00000	0.999901	
Ba 233.527	4	Lin, Calc Int	568.9	150100	0.00000	0.999904	
Be 234.861	4	Lin, Calc Int	207.8	1250000	0.00000	0.999892	
B 249.677	3	Lin, Calc Int	104.6	86830	0.00000	0.999974	
Ca 227.546	3	Lin, Calc Int	-1.1	489.7	0.00000	0.999999	
Cd 228.802	4	Lin, Calc Int	11.2	55220	0.00000	0.999902	
Co 228.616	4	Lin, Calc Int	23.8	37480	0.00000	0.999929	
Cr 267.716	4	Lin, Calc Int	211.5	106500	0.00000	0.999893	
Cu 327.393	4	Lin, Calc Int	342.2	282300	0.00000	0.999941	
Fe 239.562	4	Lin, Calc Int	-80.6	16190	0.00000	0.999991	
Mg 279.077	4	Lin, Calc Int	-30.2	3610	0.00000	0.999994	
Mn 257.610	4	Lin, Calc Int	2285.4	819500	0.00000	0.999790	
Mo 202.031	4	Lin, Calc Int	59.0	36240	0.00000	0.999978	
Ni 231.604	4	Lin, Calc Int	151.6	65960	0.00000	0.999877	
Pb 220.353	4	Lin, Calc Int	15.4	10850	0.00000	0.999946	
Sb 206.836	4	Lin, Calc Int	19.7	4183	0.00000	0.999912	
Se 196.026	3	Wt. Lin	-4.6	1826	0.00000	0.999907	
Si 251.611	4	Lin, Calc Int	986.2	41900	0.00000	0.999852	

Approved: May 10, 2012


Sn 189.927	4	Lin, Calc Int	27.5	10140	0.00000	0.999948
Ti 334.940	4	Lin, Calc Int	366.1	1008000	0.00000	0.999998
Tl 190.801	3	Lin, Calc Int	10.1	3837	0.00000	0.999892
V 290.880	4	Lin, Calc Int	659.3	191800	0.00000	0.999913
Zn 206.200	4	Lin, Calc Int	228.9	39090	0.00000	0.999779
K 766.490	4	Non Lin, Calc Int	71.2	3572	-1.69563	1.000000
Na 589.592	4	Non Lin, Calc Int	-97.0	21320	-7.71575	1.000000
Sr 407.771	4	Lin, Calc Int	693.7	2835000	0.00000	1.000000
Li 670.784	4	Lin, Calc Int	1196.3	173100	0.00000	0.999709

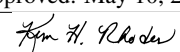
Sequence No.: 6
 Sample ID: ICV 2nd Vendor
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 11
 a&e Collected: 5/9/2012 10:22:43 AM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: ICV 2nd Vendor
 Analyte Back Pressure Flow
 All 156.0 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	2232202.8				23212.40	1.04%
YRADIAL	316650.5				3528.44	1.11%
Ga 417.206	1364843.0				10119.32	0.74%
GaRADIAL	94804.9				1357.23	1.43%
Ag 328.068†	124719.1	0.396 mg/L	0.0070	0.396 mg/L	0.0070	1.77%
QC value within limits for Ag	328.068	Recovery = 98.92%				
Al 396.153†	78626.9	9.81 mg/L	0.028	9.81 mg/L	0.028	0.28%
QC value within limits for Al	396.153	Recovery = 98.09%				
As 188.979†	1109.0	0.390 mg/L	0.0034	0.390 mg/L	0.0034	0.86%
QC value within limits for As	188.979	Recovery = 97.46%				
Ba 233.527†	150625.6	1.000 mg/L	0.0127	1.000 mg/L	0.0127	1.27%
QC value within limits for Ba	233.527	Recovery = 99.97%				
Be 234.861†	62019.6	0.0490 mg/L	0.00080	0.0490 mg/L	0.00080	1.62%
QC value within limits for Be	234.861	Recovery = 98.04%				
B 249.677†	43433.6	0.495 mg/L	0.0076	0.495 mg/L	0.0076	1.54%
QC value within limits for B	249.677	Recovery = 99.04%				
Ca 227.546†	4761.4	10.2 mg/L	0.16	10.2 mg/L	0.16	1.55%
QC value within limits for Ca	227.546	Recovery = 101.85%				
Cd 228.802†	2759.8	0.0484 mg/L	0.00096	0.0484 mg/L	0.00096	1.99%
QC value within limits for Cd	228.802	Recovery = 96.82%				
Co 228.616†	7425.4	0.197 mg/L	0.0030	0.197 mg/L	0.0030	1.54%
QC value within limits for Co	228.616	Recovery = 98.32%				
Cr 267.716†	53189.4	0.498 mg/L	0.0047	0.498 mg/L	0.0047	0.94%
QC value within limits for Cr	267.716	Recovery = 99.60%				
Cu 327.393†	141983.6	0.503 mg/L	0.0060	0.503 mg/L	0.0060	1.19%
QC value within limits for Cu	327.393	Recovery = 100.68%				
Fe 239.562†	63437.2	3.92 mg/L	0.016	3.92 mg/L	0.016	0.40%
QC value within limits for Fe	239.562	Recovery = 98.07%				
Mg 279.077†	34964.3	9.71 mg/L	0.062	9.71 mg/L	0.062	0.64%
QC value within limits for Mg	279.077	Recovery = 97.10%				
Mn 257.610†	415960.2	0.505 mg/L	0.0071	0.505 mg/L	0.0071	1.40%
QC value within limits for Mn	257.610	Recovery = 101.08%				
Mo 202.031†	34974.5	0.964 mg/L	0.0064	0.964 mg/L	0.0064	0.66%
QC value within limits for Mo	202.031	Recovery = 96.43%				
Ni 231.604†	33355.6	0.503 mg/L	0.0064	0.503 mg/L	0.0064	1.28%
QC value within limits for Ni	231.604	Recovery = 100.61%				
Pb 220.353†	5374.3	0.495 mg/L	0.0065	0.495 mg/L	0.0065	1.32%
QC value within limits for Pb	220.353	Recovery = 99.07%				
Sb 206.836†	5158.8	1.23 mg/L	0.011	1.23 mg/L	0.011	0.90%
QC value within limits for Sb	206.836	Recovery = 102.28%				
Se 196.026†	718.6	0.397 mg/L	0.0084	0.397 mg/L	0.0084	2.11%
QC value within limits for Se	196.026	Recovery = 99.37%				
Si 251.611†	210812.9	5.00 mg/L	0.050	5.00 mg/L	0.050	0.99%
QC value within limits for Si	251.611	Recovery = 99.95%				
Sn 189.927†	10376.9	1.02 mg/L	0.014	1.02 mg/L	0.014	1.36%
QC value within limits for Sn	189.927	Recovery = 102.05%				

Approved: May 10, 2012


Ti 334.940†	993077.4	0.986 mg/L	0.0058	0.986 mg/L	0.0058	0.59%
QC value within limits for Ti 334.940 Recovery = 98.58%						
Tl 190.801†	1918.9	0.512 mg/L	0.0033	0.512 mg/L	0.0033	0.64%
QC value within limits for Tl 190.801 Recovery = 102.34%						
V 290.880†	188989.9	0.981 mg/L	0.0104	0.981 mg/L	0.0104	1.06%
QC value within limits for V 290.880 Recovery = 98.10%						
Zn 206.200†	39525.4	1.01 mg/L	0.012	1.01 mg/L	0.012	1.22%
QC value within limits for Zn 206.200 Recovery = 101.00%						
K 766.490†	169128.4	48.4 mg/L	0.12	48.4 mg/L	0.12	0.26%
QC value within limits for K 766.490 Recovery = 96.79%						
Na 589.592†	1015882.7	48.5 mg/L	0.79	48.5 mg/L	0.79	1.64%
QC value within limits for Na 589.592 Recovery = 97.03%						
Sr 407.771†	2775789.0	0.979 mg/L	0.0124	0.979 mg/L	0.0124	1.26%
QC value within limits for Sr 407.771 Recovery = 97.88%						
Li 670.784†	174555.2	1.00 mg/L	0.008	1.00 mg/L	0.008	0.77%
QC value within limits for Li 670.784 Recovery = 100.14%						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

u&osampler Location: 1

ame Collected: 5/9/2012 10:28:41 AM

ama Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	155.0 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	2306806.0				23388.65	1.01%
YRADIAL	317218.0				4273.17	1.35%
Ga 417.206	1409178.1				12916.06	0.92%
GaRADIAL	95699.5				1554.30	1.62%
Ag 328.068†	-112.7	-0.00224 mg/L	0.000367	-0.00224 mg/L	0.000367	16.39%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	3.6	-0.0138 mg/L	0.00094	-0.0138 mg/L	0.00094	6.77%
QC value within limits for Al 396.153 Recovery = Not calculated						
As 188.979†	1.2	0.00195 mg/L	0.001976	0.00195 mg/L	0.001976	101.41%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	3.2	-0.00377 mg/L	0.000040	-0.00377 mg/L	0.000040	1.06%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 234.861†	-45.8	-0.00021 mg/L	0.000041	-0.00021 mg/L	0.000041	19.75%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	598.1	0.00569 mg/L	0.000306	0.00569 mg/L	0.000306	5.37%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	1.7	0.00392 mg/L	0.014705	0.00392 mg/L	0.014705	374.94%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	-1.8	-0.00025 mg/L	0.000156	-0.00025 mg/L	0.000156	63.09%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	-1.2	-0.00067 mg/L	0.000111	-0.00067 mg/L	0.000111	16.58%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	7.2	-0.00192 mg/L	0.000120	-0.00192 mg/L	0.000120	6.27%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	67.6	-0.00097 mg/L	0.000408	-0.00097 mg/L	0.000408	41.91%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	10.6	0.00564 mg/L	0.000310	0.00564 mg/L	0.000310	5.51%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	11.3	0.0114 mg/L	0.00191	0.0114 mg/L	0.00191	16.66%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	26.4	-0.00276 mg/L	0.000013	-0.00276 mg/L	0.000013	0.47%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-6.4	-0.00181 mg/L	0.000354	-0.00181 mg/L	0.000354	19.60%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	-7.3	-0.00241 mg/L	0.000177	-0.00241 mg/L	0.000177	7.36%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	2.1	-0.00123 mg/L	0.000721	-0.00123 mg/L	0.000721	58.49%
QC value within limits for Pb 220.353 Recovery = Not calculated						

Approved: May 10, 2012

John H. Rhodes

Sb 206.836†	1.2	-0.00441 mg/L	0.000491	-0.00441 mg/L	0.000491	11.14%
QC value within limits for Sb 206.836	Recovery = Not calculated					
Se 196.026†	4.9	0.00523 mg/L	0.002975	0.00523 mg/L	0.002975	56.86%
QC value within limits for Se 196.026	Recovery = Not calculated					
Si 251.611†	50.4	-0.0223 mg/L	0.00014	-0.0223 mg/L	0.00014	0.62%
QC value within limits for Si 251.611	Recovery = Not calculated					
Sn 189.927†	12.5	-0.00148 mg/L	0.000226	-0.00148 mg/L	0.000226	15.25%
QC value within limits for Sn 189.927	Recovery = Not calculated					
Ti 334.940†	219.4	-0.00014 mg/L	0.000084	-0.00014 mg/L	0.000084	58.63%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Tl 190.801†	-4.7	-0.00387 mg/L	0.001582	-0.00387 mg/L	0.001582	40.92%
QC value within limits for Tl 190.801	Recovery = Not calculated					
V 290.880†	193.4	-0.00243 mg/L	0.000506	-0.00243 mg/L	0.000506	20.81%
QC value within limits for V 290.880	Recovery = Not calculated					
Zn 206.200†	5.4	-0.00573 mg/L	0.000076	-0.00573 mg/L	0.000076	1.33%
QC value within limits for Zn 206.200	Recovery = Not calculated					
K 766.490†	73.8	0.00070 mg/L	0.025193	0.00070 mg/L	0.025193	>999.9%
QC value within limits for K 766.490	Recovery = Not calculated					
Na 589.592†	77.8	0.00820 mg/L	0.008802	0.00820 mg/L	0.008802	107.32%
QC value within limits for Na 589.592	Recovery = Not calculated					
Sr 407.771†	-45.5	-0.00026 mg/L	0.000029	-0.00026 mg/L	0.000029	11.13%
QC value within limits for Sr 407.771	Recovery = Not calculated					
Li 670.784†	32.8	-0.00672 mg/L	0.000774	-0.00672 mg/L	0.000774	11.52%
QC value within limits for Li 670.784	Recovery = Not calculated					

All analyte(s) passed QC.

```

=====
Sequence No.: 8                               u&osampler Location: 12
Sample ID: ICSA                               a&e Collected: 5/9/2012 10:35:34 AM
Analyst:                                       a&a Type: Original
Initial Sample Wt:                             n&tial Sample Vol:
Dilution:                                     a&ple Prep Vol:
=====
    
```

```

-----
Nebulizer Parameters: ICSA
Analyte      Back Pressure      Flow
All          155.0 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	2048063.7				23496.97	1.15%	
YRADIAL	298649.0				3525.48	1.18%	
Ga 417.206	1296400.4				27135.43	2.09%	
GaRADIAL	91670.2				887.97	0.97%	
Ag 328.068†	-13555.0	-0.00288 mg/L	0.001752	-0.00288 mg/L	0.001752	60.83%	
QC value within limits for Ag 328.068	Recovery = Not calculated						
Al 396.153†	2000719.9	252 mg/L	5.6	252 mg/L	5.6	2.21%	
QC value within limits for Al 396.153	Recovery = 100.66%						
As 188.979†	-15.4	0.00228 mg/L	0.001640	0.00228 mg/L	0.001640	71.84%	
QC value within limits for As 188.979	Recovery = Not calculated						
Ba 233.527†	744.6	-0.00120 mg/L	0.000272	-0.00120 mg/L	0.000272	22.72%	
QC value within limits for Ba 233.527	Recovery = Not calculated						
Be 234.861†	25250.1	-0.00099 mg/L	0.001054	-0.00099 mg/L	0.001054	106.13%	
QC value within limits for Be 234.861	Recovery = Not calculated						
B 249.677†	4494.5	0.0100 mg/L	0.00416	0.0100 mg/L	0.00416	41.56%	
QC value within limits for B 249.677	Recovery = Not calculated						
Ca 227.546†	127195.0	262 mg/L	6.9	262 mg/L	6.9	2.62%	
QC value within limits for Ca 227.546	Recovery = 104.80%						
Cd 228.802†	6.4	-0.00025 mg/L	0.000260	-0.00025 mg/L	0.000260	104.99%	
QC value within limits for Cd 228.802	Recovery = Not calculated						
Co 228.616†	13.9	-0.00265 mg/L	0.000389	-0.00265 mg/L	0.000389	14.64%	
QC value within limits for Co 228.616	Recovery = Not calculated						
Cr 267.716†	50.2	-0.00295 mg/L	0.000224	-0.00295 mg/L	0.000224	7.59%	
QC value within limits for Cr 267.716	Recovery = Not calculated						
Cu 327.393†	-1492.3	0.00141 mg/L	0.000263	0.00141 mg/L	0.000263	18.60%	
QC value within limits for Cu 327.393	Recovery = Not calculated						
Fe 239.562†	1526685.3	94.3 mg/L	1.95	94.3 mg/L	1.95	2.07%	
QC value within limits for Fe 239.562	Recovery = 94.31%						
Mg 279.077†	920540.5	255 mg/L	5.4	255 mg/L	5.4	2.12%	
QC value within limits for Mg 279.077	Recovery = 101.99%						

Approved: May 10, 2012

Tom H. Rhodes

Mn	257.610†	-2083.8	-0.00269 mg/L	0.000591	-0.00269 mg/L	0.000591	21.98%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	-78.3	0.00084 mg/L	0.000219	0.00084 mg/L	0.000219	26.04%
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni	231.604†	59.5	-0.00139 mg/L	0.000607	-0.00139 mg/L	0.000607	43.63%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb	220.353†	-380.9	-0.00110 mg/L	0.001325	-0.00110 mg/L	0.001325	119.98%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb	206.836†	-27.7	-0.00785 mg/L	0.001971	-0.00785 mg/L	0.001971	25.11%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-47.6	0.00150 mg/L	0.005057	0.00150 mg/L	0.005057	337.45%
	QC value within limits for Se 196.026 Recovery = Not calculated						
Si	251.611†	483.9	-0.0119 mg/L	0.00049	-0.0119 mg/L	0.00049	4.12%
	QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	-317.6	-0.0340 mg/L	0.00058	-0.0340 mg/L	0.00058	1.71%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti	334.940†	-40262.1	-0.00133 mg/L	0.003278	-0.00133 mg/L	0.003278	245.74%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	-54.4	-0.0104 mg/L	0.00601	-0.0104 mg/L	0.00601	57.52%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
V	290.880†	5163.1	0.00196 mg/L	0.000713	0.00196 mg/L	0.000713	36.45%
	QC value within limits for V 290.880 Recovery = Not calculated						
Zn	206.200†	194.1	-0.00270 mg/L	0.000629	-0.00270 mg/L	0.000629	23.28%
	QC value within limits for Zn 206.200 Recovery = Not calculated						
K	766.490†	-108.9	-0.0504 mg/L	0.01081	-0.0504 mg/L	0.01081	21.44%
	QC value within limits for K 766.490 Recovery = Not calculated						
Na	589.592†	94.1	0.00897 mg/L	0.007568	0.00897 mg/L	0.007568	84.41%
	QC value within limits for Na 589.592 Recovery = Not calculated						
Sr	407.771†	2944.8	-0.00492 mg/L	0.000157	-0.00492 mg/L	0.000157	3.18%
	QC value within limits for Sr 407.771 Recovery = Not calculated						
Li	670.784†	280.5	-0.00529 mg/L	0.000498	-0.00529 mg/L	0.000498	9.41%
	QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.
User canceled analysis.

Approved: May 10, 2012

John H. Rhodes

=====
Analysis Begun
 =====

Start Time: 5/9/2012 10:41:45 AM Plasma On Time: 12:00:00 AM
 Logged In Analyst: peicp2 eTechnique: ICP Continuous
 Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
 Batch ID:
 Results Data Set: 050912H
 Results Library: C:\pe\peicp2\Results\Results.mdb

=====
 Sequence No.: 1 Autosampler Location: 13
 Sample ID: ICSAB Date Collected: 5/9/2012 10:41:47 AM
 Analyst: Sample Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:
 =====

=====
Nebulizer Parameters: ICSAB
 Analyte Back Pressure Flow
 All 156.0 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	2071509.9				18942.94	0.91%
YRADIAL	306874.9				5258.79	1.71%
Ga 417.206	1325619.2				19122.05	1.44%
GaRADIAL	93782.6				1137.48	1.21%
Ag 328.068†	147340.5	0.506 mg/L	0.0117	0.506 mg/L	0.0117	2.31%
	QC value within limits for Ag	328.068	Recovery = 101.23%			
Al 396.153†	2018296.9	254 mg/L	2.3	254 mg/L	2.3	0.91%
	QC value within limits for Al	396.153	Recovery = 101.54%			
As 188.979†	645.5	0.237 mg/L	0.0044	0.237 mg/L	0.0044	1.85%
	QC value within limits for As	188.979	Recovery = 94.65%			
Ba 233.527†	38012.7	0.247 mg/L	0.0039	0.247 mg/L	0.0039	1.57%
	QC value within limits for Ba	233.527	Recovery = 98.79%			
Be 234.861†	335750.0	0.247 mg/L	0.0019	0.247 mg/L	0.0019	0.76%
	QC value within limits for Be	234.861	Recovery = 98.98%			
B 249.677†	4389.1	-0.00310 mg/L	0.006981	-0.00310 mg/L	0.006981	225.07%
	QC value within limits for B	249.677	Recovery = Not calculated			
Ca 227.546†	127582.7	263 mg/L	5.8	263 mg/L	5.8	2.21%
	QC value within limits for Ca	227.546	Recovery = 105.26%			
Cd 228.802†	22879.7	0.414 mg/L	0.0048	0.414 mg/L	0.0048	1.15%
	QC value within limits for Cd	228.802	Recovery = 82.72%			
Co 228.616†	8787.5	0.231 mg/L	0.0039	0.231 mg/L	0.0039	1.68%
	QC value within limits for Co	228.616	Recovery = 92.54%			
Cr 267.716†	26748.4	0.248 mg/L	0.0014	0.248 mg/L	0.0014	0.56%
	QC value within limits for Cr	267.716	Recovery = 99.18%			
Cu 327.393†	67895.3	0.247 mg/L	0.0059	0.247 mg/L	0.0059	2.37%
	QC value within limits for Cu	327.393	Recovery = 98.90%			
Fe 239.562†	1532482.7	94.7 mg/L	1.85	94.7 mg/L	1.85	1.96%
	QC value within limits for Fe	239.562	Recovery = 94.67%			
Mg 279.077†	922609.9	256 mg/L	5.2	256 mg/L	5.2	2.02%
	QC value within limits for Mg	279.077	Recovery = 102.22%			
Mn 257.610†	196434.7	0.240 mg/L	0.0038	0.240 mg/L	0.0038	1.57%
	QC value within limits for Mn	257.610	Recovery = 95.87%			
Mo 202.031†	-60.0	0.00153 mg/L	0.000541	0.00153 mg/L	0.000541	35.29%
	QC value within limits for Mo	202.031	Recovery = Not calculated			
Ni 231.604†	31550.7	0.476 mg/L	0.0056	0.476 mg/L	0.0056	1.19%
	QC value within limits for Ni	231.604	Recovery = 95.12%			
Pb 220.353†	4790.4	0.476 mg/L	0.0099	0.476 mg/L	0.0099	2.08%
	QC value within limits for Pb	220.353	Recovery = 95.14%			
Sb 206.836†	2061.9	0.490 mg/L	0.0065	0.490 mg/L	0.0065	1.32%
	QC value within limits for Sb	206.836	Recovery = 98.03%			
Se 196.026†	390.8	0.242 mg/L	0.0043	0.242 mg/L	0.0043	1.79%
	QC value within limits for Se	196.026	Recovery = 96.75%			
Si 251.611†	-154.9	-0.0272 mg/L	0.00022	-0.0272 mg/L	0.00022	0.80%

Approved: May 10, 2012

[Signature]

QC value within limits for Si	251.611	Recovery = Not calculated			
Sn 189.927†	-319.6	-0.0342 mg/L	0.00167	-0.0342 mg/L	0.00167 4.87%
QC value within limits for Sn	189.927	Recovery = Not calculated			
Ti 334.940†	-40760.1	-0.00178 mg/L	0.003243	-0.00178 mg/L	0.003243 181.83%
QC value within limits for Ti	334.940	Recovery = Not calculated			
Tl 190.801†	1800.4	0.473 mg/L	0.0027	0.473 mg/L	0.0027 0.58%
QC value within limits for Tl	190.801	Recovery = 94.64%			
V 290.880†	51715.9	0.245 mg/L	0.0014	0.245 mg/L	0.0014 0.55%
QC value within limits for V	290.880	Recovery = 97.84%			
Zn 206.200†	18685.6	0.473 mg/L	0.0035	0.473 mg/L	0.0035 0.73%
QC value within limits for Zn	206.200	Recovery = 94.55%			
K 766.490†	16857.3	4.71 mg/L	0.039	4.71 mg/L	0.039 0.83%
QC value within limits for K	766.490	Recovery = 94.10%			
Na 589.592†	105972.8	4.99 mg/L	0.020	4.99 mg/L	0.020 0.39%
QC value within limits for Na	589.592	Recovery = 99.70%			
Sr 407.771†	2953.7	-0.00493 mg/L	0.000092	-0.00493 mg/L	0.000092 1.86%
QC value within limits for Sr	407.771	Recovery = Not calculated			
Li 670.784†	312.2	-0.00511 mg/L	0.000215	-0.00511 mg/L	0.000215 4.20%
QC value within limits for Li	670.784	Recovery = Not calculated			

All analyte(s) passed QC.

```

=====
Sequence No.: 2                               u&osampler Location: 6
Sample ID: CCV                               a&e Collected: 5/9/2012 10:47:44 AM
Analyst:                                     a&a Type: Original
Initial Sample Wt.:                          nitial Sample Vol:
Dilution:                                   a&ple Prep Vol:
    
```

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2241291.8				31119.19	1.39%
YRADIAL	320661.5				1536.04	0.48%
Ga 417.206	1392021.9				34713.97	2.49%
GaRADIAL	95918.3				621.63	0.65%
Ag 328.068†	125251.0	0.397 mg/L	0.0107	0.397 mg/L	0.0107	2.70%
QC value within limits for Ag	328.068	Recovery = 99.34%				
Al 396.153†	77646.3	9.68 mg/L	0.012	9.68 mg/L	0.012	0.12%
QC value within limits for Al	396.153	Recovery = 96.84%				
As 188.979†	1094.2	0.384 mg/L	0.0075	0.384 mg/L	0.0075	1.94%
QC value within limits for As	188.979	Recovery = 96.12%				
Ba 233.527†	150657.8	1.000 mg/L	0.0148	1.000 mg/L	0.0148	1.48%
QC value within limits for Ba	233.527	Recovery = 100.00%				
Be 234.861†	61451.4	0.0486 mg/L	0.00120	0.0486 mg/L	0.00120	2.46%
QC value within limits for Be	234.861	Recovery = 97.16%				
B 249.677†	42391.9	0.483 mg/L	0.0137	0.483 mg/L	0.0137	2.84%
QC value within limits for B	249.677	Recovery = 96.65%				
Ca 227.546†	4706.1	10.1 mg/L	0.30	10.1 mg/L	0.30	3.01%
QC value within limits for Ca	227.546	Recovery = 100.67%				
Cd 228.802†	2729.1	0.0479 mg/L	0.00191	0.0479 mg/L	0.00191	3.99%
QC value within limits for Cd	228.802	Recovery = 95.76%				
Co 228.616†	7407.1	0.196 mg/L	0.0039	0.196 mg/L	0.0039	1.99%
QC value within limits for Co	228.616	Recovery = 98.12%				
Cr 267.716†	53055.9	0.497 mg/L	0.0045	0.497 mg/L	0.0045	0.91%
QC value within limits for Cr	267.716	Recovery = 99.35%				
Cu 327.393†	137780.0	0.489 mg/L	0.0144	0.489 mg/L	0.0144	2.94%
QC value within limits for Cu	327.393	Recovery = 97.70%				
Fe 239.562†	62906.4	3.89 mg/L	0.017	3.89 mg/L	0.017	0.44%
QC value within limits for Fe	239.562	Recovery = 97.25%				
Mg 279.077†	34856.2	9.68 mg/L	0.042	9.68 mg/L	0.042	0.44%
QC value within limits for Mg	279.077	Recovery = 96.80%				
Mn 257.610†	414550.7	0.504 mg/L	0.0069	0.504 mg/L	0.0069	1.37%
QC value within limits for Mn	257.610	Recovery = 100.74%				
Mo 202.031†	35796.0	0.987 mg/L	0.0136	0.987 mg/L	0.0136	1.38%
QC value within limits for Mo	202.031	Recovery = 98.70%				
Ni 231.604†	33045.5	0.498 mg/L	0.0079	0.498 mg/L	0.0079	1.59%

Approved: May 10, 2012
John H. Rhodes

Table with columns for analyte (e.g., Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li), concentration (mg/L), and recovery percentage. Includes a note: 'All analyte(s) passed QC.'

Sequence No.: 3 Sample ID: CCB Analyst: Initial Sample Wt: Dilution: uosampler Location: 1 Date Collected: 5/9/2012 10:53:45 AM Alpha Type: Original Initial Sample Vol: Sample Prep Vol:

Nebulizer Parameters: CCB Analyte All Back Pressure 155.0 kPa Flow 0.50 L/min

Table with columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe with their respective values.

Approved: May 10, 2012 [Signature]

Mg	279.077†	QC value within limits for Mg	279.077	Recovery = Not calculated	0.0159 mg/L	0.00245	15.35%
Mn	257.610†	QC value within limits for Mn	257.610	Recovery = Not calculated	0.000016 mg/L	-0.00274	0.59%
Mo	202.031†	QC value within limits for Mo	202.031	Recovery = Not calculated	0.000230 mg/L	-0.00157	14.66%
Ni	231.604†	QC value within limits for Ni	231.604	Recovery = Not calculated	0.000375 mg/L	-0.00227	16.54%
Pb	220.353†	QC value within limits for Pb	220.353	Recovery = Not calculated	0.000663 mg/L	-0.00123	53.78%
Sb	206.836†	QC value within limits for Sb	206.836	Recovery = Not calculated	0.000936 mg/L	-0.00363	25.77%
Se	196.026†	QC value within limits for Se	196.026	Recovery = Not calculated	0.002628 mg/L	0.00247	106.27%
Si	251.611†	QC value within limits for Si	251.611	Recovery = Not calculated	0.00043 mg/L	-0.0227	1.88%
Sn	189.927†	QC value within limits for Sn	189.927	Recovery = Not calculated	0.000564 mg/L	-0.00172	32.73%
Ti	334.940†	QC value within limits for Ti	334.940	Recovery = Not calculated	0.000195 mg/L	-0.00026	75.51%
Tl	190.801†	QC value within limits for Tl	190.801	Recovery = Not calculated	0.000812 mg/L	-0.00236	34.35%
V	290.880†	QC value within limits for V	290.880	Recovery = Not calculated	0.000723 mg/L	-0.00008	934.97%
Zn	206.200†	QC value within limits for Zn	206.200	Recovery = Not calculated	0.000204 mg/L	-0.00552	3.69%
K	766.490†	QC value within limits for K	766.490	Recovery = Not calculated	0.006314 mg/L	-0.00888	71.09%
Na	589.592†	QC value within limits for Na	589.592	Recovery = Not calculated	0.0203 mg/L	0.0203	11.46%
Sr	407.771†	QC value within limits for Sr	407.771	Recovery = Not calculated	0.000032 mg/L	-0.00015	21.13%
Li	670.784†	QC value within limits for Li	670.784	Recovery = Not calculated	0.000306 mg/L	-0.00715	4.27%

All analyte(s) passed QC.

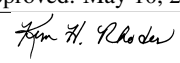
Sequence No.: 4
 Sample ID: PBW 02 WG396210-02
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u\osampler Location: 34
 ame Collected: 5/9/2012 11:00:38 AM
 ama Type: Original
 nitial Sample Vol:
 aample Prep Vol:

Nebulizer Parameters: PBW 02 WG396210-02
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: PBW 02 WG396210-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2323627.8				16977.86	0.73%
YRADIAL	318943.8				5153.64	1.62%
Ga 417.206	1451688.3				19503.99	1.34%
GarADIAL	97048.4				1672.26	1.72%
Ag 328.068†	73.6	-0.00164 mg/L	0.000469	-0.00164 mg/L	0.000469	28.54%
Al 396.153†	24.2	-0.0113 mg/L	0.00186	-0.0113 mg/L	0.00186	16.53%
As 188.979†	-3.0	0.00046 mg/L	0.002304	0.00046 mg/L	0.002304	500.42%
Ba 233.527†	25.4	-0.00362 mg/L	0.000180	-0.00362 mg/L	0.000180	4.98%
Be 234.861†	60.2	-0.00012 mg/L	0.000020	-0.00012 mg/L	0.000020	16.76%
B 249.677†	322.7	0.00252 mg/L	0.000171	0.00252 mg/L	0.000171	6.81%
Ca 227.546†	2.6	0.00591 mg/L	0.006593	0.00591 mg/L	0.006593	111.60%
Cd 228.802†	2.7	-0.00016 mg/L	0.000298	-0.00016 mg/L	0.000298	189.10%
Co 228.616†	7.8	-0.00043 mg/L	0.000179	-0.00043 mg/L	0.000179	41.73%
Cr 267.716†	8.5	-0.00191 mg/L	0.000077	-0.00191 mg/L	0.000077	4.05%
Cu 327.393†	-101.4	-0.00157 mg/L	0.000233	-0.00157 mg/L	0.000233	14.83%
Fe 239.562†	80.9	0.00998 mg/L	0.001245	0.00998 mg/L	0.001245	12.48%
Mg 279.077†	10.3	0.0112 mg/L	0.00172	0.0112 mg/L	0.00172	15.36%
Mn 257.610†	99.9	-0.00267 mg/L	0.000023	-0.00267 mg/L	0.000023	0.86%
Mo 202.031†	-0.2	-0.00164 mg/L	0.000117	-0.00164 mg/L	0.000117	7.13%

Approved: May 10, 2012


Ni 231.604†	4.5	-0.00223	mg/L	0.000382	-0.00223	mg/L	0.000382	17.13%
Pb 220.353†	-0.7	-0.00149	mg/L	0.000198	-0.00149	mg/L	0.000198	13.27%
Sb 206.836†	6.5	-0.00314	mg/L	0.000897	-0.00314	mg/L	0.000897	28.59%
Se 196.026†	9.0	0.00746	mg/L	0.001277	0.00746	mg/L	0.001277	17.12%
Si 251.611†	83.7	-0.0215	mg/L	0.00040	-0.0215	mg/L	0.00040	1.84%
Sn 189.927†	-13.7	-0.00407	mg/L	0.000188	-0.00407	mg/L	0.000188	4.63%
Ti 334.940†	68.3	-0.00029	mg/L	0.000248	-0.00029	mg/L	0.000248	84.54%
Tl 190.801†	-0.2	-0.00271	mg/L	0.000514	-0.00271	mg/L	0.000514	18.98%
V 290.880†	482.7	-0.00092	mg/L	0.001552	-0.00092	mg/L	0.001552	168.15%
Zn 206.200†	54.7	-0.00448	mg/L	0.000173	-0.00448	mg/L	0.000173	3.86%
K 766.490†	32.4	-0.0109	mg/L	0.01912	-0.0109	mg/L	0.01912	175.63%
Na 589.592†	-21.0	0.00357	mg/L	0.006444	0.00357	mg/L	0.006444	180.65%
Sr 407.771†	-67.7	-0.00027	mg/L	0.000022	-0.00027	mg/L	0.000022	8.20%
Li 670.784†	-28.5	-0.00707	mg/L	0.000323	-0.00707	mg/L	0.000323	4.57%

Sequence No.: 5

Sample ID: LCSW 02 WG396210-03

Analyst: KHR

Initial Sample Wt:

Dilution:

u@sampler Location: 35

a@e Collected: 5/9/2012 11:07:35 AM

a@a Type: Original

n@tial Sample Vol:

a@mple Prep Vol:

Nebulizer Parameters: LCSW 02 WG396210-03

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: LCSW 02 WG396210-03

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2242520.0						15651.13	0.70%
YRADIAL	315142.2						3600.70	1.14%
Ga 417.206	1376091.0						42827.93	3.11%
GaRADIAL	94146.7						2028.36	2.15%
Ag 328.068†	65278.6	0.206	mg/L	0.0061	0.206	mg/L	0.0061	2.97%
Al 396.153†	40471.1	5.04	mg/L	0.015	5.04	mg/L	0.015	0.29%
As 188.979†	560.1	0.198	mg/L	0.0059	0.198	mg/L	0.0059	2.99%
Ba 233.527†	76799.7	0.508	mg/L	0.0048	0.508	mg/L	0.0048	0.95%
Be 234.861†	31915.8	0.0252	mg/L	0.00090	0.0252	mg/L	0.00090	3.58%
B 249.677†	88171.7	1.01	mg/L	0.029	1.01	mg/L	0.029	2.85%
Ca 227.546†	2378.6	5.10	mg/L	0.167	5.10	mg/L	0.167	3.29%
Cd 228.802†	1410.6	0.0247	mg/L	0.00110	0.0247	mg/L	0.00110	4.48%
Co 228.616†	3807.9	0.101	mg/L	0.0008	0.101	mg/L	0.0008	0.82%
Cr 267.716†	27252.3	0.254	mg/L	0.0008	0.254	mg/L	0.0008	0.33%
Cu 327.393†	72854.0	0.258	mg/L	0.0081	0.258	mg/L	0.0081	3.13%
Fe 239.562†	32503.6	2.01	mg/L	0.017	2.01	mg/L	0.017	0.83%
Mg 279.077†	18368.4	5.10	mg/L	0.039	5.10	mg/L	0.039	0.76%
Mn 257.610†	209727.4	0.253	mg/L	0.0031	0.253	mg/L	0.0031	1.24%
Mo 202.031†	18371.1	0.506	mg/L	0.0047	0.506	mg/L	0.0047	0.93%
Ni 231.604†	17233.2	0.259	mg/L	0.0023	0.259	mg/L	0.0023	0.89%
Pb 220.353†	2742.1	0.252	mg/L	0.0008	0.252	mg/L	0.0008	0.30%
Sb 206.836†	2569.1	0.609	mg/L	0.0189	0.609	mg/L	0.0189	3.10%
Se 196.026†	371.9	0.207	mg/L	0.0037	0.207	mg/L	0.0037	1.81%
Si 251.611†	111526.9	2.63	mg/L	0.080	2.63	mg/L	0.080	3.04%
Sn 189.927†	5562.9	0.546	mg/L	0.0041	0.546	mg/L	0.0041	0.75%
Ti 334.940†	501508.7	0.498	mg/L	0.0013	0.498	mg/L	0.0013	0.26%
Tl 190.801†	998.9	0.265	mg/L	0.0067	0.265	mg/L	0.0067	2.52%
V 290.880†	98707.0	0.511	mg/L	0.0044	0.511	mg/L	0.0044	0.85%
Zn 206.200†	20383.3	0.518	mg/L	0.0045	0.518	mg/L	0.0045	0.88%
K 766.490†	86751.3	24.5	mg/L	0.10	24.5	mg/L	0.10	0.43%
Na 589.592†	531795.4	25.2	mg/L	0.70	25.2	mg/L	0.70	2.80%
Sr 407.771†	1412239.4	0.498	mg/L	0.0078	0.498	mg/L	0.0078	1.58%
Li 670.784†	90656.4	0.517	mg/L	0.0074	0.517	mg/L	0.0074	1.43%

Sequence No.: 6

Sample ID: L1204084401 WG396210-01

Analyst: KHR

Initial Sample Wt:

Dilution:

u@sampler Location: 36

a@e Collected: 5/9/2012 11:13:32 AM

a@a Type: Original

n@tial Sample Vol:

a@mple Prep Vol:

Approved: May 10, 2012
<i>John H. Rhodes</i>

Nebulizer Parameters: L1204084401 WG396210-01
 Analyte Back Pressure Flow
 All 155.0 kPa 0.50 L/min

Mean Data: L1204084401 WG396210-01

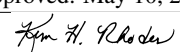
Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2147363.2					18519.82	0.86%
YRADIAL	302427.7					1429.40	0.47%
Ga 417.206	1408517.4					36687.49	2.60%
GaRADIAL	94293.8					917.86	0.97%
Ag 328.068†	-468.2	0.00064	mg/L	0.000460	0.00064	0.000460	71.57%
Al 396.153†	7.6	-0.0123	mg/L	0.00283	-0.0123	0.00283	23.04%
As 188.979†	-13.0	-0.00207	mg/L	0.000928	-0.00207	0.000928	44.89%
Ba 233.527†	21098.3	0.136	mg/L	0.0024	0.136	0.0024	1.77%
Be 234.861†	2458.4	-0.00027	mg/L	0.000092	-0.00027	0.000092	34.65%
B 249.677†	9149.4	0.100	mg/L	0.0027	0.100	0.0027	2.72%
Ca 227.546†	68136.3	139	mg/L	4.4	139	4.4	3.12%
Cd 228.802†	148.8	0.00249	mg/L	0.000243	0.00249	0.000243	9.77%
Co 228.616†	23.6	-0.00025	mg/L	0.000256	-0.00025	0.000256	102.76%
Cr 267.716†	94.6	-0.00077	mg/L	0.000090	-0.00077	0.000090	11.69%
Cu 327.393†	390.2	0.00094	mg/L	0.000418	0.00094	0.000418	44.42%
Fe 239.562†	151839.9	9.38	mg/L	0.069	9.38	0.069	0.73%
Mg 279.077†	102094.9	28.3	mg/L	0.16	28.3	0.16	0.58%
Mn 257.610†	218714.8	0.264	mg/L	0.0045	0.264	0.0045	1.72%
Mo 202.031†	38.8	-0.00004	mg/L	0.000310	-0.00004	0.000310	770.22%
Ni 231.604†	180.2	0.00044	mg/L	0.000497	0.00044	0.000497	113.84%
Pb 220.353†	6.1	-0.00072	mg/L	0.001352	-0.00072	0.001352	187.49%
Sb 206.836†	-0.0	-0.00436	mg/L	0.001957	-0.00436	0.001957	44.90%
Se 196.026†	-2.4	0.00396	mg/L	0.000960	0.00396	0.000960	24.21%
Si 251.611†	264823.5	6.30	mg/L	0.126	6.30	0.126	2.01%
Sn 189.927†	-282.0	-0.0305	mg/L	0.00021	-0.0305	0.00021	0.67%
Ti 334.940†	-22313.8	-0.00162	mg/L	0.002048	-0.00162	0.002048	126.21%
Tl 190.801†	-22.3	-0.00897	mg/L	0.003531	-0.00897	0.003531	39.35%
V 290.880†	2166.2	0.00564	mg/L	0.002823	0.00564	0.002823	50.10%
Zn 206.200†	3240.1	0.0768	mg/L	0.00065	0.0768	0.00065	0.84%
K 766.490†	15641.5	4.30	mg/L	0.084	4.30	0.084	1.94%
Na 589.592†	1394441.6	67.0	mg/L	0.24	67.0	0.24	0.35%
Sr 407.771†	1947553.6	0.684	mg/L	0.0044	0.684	0.0044	0.65%
Li 670.784†	5496.0	0.0248	mg/L	0.00063	0.0248	0.00063	2.56%

Sequence No.: 7 u&osampler Location: 37
 Sample ID: L1204084401S WG396210-04 a&e Collected: 5/9/2012 11:19:30 AM
 Analyst: KHR a&a Type: Original
 Initial Sample Wt: a&nitial Sample Vol:
 Dilution: a&mple Prep Vol:

Nebulizer Parameters: L1204084401S WG396210-04
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1204084401S WG396210-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2145766.0					5193.96	0.24%
YRADIAL	302501.7					4320.87	1.43%
Ga 417.206	1418510.3					33093.98	2.33%
GaRADIAL	93446.5					1336.39	1.43%
Ag 328.068†	60662.8	0.195	mg/L	0.0060	0.195	0.0060	3.07%
Al 396.153†	40232.4	5.01	mg/L	0.009	5.01	0.009	0.18%
As 188.979†	527.5	0.187	mg/L	0.0047	0.187	0.0047	2.52%
Ba 233.527†	95899.5	0.635	mg/L	0.0026	0.635	0.0026	0.40%
Be 234.861†	32386.7	0.0235	mg/L	0.00061	0.0235	0.00061	2.60%
B 249.677†	92721.0	1.06	mg/L	0.034	1.06	0.034	3.23%
Ca 227.546†	71862.6	147	mg/L	4.6	147	4.6	3.13%
Cd 228.802†	1428.1	0.0250	mg/L	0.00102	0.0250	0.00102	4.10%
Co 228.616†	3643.5	0.0959	mg/L	0.00049	0.0959	0.00049	0.51%

Approved: May 10, 2012


Cr 267.716†	26541.0	0.248 mg/L	0.0049	0.248 mg/L	0.0049	1.98%
Cu 327.393†	67979.6	0.241 mg/L	0.0062	0.241 mg/L	0.0062	2.58%
Fe 239.562†	180702.2	11.2 mg/L	0.07	11.2 mg/L	0.07	0.60%
Mg 279.077†	119607.9	33.1 mg/L	0.20	33.1 mg/L	0.20	0.61%
Mn 257.610†	428165.0	0.520 mg/L	0.0016	0.520 mg/L	0.0016	0.31%
Mo 202.031†	18062.3	0.498 mg/L	0.0067	0.498 mg/L	0.0067	1.35%
Ni 231.604†	16313.9	0.245 mg/L	0.0028	0.245 mg/L	0.0028	1.15%
Pb 220.353†	2689.2	0.247 mg/L	0.0009	0.247 mg/L	0.0009	0.37%
Sb 206.836†	2415.9	0.573 mg/L	0.0139	0.573 mg/L	0.0139	2.43%
Se 196.026†	348.1	0.197 mg/L	0.0037	0.197 mg/L	0.0037	1.89%
Si 251.611†	373719.4	8.89 mg/L	0.186	8.89 mg/L	0.186	2.09%
Sn 189.927†	5198.3	0.510 mg/L	0.0036	0.510 mg/L	0.0036	0.70%
Ti 334.940†	477282.5	0.495 mg/L	0.0020	0.495 mg/L	0.0020	0.40%
Tl 190.801†	925.6	0.245 mg/L	0.0054	0.245 mg/L	0.0054	2.22%
V 290.880†	98826.1	0.509 mg/L	0.0097	0.509 mg/L	0.0097	1.90%
Zn 206.200†	22269.3	0.566 mg/L	0.0020	0.566 mg/L	0.0020	0.36%
K 766.490†	102883.6	29.1 mg/L	0.11	29.1 mg/L	0.11	0.37%
Na 589.592†	1960540.7	95.3 mg/L	2.26	95.3 mg/L	2.26	2.38%
Sr 407.771†	3393844.5	1.19 mg/L	0.034	1.19 mg/L	0.034	2.82%
Li 670.784†	95037.5	0.542 mg/L	0.0049	0.542 mg/L	0.0049	0.90%

Sequence No.: 8

Sample ID: L1204084401SD WG396210-05

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 38

a&e Collected: 5/9/2012 11:25:30 AM

a&a Type: Original

n&i&tial Sample Vol:

a&mple Prep Vol:

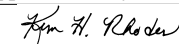
Nebulizer Parameters: L1204084401SD WG396210-05

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1204084401SD WG396210-05

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2115190.8				5104.27	0.24%
YRADIAL	298125.3				1379.64	0.46%
Ga 417.206	1359575.7				48954.93	3.60%
GaRADIAL	91572.3				63.57	0.07%
Ag 328.068†	64318.7	0.207 mg/L	0.0083	0.207 mg/L	0.0083	4.00%
Al 396.153†	41434.6	5.16 mg/L	0.010	5.16 mg/L	0.010	0.19%
As 188.979†	554.6	0.197 mg/L	0.0058	0.197 mg/L	0.0058	2.94%
Ba 233.527†	98651.0	0.653 mg/L	0.0027	0.653 mg/L	0.0027	0.41%
Be 234.861†	34333.9	0.0250 mg/L	0.00097	0.0250 mg/L	0.00097	3.89%
B 249.677†	98613.8	1.13 mg/L	0.048	1.13 mg/L	0.048	4.25%
Ca 227.546†	75149.4	154 mg/L	6.8	154 mg/L	6.8	4.41%
Cd 228.802†	1521.8	0.0267 mg/L	0.00135	0.0267 mg/L	0.00135	5.06%
Co 228.616†	3772.7	0.0994 mg/L	0.00092	0.0994 mg/L	0.00092	0.92%
Cr 267.716†	27455.9	0.256 mg/L	0.0028	0.256 mg/L	0.0028	1.10%
Cu 327.393†	71746.7	0.255 mg/L	0.0107	0.255 mg/L	0.0107	4.20%
Fe 239.562†	185234.3	11.4 mg/L	0.10	11.4 mg/L	0.10	0.85%
Mg 279.077†	122343.4	33.9 mg/L	0.16	33.9 mg/L	0.16	0.46%
Mn 257.610†	439954.8	0.535 mg/L	0.0019	0.535 mg/L	0.0019	0.35%
Mo 202.031†	18622.8	0.513 mg/L	0.0061	0.513 mg/L	0.0061	1.18%
Ni 231.604†	16939.4	0.254 mg/L	0.0016	0.254 mg/L	0.0016	0.64%
Pb 220.353†	2776.6	0.255 mg/L	0.0018	0.255 mg/L	0.0018	0.69%
Sb 206.836†	2564.6	0.608 mg/L	0.0202	0.608 mg/L	0.0202	3.33%
Se 196.026†	381.7	0.215 mg/L	0.0138	0.215 mg/L	0.0138	6.42%
Si 251.611†	391968.6	9.33 mg/L	0.308	9.33 mg/L	0.308	3.30%
Sn 189.927†	5358.0	0.526 mg/L	0.0031	0.526 mg/L	0.0031	0.59%
Ti 334.940†	492688.8	0.511 mg/L	0.0015	0.511 mg/L	0.0015	0.29%
Tl 190.801†	941.6	0.250 mg/L	0.0063	0.250 mg/L	0.0063	2.51%
V 290.880†	102010.8	0.526 mg/L	0.0089	0.526 mg/L	0.0089	1.69%
Zn 206.200†	22998.3	0.585 mg/L	0.0025	0.585 mg/L	0.0025	0.42%
K 766.490†	105070.2	29.7 mg/L	0.31	29.7 mg/L	0.31	1.03%
Na 589.592†	1992132.5	96.9 mg/L	0.19	96.9 mg/L	0.19	0.20%
Sr 407.771†	3436651.1	1.21 mg/L	0.011	1.21 mg/L	0.011	0.89%
Li 670.784†	97888.0	0.559 mg/L	0.0046	0.559 mg/L	0.0046	0.81%

Approved: May 10, 2012



Sequence No.: 9
 Sample ID: L1204084402
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 39
 a&e Collected: 5/9/2012 11:31:30 AM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: L1204084402

Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1204084402

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2208968.8				17259.62	0.78%
YRADIAL	310422.2				3797.12	1.22%
Ga 417.206	1447395.3				18704.34	1.29%
GaRADIAL	96786.8				1327.63	1.37%
Ag 328.068†	-355.6	0.00083 mg/L	0.000329	0.00083 mg/L	0.000329	39.84%
Al 396.153†	-52.8	-0.0199 mg/L	0.00772	-0.0199 mg/L	0.00772	38.74%
As 188.979†	-3.1	0.00141 mg/L	0.000725	0.00141 mg/L	0.000725	51.38%
Ba 233.527†	20802.6	0.135 mg/L	0.0019	0.135 mg/L	0.0019	1.39%
Be 234.861†	2379.7	-0.00024 mg/L	0.000013	-0.00024 mg/L	0.000013	5.55%
B 249.677†	9614.6	0.106 mg/L	0.0034	0.106 mg/L	0.0034	3.21%
Ca 227.546†	67970.4	139 mg/L	4.5	139 mg/L	4.5	3.22%
Cd 228.802†	41.5	0.00053 mg/L	0.000117	0.00053 mg/L	0.000117	22.05%
Co 228.616†	27.3	-0.00014 mg/L	0.000216	-0.00014 mg/L	0.000216	154.48%
Cr 267.716†	95.7	-0.00077 mg/L	0.000127	-0.00077 mg/L	0.000127	16.37%
Cu 327.393†	-71.9	-0.00073 mg/L	0.000393	-0.00073 mg/L	0.000393	53.89%
Fe 239.562†	145589.8	9.00 mg/L	0.142	9.00 mg/L	0.142	1.58%
Mg 279.077†	100654.9	27.9 mg/L	0.43	27.9 mg/L	0.43	1.53%
Mn 257.610†	214404.1	0.259 mg/L	0.0048	0.259 mg/L	0.0048	1.86%
Mo 202.031†	35.7	-0.00015 mg/L	0.000163	-0.00015 mg/L	0.000163	111.87%
Ni 231.604†	205.1	0.00081 mg/L	0.000693	0.00081 mg/L	0.000693	85.04%
Pb 220.353†	20.4	0.00063 mg/L	0.001825	0.00063 mg/L	0.001825	287.78%
Sb 206.836†	-0.3	-0.00444 mg/L	0.001118	-0.00444 mg/L	0.001118	25.18%
Se 196.026†	-6.7	0.00147 mg/L	0.003217	0.00147 mg/L	0.003217	218.98%
Si 251.611†	263400.4	6.26 mg/L	0.094	6.26 mg/L	0.094	1.50%
Sn 189.927†	-278.1	-0.0301 mg/L	0.00045	-0.0301 mg/L	0.00045	1.49%
Ti 334.940†	-22303.4	-0.00166 mg/L	0.001752	-0.00166 mg/L	0.001752	105.32%
Tl 190.801†	-30.7	-0.0112 mg/L	0.00192	-0.0112 mg/L	0.00192	17.21%
V 290.880†	1929.4	0.00447 mg/L	0.001633	0.00447 mg/L	0.001633	36.53%
Zn 206.200†	2982.6	0.0703 mg/L	0.00051	0.0703 mg/L	0.00051	0.72%
K 766.490†	15447.3	4.25 mg/L	0.051	4.25 mg/L	0.051	1.21%
Na 589.592†	1398520.7	67.2 mg/L	0.27	67.2 mg/L	0.27	0.39%
Sr 407.771†	1942627.5	0.682 mg/L	0.0030	0.682 mg/L	0.0030	0.44%
Li 670.784†	5453.7	0.0246 mg/L	0.00132	0.0246 mg/L	0.00132	5.35%

Sequence No.: 10
 Sample ID: L1204084403
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

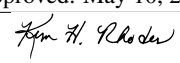
u&osampler Location: 40
 a&e Collected: 5/9/2012 11:37:29 AM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: L1204084403

Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1204084403

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2174166.0				13255.13	0.61%
YRADIAL	307051.1				1231.93	0.40%
Ga 417.206	1417460.6				2987.85	0.21%
GaRADIAL	95442.9				510.34	0.53%
Ag 328.068†	-2505.0	0.00050 mg/L	0.000581	0.00050 mg/L	0.000581	116.02%
Al 396.153†	-30.6	-0.0154 mg/L	0.01063	-0.0154 mg/L	0.01063	69.17%
As 188.979†	-10.0	0.00057 mg/L	0.000490	0.00057 mg/L	0.000490	85.92%

Approved: May 10, 2012


K 766.490†	101069.0	28.6 mg/L	0.05	28.6 mg/L	0.05	0.17%
Na 589.592†	1846427.2	89.5 mg/L	0.27	89.5 mg/L	0.27	0.30%
Sr 407.771†	2994712.3	1.05 mg/L	0.005	1.05 mg/L	0.005	0.48%
Li 670.784†	94444.3	0.539 mg/L	0.0079	0.539 mg/L	0.0079	1.47%

Sequence No.: 12
 Sample ID: L1204084403DL WG396298-04
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

uSampler Location: 42
 Date Collected: 5/9/2012 11:49:29 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1204084403DL WG396298-04

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1204084403DL WG396298-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2325029.5					18646.09	0.80%
YRADIAL	312625.5					536.24	0.17%
Ga 417.206	1404608.0					36184.42	2.58%
GaRADIAL	93862.0					958.53	1.02%
Ag 328.068†	-381.1	-0.00099	mg/L	0.000241	-0.00099	0.000241	24.27%
Al 396.153†	17.7	-0.0116	mg/L	0.00433	-0.0116	0.00433	37.45%
As 188.979†	-8.7	-0.00105	mg/L	0.001277	-0.00105	0.001277	121.43%
Ba 233.527†	5224.9	0.0309	mg/L	0.00041	0.0309	0.00041	1.32%
Be 234.861†	1453.8	-0.00007	mg/L	0.000079	-0.00007	0.000079	120.47%
B 249.677†	2610.5	0.0268	mg/L	0.00159	0.0268	0.00159	5.94%
Ca 227.546†	13146.3	27.0	mg/L	1.05	27.0	1.05	3.89%
Cd 228.802†	16.9	0.00010	mg/L	0.000330	0.00010	0.000330	326.62%
Co 228.616†	9.0	-0.00052	mg/L	0.000163	-0.00052	0.000163	31.16%
Cr 267.716†	7.8	-0.00175	mg/L	0.000084	-0.00175	0.000084	4.79%
Cu 327.393†	-73.1	-0.00107	mg/L	0.000303	-0.00107	0.000303	28.29%
Fe 239.562†	77668.6	4.80	mg/L	0.037	4.80	0.037	0.77%
Mg 279.077†	18133.1	5.03	mg/L	0.061	5.03	0.061	1.22%
Mn 257.610†	71540.7	0.0846	mg/L	0.00027	0.0846	0.00027	0.32%
Mo 202.031†	23.2	-0.00074	mg/L	0.000239	-0.00074	0.000239	32.49%
Ni 231.604†	77.5	-0.00112	mg/L	0.000694	-0.00112	0.000694	61.86%
Pb 220.353†	3.8	-0.00132	mg/L	0.001898	-0.00132	0.001898	143.39%
Sb 206.836†	2.0	-0.00405	mg/L	0.001796	-0.00405	0.001796	44.31%
Se 196.026†	-1.7	0.00298	mg/L	0.001842	0.00298	0.001842	61.87%
Si 251.611†	71285.3	1.68	mg/L	0.035	1.68	0.035	2.11%
Sn 189.927†	-172.1	-0.0197	mg/L	0.00080	-0.0197	0.00080	4.09%
Ti 334.940†	-4183.8	-0.00048	mg/L	0.000276	-0.00048	0.000276	56.87%
Tl 190.801†	-9.4	-0.00524	mg/L	0.001438	-0.00524	0.001438	27.45%
V 290.880†	624.1	-0.00107	mg/L	0.001662	-0.00107	0.001662	154.66%
Zn 206.200†	126.4	-0.00273	mg/L	0.000122	-0.00273	0.000122	4.48%
K 766.490†	3012.2	0.810	mg/L	0.0186	0.810	0.0186	2.30%
Na 589.592†	290300.7	13.7	mg/L	0.04	13.7	0.04	0.29%
Sr 407.771†	338878.3	0.119	mg/L	0.0010	0.119	0.0010	0.84%
Li 670.784†	1103.8	-0.00053	mg/L	0.000318	-0.00053	0.000318	59.48%

Sequence No.: 13
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

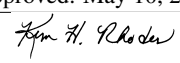
uSampler Location: 6
 Date Collected: 5/9/2012 11:55:27 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2287865.5					20805.72	0.91%

Approved: May 10, 2012


YRADIAL	317409.5				1166.63	0.37%
Ga 417.206	1374470.0				53280.18	3.88%
GaRADIAL	94186.7				296.07	0.31%
Ag 328.068†	129364.3	0.410 mg/L	0.0148	0.410 mg/L	0.0148	3.60%
QC value within limits for Ag	328.068	Recovery = 102.60%				
Al 396.153†	78336.6	9.77 mg/L	0.040	9.77 mg/L	0.040	0.41%
QC value within limits for Al	396.153	Recovery = 97.71%				
As 188.979†	1134.0	0.399 mg/L	0.0141	0.399 mg/L	0.0141	3.53%
QC value within limits for As	188.979	Recovery = 99.65%				
Ba 233.527†	150937.5	1.00 mg/L	0.017	1.00 mg/L	0.017	1.72%
QC value within limits for Ba	233.527	Recovery = 100.18%				
Be 234.861†	63651.8	0.0503 mg/L	0.00200	0.0503 mg/L	0.00200	3.97%
QC value within limits for Be	234.861	Recovery = 100.64%				
B 249.677†	44348.4	0.506 mg/L	0.0192	0.506 mg/L	0.0192	3.79%
QC value within limits for B	249.677	Recovery = 101.14%				
Ca 227.546†	4801.1	10.3 mg/L	0.43	10.3 mg/L	0.43	4.18%
QC value within limits for Ca	227.546	Recovery = 102.64%				
Cd 228.802†	2830.3	0.0496 mg/L	0.00240	0.0496 mg/L	0.00240	4.83%
QC value within limits for Cd	228.802	Recovery = 99.28%				
Co 228.616†	7427.6	0.197 mg/L	0.0034	0.197 mg/L	0.0034	1.74%
QC value within limits for Co	228.616	Recovery = 98.39%				
Cr 267.716†	53404.7	0.500 mg/L	0.0080	0.500 mg/L	0.0080	1.60%
QC value within limits for Cr	267.716	Recovery = 100.01%				
Cu 327.393†	140821.7	0.499 mg/L	0.0193	0.499 mg/L	0.0193	3.86%
QC value within limits for Cu	327.393	Recovery = 99.86%				
Fe 239.562†	64359.3	3.98 mg/L	0.032	3.98 mg/L	0.032	0.81%
QC value within limits for Fe	239.562	Recovery = 99.50%				
Mg 279.077†	35678.3	9.91 mg/L	0.059	9.91 mg/L	0.059	0.60%
QC value within limits for Mg	279.077	Recovery = 99.08%				
Mn 257.610†	413893.5	0.503 mg/L	0.0098	0.503 mg/L	0.0098	1.95%
QC value within limits for Mn	257.610	Recovery = 100.58%				
Mo 202.031†	35766.4	0.986 mg/L	0.0116	0.986 mg/L	0.0116	1.18%
QC value within limits for Mo	202.031	Recovery = 98.62%				
Ni 231.604†	33100.2	0.499 mg/L	0.0081	0.499 mg/L	0.0081	1.62%
QC value within limits for Ni	231.604	Recovery = 99.84%				
Pb 220.353†	5408.0	0.498 mg/L	0.0064	0.498 mg/L	0.0064	1.28%
QC value within limits for Pb	220.353	Recovery = 99.69%				
Sb 206.836†	5106.6	1.21 mg/L	0.049	1.21 mg/L	0.049	4.02%
QC value within limits for Sb	206.836	Recovery = 101.24%				
Se 196.026†	733.8	0.406 mg/L	0.0178	0.406 mg/L	0.0178	4.39%
QC value within limits for Se	196.026	Recovery = 101.45%				
Si 251.611†	213757.0	5.07 mg/L	0.145	5.07 mg/L	0.145	2.85%
QC value within limits for Si	251.611	Recovery = 101.35%				
Sn 189.927†	10012.1	0.984 mg/L	0.0133	0.984 mg/L	0.0133	1.35%
QC value within limits for Sn	189.927	Recovery = 98.45%				
Ti 334.940†	978363.7	0.971 mg/L	0.0027	0.971 mg/L	0.0027	0.28%
QC value within limits for Ti	334.940	Recovery = 97.12%				
Tl 190.801†	1923.7	0.513 mg/L	0.0021	0.513 mg/L	0.0021	0.41%
QC value within limits for Tl	190.801	Recovery = 102.55%				
V 290.880†	189908.5	0.986 mg/L	0.0105	0.986 mg/L	0.0105	1.07%
QC value within limits for V	290.880	Recovery = 98.57%				
Zn 206.200†	40062.1	1.02 mg/L	0.015	1.02 mg/L	0.015	1.43%
QC value within limits for Zn	206.200	Recovery = 102.37%				
K 766.490†	167388.1	47.9 mg/L	0.46	47.9 mg/L	0.46	0.96%
QC value within limits for K	766.490	Recovery = 95.77%				
Na 589.592†	1008564.1	48.2 mg/L	0.88	48.2 mg/L	0.88	1.84%
QC value within limits for Na	589.592	Recovery = 96.32%				
Sr 407.771†	2724902.7	0.961 mg/L	0.0113	0.961 mg/L	0.0113	1.18%
QC value within limits for Sr	407.771	Recovery = 96.08%				
Li 670.784†	170477.2	0.978 mg/L	0.0004	0.978 mg/L	0.0004	0.04%
QC value within limits for Li	670.784	Recovery = 97.78%				

All analyte(s) passed QC.

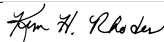
```

=====
Sequence No.: 14                               u&osampler Location: 1
Sample ID: CCB                                 ame Collected: 5/9/2012 12:01:28 PM
Analyst:                                       ama Type: Original
Initial Sample Wt:                             nitial Sample Vol:
Dilution:                                     ample Prep Vol:
=====

```

Nebulizer Parameters: CCB

Approved: May 10, 2012

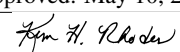


Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

 Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2330950.5				55965.63	2.40%
YRADIAL	314879.9				3757.46	1.19%
Ga 417.206	1458478.7				22325.78	1.53%
GaRADIAL	94254.5				1659.64	1.76%
Ag 328.068†	-134.7	-0.00230 mg/L	0.000415	-0.00230 mg/L	0.000415	18.02%
QC value within limits for Ag	328.068	Recovery = Not calculated				
Al 396.153†	69.3	-0.00559 mg/L	0.000320	-0.00559 mg/L	0.000320	5.73%
QC value within limits for Al	396.153	Recovery = Not calculated				
As 188.979†	1.4	0.00201 mg/L	0.000869	0.00201 mg/L	0.000869	43.30%
QC value within limits for As	188.979	Recovery = Not calculated				
Ba 233.527†	21.7	-0.00365 mg/L	0.000109	-0.00365 mg/L	0.000109	2.99%
QC value within limits for Ba	233.527	Recovery = Not calculated				
Be 234.861†	9.4	-0.00016 mg/L	0.000042	-0.00016 mg/L	0.000042	25.67%
QC value within limits for Be	234.861	Recovery = Not calculated				
B 249.677†	811.5	0.00814 mg/L	0.000371	0.00814 mg/L	0.000371	4.56%
QC value within limits for B	249.677	Recovery = Not calculated				
Ca 227.546†	11.1	0.0235 mg/L	0.02710	0.0235 mg/L	0.02710	115.31%
QC value within limits for Ca	227.546	Recovery = Not calculated				
Cd 228.802†	4.3	-0.00014 mg/L	0.000056	-0.00014 mg/L	0.000056	41.22%
QC value within limits for Cd	228.802	Recovery = Not calculated				
Co 228.616†	3.9	-0.00053 mg/L	0.000152	-0.00053 mg/L	0.000152	28.48%
QC value within limits for Co	228.616	Recovery = Not calculated				
Cr 267.716†	-1.9	-0.00201 mg/L	0.000036	-0.00201 mg/L	0.000036	1.77%
QC value within limits for Cr	267.716	Recovery = Not calculated				
Cu 327.393†	39.6	-0.00107 mg/L	0.000282	-0.00107 mg/L	0.000282	26.36%
QC value within limits for Cu	327.393	Recovery = Not calculated				
Fe 239.562†	67.3	0.00914 mg/L	0.000344	0.00914 mg/L	0.000344	3.77%
QC value within limits for Fe	239.562	Recovery = Not calculated				
Mg 279.077†	25.6	0.0154 mg/L	0.00042	0.0154 mg/L	0.00042	2.71%
QC value within limits for Mg	279.077	Recovery = Not calculated				
Mn 257.610†	45.2	-0.00273 mg/L	0.000019	-0.00273 mg/L	0.000019	0.70%
QC value within limits for Mn	257.610	Recovery = Not calculated				
Mo 202.031†	1.4	-0.00159 mg/L	0.000080	-0.00159 mg/L	0.000080	5.03%
QC value within limits for Mo	202.031	Recovery = Not calculated				
Ni 231.604†	14.5	-0.00208 mg/L	0.000243	-0.00208 mg/L	0.000243	11.70%
QC value within limits for Ni	231.604	Recovery = Not calculated				
Pb 220.353†	2.7	-0.00117 mg/L	0.001807	-0.00117 mg/L	0.001807	154.55%
QC value within limits for Pb	220.353	Recovery = Not calculated				
Sb 206.836†	4.8	-0.00355 mg/L	0.000717	-0.00355 mg/L	0.000717	20.21%
QC value within limits for Sb	206.836	Recovery = Not calculated				
Se 196.026†	5.9	0.00577 mg/L	0.001094	0.00577 mg/L	0.001094	18.95%
QC value within limits for Se	196.026	Recovery = Not calculated				
Si 251.611†	76.1	-0.0217 mg/L	0.000084	-0.0217 mg/L	0.000084	3.88%
QC value within limits for Si	251.611	Recovery = Not calculated				
Sn 189.927†	1.9	-0.00253 mg/L	0.000447	-0.00253 mg/L	0.000447	17.66%
QC value within limits for Sn	189.927	Recovery = Not calculated				
Ti 334.940†	225.1	-0.00014 mg/L	0.000109	-0.00014 mg/L	0.000109	80.74%
QC value within limits for Ti	334.940	Recovery = Not calculated				
Tl 190.801†	6.8	-0.00087 mg/L	0.000330	-0.00087 mg/L	0.000330	38.04%
QC value within limits for Tl	190.801	Recovery = Not calculated				
V 290.880†	454.0	-0.00107 mg/L	0.002227	-0.00107 mg/L	0.002227	207.64%
QC value within limits for V	290.880	Recovery = Not calculated				
Zn 206.200†	6.3	-0.00571 mg/L	0.000153	-0.00571 mg/L	0.000153	2.67%
QC value within limits for Zn	206.200	Recovery = Not calculated				
K 766.490†	46.7	-0.00689 mg/L	0.019031	-0.00689 mg/L	0.019031	276.25%
QC value within limits for K	766.490	Recovery = Not calculated				
Na 589.592†	338.0	0.0204 mg/L	0.01285	0.0204 mg/L	0.01285	62.97%
QC value within limits for Na	589.592	Recovery = Not calculated				
Sr 407.771†	347.2	-0.00012 mg/L	0.000031	-0.00012 mg/L	0.000031	24.93%
QC value within limits for Sr	407.771	Recovery = Not calculated				
Li 670.784†	-49.6	-0.00720 mg/L	0.000385	-0.00720 mg/L	0.000385	5.35%
QC value within limits for Li	670.784	Recovery = Not calculated				

All analyte(s) passed QC.

Approved: May 10, 2012


Sequence No.: 15
 Sample ID: L1204084404
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 43
 ame Collected: 5/9/2012 12:08:22 PM
 a&a Type: Original
 nitial Sample Vol:
 a&le Prep Vol:

Nebulizer Parameters: L1204084404

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1204084404

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Y 371.029	2178777.4					15282.30	0.70%	
YRADIAL	300186.9					3422.64	1.14%	
Ga 417.206	1416235.3					46592.96	3.29%	
GaRADIAL	93965.1					499.90	0.53%	
Ag 328.068†	-2666.8	0.00033	mg/L	0.000361	0.00033	mg/L	0.000361	110.66%
Al 396.153†	-61.3	-0.0192	mg/L	0.00426	-0.0192	mg/L	0.00426	22.24%
As 188.979†	-7.4	0.00156	mg/L	0.001817	0.00156	mg/L	0.001817	116.35%
Ba 233.527†	26494.1	0.172	mg/L	0.0010	0.172	mg/L	0.0010	0.61%
Be 234.861†	6588.6	-0.00028	mg/L	0.000105	-0.00028	mg/L	0.000105	36.75%
B 249.677†	8305.6	0.0840	mg/L	0.00342	0.0840	mg/L	0.00342	4.07%
Ca 227.546†	68125.9	140	mg/L	6.3	140	mg/L	6.3	4.51%
Cd 228.802†	26.6	0.00024	mg/L	0.000284	0.00024	mg/L	0.000284	119.72%
Co 228.616†	9.6	-0.00103	mg/L	0.000380	-0.00103	mg/L	0.000380	37.01%
Cr 267.716†	18.6	-0.00098	mg/L	0.000050	-0.00098	mg/L	0.000050	5.08%
Cu 327.393†	-447.2	-0.00077	mg/L	0.000113	-0.00077	mg/L	0.000113	14.78%
Fe 239.562†	394526.4	24.4	mg/L	0.22	24.4	mg/L	0.22	0.88%
Mg 279.077†	94535.1	26.2	mg/L	0.42	26.2	mg/L	0.42	1.62%
Mn 257.610†	372317.6	0.452	mg/L	0.0030	0.452	mg/L	0.0030	0.67%
Mo 202.031†	23.7	0.00032	mg/L	0.000256	0.00032	mg/L	0.000256	80.86%
Ni 231.604†	93.6	-0.00088	mg/L	0.000456	-0.00088	mg/L	0.000456	52.07%
Pb 220.353†	21.8	-0.00068	mg/L	0.000762	-0.00068	mg/L	0.000762	112.57%
Sb 206.836†	-0.1	-0.00383	mg/L	0.001506	-0.00383	mg/L	0.001506	39.35%
Se 196.026†	-5.6	0.00663	mg/L	0.001488	0.00663	mg/L	0.001488	22.45%
Si 251.611†	354391.9	8.44	mg/L	0.298	8.44	mg/L	0.298	3.54%
Sn 189.927†	-290.7	-0.0314	mg/L	0.00039	-0.0314	mg/L	0.00039	1.23%
Ti 334.940†	-22169.8	-0.00148	mg/L	0.002130	-0.00148	mg/L	0.002130	143.65%
Tl 190.801†	-29.2	-0.0110	mg/L	0.00165	-0.0110	mg/L	0.00165	15.07%
V 290.880†	2293.3	0.00398	mg/L	0.000938	0.00398	mg/L	0.000938	23.55%
Zn 206.200†	86.4	-0.00412	mg/L	0.000140	-0.00412	mg/L	0.000140	3.40%
K 766.490†	15318.8	4.21	mg/L	0.090	4.21	mg/L	0.090	2.13%
Na 589.592†	1474401.4	71.0	mg/L	0.44	71.0	mg/L	0.44	0.62%
Sr 407.771†	1770569.2	0.621	mg/L	0.0052	0.621	mg/L	0.0052	0.84%
Li 670.784†	5459.7	0.0246	mg/L	0.00067	0.0246	mg/L	0.00067	2.73%

User canceled analysis.

Approved: May 10, 2012

John H. Rhodes

=====
Analysis Begun

Start Time: 5/9/2012 12:21:44 PM Plasma On Time: 12:00:00 AM
 Logged In Analyst: peicp2 eTechnique: ICP Continuous
 Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
 Batch ID:
 Results Data Set: 050912H
 Results Library: C:\pe\peicp2\Results\Results.mdb

=====
 Sequence No.: 1 Autosampler Location: 44
 Sample ID: L1204084405 Date Collected: 5/9/2012 12:21:46 PM
 Analyst: KHR Sample Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

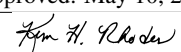
 Nebulizer Parameters: L1204084405
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

 Mean Data: L1204084405

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2082223.3				18680.92	0.90%
YRADIAL	294794.0				1162.43	0.39%
Ga 417.206	1341837.3				23826.54	1.78%
GaRADIAL	92124.5				1239.19	1.35%
Ag 328.068†	463.2	-0.00041 mg/L	0.000754	-0.00041 mg/L	0.000754	185.26%
Al 396.153†	2533.4	0.304 mg/L	0.0097	0.304 mg/L	0.0097	3.19%
As 188.979†	2.2	0.00227 mg/L	0.002010	0.00227 mg/L	0.002010	88.45%
Ba 233.527†	16541.8	0.106 mg/L	0.0013	0.106 mg/L	0.0013	1.20%
Be 234.861†	193.0	-0.00006 mg/L	0.000054	-0.00006 mg/L	0.000054	94.89%
B 249.677†	6549.2	0.0741 mg/L	0.00285	0.0741 mg/L	0.00285	3.84%
Ca 227.546†	52253.1	107 mg/L	3.1	107 mg/L	3.1	2.88%
Cd 228.802†	157.1	0.00263 mg/L	0.000318	0.00263 mg/L	0.000318	12.09%
Co 228.616†	18.9	-0.00013 mg/L	0.000351	-0.00013 mg/L	0.000351	269.91%
Cr 267.716†	355.6	0.00138 mg/L	0.000148	0.00138 mg/L	0.000148	10.71%
Cu 327.393†	974.5	0.00226 mg/L	0.000317	0.00226 mg/L	0.000317	14.03%
Fe 239.562†	3418.6	0.216 mg/L	0.0042	0.216 mg/L	0.0042	1.95%
Mg 279.077†	54652.8	15.1 mg/L	0.21	15.1 mg/L	0.21	1.36%
Mn 257.610†	10211.6	0.00969 mg/L	0.000149	0.00969 mg/L	0.000149	1.54%
Mo 202.031†	290.8	0.00643 mg/L	0.000418	0.00643 mg/L	0.000418	6.50%
Ni 231.604†	296.2	0.00220 mg/L	0.000694	0.00220 mg/L	0.000694	31.60%
Pb 220.353†	-3.3	-0.00083 mg/L	0.003096	-0.00083 mg/L	0.003096	372.23%
Sb 206.836†	4.3	-0.00364 mg/L	0.001102	-0.00364 mg/L	0.001102	30.24%
Se 196.026†	16.9	0.0118 mg/L	0.00280	0.0118 mg/L	0.00280	23.68%
Si 251.611†	309427.3	7.36 mg/L	0.114	7.36 mg/L	0.114	1.55%
Sn 189.927†	-277.5	-0.0301 mg/L	0.00116	-0.0301 mg/L	0.00116	3.85%
Ti 334.940†	-13476.3	0.00228 mg/L	0.001499	0.00228 mg/L	0.001499	65.87%
Tl 190.801†	-25.7	-0.00938 mg/L	0.005260	-0.00938 mg/L	0.005260	56.06%
V 290.880†	9249.1	0.0444 mg/L	0.00076	0.0444 mg/L	0.00076	1.71%
Zn 206.200†	1705.8	0.0378 mg/L	0.00083	0.0378 mg/L	0.00083	2.19%
K 766.490†	15233.4	4.25 mg/L	0.069	4.25 mg/L	0.069	1.62%
Na 589.592†	Saturated2					
Sr 407.771†	2505161.7	0.881 mg/L	0.0137	0.881 mg/L	0.0137	1.55%
Li 670.784†	4560.0	0.0194 mg/L	0.00040	0.0194 mg/L	0.00040	2.08%

=====
 Sequence No.: 2 Autosampler Location: 45
 Sample ID: L1204084406 Date Collected: 5/9/2012 12:27:45 PM
 Analyst: KHR Sample Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

 Nebulizer Parameters: L1204084406

Approved: May 10, 2012


Analyte Back Pressure Flow
All 153.0 kPa 0.50 L/min

Mean Data: L1204084406

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, YRADIAL, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective intensity and concentration values.

Sequence No.: 3 Sample ID: L1204084405 0.01 Analyst: KHR Initial Sample Wt: Dilution: autosampler Location: 46 Date Collected: 5/9/2012 12:34:46 PM Data Type: Original Initial Sample Vol: Sample Prep Vol:

Nebulizer Parameters: L1204084405 0.01 Analyte Back Pressure Flow All 153.0 kPa 0.50 L/min

Mean Data: L1204084405 0.01

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, YRADIAL, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu with their respective intensity and concentration values.

Approved: May 10, 2012 [Signature]

Fe 239.562†	61.0	0.00875	mg/L	0.000475	0.00875	mg/L	0.000475	5.43%
Mg 279.077†	550.4	0.161	mg/L	0.0012	0.161	mg/L	0.0012	0.73%
Mn 257.610†	195.5	-0.00255	mg/L	0.000024	-0.00255	mg/L	0.000024	0.95%
Mo 202.031†	2.3	-0.00157	mg/L	0.000164	-0.00157	mg/L	0.000164	10.50%
Ni 231.604†	9.3	-0.00216	mg/L	0.000206	-0.00216	mg/L	0.000206	9.55%
Pb 220.353†	-8.4	-0.00219	mg/L	0.000560	-0.00219	mg/L	0.000560	25.56%
Sb 206.836†	5.3	-0.00343	mg/L	0.001257	-0.00343	mg/L	0.001257	36.63%
Se 196.026†	0.2	0.00262	mg/L	0.003361	0.00262	mg/L	0.003361	128.16%
Si 251.611†	3799.7	0.0672	mg/L	0.00153	0.0672	mg/L	0.00153	2.28%
Sn 189.927†	-15.7	-0.00426	mg/L	0.001321	-0.00426	mg/L	0.001321	30.97%
Ti 334.940†	27.6	-0.00019	mg/L	0.000086	-0.00019	mg/L	0.000086	44.38%
Tl 190.801†	-3.6	-0.00359	mg/L	0.002625	-0.00359	mg/L	0.002625	73.08%
V 290.880†	387.1	-0.00142	mg/L	0.000658	-0.00142	mg/L	0.000658	46.18%
Zn 206.200†	174.1	-0.00142	mg/L	0.000094	-0.00142	mg/L	0.000094	6.64%
K 766.490†	232.0	0.0394	mg/L	0.01621	0.0394	mg/L	0.01621	41.13%
Na 589.592†	118641.9	5.58	mg/L	0.114	5.58	mg/L	0.114	2.05%
Sr 407.771†	25025.4	0.00856	mg/L	0.000137	0.00856	mg/L	0.000137	1.60%
Li 670.784†	38.2	-0.00669	mg/L	0.000501	-0.00669	mg/L	0.000501	7.49%

```

=====
Sequence No.: 4                               u&osampler Location: 47
Sample ID: L1204084406 0.01                 ame Collected: 5/9/2012 12:41:43 PM
Analyst: KHR                               ana Type: Original
Initial Sample Wt:                          nitial Sample Vol:
Dilution:                                   ample Prep Vol:
=====
    
```

```

-----
Nebulizer Parameters: L1204084406 0.01
Analyte      Back Pressure      Flow
All          153.0 kPa             0.50 L/min
-----
    
```

```

-----
Mean Data: L1204084406 0.01
-----
    
```

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD	
Y 371.029	2297450.5					32251.49	1.40%	
YRADIAL	312159.8					8948.03	2.87%	
Ga 417.206	1414431.4					13908.93	0.98%	
GaRADIAL	93544.0					885.42	0.95%	
Ag 328.068†	-7.4	-0.00191	mg/L	0.000461	-0.00191	mg/L	0.000461	24.21%
Al 396.153†	19.9	-0.0118	mg/L	0.00112	-0.0118	mg/L	0.00112	9.48%
As 188.979†	-2.7	0.00055	mg/L	0.002808	0.00055	mg/L	0.002808	512.73%
Ba 233.527†	180.1	-0.00259	mg/L	0.000071	-0.00259	mg/L	0.000071	2.74%
Be 234.861†	-58.6	-0.00022	mg/L	0.000024	-0.00022	mg/L	0.000024	11.19%
B 249.677†	415.5	0.00359	mg/L	0.000277	0.00359	mg/L	0.000277	7.72%
Ca 227.546†	474.8	0.970	mg/L	0.0248	0.970	mg/L	0.0248	2.56%
Cd 228.802†	1.5	-0.00018	mg/L	0.000218	-0.00018	mg/L	0.000218	120.88%
Co 228.616†	3.7	-0.00054	mg/L	0.000198	-0.00054	mg/L	0.000198	36.93%
Cr 267.716†	1.4	-0.00197	mg/L	0.000099	-0.00197	mg/L	0.000099	5.01%
Cu 327.393†	80.8	-0.00093	mg/L	0.000462	-0.00093	mg/L	0.000462	49.94%
Fe 239.562†	19.6	0.00619	mg/L	0.000162	0.00619	mg/L	0.000162	2.61%
Mg 279.077†	581.2	0.169	mg/L	0.0066	0.169	mg/L	0.0066	3.89%
Mn 257.610†	201.7	-0.00254	mg/L	0.000020	-0.00254	mg/L	0.000020	0.77%
Mo 202.031†	2.9	-0.00155	mg/L	0.000109	-0.00155	mg/L	0.000109	7.02%
Ni 231.604†	4.8	-0.00222	mg/L	0.000335	-0.00222	mg/L	0.000335	15.09%
Pb 220.353†	-4.7	-0.00184	mg/L	0.000141	-0.00184	mg/L	0.000141	7.63%
Sb 206.836†	1.0	-0.00446	mg/L	0.000657	-0.00446	mg/L	0.000657	14.72%
Se 196.026†	5.4	0.00549	mg/L	0.001684	0.00549	mg/L	0.001684	30.67%
Si 251.611†	3318.3	0.0557	mg/L	0.00130	0.0557	mg/L	0.00130	2.34%
Sn 189.927†	-18.1	-0.00450	mg/L	0.000463	-0.00450	mg/L	0.000463	10.30%
Ti 334.940†	-7.0	-0.00022	mg/L	0.000090	-0.00022	mg/L	0.000090	40.47%
Tl 190.801†	-4.7	-0.00387	mg/L	0.002127	-0.00387	mg/L	0.002127	54.90%
V 290.880†	313.1	-0.00181	mg/L	0.000532	-0.00181	mg/L	0.000532	29.40%
Zn 206.200†	124.3	-0.00269	mg/L	0.000344	-0.00269	mg/L	0.000344	12.77%
K 766.490†	193.4	0.0284	mg/L	0.01352	0.0284	mg/L	0.01352	47.65%
Na 589.592†	124122.7	5.84	mg/L	0.140	5.84	mg/L	0.140	2.39%
Sr 407.771†	25885.3	0.00887	mg/L	0.000146	0.00887	mg/L	0.000146	1.65%
Li 670.784†	9.1	-0.00686	mg/L	0.000699	-0.00686	mg/L	0.000699	10.19%

```

=====
Sequence No.: 5                               u&osampler Location: 48
Sample ID: L1204089804 0.01                 ame Collected: 5/9/2012 12:48:36 PM
=====
    
```

Approved: May 10, 2012
<i>[Signature]</i>

Analyst: KHR
 Initial Sample Wt:
 Dilution:

Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1204089804 0.01
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1204089804 0.01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2297382.1				39783.12	1.73%
YRADIAL	310563.4				7746.77	2.49%
Ga 417.206	1449272.2				24169.85	1.67%
GaRADIAL	94544.3				1089.82	1.15%
Ag 328.068†	-37.6	-0.00200 mg/L	0.000365	-0.00200 mg/L	0.000365	18.23%
Al 396.153†	16.0	-0.0123 mg/L	0.00081	-0.0123 mg/L	0.00081	6.61%
As 188.979†	2.6	0.00243 mg/L	0.001181	0.00243 mg/L	0.001181	48.57%
Ba 233.527†	192.5	-0.00251 mg/L	0.000099	-0.00251 mg/L	0.000099	3.94%
Be 234.861†	146.1	-0.00005 mg/L	0.000023	-0.00005 mg/L	0.000023	43.08%
B 249.677†	428.5	0.00374 mg/L	0.000013	0.00374 mg/L	0.000013	0.35%
Ca 227.546†	665.4	1.36 mg/L	0.018	1.36 mg/L	0.018	1.32%
Cd 228.802†	-5.8	-0.00032 mg/L	0.000032	-0.00032 mg/L	0.000032	9.90%
Co 228.616†	13.0	-0.00029 mg/L	0.000260	-0.00029 mg/L	0.000260	90.12%
Cr 267.716†	-5.8	-0.00204 mg/L	0.000056	-0.00204 mg/L	0.000056	2.75%
Cu 327.393†	23.4	-0.00113 mg/L	0.000530	-0.00113 mg/L	0.000530	46.96%
Fe 239.562†	57.5	0.00852 mg/L	0.000398	0.00852 mg/L	0.000398	4.67%
Mg 279.077†	1908.6	0.537 mg/L	0.0105	0.537 mg/L	0.0105	1.96%
Mn 257.610†	504.9	-0.00217 mg/L	0.000024	-0.00217 mg/L	0.000024	1.12%
Mo 202.031†	-10.0	-0.00191 mg/L	0.000244	-0.00191 mg/L	0.000244	12.82%
Ni 231.604†	-2.8	-0.00234 mg/L	0.000293	-0.00234 mg/L	0.000293	12.52%
Pb 220.353†	-1.1	-0.00152 mg/L	0.000821	-0.00152 mg/L	0.000821	54.15%
Sb 206.836†	2.0	-0.00423 mg/L	0.000980	-0.00423 mg/L	0.000980	23.19%
Se 196.026†	-1.6	0.00164 mg/L	0.000093	0.00164 mg/L	0.000093	5.68%
Si 251.611†	2899.7	0.0457 mg/L	0.00107	0.0457 mg/L	0.00107	2.34%
Sn 189.927†	-34.0	-0.00607 mg/L	0.000174	-0.00607 mg/L	0.000174	2.87%
Ti 334.940†	-346.3	-0.00050 mg/L	0.000097	-0.00050 mg/L	0.000097	19.25%
Tl 190.801†	9.3	-0.00023 mg/L	0.003400	-0.00023 mg/L	0.003400	>999.9%
V 290.880†	414.0	-0.00129 mg/L	0.001296	-0.00129 mg/L	0.001296	100.05%
Zn 206.200†	68.2	-0.00413 mg/L	0.000082	-0.00413 mg/L	0.000082	1.99%
K 766.490†	472.3	0.109 mg/L	0.0177	0.109 mg/L	0.0177	16.30%
Na 589.592†	75970.6	3.57 mg/L	0.071	3.57 mg/L	0.071	1.99%
Sr 407.771†	57622.5	0.0201 mg/L	0.00053	0.0201 mg/L	0.00053	2.62%
Li 670.784†	64.6	-0.00654 mg/L	0.000331	-0.00654 mg/L	0.000331	5.07%

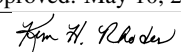
Sequence No.: 6
 Sample ID: L1205005005 0.01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

Sampler Location: 49
 Sample Collected: 5/9/2012 12:55:30 PM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1205005005 0.01
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205005005 0.01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2297482.1				10127.42	0.44%
YRADIAL	305970.9				6332.08	2.07%
Ga 417.206	1474510.2				23086.92	1.57%
GaRADIAL	94319.5				866.19	0.92%
Ag 328.068†	-20.2	-0.00190 mg/L	0.000514	-0.00190 mg/L	0.000514	27.11%
Al 396.153†	198.7	0.0107 mg/L	0.00121	0.0107 mg/L	0.00121	11.29%
As 188.979†	5.4	0.00345 mg/L	0.000563	0.00345 mg/L	0.000563	16.30%
Ba 233.527†	220.3	-0.00233 mg/L	0.000119	-0.00233 mg/L	0.000119	5.13%
Be 234.861†	257.6	0.00001 mg/L	0.000012	0.00001 mg/L	0.000012	123.85%

Approved: May 10, 2012


B 249.677†	329.1	0.00254	mg/L	0.000303	0.00254	mg/L	0.000303	11.94%
Ca 227.546†	851.0	1.74	mg/L	0.034	1.74	mg/L	0.034	1.96%
Cd 228.802†	-11.8	-0.00043	mg/L	0.000047	-0.00043	mg/L	0.000047	10.74%
Co 228.616†	6.0	-0.00048	mg/L	0.000049	-0.00048	mg/L	0.000049	10.24%
Cr 267.716†	-8.0	-0.00206	mg/L	0.000086	-0.00206	mg/L	0.000086	4.19%
Cu 327.393†	-55.3	-0.00140	mg/L	0.000171	-0.00140	mg/L	0.000171	12.26%
Fe 239.562†	2098.0	0.135	mg/L	0.0013	0.135	mg/L	0.0013	0.93%
Mg 279.077†	2361.7	0.663	mg/L	0.0082	0.663	mg/L	0.0082	1.24%
Mn 257.610†	5603.1	0.00405	mg/L	0.000106	0.00405	mg/L	0.000106	2.62%
Mo 202.031†	-14.4	-0.00202	mg/L	0.000146	-0.00202	mg/L	0.000146	7.24%
Ni 231.604†	1.9	-0.00227	mg/L	0.000242	-0.00227	mg/L	0.000242	10.66%
Pb 220.353†	13.5	-0.00017	mg/L	0.000791	-0.00017	mg/L	0.000791	465.10%
Sb 206.836†	2.6	-0.00406	mg/L	0.000320	-0.00406	mg/L	0.000320	7.87%
Se 196.026†	-0.6	0.00224	mg/L	0.000818	0.00224	mg/L	0.000818	36.51%
Si 251.611†	6445.9	0.130	mg/L	0.0023	0.130	mg/L	0.0023	1.76%
Sn 189.927†	-48.9	-0.00754	mg/L	0.000149	-0.00754	mg/L	0.000149	1.97%
Ti 334.940†	6.1	-0.00010	mg/L	0.000058	-0.00010	mg/L	0.000058	60.56%
Tl 190.801†	13.8	0.00095	mg/L	0.000513	0.00095	mg/L	0.000513	54.13%
V 290.880†	583.2	-0.00044	mg/L	0.001310	-0.00044	mg/L	0.001310	300.75%
Zn 206.200†	85.3	-0.00370	mg/L	0.000247	-0.00370	mg/L	0.000247	6.69%
K 766.490†	484.5	0.108	mg/L	0.0069	0.108	mg/L	0.0069	6.39%
Na 589.592†	153659.6	7.23	mg/L	0.296	7.23	mg/L	0.296	4.10%
Sr 407.771†	143447.3	0.0503	mg/L	0.00075	0.0503	mg/L	0.00075	1.50%
Li 670.784†	68.3	-0.00652	mg/L	0.000074	-0.00652	mg/L	0.000074	1.13%

Sequence No.: 7

Sample ID: L1205005006 0.01

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 50

a&e Collected: 5/9/2012 1:02:24 PM

a&a Type: Original

nitial Sample Vol:

a&ple Prep Vol:

Nebulizer Parameters: L1205005006 0.01

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205005006 0.01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2320197.0				21891.92	0.94%
YRADIAL	312911.4				2914.31	0.93%
Ga 417.206	1473085.8				27374.49	1.86%
GaRADIAL	95643.6				3668.86	3.84%
Ag 328.068†	7.8	-0.00183 mg/L	0.000166	-0.00183 mg/L	0.000166	9.06%
Al 396.153†	1.5	-0.0141 mg/L	0.00129	-0.0141 mg/L	0.00129	9.15%
As 188.979†	4.7	0.00317 mg/L	0.002510	0.00317 mg/L	0.002510	79.15%
Ba 233.527†	175.0	-0.00263 mg/L	0.000107	-0.00263 mg/L	0.000107	4.07%
Be 234.861†	183.4	-0.00004 mg/L	0.000023	-0.00004 mg/L	0.000023	61.97%
B 249.677†	282.1	0.00203 mg/L	0.000301	0.00203 mg/L	0.000301	14.85%
Ca 227.546†	804.7	1.65 mg/L	0.039	1.65 mg/L	0.039	2.38%
Cd 228.802†	-16.3	-0.00051 mg/L	0.000127	-0.00051 mg/L	0.000127	24.58%
Co 228.616†	2.7	-0.00057 mg/L	0.000198	-0.00057 mg/L	0.000198	35.05%
Cr 267.716†	-13.9	-0.00211 mg/L	0.000027	-0.00211 mg/L	0.000027	1.29%
Cu 327.393†	-68.0	-0.00145 mg/L	0.000148	-0.00145 mg/L	0.000148	10.21%
Fe 239.562†	1120.2	0.0742 mg/L	0.00071	0.0742 mg/L	0.00071	0.96%
Mg 279.077†	2044.7	0.575 mg/L	0.0084	0.575 mg/L	0.0084	1.46%
Mn 257.610†	5571.3	0.00401 mg/L	0.000090	0.00401 mg/L	0.000090	2.24%
Mo 202.031†	-10.4	-0.00191 mg/L	0.000082	-0.00191 mg/L	0.000082	4.31%
Ni 231.604†	6.5	-0.00220 mg/L	0.000360	-0.00220 mg/L	0.000360	16.37%
Pb 220.353†	8.7	-0.00062 mg/L	0.000711	-0.00062 mg/L	0.000711	115.22%
Sb 206.836†	0.1	-0.00467 mg/L	0.001209	-0.00467 mg/L	0.001209	25.90%
Se 196.026†	-1.2	0.00189 mg/L	0.001116	0.00189 mg/L	0.001116	59.11%
Si 251.611†	4363.1	0.0806 mg/L	0.00231	0.0806 mg/L	0.00231	2.87%
Sn 189.927†	-47.2	-0.00737 mg/L	0.000531	-0.00737 mg/L	0.000531	7.20%
Ti 334.940†	-268.3	-0.00038 mg/L	0.000035	-0.00038 mg/L	0.000035	9.13%
Tl 190.801†	5.5	-0.00121 mg/L	0.002399	-0.00121 mg/L	0.002399	197.98%
V 290.880†	503.4	-0.00084 mg/L	0.000440	-0.00084 mg/L	0.000440	52.39%
Zn 206.200†	44.0	-0.00475 mg/L	0.000037	-0.00475 mg/L	0.000037	0.79%
K 766.490†	472.4	0.105 mg/L	0.0099	0.105 mg/L	0.0099	9.41%
Na 589.592†	149478.2	7.03 mg/L	0.229	7.03 mg/L	0.229	3.26%

Approved: May 10, 2012

John H. Rhodes

Sr 407.771†	118224.1	0.0414 mg/L	0.00041	0.0414 mg/L	0.00041	1.00%
Li 670.784†	42.1	-0.00667 mg/L	0.000076	-0.00667 mg/L	0.000076	1.14%

Sequence No.: 8

Sample ID: L1205009907 0.01

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 51

ame Collected: 5/9/2012 1:09:19 PM

ama Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: L1205009907 0.01

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205009907 0.01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2232450.6				21432.69	0.96%
YRADIAL	306719.8				2200.26	0.72%
Ga 417.206	1451634.4				10284.75	0.71%
GaRADIAL	94463.9				3462.31	3.67%
Ag 328.068†	-76.6	-0.00211 mg/L	0.000369	-0.00211 mg/L	0.000369	17.47%
Al 396.153†	-1.8	-0.0145 mg/L	0.00142	-0.0145 mg/L	0.00142	9.77%
As 188.979†	9.4	0.00485 mg/L	0.002658	0.00485 mg/L	0.002658	54.84%
Ba 233.527†	51.6	-0.00345 mg/L	0.000054	-0.00345 mg/L	0.000054	1.55%
Be 234.861†	173.4	-0.00004 mg/L	0.000011	-0.00004 mg/L	0.000011	29.87%
B 249.677†	386.3	0.00324 mg/L	0.000196	0.00324 mg/L	0.000196	6.04%
Ca 227.546†	968.3	1.98 mg/L	0.011	1.98 mg/L	0.011	0.54%
Cd 228.802†	-11.3	-0.00043 mg/L	0.000115	-0.00043 mg/L	0.000115	26.49%
Co 228.616†	2.7	-0.00057 mg/L	0.000353	-0.00057 mg/L	0.000353	62.49%
Cr 267.716†	-14.0	-0.00212 mg/L	0.000110	-0.00212 mg/L	0.000110	5.18%
Cu 327.393†	-64.8	-0.00144 mg/L	0.000329	-0.00144 mg/L	0.000329	22.91%
Fe 239.562†	638.0	0.0444 mg/L	0.00162	0.0444 mg/L	0.00162	3.65%
Mg 279.077†	3950.2	1.10 mg/L	0.055	1.10 mg/L	0.055	5.01%
Mn 257.610†	3041.2	0.00092 mg/L	0.000035	0.00092 mg/L	0.000035	3.78%
Mo 202.031†	-21.4	-0.00222 mg/L	0.000224	-0.00222 mg/L	0.000224	10.08%
Ni 231.604†	3.3	-0.00225 mg/L	0.000518	-0.00225 mg/L	0.000518	23.07%
Pb 220.353†	19.6	0.00040 mg/L	0.000239	0.00040 mg/L	0.000239	60.42%
Sb 206.836†	3.5	-0.00386 mg/L	0.000264	-0.00386 mg/L	0.000264	6.85%
Se 196.026†	-2.9	0.00094 mg/L	0.001906	0.00094 mg/L	0.001906	202.03%
Si 251.611†	5458.2	0.107 mg/L	0.0013	0.107 mg/L	0.0013	1.19%
Sn 189.927†	-60.8	-0.00872 mg/L	0.000747	-0.00872 mg/L	0.000747	8.57%
Ti 334.940†	-414.0	-0.00048 mg/L	0.000050	-0.00048 mg/L	0.000050	10.61%
Tl 190.801†	1.5	-0.00225 mg/L	0.001639	-0.00225 mg/L	0.001639	72.95%
V 290.880†	893.3	0.00118 mg/L	0.001066	0.00118 mg/L	0.001066	90.03%
Zn 206.200†	27.1	-0.00518 mg/L	0.000182	-0.00518 mg/L	0.000182	3.51%
K 766.490†	426.6	0.0954 mg/L	0.01077	0.0954 mg/L	0.01077	11.29%
Na 589.592†	86400.9	4.06 mg/L	0.222	4.06 mg/L	0.222	5.46%
Sr 407.771†	139554.8	0.0489 mg/L	0.00098	0.0489 mg/L	0.00098	2.00%
Li 670.784†	120.4	-0.00621 mg/L	0.000052	-0.00621 mg/L	0.000052	0.83%

Sequence No.: 9

Sample ID: L1205009908 0.01

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 52

ame Collected: 5/9/2012 1:16:13 PM

ama Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: L1205009908 0.01

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205009908 0.01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2328056.4				2988.76	0.13%
YRADIAL	312756.8				5596.64	1.79%
Ga 417.206	1467933.8				12344.47	0.84%

Approved: May 10, 2012

John H. Rhodes

GarADIAL	96375.1					3003.36	3.12%
Ag 328.068†	-9.5	-0.00191 mg/L	0.000362	-0.00191 mg/L	0.000362	18.94%	
Al 396.153†	-2.5	-0.0146 mg/L	0.00032	-0.0146 mg/L	0.00032	2.16%	
As 188.979†	0.5	0.00168 mg/L	0.001942	0.00168 mg/L	0.001942	115.45%	
Ba 233.527†	57.6	-0.00341 mg/L	0.000142	-0.00341 mg/L	0.000142	4.18%	
Be 234.861†	155.1	-0.00005 mg/L	0.000024	-0.00005 mg/L	0.000024	46.51%	
B 249.677†	336.9	0.00267 mg/L	0.000310	0.00267 mg/L	0.000310	11.58%	
Ca 227.546†	863.4	1.76 mg/L	0.013	1.76 mg/L	0.013	0.74%	
Cd 228.802†	-8.0	-0.00036 mg/L	0.000039	-0.00036 mg/L	0.000039	10.90%	
Co 228.616†	3.0	-0.00056 mg/L	0.000165	-0.00056 mg/L	0.000165	29.57%	
Cr 267.716†	-15.3	-0.00213 mg/L	0.000071	-0.00213 mg/L	0.000071	3.35%	
Cu 327.393†	971.2	0.00223 mg/L	0.000258	0.00223 mg/L	0.000258	11.55%	
Fe 239.562†	492.6	0.0354 mg/L	0.00164	0.0354 mg/L	0.00164	4.64%	
Mg 279.077†	3948.2	1.10 mg/L	0.058	1.10 mg/L	0.058	5.23%	
Mn 257.610†	2451.1	0.00020 mg/L	0.000021	0.00020 mg/L	0.000021	10.39%	
Mo 202.031†	-12.5	-0.00197 mg/L	0.000193	-0.00197 mg/L	0.000193	9.76%	
Ni 231.604†	10.3	-0.00214 mg/L	0.000125	-0.00214 mg/L	0.000125	5.83%	
Pb 220.353†	7.6	-0.00072 mg/L	0.001191	-0.00072 mg/L	0.001191	166.22%	
Sb 206.836†	0.3	-0.00462 mg/L	0.000699	-0.00462 mg/L	0.000699	15.12%	
Se 196.026†	-1.9	0.00151 mg/L	0.002183	0.00151 mg/L	0.002183	144.58%	
Si 251.611†	5043.5	0.0969 mg/L	0.00117	0.0969 mg/L	0.00117	1.21%	
Sn 189.927†	-47.8	-0.00743 mg/L	0.000885	-0.00743 mg/L	0.000885	11.91%	
Ti 334.940†	-178.2	-0.00027 mg/L	0.000564	-0.00027 mg/L	0.000564	205.66%	
Tl 190.801†	2.3	-0.00206 mg/L	0.002255	-0.00206 mg/L	0.002255	109.72%	
V 290.880†	255.1	-0.00214 mg/L	0.000178	-0.00214 mg/L	0.000178	8.31%	
Zn 206.200†	76.1	-0.00393 mg/L	0.000168	-0.00393 mg/L	0.000168	4.27%	
K 766.490†	262.4	0.0500 mg/L	0.02249	0.0500 mg/L	0.02249	44.96%	
Na 589.592†	73852.6	3.47 mg/L	0.344	3.47 mg/L	0.344	9.90%	
Sr 407.771†	147381.2	0.0517 mg/L	0.00254	0.0517 mg/L	0.00254	4.92%	
Li 670.784†	92.6	-0.00638 mg/L	0.000110	-0.00638 mg/L	0.000110	1.73%	

Sequence No.: 10
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

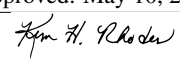
uakosampler Location: 6
 ake Collected: 5/9/2012 1:23:07 PM
 aka Type: Original
 nital Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	154.0 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	2255395.3				28048.65	1.24%
YRADIAL	315971.9				2131.02	0.67%
Ga 417.206	1381788.4				26661.33	1.93%
GarADIAL	95089.1				217.73	0.23%
Ag 328.068†	126470.7	0.401 mg/L	0.0110	0.401 mg/L	0.0110	2.74%
QC value within limits for Ag	328.068	Recovery = 100.31%				
Al 396.153†	77747.2	9.70 mg/L	0.041	9.70 mg/L	0.041	0.42%
QC value within limits for Al	396.153	Recovery = 96.97%				
As 188.979†	1117.8	0.393 mg/L	0.0055	0.393 mg/L	0.0055	1.41%
QC value within limits for As	188.979	Recovery = 98.21%				
Ba 233.527†	151974.6	1.01 mg/L	0.011	1.01 mg/L	0.011	1.11%
QC value within limits for Ba	233.527	Recovery = 100.87%				
Be 234.861†	62581.3	0.0495 mg/L	0.00150	0.0495 mg/L	0.00150	3.03%
QC value within limits for Be	234.861	Recovery = 98.94%				
B 249.677†	42826.3	0.488 mg/L	0.0161	0.488 mg/L	0.0161	3.29%
QC value within limits for B	249.677	Recovery = 97.63%				
Ca 227.546†	4730.4	10.1 mg/L	0.22	10.1 mg/L	0.22	2.16%
QC value within limits for Ca	227.546	Recovery = 101.21%				
Cd 228.802†	2790.9	0.0490 mg/L	0.00120	0.0490 mg/L	0.00120	2.45%
QC value within limits for Cd	228.802	Recovery = 97.93%				
Co 228.616†	7514.7	0.199 mg/L	0.0030	0.199 mg/L	0.0030	1.52%
QC value within limits for Co	228.616	Recovery = 99.54%				
Cr 267.716†	53191.6	0.498 mg/L	0.0028	0.498 mg/L	0.0028	0.57%
QC value within limits for Cr	267.716	Recovery = 99.61%				
Cu 327.393†	138230.9	0.490 mg/L	0.0120	0.490 mg/L	0.0120	2.45%

Approved: May 10, 2012


Fe	239.562†	64044.9	3.96 mg/L	0.039	0.99%
	QC value within limits for Cu	327.393		Recovery = 98.02%	
Mg	279.077†	35549.3	9.87 mg/L	0.078	0.79%
	QC value within limits for Fe	239.562		Recovery = 99.01%	
Mn	257.610†	417197.8	0.507 mg/L	0.0036	0.70%
	QC value within limits for Mg	279.077		Recovery = 98.72%	
Mo	202.031†	35796.1	0.987 mg/L	0.0028	0.28%
	QC value within limits for Mn	257.610		Recovery = 101.38%	
Ni	231.604†	33308.2	0.502 mg/L	0.0023	0.45%
	QC value within limits for Ni	231.604		Recovery = 100.47%	
Pb	220.353†	5452.6	0.503 mg/L	0.0044	0.87%
	QC value within limits for Pb	220.353		Recovery = 100.52%	
Sb	206.836†	5035.4	1.20 mg/L	0.026	2.20%
	QC value within limits for Sb	206.836		Recovery = 99.83%	
Se	196.026†	719.3	0.398 mg/L	0.0067	1.68%
	QC value within limits for Se	196.026		Recovery = 99.48%	
Si	251.611†	211151.2	5.01 mg/L	0.116	2.32%
	QC value within limits for Si	251.611		Recovery = 100.11%	
Sn	189.927†	10127.3	0.996 mg/L	0.0119	1.20%
	QC value within limits for Sn	189.927		Recovery = 99.58%	
Ti	334.940†	984502.2	0.977 mg/L	0.0070	0.72%
	QC value within limits for Ti	334.940		Recovery = 97.73%	
Tl	190.801†	1930.1	0.515 mg/L	0.0069	1.34%
	QC value within limits for Tl	190.801		Recovery = 102.91%	
V	290.880†	191635.1	0.995 mg/L	0.0145	1.46%
	QC value within limits for V	290.880		Recovery = 99.47%	
Zn	206.200†	40046.0	1.02 mg/L	0.008	0.77%
	QC value within limits for Zn	206.200		Recovery = 102.33%	
K	766.490†	169460.2	48.5 mg/L	0.16	0.34%
	QC value within limits for K	766.490		Recovery = 96.99%	
Na	589.592†	993613.5	47.4 mg/L	0.58	1.22%
	QC value within limits for Na	589.592		Recovery = 94.86%	
Sr	407.771†	2747072.6	0.969 mg/L	0.0148	1.52%
	QC value within limits for Sr	407.771		Recovery = 96.87%	
Li	670.784†	168805.0	0.968 mg/L	0.0071	0.73%
	QC value within limits for Li	670.784		Recovery = 96.82%	

All analyte(s) passed QC.

```

Sequence No.: 11
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:
=====
u&osampler Location: 1
a&e Collected: 5/9/2012 1:29:08 PM
a&a Type: Original
n&tial Sample Vol:
a&ple Prep Vol:
    
```

```

-----
Nebulizer Parameters: CCB
Analyte          Back Pressure    Flow
All              154.0 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	2365835.5				23604.81	1.00%
YRADIAL	318226.0				7450.71	2.34%
Ga 417.206	1451784.0				26535.53	1.83%
GaRADIAL	96473.6				1379.58	1.43%
Ag 328.068†	12.1	-0.00185 mg/L	0.000172	-0.00185 mg/L	0.000172	9.31%
	QC value within limits for Ag	328.068		Recovery = Not calculated		
Al 396.153†	54.7	-0.00742 mg/L	0.001364	-0.00742 mg/L	0.001364	18.38%
	QC value within limits for Al	396.153		Recovery = Not calculated		
As 188.979†	-1.0	0.00116 mg/L	0.003139	0.00116 mg/L	0.003139	270.94%
	QC value within limits for As	188.979		Recovery = Not calculated		
Ba 233.527†	6.2	-0.00375 mg/L	0.000080	-0.00375 mg/L	0.000080	2.13%
	QC value within limits for Ba	233.527		Recovery = Not calculated		
Be 234.861†	13.1	-0.00016 mg/L	0.000016	-0.00016 mg/L	0.000016	9.96%
	QC value within limits for Be	234.861		Recovery = Not calculated		
B 249.677†	314.7	0.00243 mg/L	0.000136	0.00243 mg/L	0.000136	5.59%
	QC value within limits for B	249.677		Recovery = Not calculated		
Ca 227.546†	3.7	0.00822 mg/L	0.037704	0.00822 mg/L	0.037704	458.55%

Approved: May 10, 2012

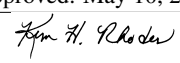
[Signature]

Cd	QC value within limits for Ca 227.546 Recovery = Not calculated			
	228.802† -4.9 -0.00030 mg/L 0.000076 -0.00030 mg/L 0.000076 25.60%			
Co	QC value within limits for Cd 228.802 Recovery = Not calculated			
	228.616† 6.1 -0.00047 mg/L 0.000167 -0.00047 mg/L 0.000167 35.45%			
Cr	QC value within limits for Co 228.616 Recovery = Not calculated			
	267.716† -9.9 -0.00208 mg/L 0.000097 -0.00208 mg/L 0.000097 4.65%			
Cu	QC value within limits for Cr 267.716 Recovery = Not calculated			
	327.393† 55.7 -0.00102 mg/L 0.000579 -0.00102 mg/L 0.000579 57.01%			
Fe	QC value within limits for Cu 327.393 Recovery = Not calculated			
	239.562† 41.4 0.00754 mg/L 0.000334 0.00754 mg/L 0.000334 4.44%			
Mg	QC value within limits for Fe 239.562 Recovery = Not calculated			
	279.077† 19.8 0.0138 mg/L 0.00363 0.0138 mg/L 0.00363 26.24%			
Mn	QC value within limits for Mg 279.077 Recovery = Not calculated			
	257.610† 44.7 -0.00274 mg/L 0.000019 -0.00274 mg/L 0.000019 0.69%			
Mo	QC value within limits for Mn 257.610 Recovery = Not calculated			
	202.031† 5.1 -0.00149 mg/L 0.000045 -0.00149 mg/L 0.000045 3.00%			
Ni	QC value within limits for Mo 202.031 Recovery = Not calculated			
	231.604† 6.9 -0.00219 mg/L 0.000288 -0.00219 mg/L 0.000288 13.11%			
Pb	QC value within limits for Ni 231.604 Recovery = Not calculated			
	220.353† 6.9 -0.00079 mg/L 0.001021 -0.00079 mg/L 0.001021 129.96%			
Sb	QC value within limits for Pb 220.353 Recovery = Not calculated			
	206.836† 0.2 -0.00467 mg/L 0.000434 -0.00467 mg/L 0.000434 9.30%			
Se	QC value within limits for Sb 206.836 Recovery = Not calculated			
	196.026† -2.0 0.00145 mg/L 0.001104 0.00145 mg/L 0.001104 76.16%			
Si	QC value within limits for Se 196.026 Recovery = Not calculated			
	251.611† 84.8 -0.0215 mg/L 0.00022 -0.0215 mg/L 0.00022 1.04%			
Sn	QC value within limits for Si 251.611 Recovery = Not calculated			
	189.927† -5.5 -0.00326 mg/L 0.000285 -0.00326 mg/L 0.000285 8.74%			
Ti	QC value within limits for Sn 189.927 Recovery = Not calculated			
	334.940† 68.6 -0.00029 mg/L 0.000079 -0.00029 mg/L 0.000079 26.91%			
Tl	QC value within limits for Ti 334.940 Recovery = Not calculated			
	190.801† -2.9 -0.00342 mg/L 0.001955 -0.00342 mg/L 0.001955 57.19%			
V	QC value within limits for Tl 190.801 Recovery = Not calculated			
	290.880† -230.7 -0.00464 mg/L 0.000791 -0.00464 mg/L 0.000791 17.04%			
Zn	QC value within limits for V 290.880 Recovery = Not calculated			
	206.200† 7.5 -0.00568 mg/L 0.000255 -0.00568 mg/L 0.000255 4.49%			
K	QC value within limits for Zn 206.200 Recovery = Not calculated			
	766.490† 23.6 -0.0134 mg/L 0.01524 -0.0134 mg/L 0.01524 114.13%			
Na	QC value within limits for K 766.490 Recovery = Not calculated			
	589.592† 85.4 0.00856 mg/L 0.004454 0.00856 mg/L 0.004454 52.03%			
Sr	QC value within limits for Na 589.592 Recovery = Not calculated			
	407.771† 157.7 -0.00019 mg/L 0.000009 -0.00019 mg/L 0.000009 4.52%			
Li	QC value within limits for Sr 407.771 Recovery = Not calculated			
	670.784† -31.2 -0.00709 mg/L 0.000447 -0.00709 mg/L 0.000447 6.31%			
	QC value within limits for Li 670.784 Recovery = Not calculated			
	All analyte(s) passed QC.			

Sequence No.: 12 u&osampler Location: 12
 Sample ID: ICSA Date Collected: 5/9/2012 1:36:01 PM
 Analyst: Data Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

Nebulizer Parameters: ICSA
 Analyte Back Pressure Flow
 All 153.0 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	2089880.3				15731.10	0.75%	
YRADIAL	302006.6				2274.55	0.75%	
Ga 417.206	1313062.5				31224.49	2.38%	
GA RADIAL	92481.6				1030.67	1.11%	
Ag 328.068†	-13421.1	-0.00300 mg/L	0.000686	-0.00300 mg/L	0.000686	22.86%	
	QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	1917095.0	241 mg/L	1.1	241 mg/L	1.1	0.45%	
	QC value within limits for Al 396.153 Recovery = 96.45%						
As 188.979†	-16.3	0.00203 mg/L	0.000967	0.00203 mg/L	0.000967	47.74%	

Approved: May 10, 2012


QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	715.3	-0.00136 mg/L	0.000121	-0.00136 mg/L	0.000121	8.90%	
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 234.861†	25247.7	-0.00073 mg/L	0.000005	-0.00073 mg/L	0.000005	0.71%	
QC value within limits for Be	234.861	Recovery = Not calculated					
B 249.677†	4552.7	0.0112 mg/L	0.00231	0.0112 mg/L	0.00231	20.64%	
QC value within limits for B	249.677	Recovery = Not calculated					
Ca 227.546†	123920.9	255 mg/L	7.7	255 mg/L	7.7	3.00%	
QC value within limits for Ca	227.546	Recovery = 102.11%					
Cd 228.802†	5.6	-0.00026 mg/L	0.000201	-0.00026 mg/L	0.000201	78.85%	
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	20.1	-0.00246 mg/L	0.000238	-0.00246 mg/L	0.000238	9.70%	
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	69.9	-0.00261 mg/L	0.000137	-0.00261 mg/L	0.000137	5.24%	
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	-1462.4	0.00142 mg/L	0.000077	0.00142 mg/L	0.000077	5.41%	
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 239.562†	1507239.1	93.1 mg/L	0.56	93.1 mg/L	0.56	0.61%	
QC value within limits for Fe	239.562	Recovery = 93.11%					
Mg 279.077†	903700.1	250 mg/L	1.5	250 mg/L	1.5	0.62%	
QC value within limits for Mg	279.077	Recovery = 100.12%					
Mn 257.610†	-2056.3	-0.00269 mg/L	0.000522	-0.00269 mg/L	0.000522	19.41%	
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	-75.9	0.00085 mg/L	0.000271	0.00085 mg/L	0.000271	31.99%	
QC value within limits for Mo	202.031	Recovery = Not calculated					
Ni 231.604†	57.7	-0.00142 mg/L	0.000666	-0.00142 mg/L	0.000666	46.90%	
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	-369.6	-0.00175 mg/L	0.001700	-0.00175 mg/L	0.001700	97.20%	
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	-21.9	-0.00653 mg/L	0.000509	-0.00653 mg/L	0.000509	7.80%	
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	-53.5	-0.00194 mg/L	0.007271	-0.00194 mg/L	0.007271	374.06%	
QC value within limits for Se	196.026	Recovery = Not calculated					
Si 251.611†	532.7	-0.0108 mg/L	0.00037	-0.0108 mg/L	0.00037	3.45%	
QC value within limits for Si	251.611	Recovery = Not calculated					
Sn 189.927†	-332.5	-0.0355 mg/L	0.00062	-0.0355 mg/L	0.00062	1.74%	
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	-38839.9	-0.00093 mg/L	0.003373	-0.00093 mg/L	0.003373	364.12%	
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	-37.6	-0.00634 mg/L	0.006408	-0.00634 mg/L	0.006408	101.00%	
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	4184.3	-0.00284 mg/L	0.002267	-0.00284 mg/L	0.002267	79.91%	
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	196.7	-0.00261 mg/L	0.001060	-0.00261 mg/L	0.001060	40.64%	
QC value within limits for Zn	206.200	Recovery = Not calculated					
K 766.490†	-143.4	-0.0601 mg/L	0.00896	-0.0601 mg/L	0.00896	14.91%	
QC value within limits for K	766.490	Recovery = Not calculated					
Na 589.592†	-106.5	-0.00044 mg/L	0.007323	-0.00044 mg/L	0.007323	>999.9%	
QC value within limits for Na	589.592	Recovery = Not calculated					
Sr 407.771†	2846.8	-0.00481 mg/L	0.000165	-0.00481 mg/L	0.000165	3.43%	
QC value within limits for Sr	407.771	Recovery = Not calculated					
Li 670.784†	226.2	-0.00560 mg/L	0.000477	-0.00560 mg/L	0.000477	8.51%	
QC value within limits for Li	670.784	Recovery = Not calculated					

All analyte(s) passed QC.

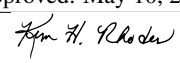
```

=====
Sequence No.: 13                               u\osampler Location: 13
Sample ID: ICSAB                               a\me Collected: 5/9/2012 1:41:57 PM
Analyst:                                       a\sa Type: Original
Initial Sample Wt:                             n\itial Sample Vol:
Dilution:                                     a\mple Prep Vol:
=====
    
```

```

-----
Nebulizer Parameters: ICSAB
Analyte      Back Pressure      Flow
All          153.0 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	2074687.2				28558.40	1.38%	

Approved: May 10, 2012


YRADIAL	299509.5				2166.16	0.72%
Ga 417.206	1333745.3				47756.12	3.58%
GaRADIAL	91995.8				415.86	0.45%
Ag 328.068†	147758.0	0.508 mg/L	0.0205	0.508 mg/L	0.0205	4.03%
QC value within limits for Ag	328.068	Recovery = 101.56%				
Al 396.153†	2005543.0	252 mg/L	0.8	252 mg/L	0.8	0.33%
QC value within limits for Al	396.153	Recovery = 100.90%				
As 188.979†	648.0	0.238 mg/L	0.0099	0.238 mg/L	0.0099	4.16%
QC value within limits for As	188.979	Recovery = 95.06%				
Ba 233.527†	38629.7	0.251 mg/L	0.0036	0.251 mg/L	0.0036	1.43%
QC value within limits for Ba	233.527	Recovery = 100.42%				
Be 234.861†	338532.0	0.249 mg/L	0.0101	0.249 mg/L	0.0101	4.03%
QC value within limits for Be	234.861	Recovery = 99.79%				
B 249.677†	4397.2	-0.00356 mg/L	0.002994	-0.00356 mg/L	0.002994	84.05%
QC value within limits for B	249.677	Recovery = Not calculated				
Ca 227.546†	126372.2	261 mg/L	10.8	261 mg/L	10.8	4.14%
QC value within limits for Ca	227.546	Recovery = 104.28%				
Cd 228.802†	23226.1	0.420 mg/L	0.0161	0.420 mg/L	0.0161	3.83%
QC value within limits for Cd	228.802	Recovery = 83.98%				
Co 228.616†	8978.9	0.236 mg/L	0.0033	0.236 mg/L	0.0033	1.39%
QC value within limits for Co	228.616	Recovery = 94.57%				
Cr 267.716†	27198.5	0.252 mg/L	0.0018	0.252 mg/L	0.0018	0.71%
QC value within limits for Cr	267.716	Recovery = 100.90%				
Cu 327.393†	67419.3	0.246 mg/L	0.0085	0.246 mg/L	0.0085	3.44%
QC value within limits for Cu	327.393	Recovery = 98.25%				
Fe 239.562†	1546253.2	95.5 mg/L	0.63	95.5 mg/L	0.63	0.66%
QC value within limits for Fe	239.562	Recovery = 95.52%				
Mg 279.077†	932561.8	258 mg/L	1.8	258 mg/L	1.8	0.70%
QC value within limits for Mg	279.077	Recovery = 103.32%				
Mn 257.610†	198924.2	0.243 mg/L	0.0024	0.243 mg/L	0.0024	1.00%
QC value within limits for Mn	257.610	Recovery = 97.09%				
Mo 202.031†	-78.5	0.00106 mg/L	0.000379	0.00106 mg/L	0.000379	35.70%
QC value within limits for Mo	202.031	Recovery = Not calculated				
Ni 231.604†	32056.8	0.483 mg/L	0.0051	0.483 mg/L	0.0051	1.05%
QC value within limits for Ni	231.604	Recovery = 96.66%				
Pb 220.353†	4863.7	0.482 mg/L	0.0093	0.482 mg/L	0.0093	1.92%
QC value within limits for Pb	220.353	Recovery = 96.42%				
Sb 206.836†	2058.5	0.489 mg/L	0.0213	0.489 mg/L	0.0213	4.36%
QC value within limits for Sb	206.836	Recovery = 97.87%				
Se 196.026†	394.1	0.244 mg/L	0.0122	0.244 mg/L	0.0122	4.99%
QC value within limits for Se	196.026	Recovery = 97.59%				
Si 251.611†	-133.0	-0.0267 mg/L	0.00090	-0.0267 mg/L	0.00090	3.37%
QC value within limits for Si	251.611	Recovery = Not calculated				
Sn 189.927†	-322.7	-0.0345 mg/L	0.00063	-0.0345 mg/L	0.00063	1.82%
QC value within limits for Sn	189.927	Recovery = Not calculated				
Ti 334.940†	-40815.3	-0.00221 mg/L	0.004523	-0.00221 mg/L	0.004523	204.66%
QC value within limits for Ti	334.940	Recovery = Not calculated				
Tl 190.801†	1817.1	0.478 mg/L	0.0041	0.478 mg/L	0.0041	0.86%
QC value within limits for Tl	190.801	Recovery = 95.51%				
V 290.880†	51901.2	0.245 mg/L	0.0022	0.245 mg/L	0.0022	0.89%
QC value within limits for V	290.880	Recovery = 98.14%				
Zn 206.200†	19312.8	0.489 mg/L	0.0041	0.489 mg/L	0.0041	0.83%
QC value within limits for Zn	206.200	Recovery = 97.76%				
K 766.490†	16868.6	4.71 mg/L	0.053	4.71 mg/L	0.053	1.12%
QC value within limits for K	766.490	Recovery = 94.17%				
Na 589.592†	105400.1	4.96 mg/L	0.006	4.96 mg/L	0.006	0.12%
QC value within limits for Na	589.592	Recovery = 99.16%				
Sr 407.771†	2967.5	-0.00487 mg/L	0.000242	-0.00487 mg/L	0.000242	4.96%
QC value within limits for Sr	407.771	Recovery = Not calculated				
Li 670.784†	242.4	-0.00551 mg/L	0.000295	-0.00551 mg/L	0.000295	5.34%
QC value within limits for Li	670.784	Recovery = Not calculated				

All analyte(s) passed QC.

```

=====
Sequence No.: 14                               u&osampler Location: 6
Sample ID: CCV                                 a&e Collected: 5/9/2012 1:47:54 PM
Analyst:                                       a&a Type: Original
Initial Sample Wt:                             nitial Sample Vol:
Dilution:                                     a&mp;le Prep Vol:
=====

```

Nebulizer Parameters: CCV

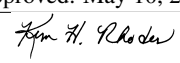
Approved: May 10, 2012
<i>Tom H. Rhodes</i>

Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

 Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2233801.3				14781.98	0.66%
YRADIAL	307607.4				2124.66	0.69%
Ga 417.206	1348929.6				13974.67	1.04%
GaRADIAL	92603.0				324.32	0.35%
Ag 328.068†	133675.4	0.424 mg/L	0.0059	0.424 mg/L	0.0059	1.38%
QC value within limits for Ag		328.068	Recovery = 106.04%			
Al 396.153†	81061.2	10.1 mg/L	0.01	10.1 mg/L	0.01	0.10%
QC value within limits for Al		396.153	Recovery = 101.11%			
As 188.979†	1154.1	0.405 mg/L	0.0051	0.405 mg/L	0.0051	1.25%
QC value within limits for As		188.979	Recovery = 101.37%			
Ba 233.527†	158491.4	1.05 mg/L	0.017	1.05 mg/L	0.017	1.66%
QC value within limits for Ba		233.527	Recovery = 105.22%			
Be 234.861†	65953.7	0.0521 mg/L	0.00074	0.0521 mg/L	0.00074	1.43%
QC value within limits for Be		234.861	Recovery = 104.28%			
B 249.677†	45015.6	0.513 mg/L	0.0085	0.513 mg/L	0.0085	1.66%
QC value within limits for B		249.677	Recovery = 102.64%			
Ca 227.546†	4923.7	10.5 mg/L	0.16	10.5 mg/L	0.16	1.54%
QC value within limits for Ca		227.546	Recovery = 105.39%			
Cd 228.802†	2902.2	0.0509 mg/L	0.00136	0.0509 mg/L	0.00136	2.67%
QC value within limits for Cd		228.802	Recovery = 101.86%			
Co 228.616†	7720.6	0.205 mg/L	0.0020	0.205 mg/L	0.0020	0.98%
QC value within limits for Co		228.616	Recovery = 102.28%			
Cr 267.716†	55957.4	0.524 mg/L	0.0083	0.524 mg/L	0.0083	1.58%
QC value within limits for Cr		267.716	Recovery = 104.81%			
Cu 327.393†	145058.3	0.514 mg/L	0.0068	0.514 mg/L	0.0068	1.33%
QC value within limits for Cu		327.393	Recovery = 102.88%			
Fe 239.562†	67647.8	4.18 mg/L	0.019	4.18 mg/L	0.019	0.46%
QC value within limits for Fe		239.562	Recovery = 104.58%			
Mg 279.077†	37453.9	10.4 mg/L	0.05	10.4 mg/L	0.05	0.48%
QC value within limits for Mg		279.077	Recovery = 104.00%			
Mn 257.610†	435009.7	0.529 mg/L	0.0083	0.529 mg/L	0.0083	1.57%
QC value within limits for Mn		257.610	Recovery = 105.74%			
Mo 202.031†	37434.4	1.03 mg/L	0.016	1.03 mg/L	0.016	1.51%
QC value within limits for Mo		202.031	Recovery = 103.23%			
Ni 231.604†	34810.6	0.525 mg/L	0.0086	0.525 mg/L	0.0086	1.64%
QC value within limits for Ni		231.604	Recovery = 105.02%			
Pb 220.353†	5585.0	0.515 mg/L	0.0034	0.515 mg/L	0.0034	0.67%
QC value within limits for Pb		220.353	Recovery = 102.97%			
Sb 206.836†	5242.6	1.25 mg/L	0.021	1.25 mg/L	0.021	1.71%
QC value within limits for Sb		206.836	Recovery = 103.95%			
Se 196.026†	745.4	0.412 mg/L	0.0087	0.412 mg/L	0.0087	2.10%
QC value within limits for Se		196.026	Recovery = 103.06%			
Si 251.611†	222107.1	5.27 mg/L	0.028	5.27 mg/L	0.028	0.53%
QC value within limits for Si		251.611	Recovery = 105.33%			
Sn 189.927†	10337.8	1.02 mg/L	0.010	1.02 mg/L	0.010	0.96%
QC value within limits for Sn		189.927	Recovery = 101.66%			
Ti 334.940†	1020827.7	1.01 mg/L	0.001	1.01 mg/L	0.001	0.12%
QC value within limits for Ti		334.940	Recovery = 101.34%			
Tl 190.801†	1979.6	0.528 mg/L	0.0017	0.528 mg/L	0.0017	0.33%
QC value within limits for Tl		190.801	Recovery = 105.59%			
V 290.880†	199345.0	1.03 mg/L	0.020	1.03 mg/L	0.020	1.92%
QC value within limits for V		290.880	Recovery = 103.49%			
Zn 206.200†	42094.3	1.08 mg/L	0.010	1.08 mg/L	0.010	0.89%
QC value within limits for Zn		206.200	Recovery = 107.59%			
K 766.490†	173674.4	49.7 mg/L	0.27	49.7 mg/L	0.27	0.55%
QC value within limits for K		766.490	Recovery = 99.46%			
Na 589.592†	1046162.1	50.0 mg/L	0.43	50.0 mg/L	0.43	0.86%
QC value within limits for Na		589.592	Recovery = 99.97%			
Sr 407.771†	2894430.6	1.02 mg/L	0.024	1.02 mg/L	0.024	2.33%
QC value within limits for Sr		407.771	Recovery = 102.06%			
Li 670.784†	172827.8	0.991 mg/L	0.0094	0.991 mg/L	0.0094	0.95%
QC value within limits for Li		670.784	Recovery = 99.14%			

All analyte(s) passed QC.

Approved: May 10, 2012


Sequence No.: 15
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

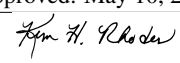
Udosampler Location: 1
 Date Collected: 5/9/2012 1:53:55 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 153.0 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	2332750.9				23382.56	1.00%
YRADIAL	318108.5				5604.73	1.76%
Ga 417.206	1456310.8				8258.05	0.57%
GaRADIAL	96306.8				1105.48	1.15%
Ag 328.068†	51.4	-0.00172 mg/L	0.000120	-0.00172 mg/L	0.000120	6.97%
QC value within limits for Ag	328.068	Recovery =	Not calculated			
Al 396.153†	101.7	-0.00151 mg/L	0.001477	-0.00151 mg/L	0.001477	98.13%
QC value within limits for Al	396.153	Recovery =	Not calculated			
As 188.979†	0.2	0.00160 mg/L	0.001421	0.00160 mg/L	0.001421	88.85%
QC value within limits for As	188.979	Recovery =	Not calculated			
Ba 233.527†	14.7	-0.00369 mg/L	0.000064	-0.00369 mg/L	0.000064	1.72%
QC value within limits for Ba	233.527	Recovery =	Not calculated			
Be 234.861†	-18.4	-0.00018 mg/L	0.000031	-0.00018 mg/L	0.000031	16.53%
QC value within limits for Be	234.861	Recovery =	Not calculated			
B 249.677†	318.6	0.00247 mg/L	0.000106	0.00247 mg/L	0.000106	4.31%
QC value within limits for B	249.677	Recovery =	Not calculated			
Ca 227.546†	7.3	0.0156 mg/L	0.01720	0.0156 mg/L	0.01720	110.27%
QC value within limits for Ca	227.546	Recovery =	Not calculated			
Cd 228.802†	0.1	-0.00021 mg/L	0.000192	-0.00021 mg/L	0.000192	91.81%
QC value within limits for Cd	228.802	Recovery =	Not calculated			
Co 228.616†	4.9	-0.00051 mg/L	0.000103	-0.00051 mg/L	0.000103	20.25%
QC value within limits for Co	228.616	Recovery =	Not calculated			
Cr 267.716†	7.2	-0.00192 mg/L	0.000055	-0.00192 mg/L	0.000055	2.86%
QC value within limits for Cr	267.716	Recovery =	Not calculated			
Cu 327.393†	89.0	-0.00090 mg/L	0.000286	-0.00090 mg/L	0.000286	31.90%
QC value within limits for Cu	327.393	Recovery =	Not calculated			
Fe 239.562†	131.2	0.0131 mg/L	0.00032	0.0131 mg/L	0.00032	2.41%
QC value within limits for Fe	239.562	Recovery =	Not calculated			
Mg 279.077†	69.7	0.0276 mg/L	0.00201	0.0276 mg/L	0.00201	7.26%
QC value within limits for Mg	279.077	Recovery =	Not calculated			
Mn 257.610†	80.9	-0.00269 mg/L	0.000040	-0.00269 mg/L	0.000040	1.47%
QC value within limits for Mn	257.610	Recovery =	Not calculated			
Mo 202.031†	-0.8	-0.00165 mg/L	0.000027	-0.00165 mg/L	0.000027	1.64%
QC value within limits for Mo	202.031	Recovery =	Not calculated			
Ni 231.604†	4.2	-0.00223 mg/L	0.000311	-0.00223 mg/L	0.000311	13.93%
QC value within limits for Ni	231.604	Recovery =	Not calculated			
Pb 220.353†	14.6	-0.00008 mg/L	0.001088	-0.00008 mg/L	0.001088	>999.9%
QC value within limits for Pb	220.353	Recovery =	Not calculated			
Sb 206.836†	4.4	-0.00364 mg/L	0.000883	-0.00364 mg/L	0.000883	24.24%
QC value within limits for Sb	206.836	Recovery =	Not calculated			
Se 196.026†	5.2	0.00536 mg/L	0.001916	0.00536 mg/L	0.001916	35.77%
QC value within limits for Se	196.026	Recovery =	Not calculated			
Si 251.611†	46.5	-0.0224 mg/L	0.00036	-0.0224 mg/L	0.00036	1.62%
QC value within limits for Si	251.611	Recovery =	Not calculated			
Sn 189.927†	0.2	-0.00269 mg/L	0.000543	-0.00269 mg/L	0.000543	20.16%
QC value within limits for Sn	189.927	Recovery =	Not calculated			
Ti 334.940†	280.1	-0.00008 mg/L	0.000038	-0.00008 mg/L	0.000038	46.17%
QC value within limits for Ti	334.940	Recovery =	Not calculated			
Tl 190.801†	-6.2	-0.00426 mg/L	0.001035	-0.00426 mg/L	0.001035	24.29%
QC value within limits for Tl	190.801	Recovery =	Not calculated			
V 290.880†	-116.2	-0.00405 mg/L	0.001331	-0.00405 mg/L	0.001331	32.90%
QC value within limits for V	290.880	Recovery =	Not calculated			
Zn 206.200†	11.7	-0.00558 mg/L	0.000024	-0.00558 mg/L	0.000024	0.44%
QC value within limits for Zn	206.200	Recovery =	Not calculated			
K 766.490†	58.5	-0.00357 mg/L	0.014043	-0.00357 mg/L	0.014043	393.19%
QC value within limits for K	766.490	Recovery =	Not calculated			
Na 589.592†	23.0	0.00563 mg/L	0.004425	0.00563 mg/L	0.004425	78.58%

Approved: May 10, 2012


QC value within limits for Na 589.592 Recovery = Not calculated
 Sr 407.771† 349.9 -0.00012 mg/L 0.000040 -0.00012 mg/L 0.000040 32.94%
 QC value within limits for Sr 407.771 Recovery = Not calculated
 Li 670.784† -15.9 -0.00700 mg/L 0.000251 -0.00700 mg/L 0.000251 3.59%
 QC value within limits for Li 670.784 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 16 u\osampler Location: 14
 Sample ID: PBW 06 WG397293-02 a\ne Collected: 5/9/2012 2:00:48 PM
 Analyst: KHR a\ne Type: Original
 Initial Sample Wt: n\itial Sample Vol:
 Dilution: a\mple Prep Vol:

Nebulizer Parameters: PBW 06 WG397293-02
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: PBW 06 WG397293-02

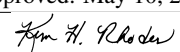
Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2315647.7					19413.12	0.84%
YRADIAL	313138.7					2982.10	0.95%
Ga 417.206	1471496.1					16403.57	1.11%
GaRADIAL	97071.8					2586.16	2.66%
Ag 328.068†	-165.7	-0.00240 mg/L	0.000116	0.000116	-0.00240 mg/L	0.000116	4.81%
Al 396.153†	38.6	-0.00944 mg/L	0.001574	0.001574	-0.00944 mg/L	0.001574	16.67%
As 188.979†	-1.7	0.00092 mg/L	0.003442	0.00092	0.00092 mg/L	0.003442	375.79%
Ba 233.527†	18.0	-0.00367 mg/L	0.000056	0.000056	-0.00367 mg/L	0.000056	1.53%
Be 234.861†	32.0	-0.00014 mg/L	0.000009	0.000009	-0.00014 mg/L	0.000009	6.26%
B 249.677†	258.7	0.00178 mg/L	0.000090	0.000090	0.00178 mg/L	0.000090	5.03%
Ca 227.546†	16.6	0.0347 mg/L	0.00624	0.00624	0.0347 mg/L	0.00624	17.97%
Cd 228.802†	-0.3	-0.00021 mg/L	0.000192	0.000192	-0.00021 mg/L	0.000192	89.62%
Co 228.616†	4.5	-0.00052 mg/L	0.000140	0.000140	-0.00052 mg/L	0.000140	27.11%
Cr 267.716†	4.3	-0.00195 mg/L	0.000064	0.000064	-0.00195 mg/L	0.000064	3.31%
Cu 327.393†	-31.2	-0.00132 mg/L	0.000324	0.000324	-0.00132 mg/L	0.000324	24.51%
Fe 239.562†	60.5	0.00872 mg/L	0.000927	0.000927	0.00872 mg/L	0.000927	10.63%
Mg 279.077†	19.0	0.0136 mg/L	0.00330	0.00330	0.0136 mg/L	0.00330	24.30%
Mn 257.610†	174.2	-0.00258 mg/L	0.000018	0.000018	-0.00258 mg/L	0.000018	0.70%
Mo 202.031†	-1.0	-0.00166 mg/L	0.000310	0.000310	-0.00166 mg/L	0.000310	18.65%
Ni 231.604†	12.5	-0.00211 mg/L	0.000094	0.000094	-0.00211 mg/L	0.000094	4.46%
Pb 220.353†	4.8	-0.00098 mg/L	0.000497	0.000497	-0.00098 mg/L	0.000497	50.69%
Sb 206.836†	3.6	-0.00384 mg/L	0.001104	0.001104	-0.00384 mg/L	0.001104	28.74%
Se 196.026†	4.5	0.00501 mg/L	0.000934	0.000934	0.00501 mg/L	0.000934	18.64%
Si 251.611†	83.1	-0.0215 mg/L	0.00029	0.00029	-0.0215 mg/L	0.00029	1.37%
Sn 189.927†	-15.0	-0.00419 mg/L	0.000800	0.000800	-0.00419 mg/L	0.000800	19.07%
Ti 334.940†	173.0	-0.00019 mg/L	0.000073	0.000073	-0.00019 mg/L	0.000073	39.58%
Tl 190.801†	4.0	-0.00161 mg/L	0.000378	0.000378	-0.00161 mg/L	0.000378	23.52%
V 290.880†	142.6	-0.00270 mg/L	0.001827	0.001827	-0.00270 mg/L	0.001827	67.75%
Zn 206.200†	70.9	-0.00406 mg/L	0.000103	0.000103	-0.00406 mg/L	0.000103	2.55%
K 766.490†	2.0	-0.0194 mg/L	0.01069	0.01069	-0.0194 mg/L	0.01069	55.11%
Na 589.592†	-187.5	-0.00424 mg/L	0.006886	0.006886	-0.00424 mg/L	0.006886	162.35%
Sr 407.771†	-56.9	-0.00027 mg/L	0.000023	0.000023	-0.00027 mg/L	0.000023	8.52%
Li 670.784†	-31.6	-0.00709 mg/L	0.000413	0.000413	-0.00709 mg/L	0.000413	5.83%

Sequence No.: 17 u\osampler Location: 15
 Sample ID: LCSW 06 WG397293-03 a\ne Collected: 5/9/2012 2:07:43 PM
 Analyst: KHR a\ne Type: Original
 Initial Sample Wt: n\itial Sample Vol:
 Dilution: a\mple Prep Vol:

Nebulizer Parameters: LCSW 06 WG397293-03
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: LCSW 06 WG397293-03

Analyte	Mean Corrected	Calib.	Sample
---------	----------------	--------	--------

Approved: May 10, 2012


Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	2263184.2				14602.28	0.65%
YRADIAL	315942.9				825.27	0.26%
Ga 417.206	1419993.9				24213.07	1.71%
GaRADIAL	95103.3				743.77	0.78%
Ag 328.068†	64291.6	0.203 mg/L	0.0059	0.203 mg/L	0.0059	2.89%
Al 396.153†	40291.9	5.02 mg/L	0.006	5.02 mg/L	0.006	0.13%
As 188.979†	556.5	0.196 mg/L	0.0033	0.196 mg/L	0.0033	1.70%
Ba 233.527†	78397.7	0.519 mg/L	0.0108	0.519 mg/L	0.0108	2.08%
Be 234.861†	31443.6	0.0248 mg/L	0.00067	0.0248 mg/L	0.00067	2.71%
B 249.677†	86172.9	0.989 mg/L	0.0278	0.989 mg/L	0.0278	2.81%
Ca 227.546†	2314.4	4.97 mg/L	0.095	4.97 mg/L	0.095	1.92%
Cd 228.802†	1381.0	0.0241 mg/L	0.00092	0.0241 mg/L	0.00092	3.80%
Co 228.616†	3856.7	0.102 mg/L	0.0006	0.102 mg/L	0.0006	0.59%
Cr 267.716†	27559.8	0.257 mg/L	0.0071	0.257 mg/L	0.0071	2.76%
Cu 327.393†	70621.9	0.250 mg/L	0.0041	0.250 mg/L	0.0041	1.63%
Fe 239.562†	32692.3	2.02 mg/L	0.014	2.02 mg/L	0.014	0.70%
Mg 279.077†	18589.7	5.17 mg/L	0.042	5.17 mg/L	0.042	0.82%
Mn 257.610†	213766.2	0.258 mg/L	0.0037	0.258 mg/L	0.0037	1.43%
Mo 202.031†	18688.4	0.515 mg/L	0.0112	0.515 mg/L	0.0112	2.19%
Ni 231.604†	17352.8	0.261 mg/L	0.0044	0.261 mg/L	0.0044	1.67%
Pb 220.353†	2784.5	0.256 mg/L	0.0019	0.256 mg/L	0.0019	0.73%
Sb 206.836†	2525.6	0.598 mg/L	0.0117	0.598 mg/L	0.0117	1.95%
Se 196.026†	364.1	0.203 mg/L	0.0057	0.203 mg/L	0.0057	2.80%
Si 251.611†	109532.1	2.59 mg/L	0.035	2.59 mg/L	0.035	1.36%
Sn 189.927†	5665.7	0.556 mg/L	0.0026	0.556 mg/L	0.0026	0.46%
Ti 334.940†	506644.4	0.503 mg/L	0.0005	0.503 mg/L	0.0005	0.10%
Tl 190.801†	1007.6	0.267 mg/L	0.0054	0.267 mg/L	0.0054	2.03%
V 290.880†	99122.1	0.513 mg/L	0.0113	0.513 mg/L	0.0113	2.20%
Zn 206.200†	20845.0	0.530 mg/L	0.0187	0.530 mg/L	0.0187	3.53%
K 766.490†	87769.2	24.8 mg/L	0.11	24.8 mg/L	0.11	0.42%
Na 589.592†	534446.4	25.3 mg/L	0.09	25.3 mg/L	0.09	0.37%
Sr 407.771†	1439273.2	0.507 mg/L	0.0073	0.507 mg/L	0.0073	1.43%
Li 670.784†	89537.0	0.510 mg/L	0.0066	0.510 mg/L	0.0066	1.29%

Sequence No.: 18

Sample ID: L1205010453 WG397293-01

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 16

Time Collected: 5/9/2012 2:13:42 PM

Time Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1205010453 WG397293-01

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1205010453 WG397293-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2315423.1					6333.59	0.27%
YRADIAL	314279.2					3851.19	1.23%
Ga 417.206	1464014.8					45740.16	3.12%
GaRADIAL	94553.8					1579.09	1.67%
Ag 328.068†	298.1	-0.00175 mg/L	0.000253	0.000253	-0.00175 mg/L	0.000253	14.47%
Al 396.153†	28322.6	3.55 mg/L	0.015	0.015	3.55 mg/L	0.015	0.41%
As 188.979†	-4.2	0.00000 mg/L	0.000761	0.000761	0.00000 mg/L	0.000761	>999.9%
Ba 233.527†	35.9	-0.00350 mg/L	0.000163	0.000163	-0.00350 mg/L	0.000163	4.65%
Be 234.861†	3531.6	0.00326 mg/L	0.000077	0.000077	0.00326 mg/L	0.000077	2.38%
B 249.677†	2898.2	0.0297 mg/L	0.00151	0.00151	0.0297 mg/L	0.00151	5.09%
Ca 227.546†	6552.7	13.5 mg/L	0.47	0.47	13.5 mg/L	0.47	3.48%
Cd 228.802†	1406.5	0.0264 mg/L	0.00095	0.00095	0.0264 mg/L	0.00095	3.59%
Co 228.616†	11146.3	0.297 mg/L	0.0028	0.0028	0.297 mg/L	0.0028	0.95%
Cr 267.716†	93.2	0.00450 mg/L	0.000153	0.000153	0.00450 mg/L	0.000153	3.41%
Cu 327.393†	137037.4	0.493 mg/L	0.0164	0.0164	0.493 mg/L	0.0164	3.32%
Fe 239.562†	2252.2	0.143 mg/L	0.0014	0.0014	0.143 mg/L	0.0014	0.96%
Mg 279.077†	23214.7	6.44 mg/L	0.062	0.062	6.44 mg/L	0.062	0.96%
Mn 257.610†	5159646.9	6.30 mg/L	0.008	0.008	6.30 mg/L	0.008	0.12%
Mo 202.031†	-80.1	-0.00252 mg/L	0.000623	0.000623	-0.00252 mg/L	0.000623	24.73%
Ni 231.604†	10956.8	0.164 mg/L	0.0022	0.0022	0.164 mg/L	0.0022	1.37%
Pb 220.353†	28.7	-0.00247 mg/L	0.000384	0.000384	-0.00247 mg/L	0.000384	15.58%

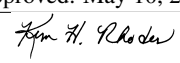
Approved: May 10, 2012


Table with 8 columns: Element, Value, Unit, Reference Value, Unit, Reference Value, Unit, Reference Value. Lists elements like Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values and units.

Sequence No.: 19
Sample ID: L1205010453S WG397293-04
Analyst: KHR
Initial Sample Wt:
Dilution:
u&osampler Location: 17
a&e Collected: 5/9/2012 2:20:39 PM
a&a Type: Original
n&itial Sample Vol:
a&mple Prep Vol:

Nebulizer Parameters: L1205010453S WG397293-04
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1205010453S WG397293-04
Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements and their mean corrected intensities and concentrations.

Sequence No.: 20
Sample ID: L1205010453SD WG397293-05
Analyst: KHR
Initial Sample Wt:
Dilution:
u&osampler Location: 18
a&e Collected: 5/9/2012 2:26:39 PM
a&a Type: Original
n&itial Sample Vol:
a&mple Prep Vol:

Nebulizer Parameters: L1205010453SD WG397293-05

Approved: May 10, 2012
[Signature]

Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1205010453SD WG397293-05

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 21 Sample ID: L1205015030 0.2 Analyst: KHR Initial Sample Wt: Dilution: uikosampler Location: 19 Date Collected: 5/9/2012 2:32:41 PM Data Type: Original Initial Sample Vol: Sample Prep Vol:

Nebulizer Parameters: L1205015030 0.2 Analyte Back Pressure Flow All 154.0 kPa 0.50 L/min

Mean Data: L1205015030 0.2

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu with their respective values.

Approved: May 10, 2012 [Signature]

Table with 8 columns: Element, Intensity, Conc., Units, Std.Dev., Conc., Units, Std.Dev., RSD. Lists elements like Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 22
Sample ID: L1205022001 0.01
Analyst: KHR
Initial Sample Wt:
Dilution:
u&osampler Location: 20
Date Collected: 5/9/2012 2:38:43 PM
Date Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205022001 0.01
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1205022001 0.01
Table with 8 columns: Analyte, Mean Corrected Intensity, Conc., Units, Std.Dev., Conc., Units, Std.Dev., RSD. Lists elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective values.

Sequence No.: 23
Sample ID: L1205010447 0.1
u&osampler Location: 21
Date Collected: 5/9/2012 2:44:47 PM

Approved: May 10, 2012
[Signature]

Analyst: KHR
Initial Sample Wt:
Dilution:

alpha Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205010447 0.1
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1205010447 0.1

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li with their respective intensity and RSD values.

Sequence No.: 24
Sample ID: L1205010447PS WG397342-01
Analyst: KHR
Initial Sample Wt:
Dilution:

autosampler Location: 22
Date Collected: 5/9/2012 2:51:47 PM
alpha Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205010447PS WG397342-01
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1205010447PS WG397342-01

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists elements like Y, Ga, Ag, Al, As, Ba, Be with their respective intensity and RSD values.

Approved: May 10, 2012
[Signature]

B 249.677†	85527.0	0.982 mg/L	0.0329	0.982 mg/L	0.0329	3.35%
Ca 227.546†	13367.5	27.5 mg/L	0.98	27.5 mg/L	0.98	3.57%
Cd 228.802†	1369.9	0.0239 mg/L	0.00110	0.0239 mg/L	0.00110	4.58%
Co 228.616†	3762.3	0.0994 mg/L	0.00205	0.0994 mg/L	0.00205	2.06%
Cr 267.716†	27103.3	0.253 mg/L	0.0007	0.253 mg/L	0.0007	0.27%
Cu 327.393†	67866.2	0.240 mg/L	0.0074	0.240 mg/L	0.0074	3.07%
Fe 239.562†	32046.0	1.98 mg/L	0.021	1.98 mg/L	0.021	1.04%
Mg 279.077†	39502.1	11.0 mg/L	0.11	11.0 mg/L	0.11	1.04%
Mn 257.610†	210703.1	0.255 mg/L	0.0031	0.255 mg/L	0.0031	1.22%
Mo 202.031†	18306.5	0.504 mg/L	0.0024	0.504 mg/L	0.0024	0.48%
Ni 231.604†	16947.8	0.254 mg/L	0.0015	0.254 mg/L	0.0015	0.61%
Pb 220.353†	2770.2	0.255 mg/L	0.0050	0.255 mg/L	0.0050	1.97%
Sb 206.836†	2535.8	0.601 mg/L	0.0180	0.601 mg/L	0.0180	2.99%
Se 196.026†	365.4	0.203 mg/L	0.0059	0.203 mg/L	0.0059	2.89%
Si 251.611†	127285.3	3.01 mg/L	0.076	3.01 mg/L	0.076	2.52%
Sn 189.927†	-173.8	-0.0199 mg/L	0.00016	-0.0199 mg/L	0.00016	0.79%
Ti 334.940†	493118.2	0.493 mg/L	0.0025	0.493 mg/L	0.0025	0.51%
Tl 190.801†	965.5	0.256 mg/L	0.0033	0.256 mg/L	0.0033	1.30%
V 290.880†	96984.3	0.502 mg/L	0.0034	0.502 mg/L	0.0034	0.68%
Zn 206.200†	25699.4	0.654 mg/L	0.0043	0.654 mg/L	0.0043	0.66%
K 766.490†	87491.0	24.7 mg/L	0.10	24.7 mg/L	0.10	0.41%
Na 589.592†	566956.2	26.9 mg/L	0.29	26.9 mg/L	0.29	1.06%
Sr 407.771†	2041571.7	0.719 mg/L	0.0118	0.719 mg/L	0.0118	1.64%
Li 670.784†	87086.6	0.496 mg/L	0.0042	0.496 mg/L	0.0042	0.84%

Sequence No.: 25

Sample ID: L1205010447DL WG397342-02
Analyst: KHR
Initial Sample Wt:
Dilution:

Sampler Location: 23
Date Collected: 5/9/2012 2:57:48 PM
Sample Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205010447DL WG397342-02

Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1205010447DL WG397342-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2281124.1					7663.16	0.34%
YRADIAL	309617.1					3458.50	1.12%
Ga 417.206	1417153.3					23717.51	1.67%
GaRADIAL	93804.8					936.22	1.00%
Ag 328.068†	-91.9	-0.00218 mg/L		0.000078	-0.00218 mg/L	0.000078	3.58%
Al 396.153†	14.4	-0.0125 mg/L		0.00145	-0.0125 mg/L	0.00145	11.58%
As 188.979†	-0.6	0.00131 mg/L		0.001148	0.00131 mg/L	0.001148	87.73%
Ba 233.527†	118.0	-0.00300 mg/L		0.000202	-0.00300 mg/L	0.000202	6.71%
Be 234.861†	-54.0	-0.00021 mg/L		0.000025	-0.00021 mg/L	0.000025	11.70%
B 249.677†	841.7	0.00850 mg/L		0.000500	0.00850 mg/L	0.000500	5.89%
Ca 227.546†	2079.8	4.25 mg/L		0.079	4.25 mg/L	0.079	1.86%
Cd 228.802†	1.9	-0.00018 mg/L		0.000134	-0.00018 mg/L	0.000134	76.23%
Co 228.616†	-3.5	-0.00073 mg/L		0.000188	-0.00073 mg/L	0.000188	25.79%
Cr 267.716†	1.5	-0.00197 mg/L		0.000106	-0.00197 mg/L	0.000106	5.35%
Cu 327.393†	39.8	-0.00107 mg/L		0.000362	-0.00107 mg/L	0.000362	33.82%
Fe 239.562†	31.2	0.00688 mg/L		0.000435	0.00688 mg/L	0.000435	6.32%
Mg 279.077†	4393.4	1.23 mg/L		0.013	1.23 mg/L	0.013	1.06%
Mn 257.610†	345.6	-0.00237 mg/L		0.000071	-0.00237 mg/L	0.000071	2.98%
Mo 202.031†	-1.6	-0.00167 mg/L		0.000126	-0.00167 mg/L	0.000126	7.54%
Ni 231.604†	-7.5	-0.00241 mg/L		0.000219	-0.00241 mg/L	0.000219	9.09%
Pb 220.353†	3.5	-0.00107 mg/L		0.000932	-0.00107 mg/L	0.000932	87.37%
Sb 206.836†	6.2	-0.00323 mg/L		0.000627	-0.00323 mg/L	0.000627	19.41%
Se 196.026†	4.5	0.00500 mg/L		0.003629	0.00500 mg/L	0.003629	72.59%
Si 251.611†	4203.6	0.0768 mg/L		0.00231	0.0768 mg/L	0.00231	3.01%
Sn 189.927†	-50.7	-0.00772 mg/L		0.000511	-0.00772 mg/L	0.000511	6.62%
Ti 334.940†	-641.4	-0.00036 mg/L		0.000027	-0.00036 mg/L	0.000027	7.46%
Tl 190.801†	-12.1	-0.00582 mg/L		0.000875	-0.00582 mg/L	0.000875	15.04%
V 290.880†	94.0	-0.00298 mg/L		0.001847	-0.00298 mg/L	0.001847	61.95%
Zn 206.200†	1277.2	0.0268 mg/L		0.00073	0.0268 mg/L	0.00073	2.71%
K 766.490†	467.1	0.110 mg/L		0.0049	0.110 mg/L	0.0049	4.48%
Na 589.592†	7436.8	0.353 mg/L		0.0024	0.353 mg/L	0.0024	0.68%

Approved: May 10, 2012
Tom H. Rhodes

Sr 407.771†	121717.4	0.0426 mg/L	0.00029	0.0426 mg/L	0.00029	0.68%
Li 670.784†	109.1	-0.00628 mg/L	0.000451	-0.00628 mg/L	0.000451	7.18%

Sequence No.: 26

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

u&osampler Location: 6

ame Collected: 5/9/2012 3:04:41 PM

ama Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	154.0 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	2230692.4				5470.25	0.25%
YRADIAL	310335.3				4236.00	1.36%
Ga 417.206	1372562.8				20078.31	1.46%
GaRADIAL	93268.4				1378.83	1.48%
Ag 328.068†	129152.9	0.410 mg/L	0.0098	0.410 mg/L	0.0098	2.40%
QC value within limits for Ag	328.068	Recovery = 102.45%				
Al 396.153†	79298.8	9.89 mg/L	0.031	9.89 mg/L	0.031	0.31%
QC value within limits for Al	396.153	Recovery = 98.90%				
As 188.979†	1127.0	0.396 mg/L	0.0067	0.396 mg/L	0.0067	1.68%
QC value within limits for As	188.979	Recovery = 98.99%				
Ba 233.527†	155266.6	1.03 mg/L	0.006	1.03 mg/L	0.006	0.56%
QC value within limits for Ba	233.527	Recovery = 103.07%				
Be 234.861†	63587.1	0.0503 mg/L	0.00105	0.0503 mg/L	0.00105	2.09%
QC value within limits for Be	234.861	Recovery = 100.54%				
B 249.677†	43943.1	0.501 mg/L	0.0124	0.501 mg/L	0.0124	2.47%
QC value within limits for B	249.677	Recovery = 100.19%				
Ca 227.546†	4806.4	10.3 mg/L	0.20	10.3 mg/L	0.20	1.92%
QC value within limits for Ca	227.546	Recovery = 102.89%				
Cd 228.802†	2811.0	0.0493 mg/L	0.00164	0.0493 mg/L	0.00164	3.33%
QC value within limits for Cd	228.802	Recovery = 98.64%				
Co 228.616†	7636.5	0.202 mg/L	0.0007	0.202 mg/L	0.0007	0.34%
QC value within limits for Co	228.616	Recovery = 101.17%				
Cr 267.716†	54730.3	0.512 mg/L	0.0071	0.512 mg/L	0.0071	1.38%
QC value within limits for Cr	267.716	Recovery = 102.50%				
Cu 327.393†	140605.8	0.499 mg/L	0.0104	0.499 mg/L	0.0104	2.09%
QC value within limits for Cu	327.393	Recovery = 99.71%				
Fe 239.562†	65507.0	4.05 mg/L	0.033	4.05 mg/L	0.033	0.83%
QC value within limits for Fe	239.562	Recovery = 101.27%				
Mg 279.077†	36440.3	10.1 mg/L	0.05	10.1 mg/L	0.05	0.50%
QC value within limits for Mg	279.077	Recovery = 101.19%				
Mn 257.610†	427781.9	0.520 mg/L	0.0022	0.520 mg/L	0.0022	0.43%
QC value within limits for Mn	257.610	Recovery = 103.97%				
Mo 202.031†	36814.8	1.02 mg/L	0.009	1.02 mg/L	0.009	0.89%
QC value within limits for Mo	202.031	Recovery = 101.51%				
Ni 231.604†	34178.1	0.516 mg/L	0.0035	0.516 mg/L	0.0035	0.68%
QC value within limits for Ni	231.604	Recovery = 103.10%				
Pb 220.353†	5555.8	0.512 mg/L	0.0022	0.512 mg/L	0.0022	0.43%
QC value within limits for Pb	220.353	Recovery = 102.42%				
Sb 206.836†	5086.8	1.21 mg/L	0.020	1.21 mg/L	0.020	1.67%
QC value within limits for Sb	206.836	Recovery = 100.85%				
Se 196.026†	729.3	0.403 mg/L	0.0086	0.403 mg/L	0.0086	2.12%
QC value within limits for Se	196.026	Recovery = 100.85%				
Si 251.611†	215299.5	5.10 mg/L	0.077	5.10 mg/L	0.077	1.52%
QC value within limits for Si	251.611	Recovery = 102.08%				
Sn 189.927†	10263.6	1.01 mg/L	0.004	1.01 mg/L	0.004	0.44%
QC value within limits for Sn	189.927	Recovery = 100.93%				
Ti 334.940†	999552.0	0.992 mg/L	0.0022	0.992 mg/L	0.0022	0.23%
QC value within limits for Ti	334.940	Recovery = 99.23%				
Tl 190.801†	1957.4	0.522 mg/L	0.0068	0.522 mg/L	0.0068	1.30%
QC value within limits for Tl	190.801	Recovery = 104.37%				
V 290.880†	194977.0	1.01 mg/L	0.015	1.01 mg/L	0.015	1.49%
QC value within limits for V	290.880	Recovery = 101.21%				
Zn 206.200†	41180.8	1.05 mg/L	0.012	1.05 mg/L	0.012	1.16%

Approved: May 10, 2012

Tom H. Rhodes

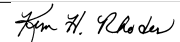
QC value within limits for Zn 206.200 Recovery = 105.24%
 K 766.490† 171903.9 49.2 mg/L 0.46 49.2 mg/L 0.46 0.93%
 QC value within limits for K 766.490 Recovery = 98.42%
 Na 589.592† 1037836.9 49.6 mg/L 1.61 49.6 mg/L 1.61 3.24%
 QC value within limits for Na 589.592 Recovery = 99.17%
 Sr 407.771† 2862726.7 1.01 mg/L 0.031 1.01 mg/L 0.031 3.12%
 QC value within limits for Sr 407.771 Recovery = 100.95%
 Li 670.784† 172275.5 0.988 mg/L 0.0116 0.988 mg/L 0.0116 1.17%
 QC value within limits for Li 670.784 Recovery = 98.82%
 All analyte(s) passed QC.

Sequence No.: 27 ukosampler Location: 1
 Sample ID: CCB Date Collected: 5/9/2012 3:10:42 PM
 Analyst: ana Type: Original
 Initial Sample Wt: initial Sample Vol:
 Dilution: sample Prep Vol:

Nebulizer Parameters: CCB
 Analyte Back Pressure Flow
 All 153.0 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	2314935.0				20098.99	0.87%
YRADIAL	308135.7				10054.28	3.26%
Ga 417.206	1423959.4				7212.98	0.51%
GaRADIAL	93104.2				1478.60	1.59%
Ag 328.068†	-81.8	-0.00214 mg/L	0.000307	-0.00214 mg/L	0.000307	14.34%
QC value within limits for Ag 328.068						Recovery = Not calculated
Al 396.153†	34.5	-0.00995 mg/L	0.000515	-0.00995 mg/L	0.000515	5.18%
QC value within limits for Al 396.153						Recovery = Not calculated
As 188.979†	-0.9	0.00120 mg/L	0.000817	0.00120 mg/L	0.000817	68.16%
QC value within limits for As 188.979						Recovery = Not calculated
Ba 233.527†	8.4	-0.00373 mg/L	0.000061	-0.00373 mg/L	0.000061	1.63%
QC value within limits for Ba 233.527						Recovery = Not calculated
Be 234.861†	-56.5	-0.00021 mg/L	0.000024	-0.00021 mg/L	0.000024	11.19%
QC value within limits for Be 234.861						Recovery = Not calculated
B 249.677†	659.7	0.00640 mg/L	0.000128	0.00640 mg/L	0.000128	1.99%
QC value within limits for B 249.677						Recovery = Not calculated
Ca 227.546†	2.9	0.00649 mg/L	0.005863	0.00649 mg/L	0.005863	90.27%
QC value within limits for Ca 227.546						Recovery = Not calculated
Cd 228.802†	-1.7	-0.00024 mg/L	0.000203	-0.00024 mg/L	0.000203	83.96%
QC value within limits for Cd 228.802						Recovery = Not calculated
Co 228.616†	1.0	-0.00061 mg/L	0.000124	-0.00061 mg/L	0.000124	20.43%
QC value within limits for Co 228.616						Recovery = Not calculated
Cr 267.716†	4.5	-0.00195 mg/L	0.000026	-0.00195 mg/L	0.000026	1.33%
QC value within limits for Cr 267.716						Recovery = Not calculated
Cu 327.393†	115.1	-0.00080 mg/L	0.000252	-0.00080 mg/L	0.000252	31.26%
QC value within limits for Cu 327.393						Recovery = Not calculated
Fe 239.562†	38.1	0.00733 mg/L	0.000200	0.00733 mg/L	0.000200	2.73%
QC value within limits for Fe 239.562						Recovery = Not calculated
Mg 279.077†	22.3	0.0145 mg/L	0.00284	0.0145 mg/L	0.00284	19.58%
QC value within limits for Mg 279.077						Recovery = Not calculated
Mn 257.610†	82.4	-0.00269 mg/L	0.000016	-0.00269 mg/L	0.000016	0.60%
QC value within limits for Mn 257.610						Recovery = Not calculated
Mo 202.031†	-0.2	-0.00164 mg/L	0.000089	-0.00164 mg/L	0.000089	5.44%
QC value within limits for Mo 202.031						Recovery = Not calculated
Ni 231.604†	-8.3	-0.00242 mg/L	0.000029	-0.00242 mg/L	0.000029	1.18%
QC value within limits for Ni 231.604						Recovery = Not calculated
Pb 220.353†	7.4	-0.00074 mg/L	0.001078	-0.00074 mg/L	0.001078	146.34%
QC value within limits for Pb 220.353						Recovery = Not calculated
Sb 206.836†	4.6	-0.00360 mg/L	0.001396	-0.00360 mg/L	0.001396	38.79%
QC value within limits for Sb 206.836						Recovery = Not calculated
Se 196.026†	-0.7	0.00215 mg/L	0.001762	0.00215 mg/L	0.001762	81.81%
QC value within limits for Se 196.026						Recovery = Not calculated
Si 251.611†	68.7	-0.0219 mg/L	0.000026	-0.0219 mg/L	0.000026	1.20%
QC value within limits for Si 251.611						Recovery = Not calculated
Sn 189.927†	-2.8	-0.00299 mg/L	0.001125	-0.00299 mg/L	0.001125	37.56%

Approved: May 10, 2012


QC value within limits for Sn 189.927	Recovery = Not calculated					
Ti 334.940†	102.7	-0.00026 mg/L	0.000135	-0.00026 mg/L	0.000135	51.94%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Tl 190.801†	-0.1	-0.00268 mg/L	0.003142	-0.00268 mg/L	0.003142	117.04%
QC value within limits for Tl 190.801	Recovery = Not calculated					
V 290.880†	-71.6	-0.00381 mg/L	0.000386	-0.00381 mg/L	0.000386	10.13%
QC value within limits for V 290.880	Recovery = Not calculated					
Zn 206.200†	44.8	-0.00473 mg/L	0.000201	-0.00473 mg/L	0.000201	4.26%
QC value within limits for Zn 206.200	Recovery = Not calculated					
K 766.490†	11.9	-0.0166 mg/L	0.01553	-0.0166 mg/L	0.01553	93.60%
QC value within limits for K 766.490	Recovery = Not calculated					
Na 589.592†	-231.2	-0.00629 mg/L	0.004607	-0.00629 mg/L	0.004607	73.22%
QC value within limits for Na 589.592	Recovery = Not calculated					
Sr 407.771†	217.3	-0.00017 mg/L	0.000027	-0.00017 mg/L	0.000027	15.78%
QC value within limits for Sr 407.771	Recovery = Not calculated					
Li 670.784†	-7.7	-0.00695 mg/L	0.000300	-0.00695 mg/L	0.000300	4.31%
QC value within limits for Li 670.784	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 28
 Sample ID: L1205022305
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 24
 a&e Collected: 5/9/2012 3:17:35 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

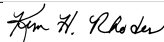
Nebulizer Parameters: L1205022305
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205022305

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2886415.4				25193.97	0.87%
YRADIAL	402061.4				3539.62	0.88%
Ga 417.206	1370598.1				31244.31	2.28%
GaRADIAL	91923.8				880.49	0.96%
Ag 328.068†	66357.2	0.204 mg/L	0.0064	0.204 mg/L	0.0064	3.13%
Al 396.153†	320619.5	40.3 mg/L	0.20	40.3 mg/L	0.20	0.50%
As 188.979†	592.3	0.209 mg/L	0.0029	0.209 mg/L	0.0029	1.38%
Ba 233.527†	55618.4	0.367 mg/L	0.0047	0.367 mg/L	0.0047	1.29%
Be 234.861†	67929.9	0.0573 mg/L	0.00147	0.0573 mg/L	0.00147	2.57%
B 249.677†	111942.4	1.27 mg/L	0.041	1.27 mg/L	0.041	3.26%
Ca 227.546†	73871.2	152 mg/L	4.3	152 mg/L	4.3	2.82%
Cd 228.802†	15585.1	0.289 mg/L	0.0076	0.289 mg/L	0.0076	2.63%
Co 228.616†	79173.7	2.11 mg/L	0.028	2.11 mg/L	0.028	1.34%
Cr 267.716†	20538.1	0.202 mg/L	0.0004	0.202 mg/L	0.0004	0.22%
Cu 327.393†	1490471.1	5.30 mg/L	0.145	5.30 mg/L	0.145	2.74%
Fe 239.562†	39438.0	2.43 mg/L	0.033	2.43 mg/L	0.033	1.36%
Mg 279.077†	182285.3	50.5 mg/L	0.34	50.5 mg/L	0.34	0.67%
Mn 257.610†	28753235.0	35.1 mg/L	0.40	35.1 mg/L	0.40	1.15%
Mo 202.031†	13246.1	0.372 mg/L	0.0037	0.372 mg/L	0.0037	1.00%
Ni 231.604†	86004.1	1.30 mg/L	0.014	1.30 mg/L	0.014	1.11%
Pb 220.353†	2169.0	0.179 mg/L	0.0028	0.179 mg/L	0.0028	1.58%
Sb 206.836†	2276.3	0.538 mg/L	0.0181	0.538 mg/L	0.0181	3.36%
Se 196.026†	410.9	0.218 mg/L	0.0047	0.218 mg/L	0.0047	2.15%
Si 251.611†	899638.9	21.4 mg/L	0.36	21.4 mg/L	0.36	1.68%
Sn 189.927†	3598.7	0.352 mg/L	0.0084	0.352 mg/L	0.0084	2.38%
Ti 334.940†	336567.8	0.356 mg/L	0.0011	0.356 mg/L	0.0011	0.31%
Tl 190.801†	640.8	0.133 mg/L	0.0146	0.133 mg/L	0.0146	10.94%
V 290.880†	67538.9	0.347 mg/L	0.0021	0.347 mg/L	0.0021	0.61%
Zn 206.200†	11569970.3	296 mg/L	1.0	296 mg/L	1.0	0.34%
K 766.490†	137289.8	39.0 mg/L	0.25	39.0 mg/L	0.25	0.64%
Na 589.592†	2603519.3	128 mg/L	1.4	128 mg/L	1.4	1.10%
Sr 407.771†	2967537.2	1.04 mg/L	0.007	1.04 mg/L	0.007	0.66%
Li 670.784†	138280.1	0.792 mg/L	0.0120	0.792 mg/L	0.0120	1.51%

Sequence No.: 29
 Sample ID: L1205010443 0.1

u&osampler Location: 25
 a&e Collected: 5/9/2012 3:23:41 PM

Approved: May 10, 2012


Analyst: KHR
 Initial Sample Wt:
 Dilution:

alpha Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1205010443 0.1
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205010443 0.1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2318567.1				35764.74	1.54%
YRADIAL	310602.0				1587.51	0.51%
Ga 417.206	1432244.6				46703.20	3.26%
GaRADIAL	94410.1				900.22	0.95%
Ag 328.068†	235.5	-0.00104 mg/L	0.000208	-0.00104 mg/L	0.000208	19.91%
Al 396.153†	1423.9	0.165 mg/L	0.0031	0.165 mg/L	0.0031	1.89%
As 188.979†	-5.2	-0.00029 mg/L	0.000771	-0.00029 mg/L	0.000771	262.72%
Ba 233.527†	456.8	-0.00075 mg/L	0.000111	-0.00075 mg/L	0.000111	14.73%
Be 234.861†	278.1	0.00000 mg/L	0.000025	0.00000 mg/L	0.000025	591.84%
B 249.677†	1205.5	0.0126 mg/L	0.00080	0.0126 mg/L	0.00080	6.36%
Ca 227.546†	11373.7	23.2 mg/L	0.96	23.2 mg/L	0.96	4.13%
Cd 228.802†	19.7	0.00016 mg/L	0.000205	0.00016 mg/L	0.000205	130.73%
Co 228.616†	30.3	0.00017 mg/L	0.000188	0.00017 mg/L	0.000188	109.52%
Cr 267.716†	71.2	-0.00130 mg/L	0.000188	-0.00130 mg/L	0.000188	14.52%
Cu 327.393†	243.6	-0.00030 mg/L	0.000309	-0.00030 mg/L	0.000309	101.90%
Fe 239.562†	4315.3	0.271 mg/L	0.0041	0.271 mg/L	0.0041	1.51%
Mg 279.077†	22098.8	6.13 mg/L	0.025	6.13 mg/L	0.025	0.40%
Mn 257.610†	6103.6	0.00469 mg/L	0.003572	0.00469 mg/L	0.003572	76.17%
Saturated within auto integration window (code 4)						
Mo 202.031†	33.6	-0.00069 mg/L	0.000143	-0.00069 mg/L	0.000143	20.75%
Ni 231.604†	140.8	-0.00016 mg/L	0.000312	-0.00016 mg/L	0.000312	192.08%
Pb 220.353†	12.0	-0.00012 mg/L	0.002332	-0.00012 mg/L	0.002332	>999.9%
Sb 206.836†	2.8	-0.00403 mg/L	0.000630	-0.00403 mg/L	0.000630	15.63%
Se 196.026†	-0.7	0.00224 mg/L	0.002487	0.00224 mg/L	0.002487	111.04%
Si 251.611†	30702.4	0.709 mg/L	0.0191	0.709 mg/L	0.0191	2.69%
Sn 189.927†	-157.4	-0.0182 mg/L	0.00022	-0.0182 mg/L	0.00022	1.19%
Ti 334.940†	-2320.4	0.00082 mg/L	0.000439	0.00082 mg/L	0.000439	53.52%
Tl 190.801†	-2.6	-0.00334 mg/L	0.003560	-0.00334 mg/L	0.003560	106.45%
V 290.880†	356.6	-0.00178 mg/L	0.000479	-0.00178 mg/L	0.000479	26.87%
Zn 206.200†	17117.2	0.432 mg/L	0.0789	0.432 mg/L	0.0789	18.27%
K 766.490†	1945.5	0.523 mg/L	0.0209	0.523 mg/L	0.0209	3.99%
Na 589.592†	30345.4	1.43 mg/L	0.023	1.43 mg/L	0.023	1.63%
Sr 407.771†	356302.3	0.125 mg/L	0.0006	0.125 mg/L	0.0006	0.44%
Li 670.784†	472.9	-0.00418 mg/L	0.000098	-0.00418 mg/L	0.000098	2.35%

Sequence No.: 30
 Sample ID: L1205010444 0.1
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

autosampler Location: 26
 Date Collected: 5/9/2012 3:29:38 PM
 alpha Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1205010444 0.1
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205010444 0.1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2321127.3				17206.95	0.74%
YRADIAL	307009.5				3259.25	1.06%
Ga 417.206	1505118.6				13316.48	0.88%
GaRADIAL	96012.7				1695.06	1.77%
Ag 328.068†	176.7	-0.00135 mg/L	0.000569	-0.00135 mg/L	0.000569	42.19%
Al 396.153†	97.5	-0.00208 mg/L	0.002633	-0.00208 mg/L	0.002633	126.48%
As 188.979†	-5.7	-0.00050 mg/L	0.002044	-0.00050 mg/L	0.002044	405.33%
Ba 233.527†	198.5	-0.00247 mg/L	0.000024	-0.00247 mg/L	0.000024	0.98%

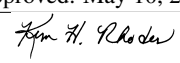
Approved: May 10, 2012


Table with columns for element symbols (e.g., Be, B, Ca), values, and units (e.g., mg/L). It lists various elements and their corresponding measurements.

Sequence No.: 31 u&osampler Location: 27
Sample ID: L1205010445 0.1 a&e Collected: 5/9/2012 3:36:33 PM
Analyst: KHR a&a Type: Original
Initial Sample Wt: n&tial Sample Vol:
Dilution: a&mple Prep Vol:

Nebulizer Parameters: L1205010445 0.1
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: L1205010445 0.1

Table with columns: Analyte, Mean Corrected Intensity, Conc. Units, Calib., Std.Dev., Sample Conc. Units, Std.Dev., RSD. It provides statistical data for various elements.

Approved: May 10, 2012
[Signature]

Na 589.592†	161590.6	7.61 mg/L	0.038	7.61 mg/L	0.038	0.50%
Sr 407.771†	213265.0	0.0745 mg/L	0.00020	0.0745 mg/L	0.00020	0.27%
Li 670.784†	5305.8	0.0237 mg/L	0.00045	0.0237 mg/L	0.00045	1.89%

Sequence No.: 32 uikosampler Location: 28
 Sample ID: L1205010446 0.1 Time Collected: 5/9/2012 3:42:32 PM
 Analyst: KHR Sample Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

Nebulizer Parameters: L1205010446 0.1
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205010446 0.1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2280076.6				14079.72	0.62%
YRADIAL	307487.5				4857.18	1.58%
Ga 417.206	1407815.2				36486.32	2.59%
GA RADIAL	93125.2				1491.03	1.60%
Ag 328.068†	-891.6	-0.00045 mg/L	0.000508	-0.00045 mg/L	0.000508	112.51%
Al 396.153†	2434.6	0.294 mg/L	0.0091	0.294 mg/L	0.0091	3.09%
As 188.979†	-1.4	0.00239 mg/L	0.000888	0.00239 mg/L	0.000888	37.08%
Ba 233.527†	133.8	-0.00318 mg/L	0.000196	-0.00318 mg/L	0.000196	6.16%
Be 234.861†	3300.0	0.00061 mg/L	0.000092	0.00061 mg/L	0.000092	15.06%
B 249.677†	7061.6	0.0728 mg/L	0.00207	0.0728 mg/L	0.00207	2.84%
Ca 227.546†	10880.1	22.7 mg/L	0.64	22.7 mg/L	0.64	2.83%
Cd 228.802†	2381.5	0.0435 mg/L	0.00134	0.0435 mg/L	0.00134	3.07%
Co 228.616†	6163.7	0.163 mg/L	0.0007	0.163 mg/L	0.0007	0.40%
Cr 267.716†	84.5	0.00260 mg/L	0.000159	0.00260 mg/L	0.000159	6.13%
Cu 327.393†	247045.7	0.880 mg/L	0.0328	0.880 mg/L	0.0328	3.73%
Fe 239.562†	200302.1	12.4 mg/L	0.10	12.4 mg/L	0.10	0.79%
Mg 279.077†	41883.1	11.6 mg/L	0.13	11.6 mg/L	0.13	1.13%
Mn 257.610†	7350079.2	8.97 mg/L	0.069	8.97 mg/L	0.069	0.77%
Mo 202.031†	-58.6	-0.00076 mg/L	0.000263	-0.00076 mg/L	0.000263	34.43%
Ni 231.604†	13326.7	0.200 mg/L	0.0003	0.200 mg/L	0.0003	0.13%
Pb 220.353†	37.1	-0.00514 mg/L	0.002885	-0.00514 mg/L	0.002885	56.13%
Sb 206.836†	0.2	-0.00418 mg/L	0.000824	-0.00418 mg/L	0.000824	19.72%
Se 196.026†	2.8	0.00522 mg/L	0.003396	0.00522 mg/L	0.003396	65.10%
Si 251.611†	61496.2	1.44 mg/L	0.036	1.44 mg/L	0.036	2.52%
Sn 189.927†	-174.1	-0.0199 mg/L	0.00159	-0.0199 mg/L	0.00159	8.00%
Ti 334.940†	-4154.0	-0.00115 mg/L	0.000280	-0.00115 mg/L	0.000280	24.35%
Tl 190.801†	-8.7	-0.0141 mg/L	0.00382	-0.0141 mg/L	0.00382	27.12%
V 290.880†	1021.3	-0.00037 mg/L	0.001689	-0.00037 mg/L	0.001689	457.27%
Zn 206.200†	3299286.4	84.4 mg/L	0.80	84.4 mg/L	0.80	0.95%
K 766.490†	5012.1	1.38 mg/L	0.025	1.38 mg/L	0.025	1.83%
Na 589.592†	175735.8	8.27 mg/L	0.019	8.27 mg/L	0.019	0.24%
Sr 407.771†	226499.5	0.0792 mg/L	0.00024	0.0792 mg/L	0.00024	0.30%
Li 670.784†	5371.1	0.0241 mg/L	0.00090	0.0241 mg/L	0.00090	3.74%

Sequence No.: 33 uikosampler Location: 29
 Sample ID: L1205010448 0.1 Time Collected: 5/9/2012 3:48:31 PM
 Analyst: KHR Sample Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

Nebulizer Parameters: L1205010448 0.1
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: L1205010448 0.1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2250434.2				8563.75	0.38%
YRADIAL	301475.4				6713.70	2.23%

Approved: May 10, 2012
John H. Rhodes

Ga 417.206	1475730.8					53468.86	3.62%
GaRADIAL	94736.4					1290.46	1.36%
Ag 328.068†	286.5	-0.00100	mg/L	0.000474	-0.00100	mg/L	0.000474 47.27%
Al 396.153†	352.4	0.0300	mg/L	0.00078	0.0300	mg/L	0.00078 2.61%
As 188.979†	-8.0	-0.00130	mg/L	0.001944	-0.00130	mg/L	0.001944 149.32%
Ba 233.527†	200.5	-0.00246	mg/L	0.000155	-0.00246	mg/L	0.000155 6.32%
Be 234.861†	30.6	-0.00015	mg/L	0.000032	-0.00015	mg/L	0.000032 20.61%
B 249.677†	953.9	0.00973	mg/L	0.000493	0.00973	mg/L	0.000493 5.06%
Ca 227.546†	21396.5	43.7	mg/L	2.22	43.7	mg/L	2.22 5.08%
Cd 228.802†	65.7	0.00099	mg/L	0.000125	0.00099	mg/L	0.000125 12.54%
Co 228.616†	8.1	-0.00041	mg/L	0.000145	-0.00041	mg/L	0.000145 35.54%
Cr 267.716†	84.3	-0.00083	mg/L	0.000124	-0.00083	mg/L	0.000124 14.89%
Cu 327.393†	479.8	0.00103	mg/L	0.000177	0.00103	mg/L	0.000177 17.22%
Fe 239.562†	1167.0	0.0768	mg/L	0.00096	0.0768	mg/L	0.00096 1.25%
Mg 279.077†	42421.0	11.8	mg/L	0.23	11.8	mg/L	0.23 1.97%
Mn 257.610†	48371.7	0.0567	mg/L	0.00098	0.0567	mg/L	0.00098 1.74%
Mo 202.031†	30.0	-0.00079	mg/L	0.000448	-0.00079	mg/L	0.000448 57.09%
Ni 231.604†	3517.4	0.0510	mg/L	0.00025	0.0510	mg/L	0.00025 0.48%
Pb 220.353†	32.8	0.00193	mg/L	0.001226	0.00193	mg/L	0.001226 63.54%
Sb 206.836†	1.7	-0.00427	mg/L	0.000257	-0.00427	mg/L	0.000257 6.02%
Se 196.026†	5.9	0.00577	mg/L	0.003294	0.00577	mg/L	0.003294 57.10%
Si 251.611†	16425.6	0.369	mg/L	0.0145	0.369	mg/L	0.0145 3.92%
Sn 189.927†	-229.7	-0.0254	mg/L	0.00030	-0.0254	mg/L	0.00030 1.19%
Ti 334.940†	-8139.0	-0.00188	mg/L	0.000529	-0.00188	mg/L	0.000529 28.11%
Tl 190.801†	-38.0	-0.0127	mg/L	0.00133	-0.0127	mg/L	0.00133 10.45%
V 290.880†	645.1	-0.00039	mg/L	0.001510	-0.00039	mg/L	0.001510 385.59%
Zn 206.200†	353098.2	9.03	mg/L	0.145	9.03	mg/L	0.145 1.60%
K 766.490†	3315.6	0.904	mg/L	0.0092	0.904	mg/L	0.0092 1.02%
Na 589.592†	92975.9	4.37	mg/L	0.084	4.37	mg/L	0.084 1.91%
Sr 407.771†	777254.8	0.273	mg/L	0.0067	0.273	mg/L	0.0067 2.45%
Li 670.784†	1686.5	0.00283	mg/L	0.000176	0.00283	mg/L	0.000176 6.22%

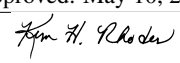
Sequence No.: 34
 Sample ID: L1205010449 0.1
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

uSampler Location: 30
 Date Collected: 5/9/2012 3:55:27 PM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1205010449 0.1
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205010449 0.1

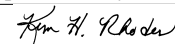
Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Std.Dev.	RSD
Y 371.029	2216896.8					3387.67	0.15%
YRADIAL	307461.9					4954.51	1.61%
Ga 417.206	1468258.5					40977.44	2.79%
GaRADIAL	95849.0					1471.89	1.54%
Ag 328.068†	35.5	-0.00182	mg/L	0.000540	-0.00182	mg/L	0.000540 29.59%
Al 396.153†	40.3	-0.00928	mg/L	0.000702	-0.00928	mg/L	0.000702 7.56%
As 188.979†	-6.3	-0.00072	mg/L	0.001814	-0.00072	mg/L	0.001814 250.34%
Ba 233.527†	181.7	-0.00258	mg/L	0.000066	-0.00258	mg/L	0.000066 2.56%
Be 234.861†	6.2	-0.00016	mg/L	0.000019	-0.00016	mg/L	0.000019 11.97%
B 249.677†	923.1	0.00939	mg/L	0.000487	0.00939	mg/L	0.000487 5.18%
Ca 227.546†	22158.5	45.3	mg/L	1.77	45.3	mg/L	1.77 3.90%
Cd 228.802†	74.2	0.00115	mg/L	0.000196	0.00115	mg/L	0.000196 17.10%
Co 228.616†	22.1	-0.00003	mg/L	0.000417	-0.00003	mg/L	0.000417 >999.9%
Cr 267.716†	71.4	-0.00092	mg/L	0.000148	-0.00092	mg/L	0.000148 16.04%
Cu 327.393†	444.8	0.00094	mg/L	0.000358	0.00094	mg/L	0.000358 37.90%
Fe 239.562†	167.6	0.0151	mg/L	0.00059	0.0151	mg/L	0.00059 3.92%
Mg 279.077†	42719.5	11.8	mg/L	0.13	11.8	mg/L	0.13 1.10%
Mn 257.610†	61049.5	0.0722	mg/L	0.00072	0.0722	mg/L	0.00072 1.00%
Mo 202.031†	27.4	-0.00086	mg/L	0.000106	-0.00086	mg/L	0.000106 12.36%
Ni 231.604†	3846.0	0.0560	mg/L	0.00036	0.0560	mg/L	0.00036 0.64%
Pb 220.353†	27.8	0.00147	mg/L	0.001207	0.00147	mg/L	0.001207 82.29%
Sb 206.836†	5.8	-0.00328	mg/L	0.001001	-0.00328	mg/L	0.001001 30.49%
Se 196.026†	6.4	0.00604	mg/L	0.002578	0.00604	mg/L	0.002578 42.69%
Si 251.611†	13601.9	0.301	mg/L	0.0144	0.301	mg/L	0.0144 4.78%

Approved: May 10, 2012


Sn 189.927†	-227.6	-0.0252 mg/L	0.00144	-0.0252 mg/L	0.00144	5.74%
Ti 334.940†	-8680.8	-0.00218 mg/L	0.000326	-0.00218 mg/L	0.000326	14.91%
Tl 190.801†	-27.6	-0.0100 mg/L	0.00050	-0.0100 mg/L	0.00050	4.96%
V 290.880†	772.1	0.00028 mg/L	0.001106	0.00028 mg/L	0.001106	397.70%
Zn 206.200†	381512.2	9.75 mg/L	0.142	9.75 mg/L	0.142	1.45%
K 766.490†	3108.9	0.846 mg/L	0.0065	0.846 mg/L	0.0065	0.77%
Na 589.592†	97136.6	4.57 mg/L	0.113	4.57 mg/L	0.113	2.48%
Sr 407.771†	793978.3	0.279 mg/L	0.0080	0.279 mg/L	0.0080	2.85%
Li 670.784†	1704.6	0.00294 mg/L	0.000209	0.00294 mg/L	0.000209	7.11%

User canceled analysis.

Approved: May 10, 2012



=====
Analysis Begun

Start Time: 5/9/2012 4:02:54 PM Plasma On Time: 12:00:00 AM
Logged In Analyst: peicp2 eTechnique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N40114 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
Batch ID:
Results Data Set: 050912H
Results Library: C:\pe\peicp2\Results\Results.mdb

=====
Sequence No.: 1 Autosampler Location: 31
Sample ID: L1205010450 0.1 Date Collected: 5/9/2012 4:02:56 PM
Analyst: KHR Sample Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1205010450 0.1
Analyte Back Pressure Flow
All 152.0 kPa 0.50 L/min

Mean Data: L1205010450 0.1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2328213.3					22717.60	0.98%
YRADIAL	311132.4					3186.06	1.02%
Ga 417.206	1431795.7					25836.53	1.80%
GaRADIAL	94487.5					1452.41	1.54%
Ag 328.068†	9.4	-0.00186	mg/L	0.000184	-0.00186	0.000184	9.91%
Al 396.153†	21.4	-0.0116	mg/L	0.00076	-0.0116	0.00076	6.57%
As 188.979†	-3.6	0.00025	mg/L	0.000859	0.00025	0.000859	342.51%
Ba 233.527†	-0.3	-0.00379	mg/L	0.000147	-0.00379	0.000147	3.88%
Be 234.861†	-102.4	-0.00025	mg/L	0.000053	-0.00025	0.000053	20.99%
B 249.677†	390.8	0.00330	mg/L	0.000195	0.00330	0.000195	5.91%
Ca 227.546†	7.8	0.0163	mg/L	0.01667	0.0163	0.01667	102.01%
Cd 228.802†	-0.9	-0.00022	mg/L	0.000043	-0.00022	0.000043	19.33%
Co 228.616†	4.5	-0.00052	mg/L	0.000174	-0.00052	0.000174	33.65%
Cr 267.716†	-1.2	-0.00200	mg/L	0.000105	-0.00200	0.000105	5.26%
Cu 327.393†	-2.5	-0.00122	mg/L	0.000116	-0.00122	0.000116	9.53%
Fe 239.562†	15.8	0.00595	mg/L	0.000247	0.00595	0.000247	4.15%
Mg 279.077†	10.0	0.0111	mg/L	0.00058	0.0111	0.00058	5.26%
Mn 257.610†	1026.9	-0.00154	mg/L	0.000101	-0.00154	0.000101	6.58%
Mo 202.031†	1.0	-0.00160	mg/L	0.000190	-0.00160	0.000190	11.84%
Ni 231.604†	-7.1	-0.00240	mg/L	0.000226	-0.00240	0.000226	9.38%
Pb 220.353†	-1.7	-0.00158	mg/L	0.001537	-0.00158	0.001537	97.48%
Sb 206.836†	8.8	-0.00260	mg/L	0.000702	-0.00260	0.000702	26.98%
Se 196.026†	3.6	0.00451	mg/L	0.002923	0.00451	0.002923	64.85%
Si 251.611†	89.0	-0.0214	mg/L	0.00028	-0.0214	0.00028	1.31%
Sn 189.927†	-9.7	-0.00367	mg/L	0.000579	-0.00367	0.000579	15.77%
Ti 334.940†	78.9	-0.00028	mg/L	0.000038	-0.00028	0.000038	13.63%
Tl 190.801†	-3.1	-0.00345	mg/L	0.000694	-0.00345	0.000694	20.10%
V 290.880†	-189.1	-0.00443	mg/L	0.000378	-0.00443	0.000378	8.53%
Zn 206.200†	1087.9	0.0220	mg/L	0.00182	0.0220	0.00182	8.28%
K 766.490†	50.2	-0.00590	mg/L	0.023058	-0.00590	0.023058	390.92%
Na 589.592†	-254.7	-0.00740	mg/L	0.006005	-0.00740	0.006005	81.19%
Sr 407.771†	76.5	-0.00022	mg/L	0.000030	-0.00022	0.000030	13.57%
Li 670.784†	-60.2	-0.00726	mg/L	0.000136	-0.00726	0.000136	1.87%

=====
Sequence No.: 2 Autosampler Location: 32
Sample ID: L1205010454 0.1 Date Collected: 5/9/2012 4:09:54 PM
Analyst: KHR Sample Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1205010454 0.1

Approved: May 10, 2012
Tom H. Rhodes

Analyte Back Pressure Flow
All 153.0 kPa 0.50 L/min

Mean Data: L1205010454 0.1

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, YRADIAL, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li.

Sequence No.: 3

Sample ID: L1205010455 0.1
Analyst: KHR
Initial Sample Wt:
Dilution:

autosampler Location: 33
Date Collected: 5/9/2012 4:16:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205010455 0.1

Analyte Back Pressure Flow
All 153.0 kPa 0.50 L/min

Mean Data: L1205010455 0.1

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, YRADIAL, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu.

Approved: May 10, 2012
[Signature]

Fe 239.562†	7.2	0.00542 mg/L	0.000115	0.00542 mg/L	0.000115	2.12%
Mg 279.077†	15.1	0.0125 mg/L	0.00258	0.0125 mg/L	0.00258	20.59%
Mn 257.610†	630.1	-0.00202 mg/L	0.000062	-0.00202 mg/L	0.000062	3.05%
Mo 202.031†	-4.0	-0.00174 mg/L	0.000212	-0.00174 mg/L	0.000212	12.17%
Ni 231.604†	-13.0	-0.00249 mg/L	0.000248	-0.00249 mg/L	0.000248	9.94%
Pb 220.353†	8.7	-0.00062 mg/L	0.001017	-0.00062 mg/L	0.001017	162.98%
Sb 206.836†	9.1	-0.00252 mg/L	0.000908	-0.00252 mg/L	0.000908	36.03%
Se 196.026†	-0.2	0.00242 mg/L	0.000263	0.00242 mg/L	0.000263	10.88%
Si 251.611†	58.6	-0.0221 mg/L	0.00037	-0.0221 mg/L	0.00037	1.66%
Sn 189.927†	-10.1	-0.00372 mg/L	0.000335	-0.00372 mg/L	0.000335	9.03%
Ti 334.940†	93.5	-0.00027 mg/L	0.000099	-0.00027 mg/L	0.000099	36.85%
Tl 190.801†	-2.3	-0.00326 mg/L	0.001510	-0.00326 mg/L	0.001510	46.33%
V 290.880†	-262.6	-0.00481 mg/L	0.002369	-0.00481 mg/L	0.002369	49.28%
Zn 206.200†	574.0	0.00881 mg/L	0.000905	0.00881 mg/L	0.000905	10.27%
K 766.490†	56.8	-0.00405 mg/L	0.026371	-0.00405 mg/L	0.026371	650.41%
Na 589.592†	-18.7	0.00367 mg/L	0.010909	0.00367 mg/L	0.010909	296.93%
Sr 407.771†	162.8	-0.00019 mg/L	0.000049	-0.00019 mg/L	0.000049	26.06%
Li 670.784†	-34.1	-0.00711 mg/L	0.000480	-0.00711 mg/L	0.000480	6.75%

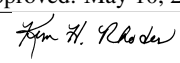
Sequence No.: 4
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

uSampler Location: 6
 Date Collected: 5/9/2012 4:23:47 PM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2265316.8				36578.92	1.61%
YRADIAL	309151.1				2911.01	0.94%
Ga 417.206	1364548.5				15925.06	1.17%
GaRADIAL	93592.4				1124.38	1.20%
Ag 328.068†	130037.2	0.413 mg/L	0.0091	0.413 mg/L	0.0091	2.21%
QC value within limits for Ag		328.068	Recovery = 103.14%			
Al 396.153†	78382.6	9.78 mg/L	0.039	9.78 mg/L	0.039	0.40%
QC value within limits for Al		396.153	Recovery = 97.76%			
As 188.979†	1135.4	0.399 mg/L	0.0069	0.399 mg/L	0.0069	1.74%
QC value within limits for As		188.979	Recovery = 99.74%			
Ba 233.527†	154696.4	1.03 mg/L	0.012	1.03 mg/L	0.012	1.19%
QC value within limits for Ba		233.527	Recovery = 102.69%			
Be 234.861†	64466.8	0.0510 mg/L	0.00107	0.0510 mg/L	0.00107	2.09%
QC value within limits for Be		234.861	Recovery = 101.94%			
B 249.677†	43871.4	0.500 mg/L	0.0099	0.500 mg/L	0.0099	1.98%
QC value within limits for B		249.677	Recovery = 100.03%			
Ca 227.546†	4759.4	10.2 mg/L	0.22	10.2 mg/L	0.22	2.12%
QC value within limits for Ca		227.546	Recovery = 101.89%			
Cd 228.802†	2825.9	0.0496 mg/L	0.00138	0.0496 mg/L	0.00138	2.78%
QC value within limits for Cd		228.802	Recovery = 99.14%			
Co 228.616†	7560.8	0.200 mg/L	0.0037	0.200 mg/L	0.0037	1.84%
QC value within limits for Co		228.616	Recovery = 100.17%			
Cr 267.716†	54259.1	0.508 mg/L	0.0050	0.508 mg/L	0.0050	0.99%
QC value within limits for Cr		267.716	Recovery = 101.61%			
Cu 327.393†	140132.9	0.497 mg/L	0.0081	0.497 mg/L	0.0081	1.62%
QC value within limits for Cu		327.393	Recovery = 99.38%			
Fe 239.562†	65458.6	4.05 mg/L	0.029	4.05 mg/L	0.029	0.72%
QC value within limits for Fe		239.562	Recovery = 101.20%			
Mg 279.077†	36376.0	10.1 mg/L	0.03	10.1 mg/L	0.03	0.27%
QC value within limits for Mg		279.077	Recovery = 101.01%			
Mn 257.610†	425224.0	0.517 mg/L	0.0070	0.517 mg/L	0.0070	1.36%
QC value within limits for Mn		257.610	Recovery = 103.35%			
Mo 202.031†	36528.3	1.01 mg/L	0.012	1.01 mg/L	0.012	1.20%
QC value within limits for Mo		202.031	Recovery = 100.72%			
Ni 231.604†	33838.6	0.510 mg/L	0.0072	0.510 mg/L	0.0072	1.40%
QC value within limits for Ni		231.604	Recovery = 102.07%			
Pb 220.353†	5499.4	0.507 mg/L	0.0087	0.507 mg/L	0.0087	1.71%

Approved: May 10, 2012


Sb	206.836†	5116.2	1.22 mg/L	0.023	1.22 mg/L	0.023	1.91%
Se	196.026†	727.9	0.403 mg/L	0.0088	0.403 mg/L	0.0088	2.18%
Si	251.611†	216817.6	5.14 mg/L	0.080	5.14 mg/L	0.080	1.55%
Sn	189.927†	10159.9	0.999 mg/L	0.0163	0.999 mg/L	0.0163	1.63%
Ti	334.940†	985565.0	0.978 mg/L	0.0045	0.978 mg/L	0.0045	0.46%
Tl	190.801†	1929.0	0.514 mg/L	0.0052	0.514 mg/L	0.0052	1.02%
V	290.880†	193145.0	1.00 mg/L	0.013	1.00 mg/L	0.013	1.34%
Zn	206.200†	41624.3	1.06 mg/L	0.012	1.06 mg/L	0.012	1.10%
K	766.490†	168623.0	48.2 mg/L	0.29	48.2 mg/L	0.29	0.60%
Na	589.592†	1003551.4	47.9 mg/L	0.49	47.9 mg/L	0.49	1.02%
Sr	407.771†	2783876.9	0.982 mg/L	0.0094	0.982 mg/L	0.0094	0.96%
Li	670.784†	165075.3	0.947 mg/L	0.0040	0.947 mg/L	0.0040	0.42%

QC value within limits for Pb 220.353 Recovery = 101.38%
 QC value within limits for Sb 206.836 Recovery = 101.43%
 QC value within limits for Se 196.026 Recovery = 100.66%
 QC value within limits for Si 251.611 Recovery = 102.81%
 QC value within limits for Sn 189.927 Recovery = 99.90%
 QC value within limits for Ti 334.940 Recovery = 97.84%
 QC value within limits for Tl 190.801 Recovery = 102.85%
 QC value within limits for V 290.880 Recovery = 100.26%
 QC value within limits for Zn 206.200 Recovery = 106.37%
 QC value within limits for K 766.490 Recovery = 96.50%
 QC value within limits for Na 589.592 Recovery = 95.83%
 QC value within limits for Sr 407.771 Recovery = 98.16%
 QC value within limits for Li 670.784 Recovery = 94.66%

All analyte(s) passed QC.

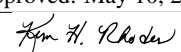
Sequence No.: 5
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

uSampler Location: 1
 Date Collected: 5/9/2012 4:29:48 PM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2338319.5				23716.21	1.01%
YRADIAL	313021.2				5369.24	1.72%
Ga 417.206	1445479.7				23600.94	1.63%
GaRADIAL	95381.8				1329.74	1.39%
Ag 328.068†	-41.8	-0.00202 mg/L	0.000046	-0.00202 mg/L	0.000046	2.29%
QC value within limits for Ag 328.068						
Al 396.153†	19.5	-0.0118 mg/L	0.00049	-0.0118 mg/L	0.00049	4.12%
QC value within limits for Al 396.153						
As 188.979†	-1.2	0.00111 mg/L	0.000856	0.00111 mg/L	0.000856	77.38%
QC value within limits for As 188.979						
Ba 233.527†	-10.1	-0.00386 mg/L	0.000073	-0.00386 mg/L	0.000073	1.88%
QC value within limits for Ba 233.527						
Be 234.861†	-49.0	-0.00021 mg/L	0.000033	-0.00021 mg/L	0.000033	16.03%
QC value within limits for Be 234.861						
B 249.677†	417.1	0.00361 mg/L	0.000212	0.00361 mg/L	0.000212	5.87%
QC value within limits for B 249.677						
Ca 227.546†	9.0	0.0189 mg/L	0.02186	0.0189 mg/L	0.02186	115.92%
QC value within limits for Ca 227.546						
Cd 228.802†	-3.9	-0.00028 mg/L	0.000205	-0.00028 mg/L	0.000205	73.22%
QC value within limits for Cd 228.802						
Co 228.616†	-2.2	-0.00069 mg/L	0.000260	-0.00069 mg/L	0.000260	37.44%
QC value within limits for Co 228.616						
Cr 267.716†	-3.2	-0.00202 mg/L	0.000116	-0.00202 mg/L	0.000116	5.73%
QC value within limits for Cr 267.716						
Cu 327.393†	73.4	-0.00095 mg/L	0.000049	-0.00095 mg/L	0.000049	5.17%
QC value within limits for Cu 327.393						
Fe 239.562†	19.0	0.00615 mg/L	0.000270	0.00615 mg/L	0.000270	4.38%
QC value within limits for Fe 239.562						
Mg 279.077†	14.0	0.0122 mg/L	0.00283	0.0122 mg/L	0.00283	23.19%

Approved: May 10, 2012


Mn	257.610†	QC value within limits for Mn 257.610	Recovery = Not calculated	0.000019	-0.00243 mg/L	0.000019	0.77%
Mo	202.031†	QC value within limits for Mo 202.031	Recovery = Not calculated	0.000201	-0.00173 mg/L	0.000201	11.59%
Ni	231.604†	QC value within limits for Ni 231.604	Recovery = Not calculated	0.000307	-0.00233 mg/L	0.000307	13.17%
Pb	220.353†	QC value within limits for Pb 220.353	Recovery = Not calculated	0.001035	-0.00094 mg/L	0.001035	109.61%
Sb	206.836†	QC value within limits for Sb 206.836	Recovery = Not calculated	0.001836	-0.00277 mg/L	0.001836	66.29%
Se	196.026†	QC value within limits for Se 196.026	Recovery = Not calculated	0.001477	0.00376 mg/L	0.001477	39.26%
Si	251.611†	QC value within limits for Si 251.611	Recovery = Not calculated	0.00037	-0.0230 mg/L	0.00037	1.61%
Sn	189.927†	QC value within limits for Sn 189.927	Recovery = Not calculated	0.000866	-0.00302 mg/L	0.000866	28.71%
Ti	334.940†	QC value within limits for Ti 334.940	Recovery = Not calculated	0.000105	-0.00028 mg/L	0.000105	38.20%
Tl	190.801†	QC value within limits for Tl 190.801	Recovery = Not calculated	0.002394	-0.00174 mg/L	0.002394	137.66%
V	290.880†	QC value within limits for V 290.880	Recovery = Not calculated	0.000715	-0.00468 mg/L	0.000715	15.26%
Zn	206.200†	QC value within limits for Zn 206.200	Recovery = Not calculated	0.000297	0.00239 mg/L	0.000297	12.40%
K	766.490†	QC value within limits for K 766.490	Recovery = Not calculated	0.016590	-0.00986 mg/L	0.016590	168.19%
Na	589.592†	QC value within limits for Na 589.592	Recovery = Not calculated	0.009012	0.00364 mg/L	0.009012	247.58%
Sr	407.771†	QC value within limits for Sr 407.771	Recovery = Not calculated	0.000008	-0.00013 mg/L	0.000008	5.73%
Li	670.784†	QC value within limits for Li 670.784	Recovery = Not calculated	0.000145	-0.00715 mg/L	0.000145	2.03%

All analyte(s) passed QC.

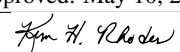
Sequence No.: 6
 Sample ID: L1205022001 500X
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 53
 a&me Collected: 5/9/2012 4:36:41 PM
 a&na Type: Original
 nitial Sample Vol:
 a&nple Prep Vol:

Nebulizer Parameters: L1205022001 500X
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205022001 500X

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2212796.1					21918.40	0.99%
YRADIAL	300033.4					3267.35	1.09%
Ga 417.206	1369551.2					31772.83	2.32%
GaRADIAL	91447.0					1041.64	1.14%
Ag 328.068†	254.3	-0.00095 mg/L	0.000300	0.000300	-0.00095 mg/L	0.000300	31.58%
Al 396.153†	20.4	-0.0118 mg/L	0.00401	0.00401	-0.0118 mg/L	0.00401	34.04%
As 188.979†	-11.4	-0.00250 mg/L	0.001786	0.001786	-0.00250 mg/L	0.001786	71.32%
Ba 233.527†	237322.0	1.58 mg/L	0.023	0.023	1.58 mg/L	0.023	1.49%
Be 234.861†	105.1	-0.00014 mg/L	0.000165	0.000165	-0.00014 mg/L	0.000165	116.36%
B 249.677†	7630.0	0.0866 mg/L	0.00454	0.00454	0.0866 mg/L	0.00454	5.25%
Ca 227.546†	16379.1	33.5 mg/L	1.03	1.03	33.5 mg/L	1.03	3.09%
Cd 228.802†	23.0	0.00022 mg/L	0.000380	0.000380	0.00022 mg/L	0.000380	174.10%
Co 228.616†	-57.8	-0.00270 mg/L	0.000066	0.000066	-0.00270 mg/L	0.000066	2.43%
Cr 267.716†	42.4	-0.00158 mg/L	0.000072	0.000072	-0.00158 mg/L	0.000072	4.54%
Cu 327.393†	-28.6	-0.00131 mg/L	0.000259	0.000259	-0.00131 mg/L	0.000259	19.69%
Fe 239.562†	4394.6	0.276 mg/L	0.0053	0.0053	0.276 mg/L	0.0053	1.93%
Mg 279.077†	12753.3	3.54 mg/L	0.055	0.055	3.54 mg/L	0.055	1.57%
Mn 257.610†	18641.7	0.0200 mg/L	0.00039	0.00039	0.0200 mg/L	0.00039	1.97%
Mo 202.031†	36.7	-0.00060 mg/L	0.000268	0.000268	-0.00060 mg/L	0.000268	44.82%
Ni 231.604†	48.0	-0.00157 mg/L	0.000400	0.000400	-0.00157 mg/L	0.000400	25.53%
Pb 220.353†	6.3	-0.00061 mg/L	0.000612	0.000612	-0.00061 mg/L	0.000612	100.27%

Approved: May 10, 2012


Sb 206.836†	-2.7	-0.00533 mg/L	0.001083	-0.00533 mg/L	0.001083	20.31%
Se 196.026†	-2.1	0.00145 mg/L	0.000641	0.00145 mg/L	0.000641	44.34%
Si 251.611†	1368.4	0.00913 mg/L	0.001159	0.00913 mg/L	0.001159	12.70%
Sn 189.927†	-192.3	-0.0217 mg/L	0.00032	-0.0217 mg/L	0.00032	1.45%
Ti 334.940†	-5657.7	-0.00096 mg/L	0.000506	-0.00096 mg/L	0.000506	52.93%
Tl 190.801†	-6.9	-0.00452 mg/L	0.003802	-0.00452 mg/L	0.003802	84.09%
V 290.880†	1183.8	0.00254 mg/L	0.000696	0.00254 mg/L	0.000696	27.45%
Zn 206.200†	414.0	0.00471 mg/L	0.000366	0.00471 mg/L	0.000366	7.76%
K 766.490†	4788.0	1.25 mg/L	0.046	1.25 mg/L	0.046	3.70%
Na 589.592†	1422480.8	68.4 mg/L	0.66	68.4 mg/L	0.66	0.96%
Sr 407.771†	Saturated2					
Li 670.784†	23713.9	0.130 mg/L	0.0019	0.130 mg/L	0.0019	1.49%

Sequence No.: 7
 Sample ID: PBW 11 WG397463-02
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 54
 a&e Collected: 5/9/2012 4:42:40 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: PBW 11 WG397463-02
 Analyte Back Pressure Flow
 All 152.0 kPa 0.50 L/min

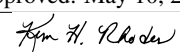
Mean Data: PBW 11 WG397463-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2356930.2				12139.25	0.52%
YRADIAL	314133.7				2334.40	0.74%
Ga 417.206	1387769.5				26428.47	1.90%
GaRADIAL	95485.6				2728.80	2.86%
Ag 328.068†	-69.7	-0.00211 mg/L	0.000520	-0.00211 mg/L	0.000520	24.66%
Al 396.153†	170.2	0.00705 mg/L	0.001329	0.00705 mg/L	0.001329	18.84%
As 188.979†	-16.0	-0.00415 mg/L	0.001323	-0.00415 mg/L	0.001323	31.92%
Ba 233.527†	-48.2	-0.00411 mg/L	0.000069	-0.00411 mg/L	0.000069	1.69%
Be 234.861†	-686.8	-0.00072 mg/L	0.000005	-0.00072 mg/L	0.000005	0.74%
B 249.677†	401.5	0.00341 mg/L	0.000392	0.00341 mg/L	0.000392	11.47%
Ca 227.546†	2.9	0.00581 mg/L	0.015522	0.00581 mg/L	0.015522	267.32%
Cd 228.802†	30.2	0.00036 mg/L	0.000205	0.00036 mg/L	0.000205	56.33%
Co 228.616†	-2.6	-0.00070 mg/L	0.000267	-0.00070 mg/L	0.000267	37.88%
Cr 267.716†	54.2	-0.00148 mg/L	0.000066	-0.00148 mg/L	0.000066	4.46%
Cu 327.393†	442.0	0.00035 mg/L	0.000326	0.00035 mg/L	0.000326	92.51%
Fe 239.562†	92.8	0.0107 mg/L	0.00140	0.0107 mg/L	0.00140	13.06%
Mg 279.077†	50.7	0.0224 mg/L	0.00134	0.0224 mg/L	0.00134	5.97%
Mn 257.610†	777.5	-0.00184 mg/L	0.000007	-0.00184 mg/L	0.000007	0.38%
Mo 202.031†	32.9	-0.00072 mg/L	0.000250	-0.00072 mg/L	0.000250	34.57%
Ni 231.604†	-72.0	-0.00339 mg/L	0.000385	-0.00339 mg/L	0.000385	11.36%
Pb 220.353†	11.1	-0.00040 mg/L	0.001017	-0.00040 mg/L	0.001017	255.24%
Sb 206.836†	10.1	-0.00230 mg/L	0.000867	-0.00230 mg/L	0.000867	37.78%
Se 196.026†	18.1	0.0124 mg/L	0.00062	0.0124 mg/L	0.00062	4.99%
Si 251.611†	379.4	-0.0145 mg/L	0.00358	-0.0145 mg/L	0.00358	24.76%
Sn 189.927†	23.3	-0.00042 mg/L	0.000364	-0.00042 mg/L	0.000364	87.50%
Ti 334.940†	304.1	-0.00006 mg/L	0.000089	-0.00006 mg/L	0.000089	149.70%
Tl 190.801†	-22.9	-0.00861 mg/L	0.000992	-0.00861 mg/L	0.000992	11.52%
V 290.880†	-481.2	-0.00595 mg/L	0.001964	-0.00595 mg/L	0.001964	33.01%
Zn 206.200†	315.9	0.00221 mg/L	0.000279	0.00221 mg/L	0.000279	12.64%
K 766.490†	101.5	0.00845 mg/L	0.030805	0.00845 mg/L	0.030805	364.48%
Na 589.592†	166.3	0.0124 mg/L	0.00902	0.0124 mg/L	0.00902	73.04%
Sr 407.771†	631.7	-0.00002 mg/L	0.000051	-0.00002 mg/L	0.000051	232.56%
Li 670.784†	-52.5	-0.00721 mg/L	0.000165	-0.00721 mg/L	0.000165	2.29%

Sequence No.: 8
 Sample ID: LCSW 11 WG397463-03
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 55
 a&e Collected: 5/9/2012 4:49:35 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: LCSW 11 WG397463-03

Approved: May 10, 2012


Analyst: KHR
 Initial Sample Wt:
 Dilution:

ama Type: Original
 nitial Sample Vol:
 aample Prep Vol:

Nebulizer Parameters: L1205016801

Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1205016801

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2326377.7				39413.01	1.69%
YRADIAL	318456.8				3314.04	1.04%
Ga 417.206	1435777.1				34031.97	2.37%
GarADIAL	95356.2				1504.66	1.58%
Ag 328.068†	-7.1	-0.00171 mg/L	0.000471	-0.00171 mg/L	0.000471	27.45%
Al 396.153†	7348.6	0.910 mg/L	0.0069	0.910 mg/L	0.0069	0.76%
As 188.979†	-16.9	-0.00445 mg/L	0.001004	-0.00445 mg/L	0.001004	22.58%
Ba 233.527†	6093.3	0.0368 mg/L	0.00078	0.0368 mg/L	0.00078	2.13%
Be 234.861†	5066.1	0.00378 mg/L	0.000217	0.00378 mg/L	0.000217	5.75%
B 249.677†	20566.8	0.235 mg/L	0.0113	0.235 mg/L	0.0113	4.79%
Ca 227.546†	3354.4	6.93 mg/L	0.206	6.93 mg/L	0.206	2.98%
Cd 228.802†	229.8	0.00422 mg/L	0.000302	0.00422 mg/L	0.000302	7.15%
Co 228.616†	2486.6	0.0657 mg/L	0.00097	0.0657 mg/L	0.00097	1.47%
Cr 267.716†	776.2	0.00532 mg/L	0.000242	0.00532 mg/L	0.000242	4.54%
Cu 327.393†	13191.8	0.0456 mg/L	0.00180	0.0456 mg/L	0.00180	3.94%
Fe 239.562†	8223.3	0.513 mg/L	0.0028	0.513 mg/L	0.0028	0.54%
Mg 279.077†	3326.5	0.930 mg/L	0.0071	0.930 mg/L	0.0071	0.77%
Mn 257.610†	35339.1	0.0404 mg/L	0.00098	0.0404 mg/L	0.00098	2.42%
Mo 202.031†	163.9	0.00293 mg/L	0.000384	0.00293 mg/L	0.000384	13.10%
Ni 231.604†	6011.8	0.0888 mg/L	0.00134	0.0888 mg/L	0.00134	1.51%
Pb 220.353†	479.5	0.0429 mg/L	0.00239	0.0429 mg/L	0.00239	5.58%
Sb 206.836†	4.5	-0.00364 mg/L	0.001351	-0.00364 mg/L	0.001351	37.08%
Se 196.026†	16.9	0.0120 mg/L	0.00261	0.0120 mg/L	0.00261	21.81%
Si 251.611†	13707.6	0.304 mg/L	0.0071	0.304 mg/L	0.0071	2.35%
Sn 189.927†	-61.6	-0.00879 mg/L	0.000604	-0.00879 mg/L	0.000604	6.87%
Ti 334.940†	2362.0	0.00301 mg/L	0.000174	0.00301 mg/L	0.000174	5.80%
Tl 190.801†	-16.6	-0.00704 mg/L	0.002317	-0.00704 mg/L	0.002317	32.93%
V 290.880†	428.2	-0.00131 mg/L	0.001505	-0.00131 mg/L	0.001505	114.75%
Zn 206.200†	16928.8	0.427 mg/L	0.0071	0.427 mg/L	0.0071	1.65%
K 766.490†	6032.6	1.52 mg/L	0.024	1.52 mg/L	0.024	1.56%
Na 589.592†	3035000.2	151 mg/L	1.3	151 mg/L	1.3	0.87%
Sr 407.771†	405050.4	0.142 mg/L	0.0015	0.142 mg/L	0.0015	1.08%
Li 670.784†	10772.8	0.0553 mg/L	0.00088	0.0553 mg/L	0.00088	1.60%

Sequence No.: 12
 Sample ID: L1205016802
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

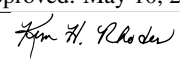
autosampler Location: 59
 ame Collected: 5/9/2012 5:15:32 PM
 ama Type: Original
 nitial Sample Vol:
 aample Prep Vol:

Nebulizer Parameters: L1205016802

Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1205016802

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2182898.9				26984.56	1.24%
YRADIAL	305761.9				4944.63	1.62%
Ga 417.206	1403294.9				23656.43	1.69%
GarADIAL	93920.8				4340.03	4.62%
Ag 328.068†	-71.8	-0.00207 mg/L	0.000335	-0.00207 mg/L	0.000335	16.19%
Al 396.153†	606.7	0.0618 mg/L	0.00198	0.0618 mg/L	0.00198	3.21%
As 188.979†	-21.6	-0.00615 mg/L	0.001678	-0.00615 mg/L	0.001678	27.29%
Ba 233.527†	14626.9	0.0936 mg/L	0.00233	0.0936 mg/L	0.00233	2.49%
Be 234.861†	-323.1	-0.00044 mg/L	0.000015	-0.00044 mg/L	0.000015	3.32%

Approved: May 10, 2012


B 249.677†	12498.1	0.143	mg/L	0.0022	0.143	mg/L	0.0022	1.57%
Ca 227.546†	4843.1	9.89	mg/L	0.185	9.89	mg/L	0.185	1.87%
Cd 228.802†	30.7	0.00039	mg/L	0.000142	0.00039	mg/L	0.000142	36.76%
Co 228.616†	36.5	0.00031	mg/L	0.000058	0.00031	mg/L	0.000058	18.78%
Cr 267.716†	374.8	0.00154	mg/L	0.000042	0.00154	mg/L	0.000042	2.73%
Cu 327.393†	1099.7	0.00269	mg/L	0.000177	0.00269	mg/L	0.000177	6.56%
Fe 239.562†	1437.7	0.0938	mg/L	0.00287	0.0938	mg/L	0.00287	3.06%
Mg 279.077†	2844.4	0.796	mg/L	0.0147	0.796	mg/L	0.0147	1.84%
Mn 257.610†	21778.6	0.0238	mg/L	0.00057	0.0238	mg/L	0.00057	2.39%
Mo 202.031†	115.9	0.00158	mg/L	0.000044	0.00158	mg/L	0.000044	2.77%
Ni 231.604†	104.4	-0.00071	mg/L	0.000168	-0.00071	mg/L	0.000168	23.69%
Pb 220.353†	9.2	-0.00051	mg/L	0.001679	-0.00051	mg/L	0.001679	331.81%
Sb 206.836†	8.7	-0.00265	mg/L	0.000464	-0.00265	mg/L	0.000464	17.47%
Se 196.026†	20.1	0.0136	mg/L	0.00460	0.0136	mg/L	0.00460	33.97%
Si 251.611†	21219.7	0.483	mg/L	0.0092	0.483	mg/L	0.0092	1.91%
Sn 189.927†	-83.0	-0.0109	mg/L	0.00096	-0.0109	mg/L	0.00096	8.83%
Ti 334.940†	529.2	0.00165	mg/L	0.000816	0.00165	mg/L	0.000816	49.58%
Tl 190.801†	-44.5	-0.0142	mg/L	0.00232	-0.0142	mg/L	0.00232	16.31%
V 290.880†	1342.2	0.00352	mg/L	0.001303	0.00352	mg/L	0.001303	36.99%
Zn 206.200†	1543.7	0.0336	mg/L	0.00041	0.0336	mg/L	0.00041	1.22%
K 766.490†	2201.9	0.442	mg/L	0.0110	0.442	mg/L	0.0110	2.49%
Na 589.592†	3110759.2	155	mg/L	6.5	155	mg/L	6.5	4.20%
Sr 407.771†	71108.4	0.0246	mg/L	0.00037	0.0246	mg/L	0.00037	1.49%
Li 670.784†	2079.4	0.00510	mg/L	0.000687	0.00510	mg/L	0.000687	13.47%

Sequence No.: 13
 Sample ID: L1205017701
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 60
 a&e Collected: 5/9/2012 5:22:30 PM
 a&a Type: Original
 nitial Sample Vol:
 a&ple Prep Vol:

Nebulizer Parameters: L1205017701

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1205017701

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2181141.8						9803.69	0.45%
YRADIAL	303697.7						2852.08	0.94%
Ga 417.206	1412459.4						31998.05	2.27%
GaRADIAL	94160.7						3077.15	3.27%
Ag 328.068†	-163.4	-0.00239	mg/L	0.000277	-0.00239	mg/L	0.000277	11.56%
Al 396.153†	1376.7	0.158	mg/L	0.0024	0.158	mg/L	0.0024	1.53%
As 188.979†	-19.5	-0.00546	mg/L	0.001360	-0.00546	mg/L	0.001360	24.91%
Ba 233.527†	253.9	-0.00209	mg/L	0.000045	-0.00209	mg/L	0.000045	2.14%
Be 234.861†	-689.2	-0.00069	mg/L	0.000054	-0.00069	mg/L	0.000054	7.76%
B 249.677†	13039.2	0.149	mg/L	0.0062	0.149	mg/L	0.0062	4.15%
Ca 227.546†	315.2	2.16	mg/L	0.025	2.16	mg/L	0.025	1.17%
Cd 228.802†	20.3	0.00027	mg/L	0.000251	0.00027	mg/L	0.000251	92.02%
Co 228.616†	116.8	0.00226	mg/L	0.000203	0.00226	mg/L	0.000203	8.99%
Cr 267.716†	169.0	0.00003	mg/L	0.000107	0.00003	mg/L	0.000107	426.13%
Cu 327.393†	673.3	0.00157	mg/L	0.000257	0.00157	mg/L	0.000257	16.43%
Fe 239.562†	589.3	0.0414	mg/L	0.00037	0.0414	mg/L	0.00037	0.90%
Mg 279.077†	1544.5	0.436	mg/L	0.0044	0.436	mg/L	0.0044	1.02%
Mn 257.610†	87141.2	0.104	mg/L	0.0019	0.104	mg/L	0.0019	1.80%
Mo 202.031†	503.8	0.0123	mg/L	0.00042	0.0123	mg/L	0.00042	3.41%
Ni 231.604†	119945.6	1.82	mg/L	0.029	1.82	mg/L	0.029	1.58%
Pb 220.353†	1.0	-0.00101	mg/L	0.000825	-0.00101	mg/L	0.000825	81.80%
Sb 206.836†	4.9	-0.00218	mg/L	0.000570	-0.00218	mg/L	0.000570	26.22%
Se 196.026†	15.9	0.0119	mg/L	0.00317	0.0119	mg/L	0.00317	26.65%
Si 251.611†	35266.8	0.818	mg/L	0.0326	0.818	mg/L	0.0326	3.98%
Sn 189.927†	-3.7	-0.00308	mg/L	0.000671	-0.00308	mg/L	0.000671	21.74%
Ti 334.940†	5587.2	0.00528	mg/L	0.001120	0.00528	mg/L	0.001120	21.22%
Tl 190.801†	-45.0	-0.0144	mg/L	0.00079	-0.0144	mg/L	0.00079	5.48%
V 290.880†	716.5	0.00028	mg/L	0.002083	0.00028	mg/L	0.002083	746.19%
Zn 206.200†	418273.6	10.7	mg/L	0.16	10.7	mg/L	0.16	1.50%
K 766.490†	1351.1	0.210	mg/L	0.0016	0.210	mg/L	0.0016	0.78%
Na 589.592†	2999528.5	149	mg/L	6.1	149	mg/L	6.1	4.13%

Approved: May 10, 2012

John H. Rhodes

Sr 407.771†	8289.3	0.00267 mg/L	0.000029	0.00267 mg/L	0.000029	1.08%
Li 670.784†	49.9	-0.00662 mg/L	0.000011	-0.00662 mg/L	0.000011	0.16%

Sequence No.: 14
 Sample ID: L1205017701PS WG397515-01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 61
 ame Collected: 5/9/2012 5:29:28 PM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: L1205017701PS WG397515-01
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1205017701PS WG397515-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2226963.0				25589.04	1.15%
YRADIAL	311852.1				624.15	0.20%
Ga 417.206	1359678.0				46890.73	3.45%
GaRADIAL	93361.6				682.97	0.73%
Ag 328.068†	63556.3	0.201 mg/L	0.0081	0.201 mg/L	0.0081	4.04%
Al 396.153†	40435.4	5.04 mg/L	0.024	5.04 mg/L	0.024	0.47%
As 188.979†	531.7	0.187 mg/L	0.0056	0.187 mg/L	0.0056	2.98%
Ba 233.527†	76661.6	0.507 mg/L	0.0057	0.507 mg/L	0.0057	1.12%
Be 234.861†	30101.6	0.0237 mg/L	0.00082	0.0237 mg/L	0.00082	3.46%
B 249.677†	93952.4	1.08 mg/L	0.046	1.08 mg/L	0.046	4.26%
Ca 227.546†	2632.4	6.89 mg/L	0.169	6.89 mg/L	0.169	2.45%
Cd 228.802†	1377.5	0.0242 mg/L	0.00168	0.0242 mg/L	0.00168	6.93%
Co 228.616†	3839.6	0.101 mg/L	0.0010	0.101 mg/L	0.0010	1.02%
Cr 267.716†	27243.7	0.254 mg/L	0.0022	0.254 mg/L	0.0022	0.85%
Cu 327.393†	70476.6	0.250 mg/L	0.0100	0.250 mg/L	0.0100	3.99%
Fe 239.562†	32149.6	1.99 mg/L	0.010	1.99 mg/L	0.010	0.48%
Mg 279.077†	19162.6	5.33 mg/L	0.021	5.33 mg/L	0.021	0.40%
Mn 257.610†	284180.8	0.345 mg/L	0.0050	0.345 mg/L	0.0050	1.44%
Mo 202.031†	18793.6	0.517 mg/L	0.0046	0.517 mg/L	0.0046	0.88%
Ni 231.604†	118424.0	1.79 mg/L	0.023	1.79 mg/L	0.023	1.30%
Pb 220.353†	2570.8	0.237 mg/L	0.0037	0.237 mg/L	0.0037	1.56%
Sb 206.836†	2472.4	0.587 mg/L	0.0232	0.587 mg/L	0.0232	3.96%
Se 196.026†	344.2	0.192 mg/L	0.0098	0.192 mg/L	0.0098	5.09%
Si 251.611†	140951.6	3.34 mg/L	0.109	3.34 mg/L	0.109	3.27%
Sn 189.927†	-52.4	-0.00788 mg/L	0.000932	-0.00788 mg/L	0.000932	11.83%
Ti 334.940†	506335.5	0.503 mg/L	0.0027	0.503 mg/L	0.0027	0.53%
Tl 190.801†	874.9	0.233 mg/L	0.0020	0.233 mg/L	0.0020	0.85%
V 290.880†	97357.3	0.504 mg/L	0.0024	0.504 mg/L	0.0024	0.48%
Zn 206.200†	387545.0	9.91 mg/L	0.157	9.91 mg/L	0.157	1.59%
K 766.490†	85838.5	24.1 mg/L	0.23	24.1 mg/L	0.23	0.96%
Na 589.592†	3167135.3	158 mg/L	1.0	158 mg/L	1.0	0.62%
Sr 407.771†	1422842.1	0.502 mg/L	0.0035	0.502 mg/L	0.0035	0.69%
Li 670.784†	85722.7	0.488 mg/L	0.0003	0.488 mg/L	0.0003	0.06%

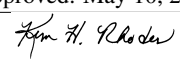
Sequence No.: 15
 Sample ID: L1205017701DL WG397515-02
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 62
 ame Collected: 5/9/2012 5:35:26 PM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: L1205017701DL WG397515-02
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1205017701DL WG397515-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2242649.8				16366.17	0.73%
YRADIAL	305209.0				9034.69	2.96%
Ga 417.206	1433198.3				33575.68	2.34%

Approved: May 10, 2012


GarADIAL	94843.6					717.64	0.76%
Ag 328.068†	-77.2	-0.00212 mg/L	0.000328	-0.00212 mg/L	0.000328	15.47%	
Al 396.153†	287.2	0.0216 mg/L	0.00077	0.0216 mg/L	0.00077	3.56%	
As 188.979†	-1.0	0.00113 mg/L	0.002551	0.00113 mg/L	0.002551	225.39%	
Ba 233.527†	31.1	-0.00358 mg/L	0.000124	-0.00358 mg/L	0.000124	3.46%	
Be 234.861†	-170.4	-0.00030 mg/L	0.000029	-0.00030 mg/L	0.000029	9.77%	
B 249.677†	3227.0	0.0360 mg/L	0.00061	0.0360 mg/L	0.00061	1.71%	
Ca 227.546†	65.7	0.442 mg/L	0.0118	0.442 mg/L	0.0118	2.67%	
Cd 228.802†	-2.2	-0.00023 mg/L	0.000120	-0.00023 mg/L	0.000120	51.54%	
Co 228.616†	19.4	-0.00016 mg/L	0.000281	-0.00016 mg/L	0.000281	172.89%	
Cr 267.716†	33.1	-0.00159 mg/L	0.000131	-0.00159 mg/L	0.000131	8.25%	
Cu 327.393†	221.2	-0.00035 mg/L	0.000636	-0.00035 mg/L	0.000636	184.26%	
Fe 239.562†	123.4	0.0126 mg/L	0.00012	0.0126 mg/L	0.00012	0.98%	
Mg 279.077†	333.2	0.101 mg/L	0.0016	0.101 mg/L	0.0016	1.59%	
Mn 257.610†	17351.7	0.0185 mg/L	0.00030	0.0185 mg/L	0.00030	1.60%	
Mo 202.031†	93.9	0.00097 mg/L	0.000142	0.00097 mg/L	0.000142	14.66%	
Ni 231.604†	24378.1	0.367 mg/L	0.0060	0.367 mg/L	0.0060	1.63%	
Pb 220.353†	-0.1	-0.00136 mg/L	0.000149	-0.00136 mg/L	0.000149	10.92%	
Sb 206.836†	4.7	-0.00330 mg/L	0.001327	-0.00330 mg/L	0.001327	40.15%	
Se 196.026†	1.3	0.00335 mg/L	0.001598	0.00335 mg/L	0.001598	47.70%	
Si 251.611†	7433.9	0.154 mg/L	0.0098	0.154 mg/L	0.0098	6.34%	
Sn 189.927†	2.9	-0.00243 mg/L	0.000321	-0.00243 mg/L	0.000321	13.21%	
Ti 334.940†	982.6	0.00063 mg/L	0.000157	0.00063 mg/L	0.000157	24.79%	
Tl 190.801†	-5.5	-0.00410 mg/L	0.000699	-0.00410 mg/L	0.000699	17.08%	
V 290.880†	413.9	-0.00128 mg/L	0.002123	-0.00128 mg/L	0.002123	165.27%	
Zn 206.200†	87147.3	2.22 mg/L	0.033	2.22 mg/L	0.033	1.49%	
K 766.490†	510.2	0.0933 mg/L	0.01650	0.0933 mg/L	0.01650	17.68%	
Na 589.592†	623304.3	29.6 mg/L	0.87	29.6 mg/L	0.87	2.94%	
Sr 407.771†	1701.1	0.00035 mg/L	0.000041	0.00035 mg/L	0.000041	11.76%	
Li 670.784†	87.3	-0.00641 mg/L	0.000054	-0.00641 mg/L	0.000054	0.84%	

Sequence No.: 16
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

autosampler Location: 6
 Date Collected: 5/9/2012 5:42:20 PM
 Sample Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	154.0 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	2179350.5				11844.86	0.54%
YRADIAL	308364.2				2716.13	0.88%
Ga 417.206	1332358.0				40850.68	3.07%
GarADIAL	93419.0				849.66	0.91%
Ag 328.068†	131969.2	0.419 mg/L	0.0157	0.419 mg/L	0.0157	3.75%
QC value within limits for Ag		328.068	Recovery = 104.69%			
Al 396.153†	80995.6	10.1 mg/L	0.02	10.1 mg/L	0.02	0.16%
QC value within limits for Al		396.153	Recovery = 101.02%			
As 188.979†	1161.3	0.408 mg/L	0.0117	0.408 mg/L	0.0117	2.86%
QC value within limits for As		188.979	Recovery = 102.01%			
Ba 233.527†	158888.1	1.05 mg/L	0.006	1.05 mg/L	0.006	0.54%
QC value within limits for Ba		233.527	Recovery = 105.48%			
Be 234.861†	65289.8	0.0516 mg/L	0.00188	0.0516 mg/L	0.00188	3.64%
QC value within limits for Be		234.861	Recovery = 103.25%			
B 249.677†	44711.2	0.510 mg/L	0.0199	0.510 mg/L	0.0199	3.90%
QC value within limits for B		249.677	Recovery = 101.94%			
Ca 227.546†	4945.8	10.6 mg/L	0.37	10.6 mg/L	0.37	3.48%
QC value within limits for Ca		227.546	Recovery = 105.81%			
Cd 228.802†	2881.2	0.0506 mg/L	0.00245	0.0506 mg/L	0.00245	4.85%
QC value within limits for Cd		228.802	Recovery = 101.10%			
Co 228.616†	7846.1	0.208 mg/L	0.0016	0.208 mg/L	0.0016	0.78%
QC value within limits for Co		228.616	Recovery = 103.95%			
Cr 267.716†	55601.6	0.521 mg/L	0.0026	0.521 mg/L	0.0026	0.50%
QC value within limits for Cr		267.716	Recovery = 104.14%			
Cu 327.393†	144787.3	0.513 mg/L	0.0186	0.513 mg/L	0.0186	3.62%

Approved: May 10, 2012

John H. Rhodes

B 249.677†	52188.2	0.248 mg/L	0.0138	0.248 mg/L	0.0138	5.58%
Ca 227.546†	-4483.6	11.2 mg/L	2.55	11.2 mg/L	2.55	22.88%
Cd 228.802†	-61.6	-0.00222 mg/L	0.000185	-0.00222 mg/L	0.000185	8.31%
Co 228.616†	2186.2	0.0361 mg/L	0.00094	0.0361 mg/L	0.00094	2.60%
Cr 267.716†	-2718.7	0.00064 mg/L	0.000910	0.00064 mg/L	0.000910	142.67%
Cu 327.393†	-9807.6	0.0333 mg/L	0.00329	0.0333 mg/L	0.00329	9.90%
Fe 239.562†	13234484.1	818 mg/L	9.8	818 mg/L	9.8	1.20%
Mg 279.077†	2028.2	0.128 mg/L	0.0248	0.128 mg/L	0.0248	19.36%
Mn 257.610†	8420360.4	10.3 mg/L	0.07	10.3 mg/L	0.07	0.72%
Mo 202.031†	-1083.0	0.0107 mg/L	0.00046	0.0107 mg/L	0.00046	4.31%
Ni 231.604†	56115.8	0.848 mg/L	0.0105	0.848 mg/L	0.0105	1.24%
Pb 220.353†	1011.7	0.0149 mg/L	0.00623	0.0149 mg/L	0.00623	41.78%
Sb 206.836†	-60.5	0.0115 mg/L	0.00310	0.0115 mg/L	0.00310	26.86%
Se 196.026†	-391.9	0.0305 mg/L	0.01329	0.0305 mg/L	0.01329	43.63%
Si 251.611†	-775.4	-0.0417 mg/L	0.00073	-0.0417 mg/L	0.00073	1.76%
Sn 189.927†	-214.9	-0.0239 mg/L	0.00358	-0.0239 mg/L	0.00358	14.99%
Ti 334.940†	-464.0	-0.00219 mg/L	0.000679	-0.00219 mg/L	0.000679	31.05%
Tl 190.801†	-13.6	-0.0163 mg/L	0.00380	-0.0163 mg/L	0.00380	23.31%
V 290.880†	15696.0	-0.0508 mg/L	0.00271	-0.0508 mg/L	0.00271	5.35%
Zn 206.200†	307727.4	7.85 mg/L	0.120	7.85 mg/L	0.120	1.53%
K 766.490†	1043.8	0.119 mg/L	0.0075	0.119 mg/L	0.0075	6.29%
Na 589.592†	3085625.2	153 mg/L	2.7	153 mg/L	2.7	1.79%
Sr 407.771†	12665.1	0.00442 mg/L	0.000041	0.00442 mg/L	0.000041	0.94%
Li 670.784†	-21.1	-0.00703 mg/L	0.000598	-0.00703 mg/L	0.000598	8.51%

Sequence No.: 19

Sample ID: L1205017703

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 64

ane Collected: 5/9/2012 6:01:25 PM

ana Type: Original

nitial Sample Vol:

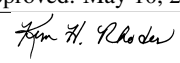
ample Prep Vol:

Nebulizer Parameters: L1205017703

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1205017703

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2313102.3					19486.06	0.84%
YRADIAL	313234.4					2335.19	0.75%
Ga 417.206	1458041.3					5616.01	0.39%
GaRADIAL	97634.0					2225.43	2.28%
Ag 328.068†	-168.5	-0.00240 mg/L		0.000302	-0.00240 mg/L	0.000302	12.57%
Al 396.153†	171.2	0.00455 mg/L		0.000959	0.00455 mg/L	0.000959	21.10%
As 188.979†	-12.4	-0.00310 mg/L		0.002733	-0.00310 mg/L	0.002733	88.15%
Ba 233.527†	7.4	-0.00371 mg/L		0.000123	-0.00371 mg/L	0.000123	3.30%
Be 234.861†	-558.1	-0.00061 mg/L		0.000025	-0.00061 mg/L	0.000025	4.11%
B 249.677†	1980.1	0.0216 mg/L		0.00022	0.0216 mg/L	0.00022	1.01%
Ca 227.546†	2376.1	4.85 mg/L		0.032	4.85 mg/L	0.032	0.66%
Cd 228.802†	31.6	0.00038 mg/L		0.000060	0.00038 mg/L	0.000060	15.81%
Co 228.616†	-9.6	-0.00082 mg/L		0.000011	-0.00082 mg/L	0.000011	1.34%
Cr 267.716†	190.5	-0.00021 mg/L		0.000082	-0.00021 mg/L	0.000082	40.06%
Cu 327.393†	677.6	0.00119 mg/L		0.000300	0.00119 mg/L	0.000300	25.08%
Fe 239.562†	780.7	0.0532 mg/L		0.00200	0.0532 mg/L	0.00200	3.76%
Mg 279.077†	3830.9	1.07 mg/L		0.006	1.07 mg/L	0.006	0.52%
Mn 257.610†	4248.3	0.00240 mg/L		0.000036	0.00240 mg/L	0.000036	1.48%
Mo 202.031†	1412.7	0.0374 mg/L		0.00032	0.0374 mg/L	0.00032	0.85%
Ni 231.604†	-4.1	-0.00235 mg/L		0.000427	-0.00235 mg/L	0.000427	18.12%
Pb 220.353†	4.1	-0.00099 mg/L		0.001024	-0.00099 mg/L	0.001024	103.14%
Sb 206.836†	9.9	-0.00231 mg/L		0.000916	-0.00231 mg/L	0.000916	39.72%
Se 196.026†	11.8	0.00900 mg/L		0.003773	0.00900 mg/L	0.003773	41.90%
Si 251.611†	2666.1	0.0397 mg/L		0.00073	0.0397 mg/L	0.00073	1.85%
Sn 189.927†	-43.3	-0.00699 mg/L		0.000392	-0.00699 mg/L	0.000392	5.61%
Ti 334.940†	54.2	0.00042 mg/L		0.000229	0.00042 mg/L	0.000229	54.66%
Tl 190.801†	-34.4	-0.0116 mg/L		0.00293	-0.0116 mg/L	0.00293	25.19%
V 290.880†	-273.6	-0.00491 mg/L		0.001707	-0.00491 mg/L	0.001707	34.79%
Zn 206.200†	285.2	0.00144 mg/L		0.000232	0.00144 mg/L	0.000232	16.16%
K 766.490†	11737.8	3.21 mg/L		0.013	3.21 mg/L	0.013	0.41%
Na 589.592†	1197874.8	57.4 mg/L		1.23	57.4 mg/L	1.23	2.14%

Approved: May 10, 2012


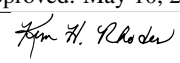
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2243017.2				44320.58	1.98%
YRADIAL	308163.6				4364.78	1.42%
Ga 417.206	1362821.9				24586.76	1.80%
GA RADIAL	93089.1				1563.86	1.68%
Ag 328.068†	126958.4	0.403 mg/L	0.0141	0.403 mg/L	0.0141	3.50%
QC value within limits for Ag		328.068	Recovery = 100.70%			
Al 396.153†	78987.7	9.85 mg/L	0.027	9.85 mg/L	0.027	0.27%
QC value within limits for Al		396.153	Recovery = 98.53%			
As 188.979†	1117.9	0.393 mg/L	0.0060	0.393 mg/L	0.0060	1.52%
QC value within limits for As		188.979	Recovery = 98.21%			
Ba 233.527†	152201.7	1.01 mg/L	0.009	1.01 mg/L	0.009	0.87%
QC value within limits for Ba		233.527	Recovery = 101.03%			
Be 234.861†	63725.4	0.0504 mg/L	0.00153	0.0504 mg/L	0.00153	3.04%
QC value within limits for Be		234.861	Recovery = 100.74%			
B 249.677†	43683.5	0.498 mg/L	0.0191	0.498 mg/L	0.0191	3.83%
QC value within limits for B		249.677	Recovery = 99.60%			
Ca 227.546†	4715.3	10.1 mg/L	0.21	10.1 mg/L	0.21	2.08%
QC value within limits for Ca		227.546	Recovery = 101.06%			
Cd 228.802†	2783.6	0.0488 mg/L	0.00157	0.0488 mg/L	0.00157	3.22%
QC value within limits for Cd		228.802	Recovery = 97.66%			
Co 228.616†	7480.5	0.198 mg/L	0.0048	0.198 mg/L	0.0048	2.41%
QC value within limits for Co		228.616	Recovery = 99.09%			
Cr 267.716†	53397.0	0.500 mg/L	0.0038	0.500 mg/L	0.0038	0.77%
QC value within limits for Cr		267.716	Recovery = 99.99%			
Cu 327.393†	138969.5	0.493 mg/L	0.0163	0.493 mg/L	0.0163	3.30%
QC value within limits for Cu		327.393	Recovery = 98.55%			
Fe 239.562†	65402.1	4.04 mg/L	0.033	4.04 mg/L	0.033	0.82%
QC value within limits for Fe		239.562	Recovery = 101.11%			
Mg 279.077†	36373.4	10.1 mg/L	0.08	10.1 mg/L	0.08	0.81%
QC value within limits for Mg		279.077	Recovery = 101.00%			
Mn 257.610†	411910.4	0.500 mg/L	0.0045	0.500 mg/L	0.0045	0.89%
QC value within limits for Mn		257.610	Recovery = 100.09%			
Mo 202.031†	36046.6	0.994 mg/L	0.0055	0.994 mg/L	0.0055	0.55%
QC value within limits for Mo		202.031	Recovery = 99.39%			
Ni 231.604†	34372.6	0.518 mg/L	0.0114	0.518 mg/L	0.0114	2.20%
QC value within limits for Ni		231.604	Recovery = 103.69%			
Pb 220.353†	5405.9	0.498 mg/L	0.0096	0.498 mg/L	0.0096	1.92%
QC value within limits for Pb		220.353	Recovery = 99.66%			
Sb 206.836†	5042.2	1.20 mg/L	0.025	1.20 mg/L	0.025	2.04%
QC value within limits for Sb		206.836	Recovery = 99.96%			
Se 196.026†	720.3	0.398 mg/L	0.0086	0.398 mg/L	0.0086	2.17%
QC value within limits for Se		196.026	Recovery = 99.62%			
Si 251.611†	211603.6	5.02 mg/L	0.135	5.02 mg/L	0.135	2.68%
QC value within limits for Si		251.611	Recovery = 100.32%			
Sn 189.927†	10010.2	0.984 mg/L	0.0233	0.984 mg/L	0.0233	2.36%
QC value within limits for Sn		189.927	Recovery = 98.43%			
Ti 334.940†	989318.1	0.982 mg/L	0.0026	0.982 mg/L	0.0026	0.26%
QC value within limits for Ti		334.940	Recovery = 98.21%			
Tl 190.801†	1913.5	0.510 mg/L	0.0047	0.510 mg/L	0.0047	0.93%
QC value within limits for Tl		190.801	Recovery = 102.05%			
V 290.880†	189469.2	0.983 mg/L	0.0054	0.983 mg/L	0.0054	0.55%
QC value within limits for V		290.880	Recovery = 98.34%			
Zn 206.200†	40346.3	1.03 mg/L	0.010	1.03 mg/L	0.010	1.00%
QC value within limits for Zn		206.200	Recovery = 103.10%			
K 766.490†	169440.6	48.5 mg/L	0.27	48.5 mg/L	0.27	0.56%
QC value within limits for K		766.490	Recovery = 96.98%			
Na 589.592†	1025138.4	49.0 mg/L	1.32	49.0 mg/L	1.32	2.70%
QC value within limits for Na		589.592	Recovery = 97.93%			
Sr 407.771†	2853384.5	1.01 mg/L	0.025	1.01 mg/L	0.025	2.44%
QC value within limits for Sr		407.771	Recovery = 100.62%			
Li 670.784†	169128.0	0.970 mg/L	0.0056	0.970 mg/L	0.0056	0.58%
QC value within limits for Li		670.784	Recovery = 97.00%			

All analyte(s) passed QC.

Sequence No.: 25
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:

Sampler Location: 1
 Date Collected: 5/9/2012 6:39:15 PM
 Data Type: Original
 Initial Sample Vol:

Approved: May 10, 2012


Dilution:

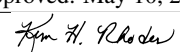
Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 154.0 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	2337176.2				24742.81	1.06%
YRADIAL	310934.6				5092.88	1.64%
Ga 417.206	1433430.3				29708.07	2.07%
GaRADIAL	94801.9				1895.88	2.00%
Ag 328.068†	-144.2	-0.00234 mg/L	0.000254	-0.00234 mg/L	0.000254	10.86%
QC value within limits for Ag	328.068	Recovery =	Not calculated			
Al 396.153†	29.2	-0.0106 mg/L	0.00192	-0.0106 mg/L	0.00192	18.09%
QC value within limits for Al	396.153	Recovery =	Not calculated			
As 188.979†	-0.8	0.00125 mg/L	0.001235	0.00125 mg/L	0.001235	98.89%
QC value within limits for As	188.979	Recovery =	Not calculated			
Ba 233.527†	5.9	-0.00375 mg/L	0.000104	-0.00375 mg/L	0.000104	2.77%
QC value within limits for Ba	233.527	Recovery =	Not calculated			
Be 234.861†	-75.7	-0.00023 mg/L	0.000023	-0.00023 mg/L	0.000023	10.22%
QC value within limits for Be	234.861	Recovery =	Not calculated			
B 249.677†	702.1	0.00689 mg/L	0.000524	0.00689 mg/L	0.000524	7.61%
QC value within limits for B	249.677	Recovery =	Not calculated			
Ca 227.546†	0.0	0.00065 mg/L	0.026493	0.00065 mg/L	0.026493	>999.9%
QC value within limits for Ca	227.546	Recovery =	Not calculated			
Cd 228.802†	-2.2	-0.00025 mg/L	0.000009	-0.00025 mg/L	0.000009	3.77%
QC value within limits for Cd	228.802	Recovery =	Not calculated			
Co 228.616†	5.7	-0.00048 mg/L	0.000144	-0.00048 mg/L	0.000144	29.75%
QC value within limits for Co	228.616	Recovery =	Not calculated			
Cr 267.716†	5.9	-0.00193 mg/L	0.000031	-0.00193 mg/L	0.000031	1.60%
QC value within limits for Cr	267.716	Recovery =	Not calculated			
Cu 327.393†	35.9	-0.00109 mg/L	0.000458	-0.00109 mg/L	0.000458	42.23%
QC value within limits for Cu	327.393	Recovery =	Not calculated			
Fe 239.562†	66.3	0.00907 mg/L	0.000688	0.00907 mg/L	0.000688	7.59%
QC value within limits for Fe	239.562	Recovery =	Not calculated			
Mg 279.077†	9.3	0.0109 mg/L	0.00301	0.0109 mg/L	0.00301	27.66%
QC value within limits for Mg	279.077	Recovery =	Not calculated			
Mn 257.610†	185.5	-0.00256 mg/L	0.000025	-0.00256 mg/L	0.000025	0.96%
QC value within limits for Mn	257.610	Recovery =	Not calculated			
Mo 202.031†	1.7	-0.00158 mg/L	0.000291	-0.00158 mg/L	0.000291	18.37%
QC value within limits for Mo	202.031	Recovery =	Not calculated			
Ni 231.604†	-5.5	-0.00238 mg/L	0.000168	-0.00238 mg/L	0.000168	7.07%
QC value within limits for Ni	231.604	Recovery =	Not calculated			
Pb 220.353†	6.4	-0.00084 mg/L	0.001158	-0.00084 mg/L	0.001158	138.56%
QC value within limits for Pb	220.353	Recovery =	Not calculated			
Sb 206.836†	6.5	-0.00315 mg/L	0.000702	-0.00315 mg/L	0.000702	22.31%
QC value within limits for Sb	206.836	Recovery =	Not calculated			
Se 196.026†	0.3	0.00270 mg/L	0.001366	0.00270 mg/L	0.001366	50.65%
QC value within limits for Se	196.026	Recovery =	Not calculated			
Si 251.611†	49.7	-0.0223 mg/L	0.00041	-0.0223 mg/L	0.00041	1.85%
QC value within limits for Si	251.611	Recovery =	Not calculated			
Sn 189.927†	-3.8	-0.00309 mg/L	0.000337	-0.00309 mg/L	0.000337	10.89%
QC value within limits for Sn	189.927	Recovery =	Not calculated			
Ti 334.940†	147.8	-0.00022 mg/L	0.000087	-0.00022 mg/L	0.000087	40.42%
QC value within limits for Ti	334.940	Recovery =	Not calculated			
Tl 190.801†	-7.7	-0.00465 mg/L	0.001482	-0.00465 mg/L	0.001482	31.89%
QC value within limits for Tl	190.801	Recovery =	Not calculated			
V 290.880†	-198.7	-0.00448 mg/L	0.001324	-0.00448 mg/L	0.001324	29.58%
QC value within limits for V	290.880	Recovery =	Not calculated			
Zn 206.200†	120.1	-0.00280 mg/L	0.000096	-0.00280 mg/L	0.000096	3.44%
QC value within limits for Zn	206.200	Recovery =	Not calculated			
K 766.490†	81.5	0.00285 mg/L	0.020131	0.00285 mg/L	0.020131	706.30%
QC value within limits for K	766.490	Recovery =	Not calculated			
Na 589.592†	91.6	0.00885 mg/L	0.004854	0.00885 mg/L	0.004854	54.84%
QC value within limits for Na	589.592	Recovery =	Not calculated			
Sr 407.771†	532.7	-0.00006 mg/L	0.000010	-0.00006 mg/L	0.000010	17.78%
QC value within limits for Sr	407.771	Recovery =	Not calculated			
Li 670.784†	-11.6	-0.00698 mg/L	0.000208	-0.00698 mg/L	0.000208	2.98%

Approved: May 10, 2012


Ti 334.940†	-7535.2	-0.00236 mg/L	0.000400	-0.00236 mg/L	0.000400	16.96%
Tl 190.801†	-16.9	-0.00717 mg/L	0.002023	-0.00717 mg/L	0.002023	28.22%
V 290.880†	977.0	-0.00071 mg/L	0.002897	-0.00071 mg/L	0.002897	406.50%
Zn 206.200†	292.6	0.00163 mg/L	0.000232	0.00163 mg/L	0.000232	14.29%
K 766.490†	2617.9	0.710 mg/L	0.0444	0.710 mg/L	0.0444	6.25%
Na 589.592†	61956.6	2.91 mg/L	0.142	2.91 mg/L	0.142	4.89%
Sr 407.771†	137507.1	0.0475 mg/L	0.00076	0.0475 mg/L	0.00076	1.60%
Li 670.784†	2264.8	0.00617 mg/L	0.000581	0.00617 mg/L	0.000581	9.41%

Sequence No.: 29

Sample ID: L1205023602 0.1

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 74

Date Collected: 5/9/2012 7:05:56 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1205023602 0.1

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205023602 0.1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2181649.2					19027.54	0.87%
YRADIAL	308622.9					5706.21	1.85%
Ga 417.206	1455172.4					11460.39	0.79%
GaRADIAL	96538.6					1616.64	1.67%
Ag 328.068†	35.7	-0.00177 mg/L	0.000200	-0.00177 mg/L	0.000200	11.31%	
Al 396.153†	27.2	-0.0109 mg/L	0.00155	-0.0109 mg/L	0.00155	14.20%	
As 188.979†	2.9	0.00254 mg/L	0.004441	0.00254 mg/L	0.004441	175.06%	
Ba 233.527†	308.5	-0.00174 mg/L	0.000154	-0.00174 mg/L	0.000154	8.88%	
Be 234.861†	171.8	-0.00003 mg/L	0.000010	-0.00003 mg/L	0.000010	37.05%	
B 249.677†	590.1	0.00560 mg/L	0.000209	0.00560 mg/L	0.000209	3.73%	
Ca 227.546†	18985.1	38.8 mg/L	2.40	38.8 mg/L	2.40	6.19%	
Cd 228.802†	-18.3	-0.00055 mg/L	0.000102	-0.00055 mg/L	0.000102	18.73%	
Co 228.616†	8.1	-0.00040 mg/L	0.000276	-0.00040 mg/L	0.000276	68.39%	
Cr 267.716†	176.5	-0.00033 mg/L	0.000055	-0.00033 mg/L	0.000055	16.92%	
Cu 327.393†	-162.8	-0.00180 mg/L	0.000142	-0.00180 mg/L	0.000142	7.92%	
Fe 239.562†	22.0	0.00454 mg/L	0.000707	0.00454 mg/L	0.000707	15.58%	
Mg 279.077†	324739.4	90.0 mg/L	2.04	90.0 mg/L	2.04	2.26%	
Mn 257.610†	27432.7	0.0307 mg/L	0.00114	0.0307 mg/L	0.00114	3.71%	
Mo 202.031†	8.6	-0.00138 mg/L	0.000144	-0.00138 mg/L	0.000144	10.40%	
Ni 231.604†	234.4	0.00126 mg/L	0.000445	0.00126 mg/L	0.000445	35.40%	
Pb 220.353†	33.4	0.00195 mg/L	0.001043	0.00195 mg/L	0.001043	53.42%	
Sb 206.836†	-1.5	-0.00508 mg/L	0.001398	-0.00508 mg/L	0.001398	27.53%	
Se 196.026†	-0.2	0.00243 mg/L	0.003705	0.00243 mg/L	0.003705	152.73%	
Si 251.611†	10449.1	0.226 mg/L	0.0109	0.226 mg/L	0.0109	4.84%	
Sn 189.927†	-226.8	-0.0251 mg/L	0.00123	-0.0251 mg/L	0.00123	4.90%	
Ti 334.940†	-7864.6	-0.00235 mg/L	0.000178	-0.00235 mg/L	0.000178	7.60%	
Tl 190.801†	-16.8	-0.00714 mg/L	0.000821	-0.00714 mg/L	0.000821	11.50%	
V 290.880†	1067.5	-0.00021 mg/L	0.001958	-0.00021 mg/L	0.001958	924.22%	
Zn 206.200†	193.9	-0.00090 mg/L	0.000093	-0.00090 mg/L	0.000093	10.32%	
K 766.490†	2583.7	0.701 mg/L	0.0406	0.701 mg/L	0.0406	5.79%	
Na 589.592†	61744.5	2.90 mg/L	0.135	2.90 mg/L	0.135	4.63%	
Sr 407.771†	135110.7	0.0466 mg/L	0.00067	0.0466 mg/L	0.00067	1.43%	
Li 670.784†	2157.5	0.00555 mg/L	0.000943	0.00555 mg/L	0.000943	16.99%	

Sequence No.: 30

Sample ID: L1205023603 0.1

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 75

Date Collected: 5/9/2012 7:12:50 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1205023603 0.1

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Approved: May 10, 2012

John H. Rhodes

Mean Data: L1205023603 0.1

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Sb, Se, Si, Sn, Ti, Tl, V, Zn, K, Na, Sr, Li.

Sequence No.: 31

Sample ID: L1205023604 0.1

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 76

Time Collected: 5/9/2012 7:19:45 PM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1205023604 0.1

Table with 3 columns: Analyte, Back Pressure, Flow. Shows values for All analytes.

Mean Data: L1205023604 0.1

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like Y, Ga, Ag, Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo.

Approved: May 10, 2012
[Signature]

Ni 231.604†	24.8	-0.00192	mg/L	0.000410	-0.00192	mg/L	0.000410	21.39%
Pb 220.353†	28.5	0.00143	mg/L	0.000640	0.00143	mg/L	0.000640	44.76%
Sb 206.836†	-1.2	-0.00499	mg/L	0.000988	-0.00499	mg/L	0.000988	19.79%
Se 196.026†	-1.9	0.00147	mg/L	0.001203	0.00147	mg/L	0.001203	82.03%
Si 251.611†	7031.1	0.144	mg/L	0.0105	0.144	mg/L	0.0105	7.25%
Sn 189.927†	-205.7	-0.0230	mg/L	0.00045	-0.0230	mg/L	0.00045	1.98%
Ti 334.940†	-5687.8	-0.00182	mg/L	0.000168	-0.00182	mg/L	0.000168	9.19%
Tl 190.801†	-16.8	-0.00707	mg/L	0.003943	-0.00707	mg/L	0.003943	55.73%
V 290.880†	1178.7	0.00129	mg/L	0.001271	0.00129	mg/L	0.001271	98.49%
Zn 206.200†	139.1	-0.00230	mg/L	0.000517	-0.00230	mg/L	0.000517	22.42%
K 766.490†	5068.1	1.38	mg/L	0.108	1.38	mg/L	0.108	7.80%
Na 589.592†	330594.0	15.6	mg/L	1.24	15.6	mg/L	1.24	7.93%
Sr 407.771†	146206.4	0.0507	mg/L	0.00225	0.0507	mg/L	0.00225	4.44%
Li 670.784†	695.5	-0.00289	mg/L	0.000927	-0.00289	mg/L	0.000927	32.06%

Sequence No.: 32 u\osampler Location: 77
 Sample ID: L1205023605 0.1 a\ne Collected: 5/9/2012 7:26:40 PM
 Analyst: KHR a\ne Type: Original
 Initial Sample Wt: n\itial Sample Vol:
 Dilution: a\mple Prep Vol:

Nebulizer Parameters: L1205023605 0.1
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205023605 0.1

Analyte	Mean Corrected	Calib.	Conc. Units	Std.Dev.	Sample	Conc. Units	Std.Dev.	RSD
Y 371.029	2174156.3						12510.53	0.58%
YRADIAL	295710.3						5091.88	1.72%
Ga 417.206	1457570.4						23502.14	1.61%
GaRADIAL	94807.1						1809.30	1.91%
Ag 328.068†	126.0	-0.00148	mg/L	0.000235	-0.00148	mg/L	0.000235	15.84%
Al 396.153†	2.0	-0.0141	mg/L	0.00247	-0.0141	mg/L	0.00247	17.57%
As 188.979†	2.5	0.00241	mg/L	0.003063	0.00241	mg/L	0.003063	127.24%
Ba 233.527†	146.5	-0.00282	mg/L	0.000156	-0.00282	mg/L	0.000156	5.55%
Be 234.861†	131.3	-0.00006	mg/L	0.000013	-0.00006	mg/L	0.000013	22.14%
B 249.677†	402.8	0.00344	mg/L	0.000121	0.00344	mg/L	0.000121	3.51%
Ca 227.546†	14879.7	30.4	mg/L	2.20	30.4	mg/L	2.20	7.25%
Cd 228.802†	1.6	-0.00019	mg/L	0.000143	-0.00019	mg/L	0.000143	76.90%
Co 228.616†	9.6	-0.00036	mg/L	0.000120	-0.00036	mg/L	0.000120	33.03%
Cr 267.716†	133.8	-0.00073	mg/L	0.000215	-0.00073	mg/L	0.000215	29.54%
Cu 327.393†	-56.9	-0.00142	mg/L	0.000164	-0.00142	mg/L	0.000164	11.57%
Fe 239.562†	114.3	0.0110	mg/L	0.00037	0.0110	mg/L	0.00037	3.37%
Mg 279.077†	192892.7	53.4	mg/L	0.92	53.4	mg/L	0.92	1.73%
Mn 257.610†	40616.0	0.0468	mg/L	0.00232	0.0468	mg/L	0.00232	4.97%
Mo 202.031†	7.7	-0.00140	mg/L	0.000061	-0.00140	mg/L	0.000061	4.35%
Ni 231.604†	89.5	-0.00094	mg/L	0.000253	-0.00094	mg/L	0.000253	26.92%
Pb 220.353†	26.9	0.00127	mg/L	0.001216	0.00127	mg/L	0.001216	95.75%
Sb 206.836†	-0.1	-0.00472	mg/L	0.000801	-0.00472	mg/L	0.000801	16.96%
Se 196.026†	-0.4	0.00232	mg/L	0.003003	0.00232	mg/L	0.003003	129.59%
Si 251.611†	9349.6	0.200	mg/L	0.0136	0.200	mg/L	0.0136	6.83%
Sn 189.927†	-213.2	-0.0237	mg/L	0.00155	-0.0237	mg/L	0.00155	6.51%
Ti 334.940†	-6295.0	-0.00205	mg/L	0.000244	-0.00205	mg/L	0.000244	11.93%
Tl 190.801†	-12.3	-0.00597	mg/L	0.002464	-0.00597	mg/L	0.002464	41.28%
V 290.880†	1473.7	0.00286	mg/L	0.003626	0.00286	mg/L	0.003626	127.00%
Zn 206.200†	128.8	-0.00257	mg/L	0.000343	-0.00257	mg/L	0.000343	13.36%
K 766.490†	3841.5	1.04	mg/L	0.004	1.04	mg/L	0.004	0.36%
Na 589.592†	438180.2	20.7	mg/L	0.99	20.7	mg/L	0.99	4.78%
Sr 407.771†	158803.6	0.0551	mg/L	0.00072	0.0551	mg/L	0.00072	1.31%
Li 670.784†	349.4	-0.00489	mg/L	0.000110	-0.00489	mg/L	0.000110	2.25%

Sequence No.: 33 u\osampler Location: 78
 Sample ID: L1205023606 0.1 a\ne Collected: 5/9/2012 7:33:35 PM
 Analyst: KHR a\ne Type: Original
 Initial Sample Wt: n\itial Sample Vol:
 Dilution: a\mple Prep Vol:

Approved: May 10, 2012
Kym H. Rhodes

Nebulizer Parameters: L1205023606 0.1

Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205023606 0.1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2175542.2					20248.30	0.93%
YRADIAL	296907.0					2941.15	0.99%
Ga 417.206	1470494.3					8286.47	0.56%
GaRADIAL	94832.9					2261.77	2.39%
Ag 328.068†	212.1	-0.00121	mg/L	0.000408	-0.00121	0.000408	33.65%
Al 396.153†	-12.8	-0.0159	mg/L	0.00150	-0.0159	0.00150	9.41%
As 188.979†	-2.6	0.00060	mg/L	0.003015	0.00060	0.003015	498.54%
Ba 233.527†	191.5	-0.00252	mg/L	0.000107	-0.00252	0.000107	4.26%
Be 234.861†	137.9	-0.00005	mg/L	0.000016	-0.00005	0.000016	28.77%
B 249.677†	411.7	0.00355	mg/L	0.000069	0.00355	0.000069	1.95%
Ca 227.546†	13643.6	27.9	mg/L	0.90	27.9	0.90	3.24%
Cd 228.802†	-7.2	-0.00034	mg/L	0.000163	-0.00034	0.000163	48.05%
Co 228.616†	2.4	-0.00056	mg/L	0.000147	-0.00056	0.000147	26.25%
Cr 267.716†	143.2	-0.00064	mg/L	0.000008	-0.00064	0.000008	1.20%
Cu 327.393†	-72.7	-0.00147	mg/L	0.000063	-0.00147	0.000063	4.26%
Fe 239.562†	16.0	0.00501	mg/L	0.000546	0.00501	0.000546	10.90%
Mg 279.077†	173251.7	48.0	mg/L	0.99	48.0	0.99	2.05%
Mn 257.610†	28344.8	0.0318	mg/L	0.00028	0.0318	0.00028	0.88%
Mo 202.031†	16.8	-0.00116	mg/L	0.000145	-0.00116	0.000145	12.53%
Ni 231.604†	70.3	-0.00123	mg/L	0.000293	-0.00123	0.000293	23.77%
Pb 220.353†	32.6	0.00179	mg/L	0.000969	0.00179	0.000969	54.19%
Sb 206.836†	3.6	-0.00383	mg/L	0.000532	-0.00383	0.000532	13.87%
Se 196.026†	-3.3	0.00073	mg/L	0.003243	0.00073	0.003243	446.17%
Si 251.611†	8508.2	0.180	mg/L	0.0047	0.180	0.0047	2.62%
Sn 189.927†	-202.2	-0.0227	mg/L	0.00052	-0.0227	0.00052	2.29%
Ti 334.940†	-5665.4	-0.00180	mg/L	0.000183	-0.00180	0.000183	10.15%
Tl 190.801†	-10.4	-0.00545	mg/L	0.000968	-0.00545	0.000968	17.76%
V 290.880†	1406.9	0.00265	mg/L	0.002200	0.00265	0.002200	83.04%
Zn 206.200†	120.7	-0.00277	mg/L	0.000361	-0.00277	0.000361	13.01%
K 766.490†	3456.7	0.930	mg/L	0.0517	0.930	0.0517	5.57%
Na 589.592†	394614.5	18.6	mg/L	1.07	18.6	1.07	5.74%
Sr 407.771†	141726.2	0.0491	mg/L	0.00085	0.0491	0.00085	1.73%
Li 670.784†	309.5	-0.00512	mg/L	0.000092	-0.00512	0.000092	1.80%

Sequence No.: 34

Sample ID: L1205023606PS WG397519-01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 79

ame Collected: 5/9/2012 7:40:31 PM
 ama Type: Original
 nitial Sample Vol:
 ample Prep Vol:

Nebulizer Parameters: L1205023606PS WG397519-01

Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1205023606PS WG397519-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2228634.8					17757.51	0.80%
YRADIAL	310033.9					3774.47	1.22%
Ga 417.206	1428947.3					30002.82	2.10%
GaRADIAL	95020.6					383.70	0.40%
Ag 328.068†	62370.6	0.197	mg/L	0.0050	0.197	0.0050	2.52%
Al 396.153†	38986.8	4.86	mg/L	0.016	4.86	0.016	0.32%
As 188.979†	557.2	0.197	mg/L	0.0022	0.197	0.0022	1.10%
Ba 233.527†	76430.8	0.505	mg/L	0.0044	0.505	0.0044	0.87%
Be 234.861†	31559.5	0.0249	mg/L	0.00045	0.0249	0.00045	1.80%
B 249.677†	85626.4	0.983	mg/L	0.0248	0.983	0.0248	2.52%
Ca 227.546†	16942.5	34.8	mg/L	0.81	34.8	0.81	2.34%
Cd 228.802†	1338.0	0.0233	mg/L	0.00081	0.0233	0.00081	3.47%
Co 228.616†	3705.7	0.0979	mg/L	0.00120	0.0979	0.00120	1.23%

Approved: May 10, 2012

John H. Rhodes

Cr 267.716†	26521.9	0.247 mg/L	0.0017	0.247 mg/L	0.0017	0.71%
Cu 327.393†	63113.5	0.223 mg/L	0.0044	0.223 mg/L	0.0044	1.96%
Fe 239.562†	31652.8	1.96 mg/L	0.013	1.96 mg/L	0.013	0.66%
Mg 279.077†	172152.0	47.7 mg/L	0.32	47.7 mg/L	0.32	0.67%
Mn 257.610†	235830.2	0.285 mg/L	0.0034	0.285 mg/L	0.0034	1.20%
Mo 202.031†	18060.7	0.497 mg/L	0.0048	0.497 mg/L	0.0048	0.96%
Ni 231.604†	17213.1	0.258 mg/L	0.0030	0.258 mg/L	0.0030	1.16%
Pb 220.353†	2749.7	0.253 mg/L	0.0029	0.253 mg/L	0.0029	1.14%
Sb 206.836†	2497.8	0.592 mg/L	0.0149	0.592 mg/L	0.0149	2.52%
Se 196.026†	372.2	0.207 mg/L	0.0043	0.207 mg/L	0.0043	2.07%
Si 251.611†	115527.3	2.73 mg/L	0.049	2.73 mg/L	0.049	1.79%
Sn 189.927†	-216.3	-0.0240 mg/L	0.00045	-0.0240 mg/L	0.00045	1.89%
Ti 334.940†	485910.9	0.487 mg/L	0.0029	0.487 mg/L	0.0029	0.60%
Tl 190.801†	977.5	0.259 mg/L	0.0021	0.259 mg/L	0.0021	0.82%
V 290.880†	96755.8	0.499 mg/L	0.0011	0.499 mg/L	0.0011	0.23%
Zn 206.200†	20445.9	0.520 mg/L	0.0046	0.520 mg/L	0.0046	0.88%
K 766.490†	88326.8	25.0 mg/L	0.07	25.0 mg/L	0.07	0.28%
Na 589.592†	904096.0	43.1 mg/L	0.93	43.1 mg/L	0.93	2.15%
Sr 407.771†	1559996.6	0.549 mg/L	0.0100	0.549 mg/L	0.0100	1.83%
Li 670.784†	86574.4	0.493 mg/L	0.0021	0.493 mg/L	0.0021	0.43%

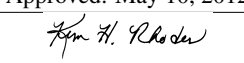
Sequence No.: 35
 Sample ID: L1205023606DL WG397519-02
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 80
 a&e Collected: 5/9/2012 7:46:31 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: L1205023606DL WG397519-02
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205023606DL WG397519-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2242377.9				3415.89	0.15%
YRADIAL	304842.9				5313.59	1.74%
Ga 417.206	1422158.9				7549.10	0.53%
GaRADIAL	94218.9				2501.86	2.66%
Ag 328.068†	94.8	-0.00158 mg/L	0.000091	-0.00158 mg/L	0.000091	5.78%
Al 396.153†	4.3	-0.0137 mg/L	0.00201	-0.0137 mg/L	0.00201	14.60%
As 188.979†	1.6	0.00208 mg/L	0.000736	0.00208 mg/L	0.000736	35.40%
Ba 233.527†	37.1	-0.00354 mg/L	0.000094	-0.00354 mg/L	0.000094	2.66%
Be 234.861†	73.3	-0.00011 mg/L	0.000014	-0.00011 mg/L	0.000014	13.19%
B 249.677†	611.1	0.00585 mg/L	0.000367	0.00585 mg/L	0.000367	6.28%
Ca 227.546†	2769.6	5.65 mg/L	0.062	5.65 mg/L	0.062	1.10%
Cd 228.802†	-11.5	-0.00042 mg/L	0.000056	-0.00042 mg/L	0.000056	13.36%
Co 228.616†	-0.2	-0.00064 mg/L	0.000155	-0.00064 mg/L	0.000155	24.24%
Cr 267.716†	29.3	-0.00171 mg/L	0.000051	-0.00171 mg/L	0.000051	3.00%
Cu 327.393†	-67.5	-0.00145 mg/L	0.000335	-0.00145 mg/L	0.000335	23.09%
Fe 239.562†	11.3	0.00548 mg/L	0.000186	0.00548 mg/L	0.000186	3.40%
Mg 279.077†	34600.8	9.59 mg/L	0.500	9.59 mg/L	0.500	5.21%
Mn 257.610†	5728.3	0.00420 mg/L	0.000070	0.00420 mg/L	0.000070	1.66%
Mo 202.031†	-8.3	-0.00186 mg/L	0.000025	-0.00186 mg/L	0.000025	1.36%
Ni 231.604†	-3.5	-0.00235 mg/L	0.000125	-0.00235 mg/L	0.000125	5.31%
Pb 220.353†	13.7	-0.00012 mg/L	0.001727	-0.00012 mg/L	0.001727	>999.9%
Sb 206.836†	0.5	-0.00458 mg/L	0.000987	-0.00458 mg/L	0.000987	21.54%
Se 196.026†	-3.4	0.00068 mg/L	0.002151	0.00068 mg/L	0.002151	314.60%
Si 251.611†	1760.0	0.0185 mg/L	0.00063	0.0185 mg/L	0.00063	3.40%
Sn 189.927†	-92.9	-0.0119 mg/L	0.00071	-0.0119 mg/L	0.00071	5.96%
Ti 334.940†	-1153.9	-0.00066 mg/L	0.000113	-0.00066 mg/L	0.000113	17.16%
Tl 190.801†	2.2	-0.00208 mg/L	0.000093	-0.00208 mg/L	0.000093	4.49%
V 290.880†	881.5	0.00091 mg/L	0.001225	0.00091 mg/L	0.001225	134.82%
Zn 206.200†	113.2	-0.00298 mg/L	0.000206	-0.00298 mg/L	0.000206	6.91%
K 766.490†	709.7	0.175 mg/L	0.0299	0.175 mg/L	0.0299	17.10%
Na 589.592†	81386.4	3.83 mg/L	0.324	3.83 mg/L	0.324	8.47%
Sr 407.771†	28489.1	0.00968 mg/L	0.000537	0.00968 mg/L	0.000537	5.55%
Li 670.784†	-25.1	-0.00706 mg/L	0.000606	-0.00706 mg/L	0.000606	8.58%

Approved: May 10, 2012


Sequence No.: 36
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

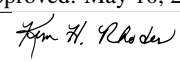
Sampler Location: 6
 Date Collected: 5/9/2012 7:53:26 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2269906.6				13686.55	0.60%
YRADIAL	313606.1				3094.89	0.99%
Ga 417.206	1374897.1				27063.92	1.97%
GaRADIAL	94408.6				476.16	0.50%
Ag 328.068†	127945.2	0.406 mg/L	0.0067	0.406 mg/L	0.0067	1.66%
QC value within limits for Ag						
Al 396.153†	78428.2	9.78 mg/L	0.014	9.78 mg/L	0.014	0.14%
QC value within limits for Al						
As 188.979†	1124.6	0.395 mg/L	0.0070	0.395 mg/L	0.0070	1.77%
QC value within limits for As						
Ba 233.527†	152810.7	1.01 mg/L	0.013	1.01 mg/L	0.013	1.29%
QC value within limits for Ba						
Be 234.861†	63322.5	0.0500 mg/L	0.00109	0.0500 mg/L	0.00109	2.18%
QC value within limits for Be						
B 249.677†	43176.2	0.492 mg/L	0.0110	0.492 mg/L	0.0110	2.23%
QC value within limits for B						
Ca 227.546†	4739.9	10.1 mg/L	0.25	10.1 mg/L	0.25	2.48%
QC value within limits for Ca						
Cd 228.802†	2807.4	0.0493 mg/L	0.00163	0.0493 mg/L	0.00163	3.32%
QC value within limits for Cd						
Co 228.616†	7556.0	0.200 mg/L	0.0015	0.200 mg/L	0.0015	0.73%
QC value within limits for Co						
Cr 267.716†	53537.3	0.501 mg/L	0.0053	0.501 mg/L	0.0053	1.05%
QC value within limits for Cr						
Cu 327.393†	138659.8	0.492 mg/L	0.0070	0.492 mg/L	0.0070	1.42%
QC value within limits for Cu						
Fe 239.562†	65210.2	4.03 mg/L	0.001	4.03 mg/L	0.001	0.03%
QC value within limits for Fe						
Mg 279.077†	36303.9	10.1 mg/L	0.04	10.1 mg/L	0.04	0.39%
QC value within limits for Mg						
Mn 257.610†	419871.6	0.510 mg/L	0.0092	0.510 mg/L	0.0092	1.81%
QC value within limits for Mn						
Mo 202.031†	35917.8	0.990 mg/L	0.0145	0.990 mg/L	0.0145	1.46%
QC value within limits for Mo						
Ni 231.604†	33408.1	0.504 mg/L	0.0095	0.504 mg/L	0.0095	1.89%
QC value within limits for Ni						
Pb 220.353†	5473.0	0.504 mg/L	0.0020	0.504 mg/L	0.0020	0.39%
QC value within limits for Pb						
Sb 206.836†	5093.3	1.21 mg/L	0.031	1.21 mg/L	0.031	2.56%
QC value within limits for Sb						
Se 196.026†	726.6	0.402 mg/L	0.0082	0.402 mg/L	0.0082	2.03%
QC value within limits for Se						
Si 251.611†	213186.6	5.05 mg/L	0.103	5.05 mg/L	0.103	2.04%
QC value within limits for Si						
Sn 189.927†	10131.2	0.996 mg/L	0.0041	0.996 mg/L	0.0041	0.41%
QC value within limits for Sn						
Ti 334.940†	986148.3	0.979 mg/L	0.0011	0.979 mg/L	0.0011	0.11%
QC value within limits for Ti						
Tl 190.801†	1924.3	0.513 mg/L	0.0047	0.513 mg/L	0.0047	0.92%
QC value within limits for Tl						
V 290.880†	190961.9	0.991 mg/L	0.0068	0.991 mg/L	0.0068	0.68%
QC value within limits for V						
Zn 206.200†	40813.1	1.04 mg/L	0.008	1.04 mg/L	0.008	0.74%
QC value within limits for Zn						
K 766.490†	167664.5	48.0 mg/L	0.23	48.0 mg/L	0.23	0.48%
QC value within limits for K						
Na 589.592†	1008163.3	48.1 mg/L	0.10	48.1 mg/L	0.10	0.20%

Approved: May 10, 2012


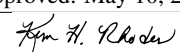
QC value within limits for Na 589.592 Recovery = 96.28%
 Sr 407.771† 2801088.1 0.988 mg/L 0.0077 0.988 mg/L 0.0077 0.78%
 QC value within limits for Sr 407.771 Recovery = 98.77%
 Li 670.784† 165751.9 0.951 mg/L 0.0082 0.951 mg/L 0.0082 0.86%
 QC value within limits for Li 670.784 Recovery = 95.05%
 All analyte(s) passed QC.

Sequence No.: 37 u&osampler Location: 1
 Sample ID: CCB a&e Collected: 5/9/2012 7:59:28 PM
 Analyst: a&a Type: Original
 Initial Sample Wt: nitial Sample Vol:
 Dilution: a&ple Prep Vol:

Nebulizer Parameters: CCB
 Analyte Back Pressure Flow
 All 154.0 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	2342897.7				14683.99	0.63%
YRADIAL	316925.5				2677.61	0.84%
Ga 417.206	1441835.7				23470.97	1.63%
GaRADIAL	95964.3				2672.40	2.78%
Ag 328.068†	-1.7	-0.00189 mg/L	0.000158	-0.00189 mg/L	0.000158	8.36%
QC value within limits for Ag 328.068		Recovery = Not calculated				
Al 396.153†	21.8	-0.0116 mg/L	0.00103	-0.0116 mg/L	0.00103	8.91%
QC value within limits for Al 396.153		Recovery = Not calculated				
As 188.979†	-2.6	0.00060 mg/L	0.001374	0.00060 mg/L	0.001374	230.36%
QC value within limits for As 188.979		Recovery = Not calculated				
Ba 233.527†	8.5	-0.00373 mg/L	0.000102	-0.00373 mg/L	0.000102	2.73%
QC value within limits for Ba 233.527		Recovery = Not calculated				
Be 234.861†	-57.1	-0.00021 mg/L	0.000007	-0.00021 mg/L	0.000007	3.07%
QC value within limits for Be 234.861		Recovery = Not calculated				
B 249.677†	580.3	0.00549 mg/L	0.000457	0.00549 mg/L	0.000457	8.33%
QC value within limits for B 249.677		Recovery = Not calculated				
Ca 227.546†	13.9	0.0289 mg/L	0.01666	0.0289 mg/L	0.01666	57.61%
QC value within limits for Ca 227.546		Recovery = Not calculated				
Cd 228.802†	0.1	-0.00020 mg/L	0.000168	-0.00020 mg/L	0.000168	82.30%
QC value within limits for Cd 228.802		Recovery = Not calculated				
Co 228.616†	4.8	-0.00051 mg/L	0.000020	-0.00051 mg/L	0.000020	3.89%
QC value within limits for Co 228.616		Recovery = Not calculated				
Cr 267.716†	8.6	-0.00191 mg/L	0.000038	-0.00191 mg/L	0.000038	1.98%
QC value within limits for Cr 267.716		Recovery = Not calculated				
Cu 327.393†	31.6	-0.00110 mg/L	0.000480	-0.00110 mg/L	0.000480	43.68%
QC value within limits for Cu 327.393		Recovery = Not calculated				
Fe 239.562†	30.6	0.00687 mg/L	0.000396	0.00687 mg/L	0.000396	5.76%
QC value within limits for Fe 239.562		Recovery = Not calculated				
Mg 279.077†	10.8	0.0113 mg/L	0.00368	0.0113 mg/L	0.00368	32.54%
QC value within limits for Mg 279.077		Recovery = Not calculated				
Mn 257.610†	142.0	-0.00262 mg/L	0.000023	-0.00262 mg/L	0.000023	0.88%
QC value within limits for Mn 257.610		Recovery = Not calculated				
Mo 202.031†	8.3	-0.00140 mg/L	0.000125	-0.00140 mg/L	0.000125	8.91%
QC value within limits for Mo 202.031		Recovery = Not calculated				
Ni 231.604†	-1.5	-0.00232 mg/L	0.000327	-0.00232 mg/L	0.000327	14.08%
QC value within limits for Ni 231.604		Recovery = Not calculated				
Pb 220.353†	2.0	-0.00124 mg/L	0.000500	-0.00124 mg/L	0.000500	40.44%
QC value within limits for Pb 220.353		Recovery = Not calculated				
Sb 206.836†	7.0	-0.00303 mg/L	0.000202	-0.00303 mg/L	0.000202	6.68%
QC value within limits for Sb 206.836		Recovery = Not calculated				
Se 196.026†	2.0	0.00360 mg/L	0.001743	0.00360 mg/L	0.001743	48.45%
QC value within limits for Se 196.026		Recovery = Not calculated				
Si 251.611†	56.0	-0.0222 mg/L	0.00015	-0.0222 mg/L	0.00015	0.66%
QC value within limits for Si 251.611		Recovery = Not calculated				
Sn 189.927†	-5.2	-0.00323 mg/L	0.000297	-0.00323 mg/L	0.000297	9.18%
QC value within limits for Sn 189.927		Recovery = Not calculated				
Ti 334.940†	361.3	0.00000 mg/L	0.000024	0.00000 mg/L	0.000024	>999.9%
QC value within limits for Ti 334.940		Recovery = Not calculated				
Tl 190.801†	2.7	-0.00196 mg/L	0.000861	-0.00196 mg/L	0.000861	44.02%

Approved: May 10, 2012


QC value within limits for Tl 190.801 Recovery = Not calculated
 V 290.880† 17.7 -0.00335 mg/L 0.000728 -0.00335 mg/L 0.000728 21.74%
 QC value within limits for V 290.880 Recovery = Not calculated
 Zn 206.200† 72.8 -0.00401 mg/L 0.000209 -0.00401 mg/L 0.000209 5.21%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 K 766.490† 81.2 0.00279 mg/L 0.005966 0.00279 mg/L 0.005966 214.04%
 QC value within limits for K 766.490 Recovery = Not calculated
 Na 589.592† 124.2 0.0104 mg/L 0.00563 0.0104 mg/L 0.00563 54.20%
 QC value within limits for Na 589.592 Recovery = Not calculated
 Sr 407.771† 476.4 -0.00008 mg/L 0.000026 -0.00008 mg/L 0.000026 33.60%
 QC value within limits for Sr 407.771 Recovery = Not calculated
 Li 670.784† -56.4 -0.00724 mg/L 0.000690 -0.00724 mg/L 0.000690 9.53%
 QC value within limits for Li 670.784 Recovery = Not calculated
 All analyte(s) passed QC.

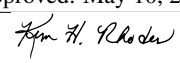
Sequence No.: 38 u\osampler Location: 81
 Sample ID: L1205023607 0.1 a\ne Collected: 5/9/2012 8:06:21 PM
 Analyst: KHR a\ne Type: Original
 Initial Sample Wt: n\itial Sample Vol:
 Dilution: a\mple Prep Vol:

Nebulizer Parameters: L1205023607 0.1
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205023607 0.1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2140613.3					12164.37	0.57%
YRADIAL	293952.6					9065.64	3.08%
Ga 417.206	1468724.0					18927.84	1.29%
GaRADIAL	93426.0					861.70	0.92%
Ag 328.068†	172.9	-0.00134 mg/L	0.000340	-0.00134 mg/L	0.000340	0.000340	25.40%
Al 396.153†	-19.9	-0.0168 mg/L	0.00033	-0.0168 mg/L	0.00033	0.00033	1.95%
As 188.979†	1.3	0.00196 mg/L	0.002029	0.00196 mg/L	0.002029	0.002029	103.45%
Ba 233.527†	166.4	-0.00268 mg/L	0.000137	-0.00268 mg/L	0.000137	0.000137	5.10%
Be 234.861†	158.5	-0.00004 mg/L	0.000006	-0.00004 mg/L	0.000006	0.000006	15.05%
B 249.677†	432.7	0.00379 mg/L	0.000061	0.00379 mg/L	0.000061	0.000061	1.62%
Ca 227.546†	19092.9	39.0 mg/L	3.35	39.0 mg/L	3.35	3.35	8.58%
Cd 228.802†	-9.2	-0.00038 mg/L	0.000075	-0.00038 mg/L	0.000075	0.000075	19.68%
Co 228.616†	-1.3	-0.00065 mg/L	0.000131	-0.00065 mg/L	0.000131	0.000131	20.13%
Cr 267.716†	184.8	-0.00025 mg/L	0.000157	-0.00025 mg/L	0.000157	0.000157	63.52%
Cu 327.393†	-49.1	-0.00139 mg/L	0.000509	-0.00139 mg/L	0.000509	0.000509	36.54%
Fe 239.562†	31.2	0.00498 mg/L	0.000339	0.00498 mg/L	0.000339	0.000339	6.80%
Mg 279.077†	347071.5	96.2 mg/L	2.83	96.2 mg/L	2.83	2.83	2.94%
Mn 257.610†	10206.8	0.00967 mg/L	0.000637	0.00967 mg/L	0.000637	0.000637	6.59%
Mo 202.031†	18.7	-0.00111 mg/L	0.000353	-0.00111 mg/L	0.000353	0.000353	31.83%
Ni 231.604†	47.3	-0.00158 mg/L	0.000161	-0.00158 mg/L	0.000161	0.000161	10.22%
Pb 220.353†	18.3	0.00057 mg/L	0.000407	0.00057 mg/L	0.000407	0.000407	71.57%
Sb 206.836†	2.0	-0.00422 mg/L	0.001701	-0.00422 mg/L	0.001701	0.001701	40.30%
Se 196.026†	-3.1	0.00084 mg/L	0.001252	0.00084 mg/L	0.001252	0.001252	148.19%
Si 251.611†	12601.8	0.277 mg/L	0.0211	0.277 mg/L	0.0211	0.0211	7.60%
Sn 189.927†	-231.5	-0.0255 mg/L	0.00101	-0.0255 mg/L	0.00101	0.00101	3.94%
Ti 334.940†	-8063.2	-0.00251 mg/L	0.000346	-0.00251 mg/L	0.000346	0.000346	13.76%
Tl 190.801†	-26.4	-0.00963 mg/L	0.004039	-0.00963 mg/L	0.004039	0.004039	41.95%
V 290.880†	1405.4	0.00139 mg/L	0.002149	0.00139 mg/L	0.002149	0.002149	154.69%
Zn 206.200†	154.4	-0.00191 mg/L	0.000254	-0.00191 mg/L	0.000254	0.000254	13.30%
K 766.490†	2496.5	0.674 mg/L	0.0294	0.674 mg/L	0.0294	0.0294	4.37%
Na 589.592†	113112.4	5.32 mg/L	0.325	5.32 mg/L	0.325	0.325	6.10%
Sr 407.771†	213104.7	0.0741 mg/L	0.00187	0.0741 mg/L	0.00187	0.00187	2.52%
Li 670.784†	1255.3	0.00034 mg/L	0.000582	0.00034 mg/L	0.000582	0.000582	171.06%

Sequence No.: 39 u\osampler Location: 82
 Sample ID: L1205023608 0.1 a\ne Collected: 5/9/2012 8:13:18 PM
 Analyst: KHR a\ne Type: Original
 Initial Sample Wt: n\itial Sample Vol:
 Dilution: a\mple Prep Vol:

Approved: May 10, 2012


Nebulizer Parameters: L1205023608 0.1

Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1205023608 0.1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2223671.6					35940.06	1.62%
YRADIAL	302501.1					4791.13	1.58%
Ga 417.206	1519025.4					26646.75	1.75%
GaRADIAL	98763.9					510.53	0.52%
Ag 328.068†	68.0	-0.00168	mg/L	0.000102	-0.00168	0.000102	6.06%
Al 396.153†	-6.7	-0.0152	mg/L	0.00196	-0.0152	0.00196	12.91%
As 188.979†	1.8	0.00215	mg/L	0.002367	0.00215	0.002367	110.17%
Ba 233.527†	217.2	-0.00234	mg/L	0.000080	-0.00234	0.000080	3.43%
Be 234.861†	178.8	-0.00002	mg/L	0.000012	-0.00002	0.000012	50.18%
B 249.677†	400.9	0.00343	mg/L	0.000061	0.00343	0.000061	1.78%
Ca 227.546†	16126.4	32.9	mg/L	2.13	32.9	2.13	6.47%
Cd 228.802†	-17.2	-0.00053	mg/L	0.000162	-0.00053	0.000162	30.73%
Co 228.616†	-4.7	-0.00075	mg/L	0.000161	-0.00075	0.000161	21.54%
Cr 267.716†	169.7	-0.00039	mg/L	0.000086	-0.00039	0.000086	21.94%
Cu 327.393†	-69.3	-0.00146	mg/L	0.000282	-0.00146	0.000282	19.26%
Fe 239.562†	6.3	0.00366	mg/L	0.000630	0.00366	0.000630	17.21%
Mg 279.077†	307663.5	85.2	mg/L	5.85	85.2	5.85	6.87%
Mn 257.610†	4294.2	0.00245	mg/L	0.000134	0.00245	0.000134	5.49%
Mo 202.031†	8.4	-0.00140	mg/L	0.000320	-0.00140	0.000320	22.94%
Ni 231.604†	35.4	-0.00176	mg/L	0.000312	-0.00176	0.000312	17.76%
Pb 220.353†	26.7	0.00131	mg/L	0.001502	0.00131	0.001502	115.11%
Sb 206.836†	1.6	-0.00433	mg/L	0.000331	-0.00433	0.000331	7.64%
Se 196.026†	-2.0	0.00140	mg/L	0.002063	0.00140	0.002063	147.49%
Si 251.611†	10634.1	0.230	mg/L	0.0158	0.230	0.0158	6.86%
Sn 189.927†	-215.9	-0.0240	mg/L	0.00089	-0.0240	0.00089	3.72%
Ti 334.940†	-7015.3	-0.00238	mg/L	0.000213	-0.00238	0.000213	8.96%
Tl 190.801†	-15.2	-0.00670	mg/L	0.001445	-0.00670	0.001445	21.57%
V 290.880†	752.0	-0.00173	mg/L	0.003850	-0.00173	0.003850	222.07%
Zn 206.200†	134.9	-0.00241	mg/L	0.000234	-0.00241	0.000234	9.70%
K 766.490†	2194.6	0.590	mg/L	0.0531	0.590	0.0531	8.99%
Na 589.592†	100775.5	4.74	mg/L	0.385	4.74	0.385	8.13%
Sr 407.771†	191958.3	0.0668	mg/L	0.00473	0.0668	0.00473	7.09%
Li 670.784†	1035.8	-0.00093	mg/L	0.000915	-0.00093	0.000915	98.66%

Sequence No.: 40

Sample ID: L1205023609 0.1

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 83

ame Collected: 5/9/2012 8:20:40 PM

ama Type: Original

nitial Sample Vol:

ample Prep Vol:

Nebulizer Parameters: L1205023609 0.1

Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: L1205023609 0.1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2185922.2					13005.33	0.59%
YRADIAL	300885.6					7206.22	2.40%
Ga 417.206	1478262.7					24333.66	1.65%
GaRADIAL	96177.3					489.70	0.51%
Ag 328.068†	217.5	-0.00120	mg/L	0.000088	-0.00120	0.000088	7.37%
Al 396.153†	105.6	-0.00104	mg/L	0.002644	-0.00104	0.002644	254.05%
As 188.979†	1.2	0.00194	mg/L	0.003368	0.00194	0.003368	173.40%
Ba 233.527†	263.3	-0.00204	mg/L	0.000070	-0.00204	0.000070	3.42%
Be 234.861†	187.8	-0.00001	mg/L	0.000021	-0.00001	0.000021	171.65%
B 249.677†	282.4	0.00206	mg/L	0.000066	0.00206	0.000066	3.20%
Ca 227.546†	20242.4	41.3	mg/L	0.99	41.3	0.99	2.40%
Cd 228.802†	-15.7	-0.00050	mg/L	0.000032	-0.00050	0.000032	6.46%
Co 228.616†	30.4	0.00019	mg/L	0.000269	0.00019	0.000269	137.83%

Approved: May 10, 2012

Khr

Cr 267.716†	140.5	-0.00066	mg/L	0.000055	-0.00066	mg/L	0.000055	8.29%
Cu 327.393†	-85.5	-0.00152	mg/L	0.000238	-0.00152	mg/L	0.000238	15.65%
Fe 239.562†	16.0	0.00510	mg/L	0.001694	0.00510	mg/L	0.001694	33.23%
Mg 279.077†	155830.7	43.2	mg/L	0.29	43.2	mg/L	0.29	0.68%
Mn 257.610†	46660.9	0.0542	mg/L	0.00022	0.0542	mg/L	0.00022	0.41%
Mo 202.031†	10.7	-0.00132	mg/L	0.000205	-0.00132	mg/L	0.000205	15.49%
Ni 231.604†	111.7	-0.00060	mg/L	0.000275	-0.00060	mg/L	0.000275	45.57%
Pb 220.353†	36.2	0.00222	mg/L	0.001656	0.00222	mg/L	0.001656	74.73%
Sb 206.836†	1.1	-0.00445	mg/L	0.000652	-0.00445	mg/L	0.000652	14.67%
Se 196.026†	-4.8	-0.00014	mg/L	0.000694	-0.00014	mg/L	0.000694	509.79%
Si 251.611†	5473.5	0.107	mg/L	0.0024	0.107	mg/L	0.0024	2.27%
Sn 189.927†	-236.1	-0.0260	mg/L	0.00057	-0.0260	mg/L	0.00057	2.20%
Ti 334.940†	-8454.0	-0.00255	mg/L	0.000176	-0.00255	mg/L	0.000176	6.90%
Tl 190.801†	-10.4	-0.00550	mg/L	0.002269	-0.00550	mg/L	0.002269	41.25%
V 290.880†	1193.9	0.00166	mg/L	0.001622	0.00166	mg/L	0.001622	97.46%
Zn 206.200†	204.9	-0.00062	mg/L	0.000403	-0.00062	mg/L	0.000403	64.92%
K 766.490†	1891.5	0.481	mg/L	0.0223	0.481	mg/L	0.0223	4.63%
Na 589.592†	598984.7	28.4	mg/L	0.86	28.4	mg/L	0.86	3.03%
Sr 407.771†	138948.8	0.0479	mg/L	0.00045	0.0479	mg/L	0.00045	0.95%
Li 670.784†	1492.9	0.00171	mg/L	0.000105	0.00171	mg/L	0.000105	6.14%

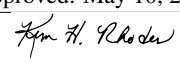
Sequence No.: 41
 Sample ID: L1205023610 WG397432-01
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 84
 a&e Collected: 5/9/2012 8:27:35 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: L1205023610 WG397432-01
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

Mean Data: L1205023610 WG397432-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2211345.2				13882.09	0.63%
YRADIAL	307085.2				7756.60	2.53%
Ga 417.206	1491331.5				16248.38	1.09%
GaRADIAL	96539.0				804.65	0.83%
Ag 328.068†	226.0	-0.00117 mg/L	0.000188	-0.00117 mg/L	0.000188	16.12%
Al 396.153†	-15.1	-0.0162 mg/L	0.00148	-0.0162 mg/L	0.00148	9.10%
As 188.979†	5.5	0.00345 mg/L	0.002267	0.00345 mg/L	0.002267	65.62%
Ba 233.527†	239.4	-0.00220 mg/L	0.000106	-0.00220 mg/L	0.000106	4.83%
Be 234.861†	160.6	-0.00004 mg/L	0.000022	-0.00004 mg/L	0.000022	55.56%
B 249.677†	250.9	0.00170 mg/L	0.000159	0.00170 mg/L	0.000159	9.38%
Ca 227.546†	19708.3	40.2 mg/L	1.30	40.2 mg/L	1.30	3.24%
Cd 228.802†	-14.4	-0.00048 mg/L	0.000159	-0.00048 mg/L	0.000159	32.90%
Co 228.616†	2.5	-0.00055 mg/L	0.000192	-0.00055 mg/L	0.000192	34.89%
Cr 267.716†	127.9	-0.00078 mg/L	0.000229	-0.00078 mg/L	0.000229	29.23%
Cu 327.393†	-161.7	-0.00179 mg/L	0.000039	-0.00179 mg/L	0.000039	2.16%
Fe 239.562†	-6.8	0.00362 mg/L	0.000400	0.00362 mg/L	0.000400	11.06%
Mg 279.077†	169031.5	46.8 mg/L	2.71	46.8 mg/L	2.71	5.79%
Mn 257.610†	287.3	-0.00244 mg/L	0.000007	-0.00244 mg/L	0.000007	0.29%
Mo 202.031†	18.0	-0.00113 mg/L	0.000062	-0.00113 mg/L	0.000062	5.52%
Ni 231.604†	-19.9	-0.00260 mg/L	0.000145	-0.00260 mg/L	0.000145	5.58%
Pb 220.353†	24.4	0.00115 mg/L	0.001468	0.00115 mg/L	0.001468	127.76%
Sb 206.836†	2.8	-0.00404 mg/L	0.001360	-0.00404 mg/L	0.001360	33.64%
Se 196.026†	-4.2	0.00021 mg/L	0.002631	0.00021 mg/L	0.002631	>999.9%
Si 251.611†	4137.1	0.0752 mg/L	0.00415	0.0752 mg/L	0.00415	5.52%
Sn 189.927†	-235.1	-0.0259 mg/L	0.00052	-0.0259 mg/L	0.00052	2.00%
Ti 334.940†	-8271.3	-0.00253 mg/L	0.000344	-0.00253 mg/L	0.000344	13.58%
Tl 190.801†	-17.8	-0.00738 mg/L	0.001691	-0.00738 mg/L	0.001691	22.90%
V 290.880†	1094.9	0.00105 mg/L	0.002261	0.00105 mg/L	0.002261	214.89%
Zn 206.200†	87.2	-0.00363 mg/L	0.000267	-0.00363 mg/L	0.000267	7.35%
K 766.490†	1696.2	0.424 mg/L	0.0175	0.424 mg/L	0.0175	4.12%
Na 589.592†	657309.1	31.2 mg/L	2.65	31.2 mg/L	2.65	8.48%
Sr 407.771†	148913.6	0.0514 mg/L	0.00220	0.0514 mg/L	0.00220	4.27%
Li 670.784†	1490.9	0.00170 mg/L	0.001096	0.00170 mg/L	0.001096	64.38%

Approved: May 10, 2012


Sequence No.: 42
 Sample ID: L1205023610DU WG397432-06
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 85
 a&e Collected: 5/9/2012 8:34:33 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

 Nebulizer Parameters: L1205023610DU WG397432-06
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

 Mean Data: L1205023610DU WG397432-06

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2205024.1					34712.78	1.57%
YRADIAL	302103.2					2199.06	0.73%
Ga 417.206	1396460.8					16187.78	1.16%
GaRADIAL	93599.0					778.82	0.83%
Ag 328.068†	6998.3	0.0204	mg/L	0.00107	0.0204	0.00107	5.24%
Al 396.153†	4270.2	0.519	mg/L	0.0110	0.519	0.0110	2.13%
As 188.979†	57.8	0.0217	mg/L	0.00358	0.0217	0.00358	16.47%
Ba 233.527†	8501.3	0.0528	mg/L	0.00079	0.0528	0.00079	1.49%
Be 234.861†	3602.1	0.00269	mg/L	0.000158	0.00269	0.000158	5.87%
B 249.677†	9298.7	0.106	mg/L	0.0045	0.106	0.0045	4.26%
Ca 227.546†	22935.0	46.9	mg/L	1.89	46.9	1.89	4.03%
Cd 228.802†	151.2	0.00246	mg/L	0.000342	0.00246	0.000342	13.91%
Co 228.616†	413.9	0.0104	mg/L	0.00004	0.0104	0.00004	0.39%
Cr 267.716†	3017.1	0.0264	mg/L	0.00052	0.0264	0.00052	1.96%
Cu 327.393†	7055.5	0.0239	mg/L	0.00091	0.0239	0.00091	3.82%
Fe 239.562†	3500.4	0.220	mg/L	0.0058	0.220	0.0058	2.65%
Mg 279.077†	163187.8	45.2	mg/L	0.26	45.2	0.26	0.58%
Mn 257.610†	22346.2	0.0245	mg/L	0.00042	0.0245	0.00042	1.71%
Mo 202.031†	1934.6	0.0518	mg/L	0.00064	0.0518	0.00064	1.24%
Ni 231.604†	1855.4	0.0258	mg/L	0.00080	0.0258	0.00080	3.09%
Pb 220.353†	304.8	0.0271	mg/L	0.00151	0.0271	0.00151	5.56%
Sb 206.836†	260.1	0.0574	mg/L	0.00325	0.0574	0.00325	5.65%
Se 196.026†	42.2	0.0257	mg/L	0.00168	0.0257	0.00168	6.55%
Si 251.611†	15961.7	0.357	mg/L	0.0104	0.357	0.0104	2.93%
Sn 189.927†	373.0	0.0341	mg/L	0.00089	0.0341	0.00089	2.62%
Ti 334.940†	45073.0	0.0514	mg/L	0.00158	0.0514	0.00158	3.09%
Tl 190.801†	88.9	0.0212	mg/L	0.00156	0.0212	0.00156	7.37%
V 290.880†	11683.8	0.0563	mg/L	0.00158	0.0563	0.00158	2.80%
Zn 206.200†	2272.6	0.0525	mg/L	0.00074	0.0525	0.00074	1.41%
K 766.490†	11098.8	3.06	mg/L	0.045	3.06	0.045	1.47%
Na 589.592†	686497.4	32.6	mg/L	0.25	32.6	0.25	0.77%
Sr 407.771†	299053.4	0.104	mg/L	0.0010	0.104	0.0010	1.00%
Li 670.784†	10989.8	0.0566	mg/L	0.00198	0.0566	0.00198	3.50%

=====

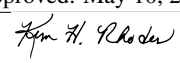
Sequence No.: 43
 Sample ID: L1205023610MS WG397432-05
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

u&osampler Location: 86
 a&e Collected: 5/9/2012 8:40:31 PM
 a&a Type: Original
 n&tial Sample Vol:
 a&ple Prep Vol:

 Nebulizer Parameters: L1205023610MS WG397432-05
 Analyte Back Pressure Flow
 All 154.0 kPa 0.50 L/min

 Mean Data: L1205023610MS WG397432-05

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2223779.2					26343.15	1.18%
YRADIAL	304446.1					1690.05	0.56%
Ga 417.206	1507722.8					20760.62	1.38%
GaRADIAL	96999.9					2310.81	2.38%
Ag 328.068†	153.1	-0.00140	mg/L	0.000061	-0.00140	0.000061	4.38%
Al 396.153†	-9.3	-0.0155	mg/L	0.00094	-0.0155	0.00094	6.10%
As 188.979†	3.3	0.00267	mg/L	0.002958	0.00267	0.002958	110.59%

Approved: May 10, 2012


Ba 233.527†	254.0	-0.00210	mg/L	0.000078	-0.00210	mg/L	0.000078	3.71%
Be 234.861†	184.7	-0.00002	mg/L	0.000015	-0.00002	mg/L	0.000015	72.50%
B 249.677†	221.5	0.00136	mg/L	0.000091	0.00136	mg/L	0.000091	6.70%
Ca 227.546†	19606.8	40.0	mg/L	1.06	40.0	mg/L	1.06	2.64%
Cd 228.802†	-13.6	-0.00046	mg/L	0.000133	-0.00046	mg/L	0.000133	28.52%
Co 228.616†	1.9	-0.00057	mg/L	0.000300	-0.00057	mg/L	0.000300	53.06%
Cr 267.716†	125.1	-0.00081	mg/L	0.000217	-0.00081	mg/L	0.000217	26.76%
Cu 327.393†	-254.6	-0.00212	mg/L	0.000331	-0.00212	mg/L	0.000331	15.59%
Fe 239.562†	-9.3	0.00356	mg/L	0.000417	0.00356	mg/L	0.000417	11.70%
Mg 279.077†	151613.1	42.0	mg/L	0.60	42.0	mg/L	0.60	1.43%
Mn 257.610†	254.3	-0.00248	mg/L	0.000021	-0.00248	mg/L	0.000021	0.86%
Mo 202.031†	1.5	-0.00159	mg/L	0.000240	-0.00159	mg/L	0.000240	15.14%
Ni 231.604†	-2.7	-0.00234	mg/L	0.000296	-0.00234	mg/L	0.000296	12.69%
Pb 220.353†	20.9	0.00083	mg/L	0.000709	0.00083	mg/L	0.000709	85.76%
Sb 206.836†	3.6	-0.00384	mg/L	0.001485	-0.00384	mg/L	0.001485	38.64%
Se 196.026†	1.9	0.00358	mg/L	0.004111	0.00358	mg/L	0.004111	114.70%
Si 251.611†	4205.1	0.0768	mg/L	0.00186	0.0768	mg/L	0.00186	2.42%
Sn 189.927†	-233.3	-0.0257	mg/L	0.00051	-0.0257	mg/L	0.00051	1.98%
Ti 334.940†	-8296.8	-0.00259	mg/L	0.000251	-0.00259	mg/L	0.000251	9.69%
Tl 190.801†	-15.1	-0.00668	mg/L	0.001980	-0.00668	mg/L	0.001980	29.61%
V 290.880†	974.4	0.00055	mg/L	0.002325	0.00055	mg/L	0.002325	422.60%
Zn 206.200†	79.4	-0.00383	mg/L	0.000162	-0.00383	mg/L	0.000162	4.22%
K 766.490†	1864.8	0.475	mg/L	0.0124	0.475	mg/L	0.0124	2.61%
Na 589.592†	580960.6	27.5	mg/L	0.90	27.5	mg/L	0.90	3.26%
Sr 407.771†	135113.3	0.0465	mg/L	0.00031	0.0465	mg/L	0.00031	0.67%
Li 670.784†	1473.7	0.00160	mg/L	0.000488	0.00160	mg/L	0.000488	30.45%

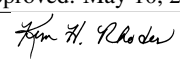
Sequence No.: 44
Sample ID: L1205025301 WG397432-02
Analyst: KHR
Initial Sample Wt:
Dilution:

u\osampler Location: 87
ame Collected: 5/9/2012 8:47:26 PM
ama Type: Original
nitial Sample Vol:
ample Prep Vol:

Nebulizer Parameters: L1205025301 WG397432-02
Analyte Back Pressure Flow
All 154.0 kPa 0.50 L/min

Mean Data: L1205025301 WG397432-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2237604.7				13181.91	0.59%
YRADIAL	306844.2				5827.34	1.90%
Ga 417.206	1507509.0				22811.60	1.51%
GARADIAL	98115.3				2086.27	2.13%
Ag 328.068†	219.1	-0.00117 mg/L	0.000350	-0.00117 mg/L	0.000350	29.94%
Al 396.153†	5846.7	0.721 mg/L	0.0093	0.721 mg/L	0.0093	1.29%
As 188.979†	-8.7	-0.00159 mg/L	0.001298	-0.00159 mg/L	0.001298	81.84%
Ba 233.527†	13092.1	0.0834 mg/L	0.00103	0.0834 mg/L	0.00103	1.24%
Be 234.861†	213.7	-0.00001 mg/L	0.000020	-0.00001 mg/L	0.000020	148.10%
B 249.677†	3199.6	0.0356 mg/L	0.00147	0.0356 mg/L	0.00147	4.13%
Ca 227.546†	27434.8	56.0 mg/L	1.86	56.0 mg/L	1.86	3.32%
Cd 228.802†	-3.0	-0.00025 mg/L	0.000189	-0.00025 mg/L	0.000189	75.87%
Co 228.616†	9.9	-0.00038 mg/L	0.000361	-0.00038 mg/L	0.000361	95.35%
Cr 267.716†	134.2	-0.00074 mg/L	0.000078	-0.00074 mg/L	0.000078	10.57%
Cu 327.393†	1765.0	0.00504 mg/L	0.000079	0.00504 mg/L	0.000079	1.57%
Fe 239.562†	1343.4	0.0878 mg/L	0.00211	0.0878 mg/L	0.00211	2.40%
Mg 279.077†	32945.2	9.13 mg/L	0.158	9.13 mg/L	0.158	1.73%
Mn 257.610†	12944.1	0.0130 mg/L	0.00006	0.0130 mg/L	0.00006	0.44%
Mo 202.031†	67.3	0.00024 mg/L	0.000154	0.00024 mg/L	0.000154	65.33%
Ni 231.604†	342.4	0.00290 mg/L	0.000270	0.00290 mg/L	0.000270	9.33%
Pb 220.353†	19.4	0.00092 mg/L	0.001570	0.00092 mg/L	0.001570	170.78%
Sb 206.836†	3.7	-0.00382 mg/L	0.002473	-0.00382 mg/L	0.002473	64.69%
Se 196.026†	8.4	0.00716 mg/L	0.001984	0.00716 mg/L	0.001984	27.71%
Si 251.611†	190946.0	4.53 mg/L	0.042	4.53 mg/L	0.042	0.94%
Sn 189.927†	-248.5	-0.0272 mg/L	0.00069	-0.0272 mg/L	0.00069	2.52%
Ti 334.940†	-10210.0	-0.00209 mg/L	0.000424	-0.00209 mg/L	0.000424	20.31%
Tl 190.801†	-23.6	-0.00890 mg/L	0.002328	-0.00890 mg/L	0.002328	26.15%
V 290.880†	833.7	0.00065 mg/L	0.001483	0.00065 mg/L	0.001483	226.46%
Zn 206.200†	754.1	0.0134 mg/L	0.00014	0.0134 mg/L	0.00014	1.05%

Approved: May 10, 2012


K 766.490†	12874.2	3.56 mg/L	0.056	3.56 mg/L	0.056	1.57%
Na 589.592†	665071.4	31.6 mg/L	0.72	31.6 mg/L	0.72	2.28%
Sr 407.771†	297194.1	0.103 mg/L	0.0013	0.103 mg/L	0.0013	1.30%
Li 670.784†	663.6	-0.00308 mg/L	0.000122	-0.00308 mg/L	0.000122	3.98%

Sequence No.: 45

Sample ID: L1205025301MS WG397432-07

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 88

a&e Collected: 5/9/2012 8:54:22 PM

a&a Type: Original

i&tial Sample Vol:

a&ple Prep Vol:

Nebulizer Parameters: L1205025301MS WG397432-07

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205025301MS WG397432-07

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2252220.3					16124.35	0.72%
YRADIAL	313480.3					4334.62	1.38%
Ga 417.206	1433305.3					9136.97	0.64%
GaRADIAL	95694.6					1830.01	1.91%
Ag 328.068†	61688.2	0.195 mg/L		0.0045	0.195 mg/L	0.0045	2.30%
Al 396.153†	44848.7	5.59 mg/L		0.028	5.59 mg/L	0.028	0.50%
As 188.979†	530.5	0.187 mg/L		0.0006	0.187 mg/L	0.0006	0.34%
Ba 233.527†	86969.3	0.576 mg/L		0.0031	0.576 mg/L	0.0031	0.55%
Be 234.861†	30704.4	0.0242 mg/L		0.00057	0.0242 mg/L	0.00057	2.37%
B 249.677†	85767.3	0.985 mg/L		0.0275	0.985 mg/L	0.0275	2.80%
Ca 227.546†	31710.0	65.0 mg/L		1.72	65.0 mg/L	1.72	2.65%
Cd 228.802†	1322.4	0.0231 mg/L		0.00085	0.0231 mg/L	0.00085	3.68%
Co 228.616†	3660.5	0.0966 mg/L		0.00096	0.0966 mg/L	0.00096	0.99%
Cr 267.716†	26194.3	0.244 mg/L		0.0049	0.244 mg/L	0.0049	1.99%
Cu 327.393†	66884.3	0.237 mg/L		0.0052	0.237 mg/L	0.0052	2.21%
Fe 239.562†	32123.8	1.99 mg/L		0.026	1.99 mg/L	0.026	1.29%
Mg 279.077†	49063.8	13.6 mg/L		0.09	13.6 mg/L	0.09	0.63%
Mn 257.610†	214976.9	0.260 mg/L		0.0013	0.260 mg/L	0.0013	0.51%
Mo 202.031†	17957.3	0.494 mg/L		0.0069	0.494 mg/L	0.0069	1.39%
Ni 231.604†	17137.2	0.257 mg/L		0.0020	0.257 mg/L	0.0020	0.78%
Pb 220.353†	2665.3	0.246 mg/L		0.0032	0.246 mg/L	0.0032	1.32%
Sb 206.836†	2434.5	0.577 mg/L		0.0041	0.577 mg/L	0.0041	0.72%
Se 196.026†	348.3	0.194 mg/L		0.0008	0.194 mg/L	0.0008	0.43%
Si 251.611†	307012.6	7.30 mg/L		0.076	7.30 mg/L	0.076	1.05%
Sn 189.927†	5380.0	0.528 mg/L		0.0053	0.528 mg/L	0.0053	1.00%
Ti 334.940†	477694.2	0.483 mg/L		0.0015	0.483 mg/L	0.0015	0.32%
Tl 190.801†	926.3	0.246 mg/L		0.0026	0.246 mg/L	0.0026	1.06%
V 290.880†	94512.2	0.489 mg/L		0.0114	0.489 mg/L	0.0114	2.34%
Zn 206.200†	19964.3	0.507 mg/L		0.0049	0.507 mg/L	0.0049	0.96%
K 766.490†	97654.0	27.6 mg/L		0.06	27.6 mg/L	0.06	0.21%
Na 589.592†	1185606.7	56.8 mg/L		0.75	56.8 mg/L	0.75	1.31%
Sr 407.771†	1677735.7	0.590 mg/L		0.0024	0.590 mg/L	0.0024	0.41%
Li 670.784†	86524.0	0.493 mg/L		0.0014	0.493 mg/L	0.0014	0.29%

Sequence No.: 46

Sample ID: L1205022305

Analyst: KHR

Initial Sample Wt:

Dilution:

u&osampler Location: 89

a&e Collected: 5/9/2012 9:00:21 PM

a&a Type: Original

i&tial Sample Vol:

a&ple Prep Vol:

Nebulizer Parameters: L1205022305

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1205022305

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2326019.2					30525.39	1.31%

Approved: May 10, 2012

John H. Rhodes

YRADIAL	321466.7					7084.78	2.20%
Ga 417.206	1519044.8					34236.75	2.25%
GA RADIAL	98208.2					1462.43	1.49%
Ag 328.068†	-32.4	-0.00198 mg/L	0.000350	-0.00198 mg/L	0.000350	17.67%	
Al 396.153†	50.3	-0.00797 mg/L	0.000440	-0.00797 mg/L	0.000440	5.52%	
As 188.979†	-5.3	-0.00037 mg/L	0.000371	-0.00037 mg/L	0.000371	100.53%	
Ba 233.527†	16.8	-0.00368 mg/L	0.000120	-0.00368 mg/L	0.000120	3.26%	
Be 234.861†	-1.7	-0.00017 mg/L	0.000041	-0.00017 mg/L	0.000041	23.91%	
B 249.677†	565.8	0.00532 mg/L	0.000205	0.00532 mg/L	0.000205	3.86%	
Ca 227.546†	20.2	0.0417 mg/L	0.02032	0.0417 mg/L	0.02032	48.72%	
Cd 228.802†	-5.9	-0.00031 mg/L	0.000094	-0.00031 mg/L	0.000094	30.33%	
Co 228.616†	1.4	-0.00060 mg/L	0.000197	-0.00060 mg/L	0.000197	32.78%	
Cr 267.716†	27.6	-0.00173 mg/L	0.000173	-0.00173 mg/L	0.000173	10.03%	
Cu 327.393†	223.8	-0.00042 mg/L	0.000324	-0.00042 mg/L	0.000324	77.41%	
Fe 239.562†	32.9	0.00701 mg/L	0.000300	0.00701 mg/L	0.000300	4.27%	
Mg 279.077†	14.9	0.0124 mg/L	0.00191	0.0124 mg/L	0.00191	15.34%	
Mn 257.610†	93.2	-0.00268 mg/L	0.000018	-0.00268 mg/L	0.000018	0.66%	
Mo 202.031†	1.2	-0.00160 mg/L	0.000072	-0.00160 mg/L	0.000072	4.50%	
Ni 231.604†	-3.4	-0.00235 mg/L	0.000010	-0.00235 mg/L	0.000010	0.41%	
Pb 220.353†	-2.0	-0.00161 mg/L	0.000780	-0.00161 mg/L	0.000780	48.53%	
Sb 206.836†	7.1	-0.00301 mg/L	0.000617	-0.00301 mg/L	0.000617	20.46%	
Se 196.026†	-1.1	0.00192 mg/L	0.002442	0.00192 mg/L	0.002442	127.33%	
Si 251.611†	392.7	-0.0141 mg/L	0.00038	-0.0141 mg/L	0.00038	2.71%	
Sn 189.927†	-22.4	-0.00493 mg/L	0.000684	-0.00493 mg/L	0.000684	13.88%	
Ti 334.940†	8.0	-0.00035 mg/L	0.000148	-0.00035 mg/L	0.000148	42.62%	
Tl 190.801†	-11.0	-0.00553 mg/L	0.003167	-0.00553 mg/L	0.003167	57.32%	
V 290.880†	247.5	-0.00215 mg/L	0.000807	-0.00215 mg/L	0.000807	37.53%	
Zn 206.200†	113.4	-0.00297 mg/L	0.000226	-0.00297 mg/L	0.000226	7.60%	
K 766.490†	8.8	-0.0175 mg/L	0.01993	-0.0175 mg/L	0.01993	113.76%	
Na 589.592†	578.1	0.0317 mg/L	0.00737	0.0317 mg/L	0.00737	23.25%	
Sr 407.771†	968.9	0.00010 mg/L	0.000024	0.00010 mg/L	0.000024	25.13%	
Li 670.784†	-65.1	-0.00729 mg/L	0.000423	-0.00729 mg/L	0.000423	5.81%	

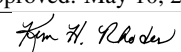
Sequence No.: 47
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

u&osampler Location: 6
 a&e Collected: 5/9/2012 9:07:16 PM
 a&a Type: Original
 n&itial Sample Vol:
 a&mple Prep Vol:

Nebulizer Parameters: CCV
 Analyte Back Pressure Flow
 All 153.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2264105.0				20285.29	0.90%
YRADIAL	312074.6				9393.26	3.01%
Ga 417.206	1369469.3				46182.67	3.37%
GA RADIAL	93878.5				3095.22	3.30%
Ag 328.068†	128386.9	0.407 mg/L	0.0160	0.407 mg/L	0.0160	3.93%
QC value within limits for Ag 328.068		Recovery = 101.83%				
Al 396.153†	78579.2	9.80 mg/L	0.026	9.80 mg/L	0.026	0.27%
QC value within limits for Al 396.153		Recovery = 98.01%				
As 188.979†	1133.1	0.398 mg/L	0.0125	0.398 mg/L	0.0125	3.14%
QC value within limits for As 188.979		Recovery = 99.57%				
Ba 233.527†	152066.0	1.01 mg/L	0.016	1.01 mg/L	0.016	1.59%
QC value within limits for Ba 233.527		Recovery = 100.93%				
Be 234.861†	63514.0	0.0502 mg/L	0.00190	0.0502 mg/L	0.00190	3.79%
QC value within limits for Be 234.861		Recovery = 100.41%				
B 249.677†	43529.0	0.496 mg/L	0.0179	0.496 mg/L	0.0179	3.61%
QC value within limits for B 249.677		Recovery = 99.24%				
Ca 227.546†	4776.0	10.2 mg/L	0.43	10.2 mg/L	0.43	4.17%
QC value within limits for Ca 227.546		Recovery = 102.16%				
Cd 228.802†	2809.7	0.0493 mg/L	0.00238	0.0493 mg/L	0.00238	4.84%
QC value within limits for Cd 228.802		Recovery = 98.56%				
Co 228.616†	7509.5	0.199 mg/L	0.0028	0.199 mg/L	0.0028	1.42%
QC value within limits for Co 228.616		Recovery = 99.48%				
Cr 267.716†	53467.7	0.501 mg/L	0.0042	0.501 mg/L	0.0042	0.83%

Approved: May 10, 2012


Element	Conc. (mg/L)	Recovery (%)	QC Value	QC Recovery (%)	Conc. (mg/L)	QC Conc. (mg/L)	RSD (%)
Cu	0.496	100.13%	327.393	100.02%	0.496	0.0206	4.16%
Fe	4.02	99.27%	239.562	99.04%	4.02	0.047	1.16%
Mg	10.0	100.56%	279.077	100.10%	10.0	0.10	1.01%
Mn	0.508	100.45%	257.610	100.00%	0.508	0.0090	1.77%
Mo	0.990	101.69%	202.031	101.00%	0.990	0.0091	0.91%
Ni	0.503	99.02%	231.604	99.00%	0.503	0.0075	1.49%
Pb	0.503	100.58%	220.353	100.00%	0.503	0.0056	1.11%
Sb	1.21	100.55%	206.836	100.04%	1.21	0.044	3.64%
Se	0.405	101.03%	196.026	101.00%	0.405	0.0171	4.22%
Si	5.07	101.25%	251.611	101.00%	5.07	0.151	2.98%
Sn	0.992	101.44%	189.927	101.00%	0.992	0.0119	1.20%
Ti	0.977	99.20%	334.940	99.00%	0.977	0.0029	0.30%
Tl	0.513	97.72%	190.801	97.00%	0.513	0.0018	0.35%
V	0.990	102.55%	290.880	102.00%	0.990	0.0057	0.58%
Zn	1.04	99.02%	206.200	99.00%	1.04	0.012	1.20%
K	48.1	103.63%	766.490	103.00%	48.1	0.23	0.47%
Na	49.0	96.12%	589.592	96.00%	49.0	1.89	3.86%
Sr	0.997	98.06%	407.771	98.00%	0.997	0.0315	3.16%
Li	0.963	99.73%	670.784	99.00%	0.963	0.0059	0.61%

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

u&osampler Location: 1

a&e Collected: 5/9/2012 9:13:17 PM

a&a Type: Original

nitial Sample Vol:

a&ple Prep Vol:

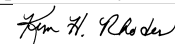
Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	154.0 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	2325982.9				38576.91	1.66%
YRADIAL	317375.0				2463.79	0.78%
Ga 417.206	1428815.7				9496.86	0.66%
GaRADIAL	96020.8				3539.00	3.69%
Ag 328.068†	-33.0	-0.00199 mg/L	0.000264	-0.00199 mg/L	0.000264	13.26%
QC value within limits for Ag						
Al 396.153†	30.0	-0.0105 mg/L	0.00105	-0.0105 mg/L	0.00105	9.97%
QC value within limits for Al						
As 188.979†	-2.3	0.00071 mg/L	0.001807	0.00071 mg/L	0.001807	253.98%
QC value within limits for As						
Ba 233.527†	4.3	-0.00376 mg/L	0.000091	-0.00376 mg/L	0.000091	2.42%
QC value within limits for Ba						
Be 234.861†	-56.6	-0.00021 mg/L	0.000016	-0.00021 mg/L	0.000016	7.70%
QC value within limits for Be						
B 249.677†	483.3	0.00437 mg/L	0.000271	0.00437 mg/L	0.000271	6.19%

Approved: May 10, 2012



Ca	227.546†	QC value within limits	for B 249.677	Recovery = Not calculated				
			1.9	0.00442 mg/L	0.020401	0.00442 mg/L	0.020401	461.92%
Cd	228.802†	QC value within limits	for Ca 227.546	Recovery = Not calculated				
			-7.1	-0.00034 mg/L	0.000181	-0.00034 mg/L	0.000181	54.09%
Co	228.616†	QC value within limits	for Cd 228.802	Recovery = Not calculated				
			0.4	-0.00062 mg/L	0.000107	-0.00062 mg/L	0.000107	17.20%
Cr	267.716†	QC value within limits	for Co 228.616	Recovery = Not calculated				
			10.8	-0.00189 mg/L	0.000076	-0.00189 mg/L	0.000076	4.03%
Cu	327.393†	QC value within limits	for Cr 267.716	Recovery = Not calculated				
			42.2	-0.00106 mg/L	0.000211	-0.00106 mg/L	0.000211	19.87%
Fe	239.562†	QC value within limits	for Cu 327.393	Recovery = Not calculated				
			29.0	0.00677 mg/L	0.000067	0.00677 mg/L	0.000067	0.99%
Mg	279.077†	QC value within limits	for Fe 239.562	Recovery = Not calculated				
			20.8	0.0141 mg/L	0.00055	0.0141 mg/L	0.00055	3.93%
Mn	257.610†	QC value within limits	for Mg 279.077	Recovery = Not calculated				
			152.6	-0.00260 mg/L	0.000015	-0.00260 mg/L	0.000015	0.57%
Mo	202.031†	QC value within limits	for Mn 257.610	Recovery = Not calculated				
			3.7	-0.00153 mg/L	0.000311	-0.00153 mg/L	0.000311	20.36%
Ni	231.604†	QC value within limits	for Mo 202.031	Recovery = Not calculated				
			-1.9	-0.00232 mg/L	0.000133	-0.00232 mg/L	0.000133	5.70%
Pb	220.353†	QC value within limits	for Ni 231.604	Recovery = Not calculated				
			3.0	-0.00115 mg/L	0.001135	-0.00115 mg/L	0.001135	98.96%
Sb	206.836†	QC value within limits	for Pb 220.353	Recovery = Not calculated				
			2.5	-0.00410 mg/L	0.001530	-0.00410 mg/L	0.001530	37.33%
Se	196.026†	QC value within limits	for Sb 206.836	Recovery = Not calculated				
			1.1	0.00310 mg/L	0.003823	0.00310 mg/L	0.003823	123.37%
Si	251.611†	QC value within limits	for Se 196.026	Recovery = Not calculated				
			81.4	-0.0216 mg/L	0.00061	-0.0216 mg/L	0.00061	2.82%
Sn	189.927†	QC value within limits	for Si 251.611	Recovery = Not calculated				
			-4.0	-0.00311 mg/L	0.000087	-0.00311 mg/L	0.000087	2.80%
Ti	334.940†	QC value within limits	for Sn 189.927	Recovery = Not calculated				
			247.8	-0.00012 mg/L	0.000147	-0.00012 mg/L	0.000147	126.82%
Tl	190.801†	QC value within limits	for Ti 334.940	Recovery = Not calculated				
			-2.9	-0.00341 mg/L	0.001605	-0.00341 mg/L	0.001605	47.01%
V	290.880†	QC value within limits	for Tl 190.801	Recovery = Not calculated				
			-99.8	-0.00396 mg/L	0.003169	-0.00396 mg/L	0.003169	80.03%
Zn	206.200†	QC value within limits	for V 290.880	Recovery = Not calculated				
			67.2	-0.00416 mg/L	0.000225	-0.00416 mg/L	0.000225	5.41%
K	766.490†	QC value within limits	for Zn 206.200	Recovery = Not calculated				
			47.9	-0.00653 mg/L	0.012492	-0.00653 mg/L	0.012492	191.16%
Na	589.592†	QC value within limits	for K 766.490	Recovery = Not calculated				
			6.1	0.00484 mg/L	0.009787	0.00484 mg/L	0.009787	202.22%
Sr	407.771†	QC value within limits	for Na 589.592	Recovery = Not calculated				
			535.5	-0.00006 mg/L	0.000025	-0.00006 mg/L	0.000025	43.85%
Li	670.784†	QC value within limits	for Sr 407.771	Recovery = Not calculated				
			-17.9	-0.00701 mg/L	0.000390	-0.00701 mg/L	0.000390	5.57%
		QC value within limits	for Li 670.784	Recovery = Not calculated				

All analyte(s) passed QC.

Approved: May 10, 2012

Tom H. Rhodes

2.3.2 Metals ICP-MS Data

2.3.2.1 Summary Data



Login Number: L12050099
Department: Metals
Analyst: Ji Hu

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG397649 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46162

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink that reads "Sheri L. Pfalzgraf".

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-13-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:46
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: NI.051012.134628
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	0.00469		0.00100	0.000500
Lead, Total	7439-92-1	0.000745		0.00100	0.000500
Selenium, Total	7782-49-2	0.00135		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-02	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-13-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:49
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: NI.051012.134921
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	0.00463		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00135		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-26-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:52
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: NI.051012.135213
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	0.000882		0.00100	0.000500
Lead, Total	7439-92-1	0.000595		0.00100	0.000500

Certificate of Analysis

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-26-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:52
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: NI.051012.135213
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Selenium, Total	7782-49-2	0.00175		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-04	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-26-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 13:55
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: NI.051012.135506
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	0.000848		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00164		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-25-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:03
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: NI.051012.140347
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000713		0.00100	0.000500
Arsenic, Total	7440-38-2	0.000639		0.00100	0.000500
Lead, Total	7439-92-1	0.00833		0.00100	0.000500
Selenium, Total	7782-49-2	0.00234		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-06	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: MW-25-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:06
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: NI.051012.140640
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.000688		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.000520		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.00255		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00198		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: PZ-03-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:09
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: NI.051012.140932
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	0.0219		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00198		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-08	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: PZ-03-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:12
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: NI.051012.141225
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	0.0220		0.00100	0.000500

Certificate of Analysis

Sample #: L12050099-08	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: PZ-03-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:12
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: NI.051012.141225
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00169		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: DUP-GW-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:15
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: NI.051012.141517
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	0.000887		0.00100	0.000500
Lead, Total	7439-92-1	0.000503		0.00100	0.000500
Selenium, Total	7782-49-2	0.00160		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-10	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: DUP-GW-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:18
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: NI.051012.141810
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	0.000855		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00154		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

Certificate of Analysis

Sample #: L12050099-10	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: DUP-GW-050212	Prep Method: 3015	Prep Date: 05/04/2012 09:33
Matrix: Water	Analytical Method: 6020	Cal Date: 05/10/2012 09:13
Workgroup #: WG397649	Analyst: JYH	Run Date: 05/10/2012 14:18
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: NI.051012.141810
Sample Tag: 01	Units: mg/L	

U	Not detected at or above adjusted sample detection limit.
---	---

2.3.2.2 QC Summary Data

Example 6020 Calculations
Perkin Elmer NexION 300X

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Final volume

Vi = Initial volume

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in (ug/L)

Example:

0.1

100

40

1

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:

Cs = Concentration computed by the data system (ug/L)

Vf = Final volume

Vi = Initial volume

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in (ug/kg)

Example:

0.1

200

0.5

1

40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (ug/kg)

Example:

40

80

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: WG397022
Analyst: VC
Spike Analyst: VC
Run Date: 05/04/2012 09:33
Method: 3015
Balance: BAL016
Instrument: MW-2

SOP: ME407 Revision 12
Spike Solution: STD49281
Spike Witness: ERP
HNO3 Lot #: COA16033
Digestion Tubes Lot #: COA16074
MS WG# 392559 Lot #: COA15974

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG397022-03	BLANK	1	40 mL	100 mL	208.094 g	208.085 g		
2	WG397022-04	LCS	1	40 mL	100 mL	209.167 g	209.162 g	.25 mL	
3	L12050099-01	SAMP	1	40 mL	100 mL	205.535 g	205.518 g		05/17/12
4	L12050099-02	SAMP	1	40 mL	100 mL	208.581 g	208.564 g		05/17/12
5	L12050099-03	SAMP	1	40 mL	100 mL	207.045 g	207.026 g		05/17/12
6	L12050099-04	SAMP	1	40 mL	100 mL	206.535 g	206.514 g		05/17/12
7	L12050099-05	SAMP	1	40 mL	100 mL	208.076 g	208.052 g		05/17/12
8	L12050099-06	SAMP	1	40 mL	100 mL	207.368 g	207.346 g		05/17/12
9	L12050099-07	SAMP	1	40 mL	100 mL	207.303 g	207.284 g		05/17/12
10	L12050099-08	SAMP	1	40 mL	100 mL	209.342 g	209.324 g		05/17/12
11	L12050099-09	SAMP	1	40 mL	100 mL	206.897 g	206.886 g		05/17/12
12	L12050099-10	SAMP	1	40 mL	100 mL	207.527 g	207.518 g		05/17/12
13	WG397022-01	REF	1	40 mL	100 mL	206.166 g	206.146 g		
14	L12050105-01	RS01	1	40 mL	100 mL	206.166 g	206.146 g		05/17/12
15	L12050105-02	SAMP	1	40 mL	100 mL	207.493 g	207.475 g		05/17/12
16	WG397022-05	MS	1	40 mL	100 mL	207.632 g	207.605 g	.25 mL	
17	L12050105-03	MS01	1	40 mL	100 mL	207.632 g	207.605 g	.25 mL	05/17/12
18	WG397022-06	MSD	1	40 mL	100 mL	208.123 g	208.102 g	.25 mL	
19	L12050105-04	SD01	1	40 mL	100 mL	208.123 g	208.102 g	.25 mL	05/17/12
20	L12050105-05	SAMP	1	40 mL	100 mL	209.028 g	209.017 g		05/17/12
21	L12050105-06	SAMP	1	40 mL	100 mL	208.639 g	208.61 g		05/17/12
22	L12050105-07	SAMP	1	40 mL	100 mL	207.667 g	207.652 g		05/17/12
23	L12050105-08	SAMP	1	40 mL	100 mL	208.294 g	208.276 g		05/17/12
24	WG397022-02	REF	1	40 mL	100 mL	209.485 g	209.463 g		
25	L12050105-09	SAMP	1	40 mL	100 mL	209.485 g	209.463 g		05/17/12
26	L12050105-10	SAMP	1	40 mL	100 mL	207.861 g	207.848 g		05/17/12
27	WG397022-07	DUP	1	40 mL	100 mL	209.064 g	209.055 g		

Analyst: Veech Collier

Reviewer: Eun Pottin



Microbac Laboratories Inc.
Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
 ICSA: STD51140 ICSAB: STD51239 Int. Std: RG17150
 CCV: STD51215 LLCCV: STD51549

397345397362,397649,397650,397653

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.051012.090223	Blank	Blank		1		05/10/12 09:02
2	NI.051012.090517	WG397640-01	Calibration Point		1		05/10/12 09:05
3	NI.051012.090809	WG397640-02	Calibration Point		1		05/10/12 09:08
4	NI.051012.091101	WG397640-03	Calibration Point		1		05/10/12 09:11
5	NI.051012.091354	WG397640-04	Calibration Point		1		05/10/12 09:13
6	NI.051012.091648	WG397640-05	Initial Calibration Verification		1		05/10/12 09:16
7	NI.051012.091943	WG397640-06	Initial Calib Blank		1		05/10/12 09:19
8	NI.051012.092238	WG397640-07	Low Level Initial Calibration V		1		05/10/12 09:22
9	NI.051012.092530	WG397640-08	Interference Check		1		05/10/12 09:25
10	NI.051012.092824	WG397640-09	Interference Check		1		05/10/12 09:28
11	NI.051012.093119	WG397640-10	QC Std 6		1		05/10/12 09:31
12	NI.051012.093847	WG397640-11	CCV		1		05/10/12 09:38
13	NI.051012.094201	WG397640-12	CCB		1		05/10/12 09:42
14	NI.051012.094514	WG397206-03	Method/Prep Blank	40/100	1		05/10/12 09:45
15	NI.051012.094807	WG397206-04	Laboratory Control S	40/100	1		05/10/12 09:48
16	NI.051012.095100	WG397206-02	Reference Sample		1	L12050125-07	05/10/12 09:51
17	NI.051012.095353	WG397206-07	Matrix Spike	40/100	1	L12050125-07	05/10/12 09:53
18	NI.051012.095646	WG397206-08	Matrix Spike Duplica	40/100	1	L12050125-07	05/10/12 09:56
19	NI.051012.095939	L12050150-28	SW-8	40/100	1		05/10/12 09:59
20	NI.051012.100232	L12050150-29	SW-9	40/100	1		05/10/12 10:02
21	NI.051012.100524	WG397345-01	Post Digestion Spike		1	L12050124-01	05/10/12 10:05
22	NI.051012.100818	WG397345-02	Serial Dilution		5	L12050124-01	05/10/12 10:08
23	NI.051012.101113	WG397640-13	CCV		1		05/10/12 10:11
24	NI.051012.101405	WG397640-14	CCB		1		05/10/12 10:14
25	NI.051012.101700	WG397640-15	Low Level Continuing Calibra		1		05/10/12 10:17
26	NI.051012.101953	L12050153-01	MW-15-050312	40/100	1		05/10/12 10:19
27	NI.051012.102247	L12050153-02	MW-15-050312	40/100	1		05/10/12 10:22
28	NI.051012.102540	L12050153-03	MW-17-050312	40/100	1		05/10/12 10:25
29	NI.051012.102832	L12050153-04	MW-17-050312	40/100	1		05/10/12 10:28
30	NI.051012.103125	L12050153-05	MW-28050312	40/100	1		05/10/12 10:31
31	NI.051012.103418	L12050153-06	MW-28050312	40/100	1		05/10/12 10:34
32	NI.051012.103711	L12050153-07	TW-02-050312	40/100	1		05/10/12 10:37
33	NI.051012.104004	L12050153-08	TW-02-050312	40/100	1		05/10/12 10:40
34	NI.051012.104258	WG397640-16	Interference Check		1		05/10/12 10:42

Page: 1 Approved: May 11, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
 ICSA: STD51140 ICSAB: STD51239 Int. Std: RG17150
 CCV: STD51215 LLCCV: STD51549

397345397362,397649,397650,397653

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.051012.104551	WG397640-17	Interference Check		1		05/10/12 10:45
36	NI.051012.104847	WG397640-18	CCV		1		05/10/12 10:48
37	NI.051012.105139	WG397640-19	CCB		1		05/10/12 10:51
38	NI.051012.105724	L1-00	100 PPB SE		1		05/10/12 10:57
39	NI.051012.110017	200 PPB SE	200 PPB SE		1		05/10/12 11:00
40	NI.051012.110309	KIM BLK	KIM BLK		1		05/10/12 11:03
41	NI.051012.110601	BLK LOT8508	BLK LOT8508		1		05/10/12 11:06
42	NI.051012.110857	WG397640-20	QC Std 6		1		05/10/12 11:08
43	NI.051012.111150	WG397640-21	QC Std 7		1		05/10/12 11:11
44	NI.051012.111446	WG397298-02	Method/Prep Blank	.5/200	1		05/10/12 11:14
45	NI.051012.111738	WG397298-03	Laboratory Control S	.5/200	1		05/10/12 11:17
46	NI.051012.112030	WG397298-01	Reference Sample		5	L12050223-01	05/10/12 11:20
47	NI.051012.112323	L12050223-02	40BF1050312DUP	.522/200	5		05/10/12 11:23
48	NI.051012.112616	WG397298-04	Matrix Spike	.511/200	5	L12050223-01	05/10/12 11:26
49	NI.051012.112908	WG397298-05	Matrix Spike Duplica	.518/200	5	L12050223-01	05/10/12 11:29
50	NI.051012.113202	L12050223-06	40BF2050312TS	.526/200	5		05/10/12 11:32
51	NI.051012.113454	WG397362-01	Post Digestion Spike		5	L12050223-06	05/10/12 11:34
52	NI.051012.113746	WG397362-02	Serial Dilution		25	L12050223-06	05/10/12 11:37
53	NI.051012.114041	WG397640-22	CCV		1		05/10/12 11:40
54	NI.051012.114333	WG397640-23	CCB		1		05/10/12 11:43
55	NI.051012.114922	L12040384-06	MAPEP-12-MAW26		1		05/10/12 11:49
56	NI.051012.122157	WG397298-01	Reference Sample		50	L12050223-01	05/10/12 12:21
57	NI.051012.122450	L12050223-02	40BF1050312DUP	.522/200	50		05/10/12 12:24
58	NI.051012.122742	WG397298-04	Matrix Spike	.511/200	50	L12050223-01	05/10/12 12:27
59	NI.051012.123034	WG397298-05	Matrix Spike Duplica	.518/200	50	L12050223-01	05/10/12 12:30
60	NI.051012.123327	L12050223-06	40BF2050312TS	.526/200	50		05/10/12 12:33
61	NI.051012.123620	WG397362-01	Post Digestion Spike		50	L12050223-06	05/10/12 12:36
62	NI.051012.124844	WG397362-02	Serial Dilution		250	L12050223-06	05/10/12 12:48
63	NI.051012.125140	WG397640-24	CCV		1		05/10/12 12:51
64	NI.051012.125433	WG397640-25	CCB		1		05/10/12 12:54
65	NI.051012.125728	WG397022-03	Method/Prep Blank	40/100	1		05/10/12 12:57
66	NI.051012.130020	WG397022-04	Laboratory Control S	40/100	1		05/10/12 13:00
67	NI.051012.130312	WG397022-01	Reference Sample		10	L12050105-01	05/10/12 13:03
68	NI.051012.130605	L12050105-02	SPE-W-SW-01-DIS	40/100	10		05/10/12 13:06

Page: 2 Approved: May 11, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
 ICSA: STD51140 ICSAB: STD51239 Int. Std: RG17150
 CCV: STD51215 LLCCV: STD51549

397345397362,397649,397650,397653

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.051012.130857	WG397022-05	Matrix Spike	40/100	10	L12050105-01	05/10/12 13:08
70	NI.051012.131149	WG397022-06	Matrix Spike Duplica	40/100	10	L12050105-01	05/10/12 13:11
71	NI.051012.131442	L12050105-05	SPE-W-SW-01-DUP	40/100	10		05/10/12 13:14
72	NI.051012.131734	L12050105-06	SPE-W-SW-05	40/100	10		05/10/12 13:17
73	NI.051012.132027	WG397649-01	Post Digestion Spike		10	L12050105-06	05/10/12 13:20
74	NI.051012.132319	WG397649-02	Serial Dilution		50	L12050105-06	05/10/12 13:23
75	NI.051012.132614	WG397640-26	CCV		1		05/10/12 13:26
76	NI.051012.132908	WG397640-27	CCB		1		05/10/12 13:29
77	NI.051012.133203	L12050105-07	SPE-W-SW-05-DIS	40/100	10		05/10/12 13:32
78	NI.051012.133456	L12050105-08	SPE-W-SW-06	40/100	10		05/10/12 13:34
79	NI.051012.133749	WG397022-02	Reference Sample		10	L12050105-09	05/10/12 13:37
80	NI.051012.134042	WG397022-07	Duplicate	40/100	10	L12050105-09	05/10/12 13:40
81	NI.051012.134334	L12050105-10	SPE-K-FB	40/100	1		05/10/12 13:43
82	NI.051012.134628	L12050099-01	MW-13-050212	40/100	1		05/10/12 13:46
83	NI.051012.134921	L12050099-02	MW-13-050212	40/100	1		05/10/12 13:49
84	NI.051012.135213	L12050099-03	MW-26-050212	40/100	1		05/10/12 13:52
85	NI.051012.135506	L12050099-04	MW-26-050212	40/100	1		05/10/12 13:55
86	NI.051012.135800	WG397640-28	CCV		1		05/10/12 13:58
87	NI.051012.140053	WG397640-29	CCB		1		05/10/12 14:00
88	NI.051012.140347	L12050099-05	MW-25-050212	40/100	1		05/10/12 14:03
89	NI.051012.140640	L12050099-06	MW-25-050212	40/100	1		05/10/12 14:06
90	NI.051012.140932	L12050099-07	PZ-03-050212	40/100	1		05/10/12 14:09
91	NI.051012.141225	L12050099-08	PZ-03-050212	40/100	1		05/10/12 14:12
92	NI.051012.141517	L12050099-09	DUP-GW-050212	40/100	1		05/10/12 14:15
93	NI.051012.141810	L12050099-10	DUP-GW-050212	40/100	1		05/10/12 14:18
94	NI.051012.142105	WG397640-30	Interference Check		1		05/10/12 14:21
95	NI.051012.142358	WG397640-31	Interference Check		1		05/10/12 14:23
96	NI.051012.142653	WG397640-32	CCV		1		05/10/12 14:26
97	NI.051012.142945	WG397640-33	CCB		1		05/10/12 14:29
98	NI.051012.143241	WG397640-34	Low Level Continuing Calibra		1		05/10/12 14:32
99	NI.051012.150236	WG397174-02	Method/Prep Blank	.5/200	1		05/10/12 15:02
100	NI.051012.150529	WG397174-03	Laboratory Control S	.5/200	1		05/10/12 15:05
101	NI.051012.150821	WG397174-01	Reference Sample		5	L12050134-26	05/10/12 15:08
102	NI.051012.151114	WG397174-04	Matrix Spike	.518/200	5	L12050134-26	05/10/12 15:11

Page: 3 Approved: May 11, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
 ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
 CCV: STD51215 LLCCV: STD51549

397345397362,397649,397650,397653

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	NI.051012.151406	WG397174-05	Matrix Spike Duplica	.509/200	5	L12050134-26	05/10/12 15:14
104	NI.051012.151700	L12050134-10	TC-SS-316	.505/200	5		05/10/12 15:17
105	NI.051012.151953	L12050134-11	TC-SUB-316	.51/200	5		05/10/12 15:19
106	NI.051012.152424	WG397650-01	Post Digestion Spike		5	L12050134-11	05/10/12 15:24
107	NI.051012.152718	WG397650-02	Serial Dilution		25	L12050134-11	05/10/12 15:27
108	NI.051012.153013	WG397640-35	CCV		1		05/10/12 15:30
109	NI.051012.153306	WG397640-36	CCB		1		05/10/12 15:33
110	NI.051012.153601	L12050134-13	TC-SUB-317	.505/200	5		05/10/12 15:36
111	NI.051012.153854	L12050134-14	TC-SUB-317A	.503/200	5		05/10/12 15:38
112	NI.051012.154146	L12050134-15	TC-SUB-318	.519/200	5		05/10/12 15:41
113	NI.051012.154440	L12050134-17	TC-SED-301	.527/200	5		05/10/12 15:44
114	NI.051012.154733	L12050134-18	TC-SED-301A	.512/200	5		05/10/12 15:47
115	NI.051012.155025	L12050134-19	TC-SED-302	.523/200	5		05/10/12 15:50
116	NI.051012.155318	L12050134-20	TC-SED-303	.527/200	5		05/10/12 15:53
117	NI.051012.155611	L12050134-22	TC-SED-304	.518/200	5		05/10/12 15:56
118	NI.051012.155904	L12050134-23	TC-SED-305	.514/200	5		05/10/12 15:59
119	NI.051012.160156	L12050134-24	TC-SED-306	.525/200	5		05/10/12 16:01
120	NI.051012.160452	WG397640-37	CCV		1		05/10/12 16:04
121	NI.051012.160744	WG397640-38	CCB		1		05/10/12 16:07
122	NI.051012.161039	L12050134-25	TC-SS-305	.503/200	5		05/10/12 16:10
123	NI.051012.161331	WG397503-02	Method/Prep Blank	40/100	1		05/10/12 16:13
124	NI.051012.161623	WG397503-03	Laboratory Control S	40/100	1		05/10/12 16:16
125	NI.051012.161917	L12050259-03	W20B		1	WG397503-01	05/10/12 16:19
126	NI.051012.162209	L12050259-05	W20B/MS	40/100	1	WG397503-04	05/10/12 16:22
127	NI.051012.162501	L12050259-07	W20B/MSD	40/100	1	WG397503-05	05/10/12 16:25
128	NI.051012.162755	L12050259-08	W37WT	40/100	1		05/10/12 16:27
129	NI.051012.163047	WG397653-01	Post Digestion Spike		1	L12050259-08	05/10/12 16:30
130	NI.051012.163339	WG397653-02	Serial Dilution		5	L12050259-08	05/10/12 16:33
131	NI.051012.163634	WG397640-39	CCV		1		05/10/12 16:36
132	NI.051012.163926	WG397640-40	CCB		1		05/10/12 16:39
133	NI.051012.164221	L12050259-09	W18	40/100	1		05/10/12 16:42
134	NI.051012.164513	L12050259-11	W31WB	40/100	1		05/10/12 16:45
135	NI.051012.164805	L12050259-13	W29	40/100	1		05/10/12 16:48
136	NI.051012.165058	L12050242-08	MW-13A	40/100	1		05/10/12 16:50

Page: 4 Approved: May 11, 2012

Shari L. Bahgat



Microbac Laboratories Inc.
Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700A Rev: _____
 Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
 ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
 CCV: STD51215 LLCCV: STD51549

397345397362,397649,397650,397653

Workgroups:

Comments:

--

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
137	NI.051012.165350	L12050242-10	MW-13B	40/100	1		05/10/12 16:53
138	NI.051012.165642	L12050257-01	C&B LEEK W-1	40/100	1		05/10/12 16:56
139	NI.051012.165936	L12050257-03	E&D COLLINS W-1	40/100	1		05/10/12 16:59
140	NI.051012.170229	L12050257-05	D NEFF W-1	40/100	1		05/10/12 17:02
141	NI.051012.170521	L12050257-07	AS JENNA DS-1	40/100	1		05/10/12 17:05
142	NI.051012.170814	L12050257-09	AS GREEK RUIN DS-2	40/100	1		05/10/12 17:08
143	NI.051012.171108	WG397640-41	CCV		1		05/10/12 17:11
144	NI.051012.171400	WG397640-42	CCB		1		05/10/12 17:14
145	NI.051012.171655	L12050257-11	D SNOW W-1	40/100	1		05/10/12 17:16
146	NI.051012.171948	L12050257-13	T&B JONES W-1	40/100	1		05/10/12 17:19
147	NI.051012.172244	WG397640-43	CCV		1		05/10/12 17:22
148	NI.051012.172536	WG397640-44	CCB		1		05/10/12 17:25
149	NI.051012.172830	WG397640-45	Low Level Continuing Calibra		1		05/10/12 17:28

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11			Rerun for silver.	

Page: 5 Approved: May 11, 2012

Shari L. Bahgat



Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
 Analyst: JYH
 Analyst: NA
 Method: 6020
 Instrument: ICP-MS2
 Curve Workgroup: 397640
 Runlog ID: 46660
 Analytical Workgroups: 397345397362,397649,397650,397653

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	153,223,099,105,134,257
Client Forms	X
Level X	
Level 3	
Level 4	153,223,099,134,257
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JYH
Secondary Reviewer	SLP
Comments	

Primary Reviewer:

Secondary Reviewer:
11-MAY-2012



Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method:6020
 Login Number:L12050099

AAB#:WG397649

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-13-050212	01	05/02/12					05/04/12	1.9	180		05/10/12	8.1	180	
MW-13-050212	02	05/02/12					05/04/12	1.9	180		05/10/12	8.1	180	
MW-26-050212	03	05/02/12					05/04/12	1.9	180		05/10/12	8.1	180	
MW-26-050212	04	05/02/12					05/04/12	1.9	180		05/10/12	8.1	180	
MW-25-050212	05	05/02/12					05/04/12	1.8	180		05/10/12	8	180	
MW-25-050212	06	05/02/12					05/04/12	1.8	180		05/10/12	8	180	
PZ-03-050212	07	05/02/12					05/04/12	1.8	180		05/10/12	8	180	
PZ-03-050212	08	05/02/12					05/04/12	1.8	180		05/10/12	8	180	
DUP-GW-050212	09	05/02/12					05/04/12	2	180		05/10/12	8.2	180	
DUP-GW-050212	10	05/02/12					05/04/12	2	180		05/10/12	8.2	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2410130
 Report generated 05/10/2012 15:40



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397649
 Blank File ID: NI.051012.125728 Blank Sample ID: WG397022-03
 Prep Date: 05/04/12 09:33 Instrument ID: ICP-MS2
 Analyzed Date: 05/10/12 12:57 Method: 6020
 Analyst: JYH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397022-04	NI.051012.130020	05/10/12 13:00	01
DUP	WG397022-07	NI.051012.134042	05/10/12 13:40	DL01
MW-13-050212	L12050099-01	NI.051012.134628	05/10/12 13:46	01
MW-13-050212	L12050099-02	NI.051012.134921	05/10/12 13:49	01
MW-26-050212	L12050099-03	NI.051012.135213	05/10/12 13:52	01
MW-26-050212	L12050099-04	NI.051012.135506	05/10/12 13:55	01
MW-25-050212	L12050099-05	NI.051012.140347	05/10/12 14:03	01
MW-25-050212	L12050099-06	NI.051012.140640	05/10/12 14:06	01
PZ-03-050212	L12050099-07	NI.051012.140932	05/10/12 14:09	01
PZ-03-050212	L12050099-08	NI.051012.141225	05/10/12 14:12	01
DUP-GW-050212	L12050099-09	NI.051012.141517	05/10/12 14:15	01
DUP-GW-050212	L12050099-10	NI.051012.141810	05/10/12 14:18	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2410131
 Report generated 05/10/2012 15:54



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/04/12 09:33 Sample ID: WG397022-03
 Instrument ID: ICP-MS2 Run Date: 05/10/12 12:57 Prep Method: 3015
 File ID: NI.051012.125728 Analyst: JYH Method: 6020
 Workgroup (AAB#): WG397649 Matrix: Water Units: mg/L
 Contract #: _____ Cal ID: ICP-MS - 10-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Arsenic, Total	0.000500	0.00100	0.000500	1	U
Lead, Total	0.000500	0.00100	0.000500	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U

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

Report Name: BLANK
 PDF ID: 2410132
 10-MAY-2012 15:54



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397022-04
Instrument ID: ICP-MS2 Run Time: 13:00 Prep Method: 3015
File ID: NI.051012.130020 Analyst: JYH Method: 6020
Workgroup (AAB#): WG397649 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD49281 Cal ID: ICP-MS - 10-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0598	95.8	80 - 120	
Arsenic, Total	0.0625	0.0621	99.3	80 - 120	
Lead, Total	0.0625	0.0649	104	80 - 120	
Selenium, Total	0.0625	0.0625	100	80 - 120	
Thallium, Total	0.0625	0.0651	104	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 2410133
Report generated: 05/10/2012 15:54



MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050099 Cal ID: ICP-MS2- Worknum: WG397649
 Instrument ID: ICP-MS2 Contract #: _____ Method: 6020
 Parent ID: WG397022-01 File ID: NI.051012.130312 Dil: 10 Matrix: WATER
 Sample ID: WG397022-05 MS File ID: NI.051012.130857 Dil: 10 Units: mg/L
 Sample ID: WG397022-06 MSD File ID: NI.051012.131149 Dil: 10

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Total	0.000555	0.0625	0.0760	121	0.0625	0.0730	116	4.04	80 - 120	20	*
Arsenic, Total	0.00137	0.0625	0.0869	137	0.0625	0.0828	130	4.84	80 - 120	20	*
Lead, Total	ND	0.0625	0.0706	113	0.0625	0.0674	108	4.70	80 - 120	20	
Selenium, Total	ND	0.0625	0.0981	157	0.0625	0.0915	146	6.92	80 - 120	20	*
Thallium, Total	ND	0.0625	0.0704	113	0.0625	0.0673	108	4.50	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12050099 **Worknum:** WG397649
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG397649-02 **File ID:** NI.051012.132319 **Dil:** 50 **Units:** ug/L
Sample: L12050105-06 **File ID:** NI.051012.131734 **Dil:** 10

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	ND	U	ND	U		
Lead	ND	U	ND	U		
Selenium	ND	U	ND	U		
Thallium	ND	U	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 100 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 2410128
05/10/2012 15:54



Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050099

Worknum: WG397649

Instrument ID: ICP-MS2

Method: 6020

Post Spike ID: WG397649-01

File ID: NI.051012.132027

Dil: 10

Units: ug/L

Sample ID: L12050105-06

File ID: NI.051012.131734

Dil: 10

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	50.2		0	U	50	100.5	75 - 125	
ARSENIC	52.2		0	U	50	104.5	75 - 125	
LEAD	51.9		0	U	50	103.8	75 - 125	
SELENIUM	53.7		0	U	50	107.4	75 - 125	
THALLIUM	52.0		0	U	50	104.1	75 - 125	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2410129
Report generated: 05/10/2012 15:54



Microbac Laboratories Inc.
Initial Calibration Summary

Login: L12050099 Workgroup (AAB#): WG397649
 Analytical Method: 6020 Instrument ID: ICP-MS2
 ICAL Worknum: WG397640 Initial Calibration Date: 10-MAY-2012 09:13

	WG397640-01		WG397640-02		WG397640-03		WG397640-04		R	Q
	Conc	INT	Conc	INT	Conc	INT	Conc	INT		
ANTIMONY	0	18.9	.4	570	50	547000	100	1070000	.999994	
ARSENIC	0	-261	.4	-200	50	56800	100	110000	.999992	
LEAD	0	1080	.4	3750	50	2540000	100	4980000	.999983	
SELENIUM	0	23.6	.4	26.7	50	6450	100	12300	.999984	
THALLIUM	0	610	.4	1410	50	808000	100	1560000	.999999	

INT = Instrument intensity
 R = Coefficient of correlation
 Q = Data Qualifier
 * = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-06
Instrument ID: ICP-MS2 Run Time: 09:19 Method: 6020
File ID: NI.051012.091943 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG397649 Cal ID: ICP-MS2 - 10-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.2	.4	.2	U
LEAD	.2	.4	.2	U
ANTIMONY	.2	.4	.2	U
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U

ICB - Modified 07/14/2009
PDF File ID: 2410139
Report generated 05/10/2012 15:40



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-12
Instrument ID: ICP-MS2 Run Time: 09:42 Method: 6020
File ID: NI.051012.094201 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2410142
Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-14
 Instrument ID: ICP-MS2 Run Time: 10:14 Method: 6020
 File ID: NI.051012.101405 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2410142
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-19
 Instrument ID: ICP-MS2 Run Time: 10:51 Method: 6020
 File ID: NI.051012.105139 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2410142
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-25
Instrument ID: ICP-MS2 Run Time: 12:54 Method: 6020
File ID: NI.051012.125433 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2410142
Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-27
 Instrument ID: ICP-MS2 Run Time: 13:29 Method: 6020
 File ID: NI.051012.132908 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2410142
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-29
 Instrument ID: ICP-MS2 Run Time: 14:00 Method: 6020
 File ID: NI.051012.140053 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2410142
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-33
 Instrument ID: ICP-MS2 Run Time: 14:29 Method: 6020
 File ID: NI.051012.142945 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
 F = Result is between MDL and RL.
 * = Result is above RL.

CCB - Modified 03/05/2008
 PDF File ID: 2410142
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
 INITIAL CALIBRATION VERIFICATION (ICV)
 (Alternate Source)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-05
 Instrument ID: ICP-MS2 Run Time: 09:16 Method: 6020
 File ID: NI.051012.091648 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 QC Key: WATERLOO

Analyte	Expected	Found	%REC	LIMITS	Q
Antimony	50	51.2	102	90 - 110	
Arsenic	50	52.3	105	90 - 110	
Lead	50	51.3	103	90 - 110	
Selenium	50	52.9	106	90 - 110	
Thallium	50	51.5	103	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
 PDF File ID: 2410138
 Report generated 05/10/2012 15:40



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-11
 Instrument ID: ICP-MS2 Run Time: 09:38 Method: 6020
 File ID: NI.051012.093847 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	50.0	50.8	ug/L	102	90 - 110		
Arsenic	50.0	50.8	ug/L	102	90 - 110		
Lead	50.0	49.8	ug/L	99.5	90 - 110		
Selenium	50.0	52.6	ug/L	105	90 - 110		
Thallium	50.0	50.1	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2410141
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-13
 Instrument ID: ICP-MS2 Run Time: 10:11 Method: 6020
 File ID: NI.051012.101113 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	49.0	ug/L	97.9	90 - 110	
Arsenic	50.0	50.5	ug/L	101	90 - 110	
Lead	50.0	49.9	ug/L	99.8	90 - 110	
Selenium	50.0	51.0	ug/L	102	90 - 110	
Thallium	50.0	50.8	ug/L	102	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2410141
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-18
 Instrument ID: ICP-MS2 Run Time: 10:48 Method: 6020
 File ID: NI.051012.104847 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	50.0	49.8	ug/L	99.6	90 - 110		
Arsenic	50.0	50.5	ug/L	101	90 - 110		
Lead	50.0	50.0	ug/L	100	90 - 110		
Selenium	50.0	52.4	ug/L	105	90 - 110		
Thallium	50.0	51.1	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2410141
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-24
 Instrument ID: ICP-MS2 Run Time: 12:51 Method: 6020
 File ID: NI.051012.125140 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	50.0	49.6	ug/L	99.2	90 - 110		
Arsenic	50.0	51.3	ug/L	103	90 - 110		
Lead	50.0	50.2	ug/L	100	90 - 110		
Selenium	50.0	52.3	ug/L	105	90 - 110		
Thallium	50.0	50.8	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2410141
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-26
 Instrument ID: ICP-MS2 Run Time: 13:26 Method: 6020
 File ID: NI.051012.132614 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	50.0	49.3	ug/L	98.6	90 - 110		
Arsenic	50.0	50.6	ug/L	101	90 - 110		
Lead	50.0	50.1	ug/L	100	90 - 110		
Selenium	50.0	53.0	ug/L	106	90 - 110		
Thallium	50.0	50.6	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2410141
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-28
 Instrument ID: ICP-MS2 Run Time: 13:58 Method: 6020
 File ID: NI.051012.135800 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	50.0	48.9	ug/L	97.9	90 - 110		
Arsenic	50.0	50.7	ug/L	101	90 - 110		
Lead	50.0	50.9	ug/L	102	90 - 110		
Selenium	50.0	52.0	ug/L	104	90 - 110		
Thallium	50.0	51.2	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2410141
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-32
 Instrument ID: ICP-MS2 Run Time: 14:26 Method: 6020
 File ID: NI.051012.142653 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	50.0	49.2	ug/L	98.4	90 - 110		
Arsenic	50.0	51.2	ug/L	102	90 - 110		
Lead	50.0	50.0	ug/L	100	90 - 110		
Selenium	50.0	52.9	ug/L	106	90 - 110		
Thallium	50.0	50.8	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2410141
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
LOW LEVEL CALIBRATION VERIFICATION

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-07
 Instrument ID: ICP-MS2 Run Time: 09:22 Method: 6020
 File ID: NI.051012.092238 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	0.400	0.419	ug/L	105	50 - 150		
Arsenic	0.400	0.412	ug/L	103	50 - 150		
Lead	0.200	0.199	ug/L	99.4	50 - 150		
Selenium	0.400	0.407	ug/L	102	50 - 150		
Thallium	0.0800	0.0724	ug/L	90.5	50 - 150		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010
 PDF File ID: 2410143
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
LOW LEVEL CALIBRATION VERIFICATION

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-15
 Instrument ID: ICP-MS2 Run Time: 10:17 Method: 6020
 File ID: NI.051012.101700 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	0.400	0.403	ug/L	101	50 - 150		
Arsenic	0.400	0.399	ug/L	99.7	50 - 150		
Lead	0.200	0.195	ug/L	97.3	50 - 150		
Selenium	0.400	0.440	ug/L	110	50 - 150		
Thallium	0.0800	0.0679	ug/L	84.9	50 - 150		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010
 PDF File ID: 2410143
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
LOW LEVEL CALIBRATION VERIFICATION

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397640-34
 Instrument ID: ICP-MS2 Run Time: 14:32 Method: 6020
 File ID: NI.051012.143241 Analyst: JYH QC Key: WATERLOO
 Workgroup (AAB#): WG397649 Cal ID: ICP-MS - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Antimony	0.400	0.410	ug/L	102	50 - 150		
Arsenic	0.400	0.390	ug/L	97.5	50 - 150		
Lead	0.200	0.199	ug/L	99.3	50 - 150		
Selenium	0.400	0.458	ug/L	115	50 - 150		
Thallium	0.0800	0.0667	ug/L	83.4	50 - 150		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010
 PDF File ID: 2410143
 Report generated 05/10/2012 15:41



Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050099
Instrument ID: ICP-MS2
Sol. A: WG397640-08
Sol. AB: WG397640-09

File ID: NI.051012.092530
File ID: NI.051012.092824

Workgroup (AAB#): WG397649
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0575	NS	100	101	101	
Arsenic	NS	0.0167	NS	100	102	102	
Lead	NS	0.0203	NS	100	102	102	
Selenium	NS	0.0349	NS	100	103	103	
Thallium	NS	0.00130	NS	100	99.5	99.5	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050099
Instrument ID: ICP-MS2
Sol. A: WG397640-16
Sol. AB: WG397640-17

File ID: NI.051012.104258
File ID: NI.051012.104551

Workgroup (AAB#): WG397649
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0422	NS	100	99.8	99.8	
Arsenic	NS	0.0169	NS	100	101	101	
Lead	NS	0.0199	NS	100	104	104	
Selenium	NS	0.115	NS	100	101	101	
Thallium	NS	-0.00910	NS	100	101	101	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.



Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050099
Instrument ID: ICP-MS2
Sol. A: WG397640-30
Sol. AB: WG397640-31

File ID: NI.051012.142105
File ID: NI.051012.142358

Workgroup (AAB#): WG397649
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0417	NS	100	98.7	98.7	
Arsenic	NS	-0.0594	NS	100	102	102	
Lead	NS	0.0188	NS	100	104	104	
Selenium	NS	0.0675	NS	100	104	104	
Thallium	NS	-0.00980	NS	100	101	101	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 2410140
Report generated 05/10/2012 15:40



Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login:L12050099 Analytical Method:6020

Analytical Workgroup:WG397649

Matrix:1

Instrument:ICP-MS2

Analyst:JYH

ICAL Date:10-MAY-2012 09:05

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L12050099-01	SAMP	10-MAY-2012 13:46	92.247	95.878	96.203	102.356
L12050099-02	SAMP	10-MAY-2012 13:49	93.81	99.832	98.404	105.23
L12050099-03	SAMP	10-MAY-2012 13:52	94.924	98.355	100.738	106.586
L12050099-04	SAMP	10-MAY-2012 13:55	92.701	95.776	98.2	102.994
L12050099-05	SAMP	10-MAY-2012 14:03	94.934	99.026	100.191	104.706
L12050099-06	SAMP	10-MAY-2012 14:06	93.461	97.907	99.174	104.057
L12050099-07	SAMP	10-MAY-2012 14:09	81.892	89.387	94.455	104.037
L12050099-08	SAMP	10-MAY-2012 14:12	83.041	91.764	97.337	107.511
L12050099-09	SAMP	10-MAY-2012 14:15	94.916	98.549	102.676	107.949
L12050099-10	SAMP	10-MAY-2012 14:18	92.467	95.439	99.032	104.567
L12050105-06	SAMP	10-MAY-2012 13:17	97.498	97.623	95.918	100.132
WG397022-03	BLANK	10-MAY-2012 12:57	95.009	92.246	91.373	95.681
WG397022-04	LCS	10-MAY-2012 13:00	98.804	100.15	98.93	102.54
WG397640-05	ICV	10-MAY-2012 09:16	97.758	96.876	98.111	102.406
WG397640-06	ICB	10-MAY-2012 09:19	95.994	94.043	95.647	97.279
WG397640-07	LLICV	10-MAY-2012 09:22	95.834	93.814	95.078	97.51
WG397640-08	ICS	10-MAY-2012 09:25	92.569	95.008	96.191	99.752
WG397640-09	ICS	10-MAY-2012 09:28	97.575	100.691	101.099	105.958
WG397640-11	CCV	10-MAY-2012 09:38	99.829	103.184	101.508	105.393
WG397640-12	CCB	10-MAY-2012 09:42	96.98	98.797	98.456	99.632
WG397640-13	CCV	10-MAY-2012 10:11	99.641	105.713	106.245	106.714
WG397640-14	CCB	10-MAY-2012 10:14	97.898	103.812	103.055	101.619
WG397640-15	LLCCV	10-MAY-2012 10:17	99.886	103.436	102.217	101.693
WG397640-16	ICS	10-MAY-2012 10:42	96.796	102.077	105.465	109.287
WG397640-17	ICS	10-MAY-2012 10:45	98.28	103.174	106.934	110.43
WG397640-18	CCV	10-MAY-2012 10:48	101.548	103.639	108.858	111.939
WG397640-19	CCB	10-MAY-2012 10:51	96.713	96.939	103.221	102.411
WG397640-24	CCV	10-MAY-2012 12:51	94.977	94.783	92.774	99.103
WG397640-25	CCB	10-MAY-2012 12:54	94.105	92.602	91.191	94.445
WG397640-26	CCV	10-MAY-2012 13:26	96.865	98.222	96.515	101.091
WG397640-27	CCB	10-MAY-2012 13:29	96.265	94.755	95.167	98.002
WG397640-28	CCV	10-MAY-2012 13:58	97.234	98.437	99.674	103.183
WG397640-29	CCB	10-MAY-2012 14:00	97.447	96.462	97.349	100.559
WG397640-30	ICS	10-MAY-2012 14:21	97.96	100.674	104.046	110.329
WG397640-31	ICS	10-MAY-2012 14:23	98.267	99.801	102.43	109.634
WG397640-32	CCV	10-MAY-2012 14:26	98.864	99.237	102.507	107.361
WG397640-33	CCB	10-MAY-2012 14:29	96.353	94.778	98.042	100.462
WG397640-34	LLCCV	10-MAY-2012 14:32	95.47	93.003	96.133	98.996
WG397649-01	PSPK	10-MAY-2012 13:20	99.058	99.831	98.984	103.056
WG397649-02	SERIAL	10-MAY-2012 13:23	95.827	90.398	90.987	93.191

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010

PDF File ID: 2410136

Report generated: 05/10/2012 15:55



Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12050099 Date: 03/16/2012
Instrument 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.



2.3.2.3 Raw Data

MassCal File Name

Mass Calibration File Name Default.tun
MassCal File Path C:\NexIONData\MassCal\Default.tun
Peak Search Window: 1.00

Sample Information

Sample Date/Time: Thursday, May 10, 2012 08:45:30

Mass Calibration and Resolution

Analyte	E Mass	Meas Mass	Mass C DAC Val	Res DAC Value	Meas Peak WCustom Res
Li	7.016	7.025	1320	2021	0.699
Mg	23.985	23.975	4702	2020	0.707
In	114.904	114.875	22869	2022	0.720
U	238.050	238.025	47458	2033	0.723

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	41.751
5.575	8.318
5.625	7.831
5.675	4.219
5.725	4.047
5.775	1.168
5.825	3.138
5.875	1.506
5.925	2.004
5.975	0.830
6.025	2.851
6.075	2.858
6.125	3.075
6.175	2.572
6.225	2.835
6.275	2.876
6.325	4.677
6.375	38.528
6.425	91.287
6.475	104.583
6.525	19.457
6.575	11.665
6.625	6.677
6.675	3.048
6.725	3.038
6.775	1.687
6.825	2.504
6.875	3.078

Report Date/Time: Thursday, May 10, 2012 08:48:04
Page 1

Approved: May 11, 2012



6.925	2.492
6.975	1.598
7.025	2.511
7.075	4.180
7.125	1.795
7.175	1.897
7.225	1.992
7.275	2.688
7.325	4.196
7.375	37.417
7.425	
7.475	136.931
7.525	
7.575	
7.625	91.287
7.675	
7.725	
7.775	55.902
7.825	223.607
7.875	223.607
7.925	
7.975	136.931
8.025	223.607
8.075	91.287
8.125	136.931
8.175	223.607
8.225	
8.275	223.607
8.325	223.607
8.375	
8.425	
8.475	
22.525	10.491
22.575	4.210
22.625	1.443
22.675	1.829
22.725	2.073
22.775	2.224
22.825	2.056
22.875	1.022
22.925	1.594
22.975	2.140
23.025	1.664
23.075	1.256
23.125	1.014
23.175	1.956
23.225	1.663

Report Date/Time: Thursday, May 10, 2012 08:48:04
Page 2

Approved: May 11, 2012



23.275	1.780
23.325	1.439
23.375	57.601
23.425	149.071
23.475	91.287
23.525	20.946
23.575	9.533
23.625	3.883
23.675	2.445
23.725	2.231
23.775	2.346
23.825	2.366
23.875	1.261
23.925	1.796
23.975	0.933
24.025	1.547
24.075	1.718
24.125	1.183
24.175	1.902
24.225	1.692
24.275	1.398
24.325	3.393
24.375	149.071
24.425	223.607
24.475	223.607
24.525	67.420
24.575	24.728
24.625	4.911
24.675	9.322
24.725	8.408
24.775	5.558
24.825	3.612
24.875	4.567
24.925	3.304
24.975	3.373
25.025	6.285
25.075	4.544
25.125	6.183
25.175	3.303
25.225	3.707
25.275	3.019
25.325	8.558
25.375	70.711
25.425	70.711
25.475	91.287
113.525	7.850
113.575	4.000

Report Date/Time: Thursday, May 10, 2012 08:48:04
Page 3

Approved: May 11, 2012



113.625	2.747
113.675	4.016
113.725	2.943
113.775	4.602
113.825	2.432
113.875	3.794
113.925	2.582
113.975	1.937
114.025	1.029
114.075	2.579
114.125	1.982
114.175	5.406
114.225	11.687
114.275	77.883
114.325	36.422
114.375	10.274
114.425	5.547
114.475	2.650
114.525	2.711
114.575	2.412
114.625	1.830
114.675	0.840
114.725	2.520
114.775	1.965
114.825	0.984
114.875	1.352
114.925	2.440
114.975	2.443
115.025	1.648
115.075	2.356
115.125	2.164
115.175	2.546
115.225	1.696
115.275	24.598
115.325	136.931
115.375	35.355
115.425	37.219
115.475	8.671
115.525	10.012
115.575	8.989
115.625	10.018
115.675	5.278
115.725	2.331
115.775	3.341
115.825	5.642
115.875	4.560
115.925	4.790

Report Date/Time: Thursday, May 10, 2012 08:48:04
Page 4

Approved: May 11, 2012



115.975	4.706
116.025	4.363
116.075	4.555
116.125	4.030
116.175	13.305
116.225	9.667
116.275	70.711
116.325	223.607
116.375	136.931
116.425	104.583
116.475	26.726
236.525	
236.575	
236.625	
236.675	
236.725	223.607
236.775	
236.825	
236.875	
236.925	
236.975	
237.025	
237.075	
237.125	
237.175	
237.225	
237.275	
237.325	
237.375	
237.425	149.071
237.475	100.296
237.525	21.066
237.575	8.688
237.625	3.261
237.675	6.004
237.725	3.134
237.775	3.681
237.825	3.534
237.875	1.941
237.925	2.630
237.975	2.340
238.025	1.793
238.075	2.068
238.125	1.340
238.175	1.954
238.225	1.316
238.275	2.070


Report Date/Time: Thursday, May 10, 2012 08:48:04
Page 5

Approved: May 11, 2012



238.325	1.833
238.375	3.407
238.425	4.541
238.475	5.095
238.525	14.546
238.575	26.307
238.625	
238.675	
238.725	
238.775	223.607
238.825	
238.875	223.607
238.925	
238.975	223.607
239.025	223.607
239.075	
239.125	
239.175	
239.225	
239.275	223.607
239.325	
239.375	
239.425	
239.475	

Report Date/Time: Thursday, May 10, 2012 08:48:04
Page 6

Approved: May 11, 2012


Daily Performance Report

Sample ID: Daily Performance Check

Sample Date/Time: Thursday, May 10, 2012 08:50:07
 Sample Description:
 Method File: C:\NexIONData\Method\Daily Performance.mth
 Dataset File: C:\NexIONData\DataSet\050212\Daily Performance Check.740
 MassCal File: C:\NexIONData\MassCal\Default.tun
 Conditions File: C:\NexIONData\Conditions\Default.dac
 Dual Detector Mode: Pulse
 Acq. Dead Time (ns): 33
 Current Dead Time (ns): 33
 Torch Z position (mm): 0.00


Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD	Mode	
Be	9.0		4147.5		4147.501		31.707		0.8	Standard	
Mg	24.0		47218.6		47218.602		484.271		1.0	Standard	
In	114.9		83320.4		83320.361		1013.162		1.2	Standard	
U	238.1		67461.5		67461.539		884.321		1.3	Standard	
[CeO	155.9		1720.6		0.019		0.000		1.1	Standard
>	Ce	139.9		91903.0		91902.975		1025.367		1.1	Standard
]	Ce++	70.0		888.9		0.010		0.000		1.3	Standard
	Bkgd	220.0		0.1		0.100		0.149		149.1	Standard

Current Conditions File Data

Current Value	Description
0.98	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-8.75	Deflector Voltage
1600.00	ICP RF Power
-1881.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-2.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
1.00	DRC Mode NEB
-7.00	DRC Mode QRO
-1.50	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.70	Cell Gas A
200.00	Axial Field Voltage
-17.00	KED Mode CRO
-12.00	KED Mode QRO
-5.00	KED Mode Cell Entrance Voltage
-23.00	KED Mode Cell Exit Voltage
4.40	KED Cell Gas A
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: Daily Performance Check
 Report Date/Time: Thursday, May 10, 2012 08:52:26
 Page 1

Approved: May 11, 2012


SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 5/10/2012 8:50:06 AM

End Time: 5/10/2012 8:52:27 AM

Daily Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9.0122): 4147.50

Obtained Intensity (Mg 23.985): 47218.60

Obtained Intensity (In 114.904): 83320.36

Obtained Intensity (U 238.05): 67461.54

Obtained Intensity (Bkgd 220): 0.10

Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=1720.63 / 91902.97)

Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=888.89 / 91902.97)

Report Date/Time: Thursday, May 10, 2012 08:52:27

Page 1

Approved: May 11, 2012



SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 5/10/2012 8:50:06 AM

Daily Performance Check

Optimization Settings:

Method: Daily Performance.mth.
Intensity Criterion: Be 9.0122 > 2000
Intensity Criterion: Mg 23.985 > 15000
Intensity Criterion: In 114.904 > 40000
Intensity Criterion: U 238.05 > 30000
Intensity Criterion: Bkgd 220 <= 1
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

Obtained Intensity (Be 9.0122): 4147.50
Obtained Intensity (Mg 23.985): 47218.60
Obtained Intensity (In 114.904): 83320.36
Obtained Intensity (U 238.05): 67461.54
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=1720.63 / 91902.97)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=888.89 / 91902.97)

[Passed] Optimum value(s): N/A

End Time: 5/10/2012 8:52:27 AM

Report Date/Time: Thursday, May 10, 2012 08:52:27

Page 2

Approved: May 11, 2012



Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, May 10, 2012 09:02:23

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12600.2	3.2				ug/L		Standard
|	Be	9	5.0	100.0				ug/L		Standard
|	Al	27	16101.9	4.0				ug/L		Standard
>	Sc	45	254528.8	1.7				ug/L		Standard
[	Ti	47	84.3	12.8				ug/L		Standard
|	V	51	5784.6	17.9				ug/L		Standard
|	Cr	52	12211.9	1.6				ug/L		Standard
|	Cr	53	5041.7	34.7				ug/L		Standard
|	Mn	55	1290.4	2.3				ug/L		Standard
|	Co	59	142.7	2.0				ug/L		Standard
|	Ni	60	79.3	7.2				ug/L		Standard
|	Cu	65	153.7	1.6				ug/L		Standard
|	Zn	66	194.0	5.4				ug/L		Standard
>	Ge	72	232023.6	2.7				ug/L		Standard
|	As	75	-296.7	19.6				ug/L		Standard
|	Se	82	17.1	26.4				ug/L		Standard
[	Se-1	77	180.3	24.8				ug/L		Standard
|	Ga	71	210138.7	2.3				mg/L		Standard
[	Rb	85	11.7	24.7				ug/L		Standard
>	Y	89	214065.0	0.8				ug/L		Standard
[	Rh	103	0.0					ug/L		Standard
[	Mo	98	5.9	45.3				ug/L		Standard
|	Ag	107	32.7	18.5				ug/L		Standard
|	Cd	111	437.0	3.5				mg/L		Standard
|	Cd	114	1159.9	6.5				ug/L		Standard
>	In	115	646603.9	1.2				ug/L		Standard
|	Sn	118	864.4	7.9				ug/L		Standard
|	Sb	123	17.7	19.6				ug/L		Standard
[	Ba	135	38.7	31.3				ug/L		Standard
[	Ce	140	46.3	19.3				ug/L		Standard
>	Tb	159	695671.4	1.6				ug/L		Standard
[	Ho	165	9.3	52.9				ug/L		Standard
|	Tl	203	687.3	6.0				ug/L		Standard
|	Tl	205	1624.1	4.1				ug/L		Standard
|	Pb	206	304.7	4.1				ug/L		Standard
|	Pb	207	231.0	2.6				ug/L		Standard
|	Pb	208	1129.3	2.1				ug/L		Standard
|	U	238	3.3	17.3				ug/L		Standard
>	Bi	209	405108.0	0.4				ug/L		Standard
[	Na	23	118.3	4.9				mg/L		Standard
|	Mg	24	376.7	23.6				mg/L		Standard

Sample ID: Blank

Report Date/Time: Thursday, May 10, 2012 09:04:56

Page 1

Approved: May 11, 2012

J. J. H.

K	39	583.3	7.1	mg/L	Standard
Ca	43	73.3	20.8	mg/L	Standard
Fe	54	784.9	12.4	mg/L	Standard
Fe	57	6132.9	4.3	mg/L	Standard
Sc-1	45	254528.8	1.7	mg/L	Standard
Cl	35	1641777.7	39.8	ug/L	Standard
Kr	83	59.8	6.1	ug/L	Standard
Br	81	11553.6	5.8	ug/L	Standard
P	31	45410.5	2.2	ug/L	Standard
S	34	568857.2	3.2	ug/L	Standard
Sr	88	240.0	16.7	ug/L	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115			
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159			
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: Blank

Report Date/Time: Thursday, May 10, 2012 09:04:56

Page 2

Approved: May 11, 2012




|	Pb	207
|	Pb	208
|	U	238
|>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
|	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: Blank
 Report Date/Time: Thursday, May 10, 2012 09:04:56
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, May 10, 2012 09:05:17

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12466.8	4.0				ug/L	12600	Standard
|	Be	9	13.3	43.3				ug/L	5	Standard
|	Al	27	14800.6	2.5				ug/L	16102	Standard
>	Sc	45	257835.7	1.7				ug/L	254529	Standard
|	Ti	47	97.3	7.7				ug/L	84	Standard
|	V	51	5018.6	3.8				ug/L	5785	Standard
|	Cr	52	12014.8	0.3				ug/L	12212	Standard
|	Cr	53	3117.0	18.7				ug/L	5042	Standard
|	Mn	55	1313.4	2.4				ug/L	1290	Standard
|	Co	59	131.7	11.8				ug/L	143	Standard
|	Ni	60	79.7	14.0				ug/L	79	Standard
|	Cu	65	150.0	8.4				ug/L	154	Standard
|	Zn	66	195.0	5.9				ug/L	194	Standard
>	Ge	72	230262.2	0.2				ug/L	232024	Standard
|	As	75	-261.1	17.6				ug/L	-297	Standard
|	Se	82	23.6	35.1				ug/L	17	Standard
|	Se-1	77	146.3	9.3				ug/L	180	Standard
|	Ga	71	207156.2	0.5				mg/L	210139	Standard
|	Rb	85	16.7	62.4				ug/L	12	Standard
>	Y	89	206999.8	2.0				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	7.1	30.2				ug/L	6	Standard
|	Ag	107	30.7	21.0				ug/L	33	Standard
|	Cd	111	467.7	3.8				mg/L	437	Standard
|	Cd	114	1171.1	1.3				ug/L	1160	Standard
>	In	115	632948.7	1.2				ug/L	646604	Standard
|	Sn	118	831.0	4.2				ug/L	864	Standard
|	Sb	123	18.9	17.8				ug/L	18	Standard
|	Ba	135	41.0	8.8				ug/L	39	Standard
|	Ce	140	49.7	16.1				ug/L	46	Standard
>	Tb	159	688008.3	1.2				ug/L	695671	Standard
|	Ho	165	7.0	49.5				ug/L	9	Standard
|	Tl	203	610.3	12.3				ug/L	687	Standard
|	Tl	205	1414.1	13.5				ug/L	1624	Standard
|	Pb	206	270.0	1.9				ug/L	305	Standard
|	Pb	207	246.7	7.8				ug/L	231	Standard
|	Pb	208	1084.7	0.6				ug/L	1129	Standard
|	U	238	2.7	78.1				ug/L	3	Standard
>	Bi	209	401597.5	1.3				ug/L	405108	Standard
|	Na	23	96.7	19.6				mg/L	118	Standard
|	Mg	24	388.3	4.5				mg/L	377	Standard

Sample ID: Standard 1

Report Date/Time: Thursday, May 10, 2012 09:07:49

Page 1

Approved: May 11, 2012

J. J. H.

K	39	608.3	5.0	mg/L	583	Standard
Ca	43	90.0	9.6	mg/L	73	Standard
Fe	54	767.1	5.8	mg/L	785	Standard
Fe	57	6306.3	2.7	mg/L	6133	Standard
Sc-1	45	257835.7	1.7	mg/L	254529	Standard
Cl	35	1051644.2	30.9	ug/L	1641778	Standard
Kr	83	55.3	12.0	ug/L	60	Standard
Br	81	11257.5	1.9	ug/L	11554	Standard
P	31	47555.4	1.2	ug/L	45410	Standard
S	34	585100.8	2.6	ug/L	568857	Standard
Sr	88	243.3	9.7	ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115			
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159			
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: Standard 1

Report Date/Time: Thursday, May 10, 2012 09:07:49

Page 2

Approved: May 11, 2012



|	Pb	207
|	Pb	208
|	U	238
|>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
|	Sr	88


QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: Standard 1

Report Date/Time: Thursday, May 10, 2012 09:07:49

Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, May 10, 2012 09:08:09

Number of Replicates: 3

Autosampler Position: 2

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12258.3	2.8				ug/L	12600	Standard
|	Be	9	213.3	22.2				ug/L	5	Standard
|	Al	27	13018.9	2.2				ug/L	16102	Standard
>	Sc	45	252400.5	2.1				ug/L	254529	Standard
|	Ti	47	246.3	11.0				ug/L	84	Standard
|	V	51	5248.0	1.8				ug/L	5785	Standard
|	Cr	52	12437.4	0.9				ug/L	12212	Standard
|	Cr	53	2731.1	21.4				ug/L	5042	Standard
|	Mn	55	2744.2	1.4				ug/L	1290	Standard
|	Co	59	871.4	3.1				ug/L	143	Standard
|	Ni	60	224.0	7.2				ug/L	79	Standard
|	Cu	65	274.3	6.5				ug/L	154	Standard
|	Zn	66	281.0	6.2				ug/L	194	Standard
>	Ge	72	230807.6	2.2				ug/L	232024	Standard
|	As	75	-199.7	13.9				ug/L	-297	Standard
|	Se	82	26.7	30.6				ug/L	17	Standard
|	Se-1	77	153.7	12.6				ug/L	180	Standard
|	Ga	71	208170.0	2.1				mg/L	210139	Standard
|	Rb	85	6.7	114.6				ug/L	12	Standard
>	Y	89	205635.1	2.9				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	440.3	3.8				ug/L	6	Standard
|	Ag	107	472.7	6.7				ug/L	33	Standard
|	Cd	111	635.8	8.9				mg/L	437	Standard
|	Cd	114	1740.3	2.9				ug/L	1160	Standard
>	In	115	635914.3	1.5				ug/L	646604	Standard
|	Sn	118	1644.4	1.9				ug/L	864	Standard
|	Sb	123	570.3	0.4				ug/L	18	Standard
|	Ba	135	263.3	10.3				ug/L	39	Standard
|	Ce	140	51.0	10.4				ug/L	46	Standard
>	Tb	159	690114.9	1.2				ug/L	695671	Standard
|	Ho	165	8.0	21.7				ug/L	9	Standard
|	Tl	203	1408.1	6.0				ug/L	687	Standard
|	Tl	205	3292.7	8.2				ug/L	1624	Standard
|	Pb	206	947.4	2.5				ug/L	305	Standard
|	Pb	207	806.4	1.3				ug/L	231	Standard
|	Pb	208	3754.8	1.8				ug/L	1129	Standard
|	U	238	1307.4	3.0				ug/L	3	Standard
>	Bi	209	399584.7	1.3				ug/L	405108	Standard
|	Na	23	115.0	13.0				mg/L	118	Standard
|	Mg	24	3177.0	1.3				mg/L	377	Standard

Sample ID: Standard 2

Report Date/Time: Thursday, May 10, 2012 09:10:42

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	648.3	1.9	mg/L	583	Standard
Ca	43	81.7	7.1	mg/L	73	Standard
Fe	54	877.5	9.7	mg/L	785	Standard
Fe	57	6818.2	3.8	mg/L	6133	Standard
Sc-1	45	252400.5	2.1	mg/L	254529	Standard
Cl	35	909216.3	31.4	ug/L	1641778	Standard
Kr	83	58.9	1.7	ug/L	60	Standard
Br	81	11275.9	2.9	ug/L	11554	Standard
P	31	47338.9	4.6	ug/L	45410	Standard
S	34	568672.6	3.1	ug/L	568857	Standard
Sr	88	261.7	14.3	ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115			
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159			
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: Standard 2

Report Date/Time: Thursday, May 10, 2012 09:10:42

Page 2

Approved: May 11, 2012




|	Pb	207
|	Pb	208
|	U	238
|>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
|	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: Standard 2
 Report Date/Time: Thursday, May 10, 2012 09:10:42
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Thursday, May 10, 2012 09:11:01

Number of Replicates: 3

Autosampler Position: 3

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12697.0	4.1	50.0000	53.787	107.6	ug/L	12600	Standard
|	Be	9	167064.6	2.1	50.0000	0.217	0.4	ug/L	5	Standard
|	Al	27	804362.4	3.4	50.0000	0.728	1.5	ug/L	16102	Standard
>	Sc	45	256559.6	2.2				ug/L	254529	Standard
|	Ti	47	153410.6	1.7	100.0000	2.414	2.4	ug/L	84	Standard
|	V	51	779011.4	4.4	50.0000	0.491	1.0	ug/L	5785	Standard
|	Cr	52	585922.9	3.4	50.0000	0.445	0.9	ug/L	12212	Standard
|	Cr	53	89888.4	2.2	50.0000	0.826	1.7	ug/L	5042	Standard
|	Mn	55	1035677.1	1.9	50.0000	0.988	2.0	ug/L	1290	Standard
|	Co	59	734902.6	1.8	50.0000	1.380	2.8	ug/L	143	Standard
|	Ni	60	154499.3	2.1	50.0000	0.925	1.8	ug/L	79	Standard
|	Cu	65	140650.8	2.6	50.0000	0.802	1.6	ug/L	154	Standard
|	Zn	66	63323.8	2.5	50.0000	0.879	1.8	ug/L	194	Standard
>	Ge	72	231627.6	3.6				ug/L	232024	Standard
|	As	75	56843.4	2.6	50.0000	0.680	1.4	ug/L	-297	Standard
|	Se	82	6450.0	2.8	50.0000	0.613	1.2	ug/L	17	Standard
|	Se-1	77	4267.3	4.5	50.0000	0.522	1.0	ug/L	180	Standard
|	Ga	71	207257.6	3.4				mg/L	210139	Standard
|	Rb	85	981.7	7.5				ug/L	12	Standard
>	Y	89	209599.2	3.4				ug/L	214065	Standard
|	Rh	103	35.0	14.3				ug/L	0	Standard
|	Mo	98	413611.0	2.7	100.0000	0.861	0.9	ug/L	6	Standard
|	Ag	107	421354.3	2.4	50.0000	0.169	0.3	ug/L	33	Standard
|	Cd	111	227412.3	1.9	50.0000	0.146	0.3	mg/L	437	Standard
|	Cd	114	592594.7	1.3	50.0000	0.789	1.6	ug/L	1160	Standard
>	In	115	643023.3	2.1				ug/L	646604	Standard
|	Sn	118	779470.8	2.3	50.0000	0.236	0.5	ug/L	864	Standard
|	Sb	123	547466.5	1.7	50.0000	0.471	0.9	ug/L	18	Standard
|	Ba	135	229011.4	1.6	50.0000	0.515	1.0	ug/L	39	Standard
|	Ce	140	869.7	4.8				ug/L	46	Standard
>	Tb	159	705659.3	2.5				ug/L	695671	Standard
|	Ho	165	18.0	38.5				ug/L	9	Standard
|	Tl	203	807838.7	1.2	50.0000	0.688	1.4	ug/L	687	Standard
|	Tl	205	1877593.8	1.7	50.0000	0.414	0.8	ug/L	1624	Standard
|	Pb	206	644401.0	1.5	50.0000	0.499	1.0	ug/L	305	Standard
|	Pb	207	551181.8	1.5	50.0000	0.519	1.0	ug/L	231	Standard
|	Pb	208	2540887.7	1.5	50.0000	0.559	1.1	ug/L	1129	Standard
|	U	238	1298037.0	2.3	50.0000	0.921	1.8	ug/L	3	Standard
>	Bi	209	396777.2	2.5				ug/L	405108	Standard
|	Na	23	18107.5	4.3	5.0000	0.147	2.9	mg/L	118	Standard
|	Mg	24	2727784.1	1.8	5.0000	0.028	0.6	mg/L	377	Standard

Sample ID: Standard 3

Report Date/Time: Thursday, May 10, 2012 09:13:34

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	59468.2	2.7	5.0000	0.029	0.6	mg/L	583	Standard
Ca	43	2153.5	1.4	5.0000	0.041	0.8	mg/L	73	Standard
Fe	54	28922.1	3.1	5.0000	0.057	1.1	mg/L	785	Standard
Fe	57	891355.0	2.9	5.0000	0.060	1.2	mg/L	6133	Standard
Sc-1	45	256559.6	2.2				mg/L	254529	Standard
Cl	35	836184.5	33.7				ug/L	1641778	Standard
Kr	83	54.6	5.9				ug/L	60	Standard
Br	81	10795.5	5.5				ug/L	11554	Standard
P	31	57242.1	0.4				ug/L	45410	Standard
S	34	668932.7	4.6				ug/L	568857	Standard
Sr	88	676.7	7.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115			
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159			
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: Standard 3

Report Date/Time: Thursday, May 10, 2012 09:13:34

Page 2

Approved: May 11, 2012



|	Pb	207
|	Pb	208
|	U	238
|>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
|	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: Standard 3

Report Date/Time: Thursday, May 10, 2012 09:13:34

Page 3

Approved: May 11, 2012



Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Thursday, May 10, 2012 09:13:54

Number of Replicates: 3

Autosampler Position: 4

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13414.3	5.3	153.0915	45.759	29.9	ug/L	12600	Standard
|	Be	9	323973.5	4.6	100.5774	3.550	3.5	ug/L	5	Standard
|	Al	27	1500939.8	1.8	99.0570	2.623	2.6	ug/L	16102	Standard
>	Sc	45	245906.8	2.2				ug/L	254529	Standard
|	Ti	47	295224.8	2.3	199.2584	1.113	0.6	ug/L	84	Standard
|	V	51	1502349.3	1.9	99.9041	0.705	0.7	ug/L	5785	Standard
|	Cr	52	1118483.5	2.2	99.7419	0.597	0.6	ug/L	12212	Standard
|	Cr	53	170014.6	1.8	99.4952	0.455	0.5	ug/L	5042	Standard
|	Mn	55	1956126.9	1.8	98.7277	0.623	0.6	ug/L	1290	Standard
|	Co	59	1387793.4	0.9	98.6826	1.392	1.4	ug/L	143	Standard
|	Ni	60	291147.1	3.9	98.5792	2.776	2.8	ug/L	79	Standard
|	Cu	65	263049.8	2.6	98.2220	1.304	1.3	ug/L	154	Standard
|	Zn	66	119805.7	2.6	98.8582	1.198	1.2	ug/L	194	Standard
>	Ge	72	224475.8	2.1				ug/L	232024	Standard
|	As	75	109567.7	2.2	99.5962	0.559	0.6	ug/L	-297	Standard
|	Se	82	12342.6	2.0	99.4265	0.465	0.5	ug/L	17	Standard
|	Se-1	77	8119.5	1.4	99.9770	0.904	0.9	ug/L	180	Standard
|	Ga	71	200013.2	2.9				mg/L	210139	Standard
|	Rb	85	7170.0	2.6				ug/L	12	Standard
>	Y	89	201687.6	2.9				ug/L	214065	Standard
|	Rh	103	61.7	32.8				ug/L	0	Standard
|	Mo	98	796443.3	0.8	199.0543	4.043	2.0	ug/L	6	Standard
|	Ag	107	800232.8	3.2	98.8186	1.525	1.5	ug/L	33	Standard
|	Cd	111	433700.0	2.1	99.0729	1.150	1.2	mg/L	437	Standard
|	Cd	114	1133497.1	2.1	99.2161	0.781	0.8	ug/L	1160	Standard
>	In	115	625291.1	2.9				ug/L	646604	Standard
|	Sn	118	1539643.1	2.5	100.8150	2.091	2.1	ug/L	864	Standard
|	Sb	123	1071937.6	2.0	100.3493	2.258	2.3	ug/L	18	Standard
|	Ba	135	445279.4	1.1	100.0081	2.403	2.4	ug/L	39	Standard
|	Ce	140	332.3	5.1				ug/L	46	Standard
>	Tb	159	705112.3	0.8				ug/L	695671	Standard
|	Ho	165	24.7	16.9				ug/L	9	Standard
|	Tl	203	1561604.6	1.8	99.8781	0.156	0.2	ug/L	687	Standard
|	Tl	205	3768842.5	1.3	101.7694	0.760	0.7	ug/L	1624	Standard
|	Pb	206	1246773.7	1.8	99.9191	0.494	0.5	ug/L	305	Standard
|	Pb	207	1060271.4	1.3	99.6327	0.677	0.7	ug/L	231	Standard
|	Pb	208	4982233.2	1.3	100.5903	0.722	0.7	ug/L	1129	Standard
|	U	238	2768770.5	1.2	104.7831	0.797	0.8	ug/L	3	Standard
>	Bi	209	384495.3	2.0				ug/L	405108	Standard
|	Na	23	35174.1	2.4	10.0821	0.277	2.7	mg/L	118	Standard
|	Mg	24	5327015.3	0.5	10.0947	0.249	2.5	mg/L	377	Standard

Sample ID: Standard 4

Report Date/Time: Thursday, May 10, 2012 09:16:26

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	111065.8	3.0	9.8949	0.190	1.9	mg/L	583	Standard
Ca	43	4150.6	3.8	10.1239	0.339	3.3	mg/L	73	Standard
Fe	54	55014.7	3.1	10.0380	0.266	2.7	mg/L	785	Standard
Fe	57	1685556.5	1.3	9.9498	0.107	1.1	mg/L	6133	Standard
Sc-1	45	245906.8	2.2				mg/L	254529	Standard
Cl	35	768307.3	35.7				ug/L	1641778	Standard
Kr	83	57.4	3.9				ug/L	60	Standard
Br	81	10497.0	3.7				ug/L	11554	Standard
P	31	54831.6	1.7				ug/L	45410	Standard
S	34	584650.2	8.1				ug/L	568857	Standard
Sr	88	15082.5	1.1				ug/L	240	Standard

QC Calculated Values

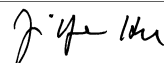
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115			
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159			
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: Standard 4

Report Date/Time: Thursday, May 10, 2012 09:16:26

Page 2

Approved: May 11, 2012




|	Pb	207
|	Pb	208
|	U	238
|>	Bi	209
|	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
|	Cl	35
|	Kr	83
|	Br	81
|	P	31
|	S	34
|	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: Standard 4
 Report Date/Time: Thursday, May 10, 2012 09:16:26
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, May 10, 2012 09:16:48

Number of Replicates: 3

Autosampler Position: 201

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12079.8	3.0	-19.4841	16.170	83.0	ug/L	12600	Standard
|	Be	9	170411.6	2.0	51.5232	2.351	4.6	ug/L	5	Standard
|	Al	27	809934.5	0.4	51.6527	1.603	3.1	ug/L	16102	Standard
>	Sc	45	252709.5	2.9				ug/L	254529	Standard
|	Ti	47	153194.2	0.4	103.3157	3.756	3.6	ug/L	84	Standard
|	V	51	773664.5	0.5	51.2690	1.475	2.9	ug/L	5785	Standard
|	Cr	52	583968.8	0.9	51.5389	1.380	2.7	ug/L	12212	Standard
|	Cr	53	89393.0	1.8	51.5554	1.953	3.8	ug/L	5042	Standard
|	Mn	55	1037347.5	0.6	52.2900	2.067	4.0	ug/L	1290	Standard
|	Co	59	723345.7	1.3	51.4012	2.219	4.3	ug/L	143	Standard
|	Ni	60	153594.3	1.3	51.9536	1.067	2.1	ug/L	79	Standard
|	Cu	65	139249.1	1.6	51.9243	0.920	1.8	ug/L	154	Standard
|	Zn	66	64771.2	2.1	53.3102	0.678	1.3	ug/L	194	Standard
>	Ge	72	224774.2	3.4				ug/L	232024	Standard
|	As	75	57416.4	1.2	52.2550	1.115	2.1	ug/L	-297	Standard
|	Se	82	6583.0	1.8	52.9030	0.829	1.6	ug/L	17	Standard
|	Se-1	77	4268.3	2.2	51.6315	0.908	1.8	ug/L	180	Standard
|	Ga	71	201837.0	3.1				mg/L	210139	Standard
|	Rb	85	993.4	13.0				ug/L	12	Standard
>	Y	89	213089.9	1.7				ug/L	214065	Standard
|	Rh	103	41.7	25.0				ug/L	0	Standard
|	Mo	98	418379.6	1.6	103.0254	1.101	1.1	ug/L	6	Standard
|	Ag	107	431477.2	1.7	52.5147	0.380	0.7	ug/L	33	Standard
|	Cd	111	230008.8	1.2	51.7381	0.272	0.5	mg/L	437	Standard
|	Cd	114	594374.2	1.1	51.2280	0.425	0.8	ug/L	1160	Standard
>	In	115	634387.7	1.6				ug/L	646604	Standard
|	Sn	118	807101.5	1.5	52.0555	0.491	0.9	ug/L	864	Standard
|	Sb	123	554794.0	1.3	51.1776	0.279	0.5	ug/L	18	Standard
|	Ba	135	233205.9	1.5	51.6018	0.448	0.9	ug/L	39	Standard
|	Ce	140	865.7	2.5				ug/L	46	Standard
>	Tb	159	712411.3	0.9				ug/L	695671	Standard
|	Ho	165	16.7	12.5				ug/L	9	Standard
|	Tl	203	829493.4	0.6	51.4990	0.939	1.8	ug/L	687	Standard
|	Tl	205	1922323.3	1.2	50.3849	1.172	2.3	ug/L	1624	Standard
|	Pb	206	660297.6	1.5	51.3726	1.120	2.2	ug/L	305	Standard
|	Pb	207	570457.7	1.6	52.0396	1.310	2.5	ug/L	231	Standard
|	Pb	208	2619182.7	0.9	51.3327	0.853	1.7	ug/L	1129	Standard
|	U	238	1356897.7	0.5	49.8585	0.603	1.2	ug/L	3	Standard
>	Bi	209	396026.0	1.6				ug/L	405108	Standard
|	Na	23	18195.9	1.2	5.0633	0.158	3.1	mg/L	118	Standard
|	Mg	24	2436500.4	17.9	4.4878	0.772	17.2	mg/L	377	Standard

Sample ID: QC Std 1

Report Date/Time: Thursday, May 10, 2012 09:19:21

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	59247.3	0.9	5.1143	0.150	2.9	mg/L	583	Standard
Ca	43	2208.5	2.0	5.1536	0.255	4.9	mg/L	73	Standard
Fe	54	29200.0	2.5	5.1104	0.030	0.6	mg/L	785	Standard
Fe	57	852740.2	1.2	4.8822	0.120	2.5	mg/L	6133	Standard
Sc-1	45	252709.5	2.9				mg/L	254529	Standard
Cl	35	715893.1	36.7				ug/L	1641778	Standard
Kr	83	54.0	0.6				ug/L	60	Standard
Br	81	10597.9	3.6				ug/L	11554	Standard
P	31	54277.9	1.2				ug/L	45410	Standard
S	34	570970.4	3.2				ug/L	568857	Standard
Sr	88	648.3	17.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	103.046		
Al	27	103.305		
Sc	45			
Ti	47	103.316		
V	51	102.538		
Cr	52	103.078		
Cr	53	103.111		
Mn	55	104.580		
Co	59	102.802		
Ni	60	103.907		
Cu	65	103.849		
Zn	66	106.620		
Ge	72		96.876	
As	75	104.510		
Se	82	105.806		
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.545	
Rh	103			
Mo	98	103.025		
Ag	107	105.029		
Cd	111	103.476		
Cd	114			
In	115		98.111	
Sn	118	104.111		
Sb	123	102.355		
Ba	135	103.204		
Ce	140			
Tb	159		102.406	
Ho	165			
Tl	203	102.998		
Tl	205			
Pb	206	102.745		

Sample ID: QC Std 1

Report Date/Time: Thursday, May 10, 2012 09:19:21

Page 2

Approved: May 11, 2012




Pb	207	104.079	
Pb	208	102.665	
U	238	99.717	
> Bi	209		97.758
Na	23	101.267	
Mg	24	89.757	
K	39	102.286	
Ca	43	103.071	
Fe	54	102.207	
Fe	57	97.644	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Mg	24	

Sample ID: QC Std 1
 Report Date/Time: Thursday, May 10, 2012 09:19:21
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, May 10, 2012 09:19:43

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	11983.1	0.2	39.0954	23.424	59.9	ug/L	12600	Standard
|	Be	9	16.7	96.4	-0.0092	0.005	55.2	ug/L	5	Standard
|	Al	27	11037.4	2.1	-0.0394	0.024	59.9	ug/L	16102	Standard
>	Sc	45	239298.6	1.6				ug/L	254529	Standard
|	Ti	47	98.3	12.3	0.0068	0.008	123.7	ug/L	84	Standard
|	V	51	3678.2	1.8	-0.0382	0.003	8.0	ug/L	5785	Standard
|	Cr	52	10249.8	1.0	-0.0901	0.021	23.2	ug/L	12212	Standard
|	Cr	53	1468.4	6.4	-0.6282	0.058	9.2	ug/L	5042	Standard
|	Mn	55	1197.4	4.9	-0.0227	0.003	13.6	ug/L	1290	Standard
|	Co	59	154.7	7.2	0.0011	0.001	70.9	ug/L	143	Standard
|	Ni	60	84.0	13.7	0.0054	0.004	72.0	ug/L	79	Standard
|	Cu	65	122.7	4.5	-0.0026	0.002	87.9	ug/L	154	Standard
|	Zn	66	170.7	5.6	-0.0307	0.010	32.6	ug/L	194	Standard
>	Ge	72	218202.8	1.3				ug/L	232024	Standard
|	As	75	-222.3	10.3	0.0189	0.024	127.3	ug/L	-297	Standard
|	Se	82	25.8	32.4	0.0551	0.067	122.4	ug/L	17	Standard
|	Se-1	77	106.0	6.6	-0.4538	0.091	20.1	ug/L	180	Standard
|	Ga	71	196847.4	2.6				mg/L	210139	Standard
|	Rb	85	16.7	34.6				ug/L	12	Standard
>	Y	89	205040.3	2.6				ug/L	214065	Standard
|	Rh	103	5.0	100.0				ug/L	0	Standard
|	Mo	98	92.2	35.4	0.0151	0.008	55.1	ug/L	6	Standard
|	Ag	107	52.7	14.4	-0.0008	0.001	119.1	ug/L	33	Standard
|	Cd	111	454.8	5.9	0.0123	0.007	53.3	mg/L	437	Standard
|	Cd	114	1128.4	0.8	0.0000	0.001	9531.5	ug/L	1160	Standard
>	In	115	618458.5	0.4				ug/L	646604	Standard
|	Sn	118	943.0	4.9	0.0065	0.003	48.3	ug/L	864	Standard
|	Sb	123	1292.0	43.9	0.1198	0.054	45.1	ug/L	18	Standard
|	Ba	135	46.3	36.4	0.0023	0.004	165.6	ug/L	39	Standard
|	Ce	140	41.7	25.0				ug/L	46	Standard
>	Tb	159	676741.5	1.2				ug/L	695671	Standard
|	Ho	165	6.0	16.7				ug/L	9	Standard
|	Tl	203	541.0	29.7	-0.0025	0.010	423.3	ug/L	687	Standard
|	Tl	205	1214.7	29.3	-0.0031	0.010	311.9	ug/L	1624	Standard
|	Pb	206	298.3	8.7	0.0006	0.002	380.6	ug/L	305	Standard
|	Pb	207	275.3	19.6	0.0027	0.005	193.5	ug/L	231	Standard
|	Pb	208	1238.7	12.1	0.0018	0.003	177.0	ug/L	1129	Standard
|	U	238	59.0	79.3	0.0046	0.002	38.3	ug/L	3	Standard
>	Bi	209	388878.3	0.6				ug/L	405108	Standard
|	Na	23	100.0	26.5	0.0022	0.008	336.6	mg/L	118	Standard
|	Mg	24	480.0	15.0	0.0001	0.000	189.3	mg/L	377	Standard

Sample ID: QC Std 2

Report Date/Time: Thursday, May 10, 2012 09:22:16

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	625.0	10.8	0.0059	0.006	103.5	mg/L	583	Standard
Ca	43	68.3	18.4	-0.0182	0.032	175.4	mg/L	73	Standard
Fe	54	763.3	2.3	-0.0079	0.003	33.1	mg/L	785	Standard
Fe	57	4555.7	5.1	-0.0066	0.002	23.7	mg/L	6133	Standard
Sc-1	45	239298.6	1.6				mg/L	254529	Standard
Cl	35	687584.2	39.1				ug/L	1641778	Standard
Kr	83	51.7	7.1				ug/L	60	Standard
Br	81	10431.9	3.8				ug/L	11554	Standard
P	31	49847.7	1.4				ug/L	45410	Standard
S	34	563603.7	1.2				ug/L	568857	Standard
Sr	88	201.7	14.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.043	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		95.784	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		95.647	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		97.279	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 2

Report Date/Time: Thursday, May 10, 2012 09:22:16

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	95.994
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 2
 Report Date/Time: Thursday, May 10, 2012 09:22:16
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, May 10, 2012 09:22:38

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	11792.9	3.3	-5.1185	65.115	1272.1	ug/L	12600	Standard
|	Be	9	16.7	96.4	-0.0092	0.005	56.6	ug/L	5	Standard
|	Al	27	14975.7	1.5	0.2101	0.027	12.7	ug/L	16102	Standard
>	Sc	45	244002.8	1.9				ug/L	254529	Standard
|	Ti	47	104.0	19.3	0.0110	0.015	132.4	ug/L	84	Standard
|	V	51	9546.3	2.9	0.3661	0.025	6.8	ug/L	5785	Standard
|	Cr	52	19353.0	0.7	0.7581	0.029	3.8	ug/L	12212	Standard
|	Cr	53	2730.2	8.6	0.1480	0.159	107.6	ug/L	5042	Standard
|	Mn	55	10886.2	1.5	0.4822	0.005	1.1	ug/L	1290	Standard
|	Co	59	5686.4	1.6	0.4068	0.010	2.4	ug/L	143	Standard
|	Ni	60	4629.7	4.0	1.5930	0.052	3.3	ug/L	79	Standard
|	Cu	65	2265.8	5.8	0.8230	0.044	5.3	ug/L	154	Standard
|	Zn	66	8450.7	1.8	7.0291	0.172	2.4	ug/L	194	Standard
>	Ge	72	217671.6	1.3				ug/L	232024	Standard
|	As	75	198.3	12.6	0.4121	0.026	6.3	ug/L	-297	Standard
|	Se	82	67.9	12.8	0.4074	0.080	19.7	ug/L	17	Standard
|	Se-1	77	138.0	6.5	-0.0374	0.102	272.8	ug/L	180	Standard
|	Ga	71	196405.4	1.9				mg/L	210139	Standard
|	Rb	85	21.7	26.6				ug/L	12	Standard
>	Y	89	203652.3	3.6				ug/L	214065	Standard
|	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	37.5	28.8	0.0013	0.003	203.4	ug/L	6	Standard
|	Ag	107	3221.7	0.5	0.3973	0.003	0.8	ug/L	33	Standard
|	Cd	111	1467.3	2.6	0.2483	0.008	3.2	mg/L	437	Standard
|	Cd	114	3814.1	2.1	0.2399	0.007	2.8	ug/L	1160	Standard
>	In	115	614777.0	0.2				ug/L	646604	Standard
|	Sn	118	773.0	4.5	-0.0044	0.002	49.4	ug/L	864	Standard
|	Sb	123	4426.1	3.0	0.4188	0.012	2.8	ug/L	18	Standard
|	Ba	135	3269.7	2.9	0.7384	0.020	2.7	ug/L	39	Standard
|	Ce	140	55.0	17.3				ug/L	46	Standard
>	Tb	159	678352.6	0.6				ug/L	695671	Standard
|	Ho	165	7.3	39.4				ug/L	9	Standard
|	Tl	203	1720.8	6.7	0.0724	0.008	11.6	ug/L	687	Standard
|	Tl	205	4090.9	7.7	0.0739	0.009	12.6	ug/L	1624	Standard
|	Pb	206	2839.9	3.3	0.2024	0.008	4.0	ug/L	305	Standard
|	Pb	207	2388.5	1.8	0.1994	0.006	3.2	ug/L	231	Standard
|	Pb	208	11082.6	0.7	0.1987	0.002	1.2	ug/L	1129	Standard
|	U	238	10155.1	0.5	0.3830	0.006	1.5	ug/L	3	Standard
>	Bi	209	388232.4	1.1				ug/L	405108	Standard
|	Na	23	96.7	13.0	0.0007	0.003	469.8	mg/L	118	Standard
|	Mg	24	498.3	4.7	0.0001	0.000	72.4	mg/L	377	Standard

Sample ID: QC Std 3

Report Date/Time: Thursday, May 10, 2012 09:25:10

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	590.0	3.7	0.0017	0.001	60.5	mg/L	583	Standard
Ca	43	81.7	12.7	0.0119	0.026	220.2	mg/L	73	Standard
Fe	54	783.3	9.9	-0.0068	0.017	255.6	mg/L	785	Standard
Fe	57	4742.4	6.0	-0.0060	0.002	37.2	mg/L	6133	Standard
Sc-1	45	244002.8	1.9				mg/L	254529	Standard
Cl	35	667573.1	38.7				ug/L	1641778	Standard
Kr	83	55.3	7.3				ug/L	60	Standard
Br	81	10410.2	4.1				ug/L	11554	Standard
P	31	50693.8	1.4				ug/L	45410	Standard
S	34	558767.9	2.4				ug/L	568857	Standard
Sr	88	213.3	30.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	91.529		
Cr	52	94.768		
Cr	53			
Mn	55	96.438		
Co	59	101.690		
Ni	60	99.564		
Cu	65	102.877		
Zn	66	112.466		
Ge	72		93.814	
As	75	103.019		
Se	82	101.847		
Se-1	77			
Ga	71			
Rb	85			
Y	89		95.136	
Rh	103			
Mo	98			
Ag	107	99.325		
Cd	111	103.472		
Cd	114			
In	115		95.078	
Sn	118			
Sb	123	104.705		
Ba	135	98.457		
Ce	140			
Tb	159		97.510	
Ho	165			
Tl	203	90.470		
Tl	205			
Pb	206			

Sample ID: QC Std 3

Report Date/Time: Thursday, May 10, 2012 09:25:10

Page 2

Approved: May 11, 2012




Pb	207		
Pb	208	99.339	
U	238	95.753	
> Bi	209		95.834
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 3
 Report Date/Time: Thursday, May 10, 2012 09:25:10
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, May 10, 2012 09:25:30

Number of Replicates: 3

Autosampler Position: 203

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12271.6	2.4	27.1175	18.088	66.7	ug/L	12600	Standard
|	Be	9	15.0	88.2	-0.0098	0.004	41.5	ug/L	5	Standard
|	Al	27	69465877.0	1.6	4593.1854	55.721	1.2	ug/L	16102	Standard
>	Sc	45	247297.0	1.1				ug/L	254529	Standard
|	Ti	47	164039.6	1.1	112.7308	1.845	1.6	ug/L	84	Standard
|	V	51	4670.4	4.0	0.0267	0.017	62.8	ug/L	5785	Standard
|	Cr	52	12324.3	2.2	0.0908	0.040	43.6	ug/L	12212	Standard
|	Cr	53	3045.3	3.5	0.3163	0.040	12.5	ug/L	5042	Standard
|	Mn	55	2380.2	3.0	0.0375	0.004	10.1	ug/L	1290	Standard
|	Co	59	377.0	8.9	0.0170	0.002	13.4	ug/L	143	Standard
|	Ni	60	1178.7	5.6	0.3825	0.017	4.5	ug/L	79	Standard
|	Cu	65	533.3	2.7	0.1532	0.008	5.1	ug/L	154	Standard
|	Zn	66	2017.5	2.0	1.5222	0.017	1.1	ug/L	194	Standard
>	Ge	72	220440.2	1.4				ug/L	232024	Standard
|	As	75	-227.0	16.7	0.0167	0.036	212.5	ug/L	-297	Standard
|	Se	82	23.6	37.7	0.0349	0.071	203.1	ug/L	17	Standard
|	Se-1	77	230.7	3.3	1.1243	0.117	10.4	ug/L	180	Standard
|	Ga	71	195339.0	1.6				mg/L	210139	Standard
|	Rb	85	3735.5	1.5				ug/L	12	Standard
>	Y	89	198862.0	2.4				ug/L	214065	Standard
|	Rh	103	3.3	173.2				ug/L	0	Standard
|	Mo	98	399927.5	0.7	100.4425	0.454	0.5	ug/L	6	Standard
|	Ag	107	95.3	11.6	0.0045	0.001	30.6	ug/L	33	Standard
|	Cd	111	634.2	5.8	0.0529	0.009	16.2	mg/L	437	Standard
|	Cd	114	3239.6	0.8	0.1854	0.003	1.6	ug/L	1160	Standard
>	In	115	621977.0	0.2				ug/L	646604	Standard
|	Sn	118	1123.4	4.5	0.0181	0.003	17.6	ug/L	864	Standard
|	Sb	123	637.9	10.8	0.0575	0.006	11.2	ug/L	18	Standard
|	Ba	135	127.7	4.8	0.0206	0.001	6.7	ug/L	39	Standard
|	Ce	140	1809.1	1.2				ug/L	46	Standard
>	Tb	159	693943.6	0.6				ug/L	695671	Standard
|	Ho	165	10.0	40.0				ug/L	9	Standard
|	Tl	203	579.0	4.1	0.0013	0.002	122.3	ug/L	687	Standard
|	Tl	205	1239.7	3.7	-0.0013	0.001	102.3	ug/L	1624	Standard
|	Pb	206	546.7	6.1	0.0219	0.003	13.4	ug/L	305	Standard
|	Pb	207	453.0	5.3	0.0207	0.002	11.8	ug/L	231	Standard
|	Pb	208	2090.7	3.4	0.0203	0.002	8.1	ug/L	1129	Standard
|	U	238	29.7	21.7	0.0036	0.000	7.2	ug/L	3	Standard
>	Bi	209	375006.1	0.4				ug/L	405108	Standard
|	Na	23	43815.0	2.8	12.4907	0.233	1.9	mg/L	118	Standard
|	Mg	24	2631952.0	1.8	4.9574	0.080	1.6	mg/L	377	Standard

Sample ID: QC Std 4

Report Date/Time: Thursday, May 10, 2012 09:28:04

Page 1

Approved: May 11, 2012

J. J. H.

K	39	58594.8	0.9	5.1667	0.054	1.1	mg/L	583	Standard
Ca	43	6012.9	4.0	14.6706	0.665	4.5	mg/L	73	Standard
Fe	54	67357.1	3.1	12.2518	0.275	2.2	mg/L	785	Standard
Fe	57	1944964.3	2.0	11.4192	0.098	0.9	mg/L	6133	Standard
Sc-1	45	247297.0	1.1				mg/L	254529	Standard
Cl	35	9736080.2	2.1				ug/L	1641778	Standard
Kr	83	65.1	11.9				ug/L	60	Standard
Br	81	10431.9	2.0				ug/L	11554	Standard
P	31	5807067.1	1.2				ug/L	45410	Standard
S	34	1254879.0	0.8				ug/L	568857	Standard
Sr	88	1176.7	0.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	91.864		
Sc	45			
Ti	47	112.731		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.008	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		92.898	
Rh	103			
Mo	98	100.443		
Ag	107			
Cd	111			
Cd	114			
In	115		96.191	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		99.752	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 4

Report Date/Time: Thursday, May 10, 2012 09:28:04

Page 2

Approved: May 11, 2012




Pb	207		
Pb	208		
U	238		
> Bi	209		92.569
Na	23	99.926	
Mg	24	99.148	
K	39	103.333	
Ca	43	97.804	
Fe	54	98.015	
Fe	57	91.354	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 4
 Report Date/Time: Thursday, May 10, 2012 09:28:04
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, May 10, 2012 09:28:24

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13129.0	1.0	51.7920	25.250	48.8	ug/L	12600	Standard
|	Be	9	348533.7	1.5	102.5183	2.130	2.1	ug/L	5	Standard
|	Al	27	65251266.3	1.5	4110.4448	92.802	2.3	ug/L	16102	Standard
>	Sc	45	259617.4	1.7				ug/L	254529	Standard
|	Ti	47	154765.8	1.1	100.3439	1.693	1.7	ug/L	84	Standard
|	V	51	1561058.9	1.6	99.7347	1.234	1.2	ug/L	5785	Standard
|	Cr	52	1158266.0	1.7	99.2328	1.041	1.0	ug/L	12212	Standard
|	Cr	53	176555.4	1.6	99.2777	2.295	2.3	ug/L	5042	Standard
|	Mn	55	1991879.5	0.7	96.5924	1.307	1.4	ug/L	1290	Standard
|	Co	59	1450109.7	0.5	99.0592	0.921	0.9	ug/L	143	Standard
|	Ni	60	306430.1	0.6	99.7023	0.930	0.9	ug/L	79	Standard
|	Cu	65	276417.3	1.5	99.1820	2.124	2.1	ug/L	154	Standard
|	Zn	66	128109.0	0.5	101.5809	1.162	1.1	ug/L	194	Standard
>	Ge	72	233627.5	0.7				ug/L	232024	Standard
|	As	75	117065.0	0.4	102.2422	1.105	1.1	ug/L	-297	Standard
|	Se	82	13342.3	0.7	103.2735	0.080	0.1	ug/L	17	Standard
|	Se-1	77	8611.4	0.3	101.9062	0.622	0.6	ug/L	180	Standard
|	Ga	71	209151.4	0.8				mg/L	210139	Standard
|	Rb	85	3608.8	3.5				ug/L	12	Standard
>	Y	89	216950.2	3.7				ug/L	214065	Standard
|	Rh	103	75.0	34.6				ug/L	0	Standard
|	Mo	98	374763.9	1.8	89.5808	1.937	2.2	ug/L	6	Standard
|	Ag	107	749241.3	0.9	88.5316	1.851	2.1	ug/L	33	Standard
|	Cd	111	458178.0	1.2	100.1285	1.650	1.6	mg/L	437	Standard
|	Cd	114	1178649.5	0.9	98.7036	1.905	1.9	ug/L	1160	Standard
>	In	115	653711.9	2.8				ug/L	646604	Standard
|	Sn	118	1906.1	1.6	0.0636	0.003	4.0	ug/L	864	Standard
|	Sb	123	1130869.1	1.4	101.2621	1.632	1.6	ug/L	18	Standard
|	Ba	135	458370.0	0.8	98.4678	2.016	2.0	ug/L	39	Standard
|	Ce	140	1739.4	4.9				ug/L	46	Standard
>	Tb	159	737121.3	2.5				ug/L	695671	Standard
|	Ho	165	17.7	8.6				ug/L	9	Standard
|	Tl	203	1598903.2	0.9	99.4927	1.499	1.5	ug/L	687	Standard
|	Tl	205	3854954.5	0.8	101.2680	1.557	1.5	ug/L	1624	Standard
|	Pb	206	1276648.9	1.5	99.5315	0.946	0.9	ug/L	305	Standard
|	Pb	207	1111939.3	1.3	101.6451	1.254	1.2	ug/L	231	Standard
|	Pb	208	5182925.5	1.3	101.7935	1.097	1.1	ug/L	1129	Standard
|	U	238	2775198.5	0.5	102.1897	2.620	2.6	ug/L	3	Standard
>	Bi	209	395286.0	2.3				ug/L	405108	Standard
|	Na	23	41573.7	2.8	11.2873	0.214	1.9	mg/L	118	Standard
|	Mg	24	2009297.9	18.3	3.6123	0.721	20.0	mg/L	377	Standard

Sample ID: QC Std 5

Report Date/Time: Thursday, May 10, 2012 09:30:56

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	53211.6	0.5	4.4628	0.058	1.3	mg/L	583	Standard
Ca	43	5587.7	1.3	12.9625	0.086	0.7	mg/L	73	Standard
Fe	54	62539.1	1.0	10.8205	0.151	1.4	mg/L	785	Standard
Fe	57	1922786.2	0.7	10.7532	0.118	1.1	mg/L	6133	Standard
Sc-1	45	259617.4	1.7				mg/L	254529	Standard
Cl	35	9001163.6	2.5				ug/L	1641778	Standard
Kr	83	65.2	5.5				ug/L	60	Standard
Br	81	11039.9	3.9				ug/L	11554	Standard
P	31	5381742.0	1.4				ug/L	45410	Standard
S	34	1225041.1	1.0				ug/L	568857	Standard
Sr	88	1353.4	15.6				ug/L	240	Standard

QC Calculated Values

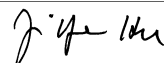
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	82.209		
Sc	45			
Ti	47	100.344		
V	51	99.735		
Cr	52	99.233		
Cr	53			
Mn	55	96.592		
Co	59	99.059		
Ni	60	99.702		
Cu	65	99.182		
Zn	66	101.581		
Ge	72		100.691	
As	75	102.242		
Se	82	103.273		
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.348	
Rh	103			
Mo	98	89.581		
Ag	107	88.532		
Cd	111	100.129		
Cd	114			
In	115		101.099	
Sn	118			
Sb	123	101.262		
Ba	135	98.468		
Ce	140			
Tb	159		105.958	
Ho	165			
Tl	203	99.493		
Tl	205			
Pb	206	99.531		

Sample ID: QC Std 5

Report Date/Time: Thursday, May 10, 2012 09:30:56

Page 2

Approved: May 11, 2012




Pb	207	101.645	
Pb	208	101.794	
U	238	102.190	
> Bi	209		97.575
Na	23	90.299	
Mg	24	72.246	
K	39	89.256	
Ca	43	86.417	
Fe	54	86.564	
Fe	57	86.026	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Mg	24	

Sample ID: QC Std 5
 Report Date/Time: Thursday, May 10, 2012 09:30:56
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 09:31:19

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12198.2	2.1	-54.6220	24.464	44.8	ug/L	12600	Standard
|	Be	9	173845.1	1.3	50.5195	0.762	1.5	ug/L	5	Standard
|	Al	27	789108.2	3.1	48.3278	1.361	2.8	ug/L	16102	Standard
>	Sc	45	262702.9	0.4				ug/L	254529	Standard
|	Ti	47	156094.0	1.3	99.4616	0.543	0.5	ug/L	84	Standard
|	V	51	799159.1	1.7	50.0397	0.729	1.5	ug/L	5785	Standard
|	Cr	52	600419.4	1.3	50.0494	0.102	0.2	ug/L	12212	Standard
|	Cr	53	90380.5	1.9	49.1847	0.593	1.2	ug/L	5042	Standard
|	Mn	55	1037765.0	1.1	49.4185	0.420	0.8	ug/L	1290	Standard
|	Co	59	746409.2	1.3	50.1087	0.593	1.2	ug/L	143	Standard
|	Ni	60	157718.7	1.5	50.4229	0.443	0.9	ug/L	79	Standard
|	Cu	65	142813.4	1.7	50.3342	0.495	1.0	ug/L	154	Standard
|	Zn	66	63461.3	2.0	49.3635	0.698	1.4	ug/L	194	Standard
>	Ge	72	237707.4	1.3				ug/L	232024	Standard
|	As	75	58651.5	1.6	50.4576	0.352	0.7	ug/L	-297	Standard
|	Se	82	6812.0	2.2	51.7404	0.566	1.1	ug/L	17	Standard
|	Se-1	77	4372.6	1.4	49.9429	0.095	0.2	ug/L	180	Standard
|	Ga	71	211871.4	1.7				mg/L	210139	Standard
|	Rb	85	1073.4	10.5				ug/L	12	Standard
>	Y	89	215356.7	1.9				ug/L	214065	Standard
|	Rh	103	40.0	43.3				ug/L	0	Standard
|	Mo	98	421921.3	1.9	99.8740	2.756	2.8	ug/L	6	Standard
|	Ag	107	478526.5	5.2	56.0011	3.477	6.2	ug/L	33	Standard
|	Cd	111	236299.2	1.1	51.0914	1.072	2.1	mg/L	437	Standard
|	Cd	114	598722.2	0.9	49.5961	0.843	1.7	ug/L	1160	Standard
>	In	115	660052.3	1.4				ug/L	646604	Standard
|	Sn	118	795517.4	0.7	49.3158	0.862	1.7	ug/L	864	Standard
|	Sb	123	567976.9	0.7	50.3635	0.993	2.0	ug/L	18	Standard
|	Ba	135	232911.3	1.1	49.5356	0.742	1.5	ug/L	39	Standard
|	Ce	140	885.7	2.6				ug/L	46	Standard
>	Tb	159	730136.4	0.8				ug/L	695671	Standard
|	Ho	165	20.7	31.5				ug/L	9	Standard
|	Tl	203	830153.5	0.8	50.5620	0.173	0.3	ug/L	687	Standard
|	Tl	205	1927839.3	1.5	49.5678	0.502	1.0	ug/L	1624	Standard
|	Pb	206	665003.5	1.2	50.7595	0.675	1.3	ug/L	305	Standard
|	Pb	207	561385.1	2.4	50.2357	0.937	1.9	ug/L	231	Standard
|	Pb	208	2601477.6	1.5	50.0190	0.534	1.1	ug/L	1129	Standard
|	U	238	1349526.2	2.0	48.6470	0.570	1.2	ug/L	3	Standard
>	Bi	209	403611.0	0.8				ug/L	405108	Standard
|	Na	23	18553.0	5.9	4.9625	0.278	5.6	mg/L	118	Standard
|	Mg	24	2729653.9	2.3	4.8396	0.093	1.9	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 09:33:51

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	61061.2	2.0	5.0670	0.084	1.7	mg/L	583	Standard
Ca	43	2120.1	3.6	4.7397	0.172	3.6	mg/L	73	Standard
Fe	54	28886.7	2.0	4.8552	0.080	1.6	mg/L	785	Standard
Fe	57	881769.3	2.5	4.8538	0.106	2.2	mg/L	6133	Standard
Sc-1	45	262702.9	0.4				mg/L	254529	Standard
Cl	35	874456.3	30.4				ug/L	1641778	Standard
Kr	83	59.0	4.4				ug/L	60	Standard
Br	81	11121.6	1.3				ug/L	11554	Standard
P	31	56614.8	2.9				ug/L	45410	Standard
S	34	632710.4	1.0				ug/L	568857	Standard
Sr	88	648.3	5.7				ug/L	240	Standard

QC Calculated Values

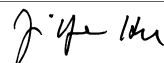
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	96.656		
Sc	45			
Ti	47	99.462		
V	51	100.079		
Cr	52	100.099		
Cr	53			
Mn	55	98.837		
Co	59	100.217		
Ni	60	100.846		
Cu	65	100.668		
Zn	66	98.727		
Ge	72		102.450	
As	75	100.915		
Se	82	103.481		
Se-1	77			
Ga	71			
Rb	85			
Y	89		100.603	
Rh	103			
Mo	98	99.874		
Ag	107	112.002		
Cd	111	102.183		
Cd	114			
In	115		102.080	
Sn	118	98.632		
Sb	123	100.727		
Ba	135	99.071		
Ce	140			
Tb	159		104.954	
Ho	165			
Tl	203	101.124		
Tl	205			
Pb	206	101.519		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 09:33:51

Page 2

Approved: May 11, 2012




Pb	207	100.471	
Pb	208	100.038	
U	238	97.294	
> Bi	209		99.630
Na	23	99.249	
Mg	24	96.791	
K	39	101.339	
Ca	43	94.795	
Fe	54	97.103	
Fe	57	97.075	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Ag	107	

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 09:33:51
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 09:38:47

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12723.7	2.1	-1.9515	25.085	1285.4	ug/L	12600	Standard
|	Be	9	176460.9	3.7	51.3246	1.458	2.8	ug/L	5	Standard
|	Al	27	794354.6	2.0	48.7066	0.504	1.0	ug/L	16102	Standard
>	Sc	45	262431.8	1.3				ug/L	254529	Standard
|	Ti	47	156472.3	1.8	99.0175	1.773	1.8	ug/L	84	Standard
|	V	51	798133.0	1.9	49.6248	0.487	1.0	ug/L	5785	Standard
|	Cr	52	600356.1	2.2	49.6887	0.700	1.4	ug/L	12212	Standard
|	Cr	53	93097.0	2.9	50.3370	0.193	0.4	ug/L	5042	Standard
|	Mn	55	1063095.5	2.0	50.2719	0.484	1.0	ug/L	1290	Standard
|	Co	59	749580.3	2.4	49.9657	0.308	0.6	ug/L	143	Standard
|	Ni	60	157121.3	3.0	49.8722	0.159	0.3	ug/L	79	Standard
|	Cu	65	143224.7	2.6	50.1228	0.192	0.4	ug/L	154	Standard
|	Zn	66	64147.9	2.2	49.5500	0.449	0.9	ug/L	194	Standard
>	Ge	72	239411.3	2.8				ug/L	232024	Standard
|	As	75	59483.0	2.8	50.8085	0.320	0.6	ug/L	-297	Standard
|	Se	82	6971.6	2.8	52.5813	0.022	0.0	ug/L	17	Standard
|	Se-1	77	4437.3	3.7	50.3271	0.426	0.8	ug/L	180	Standard
|	Ga	71	214156.1	2.4				mg/L	210139	Standard
|	Rb	85	1150.0	6.1				ug/L	12	Standard
>	Y	89	218587.2	0.9				ug/L	214065	Standard
|	Rh	103	38.3	37.7				ug/L	0	Standard
|	Mo	98	426220.9	1.4	101.4860	2.238	2.2	ug/L	6	Standard
|	Ag	107	456166.6	3.1	53.6633	0.114	0.2	ug/L	33	Standard
|	Cd	111	235528.1	2.1	51.2168	0.701	1.4	mg/L	437	Standard
|	Cd	114	597903.4	1.8	49.8176	0.755	1.5	ug/L	1160	Standard
>	In	115	656357.8	3.3				ug/L	646604	Standard
|	Sn	118	800581.1	2.4	49.9142	0.765	1.5	ug/L	864	Standard
|	Sb	123	569911.2	2.0	50.8275	0.941	1.9	ug/L	18	Standard
|	Ba	135	234379.9	1.7	50.1485	1.300	2.6	ug/L	39	Standard
|	Ce	140	847.0	2.8				ug/L	46	Standard
>	Tb	159	733192.0	2.2				ug/L	695671	Standard
|	Ho	165	27.7	14.6				ug/L	9	Standard
|	Tl	203	824476.1	2.3	50.1142	0.878	1.8	ug/L	687	Standard
|	Tl	205	1924250.9	2.3	49.3756	0.725	1.5	ug/L	1624	Standard
|	Pb	206	656414.7	2.1	50.0003	0.639	1.3	ug/L	305	Standard
|	Pb	207	560474.7	1.9	50.0560	0.542	1.1	ug/L	231	Standard
|	Pb	208	2593211.8	1.7	49.7608	0.518	1.0	ug/L	1129	Standard
|	U	238	1357330.9	2.6	48.8296	0.797	1.6	ug/L	3	Standard
>	Bi	209	404416.7	1.3				ug/L	405108	Standard
|	Na	23	18556.4	1.8	4.9697	0.117	2.3	mg/L	118	Standard
|	Mg	24	2749523.6	1.6	4.8801	0.043	0.9	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 09:41:20

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	60413.6	1.3	5.0185	0.084	1.7	mg/L	583	Standard
Ca	43	2090.1	6.4	4.6730	0.250	5.4	mg/L	73	Standard
Fe	54	29143.0	1.7	4.9057	0.119	2.4	mg/L	785	Standard
Fe	57	877360.9	2.1	4.8346	0.078	1.6	mg/L	6133	Standard
Sc-1	45	262431.8	1.3				mg/L	254529	Standard
Cl	35	1418476.5	48.9				ug/L	1641778	Standard
Kr	83	61.9	12.7				ug/L	60	Standard
Br	81	11011.5	4.1				ug/L	11554	Standard
P	31	56743.6	0.5				ug/L	45410	Standard
S	34	625424.8	5.2				ug/L	568857	Standard
Sr	88	618.3	6.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.413		
Sc	45			
Ti	47	99.018		
V	51	99.250		
Cr	52	99.377		
Cr	53			
Mn	55	100.544		
Co	59	99.931		
Ni	60	99.744		
Cu	65	100.246		
Zn	66	99.100		
Ge	72		103.184	
As	75	101.617		
Se	82	105.163		
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.113	
Rh	103			
Mo	98	101.486		
Ag	107	107.327		
Cd	111	102.434		
Cd	114			
In	115		101.508	
Sn	118	99.828		
Sb	123	101.655		
Ba	135	100.297		
Ce	140			
Tb	159		105.393	
Ho	165			
Tl	203	100.228		
Tl	205			
Pb	206	100.001		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 09:41:20

Page 2

Approved: May 11, 2012




Pb	207	100.112	
Pb	208	99.522	
U	238	97.659	
> Bi	209		99.829
Na	23	99.394	
Mg	24	97.601	
K	39	100.371	
Ca	43	93.460	
Fe	54	98.115	
Fe	57	96.691	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 09:41:20
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 09:42:01

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12366.7	1.3	20.2818	21.675	106.9	ug/L	12600	Standard
|	Be	9	20.0	66.1	-0.0084	0.004	46.6	ug/L	5	Standard
|	Al	27	11064.0	2.0	-0.0719	0.016	22.3	ug/L	16102	Standard
>	Sc	45	250654.0	2.8				ug/L	254529	Standard
|	Ti	47	91.3	17.0	-0.0012	0.010	801.6	ug/L	84	Standard
|	V	51	4270.1	3.7	-0.0118	0.006	54.9	ug/L	5785	Standard
|	Cr	52	10837.2	1.7	-0.0839	0.028	33.1	ug/L	12212	Standard
|	Cr	53	1944.3	11.2	-0.3946	0.124	31.4	ug/L	5042	Standard
|	Mn	55	1253.7	6.7	-0.0229	0.004	15.7	ug/L	1290	Standard
|	Co	59	186.0	7.1	0.0027	0.001	26.9	ug/L	143	Standard
|	Ni	60	88.0	3.0	0.0053	0.000	6.7	ug/L	79	Standard
|	Cu	65	122.7	17.3	-0.0050	0.007	143.1	ug/L	154	Standard
|	Zn	66	153.3	12.1	-0.0517	0.016	31.3	ug/L	194	Standard
>	Ge	72	229231.7	1.8				ug/L	232024	Standard
|	As	75	-250.7	11.1	0.0036	0.027	755.0	ug/L	-297	Standard
|	Se	82	27.0	25.9	0.0543	0.053	96.8	ug/L	17	Standard
|	Se-1	77	118.3	5.5	-0.3687	0.062	16.8	ug/L	180	Standard
|	Ga	71	209502.0	2.4				mg/L	210139	Standard
|	Rb	85	11.7	65.5				ug/L	12	Standard
>	Y	89	206685.5	1.9				ug/L	214065	Standard
|	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	85.4	49.8	0.0126	0.010	78.6	ug/L	6	Standard
|	Ag	107	84.7	59.7	0.0028	0.006	207.9	ug/L	33	Standard
|	Cd	111	446.2	4.6	0.0073	0.004	58.0	mg/L	437	Standard
|	Cd	114	1155.2	5.5	-0.0006	0.004	718.4	ug/L	1160	Standard
>	In	115	636620.6	2.0				ug/L	646604	Standard
|	Sn	118	887.7	4.6	0.0012	0.002	153.3	ug/L	864	Standard
|	Sb	123	292.3	34.7	0.0243	0.009	36.1	ug/L	18	Standard
|	Ba	135	46.0	13.6	0.0019	0.001	66.5	ug/L	39	Standard
|	Ce	140	39.0	24.5				ug/L	46	Standard
>	Tb	159	693111.1	2.2				ug/L	695671	Standard
|	Ho	165	6.7	37.7				ug/L	9	Standard
|	Tl	203	599.3	11.0	0.0008	0.004	492.8	ug/L	687	Standard
|	Tl	205	1380.1	13.9	0.0009	0.005	547.0	ug/L	1624	Standard
|	Pb	206	333.7	7.4	0.0031	0.002	52.5	ug/L	305	Standard
|	Pb	207	275.0	9.6	0.0023	0.002	90.1	ug/L	231	Standard
|	Pb	208	1279.4	10.5	0.0023	0.002	100.6	ug/L	1129	Standard
|	U	238	54.3	56.9	0.0044	0.001	25.5	ug/L	3	Standard
>	Bi	209	392872.8	1.6				ug/L	405108	Standard
|	Na	23	111.7	9.3	0.0043	0.004	83.9	mg/L	118	Standard
|	Mg	24	495.0	22.2	0.0001	0.000	360.9	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 09:44:34

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	688.3	9.9	0.0089	0.005	56.9	mg/L	583	Standard
Ca	43	76.7	19.9	-0.0055	0.038	695.2	mg/L	73	Standard
Fe	54	837.3	7.9	-0.0008	0.015	1811.4	mg/L	785	Standard
Fe	57	4389.0	2.2	-0.0088	0.000	3.6	mg/L	6133	Standard
Sc-1	45	250654.0	2.8				mg/L	254529	Standard
Cl	35	1008862.0	27.5				ug/L	1641778	Standard
Kr	83	58.0	11.5				ug/L	60	Standard
Br	81	11029.0	3.2				ug/L	11554	Standard
P	31	50148.8	3.7				ug/L	45410	Standard
S	34	575121.4	1.3				ug/L	568857	Standard
Sr	88	231.7	14.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.797	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		96.553	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.456	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		99.632	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 09:44:34

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	96.980
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 09:44:34
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: PBW 53 WG397206-03

Sample Date/Time: Thursday, May 10, 2012 09:45:14

Number of Replicates: 3

Autosampler Position: 205

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12590.2	0.8	-18.8209	13.633	72.4	ug/L	12600	Standard
|	Be	9	18.3	110.2	-0.0091	0.006	64.8	ug/L	5	Standard
|	Al	27	15104.2	10.5	0.1449	0.105	72.7	ug/L	16102	Standard
>	Sc	45	263273.2	1.9				ug/L	254529	Standard
|	Ti	47	102.7	4.6	0.0052	0.003	61.8	ug/L	84	Standard
|	V	51	4206.5	2.4	-0.0204	0.007	34.1	ug/L	5785	Standard
|	Cr	52	11508.4	2.3	-0.0416	0.026	61.4	ug/L	12212	Standard
|	Cr	53	1859.3	9.8	-0.4619	0.103	22.3	ug/L	5042	Standard
|	Mn	55	1363.4	3.0	-0.0186	0.002	10.4	ug/L	1290	Standard
|	Co	59	164.3	17.7	0.0010	0.002	200.0	ug/L	143	Standard
|	Ni	60	106.7	17.4	0.0110	0.006	58.2	ug/L	79	Standard
|	Cu	65	124.7	14.8	-0.0049	0.007	135.9	ug/L	154	Standard
|	Zn	66	1697.4	0.8	1.1756	0.023	2.0	ug/L	194	Standard
>	Ge	72	233069.3	0.9				ug/L	232024	Standard
|	As	75	-230.2	11.7	0.0255	0.022	85.5	ug/L	-297	Standard
|	Se	82	28.7	5.6	0.0648	0.014	21.4	ug/L	17	Standard
|	Se-1	77	119.0	20.2	-0.3832	0.295	76.9	ug/L	180	Standard
|	Ga	71	211264.5	1.1				mg/L	210139	Standard
|	Rb	85	23.3	12.4				ug/L	12	Standard
>	Y	89	209977.2	2.4				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	100.8	57.6	0.0165	0.015	89.4	ug/L	6	Standard
|	Ag	107	91.3	88.9	0.0037	0.010	270.0	ug/L	33	Standard
|	Cd	111	458.5	6.0	0.0093	0.008	88.8	mg/L	437	Standard
|	Cd	114	1151.0	6.2	-0.0017	0.008	460.8	ug/L	1160	Standard
>	In	115	642554.6	2.0				ug/L	646604	Standard
|	Sn	118	932.7	6.5	0.0036	0.005	139.3	ug/L	864	Standard
|	Sb	123	225.9	22.6	0.0181	0.005	27.5	ug/L	18	Standard
|	Ba	135	63.0	33.0	0.0056	0.005	86.5	ug/L	39	Standard
|	Ce	140	59.7	33.5				ug/L	46	Standard
>	Tb	159	692386.4	1.0				ug/L	695671	Standard
|	Ho	165	6.7	31.2				ug/L	9	Standard
|	Tl	203	563.0	35.7	-0.0018	0.013	689.8	ug/L	687	Standard
|	Tl	205	1358.4	31.6	-0.0001	0.011	15962.5	ug/L	1624	Standard
|	Pb	206	471.7	14.1	0.0135	0.005	40.4	ug/L	305	Standard
|	Pb	207	393.7	22.6	0.0129	0.008	64.6	ug/L	231	Standard
|	Pb	208	1824.7	14.8	0.0127	0.006	43.6	ug/L	1129	Standard
|	U	238	57.7	149.2	0.0045	0.003	70.1	ug/L	3	Standard
>	Bi	209	397771.4	1.1				ug/L	405108	Standard
|	Na	23	136.7	22.1	0.0095	0.009	90.2	mg/L	118	Standard
|	Mg	24	658.3	24.6	0.0003	0.000	98.0	mg/L	377	Standard

Sample ID: PBW 53 WG397206-03

Report Date/Time: Thursday, May 10, 2012 09:47:48

Page 1

Approved: May 11, 2012




K	39	643.3	3.9	0.0022	0.001	49.1	mg/L	583	Standard
Ca	43	60.0	8.3	-0.0535	0.009	16.9	mg/L	73	Standard
Fe	54	874.2	6.7	-0.0020	0.010	523.8	mg/L	785	Standard
Fe	57	4800.8	4.7	-0.0078	0.002	22.0	mg/L	6133	Standard
Sc-1	45	263273.2	1.9				mg/L	254529	Standard
Cl	35	954292.2	31.4				ug/L	1641778	Standard
Kr	83	56.2	9.6				ug/L	60	Standard
Br	81	11002.3	3.3				ug/L	11554	Standard
P	31	54236.1	1.3				ug/L	45410	Standard
S	34	595117.3	1.5				ug/L	568857	Standard
Sr	88	365.0	14.3				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.451	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		98.090	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		99.374	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		99.528	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: PBW 53 WG397206-03
 Report Date/Time: Thursday, May 10, 2012 09:47:48
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	98.189
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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 Lower	Cr	53	

Sample ID: PBW 53 WG397206-03
 Report Date/Time: Thursday, May 10, 2012 09:47:48
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: LCSW 53 WG397206-04

Sample Date/Time: Thursday, May 10, 2012 09:48:07

Number of Replicates: 3

Autosampler Position: 206

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13727.9	2.1	-11.2400	30.234	269.0	ug/L	12600	Standard
|	Be	9	85698.5	2.6	22.9252	0.607	2.6	ug/L	5	Standard
|	Al	27	472670.1	2.2	26.3114	0.994	3.8	ug/L	16102	Standard
>	Sc	45	285308.5	1.9				ug/L	254529	Standard
|	Ti	47	148.3	9.6	0.0280	0.009	33.2	ug/L	84	Standard
|	V	51	420357.9	1.5	24.7477	0.424	1.7	ug/L	5785	Standard
|	Cr	52	323574.5	1.1	24.9997	0.260	1.0	ug/L	12212	Standard
|	Cr	53	49788.4	3.4	24.9010	1.128	4.5	ug/L	5042	Standard
|	Mn	55	562853.3	2.2	25.3087	0.612	2.4	ug/L	1290	Standard
|	Co	59	395893.3	0.7	25.1317	0.362	1.4	ug/L	143	Standard
|	Ni	60	82922.6	1.2	25.0620	0.409	1.6	ug/L	79	Standard
|	Cu	65	76216.9	0.5	25.3828	0.308	1.2	ug/L	154	Standard
|	Zn	66	34217.3	2.3	25.0835	0.266	1.1	ug/L	194	Standard
>	Ge	72	251345.8	1.3				ug/L	232024	Standard
|	As	75	29396.6	1.7	24.0359	0.117	0.5	ug/L	-297	Standard
|	Se	82	3459.2	1.9	24.7720	0.657	2.7	ug/L	17	Standard
|	Se-1	77	2195.5	1.3	22.7616	0.392	1.7	ug/L	180	Standard
|	Ga	71	231806.2	1.1				mg/L	210139	Standard
|	Rb	85	46.7	27.0				ug/L	12	Standard
>	Y	89	237170.7	2.1				ug/L	214065	Standard
|	Rh	103	25.0	60.0				ug/L	0	Standard
|	Mo	98	74.0	7.4	0.0087	0.001	14.5	ug/L	6	Standard
|	Ag	107	249511.7	1.6	28.1495	0.847	3.0	ug/L	33	Standard
|	Cd	111	119029.2	0.8	24.7703	0.527	2.1	mg/L	437	Standard
|	Cd	114	295218.5	0.8	23.5309	0.474	2.0	ug/L	1160	Standard
>	In	115	684478.2	1.3				ug/L	646604	Standard
|	Sn	118	1478.4	0.8	0.0326	0.001	3.6	ug/L	864	Standard
|	Sb	123	280447.4	1.2	23.9784	0.486	2.0	ug/L	18	Standard
|	Ba	135	118496.0	1.6	24.3003	0.598	2.5	ug/L	39	Standard
|	Ce	140	179.3	4.0				ug/L	46	Standard
>	Tb	159	748547.0	1.5				ug/L	695671	Standard
|	Ho	165	10.7	43.3				ug/L	9	Standard
|	Tl	203	420966.0	0.6	24.9390	0.223	0.9	ug/L	687	Standard
|	Tl	205	983326.0	1.7	24.5937	0.508	2.1	ug/L	1624	Standard
|	Pb	206	334674.7	0.9	24.8535	0.282	1.1	ug/L	305	Standard
|	Pb	207	292762.1	1.5	25.4907	0.357	1.4	ug/L	231	Standard
|	Pb	208	1332506.9	1.1	24.9271	0.244	1.0	ug/L	1129	Standard
|	U	238	675260.2	0.1	23.6965	0.113	0.5	ug/L	3	Standard
>	Bi	209	414649.7	0.6				ug/L	405108	Standard
|	Na	23	128.3	22.8	0.0046	0.008	166.9	mg/L	118	Standard
|	Mg	24	815.0	9.2	0.0005	0.000	29.8	mg/L	377	Standard

Sample ID: LCSW 53 WG397206-04

Report Date/Time: Thursday, May 10, 2012 09:50:40

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	665.0	8.0	-0.0002	0.005	2120.5	mg/L	583	Standard
Ca	43	61.7	33.8	-0.0611	0.042	68.4	mg/L	73	Standard
Fe	54	1199.2	5.4	0.0382	0.008	20.7	mg/L	785	Standard
Fe	57	5024.2	3.8	-0.0087	0.001	12.3	mg/L	6133	Standard
Sc-1	45	285308.5	1.9				mg/L	254529	Standard
Cl	35	926136.4	25.7				ug/L	1641778	Standard
Kr	83	59.9	8.1				ug/L	60	Standard
Br	81	13070.7	7.5				ug/L	11554	Standard
P	31	80447.3	3.3				ug/L	45410	Standard
S	34	630581.2	4.5				ug/L	568857	Standard
Sr	88	1820.1	6.0				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		108.328	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		110.794	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		105.857	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.601	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: LCSW 53 WG397206-04
 Report Date/Time: Thursday, May 10, 2012 09:50:40
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	102.355
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: LCSW 53 WG397206-04
 Report Date/Time: Thursday, May 10, 2012 09:50:40
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205012507 WG397206-02

Sample Date/Time: Thursday, May 10, 2012 09:51:00

Number of Replicates: 3

Autosampler Position: 207

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	29101.3	2.1	1401.0281	123.391	8.8	ug/L	12600	Standard
|	Be	9	40.0	25.0	-0.0036	0.003	75.3	ug/L	5	Standard
|	Al	27	789136.1	3.3	44.9180	1.009	2.2	ug/L	16102	Standard
>	Sc	45	282394.6	3.6				ug/L	254529	Standard
|	Ti	47	1833.8	15.4	1.0775	0.169	15.7	ug/L	84	Standard
|	V	51	6396.4	1.5	0.1021	0.009	9.1	ug/L	5785	Standard
|	Cr	52	13987.5	1.1	0.1198	0.023	19.2	ug/L	12212	Standard
|	Cr	53	2243.5	10.8	-0.2980	0.145	48.7	ug/L	5042	Standard
|	Mn	55	141935.1	1.3	6.5140	0.079	1.2	ug/L	1290	Standard
|	Co	59	1529.4	2.2	0.0899	0.003	3.5	ug/L	143	Standard
|	Ni	60	1220.0	4.8	0.3564	0.017	4.8	ug/L	79	Standard
|	Cu	65	635.3	7.6	0.1686	0.014	8.6	ug/L	154	Standard
|	Zn	66	3732.1	2.2	2.6635	0.048	1.8	ug/L	194	Standard
>	Ge	72	243886.7	1.0				ug/L	232024	Standard
|	As	75	-163.2	0.9	0.0902	0.002	2.5	ug/L	-297	Standard
|	Se	82	36.4	9.3	0.1116	0.022	20.1	ug/L	17	Standard
|	Se-1	77	139.0	14.0	-0.2155	0.241	111.9	ug/L	180	Standard
|	Ga	71	220342.7	0.7				mg/L	210139	Standard
|	Rb	85	4962.5	6.9				ug/L	12	Standard
>	Y	89	226704.5	3.1				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	80.1	9.3	0.0105	0.002	14.5	ug/L	6	Standard
|	Ag	107	79.7	47.5	0.0018	0.004	237.2	ug/L	33	Standard
|	Cd	111	529.2	4.7	0.0202	0.004	21.0	mg/L	437	Standard
|	Cd	114	1355.4	4.5	0.0110	0.004	34.2	ug/L	1160	Standard
>	In	115	669337.8	1.4				ug/L	646604	Standard
|	Sn	118	1205.4	4.0	0.0178	0.002	11.2	ug/L	864	Standard
|	Sb	123	332.0	20.8	0.0265	0.006	21.3	ug/L	18	Standard
|	Ba	135	19614.0	1.6	4.1057	0.034	0.8	ug/L	39	Standard
|	Ce	140	17678.6	0.9				ug/L	46	Standard
>	Tb	159	727063.0	1.6				ug/L	695671	Standard
|	Ho	165	220.3	9.4				ug/L	9	Standard
|	Tl	203	527.0	25.6	-0.0052	0.008	151.2	ug/L	687	Standard
|	Tl	205	1277.4	24.8	-0.0034	0.008	231.7	ug/L	1624	Standard
|	Pb	206	1359.7	2.8	0.0788	0.002	3.0	ug/L	305	Standard
|	Pb	207	1169.7	3.6	0.0798	0.004	4.5	ug/L	231	Standard
|	Pb	208	5319.7	2.6	0.0774	0.002	3.2	ug/L	1129	Standard
|	U	238	200.3	15.9	0.0095	0.001	11.4	ug/L	3	Standard
>	Bi	209	411480.7	0.7				ug/L	405108	Standard
|	Na	23	2955.3	1.8	0.7127	0.023	3.3	mg/L	118	Standard
|	Mg	24	211080.4	1.7	0.3476	0.010	2.8	mg/L	377	Standard

Sample ID: L1205012507 WG397206-02

Report Date/Time: Thursday, May 10, 2012 09:53:33

Page 1

Approved: May 11, 2012


J. J. H.

K	39	2466.9	8.4	0.1410	0.017	12.4	mg/L	583	Standard
Ca	43	390.0	6.7	0.6529	0.078	11.9	mg/L	73	Standard
Fe	54	1586.7	6.8	0.1033	0.026	25.2	mg/L	785	Standard
Fe	57	27508.3	2.9	0.1076	0.003	2.4	mg/L	6133	Standard
Sc-1	45	282394.6	3.6				mg/L	254529	Standard
Cl	35	969873.6	29.0				ug/L	1641778	Standard
Kr	83	53.4	1.6				ug/L	60	Standard
Br	81	13827.1	1.0				ug/L	11554	Standard
P	31	58931.1	2.6				ug/L	45410	Standard
S	34	557634.8	1.7				ug/L	568857	Standard
Sr	88	124795.4	2.9				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.113	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		105.905	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.516	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.512	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205012507 WG397206-02
 Report Date/Time: Thursday, May 10, 2012 09:53:33
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	101.573
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205012507 WG397206-02
 Report Date/Time: Thursday, May 10, 2012 09:53:33
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205012508S WG397206-07

Sample Date/Time: Thursday, May 10, 2012 09:53:53

Number of Replicates: 3

Autosampler Position: 208

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	30039.8	0.8	1416.7739	42.184	3.0	ug/L	12600	Standard
|	Be	9	90119.0	2.6	23.7569	0.654	2.8	ug/L	5	Standard
|	Al	27	1125496.1	4.3	62.7993	3.118	5.0	ug/L	16102	Standard
>	Sc	45	289508.2	0.8				ug/L	254529	Standard
|	Ti	47	1495.4	5.2	0.8509	0.043	5.1	ug/L	84	Standard
|	V	51	415342.8	1.7	24.7482	0.592	2.4	ug/L	5785	Standard
|	Cr	52	321691.4	1.0	25.1617	0.477	1.9	ug/L	12212	Standard
|	Cr	53	48729.9	0.7	24.6463	0.405	1.6	ug/L	5042	Standard
|	Mn	55	693278.7	0.4	31.5684	0.248	0.8	ug/L	1290	Standard
|	Co	59	393532.9	1.2	25.2823	0.425	1.7	ug/L	143	Standard
|	Ni	60	84481.9	1.1	25.8392	0.087	0.3	ug/L	79	Standard
|	Cu	65	76119.4	1.8	25.6527	0.250	1.0	ug/L	154	Standard
|	Zn	66	37547.8	1.0	27.8785	0.057	0.2	ug/L	194	Standard
>	Ge	72	248351.6	0.9				ug/L	232024	Standard
|	As	75	30668.4	2.0	25.3655	0.359	1.4	ug/L	-297	Standard
|	Se	82	3527.0	2.4	25.5627	0.601	2.4	ug/L	17	Standard
|	Se-1	77	2309.5	0.5	24.3494	0.313	1.3	ug/L	180	Standard
|	Ga	71	225679.4	0.8				mg/L	210139	Standard
|	Rb	85	5424.3	6.3				ug/L	12	Standard
>	Y	89	226317.7	0.4				ug/L	214065	Standard
|	Rh	103	35.0	62.3				ug/L	0	Standard
|	Mo	98	81.4	16.0	0.0105	0.003	31.2	ug/L	6	Standard
|	Ag	107	240263.4	1.7	27.1926	0.072	0.3	ug/L	33	Standard
|	Cd	111	121337.5	1.3	25.3375	0.254	1.0	mg/L	437	Standard
|	Cd	114	306227.3	0.7	24.4966	0.354	1.4	ug/L	1160	Standard
>	In	115	682125.9	1.9				ug/L	646604	Standard
|	Sn	118	1361.4	4.4	0.0258	0.003	12.8	ug/L	864	Standard
|	Sb	123	284817.2	0.8	24.4371	0.411	1.7	ug/L	18	Standard
|	Ba	135	137900.4	0.7	28.3779	0.358	1.3	ug/L	39	Standard
|	Ce	140	17979.3	0.7				ug/L	46	Standard
>	Tb	159	732500.9	0.6				ug/L	695671	Standard
|	Ho	165	227.7	10.9				ug/L	9	Standard
|	Tl	203	414288.1	0.7	24.9403	0.225	0.9	ug/L	687	Standard
|	Tl	205	963876.4	0.7	24.4969	0.294	1.2	ug/L	1624	Standard
|	Pb	206	331274.1	0.5	24.9999	0.309	1.2	ug/L	305	Standard
|	Pb	207	289403.5	1.5	25.6047	0.139	0.5	ug/L	231	Standard
|	Pb	208	1323745.3	1.0	25.1639	0.163	0.6	ug/L	1129	Standard
|	U	238	668840.9	1.2	23.8522	0.413	1.7	ug/L	3	Standard
>	Bi	209	408078.7	1.6				ug/L	405108	Standard
|	Na	23	2930.3	2.7	0.6880	0.021	3.0	mg/L	118	Standard
|	Mg	24	213565.3	2.8	0.3429	0.012	3.5	mg/L	377	Standard

Sample ID: L1205012508S WG397206-07

Report Date/Time: Thursday, May 10, 2012 09:56:26

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	2370.2	2.8	0.1287	0.004	2.8	mg/L	583	Standard
Ca	43	403.3	11.5	0.6591	0.103	15.6	mg/L	73	Standard
Fe	54	1595.4	9.9	0.0977	0.024	24.2	mg/L	785	Standard
Fe	57	27727.0	3.1	0.1052	0.005	5.1	mg/L	6133	Standard
Sc-1	45	289508.2	0.8				mg/L	254529	Standard
Cl	35	731520.8	38.6				ug/L	1641778	Standard
Kr	83	57.8	0.9				ug/L	60	Standard
Br	81	12839.6	0.5				ug/L	11554	Standard
P	31	59468.2	1.7				ug/L	45410	Standard
S	34	516644.8	2.7				ug/L	568857	Standard
Sr	88	125368.4	2.1				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		107.037	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		105.724	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		105.494	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.294	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205012508S WG397206-07
 Report Date/Time: Thursday, May 10, 2012 09:56:26
 Page 2


Approved: May 11, 2012


|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	100.733
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205012508S WG397206-07
 Report Date/Time: Thursday, May 10, 2012 09:56:26
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205012509SD WG397206-08

Sample Date/Time: Thursday, May 10, 2012 09:56:46

Number of Replicates: 3

Autosampler Position: 209

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	30049.8	3.2	1453.3397	66.702	4.6	ug/L	12600	Standard
|	Be	9	88965.6	2.7	23.7745	0.821	3.5	ug/L	5	Standard
|	Al	27	968575.6	2.0	54.6664	1.139	2.1	ug/L	16102	Standard
>	Sc	45	285629.0	1.1				ug/L	254529	Standard
|	Ti	47	1246.1	13.1	0.7017	0.100	14.2	ug/L	84	Standard
|	V	51	417216.0	2.7	24.9551	0.809	3.2	ug/L	5785	Standard
|	Cr	52	321923.2	1.9	25.2787	0.676	2.7	ug/L	12212	Standard
|	Cr	53	48679.8	2.0	24.7182	0.716	2.9	ug/L	5042	Standard
|	Mn	55	695798.3	1.8	31.8036	0.736	2.3	ug/L	1290	Standard
|	Co	59	391699.7	0.7	25.2580	0.335	1.3	ug/L	143	Standard
|	Ni	60	83585.3	1.6	25.6631	0.588	2.3	ug/L	79	Standard
|	Cu	65	76715.1	0.9	25.9538	0.416	1.6	ug/L	154	Standard
|	Zn	66	37966.2	1.6	28.2983	0.513	1.8	ug/L	194	Standard
>	Ge	72	247429.0	0.8				ug/L	232024	Standard
|	As	75	30514.7	0.3	25.3352	0.270	1.1	ug/L	-297	Standard
|	Se	82	3519.9	0.9	25.6085	0.418	1.6	ug/L	17	Standard
|	Se-1	77	2293.5	2.9	24.2665	0.883	3.6	ug/L	180	Standard
|	Ga	71	225701.1	1.2				mg/L	210139	Standard
|	Rb	85	4419.0	0.7				ug/L	12	Standard
>	Y	89	231805.2	2.1				ug/L	214065	Standard
|	Rh	103	21.7	53.3				ug/L	0	Standard
|	Mo	98	115.0	15.3	0.0181	0.004	19.7	ug/L	6	Standard
|	Ag	107	239189.8	1.4	27.0898	0.606	2.2	ug/L	33	Standard
|	Cd	111	120550.9	1.8	25.1901	0.732	2.9	mg/L	437	Standard
|	Cd	114	304765.2	1.2	24.3934	0.591	2.4	ug/L	1160	Standard
>	In	115	681804.5	2.0				ug/L	646604	Standard
|	Sn	118	1445.4	3.6	0.0309	0.002	6.4	ug/L	864	Standard
|	Sb	123	282607.8	1.3	24.2612	0.596	2.5	ug/L	18	Standard
|	Ba	135	136540.7	2.1	28.1193	1.045	3.7	ug/L	39	Standard
|	Ce	140	16438.9	2.2				ug/L	46	Standard
>	Tb	159	727038.1	0.9				ug/L	695671	Standard
|	Ho	165	214.3	2.2				ug/L	9	Standard
|	Tl	203	413045.0	1.3	24.6487	0.433	1.8	ug/L	687	Standard
|	Tl	205	966735.6	1.3	24.3551	0.423	1.7	ug/L	1624	Standard
|	Pb	206	330803.0	2.7	24.7466	0.764	3.1	ug/L	305	Standard
|	Pb	207	290157.5	1.7	25.4500	0.545	2.1	ug/L	231	Standard
|	Pb	208	1324458.4	2.4	24.9593	0.682	2.7	ug/L	1129	Standard
|	U	238	658082.0	2.3	23.2639	0.633	2.7	ug/L	3	Standard
>	Bi	209	411642.6	0.5				ug/L	405108	Standard
|	Na	23	3020.3	8.9	0.7197	0.062	8.6	mg/L	118	Standard
|	Mg	24	212766.7	3.9	0.3462	0.014	3.9	mg/L	377	Standard

Sample ID: L1205012509SD WG397206-08

Report Date/Time: Thursday, May 10, 2012 09:59:19

Page 1

Approved: May 11, 2012

J. Y. H.


K	39	2288.5	6.0	0.1248	0.009	7.6	mg/L	583	Standard
Ca	43	413.3	6.9	0.6916	0.056	8.2	mg/L	73	Standard
Fe	54	1532.5	5.0	0.0913	0.015	16.3	mg/L	785	Standard
Fe	57	25688.4	2.8	0.0966	0.003	2.9	mg/L	6133	Standard
Sc-1	45	285629.0	1.1				mg/L	254529	Standard
Cl	35	803112.0	27.2				ug/L	1641778	Standard
Kr	83	59.2	10.1				ug/L	60	Standard
Br	81	13099.0	4.4				ug/L	11554	Standard
P	31	58704.5	4.5				ug/L	45410	Standard
S	34	482012.6	2.5				ug/L	568857	Standard
Sr	88	126141.4	2.2				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.640	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		108.287	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		105.444	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.509	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205012509SD WG397206-08
 Report Date/Time: Thursday, May 10, 2012 09:59:19
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	101.613
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: L1205012509SD WG397206-08
 Report Date/Time: Thursday, May 10, 2012 09:59:19
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015028

Sample Date/Time: Thursday, May 10, 2012 09:59:39

Number of Replicates: 3

Autosampler Position: 210

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	24862.1	2.4	783.6437	41.219	5.3	ug/L	12600	Standard
|	Be	9	23.3	24.7	-0.0088	0.001	15.7	ug/L	5	Standard
|	Al	27	720039.5	4.8	36.6679	1.634	4.5	ug/L	16102	Standard
>	Sc	45	314303.2	0.4				ug/L	254529	Standard
|	Ti	47	4200.6	8.9	2.5615	0.171	6.7	ug/L	84	Standard
|	V	51	12378.3	4.4	0.4738	0.034	7.2	ug/L	5785	Standard
|	Cr	52	14154.6	1.3	0.1406	0.019	13.6	ug/L	12212	Standard
|	Cr	53	3132.8	11.2	0.1973	0.186	94.2	ug/L	5042	Standard
|	Mn	55	1368137.9	2.5	63.8982	1.017	1.6	ug/L	1290	Standard
|	Co	59	3928.2	3.5	0.2483	0.004	1.7	ug/L	143	Standard
|	Ni	60	3360.7	3.8	1.0298	0.021	2.0	ug/L	79	Standard
|	Cu	65	7380.8	4.4	2.5037	0.116	4.6	ug/L	154	Standard
|	Zn	66	4867.4	3.3	3.5497	0.114	3.2	ug/L	194	Standard
>	Ge	72	242481.5	2.8				ug/L	232024	Standard
|	As	75	83.3	52.2	0.2959	0.035	11.7	ug/L	-297	Standard
|	Se	82	126.0	11.0	0.7821	0.094	12.1	ug/L	17	Standard
|	Se-1	77	186.0	6.6	0.3411	0.196	57.5	ug/L	180	Standard
|	Ga	71	219699.5	2.8				mg/L	210139	Standard
|	Rb	85	11202.5	3.5				ug/L	12	Standard
>	Y	89	227939.0	2.3				ug/L	214065	Standard
|	Rh	103	85.0	10.2				ug/L	0	Standard
|	Mo	98	473.0	1.9	0.1009	0.003	3.5	ug/L	6	Standard
|	Ag	107	59.3	17.5	-0.0006	0.001	170.8	ug/L	33	Standard
|	Cd	111	532.3	4.0	0.0194	0.002	12.3	mg/L	437	Standard
|	Cd	114	1348.6	1.0	0.0091	0.004	41.6	ug/L	1160	Standard
>	In	115	677840.5	2.5				ug/L	646604	Standard
|	Sn	118	1669.8	4.5	0.0450	0.005	11.9	ug/L	864	Standard
|	Sb	123	1319.9	25.5	0.1110	0.026	23.6	ug/L	18	Standard
|	Ba	135	162701.9	2.4	33.6900	0.042	0.1	ug/L	39	Standard
|	Ce	140	11343.2	1.6				ug/L	46	Standard
>	Tb	159	738235.7	3.0				ug/L	695671	Standard
|	Ho	165	186.0	7.5				ug/L	9	Standard
|	Tl	203	788.7	6.2	0.0121	0.002	19.5	ug/L	687	Standard
|	Tl	205	1893.5	2.6	0.0139	0.000	2.8	ug/L	1624	Standard
|	Pb	206	2042.5	3.5	0.1354	0.003	2.1	ug/L	305	Standard
|	Pb	207	1715.1	4.6	0.1331	0.006	4.3	ug/L	231	Standard
|	Pb	208	8042.5	2.4	0.1343	0.001	0.8	ug/L	1129	Standard
|	U	238	8550.1	3.6	0.3157	0.007	2.1	ug/L	3	Standard
>	Bi	209	397066.3	2.1				ug/L	405108	Standard
|	Na	23	31723.2	2.5	7.1042	0.152	2.1	mg/L	118	Standard
|	Mg	24	3206791.5	2.9	4.7520	0.117	2.5	mg/L	377	Standard

Sample ID: L1205015028

Report Date/Time: Thursday, May 10, 2012 10:02:12

Page 1

Approved: May 11, 2012

K	39	12757.0	3.6	0.8422	0.029	3.5	mg/L	583	Standard
Ca	43	8687.5	2.4	16.7004	0.371	2.2	mg/L	73	Standard
Fe	54	2859.3	2.3	0.2611	0.008	3.1	mg/L	785	Standard
Fe	57	77511.1	2.1	0.3248	0.006	1.9	mg/L	6133	Standard
Sc-1	45	314303.2	0.4				mg/L	254529	Standard
Cl	35	2012203.3	5.6				ug/L	1641778	Standard
Kr	83	61.0	1.1				ug/L	60	Standard
Br	81	64916.3	0.5				ug/L	11554	Standard
P	31	77288.4	2.4				ug/L	45410	Standard
S	34	745464.5	2.5				ug/L	568857	Standard
Sr	88	3815523.9	2.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.507	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		106.481	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		104.831	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.118	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015028

Report Date/Time: Thursday, May 10, 2012 10:02:12

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	98.015
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205015028
 Report Date/Time: Thursday, May 10, 2012 10:02:12
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015029

Sample Date/Time: Thursday, May 10, 2012 10:02:32

Number of Replicates: 3

Autosampler Position: 211

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	24464.7	2.0	678.6976	26.733	3.9	ug/L	12600	Standard
|	Be	9	86.7	18.5	0.0059	0.004	62.6	ug/L	5	Standard
|	Al	27	9554900.8	4.5	478.2140	16.376	3.4	ug/L	16102	Standard
>	Sc	45	326214.3	2.7				ug/L	254529	Standard
|	Ti	47	29781.6	2.3	17.3644	0.496	2.9	ug/L	84	Standard
|	V	51	31187.7	1.4	1.5123	0.059	3.9	ug/L	5785	Standard
|	Cr	52	23636.8	1.3	0.8057	0.058	7.2	ug/L	12212	Standard
|	Cr	53	3610.4	6.5	0.3349	0.157	47.0	ug/L	5042	Standard
|	Mn	55	1611726.4	2.1	70.4716	1.979	2.8	ug/L	1290	Standard
|	Co	59	7140.3	1.2	0.4297	0.010	2.3	ug/L	143	Standard
|	Ni	60	2640.6	2.8	0.7510	0.009	1.2	ug/L	79	Standard
|	Cu	65	4257.9	1.7	1.3287	0.020	1.5	ug/L	154	Standard
|	Zn	66	10538.3	0.7	7.3741	0.160	2.2	ug/L	194	Standard
>	Ge	72	259069.6	1.9				ug/L	232024	Standard
|	As	75	36.6	42.6	0.2551	0.012	4.6	ug/L	-297	Standard
|	Se	82	84.8	4.9	0.4350	0.040	9.2	ug/L	17	Standard
|	Se-1	77	149.7	13.6	-0.1925	0.250	130.1	ug/L	180	Standard
|	Ga	71	241777.7	2.1				mg/L	210139	Standard
|	Rb	85	13532.7	2.3				ug/L	12	Standard
>	Y	89	243803.1	2.2				ug/L	214065	Standard
|	Rh	103	30.0	28.9				ug/L	0	Standard
|	Mo	98	395.7	7.6	0.0788	0.007	9.1	ug/L	6	Standard
|	Ag	107	95.3	14.7	0.0030	0.001	47.2	ug/L	33	Standard
|	Cd	111	749.9	1.2	0.0579	0.000	0.4	mg/L	437	Standard
|	Cd	114	1892.7	7.1	0.0458	0.009	20.0	ug/L	1160	Standard
>	In	115	711256.9	1.2				ug/L	646604	Standard
|	Sn	118	6938.6	1.0	0.3437	0.003	0.9	ug/L	864	Standard
|	Sb	123	1703.3	3.8	0.1376	0.004	2.7	ug/L	18	Standard
|	Ba	135	82104.9	1.8	16.1972	0.121	0.7	ug/L	39	Standard
|	Ce	140	78547.8	1.6				ug/L	46	Standard
>	Tb	159	771054.8	1.1				ug/L	695671	Standard
|	Ho	165	847.4	4.3				ug/L	9	Standard
|	Tl	203	501.3	22.4	-0.0072	0.007	90.7	ug/L	687	Standard
|	Tl	205	1185.4	20.8	-0.0061	0.006	98.6	ug/L	1624	Standard
|	Pb	206	4811.4	1.3	0.3318	0.004	1.2	ug/L	305	Standard
|	Pb	207	3994.5	2.3	0.3225	0.007	2.1	ug/L	231	Standard
|	Pb	208	18717.2	2.4	0.3248	0.007	2.2	ug/L	1129	Standard
|	U	238	842.4	3.7	0.0317	0.001	3.3	ug/L	3	Standard
>	Bi	209	417817.5	0.3				ug/L	405108	Standard
|	Na	23	16455.6	5.8	3.5359	0.146	4.1	mg/L	118	Standard
|	Mg	24	803549.4	1.2	1.1470	0.021	1.9	mg/L	377	Standard

Sample ID: L1205015029

Report Date/Time: Thursday, May 10, 2012 10:05:05

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	14778.9	2.8	0.9464	0.029	3.1	mg/L	583	Standard
Ca	43	1645.1	8.9	2.8913	0.288	10.0	mg/L	73	Standard
Fe	54	5314.8	5.3	0.5887	0.029	4.9	mg/L	785	Standard
Fe	57	129492.8	1.5	0.5439	0.009	1.7	mg/L	6133	Standard
Sc-1	45	326214.3	2.7				mg/L	254529	Standard
Cl	35	1076847.9	18.7				ug/L	1641778	Standard
Kr	83	59.2	4.2				ug/L	60	Standard
Br	81	30585.0	2.8				ug/L	11554	Standard
P	31	140553.2	1.7				ug/L	45410	Standard
S	34	781033.8	4.6				ug/L	568857	Standard
Sr	88	954115.7	0.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		111.657	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		113.892	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		109.999	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		110.836	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015029

Report Date/Time: Thursday, May 10, 2012 10:05:05

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	103.137
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205015029
 Report Date/Time: Thursday, May 10, 2012 10:05:05
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015029PS WG397345-01

Sample Date/Time: Thursday, May 10, 2012 10:05:24

Number of Replicates: 3

Autosampler Position: 212

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	24010.7	3.7	662.1381	81.290	12.3	ug/L	12600	Standard
|	Be	9	188667.7	2.2	44.5962	0.752	1.7	ug/L	5	Standard
|	Al	27	10235851.1	2.4	517.5354	8.452	1.6	ug/L	16102	Standard
>	Sc	45	322937.0	0.8				ug/L	254529	Standard
|	Ti	47	29879.1	2.3	17.2309	0.405	2.4	ug/L	84	Standard
|	V	51	917629.2	2.3	52.1670	1.279	2.5	ug/L	5785	Standard
|	Cr	52	686194.1	2.4	51.9604	1.290	2.5	ug/L	12212	Standard
|	Cr	53	105726.2	3.5	52.3223	1.921	3.7	ug/L	5042	Standard
|	Mn	55	2718042.1	2.7	117.6020	3.203	2.7	ug/L	1290	Standard
|	Co	59	857461.2	2.8	52.2504	1.500	2.9	ug/L	143	Standard
|	Ni	60	181398.1	2.1	52.6419	1.083	2.1	ug/L	79	Standard
|	Cu	65	165310.0	1.2	52.8899	0.700	1.3	ug/L	154	Standard
|	Zn	66	77480.0	1.5	54.7260	0.865	1.6	ug/L	194	Standard
>	Ge	72	261872.7	0.1				ug/L	232024	Standard
|	As	75	63168.0	1.4	49.3345	0.737	1.5	ug/L	-297	Standard
|	Se	82	7103.7	2.1	48.9721	1.088	2.2	ug/L	17	Standard
|	Se-1	77	4520.0	2.2	46.7511	1.146	2.5	ug/L	180	Standard
|	Ga	71	240152.2	0.1				mg/L	210139	Standard
|	Rb	85	13666.2	3.7				ug/L	12	Standard
>	Y	89	249131.7	1.2				ug/L	214065	Standard
|	Rh	103	48.3	21.5				ug/L	0	Standard
|	Mo	98	481.4	2.8	0.0961	0.002	2.5	ug/L	6	Standard
|	Ag	107	507042.7	2.2	54.2833	0.773	1.4	ug/L	33	Standard
|	Cd	111	250480.2	2.3	49.5532	0.599	1.2	mg/L	437	Standard
|	Cd	114	630683.9	2.0	47.8039	0.410	0.9	ug/L	1160	Standard
>	In	115	721162.9	1.1				ug/L	646604	Standard
|	Sn	118	7267.1	2.3	0.3568	0.009	2.4	ug/L	864	Standard
|	Sb	123	594720.1	1.7	48.2556	0.294	0.6	ug/L	18	Standard
|	Ba	135	333842.0	1.9	64.9777	0.507	0.8	ug/L	39	Standard
|	Ce	140	77911.1	0.7				ug/L	46	Standard
>	Tb	159	775773.6	0.3				ug/L	695671	Standard
|	Ho	165	874.7	1.6				ug/L	9	Standard
|	Tl	203	872534.9	0.9	51.3967	0.226	0.4	ug/L	687	Standard
|	Tl	205	2093650.1	4.2	52.0590	1.964	3.8	ug/L	1624	Standard
|	Pb	206	695705.2	1.5	51.3552	0.545	1.1	ug/L	305	Standard
|	Pb	207	605768.2	1.6	52.4284	0.610	1.2	ug/L	231	Standard
|	Pb	208	2768027.9	1.3	51.4725	0.457	0.9	ug/L	1129	Standard
|	U	238	1421981.0	2.4	49.5747	0.953	1.9	ug/L	3	Standard
>	Bi	209	417323.9	0.5				ug/L	405108	Standard
|	Na	23	15818.3	0.9	3.4340	0.042	1.2	mg/L	118	Standard
|	Mg	24	797868.0	0.9	1.1501	0.008	0.7	mg/L	377	Standard

Sample ID: L1205015029PS WG397345-01

Report Date/Time: Thursday, May 10, 2012 10:07:58

Page 1

Approved: May 11, 2012




K	39	14887.3	3.2	0.9636	0.026	2.7	mg/L	583	Standard
Ca	43	1651.8	6.5	2.9325	0.179	6.1	mg/L	73	Standard
Fe	54	5058.0	4.2	0.5604	0.035	6.3	mg/L	785	Standard
Fe	57	124914.6	1.8	0.5290	0.009	1.6	mg/L	6133	Standard
Sc-1	45	322937.0	0.8				mg/L	254529	Standard
Cl	35	1091422.8	19.1				ug/L	1641778	Standard
Kr	83	64.6	2.1				ug/L	60	Standard
Br	81	29901.2	2.7				ug/L	11554	Standard
P	31	138303.5	2.1				ug/L	45410	Standard
S	34	743442.1	3.4				ug/L	568857	Standard
Sr	88	929498.2	0.7				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		112.865	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		116.381	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		111.531	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		111.514	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015029PS WG397345-01
 Report Date/Time: Thursday, May 10, 2012 10:07:58
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	103.015
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015029PS WG397345-01
 Report Date/Time: Thursday, May 10, 2012 10:07:58
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015029SDL WG397345-02

Sample Date/Time: Thursday, May 10, 2012 10:08:18

Number of Replicates: 3

Autosampler Position: 213

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	15573.0	1.9	165.5562	44.386	26.8	ug/L	12600	Standard
|	Be	9	26.7	75.8	-0.0074	0.005	72.5	ug/L	5	Standard
|	Al	27	1900664.6	4.6	108.9159	1.031	0.9	ug/L	16102	Standard
>	Sc	45	283324.6	4.5				ug/L	254529	Standard
|	Ti	47	5580.7	5.5	3.3558	0.098	2.9	ug/L	84	Standard
|	V	51	9112.3	3.8	0.2608	0.012	4.6	ug/L	5785	Standard
|	Cr	52	14020.2	1.7	0.1062	0.017	16.0	ug/L	12212	Standard
|	Cr	53	2184.3	9.3	-0.3493	0.080	23.0	ug/L	5042	Standard
|	Mn	55	302882.6	3.1	13.7972	0.082	0.6	ug/L	1290	Standard
|	Co	59	1460.7	7.3	0.0839	0.005	5.5	ug/L	143	Standard
|	Ni	60	582.3	3.5	0.1551	0.003	1.8	ug/L	79	Standard
|	Cu	65	1071.4	6.6	0.3132	0.017	5.4	ug/L	154	Standard
|	Zn	66	4249.9	5.5	3.0106	0.099	3.3	ug/L	194	Standard
>	Ge	72	247373.4	2.8				ug/L	232024	Standard
|	As	75	-165.7	18.7	0.0897	0.028	31.5	ug/L	-297	Standard
|	Se	82	35.2	22.7	0.0992	0.057	58.0	ug/L	17	Standard
|	Se-1	77	123.3	19.0	-0.4185	0.258	61.7	ug/L	180	Standard
|	Ga	71	224517.4	3.3				mg/L	210139	Standard
|	Rb	85	2528.5	6.6				ug/L	12	Standard
>	Y	89	224888.6	1.5				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	191.7	5.0	0.0360	0.001	3.5	ug/L	6	Standard
|	Ag	107	62.0	42.2	-0.0003	0.003	825.3	ug/L	33	Standard
|	Cd	111	532.6	4.2	0.0194	0.003	14.5	mg/L	437	Standard
|	Cd	114	1359.9	2.2	0.0099	0.002	15.9	ug/L	1160	Standard
>	In	115	678072.2	2.3				ug/L	646604	Standard
|	Sn	118	2107.5	5.9	0.0713	0.005	7.5	ug/L	864	Standard
|	Sb	123	1376.0	33.1	0.1157	0.037	31.6	ug/L	18	Standard
|	Ba	135	15394.5	4.4	3.1781	0.069	2.2	ug/L	39	Standard
|	Ce	140	14645.1	3.6				ug/L	46	Standard
>	Tb	159	727832.0	2.3				ug/L	695671	Standard
|	Ho	165	147.0	13.6				ug/L	9	Standard
|	Tl	203	498.3	25.4	-0.0068	0.007	104.3	ug/L	687	Standard
|	Tl	205	1136.4	25.3	-0.0068	0.007	101.1	ug/L	1624	Standard
|	Pb	206	1272.7	2.4	0.0729	0.000	0.3	ug/L	305	Standard
|	Pb	207	1066.4	5.3	0.0713	0.003	4.0	ug/L	231	Standard
|	Pb	208	5013.3	3.7	0.0723	0.001	1.7	ug/L	1129	Standard
|	U	238	207.0	24.6	0.0098	0.002	17.0	ug/L	3	Standard
>	Bi	209	408564.3	2.4				ug/L	405108	Standard
|	Na	23	3268.7	4.8	0.7886	0.041	5.2	mg/L	118	Standard
|	Mg	24	173926.4	2.7	0.2853	0.006	2.1	mg/L	377	Standard

Sample ID: L1205015029SDL WG397345-02

Report Date/Time: Thursday, May 10, 2012 10:10:51

Page 1

Approved: May 11, 2012




K	39	3337.0	0.9	0.2081	0.011	5.1	mg/L	583	Standard
Ca	43	340.0	16.7	0.5415	0.123	22.7	mg/L	73	Standard
Fe	54	1635.7	5.4	0.1103	0.022	19.7	mg/L	785	Standard
Fe	57	28124.4	3.3	0.1103	0.002	1.6	mg/L	6133	Standard
Sc-1	45	283324.6	4.5				mg/L	254529	Standard
Cl	35	828907.5	27.8				ug/L	1641778	Standard
Kr	83	61.3	2.5				ug/L	60	Standard
Br	81	14978.2	2.8				ug/L	11554	Standard
P	31	66436.3	3.2				ug/L	45410	Standard
S	34	570631.6	2.4				ug/L	568857	Standard
Sr	88	172503.6	2.8				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.616	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		105.056	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		104.867	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.623	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015029SDL WG397345-02
 Report Date/Time: Thursday, May 10, 2012 10:10:51
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	100.853
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Se-1 77 Lower	Se-1	77	

Sample ID: L1205015029SDL WG397345-02
 Report Date/Time: Thursday, May 10, 2012 10:10:51
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 10:11:13

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13185.7	1.9	-3.8196	32.662	855.1	ug/L	12600	Standard
|	Be	9	184849.1	0.6	51.8132	1.058	2.0	ug/L	5	Standard
|	Al	27	824229.1	2.8	48.6851	0.845	1.7	ug/L	16102	Standard
>	Sc	45	272407.3	1.5				ug/L	254529	Standard
|	Ti	47	163144.9	2.1	100.7475	2.277	2.3	ug/L	84	Standard
|	V	51	839228.7	2.5	50.9327	1.432	2.8	ug/L	5785	Standard
|	Cr	52	628860.5	3.0	50.8206	1.717	3.4	ug/L	12212	Standard
|	Cr	53	93421.4	1.9	49.2756	1.093	2.2	ug/L	5042	Standard
|	Mn	55	1094443.6	1.4	50.5100	0.864	1.7	ug/L	1290	Standard
|	Co	59	782089.0	1.4	50.8824	0.823	1.6	ug/L	143	Standard
|	Ni	60	164447.6	2.2	50.9531	1.284	2.5	ug/L	79	Standard
|	Cu	65	148898.8	1.5	50.8614	0.916	1.8	ug/L	154	Standard
|	Zn	66	66569.9	1.7	50.1877	0.990	2.0	ug/L	194	Standard
>	Ge	72	245279.4	0.3				ug/L	232024	Standard
|	As	75	60519.6	1.7	50.4600	0.981	1.9	ug/L	-297	Standard
|	Se	82	6921.6	1.5	50.9511	0.870	1.7	ug/L	17	Standard
|	Se-1	77	4556.4	1.4	50.4546	0.860	1.7	ug/L	180	Standard
|	Ga	71	222215.0	0.2				mg/L	210139	Standard
|	Rb	85	1081.7	2.8				ug/L	12	Standard
>	Y	89	221177.8	1.2				ug/L	214065	Standard
|	Rh	103	43.3	37.1				ug/L	0	Standard
|	Mo	98	434333.5	0.7	98.7775	1.260	1.3	ug/L	6	Standard
|	Ag	107	453371.0	0.2	50.9648	0.841	1.7	ug/L	33	Standard
|	Cd	111	239092.8	1.7	49.6628	0.720	1.5	mg/L	437	Standard
|	Cd	114	617219.0	1.8	49.1203	0.669	1.4	ug/L	1160	Standard
>	In	115	686983.9	1.9				ug/L	646604	Standard
|	Sn	118	823947.0	2.0	49.0716	0.754	1.5	ug/L	864	Standard
|	Sb	123	574875.4	2.3	48.9676	0.545	1.1	ug/L	18	Standard
|	Ba	135	237579.4	1.3	48.5557	1.188	2.4	ug/L	39	Standard
|	Ce	140	898.0	2.6				ug/L	46	Standard
>	Tb	159	742381.4	0.6				ug/L	695671	Standard
|	Ho	165	26.0	30.0				ug/L	9	Standard
|	Tl	203	833732.4	1.2	50.7765	0.366	0.7	ug/L	687	Standard
|	Tl	205	1949824.4	1.5	50.1294	0.270	0.5	ug/L	1624	Standard
|	Pb	206	663392.3	1.4	50.6316	0.546	1.1	ug/L	305	Standard
|	Pb	207	560084.6	1.6	50.1173	0.332	0.7	ug/L	231	Standard
|	Pb	208	2595703.6	1.7	49.9028	0.309	0.6	ug/L	1129	Standard
|	U	238	1330487.6	2.0	47.9569	0.452	0.9	ug/L	3	Standard
>	Bi	209	403653.3	1.5				ug/L	405108	Standard
|	Na	23	19385.7	1.2	5.0023	0.122	2.4	mg/L	118	Standard
|	Mg	24	2851885.9	2.5	4.8760	0.063	1.3	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 10:13:46

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	62194.1	1.2	4.9775	0.125	2.5	mg/L	583	Standard
Ca	43	2193.5	1.9	4.7303	0.161	3.4	mg/L	73	Standard
Fe	54	31122.8	2.5	5.0504	0.063	1.3	mg/L	785	Standard
Fe	57	901951.8	2.9	4.7872	0.077	1.6	mg/L	6133	Standard
Sc-1	45	272407.3	1.5				mg/L	254529	Standard
Cl	35	713961.4	31.9				ug/L	1641778	Standard
Kr	83	57.1	3.5				ug/L	60	Standard
Br	81	11555.2	2.2				ug/L	11554	Standard
P	31	58949.6	3.9				ug/L	45410	Standard
S	34	669003.8	4.6				ug/L	568857	Standard
Sr	88	715.0	14.8				ug/L	240	Standard

QC Calculated Values

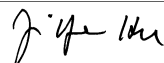
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.370		
Sc	45			
Ti	47	100.747		
V	51	101.865		
Cr	52	101.641		
Cr	53			
Mn	55	101.020		
Co	59	101.765		
Ni	60	101.906		
Cu	65	101.723		
Zn	66	100.375		
Ge	72		105.713	
As	75	100.920		
Se	82	101.902		
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.323	
Rh	103			
Mo	98	98.778		
Ag	107	101.930		
Cd	111	99.326		
Cd	114			
In	115		106.245	
Sn	118	98.143		
Sb	123	97.935		
Ba	135	97.111		
Ce	140			
Tb	159		106.714	
Ho	165			
Tl	203	101.553		
Tl	205			
Pb	206	101.263		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 10:13:46

Page 2

Approved: May 11, 2012



Pb	207	100.235	
Pb	208	99.806	
U	238	95.914	
> Bi	209		99.641
Na	23	100.046	
Mg	24	97.520	
K	39	99.551	
Ca	43	94.605	
Fe	54	101.008	
Fe	57	95.744	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 10:13:46

Page 3

Approved: May 11, 2012



Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 10:14:05

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13020.6	2.6	25.1528	5.051	20.1	ug/L	12600	Standard
|	Be	9	15.0	66.7	-0.0101	0.003	27.7	ug/L	5	Standard
|	Al	27	12316.8	15.4	-0.0287	0.103	359.5	ug/L	16102	Standard
>	Sc	45	262812.3	2.4				ug/L	254529	Standard
[	Ti	47	102.7	8.8	0.0030	0.005	169.5	ug/L	84	Standard
|	V	51	3923.0	3.1	-0.0468	0.008	17.5	ug/L	5785	Standard
|	Cr	52	11249.8	2.9	-0.0956	0.034	35.3	ug/L	12212	Standard
|	Cr	53	1214.2	4.6	-0.8537	0.025	3.0	ug/L	5042	Standard
|	Mn	55	1349.4	3.3	-0.0214	0.002	7.2	ug/L	1290	Standard
|	Co	59	177.3	11.9	0.0015	0.001	91.4	ug/L	143	Standard
|	Ni	60	76.7	19.2	0.0003	0.005	1485.8	ug/L	79	Standard
|	Cu	65	134.0	6.8	-0.0031	0.003	93.5	ug/L	154	Standard
|	Zn	66	169.7	14.1	-0.0453	0.017	37.9	ug/L	194	Standard
>	Ge	72	240869.3	0.9				ug/L	232024	Standard
|	As	75	-242.5	16.8	0.0216	0.033	150.7	ug/L	-297	Standard
|	Se	82	25.3	18.3	0.0320	0.036	112.6	ug/L	17	Standard
[	Se-1	77	95.0	5.9	-0.7110	0.066	9.2	ug/L	180	Standard
|	Ga	71	217940.3	0.9				mg/L	210139	Standard
[	Rb	85	21.7	35.3				ug/L	12	Standard
>	Y	89	217075.9	1.7				ug/L	214065	Standard
[	Rh	103	1.7	173.2				ug/L	0	Standard
[	Mo	98	87.1	56.3	0.0121	0.011	92.0	ug/L	6	Standard
|	Ag	107	65.7	30.9	0.0002	0.002	1024.8	ug/L	33	Standard
|	Cd	111	480.2	8.7	0.0101	0.008	74.3	mg/L	437	Standard
|	Cd	114	1181.5	5.4	-0.0028	0.004	137.0	ug/L	1160	Standard
>	In	115	666360.8	1.3				ug/L	646604	Standard
|	Sn	118	951.0	4.7	0.0025	0.002	88.6	ug/L	864	Standard
|	Sb	123	329.5	36.7	0.0264	0.010	38.5	ug/L	18	Standard
[	Ba	135	53.7	8.4	0.0031	0.001	34.9	ug/L	39	Standard
[	Ce	140	47.7	4.8				ug/L	46	Standard
>	Tb	159	706935.5	1.0				ug/L	695671	Standard
[	Ho	165	8.3	6.9				ug/L	9	Standard
|	Tl	203	459.0	38.1	-0.0082	0.011	132.5	ug/L	687	Standard
|	Tl	205	1068.0	31.0	-0.0076	0.009	114.7	ug/L	1624	Standard
|	Pb	206	335.3	16.5	0.0030	0.004	143.9	ug/L	305	Standard
|	Pb	207	276.3	19.0	0.0022	0.005	213.8	ug/L	231	Standard
|	Pb	208	1310.0	15.0	0.0027	0.004	143.6	ug/L	1129	Standard
|	U	238	104.7	77.9	0.0062	0.003	47.9	ug/L	3	Standard
>	Bi	209	396590.7	0.2				ug/L	405108	Standard
[	Na	23	111.7	2.6	0.0028	0.001	37.5	mg/L	118	Standard
|	Mg	24	606.7	25.8	0.0002	0.000	122.4	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 10:16:38

Page 1

Approved: May 11, 2012

J. J. H.

K	39	646.7	7.0	0.0027	0.005	171.0	mg/L	583	Standard
Ca	43	50.0	17.3	-0.0761	0.023	30.2	mg/L	73	Standard
Fe	54	859.2	5.1	-0.0042	0.010	240.4	mg/L	785	Standard
Fe	57	4824.1	6.7	-0.0076	0.001	16.2	mg/L	6133	Standard
Sc-1	45	262812.3	2.4				mg/L	254529	Standard
Cl	35	517735.2	40.9				ug/L	1641778	Standard
Kr	83	56.6	10.4				ug/L	60	Standard
Br	81	11296.7	1.5				ug/L	11554	Standard
P	31	54947.8	2.1				ug/L	45410	Standard
S	34	662756.8	1.7				ug/L	568857	Standard
Sr	88	246.7	8.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.812	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.407	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.055	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		101.619	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 10:16:38

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	97.898
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 10:16:38
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, May 10, 2012 10:17:00

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12860.5	2.3	-33.9657	12.565	37.0	ug/L	12600	Standard
|	Be	9	8.3	34.6	-0.0121	0.001	7.0	ug/L	5	Standard
|	Al	27	16665.8	2.0	0.2077	0.038	18.4	ug/L	16102	Standard
>	Sc	45	272244.8	2.1				ug/L	254529	Standard
|	Ti	47	86.7	8.3	-0.0068	0.004	62.3	ug/L	84	Standard
|	V	51	10598.0	2.4	0.3705	0.015	4.1	ug/L	5785	Standard
|	Cr	52	21334.0	1.4	0.7575	0.019	2.5	ug/L	12212	Standard
|	Cr	53	2851.9	4.9	0.0594	0.086	144.7	ug/L	5042	Standard
|	Mn	55	12025.1	1.0	0.4833	0.008	1.7	ug/L	1290	Standard
|	Co	59	6185.6	2.1	0.4011	0.009	2.2	ug/L	143	Standard
|	Ni	60	5169.2	1.1	1.6138	0.022	1.3	ug/L	79	Standard
|	Cu	65	2490.9	3.5	0.8206	0.030	3.6	ug/L	154	Standard
|	Zn	66	9359.2	1.0	7.0607	0.093	1.3	ug/L	194	Standard
>	Ge	72	239996.5	0.6				ug/L	232024	Standard
|	As	75	202.8	22.0	0.3986	0.039	9.7	ug/L	-297	Standard
|	Se	82	79.4	9.2	0.4404	0.054	12.2	ug/L	17	Standard
|	Se-1	77	156.0	6.5	0.0086	0.127	1476.1	ug/L	180	Standard
|	Ga	71	219031.8	0.2				mg/L	210139	Standard
|	Rb	85	20.0	43.3				ug/L	12	Standard
>	Y	89	220672.4	1.9				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	28.0	29.8	-0.0016	0.002	126.0	ug/L	6	Standard
|	Ag	107	3673.4	1.1	0.4218	0.005	1.2	ug/L	33	Standard
|	Cd	111	1585.0	1.7	0.2500	0.005	2.2	mg/L	437	Standard
|	Cd	114	4093.7	1.1	0.2393	0.003	1.2	ug/L	1160	Standard
>	In	115	660941.0	0.3				ug/L	646604	Standard
|	Sn	118	877.7	5.0	-0.0015	0.003	180.5	ug/L	864	Standard
|	Sb	123	4581.6	1.4	0.4032	0.006	1.4	ug/L	18	Standard
|	Ba	135	3480.1	2.1	0.7310	0.013	1.8	ug/L	39	Standard
|	Ce	140	49.3	3.1				ug/L	46	Standard
>	Tb	159	707449.3	0.3				ug/L	695671	Standard
|	Ho	165	7.3	28.4				ug/L	9	Standard
|	Tl	203	1720.4	10.2	0.0679	0.011	16.1	ug/L	687	Standard
|	Tl	205	4054.9	6.2	0.0685	0.007	9.8	ug/L	1624	Standard
|	Pb	206	2848.9	1.1	0.1939	0.003	1.6	ug/L	305	Standard
|	Pb	207	2484.9	3.5	0.1990	0.009	4.3	ug/L	231	Standard
|	Pb	208	11335.7	1.4	0.1945	0.004	2.0	ug/L	1129	Standard
|	U	238	10464.6	2.2	0.3787	0.010	2.5	ug/L	3	Standard
>	Bi	209	404645.9	0.4				ug/L	405108	Standard
|	Na	23	118.3	27.2	0.0034	0.008	230.2	mg/L	118	Standard
|	Mg	24	553.3	12.3	0.0001	0.000	164.4	mg/L	377	Standard

Sample ID: QC Std 8

Report Date/Time: Thursday, May 10, 2012 10:19:32

Page 1

Approved: May 11, 2012

J. J. H.

K	39	623.3	5.8	-0.0011	0.003	247.8	mg/L	583	Standard
Ca	43	63.3	12.1	-0.0503	0.020	39.6	mg/L	73	Standard
Fe	54	911.1	11.9	-0.0006	0.020	3168.2	mg/L	785	Standard
Fe	57	4989.2	2.0	-0.0076	0.001	7.5	mg/L	6133	Standard
Sc-1	45	272244.8	2.1				mg/L	254529	Standard
Cl	35	652552.3	33.0				ug/L	1641778	Standard
Kr	83	55.9	3.0				ug/L	60	Standard
Br	81	11411.8	2.5				ug/L	11554	Standard
P	31	57848.0	6.0				ug/L	45410	Standard
S	34	666886.6	1.2				ug/L	568857	Standard
Sr	88	268.3	14.0				ug/L	240	Standard

QC Calculated Values

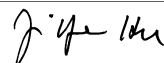
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	92.617		
Cr	52	94.694		
Cr	53			
Mn	55	96.653		
Co	59	100.278		
Ni	60	100.860		
Cu	65	102.577		
Zn	66	112.971		
Ge	72		103.436	
As	75	99.644		
Se	82	110.105		
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.087	
Rh	103			
Mo	98			
Ag	107	105.455		
Cd	111	104.152		
Cd	114			
In	115		102.217	
Sn	118			
Sb	123	100.793		
Ba	135	97.463		
Ce	140			
Tb	159		101.693	
Ho	165			
Tl	203	84.866		
Tl	205			
Pb	206			

Sample ID: QC Std 8

Report Date/Time: Thursday, May 10, 2012 10:19:32

Page 2

Approved: May 11, 2012




Pb	207		
Pb	208	97.270	
U	238	94.672	
> Bi	209		99.886
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 8
 Report Date/Time: Thursday, May 10, 2012 10:19:32
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015301

Sample Date/Time: Thursday, May 10, 2012 10:19:53

Number of Replicates: 3

Autosampler Position: 214

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	120788.1	2.5	9633.3895	425.963	4.4	ug/L	12600	Standard
|	Be	9	18.3	15.7	-0.0095	0.001	6.9	ug/L	5	Standard
|	Al	27	299336.6	1.2	16.3853	0.413	2.5	ug/L	16102	Standard
>	Sc	45	285126.8	3.6				ug/L	254529	Standard
|	Ti	47	753.0	5.6	0.4170	0.022	5.2	ug/L	84	Standard
|	V	51	7371.5	4.9	0.1722	0.018	10.3	ug/L	5785	Standard
|	Cr	52	15701.5	2.5	0.2917	0.029	10.0	ug/L	12212	Standard
|	Cr	53	2784.4	10.1	0.0300	0.129	430.3	ug/L	5042	Standard
|	Mn	55	69393.3	2.0	3.2155	0.067	2.1	ug/L	1290	Standard
|	Co	59	1631.1	2.7	0.0989	0.002	1.9	ug/L	143	Standard
|	Ni	60	6437.0	4.5	2.0280	0.044	2.2	ug/L	79	Standard
|	Cu	65	18962.9	2.6	6.6209	0.181	2.7	ug/L	154	Standard
|	Zn	66	46218.8	2.6	35.7959	0.785	2.2	ug/L	194	Standard
>	Ge	72	238532.3	4.0				ug/L	232024	Standard
|	As	75	62.8	42.0	0.2795	0.021	7.4	ug/L	-297	Standard
|	Se	82	136.7	4.9	0.8798	0.039	4.5	ug/L	17	Standard
|	Se-1	77	210.3	4.6	0.6601	0.015	2.3	ug/L	180	Standard
|	Ga	71	214967.3	4.6				mg/L	210139	Standard
|	Rb	85	10231.8	4.7				ug/L	12	Standard
>	Y	89	220731.0	3.7				ug/L	214065	Standard
|	Rh	103	86.7	6.7				ug/L	0	Standard
|	Mo	98	1342.8	1.3	0.3062	0.007	2.3	ug/L	6	Standard
|	Ag	107	60.0	14.2	-0.0004	0.001	217.9	ug/L	33	Standard
|	Cd	111	1041.9	2.3	0.1304	0.006	4.8	mg/L	437	Standard
|	Cd	114	2649.6	2.2	0.1175	0.003	2.8	ug/L	1160	Standard
>	In	115	667375.4	1.2				ug/L	646604	Standard
|	Sn	118	1254.1	1.3	0.0211	0.000	1.7	ug/L	864	Standard
|	Sb	123	2062.9	2.3	0.1784	0.005	3.1	ug/L	18	Standard
|	Ba	135	80922.3	2.4	17.0131	0.199	1.2	ug/L	39	Standard
|	Ce	140	4260.6	2.0				ug/L	46	Standard
>	Tb	159	730629.3	1.9				ug/L	695671	Standard
|	Ho	165	78.3	8.7				ug/L	9	Standard
|	Tl	203	824.4	3.2	0.0159	0.002	13.6	ug/L	687	Standard
|	Tl	205	1943.5	4.0	0.0167	0.002	9.4	ug/L	1624	Standard
|	Pb	206	11665.8	1.2	0.9092	0.020	2.3	ug/L	305	Standard
|	Pb	207	9919.6	0.8	0.9064	0.015	1.7	ug/L	231	Standard
|	Pb	208	45975.7	1.3	0.9024	0.010	1.1	ug/L	1129	Standard
|	U	238	7350.8	1.7	0.2797	0.003	1.0	ug/L	3	Standard
>	Bi	209	385767.4	2.0				ug/L	405108	Standard
|	Na	23	86903.6	2.9	21.5150	0.405	1.9	mg/L	118	Standard
|	Mg	24	3416246.4	1.4	5.5848	0.174	3.1	mg/L	377	Standard

Sample ID: L1205015301

Report Date/Time: Thursday, May 10, 2012 10:22:27

Page 1

Approved: May 11, 2012

K	39	17670.3	1.2	1.3142	0.042	3.2	mg/L	583	Standard
Ca	43	12601.9	2.4	26.8411	1.057	3.9	mg/L	73	Standard
Fe	54	1196.5	6.6	0.0378	0.006	15.7	mg/L	785	Standard
Fe	57	28030.9	3.1	0.1089	0.002	1.8	mg/L	6133	Standard
Sc-1	45	285126.8	3.6				mg/L	254529	Standard
Cl	35	4187116.6	6.8				ug/L	1641778	Standard
Kr	83	58.7	13.8				ug/L	60	Standard
Br	81	49566.9	4.1				ug/L	11554	Standard
P	31	75187.8	1.5				ug/L	45410	Standard
S	34	1932472.2	2.4				ug/L	568857	Standard
Sr	88	2759118.3	1.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.805	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.114	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.212	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.025	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015301

Report Date/Time: Thursday, May 10, 2012 10:22:27

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.226
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205015301
 Report Date/Time: Thursday, May 10, 2012 10:22:27
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015302

Sample Date/Time: Thursday, May 10, 2012 10:22:47

Number of Replicates: 3

Autosampler Position: 215

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	119707.8	1.4	9754.5742	287.070	2.9	ug/L	12600	Standard
|	Be	9	15.0	66.7	-0.0103	0.003	26.2	ug/L	5	Standard
|	Al	27	97610.2	2.0	4.9209	0.047	1.0	ug/L	16102	Standard
>	Sc	45	279312.9	1.2				ug/L	254529	Standard
|	Ti	47	443.0	6.1	0.2147	0.014	6.7	ug/L	84	Standard
|	V	51	6954.1	3.7	0.1378	0.007	5.4	ug/L	5785	Standard
|	Cr	52	15870.0	0.5	0.2810	0.028	9.9	ug/L	12212	Standard
|	Cr	53	3592.1	3.2	0.4472	0.101	22.5	ug/L	5042	Standard
|	Mn	55	54371.1	1.4	2.4527	0.041	1.7	ug/L	1290	Standard
|	Co	59	1413.1	3.3	0.0826	0.005	5.5	ug/L	143	Standard
|	Ni	60	6698.5	2.5	2.0720	0.021	1.0	ug/L	79	Standard
|	Cu	65	17181.7	2.0	5.8808	0.094	1.6	ug/L	154	Standard
|	Zn	66	44578.8	2.2	33.8667	0.071	0.2	ug/L	194	Standard
>	Ge	72	242984.7	2.0				ug/L	232024	Standard
|	As	75	30.4	154.0	0.2515	0.039	15.6	ug/L	-297	Standard
|	Se	82	135.6	3.2	0.8525	0.045	5.2	ug/L	17	Standard
|	Se-1	77	242.7	3.5	0.9915	0.152	15.4	ug/L	180	Standard
|	Ga	71	217572.8	1.0				mg/L	210139	Standard
|	Rb	85	8909.3	1.2				ug/L	12	Standard
>	Y	89	219767.9	2.3				ug/L	214065	Standard
|	Rh	103	81.7	30.2				ug/L	0	Standard
|	Mo	98	1888.0	1.4	0.4295	0.006	1.5	ug/L	6	Standard
|	Ag	107	49.3	1.2	-0.0017	0.000	3.4	ug/L	33	Standard
|	Cd	111	1030.4	3.2	0.1257	0.006	5.1	mg/L	437	Standard
|	Cd	114	2603.5	2.4	0.1117	0.005	4.2	ug/L	1160	Standard
>	In	115	673838.1	0.3				ug/L	646604	Standard
|	Sn	118	1085.0	4.4	0.0100	0.003	27.4	ug/L	864	Standard
|	Sb	123	1890.1	2.8	0.1617	0.004	2.7	ug/L	18	Standard
|	Ba	135	79777.1	0.8	16.6127	0.091	0.5	ug/L	39	Standard
|	Ce	140	1592.1	2.9				ug/L	46	Standard
>	Tb	159	742833.9	0.7				ug/L	695671	Standard
|	Ho	165	35.3	13.1				ug/L	9	Standard
|	Tl	203	787.0	2.4	0.0134	0.001	9.2	ug/L	687	Standard
|	Tl	205	1884.1	0.7	0.0151	0.000	0.7	ug/L	1624	Standard
|	Pb	206	3265.7	1.0	0.2376	0.002	0.7	ug/L	305	Standard
|	Pb	207	2812.9	2.9	0.2403	0.007	2.7	ug/L	231	Standard
|	Pb	208	12878.5	1.1	0.2360	0.001	0.5	ug/L	1129	Standard
|	U	238	7053.3	2.4	0.2682	0.005	1.9	ug/L	3	Standard
>	Bi	209	386088.7	0.6				ug/L	405108	Standard
|	Na	23	85731.9	0.9	21.6640	0.409	1.9	mg/L	118	Standard
|	Mg	24	3316563.1	1.2	5.5319	0.134	2.4	mg/L	377	Standard

Sample ID: L1205015302

Report Date/Time: Thursday, May 10, 2012 10:25:20

Page 1

Approved: May 11, 2012

J. J. H.

K	39	17208.1	1.6	1.3053	0.021	1.6	mg/L	583	Standard
Ca	43	12365.0	1.1	26.8663	0.352	1.3	mg/L	73	Standard
Fe	54	1001.6	6.2	0.0100	0.008	80.7	mg/L	785	Standard
Fe	57	21672.2	1.9	0.0787	0.003	3.6	mg/L	6133	Standard
Sc-1	45	279312.9	1.2				mg/L	254529	Standard
Cl	35	4144951.0	5.3				ug/L	1641778	Standard
Kr	83	58.3	9.8				ug/L	60	Standard
Br	81	49499.9	1.7				ug/L	11554	Standard
P	31	69848.2	1.9				ug/L	45410	Standard
S	34	1919869.4	0.2				ug/L	568857	Standard
Sr	88	2592723.6	1.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.724	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.664	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		104.212	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.779	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015302

Report Date/Time: Thursday, May 10, 2012 10:25:20

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.305
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205015302
 Report Date/Time: Thursday, May 10, 2012 10:25:20
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015303

Sample Date/Time: Thursday, May 10, 2012 10:25:40

Number of Replicates: 3

Autosampler Position: 216

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	495440.1	1.9	42451.3919	574.460	1.4	ug/L	12600	Standard
|	Be	9	6.7	43.3	-0.0127	0.001	6.1	ug/L	5	Standard
|	Al	27	70405.0	4.0	3.1658	0.227	7.2	ug/L	16102	Standard
>	Sc	45	290983.3	2.0				ug/L	254529	Standard
|	Ti	47	962.0	4.7	0.5754	0.026	4.5	ug/L	84	Standard
|	V	51	5731.3	4.7	0.0844	0.021	24.3	ug/L	5785	Standard
|	Cr	52	14838.3	0.9	0.2710	0.023	8.4	ug/L	12212	Standard
|	Cr	53	3182.0	4.4	0.3284	0.081	24.6	ug/L	5042	Standard
|	Mn	55	5540790.9	2.3	274.3835	4.111	1.5	ug/L	1290	Standard
|	Co	59	50172.6	1.0	3.4885	0.024	0.7	ug/L	143	Standard
|	Ni	60	16814.3	1.2	5.5615	0.030	0.5	ug/L	79	Standard
|	Cu	65	1502.4	1.8	0.5007	0.006	1.2	ug/L	154	Standard
|	Zn	66	12140.2	0.7	9.6671	0.126	1.3	ug/L	194	Standard
>	Ge	72	228879.5	0.8				ug/L	232024	Standard
|	As	75	6490.2	1.0	5.9993	0.031	0.5	ug/L	-297	Standard
|	Se	82	224.3	7.5	1.6166	0.139	8.6	ug/L	17	Standard
|	Se-1	77	221.3	9.3	0.9000	0.247	27.5	ug/L	180	Standard
|	Ga	71	205612.2	1.2				mg/L	210139	Standard
|	Rb	85	30639.3	0.7				ug/L	12	Standard
>	Y	89	217865.1	3.9				ug/L	214065	Standard
|	Rh	103	320.0	12.2				ug/L	0	Standard
|	Mo	98	783.8	2.7	0.1771	0.005	2.5	ug/L	6	Standard
|	Ag	107	48.7	16.6	-0.0017	0.001	47.9	ug/L	33	Standard
|	Cd	111	639.7	5.9	0.0455	0.006	14.0	mg/L	437	Standard
|	Cd	114	1636.3	3.3	0.0357	0.002	6.5	ug/L	1160	Standard
>	In	115	661008.3	2.4				ug/L	646604	Standard
|	Sn	118	1009.7	3.8	0.0067	0.003	38.4	ug/L	864	Standard
|	Sb	123	852.6	5.9	0.0730	0.003	4.1	ug/L	18	Standard
|	Ba	135	272975.2	2.7	57.9676	0.589	1.0	ug/L	39	Standard
|	Ce	140	3418.4	2.7				ug/L	46	Standard
>	Tb	159	735834.1	2.6				ug/L	695671	Standard
|	Ho	165	91.7	7.3				ug/L	9	Standard
|	Tl	203	1511.4	2.1	0.0654	0.003	3.9	ug/L	687	Standard
|	Tl	205	3489.4	0.6	0.0639	0.001	2.0	ug/L	1624	Standard
|	Pb	206	3400.7	1.6	0.2648	0.008	3.1	ug/L	305	Standard
|	Pb	207	2654.6	3.4	0.2404	0.006	2.6	ug/L	231	Standard
|	Pb	208	12766.8	0.3	0.2492	0.003	1.4	ug/L	1129	Standard
|	U	238	15900.7	0.2	0.6376	0.009	1.5	ug/L	3	Standard
>	Bi	209	364237.0	1.5				ug/L	405108	Standard
|	Na	23	107619.3	2.3	26.1115	0.718	2.8	mg/L	118	Standard
|	Mg	24	9741908.8	1.9	15.5969	0.174	1.1	mg/L	377	Standard

Sample ID: L1205015303

Report Date/Time: Thursday, May 10, 2012 10:28:12

Page 1

Approved: May 11, 2012

J. J. H.

K	39	34332.2	1.6	2.5470	0.032	1.3	mg/L	583	Standard
Ca	43	43253.3	2.0	90.6596	0.523	0.6	mg/L	73	Standard
Fe	54	15526.8	1.7	2.2776	0.037	1.6	mg/L	785	Standard
Fe	57	534179.9	1.6	2.6394	0.021	0.8	mg/L	6133	Standard
Sc-1	45	290983.3	2.0				mg/L	254529	Standard
Cl	35	4251055.1	2.9				ug/L	1641778	Standard
Kr	83	69.0	7.0				ug/L	60	Standard
Br	81	75695.5	3.9				ug/L	11554	Standard
P	31	58936.3	5.6				ug/L	45410	Standard
S	34	5203598.5	1.9				ug/L	568857	Standard
Sr	88	10890919.5	4.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.645	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.775	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.228	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.773	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015303

Report Date/Time: Thursday, May 10, 2012 10:28:12

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	89.911
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015303
 Report Date/Time: Thursday, May 10, 2012 10:28:12
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015304

Sample Date/Time: Thursday, May 10, 2012 10:28:32

Number of Replicates: 3

Autosampler Position: 217

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	500292.1	2.5	41969.7833	2186.063	5.2	ug/L	12600	Standard
|	Be	9	21.7	35.3	-0.0089	0.002	20.9	ug/L	5	Standard
|	Al	27	94688.3	1.7	4.4167	0.173	3.9	ug/L	16102	Standard
>	Sc	45	297335.3	2.5				ug/L	254529	Standard
|	Ti	47	876.0	4.0	0.5130	0.036	7.1	ug/L	84	Standard
|	V	51	5815.6	4.5	0.0858	0.014	16.7	ug/L	5785	Standard
|	Cr	52	13580.8	1.5	0.1476	0.029	19.6	ug/L	12212	Standard
|	Cr	53	3142.0	8.3	0.2842	0.105	37.0	ug/L	5042	Standard
|	Mn	55	5153556.9	2.9	252.5578	4.901	1.9	ug/L	1290	Standard
|	Co	59	46047.9	2.6	3.1673	0.039	1.2	ug/L	143	Standard
|	Ni	60	16850.4	5.3	5.5130	0.189	3.4	ug/L	79	Standard
|	Cu	65	1521.4	2.6	0.5020	0.015	3.1	ug/L	154	Standard
|	Zn	66	13444.6	2.1	10.6114	0.162	1.5	ug/L	194	Standard
>	Ge	72	231299.8	2.4				ug/L	232024	Standard
|	As	75	6915.7	3.4	6.3131	0.117	1.8	ug/L	-297	Standard
|	Se	82	220.5	2.0	1.5681	0.015	1.0	ug/L	17	Standard
|	Se-1	77	249.7	7.3	1.2190	0.259	21.3	ug/L	180	Standard
|	Ga	71	207437.6	2.6				mg/L	210139	Standard
|	Rb	85	31723.2	2.3				ug/L	12	Standard
>	Y	89	213519.3	1.8				ug/L	214065	Standard
|	Rh	103	288.3	23.1				ug/L	0	Standard
|	Mo	98	749.6	4.7	0.1675	0.010	6.1	ug/L	6	Standard
|	Ag	107	47.0	16.9	-0.0019	0.001	43.4	ug/L	33	Standard
|	Cd	111	641.4	4.9	0.0447	0.006	13.8	mg/L	437	Standard
|	Cd	114	1571.7	2.9	0.0292	0.003	11.9	ug/L	1160	Standard
>	In	115	666742.0	1.4				ug/L	646604	Standard
|	Sn	118	1033.7	4.2	0.0076	0.003	39.9	ug/L	864	Standard
|	Sb	123	856.1	5.0	0.0726	0.003	4.3	ug/L	18	Standard
|	Ba	135	284124.3	2.9	59.8123	1.189	2.0	ug/L	39	Standard
|	Ce	140	3140.3	2.1				ug/L	46	Standard
>	Tb	159	760222.2	2.4				ug/L	695671	Standard
|	Ho	165	88.7	10.7				ug/L	9	Standard
|	Tl	203	1568.7	0.5	0.0677	0.000	0.7	ug/L	687	Standard
|	Tl	205	3707.1	3.5	0.0685	0.003	5.0	ug/L	1624	Standard
|	Pb	206	2474.9	2.0	0.1832	0.003	1.5	ug/L	305	Standard
|	Pb	207	1971.1	0.8	0.1697	0.002	1.5	ug/L	231	Standard
|	Pb	208	9274.1	1.7	0.1718	0.002	1.0	ug/L	1129	Standard
|	U	238	15038.1	2.2	0.5941	0.010	1.6	ug/L	3	Standard
>	Bi	209	369742.5	0.8				ug/L	405108	Standard
|	Na	23	106316.9	2.7	25.2553	1.164	4.6	mg/L	118	Standard
|	Mg	24	9660434.7	3.6	15.1503	0.929	6.1	mg/L	377	Standard

Sample ID: L1205015304

Report Date/Time: Thursday, May 10, 2012 10:31:05

Page 1

Approved: May 11, 2012

J. J. H.

K	39	33670.7	0.9	2.4434	0.070	2.9	mg/L	583	Standard
Ca	43	41468.4	2.7	85.0973	3.666	4.3	mg/L	73	Standard
Fe	54	15897.5	0.9	2.2835	0.085	3.7	mg/L	785	Standard
Fe	57	542744.9	2.9	2.6260	0.129	4.9	mg/L	6133	Standard
Sc-1	45	297335.3	2.5				mg/L	254529	Standard
Cl	35	4376781.8	3.3				ug/L	1641778	Standard
Kr	83	68.7	6.3				ug/L	60	Standard
Br	81	77842.1	3.3				ug/L	11554	Standard
P	31	58557.2	3.5				ug/L	45410	Standard
S	34	4977890.6	1.9				ug/L	568857	Standard
Sr	88	10489995.6	0.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.688	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.745	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.114	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		109.279	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015304

Report Date/Time: Thursday, May 10, 2012 10:31:05

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	91.270
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015304
 Report Date/Time: Thursday, May 10, 2012 10:31:05
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015305

Sample Date/Time: Thursday, May 10, 2012 10:31:25

Number of Replicates: 3

Autosampler Position: 218

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	244263.4	1.3	20480.7476	171.122	0.8	ug/L	12600	Standard
|	Be	9	120.0	19.1	0.0173	0.006	33.5	ug/L	5	Standard
|	Al	27	1564353.6	2.4	87.8762	1.480	1.7	ug/L	16102	Standard
>	Sc	45	288537.2	2.0				ug/L	254529	Standard
|	Ti	47	5233.9	9.7	3.3256	0.313	9.4	ug/L	84	Standard
|	V	51	9925.6	1.6	0.3441	0.012	3.4	ug/L	5785	Standard
|	Cr	52	15855.6	1.7	0.3294	0.024	7.2	ug/L	12212	Standard
|	Cr	53	3077.0	7.9	0.2274	0.146	64.2	ug/L	5042	Standard
|	Mn	55	10423242.0	3.0	504.7321	16.709	3.3	ug/L	1290	Standard
|	Co	59	297942.4	2.5	20.3008	0.535	2.6	ug/L	143	Standard
|	Ni	60	22478.3	3.3	7.2759	0.251	3.5	ug/L	79	Standard
|	Cu	65	47039.3	1.7	16.8003	0.383	2.3	ug/L	154	Standard
|	Zn	66	77914.9	2.6	61.5792	1.783	2.9	ug/L	194	Standard
>	Ge	72	234133.5	0.6				ug/L	232024	Standard
|	As	75	2053.4	2.5	2.0121	0.053	2.6	ug/L	-297	Standard
|	Se	82	134.0	2.2	0.8779	0.024	2.8	ug/L	17	Standard
|	Se-1	77	192.0	6.0	0.4873	0.152	31.1	ug/L	180	Standard
|	Ga	71	211830.9	0.4				mg/L	210139	Standard
|	Rb	85	26843.8	3.3				ug/L	12	Standard
>	Y	89	219149.3	2.9				ug/L	214065	Standard
|	Rh	103	120.0	37.0				ug/L	0	Standard
|	Mo	98	3042.6	3.1	0.6955	0.016	2.4	ug/L	6	Standard
|	Ag	107	118.7	4.3	0.0062	0.000	7.5	ug/L	33	Standard
|	Cd	111	1832.1	3.5	0.2948	0.010	3.3	mg/L	437	Standard
|	Cd	114	4821.8	1.0	0.2911	0.006	2.0	ug/L	1160	Standard
>	In	115	675451.9	1.2				ug/L	646604	Standard
|	Sn	118	2434.9	1.0	0.0918	0.002	2.7	ug/L	864	Standard
|	Sb	123	2999.0	3.2	0.2573	0.006	2.4	ug/L	18	Standard
|	Ba	135	208361.3	2.1	43.2962	0.428	1.0	ug/L	39	Standard
|	Ce	140	16762.9	1.5				ug/L	46	Standard
>	Tb	159	746584.3	1.1				ug/L	695671	Standard
|	Ho	165	331.7	3.9				ug/L	9	Standard
|	Tl	203	987.0	7.9	0.0281	0.005	16.2	ug/L	687	Standard
|	Tl	205	2330.2	1.5	0.0291	0.001	4.5	ug/L	1624	Standard
|	Pb	206	16289.1	2.0	1.3181	0.016	1.2	ug/L	305	Standard
|	Pb	207	13664.5	1.7	1.2962	0.014	1.1	ug/L	231	Standard
|	Pb	208	63384.8	1.9	1.2917	0.012	0.9	ug/L	1129	Standard
|	U	238	11339.2	2.5	0.4431	0.008	1.7	ug/L	3	Standard
>	Bi	209	374313.6	1.1				ug/L	405108	Standard
|	Na	23	101822.8	2.8	24.9060	0.297	1.2	mg/L	118	Standard
|	Mg	24	5512372.7	0.5	8.9018	0.191	2.1	mg/L	377	Standard

Sample ID: L1205015305

Report Date/Time: Thursday, May 10, 2012 10:33:58

Page 1

Approved: May 11, 2012

J. J. H.

K	39	17817.1	2.3	1.3083	0.019	1.4	mg/L	583	Standard
Ca	43	23100.9	1.9	48.7419	0.321	0.7	mg/L	73	Standard
Fe	54	21101.5	5.8	3.1790	0.210	6.6	mg/L	785	Standard
Fe	57	672913.7	0.7	3.3630	0.066	2.0	mg/L	6133	Standard
Sc-1	45	288537.2	2.0				mg/L	254529	Standard
Cl	35	4438702.8	3.4				ug/L	1641778	Standard
Kr	83	62.7	5.1				ug/L	60	Standard
Br	81	58056.9	1.6				ug/L	11554	Standard
P	31	90076.2	2.0				ug/L	45410	Standard
S	34	2067531.3	2.9				ug/L	568857	Standard
Sr	88	4080843.6	1.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.909	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.375	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		104.461	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.319	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015305

Report Date/Time: Thursday, May 10, 2012 10:33:58

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	92.398
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015305
 Report Date/Time: Thursday, May 10, 2012 10:33:58
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015306

Sample Date/Time: Thursday, May 10, 2012 10:34:18

Number of Replicates: 3

Autosampler Position: 219

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	239349.9	2.6	20848.0178	697.103	3.3	ug/L	12600	Standard
|	Be	9	21.7	58.1	-0.0085	0.003	40.3	ug/L	5	Standard
|	Al	27	150048.5	4.1	8.0332	0.403	5.0	ug/L	16102	Standard
>	Sc	45	278037.9	0.6				ug/L	254529	Standard
|	Ti	47	1135.0	5.6	0.7046	0.043	6.1	ug/L	84	Standard
|	V	51	6041.5	2.8	0.1123	0.015	13.1	ug/L	5785	Standard
|	Cr	52	13682.5	0.7	0.1921	0.005	2.6	ug/L	12212	Standard
|	Cr	53	2551.0	4.5	-0.0105	0.067	634.6	ug/L	5042	Standard
|	Mn	55	10233691.8	0.9	516.6971	3.589	0.7	ug/L	1290	Standard
|	Co	59	289673.3	1.6	20.5796	0.210	1.0	ug/L	143	Standard
|	Ni	60	20558.3	2.8	6.9365	0.132	1.9	ug/L	79	Standard
|	Cu	65	15449.5	3.3	5.7196	0.136	2.4	ug/L	154	Standard
|	Zn	66	71325.2	2.1	58.7633	0.738	1.3	ug/L	194	Standard
>	Ge	72	224539.7	0.9				ug/L	232024	Standard
|	As	75	1806.6	3.2	1.8647	0.064	3.4	ug/L	-297	Standard
|	Se	82	114.0	6.0	0.7619	0.062	8.2	ug/L	17	Standard
|	Se-1	77	176.7	14.8	0.3928	0.321	81.8	ug/L	180	Standard
|	Ga	71	200570.9	2.1				mg/L	210139	Standard
|	Rb	85	24109.2	2.5				ug/L	12	Standard
>	Y	89	209201.4	2.1				ug/L	214065	Standard
|	Rh	103	101.7	44.1				ug/L	0	Standard
|	Mo	98	2983.2	1.0	0.6965	0.002	0.2	ug/L	6	Standard
|	Ag	107	45.7	5.1	-0.0020	0.000	11.4	ug/L	33	Standard
|	Cd	111	1653.8	0.8	0.2647	0.005	1.9	mg/L	437	Standard
|	Cd	114	4288.7	1.7	0.2553	0.008	3.1	ug/L	1160	Standard
>	In	115	661308.7	0.8				ug/L	646604	Standard
|	Sn	118	1079.0	1.4	0.0109	0.000	3.4	ug/L	864	Standard
|	Sb	123	2512.9	1.5	0.2199	0.005	2.3	ug/L	18	Standard
|	Ba	135	220827.0	0.9	46.8749	0.732	1.6	ug/L	39	Standard
|	Ce	140	2152.2	0.7				ug/L	46	Standard
>	Tb	159	733428.0	1.8				ug/L	695671	Standard
|	Ho	165	58.7	20.2				ug/L	9	Standard
|	Tl	203	700.7	1.3	0.0101	0.001	7.4	ug/L	687	Standard
|	Tl	205	1646.1	2.0	0.0108	0.001	10.4	ug/L	1624	Standard
|	Pb	206	1298.7	2.2	0.0856	0.002	2.2	ug/L	305	Standard
|	Pb	207	1070.4	2.2	0.0821	0.003	3.3	ug/L	231	Standard
|	Pb	208	5016.7	0.4	0.0828	0.000	0.5	ug/L	1129	Standard
|	U	238	10683.4	1.8	0.4244	0.010	2.4	ug/L	3	Standard
>	Bi	209	368406.2	0.7				ug/L	405108	Standard
|	Na	23	100458.7	1.7	25.5052	0.577	2.3	mg/L	118	Standard
|	Mg	24	5580270.1	1.5	9.3498	0.186	2.0	mg/L	377	Standard

Sample ID: L1205015306

Report Date/Time: Thursday, May 10, 2012 10:36:51

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	17635.3	3.5	1.3454	0.054	4.0	mg/L	583	Standard
Ca	43	22955.7	3.2	50.2763	1.879	3.7	mg/L	73	Standard
Fe	54	19477.7	0.1	3.0378	0.018	0.6	mg/L	785	Standard
Fe	57	635481.6	1.6	3.2946	0.070	2.1	mg/L	6133	Standard
Sc-1	45	278037.9	0.6				mg/L	254529	Standard
Cl	35	4461007.3	5.8				ug/L	1641778	Standard
Kr	83	61.8	3.6				ug/L	60	Standard
Br	81	57316.5	0.7				ug/L	11554	Standard
P	31	74874.7	3.0				ug/L	45410	Standard
S	34	2040121.9	1.6				ug/L	568857	Standard
Sr	88	3983561.6	1.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.775	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.728	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.274	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.427	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015306

Report Date/Time: Thursday, May 10, 2012 10:36:51

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	90.940
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015306
 Report Date/Time: Thursday, May 10, 2012 10:36:51
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015307

Sample Date/Time: Thursday, May 10, 2012 10:37:11

Number of Replicates: 3

Autosampler Position: 220

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	804762.1	0.9	68113.3483	679.300	1.0	ug/L	12600	Standard
|	Be	9	16.7	62.4	-0.0102	0.003	26.3	ug/L	5	Standard
|	Al	27	654963.8	0.6	35.1794	0.118	0.3	ug/L	16102	Standard
>	Sc	45	297760.7	0.5				ug/L	254529	Standard
|	Ti	47	2692.9	26.5	1.7334	0.463	26.7	ug/L	84	Standard
|	V	51	8259.3	3.9	0.2539	0.026	10.3	ug/L	5785	Standard
|	Cr	52	15432.9	1.6	0.3340	0.025	7.6	ug/L	12212	Standard
|	Cr	53	4260.6	2.6	0.9765	0.084	8.6	ug/L	5042	Standard
|	Mn	55	4212528.8	0.4	210.2204	1.070	0.5	ug/L	1290	Standard
|	Co	59	26970.3	0.8	1.8851	0.023	1.2	ug/L	143	Standard
|	Ni	60	14225.3	1.7	4.7379	0.047	1.0	ug/L	79	Standard
|	Cu	65	3488.7	2.0	1.2384	0.020	1.6	ug/L	154	Standard
|	Zn	66	30642.6	0.6	24.8594	0.098	0.4	ug/L	194	Standard
>	Ge	72	227124.4	0.8				ug/L	232024	Standard
|	As	75	2922.5	2.0	2.8459	0.030	1.1	ug/L	-297	Standard
|	Se	82	272.5	5.3	2.0142	0.098	4.8	ug/L	17	Standard
|	Se-1	77	351.0	1.7	2.5278	0.041	1.6	ug/L	180	Standard
|	Ga	71	205766.9	1.2				mg/L	210139	Standard
|	Rb	85	28752.3	2.7				ug/L	12	Standard
>	Y	89	216080.3	1.9				ug/L	214065	Standard
|	Rh	103	343.3	16.0				ug/L	0	Standard
|	Mo	98	875.9	6.8	0.1978	0.015	7.6	ug/L	6	Standard
|	Ag	107	85.0	11.9	0.0025	0.001	45.7	ug/L	33	Standard
|	Cd	111	852.9	1.4	0.0906	0.003	3.6	mg/L	437	Standard
|	Cd	114	2192.5	0.5	0.0808	0.002	2.6	ug/L	1160	Standard
>	In	115	664556.5	0.7				ug/L	646604	Standard
|	Sn	118	5145.2	2.4	0.2612	0.008	3.2	ug/L	864	Standard
|	Sb	123	1596.6	3.4	0.1381	0.005	3.3	ug/L	18	Standard
|	Ba	135	408901.0	0.8	86.3736	0.184	0.2	ug/L	39	Standard
|	Ce	140	17386.0	3.1				ug/L	46	Standard
>	Tb	159	745646.1	0.3				ug/L	695671	Standard
|	Ho	165	330.7	7.1				ug/L	9	Standard
|	Tl	203	609.3	3.4	0.0057	0.002	34.2	ug/L	687	Standard
|	Tl	205	1413.1	2.8	0.0059	0.001	15.8	ug/L	1624	Standard
|	Pb	206	103312.0	0.6	8.9893	0.061	0.7	ug/L	305	Standard
|	Pb	207	84808.7	0.6	8.6516	0.122	1.4	ug/L	231	Standard
|	Pb	208	397741.9	0.5	8.7175	0.067	0.8	ug/L	1129	Standard
|	U	238	11438.0	0.6	0.4734	0.003	0.7	ug/L	3	Standard
>	Bi	209	353327.3	1.3				ug/L	405108	Standard
|	Na	23	192086.7	0.9	45.5569	0.532	1.2	mg/L	118	Standard
|	Mg	24	14863208.7	1.7	23.2552	0.510	2.2	mg/L	377	Standard

Sample ID: L1205015307

Report Date/Time: Thursday, May 10, 2012 10:39:44

Page 1

Approved: May 11, 2012

J. J. H.

K	39	28598.6	3.0	2.0634	0.056	2.7	mg/L	583	Standard
Ca	43	47206.8	1.8	96.7118	2.185	2.3	mg/L	73	Standard
Fe	54	26011.6	2.9	3.8259	0.113	3.0	mg/L	785	Standard
Fe	57	891336.4	0.8	4.3254	0.056	1.3	mg/L	6133	Standard
Sc-1	45	297760.7	0.5				mg/L	254529	Standard
Cl	35	8521486.0	1.3				ug/L	1641778	Standard
Kr	83	81.6	4.1				ug/L	60	Standard
Br	81	105401.0	5.1				ug/L	11554	Standard
P	31	77620.2	4.4				ug/L	45410	Standard
S	34	5456669.5	2.0				ug/L	568857	Standard
Sr	88	13157757.4	1.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.889	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		100.941	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.776	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.184	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015307

Report Date/Time: Thursday, May 10, 2012 10:39:44

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	87.218
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015307
 Report Date/Time: Thursday, May 10, 2012 10:39:44
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205015308

Sample Date/Time: Thursday, May 10, 2012 10:40:04

Number of Replicates: 3

Autosampler Position: 221

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	793359.2	3.2	67695.0581	512.185	0.8	ug/L	12600	Standard
|	Be	9	13.3	43.3	-0.0109	0.002	15.0	ug/L	5	Standard
|	Al	27	67247.4	4.6	2.9329	0.213	7.3	ug/L	16102	Standard
>	Sc	45	295343.0	3.5				ug/L	254529	Standard
|	Ti	47	989.4	4.3	0.6035	0.043	7.2	ug/L	84	Standard
|	V	51	6039.1	6.9	0.1099	0.023	20.9	ug/L	5785	Standard
|	Cr	52	13565.1	0.6	0.1756	0.022	12.4	ug/L	12212	Standard
|	Cr	53	4368.1	0.9	1.0562	0.046	4.4	ug/L	5042	Standard
|	Mn	55	3988221.4	0.6	200.3380	3.625	1.8	ug/L	1290	Standard
|	Co	59	24797.3	1.4	1.7438	0.035	2.0	ug/L	143	Standard
|	Ni	60	13463.3	2.6	4.5117	0.067	1.5	ug/L	79	Standard
|	Cu	65	1795.8	2.1	0.6180	0.030	4.9	ug/L	154	Standard
|	Zn	66	23944.9	0.1	19.5186	0.468	2.4	ug/L	194	Standard
>	Ge	72	225690.4	2.3				ug/L	232024	Standard
|	As	75	2582.7	3.5	2.5581	0.134	5.2	ug/L	-297	Standard
|	Se	82	268.8	1.2	1.9995	0.074	3.7	ug/L	17	Standard
|	Se-1	77	341.7	5.4	2.4379	0.164	6.7	ug/L	180	Standard
|	Ga	71	203453.2	1.9				mg/L	210139	Standard
|	Rb	85	27363.0	1.8				ug/L	12	Standard
>	Y	89	209579.9	2.0				ug/L	214065	Standard
|	Rh	103	301.7	22.5				ug/L	0	Standard
|	Mo	98	857.7	3.2	0.1957	0.005	2.3	ug/L	6	Standard
|	Ag	107	52.3	16.5	-0.0012	0.001	73.9	ug/L	33	Standard
|	Cd	111	698.5	7.4	0.0593	0.015	25.9	mg/L	437	Standard
|	Cd	114	1782.2	2.3	0.0486	0.002	3.1	ug/L	1160	Standard
>	In	115	657345.6	3.0				ug/L	646604	Standard
|	Sn	118	1027.7	1.3	0.0082	0.002	25.0	ug/L	864	Standard
|	Sb	123	1250.0	4.3	0.1088	0.006	5.1	ug/L	18	Standard
|	Ba	135	396336.9	1.1	84.6765	2.060	2.4	ug/L	39	Standard
|	Ce	140	1470.1	2.4				ug/L	46	Standard
>	Tb	159	735782.6	1.4				ug/L	695671	Standard
|	Ho	165	54.0	1.9				ug/L	9	Standard
|	Tl	203	572.7	5.8	0.0030	0.003	96.0	ug/L	687	Standard
|	Tl	205	1340.1	4.0	0.0036	0.001	26.6	ug/L	1624	Standard
|	Pb	206	4300.3	1.8	0.3507	0.006	1.6	ug/L	305	Standard
|	Pb	207	3532.7	1.8	0.3372	0.012	3.5	ug/L	231	Standard
|	Pb	208	16401.4	1.2	0.3361	0.002	0.6	ug/L	1129	Standard
|	U	238	10631.7	1.9	0.4387	0.013	2.9	ug/L	3	Standard
>	Bi	209	354612.5	1.7				ug/L	405108	Standard
|	Na	23	189135.5	3.0	45.2439	1.448	3.2	mg/L	118	Standard
|	Mg	24	13972672.8	0.6	22.0549	0.674	3.1	mg/L	377	Standard

Sample ID: L1205015308

Report Date/Time: Thursday, May 10, 2012 10:42:36

Page 1

Approved: May 11, 2012



K	39	28421.7	4.2	2.0675	0.038	1.8	mg/L	583	Standard
Ca	43	44966.6	2.0	92.9058	2.184	2.4	mg/L	73	Standard
Fe	54	24815.9	1.3	3.6776	0.160	4.3	mg/L	785	Standard
Fe	57	870148.3	1.4	4.2591	0.122	2.9	mg/L	6133	Standard
Sc-1	45	295343.0	3.5				mg/L	254529	Standard
Cl	35	8413730.3	2.5				ug/L	1641778	Standard
Kr	83	71.9	4.4				ug/L	60	Standard
Br	81	94870.3	1.4				ug/L	11554	Standard
P	31	63315.5	3.6				ug/L	45410	Standard
S	34	5466100.9	0.8				ug/L	568857	Standard
Sr	88	12622484.6	2.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.270	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.905	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		101.661	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.766	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205015308

Report Date/Time: Thursday, May 10, 2012 10:42:36

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	87.535
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015308
 Report Date/Time: Thursday, May 10, 2012 10:42:36
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, May 10, 2012 10:42:58

Number of Replicates: 3

Autosampler Position: 203

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	14061.5	3.6	85.6074	62.286	72.8	ug/L	12600	Standard
|	Be	9	10.0	50.0	-0.0116	0.002	13.4	ug/L	5	Standard
|	Al	27	78080848.8	1.6	4712.1655	160.833	3.4	ug/L	16102	Standard
>	Sc	45	271236.5	4.8				ug/L	254529	Standard
|	Ti	47	185290.8	3.1	118.4952	1.290	1.1	ug/L	84	Standard
|	V	51	5486.3	1.7	0.0563	0.007	13.3	ug/L	5785	Standard
|	Cr	52	13831.0	1.4	0.1410	0.014	10.1	ug/L	12212	Standard
|	Cr	53	4329.8	13.1	0.9087	0.266	29.2	ug/L	5042	Standard
|	Mn	55	2730.9	5.3	0.0458	0.005	10.1	ug/L	1290	Standard
|	Co	59	398.3	4.4	0.0166	0.001	3.8	ug/L	143	Standard
|	Ni	60	1393.7	5.9	0.4233	0.018	4.3	ug/L	79	Standard
|	Cu	65	664.3	2.8	0.1856	0.011	6.0	ug/L	154	Standard
|	Zn	66	2335.8	4.1	1.6537	0.036	2.2	ug/L	194	Standard
>	Ge	72	236842.4	2.3				ug/L	232024	Standard
|	As	75	-243.1	18.7	0.0169	0.042	250.9	ug/L	-297	Standard
|	Se	82	35.9	22.7	0.1151	0.056	48.3	ug/L	17	Standard
|	Se-1	77	284.7	6.9	1.5640	0.274	17.5	ug/L	180	Standard
|	Ga	71	210803.4	3.9				mg/L	210139	Standard
|	Rb	85	3943.8	7.0				ug/L	12	Standard
>	Y	89	212100.9	0.4				ug/L	214065	Standard
|	Rh	103	6.7	86.6				ug/L	0	Standard
|	Mo	98	424793.1	2.2	97.3042	1.813	1.9	ug/L	6	Standard
|	Ag	107	108.0	5.2	0.0049	0.001	13.2	ug/L	33	Standard
|	Cd	111	783.4	7.7	0.0713	0.012	16.3	mg/L	437	Standard
|	Cd	114	3612.3	2.6	0.1902	0.007	3.8	ug/L	1160	Standard
>	In	115	681942.8	0.7				ug/L	646604	Standard
|	Sn	118	1147.0	0.9	0.0130	0.001	7.4	ug/L	864	Standard
|	Sb	123	520.8	1.1	0.0422	0.001	1.8	ug/L	18	Standard
|	Ba	135	169.0	12.0	0.0266	0.004	16.1	ug/L	39	Standard
|	Ce	140	2003.8	2.5				ug/L	46	Standard
>	Tb	159	760277.0	0.6				ug/L	695671	Standard
|	Ho	165	10.3	5.6				ug/L	9	Standard
|	Tl	203	440.3	2.8	-0.0091	0.001	11.3	ug/L	687	Standard
|	Tl	205	1001.7	1.9	-0.0091	0.000	3.5	ug/L	1624	Standard
|	Pb	206	577.7	4.0	0.0223	0.002	8.6	ug/L	305	Standard
|	Pb	207	460.7	3.2	0.0195	0.001	7.1	ug/L	231	Standard
|	Pb	208	2165.7	2.1	0.0199	0.001	4.8	ug/L	1129	Standard
|	U	238	18.7	15.5	0.0031	0.000	3.3	ug/L	3	Standard
>	Bi	209	392129.1	1.0				ug/L	405108	Standard
|	Na	23	48250.0	1.2	12.5580	0.501	4.0	mg/L	118	Standard
|	Mg	24	2997099.3	2.5	5.1509	0.135	2.6	mg/L	377	Standard

Sample ID: QC Std 4

Report Date/Time: Thursday, May 10, 2012 10:45:31

Page 1

Approved: May 11, 2012

J. J. H.

K	39	64450.2	2.0	5.1862	0.160	3.1	mg/L	583	Standard
Ca	43	6629.8	3.9	14.7570	0.551	3.7	mg/L	73	Standard
Fe	54	72743.9	4.4	12.0653	0.214	1.8	mg/L	785	Standard
Fe	57	2174613.8	2.4	11.6533	0.400	3.4	mg/L	6133	Standard
Sc-1	45	271236.5	4.8				mg/L	254529	Standard
Cl	35	10630468.9	1.6				ug/L	1641778	Standard
Kr	83	67.4	5.7				ug/L	60	Standard
Br	81	13432.7	14.0				ug/L	11554	Standard
P	31	6463811.7	3.3				ug/L	45410	Standard
S	34	1451982.1	2.6				ug/L	568857	Standard
Sr	88	1848.4	17.5				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	94.243		
Sc	45			
Ti	47	118.495		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.077	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.083	
Rh	103			
Mo	98	97.304		
Ag	107			
Cd	111			
Cd	114			
In	115		105.465	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		109.287	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 4

Report Date/Time: Thursday, May 10, 2012 10:45:31

Page 2

Approved: May 11, 2012



Pb	207		
Pb	208		
U	238		
> Bi	209		96.796
Na	23	100.464	
Mg	24	103.018	
K	39	103.724	
Ca	43	98.380	
Fe	54	96.522	
Fe	57	93.227	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits


Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 4

Report Date/Time: Thursday, May 10, 2012 10:45:31

Page 3

Approved: May 11, 2012



Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, May 10, 2012 10:45:51

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	14486.9	2.7	140.6143	17.168	12.2	ug/L	12600	Standard
|	Be	9	369678.0	2.9	105.3079	2.929	2.8	ug/L	5	Standard
|	Al	27	69610920.0	2.2	4246.2511	39.512	0.9	ug/L	16102	Standard
>	Sc	45	268059.5	2.1				ug/L	254529	Standard
|	Ti	47	161837.3	2.1	102.4025	1.303	1.3	ug/L	84	Standard
|	V	51	1640158.8	1.3	102.2878	0.897	0.9	ug/L	5785	Standard
|	Cr	52	1220880.6	2.2	102.1122	0.185	0.2	ug/L	12212	Standard
|	Cr	53	185293.0	1.6	101.7181	0.936	0.9	ug/L	5042	Standard
|	Mn	55	2088870.4	2.0	98.8573	0.715	0.7	ug/L	1290	Standard
|	Co	59	1482760.5	2.5	98.8420	0.506	0.5	ug/L	143	Standard
|	Ni	60	312086.1	2.3	99.0949	0.787	0.8	ug/L	79	Standard
|	Cu	65	278107.6	1.7	97.3823	0.386	0.4	ug/L	154	Standard
|	Zn	66	131644.5	1.6	101.8769	0.989	1.0	ug/L	194	Standard
>	Ge	72	239388.5	2.1				ug/L	232024	Standard
|	As	75	118183.2	1.5	100.7406	0.541	0.5	ug/L	-297	Standard
|	Se	82	13404.4	2.6	101.2500	1.107	1.1	ug/L	17	Standard
|	Se-1	77	8951.0	2.1	103.4003	0.915	0.9	ug/L	180	Standard
|	Ga	71	213637.3	2.7				mg/L	210139	Standard
|	Rb	85	3343.7	4.2				ug/L	12	Standard
>	Y	89	216222.0	0.9				ug/L	214065	Standard
|	Rh	103	75.0	20.0				ug/L	0	Standard
|	Mo	98	374958.3	1.8	84.7098	0.083	0.1	ug/L	6	Standard
|	Ag	107	762796.8	3.1	85.1708	1.271	1.5	ug/L	33	Standard
|	Cd	111	484297.5	1.9	100.0311	0.610	0.6	mg/L	437	Standard
|	Cd	114	1254417.9	1.1	99.2909	0.759	0.8	ug/L	1160	Standard
>	In	115	691436.6	1.8				ug/L	646604	Standard
|	Sn	118	2006.1	3.2	0.0629	0.003	4.1	ug/L	864	Standard
|	Sb	123	1178649.9	1.4	99.7596	0.733	0.7	ug/L	18	Standard
|	Ba	135	485033.4	1.4	98.4790	0.644	0.7	ug/L	39	Standard
|	Ce	140	1877.8	4.2				ug/L	46	Standard
>	Tb	159	768227.1	2.0				ug/L	695671	Standard
|	Ho	165	13.0	33.5				ug/L	9	Standard
|	Tl	203	1638974.3	1.4	101.2394	0.690	0.7	ug/L	687	Standard
|	Tl	205	3988110.2	2.2	103.9897	0.996	1.0	ug/L	1624	Standard
|	Pb	206	1300014.9	1.1	100.6232	0.963	1.0	ug/L	305	Standard
|	Pb	207	1131353.8	2.2	102.6581	0.929	0.9	ug/L	231	Standard
|	Pb	208	5315152.0	1.4	103.6318	0.669	0.6	ug/L	1129	Standard
|	U	238	2793650.2	1.9	102.0966	1.275	1.2	ug/L	3	Standard
>	Bi	209	398138.6	1.8				ug/L	405108	Standard
|	Na	23	42810.4	2.3	11.2578	0.141	1.3	mg/L	118	Standard
|	Mg	24	2365407.9	18.7	4.1018	0.706	17.2	mg/L	377	Standard

Sample ID: QC Std 5

Report Date/Time: Thursday, May 10, 2012 10:48:24

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	56828.1	1.8	4.6176	0.074	1.6	mg/L	583	Standard
Ca	43	5912.8	3.9	13.2904	0.501	3.8	mg/L	73	Standard
Fe	54	65446.5	2.0	10.9697	0.248	2.3	mg/L	785	Standard
Fe	57	1957331.7	1.0	10.6045	0.330	3.1	mg/L	6133	Standard
Sc-1	45	268059.5	2.1				mg/L	254529	Standard
Cl	35	9308870.3	2.7				ug/L	1641778	Standard
Kr	83	61.1	10.8				ug/L	60	Standard
Br	81	12088.2	2.2				ug/L	11554	Standard
P	31	5622369.6	1.6				ug/L	45410	Standard
S	34	1282358.6	3.8				ug/L	568857	Standard
Sr	88	1620.1	9.1				ug/L	240	Standard

QC Calculated Values

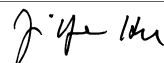
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	84.925		
Sc	45			
Ti	47	102.402		
V	51	102.288		
Cr	52	102.112		
Cr	53			
Mn	55	98.857		
Co	59	98.842		
Ni	60	99.095		
Cu	65	97.382		
Zn	66	101.877		
Ge	72		103.174	
As	75	100.741		
Se	82	101.250		
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.008	
Rh	103			
Mo	98	84.710		
Ag	107	85.171		
Cd	111	100.031		
Cd	114			
In	115		106.934	
Sn	118			
Sb	123	99.760		
Ba	135	98.479		
Ce	140			
Tb	159		110.430	
Ho	165			
Tl	203	101.239		
Tl	205			
Pb	206	100.623		

Sample ID: QC Std 5

Report Date/Time: Thursday, May 10, 2012 10:48:24

Page 2

Approved: May 11, 2012




Pb	207	102.658	
Pb	208	103.632	
U	238	102.097	
> Bi	209		98.280
Na	23	90.062	
Mg	24	82.036	
K	39	92.353	
Ca	43	88.602	
Fe	54	87.757	
Fe	57	84.836	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 5
 Report Date/Time: Thursday, May 10, 2012 10:48:24
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 10:48:47

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13716.2	1.6	5.1074	26.245	513.9	ug/L	12600	Standard
|	Be	9	187872.7	1.3	50.9938	1.420	2.8	ug/L	5	Standard
|	Al	27	850010.8	1.0	48.6335	1.385	2.8	ug/L	16102	Standard
>	Sc	45	281341.9	1.8				ug/L	254529	Standard
|	Ti	47	167123.3	0.8	105.2752	1.305	1.2	ug/L	84	Standard
|	V	51	851854.7	1.0	52.7457	0.894	1.7	ug/L	5785	Standard
|	Cr	52	639431.8	1.3	52.7453	0.665	1.3	ug/L	12212	Standard
|	Cr	53	95975.5	1.0	51.7093	0.673	1.3	ug/L	5042	Standard
|	Mn	55	1116432.6	0.6	52.5588	0.259	0.5	ug/L	1290	Standard
|	Co	59	783994.0	0.7	52.0265	0.139	0.3	ug/L	143	Standard
|	Ni	60	162611.3	0.1	51.3927	0.421	0.8	ug/L	79	Standard
|	Cu	65	147066.0	1.1	51.2388	0.161	0.3	ug/L	154	Standard
|	Zn	66	65507.0	1.7	50.3714	0.478	0.9	ug/L	194	Standard
>	Ge	72	240465.9	0.8				ug/L	232024	Standard
|	As	75	59414.6	1.9	50.5259	0.674	1.3	ug/L	-297	Standard
|	Se	82	6973.7	1.7	52.3636	0.604	1.2	ug/L	17	Standard
|	Se-1	77	4502.7	2.0	50.8695	0.807	1.6	ug/L	180	Standard
|	Ga	71	220428.1	1.4				mg/L	210139	Standard
|	Rb	85	1103.4	8.8				ug/L	12	Standard
>	Y	89	227106.6	2.3				ug/L	214065	Standard
|	Rh	103	48.3	15.8				ug/L	0	Standard
|	Mo	98	435202.1	2.2	96.5763	1.175	1.2	ug/L	6	Standard
|	Ag	107	485794.4	4.2	53.2782	1.772	3.3	ug/L	33	Standard
|	Cd	111	245431.7	1.2	49.7526	0.557	1.1	mg/L	437	Standard
|	Cd	114	632406.8	1.4	49.1185	0.644	1.3	ug/L	1160	Standard
>	In	115	703882.3	1.1				ug/L	646604	Standard
|	Sn	118	848076.3	1.7	49.2954	0.909	1.8	ug/L	864	Standard
|	Sb	123	598753.2	2.1	49.7779	0.940	1.9	ug/L	18	Standard
|	Ba	135	246630.9	1.0	49.1839	0.423	0.9	ug/L	39	Standard
|	Ce	140	914.7	0.7				ug/L	46	Standard
>	Tb	159	778731.0	1.3				ug/L	695671	Standard
|	Ho	165	25.0	25.0				ug/L	9	Standard
|	Tl	203	855445.7	1.3	51.1214	0.884	1.7	ug/L	687	Standard
|	Tl	205	1979463.6	1.4	49.9379	0.904	1.8	ug/L	1624	Standard
|	Pb	206	676592.3	1.6	50.6693	0.983	1.9	ug/L	305	Standard
|	Pb	207	569617.5	0.8	50.0140	0.544	1.1	ug/L	231	Standard
|	Pb	208	2649653.8	1.0	49.9847	0.560	1.1	ug/L	1129	Standard
|	U	238	1368815.2	1.5	48.4167	0.965	2.0	ug/L	3	Standard
>	Bi	209	411380.4	0.6				ug/L	405108	Standard
|	Na	23	20260.2	2.2	5.0610	0.032	0.6	mg/L	118	Standard
|	Mg	24	2934936.8	1.5	4.8603	0.124	2.6	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 10:51:19

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	63963.1	1.6	4.9561	0.107	2.2	mg/L	583	Standard
Ca	43	2303.5	4.4	4.8099	0.130	2.7	mg/L	73	Standard
Fe	54	30385.3	3.0	4.7671	0.163	3.4	mg/L	785	Standard
Fe	57	918196.7	2.2	4.7199	0.141	3.0	mg/L	6133	Standard
Sc-1	45	281341.9	1.8				mg/L	254529	Standard
Cl	35	717487.3	34.4				ug/L	1641778	Standard
Kr	83	58.2	3.7				ug/L	60	Standard
Br	81	11433.5	4.4				ug/L	11554	Standard
P	31	62236.7	1.3				ug/L	45410	Standard
S	34	688131.1	1.6				ug/L	568857	Standard
Sr	88	681.7	14.6				ug/L	240	Standard

QC Calculated Values

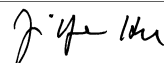
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	97.267		
Sc	45			
Ti	47	105.275		
V	51	105.491		
Cr	52	105.491		
Cr	53			
Mn	55	105.118		
Co	59	104.053		
Ni	60	102.785		
Cu	65	102.478		
Zn	66	100.743		
Ge	72		103.639	
As	75	101.052		
Se	82	104.727		
Se-1	77			
Ga	71			
Rb	85			
Y	89		106.092	
Rh	103			
Mo	98	96.576		
Ag	107	106.556		
Cd	111	99.505		
Cd	114			
In	115		108.858	
Sn	118	98.591		
Sb	123	99.556		
Ba	135	98.368		
Ce	140			
Tb	159		111.939	
Ho	165			
Tl	203	102.243		
Tl	205			
Pb	206	101.339		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 10:51:19

Page 2

Approved: May 11, 2012




Pb	207	100.028	
Pb	208	99.969	
U	238	96.833	
> Bi	209		101.548
Na	23	101.220	
Mg	24	97.205	
K	39	99.121	
Ca	43	96.198	
Fe	54	95.342	
Fe	57	94.398	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 10:51:19
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 10:51:39

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13269.1	2.7	69.8225	16.774	24.0	ug/L	12600	Standard
|	Be	9	21.7	74.2	-0.0080	0.005	61.0	ug/L	5	Standard
|	Al	27	12665.3	8.6	0.0074	0.080	1082.1	ug/L	16102	Standard
>	Sc	45	258712.0	1.5				ug/L	254529	Standard
|	Ti	47	98.3	16.5	0.0049	0.012	248.8	ug/L	84	Standard
|	V	51	3854.5	2.1	-0.0339	0.010	29.4	ug/L	5785	Standard
|	Cr	52	11372.9	2.6	-0.0172	0.043	248.2	ug/L	12212	Standard
|	Cr	53	1049.2	15.0	-0.9045	0.082	9.1	ug/L	5042	Standard
|	Mn	55	1534.4	14.7	-0.0074	0.012	167.3	ug/L	1290	Standard
|	Co	59	177.7	23.9	0.0024	0.003	134.4	ug/L	143	Standard
|	Ni	60	86.0	8.1	0.0052	0.003	54.1	ug/L	79	Standard
|	Cu	65	163.0	8.0	0.0110	0.004	36.8	ug/L	154	Standard
|	Zn	66	206.3	13.4	-0.0059	0.020	338.8	ug/L	194	Standard
>	Ge	72	224922.3	2.0				ug/L	232024	Standard
|	As	75	-199.7	6.8	0.0455	0.015	32.6	ug/L	-297	Standard
|	Se	82	32.5	22.0	0.1026	0.052	50.8	ug/L	17	Standard
|	Se-1	77	96.0	16.8	-0.6214	0.183	29.5	ug/L	180	Standard
|	Ga	71	204759.4	2.1				mg/L	210139	Standard
|	Rb	85	31.7	32.9				ug/L	12	Standard
>	Y	89	208874.4	3.6				ug/L	214065	Standard
|	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	94.1	44.3	0.0137	0.009	68.1	ug/L	6	Standard
|	Ag	107	486.7	31.6	0.0488	0.017	34.8	ug/L	33	Standard
|	Cd	111	455.8	6.7	0.0048	0.006	116.0	mg/L	437	Standard
|	Cd	114	1208.7	0.7	-0.0007	0.001	176.7	ug/L	1160	Standard
>	In	115	667431.5	1.6				ug/L	646604	Standard
|	Sn	118	919.7	10.5	0.0005	0.005	1077.8	ug/L	864	Standard
|	Sb	123	693.6	23.4	0.0582	0.013	22.8	ug/L	18	Standard
|	Ba	135	55.7	8.9	0.0035	0.001	27.3	ug/L	39	Standard
|	Ce	140	38.0	20.9				ug/L	46	Standard
>	Tb	159	712447.4	1.3				ug/L	695671	Standard
|	Ho	165	9.0	11.1				ug/L	9	Standard
|	Tl	203	443.7	30.3	-0.0089	0.008	89.5	ug/L	687	Standard
|	Tl	205	1067.4	31.9	-0.0074	0.009	116.5	ug/L	1624	Standard
|	Pb	206	324.3	7.6	0.0024	0.002	68.9	ug/L	305	Standard
|	Pb	207	261.0	11.5	0.0011	0.002	217.2	ug/L	231	Standard
|	Pb	208	1253.0	10.7	0.0018	0.002	123.2	ug/L	1129	Standard
|	U	238	90.0	45.2	0.0057	0.001	25.9	ug/L	3	Standard
>	Bi	209	391790.9	1.5				ug/L	405108	Standard
|	Na	23	125.0	10.6	0.0069	0.003	48.2	mg/L	118	Standard
|	Mg	24	758.4	54.9	0.0005	0.001	153.1	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 10:54:12

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	665.0	9.9	0.0050	0.005	98.7	mg/L	583	Standard
Ca	43	73.3	33.6	-0.0190	0.060	316.5	mg/L	73	Standard
Fe	54	843.3	11.6	-0.0046	0.019	419.2	mg/L	785	Standard
Fe	57	4922.5	7.0	-0.0066	0.002	28.4	mg/L	6133	Standard
Sc-1	45	258712.0	1.5				mg/L	254529	Standard
Cl	35	636666.4	36.2				ug/L	1641778	Standard
Kr	83	52.3	8.3				ug/L	60	Standard
Br	81	11024.8	2.1				ug/L	11554	Standard
P	31	55730.7	2.1				ug/L	45410	Standard
S	34	688146.0	1.0				ug/L	568857	Standard
Sr	88	300.0	36.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.939	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.575	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.221	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.411	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 10:54:12

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	96.713
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 10:54:12
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: 100 PPB SE

Sample Date/Time: Thursday, May 10, 2012 10:57:24

Number of Replicates: 3

Autosampler Position: 230

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13586.1	1.9	56.4998	18.845	33.4	ug/L	12600	Standard
|	Be	9	16.7	45.8	-0.0096	0.002	23.6	ug/L	5	Standard
|	Al	27	12948.9	4.7	-0.0022	0.050	2246.2	ug/L	16102	Standard
>	Sc	45	267648.8	1.8				ug/L	254529	Standard
|	Ti	47	88.7	2.3	-0.0034	0.002	58.2	ug/L	84	Standard
|	V	51	4454.6	0.9	-0.0020	0.003	155.4	ug/L	5785	Standard
|	Cr	52	11761.6	1.1	-0.0106	0.021	202.2	ug/L	12212	Standard
|	Cr	53	2200.2	35.6	-0.2579	0.443	171.6	ug/L	5042	Standard
|	Mn	55	3376.7	1.8	0.0808	0.003	3.2	ug/L	1290	Standard
|	Co	59	137.3	23.3	-0.0008	0.002	299.1	ug/L	143	Standard
|	Ni	60	147.7	9.5	0.0247	0.005	20.1	ug/L	79	Standard
|	Cu	65	151.3	9.6	0.0052	0.006	111.1	ug/L	154	Standard
|	Zn	66	2012.1	2.9	1.4401	0.047	3.3	ug/L	194	Standard
>	Ge	72	231047.8	1.0				ug/L	232024	Standard
|	As	75	436.2	43.7	0.6116	0.171	28.0	ug/L	-297	Standard
|	Se	82	12707.5	1.8	99.4677	2.569	2.6	ug/L	17	Standard
|	Se-1	77	8231.2	1.3	98.4391	1.751	1.8	ug/L	180	Standard
|	Ga	71	209217.7	0.9				mg/L	210139	Standard
|	Rb	85	20.0	43.3				ug/L	12	Standard
>	Y	89	208692.4	0.7				ug/L	214065	Standard
|	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	44.2	20.3	0.0023	0.002	96.9	ug/L	6	Standard
|	Ag	107	104.7	13.9	0.0049	0.002	38.6	ug/L	33	Standard
|	Cd	111	473.2	2.7	0.0095	0.001	14.1	mg/L	437	Standard
|	Cd	114	1236.7	3.3	0.0025	0.002	77.6	ug/L	1160	Standard
>	In	115	661108.1	1.5				ug/L	646604	Standard
|	Sn	118	943.4	0.9	0.0025	0.000	15.3	ug/L	864	Standard
|	Sb	123	253.8	7.7	0.0200	0.002	8.6	ug/L	18	Standard
|	Ba	135	56.7	20.3	0.0038	0.002	60.4	ug/L	39	Standard
|	Ce	140	44.0	2.3				ug/L	46	Standard
>	Tb	159	711979.0	0.7				ug/L	695671	Standard
|	Ho	165	9.3	22.3				ug/L	9	Standard
|	Tl	203	547.7	19.1	-0.0024	0.006	269.7	ug/L	687	Standard
|	Tl	205	1246.4	24.5	-0.0026	0.008	303.8	ug/L	1624	Standard
|	Pb	206	316.7	3.8	0.0018	0.001	53.6	ug/L	305	Standard
|	Pb	207	265.7	7.4	0.0015	0.002	104.3	ug/L	231	Standard
|	Pb	208	1257.0	5.4	0.0019	0.001	62.9	ug/L	1129	Standard
|	U	238	41.7	63.6	0.0040	0.001	25.2	ug/L	3	Standard
>	Bi	209	391997.0	0.8				ug/L	405108	Standard
|	Na	23	101.7	30.0	-0.0005	0.008	1586.1	mg/L	118	Standard
|	Mg	24	345.0	27.7	-0.0003	0.000	67.7	mg/L	377	Standard

Sample ID: 100 PPB SE

Report Date/Time: Thursday, May 10, 2012 10:59:57

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	605.0	0.8	-0.0018	0.001	72.0	mg/L	583	Standard
Ca	43	51.7	29.6	-0.0747	0.035	46.8	mg/L	73	Standard
Fe	54	799.7	10.7	-0.0170	0.017	97.8	mg/L	785	Standard
Fe	57	4930.8	9.6	-0.0075	0.003	37.2	mg/L	6133	Standard
Sc-1	45	267648.8	1.8				mg/L	254529	Standard
Cl	35	954586.2	63.0				ug/L	1641778	Standard
Kr	83	59.0	13.1				ug/L	60	Standard
Br	81	11390.1	1.3				ug/L	11554	Standard
P	31	58415.0	3.5				ug/L	45410	Standard
S	34	711357.1	0.6				ug/L	568857	Standard
Sr	88	363.3	19.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.579	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.490	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.243	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.344	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: 100 PPB SE

Report Date/Time: Thursday, May 10, 2012 10:59:57

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	96.764
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: 100 PPB SE
 Report Date/Time: Thursday, May 10, 2012 10:59:57
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: 200 PPB SE

Sample Date/Time: Thursday, May 10, 2012 11:00:17

Number of Replicates: 3

Autosampler Position: 231

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13162.4	2.2	49.5509	28.652	57.8	ug/L	12600	Standard
|	Be	9	13.3	21.7	-0.0105	0.001	8.7	ug/L	5	Standard
|	Al	27	11893.0	3.9	-0.0479	0.027	55.4	ug/L	16102	Standard
>	Sc	45	260711.1	2.0				ug/L	254529	Standard
|	Ti	47	88.3	6.2	-0.0035	0.004	102.4	ug/L	84	Standard
|	V	51	4252.6	1.3	-0.0146	0.005	37.5	ug/L	5785	Standard
|	Cr	52	11855.3	1.3	-0.0011	0.012	1141.9	ug/L	12212	Standard
|	Cr	53	1618.4	17.9	-0.5919	0.151	25.6	ug/L	5042	Standard
|	Mn	55	3164.7	2.1	0.0706	0.002	2.7	ug/L	1290	Standard
|	Co	59	157.3	16.2	0.0006	0.002	266.5	ug/L	143	Standard
|	Ni	60	140.3	8.5	0.0223	0.003	14.7	ug/L	79	Standard
|	Cu	65	154.3	7.0	0.0063	0.004	57.7	ug/L	154	Standard
|	Zn	66	1701.4	5.8	1.1917	0.056	4.7	ug/L	194	Standard
>	Ge	72	230739.0	1.8				ug/L	232024	Standard
|	As	75	1819.8	27.3	1.8311	0.436	23.8	ug/L	-297	Standard
|	Se	82	25679.5	2.5	201.3950	2.660	1.3	ug/L	17	Standard
|	Se-1	77	16341.1	1.0	197.4957	2.506	1.3	ug/L	180	Standard
|	Ga	71	210517.0	1.6				mg/L	210139	Standard
|	Rb	85	13.3	57.3				ug/L	12	Standard
>	Y	89	209012.1	1.9				ug/L	214065	Standard
|	Rh	103	3.3	173.2				ug/L	0	Standard
|	Mo	98	57.9	51.0	0.0055	0.007	129.2	ug/L	6	Standard
|	Ag	107	72.3	12.4	0.0011	0.001	109.2	ug/L	33	Standard
|	Cd	111	469.9	8.1	0.0085	0.007	76.9	mg/L	437	Standard
|	Cd	114	1234.0	1.7	0.0022	0.003	151.2	ug/L	1160	Standard
>	In	115	662140.9	1.7				ug/L	646604	Standard
|	Sn	118	934.7	3.0	0.0019	0.001	40.9	ug/L	864	Standard
|	Sb	123	203.3	11.1	0.0155	0.002	11.6	ug/L	18	Standard
|	Ba	135	47.0	22.5	0.0018	0.002	132.5	ug/L	39	Standard
|	Ce	140	50.3	11.6				ug/L	46	Standard
>	Tb	159	701181.3	1.6				ug/L	695671	Standard
|	Ho	165	7.3	34.3				ug/L	9	Standard
|	Tl	203	449.0	22.8	-0.0087	0.006	67.5	ug/L	687	Standard
|	Tl	205	1073.4	26.2	-0.0073	0.007	93.4	ug/L	1624	Standard
|	Pb	206	287.7	13.5	-0.0006	0.003	452.8	ug/L	305	Standard
|	Pb	207	245.7	2.2	-0.0004	0.000	19.5	ug/L	231	Standard
|	Pb	208	1169.0	4.6	0.0001	0.001	770.3	ug/L	1129	Standard
|	U	238	19.3	31.6	0.0031	0.000	7.5	ug/L	3	Standard
>	Bi	209	393603.1	1.9				ug/L	405108	Standard
|	Na	23	91.7	16.7	-0.0024	0.004	165.9	mg/L	118	Standard
|	Mg	24	311.7	14.5	-0.0003	0.000	25.6	mg/L	377	Standard

Sample ID: 200 PPB SE

Report Date/Time: Thursday, May 10, 2012 11:02:49

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	713.4	6.5	0.0087	0.004	44.8	mg/L	583	Standard
Ca	43	85.0	27.0	0.0066	0.054	823.8	mg/L	73	Standard
Fe	54	852.2	5.4	-0.0044	0.005	117.3	mg/L	785	Standard
Fe	57	4920.8	6.3	-0.0068	0.002	32.0	mg/L	6133	Standard
Sc-1	45	260711.1	2.0				mg/L	254529	Standard
Cl	35	702883.2	31.2				ug/L	1641778	Standard
Kr	83	56.0	8.8				ug/L	60	Standard
Br	81	11365.1	1.4				ug/L	11554	Standard
P	31	59650.6	2.5				ug/L	45410	Standard
S	34	720009.9	2.0				ug/L	568857	Standard
Sr	88	360.0	23.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.446	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.640	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.403	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		100.792	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: 200 PPB SE

Report Date/Time: Thursday, May 10, 2012 11:02:49

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	97.160
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Se 82 Upper, S, EEE	Se	82	
Se-1 77 Upper, S, EEE	Se-1	77	

Sample ID: 200 PPB SE
 Report Date/Time: Thursday, May 10, 2012 11:02:49
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: KIM BLK

Sample Date/Time: Thursday, May 10, 2012 11:03:09

Number of Replicates: 3

Autosampler Position: 232

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13722.9	1.0	93.9955	15.813	16.8	ug/L	12600	Standard
|	Be	9	16.7	62.4	-0.0096	0.003	31.5	ug/L	5	Standard
|	Al	27	19771.2	1.5	0.4367	0.030	6.9	ug/L	16102	Standard
>	Sc	45	262786.2	1.4				ug/L	254529	Standard
|	Ti	47	545.7	3.2	0.2922	0.014	4.6	ug/L	84	Standard
|	V	51	4325.9	2.7	-0.0137	0.005	34.9	ug/L	5785	Standard
|	Cr	52	11809.9	1.4	-0.0189	0.012	64.9	ug/L	12212	Standard
|	Cr	53	1547.6	15.6	-0.6442	0.127	19.8	ug/L	5042	Standard
|	Mn	55	1654.1	2.6	-0.0047	0.002	48.0	ug/L	1290	Standard
|	Co	59	181.0	12.9	0.0021	0.002	82.0	ug/L	143	Standard
|	Ni	60	125.7	12.9	0.0169	0.005	28.5	ug/L	79	Standard
|	Cu	65	396.0	2.4	0.0923	0.005	5.6	ug/L	154	Standard
|	Zn	66	8876.6	2.6	6.8679	0.201	2.9	ug/L	194	Standard
>	Ge	72	233865.2	1.3				ug/L	232024	Standard
|	As	75	-243.4	16.4	0.0147	0.033	228.0	ug/L	-297	Standard
|	Se	82	28.6	41.5	0.0625	0.090	143.9	ug/L	17	Standard
|	Se-1	77	102.3	5.6	-0.5892	0.077	13.0	ug/L	180	Standard
|	Ga	71	210616.9	1.4				mg/L	210139	Standard
|	Rb	85	35.0	24.7				ug/L	12	Standard
>	Y	89	211161.6	2.0				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	704.8	0.9	0.1564	0.003	2.0	ug/L	6	Standard
|	Ag	107	46.0	10.9	-0.0021	0.001	26.4	ug/L	33	Standard
|	Cd	111	472.2	4.2	0.0080	0.005	63.8	mg/L	437	Standard
|	Cd	114	1234.6	4.9	0.0011	0.005	448.1	ug/L	1160	Standard
>	In	115	669248.8	1.0				ug/L	646604	Standard
|	Sn	118	2948.0	3.0	0.1245	0.007	5.4	ug/L	864	Standard
|	Sb	123	347.8	3.2	0.0279	0.001	4.4	ug/L	18	Standard
|	Ba	135	1326.7	1.1	0.2701	0.002	0.9	ug/L	39	Standard
|	Ce	140	65.0	19.6				ug/L	46	Standard
>	Tb	159	711254.2	0.9				ug/L	695671	Standard
|	Ho	165	7.0	49.5				ug/L	9	Standard
|	Tl	203	435.7	36.5	-0.0098	0.009	92.9	ug/L	687	Standard
|	Tl	205	1032.7	33.1	-0.0087	0.008	95.0	ug/L	1624	Standard
|	Pb	206	332.3	2.2	0.0028	0.001	42.3	ug/L	305	Standard
|	Pb	207	279.7	11.0	0.0025	0.002	88.7	ug/L	231	Standard
|	Pb	208	1277.4	2.0	0.0021	0.000	19.0	ug/L	1129	Standard
|	U	238	8.3	25.0	0.0027	0.000	2.7	ug/L	3	Standard
>	Bi	209	396316.0	2.5				ug/L	405108	Standard
|	Na	23	138.3	15.0	0.0099	0.005	52.9	mg/L	118	Standard
|	Mg	24	1243.4	5.4	0.0013	0.000	10.0	mg/L	377	Standard

Sample ID: KIM BLK

Report Date/Time: Thursday, May 10, 2012 11:05:41

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	743.4	5.9	0.0108	0.004	41.7	mg/L	583	Standard
Ca	43	78.3	36.3	-0.0101	0.068	677.0	mg/L	73	Standard
Fe	54	917.3	3.9	0.0057	0.004	71.6	mg/L	785	Standard
Fe	57	4889.1	3.1	-0.0072	0.001	16.7	mg/L	6133	Standard
Sc-1	45	262786.2	1.4				mg/L	254529	Standard
Cl	35	661739.1	33.4				ug/L	1641778	Standard
Kr	83	55.0	7.3				ug/L	60	Standard
Br	81	11349.3	1.9				ug/L	11554	Standard
P	31	96452.0	3.0				ug/L	45410	Standard
S	34	715398.5	2.4				ug/L	568857	Standard
Sr	88	445.0	10.3				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.794	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		98.644	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.502	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.240	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: KIM BLK

Report Date/Time: Thursday, May 10, 2012 11:05:41

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	97.830
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: KIM BLK
 Report Date/Time: Thursday, May 10, 2012 11:05:41
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: BLK LOT8508

Sample Date/Time: Thursday, May 10, 2012 11:06:01

Number of Replicates: 3

Autosampler Position: 233

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	11659.5	2.2	92.2826	46.635	50.5	ug/L	12600	Standard
|	Be	9	23.3	155.0	-0.0064	0.013	196.0	ug/L	5	Standard
|	Al	27	11330.4	99.4	0.0408	0.837	2049.4	ug/L	16102	Standard
>	Sc	45	223627.0	2.1				ug/L	254529	Standard
|	Ti	47	78.0	50.1	-0.0054	0.028	528.4	ug/L	84	Standard
|	V	51	3828.3	13.8	-0.0184	0.039	212.0	ug/L	5785	Standard
|	Cr	52	9500.0	1.9	-0.1281	0.025	19.5	ug/L	12212	Standard
|	Cr	53	1221.7	28.0	-0.7522	0.218	29.0	ug/L	5042	Standard
|	Mn	55	1610.8	68.3	0.0019	0.060	3065.9	ug/L	1290	Standard
|	Co	59	191.0	85.4	0.0042	0.012	293.4	ug/L	143	Standard
|	Ni	60	92.3	39.4	0.0095	0.013	140.2	ug/L	79	Standard
|	Cu	65	118.7	19.2	-0.0025	0.009	371.9	ug/L	154	Standard
|	Zn	66	645.3	5.3	0.3927	0.034	8.5	ug/L	194	Standard
>	Ge	72	210661.6	1.6				ug/L	232024	Standard
|	As	75	-173.9	22.6	0.0582	0.039	67.4	ug/L	-297	Standard
|	Se	82	26.2	8.7	0.0664	0.016	24.7	ug/L	17	Standard
|	Se-1	77	85.7	4.1	-0.6769	0.031	4.5	ug/L	180	Standard
|	Ga	71	182844.0	1.0				mg/L	210139	Standard
|	Rb	85	21.7	74.2				ug/L	12	Standard
>	Y	89	183201.7	3.3				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	24.0	126.7	-0.0019	0.008	408.3	ug/L	6	Standard
|	Ag	107	55.7	32.6	-0.0002	0.002	1212.4	ug/L	33	Standard
|	Cd	111	93.9	35.4	-0.0704	0.008	11.1	mg/L	437	Standard
|	Cd	114	260.6	22.8	-0.0761	0.005	7.0	ug/L	1160	Standard
>	In	115	597409.8	3.8				ug/L	646604	Standard
|	Sn	118	451.7	6.6	-0.0249	0.002	7.9	ug/L	864	Standard
|	Sb	123	123.4	58.0	0.0096	0.007	72.7	ug/L	18	Standard
|	Ba	135	50.0	100.6	0.0035	0.012	335.4	ug/L	39	Standard
|	Ce	140	42.0	10.9				ug/L	46	Standard
>	Tb	159	646732.2	1.9				ug/L	695671	Standard
|	Ho	165	5.7	27.0				ug/L	9	Standard
|	Tl	203	687.4	45.6	0.0080	0.020	251.1	ug/L	687	Standard
|	Tl	205	1648.8	49.5	0.0097	0.022	228.2	ug/L	1624	Standard
|	Pb	206	460.0	68.0	0.0144	0.025	175.4	ug/L	305	Standard
|	Pb	207	396.0	70.6	0.0148	0.026	177.9	ug/L	231	Standard
|	Pb	208	1808.7	73.9	0.0141	0.027	192.2	ug/L	1129	Standard
|	U	238	248.0	166.6	0.0119	0.016	132.8	ug/L	3	Standard
>	Bi	209	377568.0	0.7				ug/L	405108	Standard
|	Na	23	160.0	37.9	0.0234	0.020	84.5	mg/L	118	Standard
|	Mg	24	2397.1	133.0	0.0042	0.007	161.2	mg/L	377	Standard

Sample ID: BLK LOT8508

Report Date/Time: Thursday, May 10, 2012 11:08:35

Page 1

Approved: May 11, 2012



K	39	698.3	8.2	0.0173	0.007	39.8	mg/L	583	Standard
Ca	43	80.0	27.2	0.0257	0.058	227.9	mg/L	73	Standard
Fe	54	334.5	3.5	-0.0851	0.003	3.9	mg/L	785	Standard
Fe	57	4794.1	12.3	-0.0031	0.004	139.8	mg/L	6133	Standard
Sc-1	45	223627.0	2.1				mg/L	254529	Standard
Cl	35	425883.3	57.4				ug/L	1641778	Standard
Kr	83	47.3	10.9				ug/L	60	Standard
Br	81	8892.6	4.4				ug/L	11554	Standard
P	31	17108.0	2.8				ug/L	45410	Standard
S	34	581349.9	3.8				ug/L	568857	Standard
Sr	88	623.4	105.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.793	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		85.582	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		92.392	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		92.965	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: BLK LOT8508

Report Date/Time: Thursday, May 10, 2012 11:08:35

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	93.202
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: BLK LOT8508
 Report Date/Time: Thursday, May 10, 2012 11:08:35
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 11:08:57

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13863.0	2.2	97.1526	51.300	52.8	ug/L	12600	Standard
|	Be	9	179763.5	1.0	51.8052	0.700	1.4	ug/L	5	Standard
|	Al	27	830238.4	3.8	50.4503	1.418	2.8	ug/L	16102	Standard
>	Sc	45	264933.3	1.7				ug/L	254529	Standard
|	Ti	47	157454.7	1.4	102.6115	1.428	1.4	ug/L	84	Standard
|	V	51	805554.6	1.3	51.5936	0.488	0.9	ug/L	5785	Standard
|	Cr	52	609954.4	2.2	52.0353	0.685	1.3	ug/L	12212	Standard
|	Cr	53	91436.1	3.5	50.9341	1.327	2.6	ug/L	5042	Standard
|	Mn	55	1045216.5	1.8	50.9045	0.810	1.6	ug/L	1290	Standard
|	Co	59	744714.6	2.1	51.1236	0.465	0.9	ug/L	143	Standard
|	Ni	60	154655.1	1.7	50.5663	0.767	1.5	ug/L	79	Standard
|	Cu	65	139436.5	2.1	50.2559	0.389	0.8	ug/L	154	Standard
|	Zn	66	62732.6	1.7	49.9043	0.176	0.4	ug/L	194	Standard
>	Ge	72	232434.5	1.4				ug/L	232024	Standard
|	As	75	57145.7	1.1	50.2814	0.458	0.9	ug/L	-297	Standard
|	Se	82	6460.0	0.3	50.1833	0.602	1.2	ug/L	17	Standard
|	Se-1	77	4330.6	0.4	50.6148	0.685	1.4	ug/L	180	Standard
|	Ga	71	209948.2	2.6				mg/L	210139	Standard
|	Rb	85	1003.4	8.3				ug/L	12	Standard
>	Y	89	212895.4	0.9				ug/L	214065	Standard
|	Rh	103	26.7	60.3				ug/L	0	Standard
|	Mo	98	413925.1	1.0	96.9170	1.848	1.9	ug/L	6	Standard
|	Ag	107	431829.7	1.7	49.9680	0.577	1.2	ug/L	33	Standard
|	Cd	111	232358.3	1.3	49.6873	0.464	0.9	mg/L	437	Standard
|	Cd	114	605875.7	2.1	49.6376	0.566	1.1	ug/L	1160	Standard
>	In	115	667282.6	1.6				ug/L	646604	Standard
|	Sn	118	805510.5	1.2	49.3903	0.450	0.9	ug/L	864	Standard
|	Sb	123	560448.1	0.9	49.1538	0.532	1.1	ug/L	18	Standard
|	Ba	135	234883.1	1.1	49.4122	0.390	0.8	ug/L	39	Standard
|	Ce	140	871.4	3.0				ug/L	46	Standard
>	Tb	159	729967.5	1.3				ug/L	695671	Standard
|	Ho	165	18.7	36.5				ug/L	9	Standard
|	Tl	203	818088.8	1.4	50.8597	0.051	0.1	ug/L	687	Standard
|	Tl	205	1911130.2	0.9	50.1610	0.463	0.9	ug/L	1624	Standard
|	Pb	206	655256.0	1.0	51.0521	0.249	0.5	ug/L	305	Standard
|	Pb	207	552488.6	1.2	50.4684	0.286	0.6	ug/L	231	Standard
|	Pb	208	2557112.3	0.7	50.1894	0.485	1.0	ug/L	1129	Standard
|	U	238	1319386.9	0.7	48.5526	0.414	0.9	ug/L	3	Standard
>	Bi	209	395420.0	1.5				ug/L	405108	Standard
|	Na	23	19449.1	1.4	5.1602	0.025	0.5	mg/L	118	Standard
|	Mg	24	2885095.1	2.0	5.0729	0.108	2.1	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 11:11:30

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	62704.5	1.0	5.1613	0.076	1.5	mg/L	583	Standard
Ca	43	2180.2	0.4	4.8378	0.092	1.9	mg/L	73	Standard
Fe	54	31003.6	1.9	5.1792	0.190	3.7	mg/L	785	Standard
Fe	57	920827.9	3.0	5.0278	0.136	2.7	mg/L	6133	Standard
Sc-1	45	264933.3	1.7				mg/L	254529	Standard
Cl	35	544475.2	34.0				ug/L	1641778	Standard
Kr	83	60.8	8.1				ug/L	60	Standard
Br	81	10963.1	0.8				ug/L	11554	Standard
P	31	63814.0	9.0				ug/L	45410	Standard
S	34	708775.4	5.2				ug/L	568857	Standard
Sr	88	690.0	10.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	100.901		
Sc	45			
Ti	47	102.611		
V	51	103.187		
Cr	52	104.071		
Cr	53			
Mn	55	101.809		
Co	59	102.247		
Ni	60	101.133		
Cu	65	100.512		
Zn	66	99.809		
Ge	72		100.177	
As	75	100.563		
Se	82	100.367		
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.454	
Rh	103			
Mo	98	96.917		
Ag	107	99.936		
Cd	111	99.375		
Cd	114			
In	115		103.198	
Sn	118	98.781		
Sb	123	98.308		
Ba	135	98.824		
Ce	140			
Tb	159		104.930	
Ho	165			
Tl	203	101.719		
Tl	205			
Pb	206	102.104		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 11:11:30

Page 2

Approved: May 11, 2012




Pb	207	100.937	
Pb	208	100.379	
U	238	97.105	
> Bi	209		97.609
Na	23	103.203	
Mg	24	101.458	
K	39	103.226	
Ca	43	96.756	
Fe	54	103.585	
Fe	57	100.556	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 11:11:30
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 11:11:50

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13851.3	0.3	76.2279	40.824	53.6	ug/L	12600	Standard
|	Be	9	13.3	43.3	-0.0107	0.002	14.5	ug/L	5	Standard
|	Al	27	13591.1	8.2	0.0332	0.075	225.4	ug/L	16102	Standard
>	Sc	45	268943.8	2.8				ug/L	254529	Standard
|	Ti	47	94.7	2.7	-0.0009	0.002	230.5	ug/L	84	Standard
|	V	51	3925.0	2.0	-0.0423	0.007	15.7	ug/L	5785	Standard
|	Cr	52	11352.6	1.7	-0.0700	0.016	23.5	ug/L	12212	Standard
|	Cr	53	1072.5	10.2	-0.9211	0.065	7.0	ug/L	5042	Standard
|	Mn	55	1326.4	4.0	-0.0213	0.003	13.4	ug/L	1290	Standard
|	Co	59	149.7	7.0	-0.0002	0.001	495.2	ug/L	143	Standard
|	Ni	60	70.0	1.4	-0.0014	0.000	12.8	ug/L	79	Standard
|	Cu	65	153.3	11.7	0.0046	0.007	143.2	ug/L	154	Standard
|	Zn	66	197.7	2.9	-0.0209	0.005	23.3	ug/L	194	Standard
>	Ge	72	236642.4	0.8				ug/L	232024	Standard
|	As	75	-236.4	6.5	0.0230	0.013	56.4	ug/L	-297	Standard
|	Se	82	25.8	10.6	0.0387	0.020	52.0	ug/L	17	Standard
|	Se-1	77	100.7	8.4	-0.6233	0.110	17.7	ug/L	180	Standard
|	Ga	71	215155.9	0.7				mg/L	210139	Standard
|	Rb	85	16.7	62.4				ug/L	12	Standard
>	Y	89	216786.9	1.8				ug/L	214065	Standard
|	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	76.2	61.1	0.0096	0.011	111.4	ug/L	6	Standard
|	Ag	107	103.0	5.4	0.0046	0.001	17.6	ug/L	33	Standard
|	Cd	111	480.5	8.2	0.0103	0.008	76.5	mg/L	437	Standard
|	Cd	114	1190.1	2.1	-0.0020	0.002	109.1	ug/L	1160	Standard
>	In	115	665810.9	2.8				ug/L	646604	Standard
|	Sn	118	917.4	6.9	0.0005	0.004	688.3	ug/L	864	Standard
|	Sb	123	251.5	28.4	0.0196	0.006	30.3	ug/L	18	Standard
|	Ba	135	51.7	13.2	0.0027	0.001	44.1	ug/L	39	Standard
|	Ce	140	41.0	23.5				ug/L	46	Standard
>	Tb	159	713167.5	3.1				ug/L	695671	Standard
|	Ho	165	9.0	22.2				ug/L	9	Standard
|	Tl	203	405.7	42.0	-0.0118	0.010	86.8	ug/L	687	Standard
|	Tl	205	962.7	39.8	-0.0106	0.010	91.2	ug/L	1624	Standard
|	Pb	206	303.7	11.7	0.0003	0.002	775.7	ug/L	305	Standard
|	Pb	207	267.7	10.3	0.0012	0.002	165.9	ug/L	231	Standard
|	Pb	208	1206.7	8.2	0.0005	0.002	370.2	ug/L	1129	Standard
|	U	238	53.3	56.5	0.0043	0.001	24.7	ug/L	3	Standard
>	Bi	209	399879.3	2.3				ug/L	405108	Standard
|	Na	23	91.7	36.3	-0.0033	0.008	252.3	mg/L	118	Standard
|	Mg	24	533.3	16.8	0.0001	0.000	250.5	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 11:14:23

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	650.0	5.8	0.0017	0.004	258.5	mg/L	583	Standard
Ca	43	55.0	50.6	-0.0667	0.067	100.9	mg/L	73	Standard
Fe	54	887.7	2.5	-0.0027	0.008	287.9	mg/L	785	Standard
Fe	57	4725.7	2.1	-0.0087	0.001	12.2	mg/L	6133	Standard
Sc-1	45	268943.8	2.8				mg/L	254529	Standard
Cl	35	585876.2	38.9				ug/L	1641778	Standard
Kr	83	53.0	1.1				ug/L	60	Standard
Br	81	11477.7	1.9				ug/L	11554	Standard
P	31	61945.6	3.3				ug/L	45410	Standard
S	34	720255.9	1.5				ug/L	568857	Standard
Sr	88	276.7	13.7				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.991	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.272	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.970	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.515	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 11:14:23

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	98.709
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 11:14:23
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: PBS 2B WG397298-02

Sample Date/Time: Thursday, May 10, 2012 11:14:46

Number of Replicates: 3

Autosampler Position: 234

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13654.5	2.8	91.1101	41.686	45.8	ug/L	12600	Standard
|	Be	9	6.7	43.3	-0.0125	0.001	6.5	ug/L	5	Standard
|	Al	27	33432.0	7.0	1.2917	0.125	9.7	ug/L	16102	Standard
>	Sc	45	262043.4	1.0				ug/L	254529	Standard
|	Ti	47	90.0	6.8	-0.0030	0.003	115.5	ug/L	84	Standard
|	V	51	3937.5	3.2	-0.0374	0.010	25.9	ug/L	5785	Standard
|	Cr	52	11576.4	0.6	-0.0347	0.016	47.5	ug/L	12212	Standard
|	Cr	53	1048.4	11.3	-0.9249	0.074	8.0	ug/L	5042	Standard
|	Mn	55	9230.5	2.8	0.3645	0.008	2.2	ug/L	1290	Standard
|	Co	59	141.7	12.1	-0.0006	0.001	193.9	ug/L	143	Standard
|	Ni	60	116.0	7.9	0.0140	0.003	18.5	ug/L	79	Standard
|	Cu	65	270.7	3.9	0.0477	0.004	8.9	ug/L	154	Standard
|	Zn	66	1630.1	3.7	1.1230	0.040	3.6	ug/L	194	Standard
>	Ge	72	232845.7	1.1				ug/L	232024	Standard
|	As	75	-234.0	2.9	0.0219	0.006	28.6	ug/L	-297	Standard
|	Se	82	23.2	20.2	0.0222	0.038	173.3	ug/L	17	Standard
|	Se-1	77	90.3	7.1	-0.7292	0.078	10.6	ug/L	180	Standard
|	Ga	71	212748.8	1.4				mg/L	210139	Standard
|	Rb	85	18.3	63.0				ug/L	12	Standard
>	Y	89	212082.7	1.9				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	57.1	6.5	0.0052	0.001	14.1	ug/L	6	Standard
|	Ag	107	40.7	11.1	-0.0027	0.001	21.9	ug/L	33	Standard
|	Cd	111	465.6	4.0	0.0071	0.003	41.9	mg/L	437	Standard
|	Cd	114	1213.6	2.3	-0.0001	0.003	4657.6	ug/L	1160	Standard
>	In	115	665750.5	1.4				ug/L	646604	Standard
|	Sn	118	1422.4	5.1	0.0316	0.005	15.3	ug/L	864	Standard
|	Sb	123	134.6	2.9	0.0093	0.000	5.3	ug/L	18	Standard
|	Ba	135	54.3	3.8	0.0033	0.001	15.4	ug/L	39	Standard
|	Ce	140	51.0	32.4				ug/L	46	Standard
>	Tb	159	715697.8	1.9				ug/L	695671	Standard
|	Ho	165	7.0	37.8				ug/L	9	Standard
|	Tl	203	359.3	54.0	-0.0146	0.012	82.1	ug/L	687	Standard
|	Tl	205	824.7	49.5	-0.0141	0.011	75.2	ug/L	1624	Standard
|	Pb	206	353.3	1.5	0.0042	0.000	10.5	ug/L	305	Standard
|	Pb	207	307.7	2.2	0.0049	0.001	11.7	ug/L	231	Standard
|	Pb	208	1384.4	1.4	0.0040	0.000	10.9	ug/L	1129	Standard
|	U	238	16.3	25.5	0.0030	0.000	5.0	ug/L	3	Standard
>	Bi	209	399004.5	0.4				ug/L	405108	Standard
|	Na	23	96.7	10.8	-0.0012	0.003	262.4	mg/L	118	Standard
|	Mg	24	680.0	11.0	0.0003	0.000	40.9	mg/L	377	Standard

Sample ID: PBS 2B WG397298-02

Report Date/Time: Thursday, May 10, 2012 11:17:18

Page 1

Approved: May 11, 2012




K	39	681.7	8.1	0.0057	0.005	81.7	mg/L	583	Standard
Ca	43	50.0	30.0	-0.0759	0.036	47.1	mg/L	73	Standard
Fe	54	836.1	14.8	-0.0077	0.023	296.7	mg/L	785	Standard
Fe	57	4669.1	7.2	-0.0084	0.002	24.4	mg/L	6133	Standard
Sc-1	45	262043.4	1.0				mg/L	254529	Standard
Cl	35	433791.3	50.8				ug/L	1641778	Standard
Kr	83	52.7	5.5				ug/L	60	Standard
Br	81	11160.8	2.2				ug/L	11554	Standard
P	31	59754.3	1.2				ug/L	45410	Standard
S	34	708844.9	1.3				ug/L	568857	Standard
Sr	88	380.0	3.5				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.354	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.074	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.961	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.879	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: PBS 2B WG397298-02
 Report Date/Time: Thursday, May 10, 2012 11:17:18
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	98.493
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: PBS 2B WG397298-02
 Report Date/Time: Thursday, May 10, 2012 11:17:18
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: LCSS 2B WG397298-03

Sample Date/Time: Thursday, May 10, 2012 11:17:38

Number of Replicates: 3

Autosampler Position: 235

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

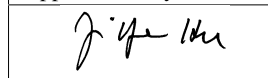
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	15342.8	3.4	65.8080	43.592	66.2	ug/L	12600	Standard
|	Be	9	92139.3	1.4	23.4305	0.106	0.5	ug/L	5	Standard
|	Al	27	518484.4	2.0	27.4589	0.170	0.6	ug/L	16102	Standard
>	Sc	45	300118.8	1.7				ug/L	254529	Standard
|	Ti	47	152.3	8.3	0.0281	0.007	26.2	ug/L	84	Standard
|	V	51	443046.5	1.4	25.4526	0.053	0.2	ug/L	5785	Standard
|	Cr	52	347510.8	1.7	26.2429	0.419	1.6	ug/L	12212	Standard
|	Cr	53	52726.6	2.4	25.7688	0.465	1.8	ug/L	5042	Standard
|	Mn	55	610631.8	1.8	26.7883	0.189	0.7	ug/L	1290	Standard
|	Co	59	427499.5	2.4	26.4718	0.389	1.5	ug/L	143	Standard
|	Ni	60	89708.1	1.0	26.4506	0.171	0.6	ug/L	79	Standard
|	Cu	65	81403.5	1.7	26.4473	0.208	0.8	ug/L	154	Standard
|	Zn	66	34644.6	1.5	24.7763	0.143	0.6	ug/L	194	Standard
>	Ge	72	257637.6	1.4				ug/L	232024	Standard
|	As	75	29334.1	1.8	23.4068	0.352	1.5	ug/L	-297	Standard
|	Se	82	3332.2	2.7	23.2653	0.486	2.1	ug/L	17	Standard
|	Se-1	77	2197.8	3.3	22.1841	0.708	3.2	ug/L	180	Standard
|	Ga	71	242508.7	1.7				mg/L	210139	Standard
|	Rb	85	125.0	62.4				ug/L	12	Standard
>	Y	89	245889.2	0.7				ug/L	214065	Standard
|	Rh	103	23.3	32.7				ug/L	0	Standard
|	Mo	98	79.7	11.2	0.0090	0.002	20.4	ug/L	6	Standard
|	Ag	107	245861.8	2.3	26.2054	0.257	1.0	ug/L	33	Standard
|	Cd	111	121447.3	1.0	23.8793	0.106	0.4	mg/L	437	Standard
|	Cd	114	304505.4	1.2	22.9328	0.080	0.3	ug/L	1160	Standard
>	In	115	724228.9	1.3				ug/L	646604	Standard
|	Sn	118	3143.0	11.2	0.1217	0.018	14.7	ug/L	864	Standard
|	Sb	123	284292.5	1.8	22.9686	0.128	0.6	ug/L	18	Standard
|	Ba	135	125086.3	1.7	24.2390	0.157	0.6	ug/L	39	Standard
|	Ce	140	151.7	13.5				ug/L	46	Standard
>	Tb	159	779973.6	0.6				ug/L	695671	Standard
|	Ho	165	8.3	13.9				ug/L	9	Standard
|	Tl	203	434113.9	0.5	25.5261	0.026	0.1	ug/L	687	Standard
|	Tl	205	1014442.8	1.6	25.1811	0.286	1.1	ug/L	1624	Standard
|	Pb	206	343897.8	1.4	25.3471	0.243	1.0	ug/L	305	Standard
|	Pb	207	299611.6	1.2	25.8921	0.208	0.8	ug/L	231	Standard
|	Pb	208	1369922.2	0.7	25.4360	0.071	0.3	ug/L	1129	Standard
|	U	238	695730.8	1.0	24.2319	0.161	0.7	ug/L	3	Standard
>	Bi	209	417769.7	0.5				ug/L	405108	Standard
|	Na	23	120.0	4.2	0.0010	0.001	71.6	mg/L	118	Standard
|	Mg	24	933.4	2.4	0.0006	0.000	4.1	mg/L	377	Standard

Sample ID: LCSS 2B WG397298-03

Report Date/Time: Thursday, May 10, 2012 11:20:10

Page 1

Approved: May 11, 2012




K	39	655.0	21.4	-0.0034	0.011	321.0	mg/L	583	Standard
Ca	43	73.3	14.2	-0.0433	0.021	48.9	mg/L	73	Standard
Fe	54	1408.9	1.0	0.0606	0.004	6.2	mg/L	785	Standard
Fe	57	5774.4	0.3	-0.0063	0.000	7.3	mg/L	6133	Standard
Sc-1	45	300118.8	1.7				mg/L	254529	Standard
Cl	35	590889.7	32.4				ug/L	1641778	Standard
Kr	83	61.9	2.0				ug/L	60	Standard
Br	81	13425.9	1.7				ug/L	11554	Standard
P	31	108116.9	1.4				ug/L	45410	Standard
S	34	769897.7	5.1				ug/L	568857	Standard
Sr	88	631.7	7.1				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		111.039	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		114.867	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		112.005	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		112.118	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: LCSS 2B WG397298-03
 Report Date/Time: Thursday, May 10, 2012 11:20:10
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	103.126
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: LCSS 2B WG397298-03
 Report Date/Time: Thursday, May 10, 2012 11:20:10
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022301 WG397298-01

Sample Date/Time: Thursday, May 10, 2012 11:20:30

Number of Replicates: 3

Autosampler Position: 236

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	941157.0	1.4	67403.3366	127.135	0.2	ug/L	12600	Standard
|	Be	9	1950.1	2.6	0.4090	0.018	4.3	ug/L	5	Standard
|	Al	27	99476584.1	2.4	4623.5481	105.549	2.3	ug/L	16102	Standard
>	Sc	45	351830.3	1.6				ug/L	254529	Standard
|	Ti	47	55215.1	2.6	36.7572	0.708	1.9	ug/L	84	Standard
|	V	51	422751.9	0.3	27.5572	0.115	0.4	ug/L	5785	Standard
|	Cr	52	187767.6	0.3	15.6716	0.145	0.9	ug/L	12212	Standard
|	Cr	53	27788.8	2.0	14.7824	0.293	2.0	ug/L	5042	Standard
|	Mn	55	1807158.1	2.3	90.0717	1.440	1.6	ug/L	1290	Standard
|	Co	59	80519.1	2.6	5.6441	0.108	1.9	ug/L	143	Standard
|	Ni	60	24139.2	2.1	8.0514	0.116	1.4	ug/L	79	Standard
|	Cu	65	25161.5	1.9	9.2349	0.141	1.5	ug/L	154	Standard
|	Zn	66	16190.6	1.3	13.0434	0.092	0.7	ug/L	194	Standard
>	Ge	72	227262.4	0.7				ug/L	232024	Standard
|	As	75	3003.7	0.3	2.9173	0.026	0.9	ug/L	-297	Standard
|	Se	82	51.0	14.9	0.2480	0.063	25.4	ug/L	17	Standard
|	Se-1	77	121.7	13.2	-0.3137	0.207	66.0	ug/L	180	Standard
|	Ga	71	226986.0	1.0				mg/L	210139	Standard
|	Rb	85	135347.0	2.0				ug/L	12	Standard
>	Y	89	336115.6	0.3				ug/L	214065	Standard
|	Rh	103	6.7	86.6				ug/L	0	Standard
|	Mo	98	613.5	3.8	0.1406	0.005	3.7	ug/L	6	Standard
|	Ag	107	530.7	15.5	0.0563	0.010	17.2	ug/L	33	Standard
|	Cd	111	241.7	12.6	-0.0392	0.007	17.6	mg/L	437	Standard
|	Cd	114	585.9	5.8	-0.0501	0.003	5.7	ug/L	1160	Standard
>	In	115	643889.6	0.3				ug/L	646604	Standard
|	Sn	118	800.0	6.3	-0.0050	0.003	64.6	ug/L	864	Standard
|	Sb	123	267.2	21.1	0.0218	0.005	23.7	ug/L	18	Standard
|	Ba	135	69632.7	1.7	15.1737	0.212	1.4	ug/L	39	Standard
|	Ce	140	3092499.2	0.6				ug/L	46	Standard
>	Tb	159	722669.2	0.8				ug/L	695671	Standard
|	Ho	165	19922.1	1.2				ug/L	9	Standard
|	Tl	203	2212.8	5.7	0.1003	0.007	7.4	ug/L	687	Standard
|	Tl	205	5130.9	7.3	0.0985	0.010	9.7	ug/L	1624	Standard
|	Pb	206	70269.9	0.7	5.4282	0.023	0.4	ug/L	305	Standard
|	Pb	207	54306.2	1.3	4.9165	0.056	1.1	ug/L	231	Standard
|	Pb	208	259992.2	0.7	5.0579	0.030	0.6	ug/L	1129	Standard
|	U	238	15428.5	2.4	0.5674	0.014	2.4	ug/L	3	Standard
>	Bi	209	397287.3	0.3				ug/L	405108	Standard
|	Na	23	105.0	14.3	-0.0062	0.003	43.5	mg/L	118	Standard
|	Mg	24	564956.9	0.5	0.7474	0.015	2.0	mg/L	377	Standard

Sample ID: L1205022301 WG397298-01

Report Date/Time: Thursday, May 10, 2012 11:23:03

Page 1

Approved: May 11, 2012




K	39	6791.5	0.8	0.3736	0.004	1.2	mg/L	583	Standard
Ca	43	228.3	18.4	0.2042	0.075	36.6	mg/L	73	Standard
Fe	54	98742.2	1.6	12.6308	0.141	1.1	mg/L	785	Standard
Fe	57	2783754.0	0.5	11.4901	0.132	1.2	mg/L	6133	Standard
Sc-1	45	351830.3	1.6				mg/L	254529	Standard
Cl	35	399395.3	57.7				ug/L	1641778	Standard
Kr	83	74.3	7.8				ug/L	60	Standard
Br	81	10160.9	1.0				ug/L	11554	Standard
P	31	158396.3	1.6				ug/L	45410	Standard
S	34	544795.9	4.1				ug/L	568857	Standard
Sr	88	47924.0	1.0				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.948	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		157.016	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		99.580	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		103.881	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022301 WG397298-01
 Report Date/Time: Thursday, May 10, 2012 11:23:03
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	98.069
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205022301 WG397298-01
 Report Date/Time: Thursday, May 10, 2012 11:23:03
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022302

Sample Date/Time: Thursday, May 10, 2012 11:23:23
 Number of Replicates: 3
 Autosampler Position: 237
 Sample Description: 5
 Method File: C:\NexIONData\Method\6020a.mth
 Aliquot Volume (mL):
 Diluted to Volume (mL):
 User Name: JYH user
 Cumulative Autodilution Factor: 1
 Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	1718477.2	2.3	128809.0126	4449.574	3.5	ug/L	12600	Standard
|	Be	9	2163.5	2.7	0.4728	0.020	4.2	ug/L	5	Standard
|	Al	27	134608223.4	1.2	6491.0489	168.187	2.6	ug/L	16102	Standard
>	Sc	45	339190.2	1.5				ug/L	254529	Standard
|	Ti	47	66350.7	1.8	43.8210	0.354	0.8	ug/L	84	Standard
|	V	51	449611.8	2.2	29.0795	0.148	0.5	ug/L	5785	Standard
|	Cr	52	254121.9	2.0	21.3889	0.089	0.4	ug/L	12212	Standard
|	Cr	53	37802.1	2.9	20.4739	0.362	1.8	ug/L	5042	Standard
|	Mn	55	2493827.2	3.0	123.2914	1.506	1.2	ug/L	1290	Standard
|	Co	59	108959.6	3.2	7.5773	0.102	1.3	ug/L	143	Standard
|	Ni	60	26873.5	2.8	8.8911	0.091	1.0	ug/L	79	Standard
|	Cu	65	23722.9	2.1	8.6315	0.047	0.5	ug/L	154	Standard
|	Zn	66	20634.7	2.6	16.5313	0.141	0.9	ug/L	194	Standard
>	Ge	72	229159.7	1.8				ug/L	232024	Standard
|	As	75	3556.8	1.5	3.3866	0.046	1.4	ug/L	-297	Standard
|	Se	82	48.6	21.6	0.2249	0.077	34.4	ug/L	17	Standard
|	Se-1	77	125.3	8.6	-0.2807	0.148	52.9	ug/L	180	Standard
|	Ga	71	227801.6	2.1				mg/L	210139	Standard
|	Rb	85	177853.7	3.8				ug/L	12	Standard
>	Y	89	334699.5	2.5				ug/L	214065	Standard
|	Rh	103	6.7	43.3				ug/L	0	Standard
|	Mo	98	831.1	1.8	0.1971	0.007	3.4	ug/L	6	Standard
|	Ag	107	482.0	13.7	0.0514	0.007	14.0	ug/L	33	Standard
|	Cd	111	277.6	3.4	-0.0301	0.002	5.0	mg/L	437	Standard
|	Cd	114	634.7	2.0	-0.0450	0.001	1.9	ug/L	1160	Standard
>	In	115	632624.5	2.0				ug/L	646604	Standard
|	Sn	118	781.4	1.0	-0.0053	0.001	10.0	ug/L	864	Standard
|	Sb	123	229.4	10.6	0.0187	0.002	11.5	ug/L	18	Standard
|	Ba	135	78324.3	1.2	17.3755	0.193	1.1	ug/L	39	Standard
|	Ce	140	2428759.0	1.1				ug/L	46	Standard
>	Tb	159	730693.1	0.3				ug/L	695671	Standard
|	Ho	165	20474.5	2.0				ug/L	9	Standard
|	Tl	203	2217.5	5.9	0.1045	0.010	9.6	ug/L	687	Standard
|	Tl	205	5162.5	2.4	0.1032	0.005	4.6	ug/L	1624	Standard
|	Pb	206	101997.6	2.3	8.1105	0.087	1.1	ug/L	305	Standard
|	Pb	207	79156.3	1.5	7.3783	0.020	0.3	ug/L	231	Standard
|	Pb	208	377221.8	2.2	7.5547	0.071	0.9	ug/L	1129	Standard
|	U	238	14796.9	2.1	0.5594	0.005	0.9	ug/L	3	Standard
>	Bi	209	386462.5	1.3				ug/L	405108	Standard
|	Na	23	125.0	4.0	-0.0012	0.001	69.6	mg/L	118	Standard
|	Mg	24	804227.7	1.8	1.1039	0.027	2.4	mg/L	377	Standard

Sample ID: L1205022302

Report Date/Time: Thursday, May 10, 2012 11:25:56
 Page 1

Approved: May 11, 2012

J. J. Hu

K	39	10698.8	4.8	0.6434	0.042	6.6	mg/L	583	Standard
Ca	43	188.3	20.3	0.1468	0.069	47.2	mg/L	73	Standard
Fe	54	129521.8	3.7	17.2403	0.604	3.5	mg/L	785	Standard
Fe	57	3685919.9	1.5	15.7931	0.253	1.6	mg/L	6133	Standard
Sc-1	45	339190.2	1.5				mg/L	254529	Standard
Cl	35	449164.4	38.6				ug/L	1641778	Standard
Kr	83	82.9	5.2				ug/L	60	Standard
Br	81	10320.2	1.0				ug/L	11554	Standard
P	31	203984.0	1.0				ug/L	45410	Standard
S	34	572326.0	3.2				ug/L	568857	Standard
Sr	88	51943.9	0.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.766	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		156.354	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.838	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.034	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022302

Report Date/Time: Thursday, May 10, 2012 11:25:56

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.397
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205022302
 Report Date/Time: Thursday, May 10, 2012 11:25:56
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022303S WG397298-04

Sample Date/Time: Thursday, May 10, 2012 11:26:16

Number of Replicates: 3

Autosampler Position: 238

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	1885139.8	1.6	127088.3845	1886.791	1.5	ug/L	12600	Standard
|	Be	9	25222.7	5.0	5.0942	0.235	4.6	ug/L	5	Standard
|	Al	27	160650156.0	2.4	6969.0177	171.503	2.5	ug/L	16102	Standard
>	Sc	45	377002.0	1.8				ug/L	254529	Standard
|	Ti	47	72095.1	1.5	48.1378	1.247	2.6	ug/L	84	Standard
|	V	51	611566.6	3.5	40.0982	1.772	4.4	ug/L	5785	Standard
|	Cr	52	312297.4	2.6	26.8249	0.978	3.6	ug/L	12212	Standard
|	Cr	53	47039.6	2.9	26.1521	1.092	4.2	ug/L	5042	Standard
|	Mn	55	2061880.3	3.7	103.0495	4.590	4.5	ug/L	1290	Standard
|	Co	59	183085.5	3.0	12.8802	0.485	3.8	ug/L	143	Standard
|	Ni	60	50086.0	2.7	16.7754	0.624	3.7	ug/L	79	Standard
|	Cu	65	45451.1	2.1	16.7633	0.452	2.7	ug/L	154	Standard
|	Zn	66	30413.9	3.3	24.7192	0.974	3.9	ug/L	194	Standard
>	Ge	72	226738.8	1.2				ug/L	232024	Standard
|	As	75	10532.5	3.0	9.6860	0.381	3.9	ug/L	-297	Standard
|	Se	82	867.2	2.2	6.7706	0.235	3.5	ug/L	17	Standard
|	Se-1	77	698.0	2.7	6.8425	0.230	3.4	ug/L	180	Standard
|	Ga	71	236683.4	0.9				mg/L	210139	Standard
|	Rb	85	227416.2	4.4				ug/L	12	Standard
>	Y	89	341489.1	1.3				ug/L	214065	Standard
|	Rh	103	10.0	50.0				ug/L	0	Standard
|	Mo	98	886.2	3.5	0.2118	0.006	2.7	ug/L	6	Standard
|	Ag	107	47350.3	4.5	5.8015	0.223	3.8	ug/L	33	Standard
|	Cd	111	28424.8	4.1	6.3626	0.219	3.4	mg/L	437	Standard
|	Cd	114	76034.8	3.2	6.5178	0.184	2.8	ug/L	1160	Standard
>	In	115	629352.5	0.9				ug/L	646604	Standard
|	Sn	118	799.7	2.5	-0.0039	0.002	41.9	ug/L	864	Standard
|	Sb	123	1494.4	3.6	0.1365	0.005	4.0	ug/L	18	Standard
|	Ba	135	115755.8	3.3	25.8117	0.727	2.8	ug/L	39	Standard
|	Ce	140	2525160.5	3.4				ug/L	46	Standard
>	Tb	159	725898.3	0.3				ug/L	695671	Standard
|	Ho	165	21444.9	4.5				ug/L	9	Standard
|	Tl	203	97213.2	5.5	6.0125	0.296	4.9	ug/L	687	Standard
|	Tl	205	225794.5	4.1	5.8961	0.210	3.6	ug/L	1624	Standard
|	Pb	206	165087.5	4.0	12.8477	0.440	3.4	ug/L	305	Standard
|	Pb	207	135698.4	3.4	12.3817	0.357	2.9	ug/L	231	Standard
|	Pb	208	631005.7	3.6	12.3702	0.379	3.1	ug/L	1129	Standard
|	U	238	166648.7	3.0	6.1365	0.175	2.9	ug/L	3	Standard
>	Bi	209	395273.9	1.0				ug/L	405108	Standard
|	Na	23	130.0	10.2	-0.0029	0.003	101.1	mg/L	118	Standard
|	Mg	24	1016043.6	2.0	1.2548	0.021	1.7	mg/L	377	Standard

Sample ID: L1205022303S WG397298-04

Report Date/Time: Thursday, May 10, 2012 11:28:48

Page 1


Approved: May 11, 2012

K	39	13702.9	2.2	0.7488	0.005	0.6	mg/L	583	Standard
Ca	43	206.7	20.3	0.1428	0.072	50.1	mg/L	73	Standard
Fe	54	123270.0	2.8	14.7400	0.302	2.0	mg/L	785	Standard
Fe	57	3560735.4	2.1	13.7235	0.360	2.6	mg/L	6133	Standard
Sc-1	45	377002.0	1.8				mg/L	254529	Standard
Cl	35	434261.1	40.4				ug/L	1641778	Standard
Kr	83	85.8	6.3				ug/L	60	Standard
Br	81	9977.5	2.9				ug/L	11554	Standard
P	31	202607.5	3.5				ug/L	45410	Standard
S	34	562269.7	1.3				ug/L	568857	Standard
Sr	88	63680.4	4.4				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.722	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		159.526	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.332	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.345	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022303S WG397298-04
 Report Date/Time: Thursday, May 10, 2012 11:28:48
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	97.572
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: L1205022303S WG397298-04
 Report Date/Time: Thursday, May 10, 2012 11:28:48
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022304SD WG397298-05

Sample Date/Time: Thursday, May 10, 2012 11:29:08

Number of Replicates: 3

Autosampler Position: 239

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	465099.9	2.4	41097.9585	1278.268	3.1	ug/L	12600	Standard
|	Be	9	21490.2	1.1	5.8074	0.122	2.1	ug/L	5	Standard
|	Al	27	46197308.8	2.2	2679.3866	64.641	2.4	ug/L	16102	Standard
>	Sc	45	281912.0	1.0				ug/L	254529	Standard
|	Ti	47	36366.9	2.4	24.5298	0.427	1.7	ug/L	84	Standard
|	V	51	247571.9	1.9	16.2498	0.502	3.1	ug/L	5785	Standard
|	Cr	52	139097.1	2.4	11.5149	0.380	3.3	ug/L	12212	Standard
|	Cr	53	20789.3	1.6	10.8460	0.139	1.3	ug/L	5042	Standard
|	Mn	55	2252875.7	1.3	113.8993	1.644	1.4	ug/L	1290	Standard
|	Co	59	143723.6	1.7	10.2257	0.198	1.9	ug/L	143	Standard
|	Ni	60	28103.7	2.1	9.5109	0.236	2.5	ug/L	79	Standard
|	Cu	65	24889.8	1.6	9.2641	0.159	1.7	ug/L	154	Standard
|	Zn	66	17323.9	2.5	14.1678	0.343	2.4	ug/L	194	Standard
>	Ge	72	224125.7	1.5				ug/L	232024	Standard
|	As	75	7504.4	2.5	7.0433	0.158	2.2	ug/L	-297	Standard
|	Se	82	809.4	2.4	6.3833	0.178	2.8	ug/L	17	Standard
|	Se-1	77	614.0	3.8	5.8915	0.378	6.4	ug/L	180	Standard
|	Ga	71	208742.3	1.5				mg/L	210139	Standard
|	Rb	85	73708.9	2.1				ug/L	12	Standard
>	Y	89	254471.7	2.6				ug/L	214065	Standard
|	Rh	103	18.3	56.8				ug/L	0	Standard
|	Mo	98	340.5	1.8	0.0764	0.001	1.9	ug/L	6	Standard
|	Ag	107	43661.2	3.1	5.3514	0.096	1.8	ug/L	33	Standard
|	Cd	111	26117.1	3.2	5.8412	0.128	2.2	mg/L	437	Standard
|	Cd	114	69757.2	2.5	5.9742	0.108	1.8	ug/L	1160	Standard
>	In	115	629161.3	2.5				ug/L	646604	Standard
|	Sn	118	653.3	0.7	-0.0134	0.001	8.9	ug/L	864	Standard
|	Sb	123	6004.9	2.8	0.5561	0.009	1.7	ug/L	18	Standard
|	Ba	135	63646.8	1.6	14.1959	0.131	0.9	ug/L	39	Standard
|	Ce	140	939891.1	1.5				ug/L	46	Standard
>	Tb	159	699222.3	1.8				ug/L	695671	Standard
|	Ho	165	8620.5	1.8				ug/L	9	Standard
|	Tl	203	87314.9	1.9	5.4314	0.082	1.5	ug/L	687	Standard
|	Tl	205	202412.5	2.1	5.3154	0.073	1.4	ug/L	1624	Standard
|	Pb	206	104496.5	1.9	8.1755	0.111	1.4	ug/L	305	Standard
|	Pb	207	87899.3	2.2	8.0625	0.108	1.3	ug/L	231	Standard
|	Pb	208	407233.8	2.2	8.0253	0.093	1.2	ug/L	1129	Standard
|	U	238	140834.6	1.7	5.2184	0.035	0.7	ug/L	3	Standard
>	Bi	209	392823.6	1.2				ug/L	405108	Standard
|	Na	23	130.0	29.0	0.0054	0.010	179.4	mg/L	118	Standard
|	Mg	24	310059.4	1.8	0.5116	0.012	2.3	mg/L	377	Standard

Sample ID: L1205022304SD WG397298-05

Report Date/Time: Thursday, May 10, 2012 11:31:42

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	3962.2	0.7	0.2580	0.003	1.1	mg/L	583	Standard
Ca	43	111.7	44.2	0.0501	0.109	217.2	mg/L	73	Standard
Fe	54	39135.2	1.4	6.1701	0.082	1.3	mg/L	785	Standard
Fe	57	1198170.1	1.7	6.1557	0.111	1.8	mg/L	6133	Standard
Sc-1	45	281912.0	1.0				mg/L	254529	Standard
Cl	35	362533.9	60.9				ug/L	1641778	Standard
Kr	83	61.6	3.5				ug/L	60	Standard
Br	81	9963.3	1.6				ug/L	11554	Standard
P	31	116258.6	1.7				ug/L	45410	Standard
S	34	557544.3	0.9				ug/L	568857	Standard
Sr	88	20507.2	3.8				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.596	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		118.876	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.302	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		100.510	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022304SD WG397298-05
 Report Date/Time: Thursday, May 10, 2012 11:31:42
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	96.968
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205022304SD WG397298-05
 Report Date/Time: Thursday, May 10, 2012 11:31:42
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022306

Sample Date/Time: Thursday, May 10, 2012 11:32:02

Number of Replicates: 3

Autosampler Position: 240

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	513251.2	2.3	39016.7942	1700.130	4.4	ug/L	12600	Standard
|	Be	9	2351.8	1.7	0.5347	0.025	4.7	ug/L	5	Standard
|	Al	27	65900707.5	2.0	3294.1750	148.401	4.5	ug/L	16102	Standard
>	Sc	45	327390.2	3.4				ug/L	254529	Standard
|	Ti	47	23899.8	0.1	14.3802	0.107	0.7	ug/L	84	Standard
|	V	51	236359.6	1.5	13.8163	0.180	1.3	ug/L	5785	Standard
|	Cr	52	129948.6	0.7	9.4392	0.115	1.2	ug/L	12212	Standard
|	Cr	53	19167.1	1.2	8.6673	0.204	2.4	ug/L	5042	Standard
|	Mn	55	7694754.5	1.2	347.7960	6.821	2.0	ug/L	1290	Standard
|	Co	59	121677.1	2.4	7.7332	0.221	2.9	ug/L	143	Standard
|	Ni	60	16269.4	1.9	4.9084	0.127	2.6	ug/L	79	Standard
|	Cu	65	24703.5	2.7	8.2114	0.290	3.5	ug/L	154	Standard
|	Zn	66	35862.7	0.4	26.3573	0.325	1.2	ug/L	194	Standard
>	Ge	72	250822.5	0.8				ug/L	232024	Standard
|	As	75	3362.7	0.7	2.9561	0.042	1.4	ug/L	-297	Standard
|	Se	82	65.5	9.4	0.3145	0.046	14.8	ug/L	17	Standard
|	Se-1	77	147.3	11.9	-0.1675	0.200	119.4	ug/L	180	Standard
|	Ga	71	241205.5	0.6				mg/L	210139	Standard
|	Rb	85	117087.5	2.5				ug/L	12	Standard
>	Y	89	392625.0	2.0				ug/L	214065	Standard
|	Rh	103	11.7	65.5				ug/L	0	Standard
|	Mo	98	819.6	0.2	0.1734	0.002	1.3	ug/L	6	Standard
|	Ag	107	690.3	5.9	0.0682	0.004	5.3	ug/L	33	Standard
|	Cd	111	883.6	2.8	0.0863	0.004	5.2	mg/L	437	Standard
|	Cd	114	2259.6	1.4	0.0756	0.004	5.3	ug/L	1160	Standard
>	In	115	705150.9	1.1				ug/L	646604	Standard
|	Sn	118	1424.1	1.2	0.0268	0.002	5.8	ug/L	864	Standard
|	Sb	123	178.8	19.0	0.0124	0.003	24.3	ug/L	18	Standard
|	Ba	135	114237.5	1.9	22.7368	0.446	2.0	ug/L	39	Standard
|	Ce	140	1769534.0	2.4				ug/L	46	Standard
>	Tb	159	783602.9	1.5				ug/L	695671	Standard
|	Ho	165	21167.8	2.2				ug/L	9	Standard
|	Tl	203	1813.4	9.6	0.0712	0.011	15.8	ug/L	687	Standard
|	Tl	205	4076.9	10.7	0.0668	0.012	17.6	ug/L	1624	Standard
|	Pb	206	142158.5	1.1	10.5679	0.154	1.5	ug/L	305	Standard
|	Pb	207	115469.4	1.1	10.0628	0.092	0.9	ug/L	231	Standard
|	Pb	208	541671.6	1.2	10.1424	0.114	1.1	ug/L	1129	Standard
|	U	238	9893.6	1.0	0.3504	0.006	1.7	ug/L	3	Standard
>	Bi	209	413713.7	0.8				ug/L	405108	Standard
|	Na	23	131.7	7.9	0.0011	0.001	123.6	mg/L	118	Standard
|	Mg	24	593796.3	1.2	0.8447	0.028	3.3	mg/L	377	Standard

Sample ID: L1205022306

Report Date/Time: Thursday, May 10, 2012 11:34:34

Page 1

Approved: May 11, 2012

J. J. H.

K	39	7016.6	2.4	0.4205	0.006	1.5	mg/L	583	Standard
Ca	43	510.0	6.0	0.7591	0.038	4.9	mg/L	73	Standard
Fe	54	52709.7	4.0	7.1848	0.363	5.1	mg/L	785	Standard
Fe	57	1597398.5	2.2	7.0747	0.182	2.6	mg/L	6133	Standard
Sc-1	45	327390.2	3.4				mg/L	254529	Standard
Cl	35	544405.4	40.8				ug/L	1641778	Standard
Kr	83	78.1	9.4				ug/L	60	Standard
Br	81	13046.5	2.7				ug/L	11554	Standard
P	31	429670.3	1.9				ug/L	45410	Standard
S	34	671788.0	2.3				ug/L	568857	Standard
Sr	88	78809.5	2.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		108.102	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		183.414	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		109.055	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		112.640	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022306

Report Date/Time: Thursday, May 10, 2012 11:34:34

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	102.124
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205022306
 Report Date/Time: Thursday, May 10, 2012 11:34:34
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022306PS WG397362-01

Sample Date/Time: Thursday, May 10, 2012 11:34:54

Number of Replicates: 3

Autosampler Position: 241

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	513304.0	2.7	38551.4847	913.902	2.4	ug/L	12600	Standard
|	Be	9	200509.3	3.8	46.2321	1.000	2.2	ug/L	5	Standard
|	Al	27	66191254.8	3.0	3269.4290	66.448	2.0	ug/L	16102	Standard
>	Sc	45	331000.4	1.7				ug/L	254529	Standard
|	Ti	47	23754.3	2.9	14.3840	0.321	2.2	ug/L	84	Standard
|	V	51	1102148.0	2.8	65.9062	0.671	1.0	ug/L	5785	Standard
|	Cr	52	777196.6	2.2	62.0403	1.101	1.8	ug/L	12212	Standard
|	Cr	53	117176.5	1.9	61.1993	1.753	2.9	ug/L	5042	Standard
|	Mn	55	8762712.2	2.1	398.6364	8.253	2.1	ug/L	1290	Standard
|	Co	59	919214.2	2.6	58.8578	0.992	1.7	ug/L	143	Standard
|	Ni	60	186105.0	3.7	56.7441	1.383	2.4	ug/L	79	Standard
|	Cu	65	178752.9	3.0	60.0947	0.966	1.6	ug/L	154	Standard
|	Zn	66	103658.8	2.3	77.0023	0.698	0.9	ug/L	194	Standard
>	Ge	72	249219.7	1.9				ug/L	232024	Standard
|	As	75	64275.1	1.8	52.7344	0.569	1.1	ug/L	-297	Standard
|	Se	82	6953.3	1.0	50.3790	0.567	1.1	ug/L	17	Standard
|	Se-1	77	4595.0	1.8	50.0638	0.138	0.3	ug/L	180	Standard
|	Ga	71	242691.0	0.7				mg/L	210139	Standard
|	Rb	85	119790.1	1.2				ug/L	12	Standard
>	Y	89	390037.2	1.5				ug/L	214065	Standard
|	Rh	103	58.3	30.1				ug/L	0	Standard
|	Mo	98	928.0	3.4	0.1993	0.007	3.3	ug/L	6	Standard
|	Ag	107	465340.9	2.3	51.4043	0.232	0.5	ug/L	33	Standard
|	Cd	111	246113.4	2.1	50.2455	0.507	1.0	mg/L	437	Standard
|	Cd	114	634384.4	2.1	49.6230	0.539	1.1	ug/L	1160	Standard
>	In	115	698916.4	2.0				ug/L	646604	Standard
|	Sn	118	1939.5	1.6	0.0578	0.000	0.7	ug/L	864	Standard
|	Sb	123	585512.4	1.2	49.0277	0.394	0.8	ug/L	18	Standard
|	Ba	135	362512.0	2.1	72.8084	0.441	0.6	ug/L	39	Standard
|	Ce	140	1770448.5	1.4				ug/L	46	Standard
>	Tb	159	787481.4	2.2				ug/L	695671	Standard
|	Ho	165	21140.1	2.0				ug/L	9	Standard
|	Tl	203	865284.0	2.3	51.1708	0.351	0.7	ug/L	687	Standard
|	Tl	205	2056255.0	6.4	51.3071	2.258	4.4	ug/L	1624	Standard
|	Pb	206	828294.5	2.2	61.3896	0.231	0.4	ug/L	305	Standard
|	Pb	207	711669.7	2.1	61.8445	0.371	0.6	ug/L	231	Standard
|	Pb	208	3276171.2	2.3	61.1669	0.300	0.5	ug/L	1129	Standard
|	U	238	1397172.3	2.4	48.9098	1.038	2.1	ug/L	3	Standard
>	Bi	209	415679.4	2.1				ug/L	405108	Standard
|	Na	23	91.7	30.0	-0.0076	0.006	81.0	mg/L	118	Standard
|	Mg	24	589667.9	2.4	0.8290	0.012	1.5	mg/L	377	Standard

Sample ID: L1205022306PS WG397362-01

Report Date/Time: Thursday, May 10, 2012 11:37:26

Page 1


Approved: May 11, 2012

K	39	7058.3	0.3	0.4181	0.008	2.0	mg/L	583	Standard
Ca	43	518.3	4.0	0.7649	0.052	6.9	mg/L	73	Standard
Fe	54	53384.1	0.6	7.1939	0.078	1.1	mg/L	785	Standard
Fe	57	1581639.3	1.5	6.9249	0.013	0.2	mg/L	6133	Standard
Sc-1	45	331000.4	1.7				mg/L	254529	Standard
Cl	35	557096.1	40.3				ug/L	1641778	Standard
Kr	83	79.8	6.5				ug/L	60	Standard
Br	81	12655.3	1.9				ug/L	11554	Standard
P	31	430081.9	1.4				ug/L	45410	Standard
S	34	651925.3	3.2				ug/L	568857	Standard
Sr	88	79018.9	2.4				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		107.411	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		182.205	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		108.090	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		113.197	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022306PS WG397362-01
 Report Date/Time: Thursday, May 10, 2012 11:37:26
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	102.610
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205022306PS WG397362-01
 Report Date/Time: Thursday, May 10, 2012 11:37:26
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022306SDL WG397362-02

Sample Date/Time: Thursday, May 10, 2012 11:37:46

Number of Replicates: 3

Autosampler Position: 242

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	98517.8	3.0	8745.3644	112.178	1.3	ug/L	12600	Standard
|	Be	9	451.7	14.7	0.1220	0.021	17.2	ug/L	5	Standard
|	Al	27	11800171.9	1.5	762.0679	10.958	1.4	ug/L	16102	Standard
>	Sc	45	253041.6	2.9				ug/L	254529	Standard
|	Ti	47	4170.6	1.4	2.8076	0.014	0.5	ug/L	84	Standard
|	V	51	43054.3	1.5	2.6350	0.018	0.7	ug/L	5785	Standard
|	Cr	52	29572.5	0.8	1.6748	0.014	0.8	ug/L	12212	Standard
|	Cr	53	3981.4	6.4	0.8857	0.179	20.2	ug/L	5042	Standard
|	Mn	55	1350455.4	0.9	69.4234	0.507	0.7	ug/L	1290	Standard
|	Co	59	20576.0	2.1	1.4803	0.014	0.9	ug/L	143	Standard
|	Ni	60	2809.6	1.5	0.9457	0.004	0.4	ug/L	79	Standard
|	Cu	65	4499.3	1.7	1.6634	0.048	2.9	ug/L	154	Standard
|	Zn	66	9564.4	1.3	7.8806	0.126	1.6	ug/L	194	Standard
>	Ge	72	220305.3	1.3				ug/L	232024	Standard
|	As	75	516.3	10.6	0.7038	0.053	7.5	ug/L	-297	Standard
|	Se	82	29.1	33.1	0.0814	0.082	100.3	ug/L	17	Standard
|	Se-1	77	99.3	17.7	-0.5500	0.242	44.0	ug/L	180	Standard
|	Ga	71	198082.4	2.7				mg/L	210139	Standard
|	Rb	85	18988.6	0.4				ug/L	12	Standard
>	Y	89	226542.2	3.3				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	140.9	2.9	0.0265	0.001	3.9	ug/L	6	Standard
|	Ag	107	128.7	4.4	0.0083	0.001	8.1	ug/L	33	Standard
|	Cd	111	256.4	1.0	-0.0352	0.000	0.9	mg/L	437	Standard
|	Cd	114	676.7	3.3	-0.0416	0.002	4.0	ug/L	1160	Standard
>	In	115	635307.2	0.5				ug/L	646604	Standard
|	Sn	118	608.7	3.2	-0.0167	0.001	6.9	ug/L	864	Standard
|	Sb	123	974.3	35.8	0.0872	0.032	36.4	ug/L	18	Standard
|	Ba	135	20335.3	0.9	4.4856	0.043	1.0	ug/L	39	Standard
|	Ce	140	317968.0	1.0				ug/L	46	Standard
>	Tb	159	685093.7	0.3				ug/L	695671	Standard
|	Ho	165	3661.8	0.6				ug/L	9	Standard
|	Tl	203	703.3	17.5	0.0077	0.008	103.9	ug/L	687	Standard
|	Tl	205	1651.4	22.3	0.0084	0.010	119.1	ug/L	1624	Standard
|	Pb	206	25850.0	0.9	2.0213	0.008	0.4	ug/L	305	Standard
|	Pb	207	21124.1	2.7	1.9356	0.035	1.8	ug/L	231	Standard
|	Pb	208	98681.5	1.3	1.9430	0.011	0.6	ug/L	1129	Standard
|	U	238	1749.8	3.8	0.0677	0.003	4.4	ug/L	3	Standard
>	Bi	209	389707.1	0.9				ug/L	405108	Standard
|	Na	23	103.3	24.4	0.0016	0.007	422.6	mg/L	118	Standard
|	Mg	24	120196.6	1.3	0.2205	0.005	2.2	mg/L	377	Standard

Sample ID: L1205022306SDL WG397362-02

Report Date/Time: Thursday, May 10, 2012 11:40:19

Page 1

Approved: May 11, 2012


K	39	1778.4	3.0	0.1032	0.005	4.4	mg/L	583	Standard
Ca	43	161.7	6.4	0.1982	0.031	15.9	mg/L	73	Standard
Fe	54	9945.9	3.3	1.6372	0.038	2.3	mg/L	785	Standard
Fe	57	300529.2	2.6	1.6954	0.007	0.4	mg/L	6133	Standard
Sc-1	45	253041.6	2.9				mg/L	254529	Standard
Cl	35	362596.9	63.3				ug/L	1641778	Standard
Kr	83	50.6	13.0				ug/L	60	Standard
Br	81	9397.9	1.5				ug/L	11554	Standard
P	31	97580.8	2.0				ug/L	45410	Standard
S	34	523305.1	3.8				ug/L	568857	Standard
Sr	88	13921.4	3.4				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.950	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		105.829	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.253	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.479	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022306SDL WG397362-02
 Report Date/Time: Thursday, May 10, 2012 11:40:19
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	96.198
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205022306SDL WG397362-02
 Report Date/Time: Thursday, May 10, 2012 11:40:19
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 11:40:41

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	14418.5	1.7	76.1381	6.948	9.1	ug/L	12600	Standard
|	Be	9	188631.4	3.8	51.4552	1.363	2.6	ug/L	5	Standard
|	Al	27	859087.4	1.9	49.4166	0.375	0.8	ug/L	16102	Standard
>	Sc	45	279801.8	1.2				ug/L	254529	Standard
|	Ti	47	163930.9	1.6	104.3696	2.150	2.1	ug/L	84	Standard
|	V	51	837191.6	1.0	52.3891	0.855	1.6	ug/L	5785	Standard
|	Cr	52	622500.8	2.1	51.8855	1.380	2.7	ug/L	12212	Standard
|	Cr	53	93963.9	1.9	51.1531	1.276	2.5	ug/L	5042	Standard
|	Mn	55	1106066.2	1.2	52.6291	0.797	1.5	ug/L	1290	Standard
|	Co	59	772624.3	1.8	51.8230	1.105	2.1	ug/L	143	Standard
|	Ni	60	162050.0	2.4	51.7630	1.323	2.6	ug/L	79	Standard
|	Cu	65	146009.8	2.8	51.4194	1.564	3.0	ug/L	154	Standard
|	Zn	66	65036.0	1.8	50.5503	1.109	2.2	ug/L	194	Standard
>	Ge	72	237921.5	0.6				ug/L	232024	Standard
|	As	75	58826.0	1.2	50.5658	0.869	1.7	ug/L	-297	Standard
|	Se	82	6853.3	0.5	52.0128	0.516	1.0	ug/L	17	Standard
|	Se-1	77	4440.7	1.7	50.7055	1.156	2.3	ug/L	180	Standard
|	Ga	71	214354.1	1.1				mg/L	210139	Standard
|	Rb	85	1203.4	4.4				ug/L	12	Standard
>	Y	89	218978.9	3.3				ug/L	214065	Standard
|	Rh	103	35.0	14.3				ug/L	0	Standard
|	Mo	98	423829.1	1.5	97.0831	2.658	2.7	ug/L	6	Standard
|	Ag	107	441037.7	0.6	49.9338	1.220	2.4	ug/L	33	Standard
|	Cd	111	237397.5	1.7	49.6568	0.380	0.8	mg/L	437	Standard
|	Cd	114	613107.8	1.6	49.1369	0.221	0.4	ug/L	1160	Standard
>	In	115	682163.3	1.9				ug/L	646604	Standard
|	Sn	118	823210.1	3.1	49.3645	0.668	1.4	ug/L	864	Standard
|	Sb	123	576029.8	1.7	49.4156	0.319	0.6	ug/L	18	Standard
|	Ba	135	241835.4	1.8	49.7633	0.246	0.5	ug/L	39	Standard
|	Ce	140	1048.7	14.4				ug/L	46	Standard
>	Tb	159	744039.1	0.7				ug/L	695671	Standard
|	Ho	165	20.7	17.0				ug/L	9	Standard
|	Tl	203	829818.7	0.4	51.0284	0.480	0.9	ug/L	687	Standard
|	Tl	205	1929638.8	0.7	50.0939	0.622	1.2	ug/L	1624	Standard
|	Pb	206	660074.4	0.5	50.8670	0.498	1.0	ug/L	305	Standard
|	Pb	207	558424.4	0.7	50.4556	0.601	1.2	ug/L	231	Standard
|	Pb	208	2585500.7	0.7	50.1917	0.590	1.2	ug/L	1129	Standard
|	U	238	1319560.5	1.6	48.0274	0.818	1.7	ug/L	3	Standard
>	Bi	209	399772.7	0.5				ug/L	405108	Standard
|	Na	23	20363.7	2.8	5.1146	0.087	1.7	mg/L	118	Standard
|	Mg	24	2943811.2	1.0	4.9006	0.016	0.3	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 11:43:14

Page 1

Approved: May 11, 2012



K	39	63450.9	0.8	4.9429	0.077	1.5	mg/L	583	Standard
Ca	43	2343.5	7.8	4.9237	0.340	6.9	mg/L	73	Standard
Fe	54	31410.3	2.9	4.9596	0.101	2.0	mg/L	785	Standard
Fe	57	930155.0	2.1	4.8068	0.043	0.9	mg/L	6133	Standard
Sc-1	45	279801.8	1.2				mg/L	254529	Standard
Cl	35	517557.6	41.8				ug/L	1641778	Standard
Kr	83	53.0	10.9				ug/L	60	Standard
Br	81	11250.0	2.5				ug/L	11554	Standard
P	31	63496.1	1.8				ug/L	45410	Standard
S	34	729690.4	1.0				ug/L	568857	Standard
Sr	88	651.7	6.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	98.833		
Sc	45			
Ti	47	104.370		
V	51	104.778		
Cr	52	103.771		
Cr	53			
Mn	55	105.258		
Co	59	103.646		
Ni	60	103.526		
Cu	65	102.839		
Zn	66	101.101		
Ge	72		102.542	
As	75	101.132		
Se	82	104.026		
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.296	
Rh	103			
Mo	98	97.083		
Ag	107	99.868		
Cd	111	99.314		
Cd	114			
In	115		105.499	
Sn	118	98.729		
Sb	123	98.831		
Ba	135	99.527		
Ce	140			
Tb	159		106.953	
Ho	165			
Tl	203	102.057		
Tl	205			
Pb	206	101.734		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 11:43:14

Page 2

Approved: May 11, 2012




Pb	207	100.911	
Pb	208	100.383	
U	238	96.055	
> Bi	209		98.683
Na	23	102.293	
Mg	24	98.013	
K	39	98.859	
Ca	43	98.474	
Fe	54	99.192	
Fe	57	96.136	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 11:43:14
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 11:43:33

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13716.2	2.2	77.3438	13.719	17.7	ug/L	12600	Standard
|	Be	9	10.0	50.0	-0.0115	0.001	12.8	ug/L	5	Standard
|	Al	27	16294.1	24.7	0.2106	0.265	125.6	ug/L	16102	Standard
>	Sc	45	265939.1	1.8				ug/L	254529	Standard
|	Ti	47	99.7	18.2	0.0036	0.011	305.3	ug/L	84	Standard
|	V	51	3691.2	2.2	-0.0519	0.009	17.1	ug/L	5785	Standard
|	Cr	52	11114.7	2.6	-0.0697	0.013	18.6	ug/L	12212	Standard
|	Cr	53	1013.4	9.5	-0.9425	0.050	5.3	ug/L	5042	Standard
|	Mn	55	1436.7	5.2	-0.0145	0.004	24.7	ug/L	1290	Standard
|	Co	59	168.0	6.8	0.0013	0.001	71.1	ug/L	143	Standard
|	Ni	60	73.7	11.0	0.0003	0.002	793.0	ug/L	79	Standard
|	Cu	65	122.7	6.2	-0.0053	0.004	72.5	ug/L	154	Standard
|	Zn	66	167.7	7.2	-0.0414	0.013	31.3	ug/L	194	Standard
>	Ge	72	231606.9	2.6				ug/L	232024	Standard
|	As	75	-235.8	5.1	0.0189	0.016	83.2	ug/L	-297	Standard
|	Se	82	23.4	5.4	0.0247	0.014	58.3	ug/L	17	Standard
|	Se-1	77	93.7	7.7	-0.6839	0.058	8.4	ug/L	180	Standard
|	Ga	71	211597.1	3.9				mg/L	210139	Standard
|	Rb	85	31.7	50.8				ug/L	12	Standard
>	Y	89	211655.1	2.0				ug/L	214065	Standard
|	Rh	103	8.3	91.7				ug/L	0	Standard
|	Mo	98	70.2	73.1	0.0085	0.012	143.6	ug/L	6	Standard
|	Ag	107	114.3	7.9	0.0061	0.001	17.3	ug/L	33	Standard
|	Cd	111	462.9	2.6	0.0080	0.003	33.3	mg/L	437	Standard
|	Cd	114	1176.8	1.5	-0.0017	0.001	82.3	ug/L	1160	Standard
>	In	115	656263.3	0.3				ug/L	646604	Standard
|	Sn	118	941.4	3.6	0.0028	0.002	73.6	ug/L	864	Standard
|	Sb	123	381.1	22.8	0.0315	0.008	24.7	ug/L	18	Standard
|	Ba	135	47.3	13.6	0.0019	0.001	72.9	ug/L	39	Standard
|	Ce	140	59.0	9.4				ug/L	46	Standard
>	Tb	159	715860.3	0.9				ug/L	695671	Standard
|	Ho	165	6.7	37.7				ug/L	9	Standard
|	Tl	203	379.3	45.2	-0.0130	0.011	82.0	ug/L	687	Standard
|	Tl	205	922.7	40.8	-0.0112	0.010	87.8	ug/L	1624	Standard
|	Pb	206	309.0	10.7	0.0011	0.003	219.8	ug/L	305	Standard
|	Pb	207	275.3	7.2	0.0024	0.002	74.1	ug/L	231	Standard
|	Pb	208	1237.0	8.2	0.0015	0.002	133.1	ug/L	1129	Standard
|	U	238	67.7	41.0	0.0049	0.001	20.9	ug/L	3	Standard
>	Bi	209	393139.1	0.3				ug/L	405108	Standard
|	Na	23	75.0	13.3	-0.0073	0.002	33.6	mg/L	118	Standard
|	Mg	24	488.3	14.3	-0.0000	0.000	1017.4	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 11:46:07

Page 1

Approved: May 11, 2012

J. J. H.

K	39	650.0	4.3	0.0023	0.002	87.2	mg/L	583	Standard
Ca	43	48.3	15.8	-0.0815	0.019	22.8	mg/L	73	Standard
Fe	54	888.6	6.2	-0.0011	0.007	669.7	mg/L	785	Standard
Fe	57	4654.0	2.0	-0.0088	0.001	8.1	mg/L	6133	Standard
Sc-1	45	265939.1	1.8				mg/L	254529	Standard
Cl	35	522433.8	42.9				ug/L	1641778	Standard
Kr	83	56.2	7.5				ug/L	60	Standard
Br	81	11034.0	2.8				ug/L	11554	Standard
P	31	58798.1	3.2				ug/L	45410	Standard
S	34	703450.8	2.5				ug/L	568857	Standard
Sr	88	223.3	12.3				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.820	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		98.874	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		101.494	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.902	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 11:46:07

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	97.046
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 11:46:07
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1204038406

Sample Date/Time: Thursday, May 10, 2012 11:49:22

Number of Replicates: 3

Autosampler Position: 222

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	106976.2	14.0	13925.5920	1274.435	9.2	ug/L	12600	Standard
|	Be	9	480062.9	7.4	203.0771	3.642	1.8	ug/L	5	Standard
|	Al	27	58591.5	3.4	4.5230	0.151	3.3	ug/L	16102	Standard
>	Sc	45	180384.6	5.6				ug/L	254529	Standard
|	Ti	47	1105.4	6.6	1.2551	0.087	6.9	ug/L	84	Standard
|	V	51	4937199.6	7.7	580.3136	38.758	6.7	ug/L	5785	Standard
|	Cr	52	4216511.5	7.2	668.9542	42.021	6.3	ug/L	12212	Standard
|	Cr	53	683637.7	4.2	714.9156	23.736	3.3	ug/L	5042	Standard
|	Mn	55	81197.7	8.3	7.1551	0.674	9.4	ug/L	1290	Standard
|	Co	59	4568724.6	3.6	572.9523	14.655	2.6	ug/L	143	Standard
|	Ni	60	1646.1	4.0	0.9595	0.028	3.0	ug/L	79	Standard
|	Cu	65	521599.3	2.0	343.7008	4.477	1.3	ug/L	154	Standard
|	Zn	66	581085.2	2.0	847.1949	12.397	1.5	ug/L	194	Standard
>	Ge	72	127246.1	1.1				ug/L	232024	Standard
|	As	75	340.0	99.6	0.7666	0.533	69.5	ug/L	-297	Standard
|	Se	82	5853.9	4.2	83.1439	2.637	3.2	ug/L	17	Standard
|	Se-1	77	3947.5	1.2	85.4792	0.708	0.8	ug/L	180	Standard
|	Ga	71	117939.6	1.3				mg/L	210139	Standard
|	Rb	85	1510123.1	7.1				ug/L	12	Standard
>	Y	89	129025.6	2.5				ug/L	214065	Standard
|	Rh	103	131.7	9.6				ug/L	0	Standard
|	Mo	98	794.0	2.8	0.3568	0.038	10.7	ug/L	6	Standard
|	Ag	107	60.7	13.2	0.0063	0.001	10.4	ug/L	33	Standard
|	Cd	111	358102.6	11.7	149.3761	4.922	3.3	mg/L	437	Standard
|	Cd	114	967715.1	9.3	154.8968	2.230	1.4	ug/L	1160	Standard
>	In	115	341848.9	8.4				ug/L	646604	Standard
|	Sn	118	1079.0	7.5	0.0734	0.001	1.8	ug/L	864	Standard
|	Sb	123	5975303.5	10.8	1021.5514	24.360	2.4	ug/L	18	Standard
|	Ba	135	863882.1	5.0	355.4652	12.741	3.6	ug/L	39	Standard
|	Ce	140	427.0	19.3				ug/L	46	Standard
>	Tb	159	440298.9	5.5				ug/L	695671	Standard
|	Ho	165	23.3	4.9				ug/L	9	Standard
|	Tl	203	3382001.0	2.5	395.9624	2.517	0.6	ug/L	687	Standard
|	Tl	205	7824206.7	2.7	386.7080	3.213	0.8	ug/L	1624	Standard
|	Pb	206	2487404.7	2.8	364.8601	3.976	1.1	ug/L	305	Standard
|	Pb	207	2009306.3	7.4	345.3557	18.603	5.4	ug/L	231	Standard
|	Pb	208	9562336.9	3.6	353.2917	5.580	1.6	ug/L	1129	Standard
|	U	238	1296397.3	5.3	89.7453	2.963	3.3	ug/L	3	Standard
>	Bi	209	210083.8	2.0				ug/L	405108	Standard
|	Na	23	24156.0	7.2	9.4297	0.203	2.2	mg/L	118	Standard
|	Mg	24	2715979.5	5.9	7.0128	0.048	0.7	mg/L	377	Standard

Sample ID: L1204038406

Report Date/Time: Thursday, May 10, 2012 11:51:55

Page 1

Approved: May 11, 2012

K	39	14706655.2	6.1	1795.1122	27.164	1.5	mg/L	583	Standard
Ca	43	8319.0	1.2	28.0400	1.235	4.4	mg/L	73	Standard
Fe	54	709.2	10.9	0.0269	0.029	107.6	mg/L	785	Standard
Fe	57	19115.4	6.0	0.1200	0.002	1.6	mg/L	6133	Standard
Sc-1	45	180384.6	5.6				mg/L	254529	Standard
Cl	35	805026.0	40.6				ug/L	1641778	Standard
Kr	83	62.0	11.2				ug/L	60	Standard
Br	81	13662.0	1.3				ug/L	11554	Standard
P	31	59259.3	6.0				ug/L	45410	Standard
S	34	790019.9	9.0				ug/L	568857	Standard
Sr	88	1532369.4	4.3				ug/L	240	Standard

QC Calculated Values

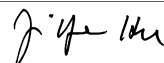
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		54.842	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		60.274	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		52.868	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		63.291	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1204038406

Report Date/Time: Thursday, May 10, 2012 11:51:55

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	51.859
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
V 51 Upper, S, EEE	V	51	
Cr 52 Upper, S, EEE	Cr	52	
Cr 53 Upper, S, EEE	Cr	53	
Co 59 Upper, S, EEE	Co	59	
Cu 65 Upper, S, EEE	Cu	65	
Zn 66 Upper, S, EEE	Zn	66	
Cd 111 Upper, S, EEE	Cd	111	
Cd 114 Upper, S, EEE	Cd	114	
Sb 123 Upper, S, EEE	Sb	123	
Ba 135 Upper, S, EEE	Ba	135	
Tl 203 Upper, S, EEE	Tl	203	
Tl 205 Upper, S, EEE	Tl	205	
Pb 206 Upper, S, EEE	Pb	206	
Pb 207 Upper, S, EEE	Pb	207	
Pb 208 Upper, S, EEE	Pb	208	

Sample ID: L1204038406
 Report Date/Time: Thursday, May 10, 2012 11:51:55
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022301 WG397298-01

Sample Date/Time: Thursday, May 10, 2012 12:21:57

Number of Replicates: 3

Autosampler Position: 236

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	59881.4	0.7	6106.8219	154.719	2.5	ug/L	12600	Standard
|	Be	9	228.3	28.2	0.0691	0.024	34.5	ug/L	5	Standard
|	Al	27	6578386.9	1.1	513.9484	8.576	1.7	ug/L	16102	Standard
>	Sc	45	209040.8	1.8				ug/L	254529	Standard
|	Ti	47	3484.1	2.7	2.7625	0.123	4.4	ug/L	84	Standard
|	V	51	28800.4	2.0	2.0143	0.031	1.6	ug/L	5785	Standard
|	Cr	52	18655.5	0.5	0.9770	0.024	2.4	ug/L	12212	Standard
|	Cr	53	6518.1	23.7	3.1342	1.186	37.8	ug/L	5042	Standard
|	Mn	55	113792.8	2.1	6.8124	0.071	1.0	ug/L	1290	Standard
|	Co	59	5575.4	10.1	0.4650	0.041	8.9	ug/L	143	Standard
|	Ni	60	1657.4	5.0	0.6496	0.025	3.8	ug/L	79	Standard
|	Cu	65	1817.4	6.6	0.7646	0.042	5.4	ug/L	154	Standard
|	Zn	66	2578.6	0.9	2.3825	0.056	2.4	ug/L	194	Standard
>	Ge	72	187062.5	1.6				ug/L	232024	Standard
|	As	75	43.6	103.3	0.2734	0.049	17.8	ug/L	-297	Standard
|	Se	82	20.7	51.0	0.0413	0.100	242.4	ug/L	17	Standard
|	Se-1	77	199.7	34.9	1.1947	1.108	92.7	ug/L	180	Standard
|	Ga	71	164047.7	2.5				mg/L	210139	Standard
|	Rb	85	8810.9	6.1				ug/L	12	Standard
>	Y	89	186330.4	0.7				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	219.4	63.4	0.0568	0.041	72.0	ug/L	6	Standard
|	Ag	107	263.0	76.2	0.0311	0.029	94.1	ug/L	33	Standard
|	Cd	111	348.5	32.5	0.0019	0.030	1596.6	mg/L	437	Standard
|	Cd	114	920.1	35.2	-0.0041	0.033	792.0	ug/L	1160	Standard
>	In	115	524713.8	1.2				ug/L	646604	Standard
|	Sn	118	942.7	20.9	0.0176	0.015	83.0	ug/L	864	Standard
|	Sb	123	683.5	62.4	0.0734	0.047	64.0	ug/L	18	Standard
|	Ba	135	4813.8	5.6	1.2793	0.057	4.4	ug/L	39	Standard
|	Ce	140	201218.4	0.8				ug/L	46	Standard
>	Tb	159	599786.3	1.4				ug/L	695671	Standard
|	Ho	165	1264.7	3.1				ug/L	9	Standard
|	Tl	203	1276.1	41.4	0.0503	0.035	70.4	ug/L	687	Standard
|	Tl	205	2951.3	40.0	0.0493	0.033	67.8	ug/L	1624	Standard
|	Pb	206	5444.6	7.0	0.4431	0.029	6.6	ug/L	305	Standard
|	Pb	207	4856.1	14.0	0.4654	0.075	16.2	ug/L	231	Standard
|	Pb	208	21084.6	3.3	0.4319	0.014	3.3	ug/L	1129	Standard
|	U	238	1693.1	33.3	0.0707	0.022	31.6	ug/L	3	Standard
>	Bi	209	359891.1	1.6				ug/L	405108	Standard
|	Na	23	150.0	60.8	0.0236	0.031	131.4	mg/L	118	Standard
|	Mg	24	44739.4	5.2	0.0989	0.006	5.9	mg/L	377	Standard

Sample ID: L1205022301 WG397298-01

Report Date/Time: Thursday, May 10, 2012 12:24:30

Page 1

Approved: May 11, 2012




K	39	1728.4	24.4	0.1307	0.045	34.5	mg/L	583	Standard
Ca	43	95.0	5.3	0.0850	0.011	12.8	mg/L	73	Standard
Fe	54	6986.6	2.5	1.3690	0.015	1.1	mg/L	785	Standard
Fe	57	194490.5	1.6	1.3208	0.022	1.7	mg/L	6133	Standard
Sc-1	45	209040.8	1.8				mg/L	254529	Standard
Cl	35	1379158.4	16.3				ug/L	1641778	Standard
Kr	83	49.3	8.9				ug/L	60	Standard
Br	81	8133.9	2.9				ug/L	11554	Standard
P	31	35234.3	2.7				ug/L	45410	Standard
S	34	545469.6	1.8				ug/L	568857	Standard
Sr	88	5676.1	33.7				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		80.622	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		87.044	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		81.149	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		86.217	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022301 WG397298-01
 Report Date/Time: Thursday, May 10, 2012 12:24:30
 Page 2


Approved: May 11, 2012


|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	88.838
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	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: L1205022301 WG397298-01
 Report Date/Time: Thursday, May 10, 2012 12:24:30
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022302

Sample Date/Time: Thursday, May 10, 2012 12:24:50

Number of Replicates: 3

Autosampler Position: 237

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	107582.3	0.5	11916.4316	363.602	3.1	ug/L	12600	Standard
|	Be	9	136.7	18.4	0.0354	0.010	27.4	ug/L	5	Standard
|	Al	27	9473218.3	0.6	737.8715	22.077	3.0	ug/L	16102	Standard
>	Sc	45	209842.0	2.4				ug/L	254529	Standard
|	Ti	47	4244.6	1.7	3.3391	0.043	1.3	ug/L	84	Standard
|	V	51	31765.1	0.7	2.2234	0.042	1.9	ug/L	5785	Standard
|	Cr	52	23296.6	0.1	1.4509	0.050	3.5	ug/L	12212	Standard
|	Cr	53	5049.2	9.6	2.0310	0.286	14.1	ug/L	5042	Standard
|	Mn	55	175677.3	1.0	10.4471	0.258	2.5	ug/L	1290	Standard
|	Co	59	7167.4	0.7	0.5946	0.012	2.0	ug/L	143	Standard
|	Ni	60	1802.4	2.1	0.7005	0.013	1.9	ug/L	79	Standard
|	Cu	65	1660.4	2.9	0.6863	0.020	3.0	ug/L	154	Standard
|	Zn	66	2802.3	1.0	2.5730	0.033	1.3	ug/L	194	Standard
>	Ge	72	189187.8	2.0				ug/L	232024	Standard
|	As	75	61.3	72.4	0.2923	0.048	16.3	ug/L	-297	Standard
|	Se	82	22.8	29.1	0.0602	0.068	112.1	ug/L	17	Standard
|	Se-1	77	114.0	15.6	-0.1282	0.230	179.7	ug/L	180	Standard
|	Ga	71	166808.1	1.8				mg/L	210139	Standard
|	Rb	85	12361.7	4.0				ug/L	12	Standard
>	Y	89	196249.8	2.1				ug/L	214065	Standard
|	Rh	103	3.3	173.2				ug/L	0	Standard
|	Mo	98	69.4	7.2	0.0122	0.001	11.5	ug/L	6	Standard
|	Ag	107	58.0	13.5	0.0010	0.001	113.2	ug/L	33	Standard
|	Cd	111	203.5	16.3	-0.0382	0.009	24.7	mg/L	437	Standard
|	Cd	114	576.4	5.0	-0.0406	0.004	8.8	ug/L	1160	Standard
>	In	115	532727.0	1.2				ug/L	646604	Standard
|	Sn	118	520.0	5.5	-0.0159	0.002	11.7	ug/L	864	Standard
|	Sb	123	93.3	3.4	0.0078	0.000	5.9	ug/L	18	Standard
|	Ba	135	5471.3	1.8	1.4338	0.033	2.3	ug/L	39	Standard
|	Ce	140	166616.2	1.1				ug/L	46	Standard
>	Tb	159	611375.8	0.9				ug/L	695671	Standard
|	Ho	165	1373.7	3.3				ug/L	9	Standard
|	Tl	203	694.0	7.5	0.0100	0.003	34.0	ug/L	687	Standard
|	Tl	205	1583.4	6.9	0.0094	0.003	30.3	ug/L	1624	Standard
|	Pb	206	7625.6	1.2	0.6205	0.012	2.0	ug/L	305	Standard
|	Pb	207	6097.9	1.6	0.5804	0.014	2.4	ug/L	231	Standard
|	Pb	208	28694.9	1.2	0.5871	0.010	1.8	ug/L	1129	Standard
|	U	238	1070.0	1.1	0.0450	0.001	1.5	ug/L	3	Standard
>	Bi	209	365231.4	0.7				ug/L	405108	Standard
|	Na	23	70.0	7.1	-0.0037	0.001	38.1	mg/L	118	Standard
|	Mg	24	67118.4	1.9	0.1482	0.003	1.7	mg/L	377	Standard

Sample ID: L1205022302

Report Date/Time: Thursday, May 10, 2012 12:27:22

Page 1

Approved: May 11, 2012

J. J. H.

K	39	1445.1	4.3	0.1001	0.006	5.9	mg/L	583	Standard
Ca	43	80.0	16.5	0.0399	0.033	84.0	mg/L	73	Standard
Fe	54	10147.1	1.9	2.0495	0.016	0.8	mg/L	785	Standard
Fe	57	278296.1	1.2	1.8979	0.054	2.8	mg/L	6133	Standard
Sc-1	45	209842.0	2.4				mg/L	254529	Standard
Cl	35	632837.9	34.1				ug/L	1641778	Standard
Kr	83	48.6	15.1				ug/L	60	Standard
Br	81	8098.0	1.1				ug/L	11554	Standard
P	31	38802.1	0.9				ug/L	45410	Standard
S	34	550645.6	2.3				ug/L	568857	Standard
Sr	88	3903.8	5.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		81.538	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		91.678	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		82.388	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		87.883	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022302

Report Date/Time: Thursday, May 10, 2012 12:27:22

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	90.157
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205022302
 Report Date/Time: Thursday, May 10, 2012 12:27:22
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022303S WG397298-04

Sample Date/Time: Thursday, May 10, 2012 12:27:42

Number of Replicates: 3

Autosampler Position: 238

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	127358.3	2.6	13963.2227	439.099	3.1	ug/L	12600	Standard
|	Be	9	1438.4	4.6	0.4967	0.023	4.7	ug/L	5	Standard
|	Al	27	11139389.2	0.5	846.9347	4.245	0.5	ug/L	16102	Standard
>	Sc	45	214901.6	0.4				ug/L	254529	Standard
|	Ti	47	4538.0	0.9	3.5062	0.064	1.8	ug/L	84	Standard
|	V	51	41344.8	2.6	2.9205	0.112	3.8	ug/L	5785	Standard
|	Cr	52	26806.0	2.0	1.7724	0.081	4.6	ug/L	12212	Standard
|	Cr	53	5165.9	6.5	2.0467	0.198	9.7	ug/L	5042	Standard
|	Mn	55	134585.9	2.0	7.8318	0.228	2.9	ug/L	1290	Standard
|	Co	59	11789.6	2.4	0.9659	0.032	3.3	ug/L	143	Standard
|	Ni	60	3304.7	1.4	1.2795	0.026	2.0	ug/L	79	Standard
|	Cu	65	3120.7	4.0	1.3081	0.066	5.1	ug/L	154	Standard
|	Zn	66	3131.3	1.7	2.8384	0.080	2.8	ug/L	194	Standard
>	Ge	72	192794.2	0.9				ug/L	232024	Standard
|	As	75	499.8	9.1	0.7545	0.052	6.9	ug/L	-297	Standard
|	Se	82	74.0	11.3	0.5370	0.083	15.5	ug/L	17	Standard
|	Se-1	77	141.7	19.8	0.2449	0.392	160.2	ug/L	180	Standard
|	Ga	71	170601.1	0.7				mg/L	210139	Standard
|	Rb	85	15045.8	5.7				ug/L	12	Standard
>	Y	89	192358.4	0.8				ug/L	214065	Standard
|	Rh	103	5.0	100.0				ug/L	0	Standard
|	Mo	98	70.6	9.1	0.0121	0.002	14.2	ug/L	6	Standard
|	Ag	107	3022.3	0.2	0.4221	0.005	1.1	ug/L	33	Standard
|	Cd	111	1929.6	1.8	0.4147	0.004	0.9	mg/L	437	Standard
|	Cd	114	5310.1	1.0	0.4353	0.009	2.1	ug/L	1160	Standard
>	In	115	543481.1	1.1				ug/L	646604	Standard
|	Sn	118	576.7	2.1	-0.0124	0.001	10.9	ug/L	864	Standard
|	Sb	123	155.6	4.2	0.0143	0.001	3.7	ug/L	18	Standard
|	Ba	135	7847.0	0.5	2.0189	0.015	0.8	ug/L	39	Standard
|	Ce	140	167842.5	0.6				ug/L	46	Standard
>	Tb	159	617977.6	0.8				ug/L	695671	Standard
|	Ho	165	1411.1	2.8				ug/L	9	Standard
|	Tl	203	7089.3	0.6	0.4309	0.003	0.8	ug/L	687	Standard
|	Tl	205	16722.6	0.7	0.4300	0.003	0.6	ug/L	1624	Standard
|	Pb	206	11707.2	3.3	0.9443	0.029	3.1	ug/L	305	Standard
|	Pb	207	9747.5	1.3	0.9215	0.013	1.5	ug/L	231	Standard
|	Pb	208	45209.6	2.2	0.9181	0.017	1.9	ug/L	1129	Standard
|	U	238	11201.5	3.6	0.4393	0.014	3.2	ug/L	3	Standard
>	Bi	209	372965.7	0.5				ug/L	405108	Standard
|	Na	23	73.3	17.2	-0.0031	0.004	134.0	mg/L	118	Standard
|	Mg	24	83018.5	1.1	0.1791	0.001	0.7	mg/L	377	Standard

Sample ID: L1205022303S WG397298-04

Report Date/Time: Thursday, May 10, 2012 12:30:14

Page 1

Approved: May 11, 2012




K	39	1585.1	7.0	0.1109	0.012	10.4	mg/L	583	Standard
Ca	43	73.3	3.9	0.0159	0.008	53.2	mg/L	73	Standard
Fe	54	9313.1	1.9	1.8209	0.046	2.5	mg/L	785	Standard
Fe	57	257793.3	1.6	1.7128	0.035	2.0	mg/L	6133	Standard
Sc-1	45	214901.6	0.4				mg/L	254529	Standard
Cl	35	597647.5	25.4				ug/L	1641778	Standard
Kr	83	49.1	4.0				ug/L	60	Standard
Br	81	8371.5	1.2				ug/L	11554	Standard
P	31	39399.5	2.2				ug/L	45410	Standard
S	34	534576.2	0.3				ug/L	568857	Standard
Sr	88	4525.7	3.1				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.093	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		89.860	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		84.052	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		88.832	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022303S WG397298-04
 Report Date/Time: Thursday, May 10, 2012 12:30:14
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	92.066
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205022303S WG397298-04
 Report Date/Time: Thursday, May 10, 2012 12:30:14
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022304SD WG397298-05

Sample Date/Time: Thursday, May 10, 2012 12:30:34

Number of Replicates: 3

Autosampler Position: 239

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	38229.8	0.7	3469.7208	69.733	2.0	ug/L	12600	Standard
|	Be	9	1360.1	3.2	0.4847	0.013	2.7	ug/L	5	Standard
|	Al	27	3428119.2	2.1	268.6638	3.406	1.3	ug/L	16102	Standard
>	Sc	45	208050.4	0.8				ug/L	254529	Standard
|	Ti	47	2513.9	2.0	1.9561	0.032	1.7	ug/L	84	Standard
|	V	51	19634.3	1.6	1.2660	0.018	1.4	ug/L	5785	Standard
|	Cr	52	16816.0	1.8	0.7609	0.030	3.9	ug/L	12212	Standard
|	Cr	53	3331.2	8.2	0.8279	0.205	24.7	ug/L	5042	Standard
|	Mn	55	156426.7	1.2	9.3084	0.081	0.9	ug/L	1290	Standard
|	Co	59	10116.7	1.5	0.8449	0.008	0.9	ug/L	143	Standard
|	Ni	60	1971.8	2.1	0.7701	0.019	2.5	ug/L	79	Standard
|	Cu	65	1813.8	1.6	0.7558	0.010	1.4	ug/L	154	Standard
|	Zn	66	2384.2	2.2	2.1672	0.056	2.6	ug/L	194	Standard
>	Ge	72	188821.6	0.6				ug/L	232024	Standard
|	As	75	350.4	3.5	0.6042	0.012	2.0	ug/L	-297	Standard
|	Se	82	75.2	8.6	0.5629	0.061	10.8	ug/L	17	Standard
|	Se-1	77	132.3	8.7	0.1517	0.178	117.6	ug/L	180	Standard
|	Ga	71	165642.6	1.2				mg/L	210139	Standard
|	Rb	85	5274.3	6.3				ug/L	12	Standard
>	Y	89	182671.4	1.7				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	48.4	4.1	0.0062	0.001	11.5	ug/L	6	Standard
|	Ag	107	2976.6	3.5	0.4284	0.018	4.3	ug/L	33	Standard
|	Cd	111	1843.7	0.8	0.4068	0.006	1.4	mg/L	437	Standard
|	Cd	114	5167.0	1.2	0.4366	0.010	2.3	ug/L	1160	Standard
>	In	115	527571.2	1.5				ug/L	646604	Standard
|	Sn	118	829.0	9.9	0.0084	0.005	63.8	ug/L	864	Standard
|	Sb	123	485.8	4.4	0.0514	0.002	3.1	ug/L	18	Standard
|	Ba	135	4667.4	0.8	1.2339	0.013	1.0	ug/L	39	Standard
|	Ce	140	68478.1	1.6				ug/L	46	Standard
>	Tb	159	600818.0	1.6				ug/L	695671	Standard
|	Ho	165	624.7	2.3				ug/L	9	Standard
|	Tl	203	7039.3	1.8	0.4422	0.011	2.5	ug/L	687	Standard
|	Tl	205	16274.1	0.5	0.4318	0.005	1.1	ug/L	1624	Standard
|	Pb	206	8104.8	1.4	0.6677	0.012	1.7	ug/L	305	Standard
|	Pb	207	6839.2	1.1	0.6605	0.010	1.5	ug/L	231	Standard
|	Pb	208	31569.2	1.2	0.6548	0.008	1.2	ug/L	1129	Standard
|	U	238	10305.8	0.5	0.4171	0.004	1.0	ug/L	3	Standard
>	Bi	209	361610.1	0.7				ug/L	405108	Standard
|	Na	23	68.3	48.7	-0.0041	0.011	273.3	mg/L	118	Standard
|	Mg	24	24736.8	0.5	0.0545	0.000	0.4	mg/L	377	Standard

Sample ID: L1205022304SD WG397298-05

Report Date/Time: Thursday, May 10, 2012 12:33:07

Page 1

Approved: May 11, 2012


J. J. H.

K	39	891.7	11.5	0.0428	0.011	26.5	mg/L	583	Standard
Ca	43	65.0	13.3	-0.0016	0.027	1652.2	mg/L	73	Standard
Fe	54	3742.3	3.5	0.6660	0.022	3.2	mg/L	785	Standard
Fe	57	90697.3	0.6	0.6006	0.005	0.9	mg/L	6133	Standard
Sc-1	45	208050.4	0.8				mg/L	254529	Standard
Cl	35	485134.5	41.2				ug/L	1641778	Standard
Kr	83	46.9	16.4				ug/L	60	Standard
Br	81	8456.5	3.9				ug/L	11554	Standard
P	31	32489.8	1.2				ug/L	45410	Standard
S	34	511735.0	3.0				ug/L	568857	Standard
Sr	88	1725.1	3.6				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		81.380	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		85.335	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		81.591	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		86.365	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022304SD WG397298-05
 Report Date/Time: Thursday, May 10, 2012 12:33:07
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	89.263
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205022304SD WG397298-05
 Report Date/Time: Thursday, May 10, 2012 12:33:07
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022306

Sample Date/Time: Thursday, May 10, 2012 12:33:27

Number of Replicates: 3

Autosampler Position: 240

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	44072.3	0.2	4047.9583	36.389	0.9	ug/L	12600	Standard
|	Be	9	191.7	1.5	0.0541	0.001	1.3	ug/L	5	Standard
|	Al	27	5678376.4	1.5	433.8904	5.501	1.3	ug/L	16102	Standard
>	Sc	45	213640.7	0.8				ug/L	254529	Standard
|	Ti	47	1858.4	0.9	1.3605	0.026	1.9	ug/L	84	Standard
|	V	51	21227.3	1.4	1.3138	0.034	2.6	ug/L	5785	Standard
|	Cr	52	17331.2	2.5	0.7293	0.043	5.8	ug/L	12212	Standard
|	Cr	53	3234.5	8.3	0.6530	0.196	30.1	ug/L	5042	Standard
|	Mn	55	608780.3	1.1	34.7665	0.702	2.0	ug/L	1290	Standard
|	Co	59	9496.0	0.5	0.7549	0.011	1.5	ug/L	143	Standard
|	Ni	60	1560.1	2.5	0.5749	0.015	2.6	ug/L	79	Standard
|	Cu	65	2248.2	0.4	0.9021	0.012	1.4	ug/L	154	Standard
|	Zn	66	4982.8	2.2	4.4923	0.127	2.8	ug/L	194	Standard
>	Ge	72	198086.5	1.0				ug/L	232024	Standard
|	As	75	127.4	21.6	0.3576	0.029	8.2	ug/L	-297	Standard
|	Se	82	22.6	9.6	0.0480	0.019	40.2	ug/L	17	Standard
|	Se-1	77	109.0	18.0	-0.2712	0.289	106.5	ug/L	180	Standard
|	Ga	71	172053.8	1.3				mg/L	210139	Standard
|	Rb	85	9001.0	2.4				ug/L	12	Standard
>	Y	89	198603.5	2.1				ug/L	214065	Standard
|	Rh	103	5.0	100.0				ug/L	0	Standard
|	Mo	98	107.0	17.5	0.0223	0.005	23.8	ug/L	6	Standard
|	Ag	107	52.0	14.5	-0.0001	0.001	1936.6	ug/L	33	Standard
|	Cd	111	257.4	4.3	-0.0257	0.004	15.0	mg/L	437	Standard
|	Cd	114	740.6	3.7	-0.0259	0.004	15.3	ug/L	1160	Standard
>	In	115	548114.9	1.7				ug/L	646604	Standard
|	Sn	118	587.3	3.1	-0.0120	0.002	17.1	ug/L	864	Standard
|	Sb	123	73.5	18.0	0.0054	0.001	26.1	ug/L	18	Standard
|	Ba	135	9745.8	1.4	2.4882	0.034	1.4	ug/L	39	Standard
|	Ce	140	152631.7	1.2				ug/L	46	Standard
>	Tb	159	621561.8	0.8				ug/L	695671	Standard
|	Ho	165	1769.8	3.4				ug/L	9	Standard
|	Tl	203	568.0	20.5	0.0009	0.008	843.1	ug/L	687	Standard
|	Tl	205	1340.1	18.9	0.0019	0.007	372.2	ug/L	1624	Standard
|	Pb	206	12890.1	1.3	1.0470	0.019	1.9	ug/L	305	Standard
|	Pb	207	10711.1	1.8	1.0194	0.011	1.1	ug/L	231	Standard
|	Pb	208	49529.1	1.1	1.0127	0.010	1.0	ug/L	1129	Standard
|	U	238	827.0	4.6	0.0348	0.002	4.8	ug/L	3	Standard
>	Bi	209	371307.1	0.8				ug/L	405108	Standard
|	Na	23	76.7	24.7	-0.0019	0.006	315.2	mg/L	118	Standard
|	Mg	24	56910.0	1.4	0.1232	0.002	1.8	mg/L	377	Standard

Sample ID: L1205022306

Report Date/Time: Thursday, May 10, 2012 12:36:00

Page 1

Approved: May 11, 2012

K	39	1166.7	5.1	0.0687	0.005	7.8	mg/L	583	Standard
Ca	43	116.7	27.9	0.1414	0.095	67.4	mg/L	73	Standard
Fe	54	5466.5	2.4	1.0123	0.031	3.1	mg/L	785	Standard
Fe	57	143328.1	1.4	0.9427	0.013	1.4	mg/L	6133	Standard
Sc-1	45	213640.7	0.8				mg/L	254529	Standard
Cl	35	450186.0	40.4				ug/L	1641778	Standard
Kr	83	45.9	1.1				ug/L	60	Standard
Br	81	8957.6	3.8				ug/L	11554	Standard
P	31	62654.3	1.8				ug/L	45410	Standard
S	34	532343.3	1.5				ug/L	568857	Standard
Sr	88	6776.5	2.3				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.373	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		92.777	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		84.768	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		89.347	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022306

Report Date/Time: Thursday, May 10, 2012 12:36:00

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	91.656
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205022306
 Report Date/Time: Thursday, May 10, 2012 12:36:00
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022306PS WG397362-01

Sample Date/Time: Thursday, May 10, 2012 12:36:20

Number of Replicates: 3

Autosampler Position: 241

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	55638.7	3.8	4780.2631	62.145	1.3	ug/L	12600	Standard
|	Be	9	184559.3	2.3	59.4994	1.569	2.6	ug/L	5	Standard
|	Al	27	8067231.8	2.1	556.4115	17.299	3.1	ug/L	16102	Standard
>	Sc	45	237003.7	4.8				ug/L	254529	Standard
|	Ti	47	2441.9	1.6	1.7097	0.025	1.5	ug/L	84	Standard
|	V	51	847518.1	2.5	60.4278	1.129	1.9	ug/L	5785	Standard
|	Cr	52	637091.7	2.7	60.6274	1.247	2.1	ug/L	12212	Standard
|	Cr	53	99632.4	1.4	62.0740	0.849	1.4	ug/L	5042	Standard
|	Mn	55	1898221.9	1.8	102.9258	1.642	1.6	ug/L	1290	Standard
|	Co	59	815879.7	2.5	62.3085	1.130	1.8	ug/L	143	Standard
|	Ni	60	173455.3	2.6	63.0904	1.336	2.1	ug/L	79	Standard
|	Cu	65	161132.2	2.1	64.6197	0.860	1.3	ug/L	154	Standard
|	Zn	66	78536.4	2.1	69.5680	1.003	1.4	ug/L	194	Standard
>	Ge	72	208942.6	1.0				ug/L	232024	Standard
|	As	75	67583.8	2.3	66.0712	0.926	1.4	ug/L	-297	Standard
|	Se	82	8049.6	2.5	69.6093	1.100	1.6	ug/L	17	Standard
|	Se-1	77	5233.6	3.1	68.6555	1.520	2.2	ug/L	180	Standard
|	Ga	71	186742.1	2.1				mg/L	210139	Standard
|	Rb	85	12340.0	1.2				ug/L	12	Standard
>	Y	89	213163.5	3.4				ug/L	214065	Standard
|	Rh	103	36.7	64.4				ug/L	0	Standard
|	Mo	98	295.8	3.4	0.0721	0.005	6.2	ug/L	6	Standard
|	Ag	107	477359.7	2.8	64.0145	0.774	1.2	ug/L	33	Standard
|	Cd	111	250176.7	2.0	62.0315	1.131	1.8	mg/L	437	Standard
|	Cd	114	666981.8	1.7	63.3773	1.551	2.4	ug/L	1160	Standard
>	In	115	575915.6	3.7				ug/L	646604	Standard
|	Sn	118	1221.0	7.8	0.0309	0.006	20.0	ug/L	864	Standard
|	Sb	123	604036.3	1.8	61.4050	1.194	1.9	ug/L	18	Standard
|	Ba	135	271672.1	2.3	66.2404	0.956	1.4	ug/L	39	Standard
|	Ce	140	190008.9	1.9				ug/L	46	Standard
>	Tb	159	647898.4	4.4				ug/L	695671	Standard
|	Ho	165	2173.5	2.6				ug/L	9	Standard
|	Tl	203	939578.1	2.1	59.7169	0.646	1.1	ug/L	687	Standard
|	Tl	205	2365016.3	2.6	63.4530	0.542	0.9	ug/L	1624	Standard
|	Pb	206	766408.3	2.1	61.0437	0.937	1.5	ug/L	305	Standard
|	Pb	207	674122.6	2.3	62.9510	0.730	1.2	ug/L	231	Standard
|	Pb	208	3065271.3	2.3	61.4982	0.603	1.0	ug/L	1129	Standard
|	U	238	1486905.9	1.3	55.9434	1.383	2.5	ug/L	3	Standard
>	Bi	209	386906.5	3.1				ug/L	405108	Standard
|	Na	23	96.7	29.4	0.0013	0.007	544.0	mg/L	118	Standard
|	Mg	24	71866.8	3.5	0.1405	0.002	1.7	mg/L	377	Standard

Sample ID: L1205022306PS WG397362-01

Report Date/Time: Thursday, May 10, 2012 12:38:53

Page 1

Approved: May 11, 2012


K	39	1261.7	3.8	0.0657	0.001	2.1	mg/L	583	Standard
Ca	43	140.0	18.9	0.1701	0.078	45.6	mg/L	73	Standard
Fe	54	6730.6	2.6	1.1416	0.049	4.3	mg/L	785	Standard
Fe	57	181614.2	2.9	1.0824	0.022	2.0	mg/L	6133	Standard
Sc-1	45	237003.7	4.8				mg/L	254529	Standard
Cl	35	448391.9	40.8				ug/L	1641778	Standard
Kr	83	49.3	6.4				ug/L	60	Standard
Br	81	10008.3	2.1				ug/L	11554	Standard
P	31	77955.3	4.7				ug/L	45410	Standard
S	34	557743.2	1.5				ug/L	568857	Standard
Sr	88	8749.2	3.1				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.052	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.579	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		89.068	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		93.133	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022306PS WG397362-01
 Report Date/Time: Thursday, May 10, 2012 12:38:53
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.507
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205022306PS WG397362-01
 Report Date/Time: Thursday, May 10, 2012 12:38:53
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205022306SDL WG397362-02

Sample Date/Time: Thursday, May 10, 2012 12:48:44

Number of Replicates: 3

Autosampler Position: 242

Sample Description: 250

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	16647.5	4.5	779.2677	47.238	6.1	ug/L	12600	Standard
|	Be	9	41.7	38.6	0.0006	0.006	902.0	ug/L	5	Standard
|	Al	27	1127241.0	2.3	86.6495	1.633	1.9	ug/L	16102	Standard
>	Sc	45	210922.8	3.9				ug/L	254529	Standard
|	Ti	47	405.7	6.9	0.2475	0.015	6.1	ug/L	84	Standard
|	V	51	7333.6	5.6	0.2613	0.022	8.4	ug/L	5785	Standard
|	Cr	52	9761.1	2.8	-0.0476	0.004	7.9	ug/L	12212	Standard
|	Cr	53	3999.7	28.8	1.1527	0.748	64.9	ug/L	5042	Standard
|	Mn	55	117373.0	1.8	6.6085	0.075	1.1	ug/L	1290	Standard
|	Co	59	1905.1	4.6	0.1426	0.004	2.6	ug/L	143	Standard
|	Ni	60	422.0	7.4	0.1375	0.011	8.1	ug/L	79	Standard
|	Cu	65	626.3	4.6	0.2143	0.006	2.7	ug/L	154	Standard
|	Zn	66	3123.3	4.6	2.7377	0.069	2.5	ug/L	194	Standard
>	Ge	72	198857.0	2.5				ug/L	232024	Standard
|	As	75	-174.3	21.4	0.0479	0.038	79.6	ug/L	-297	Standard
|	Se	82	14.3	34.8	-0.0289	0.043	150.3	ug/L	17	Standard
|	Se-1	77	159.3	21.4	0.4314	0.461	106.8	ug/L	180	Standard
|	Ga	71	173958.0	2.6				mg/L	210139	Standard
|	Rb	85	1726.8	13.2				ug/L	12	Standard
>	Y	89	183847.7	3.0				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	24.1	23.9	-0.0013	0.002	124.3	ug/L	6	Standard
|	Ag	107	33.3	14.2	-0.0026	0.001	25.0	ug/L	33	Standard
|	Cd	111	106.3	12.0	-0.0648	0.003	5.4	mg/L	437	Standard
|	Cd	114	297.1	4.6	-0.0700	0.002	2.3	ug/L	1160	Standard
>	In	115	542911.5	1.1				ug/L	646604	Standard
|	Sn	118	457.3	8.2	-0.0214	0.003	12.9	ug/L	864	Standard
|	Sb	123	147.4	12.2	0.0134	0.002	14.4	ug/L	18	Standard
|	Ba	135	1872.4	1.0	0.4760	0.009	1.9	ug/L	39	Standard
|	Ce	140	28939.3	0.9				ug/L	46	Standard
>	Tb	159	605259.7	1.7				ug/L	695671	Standard
|	Ho	165	327.7	3.7				ug/L	9	Standard
|	Tl	203	540.7	15.7	-0.0007	0.006	775.2	ug/L	687	Standard
|	Tl	205	1311.1	9.0	0.0013	0.004	272.7	ug/L	1624	Standard
|	Pb	206	2724.6	2.9	0.2043	0.003	1.5	ug/L	305	Standard
|	Pb	207	2229.5	4.1	0.1952	0.006	2.9	ug/L	231	Standard
|	Pb	208	10418.1	1.8	0.1961	0.001	0.4	ug/L	1129	Standard
|	U	238	154.3	8.0	0.0085	0.000	4.9	ug/L	3	Standard
>	Bi	209	369304.6	1.6				ug/L	405108	Standard
|	Na	23	68.3	11.2	-0.0043	0.003	65.9	mg/L	118	Standard
|	Mg	24	11404.3	1.9	0.0243	0.001	2.2	mg/L	377	Standard

Sample ID: L1205022306SDL WG397362-02

Report Date/Time: Thursday, May 10, 2012 12:51:18

Page 1

Approved: May 11, 2012




K	39	786.7	4.7	0.0307	0.006	18.9	mg/L	583	Standard
Ca	43	95.0	19.0	0.0818	0.045	54.6	mg/L	73	Standard
Fe	54	1337.0	3.6	0.1357	0.010	7.5	mg/L	785	Standard
Fe	57	30592.5	2.5	0.1770	0.005	2.9	mg/L	6133	Standard
Sc-1	45	210922.8	3.9				mg/L	254529	Standard
Cl	35	979153.5	45.7				ug/L	1641778	Standard
Kr	83	50.7	14.9				ug/L	60	Standard
Br	81	8739.2	3.4				ug/L	11554	Standard
P	31	25160.1	6.3				ug/L	45410	Standard
S	34	533441.3	3.1				ug/L	568857	Standard
Sr	88	1361.7	5.1				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.706	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		85.884	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		83.964	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		87.004	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205022306SDL WG397362-02
 Report Date/Time: Thursday, May 10, 2012 12:51:18
 Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	91.162
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205022306SDL WG397362-02
 Report Date/Time: Thursday, May 10, 2012 12:51:18
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 12:51:40

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	11881.3	1.2	-33.9569	14.857	43.8	ug/L	12600	Standard
|	Be	9	155298.7	1.9	47.1435	1.415	3.0	ug/L	5	Standard
|	Al	27	810913.8	3.3	51.9208	0.910	1.8	ug/L	16102	Standard
>	Sc	45	251560.2	2.3				ug/L	254529	Standard
|	Ti	47	146813.4	3.3	101.1016	1.647	1.6	ug/L	84	Standard
|	V	51	733575.6	3.8	49.6331	0.885	1.8	ug/L	5785	Standard
|	Cr	52	544003.2	2.7	48.9893	0.476	1.0	ug/L	12212	Standard
|	Cr	53	85702.6	2.7	50.4540	1.174	2.3	ug/L	5042	Standard
|	Mn	55	984264.6	1.7	50.6640	0.144	0.3	ug/L	1290	Standard
|	Co	59	712219.0	2.7	51.6776	0.772	1.5	ug/L	143	Standard
|	Ni	60	149622.0	2.0	51.7054	0.496	1.0	ug/L	79	Standard
|	Cu	65	134891.8	2.9	51.3839	0.540	1.1	ug/L	154	Standard
|	Zn	66	59707.8	1.6	50.2079	0.538	1.1	ug/L	194	Standard
>	Ge	72	219917.9	2.0				ug/L	232024	Standard
|	As	75	55212.5	1.9	51.3406	0.534	1.0	ug/L	-297	Standard
|	Se	82	6369.8	2.5	52.3029	1.072	2.0	ug/L	17	Standard
|	Se-1	77	4149.6	3.5	51.2803	1.741	3.4	ug/L	180	Standard
|	Ga	71	196507.3	3.2				mg/L	210139	Standard
|	Rb	85	960.0	5.6				ug/L	12	Standard
>	Y	89	209900.7	1.0				ug/L	214065	Standard
|	Rh	103	36.7	47.9				ug/L	0	Standard
|	Mo	98	402596.1	1.4	104.8362	0.656	0.6	ug/L	6	Standard
|	Ag	107	397061.6	1.6	51.1040	0.476	0.9	ug/L	33	Standard
|	Cd	111	207169.1	0.7	49.2761	0.317	0.6	mg/L	437	Standard
|	Cd	114	544990.4	0.4	49.6693	0.280	0.6	ug/L	1160	Standard
>	In	115	599877.4	0.9				ug/L	646604	Standard
|	Sn	118	730032.8	0.9	49.7895	0.170	0.3	ug/L	864	Standard
|	Sb	123	508405.0	1.2	49.5944	0.339	0.7	ug/L	18	Standard
|	Ba	135	221696.6	1.0	51.8756	0.144	0.3	ug/L	39	Standard
|	Ce	140	867.7	1.2				ug/L	46	Standard
>	Tb	159	689428.8	1.9				ug/L	695671	Standard
|	Ho	165	18.7	6.2				ug/L	9	Standard
|	Tl	203	795534.2	2.2	50.8295	0.260	0.5	ug/L	687	Standard
|	Tl	205	1856659.5	2.3	50.0798	0.395	0.8	ug/L	1624	Standard
|	Pb	206	634860.8	2.4	50.8316	0.071	0.1	ug/L	305	Standard
|	Pb	207	538176.9	2.0	50.5251	0.219	0.4	ug/L	231	Standard
|	Pb	208	2487273.8	2.2	50.1692	0.127	0.3	ug/L	1129	Standard
|	U	238	1253718.7	2.4	47.4135	0.568	1.2	ug/L	3	Standard
>	Bi	209	384758.2	2.4				ug/L	405108	Standard
|	Na	23	18050.7	1.7	5.0435	0.035	0.7	mg/L	118	Standard
|	Mg	24	2724951.6	0.8	5.0479	0.154	3.0	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 12:54:13

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	59369.5	2.4	5.1465	0.111	2.2	mg/L	583	Standard
Ca	43	2201.8	4.8	5.1550	0.141	2.7	mg/L	73	Standard
Fe	54	32370.1	2.6	5.7077	0.028	0.5	mg/L	785	Standard
Fe	57	884957.4	2.9	5.0885	0.032	0.6	mg/L	6133	Standard
Sc-1	45	251560.2	2.3				mg/L	254529	Standard
Cl	35	776460.9	21.6				ug/L	1641778	Standard
Kr	83	56.6	11.9				ug/L	60	Standard
Br	81	10905.6	1.5				ug/L	11554	Standard
P	31	60253.8	2.9				ug/L	45410	Standard
S	34	690987.1	1.7				ug/L	568857	Standard
Sr	88	638.3	10.7				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	103.842		
Sc	45			
Ti	47	101.102		
V	51	99.266		
Cr	52	97.979		
Cr	53			
Mn	55	101.328		
Co	59	103.355		
Ni	60	103.411		
Cu	65	102.768		
Zn	66	100.416		
Ge	72		94.783	
As	75	102.681		
Se	82	104.606		
Se-1	77			
Ga	71			
Rb	85			
Y	89		98.055	
Rh	103			
Mo	98	104.836		
Ag	107	102.208		
Cd	111	98.552		
Cd	114			
In	115		92.774	
Sn	118	99.579		
Sb	123	99.189		
Ba	135	103.751		
Ce	140			
Tb	159		99.103	
Ho	165			
Tl	203	101.659		
Tl	205			
Pb	206	101.663		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 12:54:13

Page 2

Approved: May 11, 2012




Pb	207	101.050	
Pb	208	100.338	
U	238	94.827	
> Bi	209		94.977
Na	23	100.869	
Mg	24	100.957	
K	39	102.929	
Ca	43	103.100	
Fe	54	114.153	
Fe	57	101.771	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Fe	54	

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 12:54:13
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 12:54:33

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	11322.6	2.8	2.2464	29.511	1313.7	ug/L	12600	Standard
|	Be	9	13.3	142.0	-0.0101	0.006	59.8	ug/L	5	Standard
|	Al	27	13064.0	2.3	0.1243	0.034	27.1	ug/L	16102	Standard
>	Sc	45	232758.1	2.2				ug/L	254529	Standard
|	Ti	47	79.0	12.1	-0.0058	0.007	117.7	ug/L	84	Standard
|	V	51	3860.8	1.6	-0.0216	0.001	2.4	ug/L	5785	Standard
|	Cr	52	9971.3	1.7	-0.1017	0.003	2.6	ug/L	12212	Standard
|	Cr	53	1827.6	11.3	-0.3904	0.139	35.7	ug/L	5042	Standard
|	Mn	55	1213.7	6.4	-0.0208	0.005	21.7	ug/L	1290	Standard
|	Co	59	144.3	11.8	0.0005	0.001	288.4	ug/L	143	Standard
|	Ni	60	67.3	14.7	-0.0001	0.003	5486.3	ug/L	79	Standard
|	Cu	65	141.3	10.3	0.0054	0.006	113.6	ug/L	154	Standard
|	Zn	66	180.0	4.3	-0.0205	0.006	30.7	ug/L	194	Standard
>	Ge	72	214857.6	1.6				ug/L	232024	Standard
|	As	75	-198.2	11.4	0.0383	0.024	63.1	ug/L	-297	Standard
|	Se	82	23.0	19.0	0.0349	0.035	99.8	ug/L	17	Standard
|	Se-1	77	102.3	16.1	-0.4788	0.231	48.3	ug/L	180	Standard
|	Ga	71	193379.5	1.8				mg/L	210139	Standard
|	Rb	85	11.7	49.5				ug/L	12	Standard
>	Y	89	208374.9	1.2				ug/L	214065	Standard
|	Rh	103	3.3	173.2				ug/L	0	Standard
|	Mo	98	74.2	67.1	0.0114	0.013	114.0	ug/L	6	Standard
|	Ag	107	71.3	29.1	0.0020	0.003	135.3	ug/L	33	Standard
|	Cd	111	433.2	1.8	0.0122	0.003	20.8	mg/L	437	Standard
|	Cd	114	1057.5	4.1	-0.0017	0.003	195.0	ug/L	1160	Standard
>	In	115	589647.1	0.7				ug/L	646604	Standard
|	Sn	118	851.7	4.9	0.0032	0.003	77.2	ug/L	864	Standard
|	Sb	123	250.0	31.3	0.0223	0.008	33.9	ug/L	18	Standard
|	Ba	135	50.3	14.9	0.0038	0.002	45.2	ug/L	39	Standard
|	Ce	140	49.0	14.3				ug/L	46	Standard
>	Tb	159	657030.0	1.2				ug/L	695671	Standard
|	Ho	165	5.7	56.7				ug/L	9	Standard
|	Tl	203	535.7	32.9	-0.0021	0.011	534.8	ug/L	687	Standard
|	Tl	205	1168.0	26.7	-0.0038	0.009	226.7	ug/L	1624	Standard
|	Pb	206	306.3	7.7	0.0017	0.002	114.6	ug/L	305	Standard
|	Pb	207	271.3	14.2	0.0028	0.004	129.8	ug/L	231	Standard
|	Pb	208	1216.0	14.7	0.0018	0.004	201.3	ug/L	1129	Standard
|	U	238	63.3	58.9	0.0048	0.001	29.5	ug/L	3	Standard
>	Bi	209	381226.6	0.8				ug/L	405108	Standard
|	Na	23	86.7	17.6	-0.0009	0.005	558.8	mg/L	118	Standard
|	Mg	24	511.7	17.2	0.0002	0.000	98.6	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 12:57:06

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	658.3	9.0	0.0107	0.006	54.5	mg/L	583	Standard
Ca	43	80.0	6.3	0.0173	0.012	67.1	mg/L	73	Standard
Fe	54	880.3	9.5	0.0189	0.015	76.9	mg/L	785	Standard
Fe	57	4352.3	3.4	-0.0071	0.001	20.7	mg/L	6133	Standard
Sc-1	45	232758.1	2.2				mg/L	254529	Standard
Cl	35	628898.4	33.6				ug/L	1641778	Standard
Kr	83	53.2	7.3				ug/L	60	Standard
Br	81	10710.5	4.5				ug/L	11554	Standard
P	31	55473.9	1.7				ug/L	45410	Standard
S	34	661906.0	3.1				ug/L	568857	Standard
Sr	88	241.7	6.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.602	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.342	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		91.191	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		94.445	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 12:57:06

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	94.105
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 12:57:06
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: PBW 15 WG397022-03

Sample Date/Time: Thursday, May 10, 2012 12:57:28

Number of Replicates: 3

Autosampler Position: 243

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	11609.4	3.6	-0.4264	49.331	11570.6	ug/L	12600	Standard
|	Be	9	8.3	34.6	-0.0118	0.001	7.1	ug/L	5	Standard
|	Al	27	8867.6	1.8	-0.1874	0.021	11.1	ug/L	16102	Standard
>	Sc	45	239384.6	5.2				ug/L	254529	Standard
|	Ti	47	80.0	15.6	-0.0049	0.008	165.4	ug/L	84	Standard
|	V	51	3662.3	3.7	-0.0345	0.006	18.8	ug/L	5785	Standard
|	Cr	52	10034.0	0.4	-0.0920	0.017	18.7	ug/L	12212	Standard
|	Cr	53	1758.4	8.2	-0.4297	0.094	21.9	ug/L	5042	Standard
|	Mn	55	1333.7	3.6	-0.0142	0.001	9.1	ug/L	1290	Standard
|	Co	59	125.7	12.6	-0.0009	0.001	129.3	ug/L	143	Standard
|	Ni	60	83.7	11.1	0.0058	0.003	54.4	ug/L	79	Standard
|	Cu	65	118.7	10.2	-0.0033	0.004	121.0	ug/L	154	Standard
|	Zn	66	1515.1	2.2	1.1376	0.015	1.3	ug/L	194	Standard
>	Ge	72	214032.1	1.7				ug/L	232024	Standard
|	As	75	-230.1	5.1	0.0076	0.009	120.9	ug/L	-297	Standard
|	Se	82	25.4	7.6	0.0568	0.020	35.4	ug/L	17	Standard
|	Se-1	77	104.0	12.7	-0.4539	0.166	36.7	ug/L	180	Standard
|	Ga	71	191622.4	2.8				mg/L	210139	Standard
|	Rb	85	16.7	45.8				ug/L	12	Standard
>	Y	89	205992.7	1.5				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	43.5	9.5	0.0033	0.001	34.0	ug/L	6	Standard
|	Ag	107	43.0	33.8	-0.0018	0.002	107.5	ug/L	33	Standard
|	Cd	111	400.2	2.7	0.0040	0.003	73.2	mg/L	437	Standard
|	Cd	114	1058.3	3.0	-0.0018	0.003	158.7	ug/L	1160	Standard
>	In	115	590820.9	0.4				ug/L	646604	Standard
|	Sn	118	734.0	1.5	-0.0050	0.001	17.2	ug/L	864	Standard
|	Sb	123	139.2	14.1	0.0113	0.002	16.7	ug/L	18	Standard
|	Ba	135	43.3	21.4	0.0021	0.002	103.9	ug/L	39	Standard
|	Ce	140	45.7	17.0				ug/L	46	Standard
>	Tb	159	665627.3	1.4				ug/L	695671	Standard
|	Ho	165	4.7	32.7				ug/L	9	Standard
|	Tl	203	522.7	20.1	-0.0033	0.006	189.4	ug/L	687	Standard
|	Tl	205	1164.7	19.1	-0.0042	0.006	134.0	ug/L	1624	Standard
|	Pb	206	308.0	5.3	0.0016	0.001	70.5	ug/L	305	Standard
|	Pb	207	251.7	5.4	0.0007	0.001	136.5	ug/L	231	Standard
|	Pb	208	1195.4	2.7	0.0011	0.000	20.6	ug/L	1129	Standard
|	U	238	21.7	67.3	0.0032	0.001	16.9	ug/L	3	Standard
>	Bi	209	384887.9	1.8				ug/L	405108	Standard
|	Na	23	70.0	28.6	-0.0064	0.007	110.0	mg/L	118	Standard
|	Mg	24	283.3	6.2	-0.0003	0.000	9.7	mg/L	377	Standard

Sample ID: PBW 15 WG397022-03

Report Date/Time: Thursday, May 10, 2012 13:00:00

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	638.3	18.1	0.0069	0.008	122.1	mg/L	583	Standard
Ca	43	60.0	58.3	-0.0364	0.099	271.2	mg/L	73	Standard
Fe	54	878.8	13.8	0.0135	0.016	114.7	mg/L	785	Standard
Fe	57	4424.0	8.8	-0.0075	0.001	13.1	mg/L	6133	Standard
Sc-1	45	239384.6	5.2				mg/L	254529	Standard
Cl	35	701668.0	27.3				ug/L	1641778	Standard
Kr	83	52.7	8.6				ug/L	60	Standard
Br	81	10792.2	5.6				ug/L	11554	Standard
P	31	56844.1	4.2				ug/L	45410	Standard
S	34	651759.9	0.6				ug/L	568857	Standard
Sr	88	261.7	28.7				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.246	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		96.229	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		91.373	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		95.681	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: PBW 15 WG397022-03
 Report Date/Time: Thursday, May 10, 2012 13:00:00
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	95.009
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: PBW 15 WG397022-03
 Report Date/Time: Thursday, May 10, 2012 13:00:00
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: LCSW 15 WG397022-04

Sample Date/Time: Thursday, May 10, 2012 13:00:20

Number of Replicates: 3

Autosampler Position: 244

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12520.2	3.7	-11.5748	40.655	351.2	ug/L	12600	Standard
|	Be	9	79779.5	1.6	23.3959	0.119	0.5	ug/L	5	Standard
|	Al	27	479142.8	1.7	29.3187	0.362	1.2	ug/L	16102	Standard
>	Sc	45	260248.3	2.0				ug/L	254529	Standard
|	Ti	47	119.0	7.3	0.0162	0.008	46.5	ug/L	84	Standard
|	V	51	397879.8	1.9	25.3542	0.505	2.0	ug/L	5785	Standard
|	Cr	52	305128.2	2.3	25.5286	0.387	1.5	ug/L	12212	Standard
|	Cr	53	47357.2	1.1	25.6779	0.928	3.6	ug/L	5042	Standard
|	Mn	55	536917.7	2.4	26.1237	0.422	1.6	ug/L	1290	Standard
|	Co	59	386507.1	2.8	26.5437	0.275	1.0	ug/L	143	Standard
|	Ni	60	81812.7	1.9	26.7583	0.594	2.2	ug/L	79	Standard
|	Cu	65	73930.4	2.7	26.6397	0.434	1.6	ug/L	154	Standard
|	Zn	66	30989.3	0.5	24.5914	0.844	3.4	ug/L	194	Standard
>	Ge	72	232372.6	3.7				ug/L	232024	Standard
|	As	75	28057.2	1.6	24.8219	0.603	2.4	ug/L	-297	Standard
|	Se	82	3225.6	2.5	24.9939	0.622	2.5	ug/L	17	Standard
|	Se-1	77	2080.8	1.8	23.3908	0.548	2.3	ug/L	180	Standard
|	Ga	71	214008.8	4.1				mg/L	210139	Standard
|	Rb	85	31.7	18.2				ug/L	12	Standard
>	Y	89	232055.2	0.5				ug/L	214065	Standard
|	Rh	103	18.3	56.8				ug/L	0	Standard
|	Mo	98	52.9	20.8	0.0047	0.002	50.3	ug/L	6	Standard
|	Ag	107	217431.9	3.5	26.2376	0.428	1.6	ug/L	33	Standard
|	Cd	111	108710.2	1.9	24.2051	0.450	1.9	mg/L	437	Standard
|	Cd	114	277492.4	1.5	23.6670	0.246	1.0	ug/L	1160	Standard
>	In	115	639685.9	2.5				ug/L	646604	Standard
|	Sn	118	1758.8	3.7	0.0567	0.003	5.3	ug/L	864	Standard
|	Sb	123	261671.5	1.8	23.9390	0.199	0.8	ug/L	18	Standard
|	Ba	135	118383.3	2.9	25.9725	0.341	1.3	ug/L	39	Standard
|	Ce	140	168.7	6.0				ug/L	46	Standard
>	Tb	159	713344.5	1.6				ug/L	695671	Standard
|	Ho	165	12.0	38.2				ug/L	9	Standard
|	Tl	203	424409.8	1.4	26.0512	0.228	0.9	ug/L	687	Standard
|	Tl	205	983926.0	1.8	25.4952	0.134	0.5	ug/L	1624	Standard
|	Pb	206	335917.6	2.0	25.8439	0.102	0.4	ug/L	305	Standard
|	Pb	207	292340.2	1.2	26.3744	0.315	1.2	ug/L	231	Standard
|	Pb	208	1338488.3	1.7	25.9430	0.283	1.1	ug/L	1129	Standard
|	U	238	665108.9	1.4	24.1829	0.338	1.4	ug/L	3	Standard
>	Bi	209	400262.1	2.3				ug/L	405108	Standard
|	Na	23	91.7	20.7	-0.0024	0.005	193.3	mg/L	118	Standard
|	Mg	24	553.3	11.3	0.0001	0.000	81.7	mg/L	377	Standard

Sample ID: LCSW 15 WG397022-04

Report Date/Time: Thursday, May 10, 2012 13:02:52

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	625.0	5.5	0.0013	0.004	264.8	mg/L	583	Standard
Ca	43	60.0	30.0	-0.0514	0.044	86.6	mg/L	73	Standard
Fe	54	1288.5	8.3	0.0724	0.019	26.8	mg/L	785	Standard
Fe	57	4864.1	4.0	-0.0071	0.001	12.3	mg/L	6133	Standard
Sc-1	45	260248.3	2.0				mg/L	254529	Standard
Cl	35	626228.2	30.0				ug/L	1641778	Standard
Kr	83	63.1	11.5				ug/L	60	Standard
Br	81	12238.3	2.6				ug/L	11554	Standard
P	31	83725.5	6.6				ug/L	45410	Standard
S	34	684043.2	5.3				ug/L	568857	Standard
Sr	88	758.4	14.3				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.150	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		108.404	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.930	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.540	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: LCSW 15 WG397022-04
 Report Date/Time: Thursday, May 10, 2012 13:02:52
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	98.804
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: LCSW 15 WG397022-04
 Report Date/Time: Thursday, May 10, 2012 13:02:52
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010501 WG397022-01
 Sample Date/Time: Thursday, May 10, 2012 13:03:12
 Number of Replicates: 3
 Autosampler Position: 245
 Sample Description: 10
 Method File: C:\NexIONData\Method\6020a.mth
 Aliquot Volume (mL):
 Diluted to Volume (mL):
 User Name: JYH user
 Cumulative Autodilution Factor: 1
 Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13582.8	3.7	344.1587	32.000	9.3	ug/L	12600	Standard
|	Be	9	11.7	65.5	-0.0104	0.003	24.5	ug/L	5	Standard
|	Al	27	53037.7	1.5	3.1663	0.142	4.5	ug/L	16102	Standard
>	Sc	45	219138.9	2.3				ug/L	254529	Standard
|	Ti	47	137.0	5.1	0.0402	0.006	13.7	ug/L	84	Standard
|	V	51	3817.1	6.1	-0.0106	0.016	149.1	ug/L	5785	Standard
|	Cr	52	9375.9	8.3	-0.1112	0.073	65.4	ug/L	12212	Standard
|	Cr	53	1490.9	9.3	-0.5510	0.094	17.1	ug/L	5042	Standard
|	Mn	55	86584.2	2.9	4.7262	0.107	2.3	ug/L	1290	Standard
|	Co	59	386.0	2.7	0.0199	0.001	4.2	ug/L	143	Standard
|	Ni	60	1372.1	5.7	0.4873	0.026	5.3	ug/L	79	Standard
|	Cu	65	408.0	2.7	0.1179	0.004	3.6	ug/L	154	Standard
|	Zn	66	93186.9	3.1	84.5633	2.143	2.5	ug/L	194	Standard
>	Ge	72	204040.4	0.6				ug/L	232024	Standard
|	As	75	-172.1	8.8	0.0548	0.014	25.4	ug/L	-297	Standard
|	Se	82	18.4	28.3	0.0051	0.047	920.6	ug/L	17	Standard
|	Se-1	77	93.7	3.4	-0.5292	0.039	7.5	ug/L	180	Standard
|	Ga	71	176698.7	0.4				mg/L	210139	Standard
|	Rb	85	808.4	12.7				ug/L	12	Standard
>	Y	89	187999.6	2.4				ug/L	214065	Standard
|	Rh	103	6.7	86.6				ug/L	0	Standard
|	Mo	98	52.1	19.8	0.0061	0.003	47.3	ug/L	6	Standard
|	Ag	107	42.7	17.3	-0.0016	0.001	61.5	ug/L	33	Standard
|	Cd	111	166.6	4.6	-0.0511	0.002	3.8	mg/L	437	Standard
|	Cd	114	447.6	3.5	-0.0570	0.002	2.7	ug/L	1160	Standard
>	In	115	571034.9	0.5				ug/L	646604	Standard
|	Sn	118	487.7	2.7	-0.0209	0.001	4.9	ug/L	864	Standard
|	Sb	123	241.2	16.0	0.0222	0.004	17.5	ug/L	18	Standard
|	Ba	135	2620.9	0.9	0.6362	0.008	1.3	ug/L	39	Standard
|	Ce	140	854.4	3.1				ug/L	46	Standard
>	Tb	159	633487.2	2.3				ug/L	695671	Standard
|	Ho	165	15.7	7.4				ug/L	9	Standard
|	Tl	203	545.3	3.9	-0.0015	0.001	85.1	ug/L	687	Standard
|	Tl	205	1336.7	5.9	0.0008	0.002	257.5	ug/L	1624	Standard
|	Pb	206	364.3	5.1	0.0064	0.001	22.7	ug/L	305	Standard
|	Pb	207	335.3	7.5	0.0088	0.002	26.1	ug/L	231	Standard
|	Pb	208	1479.0	3.1	0.0071	0.001	12.3	ug/L	1129	Standard
|	U	238	268.0	3.9	0.0126	0.000	3.4	ug/L	3	Standard
>	Bi	209	381378.9	0.2				ug/L	405108	Standard
|	Na	23	1828.4	4.6	0.5621	0.014	2.4	mg/L	118	Standard
|	Mg	24	243193.1	1.4	0.5163	0.012	2.4	mg/L	377	Standard

Sample ID: L1205010501 WG397022-01
 Report Date/Time: Thursday, May 10, 2012 13:05:45
 Page 1

Approved: May 11, 2012


J. Y. H.

K	39	2221.8	3.9	0.1718	0.010	5.7	mg/L	583	Standard
Ca	43	1238.4	5.7	3.2632	0.232	7.1	mg/L	73	Standard
Fe	54	352.4	16.3	-0.0801	0.010	12.9	mg/L	785	Standard
Fe	57	6571.4	12.3	0.0093	0.005	52.9	mg/L	6133	Standard
Sc-1	45	219138.9	2.3				mg/L	254529	Standard
Cl	35	498493.8	43.3				ug/L	1641778	Standard
Kr	83	45.4	5.9				ug/L	60	Standard
Br	81	9183.6	8.8				ug/L	11554	Standard
P	31	21628.8	2.2				ug/L	45410	Standard
S	34	763161.3	6.7				ug/L	568857	Standard
Sr	88	130159.0	4.3				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.940	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		87.824	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		88.313	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		91.061	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010501 WG397022-01
 Report Date/Time: Thursday, May 10, 2012 13:05:45
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	94.143
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010501 WG397022-01
 Report Date/Time: Thursday, May 10, 2012 13:05:45
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010502

Sample Date/Time: Thursday, May 10, 2012 13:06:05

Number of Replicates: 3

Autosampler Position: 246

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13993.1	2.1	385.9266	19.895	5.2	ug/L	12600	Standard
|	Be	9	6.7	43.3	-0.0121	0.001	7.8	ug/L	5	Standard
|	Al	27	12743.7	4.0	0.1531	0.026	16.8	ug/L	16102	Standard
>	Sc	45	220023.1	2.0				ug/L	254529	Standard
[	Ti	47	94.7	8.2	0.0073	0.006	88.2	ug/L	84	Standard
|	V	51	4134.0	3.1	0.0062	0.012	189.1	ug/L	5785	Standard
|	Cr	52	10926.3	2.1	0.0192	0.025	131.5	ug/L	12212	Standard
|	Cr	53	1600.9	17.9	-0.5017	0.189	37.6	ug/L	5042	Standard
|	Mn	55	73783.2	0.9	3.9264	0.065	1.6	ug/L	1290	Standard
|	Co	59	341.0	2.8	0.0158	0.001	4.1	ug/L	143	Standard
|	Ni	60	1276.1	1.7	0.4414	0.014	3.1	ug/L	79	Standard
|	Cu	65	382.7	6.4	0.1040	0.008	7.7	ug/L	154	Standard
|	Zn	66	91200.3	1.1	80.9587	0.157	0.2	ug/L	194	Standard
>	Ge	72	208584.7	1.2				ug/L	232024	Standard
|	As	75	-180.8	8.8	0.0500	0.013	26.6	ug/L	-297	Standard
|	Se	82	23.8	10.2	0.0484	0.022	46.5	ug/L	17	Standard
[	Se-1	77	94.0	12.3	-0.5518	0.167	30.2	ug/L	180	Standard
|	Ga	71	181013.9	0.9				mg/L	210139	Standard
|	Rb	85	681.7	12.3				ug/L	12	Standard
>	Y	89	187678.8	1.9				ug/L	214065	Standard
[	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	43.9	14.0	0.0039	0.002	48.0	ug/L	6	Standard
|	Ag	107	37.7	19.2	-0.0023	0.001	41.5	ug/L	33	Standard
|	Cd	111	163.2	2.5	-0.0518	0.002	3.0	mg/L	437	Standard
|	Cd	114	421.4	3.8	-0.0593	0.002	3.5	ug/L	1160	Standard
>	In	115	568610.1	1.3				ug/L	646604	Standard
|	Sn	118	766.7	2.5	-0.0007	0.001	138.0	ug/L	864	Standard
|	Sb	123	131.2	8.4	0.0110	0.001	8.7	ug/L	18	Standard
[	Ba	135	2460.9	2.6	0.5995	0.020	3.4	ug/L	39	Standard
|	Ce	140	65.7	5.3				ug/L	46	Standard
>	Tb	159	627827.5	2.0				ug/L	695671	Standard
|	Ho	165	8.3	18.3				ug/L	9	Standard
|	Tl	203	535.7	11.5	-0.0017	0.005	289.6	ug/L	687	Standard
|	Tl	205	1228.0	7.2	-0.0017	0.003	177.2	ug/L	1624	Standard
|	Pb	206	331.0	15.1	0.0041	0.004	108.7	ug/L	305	Standard
|	Pb	207	285.0	9.8	0.0044	0.003	64.3	ug/L	231	Standard
|	Pb	208	1295.4	7.4	0.0038	0.002	62.6	ug/L	1129	Standard
|	U	238	255.0	8.2	0.0123	0.001	8.2	ug/L	3	Standard
>	Bi	209	376669.8	2.3				ug/L	405108	Standard
[	Na	23	1881.8	8.2	0.5776	0.058	10.0	mg/L	118	Standard
|	Mg	24	251204.0	1.7	0.5313	0.019	3.6	mg/L	377	Standard

Sample ID: L1205010502

Report Date/Time: Thursday, May 10, 2012 13:08:37

Page 1

Approved: May 11, 2012

J. J. H.

K	39	2220.2	7.0	0.1707	0.016	9.3	mg/L	583	Standard
Ca	43	1203.4	6.8	3.1496	0.204	6.5	mg/L	73	Standard
Fe	54	437.6	4.1	-0.0626	0.005	8.7	mg/L	785	Standard
Fe	57	6818.2	2.2	0.0108	0.001	4.9	mg/L	6133	Standard
Sc-1	45	220023.1	2.0				mg/L	254529	Standard
Cl	35	445375.9	44.1				ug/L	1641778	Standard
Kr	83	46.4	7.4				ug/L	60	Standard
Br	81	9359.6	2.8				ug/L	11554	Standard
P	31	19859.7	4.4				ug/L	45410	Standard
S	34	842565.4	2.3				ug/L	568857	Standard
Sr	88	127895.9	1.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.898	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		87.674	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		87.938	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		90.248	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010502

Report Date/Time: Thursday, May 10, 2012 13:08:37

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	92.980
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010502
 Report Date/Time: Thursday, May 10, 2012 13:08:37
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010503S WG397022-05

Sample Date/Time: Thursday, May 10, 2012 13:08:57

Number of Replicates: 3

Autosampler Position: 247

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13833.0	3.7	390.8431	22.102	5.7	ug/L	12600	Standard
|	Be	9	9119.4	0.9	3.1984	0.047	1.5	ug/L	5	Standard
|	Al	27	62363.2	3.8	3.9121	0.209	5.3	ug/L	16102	Standard
>	Sc	45	216799.0	2.4				ug/L	254529	Standard
|	Ti	47	105.7	20.1	0.0171	0.015	87.4	ug/L	84	Standard
|	V	51	41732.4	0.4	2.7842	0.053	1.9	ug/L	5785	Standard
|	Cr	52	39016.2	0.6	2.8436	0.072	2.5	ug/L	12212	Standard
|	Cr	53	5977.0	4.9	2.3969	0.179	7.5	ug/L	5042	Standard
|	Mn	55	147754.5	2.3	8.1592	0.139	1.7	ug/L	1290	Standard
|	Co	59	37464.3	2.6	2.9323	0.070	2.4	ug/L	143	Standard
|	Ni	60	9185.1	2.1	3.4128	0.065	1.9	ug/L	79	Standard
|	Cu	65	7702.3	2.8	3.1288	0.076	2.4	ug/L	154	Standard
|	Zn	66	101314.6	1.3	92.3477	1.602	1.7	ug/L	194	Standard
>	Ge	72	203218.7	1.6				ug/L	232024	Standard
|	As	75	3242.4	3.3	3.4748	0.104	3.0	ug/L	-297	Standard
|	Se	82	457.7	6.3	3.9234	0.300	7.6	ug/L	17	Standard
|	Se-1	77	373.3	9.7	3.3493	0.501	15.0	ug/L	180	Standard
|	Ga	71	177843.9	2.9				mg/L	210139	Standard
|	Rb	85	726.7	11.2				ug/L	12	Standard
>	Y	89	187214.8	1.7				ug/L	214065	Standard
|	Rh	103	3.3	173.2				ug/L	0	Standard
|	Mo	98	36.6	8.1	0.0020	0.001	50.3	ug/L	6	Standard
|	Ag	107	20331.0	4.8	2.7923	0.137	4.9	ug/L	33	Standard
|	Cd	111	12437.0	4.5	3.0775	0.143	4.7	mg/L	437	Standard
|	Cd	114	33655.5	3.4	3.1887	0.150	4.7	ug/L	1160	Standard
>	In	115	560841.0	1.8				ug/L	646604	Standard
|	Sn	118	466.7	3.2	-0.0218	0.001	6.7	ug/L	864	Standard
|	Sb	123	29145.1	3.0	3.0394	0.112	3.7	ug/L	18	Standard
|	Ba	135	14560.7	2.7	3.6377	0.131	3.6	ug/L	39	Standard
|	Ce	140	207.3	51.6				ug/L	46	Standard
>	Tb	159	622424.2	1.3				ug/L	695671	Standard
|	Ho	165	12.0	22.0				ug/L	9	Standard
|	Tl	203	44204.1	3.0	2.8159	0.075	2.7	ug/L	687	Standard
|	Tl	205	103709.3	3.2	2.7903	0.107	3.8	ug/L	1624	Standard
|	Pb	206	34979.0	1.7	2.8053	0.060	2.1	ug/L	305	Standard
|	Pb	207	30539.4	2.5	2.8721	0.068	2.4	ug/L	231	Standard
|	Pb	208	139768.3	2.1	2.8240	0.071	2.5	ug/L	1129	Standard
|	U	238	67256.3	2.7	2.5694	0.063	2.5	ug/L	3	Standard
>	Bi	209	381209.6	1.4				ug/L	405108	Standard
|	Na	23	1835.1	6.4	0.5706	0.029	5.1	mg/L	118	Standard
|	Mg	24	247692.5	2.8	0.5314	0.007	1.2	mg/L	377	Standard

Sample ID: L1205010503S WG397022-05

Report Date/Time: Thursday, May 10, 2012 13:11:29

Page 1

Approved: May 11, 2012


J. J. H.

K	39	2325.2	3.9	0.1847	0.011	5.9	mg/L	583	Standard
Ca	43	1275.1	8.7	3.3986	0.231	6.8	mg/L	73	Standard
Fe	54	397.3	9.0	-0.0696	0.009	13.5	mg/L	785	Standard
Fe	57	6916.6	3.0	0.0122	0.002	15.8	mg/L	6133	Standard
Sc-1	45	216799.0	2.4				mg/L	254529	Standard
Cl	35	422537.2	45.1				ug/L	1641778	Standard
Kr	83	46.0	8.8				ug/L	60	Standard
Br	81	9232.0	2.8				ug/L	11554	Standard
P	31	21214.0	3.4				ug/L	45410	Standard
S	34	858256.5	1.6				ug/L	568857	Standard
Sr	88	126998.7	3.3				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.585	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		87.457	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		86.736	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		89.471	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010503S WG397022-05
 Report Date/Time: Thursday, May 10, 2012 13:11:29
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	94.101
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010503S WG397022-05
 Report Date/Time: Thursday, May 10, 2012 13:11:29
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010504SD WG397022-06

Sample Date/Time: Thursday, May 10, 2012 13:11:49

Number of Replicates: 3

Autosampler Position: 248

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	14376.8	1.5	419.5986	56.968	13.6	ug/L	12600	Standard
|	Be	9	8834.2	1.4	3.0314	0.102	3.4	ug/L	5	Standard
|	Al	27	54068.0	2.0	3.1977	0.113	3.5	ug/L	16102	Standard
>	Sc	45	221584.0	2.1				ug/L	254529	Standard
|	Ti	47	90.7	5.4	0.0055	0.004	74.4	ug/L	84	Standard
|	V	51	40568.9	1.0	2.6721	0.008	0.3	ug/L	5785	Standard
|	Cr	52	38061.8	1.1	2.7153	0.047	1.7	ug/L	12212	Standard
|	Cr	53	5689.4	6.3	2.1774	0.262	12.0	ug/L	5042	Standard
|	Mn	55	129951.6	1.2	7.1033	0.076	1.1	ug/L	1290	Standard
|	Co	59	35451.1	1.3	2.7502	0.048	1.7	ug/L	143	Standard
|	Ni	60	8852.9	1.7	3.2596	0.039	1.2	ug/L	79	Standard
|	Cu	65	7396.1	0.5	2.9763	0.037	1.2	ug/L	154	Standard
|	Zn	66	96007.2	0.8	86.7343	0.662	0.8	ug/L	194	Standard
>	Ge	72	204987.1	0.8				ug/L	232024	Standard
|	As	75	3105.9	4.1	3.3105	0.101	3.1	ug/L	-297	Standard
|	Se	82	432.4	5.3	3.6610	0.170	4.7	ug/L	17	Standard
|	Se-1	77	359.7	6.9	3.1174	0.357	11.4	ug/L	180	Standard
|	Ga	71	178499.3	0.7				mg/L	210139	Standard
|	Rb	85	705.0	14.2				ug/L	12	Standard
>	Y	89	186702.8	4.0				ug/L	214065	Standard
|	Rh	103	6.7	43.3				ug/L	0	Standard
|	Mo	98	43.7	12.7	0.0038	0.001	36.3	ug/L	6	Standard
|	Ag	107	19657.7	1.4	2.6696	0.028	1.1	ug/L	33	Standard
|	Cd	111	11789.2	3.1	2.8786	0.060	2.1	mg/L	437	Standard
|	Cd	114	32135.0	1.0	3.0045	0.011	0.4	ug/L	1160	Standard
>	In	115	567066.6	1.3				ug/L	646604	Standard
|	Sn	118	514.0	3.2	-0.0188	0.001	6.7	ug/L	864	Standard
|	Sb	123	28307.5	1.2	2.9189	0.011	0.4	ug/L	18	Standard
|	Ba	135	14165.3	1.6	3.4989	0.046	1.3	ug/L	39	Standard
|	Ce	140	109.0	3.3				ug/L	46	Standard
>	Tb	159	631737.3	0.5				ug/L	695671	Standard
|	Ho	165	11.7	13.1				ug/L	9	Standard
|	Tl	203	42535.0	1.2	2.6919	0.026	1.0	ug/L	687	Standard
|	Tl	205	98710.8	0.6	2.6376	0.015	0.6	ug/L	1624	Standard
|	Pb	206	33660.4	0.9	2.6822	0.018	0.7	ug/L	305	Standard
|	Pb	207	29359.8	0.2	2.7437	0.010	0.4	ug/L	231	Standard
|	Pb	208	134210.6	0.5	2.6942	0.005	0.2	ug/L	1129	Standard
|	U	238	64710.6	1.2	2.4575	0.021	0.9	ug/L	3	Standard
>	Bi	209	383481.6	0.3				ug/L	405108	Standard
|	Na	23	1728.4	8.4	0.5244	0.052	9.9	mg/L	118	Standard
|	Mg	24	236264.6	1.0	0.4961	0.015	2.9	mg/L	377	Standard

Sample ID: L1205010504SD WG397022-06

Report Date/Time: Thursday, May 10, 2012 13:14:22

Page 1

Approved: May 11, 2012


J. J. H.

K	39	2186.8	4.9	0.1658	0.012	7.2	mg/L	583	Standard
Ca	43	1291.7	3.7	3.3710	0.142	4.2	mg/L	73	Standard
Fe	54	423.9	12.1	-0.0662	0.009	13.7	mg/L	785	Standard
Fe	57	6771.5	6.3	0.0102	0.003	32.2	mg/L	6133	Standard
Sc-1	45	221584.0	2.1				mg/L	254529	Standard
Cl	35	405957.1	46.1				ug/L	1641778	Standard
Kr	83	45.1	12.3				ug/L	60	Standard
Br	81	9232.8	2.6				ug/L	11554	Standard
P	31	21728.9	2.5				ug/L	45410	Standard
S	34	876603.2	2.0				ug/L	568857	Standard
Sr	88	123459.4	1.8				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.348	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		87.218	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		87.699	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		90.810	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010504SD WG397022-06
 Report Date/Time: Thursday, May 10, 2012 13:14:22
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	94.662
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010504SD WG397022-06
 Report Date/Time: Thursday, May 10, 2012 13:14:22
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010505

Sample Date/Time: Thursday, May 10, 2012 13:14:42

Number of Replicates: 3

Autosampler Position: 249

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	14311.8	2.4	385.7430	52.088	13.5	ug/L	12600	Standard
|	Be	9	6.7	86.6	-0.0122	0.002	16.2	ug/L	5	Standard
|	Al	27	62922.1	2.6	3.7786	0.156	4.1	ug/L	16102	Standard
>	Sc	45	225093.2	1.3				ug/L	254529	Standard
|	Ti	47	155.3	2.4	0.0529	0.003	5.1	ug/L	84	Standard
|	V	51	4261.6	5.7	0.0197	0.019	98.1	ug/L	5785	Standard
|	Cr	52	11068.4	2.3	0.0483	0.029	59.3	ug/L	12212	Standard
|	Cr	53	1471.7	22.4	-0.5709	0.217	38.0	ug/L	5042	Standard
|	Mn	55	98226.1	1.0	5.3311	0.026	0.5	ug/L	1290	Standard
|	Co	59	480.7	5.2	0.0270	0.002	6.4	ug/L	143	Standard
|	Ni	60	1252.4	2.0	0.4392	0.009	2.1	ug/L	79	Standard
|	Cu	65	377.3	7.4	0.1042	0.012	11.7	ug/L	154	Standard
|	Zn	66	97032.5	2.0	87.3800	1.412	1.6	ug/L	194	Standard
>	Ge	72	205636.4	0.6				ug/L	232024	Standard
|	As	75	-194.1	7.4	0.0343	0.015	42.7	ug/L	-297	Standard
|	Se	82	18.2	29.5	0.0015	0.047	3218.7	ug/L	17	Standard
|	Se-1	77	95.0	1.1	-0.5209	0.011	2.1	ug/L	180	Standard
|	Ga	71	179721.3	0.5				mg/L	210139	Standard
|	Rb	85	880.0	9.9				ug/L	12	Standard
>	Y	89	188916.0	2.6				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	52.9	21.2	0.0065	0.003	46.3	ug/L	6	Standard
|	Ag	107	40.3	20.8	-0.0018	0.001	60.6	ug/L	33	Standard
|	Cd	111	168.6	4.8	-0.0499	0.002	4.7	mg/L	437	Standard
|	Cd	114	448.2	1.1	-0.0562	0.001	1.4	ug/L	1160	Standard
>	In	115	561305.6	0.8				ug/L	646604	Standard
|	Sn	118	625.3	6.5	-0.0103	0.003	26.0	ug/L	864	Standard
|	Sb	123	359.0	25.3	0.0349	0.009	26.9	ug/L	18	Standard
|	Ba	135	2754.3	1.4	0.6807	0.014	2.0	ug/L	39	Standard
|	Ce	140	477.0	4.7				ug/L	46	Standard
>	Tb	159	631004.8	1.8				ug/L	695671	Standard
|	Ho	165	18.3	22.7				ug/L	9	Standard
|	Tl	203	512.3	8.7	-0.0038	0.003	75.4	ug/L	687	Standard
|	Tl	205	1167.0	12.4	-0.0039	0.004	97.4	ug/L	1624	Standard
|	Pb	206	376.0	13.8	0.0072	0.004	56.3	ug/L	305	Standard
|	Pb	207	324.7	10.9	0.0077	0.004	45.6	ug/L	231	Standard
|	Pb	208	1485.0	11.4	0.0072	0.004	49.1	ug/L	1129	Standard
|	U	238	258.3	2.9	0.0122	0.000	3.1	ug/L	3	Standard
>	Bi	209	382549.5	1.1				ug/L	405108	Standard
|	Na	23	1915.1	8.9	0.5736	0.047	8.2	mg/L	118	Standard
|	Mg	24	251208.8	3.6	0.5191	0.019	3.6	mg/L	377	Standard

Sample ID: L1205010505

Report Date/Time: Thursday, May 10, 2012 13:17:14

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	2251.8	10.0	0.1689	0.025	14.6	mg/L	583	Standard
Ca	43	1255.1	9.3	3.2169	0.344	10.7	mg/L	73	Standard
Fe	54	447.1	10.7	-0.0627	0.011	17.1	mg/L	785	Standard
Fe	57	7728.6	2.3	0.0157	0.001	3.6	mg/L	6133	Standard
Sc-1	45	225093.2	1.3				mg/L	254529	Standard
Cl	35	401511.4	46.1				ug/L	1641778	Standard
Kr	83	46.8	11.1				ug/L	60	Standard
Br	81	9642.2	0.2				ug/L	11554	Standard
P	31	22273.9	1.5				ug/L	45410	Standard
S	34	913040.8	1.1				ug/L	568857	Standard
Sr	88	132097.3	3.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.627	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		88.252	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		86.808	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		90.704	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010505

Report Date/Time: Thursday, May 10, 2012 13:17:14

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	94.431
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010505
 Report Date/Time: Thursday, May 10, 2012 13:17:14
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010506

Sample Date/Time: Thursday, May 10, 2012 13:17:34

Number of Replicates: 3

Autosampler Position: 250

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	52646.3	1.1	3975.7233	96.528	2.4	ug/L	12600	Standard
|	Be	9	11.7	89.2	-0.0110	0.003	27.6	ug/L	5	Standard
|	Al	27	30859.7	2.4	1.1566	0.046	3.9	ug/L	16102	Standard
>	Sc	45	258762.9	1.6				ug/L	254529	Standard
|	Ti	47	162.0	5.5	0.0469	0.006	13.3	ug/L	84	Standard
|	V	51	4735.6	0.3	0.0224	0.002	9.0	ug/L	5785	Standard
|	Cr	52	13667.2	0.9	0.1800	0.004	2.4	ug/L	12212	Standard
|	Cr	53	1589.3	18.2	-0.5910	0.163	27.5	ug/L	5042	Standard
|	Mn	55	373464.8	1.2	18.6102	0.177	1.0	ug/L	1290	Standard
|	Co	59	2796.3	4.1	0.1867	0.006	3.3	ug/L	143	Standard
|	Ni	60	5015.2	1.6	1.6595	0.013	0.8	ug/L	79	Standard
|	Cu	65	1210.0	7.4	0.3982	0.031	7.8	ug/L	154	Standard
|	Zn	66	192365.1	2.0	157.4170	3.005	1.9	ug/L	194	Standard
>	Ge	72	226509.0	1.0				ug/L	232024	Standard
|	As	75	-208.1	17.6	0.0396	0.031	79.1	ug/L	-297	Standard
|	Se	82	29.7	2.5	0.0792	0.006	7.7	ug/L	17	Standard
|	Se-1	77	108.7	5.3	-0.4706	0.078	16.6	ug/L	180	Standard
|	Ga	71	203944.0	1.7				mg/L	210139	Standard
|	Rb	85	2486.9	4.3				ug/L	12	Standard
>	Y	89	212356.3	1.3				ug/L	214065	Standard
|	Rh	103	40.0	33.1				ug/L	0	Standard
|	Mo	98	90.4	0.8	0.0146	0.000	2.1	ug/L	6	Standard
|	Ag	107	46.3	5.0	-0.0016	0.000	21.1	ug/L	33	Standard
|	Cd	111	579.8	0.9	0.0408	0.000	0.8	mg/L	437	Standard
|	Cd	114	1485.6	2.3	0.0313	0.002	7.2	ug/L	1160	Standard
>	In	115	620210.0	1.0				ug/L	646604	Standard
|	Sn	118	863.7	1.5	0.0011	0.001	62.6	ug/L	864	Standard
|	Sb	123	289.8	23.6	0.0249	0.007	27.1	ug/L	18	Standard
|	Ba	135	2885.9	3.0	0.6452	0.026	4.1	ug/L	39	Standard
|	Ce	140	374.7	2.6				ug/L	46	Standard
>	Tb	159	696590.1	0.9				ug/L	695671	Standard
|	Ho	165	11.7	21.6				ug/L	9	Standard
|	Tl	203	425.3	38.0	-0.0102	0.010	98.3	ug/L	687	Standard
|	Tl	205	1020.0	35.3	-0.0088	0.009	107.7	ug/L	1624	Standard
|	Pb	206	401.0	7.0	0.0082	0.002	26.6	ug/L	305	Standard
|	Pb	207	349.0	6.5	0.0090	0.002	22.8	ug/L	231	Standard
|	Pb	208	1566.0	5.9	0.0078	0.002	23.2	ug/L	1129	Standard
|	U	238	197.0	3.1	0.0097	0.000	2.4	ug/L	3	Standard
>	Bi	209	394972.2	0.1				ug/L	405108	Standard
|	Na	23	2095.1	5.2	0.5448	0.025	4.5	mg/L	118	Standard
|	Mg	24	813347.2	0.7	1.4637	0.027	1.8	mg/L	377	Standard

Sample ID: L1205010506

Report Date/Time: Thursday, May 10, 2012 13:20:07

Page 1

Approved: May 11, 2012

J. J. H.

K	39	2421.9	2.4	0.1545	0.004	2.6	mg/L	583	Standard
Ca	43	3373.7	2.8	7.7794	0.346	4.4	mg/L	73	Standard
Fe	54	989.4	16.2	0.0207	0.026	123.5	mg/L	785	Standard
Fe	57	11908.0	3.9	0.0327	0.003	8.8	mg/L	6133	Standard
Sc-1	45	258762.9	1.6				mg/L	254529	Standard
Cl	35	538421.3	37.4				ug/L	1641778	Standard
Kr	83	59.0	4.3				ug/L	60	Standard
Br	81	11683.7	4.5				ug/L	11554	Standard
P	31	60943.2	3.2				ug/L	45410	Standard
S	34	2048166.4	0.3				ug/L	568857	Standard
Sr	88	878057.4	3.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.623	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.202	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		95.918	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		100.132	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010506

Report Date/Time: Thursday, May 10, 2012 13:20:07

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	97.498
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1205010506
 Report Date/Time: Thursday, May 10, 2012 13:20:07
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010506PS WG397649-01

Sample Date/Time: Thursday, May 10, 2012 13:20:27

Number of Replicates: 3

Autosampler Position: 251

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	54962.9	3.1	4149.1502	34.165	0.8	ug/L	12600	Standard
|	Be	9	168778.4	1.8	49.2978	0.660	1.3	ug/L	5	Standard
|	Al	27	870622.8	3.1	53.6702	0.350	0.7	ug/L	16102	Standard
>	Sc	45	261403.3	2.5				ug/L	254529	Standard
|	Ti	47	156.7	5.2	0.0409	0.004	9.9	ug/L	84	Standard
|	V	51	779567.1	2.2	50.0904	0.751	1.5	ug/L	5785	Standard
|	Cr	52	585785.7	4.0	50.1026	1.556	3.1	ug/L	12212	Standard
|	Cr	53	91470.4	3.0	51.1370	1.066	2.1	ug/L	5042	Standard
|	Mn	55	1444639.5	1.6	70.6314	0.594	0.8	ug/L	1290	Standard
|	Co	59	757214.3	2.2	52.1616	0.511	1.0	ug/L	143	Standard
|	Ni	60	165552.0	1.5	54.3158	0.146	0.3	ug/L	79	Standard
|	Cu	65	146963.5	2.2	53.1556	0.703	1.3	ug/L	154	Standard
|	Zn	66	262681.4	2.0	210.2473	1.887	0.9	ug/L	194	Standard
>	Ge	72	231630.6	1.2				ug/L	232024	Standard
|	As	75	59162.5	1.7	52.2235	0.384	0.7	ug/L	-297	Standard
|	Se	82	6888.6	1.8	53.7017	0.387	0.7	ug/L	17	Standard
|	Se-1	77	4375.0	3.3	51.3215	1.161	2.3	ug/L	180	Standard
|	Ga	71	208888.0	1.7				mg/L	210139	Standard
|	Rb	85	2698.6	3.1				ug/L	12	Standard
>	Y	89	220754.6	3.7				ug/L	214065	Standard
|	Rh	103	73.3	37.6				ug/L	0	Standard
|	Mo	98	194.9	9.1	0.0394	0.004	10.1	ug/L	6	Standard
|	Ag	107	449243.2	2.1	54.1911	0.519	1.0	ug/L	33	Standard
|	Cd	111	228900.1	3.2	51.0257	1.184	2.3	mg/L	437	Standard
|	Cd	114	586149.3	1.9	50.0660	0.532	1.1	ug/L	1160	Standard
>	In	115	640034.1	1.2				ug/L	646604	Standard
|	Sn	118	1150.7	1.8	0.0177	0.002	10.3	ug/L	864	Standard
|	Sb	123	549564.3	1.5	50.2450	0.157	0.3	ug/L	18	Standard
|	Ba	135	238782.9	1.8	52.3660	0.279	0.5	ug/L	39	Standard
|	Ce	140	400.3	5.0				ug/L	46	Standard
>	Tb	159	716933.4	0.8				ug/L	695671	Standard
|	Ho	165	15.3	3.8				ug/L	9	Standard
|	Tl	203	849312.2	1.7	52.0300	0.907	1.7	ug/L	687	Standard
|	Tl	205	1977987.7	1.3	51.1527	0.439	0.9	ug/L	1624	Standard
|	Pb	206	671887.3	1.7	51.5820	0.971	1.9	ug/L	305	Standard
|	Pb	207	584524.9	1.6	52.6124	0.661	1.3	ug/L	231	Standard
|	Pb	208	2683590.9	1.5	51.8969	0.597	1.2	ug/L	1129	Standard
|	U	238	1360553.3	2.8	49.3267	1.070	2.2	ug/L	3	Standard
>	Bi	209	401293.0	0.9				ug/L	405108	Standard
|	Na	23	2100.1	4.2	0.5405	0.022	4.0	mg/L	118	Standard
|	Mg	24	851470.8	1.8	1.5168	0.015	1.0	mg/L	377	Standard

Sample ID: L1205010506PS WG397649-01

Report Date/Time: Thursday, May 10, 2012 13:22:59

Page 1

Approved: May 11, 2012




K	39	2488.5	3.4	0.1583	0.012	7.6	mg/L	583	Standard
Ca	43	3432.1	1.2	7.8343	0.166	2.1	mg/L	73	Standard
Fe	54	996.7	3.0	0.0206	0.009	45.0	mg/L	785	Standard
Fe	57	11896.3	2.4	0.0320	0.001	3.7	mg/L	6133	Standard
Sc-1	45	261403.3	2.5				mg/L	254529	Standard
Cl	35	555693.3	35.7				ug/L	1641778	Standard
Kr	83	58.2	7.5				ug/L	60	Standard
Br	81	11456.0	3.2				ug/L	11554	Standard
P	31	61662.8	3.5				ug/L	45410	Standard
S	34	2115639.7	1.4				ug/L	568857	Standard
Sr	88	913308.3	3.2				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.831	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.125	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.984	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		103.056	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010506PS WG397649-01
 Report Date/Time: Thursday, May 10, 2012 13:22:59
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	99.058
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1205010506PS WG397649-01
 Report Date/Time: Thursday, May 10, 2012 13:22:59
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010506SDL WG397649-02

Sample Date/Time: Thursday, May 10, 2012 13:23:19

Number of Replicates: 3

Autosampler Position: 252

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	18214.3	2.4	828.4643	46.611	5.6	ug/L	12600	Standard
|	Be	9	38.3	49.4	-0.0014	0.006	453.7	ug/L	5	Standard
|	Al	27	19562.6	1.0	0.6261	0.010	1.6	ug/L	16102	Standard
>	Sc	45	225294.3	0.4				ug/L	254529	Standard
|	Ti	47	78.3	7.0	-0.0049	0.004	73.7	ug/L	84	Standard
|	V	51	4420.8	2.0	0.0249	0.004	15.5	ug/L	5785	Standard
|	Cr	52	12154.9	1.5	0.1320	0.027	20.8	ug/L	12212	Standard
|	Cr	53	1537.6	20.6	-0.5501	0.184	33.5	ug/L	5042	Standard
|	Mn	55	64560.6	0.5	3.4059	0.071	2.1	ug/L	1290	Standard
|	Co	59	647.7	16.2	0.0390	0.007	18.3	ug/L	143	Standard
|	Ni	60	942.7	3.0	0.3178	0.006	1.9	ug/L	79	Standard
|	Cu	65	390.0	5.3	0.1061	0.006	5.4	ug/L	154	Standard
|	Zn	66	42210.7	0.5	37.1722	0.441	1.2	ug/L	194	Standard
>	Ge	72	209745.7	1.6				ug/L	232024	Standard
|	As	75	-175.8	18.3	0.0556	0.033	59.2	ug/L	-297	Standard
|	Se	82	26.6	6.9	0.0717	0.015	21.1	ug/L	17	Standard
|	Se-1	77	102.7	0.6	-0.4433	0.019	4.2	ug/L	180	Standard
|	Ga	71	184264.9	1.7				mg/L	210139	Standard
|	Rb	85	478.3	13.2				ug/L	12	Standard
>	Y	89	190937.7	2.4				ug/L	214065	Standard
|	Rh	103	8.3	69.3				ug/L	0	Standard
|	Mo	98	21.6	19.0	-0.0024	0.001	47.3	ug/L	6	Standard
|	Ag	107	86.3	49.3	0.0039	0.005	138.1	ug/L	33	Standard
|	Cd	111	197.0	12.8	-0.0450	0.005	12.0	mg/L	437	Standard
|	Cd	114	537.6	23.8	-0.0500	0.011	22.3	ug/L	1160	Standard
>	In	115	588326.3	1.5				ug/L	646604	Standard
|	Sn	118	511.7	6.7	-0.0203	0.002	12.3	ug/L	864	Standard
|	Sb	123	1038.1	29.4	0.1005	0.029	28.6	ug/L	18	Standard
|	Ba	135	602.7	6.3	0.1355	0.007	5.1	ug/L	39	Standard
|	Ce	140	118.3	8.1				ug/L	46	Standard
>	Tb	159	648300.9	1.2				ug/L	695671	Standard
|	Ho	165	9.7	39.2				ug/L	9	Standard
|	Tl	203	585.0	34.8	0.0004	0.013	3643.0	ug/L	687	Standard
|	Tl	205	1348.7	30.1	0.0005	0.011	2220.4	ug/L	1624	Standard
|	Pb	206	436.7	23.6	0.0116	0.008	70.5	ug/L	305	Standard
|	Pb	207	351.7	23.7	0.0098	0.008	79.3	ug/L	231	Standard
|	Pb	208	1639.0	23.9	0.0098	0.008	79.7	ug/L	1129	Standard
|	U	238	193.7	86.2	0.0097	0.006	64.8	ug/L	3	Standard
>	Bi	209	388203.3	0.1				ug/L	405108	Standard
|	Na	23	431.7	15.4	0.1081	0.021	19.0	mg/L	118	Standard
|	Mg	24	168469.8	0.6	0.3475	0.001	0.3	mg/L	377	Standard

Sample ID: L1205010506SDL WG397649-02

Report Date/Time: Thursday, May 10, 2012 13:25:52

Page 1

Approved: May 11, 2012

J. J. H.


K	39	946.7	5.3	0.0410	0.005	11.6	mg/L	583	Standard
Ca	43	690.0	11.3	1.6787	0.205	12.2	mg/L	73	Standard
Fe	54	482.2	8.5	-0.0557	0.009	15.5	mg/L	785	Standard
Fe	57	7266.7	1.7	0.0126	0.001	6.8	mg/L	6133	Standard
Sc-1	45	225294.3	0.4				mg/L	254529	Standard
Cl	35	424973.3	41.2				ug/L	1641778	Standard
Kr	83	48.6	7.1				ug/L	60	Standard
Br	81	9281.2	3.2				ug/L	11554	Standard
P	31	24533.2	4.4				ug/L	45410	Standard
S	34	1013390.8	2.1				ug/L	568857	Standard
Sr	88	148661.1	2.7				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.398	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		89.196	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		90.987	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		93.191	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010506SDL WG397649-02
 Report Date/Time: Thursday, May 10, 2012 13:25:52
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.827
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010506SDL WG397649-02
 Report Date/Time: Thursday, May 10, 2012 13:25:52
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 13:26:14

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

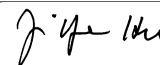
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12001.4	3.9	-39.3709	36.024	91.5	ug/L	12600	Standard
|	Be	9	161454.2	1.9	48.3039	0.648	1.3	ug/L	5	Standard
|	Al	27	808529.1	1.7	51.0274	0.399	0.8	ug/L	16102	Standard
>	Sc	45	255152.2	0.9				ug/L	254529	Standard
|	Ti	47	150669.0	2.3	100.1568	3.255	3.2	ug/L	84	Standard
|	V	51	752025.5	2.0	49.1179	1.464	3.0	ug/L	5785	Standard
|	Cr	52	554061.5	2.0	48.1435	1.465	3.0	ug/L	12212	Standard
|	Cr	53	86936.3	2.7	49.3648	1.878	3.8	ug/L	5042	Standard
|	Mn	55	1015649.1	1.7	50.4551	1.318	2.6	ug/L	1290	Standard
|	Co	59	721299.2	2.4	50.5157	1.673	3.3	ug/L	143	Standard
|	Ni	60	153034.5	2.2	51.0389	1.500	2.9	ug/L	79	Standard
|	Cu	65	136871.3	2.3	50.3254	1.543	3.1	ug/L	154	Standard
|	Zn	66	61167.3	2.0	49.6366	1.405	2.8	ug/L	194	Standard
>	Ge	72	227897.9	1.0				ug/L	232024	Standard
|	As	75	56408.5	1.1	50.6220	0.930	1.8	ug/L	-297	Standard
|	Se	82	6687.0	0.9	52.9899	1.000	1.9	ug/L	17	Standard
|	Se-1	77	4190.9	1.5	49.9323	1.020	2.0	ug/L	180	Standard
|	Ga	71	204401.3	1.0				mg/L	210139	Standard
|	Rb	85	971.7	7.7				ug/L	12	Standard
>	Y	89	220751.0	3.3				ug/L	214065	Standard
|	Rh	103	40.0	12.5				ug/L	0	Standard
|	Mo	98	410062.0	2.1	102.6384	1.706	1.7	ug/L	6	Standard
|	Ag	107	425824.0	2.7	52.6801	1.245	2.4	ug/L	33	Standard
|	Cd	111	216374.0	1.4	49.4682	0.512	1.0	mg/L	437	Standard
|	Cd	114	559585.7	1.2	49.0182	0.420	0.9	ug/L	1160	Standard
>	In	115	624072.4	0.4				ug/L	646604	Standard
|	Sn	118	749779.3	2.5	49.1507	1.102	2.2	ug/L	864	Standard
|	Sb	123	525793.0	1.8	49.3010	0.754	1.5	ug/L	18	Standard
|	Ba	135	226807.2	2.2	51.0128	1.021	2.0	ug/L	39	Standard
|	Ce	140	865.4	4.6				ug/L	46	Standard
>	Tb	159	703258.3	1.0				ug/L	695671	Standard
|	Ho	165	19.7	26.1				ug/L	9	Standard
|	Tl	203	808413.7	1.4	50.6427	0.586	1.2	ug/L	687	Standard
|	Tl	205	1879448.1	1.5	49.7037	0.643	1.3	ug/L	1624	Standard
|	Pb	206	643864.4	1.6	50.5464	0.698	1.4	ug/L	305	Standard
|	Pb	207	546619.6	1.3	50.3133	0.557	1.1	ug/L	231	Standard
|	Pb	208	2531597.6	1.5	50.0650	0.626	1.3	ug/L	1129	Standard
|	U	238	1298521.7	2.0	48.1467	0.863	1.8	ug/L	3	Standard
>	Bi	209	392406.5	0.2				ug/L	405108	Standard
|	Na	23	18493.0	4.3	5.0932	0.185	3.6	mg/L	118	Standard
|	Mg	24	2741681.8	3.9	5.0043	0.162	3.2	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 13:28:48

Page 1

Approved: May 11, 2012



K	39	60149.2	0.5	5.1403	0.069	1.3	mg/L	583	Standard
Ca	43	2128.5	4.3	4.9052	0.189	3.9	mg/L	73	Standard
Fe	54	31595.5	3.2	5.4864	0.130	2.4	mg/L	785	Standard
Fe	57	872275.8	1.4	4.9446	0.065	1.3	mg/L	6133	Standard
Sc-1	45	255152.2	0.9				mg/L	254529	Standard
Cl	35	508600.6	38.0				ug/L	1641778	Standard
Kr	83	59.8	1.8				ug/L	60	Standard
Br	81	11658.7	2.3				ug/L	11554	Standard
P	31	67734.4	0.7				ug/L	45410	Standard
S	34	765527.5	3.6				ug/L	568857	Standard
Sr	88	641.7	15.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	102.055		
Sc	45			
Ti	47	100.157		
V	51	98.236		
Cr	52	96.287		
Cr	53			
Mn	55	100.910		
Co	59	101.031		
Ni	60	102.078		
Cu	65	100.651		
Zn	66	99.273		
Ge	72		98.222	
As	75	101.244		
Se	82	105.980		
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.123	
Rh	103			
Mo	98	102.638		
Ag	107	105.360		
Cd	111	98.936		
Cd	114			
In	115		96.515	
Sn	118	98.301		
Sb	123	98.602		
Ba	135	102.026		
Ce	140			
Tb	159		101.091	
Ho	165			
Tl	203	101.285		
Tl	205			
Pb	206	101.093		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 13:28:48

Page 2

Approved: May 11, 2012




Pb	207	100.627	
Pb	208	100.130	
U	238	96.293	
> Bi	209		96.865
Na	23	101.864	
Mg	24	100.086	
K	39	102.806	
Ca	43	98.104	
Fe	54	109.728	
Fe	57	98.891	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 13:28:48
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 13:29:08

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12103.2	3.3	16.0849	46.489	289.0	ug/L	12600	Standard
|	Be	9	18.3	15.7	-0.0087	0.001	13.8	ug/L	5	Standard
|	Al	27	14577.1	10.3	0.1790	0.151	84.3	ug/L	16102	Standard
>	Sc	45	246388.9	6.2				ug/L	254529	Standard
|	Ti	47	97.7	9.5	0.0058	0.006	99.2	ug/L	84	Standard
|	V	51	3720.5	3.6	-0.0370	0.015	39.7	ug/L	5785	Standard
|	Cr	52	10594.7	0.7	-0.0654	0.017	25.3	ug/L	12212	Standard
|	Cr	53	1120.9	8.4	-0.8451	0.067	8.0	ug/L	5042	Standard
|	Mn	55	1364.4	8.5	-0.0145	0.007	47.0	ug/L	1290	Standard
|	Co	59	188.7	38.2	0.0035	0.005	155.7	ug/L	143	Standard
|	Ni	60	77.3	20.0	0.0029	0.006	199.5	ug/L	79	Standard
|	Cu	65	152.3	16.3	0.0085	0.011	124.3	ug/L	154	Standard
|	Zn	66	213.0	19.1	0.0044	0.038	865.3	ug/L	194	Standard
>	Ge	72	219852.8	2.3				ug/L	232024	Standard
|	As	75	-236.3	7.3	0.0077	0.014	178.6	ug/L	-297	Standard
|	Se	82	23.6	9.7	0.0364	0.023	62.8	ug/L	17	Standard
|	Se-1	77	93.0	11.3	-0.6302	0.138	21.9	ug/L	180	Standard
|	Ga	71	199973.9	2.5				mg/L	210139	Standard
|	Rb	85	25.0	52.9				ug/L	12	Standard
>	Y	89	213453.2	1.1				ug/L	214065	Standard
|	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	77.5	70.6	0.0115	0.014	121.4	ug/L	6	Standard
|	Ag	107	107.7	35.7	0.0061	0.005	79.1	ug/L	33	Standard
|	Cd	111	453.2	7.2	0.0124	0.008	63.0	mg/L	437	Standard
|	Cd	114	1111.5	8.9	-0.0010	0.008	832.0	ug/L	1160	Standard
>	In	115	615353.5	0.7				ug/L	646604	Standard
|	Sn	118	914.4	2.0	0.0050	0.001	28.2	ug/L	864	Standard
|	Sb	123	394.5	38.4	0.0350	0.014	41.3	ug/L	18	Standard
|	Ba	135	57.7	41.6	0.0050	0.005	111.0	ug/L	39	Standard
|	Ce	140	45.0	34.9				ug/L	46	Standard
>	Tb	159	681769.6	1.9				ug/L	695671	Standard
|	Ho	165	5.3	10.8				ug/L	9	Standard
|	Tl	203	451.7	52.3	-0.0082	0.015	181.9	ug/L	687	Standard
|	Tl	205	1024.0	53.8	-0.0083	0.015	178.2	ug/L	1624	Standard
|	Pb	206	323.3	15.3	0.0025	0.004	162.9	ug/L	305	Standard
|	Pb	207	283.0	21.0	0.0033	0.006	167.1	ug/L	231	Standard
|	Pb	208	1295.4	19.2	0.0028	0.005	176.2	ug/L	1129	Standard
|	U	238	106.0	117.1	0.0064	0.005	73.0	ug/L	3	Standard
>	Bi	209	389978.2	2.8				ug/L	405108	Standard
|	Na	23	83.3	24.2	-0.0032	0.007	209.8	mg/L	118	Standard
|	Mg	24	520.0	26.9	0.0001	0.000	249.7	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 13:31:41

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	680.0	4.6	0.0095	0.006	66.3	mg/L	583	Standard
Ca	43	56.7	31.0	-0.0531	0.037	68.9	mg/L	73	Standard
Fe	54	908.3	6.7	0.0155	0.021	133.2	mg/L	785	Standard
Fe	57	4770.8	6.2	-0.0061	0.002	38.8	mg/L	6133	Standard
Sc-1	45	246388.9	6.2				mg/L	254529	Standard
Cl	35	467051.0	35.0				ug/L	1641778	Standard
Kr	83	52.3	4.5				ug/L	60	Standard
Br	81	11375.9	3.0				ug/L	11554	Standard
P	31	63007.6	4.5				ug/L	45410	Standard
S	34	745520.1	1.9				ug/L	568857	Standard
Sr	88	246.7	7.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.755	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.714	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		95.167	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.002	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 13:31:41

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	96.265
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 13:31:41
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010507

Sample Date/Time: Thursday, May 10, 2012 13:32:03

Number of Replicates: 3

Autosampler Position: 253

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	59347.7	2.4	5447.4290	174.755	3.2	ug/L	12600	Standard
|	Be	9	11.7	49.5	-0.0105	0.002	19.2	ug/L	5	Standard
|	Al	27	16455.6	3.3	0.3883	0.007	1.9	ug/L	16102	Standard
>	Sc	45	227635.3	3.5				ug/L	254529	Standard
|	Ti	47	125.0	4.9	0.0279	0.004	13.0	ug/L	84	Standard
|	V	51	4254.8	5.7	0.0100	0.012	119.0	ug/L	5785	Standard
|	Cr	52	11352.9	9.8	0.0425	0.082	192.1	ug/L	12212	Standard
|	Cr	53	1174.2	6.8	-0.7849	0.075	9.5	ug/L	5042	Standard
|	Mn	55	449105.6	4.5	23.9577	0.993	4.1	ug/L	1290	Standard
|	Co	59	3177.0	4.6	0.2292	0.011	4.7	ug/L	143	Standard
|	Ni	60	5821.5	7.7	2.0653	0.146	7.1	ug/L	79	Standard
|	Cu	65	1217.4	7.8	0.4316	0.019	4.3	ug/L	154	Standard
|	Zn	66	283294.5	3.6	247.9874	5.750	2.3	ug/L	194	Standard
>	Ge	72	211880.7	3.9				ug/L	232024	Standard
|	As	75	-184.9	11.3	0.0484	0.024	49.4	ug/L	-297	Standard
|	Se	82	21.9	26.3	0.0282	0.047	167.4	ug/L	17	Standard
|	Se-1	77	86.0	4.2	-0.6772	0.074	11.0	ug/L	180	Standard
|	Ga	71	184540.3	3.6				mg/L	210139	Standard
|	Rb	85	2796.9	2.4				ug/L	12	Standard
>	Y	89	193777.0	3.0				ug/L	214065	Standard
|	Rh	103	43.3	13.3				ug/L	0	Standard
|	Mo	98	66.2	20.3	0.0092	0.003	34.3	ug/L	6	Standard
|	Ag	107	41.7	24.6	-0.0020	0.001	64.0	ug/L	33	Standard
|	Cd	111	303.9	7.8	-0.0198	0.004	20.9	mg/L	437	Standard
|	Cd	114	859.1	2.6	-0.0207	0.001	6.1	ug/L	1160	Standard
>	In	115	594050.0	2.4				ug/L	646604	Standard
|	Sn	118	517.7	5.4	-0.0202	0.001	5.3	ug/L	864	Standard
|	Sb	123	160.0	6.6	0.0133	0.001	10.2	ug/L	18	Standard
|	Ba	135	3523.1	4.7	0.8241	0.020	2.5	ug/L	39	Standard
|	Ce	140	192.0	1.9				ug/L	46	Standard
>	Tb	159	662544.1	1.4				ug/L	695671	Standard
|	Ho	165	14.7	32.2				ug/L	9	Standard
|	Tl	203	541.7	23.0	-0.0021	0.008	402.6	ug/L	687	Standard
|	Tl	205	1252.4	18.2	-0.0018	0.007	364.5	ug/L	1624	Standard
|	Pb	206	320.7	11.2	0.0026	0.003	120.7	ug/L	305	Standard
|	Pb	207	270.3	11.0	0.0024	0.003	127.4	ug/L	231	Standard
|	Pb	208	1235.4	8.1	0.0019	0.002	117.5	ug/L	1129	Standard
|	U	238	233.3	4.3	0.0112	0.000	2.5	ug/L	3	Standard
>	Bi	209	385489.0	1.2				ug/L	405108	Standard
|	Na	23	2433.5	9.5	0.7286	0.073	10.0	mg/L	118	Standard
|	Mg	24	999729.4	2.5	2.0456	0.021	1.0	mg/L	377	Standard

Sample ID: L1205010507

Report Date/Time: Thursday, May 10, 2012 13:34:37

Page 1

Approved: May 11, 2012

J. J. H.

K	39	2843.6	2.4	0.2239	0.016	7.3	mg/L	583	Standard
Ca	43	4502.3	4.4	11.9045	0.644	5.4	mg/L	73	Standard
Fe	54	345.2	18.0	-0.0843	0.011	12.6	mg/L	785	Standard
Fe	57	12193.3	11.8	0.0436	0.007	16.4	mg/L	6133	Standard
Sc-1	45	227635.3	3.5				mg/L	254529	Standard
Cl	35	377043.5	53.0				ug/L	1641778	Standard
Kr	83	51.9	2.1				ug/L	60	Standard
Br	81	9939.1	2.2				ug/L	11554	Standard
P	31	22024.4	6.0				ug/L	45410	Standard
S	34	2252693.1	4.9				ug/L	568857	Standard
Sr	88	985601.2	2.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.319	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		90.523	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		91.872	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		95.238	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010507

Report Date/Time: Thursday, May 10, 2012 13:34:37

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.157
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1205010507
 Report Date/Time: Thursday, May 10, 2012 13:34:37
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010508

Sample Date/Time: Thursday, May 10, 2012 13:34:56

Number of Replicates: 3

Autosampler Position: 254

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12148.2	3.6	119.0529	53.265	44.7	ug/L	12600	Standard
|	Be	9	11.7	99.0	-0.0105	0.004	36.9	ug/L	5	Standard
|	Al	27	108935.2	0.5	7.0079	0.096	1.4	ug/L	16102	Standard
>	Sc	45	228363.1	0.7				ug/L	254529	Standard
|	Ti	47	106.3	16.2	0.0139	0.013	90.4	ug/L	84	Standard
|	V	51	4584.9	2.0	0.0303	0.005	17.0	ug/L	5785	Standard
|	Cr	52	12375.4	1.3	0.1300	0.012	9.4	ug/L	12212	Standard
|	Cr	53	1233.4	22.7	-0.7567	0.173	22.9	ug/L	5042	Standard
|	Mn	55	141414.1	2.3	7.4133	0.199	2.7	ug/L	1290	Standard
|	Co	59	1610.1	4.3	0.1099	0.005	4.9	ug/L	143	Standard
|	Ni	60	746.7	0.1	0.2416	0.001	0.5	ug/L	79	Standard
|	Cu	65	781.0	0.6	0.2565	0.001	0.5	ug/L	154	Standard
|	Zn	66	19644.1	0.9	16.8694	0.203	1.2	ug/L	194	Standard
>	Ge	72	213855.7	0.4				ug/L	232024	Standard
|	As	75	-128.8	10.2	0.1038	0.013	12.2	ug/L	-297	Standard
|	Se	82	25.4	30.0	0.0562	0.064	113.5	ug/L	17	Standard
|	Se-1	77	86.7	14.7	-0.6803	0.169	24.9	ug/L	180	Standard
|	Ga	71	186863.6	0.9				mg/L	210139	Standard
|	Rb	85	980.0	7.6				ug/L	12	Standard
>	Y	89	194556.2	0.8				ug/L	214065	Standard
|	Rh	103	6.7	43.3				ug/L	0	Standard
|	Mo	98	173.2	4.8	0.0373	0.002	4.3	ug/L	6	Standard
|	Ag	107	40.3	23.8	-0.0021	0.001	61.1	ug/L	33	Standard
|	Cd	111	162.0	12.1	-0.0539	0.005	8.5	mg/L	437	Standard
|	Cd	114	398.4	6.9	-0.0632	0.002	3.7	ug/L	1160	Standard
>	In	115	594659.8	1.4				ug/L	646604	Standard
|	Sn	118	530.3	11.5	-0.0194	0.004	22.2	ug/L	864	Standard
|	Sb	123	165.2	13.0	0.0138	0.002	15.0	ug/L	18	Standard
|	Ba	135	5300.6	1.7	1.2434	0.031	2.5	ug/L	39	Standard
|	Ce	140	1125.0	3.6				ug/L	46	Standard
>	Tb	159	653480.8	2.0				ug/L	695671	Standard
|	Ho	165	50.0	12.5				ug/L	9	Standard
|	Tl	203	481.3	25.5	-0.0063	0.008	127.0	ug/L	687	Standard
|	Tl	205	1154.7	18.8	-0.0048	0.006	126.6	ug/L	1624	Standard
|	Pb	206	421.7	7.4	0.0103	0.003	26.2	ug/L	305	Standard
|	Pb	207	346.7	5.7	0.0093	0.002	22.3	ug/L	231	Standard
|	Pb	208	1589.7	6.9	0.0087	0.002	27.5	ug/L	1129	Standard
|	U	238	188.3	8.0	0.0094	0.001	6.5	ug/L	3	Standard
>	Bi	209	389275.7	0.7				ug/L	405108	Standard
|	Na	23	683.3	12.9	0.1843	0.028	15.3	mg/L	118	Standard
|	Mg	24	125270.9	2.1	0.2547	0.006	2.2	mg/L	377	Standard

Sample ID: L1205010508

Report Date/Time: Thursday, May 10, 2012 13:37:29

Page 1

Approved: May 11, 2012

J. J. H.

K	39	2288.5	2.5	0.1691	0.004	2.4	mg/L	583	Standard
Ca	43	733.4	9.6	1.7695	0.178	10.1	mg/L	73	Standard
Fe	54	635.2	4.5	-0.0265	0.005	18.6	mg/L	785	Standard
Fe	57	13380.9	1.2	0.0510	0.002	3.0	mg/L	6133	Standard
Sc-1	45	228363.1	0.7				mg/L	254529	Standard
Cl	35	359537.1	55.2				ug/L	1641778	Standard
Kr	83	46.4	4.6				ug/L	60	Standard
Br	81	9638.1	1.4				ug/L	11554	Standard
P	31	24524.0	2.1				ug/L	45410	Standard
S	34	865196.1	0.1				ug/L	568857	Standard
Sr	88	96551.8	2.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.170	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		90.887	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		91.967	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		93.935	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010508

Report Date/Time: Thursday, May 10, 2012 13:37:29

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	96.092
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010508
 Report Date/Time: Thursday, May 10, 2012 13:37:29
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010509 WG397022-02

Sample Date/Time: Thursday, May 10, 2012 13:37:49

Number of Replicates: 3

Autosampler Position: 255

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12179.9	1.1	134.6997	28.634	21.3	ug/L	12600	Standard
|	Be	9	13.3	21.7	-0.0099	0.001	9.3	ug/L	5	Standard
|	Al	27	63538.0	1.2	3.7962	0.014	0.4	ug/L	16102	Standard
>	Sc	45	226385.6	1.5				ug/L	254529	Standard
|	Ti	47	73.0	2.4	-0.0090	0.001	16.6	ug/L	84	Standard
|	V	51	4213.3	3.6	0.0088	0.009	103.2	ug/L	5785	Standard
|	Cr	52	11876.3	2.1	0.0998	0.015	15.3	ug/L	12212	Standard
|	Cr	53	1182.5	22.9	-0.7775	0.169	21.7	ug/L	5042	Standard
|	Mn	55	144535.9	1.3	7.6944	0.067	0.9	ug/L	1290	Standard
|	Co	59	1576.4	2.3	0.1092	0.002	1.7	ug/L	143	Standard
|	Ni	60	871.7	2.8	0.2907	0.008	2.8	ug/L	79	Standard
|	Cu	65	751.7	4.7	0.2495	0.015	6.2	ug/L	154	Standard
|	Zn	66	17303.9	1.6	15.0664	0.263	1.7	ug/L	194	Standard
>	Ge	72	210664.5	0.7				ug/L	232024	Standard
|	As	75	-117.2	14.1	0.1130	0.017	14.9	ug/L	-297	Standard
|	Se	82	23.0	12.2	0.0394	0.024	61.2	ug/L	17	Standard
|	Se-1	77	108.3	2.7	-0.3737	0.045	12.2	ug/L	180	Standard
|	Ga	71	184287.4	1.1				mg/L	210139	Standard
|	Rb	85	1005.0	9.5				ug/L	12	Standard
>	Y	89	194625.4	0.8				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	140.1	5.2	0.0286	0.002	5.8	ug/L	6	Standard
|	Ag	107	38.0	13.7	-0.0024	0.001	27.9	ug/L	33	Standard
|	Cd	111	149.4	8.0	-0.0570	0.003	4.7	mg/L	437	Standard
|	Cd	114	413.7	2.8	-0.0619	0.001	1.2	ug/L	1160	Standard
>	In	115	595188.1	1.0				ug/L	646604	Standard
|	Sn	118	495.0	3.9	-0.0218	0.002	7.7	ug/L	864	Standard
|	Sb	123	135.2	12.7	0.0108	0.002	14.5	ug/L	18	Standard
|	Ba	135	5441.6	2.1	1.2753	0.014	1.1	ug/L	39	Standard
|	Ce	140	513.7	7.5				ug/L	46	Standard
>	Tb	159	655369.9	0.7				ug/L	695671	Standard
|	Ho	165	25.3	25.7				ug/L	9	Standard
|	Tl	203	490.7	21.9	-0.0058	0.007	118.3	ug/L	687	Standard
|	Tl	205	1094.7	25.8	-0.0065	0.008	116.6	ug/L	1624	Standard
|	Pb	206	336.3	10.2	0.0035	0.003	77.9	ug/L	305	Standard
|	Pb	207	293.3	9.6	0.0042	0.003	65.0	ug/L	231	Standard
|	Pb	208	1353.4	6.6	0.0039	0.002	47.0	ug/L	1129	Standard
|	U	238	187.7	3.0	0.0094	0.000	2.7	ug/L	3	Standard
>	Bi	209	390430.9	0.8				ug/L	405108	Standard
|	Na	23	680.0	1.9	0.1850	0.003	1.7	mg/L	118	Standard
|	Mg	24	127783.3	0.8	0.2621	0.005	1.8	mg/L	377	Standard

Sample ID: L1205010509 WG397022-02

Report Date/Time: Thursday, May 10, 2012 13:40:22

Page 1

Approved: May 11, 2012




K	39	2275.2	0.2	0.1698	0.003	1.7	mg/L	583	Standard
Ca	43	770.0	8.1	1.8874	0.188	9.9	mg/L	73	Standard
Fe	54	480.3	14.3	-0.0565	0.015	26.6	mg/L	785	Standard
Fe	57	8884.3	0.6	0.0228	0.001	2.3	mg/L	6133	Standard
Sc-1	45	226385.6	1.5				mg/L	254529	Standard
Cl	35	347917.9	56.0				ug/L	1641778	Standard
Kr	83	45.6	1.5				ug/L	60	Standard
Br	81	9648.1	1.6				ug/L	11554	Standard
P	31	23590.0	0.9				ug/L	45410	Standard
S	34	870683.1	0.7				ug/L	568857	Standard
Sr	88	101027.5	2.1				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.794	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		90.919	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		92.048	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		94.207	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010509 WG397022-02
 Report Date/Time: Thursday, May 10, 2012 13:40:22
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	96.377
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010509 WG397022-02
 Report Date/Time: Thursday, May 10, 2012 13:40:22
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010509DP WG397022-07

Sample Date/Time: Thursday, May 10, 2012 13:40:42

Number of Replicates: 3

Autosampler Position: 256

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12243.3	4.7	130.8175	84.583	64.7	ug/L	12600	Standard
|	Be	9	6.7	114.6	-0.0122	0.003	20.6	ug/L	5	Standard
|	Al	27	73343.8	1.9	4.4597	0.032	0.7	ug/L	16102	Standard
>	Sc	45	228307.5	1.6				ug/L	254529	Standard
|	Ti	47	77.0	9.4	-0.0057	0.005	92.8	ug/L	84	Standard
|	V	51	4279.7	1.9	0.0158	0.007	47.1	ug/L	5785	Standard
|	Cr	52	11621.8	0.6	0.0836	0.005	6.5	ug/L	12212	Standard
|	Cr	53	1236.7	22.2	-0.7366	0.178	24.2	ug/L	5042	Standard
|	Mn	55	136144.1	1.8	7.2966	0.119	1.6	ug/L	1290	Standard
|	Co	59	1534.7	1.9	0.1069	0.002	2.1	ug/L	143	Standard
|	Ni	60	813.0	4.4	0.2717	0.014	5.2	ug/L	79	Standard
|	Cu	65	721.0	6.3	0.2394	0.019	7.8	ug/L	154	Standard
|	Zn	66	16087.5	1.6	14.0983	0.174	1.2	ug/L	194	Standard
>	Ge	72	209127.7	0.5				ug/L	232024	Standard
|	As	75	-143.8	6.5	0.0864	0.010	11.1	ug/L	-297	Standard
|	Se	82	21.0	14.8	0.0235	0.026	112.8	ug/L	17	Standard
|	Se-1	77	90.7	11.0	-0.6010	0.134	22.3	ug/L	180	Standard
|	Ga	71	183034.3	0.8				mg/L	210139	Standard
|	Rb	85	903.4	8.3				ug/L	12	Standard
>	Y	89	187290.6	1.2				ug/L	214065	Standard
|	Rh	103	5.0	0.0				ug/L	0	Standard
|	Mo	98	144.1	7.7	0.0303	0.003	9.5	ug/L	6	Standard
|	Ag	107	37.7	5.5	-0.0024	0.000	8.9	ug/L	33	Standard
|	Cd	111	148.7	1.2	-0.0565	0.001	1.4	mg/L	437	Standard
|	Cd	114	411.1	5.1	-0.0614	0.003	4.2	ug/L	1160	Standard
>	In	115	584536.6	1.5				ug/L	646604	Standard
|	Sn	118	529.7	1.4	-0.0188	0.001	5.2	ug/L	864	Standard
|	Sb	123	138.5	5.5	0.0114	0.001	7.3	ug/L	18	Standard
|	Ba	135	5223.9	1.2	1.2468	0.034	2.7	ug/L	39	Standard
|	Ce	140	514.7	4.1				ug/L	46	Standard
>	Tb	159	644847.1	1.3				ug/L	695671	Standard
|	Ho	165	27.3	38.8				ug/L	9	Standard
|	Tl	203	482.7	20.7	-0.0059	0.006	107.7	ug/L	687	Standard
|	Tl	205	1145.4	22.6	-0.0047	0.007	145.6	ug/L	1624	Standard
|	Pb	206	362.3	10.2	0.0059	0.003	46.2	ug/L	305	Standard
|	Pb	207	321.7	12.5	0.0073	0.004	52.0	ug/L	231	Standard
|	Pb	208	1426.0	9.5	0.0058	0.003	47.7	ug/L	1129	Standard
|	U	238	192.0	12.2	0.0097	0.001	9.2	ug/L	3	Standard
>	Bi	209	384773.4	1.5				ug/L	405108	Standard
|	Na	23	703.3	4.0	0.1906	0.012	6.5	mg/L	118	Standard
|	Mg	24	123770.2	0.6	0.2517	0.005	1.9	mg/L	377	Standard

Sample ID: L1205010509DP WG397022-07

Report Date/Time: Thursday, May 10, 2012 13:43:14

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	2106.8	4.7	0.1516	0.007	4.8	mg/L	583	Standard
Ca	43	768.4	4.9	1.8647	0.110	5.9	mg/L	73	Standard
Fe	54	413.4	9.7	-0.0708	0.007	10.6	mg/L	785	Standard
Fe	57	8540.7	3.3	0.0202	0.002	12.0	mg/L	6133	Standard
Sc-1	45	228307.5	1.6				mg/L	254529	Standard
Cl	35	395057.0	40.3				ug/L	1641778	Standard
Kr	83	49.4	10.1				ug/L	60	Standard
Br	81	9588.0	3.2				ug/L	11554	Standard
P	31	23126.8	2.9				ug/L	45410	Standard
S	34	843764.9	1.5				ug/L	568857	Standard
Sr	88	94695.1	2.7				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.132	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		87.492	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		90.401	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		92.694	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010509DP WG397022-07
 Report Date/Time: Thursday, May 10, 2012 13:43:14
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	94.980
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010509DP WG397022-07
 Report Date/Time: Thursday, May 10, 2012 13:43:14
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205010510

Sample Date/Time: Thursday, May 10, 2012 13:43:34

Number of Replicates: 3

Autosampler Position: 257

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12870.5	1.1	29.6464	39.872	134.5	ug/L	12600	Standard
|	Be	9	5.0	100.0	-0.0129	0.002	11.7	ug/L	5	Standard
|	Al	27	47832.1	3.8	2.2257	0.041	1.8	ug/L	16102	Standard
>	Sc	45	259009.4	2.7				ug/L	254529	Standard
|	Ti	47	164.3	0.9	0.0491	0.003	6.8	ug/L	84	Standard
|	V	51	4920.6	2.0	0.0367	0.010	27.9	ug/L	5785	Standard
|	Cr	52	14031.8	1.6	0.2203	0.012	5.7	ug/L	12212	Standard
|	Cr	53	1540.9	17.9	-0.6141	0.151	24.6	ug/L	5042	Standard
|	Mn	55	2219.2	2.0	0.0269	0.001	3.4	ug/L	1290	Standard
|	Co	59	158.0	10.4	0.0009	0.001	102.7	ug/L	143	Standard
|	Ni	60	134.7	11.1	0.0217	0.006	28.4	ug/L	79	Standard
|	Cu	65	409.0	8.9	0.1024	0.010	9.7	ug/L	154	Standard
|	Zn	66	1972.1	3.4	1.4492	0.032	2.2	ug/L	194	Standard
>	Ge	72	225168.8	2.5				ug/L	232024	Standard
|	As	75	-236.6	14.1	0.0122	0.033	268.0	ug/L	-297	Standard
|	Se	82	28.1	22.6	0.0673	0.047	70.4	ug/L	17	Standard
|	Se-1	77	111.0	15.4	-0.4358	0.185	42.4	ug/L	180	Standard
|	Ga	71	205550.6	2.9				mg/L	210139	Standard
|	Rb	85	43.3	56.9				ug/L	12	Standard
>	Y	89	216012.5	1.6				ug/L	214065	Standard
|	Rh	103	5.0	173.2				ug/L	0	Standard
|	Mo	98	15.6	25.7	-0.0043	0.001	22.5	ug/L	6	Standard
|	Ag	107	56.0	18.1	-0.0004	0.001	277.1	ug/L	33	Standard
|	Cd	111	479.3	5.6	0.0174	0.007	40.1	mg/L	437	Standard
|	Cd	114	1228.9	5.3	0.0083	0.005	54.7	ug/L	1160	Standard
>	In	115	621649.5	1.2				ug/L	646604	Standard
|	Sn	118	939.0	2.7	0.0059	0.001	16.4	ug/L	864	Standard
|	Sb	123	147.9	4.2	0.0114	0.001	6.3	ug/L	18	Standard
|	Ba	135	279.7	6.9	0.0550	0.005	9.1	ug/L	39	Standard
|	Ce	140	98.3	7.4				ug/L	46	Standard
>	Tb	159	692415.2	0.4				ug/L	695671	Standard
|	Ho	165	7.3	20.8				ug/L	9	Standard
|	Tl	203	321.3	44.7	-0.0165	0.009	53.1	ug/L	687	Standard
|	Tl	205	744.7	54.9	-0.0158	0.011	67.0	ug/L	1624	Standard
|	Pb	206	372.7	1.9	0.0064	0.000	3.4	ug/L	305	Standard
|	Pb	207	317.0	10.3	0.0065	0.003	41.1	ug/L	231	Standard
|	Pb	208	1420.4	3.3	0.0054	0.001	12.4	ug/L	1129	Standard
|	U	238	23.7	60.1	0.0033	0.001	16.3	ug/L	3	Standard
>	Bi	209	389367.5	1.3				ug/L	405108	Standard
|	Na	23	91.7	13.7	-0.0023	0.003	138.2	mg/L	118	Standard
|	Mg	24	3125.3	3.6	0.0048	0.000	1.9	mg/L	377	Standard

Sample ID: L1205010510

Report Date/Time: Thursday, May 10, 2012 13:46:08

Page 1

Approved: May 11, 2012

J. J. H.

K	39	745.0	4.6	0.0118	0.004	31.1	mg/L	583	Standard
Ca	43	70.0	32.7	-0.0279	0.052	187.6	mg/L	73	Standard
Fe	54	989.6	2.1	0.0208	0.003	12.9	mg/L	785	Standard
Fe	57	6309.6	5.3	0.0011	0.001	88.7	mg/L	6133	Standard
Sc-1	45	259009.4	2.7				mg/L	254529	Standard
Cl	35	518695.5	39.1				ug/L	1641778	Standard
Kr	83	55.9	10.2				ug/L	60	Standard
Br	81	11835.5	3.1				ug/L	11554	Standard
P	31	69351.0	3.8				ug/L	45410	Standard
S	34	863926.5	2.2				ug/L	568857	Standard
Sr	88	1346.7	5.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.046	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		100.910	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		96.141	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		99.532	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010510

Report Date/Time: Thursday, May 10, 2012 13:46:08

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	96.114
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205010510
 Report Date/Time: Thursday, May 10, 2012 13:46:08
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009901

Sample Date/Time: Thursday, May 10, 2012 13:46:28

Number of Replicates: 3

Autosampler Position: 258

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	140904.1	2.7	11528.5872	428.565	3.7	ug/L	12600	Standard
|	Be	9	40.0	25.0	-0.0037	0.003	70.8	ug/L	5	Standard
|	Al	27	488288.5	2.7	27.4083	0.212	0.8	ug/L	16102	Standard
>	Sc	45	283195.6	3.3				ug/L	254529	Standard
|	Ti	47	2697.6	27.1	1.7710	0.459	25.9	ug/L	84	Standard
|	V	51	9599.1	2.5	0.3555	0.016	4.4	ug/L	5785	Standard
|	Cr	52	19095.4	3.1	0.6957	0.027	3.9	ug/L	12212	Standard
|	Cr	53	2800.3	9.4	0.1515	0.121	79.9	ug/L	5042	Standard
|	Mn	55	1812597.7	2.4	92.3020	0.264	0.3	ug/L	1290	Standard
|	Co	59	5463.7	2.5	0.3818	0.008	2.1	ug/L	143	Standard
|	Ni	60	5061.2	7.9	1.7044	0.095	5.6	ug/L	79	Standard
|	Cu	65	1486.7	2.6	0.5107	0.001	0.2	ug/L	154	Standard
|	Zn	66	4674.7	2.7	3.7239	0.091	2.4	ug/L	194	Standard
>	Ge	72	222458.8	2.4				ug/L	232024	Standard
|	As	75	1802.8	5.4	1.8755	0.050	2.6	ug/L	-297	Standard
|	Se	82	86.0	7.5	0.5413	0.038	6.9	ug/L	17	Standard
|	Se-1	77	165.7	15.4	0.2753	0.324	117.8	ug/L	180	Standard
|	Ga	71	200561.4	2.1				mg/L	210139	Standard
|	Rb	85	23813.7	4.4				ug/L	12	Standard
>	Y	89	221412.4	3.6				ug/L	214065	Standard
|	Rh	103	130.0	17.6				ug/L	0	Standard
|	Mo	98	5953.5	4.5	1.4866	0.047	3.2	ug/L	6	Standard
|	Ag	107	107.3	6.9	0.0060	0.001	18.4	ug/L	33	Standard
|	Cd	111	1068.5	3.6	0.1527	0.005	3.2	mg/L	437	Standard
|	Cd	114	2800.1	2.8	0.1466	0.004	2.9	ug/L	1160	Standard
>	In	115	622054.3	1.6				ug/L	646604	Standard
|	Sn	118	1287.1	1.4	0.0288	0.000	0.7	ug/L	864	Standard
|	Sb	123	889.9	3.6	0.0812	0.002	2.0	ug/L	18	Standard
|	Ba	135	305014.1	1.2	68.8329	0.368	0.5	ug/L	39	Standard
|	Ce	140	14474.6	9.3				ug/L	46	Standard
>	Tb	159	712064.4	1.6				ug/L	695671	Standard
|	Ho	165	251.7	4.6				ug/L	9	Standard
|	Tl	203	693.7	5.3	0.0090	0.003	34.7	ug/L	687	Standard
|	Tl	205	1665.1	3.4	0.0107	0.001	7.6	ug/L	1624	Standard
|	Pb	206	3961.2	4.2	0.3035	0.008	2.7	ug/L	305	Standard
|	Pb	207	3315.7	2.1	0.2977	0.003	0.9	ug/L	231	Standard
|	Pb	208	15456.1	1.8	0.2981	0.001	0.4	ug/L	1129	Standard
|	U	238	6685.8	0.8	0.2627	0.002	0.9	ug/L	3	Standard
>	Bi	209	373698.9	1.7				ug/L	405108	Standard
|	Na	23	88301.7	2.7	22.0109	0.477	2.2	mg/L	118	Standard
|	Mg	24	3348572.3	2.5	5.5108	0.194	3.5	mg/L	377	Standard

Sample ID: L1205009901

Report Date/Time: Thursday, May 10, 2012 13:49:01

Page 1

Approved: May 11, 2012

K	39	21685.5	2.9	1.6351	0.037	2.3	mg/L	583	Standard
Ca	43	18579.7	3.4	39.9056	0.244	0.6	mg/L	73	Standard
Fe	54	17795.9	1.2	2.7112	0.104	3.8	mg/L	785	Standard
Fe	57	526806.9	2.4	2.6757	0.059	2.2	mg/L	6133	Standard
Sc-1	45	283195.6	3.3				mg/L	254529	Standard
Cl	35	3136924.6	6.1				ug/L	1641778	Standard
Kr	83	53.3	4.4				ug/L	60	Standard
Br	81	39801.4	1.3				ug/L	11554	Standard
P	31	207279.4	2.0				ug/L	45410	Standard
S	34	1721635.3	2.7				ug/L	568857	Standard
Sr	88	5560232.3	4.3				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.878	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.432	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		96.203	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.356	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009901

Report Date/Time: Thursday, May 10, 2012 13:49:01

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	92.247
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205009901
 Report Date/Time: Thursday, May 10, 2012 13:49:01
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009902

Sample Date/Time: Thursday, May 10, 2012 13:49:21

Number of Replicates: 3

Autosampler Position: 259

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	146760.7	0.8	11886.1940	111.139	0.9	ug/L	12600	Standard
|	Be	9	26.7	43.3	-0.0073	0.003	43.4	ug/L	5	Standard
|	Al	27	169609.4	2.5	8.8787	0.285	3.2	ug/L	16102	Standard
>	Sc	45	286818.1	1.7				ug/L	254529	Standard
|	Ti	47	1153.4	4.3	0.6929	0.022	3.1	ug/L	84	Standard
|	V	51	8968.2	3.1	0.2889	0.013	4.4	ug/L	5785	Standard
|	Cr	52	20273.6	2.6	0.7297	0.025	3.4	ug/L	12212	Standard
|	Cr	53	2736.1	2.2	0.0501	0.055	109.4	ug/L	5042	Standard
|	Mn	55	1882688.5	2.3	92.0834	2.305	2.5	ug/L	1290	Standard
|	Co	59	5795.8	2.3	0.3891	0.008	1.9	ug/L	143	Standard
|	Ni	60	5117.2	2.0	1.6557	0.020	1.2	ug/L	79	Standard
|	Cu	65	1152.7	4.0	0.3676	0.019	5.1	ug/L	154	Standard
|	Zn	66	2197.8	3.2	1.5844	0.031	2.0	ug/L	194	Standard
>	Ge	72	231634.4	1.5				ug/L	232024	Standard
|	As	75	1847.4	2.9	1.8503	0.051	2.8	ug/L	-297	Standard
|	Se	82	89.4	12.2	0.5413	0.089	16.4	ug/L	17	Standard
|	Se-1	77	169.0	3.6	0.2326	0.082	35.5	ug/L	180	Standard
|	Ga	71	205507.5	2.3				mg/L	210139	Standard
|	Rb	85	22937.4	2.7				ug/L	12	Standard
>	Y	89	220516.5	0.8				ug/L	214065	Standard
|	Rh	103	140.0	18.6				ug/L	0	Standard
|	Mo	98	6131.2	1.5	1.4972	0.007	0.5	ug/L	6	Standard
|	Ag	107	43.7	19.5	-0.0021	0.001	48.9	ug/L	33	Standard
|	Cd	111	521.5	2.6	0.0243	0.004	15.0	mg/L	437	Standard
|	Cd	114	1293.9	5.4	0.0114	0.005	40.0	ug/L	1160	Standard
>	In	115	636286.6	1.3				ug/L	646604	Standard
|	Sn	118	1423.1	4.8	0.0357	0.003	9.1	ug/L	864	Standard
|	Sb	123	546.5	4.5	0.0478	0.002	3.5	ug/L	18	Standard
|	Ba	135	302427.3	2.1	66.7148	0.512	0.8	ug/L	39	Standard
|	Ce	140	5678.1	1.8				ug/L	46	Standard
>	Tb	159	732055.3	1.2				ug/L	695671	Standard
|	Ho	165	135.0	11.6				ug/L	9	Standard
|	Tl	203	625.7	5.0	0.0038	0.002	51.0	ug/L	687	Standard
|	Tl	205	1450.7	5.2	0.0040	0.002	41.0	ug/L	1624	Standard
|	Pb	206	712.7	3.7	0.0347	0.003	7.6	ug/L	305	Standard
|	Pb	207	572.3	2.6	0.0315	0.001	2.8	ug/L	231	Standard
|	Pb	208	2691.1	1.4	0.0320	0.001	3.7	ug/L	1129	Standard
|	U	238	5991.5	4.1	0.2317	0.007	3.0	ug/L	3	Standard
>	Bi	209	380031.6	1.1				ug/L	405108	Standard
|	Na	23	88925.2	1.0	21.8823	0.251	1.1	mg/L	118	Standard
|	Mg	24	3372655.9	1.8	5.4777	0.093	1.7	mg/L	377	Standard

Sample ID: L1205009902

Report Date/Time: Thursday, May 10, 2012 13:51:53

Page 1

Approved: May 11, 2012

J. J. H.

K	39	22022.7	2.4	1.6400	0.063	3.9	mg/L	583	Standard
Ca	43	18564.7	3.1	39.3702	1.177	3.0	mg/L	73	Standard
Fe	54	14260.3	3.0	2.1112	0.036	1.7	mg/L	785	Standard
Fe	57	423861.1	2.6	2.1181	0.057	2.7	mg/L	6133	Standard
Sc-1	45	286818.1	1.7				mg/L	254529	Standard
Cl	35	3373707.2	4.1				ug/L	1641778	Standard
Kr	83	59.4	10.0				ug/L	60	Standard
Br	81	37509.7	2.9				ug/L	11554	Standard
P	31	157762.2	1.3				ug/L	45410	Standard
S	34	1800017.2	1.8				ug/L	568857	Standard
Sr	88	5510391.4	1.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.832	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.014	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.404	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.230	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009902

Report Date/Time: Thursday, May 10, 2012 13:51:53

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	93.810
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205009902
 Report Date/Time: Thursday, May 10, 2012 13:51:53
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009903

Sample Date/Time: Thursday, May 10, 2012 13:52:13

Number of Replicates: 3

Autosampler Position: 260

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	194683.5	3.0	16430.5692	543.637	3.3	ug/L	12600	Standard
|	Be	9	20.0	25.0	-0.0090	0.001	15.7	ug/L	5	Standard
|	Al	27	134097.5	1.1	6.9662	0.172	2.5	ug/L	16102	Standard
>	Sc	45	282740.5	3.2				ug/L	254529	Standard
|	Ti	47	666.7	7.5	0.3809	0.026	6.8	ug/L	84	Standard
|	V	51	6734.7	3.9	0.1512	0.015	9.6	ug/L	5785	Standard
|	Cr	52	16972.2	1.3	0.4640	0.012	2.7	ug/L	12212	Standard
|	Cr	53	3667.1	7.9	0.6198	0.203	32.8	ug/L	5042	Standard
|	Mn	55	1971275.7	0.4	97.8812	1.661	1.7	ug/L	1290	Standard
|	Co	59	6445.7	1.5	0.4406	0.004	0.9	ug/L	143	Standard
|	Ni	60	8580.1	4.0	2.8342	0.075	2.6	ug/L	79	Standard
|	Cu	65	4157.9	2.9	1.4781	0.023	1.6	ug/L	154	Standard
|	Zn	66	64042.8	2.6	51.8970	0.668	1.3	ug/L	194	Standard
>	Ge	72	228206.2	2.0				ug/L	232024	Standard
|	As	75	141.6	20.4	0.3528	0.026	7.4	ug/L	-297	Standard
|	Se	82	108.0	4.1	0.6996	0.051	7.3	ug/L	17	Standard
|	Se-1	77	241.7	3.3	1.1586	0.040	3.4	ug/L	180	Standard
|	Ga	71	205540.3	2.5				mg/L	210139	Standard
|	Rb	85	23499.9	3.4				ug/L	12	Standard
>	Y	89	220995.7	2.6				ug/L	214065	Standard
|	Rh	103	93.3	27.5				ug/L	0	Standard
|	Mo	98	1107.2	3.4	0.2573	0.006	2.3	ug/L	6	Standard
|	Ag	107	70.3	14.0	0.0010	0.001	113.7	ug/L	33	Standard
|	Cd	111	1299.4	2.6	0.1923	0.005	2.6	mg/L	437	Standard
|	Cd	114	3391.9	2.2	0.1853	0.006	3.3	ug/L	1160	Standard
>	In	115	651374.9	1.4				ug/L	646604	Standard
|	Sn	118	1099.7	4.1	0.0132	0.003	19.4	ug/L	864	Standard
|	Sb	123	971.7	2.1	0.0848	0.001	0.9	ug/L	18	Standard
|	Ba	135	307699.6	1.8	66.3101	0.719	1.1	ug/L	39	Standard
|	Ce	140	2632.6	3.4				ug/L	46	Standard
>	Tb	159	741487.0	3.2				ug/L	695671	Standard
|	Ho	165	47.0	9.8				ug/L	9	Standard
|	Tl	203	857.7	3.3	0.0182	0.002	11.6	ug/L	687	Standard
|	Tl	205	1986.5	1.6	0.0181	0.000	1.4	ug/L	1624	Standard
|	Pb	206	3290.7	1.4	0.2407	0.003	1.2	ug/L	305	Standard
|	Pb	207	2839.3	2.7	0.2439	0.008	3.5	ug/L	231	Standard
|	Pb	208	12930.8	1.6	0.2381	0.004	1.6	ug/L	1129	Standard
|	U	238	4296.9	0.6	0.1650	0.002	1.2	ug/L	3	Standard
>	Bi	209	384543.9	1.3				ug/L	405108	Standard
|	Na	23	93983.9	1.1	23.4754	0.737	3.1	mg/L	118	Standard
|	Mg	24	4300531.2	1.8	7.0873	0.107	1.5	mg/L	377	Standard

Sample ID: L1205009903

Report Date/Time: Thursday, May 10, 2012 13:54:46

Page 1

Approved: May 11, 2012

K	39	19379.1	2.1	1.4592	0.071	4.9	mg/L	583	Standard
Ca	43	17413.3	1.4	37.4847	1.684	4.5	mg/L	73	Standard
Fe	54	2531.2	4.4	0.2551	0.030	11.6	mg/L	785	Standard
Fe	57	76027.0	2.4	0.3573	0.004	1.1	mg/L	6133	Standard
Sc-1	45	282740.5	3.2				mg/L	254529	Standard
Cl	35	3922597.8	4.7				ug/L	1641778	Standard
Kr	83	59.2	13.6				ug/L	60	Standard
Br	81	51390.3	0.8				ug/L	11554	Standard
P	31	66145.0	3.3				ug/L	45410	Standard
S	34	1900575.1	1.0				ug/L	568857	Standard
Sr	88	3512048.2	4.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.355	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.238	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.738	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.586	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009903

Report Date/Time: Thursday, May 10, 2012 13:54:46

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	94.924
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205009903
 Report Date/Time: Thursday, May 10, 2012 13:54:46
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009904

Sample Date/Time: Thursday, May 10, 2012 13:55:06

Number of Replicates: 3

Autosampler Position: 301

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	186558.4	1.7	16282.7575	309.508	1.9	ug/L	12600	Standard
|	Be	9	6.7	86.6	-0.0126	0.002	12.9	ug/L	5	Standard
|	Al	27	51472.3	1.8	2.2882	0.063	2.7	ug/L	16102	Standard
>	Sc	45	273126.4	0.3				ug/L	254529	Standard
|	Ti	47	530.0	1.9	0.2999	0.007	2.2	ug/L	84	Standard
|	V	51	7119.7	4.4	0.1889	0.018	9.3	ug/L	5785	Standard
|	Cr	52	17718.7	2.4	0.5724	0.041	7.2	ug/L	12212	Standard
|	Cr	53	4311.4	1.7	1.0621	0.064	6.0	ug/L	5042	Standard
|	Mn	55	1952668.8	1.5	99.5471	1.236	1.2	ug/L	1290	Standard
|	Co	59	5991.2	3.8	0.4200	0.013	3.2	ug/L	143	Standard
|	Ni	60	8853.3	16.4	3.0026	0.470	15.7	ug/L	79	Standard
|	Cu	65	2075.5	6.5	0.7332	0.044	6.1	ug/L	154	Standard
|	Zn	66	57542.1	2.2	47.8699	0.723	1.5	ug/L	194	Standard
>	Ge	72	222223.5	0.8				ug/L	232024	Standard
|	As	75	122.8	47.1	0.3391	0.054	15.8	ug/L	-297	Standard
|	Se	82	100.0	3.8	0.6567	0.024	3.7	ug/L	17	Standard
|	Se-1	77	258.3	7.8	1.4492	0.230	15.9	ug/L	180	Standard
|	Ga	71	199465.2	1.4				mg/L	210139	Standard
|	Rb	85	21542.0	2.7				ug/L	12	Standard
>	Y	89	212597.0	3.0				ug/L	214065	Standard
|	Rh	103	110.0	9.1				ug/L	0	Standard
|	Mo	98	998.4	2.3	0.2375	0.007	2.8	ug/L	6	Standard
|	Ag	107	45.3	1.3	-0.0019	0.000	5.3	ug/L	33	Standard
|	Cd	111	1059.6	2.0	0.1457	0.003	2.4	mg/L	437	Standard
|	Cd	114	2766.6	1.4	0.1387	0.004	2.7	ug/L	1160	Standard
>	In	115	634964.2	0.5				ug/L	646604	Standard
|	Sn	118	881.0	2.9	0.0009	0.001	147.6	ug/L	864	Standard
|	Sb	123	929.5	2.5	0.0832	0.002	2.9	ug/L	18	Standard
|	Ba	135	283704.4	1.9	62.7176	1.039	1.7	ug/L	39	Standard
|	Ce	140	1167.4	0.7				ug/L	46	Standard
>	Tb	159	716502.6	0.9				ug/L	695671	Standard
|	Ho	165	25.3	16.0				ug/L	9	Standard
|	Tl	203	782.7	6.2	0.0145	0.003	20.1	ug/L	687	Standard
|	Tl	205	1827.4	0.2	0.0149	0.000	2.2	ug/L	1624	Standard
|	Pb	206	1041.0	1.2	0.0624	0.001	1.9	ug/L	305	Standard
|	Pb	207	868.0	1.5	0.0606	0.001	2.2	ug/L	231	Standard
|	Pb	208	3976.5	1.0	0.0592	0.000	0.7	ug/L	1129	Standard
|	U	238	3829.8	1.2	0.1508	0.001	0.9	ug/L	3	Standard
>	Bi	209	375539.8	0.5				ug/L	405108	Standard
|	Na	23	89401.3	0.6	23.1019	0.205	0.9	mg/L	118	Standard
|	Mg	24	4086150.6	1.6	6.9688	0.106	1.5	mg/L	377	Standard

Sample ID: L1205009904

Report Date/Time: Thursday, May 10, 2012 13:57:38

Page 1

Approved: May 11, 2012



K	39	18875.1	2.4	1.4704	0.040	2.7	mg/L	583	Standard
Ca	43	16250.4	0.8	36.1723	0.372	1.0	mg/L	73	Standard
Fe	54	2321.7	7.7	0.2339	0.029	12.3	mg/L	785	Standard
Fe	57	68233.3	0.5	0.3295	0.001	0.3	mg/L	6133	Standard
Sc-1	45	273126.4	0.3				mg/L	254529	Standard
Cl	35	3822923.3	4.3				ug/L	1641778	Standard
Kr	83	54.2	3.4				ug/L	60	Standard
Br	81	47094.0	3.1				ug/L	11554	Standard
P	31	61293.0	3.7				ug/L	45410	Standard
S	34	1813447.9	0.9				ug/L	568857	Standard
Sr	88	3185110.4	3.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.776	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.314	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.200	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.994	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009904

Report Date/Time: Thursday, May 10, 2012 13:57:38

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	92.701
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205009904
 Report Date/Time: Thursday, May 10, 2012 13:57:38
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 13:58:00

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12922.2	0.8	34.0670	39.602	116.2	ug/L	12600	Standard
|	Be	9	168106.0	5.6	49.5642	3.561	7.2	ug/L	5	Standard
|	Al	27	852373.1	5.2	53.0563	3.956	7.5	ug/L	16102	Standard
>	Sc	45	259138.0	2.3				ug/L	254529	Standard
|	Ti	47	152604.0	3.8	101.1939	3.025	3.0	ug/L	84	Standard
|	V	51	785889.7	5.2	51.2242	2.648	5.2	ug/L	5785	Standard
|	Cr	52	584149.7	4.9	50.6956	2.539	5.0	ug/L	12212	Standard
|	Cr	53	87700.7	3.0	49.6919	1.454	2.9	ug/L	5042	Standard
|	Mn	55	1037319.3	2.8	51.4160	1.312	2.6	ug/L	1290	Standard
|	Co	59	737147.4	2.7	51.5112	1.543	3.0	ug/L	143	Standard
|	Ni	60	155092.0	2.5	51.6077	1.132	2.2	ug/L	79	Standard
|	Cu	65	139146.0	2.8	51.0448	1.294	2.5	ug/L	154	Standard
|	Zn	66	62167.7	2.2	50.3346	0.868	1.7	ug/L	194	Standard
>	Ge	72	228397.3	1.9				ug/L	232024	Standard
|	As	75	56660.2	2.4	50.7294	0.594	1.2	ug/L	-297	Standard
|	Se	82	6583.0	3.6	52.0338	1.034	2.0	ug/L	17	Standard
|	Se-1	77	4336.3	3.6	51.6068	1.704	3.3	ug/L	180	Standard
|	Ga	71	205532.3	1.9				mg/L	210139	Standard
|	Rb	85	1051.7	7.6				ug/L	12	Standard
>	Y	89	218643.3	1.8				ug/L	214065	Standard
|	Rh	103	40.0					ug/L	0	Standard
|	Mo	98	416401.8	4.1	100.9006	2.360	2.3	ug/L	6	Standard
|	Ag	107	426435.2	2.0	51.0861	0.042	0.1	ug/L	33	Standard
|	Cd	111	226667.1	3.5	50.1717	0.789	1.6	mg/L	437	Standard
|	Cd	114	585472.5	2.9	49.6572	0.554	1.1	ug/L	1160	Standard
>	In	115	644497.0	1.9				ug/L	646604	Standard
|	Sn	118	786964.5	3.3	49.9478	0.722	1.4	ug/L	864	Standard
|	Sb	123	539178.2	3.6	48.9445	0.861	1.8	ug/L	18	Standard
|	Ba	135	234549.8	3.7	51.0724	0.953	1.9	ug/L	39	Standard
|	Ce	140	898.7	3.4				ug/L	46	Standard
>	Tb	159	717817.0	1.3				ug/L	695671	Standard
|	Ho	165	22.7	15.5				ug/L	9	Standard
|	Tl	203	820606.5	3.0	51.2125	1.081	2.1	ug/L	687	Standard
|	Tl	205	1909386.0	2.6	50.3086	1.069	2.1	ug/L	1624	Standard
|	Pb	206	654859.9	3.3	51.2164	1.314	2.6	ug/L	305	Standard
|	Pb	207	556729.6	3.0	51.0489	0.955	1.9	ug/L	231	Standard
|	Pb	208	2584261.8	3.2	50.9096	0.911	1.8	ug/L	1129	Standard
|	U	238	1308232.2	3.5	48.3266	1.488	3.1	ug/L	3	Standard
>	Bi	209	393903.8	2.2				ug/L	405108	Standard
|	Na	23	19037.0	4.0	5.1682	0.317	6.1	mg/L	118	Standard
|	Mg	24	2850379.0	2.6	5.1268	0.236	4.6	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 14:00:33

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	62252.7	2.4	5.2414	0.205	3.9	mg/L	583	Standard
Ca	43	2255.2	1.8	5.1295	0.215	4.2	mg/L	73	Standard
Fe	54	32622.7	4.1	5.5835	0.284	5.1	mg/L	785	Standard
Fe	57	913969.9	2.3	5.1051	0.212	4.1	mg/L	6133	Standard
Sc-1	45	259138.0	2.3				mg/L	254529	Standard
Cl	35	544345.6	38.4				ug/L	1641778	Standard
Kr	83	52.9	3.5				ug/L	60	Standard
Br	81	12506.9	11.2				ug/L	11554	Standard
P	31	64403.3	1.1				ug/L	45410	Standard
S	34	741873.4	1.7				ug/L	568857	Standard
Sr	88	830.0	20.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	106.113		
Sc	45			
Ti	47	101.194		
V	51	102.448		
Cr	52	101.391		
Cr	53			
Mn	55	102.832		
Co	59	103.022		
Ni	60	103.215		
Cu	65	102.090		
Zn	66	100.669		
Ge	72		98.437	
As	75	101.459		
Se	82	104.068		
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.139	
Rh	103			
Mo	98	100.901		
Ag	107	102.172		
Cd	111	100.343		
Cd	114			
In	115		99.674	
Sn	118	99.896		
Sb	123	97.889		
Ba	135	102.145		
Ce	140			
Tb	159		103.183	
Ho	165			
Tl	203	102.425		
Tl	205			
Pb	206	102.433		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 14:00:33

Page 2

Approved: May 11, 2012




Pb	207	102.098	
Pb	208	101.819	
U	238	96.653	
> Bi	209		97.234
Na	23	103.365	
Mg	24	102.536	
K	39	104.827	
Ca	43	102.590	
Fe	54	111.670	
Fe	57	102.103	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Fe	54	

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 14:00:33
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 14:00:53

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12903.8	4.6	40.7581	47.405	116.3	ug/L	12600	Standard
|	Be	9	13.3	43.3	-0.0105	0.002	17.1	ug/L	5	Standard
|	Al	27	13844.7	3.0	0.0860	0.013	15.6	ug/L	16102	Standard
>	Sc	45	257257.6	1.5				ug/L	254529	Standard
|	Ti	47	107.0	10.4	0.0108	0.006	54.4	ug/L	84	Standard
|	V	51	3637.8	3.6	-0.0473	0.006	13.6	ug/L	5785	Standard
|	Cr	52	10828.5	1.8	-0.0617	0.007	11.7	ug/L	12212	Standard
|	Cr	53	1000.9	10.9	-0.9297	0.059	6.4	ug/L	5042	Standard
|	Mn	55	1392.4	5.2	-0.0144	0.002	14.1	ug/L	1290	Standard
|	Co	59	134.7	8.9	-0.0007	0.001	100.5	ug/L	143	Standard
|	Ni	60	77.7	4.1	0.0025	0.001	23.0	ug/L	79	Standard
|	Cu	65	169.3	5.0	0.0137	0.002	15.6	ug/L	154	Standard
|	Zn	66	209.7	12.2	-0.0023	0.018	755.4	ug/L	194	Standard
>	Ge	72	223814.9	2.4				ug/L	232024	Standard
|	As	75	-213.1	5.0	0.0325	0.011	33.6	ug/L	-297	Standard
|	Se	82	29.1	17.4	0.0775	0.043	55.6	ug/L	17	Standard
|	Se-1	77	92.7	20.5	-0.6583	0.221	33.6	ug/L	180	Standard
|	Ga	71	204523.8	1.8				mg/L	210139	Standard
|	Rb	85	31.7	79.5				ug/L	12	Standard
>	Y	89	212429.6	2.8				ug/L	214065	Standard
|	Rh	103	6.7	43.3				ug/L	0	Standard
|	Mo	98	90.0	73.8	0.0140	0.016	115.2	ug/L	6	Standard
|	Ag	107	103.0	31.5	0.0052	0.004	72.2	ug/L	33	Standard
|	Cd	111	452.8	10.4	0.0099	0.008	83.1	mg/L	437	Standard
|	Cd	114	1143.5	7.7	-0.0005	0.005	1105.1	ug/L	1160	Standard
>	In	115	629459.4	2.7				ug/L	646604	Standard
|	Sn	118	965.0	9.6	0.0068	0.005	74.4	ug/L	864	Standard
|	Sb	123	226.2	41.3	0.0184	0.008	45.2	ug/L	18	Standard
|	Ba	135	50.7	36.7	0.0031	0.004	130.6	ug/L	39	Standard
|	Ce	140	47.0	12.9				ug/L	46	Standard
>	Tb	159	699557.3	2.5				ug/L	695671	Standard
|	Ho	165	11.3	35.7				ug/L	9	Standard
|	Tl	203	368.3	45.5	-0.0138	0.010	74.5	ug/L	687	Standard
|	Tl	205	823.4	42.7	-0.0139	0.009	65.1	ug/L	1624	Standard
|	Pb	206	311.3	14.8	0.0012	0.003	281.3	ug/L	305	Standard
|	Pb	207	262.0	11.5	0.0010	0.002	223.6	ug/L	231	Standard
|	Pb	208	1222.7	11.7	0.0011	0.003	236.9	ug/L	1129	Standard
|	U	238	75.0	79.7	0.0052	0.002	42.1	ug/L	3	Standard
>	Bi	209	394765.9	2.5				ug/L	405108	Standard
|	Na	23	98.3	11.7	-0.0003	0.003	1024.1	mg/L	118	Standard
|	Mg	24	580.0	23.7	0.0002	0.000	131.1	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 14:03:26

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	650.0	1.5	0.0041	0.002	39.0	mg/L	583	Standard
Ca	43	55.0	9.1	-0.0619	0.014	22.3	mg/L	73	Standard
Fe	54	982.6	10.2	0.0206	0.015	74.0	mg/L	785	Standard
Fe	57	4585.7	2.6	-0.0084	0.000	3.8	mg/L	6133	Standard
Sc-1	45	257257.6	1.5				mg/L	254529	Standard
Cl	35	509795.0	38.5				ug/L	1641778	Standard
Kr	83	52.8	12.0				ug/L	60	Standard
Br	81	11586.9	1.4				ug/L	11554	Standard
P	31	65651.4	5.5				ug/L	45410	Standard
S	34	740218.7	0.2				ug/L	568857	Standard
Sr	88	416.7	48.5				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.462	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.236	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.349	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		100.559	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 14:03:26

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	97.447
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|>	Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 14:03:26
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009905

Sample Date/Time: Thursday, May 10, 2012 14:03:47

Number of Replicates: 3

Autosampler Position: 302

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	131590.9	2.4	11124.6384	191.496	1.7	ug/L	12600	Standard
|	Be	9	6.7	43.3	-0.0126	0.001	6.5	ug/L	5	Standard
|	Al	27	189356.5	2.8	10.5501	0.209	2.0	ug/L	16102	Standard
>	Sc	45	272955.2	1.0				ug/L	254529	Standard
|	Ti	47	817.7	18.6	0.4778	0.100	21.0	ug/L	84	Standard
|	V	51	7652.7	2.1	0.2081	0.013	6.3	ug/L	5785	Standard
|	Cr	52	18267.7	1.1	0.5677	0.008	1.4	ug/L	12212	Standard
|	Cr	53	3823.0	18.3	0.6949	0.419	60.4	ug/L	5042	Standard
|	Mn	55	238386.9	2.2	11.6789	0.209	1.8	ug/L	1290	Standard
|	Co	59	1431.1	3.6	0.0891	0.003	3.5	ug/L	143	Standard
|	Ni	60	7001.6	1.7	2.2930	0.037	1.6	ug/L	79	Standard
|	Cu	65	22848.6	1.6	8.2899	0.123	1.5	ug/L	154	Standard
|	Zn	66	147346.7	0.9	118.8272	1.309	1.1	ug/L	194	Standard
>	Ge	72	229763.0	0.6				ug/L	232024	Standard
|	As	75	32.8	66.0	0.2555	0.019	7.5	ug/L	-297	Standard
|	Se	82	138.8	2.7	0.9361	0.036	3.8	ug/L	17	Standard
|	Se-1	77	224.0	2.9	0.9223	0.065	7.1	ug/L	180	Standard
|	Ga	71	206199.3	0.4				mg/L	210139	Standard
|	Rb	85	15189.3	5.7				ug/L	12	Standard
>	Y	89	219111.4	1.0				ug/L	214065	Standard
|	Rh	103	98.3	22.9				ug/L	0	Standard
|	Mo	98	1025.1	2.1	0.2390	0.004	1.8	ug/L	6	Standard
|	Ag	107	66.7	8.5	0.0006	0.001	122.3	ug/L	33	Standard
|	Cd	111	1721.6	4.4	0.2869	0.010	3.3	mg/L	437	Standard
|	Cd	114	4564.6	2.0	0.2860	0.001	0.4	ug/L	1160	Standard
>	In	115	647841.6	1.9				ug/L	646604	Standard
|	Sn	118	5076.2	2.5	0.2650	0.003	1.1	ug/L	864	Standard
|	Sb	123	3184.8	5.0	0.2851	0.009	3.2	ug/L	18	Standard
|	Ba	135	187394.7	1.8	40.6024	0.386	0.9	ug/L	39	Standard
|	Ce	140	2843.3	1.9				ug/L	46	Standard
>	Tb	159	728409.1	0.7				ug/L	695671	Standard
|	Ho	165	47.7	18.1				ug/L	9	Standard
|	Tl	203	808.0	4.6	0.0150	0.003	18.3	ug/L	687	Standard
|	Tl	205	1950.5	0.4	0.0171	0.000	1.8	ug/L	1624	Standard
|	Pb	206	42435.0	1.4	3.3776	0.024	0.7	ug/L	305	Standard
|	Pb	207	36108.6	1.0	3.3698	0.016	0.5	ug/L	231	Standard
|	Pb	208	166116.0	1.4	3.3305	0.027	0.8	ug/L	1129	Standard
|	U	238	2368.5	4.5	0.0920	0.004	3.8	ug/L	3	Standard
>	Bi	209	384583.9	0.7				ug/L	405108	Standard
|	Na	23	77873.1	3.4	20.1304	0.585	2.9	mg/L	118	Standard
|	Mg	24	2899620.6	2.3	4.9477	0.070	1.4	mg/L	377	Standard

Sample ID: L1205009905

Report Date/Time: Thursday, May 10, 2012 14:06:20

Page 1

Approved: May 11, 2012



K	39	15476.2	3.1	1.1969	0.027	2.3	mg/L	583	Standard
Ca	43	11953.0	2.6	26.5756	0.823	3.1	mg/L	73	Standard
Fe	54	2315.5	2.1	0.2332	0.009	3.9	mg/L	785	Standard
Fe	57	60965.8	2.4	0.2910	0.007	2.4	mg/L	6133	Standard
Sc-1	45	272955.2	1.0				mg/L	254529	Standard
Cl	35	3507113.7	4.2				ug/L	1641778	Standard
Kr	83	51.8	3.7				ug/L	60	Standard
Br	81	43913.6	3.6				ug/L	11554	Standard
P	31	71238.0	2.4				ug/L	45410	Standard
S	34	1598188.4	0.3				ug/L	568857	Standard
Sr	88	2331501.9	6.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.026	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.357	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.191	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.706	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009905

Report Date/Time: Thursday, May 10, 2012 14:06:20

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	94.934
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1205009905
 Report Date/Time: Thursday, May 10, 2012 14:06:20
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009906

Sample Date/Time: Thursday, May 10, 2012 14:06:40

Number of Replicates: 3

Autosampler Position: 303

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	130545.6	4.3	10783.4770	163.643	1.5	ug/L	12600	Standard
|	Be	9	10.0		-0.0117	0.000	0.7	ug/L	5	Standard
|	Al	27	48286.9	3.7	2.0420	0.024	1.2	ug/L	16102	Standard
>	Sc	45	278417.9	2.9				ug/L	254529	Standard
|	Ti	47	440.0	9.9	0.2316	0.018	7.7	ug/L	84	Standard
|	V	51	7083.0	6.5	0.1760	0.018	10.1	ug/L	5785	Standard
|	Cr	52	17844.2	4.5	0.5483	0.015	2.8	ug/L	12212	Standard
|	Cr	53	4582.4	4.5	1.1659	0.116	10.0	ug/L	5042	Standard
|	Mn	55	228971.9	5.2	11.3403	0.138	1.2	ug/L	1290	Standard
|	Co	59	1344.4	5.0	0.0842	0.002	3.0	ug/L	143	Standard
|	Ni	60	7444.5	5.0	2.4671	0.029	1.2	ug/L	79	Standard
|	Cu	65	16532.0	5.0	6.0518	0.072	1.2	ug/L	154	Standard
|	Zn	66	137379.0	4.0	112.0422	0.069	0.1	ug/L	194	Standard
>	Ge	72	227167.1	4.1				ug/L	232024	Standard
|	As	75	-19.0	352.5	0.2080	0.062	29.8	ug/L	-297	Standard
|	Se	82	119.4	4.6	0.7938	0.024	3.1	ug/L	17	Standard
|	Se-1	77	244.7	3.0	1.2121	0.111	9.2	ug/L	180	Standard
|	Ga	71	201854.0	3.8				mg/L	210139	Standard
|	Rb	85	14753.9	6.1				ug/L	12	Standard
>	Y	89	216487.7	4.5				ug/L	214065	Standard
|	Rh	103	78.3	25.8				ug/L	0	Standard
|	Mo	98	969.8	7.9	0.2279	0.013	5.9	ug/L	6	Standard
|	Ag	107	38.0	22.5	-0.0028	0.001	33.2	ug/L	33	Standard
|	Cd	111	1677.4	3.8	0.2810	0.007	2.6	mg/L	437	Standard
|	Cd	114	4335.1	4.1	0.2703	0.007	2.4	ug/L	1160	Standard
>	In	115	641264.2	2.4				ug/L	646604	Standard
|	Sn	118	1115.0	4.6	0.0153	0.002	13.7	ug/L	864	Standard
|	Sb	123	3044.4	3.7	0.2753	0.006	2.3	ug/L	18	Standard
|	Ba	135	183071.8	3.4	40.0654	0.461	1.1	ug/L	39	Standard
|	Ce	140	877.7	4.1				ug/L	46	Standard
>	Tb	159	723892.9	2.8				ug/L	695671	Standard
|	Ho	165	25.0	17.4				ug/L	9	Standard
|	Tl	203	794.7	1.0	0.0149	0.001	8.0	ug/L	687	Standard
|	Tl	205	1799.4	3.2	0.0138	0.001	7.0	ug/L	1624	Standard
|	Pb	206	13083.3	2.2	1.0422	0.016	1.6	ug/L	305	Standard
|	Pb	207	11017.7	4.4	1.0283	0.013	1.3	ug/L	231	Standard
|	Pb	208	50891.7	3.0	1.0207	0.005	0.5	ug/L	1129	Standard
|	U	238	2321.8	3.4	0.0916	0.002	1.7	ug/L	3	Standard
>	Bi	209	378617.0	3.2				ug/L	405108	Standard
|	Na	23	78131.1	3.4	19.8014	0.321	1.6	mg/L	118	Standard
|	Mg	24	2864988.2	3.3	4.7927	0.024	0.5	mg/L	377	Standard

Sample ID: L1205009906

Report Date/Time: Thursday, May 10, 2012 14:09:13

Page 1

Approved: May 11, 2012

J. J. H.

K	39	15389.5	4.0	1.1654	0.014	1.2	mg/L	583	Standard
Ca	43	11858.0	4.8	25.8301	0.609	2.4	mg/L	73	Standard
Fe	54	1933.8	4.8	0.1634	0.019	11.7	mg/L	785	Standard
Fe	57	48335.4	4.9	0.2184	0.005	2.3	mg/L	6133	Standard
Sc-1	45	278417.9	2.9				mg/L	254529	Standard
Cl	35	3523387.2	4.8				ug/L	1641778	Standard
Kr	83	56.9	2.2				ug/L	60	Standard
Br	81	41329.7	3.5				ug/L	11554	Standard
P	31	67126.4	7.0				ug/L	45410	Standard
S	34	1609008.6	3.8				ug/L	568857	Standard
Sr	88	2303277.2	6.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.907	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.132	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		99.174	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.057	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009906

Report Date/Time: Thursday, May 10, 2012 14:09:13

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	93.461
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1205009906
 Report Date/Time: Thursday, May 10, 2012 14:09:13
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009907

Sample Date/Time: Thursday, May 10, 2012 14:09:32

Number of Replicates: 3

Autosampler Position: 304

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	540934.1	1.1	45948.8071	945.552	2.1	ug/L	12600	Standard
|	Be	9	15.0	120.2	-0.0105	0.005	46.1	ug/L	5	Standard
|	Al	27	92067.7	5.3	4.3208	0.118	2.7	ug/L	16102	Standard
>	Sc	45	294258.3	3.1				ug/L	254529	Standard
|	Ti	47	2098.5	3.0	1.4726	0.063	4.3	ug/L	84	Standard
|	V	51	12838.5	4.9	0.6371	0.066	10.4	ug/L	5785	Standard
|	Cr	52	20884.4	0.8	0.9969	0.033	3.3	ug/L	12212	Standard
|	Cr	53	24206.8	1.0	14.0449	0.226	1.6	ug/L	5042	Standard
|	Mn	55	2389185.5	2.0	130.5450	0.905	0.7	ug/L	1290	Standard
|	Co	59	3805.8	2.2	0.2827	0.006	2.1	ug/L	143	Standard
|	Ni	60	11284.2	3.8	4.1122	0.080	1.9	ug/L	79	Standard
|	Cu	65	1187.0	3.6	0.4302	0.010	2.3	ug/L	154	Standard
|	Zn	66	2749.6	4.3	2.2836	0.058	2.6	ug/L	194	Standard
>	Ge	72	207398.4	2.5				ug/L	232024	Standard
|	As	75	8691.4	0.3	8.7610	0.182	2.1	ug/L	-297	Standard
|	Se	82	108.8	13.7	0.7925	0.136	17.2	ug/L	17	Standard
|	Se-1	77	1255.7	0.2	15.2232	0.381	2.5	ug/L	180	Standard
|	Ga	71	185293.2	2.4				mg/L	210139	Standard
|	Rb	85	26985.7	2.2				ug/L	12	Standard
>	Y	89	200020.2	1.7				ug/L	214065	Standard
|	Rh	103	931.7	19.1				ug/L	0	Standard
|	Mo	98	2356.0	3.2	0.5943	0.010	1.7	ug/L	6	Standard
|	Ag	107	51.7	5.6	-0.0008	0.000	49.9	ug/L	33	Standard
|	Cd	111	452.7	5.7	0.0131	0.006	42.3	mg/L	437	Standard
|	Cd	114	1272.9	3.7	0.0142	0.003	18.0	ug/L	1160	Standard
>	In	115	610750.3	1.5				ug/L	646604	Standard
|	Sn	118	1324.1	0.9	0.0329	0.001	2.8	ug/L	864	Standard
|	Sb	123	532.8	1.8	0.0486	0.001	1.6	ug/L	18	Standard
|	Ba	135	58154.1	0.8	13.3604	0.106	0.8	ug/L	39	Standard
|	Ce	140	946.7	3.9				ug/L	46	Standard
>	Tb	159	723756.4	2.0				ug/L	695671	Standard
|	Ho	165	116.0	2.3				ug/L	9	Standard
|	Tl	203	253.3	7.8	-0.0179	0.002	8.9	ug/L	687	Standard
|	Tl	205	597.7	6.5	-0.0169	0.001	8.5	ug/L	1624	Standard
|	Pb	206	498.0	3.8	0.0232	0.001	5.4	ug/L	305	Standard
|	Pb	207	419.3	1.6	0.0227	0.000	1.8	ug/L	231	Standard
|	Pb	208	1969.1	2.6	0.0231	0.001	3.4	ug/L	1129	Standard
|	U	238	2635.9	1.6	0.1180	0.003	2.6	ug/L	3	Standard
>	Bi	209	331752.7	1.3				ug/L	405108	Standard
|	Na	23	479658.4	1.5	115.2076	3.045	2.6	mg/L	118	Standard
|	Mg	24	21651469.1	1.4	34.2943	0.934	2.7	mg/L	377	Standard

Sample ID: L1205009907

Report Date/Time: Thursday, May 10, 2012 14:12:05

Page 1

Approved: May 11, 2012

J. J. H.

K	39	35880.8	1.5	2.6347	0.052	2.0	mg/L	583	Standard
Ca	43	33031.0	1.0	68.4709	2.749	4.0	mg/L	73	Standard
Fe	54	8788.9	2.6	1.2074	0.012	1.0	mg/L	785	Standard
Fe	57	322516.9	1.4	1.5624	0.026	1.7	mg/L	6133	Standard
Sc-1	45	294258.3	3.1				mg/L	254529	Standard
Cl	35	25968430.5	1.6				ug/L	1641778	Standard
Kr	83	77.0	13.2				ug/L	60	Standard
Br	81	45067.8	1.4				ug/L	11554	Standard
P	31	240731.9	3.2				ug/L	45410	Standard
S	34	6383964.6	1.0				ug/L	568857	Standard
Sr	88	30551917.4	1.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.387	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		93.439	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		94.455	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.037	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009907

Report Date/Time: Thursday, May 10, 2012 14:12:05

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	81.892
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205009907
 Report Date/Time: Thursday, May 10, 2012 14:12:05
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009908

Sample Date/Time: Thursday, May 10, 2012 14:12:25

Number of Replicates: 3

Autosampler Position: 305

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	574629.9	2.5	47940.9425	1113.576	2.3	ug/L	12600	Standard
|	Be	9	60.0	60.1	0.0008	0.009	1091.1	ug/L	5	Standard
|	Al	27	498611.2	3.0	26.4044	0.722	2.7	ug/L	16102	Standard
>	Sc	45	299793.6	0.4				ug/L	254529	Standard
|	Ti	47	2110.5	4.7	1.4407	0.069	4.8	ug/L	84	Standard
|	V	51	13899.5	3.7	0.6868	0.040	5.9	ug/L	5785	Standard
|	Cr	52	21495.2	2.2	1.0015	0.036	3.6	ug/L	12212	Standard
|	Cr	53	22808.8	2.0	12.7633	0.341	2.7	ug/L	5042	Standard
|	Mn	55	2248153.0	2.0	119.6385	2.252	1.9	ug/L	1290	Standard
|	Co	59	3676.4	1.0	0.2653	0.002	0.9	ug/L	143	Standard
|	Ni	60	10390.6	1.9	3.6863	0.045	1.2	ug/L	79	Standard
|	Cu	65	1583.4	1.7	0.5739	0.007	1.3	ug/L	154	Standard
|	Zn	66	3523.7	2.7	2.8950	0.072	2.5	ug/L	194	Standard
>	Ge	72	212914.9	0.8				ug/L	232024	Standard
|	As	75	8951.5	3.5	8.7851	0.269	3.1	ug/L	-297	Standard
|	Se	82	98.0	2.5	0.6751	0.018	2.7	ug/L	17	Standard
|	Se-1	77	1143.0	3.8	13.2895	0.675	5.1	ug/L	180	Standard
|	Ga	71	193434.0	1.2				mg/L	210139	Standard
|	Rb	85	25693.5	5.0				ug/L	12	Standard
>	Y	89	204578.6	0.7				ug/L	214065	Standard
|	Rh	103	1006.7	5.5				ug/L	0	Standard
|	Mo	98	2551.7	0.8	0.6252	0.009	1.4	ug/L	6	Standard
|	Ag	107	91.0	5.8	0.0038	0.001	19.0	ug/L	33	Standard
|	Cd	111	524.3	3.0	0.0262	0.003	10.0	mg/L	437	Standard
|	Cd	114	1392.7	5.9	0.0213	0.008	36.3	ug/L	1160	Standard
>	In	115	629382.3	1.0				ug/L	646604	Standard
|	Sn	118	1393.7	1.5	0.0348	0.001	1.5	ug/L	864	Standard
|	Sb	123	774.8	5.8	0.0696	0.005	6.9	ug/L	18	Standard
|	Ba	135	61336.9	1.7	13.6740	0.234	1.7	ug/L	39	Standard
|	Ce	140	5359.9	1.5				ug/L	46	Standard
>	Tb	159	747926.5	0.3				ug/L	695671	Standard
|	Ho	165	161.3	1.3				ug/L	9	Standard
|	Tl	203	417.0	4.2	-0.0062	0.001	12.2	ug/L	687	Standard
|	Tl	205	977.4	1.5	-0.0054	0.001	9.6	ug/L	1624	Standard
|	Pb	206	1138.4	1.8	0.0812	0.001	1.5	ug/L	305	Standard
|	Pb	207	928.7	3.7	0.0768	0.004	5.6	ug/L	231	Standard
|	Pb	208	4348.9	0.8	0.0774	0.002	2.0	ug/L	1129	Standard
|	U	238	3404.4	3.0	0.1496	0.002	1.6	ug/L	3	Standard
>	Bi	209	336407.0	1.7				ug/L	405108	Standard
|	Na	23	424430.8	2.0	100.0059	1.779	1.8	mg/L	118	Standard
|	Mg	24	22397252.1	1.5	34.8027	0.394	1.1	mg/L	377	Standard

Sample ID: L1205009908

Report Date/Time: Thursday, May 10, 2012 14:14:57

Page 1

Approved: May 11, 2012

J. J. H.

K	39	33188.0	1.4	2.3863	0.031	1.3	mg/L	583	Standard
Ca	43	32149.1	1.8	65.3475	0.944	1.4	mg/L	73	Standard
Fe	54	7757.6	3.6	1.0254	0.042	4.1	mg/L	785	Standard
Fe	57	285681.3	2.9	1.3534	0.037	2.7	mg/L	6133	Standard
Sc-1	45	299793.6	0.4				mg/L	254529	Standard
Cl	35	24096639.7	0.6				ug/L	1641778	Standard
Kr	83	95.2	8.7				ug/L	60	Standard
Br	81	46642.5	1.3				ug/L	11554	Standard
P	31	225733.1	2.4				ug/L	45410	Standard
S	34	6131706.0	2.0				ug/L	568857	Standard
Sr	88	33948076.3	2.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.764	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		95.568	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.337	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.511	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009908

Report Date/Time: Thursday, May 10, 2012 14:14:57

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	83.041
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205009908
 Report Date/Time: Thursday, May 10, 2012 14:14:57
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009909

Sample Date/Time: Thursday, May 10, 2012 14:15:17

Number of Replicates: 3

Autosampler Position: 306

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	211391.1	0.6	17707.9894	500.980	2.8	ug/L	12600	Standard
|	Be	9	8.3	69.3	-0.0122	0.002	12.3	ug/L	5	Standard
|	Al	27	124149.6	6.3	6.2981	0.434	6.9	ug/L	16102	Standard
>	Sc	45	286312.3	2.1				ug/L	254529	Standard
|	Ti	47	803.4	6.0	0.4708	0.026	5.5	ug/L	84	Standard
|	V	51	7544.3	3.0	0.2033	0.008	3.9	ug/L	5785	Standard
|	Cr	52	19450.5	3.4	0.6800	0.045	6.6	ug/L	12212	Standard
|	Cr	53	5602.7	4.6	1.7428	0.160	9.2	ug/L	5042	Standard
|	Mn	55	2081031.2	1.7	103.1092	0.867	0.8	ug/L	1290	Standard
|	Co	59	6495.1	1.0	0.4431	0.003	0.6	ug/L	143	Standard
|	Ni	60	8820.2	3.1	2.9085	0.045	1.6	ug/L	79	Standard
|	Cu	65	3870.5	2.0	1.3698	0.017	1.2	ug/L	154	Standard
|	Zn	66	62744.0	1.4	50.7450	0.596	1.2	ug/L	194	Standard
>	Ge	72	228657.0	1.5				ug/L	232024	Standard
|	As	75	144.1	31.3	0.3546	0.039	11.1	ug/L	-297	Standard
|	Se	82	100.5	3.9	0.6383	0.043	6.7	ug/L	17	Standard
|	Se-1	77	275.7	3.1	1.5725	0.127	8.1	ug/L	180	Standard
|	Ga	71	205935.2	1.2				mg/L	210139	Standard
|	Rb	85	23476.5	4.1				ug/L	12	Standard
>	Y	89	218947.5	1.6				ug/L	214065	Standard
|	Rh	103	150.0	33.3				ug/L	0	Standard
|	Mo	98	1119.4	1.8	0.2552	0.001	0.4	ug/L	6	Standard
|	Ag	107	45.7	19.9	-0.0021	0.001	45.3	ug/L	33	Standard
|	Cd	111	1240.4	1.7	0.1744	0.010	5.5	mg/L	437	Standard
|	Cd	114	3194.4	3.5	0.1636	0.004	2.4	ug/L	1160	Standard
>	In	115	663904.8	2.1				ug/L	646604	Standard
|	Sn	118	1239.1	3.6	0.0205	0.001	6.8	ug/L	864	Standard
|	Sb	123	948.9	7.0	0.0811	0.004	5.2	ug/L	18	Standard
|	Ba	135	311451.3	3.0	65.8527	1.521	2.3	ug/L	39	Standard
|	Ce	140	2291.5	3.9				ug/L	46	Standard
>	Tb	159	750970.7	2.3				ug/L	695671	Standard
|	Ho	165	38.7	12.8				ug/L	9	Standard
|	Tl	203	802.0	2.1	0.0146	0.002	11.4	ug/L	687	Standard
|	Tl	205	1775.1	4.9	0.0123	0.002	14.9	ug/L	1624	Standard
|	Pb	206	2888.6	0.8	0.2085	0.001	0.6	ug/L	305	Standard
|	Pb	207	2359.2	3.9	0.1987	0.006	3.1	ug/L	231	Standard
|	Pb	208	11104.3	2.5	0.2012	0.003	1.6	ug/L	1129	Standard
|	U	238	4273.9	3.2	0.1641	0.003	2.1	ug/L	3	Standard
>	Bi	209	384512.7	1.2				ug/L	405108	Standard
|	Na	23	98984.0	2.2	24.4094	0.788	3.2	mg/L	118	Standard
|	Mg	24	4446916.6	2.4	7.2374	0.251	3.5	mg/L	377	Standard

Sample ID: L1205009909

Report Date/Time: Thursday, May 10, 2012 14:17:50

Page 1

Approved: May 11, 2012

J. J. H.

K	39	20190.1	3.8	1.5021	0.077	5.1	mg/L	583	Standard
Ca	43	17657.0	3.2	37.5072	1.285	3.4	mg/L	73	Standard
Fe	54	2763.4	7.1	0.2867	0.035	12.2	mg/L	785	Standard
Fe	57	80233.6	2.2	0.3740	0.015	4.0	mg/L	6133	Standard
Sc-1	45	286312.3	2.1				mg/L	254529	Standard
Cl	35	4346428.8	6.3				ug/L	1641778	Standard
Kr	83	61.9	7.4				ug/L	60	Standard
Br	81	45870.2	1.4				ug/L	11554	Standard
P	31	69755.2	1.1				ug/L	45410	Standard
S	34	1977011.3	1.5				ug/L	568857	Standard
Sr	88	3461007.4	3.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.549	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.281	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.676	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.949	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009909

Report Date/Time: Thursday, May 10, 2012 14:17:50

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	94.916
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205009909
 Report Date/Time: Thursday, May 10, 2012 14:17:50
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205009910

Sample Date/Time: Thursday, May 10, 2012 14:18:10

Number of Replicates: 3

Autosampler Position: 307

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	193367.1	5.8	16629.3391	208.751	1.3	ug/L	12600	Standard
|	Be	9	6.7	43.3	-0.0126	0.001	7.3	ug/L	5	Standard
|	Al	27	67954.0	5.7	3.2103	0.107	3.3	ug/L	16102	Standard
>	Sc	45	277600.3	5.7				ug/L	254529	Standard
|	Ti	47	694.3	3.8	0.4138	0.006	1.5	ug/L	84	Standard
|	V	51	7064.8	4.6	0.1871	0.015	7.9	ug/L	5785	Standard
|	Cr	52	17524.5	4.7	0.5601	0.011	2.0	ug/L	12212	Standard
|	Cr	53	5436.8	5.8	1.7503	0.176	10.1	ug/L	5042	Standard
|	Mn	55	1963392.7	3.4	100.4737	1.085	1.1	ug/L	1290	Standard
|	Co	59	6033.2	4.7	0.4245	0.005	1.1	ug/L	143	Standard
|	Ni	60	8071.5	4.7	2.7473	0.049	1.8	ug/L	79	Standard
|	Cu	65	2369.2	4.7	0.8474	0.011	1.3	ug/L	154	Standard
|	Zn	66	67049.5	3.6	56.0190	0.346	0.6	ug/L	194	Standard
>	Ge	72	221441.3	4.2				ug/L	232024	Standard
|	As	75	126.1	28.3	0.3418	0.029	8.6	ug/L	-297	Standard
|	Se	82	94.6	4.4	0.6168	0.066	10.8	ug/L	17	Standard
|	Se-1	77	264.7	5.5	1.5512	0.323	20.8	ug/L	180	Standard
|	Ga	71	198593.8	5.0				mg/L	210139	Standard
|	Rb	85	22293.1	5.5				ug/L	12	Standard
>	Y	89	211039.5	4.0				ug/L	214065	Standard
|	Rh	103	98.3	5.9				ug/L	0	Standard
|	Mo	98	1059.2	5.9	0.2501	0.005	2.0	ug/L	6	Standard
|	Ag	107	43.0	10.1	-0.0022	0.001	28.9	ug/L	33	Standard
|	Cd	111	1055.8	6.6	0.1428	0.010	7.3	mg/L	437	Standard
|	Cd	114	2832.5	3.0	0.1425	0.004	2.8	ug/L	1160	Standard
>	In	115	640346.9	4.1				ug/L	646604	Standard
|	Sn	118	1084.4	5.2	0.0134	0.001	7.4	ug/L	864	Standard
|	Sb	123	1026.7	6.7	0.0913	0.003	2.8	ug/L	18	Standard
|	Ba	135	294202.9	4.9	64.4786	0.529	0.8	ug/L	39	Standard
|	Ce	140	1231.1	0.7				ug/L	46	Standard
>	Tb	159	727441.4	4.2				ug/L	695671	Standard
|	Ho	165	24.0	15.0				ug/L	9	Standard
|	Tl	203	749.7	2.5	0.0125	0.001	6.1	ug/L	687	Standard
|	Tl	205	1693.1	1.5	0.0114	0.001	10.4	ug/L	1624	Standard
|	Pb	206	1190.4	7.5	0.0748	0.004	5.3	ug/L	305	Standard
|	Pb	207	972.7	7.8	0.0708	0.004	6.0	ug/L	231	Standard
|	Pb	208	4623.6	5.9	0.0728	0.002	3.0	ug/L	1129	Standard
|	U	238	3956.5	6.1	0.1560	0.004	2.8	ug/L	3	Standard
>	Bi	209	374591.9	3.9				ug/L	405108	Standard
|	Na	23	93159.2	4.4	23.6976	0.329	1.4	mg/L	118	Standard
|	Mg	24	4201238.5	5.6	7.0500	0.033	0.5	mg/L	377	Standard

Sample ID: L1205009910

Report Date/Time: Thursday, May 10, 2012 14:20:44

Page 1

Approved: May 11, 2012

J. J. H.

K	39	19591.0	5.0	1.5031	0.017	1.1	mg/L	583	Standard
Ca	43	16632.5	3.2	36.4649	1.072	2.9	mg/L	73	Standard
Fe	54	2373.5	5.6	0.2362	0.003	1.1	mg/L	785	Standard
Fe	57	70040.2	6.1	0.3331	0.002	0.5	mg/L	6133	Standard
Sc-1	45	277600.3	5.7				mg/L	254529	Standard
Cl	35	3969541.6	5.4				ug/L	1641778	Standard
Kr	83	56.7	7.2				ug/L	60	Standard
Br	81	45382.1	3.7				ug/L	11554	Standard
P	31	66183.5	3.3				ug/L	45410	Standard
S	34	1876133.8	3.7				ug/L	568857	Standard
Sr	88	3210196.9	4.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.439	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		98.587	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		99.032	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.567	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205009910

Report Date/Time: Thursday, May 10, 2012 14:20:44

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	92.467
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205009910
 Report Date/Time: Thursday, May 10, 2012 14:20:44
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, May 10, 2012 14:21:05

Number of Replicates: 3

Autosampler Position: 203

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	14855.6	2.4	149.8930	6.680	4.5	ug/L	12600	Standard
|	Be	9	10.0	173.2	-0.0117	0.005	41.0	ug/L	5	Standard
|	Al	27	82003170.8	4.7	4908.8398	126.113	2.6	ug/L	16102	Standard
>	Sc	45	273061.1	2.2				ug/L	254529	Standard
|	Ti	47	187314.6	3.3	121.4525	2.417	2.0	ug/L	84	Standard
|	V	51	5628.3	6.5	0.0699	0.018	25.9	ug/L	5785	Standard
|	Cr	52	13705.5	1.5	0.1464	0.002	1.3	ug/L	12212	Standard
|	Cr	53	5959.5	13.7	1.8750	0.442	23.5	ug/L	5042	Standard
|	Mn	55	2571.6	3.8	0.0400	0.006	15.6	ug/L	1290	Standard
|	Co	59	403.7	2.3	0.0173	0.000	1.8	ug/L	143	Standard
|	Ni	60	1381.1	9.5	0.4255	0.039	9.2	ug/L	79	Standard
|	Cu	65	698.7	6.0	0.2010	0.013	6.7	ug/L	154	Standard
|	Zn	66	2377.2	2.9	1.7122	0.026	1.5	ug/L	194	Standard
>	Ge	72	233586.7	1.5				ug/L	232024	Standard
|	As	75	-327.5	11.1	-0.0594	0.036	60.7	ug/L	-297	Standard
|	Se	82	29.2	16.1	0.0675	0.034	50.4	ug/L	17	Standard
|	Se-1	77	351.7	7.0	2.4166	0.307	12.7	ug/L	180	Standard
|	Ga	71	208344.1	2.2				mg/L	210139	Standard
|	Rb	85	4025.5	2.0				ug/L	12	Standard
>	Y	89	218156.1	1.0				ug/L	214065	Standard
|	Rh	103	20.0	43.3				ug/L	0	Standard
|	Mo	98	423686.3	1.6	98.3748	1.249	1.3	ug/L	6	Standard
|	Ag	107	86.0	10.3	0.0025	0.001	42.0	ug/L	33	Standard
|	Cd	111	905.4	2.1	0.0995	0.003	3.5	mg/L	437	Standard
|	Cd	114	3887.0	5.1	0.2165	0.015	6.9	ug/L	1160	Standard
>	In	115	672762.7	0.3				ug/L	646604	Standard
|	Sn	118	1098.7	2.3	0.0110	0.001	13.0	ug/L	864	Standard
|	Sb	123	508.3	6.6	0.0417	0.003	6.9	ug/L	18	Standard
|	Ba	135	188.0	18.2	0.0310	0.007	22.6	ug/L	39	Standard
|	Ce	140	2001.8	3.4				ug/L	46	Standard
>	Tb	159	767530.3	1.0				ug/L	695671	Standard
|	Ho	165	17.7	26.7				ug/L	9	Standard
|	Tl	203	433.7	6.9	-0.0098	0.002	19.3	ug/L	687	Standard
|	Tl	205	949.4	2.8	-0.0107	0.000	4.1	ug/L	1624	Standard
|	Pb	206	551.0	6.7	0.0197	0.002	11.7	ug/L	305	Standard
|	Pb	207	465.0	7.3	0.0194	0.003	13.2	ug/L	231	Standard
|	Pb	208	2136.4	5.6	0.0188	0.002	9.5	ug/L	1129	Standard
|	U	238	18.3	3.1	0.0031	0.000	0.8	ug/L	3	Standard
>	Bi	209	396843.3	1.2				ug/L	405108	Standard
|	Na	23	50072.7	3.2	12.9282	0.125	1.0	mg/L	118	Standard
|	Mg	24	3055536.3	3.1	5.2115	0.058	1.1	mg/L	377	Standard

Sample ID: QC Std 4

Report Date/Time: Thursday, May 10, 2012 14:23:38

Page 1

Approved: May 11, 2012

J. J. H.

K	39	64719.7	3.2	5.1677	0.096	1.9	mg/L	583	Standard
Ca	43	6813.2	3.3	15.0550	0.176	1.2	mg/L	73	Standard
Fe	54	78017.3	2.8	12.8597	0.094	0.7	mg/L	785	Standard
Fe	57	2257892.2	3.1	12.0066	0.117	1.0	mg/L	6133	Standard
Sc-1	45	273061.1	2.2				mg/L	254529	Standard
Cl	35	10598008.8	1.2				ug/L	1641778	Standard
Kr	83	64.0	2.9				ug/L	60	Standard
Br	81	13061.5	8.8				ug/L	11554	Standard
P	31	6553629.8	2.9				ug/L	45410	Standard
S	34	1543540.4	3.3				ug/L	568857	Standard
Sr	88	1945.1	24.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	98.177		
Sc	45			
Ti	47	121.452		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.674	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.911	
Rh	103			
Mo	98	98.375		
Ag	107			
Cd	111			
Cd	114			
In	115		104.046	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		110.329	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 4

Report Date/Time: Thursday, May 10, 2012 14:23:38

Page 2

Approved: May 11, 2012




Pb	207		
Pb	208		
U	238		
> Bi	209		97.960
Na	23	103.426	
Mg	24	104.230	
K	39	103.355	
Ca	43	100.367	
Fe	54	102.878	
Fe	57	96.052	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Ti	47	

Sample ID: QC Std 4
 Report Date/Time: Thursday, May 10, 2012 14:23:38
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, May 10, 2012 14:23:58

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13819.6	3.7	81.7223	28.189	34.5	ug/L	12600	Standard
|	Be	9	358571.3	2.2	102.5292	0.686	0.7	ug/L	5	Standard
|	Al	27	71579143.4	2.9	4382.9194	60.698	1.4	ug/L	16102	Standard
>	Sc	45	267004.1	1.6				ug/L	254529	Standard
|	Ti	47	161192.3	3.5	105.5054	5.286	5.0	ug/L	84	Standard
|	V	51	1592709.6	2.8	102.7235	4.046	3.9	ug/L	5785	Standard
|	Cr	52	1190191.5	3.2	102.9577	3.927	3.8	ug/L	12212	Standard
|	Cr	53	180443.5	2.4	102.4600	4.011	3.9	ug/L	5042	Standard
|	Mn	55	2040821.9	2.4	99.9118	4.368	4.4	ug/L	1290	Standard
|	Co	59	1443936.9	2.6	99.5665	4.027	4.0	ug/L	143	Standard
|	Ni	60	305325.5	2.7	100.2847	4.311	4.3	ug/L	79	Standard
|	Cu	65	272079.9	2.2	98.5629	4.562	4.6	ug/L	154	Standard
|	Zn	66	125572.4	2.1	100.5031	3.727	3.7	ug/L	194	Standard
>	Ge	72	231562.9	2.6				ug/L	232024	Standard
|	As	75	115827.0	2.0	102.0968	3.027	3.0	ug/L	-297	Standard
|	Se	82	13292.4	3.0	103.8579	4.344	4.2	ug/L	17	Standard
|	Se-1	77	8714.2	2.8	104.1454	4.833	4.6	ug/L	180	Standard
|	Ga	71	205514.0	1.7				mg/L	210139	Standard
|	Rb	85	3392.0	7.3				ug/L	12	Standard
>	Y	89	220638.9	2.6				ug/L	214065	Standard
|	Rh	103	86.7	6.7				ug/L	0	Standard
|	Mo	98	372953.0	2.1	87.9689	2.184	2.5	ug/L	6	Standard
|	Ag	107	630346.0	6.5	73.4838	4.726	6.4	ug/L	33	Standard
|	Cd	111	456587.0	1.2	98.4587	1.606	1.6	mg/L	437	Standard
|	Cd	114	1192548.2	1.5	98.5413	1.933	2.0	ug/L	1160	Standard
>	In	115	662318.3	0.8				ug/L	646604	Standard
|	Sn	118	1928.8	4.3	0.0634	0.005	8.5	ug/L	864	Standard
|	Sb	123	1116774.1	1.0	98.6761	1.241	1.3	ug/L	18	Standard
|	Ba	135	479641.3	1.5	101.6660	1.890	1.9	ug/L	39	Standard
|	Ce	140	1824.1	2.7				ug/L	46	Standard
>	Tb	159	762693.7	1.7				ug/L	695671	Standard
|	Ho	165	13.7	8.4				ug/L	9	Standard
|	Tl	203	1636732.3	2.2	101.1045	1.522	1.5	ug/L	687	Standard
|	Tl	205	4085046.9	1.9	106.5311	1.195	1.1	ug/L	1624	Standard
|	Pb	206	1299296.6	2.0	100.5655	0.948	0.9	ug/L	305	Standard
|	Pb	207	1131100.5	1.9	102.6526	1.557	1.5	ug/L	231	Standard
|	Pb	208	5341352.2	2.0	104.1505	1.598	1.5	ug/L	1129	Standard
|	U	238	2847053.9	2.8	104.0463	1.933	1.9	ug/L	3	Standard
>	Bi	209	398088.8	1.4				ug/L	405108	Standard
|	Na	23	43863.4	3.2	11.5788	0.187	1.6	mg/L	118	Standard
|	Mg	24	2161276.0	17.5	3.7771	0.720	19.1	mg/L	377	Standard

Sample ID: QC Std 5

Report Date/Time: Thursday, May 10, 2012 14:26:31

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	56923.4	1.4	4.6435	0.010	0.2	mg/L	583	Standard
Ca	43	6052.9	6.9	13.6558	0.767	5.6	mg/L	73	Standard
Fe	54	68098.2	3.6	11.4619	0.262	2.3	mg/L	785	Standard
Fe	57	1991705.9	0.3	10.8316	0.202	1.9	mg/L	6133	Standard
Sc-1	45	267004.1	1.6				mg/L	254529	Standard
Cl	35	9400767.4	2.0				ug/L	1641778	Standard
Kr	83	73.0	5.8				ug/L	60	Standard
Br	81	12065.6	1.7				ug/L	11554	Standard
P	31	5680281.2	1.8				ug/L	45410	Standard
S	34	1377491.8	3.2				ug/L	568857	Standard
Sr	88	1453.4	6.5				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	87.658		
Sc	45			
Ti	47	105.505		
V	51	102.724		
Cr	52	102.958		
Cr	53			
Mn	55	99.912		
Co	59	99.566		
Ni	60	100.285		
Cu	65	98.563		
Zn	66	100.503		
Ge	72		99.801	
As	75	102.097		
Se	82	103.858		
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.071	
Rh	103			
Mo	98	87.969		
Ag	107	73.484		
Cd	111	98.459		
Cd	114			
In	115		102.430	
Sn	118			
Sb	123	98.676		
Ba	135	101.666		
Ce	140			
Tb	159		109.634	
Ho	165			
Tl	203	101.104		
Tl	205			
Pb	206	100.566		

Sample ID: QC Std 5

Report Date/Time: Thursday, May 10, 2012 14:26:31

Page 2

Approved: May 11, 2012




Pb	207	102.653	
Pb	208	104.151	
U	238	104.046	
> Bi	209		98.267
Na	23	92.630	
Mg	24	75.542	
K	39	92.870	
Ca	43	91.039	
Fe	54	91.695	
Fe	57	86.653	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ag	107	
QC Std 5	Mg	24	

Sample ID: QC Std 5
 Report Date/Time: Thursday, May 10, 2012 14:26:31
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 14:26:53

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13345.9	4.9	3.7367	26.757	716.1	ug/L	12600	Standard
|	Be	9	174199.0	0.2	48.5986	2.169	4.5	ug/L	5	Standard
|	Al	27	862778.9	2.2	50.7539	1.983	3.9	ug/L	16102	Standard
>	Sc	45	273996.8	4.5				ug/L	254529	Standard
|	Ti	47	157381.9	2.6	103.5359	1.605	1.6	ug/L	84	Standard
|	V	51	802896.3	2.0	51.9196	0.889	1.7	ug/L	5785	Standard
|	Cr	52	601201.3	2.5	51.7746	0.648	1.3	ug/L	12212	Standard
|	Cr	53	91182.9	2.9	51.2966	1.149	2.2	ug/L	5042	Standard
|	Mn	55	1070527.9	1.9	52.6384	0.470	0.9	ug/L	1290	Standard
|	Co	59	749754.2	2.4	51.9616	0.148	0.3	ug/L	143	Standard
|	Ni	60	156427.6	2.3	51.6315	0.304	0.6	ug/L	79	Standard
|	Cu	65	141656.5	2.8	51.5449	0.695	1.3	ug/L	154	Standard
|	Zn	66	63462.7	1.7	50.9765	0.581	1.1	ug/L	194	Standard
>	Ge	72	230253.8	2.5				ug/L	232024	Standard
|	As	75	57601.7	2.7	51.1551	0.210	0.4	ug/L	-297	Standard
|	Se	82	6743.7	2.9	52.8834	0.225	0.4	ug/L	17	Standard
|	Se-1	77	4336.0	0.2	51.1958	1.486	2.9	ug/L	180	Standard
|	Ga	71	210492.3	3.1				mg/L	210139	Standard
|	Rb	85	1055.0	10.2				ug/L	12	Standard
>	Y	89	216695.6	1.9				ug/L	214065	Standard
|	Rh	103	33.3	45.8				ug/L	0	Standard
|	Mo	98	419080.0	1.9	98.7671	0.244	0.2	ug/L	6	Standard
|	Ag	107	446083.6	3.6	51.9680	1.845	3.5	ug/L	33	Standard
|	Cd	111	230062.1	1.0	49.5288	0.364	0.7	mg/L	437	Standard
|	Cd	114	594300.0	1.3	49.0199	0.233	0.5	ug/L	1160	Standard
>	In	115	662814.0	1.8				ug/L	646604	Standard
|	Sn	118	801732.7	1.6	49.4902	0.572	1.2	ug/L	864	Standard
|	Sb	123	557045.0	2.0	49.1797	0.501	1.0	ug/L	18	Standard
|	Ba	135	239133.4	0.9	50.6490	0.640	1.3	ug/L	39	Standard
|	Ce	140	903.7	1.6				ug/L	46	Standard
>	Tb	159	746881.6	1.5				ug/L	695671	Standard
|	Ho	165	17.7	3.3				ug/L	9	Standard
|	Tl	203	827329.3	1.1	50.7875	0.530	1.0	ug/L	687	Standard
|	Tl	205	1923240.5	1.8	49.8360	0.128	0.3	ug/L	1624	Standard
|	Pb	206	660316.4	1.2	50.7966	0.415	0.8	ug/L	305	Standard
|	Pb	207	556423.8	2.1	50.1803	0.063	0.1	ug/L	231	Standard
|	Pb	208	2581408.8	1.8	50.0207	0.182	0.4	ug/L	1129	Standard
|	U	238	1334659.3	2.5	48.4842	0.281	0.6	ug/L	3	Standard
>	Bi	209	400504.3	2.0				ug/L	405108	Standard
|	Na	23	20128.4	3.4	5.1660	0.126	2.4	mg/L	118	Standard
|	Mg	24	2850155.7	1.8	4.8489	0.125	2.6	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 14:29:26

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	63379.0	2.5	5.0459	0.134	2.6	mg/L	583	Standard
Ca	43	2231.8	5.0	4.7850	0.041	0.9	mg/L	73	Standard
Fe	54	32172.0	1.1	5.2007	0.194	3.7	mg/L	785	Standard
Fe	57	928442.9	2.5	4.9038	0.120	2.4	mg/L	6133	Standard
Sc-1	45	273996.8	4.5				mg/L	254529	Standard
Cl	35	492355.4	56.3				ug/L	1641778	Standard
Kr	83	58.9	7.5				ug/L	60	Standard
Br	81	11883.8	1.1				ug/L	11554	Standard
P	31	66874.1	4.5				ug/L	45410	Standard
S	34	729326.8	1.6				ug/L	568857	Standard
Sr	88	740.0	13.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	101.508		
Sc	45			
Ti	47	103.536		
V	51	103.839		
Cr	52	103.549		
Cr	53			
Mn	55	105.277		
Co	59	103.923		
Ni	60	103.263		
Cu	65	103.090		
Zn	66	101.953		
Ge	72		99.237	
As	75	102.310		
Se	82	105.767		
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.229	
Rh	103			
Mo	98	98.767		
Ag	107	103.936		
Cd	111	99.058		
Cd	114			
In	115		102.507	
Sn	118	98.980		
Sb	123	98.359		
Ba	135	101.298		
Ce	140			
Tb	159		107.361	
Ho	165			
Tl	203	101.575		
Tl	205			
Pb	206	101.593		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 14:29:26

Page 2

Approved: May 11, 2012



Pb	207	100.361	
Pb	208	100.041	
U	238	96.968	
> Bi	209		98.864
Na	23	103.320	
Mg	24	96.977	
K	39	100.918	
Ca	43	95.699	
Fe	54	104.014	
Fe	57	98.076	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		


QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 14:29:26

Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 14:29:45

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12752.0	4.0	81.8773	12.143	14.8	ug/L	12600	Standard
|	Be	9	8.3	34.6	-0.0118	0.001	8.1	ug/L	5	Standard
|	Al	27	14036.5	1.9	0.1384	0.032	23.3	ug/L	16102	Standard
>	Sc	45	246364.8	3.2				ug/L	254529	Standard
|	Ti	47	111.3	17.1	0.0151	0.012	82.3	ug/L	84	Standard
|	V	51	3690.2	2.3	-0.0393	0.007	17.2	ug/L	5785	Standard
|	Cr	52	10849.2	1.8	-0.0422	0.032	74.8	ug/L	12212	Standard
|	Cr	53	1036.7	12.9	-0.8974	0.075	8.4	ug/L	5042	Standard
|	Mn	55	1382.4	3.0	-0.0136	0.003	18.5	ug/L	1290	Standard
|	Co	59	182.7	19.4	0.0030	0.003	83.5	ug/L	143	Standard
|	Ni	60	84.0	25.9	0.0051	0.007	143.9	ug/L	79	Standard
|	Cu	65	189.0	5.8	0.0223	0.004	16.1	ug/L	154	Standard
|	Zn	66	214.7	8.7	0.0052	0.016	309.8	ug/L	194	Standard
>	Ge	72	219906.6	1.4				ug/L	232024	Standard
|	As	75	-242.7	9.8	0.0017	0.023	1321.7	ug/L	-297	Standard
|	Se	82	22.4	10.8	0.0265	0.022	84.0	ug/L	17	Standard
|	Se-1	77	93.0	15.2	-0.6324	0.166	26.2	ug/L	180	Standard
|	Ga	71	202104.0	1.9				mg/L	210139	Standard
|	Rb	85	23.3	24.7				ug/L	12	Standard
>	Y	89	207727.7	0.9				ug/L	214065	Standard
|	Rh	103	10.0	86.6				ug/L	0	Standard
|	Mo	98	102.1	40.7	0.0170	0.011	61.9	ug/L	6	Standard
|	Ag	107	1212.7	13.1	0.1404	0.020	13.9	ug/L	33	Standard
|	Cd	111	451.8	10.1	0.0091	0.011	123.8	mg/L	437	Standard
|	Cd	114	1147.4	0.6	-0.0007	0.003	461.5	ug/L	1160	Standard
>	In	115	633940.2	3.0				ug/L	646604	Standard
|	Sn	118	942.7	7.4	0.0050	0.004	72.1	ug/L	864	Standard
|	Sb	123	627.9	27.5	0.0556	0.017	30.1	ug/L	18	Standard
|	Ba	135	51.0	14.8	0.0031	0.001	46.8	ug/L	39	Standard
|	Ce	140	41.3	34.0				ug/L	46	Standard
>	Tb	159	698884.3	2.8				ug/L	695671	Standard
|	Ho	165	8.0	12.5				ug/L	9	Standard
|	Tl	203	393.0	35.6	-0.0120	0.009	71.9	ug/L	687	Standard
|	Tl	205	917.0	35.6	-0.0112	0.008	75.4	ug/L	1624	Standard
|	Pb	206	319.0	10.0	0.0021	0.002	106.4	ug/L	305	Standard
|	Pb	207	285.0	11.6	0.0034	0.003	77.5	ug/L	231	Standard
|	Pb	208	1274.4	8.6	0.0024	0.002	78.0	ug/L	1129	Standard
|	U	238	65.0	33.3	0.0048	0.001	16.1	ug/L	3	Standard
>	Bi	209	390334.5	1.9				ug/L	405108	Standard
|	Na	23	121.7	19.4	0.0076	0.006	84.0	mg/L	118	Standard
|	Mg	24	486.7	3.1	0.0001	0.000	50.9	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 14:32:19

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	683.3	14.7	0.0097	0.011	110.6	mg/L	583	Standard
Ca	43	51.7	36.6	-0.0646	0.047	73.0	mg/L	73	Standard
Fe	54	977.1	12.8	0.0278	0.027	95.4	mg/L	785	Standard
Fe	57	4782.4	7.6	-0.0060	0.003	42.2	mg/L	6133	Standard
Sc-1	45	246364.8	3.2				mg/L	254529	Standard
Cl	35	532469.9	36.3				ug/L	1641778	Standard
Kr	83	57.4	3.4				ug/L	60	Standard
Br	81	11225.0	2.7				ug/L	11554	Standard
P	31	64559.3	6.3				ug/L	45410	Standard
S	34	718870.8	1.7				ug/L	568857	Standard
Sr	88	250.0	4.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.778	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.040	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.042	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		100.462	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 14:32:19

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	96.353
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 14:32:19
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, May 10, 2012 14:32:41

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12760.4	2.2	49.4821	31.876	64.4	ug/L	12600	Standard
|	Be	9	21.7	48.0	-0.0079	0.003	39.2	ug/L	5	Standard
|	Al	27	17400.0	1.0	0.3321	0.022	6.5	ug/L	16102	Standard
>	Sc	45	252744.0	0.9				ug/L	254529	Standard
|	Ti	47	128.3	9.0	0.0285	0.007	25.1	ug/L	84	Standard
|	V	51	9496.6	0.5	0.3683	0.007	2.0	ug/L	5785	Standard
|	Cr	52	19346.7	0.6	0.7731	0.011	1.4	ug/L	12212	Standard
|	Cr	53	2314.3	4.2	-0.0957	0.046	48.6	ug/L	5042	Standard
|	Mn	55	11229.2	2.4	0.5051	0.009	1.9	ug/L	1290	Standard
|	Co	59	5527.3	2.0	0.3986	0.011	2.6	ug/L	143	Standard
|	Ni	60	4605.4	2.1	1.5987	0.028	1.7	ug/L	79	Standard
|	Cu	65	2297.2	0.2	0.8431	0.011	1.3	ug/L	154	Standard
|	Zn	66	8417.3	1.9	7.0621	0.106	1.5	ug/L	194	Standard
>	Ge	72	215789.6	1.0				ug/L	232024	Standard
|	As	75	173.6	6.4	0.3901	0.009	2.3	ug/L	-297	Standard
|	Se	82	73.5	0.9	0.4584	0.001	0.3	ug/L	17	Standard
|	Se-1	77	130.0	13.1	-0.1264	0.213	168.2	ug/L	180	Standard
|	Ga	71	198116.2	0.6				mg/L	210139	Standard
|	Rb	85	10.0	50.0				ug/L	12	Standard
>	Y	89	202139.5	0.8				ug/L	214065	Standard
|	Rh	103	3.3	173.2				ug/L	0	Standard
|	Mo	98	58.6	59.9	0.0065	0.009	132.0	ug/L	6	Standard
|	Ag	107	3907.5	1.3	0.4781	0.007	1.5	ug/L	33	Standard
|	Cd	111	1474.3	4.6	0.2461	0.009	3.7	mg/L	437	Standard
|	Cd	114	3851.5	3.1	0.2394	0.004	1.6	ug/L	1160	Standard
>	In	115	621597.5	2.0				ug/L	646604	Standard
|	Sn	118	769.4	5.8	-0.0052	0.002	44.2	ug/L	864	Standard
|	Sb	123	4381.1	2.5	0.4099	0.002	0.6	ug/L	18	Standard
|	Ba	135	3396.7	2.4	0.7589	0.007	0.9	ug/L	39	Standard
|	Ce	140	48.7	8.3				ug/L	46	Standard
>	Tb	159	688685.1	2.5				ug/L	695671	Standard
|	Ho	165	6.7	8.7				ug/L	9	Standard
|	Tl	203	1626.8	9.3	0.0667	0.008	11.5	ug/L	687	Standard
|	Tl	205	3871.2	9.5	0.0683	0.008	11.9	ug/L	1624	Standard
|	Pb	206	2784.3	4.3	0.1988	0.007	3.7	ug/L	305	Standard
|	Pb	207	2414.2	1.7	0.2027	0.004	2.1	ug/L	231	Standard
|	Pb	208	11034.9	2.3	0.1985	0.001	0.5	ug/L	1129	Standard
|	U	238	10070.7	2.1	0.3814	0.011	3.0	ug/L	3	Standard
>	Bi	209	386755.4	1.9				ug/L	405108	Standard
|	Na	23	116.7	34.4	0.0054	0.011	211.7	mg/L	118	Standard
|	Mg	24	1265.1	7.3	0.0015	0.000	12.6	mg/L	377	Standard

Sample ID: QC Std 8

Report Date/Time: Thursday, May 10, 2012 14:35:14

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	701.7	2.1	0.0096	0.002	18.0	mg/L	583	Standard
Ca	43	61.7	18.7	-0.0436	0.028	63.9	mg/L	73	Standard
Fe	54	954.0	6.2	0.0188	0.012	62.8	mg/L	785	Standard
Fe	57	4984.2	1.9	-0.0056	0.000	7.8	mg/L	6133	Standard
Sc-1	45	252744.0	0.9				mg/L	254529	Standard
Cl	35	527046.4	37.5				ug/L	1641778	Standard
Kr	83	55.7	8.3				ug/L	60	Standard
Br	81	11222.5	1.2				ug/L	11554	Standard
P	31	64163.9	2.0				ug/L	45410	Standard
S	34	715733.7	0.6				ug/L	568857	Standard
Sr	88	1701.8	61.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	92.067		
Cr	52	96.634		
Cr	53			
Mn	55	101.021		
Co	59	99.654		
Ni	60	99.921		
Cu	65	105.382		
Zn	66	112.994		
Ge	72		93.003	
As	75	97.528		
Se	82	114.612		
Se-1	77			
Ga	71			
Rb	85			
Y	89		94.429	
Rh	103			
Mo	98			
Ag	107	119.532		
Cd	111	102.534		
Cd	114			
In	115		96.133	
Sn	118			
Sb	123	102.487		
Ba	135	101.191		
Ce	140			
Tb	159		98.996	
Ho	165			
Tl	203	83.332		
Tl	205			
Pb	206			

Sample ID: QC Std 8

Report Date/Time: Thursday, May 10, 2012 14:35:14

Page 2

Approved: May 11, 2012



Pb	207		
Pb	208	99.272	
U	238	95.339	
> Bi	209		95.470
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		


QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 8

Report Date/Time: Thursday, May 10, 2012 14:35:14

Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: PBS A2 WG397174-02

Sample Date/Time: Thursday, May 10, 2012 15:02:36

Number of Replicates: 3

Autosampler Position: 401

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12533.5	3.8	38.0073	24.260	63.8	ug/L	12600	Standard
|	Be	9	13.3	114.6	-0.0103	0.005	44.9	ug/L	5	Standard
|	Al	27	13432.6	5.7	0.0839	0.061	72.6	ug/L	16102	Standard
>	Sc	45	250470.0	3.6				ug/L	254529	Standard
|	Ti	47	95.3	19.7	0.0024	0.012	505.4	ug/L	84	Standard
|	V	51	5529.8	10.4	0.0765	0.045	58.2	ug/L	5785	Standard
|	Cr	52	11641.8	1.9	0.0023	0.007	295.2	ug/L	12212	Standard
|	Cr	53	5206.8	30.7	1.5601	1.001	64.1	ug/L	5042	Standard
|	Mn	55	2317.8	3.2	0.0315	0.004	13.7	ug/L	1290	Standard
|	Co	59	139.7	4.6	-0.0004	0.000	98.5	ug/L	143	Standard
|	Ni	60	187.7	5.8	0.0393	0.004	9.0	ug/L	79	Standard
|	Cu	65	199.0	6.4	0.0241	0.005	18.9	ug/L	154	Standard
|	Zn	66	1857.1	2.5	1.3504	0.048	3.6	ug/L	194	Standard
>	Ge	72	225818.0	1.6				ug/L	232024	Standard
|	As	75	-285.3	3.1	-0.0307	0.004	13.3	ug/L	-297	Standard
|	Se	82	21.0	13.3	0.0100	0.025	251.4	ug/L	17	Standard
|	Se-1	77	199.0	32.6	0.6681	0.856	128.1	ug/L	180	Standard
|	Ga	71	203302.6	2.2				mg/L	210139	Standard
|	Rb	85	33.3	43.3				ug/L	12	Standard
>	Y	89	216947.8	2.5				ug/L	214065	Standard
|	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	78.9	7.5	0.0114	0.002	14.0	ug/L	6	Standard
|	Ag	107	396.7	6.7	0.0413	0.004	10.9	ug/L	33	Standard
|	Cd	111	448.5	6.3	0.0088	0.002	26.5	mg/L	437	Standard
|	Cd	114	1168.9	5.2	0.0016	0.001	79.0	ug/L	1160	Standard
>	In	115	630207.2	3.9				ug/L	646604	Standard
|	Sn	118	899.4	3.2	0.0026	0.001	44.4	ug/L	864	Standard
|	Sb	123	104.9	7.3	0.0073	0.001	14.6	ug/L	18	Standard
|	Ba	135	72.7	11.7	0.0080	0.002	26.1	ug/L	39	Standard
|	Ce	140	89.7	4.2				ug/L	46	Standard
>	Tb	159	691218.5	3.9				ug/L	695671	Standard
|	Ho	165	8.3	68.2				ug/L	9	Standard
|	Tl	203	699.3	4.6	0.0077	0.004	47.9	ug/L	687	Standard
|	Tl	205	1610.4	2.8	0.0076	0.002	22.0	ug/L	1624	Standard
|	Pb	206	601.3	1.9	0.0248	0.003	11.0	ug/L	305	Standard
|	Pb	207	509.3	6.9	0.0246	0.004	15.8	ug/L	231	Standard
|	Pb	208	2327.1	2.4	0.0237	0.002	8.0	ug/L	1129	Standard
|	U	238	11.7	99.3	0.0029	0.000	16.2	ug/L	3	Standard
>	Bi	209	387920.7	4.8				ug/L	405108	Standard
|	Na	23	86.7	26.0	-0.0027	0.007	244.9	mg/L	118	Standard
|	Mg	24	368.3	29.3	-0.0002	0.000	126.6	mg/L	377	Standard

Sample ID: PBS A2 WG397174-02

Report Date/Time: Thursday, May 10, 2012 15:05:09

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	663.3	9.8	0.0068	0.007	97.9	mg/L	583	Standard
Ca	43	58.3	35.7	-0.0499	0.053	106.2	mg/L	73	Standard
Fe	54	985.8	5.1	0.0262	0.011	43.3	mg/L	785	Standard
Fe	57	4782.4	2.7	-0.0065	0.002	25.3	mg/L	6133	Standard
Sc-1	45	250470.0	3.6				mg/L	254529	Standard
Cl	35	1513991.8	26.4				ug/L	1641778	Standard
Kr	83	59.9	11.6				ug/L	60	Standard
Br	81	11888.0	1.3				ug/L	11554	Standard
P	31	61155.0	3.8				ug/L	45410	Standard
S	34	705030.9	2.7				ug/L	568857	Standard
Sr	88	415.0	15.9				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.325	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.347	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.464	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		99.360	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: PBS A2 WG397174-02
 Report Date/Time: Thursday, May 10, 2012 15:05:09
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	95.757
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: PBS A2 WG397174-02
 Report Date/Time: Thursday, May 10, 2012 15:05:09
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: LCSS A2 WG397174-03

Sample Date/Time: Thursday, May 10, 2012 15:05:29

Number of Replicates: 3

Autosampler Position: 402

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	14964.1	1.9	68.3159	25.828	37.8	ug/L	12600	Standard
|	Be	9	81674.6	1.7	21.3366	0.490	2.3	ug/L	5	Standard
|	Al	27	994452.8	1.8	54.8792	1.081	2.0	ug/L	16102	Standard
>	Sc	45	292139.7	1.0				ug/L	254529	Standard
|	Ti	47	284.0	6.7	0.1143	0.013	11.6	ug/L	84	Standard
|	V	51	412367.4	3.3	24.9091	0.611	2.5	ug/L	5785	Standard
|	Cr	52	315354.3	3.0	25.0010	0.748	3.0	ug/L	12212	Standard
|	Cr	53	50656.2	2.4	26.0560	0.452	1.7	ug/L	5042	Standard
|	Mn	55	653491.8	3.7	30.1565	0.498	1.7	ug/L	1290	Standard
|	Co	59	393502.6	2.8	25.6274	0.425	1.7	ug/L	143	Standard
|	Ni	60	82685.9	4.0	25.6350	0.659	2.6	ug/L	79	Standard
|	Cu	65	74955.1	3.0	25.6127	0.669	2.6	ug/L	154	Standard
|	Zn	66	31757.3	3.4	23.8762	0.391	1.6	ug/L	194	Standard
>	Ge	72	244999.4	2.9				ug/L	232024	Standard
|	As	75	28683.2	4.0	24.0611	0.678	2.8	ug/L	-297	Standard
|	Se	82	3367.1	4.6	24.7285	0.737	3.0	ug/L	17	Standard
|	Se-1	77	2158.2	3.8	22.9633	0.285	1.2	ug/L	180	Standard
|	Ga	71	227341.8	3.4				mg/L	210139	Standard
|	Rb	85	1228.4	7.3				ug/L	12	Standard
>	Y	89	243736.3	3.4				ug/L	214065	Standard
|	Rh	103	31.7	18.2				ug/L	0	Standard
|	Mo	98	100.2	9.9	0.0150	0.002	11.7	ug/L	6	Standard
|	Ag	107	222859.2	3.3	25.5320	0.791	3.1	ug/L	33	Standard
|	Cd	111	112899.7	2.6	23.8567	0.496	2.1	mg/L	437	Standard
|	Cd	114	282973.3	3.2	22.9043	0.698	3.0	ug/L	1160	Standard
>	In	115	673947.0	2.5				ug/L	646604	Standard
|	Sn	118	1574.7	2.8	0.0398	0.001	1.8	ug/L	864	Standard
|	Sb	123	264955.4	2.3	23.0088	0.525	2.3	ug/L	18	Standard
|	Ba	135	120073.0	1.8	25.0117	0.623	2.5	ug/L	39	Standard
|	Ce	140	9573.7	1.5				ug/L	46	Standard
>	Tb	159	746138.5	1.7				ug/L	695671	Standard
|	Ho	165	101.3	4.1				ug/L	9	Standard
|	Tl	203	418843.5	3.2	25.5394	0.567	2.2	ug/L	687	Standard
|	Tl	205	980780.2	3.0	25.2485	0.547	2.2	ug/L	1624	Standard
|	Pb	206	331004.7	3.3	25.2997	0.558	2.2	ug/L	305	Standard
|	Pb	207	289266.8	3.6	25.9236	0.687	2.6	ug/L	231	Standard
|	Pb	208	1320739.4	3.2	25.4302	0.553	2.2	ug/L	1129	Standard
|	U	238	664017.0	2.6	23.9843	0.372	1.5	ug/L	3	Standard
>	Bi	209	402803.8	1.1				ug/L	405108	Standard
|	Na	23	140.0	9.4	0.0066	0.003	49.6	mg/L	118	Standard
|	Mg	24	7788.7	0.7	0.0116	0.000	1.6	mg/L	377	Standard

Sample ID: LCSS A2 WG397174-03

Report Date/Time: Thursday, May 10, 2012 15:08:01

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	688.3	5.1	0.0003	0.002	736.7	mg/L	583	Standard
Ca	43	61.7	44.7	-0.0633	0.059	92.4	mg/L	73	Standard
Fe	54	1925.3	5.1	0.1469	0.014	9.7	mg/L	785	Standard
Fe	57	18316.1	2.4	0.0570	0.002	3.8	mg/L	6133	Standard
Sc-1	45	292139.7	1.0				mg/L	254529	Standard
Cl	35	1308614.8	13.2				ug/L	1641778	Standard
Kr	83	62.3	2.5				ug/L	60	Standard
Br	81	14294.3	7.2				ug/L	11554	Standard
P	31	102671.8	1.8				ug/L	45410	Standard
S	34	781896.2	2.8				ug/L	568857	Standard
Sr	88	2206.8	1.5				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.592	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		113.861	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		104.229	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.254	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: LCSS A2 WG397174-03
 Report Date/Time: Thursday, May 10, 2012 15:08:01
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	99.431
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: LCSS A2 WG397174-03
 Report Date/Time: Thursday, May 10, 2012 15:08:01
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013426 WG397174-01
 Sample Date/Time: Thursday, May 10, 2012 15:08:21
 Number of Replicates: 3
 Autosampler Position: 403
 Sample Description: 5
 Method File: C:\NexIONData\Method\6020a.mth
 Aliquot Volume (mL):
 Diluted to Volume (mL):
 User Name: JYH user
 Cumulative Autodilution Factor: 1
 Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	144899.7	2.0	11624.3781	307.120	2.6	ug/L	12600	Standard
|	Be	9	708.4	13.6	0.1727	0.025	14.5	ug/L	5	Standard
|	Al	27	64589248.2	1.1	3655.0253	26.913	0.7	ug/L	16102	Standard
>	Sc	45	288935.7	0.5				ug/L	254529	Standard
|	Ti	47	15853.3	0.9	10.8164	0.210	1.9	ug/L	84	Standard
|	V	51	182556.3	1.5	12.0810	0.163	1.3	ug/L	5785	Standard
|	Cr	52	113914.4	2.0	9.3894	0.139	1.5	ug/L	12212	Standard
|	Cr	53	18374.5	0.6	9.5686	0.093	1.0	ug/L	5042	Standard
|	Mn	55	3409981.7	0.4	174.9562	2.075	1.2	ug/L	1290	Standard
|	Co	59	62312.2	1.4	4.4926	0.111	2.5	ug/L	143	Standard
|	Ni	60	35862.1	1.1	12.3209	0.271	2.2	ug/L	79	Standard
|	Cu	65	26243.7	0.6	9.9144	0.171	1.7	ug/L	154	Standard
|	Zn	66	31891.9	2.6	26.6203	0.991	3.7	ug/L	194	Standard
>	Ge	72	220905.9	1.1				ug/L	232024	Standard
|	As	75	2374.9	0.3	2.4153	0.030	1.2	ug/L	-297	Standard
|	Se	82	38.6	10.1	0.1583	0.035	21.8	ug/L	17	Standard
|	Se-1	77	116.0	1.5	-0.3432	0.020	5.8	ug/L	180	Standard
|	Ga	71	202733.7	0.8				mg/L	210139	Standard
|	Rb	85	103483.9	1.3				ug/L	12	Standard
>	Y	89	268091.8	2.2				ug/L	214065	Standard
|	Rh	103	18.3	41.7				ug/L	0	Standard
|	Mo	98	229.5	5.5	0.0505	0.004	8.0	ug/L	6	Standard
|	Ag	107	468.7	10.7	0.0517	0.006	10.7	ug/L	33	Standard
|	Cd	111	327.5	1.7	-0.0163	0.001	5.9	mg/L	437	Standard
|	Cd	114	925.5	1.4	-0.0170	0.002	12.5	ug/L	1160	Standard
>	In	115	611633.2	1.4				ug/L	646604	Standard
|	Sn	118	491.3	3.4	-0.0230	0.002	6.5	ug/L	864	Standard
|	Sb	123	138.0	3.1	0.0107	0.001	4.9	ug/L	18	Standard
|	Ba	135	340905.6	0.7	78.2464	0.583	0.7	ug/L	39	Standard
|	Ce	140	587223.0	0.9				ug/L	46	Standard
>	Tb	159	688604.0	1.5				ug/L	695671	Standard
|	Ho	165	9201.8	1.5				ug/L	9	Standard
|	Tl	203	1425.1	5.3	0.0515	0.004	7.1	ug/L	687	Standard
|	Tl	205	3269.0	3.0	0.0499	0.002	4.1	ug/L	1624	Standard
|	Pb	206	48516.9	0.6	3.7415	0.044	1.2	ug/L	305	Standard
|	Pb	207	40596.6	0.7	3.6703	0.040	1.1	ug/L	231	Standard
|	Pb	208	188676.3	0.5	3.6649	0.028	0.8	ug/L	1129	Standard
|	U	238	6501.4	2.0	0.2405	0.003	1.3	ug/L	3	Standard
>	Bi	209	397237.4	1.2				ug/L	405108	Standard
|	Na	23	310.0	8.1	0.0486	0.006	13.3	mg/L	118	Standard
|	Mg	24	1029787.6	1.9	1.6596	0.035	2.1	mg/L	377	Standard

Sample ID: L1205013426 WG397174-01
 Report Date/Time: Thursday, May 10, 2012 15:10:54
 Page 1

Approved: May 11, 2012

J. J. H.


K	39	8624.1	2.2	0.6058	0.018	2.9	mg/L	583	Standard
Ca	43	850.0	4.1	1.6052	0.066	4.1	mg/L	73	Standard
Fe	54	50678.0	1.4	7.8361	0.119	1.5	mg/L	785	Standard
Fe	57	1443546.8	1.6	7.2423	0.151	2.1	mg/L	6133	Standard
Sc-1	45	288935.7	0.5				mg/L	254529	Standard
Cl	35	711932.7	32.4				ug/L	1641778	Standard
Kr	83	60.1	11.8				ug/L	60	Standard
Br	81	11261.7	2.4				ug/L	11554	Standard
P	31	312072.9	0.8				ug/L	45410	Standard
S	34	582898.5	1.2				ug/L	568857	Standard
Sr	88	426420.8	0.8				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.208	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		125.239	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		94.592	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.984	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013426 WG397174-01
 Report Date/Time: Thursday, May 10, 2012 15:10:54
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	98.057
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205013426 WG397174-01
 Report Date/Time: Thursday, May 10, 2012 15:10:54
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013426S WG397174-04

Sample Date/Time: Thursday, May 10, 2012 15:11:14

Number of Replicates: 3

Autosampler Position: 404

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	138523.8	1.5	11751.4061	395.728	3.4	ug/L	12600	Standard
|	Be	9	17690.3	1.1	4.9251	0.161	3.3	ug/L	5	Standard
|	Al	27	62619581.1	1.6	3742.9629	80.264	2.1	ug/L	16102	Standard
>	Sc	45	273640.2	2.8				ug/L	254529	Standard
|	Ti	47	17824.5	2.7	12.5906	0.035	0.3	ug/L	84	Standard
|	V	51	252310.2	2.7	17.4006	0.222	1.3	ug/L	5785	Standard
|	Cr	52	160901.6	2.8	14.2022	0.141	1.0	ug/L	12212	Standard
|	Cr	53	25222.7	3.5	14.2278	0.130	0.9	ug/L	5042	Standard
|	Mn	55	3252284.7	2.3	172.6409	0.748	0.4	ug/L	1290	Standard
|	Co	59	119880.8	1.5	8.9533	0.148	1.6	ug/L	143	Standard
|	Ni	60	47625.8	2.3	16.9365	0.091	0.5	ug/L	79	Standard
|	Cu	65	35909.2	2.0	14.0565	0.160	1.1	ug/L	154	Standard
|	Zn	66	36895.9	1.6	31.8963	0.392	1.2	ug/L	194	Standard
>	Ge	72	213513.3	2.7				ug/L	232024	Standard
|	As	75	7502.6	3.4	7.3792	0.050	0.7	ug/L	-297	Standard
|	Se	82	671.5	3.7	5.5397	0.231	4.2	ug/L	17	Standard
|	Se-1	77	538.3	7.0	5.2689	0.301	5.7	ug/L	180	Standard
|	Ga	71	196174.0	3.7				mg/L	210139	Standard
|	Rb	85	91641.5	2.9				ug/L	12	Standard
>	Y	89	261622.8	0.8				ug/L	214065	Standard
|	Rh	103	8.3	124.9				ug/L	0	Standard
|	Mo	98	240.4	6.9	0.0553	0.005	9.1	ug/L	6	Standard
|	Ag	107	35145.4	1.3	4.5780	0.079	1.7	ug/L	33	Standard
|	Cd	111	21570.8	2.0	5.1165	0.088	1.7	mg/L	437	Standard
|	Cd	114	57831.1	1.4	5.2520	0.041	0.8	ug/L	1160	Standard
>	In	115	591914.7	1.0				ug/L	646604	Standard
|	Sn	118	500.7	3.1	-0.0213	0.001	6.5	ug/L	864	Standard
|	Sb	123	3861.3	0.2	0.3793	0.004	0.9	ug/L	18	Standard
|	Ba	135	348844.9	2.1	82.7248	0.931	1.1	ug/L	39	Standard
|	Ce	140	569815.0	1.2				ug/L	46	Standard
>	Tb	159	670313.7	1.6				ug/L	695671	Standard
|	Ho	165	8610.4	2.1				ug/L	9	Standard
|	Tl	203	74299.8	1.4	4.6979	0.090	1.9	ug/L	687	Standard
|	Tl	205	173509.0	1.4	4.6322	0.106	2.3	ug/L	1624	Standard
|	Pb	206	106905.2	1.3	8.5114	0.115	1.4	ug/L	305	Standard
|	Pb	207	90984.7	1.4	8.4932	0.119	1.4	ug/L	231	Standard
|	Pb	208	421002.8	1.8	8.4431	0.116	1.4	ug/L	1129	Standard
|	U	238	117509.2	2.8	4.4299	0.055	1.2	ug/L	3	Standard
>	Bi	209	386117.5	2.0				ug/L	405108	Standard
|	Na	23	305.0	7.5	0.0515	0.006	11.6	mg/L	118	Standard
|	Mg	24	1006034.1	1.8	1.7126	0.048	2.8	mg/L	377	Standard

Sample ID: L1205013426S WG397174-04

Report Date/Time: Thursday, May 10, 2012 15:13:46

Page 1

Approved: May 11, 2012




K	39	7688.6	3.3	0.5673	0.016	2.8	mg/L	583	Standard
Ca	43	730.0	4.7	1.4372	0.032	2.2	mg/L	73	Standard
Fe	54	49903.4	2.7	8.1550	0.167	2.0	mg/L	785	Standard
Fe	57	1422057.8	2.5	7.5351	0.104	1.4	mg/L	6133	Standard
Sc-1	45	273640.2	2.8				mg/L	254529	Standard
Cl	35	581773.2	32.6				ug/L	1641778	Standard
Kr	83	62.7	6.3				ug/L	60	Standard
Br	81	11048.2	3.0				ug/L	11554	Standard
P	31	284748.5	2.5				ug/L	45410	Standard
S	34	558981.9	1.9				ug/L	568857	Standard
Sr	88	397398.7	1.9				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.022	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		122.217	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		91.542	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		96.355	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013426S WG397174-04
 Report Date/Time: Thursday, May 10, 2012 15:13:46
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.312
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
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205013426S WG397174-04
 Report Date/Time: Thursday, May 10, 2012 15:13:46
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013426SD WG397174-05

Sample Date/Time: Thursday, May 10, 2012 15:14:06

Number of Replicates: 3

Autosampler Position: 405

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	169004.0	0.3	13230.6174	207.512	1.6	ug/L	12600	Standard
|	Be	9	18876.8	3.0	4.7971	0.162	3.4	ug/L	5	Standard
|	Al	27	80322175.7	0.3	4384.2595	90.791	2.1	ug/L	16102	Standard
>	Sc	45	299637.7	1.7				ug/L	254529	Standard
|	Ti	47	35873.4	1.2	23.9759	0.532	2.2	ug/L	84	Standard
|	V	51	299845.7	1.5	19.5537	0.379	1.9	ug/L	5785	Standard
|	Cr	52	189012.5	1.4	15.8604	0.264	1.7	ug/L	12212	Standard
|	Cr	53	28775.6	1.8	15.4390	0.110	0.7	ug/L	5042	Standard
|	Mn	55	4096904.2	0.5	205.2746	1.775	0.9	ug/L	1290	Standard
|	Co	59	136645.2	1.5	9.6304	0.067	0.7	ug/L	143	Standard
|	Ni	60	54321.6	1.5	18.2338	0.258	1.4	ug/L	79	Standard
|	Cu	65	40264.8	2.4	14.8758	0.220	1.5	ug/L	154	Standard
|	Zn	66	40997.4	2.3	33.4503	0.406	1.2	ug/L	194	Standard
>	Ge	72	226218.7	1.2				ug/L	232024	Standard
|	As	75	8152.6	2.3	7.5631	0.128	1.7	ug/L	-297	Standard
|	Se	82	729.2	0.3	5.6807	0.082	1.4	ug/L	17	Standard
|	Se-1	77	594.7	5.2	5.5796	0.457	8.2	ug/L	180	Standard
|	Ga	71	208321.4	2.0				mg/L	210139	Standard
|	Rb	85	112900.9	2.6				ug/L	12	Standard
>	Y	89	288140.0	2.4				ug/L	214065	Standard
|	Rh	103	31.7	24.1				ug/L	0	Standard
|	Mo	98	292.7	5.6	0.0654	0.005	7.8	ug/L	6	Standard
|	Ag	107	37620.7	2.5	4.6667	0.053	1.1	ug/L	33	Standard
|	Cd	111	22683.7	1.5	5.1248	0.025	0.5	mg/L	437	Standard
|	Cd	114	61092.1	1.2	5.2851	0.011	0.2	ug/L	1160	Standard
>	In	115	621472.5	1.4				ug/L	646604	Standard
|	Sn	118	603.3	2.9	-0.0161	0.002	9.5	ug/L	864	Standard
|	Sb	123	1056.7	3.7	0.0970	0.004	3.7	ug/L	18	Standard
|	Ba	135	375510.0	0.4	84.8273	0.899	1.1	ug/L	39	Standard
|	Ce	140	671883.5	0.5				ug/L	46	Standard
>	Tb	159	702915.7	2.3				ug/L	695671	Standard
|	Ho	165	9852.2	1.5				ug/L	9	Standard
|	Tl	203	77536.9	0.5	4.7172	0.061	1.3	ug/L	687	Standard
|	Tl	205	181169.1	1.2	4.6536	0.076	1.6	ug/L	1624	Standard
|	Pb	206	113925.7	0.9	8.7278	0.108	1.2	ug/L	305	Standard
|	Pb	207	97212.9	0.4	8.7319	0.072	0.8	ug/L	231	Standard
|	Pb	208	448908.8	0.4	8.6632	0.069	0.8	ug/L	1129	Standard
|	U	238	125524.9	1.4	4.5536	0.030	0.7	ug/L	3	Standard
>	Bi	209	401263.2	0.8				ug/L	405108	Standard
|	Na	23	348.3	9.6	0.0550	0.009	15.9	mg/L	118	Standard
|	Mg	24	1116733.2	0.9	1.7359	0.044	2.6	mg/L	377	Standard

Sample ID: L1205013426SD WG397174-05

Report Date/Time: Thursday, May 10, 2012 15:16:40

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	9369.6	1.1	0.6373	0.020	3.1	mg/L	583	Standard
Ca	43	836.7	1.2	1.5143	0.041	2.7	mg/L	73	Standard
Fe	54	60711.8	1.3	9.0789	0.271	3.0	mg/L	785	Standard
Fe	57	1697718.2	1.3	8.2199	0.232	2.8	mg/L	6133	Standard
Sc-1	45	299637.7	1.7				mg/L	254529	Standard
Cl	35	545542.3	32.3				ug/L	1641778	Standard
Kr	83	63.3	3.7				ug/L	60	Standard
Br	81	11604.4	1.0				ug/L	11554	Standard
P	31	302349.2	1.7				ug/L	45410	Standard
S	34	594015.7	0.7				ug/L	568857	Standard
Sr	88	452016.2	2.5				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.498	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		134.604	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		96.113	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		101.041	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013426SD WG397174-05
 Report Date/Time: Thursday, May 10, 2012 15:16:40
 Page 2

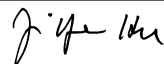
Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	99.051
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205013426SD WG397174-05
 Report Date/Time: Thursday, May 10, 2012 15:16:40
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013410

Sample Date/Time: Thursday, May 10, 2012 15:17:00

Number of Replicates: 3

Autosampler Position: 406

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

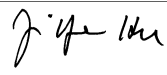
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	101460.3	1.0	7932.6009	161.213	2.0	ug/L	12600	Standard
|	Be	9	830.0	12.2	0.2090	0.027	13.1	ug/L	5	Standard
|	Al	27	68361630.5	1.7	3939.9146	33.161	0.8	ug/L	16102	Standard
>	Sc	45	283694.8	0.9				ug/L	254529	Standard
|	Ti	47	8819.6	2.0	5.9490	0.131	2.2	ug/L	84	Standard
|	V	51	101675.7	1.9	6.5532	0.089	1.4	ug/L	5785	Standard
|	Cr	52	107998.9	0.7	8.7820	0.058	0.7	ug/L	12212	Standard
|	Cr	53	16622.4	1.3	8.4434	0.162	1.9	ug/L	5042	Standard
|	Mn	55	3792321.8	0.5	193.2637	0.053	0.0	ug/L	1290	Standard
|	Co	59	52272.7	0.4	3.7412	0.012	0.3	ug/L	143	Standard
|	Ni	60	37015.8	1.4	12.6304	0.106	0.8	ug/L	79	Standard
|	Cu	65	29724.1	1.6	11.1589	0.173	1.6	ug/L	154	Standard
|	Zn	66	44493.6	1.2	36.9480	0.303	0.8	ug/L	194	Standard
>	Ge	72	222394.6	0.6				ug/L	232024	Standard
|	As	75	942.3	6.7	1.0889	0.056	5.1	ug/L	-297	Standard
|	Se	82	45.4	14.3	0.2115	0.052	24.6	ug/L	17	Standard
|	Se-1	77	133.0	11.1	-0.1373	0.197	143.2	ug/L	180	Standard
|	Ga	71	201729.1	0.8				mg/L	210139	Standard
|	Rb	85	75822.6	1.8				ug/L	12	Standard
>	Y	89	283684.7	1.3				ug/L	214065	Standard
|	Rh	103	25.0	72.1				ug/L	0	Standard
|	Mo	98	120.4	11.6	0.0222	0.004	17.0	ug/L	6	Standard
|	Ag	107	438.3	2.3	0.0472	0.002	3.8	ug/L	33	Standard
|	Cd	111	553.4	2.2	0.0347	0.004	11.2	mg/L	437	Standard
|	Cd	114	1516.6	0.6	0.0340	0.002	6.1	ug/L	1160	Standard
>	In	115	620172.7	1.1				ug/L	646604	Standard
|	Sn	118	626.7	1.9	-0.0145	0.001	4.5	ug/L	864	Standard
|	Sb	123	210.3	8.7	0.0174	0.002	10.7	ug/L	18	Standard
|	Ba	135	473754.1	1.4	107.2552	2.556	2.4	ug/L	39	Standard
|	Ce	140	632130.3	1.5				ug/L	46	Standard
>	Tb	159	689336.0	0.1				ug/L	695671	Standard
|	Ho	165	9861.2	1.9				ug/L	9	Standard
|	Tl	203	1072.0	10.3	0.0303	0.006	21.0	ug/L	687	Standard
|	Tl	205	2477.9	10.2	0.0298	0.006	20.6	ug/L	1624	Standard
|	Pb	206	207502.2	0.2	16.2283	0.161	1.0	ug/L	305	Standard
|	Pb	207	176951.4	1.1	16.2267	0.307	1.9	ug/L	231	Standard
|	Pb	208	812069.6	0.7	15.9988	0.210	1.3	ug/L	1129	Standard
|	U	238	3586.8	1.2	0.1350	0.003	2.0	ug/L	3	Standard
>	Bi	209	393545.7	0.8				ug/L	405108	Standard
|	Na	23	323.3	6.4	0.0533	0.006	11.0	mg/L	118	Standard
|	Mg	24	906996.9	1.1	1.4887	0.029	1.9	mg/L	377	Standard

Sample ID: L1205013410

Report Date/Time: Thursday, May 10, 2012 15:19:33

Page 1

Approved: May 11, 2012



K	39	9626.4	4.3	0.6959	0.038	5.5	mg/L	583	Standard
Ca	43	1445.1	7.3	2.9214	0.241	8.2	mg/L	73	Standard
Fe	54	29646.6	0.9	4.6073	0.085	1.8	mg/L	785	Standard
Fe	57	840183.9	0.7	4.2789	0.007	0.2	mg/L	6133	Standard
Sc-1	45	283694.8	0.9				mg/L	254529	Standard
Cl	35	540991.4	34.4				ug/L	1641778	Standard
Kr	83	63.0	3.2				ug/L	60	Standard
Br	81	13421.8	0.5				ug/L	11554	Standard
P	31	370821.4	0.8				ug/L	45410	Standard
S	34	642669.3	1.0				ug/L	568857	Standard
Sr	88	523762.8	1.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.850	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		132.523	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		95.912	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		99.089	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013410

Report Date/Time: Thursday, May 10, 2012 15:19:33

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	97.146
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1205013410
 Report Date/Time: Thursday, May 10, 2012 15:19:33
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013411

Sample Date/Time: Thursday, May 10, 2012 15:19:53

Number of Replicates: 3

Autosampler Position: 407

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	55616.9	0.4	4362.7392	47.572	1.1	ug/L	12600	Standard
|	Be	9	688.3	4.0	0.1921	0.007	3.5	ug/L	5	Standard
|	Al	27	36586712.7	2.1	2350.3604	28.881	1.2	ug/L	16102	Standard
>	Sc	45	254474.3	0.9				ug/L	254529	Standard
|	Ti	47	2047.5	3.3	1.3651	0.066	4.8	ug/L	84	Standard
|	V	51	47691.4	1.4	2.9905	0.040	1.3	ug/L	5785	Standard
|	Cr	52	46845.6	0.7	3.3146	0.073	2.2	ug/L	12212	Standard
|	Cr	53	7238.4	5.8	2.9108	0.253	8.7	ug/L	5042	Standard
|	Mn	55	4624222.0	1.1	240.8908	3.561	1.5	ug/L	1290	Standard
|	Co	59	41723.4	0.7	3.0504	0.044	1.5	ug/L	143	Standard
|	Ni	60	23306.9	1.3	8.1207	0.165	2.0	ug/L	79	Standard
|	Cu	65	10159.1	1.7	3.8659	0.082	2.1	ug/L	154	Standard
|	Zn	66	130077.1	1.4	110.7572	1.939	1.8	ug/L	194	Standard
>	Ge	72	217606.7	1.5				ug/L	232024	Standard
|	As	75	328.1	17.1	0.5330	0.048	9.0	ug/L	-297	Standard
|	Se	82	34.9	10.8	0.1320	0.028	21.3	ug/L	17	Standard
|	Se-1	77	102.0	7.7	-0.5013	0.110	22.0	ug/L	180	Standard
|	Ga	71	197028.7	1.8				mg/L	210139	Standard
|	Rb	85	32232.6	0.6				ug/L	12	Standard
>	Y	89	257500.4	2.3				ug/L	214065	Standard
|	Rh	103	13.3	57.3				ug/L	0	Standard
|	Mo	98	80.2	2.0	0.0122	0.000	3.5	ug/L	6	Standard
|	Ag	107	187.7	2.7	0.0162	0.001	4.7	ug/L	33	Standard
|	Cd	111	529.8	6.5	0.0305	0.008	24.8	mg/L	437	Standard
|	Cd	114	1404.0	2.1	0.0253	0.002	9.3	ug/L	1160	Standard
>	In	115	614185.8	0.6				ug/L	646604	Standard
|	Sn	118	736.4	1.1	-0.0068	0.001	12.3	ug/L	864	Standard
|	Sb	123	100.3	9.6	0.0071	0.001	12.6	ug/L	18	Standard
|	Ba	135	415912.3	0.5	95.0629	0.768	0.8	ug/L	39	Standard
|	Ce	140	432211.9	0.9				ug/L	46	Standard
>	Tb	159	685273.0	0.5				ug/L	695671	Standard
|	Ho	165	7143.4	1.7				ug/L	9	Standard
|	Tl	203	793.4	5.2	0.0127	0.003	21.8	ug/L	687	Standard
|	Tl	205	1859.4	9.6	0.0133	0.005	37.0	ug/L	1624	Standard
|	Pb	206	38538.6	1.2	2.9850	0.042	1.4	ug/L	305	Standard
|	Pb	207	32065.2	1.7	2.9115	0.051	1.7	ug/L	231	Standard
|	Pb	208	149567.4	1.2	2.9178	0.035	1.2	ug/L	1129	Standard
|	U	238	1258.4	5.6	0.0488	0.003	5.8	ug/L	3	Standard
>	Bi	209	394872.4	0.5				ug/L	405108	Standard
|	Na	23	316.7	10.0	0.0606	0.008	13.6	mg/L	118	Standard
|	Mg	24	555237.4	0.7	1.0156	0.009	0.9	mg/L	377	Standard

Sample ID: L1205013411

Report Date/Time: Thursday, May 10, 2012 15:22:25

Page 1

Approved: May 11, 2012

J. J. H.

K	39	3757.1	2.8	0.2736	0.012	4.3	mg/L	583	Standard
Ca	43	1406.7	4.9	3.1852	0.135	4.2	mg/L	73	Standard
Fe	54	11701.3	2.2	1.9413	0.049	2.5	mg/L	785	Standard
Fe	57	331942.1	1.2	1.8654	0.009	0.5	mg/L	6133	Standard
Sc-1	45	254474.3	0.9				mg/L	254529	Standard
Cl	35	475815.8	36.8				ug/L	1641778	Standard
Kr	83	58.1	7.8				ug/L	60	Standard
Br	81	11373.4	2.4				ug/L	11554	Standard
P	31	140475.8	1.3				ug/L	45410	Standard
S	34	640515.4	2.3				ug/L	568857	Standard
Sr	88	462384.3	1.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.786	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		120.291	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		94.986	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.505	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013411

Report Date/Time: Thursday, May 10, 2012 15:22:25

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	97.473
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205013411
 Report Date/Time: Thursday, May 10, 2012 15:22:25
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013411PS WG397650-01

Sample Date/Time: Thursday, May 10, 2012 15:24:24

Number of Replicates: 3

Autosampler Position: 408

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	64858.6	3.1	4430.3622	52.208	1.2	ug/L	12600	Standard
|	Be	9	181698.6	3.0	47.3067	0.446	0.9	ug/L	5	Standard
|	Al	27	41420431.4	2.2	2310.2262	55.860	2.4	ug/L	16102	Standard
>	Sc	45	293277.3	3.9				ug/L	254529	Standard
|	Ti	47	2427.5	4.7	1.5207	0.048	3.1	ug/L	84	Standard
|	V	51	885436.8	2.7	56.7297	0.486	0.9	ug/L	5785	Standard
|	Cr	52	675864.5	2.8	57.7643	0.191	0.3	ug/L	12212	Standard
|	Cr	53	104498.5	3.2	58.4247	0.495	0.8	ug/L	5042	Standard
|	Mn	55	6426756.8	2.6	313.3908	1.216	0.4	ug/L	1290	Standard
|	Co	59	844843.8	2.8	57.9934	0.183	0.3	ug/L	143	Standard
|	Ni	60	247482.6	5.8	80.8713	2.574	3.2	ug/L	79	Standard
|	Cu	65	165447.8	2.6	59.6380	0.448	0.8	ug/L	154	Standard
|	Zn	66	185904.3	3.3	148.2022	0.641	0.4	ug/L	194	Standard
>	Ge	72	232472.5	2.9				ug/L	232024	Standard
|	As	75	61247.0	2.9	53.8649	0.627	1.2	ug/L	-297	Standard
|	Se	82	7138.1	2.7	55.4543	0.220	0.4	ug/L	17	Standard
|	Se-1	77	4531.3	1.6	53.0446	0.846	1.6	ug/L	180	Standard
|	Ga	71	216226.2	3.0				mg/L	210139	Standard
|	Rb	85	38356.9	3.9				ug/L	12	Standard
>	Y	89	291463.2	2.9				ug/L	214065	Standard
|	Rh	103	76.7	3.8				ug/L	0	Standard
|	Mo	98	228.1	9.3	0.0468	0.004	9.2	ug/L	6	Standard
|	Ag	107	471308.6	3.1	56.2337	1.675	3.0	ug/L	33	Standard
|	Cd	111	236933.0	2.3	52.2473	1.242	2.4	mg/L	437	Standard
|	Cd	114	604739.5	1.9	51.0907	0.794	1.6	ug/L	1160	Standard
>	In	115	647186.2	1.9				ug/L	646604	Standard
|	Sn	118	1602.4	3.9	0.0455	0.005	10.8	ug/L	864	Standard
|	Sb	123	565231.5	1.4	51.1138	0.712	1.4	ug/L	18	Standard
|	Ba	135	700359.1	2.1	151.9254	2.471	1.6	ug/L	39	Standard
|	Ce	140	478582.9	2.9				ug/L	46	Standard
>	Tb	159	730173.7	2.5				ug/L	695671	Standard
|	Ho	165	8048.5	2.4				ug/L	9	Standard
|	Tl	203	868751.0	2.3	53.7321	0.593	1.1	ug/L	687	Standard
|	Tl	205	2135814.6	6.8	55.7466	3.116	5.6	ug/L	1624	Standard
|	Pb	206	731191.2	3.8	56.6669	1.438	2.5	ug/L	305	Standard
|	Pb	207	634931.5	2.7	57.6999	0.879	1.5	ug/L	231	Standard
|	Pb	208	2898347.3	2.6	56.5901	0.835	1.5	ug/L	1129	Standard
|	U	238	1394703.8	2.7	51.0529	0.733	1.4	ug/L	3	Standard
>	Bi	209	397440.1	1.3				ug/L	405108	Standard
|	Na	23	315.0	8.4	0.0487	0.006	12.8	mg/L	118	Standard
|	Mg	24	607016.7	4.6	0.9632	0.012	1.2	mg/L	377	Standard

Sample ID: L1205013411PS WG397650-01

Report Date/Time: Thursday, May 10, 2012 15:26:58

Page 1

Approved: May 11, 2012




K	39	4032.2	2.7	0.2517	0.019	7.7	mg/L	583	Standard
Ca	43	1503.4	2.1	2.9426	0.101	3.4	mg/L	73	Standard
Fe	54	13480.1	7.1	1.9388	0.078	4.0	mg/L	785	Standard
Fe	57	374524.2	4.2	1.8254	0.017	0.9	mg/L	6133	Standard
Sc-1	45	293277.3	3.9				mg/L	254529	Standard
Cl	35	945373.7	43.2				ug/L	1641778	Standard
Kr	83	74.1	8.5				ug/L	60	Standard
Br	81	13380.1	2.7				ug/L	11554	Standard
P	31	179419.2	3.1				ug/L	45410	Standard
S	34	704366.8	5.2				ug/L	568857	Standard
Sr	88	560956.0	1.8				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.193	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		136.156	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.090	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.960	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013411PS WG397650-01
 Report Date/Time: Thursday, May 10, 2012 15:26:58
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	98.107
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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	

Sample ID: L1205013411PS WG397650-01
 Report Date/Time: Thursday, May 10, 2012 15:26:58
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013411SDL WG397650-02

Sample Date/Time: Thursday, May 10, 2012 15:27:18

Number of Replicates: 3

Autosampler Position: 409

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	19248.9	2.8	922.9908	119.861	13.0	ug/L	12600	Standard
|	Be	9	158.3	15.6	0.0385	0.008	19.6	ug/L	5	Standard
|	Al	27	6842857.8	1.4	490.3671	14.322	2.9	ug/L	16102	Standard
>	Sc	45	227995.7	3.6				ug/L	254529	Standard
|	Ti	47	426.0	6.4	0.2499	0.021	8.6	ug/L	84	Standard
|	V	51	11594.4	1.3	0.5465	0.006	1.1	ug/L	5785	Standard
|	Cr	52	15495.9	1.5	0.4712	0.007	1.6	ug/L	12212	Standard
|	Cr	53	2561.9	12.7	0.1222	0.211	172.7	ug/L	5042	Standard
|	Mn	55	869793.5	1.2	47.4806	0.345	0.7	ug/L	1290	Standard
|	Co	59	7722.0	0.8	0.5842	0.010	1.7	ug/L	143	Standard
|	Ni	60	4362.3	3.3	1.5756	0.042	2.7	ug/L	79	Standard
|	Cu	65	1955.1	3.0	0.7411	0.026	3.5	ug/L	154	Standard
|	Zn	66	27121.3	2.0	24.0946	0.237	1.0	ug/L	194	Standard
>	Ge	72	207342.5	1.1				ug/L	232024	Standard
|	As	75	-95.5	7.5	0.1326	0.007	5.1	ug/L	-297	Standard
|	Se	82	23.3	3.0	0.0449	0.008	17.7	ug/L	17	Standard
|	Se-1	77	94.7	10.4	-0.5358	0.138	25.8	ug/L	180	Standard
|	Ga	71	181785.0	0.7				mg/L	210139	Standard
|	Rb	85	5766.1	2.9				ug/L	12	Standard
>	Y	89	202029.8	1.1				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	19.5	31.2	-0.0030	0.002	56.1	ug/L	6	Standard
|	Ag	107	68.0	18.4	0.0016	0.002	100.0	ug/L	33	Standard
|	Cd	111	172.0	3.8	-0.0507	0.001	2.9	mg/L	437	Standard
|	Cd	114	448.6	3.2	-0.0578	0.002	2.7	ug/L	1160	Standard
>	In	115	583689.6	0.8				ug/L	646604	Standard
|	Sn	118	488.3	5.2	-0.0216	0.002	7.9	ug/L	864	Standard
|	Sb	123	762.1	16.8	0.0739	0.012	16.8	ug/L	18	Standard
|	Ba	135	77383.5	1.9	18.6036	0.257	1.4	ug/L	39	Standard
|	Ce	140	80208.7	0.2				ug/L	46	Standard
>	Tb	159	648731.9	1.0				ug/L	695671	Standard
|	Ho	165	1319.4	1.6				ug/L	9	Standard
|	Tl	203	667.0	12.8	0.0057	0.005	94.7	ug/L	687	Standard
|	Tl	205	1502.7	7.5	0.0048	0.003	70.3	ug/L	1624	Standard
|	Pb	206	7335.8	1.2	0.5616	0.017	3.0	ug/L	305	Standard
|	Pb	207	6117.9	1.1	0.5486	0.007	1.3	ug/L	231	Standard
|	Pb	208	28645.6	1.1	0.5521	0.014	2.6	ug/L	1129	Standard
|	U	238	298.0	5.9	0.0136	0.001	4.8	ug/L	3	Standard
>	Bi	209	386854.7	1.7				ug/L	405108	Standard
|	Na	23	101.7	22.2	0.0043	0.007	172.8	mg/L	118	Standard
|	Mg	24	114091.6	3.1	0.2323	0.001	0.5	mg/L	377	Standard

Sample ID: L1205013411SDL WG397650-02

Report Date/Time: Thursday, May 10, 2012 15:29:50

Page 1

Approved: May 11, 2012


J. Y. H.

K	39	1211.7	7.2	0.0657	0.012	18.2	mg/L	583	Standard
Ca	43	300.0	7.3	0.6125	0.071	11.6	mg/L	73	Standard
Fe	54	2385.8	3.6	0.3235	0.010	3.1	mg/L	785	Standard
Fe	57	65851.1	0.3	0.3867	0.016	4.2	mg/L	6133	Standard
Sc-1	45	227995.7	3.6				mg/L	254529	Standard
Cl	35	433017.8	54.4				ug/L	1641778	Standard
Kr	83	46.2	6.2				ug/L	60	Standard
Br	81	9426.3	2.4				ug/L	11554	Standard
P	31	40902.7	2.3				ug/L	45410	Standard
S	34	562688.5	2.2				ug/L	568857	Standard
Sr	88	85356.4	0.7				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.363	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		94.378	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		90.270	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		93.253	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013411SDL WG397650-02
 Report Date/Time: Thursday, May 10, 2012 15:29:50
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	95.494
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205013411SDL WG397650-02
 Report Date/Time: Thursday, May 10, 2012 15:29:50
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 15:30:13

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12873.8	2.4	35.1321	42.539	121.1	ug/L	12600	Standard
|	Be	9	169182.8	1.6	50.0806	0.498	1.0	ug/L	5	Standard
|	Al	27	820031.4	2.9	51.1967	0.236	0.5	ug/L	16102	Standard
>	Sc	45	257936.3	2.6				ug/L	254529	Standard
|	Ti	47	151829.9	2.4	101.2833	1.041	1.0	ug/L	84	Standard
|	V	51	768943.0	3.6	50.3973	0.688	1.4	ug/L	5785	Standard
|	Cr	52	573683.4	3.9	50.0511	0.834	1.7	ug/L	12212	Standard
|	Cr	53	87371.3	3.0	49.7914	0.452	0.9	ug/L	5042	Standard
|	Mn	55	1013073.9	2.6	50.5034	0.377	0.7	ug/L	1290	Standard
|	Co	59	718302.3	2.6	50.4813	0.580	1.1	ug/L	143	Standard
|	Ni	60	151188.0	3.9	50.5890	0.868	1.7	ug/L	79	Standard
|	Cu	65	137886.3	3.2	50.8711	0.446	0.9	ug/L	154	Standard
|	Zn	66	61095.3	2.6	49.7521	0.306	0.6	ug/L	194	Standard
>	Ge	72	227057.6	2.3				ug/L	232024	Standard
|	As	75	56763.6	2.3	51.1223	0.396	0.8	ug/L	-297	Standard
|	Se	82	6762.9	1.1	53.7962	0.670	1.2	ug/L	17	Standard
|	Se-1	77	4187.6	3.2	50.0797	1.304	2.6	ug/L	180	Standard
|	Ga	71	205542.8	1.9				mg/L	210139	Standard
|	Rb	85	1021.7	2.8				ug/L	12	Standard
>	Y	89	216232.2	1.5				ug/L	214065	Standard
|	Rh	103	33.3	34.6				ug/L	0	Standard
|	Mo	98	416382.5	3.1	102.2751	1.899	1.9	ug/L	6	Standard
|	Ag	107	428518.7	3.0	52.0240	0.823	1.6	ug/L	33	Standard
|	Cd	111	220858.5	3.9	49.5453	1.198	2.4	mg/L	437	Standard
|	Cd	114	570521.2	3.6	49.0396	1.141	2.3	ug/L	1160	Standard
>	In	115	635886.4	1.5				ug/L	646604	Standard
|	Sn	118	765972.0	3.4	49.2722	0.979	2.0	ug/L	864	Standard
|	Sb	123	528425.3	2.6	48.6243	0.639	1.3	ug/L	18	Standard
|	Ba	135	227523.2	2.3	50.2207	0.562	1.1	ug/L	39	Standard
|	Ce	140	868.0	3.6				ug/L	46	Standard
>	Tb	159	708024.6	1.8				ug/L	695671	Standard
|	Ho	165	22.0	25.3				ug/L	9	Standard
|	Tl	203	799343.5	2.0	50.6344	0.574	1.1	ug/L	687	Standard
|	Tl	205	1860801.1	1.4	49.7631	0.371	0.7	ug/L	1624	Standard
|	Pb	206	639070.7	1.7	50.7330	0.571	1.1	ug/L	305	Standard
|	Pb	207	542542.2	1.9	50.4978	0.647	1.3	ug/L	231	Standard
|	Pb	208	2503278.4	1.7	50.0602	0.561	1.1	ug/L	1129	Standard
|	U	238	1264663.8	2.5	47.4154	0.853	1.8	ug/L	3	Standard
>	Bi	209	388048.9	0.9				ug/L	405108	Standard
|	Na	23	19005.3	3.2	5.1796	0.129	2.5	mg/L	118	Standard
|	Mg	24	2810053.6	1.4	5.0767	0.144	2.8	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 15:32:46

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	60942.3	1.8	5.1528	0.094	1.8	mg/L	583	Standard
Ca	43	2181.8	2.5	4.9782	0.116	2.3	mg/L	73	Standard
Fe	54	31458.1	1.6	5.4032	0.082	1.5	mg/L	785	Standard
Fe	57	905960.2	2.6	5.0810	0.030	0.6	mg/L	6133	Standard
Sc-1	45	257936.3	2.6				mg/L	254529	Standard
Cl	35	591747.5	33.7				ug/L	1641778	Standard
Kr	83	56.9	9.4				ug/L	60	Standard
Br	81	11786.3	2.9				ug/L	11554	Standard
P	31	65039.4	2.5				ug/L	45410	Standard
S	34	717753.6	3.0				ug/L	568857	Standard
Sr	88	636.7	13.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	102.393		
Sc	45			
Ti	47	101.283		
V	51	100.795		
Cr	52	100.102		
Cr	53			
Mn	55	101.007		
Co	59	100.963		
Ni	60	101.178		
Cu	65	101.742		
Zn	66	99.504		
Ge	72		97.860	
As	75	102.245		
Se	82	107.592		
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.012	
Rh	103			
Mo	98	102.275		
Ag	107	104.048		
Cd	111	99.091		
Cd	114			
In	115		98.342	
Sn	118	98.544		
Sb	123	97.249		
Ba	135	100.441		
Ce	140			
Tb	159		101.776	
Ho	165			
Tl	203	101.269		
Tl	205			
Pb	206	101.466		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 15:32:46

Page 2

Approved: May 11, 2012




Pb	207	100.996	
Pb	208	100.120	
U	238	94.831	
> Bi	209		95.789
Na	23	103.592	
Mg	24	101.533	
K	39	103.056	
Ca	43	99.563	
Fe	54	108.064	
Fe	57	101.620	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 15:32:46
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 15:33:06

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12246.6	2.4	41.1395	25.690	62.4	ug/L	12600	Standard
|	Be	9	28.3	53.9	-0.0057	0.004	79.4	ug/L	5	Standard
|	Al	27	14507.0	9.7	0.1790	0.111	61.8	ug/L	16102	Standard
>	Sc	45	244177.9	2.9				ug/L	254529	Standard
|	Ti	47	91.0	15.3	0.0029	0.008	284.1	ug/L	84	Standard
|	V	51	3633.2	1.4	-0.0359	0.003	8.4	ug/L	5785	Standard
|	Cr	52	10558.3	1.3	-0.0401	0.023	57.6	ug/L	12212	Standard
|	Cr	53	1295.1	12.2	-0.7181	0.080	11.2	ug/L	5042	Standard
|	Mn	55	1282.1	3.0	-0.0168	0.001	6.6	ug/L	1290	Standard
|	Co	59	139.3	7.2	0.0002	0.001	503.0	ug/L	143	Standard
|	Ni	60	76.7	9.3	0.0034	0.003	81.6	ug/L	79	Standard
|	Cu	65	146.3	13.3	0.0076	0.007	88.0	ug/L	154	Standard
|	Zn	66	194.0	6.4	-0.0074	0.009	120.8	ug/L	194	Standard
>	Ge	72	213559.5	2.5				ug/L	232024	Standard
|	As	75	-245.2	9.1	-0.0071	0.016	221.1	ug/L	-297	Standard
|	Se	82	25.7	26.1	0.0595	0.058	97.7	ug/L	17	Standard
|	Se-1	77	101.7	17.3	-0.4843	0.199	41.0	ug/L	180	Standard
|	Ga	71	192421.1	2.8				mg/L	210139	Standard
|	Rb	85	26.7	10.8				ug/L	12	Standard
>	Y	89	203433.7	6.5				ug/L	214065	Standard
|	Rh	103	6.7	86.6				ug/L	0	Standard
|	Mo	98	76.6	60.8	0.0114	0.011	98.4	ug/L	6	Standard
|	Ag	107	92.7	22.7	0.0044	0.002	52.8	ug/L	33	Standard
|	Cd	111	423.5	7.9	0.0073	0.005	62.5	mg/L	437	Standard
|	Cd	114	1101.4	4.3	-0.0000	0.001	1914.8	ug/L	1160	Standard
>	In	115	603836.3	3.5				ug/L	646604	Standard
|	Sn	118	907.0	4.5	0.0056	0.001	14.0	ug/L	864	Standard
|	Sb	123	351.4	28.1	0.0314	0.008	26.4	ug/L	18	Standard
|	Ba	135	60.0	23.6	0.0057	0.003	50.1	ug/L	39	Standard
|	Ce	140	47.7	10.6				ug/L	46	Standard
>	Tb	159	663986.3	4.1				ug/L	695671	Standard
|	Ho	165	9.3	52.9				ug/L	9	Standard
|	Tl	203	507.3	34.9	-0.0031	0.011	363.0	ug/L	687	Standard
|	Tl	205	1164.7	37.9	-0.0031	0.012	392.1	ug/L	1624	Standard
|	Pb	206	309.0	13.7	0.0026	0.003	126.6	ug/L	305	Standard
|	Pb	207	263.7	10.1	0.0027	0.002	81.2	ug/L	231	Standard
|	Pb	208	1216.7	11.9	0.0025	0.003	110.1	ug/L	1129	Standard
|	U	238	62.0	46.2	0.0048	0.001	22.8	ug/L	3	Standard
>	Bi	209	371167.7	1.6				ug/L	405108	Standard
|	Na	23	103.3	32.2	0.0025	0.009	350.8	mg/L	118	Standard
|	Mg	24	508.3	2.0	0.0001	0.000	16.7	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 15:35:38

Page 1

Approved: May 11, 2012

J. J. H.

K	39	606.7	7.5	0.0032	0.006	173.6	mg/L	583	Standard
Ca	43	55.0	48.1	-0.0537	0.069	129.1	mg/L	73	Standard
Fe	54	903.0	14.1	0.0151	0.022	146.0	mg/L	785	Standard
Fe	57	4362.3	2.4	-0.0083	0.001	12.0	mg/L	6133	Standard
Sc-1	45	244177.9	2.9				mg/L	254529	Standard
Cl	35	584898.7	33.7				ug/L	1641778	Standard
Kr	83	54.4	4.3				ug/L	60	Standard
Br	81	11180.0	6.8				ug/L	11554	Standard
P	31	61289.0	5.5				ug/L	45410	Standard
S	34	689730.6	3.8				ug/L	568857	Standard
Sr	88	248.3	23.3				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.042	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		95.034	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		93.386	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		95.445	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 15:35:38

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	91.622
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 15:35:38
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013413

Sample Date/Time: Thursday, May 10, 2012 15:36:01

Number of Replicates: 3

Autosampler Position: 410

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	62881.9	2.0	5442.6730	164.623	3.0	ug/L	12600	Standard
|	Be	9	496.7	5.9	0.1428	0.009	6.4	ug/L	5	Standard
|	Al	27	39339969.0	2.2	2665.8083	54.560	2.0	ug/L	16102	Standard
>	Sc	45	241281.2	1.3				ug/L	254529	Standard
|	Ti	47	11151.8	2.0	8.2442	0.194	2.3	ug/L	84	Standard
|	V	51	76611.5	0.5	5.3452	0.008	0.2	ug/L	5785	Standard
|	Cr	52	67204.7	0.9	5.6395	0.079	1.4	ug/L	12212	Standard
|	Cr	53	10150.1	2.2	5.1263	0.129	2.5	ug/L	5042	Standard
|	Mn	55	5148954.2	2.1	286.8205	7.025	2.4	ug/L	1290	Standard
|	Co	59	43352.6	2.6	3.3901	0.099	2.9	ug/L	143	Standard
|	Ni	60	30539.1	2.3	11.3867	0.302	2.7	ug/L	79	Standard
|	Cu	65	10692.1	2.7	4.3568	0.136	3.1	ug/L	154	Standard
|	Zn	66	26287.8	2.0	23.7955	0.554	2.3	ug/L	194	Standard
>	Ge	72	203499.8	0.4				ug/L	232024	Standard
|	As	75	1298.1	2.9	1.5251	0.042	2.8	ug/L	-297	Standard
|	Se	82	31.0	22.9	0.1180	0.064	54.0	ug/L	17	Standard
|	Se-1	77	107.3	3.9	-0.3366	0.061	18.0	ug/L	180	Standard
|	Ga	71	183859.6	1.0				mg/L	210139	Standard
|	Rb	85	37446.2	1.7				ug/L	12	Standard
>	Y	89	242734.1	1.3				ug/L	214065	Standard
|	Rh	103	15.0	66.7				ug/L	0	Standard
|	Mo	98	104.5	31.8	0.0201	0.009	44.4	ug/L	6	Standard
|	Ag	107	300.3	14.6	0.0329	0.006	17.8	ug/L	33	Standard
|	Cd	111	466.1	11.0	0.0228	0.013	55.0	mg/L	437	Standard
|	Cd	114	1194.7	4.9	0.0137	0.006	42.3	ug/L	1160	Standard
>	In	115	576131.2	0.6				ug/L	646604	Standard
|	Sn	118	634.3	10.7	-0.0108	0.005	44.6	ug/L	864	Standard
|	Sb	123	194.2	17.0	0.0172	0.003	19.3	ug/L	18	Standard
|	Ba	135	377862.3	1.4	92.0743	1.782	1.9	ug/L	39	Standard
|	Ce	140	440524.8	1.2				ug/L	46	Standard
>	Tb	159	645488.7	1.3				ug/L	695671	Standard
|	Ho	165	7489.5	1.2				ug/L	9	Standard
|	Tl	203	959.7	15.4	0.0265	0.009	33.6	ug/L	687	Standard
|	Tl	205	2196.2	11.1	0.0255	0.006	23.4	ug/L	1624	Standard
|	Pb	206	74869.9	1.3	6.1613	0.045	0.7	ug/L	305	Standard
|	Pb	207	64219.8	2.0	6.1966	0.103	1.7	ug/L	231	Standard
|	Pb	208	295407.3	0.9	6.1242	0.066	1.1	ug/L	1129	Standard
|	U	238	1765.8	1.2	0.0713	0.000	0.5	ug/L	3	Standard
>	Bi	209	373140.2	1.6				ug/L	405108	Standard
|	Na	23	371.7	9.0	0.0817	0.011	13.5	mg/L	118	Standard
|	Mg	24	620287.3	0.2	1.1969	0.016	1.3	mg/L	377	Standard

Sample ID: L1205013413

Report Date/Time: Thursday, May 10, 2012 15:38:34

Page 1

Approved: May 11, 2012

J. J. H.

K	39	4173.9	4.0	0.3294	0.016	4.8	mg/L	583	Standard
Ca	43	1086.7	9.0	2.5582	0.213	8.3	mg/L	73	Standard
Fe	54	20235.8	0.6	3.6672	0.031	0.8	mg/L	785	Standard
Fe	57	589719.9	1.1	3.5255	0.055	1.6	mg/L	6133	Standard
Sc-1	45	241281.2	1.3				mg/L	254529	Standard
Cl	35	472298.6	38.9				ug/L	1641778	Standard
Kr	83	57.3	2.7				ug/L	60	Standard
Br	81	10725.5	0.5				ug/L	11554	Standard
P	31	215312.8	2.0				ug/L	45410	Standard
S	34	554716.5	2.4				ug/L	568857	Standard
Sr	88	371941.2	2.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.707	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		113.393	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		89.101	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		92.786	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013413

Report Date/Time: Thursday, May 10, 2012 15:38:34

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	92.109
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205013413
 Report Date/Time: Thursday, May 10, 2012 15:38:34
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013414

Sample Date/Time: Thursday, May 10, 2012 15:38:54

Number of Replicates: 3

Autosampler Position: 411

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	125902.9	3.0	10392.9257	13.634	0.1	ug/L	12600	Standard
|	Be	9	883.4	7.1	0.2290	0.023	10.2	ug/L	5	Standard
|	Al	27	81479765.9	1.0	4801.8448	123.576	2.6	ug/L	16102	Standard
>	Sc	45	277596.3	3.0				ug/L	254529	Standard
|	Ti	47	18365.8	2.6	13.1643	0.148	1.1	ug/L	84	Standard
|	V	51	148190.6	0.8	10.2525	0.097	0.9	ug/L	5785	Standard
|	Cr	52	312224.5	1.2	28.9711	0.136	0.5	ug/L	12212	Standard
|	Cr	53	47655.7	2.3	28.6762	0.240	0.8	ug/L	5042	Standard
|	Mn	55	6304755.4	3.0	339.5764	4.957	1.5	ug/L	1290	Standard
|	Co	59	85752.4	2.5	6.4930	0.063	1.0	ug/L	143	Standard
|	Ni	60	89225.7	2.2	32.2122	0.356	1.1	ug/L	79	Standard
|	Cu	65	49133.9	2.8	19.5288	0.254	1.3	ug/L	154	Standard
|	Zn	66	97766.2	2.7	86.0242	0.999	1.2	ug/L	194	Standard
>	Ge	72	210434.1	1.6				ug/L	232024	Standard
|	As	75	5343.3	1.8	5.3958	0.047	0.9	ug/L	-297	Standard
|	Se	82	42.7	29.5	0.2104	0.115	54.5	ug/L	17	Standard
|	Se-1	77	119.7	6.0	-0.2194	0.122	55.8	ug/L	180	Standard
|	Ga	71	192707.8	2.3				mg/L	210139	Standard
|	Rb	85	79003.9	2.8				ug/L	12	Standard
>	Y	89	276226.9	0.5				ug/L	214065	Standard
|	Rh	103	28.3	44.4				ug/L	0	Standard
|	Mo	98	718.3	0.7	0.1825	0.001	0.5	ug/L	6	Standard
|	Ag	107	857.4	1.7	0.1052	0.001	1.3	ug/L	33	Standard
|	Cd	111	1003.9	7.4	0.1510	0.017	11.2	mg/L	437	Standard
|	Cd	114	2813.1	1.5	0.1620	0.003	2.0	ug/L	1160	Standard
>	In	115	588357.8	0.5				ug/L	646604	Standard
|	Sn	118	2949.6	2.2	0.1494	0.004	2.5	ug/L	864	Standard
|	Sb	123	290.2	7.9	0.0264	0.002	8.2	ug/L	18	Standard
|	Ba	135	495951.7	2.0	118.3292	2.105	1.8	ug/L	39	Standard
|	Ce	140	651557.1	1.7				ug/L	46	Standard
>	Tb	159	674974.9	1.0				ug/L	695671	Standard
|	Ho	165	10914.9	1.4				ug/L	9	Standard
|	Tl	203	1160.4	7.9	0.0390	0.007	16.7	ug/L	687	Standard
|	Tl	205	2722.6	6.3	0.0394	0.005	13.4	ug/L	1624	Standard
|	Pb	206	278422.3	2.2	22.7158	0.378	1.7	ug/L	305	Standard
|	Pb	207	238809.6	1.5	22.8447	0.203	0.9	ug/L	231	Standard
|	Pb	208	1094428.1	1.8	22.4932	0.267	1.2	ug/L	1129	Standard
|	U	238	3663.1	3.1	0.1436	0.003	2.4	ug/L	3	Standard
>	Bi	209	377358.2	0.7				ug/L	405108	Standard
|	Na	23	475.0	5.6	0.0936	0.003	3.5	mg/L	118	Standard
|	Mg	24	1378645.7	1.9	2.3134	0.033	1.4	mg/L	377	Standard

Sample ID: L1205013414

Report Date/Time: Thursday, May 10, 2012 15:41:26

Page 1

Approved: May 11, 2012

J. J. H.

K	39	6636.5	7.3	0.4747	0.030	6.3	mg/L	583	Standard
Ca	43	2353.5	2.5	4.9924	0.209	4.2	mg/L	73	Standard
Fe	54	73969.7	1.3	11.9886	0.246	2.1	mg/L	785	Standard
Fe	57	2053283.0	2.0	10.7402	0.138	1.3	mg/L	6133	Standard
Sc-1	45	277596.3	3.0				mg/L	254529	Standard
Cl	35	467811.8	36.4				ug/L	1641778	Standard
Kr	83	57.9	2.7				ug/L	60	Standard
Br	81	12682.0	2.2				ug/L	11554	Standard
P	31	334629.5	2.3				ug/L	45410	Standard
S	34	609683.1	3.6				ug/L	568857	Standard
Sr	88	710393.4	3.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.695	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		129.039	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		90.992	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		97.025	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013414

Report Date/Time: Thursday, May 10, 2012 15:41:26

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	93.150
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1205013414
 Report Date/Time: Thursday, May 10, 2012 15:41:26
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013415

Sample Date/Time: Thursday, May 10, 2012 15:41:46

Number of Replicates: 3

Autosampler Position: 412

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	98938.8	2.3	8603.6515	255.232	3.0	ug/L	12600	Standard
|	Be	9	878.4	4.3	0.2457	0.008	3.3	ug/L	5	Standard
|	Al	27	66387379.1	2.3	4210.2901	27.703	0.7	ug/L	16102	Standard
>	Sc	45	257848.3	2.7				ug/L	254529	Standard
|	Ti	47	5766.4	2.1	4.2049	0.012	0.3	ug/L	84	Standard
|	V	51	67851.1	1.9	4.6692	0.124	2.7	ug/L	5785	Standard
|	Cr	52	80517.4	2.3	6.9110	0.171	2.5	ug/L	12212	Standard
|	Cr	53	12229.1	4.5	6.4339	0.178	2.8	ug/L	5042	Standard
|	Mn	55	4648578.4	2.9	257.2099	3.422	1.3	ug/L	1290	Standard
|	Co	59	53423.4	2.4	4.1522	0.040	1.0	ug/L	143	Standard
|	Ni	60	34318.5	1.9	12.7156	0.226	1.8	ug/L	79	Standard
|	Cu	65	14552.0	3.0	5.9081	0.147	2.5	ug/L	154	Standard
|	Zn	66	16433.2	0.9	14.7135	0.244	1.7	ug/L	194	Standard
>	Ge	72	204845.9	2.2				ug/L	232024	Standard
|	As	75	665.0	5.0	0.8878	0.041	4.7	ug/L	-297	Standard
|	Se	82	39.2	35.0	0.1866	0.115	61.7	ug/L	17	Standard
|	Se-1	77	110.0	17.0	-0.3114	0.239	76.7	ug/L	180	Standard
|	Ga	71	184792.0	2.8				mg/L	210139	Standard
|	Rb	85	59620.5	3.8				ug/L	12	Standard
>	Y	89	253070.5	5.7				ug/L	214065	Standard
|	Rh	103	10.0	86.6				ug/L	0	Standard
|	Mo	98	69.9	18.2	0.0107	0.003	32.4	ug/L	6	Standard
|	Ag	107	221.7	7.2	0.0222	0.001	4.8	ug/L	33	Standard
|	Cd	111	370.9	4.2	-0.0013	0.003	204.4	mg/L	437	Standard
|	Cd	114	994.0	6.6	-0.0060	0.004	70.3	ug/L	1160	Standard
>	In	115	579431.7	5.0				ug/L	646604	Standard
|	Sn	118	524.7	5.6	-0.0188	0.002	9.7	ug/L	864	Standard
|	Sb	123	93.4	9.7	0.0069	0.000	6.4	ug/L	18	Standard
|	Ba	135	253368.8	2.6	61.4289	1.453	2.4	ug/L	39	Standard
|	Ce	140	599560.1	2.2				ug/L	46	Standard
>	Tb	159	651742.2	3.3				ug/L	695671	Standard
|	Ho	165	9249.8	4.0				ug/L	9	Standard
|	Tl	203	1002.0	7.6	0.0297	0.003	11.1	ug/L	687	Standard
|	Tl	205	2333.8	11.3	0.0297	0.006	19.2	ug/L	1624	Standard
|	Pb	206	39649.5	2.6	3.2745	0.044	1.3	ug/L	305	Standard
|	Pb	207	32588.4	2.4	3.1550	0.050	1.6	ug/L	231	Standard
|	Pb	208	152638.3	2.3	3.1751	0.047	1.5	ug/L	1129	Standard
|	U	238	3801.5	4.1	0.1516	0.004	2.8	ug/L	3	Standard
>	Bi	209	370604.0	2.6				ug/L	405108	Standard
|	Na	23	2083.5	3.7	0.5444	0.037	6.8	mg/L	118	Standard
|	Mg	24	818025.2	1.5	1.4774	0.020	1.3	mg/L	377	Standard

Sample ID: L1205013415

Report Date/Time: Thursday, May 10, 2012 15:44:20

Page 1

Approved: May 11, 2012

K	39	4128.9	1.7	0.3011	0.004	1.4	mg/L	583	Standard
Ca	43	1998.5	12.1	4.5494	0.620	13.6	mg/L	73	Standard
Fe	54	20021.8	3.7	3.3835	0.077	2.3	mg/L	785	Standard
Fe	57	580483.8	2.1	3.2449	0.048	1.5	mg/L	6133	Standard
Sc-1	45	257848.3	2.7				mg/L	254529	Standard
Cl	35	459378.0	37.5				ug/L	1641778	Standard
Kr	83	60.4	5.2				ug/L	60	Standard
Br	81	12290.8	1.8				ug/L	11554	Standard
P	31	177927.2	1.8				ug/L	45410	Standard
S	34	588754.3	3.6				ug/L	568857	Standard
Sr	88	950152.8	3.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.287	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		118.221	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		89.612	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		93.685	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013415

Report Date/Time: Thursday, May 10, 2012 15:44:20

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	91.483
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205013415
 Report Date/Time: Thursday, May 10, 2012 15:44:20
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013417

Sample Date/Time: Thursday, May 10, 2012 15:44:40

Number of Replicates: 3

Autosampler Position: 413

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	88004.8	0.3	7788.5179	34.017	0.4	ug/L	12600	Standard
|	Be	9	365.0	14.3	0.0971	0.017	17.0	ug/L	5	Standard
|	Al	27	38125983.9	0.5	2493.5980	18.860	0.8	ug/L	16102	Standard
>	Sc	45	249975.3	0.6				ug/L	254529	Standard
|	Ti	47	58714.2	1.2	44.0945	0.664	1.5	ug/L	84	Standard
|	V	51	135897.8	1.8	9.8037	0.126	1.3	ug/L	5785	Standard
|	Cr	52	82232.2	1.1	7.2132	0.127	1.8	ug/L	12212	Standard
|	Cr	53	12463.5	1.8	6.7219	0.077	1.1	ug/L	5042	Standard
|	Mn	55	3086443.7	0.4	173.5694	1.289	0.7	ug/L	1290	Standard
|	Co	59	47549.2	0.4	3.7558	0.056	1.5	ug/L	143	Standard
|	Ni	60	28235.3	1.6	10.6276	0.063	0.6	ug/L	79	Standard
|	Cu	65	12268.3	0.6	5.0554	0.024	0.5	ug/L	154	Standard
|	Zn	66	19357.4	0.7	17.6474	0.071	0.4	ug/L	194	Standard
>	Ge	72	201537.3	1.1				ug/L	232024	Standard
|	As	75	2243.4	2.5	2.4928	0.063	2.5	ug/L	-297	Standard
|	Se	82	45.4	10.6	0.2497	0.045	17.9	ug/L	17	Standard
|	Se-1	77	110.0	13.8	-0.2864	0.193	67.5	ug/L	180	Standard
|	Ga	71	182748.8	2.2				mg/L	210139	Standard
|	Rb	85	41010.4	0.8				ug/L	12	Standard
>	Y	89	269793.1	1.9				ug/L	214065	Standard
|	Rh	103	6.7	114.6				ug/L	0	Standard
|	Mo	98	259.7	5.4	0.0629	0.004	6.9	ug/L	6	Standard
|	Ag	107	161.0	7.2	0.0144	0.002	13.2	ug/L	33	Standard
|	Cd	111	461.1	7.6	0.0227	0.009	40.2	mg/L	437	Standard
|	Cd	114	1190.0	3.2	0.0143	0.002	11.8	ug/L	1160	Standard
>	In	115	570781.2	1.7				ug/L	646604	Standard
|	Sn	118	535.0	5.2	-0.0175	0.001	7.9	ug/L	864	Standard
|	Sb	123	104.2	13.6	0.0082	0.001	15.4	ug/L	18	Standard
|	Ba	135	184969.6	1.1	45.5014	1.239	2.7	ug/L	39	Standard
|	Ce	140	511305.7	0.6				ug/L	46	Standard
>	Tb	159	643235.2	0.8				ug/L	695671	Standard
|	Ho	165	10169.4	1.3				ug/L	9	Standard
|	Tl	203	959.7	11.7	0.0272	0.007	25.6	ug/L	687	Standard
|	Tl	205	2157.2	10.2	0.0250	0.006	22.5	ug/L	1624	Standard
|	Pb	206	34498.2	1.3	2.8557	0.058	2.0	ug/L	305	Standard
|	Pb	207	28749.6	1.5	2.7899	0.059	2.1	ug/L	231	Standard
|	Pb	208	134368.4	1.1	2.8016	0.053	1.9	ug/L	1129	Standard
|	U	238	6370.7	1.1	0.2533	0.001	0.3	ug/L	3	Standard
>	Bi	209	369375.1	0.9				ug/L	405108	Standard
|	Na	23	435.0	13.6	0.0958	0.017	18.1	mg/L	118	Standard
|	Mg	24	817189.9	1.0	1.5221	0.008	0.5	mg/L	377	Standard

Sample ID: L1205013417

Report Date/Time: Thursday, May 10, 2012 15:47:13

Page 1

Approved: May 11, 2012



K	39	5045.8	5.2	0.3930	0.023	6.0	mg/L	583	Standard
Ca	43	2645.2	1.3	6.2753	0.116	1.8	mg/L	73	Standard
Fe	54	32746.5	0.7	5.8139	0.067	1.2	mg/L	785	Standard
Fe	57	963090.6	0.8	5.5770	0.073	1.3	mg/L	6133	Standard
Sc-1	45	249975.3	0.6				mg/L	254529	Standard
Cl	35	443047.1	38.7				ug/L	1641778	Standard
Kr	83	56.0	4.6				ug/L	60	Standard
Br	81	9512.2	1.0				ug/L	11554	Standard
P	31	420322.3	0.8				ug/L	45410	Standard
S	34	640633.6	1.6				ug/L	568857	Standard
Sr	88	604370.5	1.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.861	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		126.033	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		88.274	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		92.463	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013417

Report Date/Time: Thursday, May 10, 2012 15:47:13

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	91.179
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205013417
 Report Date/Time: Thursday, May 10, 2012 15:47:13
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013418

Sample Date/Time: Thursday, May 10, 2012 15:47:33

Number of Replicates: 3

Autosampler Position: 414

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	75243.1	2.7	6461.4376	64.047	1.0	ug/L	12600	Standard
|	Be	9	350.0	15.9	0.0919	0.013	14.6	ug/L	5	Standard
|	Al	27	30017434.6	2.6	1958.9082	30.579	1.6	ug/L	16102	Standard
>	Sc	45	250569.9	3.5				ug/L	254529	Standard
|	Ti	47	48446.0	0.7	35.1825	0.571	1.6	ug/L	84	Standard
|	V	51	119104.4	2.3	8.2666	0.127	1.5	ug/L	5785	Standard
|	Cr	52	73898.2	3.0	6.1320	0.086	1.4	ug/L	12212	Standard
|	Cr	53	10992.3	2.6	5.5096	0.037	0.7	ug/L	5042	Standard
|	Mn	55	2121288.5	1.8	115.3514	0.724	0.6	ug/L	1290	Standard
|	Co	59	42875.6	1.9	3.2741	0.043	1.3	ug/L	143	Standard
|	Ni	60	25536.2	1.4	9.2949	0.113	1.2	ug/L	79	Standard
|	Cu	65	10765.2	1.6	4.2831	0.027	0.6	ug/L	154	Standard
|	Zn	66	16834.7	2.2	14.8160	0.163	1.1	ug/L	194	Standard
>	Ge	72	208374.2	2.1				ug/L	232024	Standard
|	As	75	2463.6	1.1	2.6340	0.051	1.9	ug/L	-297	Standard
|	Se	82	37.6	17.1	0.1691	0.062	36.6	ug/L	17	Standard
|	Se-1	77	109.3	15.3	-0.3415	0.250	73.2	ug/L	180	Standard
|	Ga	71	188105.5	2.2				mg/L	210139	Standard
|	Rb	85	36360.2	0.6				ug/L	12	Standard
>	Y	89	240704.5	2.7				ug/L	214065	Standard
|	Rh	103	21.7	26.6				ug/L	0	Standard
|	Mo	98	233.1	12.8	0.0537	0.008	14.4	ug/L	6	Standard
|	Ag	107	161.3	5.2	0.0138	0.001	5.5	ug/L	33	Standard
|	Cd	111	378.8	5.3	-0.0008	0.004	523.2	mg/L	437	Standard
|	Cd	114	1016.0	5.3	-0.0054	0.003	48.1	ug/L	1160	Standard
>	In	115	588198.7	3.0				ug/L	646604	Standard
|	Sn	118	659.7	2.4	-0.0100	0.000	3.3	ug/L	864	Standard
|	Sb	123	86.9	13.3	0.0061	0.001	14.9	ug/L	18	Standard
|	Ba	135	158800.3	1.4	37.9062	0.617	1.6	ug/L	39	Standard
|	Ce	140	387068.2	1.1				ug/L	46	Standard
>	Tb	159	657605.2	3.8				ug/L	695671	Standard
|	Ho	165	6767.8	2.9				ug/L	9	Standard
|	Tl	203	860.4	9.8	0.0188	0.003	17.8	ug/L	687	Standard
|	Tl	205	2092.8	12.8	0.0214	0.005	23.9	ug/L	1624	Standard
|	Pb	206	27623.8	1.9	2.2154	0.051	2.3	ug/L	305	Standard
|	Pb	207	22884.6	0.9	2.1518	0.065	3.0	ug/L	231	Standard
|	Pb	208	106769.4	1.7	2.1567	0.055	2.5	ug/L	1129	Standard
|	U	238	5213.9	1.2	0.2019	0.006	3.1	ug/L	3	Standard
>	Bi	209	380533.9	3.7				ug/L	405108	Standard
|	Na	23	391.7	9.0	0.0835	0.014	16.4	mg/L	118	Standard
|	Mg	24	698371.7	3.1	1.2977	0.007	0.5	mg/L	377	Standard

Sample ID: L1205013418

Report Date/Time: Thursday, May 10, 2012 15:50:06

Page 1

Approved: May 11, 2012

J. J. H.

K	39	3962.2	4.2	0.2971	0.024	8.1	mg/L	583	Standard
Ca	43	2025.1	1.3	4.7503	0.153	3.2	mg/L	73	Standard
Fe	54	29034.0	4.5	5.1235	0.065	1.3	mg/L	785	Standard
Fe	57	861498.4	3.2	4.9733	0.026	0.5	mg/L	6133	Standard
Sc-1	45	250569.9	3.5				mg/L	254529	Standard
Cl	35	434162.4	39.4				ug/L	1641778	Standard
Kr	83	56.2	8.4				ug/L	60	Standard
Br	81	9739.0	2.0				ug/L	11554	Standard
P	31	309357.4	2.3				ug/L	45410	Standard
S	34	658954.5	1.7				ug/L	568857	Standard
Sr	88	445524.5	3.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.807	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		112.445	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		90.967	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		94.528	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013418

Report Date/Time: Thursday, May 10, 2012 15:50:06

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	93.934
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205013418
 Report Date/Time: Thursday, May 10, 2012 15:50:06
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013419

Sample Date/Time: Thursday, May 10, 2012 15:50:25

Number of Replicates: 3

Autosampler Position: 415

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	91046.1	2.1	7843.0601	374.466	4.8	ug/L	12600	Standard
|	Be	9	428.3	6.0	0.1127	0.005	4.5	ug/L	5	Standard
|	Al	27	36377252.5	0.7	2313.1605	64.465	2.8	ug/L	16102	Standard
>	Sc	45	257231.3	2.8				ug/L	254529	Standard
|	Ti	47	58362.2	0.6	41.7356	0.435	1.0	ug/L	84	Standard
|	V	51	137290.9	1.5	9.4215	0.178	1.9	ug/L	5785	Standard
|	Cr	52	80667.5	1.3	6.6698	0.133	2.0	ug/L	12212	Standard
|	Cr	53	12173.2	1.3	6.1465	0.135	2.2	ug/L	5042	Standard
|	Mn	55	3718810.7	1.5	199.1625	2.966	1.5	ug/L	1290	Standard
|	Co	59	49187.8	3.3	3.6995	0.124	3.4	ug/L	143	Standard
|	Ni	60	29415.2	1.7	10.5440	0.178	1.7	ug/L	79	Standard
|	Cu	65	13504.7	2.8	5.3017	0.141	2.7	ug/L	154	Standard
|	Zn	66	21037.3	1.5	18.2703	0.281	1.5	ug/L	194	Standard
>	Ge	72	211627.4	0.4				ug/L	232024	Standard
|	As	75	1981.3	2.5	2.1325	0.051	2.4	ug/L	-297	Standard
|	Se	82	40.3	12.8	0.1869	0.046	24.4	ug/L	17	Standard
|	Se-1	77	120.0	10.9	-0.2247	0.181	80.6	ug/L	180	Standard
|	Ga	71	190725.9	1.9				mg/L	210139	Standard
|	Rb	85	44816.2	1.3				ug/L	12	Standard
>	Y	89	301014.2	0.9				ug/L	214065	Standard
|	Rh	103	21.7	81.0				ug/L	0	Standard
|	Mo	98	358.8	4.4	0.0857	0.005	6.1	ug/L	6	Standard
|	Ag	107	179.7	5.2	0.0159	0.001	5.7	ug/L	33	Standard
|	Cd	111	494.9	4.7	0.0256	0.004	16.2	mg/L	437	Standard
|	Cd	114	1302.1	1.2	0.0195	0.003	13.7	ug/L	1160	Standard
>	In	115	597181.8	1.2				ug/L	646604	Standard
|	Sn	118	533.3	2.3	-0.0193	0.001	3.0	ug/L	864	Standard
|	Sb	123	73.6	19.4	0.0047	0.001	27.8	ug/L	18	Standard
|	Ba	135	242067.0	1.4	56.9001	0.651	1.1	ug/L	39	Standard
|	Ce	140	577475.4	1.0				ug/L	46	Standard
>	Tb	159	670208.7	1.1				ug/L	695671	Standard
|	Ho	165	13194.1	1.6				ug/L	9	Standard
|	Tl	203	889.7	12.0	0.0204	0.007	35.5	ug/L	687	Standard
|	Tl	205	2111.8	10.2	0.0216	0.006	28.8	ug/L	1624	Standard
|	Pb	206	28598.0	1.3	2.2758	0.024	1.1	ug/L	305	Standard
|	Pb	207	23607.7	1.4	2.2022	0.032	1.5	ug/L	231	Standard
|	Pb	208	110318.3	1.2	2.2110	0.026	1.2	ug/L	1129	Standard
|	U	238	8298.9	2.4	0.3173	0.008	2.5	ug/L	3	Standard
>	Bi	209	383399.4	0.7				ug/L	405108	Standard
|	Na	23	536.7	9.4	0.1205	0.018	15.1	mg/L	118	Standard
|	Mg	24	772448.8	1.0	1.3986	0.025	1.8	mg/L	377	Standard

Sample ID: L1205013419

Report Date/Time: Thursday, May 10, 2012 15:52:58

Page 1

Approved: May 11, 2012

J. J. H.

K	39	4562.4	6.4	0.3388	0.014	4.2	mg/L	583	Standard
Ca	43	3103.7	0.3	7.1860	0.232	3.2	mg/L	73	Standard
Fe	54	33719.2	1.7	5.8189	0.076	1.3	mg/L	785	Standard
Fe	57	985652.0	0.5	5.5486	0.131	2.4	mg/L	6133	Standard
Sc-1	45	257231.3	2.8				mg/L	254529	Standard
Cl	35	424453.1	39.7				ug/L	1641778	Standard
Kr	83	61.1	11.5				ug/L	60	Standard
Br	81	10099.2	1.4				ug/L	11554	Standard
P	31	582921.0	1.2				ug/L	45410	Standard
S	34	675343.1	1.1				ug/L	568857	Standard
Sr	88	602328.0	0.9				ug/L	240	Standard

QC Calculated Values

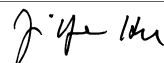
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.209	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		140.618	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		92.357	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		96.340	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013419

Report Date/Time: Thursday, May 10, 2012 15:52:58

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	94.641
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205013419
 Report Date/Time: Thursday, May 10, 2012 15:52:58
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013420

Sample Date/Time: Thursday, May 10, 2012 15:53:18

Number of Replicates: 3

Autosampler Position: 416

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	100487.3	2.4	8840.6888	388.956	4.4	ug/L	12600	Standard
|	Be	9	375.0	19.6	0.0972	0.020	20.4	ug/L	5	Standard
|	Al	27	41775857.4	1.5	2670.6588	19.157	0.7	ug/L	16102	Standard
>	Sc	45	255773.1	2.2				ug/L	254529	Standard
|	Ti	47	74968.3	0.6	52.4906	1.760	3.4	ug/L	84	Standard
|	V	51	154295.0	0.6	10.3930	0.363	3.5	ug/L	5785	Standard
|	Cr	52	108030.5	1.7	9.0646	0.299	3.3	ug/L	12212	Standard
|	Cr	53	16006.8	1.3	8.3502	0.414	5.0	ug/L	5042	Standard
|	Mn	55	3000754.3	1.3	157.3102	6.472	4.1	ug/L	1290	Standard
|	Co	59	38361.8	1.8	2.8224	0.132	4.7	ug/L	143	Standard
|	Ni	60	30923.5	1.7	10.8514	0.429	4.0	ug/L	79	Standard
|	Cu	65	12964.5	1.6	4.9798	0.215	4.3	ug/L	154	Standard
|	Zn	66	18792.3	0.6	15.9535	0.569	3.6	ug/L	194	Standard
>	Ge	72	216339.4	2.8				ug/L	232024	Standard
|	As	75	1280.0	2.6	1.4319	0.059	4.1	ug/L	-297	Standard
|	Se	82	38.3	12.4	0.1621	0.039	24.0	ug/L	17	Standard
|	Se-1	77	106.0	6.2	-0.4416	0.088	19.9	ug/L	180	Standard
|	Ga	71	193276.6	3.0				mg/L	210139	Standard
|	Rb	85	50570.9	2.2				ug/L	12	Standard
>	Y	89	247860.4	2.9				ug/L	214065	Standard
|	Rh	103	5.0	173.2				ug/L	0	Standard
|	Mo	98	432.2	4.3	0.1051	0.003	3.2	ug/L	6	Standard
|	Ag	107	183.3	4.6	0.0164	0.001	5.6	ug/L	33	Standard
|	Cd	111	358.1	7.3	-0.0070	0.006	79.8	mg/L	437	Standard
|	Cd	114	938.9	3.3	-0.0136	0.005	33.8	ug/L	1160	Standard
>	In	115	596073.3	2.0				ug/L	646604	Standard
|	Sn	118	553.0	1.9	-0.0179	0.001	8.0	ug/L	864	Standard
|	Sb	123	77.9	11.6	0.0051	0.001	14.4	ug/L	18	Standard
|	Ba	135	248585.0	0.8	58.5555	1.276	2.2	ug/L	39	Standard
|	Ce	140	374155.4	0.4				ug/L	46	Standard
>	Tb	159	673091.7	1.4				ug/L	695671	Standard
|	Ho	165	5872.1	1.9				ug/L	9	Standard
|	Tl	203	914.0	17.5	0.0215	0.009	40.8	ug/L	687	Standard
|	Tl	205	2116.5	18.9	0.0213	0.009	43.9	ug/L	1624	Standard
|	Pb	206	27338.3	1.6	2.1665	0.089	4.1	ug/L	305	Standard
|	Pb	207	22849.2	0.7	2.1223	0.063	3.0	ug/L	231	Standard
|	Pb	208	106639.2	0.5	2.1282	0.065	3.1	ug/L	1129	Standard
|	U	238	6387.3	1.0	0.2438	0.006	2.6	ug/L	3	Standard
>	Bi	209	385076.2	2.5				ug/L	405108	Standard
|	Na	23	578.3	16.1	0.1326	0.026	19.8	mg/L	118	Standard
|	Mg	24	842203.1	0.7	1.5335	0.027	1.8	mg/L	377	Standard

Sample ID: L1205013420

Report Date/Time: Thursday, May 10, 2012 15:55:51

Page 1

Approved: May 11, 2012

J. J. H.

K	39	5596.0	1.5	0.4305	0.018	4.1	mg/L	583	Standard
Ca	43	1638.4	6.3	3.7261	0.311	8.3	mg/L	73	Standard
Fe	54	29911.3	1.3	5.1748	0.104	2.0	mg/L	785	Standard
Fe	57	876528.2	1.1	4.9591	0.168	3.4	mg/L	6133	Standard
Sc-1	45	255773.1	2.2				mg/L	254529	Standard
Cl	35	380190.6	55.5				ug/L	1641778	Standard
Kr	83	56.8	10.5				ug/L	60	Standard
Br	81	10863.9	2.9				ug/L	11554	Standard
P	31	260970.9	0.8				ug/L	45410	Standard
S	34	688256.4	1.6				ug/L	568857	Standard
Sr	88	455213.8	3.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.240	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		115.787	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		92.185	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		96.754	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013420

Report Date/Time: Thursday, May 10, 2012 15:55:51

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.055
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205013420
 Report Date/Time: Thursday, May 10, 2012 15:55:51
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013422

Sample Date/Time: Thursday, May 10, 2012 15:56:11

Number of Replicates: 3

Autosampler Position: 417

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	100442.0	2.6	8464.0497	230.572	2.7	ug/L	12600	Standard
|	Be	9	350.0	7.1	0.0862	0.007	8.0	ug/L	5	Standard
|	Al	27	38739406.3	2.5	2386.2495	72.751	3.0	ug/L	16102	Standard
>	Sc	45	265446.8	0.6				ug/L	254529	Standard
|	Ti	47	57789.0	2.0	40.8645	0.312	0.8	ug/L	84	Standard
|	V	51	133429.9	1.5	9.0439	0.110	1.2	ug/L	5785	Standard
|	Cr	52	103301.0	0.4	8.7249	0.158	1.8	ug/L	12212	Standard
|	Cr	53	15696.5	0.7	8.2579	0.084	1.0	ug/L	5042	Standard
|	Mn	55	2176624.8	0.9	115.2505	0.522	0.5	ug/L	1290	Standard
|	Co	59	44237.2	2.0	3.2891	0.037	1.1	ug/L	143	Standard
|	Ni	60	30978.0	1.8	10.9820	0.054	0.5	ug/L	79	Standard
|	Cu	65	13237.4	2.6	5.1374	0.080	1.5	ug/L	154	Standard
|	Zn	66	24240.4	3.6	20.8401	0.518	2.5	ug/L	194	Standard
>	Ge	72	213992.1	1.3				ug/L	232024	Standard
|	As	75	1483.7	2.1	1.6382	0.040	2.4	ug/L	-297	Standard
|	Se	82	40.9	5.5	0.1879	0.023	12.4	ug/L	17	Standard
|	Se-1	77	118.0	18.4	-0.2703	0.277	102.7	ug/L	180	Standard
|	Ga	71	192927.4	1.7				mg/L	210139	Standard
|	Rb	85	45944.6	1.9				ug/L	12	Standard
>	Y	89	269559.8	3.0				ug/L	214065	Standard
|	Rh	103	15.0	66.7				ug/L	0	Standard
|	Mo	98	380.1	3.8	0.0907	0.003	3.5	ug/L	6	Standard
|	Ag	107	201.3	5.9	0.0185	0.001	6.3	ug/L	33	Standard
|	Cd	111	350.2	2.2	-0.0094	0.003	28.9	mg/L	437	Standard
|	Cd	114	927.2	3.6	-0.0154	0.002	12.6	ug/L	1160	Standard
>	In	115	600435.3	1.5				ug/L	646604	Standard
|	Sn	118	577.7	0.9	-0.0165	0.001	5.7	ug/L	864	Standard
|	Sb	123	96.7	16.1	0.0069	0.001	20.1	ug/L	18	Standard
|	Ba	135	200393.2	0.8	46.8534	0.786	1.7	ug/L	39	Standard
|	Ce	140	630740.6	0.7				ug/L	46	Standard
>	Tb	159	673667.2	0.5				ug/L	695671	Standard
|	Ho	165	9889.9	1.4				ug/L	9	Standard
|	Tl	203	926.7	12.0	0.0222	0.007	32.6	ug/L	687	Standard
|	Tl	205	2095.1	11.3	0.0206	0.006	31.5	ug/L	1624	Standard
|	Pb	206	31769.9	1.3	2.5049	0.010	0.4	ug/L	305	Standard
|	Pb	207	26432.0	0.4	2.4433	0.031	1.3	ug/L	231	Standard
|	Pb	208	123043.4	0.7	2.4435	0.009	0.4	ug/L	1129	Standard
|	U	238	8746.2	2.1	0.3309	0.005	1.6	ug/L	3	Standard
>	Bi	209	387320.3	0.9				ug/L	405108	Standard
|	Na	23	495.0	9.9	0.1045	0.012	11.8	mg/L	118	Standard
|	Mg	24	829918.5	2.2	1.4556	0.024	1.7	mg/L	377	Standard

Sample ID: L1205013422

Report Date/Time: Thursday, May 10, 2012 15:58:44

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	5155.9	5.9	0.3761	0.023	6.2	mg/L	583	Standard
Ca	43	1878.5	7.7	4.1315	0.312	7.6	mg/L	73	Standard
Fe	54	30141.2	2.2	5.0187	0.097	1.9	mg/L	785	Standard
Fe	57	877932.6	1.1	4.7824	0.027	0.6	mg/L	6133	Standard
Sc-1	45	265446.8	0.6				mg/L	254529	Standard
Cl	35	439576.4	36.9				ug/L	1641778	Standard
Kr	83	58.9	2.9				ug/L	60	Standard
Br	81	10822.2	2.1				ug/L	11554	Standard
P	31	315437.5	2.3				ug/L	45410	Standard
S	34	674306.5	2.1				ug/L	568857	Standard
Sr	88	490857.5	1.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.229	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		125.924	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		92.860	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		96.837	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013422

Report Date/Time: Thursday, May 10, 2012 15:58:44

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.609
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: L1205013422
 Report Date/Time: Thursday, May 10, 2012 15:58:44
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013423

Sample Date/Time: Thursday, May 10, 2012 15:59:04

Number of Replicates: 3

Autosampler Position: 418

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	97257.8	0.8	8340.5040	102.842	1.2	ug/L	12600	Standard
|	Be	9	363.3	10.5	0.0921	0.011	12.1	ug/L	5	Standard
|	Al	27	35138560.2	2.6	2206.3348	49.774	2.3	ug/L	16102	Standard
>	Sc	45	260354.5	0.5				ug/L	254529	Standard
|	Ti	47	56722.7	1.9	40.2612	1.688	4.2	ug/L	84	Standard
|	V	51	151736.7	0.7	10.3607	0.251	2.4	ug/L	5785	Standard
|	Cr	52	92966.4	1.3	7.7772	0.245	3.2	ug/L	12212	Standard
|	Cr	53	13618.6	0.9	6.9927	0.278	4.0	ug/L	5042	Standard
|	Mn	55	3630600.7	1.1	192.9692	6.085	3.2	ug/L	1290	Standard
|	Co	59	47019.5	0.7	3.5091	0.104	3.0	ug/L	143	Standard
|	Ni	60	31036.4	1.1	11.0430	0.374	3.4	ug/L	79	Standard
|	Cu	65	13180.4	0.4	5.1335	0.135	2.6	ug/L	154	Standard
|	Zn	66	18498.6	1.3	15.9179	0.288	1.8	ug/L	194	Standard
>	Ge	72	213336.3	2.4				ug/L	232024	Standard
|	As	75	1345.6	1.1	1.5110	0.036	2.4	ug/L	-297	Standard
|	Se	82	53.2	3.7	0.2939	0.026	8.8	ug/L	17	Standard
|	Se-1	77	118.0	12.0	-0.2666	0.152	57.0	ug/L	180	Standard
|	Ga	71	191001.8	1.2				mg/L	210139	Standard
|	Rb	85	39900.9	6.5				ug/L	12	Standard
>	Y	89	388813.0	1.5				ug/L	214065	Standard
|	Rh	103	43.3	46.6				ug/L	0	Standard
|	Mo	98	597.8	0.8	0.1486	0.001	0.9	ug/L	6	Standard
|	Ag	107	171.0	7.3	0.0148	0.002	10.4	ug/L	33	Standard
|	Cd	111	535.4	2.1	0.0356	0.003	7.4	mg/L	437	Standard
|	Cd	114	1417.2	2.1	0.0304	0.003	11.5	ug/L	1160	Standard
>	In	115	595810.6	1.0				ug/L	646604	Standard
|	Sn	118	777.7	15.6	-0.0025	0.008	341.7	ug/L	864	Standard
|	Sb	123	79.4	11.8	0.0053	0.001	16.4	ug/L	18	Standard
|	Ba	135	351746.7	1.5	82.8708	0.462	0.6	ug/L	39	Standard
|	Ce	140	613117.7	1.4				ug/L	46	Standard
>	Tb	159	685669.6	1.3				ug/L	695671	Standard
|	Ho	165	19614.4	0.7				ug/L	9	Standard
|	Tl	203	852.0	10.8	0.0181	0.005	30.1	ug/L	687	Standard
|	Tl	205	1976.5	12.5	0.0181	0.006	35.7	ug/L	1624	Standard
|	Pb	206	37326.3	1.0	2.9852	0.051	1.7	ug/L	305	Standard
|	Pb	207	31067.8	1.2	2.9129	0.064	2.2	ug/L	231	Standard
|	Pb	208	145353.0	0.6	2.9281	0.048	1.6	ug/L	1129	Standard
|	U	238	12861.1	1.5	0.4917	0.011	2.2	ug/L	3	Standard
>	Bi	209	382468.3	1.6				ug/L	405108	Standard
|	Na	23	565.0	7.7	0.1261	0.011	8.8	mg/L	118	Standard
|	Mg	24	880586.9	1.5	1.5748	0.022	1.4	mg/L	377	Standard

Sample ID: L1205013423

Report Date/Time: Thursday, May 10, 2012 16:01:36

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	4205.6	3.6	0.3041	0.011	3.7	mg/L	583	Standard
Ca	43	6486.4	5.1	15.0345	0.781	5.2	mg/L	73	Standard
Fe	54	35746.1	1.3	6.1004	0.054	0.9	mg/L	785	Standard
Fe	57	1034764.3	1.5	5.7537	0.062	1.1	mg/L	6133	Standard
Sc-1	45	260354.5	0.5				mg/L	254529	Standard
Cl	35	368921.2	55.0				ug/L	1641778	Standard
Kr	83	70.6	2.9				ug/L	60	Standard
Br	81	10952.3	3.7				ug/L	11554	Standard
P	31	1128287.0	1.2				ug/L	45410	Standard
S	34	709993.4	0.9				ug/L	568857	Standard
Sr	88	1335635.8	4.1				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.946	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		181.633	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		92.145	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.562	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013423

Report Date/Time: Thursday, May 10, 2012 16:01:36

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	94.411
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
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: L1205013423
 Report Date/Time: Thursday, May 10, 2012 16:01:36
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013424

Sample Date/Time: Thursday, May 10, 2012 16:01:56

Number of Replicates: 3

Autosampler Position: 419

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	138903.9	1.6	11591.3308	88.898	0.8	ug/L	12600	Standard
|	Be	9	601.7	11.1	0.1508	0.015	9.7	ug/L	5	Standard
|	Al	27	56837181.6	0.2	3347.5620	73.793	2.2	ug/L	16102	Standard
>	Sc	45	277702.7	2.3				ug/L	254529	Standard
|	Ti	47	67959.1	0.3	49.0347	0.704	1.4	ug/L	84	Standard
|	V	51	204250.7	1.0	14.2835	0.125	0.9	ug/L	5785	Standard
|	Cr	52	117757.2	1.5	10.3132	0.231	2.2	ug/L	12212	Standard
|	Cr	53	17390.0	2.4	9.5275	0.086	0.9	ug/L	5042	Standard
|	Mn	55	7255472.0	0.9	392.0434	4.259	1.1	ug/L	1290	Standard
|	Co	59	69494.7	2.0	5.2760	0.041	0.8	ug/L	143	Standard
|	Ni	60	38762.9	1.0	14.0245	0.233	1.7	ug/L	79	Standard
|	Cu	65	21473.5	1.5	8.5334	0.080	0.9	ug/L	154	Standard
|	Zn	66	27344.7	0.7	24.0106	0.321	1.3	ug/L	194	Standard
>	Ge	72	209817.7	1.7				ug/L	232024	Standard
|	As	75	4452.0	1.8	4.5461	0.021	0.5	ug/L	-297	Standard
|	Se	82	60.8	13.9	0.3665	0.073	20.0	ug/L	17	Standard
|	Se-1	77	132.0	9.9	-0.0517	0.154	297.8	ug/L	180	Standard
|	Ga	71	191198.5	2.2				mg/L	210139	Standard
|	Rb	85	61195.0	1.6				ug/L	12	Standard
>	Y	89	353513.6	2.8				ug/L	214065	Standard
|	Rh	103	46.7	62.8				ug/L	0	Standard
|	Mo	98	408.2	4.7	0.1009	0.004	3.9	ug/L	6	Standard
|	Ag	107	241.0	4.2	0.0245	0.002	6.3	ug/L	33	Standard
|	Cd	111	915.8	2.6	0.1312	0.009	6.7	mg/L	437	Standard
|	Cd	114	2447.4	1.8	0.1294	0.005	3.5	ug/L	1160	Standard
>	In	115	584521.2	1.7				ug/L	646604	Standard
|	Sn	118	603.0	2.2	-0.0136	0.001	8.7	ug/L	864	Standard
|	Sb	123	77.9	11.5	0.0053	0.001	18.5	ug/L	18	Standard
|	Ba	135	562901.0	1.4	135.2084	2.474	1.8	ug/L	39	Standard
|	Ce	140	849923.7	1.0				ug/L	46	Standard
>	Tb	159	675620.8	0.6				ug/L	695671	Standard
|	Ho	165	18505.3	1.7				ug/L	9	Standard
|	Tl	203	1016.4	16.6	0.0300	0.010	34.2	ug/L	687	Standard
|	Tl	205	2399.2	12.3	0.0309	0.007	23.8	ug/L	1624	Standard
|	Pb	206	47686.9	0.9	3.9056	0.078	2.0	ug/L	305	Standard
|	Pb	207	39881.4	0.5	3.8292	0.056	1.5	ug/L	231	Standard
|	Pb	208	184704.4	0.8	3.8103	0.072	1.9	ug/L	1129	Standard
|	U	238	17818.5	1.7	0.6953	0.013	1.8	ug/L	3	Standard
>	Bi	209	374159.3	1.2				ug/L	405108	Standard
|	Na	23	650.0	3.1	0.1383	0.009	6.2	mg/L	118	Standard
|	Mg	24	1153710.5	0.9	1.9355	0.060	3.1	mg/L	377	Standard

Sample ID: L1205013424

Report Date/Time: Thursday, May 10, 2012 16:04:29

Page 1

Approved: May 11, 2012

J. J. H.

K	39	6323.0	2.5	0.4502	0.023	5.1	mg/L	583	Standard
Ca	43	7485.2	1.4	16.2869	0.437	2.7	mg/L	73	Standard
Fe	54	57546.0	1.2	9.2903	0.314	3.4	mg/L	785	Standard
Fe	57	1626764.8	1.4	8.4990	0.161	1.9	mg/L	6133	Standard
Sc-1	45	277702.7	2.3				mg/L	254529	Standard
Cl	35	422269.4	39.2				ug/L	1641778	Standard
Kr	83	69.2	1.9				ug/L	60	Standard
Br	81	10968.1	2.2				ug/L	11554	Standard
P	31	538212.7	0.7				ug/L	45410	Standard
S	34	694165.5	0.2				ug/L	568857	Standard
Sr	88	1344292.2	0.3				ug/L	240	Standard

QC Calculated Values

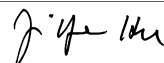
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.429	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		165.143	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		90.399	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		97.118	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013424

Report Date/Time: Thursday, May 10, 2012 16:04:29

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	92.360
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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: L1205013424
 Report Date/Time: Thursday, May 10, 2012 16:04:29
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 16:04:52

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12692.0	1.2	27.6463	40.640	147.0	ug/L	12600	Standard
|	Be	9	168527.4	2.4	50.2999	0.978	1.9	ug/L	5	Standard
|	Al	27	836352.5	2.8	52.6774	0.916	1.7	ug/L	16102	Standard
>	Sc	45	255912.3	4.2				ug/L	254529	Standard
|	Ti	47	152140.9	4.1	103.0644	3.137	3.0	ug/L	84	Standard
|	V	51	766715.8	3.9	51.0475	1.607	3.1	ug/L	5785	Standard
|	Cr	52	566818.5	2.9	50.2409	0.987	2.0	ug/L	12212	Standard
|	Cr	53	86421.7	2.1	50.0336	0.527	1.1	ug/L	5042	Standard
|	Mn	55	1009998.7	3.6	51.1361	1.304	2.6	ug/L	1290	Standard
|	Co	59	718586.7	3.0	51.2901	1.056	2.1	ug/L	143	Standard
|	Ni	60	152117.1	2.5	51.7100	0.875	1.7	ug/L	79	Standard
|	Cu	65	135831.3	2.2	50.9045	0.605	1.2	ug/L	154	Standard
|	Zn	66	60227.5	2.4	49.8146	0.736	1.5	ug/L	194	Standard
>	Ge	72	223542.5	1.2				ug/L	232024	Standard
|	As	75	55728.8	2.4	50.9755	0.707	1.4	ug/L	-297	Standard
|	Se	82	6546.7	3.8	52.8747	1.547	2.9	ug/L	17	Standard
|	Se-1	77	4177.6	2.4	50.7640	0.788	1.6	ug/L	180	Standard
|	Ga	71	200953.1	1.7				mg/L	210139	Standard
|	Rb	85	1031.7	3.6				ug/L	12	Standard
>	Y	89	212913.1	3.1				ug/L	214065	Standard
|	Rh	103	23.3	32.7				ug/L	0	Standard
|	Mo	98	404000.6	5.0	101.1268	2.650	2.6	ug/L	6	Standard
|	Ag	107	410566.7	3.5	50.8134	1.070	2.1	ug/L	33	Standard
|	Cd	111	215264.5	3.5	49.2288	0.618	1.3	mg/L	437	Standard
|	Cd	114	561133.6	3.3	49.1695	0.509	1.0	ug/L	1160	Standard
>	In	115	623818.1	2.5				ug/L	646604	Standard
|	Sn	118	752808.7	3.0	49.3680	0.352	0.7	ug/L	864	Standard
|	Sb	123	520160.6	2.6	48.7935	0.199	0.4	ug/L	18	Standard
|	Ba	135	225273.9	2.2	50.6921	0.160	0.3	ug/L	39	Standard
|	Ce	140	973.0	8.3				ug/L	46	Standard
>	Tb	159	699276.5	1.8				ug/L	695671	Standard
|	Ho	165	25.3	34.0				ug/L	9	Standard
|	Tl	203	783473.6	1.9	50.8209	0.639	1.3	ug/L	687	Standard
|	Tl	205	1820380.8	1.7	49.8490	0.414	0.8	ug/L	1624	Standard
|	Pb	206	626547.3	2.4	50.9282	0.696	1.4	ug/L	305	Standard
|	Pb	207	528143.3	2.3	50.3347	0.732	1.5	ug/L	231	Standard
|	Pb	208	2460475.5	2.3	50.3813	0.611	1.2	ug/L	1129	Standard
|	U	238	1257267.8	3.1	48.2657	0.999	2.1	ug/L	3	Standard
>	Bi	209	378964.5	1.2				ug/L	405108	Standard
|	Na	23	19295.6	4.9	5.3030	0.236	4.5	mg/L	118	Standard
|	Mg	24	2841309.2	3.1	5.1731	0.058	1.1	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 16:07:24

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	61462.8	3.5	5.2392	0.096	1.8	mg/L	583	Standard
Ca	43	2148.5	3.0	4.9469	0.325	6.6	mg/L	73	Standard
Fe	54	31734.2	4.5	5.4951	0.076	1.4	mg/L	785	Standard
Fe	57	905360.1	3.4	5.1193	0.054	1.1	mg/L	6133	Standard
Sc-1	45	255912.3	4.2				mg/L	254529	Standard
Cl	35	502163.2	38.0				ug/L	1641778	Standard
Kr	83	52.3	5.1				ug/L	60	Standard
Br	81	12100.7	3.5				ug/L	11554	Standard
P	31	67169.0	6.8				ug/L	45410	Standard
S	34	756698.0	3.6				ug/L	568857	Standard
Sr	88	751.7	7.7				ug/L	240	Standard

QC Calculated Values

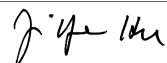
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	105.355		
Sc	45			
Ti	47	103.064		
V	51	102.095		
Cr	52	100.482		
Cr	53			
Mn	55	102.272		
Co	59	102.580		
Ni	60	103.420		
Cu	65	101.809		
Zn	66	99.629		
Ge	72		96.345	
As	75	101.951		
Se	82	105.749		
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.462	
Rh	103			
Mo	98	101.127		
Ag	107	101.627		
Cd	111	98.458		
Cd	114			
In	115		96.476	
Sn	118	98.736		
Sb	123	97.587		
Ba	135	101.384		
Ce	140			
Tb	159		100.518	
Ho	165			
Tl	203	101.642		
Tl	205			
Pb	206	101.856		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 16:07:24

Page 2

Approved: May 11, 2012




Pb	207	100.669	
Pb	208	100.763	
U	238	96.531	
> Bi	209		93.547
Na	23	106.061	
Mg	24	103.463	
K	39	104.783	
Ca	43	98.938	
Fe	54	109.901	
Fe	57	102.387	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 16:07:24
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 16:07:44

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12386.7	4.6	47.8185	15.607	32.6	ug/L	12600	Standard
|	Be	9	10.0	86.6	-0.0114	0.002	21.6	ug/L	5	Standard
|	Al	27	15352.8	2.7	0.2297	0.058	25.3	ug/L	16102	Standard
>	Sc	45	245720.3	5.5				ug/L	254529	Standard
|	Ti	47	85.3	11.1	-0.0010	0.004	414.2	ug/L	84	Standard
|	V	51	3722.4	1.8	-0.0288	0.008	26.1	ug/L	5785	Standard
|	Cr	52	10885.6	1.8	-0.0062	0.030	481.6	ug/L	12212	Standard
|	Cr	53	881.7	15.1	-0.9755	0.059	6.1	ug/L	5042	Standard
|	Mn	55	1377.1	5.1	-0.0116	0.001	12.3	ug/L	1290	Standard
|	Co	59	143.3	13.5	0.0005	0.001	208.8	ug/L	143	Standard
|	Ni	60	74.3	18.9	0.0025	0.004	148.7	ug/L	79	Standard
|	Cu	65	154.3	11.8	0.0110	0.007	63.3	ug/L	154	Standard
|	Zn	66	188.3	4.4	-0.0118	0.009	78.4	ug/L	194	Standard
>	Ge	72	213079.7	4.7				ug/L	232024	Standard
|	As	75	-233.5	10.5	0.0025	0.032	1282.6	ug/L	-297	Standard
|	Se	82	28.8	28.7	0.0853	0.067	78.0	ug/L	17	Standard
|	Se-1	77	84.7	8.7	-0.7040	0.048	6.8	ug/L	180	Standard
|	Ga	71	194813.2	5.4				mg/L	210139	Standard
|	Rb	85	30.0	33.3				ug/L	12	Standard
>	Y	89	200809.8	3.7				ug/L	214065	Standard
|	Rh	103	0.0					ug/L	0	Standard
|	Mo	98	73.5	58.3	0.0107	0.010	96.7	ug/L	6	Standard
|	Ag	107	100.3	19.8	0.0055	0.002	39.6	ug/L	33	Standard
|	Cd	111	419.9	11.5	0.0071	0.008	113.6	mg/L	437	Standard
|	Cd	114	1068.4	2.0	-0.0023	0.002	77.7	ug/L	1160	Standard
>	In	115	599594.8	3.7				ug/L	646604	Standard
|	Sn	118	917.4	7.2	0.0067	0.002	34.2	ug/L	864	Standard
|	Sb	123	221.3	38.5	0.0189	0.007	39.2	ug/L	18	Standard
|	Ba	135	55.7	6.3	0.0049	0.001	26.6	ug/L	39	Standard
|	Ce	140	54.3	13.8				ug/L	46	Standard
>	Tb	159	659972.7	4.1				ug/L	695671	Standard
|	Ho	165	7.0					ug/L	9	Standard
|	Tl	203	411.3	48.6	-0.0098	0.012	120.0	ug/L	687	Standard
|	Tl	205	1012.0	47.9	-0.0077	0.012	158.1	ug/L	1624	Standard
|	Pb	206	302.0	19.3	0.0018	0.004	197.2	ug/L	305	Standard
|	Pb	207	258.3	10.3	0.0021	0.002	78.2	ug/L	231	Standard
|	Pb	208	1162.4	14.8	0.0012	0.003	205.7	ug/L	1129	Standard
|	U	238	54.0	60.0	0.0045	0.001	25.9	ug/L	3	Standard
>	Bi	209	372033.2	4.7				ug/L	405108	Standard
|	Na	23	56.7	44.4	-0.0112	0.006	57.6	mg/L	118	Standard
|	Mg	24	550.0	22.1	0.0002	0.000	102.7	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 16:10:16

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	651.7	17.9	0.0066	0.008	116.4	mg/L	583	Standard
Ca	43	50.0	36.1	-0.0696	0.039	56.6	mg/L	73	Standard
Fe	54	872.7	3.0	0.0089	0.010	117.7	mg/L	785	Standard
Fe	57	4760.7	2.2	-0.0060	0.002	31.7	mg/L	6133	Standard
Sc-1	45	245720.3	5.5				mg/L	254529	Standard
Cl	35	506977.1	38.2				ug/L	1641778	Standard
Kr	83	51.9	8.4				ug/L	60	Standard
Br	81	11390.9	0.9				ug/L	11554	Standard
P	31	63292.2	6.1				ug/L	45410	Standard
S	34	740744.9	3.9				ug/L	568857	Standard
Sr	88	243.3	16.5				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.835	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		93.808	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		92.730	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		94.868	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 16:10:16

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	91.836
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 16:10:16
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205013425

Sample Date/Time: Thursday, May 10, 2012 16:10:39

Number of Replicates: 3

Autosampler Position: 420

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	131489.8	0.5	11053.9484	145.823	1.3	ug/L	12600	Standard
|	Be	9	605.0	18.1	0.1539	0.030	19.6	ug/L	5	Standard
|	Al	27	60991036.5	2.6	3635.8819	135.603	3.7	ug/L	16102	Standard
>	Sc	45	274358.6	1.2				ug/L	254529	Standard
|	Ti	47	23619.4	3.0	16.8273	0.524	3.1	ug/L	84	Standard
|	V	51	188990.4	0.9	13.0574	0.140	1.1	ug/L	5785	Standard
|	Cr	52	106462.4	1.1	9.1190	0.123	1.3	ug/L	12212	Standard
|	Cr	53	15707.3	1.3	8.3580	0.127	1.5	ug/L	5042	Standard
|	Mn	55	7068538.3	2.6	378.0444	9.916	2.6	ug/L	1290	Standard
|	Co	59	81965.8	1.8	6.1618	0.109	1.8	ug/L	143	Standard
|	Ni	60	41757.2	3.3	14.9551	0.522	3.5	ug/L	79	Standard
|	Cu	65	25697.4	2.6	10.1176	0.265	2.6	ug/L	154	Standard
|	Zn	66	33560.5	3.0	29.2054	0.910	3.1	ug/L	194	Standard
>	Ge	72	211958.9	0.2				ug/L	232024	Standard
|	As	75	2142.1	3.0	2.2838	0.061	2.7	ug/L	-297	Standard
|	Se	82	51.7	7.1	0.2832	0.032	11.2	ug/L	17	Standard
|	Se-1	77	114.3	7.4	-0.3031	0.110	36.4	ug/L	180	Standard
|	Ga	71	194172.1	1.2				mg/L	210139	Standard
|	Rb	85	121977.0	6.5				ug/L	12	Standard
>	Y	89	250249.1	2.9				ug/L	214065	Standard
|	Rh	103	28.3	40.8				ug/L	0	Standard
|	Mo	98	397.1	6.6	0.0963	0.007	6.9	ug/L	6	Standard
|	Ag	107	346.3	5.0	0.0377	0.002	5.9	ug/L	33	Standard
|	Cd	111	468.5	3.8	0.0200	0.005	23.8	mg/L	437	Standard
|	Cd	114	1280.7	6.2	0.0183	0.007	39.1	ug/L	1160	Standard
>	In	115	593463.4	0.6				ug/L	646604	Standard
|	Sn	118	635.3	0.9	-0.0121	0.000	3.1	ug/L	864	Standard
|	Sb	123	163.0	10.7	0.0136	0.002	12.7	ug/L	18	Standard
|	Ba	135	423538.4	2.8	100.1979	3.403	3.4	ug/L	39	Standard
|	Ce	140	691676.5	2.4				ug/L	46	Standard
>	Tb	159	673742.0	0.7				ug/L	695671	Standard
|	Ho	165	7672.6	1.7				ug/L	9	Standard
|	Tl	203	1049.4	13.1	0.0308	0.008	26.2	ug/L	687	Standard
|	Tl	205	2555.9	12.2	0.0338	0.008	22.9	ug/L	1624	Standard
|	Pb	206	65228.5	2.3	5.2388	0.168	3.2	ug/L	305	Standard
|	Pb	207	54446.0	2.1	5.1266	0.160	3.1	ug/L	231	Standard
|	Pb	208	253846.1	2.0	5.1354	0.152	3.0	ug/L	1129	Standard
|	U	238	5432.3	0.5	0.2093	0.003	1.6	ug/L	3	Standard
>	Bi	209	382142.4	1.1				ug/L	405108	Standard
|	Na	23	260.0	17.6	0.0398	0.012	30.9	mg/L	118	Standard
|	Mg	24	984682.2	1.1	1.6714	0.035	2.1	mg/L	377	Standard

Sample ID: L1205013425

Report Date/Time: Thursday, May 10, 2012 16:13:11

Page 1

Approved: May 11, 2012



K	39	16944.5	1.8	1.3088	0.038	2.9	mg/L	583	Standard
Ca	43	1696.8	8.6	3.5899	0.365	10.2	mg/L	73	Standard
Fe	54	43942.9	1.5	7.1437	0.190	2.7	mg/L	785	Standard
Fe	57	1252438.3	1.9	6.6150	0.175	2.6	mg/L	6133	Standard
Sc-1	45	274358.6	1.2				mg/L	254529	Standard
Cl	35	496367.0	37.0				ug/L	1641778	Standard
Kr	83	56.1	2.8				ug/L	60	Standard
Br	81	14232.5	3.6				ug/L	11554	Standard
P	31	517663.2	1.4				ug/L	45410	Standard
S	34	628613.6	1.1				ug/L	568857	Standard
Sr	88	786011.9	3.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.352	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		116.903	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		91.782	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		96.848	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205013425

Report Date/Time: Thursday, May 10, 2012 16:13:11

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	94.331
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1205013425
 Report Date/Time: Thursday, May 10, 2012 16:13:11
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: PBW 50 WG397503-02

Sample Date/Time: Thursday, May 10, 2012 16:13:31

Number of Replicates: 3

Autosampler Position: 421

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12740.4	5.7	35.8652	49.966	139.3	ug/L	12600	Standard
|	Be	9	11.7	49.5	-0.0109	0.002	16.0	ug/L	5	Standard
|	Al	27	13157.4	12.6	0.0499	0.101	201.4	ug/L	16102	Standard
>	Sc	45	254912.1	2.2				ug/L	254529	Standard
|	Ti	47	85.3	22.5	-0.0013	0.014	1053.9	ug/L	84	Standard
|	V	51	3617.8	3.9	-0.0388	0.010	25.0	ug/L	5785	Standard
|	Cr	52	10749.5	2.7	-0.0297	0.009	32.0	ug/L	12212	Standard
|	Cr	53	1058.4	15.5	-0.8701	0.095	10.9	ug/L	5042	Standard
|	Mn	55	2049.8	6.6	0.0232	0.007	28.3	ug/L	1290	Standard
|	Co	59	140.0	7.5	0.0001	0.001	461.1	ug/L	143	Standard
|	Ni	60	83.7	20.4	0.0056	0.005	97.2	ug/L	79	Standard
|	Cu	65	139.7	8.5	0.0046	0.003	74.3	ug/L	154	Standard
|	Zn	66	2064.8	5.2	1.6044	0.050	3.1	ug/L	194	Standard
>	Ge	72	215114.9	2.5				ug/L	232024	Standard
|	As	75	-236.4	18.1	0.0032	0.035	1074.0	ug/L	-297	Standard
|	Se	82	26.4	20.1	0.0649	0.048	74.2	ug/L	17	Standard
|	Se-1	77	106.0	13.1	-0.4308	0.217	50.3	ug/L	180	Standard
|	Ga	71	195568.7	3.4				mg/L	210139	Standard
|	Rb	85	45.0	29.4				ug/L	12	Standard
>	Y	89	200308.1	3.6				ug/L	214065	Standard
|	Rh	103	1.7	173.2				ug/L	0	Standard
|	Mo	98	40.5	23.9	0.0024	0.002	103.0	ug/L	6	Standard
|	Ag	107	37.0	22.1	-0.0026	0.001	34.8	ug/L	33	Standard
|	Cd	111	430.3	6.3	0.0102	0.003	29.5	mg/L	437	Standard
|	Cd	114	1100.1	6.5	0.0010	0.005	526.8	ug/L	1160	Standard
>	In	115	596766.2	3.5				ug/L	646604	Standard
|	Sn	118	943.7	3.9	0.0089	0.001	9.5	ug/L	864	Standard
|	Sb	123	100.5	2.0	0.0074	0.000	4.2	ug/L	18	Standard
|	Ba	135	107.7	37.3	0.0170	0.009	51.1	ug/L	39	Standard
|	Ce	140	91.7	16.4				ug/L	46	Standard
>	Tb	159	661281.2	3.1				ug/L	695671	Standard
|	Ho	165	6.7	60.6				ug/L	9	Standard
|	Tl	203	381.3	45.9	-0.0117	0.011	93.0	ug/L	687	Standard
|	Tl	205	844.0	42.7	-0.0122	0.009	77.5	ug/L	1624	Standard
|	Pb	206	289.0	4.0	0.0008	0.001	96.8	ug/L	305	Standard
|	Pb	207	262.0	8.0	0.0024	0.001	60.1	ug/L	231	Standard
|	Pb	208	1202.4	4.0	0.0021	0.000	22.2	ug/L	1129	Standard
|	U	238	9.7	15.8	0.0028	0.000	2.3	ug/L	3	Standard
>	Bi	209	372740.8	2.4				ug/L	405108	Standard
|	Na	23	68.3	15.2	-0.0083	0.003	39.7	mg/L	118	Standard
|	Mg	24	466.7	20.8	-0.0000	0.000	1469.4	mg/L	377	Standard

Sample ID: PBW 50 WG397503-02

Report Date/Time: Thursday, May 10, 2012 16:16:03

Page 1

Approved: May 11, 2012


J. J. H.

K	39	643.3	7.1	0.0041	0.005	117.4	mg/L	583	Standard
Ca	43	65.0	40.0	-0.0360	0.066	184.4	mg/L	73	Standard
Fe	54	863.6	5.2	0.0012	0.011	871.1	mg/L	785	Standard
Fe	57	5806.1	0.2	-0.0012	0.001	65.6	mg/L	6133	Standard
Sc-1	45	254912.1	2.2				mg/L	254529	Standard
Cl	35	497062.0	39.7				ug/L	1641778	Standard
Kr	83	57.8	11.7				ug/L	60	Standard
Br	81	11466.0	4.5				ug/L	11554	Standard
P	31	58045.2	2.7				ug/L	45410	Standard
S	34	627294.1	6.3				ug/L	568857	Standard
Sr	88	390.0	9.0				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.713	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		93.574	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		92.292	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		95.057	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: PBW 50 WG397503-02
 Report Date/Time: Thursday, May 10, 2012 16:16:03
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	92.010
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: PBW 50 WG397503-02
 Report Date/Time: Thursday, May 10, 2012 16:16:03
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: LCSW 50 WG397503-03

Sample Date/Time: Thursday, May 10, 2012 16:16:23

Number of Replicates: 3

Autosampler Position: 422

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results


IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13904.7	7.2	61.9325	76.735	123.9	ug/L	12600	Standard
|	Be	9	83424.3	4.1	23.3421	0.490	2.1	ug/L	5	Standard
|	Al	27	497235.3	6.2	28.9977	0.505	1.7	ug/L	16102	Standard
>	Sc	45	272959.1	6.0				ug/L	254529	Standard
|	Ti	47	110.7	6.2	0.0110	0.003	28.5	ug/L	84	Standard
|	V	51	402816.5	5.5	25.8086	1.070	4.1	ug/L	5785	Standard
|	Cr	52	311133.3	5.0	26.1984	1.018	3.9	ug/L	12212	Standard
|	Cr	53	47381.6	5.7	25.8229	1.128	4.4	ug/L	5042	Standard
|	Mn	55	539353.9	4.0	26.3881	0.740	2.8	ug/L	1290	Standard
|	Co	59	383042.7	4.6	26.4511	0.836	3.2	ug/L	143	Standard
|	Ni	60	80304.7	3.4	26.4066	0.534	2.0	ug/L	79	Standard
|	Cu	65	72508.3	4.1	26.2702	0.663	2.5	ug/L	154	Standard
|	Zn	66	31029.4	3.1	24.7504	0.473	1.9	ug/L	194	Standard
>	Ge	72	230972.6	1.9				ug/L	232024	Standard
|	As	75	27230.6	3.5	24.2253	0.558	2.3	ug/L	-297	Standard
|	Se	82	3169.3	3.6	24.6879	0.478	1.9	ug/L	17	Standard
|	Se-1	77	2009.1	2.3	22.6566	0.292	1.3	ug/L	180	Standard
|	Ga	71	212732.3	3.1				mg/L	210139	Standard
|	Rb	85	60.0	16.7				ug/L	12	Standard
>	Y	89	220886.4	3.5				ug/L	214065	Standard
|	Rh	103	20.0	90.1				ug/L	0	Standard
|	Mo	98	45.4	12.3	0.0028	0.001	37.2	ug/L	6	Standard
|	Ag	107	215466.0	4.9	25.8364	0.654	2.5	ug/L	33	Standard
|	Cd	111	108495.9	3.1	24.0042	0.171	0.7	mg/L	437	Standard
|	Cd	114	274694.7	3.7	23.2772	0.258	1.1	ug/L	1160	Standard
>	In	115	643589.8	2.8				ug/L	646604	Standard
|	Sn	118	1222.7	4.7	0.0219	0.002	7.0	ug/L	864	Standard
|	Sb	123	258994.9	4.0	23.5424	0.285	1.2	ug/L	18	Standard
|	Ba	135	115253.4	3.6	25.1293	0.305	1.2	ug/L	39	Standard
|	Ce	140	197.0	19.4				ug/L	46	Standard
>	Tb	159	718276.8	3.5				ug/L	695671	Standard
|	Ho	165	9.7	6.0				ug/L	9	Standard
|	Tl	203	402136.0	3.7	25.3577	0.157	0.6	ug/L	687	Standard
|	Tl	205	938793.3	4.4	24.9869	0.191	0.8	ug/L	1624	Standard
|	Pb	206	319542.1	5.1	25.2484	0.364	1.4	ug/L	305	Standard
|	Pb	207	278668.2	5.3	25.8159	0.374	1.4	ug/L	231	Standard
|	Pb	208	1272497.1	4.9	25.3296	0.282	1.1	ug/L	1129	Standard
|	U	238	632887.4	5.1	23.6308	0.296	1.3	ug/L	3	Standard
>	Bi	209	389580.1	3.9				ug/L	405108	Standard
|	Na	23	113.3	35.9	0.0025	0.013	495.4	mg/L	118	Standard
|	Mg	24	716.7	2.9	0.0004	0.000	23.4	mg/L	377	Standard

Sample ID: LCSW 50 WG397503-03

Report Date/Time: Thursday, May 10, 2012 16:18:57

Page 1

Approved: May 11, 2012




K	39	636.7	11.8	-0.0003	0.004	1247.0	mg/L	583	Standard
Ca	43	58.3	13.1	-0.0619	0.017	27.8	mg/L	73	Standard
Fe	54	1332.8	14.2	0.0690	0.025	36.6	mg/L	785	Standard
Fe	57	5881.1	8.4	-0.0030	0.001	35.1	mg/L	6133	Standard
Sc-1	45	272959.1	6.0				mg/L	254529	Standard
Cl	35	526473.5	35.2				ug/L	1641778	Standard
Kr	83	56.8	10.1				ug/L	60	Standard
Br	81	13209.9	2.7				ug/L	11554	Standard
P	31	86997.6	8.1				ug/L	45410	Standard
S	34	641382.8	6.4				ug/L	568857	Standard
Sr	88	995.0	5.3				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.547	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.187	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		99.534	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		103.249	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: LCSW 50 WG397503-03
 Report Date/Time: Thursday, May 10, 2012 16:18:57
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	96.167
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: LCSW 50 WG397503-03
 Report Date/Time: Thursday, May 10, 2012 16:18:57
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025903 WG397503-01

Sample Date/Time: Thursday, May 10, 2012 16:19:17

Number of Replicates: 3

Autosampler Position: 423

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	207797.2	1.8	19502.8265	516.057	2.6	ug/L	12600	Standard
|	Be	9	15.0	33.3	-0.0100	0.002	15.8	ug/L	5	Standard
|	Al	27	101833.2	4.4	5.6904	0.416	7.3	ug/L	16102	Standard
>	Sc	45	257154.3	3.8				ug/L	254529	Standard
|	Ti	47	516.0	19.4	0.3256	0.087	26.6	ug/L	84	Standard
|	V	51	7912.8	4.1	0.2941	0.043	14.5	ug/L	5785	Standard
|	Cr	52	19309.3	1.3	0.8855	0.048	5.5	ug/L	12212	Standard
|	Cr	53	10770.5	12.0	5.5777	1.093	19.6	ug/L	5042	Standard
|	Mn	55	46185.0	2.0	2.4969	0.039	1.6	ug/L	1290	Standard
|	Co	59	2124.1	3.0	0.1568	0.001	0.5	ug/L	143	Standard
|	Ni	60	106491.8	2.8	39.8878	0.511	1.3	ug/L	79	Standard
|	Cu	65	1005.7	6.6	0.3662	0.030	8.2	ug/L	154	Standard
|	Zn	66	16667.5	1.7	15.0834	0.741	4.9	ug/L	194	Standard
>	Ge	72	202902.6	3.4				ug/L	232024	Standard
|	As	75	1599.1	5.2	1.8302	0.030	1.6	ug/L	-297	Standard
|	Se	82	590.6	6.3	5.1101	0.168	3.3	ug/L	17	Standard
|	Se-1	77	758.4	13.5	8.7310	1.731	19.8	ug/L	180	Standard
|	Ga	71	183519.2	3.4				mg/L	210139	Standard
|	Rb	85	29408.6	7.4				ug/L	12	Standard
>	Y	89	193862.1	4.2				ug/L	214065	Standard
|	Rh	103	116.7	30.1				ug/L	0	Standard
|	Mo	98	81288.7	3.9	21.7894	0.328	1.5	ug/L	6	Standard
|	Ag	107	54.0	20.4	-0.0002	0.001	589.6	ug/L	33	Standard
|	Cd	111	422.6	1.4	0.0109	0.004	36.4	mg/L	437	Standard
|	Cd	114	1403.8	4.6	0.0321	0.004	13.6	ug/L	1160	Standard
>	In	115	582465.5	2.4				ug/L	646604	Standard
|	Sn	118	1104.7	2.6	0.0218	0.002	10.2	ug/L	864	Standard
|	Sb	123	512.0	2.6	0.0490	0.002	4.0	ug/L	18	Standard
|	Ba	135	59867.4	2.5	14.4213	0.042	0.3	ug/L	39	Standard
|	Ce	140	249.7	7.5				ug/L	46	Standard
>	Tb	159	669405.8	2.9				ug/L	695671	Standard
|	Ho	165	11.0	31.5				ug/L	9	Standard
|	Tl	203	367.0	6.7	-0.0088	0.002	18.8	ug/L	687	Standard
|	Tl	205	847.7	6.9	-0.0084	0.002	18.2	ug/L	1624	Standard
|	Pb	206	676.3	5.9	0.0414	0.003	7.7	ug/L	305	Standard
|	Pb	207	562.3	3.3	0.0400	0.003	7.4	ug/L	231	Standard
|	Pb	208	2642.1	1.0	0.0405	0.001	3.2	ug/L	1129	Standard
|	U	238	784.0	3.7	0.0377	0.001	2.3	ug/L	3	Standard
>	Bi	209	323234.2	1.4				ug/L	405108	Standard
|	Na	23	671135.6	0.7	184.5528	6.732	3.6	mg/L	118	Standard
|	Mg	24	264695.6	1.1	0.4790	0.013	2.7	mg/L	377	Standard

Sample ID: L1205025903 WG397503-01

Report Date/Time: Thursday, May 10, 2012 16:21:49

Page 1


Approved: May 11, 2012

K	39	11622.8	4.4	0.9437	0.015	1.6	mg/L	583	Standard
Ca	43	930.0	4.3	2.0222	0.176	8.7	mg/L	73	Standard
Fe	54	985.0	6.9	0.0211	0.005	25.8	mg/L	785	Standard
Fe	57	8704.2	1.6	0.0150	0.001	8.6	mg/L	6133	Standard
Sc-1	45	257154.3	3.8				mg/L	254529	Standard
Cl	35	24502090.1	0.6				ug/L	1641778	Standard
Kr	83	82.6	21.2				ug/L	60	Standard
Br	81	369654.0	1.6				ug/L	11554	Standard
P	31	64243.5	3.7				ug/L	45410	Standard
S	34	1125265.0	3.2				ug/L	568857	Standard
Sr	88	2436813.9	3.1				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.449	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		90.562	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		90.081	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		96.224	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025903 WG397503-01
 Report Date/Time: Thursday, May 10, 2012 16:21:49
 Page 2


Approved: May 11, 2012


Pb	207	
Pb	208	
U	238	
> Bi	209	79.790
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025903 WG397503-01
 Report Date/Time: Thursday, May 10, 2012 16:21:49
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025905S WG397503-04

Sample Date/Time: Thursday, May 10, 2012 16:22:09

Number of Replicates: 3

Autosampler Position: 424

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	210884.7	2.5	20211.0585	397.060	2.0	ug/L	12600	Standard
|	Be	9	83672.4	4.3	25.3069	0.406	1.6	ug/L	5	Standard
|	Al	27	535311.0	3.0	33.9122	0.510	1.5	ug/L	16102	Standard
>	Sc	45	252269.0	3.0				ug/L	254529	Standard
|	Ti	47	722.4	5.4	0.4748	0.041	8.6	ug/L	84	Standard
|	V	51	388638.0	3.0	28.1797	0.368	1.3	ug/L	5785	Standard
|	Cr	52	291806.5	3.3	27.8398	0.290	1.0	ug/L	12212	Standard
|	Cr	53	54167.6	3.3	33.8244	0.362	1.1	ug/L	5042	Standard
|	Mn	55	511590.9	3.3	28.2992	0.370	1.3	ug/L	1290	Standard
|	Co	59	329509.5	3.8	25.7221	0.469	1.8	ug/L	143	Standard
|	Ni	60	174638.2	3.6	64.9425	0.841	1.3	ug/L	79	Standard
|	Cu	65	59985.9	3.5	24.5645	0.312	1.3	ug/L	154	Standard
|	Zn	66	29628.3	3.2	26.7258	0.240	0.9	ug/L	194	Standard
>	Ge	72	204339.2	2.3				ug/L	232024	Standard
|	As	75	27837.3	3.2	27.9570	0.265	0.9	ug/L	-297	Standard
|	Se	82	3473.9	3.7	30.6260	0.475	1.6	ug/L	17	Standard
|	Se-1	77	2858.6	3.2	37.5408	0.335	0.9	ug/L	180	Standard
|	Ga	71	184218.0	3.5				mg/L	210139	Standard
|	Rb	85	29298.3	2.8				ug/L	12	Standard
>	Y	89	196931.1	3.8				ug/L	214065	Standard
|	Rh	103	221.7	23.7				ug/L	0	Standard
|	Mo	98	82233.2	3.5	21.3145	0.508	2.4	ug/L	6	Standard
|	Ag	107	162628.2	3.6	20.8355	0.449	2.2	ug/L	33	Standard
|	Cd	111	99002.7	3.0	23.3962	0.328	1.4	mg/L	437	Standard
|	Cd	114	263823.7	2.1	23.8903	0.292	1.2	ug/L	1160	Standard
>	In	115	602430.7	1.9				ug/L	646604	Standard
|	Sn	118	1036.0	1.6	0.0145	0.002	13.4	ug/L	864	Standard
|	Sb	123	248198.8	3.4	24.1045	0.483	2.0	ug/L	18	Standard
|	Ba	135	168931.4	3.0	39.3558	0.632	1.6	ug/L	39	Standard
|	Ce	140	615.0	1.7				ug/L	46	Standard
>	Tb	159	680846.9	2.7				ug/L	695671	Standard
|	Ho	165	14.7	34.3				ug/L	9	Standard
|	Tl	203	356944.4	2.4	26.6004	0.125	0.5	ug/L	687	Standard
|	Tl	205	829534.5	2.0	26.0993	0.158	0.6	ug/L	1624	Standard
|	Pb	206	283770.4	2.1	26.5097	0.275	1.0	ug/L	305	Standard
|	Pb	207	245733.4	1.7	26.9173	0.260	1.0	ug/L	231	Standard
|	Pb	208	1127291.5	2.0	26.5285	0.166	0.6	ug/L	1129	Standard
|	U	238	588290.4	3.2	25.9632	0.210	0.8	ug/L	3	Standard
>	Bi	209	329656.7	2.4				ug/L	405108	Standard
|	Na	23	691329.4	1.6	193.6699	3.079	1.6	mg/L	118	Standard
|	Mg	24	274355.7	3.8	0.5057	0.008	1.5	mg/L	377	Standard

Sample ID: L1205025905S WG397503-04

Report Date/Time: Thursday, May 10, 2012 16:24:41

Page 1

Approved: May 11, 2012

J. J. H.


K	39	11641.1	5.5	0.9642	0.028	2.9	mg/L	583	Standard
Ca	43	911.7	8.5	2.0189	0.220	10.9	mg/L	73	Standard
Fe	54	1046.4	9.8	0.0355	0.014	38.6	mg/L	785	Standard
Fe	57	11252.5	1.5	0.0307	0.002	6.9	mg/L	6133	Standard
Sc-1	45	252269.0	3.0				mg/L	254529	Standard
Cl	35	24615245.0	1.4				ug/L	1641778	Standard
Kr	83	127.3	3.2				ug/L	60	Standard
Br	81	407506.4	2.1				ug/L	11554	Standard
P	31	67984.8	3.8				ug/L	45410	Standard
S	34	1148961.8	2.7				ug/L	568857	Standard
Sr	88	2537714.0	4.5				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.068	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		91.996	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		93.168	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		97.869	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025905S WG397503-04
 Report Date/Time: Thursday, May 10, 2012 16:24:41
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	81.375
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025905S WG397503-04
 Report Date/Time: Thursday, May 10, 2012 16:24:41
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025907SD WG397503-05

Sample Date/Time: Thursday, May 10, 2012 16:25:01

Number of Replicates: 3

Autosampler Position: 425

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	212028.3	0.5	20174.7091	484.494	2.4	ug/L	12600	Standard
|	Be	9	82135.4	1.7	24.6718	0.267	1.1	ug/L	5	Standard
|	Al	27	512880.1	1.2	32.2236	0.586	1.8	ug/L	16102	Standard
>	Sc	45	254083.2	1.8				ug/L	254529	Standard
|	Ti	47	852.0	4.8	0.5727	0.047	8.3	ug/L	84	Standard
|	V	51	390608.6	1.7	28.3948	0.375	1.3	ug/L	5785	Standard
|	Cr	52	294166.6	2.0	28.1456	0.246	0.9	ug/L	12212	Standard
|	Cr	53	54528.0	2.1	34.1495	0.477	1.4	ug/L	5042	Standard
|	Mn	55	509976.7	2.4	28.2786	0.377	1.3	ug/L	1290	Standard
|	Co	59	332045.2	1.6	25.9884	0.393	1.5	ug/L	143	Standard
|	Ni	60	173345.9	3.1	64.6144	0.639	1.0	ug/L	79	Standard
|	Cu	65	60519.6	1.3	24.8521	0.582	2.3	ug/L	154	Standard
|	Zn	66	29331.7	1.6	26.5269	0.556	2.1	ug/L	194	Standard
>	Ge	72	203895.8	2.9				ug/L	232024	Standard
|	As	75	27915.2	1.0	28.1093	0.561	2.0	ug/L	-297	Standard
|	Se	82	3405.4	1.5	30.0996	0.506	1.7	ug/L	17	Standard
|	Se-1	77	2877.3	2.0	37.9043	1.073	2.8	ug/L	180	Standard
|	Ga	71	182092.8	1.5				mg/L	210139	Standard
|	Rb	85	30268.6	2.7				ug/L	12	Standard
>	Y	89	193761.5	2.3				ug/L	214065	Standard
|	Rh	103	308.3	7.7				ug/L	0	Standard
|	Mo	98	85152.7	1.1	22.5107	0.129	0.6	ug/L	6	Standard
|	Ag	107	161726.0	1.6	21.1330	0.264	1.3	ug/L	33	Standard
|	Cd	111	98039.5	1.5	23.6301	0.161	0.7	mg/L	437	Standard
|	Cd	114	263518.9	1.3	24.3369	0.326	1.3	ug/L	1160	Standard
>	In	115	590776.9	1.6				ug/L	646604	Standard
|	Sn	118	2738.6	3.0	0.1340	0.008	6.3	ug/L	864	Standard
|	Sb	123	246750.9	0.9	24.4418	0.178	0.7	ug/L	18	Standard
|	Ba	135	171989.4	1.0	40.8698	0.765	1.9	ug/L	39	Standard
|	Ce	140	166.3	10.6				ug/L	46	Standard
>	Tb	159	676701.8	0.1				ug/L	695671	Standard
|	Ho	165	12.7	31.9				ug/L	9	Standard
|	Tl	203	357534.7	0.7	26.8028	0.238	0.9	ug/L	687	Standard
|	Tl	205	834080.4	0.5	26.3971	0.250	0.9	ug/L	1624	Standard
|	Pb	206	282462.3	0.4	26.5422	0.179	0.7	ug/L	305	Standard
|	Pb	207	246886.9	0.2	27.2010	0.155	0.6	ug/L	231	Standard
|	Pb	208	1125732.4	0.3	26.6474	0.081	0.3	ug/L	1129	Standard
|	U	238	597202.6	0.6	26.5164	0.163	0.6	ug/L	3	Standard
>	Bi	209	327712.9	0.5				ug/L	405108	Standard
|	Na	23	726150.6	0.6	201.9416	2.353	1.2	mg/L	118	Standard
|	Mg	24	290610.5	0.3	0.5321	0.009	1.6	mg/L	377	Standard

Sample ID: L1205025907SD WG397503-05

Report Date/Time: Thursday, May 10, 2012 16:27:35

Page 1

Approved: May 11, 2012


K	39	11949.7	1.3	0.9842	0.009	0.9	mg/L	583	Standard
Ca	43	963.4	1.8	2.1256	0.083	3.9	mg/L	73	Standard
Fe	54	1019.5	8.4	0.0296	0.016	52.9	mg/L	785	Standard
Fe	57	9032.7	2.2	0.0175	0.002	9.1	mg/L	6133	Standard
Sc-1	45	254083.2	1.8				mg/L	254529	Standard
Cl	35	25096132.0	1.3				ug/L	1641778	Standard
Kr	83	151.2	2.0				ug/L	60	Standard
Br	81	408145.4	1.1				ug/L	11554	Standard
P	31	69483.2	3.0				ug/L	45410	Standard
S	34	1174865.3	1.3				ug/L	568857	Standard
Sr	88	2606512.9	0.6				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.877	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		90.515	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		91.366	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		97.273	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025907SD WG397503-05
 Report Date/Time: Thursday, May 10, 2012 16:27:35
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	80.895
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025907SD WG397503-05
 Report Date/Time: Thursday, May 10, 2012 16:27:35
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025908

Sample Date/Time: Thursday, May 10, 2012 16:27:55

Number of Replicates: 3

Autosampler Position: 426

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	274792.5	2.9	22987.4707	565.500	2.5	ug/L	12600	Standard
|	Be	9	33.3	31.2	-0.0057	0.003	46.4	ug/L	5	Standard
|	Al	27	175314.1	9.3	9.0549	0.823	9.1	ug/L	16102	Standard
>	Sc	45	290972.5	0.9				ug/L	254529	Standard
|	Ti	47	1183.0	6.7	0.7741	0.048	6.2	ug/L	84	Standard
|	V	51	7509.0	27.5	0.2351	0.151	64.4	ug/L	5785	Standard
|	Cr	52	41020.8	1.5	2.8287	0.090	3.2	ug/L	12212	Standard
|	Cr	53	7249.2	4.3	2.9812	0.149	5.0	ug/L	5042	Standard
|	Mn	55	547530.8	1.6	28.8636	0.554	1.9	ug/L	1290	Standard
|	Co	59	2420.2	4.0	0.1698	0.004	2.5	ug/L	143	Standard
|	Ni	60	15471.6	4.5	5.4594	0.186	3.4	ug/L	79	Standard
|	Cu	65	3127.7	3.6	1.1729	0.028	2.4	ug/L	154	Standard
|	Zn	66	4927.5	1.4	4.0877	0.087	2.1	ug/L	194	Standard
>	Ge	72	214485.7	1.7				ug/L	232024	Standard
|	As	75	-9.0	621.5	0.2179	0.053	24.4	ug/L	-297	Standard
|	Se	82	174.3	6.6	1.3136	0.092	7.0	ug/L	17	Standard
|	Se-1	77	339.3	3.2	2.6334	0.214	8.1	ug/L	180	Standard
|	Ga	71	195940.6	1.3				mg/L	210139	Standard
|	Rb	85	7593.6	1.8				ug/L	12	Standard
>	Y	89	215744.5	3.2				ug/L	214065	Standard
|	Rh	103	236.7	6.8				ug/L	0	Standard
|	Mo	98	905.8	11.9	0.2134	0.020	9.6	ug/L	6	Standard
|	Ag	107	642.7	18.3	0.0703	0.012	17.5	ug/L	33	Standard
|	Cd	111	703.8	12.5	0.0647	0.016	24.0	mg/L	437	Standard
|	Cd	114	1840.3	9.0	0.0580	0.010	17.4	ug/L	1160	Standard
>	In	115	637518.8	2.6				ug/L	646604	Standard
|	Sn	118	1333.7	9.4	0.0298	0.008	25.4	ug/L	864	Standard
|	Sb	123	373.6	34.2	0.0316	0.011	33.9	ug/L	18	Standard
|	Ba	135	23294.6	2.6	5.1218	0.063	1.2	ug/L	39	Standard
|	Ce	140	1667.1	17.2				ug/L	46	Standard
>	Tb	159	740298.4	2.5				ug/L	695671	Standard
|	Ho	165	69.3	5.8				ug/L	9	Standard
|	Tl	203	983.7	12.6	0.0338	0.008	23.4	ug/L	687	Standard
|	Tl	205	2229.8	11.2	0.0319	0.006	20.1	ug/L	1624	Standard
|	Pb	206	848.7	14.0	0.0531	0.009	17.2	ug/L	305	Standard
|	Pb	207	707.3	10.9	0.0516	0.008	15.0	ug/L	231	Standard
|	Pb	208	3312.8	11.9	0.0520	0.008	14.8	ug/L	1129	Standard
|	U	238	68283.5	1.6	2.9001	0.015	0.5	ug/L	3	Standard
>	Bi	209	342880.8	2.1				ug/L	405108	Standard
|	Na	23	280387.4	0.8	68.0651	0.770	1.1	mg/L	118	Standard
|	Mg	24	44529933.2	2.5	71.2879	1.133	1.6	mg/L	377	Standard

Sample ID: L1205025908

Report Date/Time: Thursday, May 10, 2012 16:30:27

Page 1

Approved: May 11, 2012

J. J. H.

K	39	21874.1	1.5	1.6040	0.019	1.2	mg/L	583	Standard
Ca	43	39180.6	1.1	82.1059	0.390	0.5	mg/L	73	Standard
Fe	54	1236.1	3.6	0.0403	0.007	17.4	mg/L	785	Standard
Fe	57	62835.1	3.1	0.2801	0.007	2.6	mg/L	6133	Standard
Sc-1	45	290972.5	0.9				mg/L	254529	Standard
Cl	35	7103651.4	0.9				ug/L	1641778	Standard
Kr	83	93.9	6.1				ug/L	60	Standard
Br	81	74019.2	6.8				ug/L	11554	Standard
P	31	89704.0	2.3				ug/L	45410	Standard
S	34	20733869.9	3.1				ug/L	568857	Standard
Sr	88	4681666.4	2.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.441	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		100.785	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.595	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.415	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025908

Report Date/Time: Thursday, May 10, 2012 16:30:27

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	84.639
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025908
 Report Date/Time: Thursday, May 10, 2012 16:30:27
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025908PS WG397653-01

Sample Date/Time: Thursday, May 10, 2012 16:30:47

Number of Replicates: 3

Autosampler Position: 427

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	310558.0	2.1	23634.5076	1542.761	6.5	ug/L	12600	Standard
|	Be	9	171707.7	2.0	40.9016	2.046	5.0	ug/L	5	Standard
|	Al	27	1042478.1	2.3	52.3985	2.444	4.7	ug/L	16102	Standard
>	Sc	45	320985.7	5.3				ug/L	254529	Standard
|	Ti	47	1125.7	7.4	0.6734	0.077	11.5	ug/L	84	Standard
|	V	51	838734.1	3.4	53.7309	2.939	5.5	ug/L	5785	Standard
|	Cr	52	639645.9	3.2	54.6374	3.331	6.1	ug/L	12212	Standard
|	Cr	53	96253.1	0.9	53.7386	3.247	6.0	ug/L	5042	Standard
|	Mn	55	1615880.8	1.3	78.7931	4.825	6.1	ug/L	1290	Standard
|	Co	59	704518.6	1.8	48.3732	2.351	4.9	ug/L	143	Standard
|	Ni	60	156811.9	2.2	51.2644	2.183	4.3	ug/L	79	Standard
|	Cu	65	125343.9	2.7	45.1614	1.755	3.9	ug/L	154	Standard
|	Zn	66	58328.8	2.7	46.3751	1.760	3.8	ug/L	194	Standard
>	Ge	72	232856.2	6.2				ug/L	232024	Standard
|	As	75	53630.1	1.5	47.2147	2.494	5.3	ug/L	-297	Standard
|	Se	82	6587.1	2.6	51.1550	2.011	3.9	ug/L	17	Standard
|	Se-1	77	4381.6	1.4	51.2364	2.578	5.0	ug/L	180	Standard
|	Ga	71	216488.2	6.2				mg/L	210139	Standard
|	Rb	85	8070.5	1.3				ug/L	12	Standard
>	Y	89	237916.2	4.8				ug/L	214065	Standard
|	Rh	103	255.0	18.9				ug/L	0	Standard
|	Mo	98	1043.5	5.3	0.2228	0.000	0.0	ug/L	6	Standard
|	Ag	107	366936.6	2.0	40.1939	1.536	3.8	ug/L	33	Standard
|	Cd	111	211939.2	2.6	42.8858	1.594	3.7	mg/L	437	Standard
|	Cd	114	545186.5	2.1	42.2785	1.882	4.5	ug/L	1160	Standard
>	In	115	705748.8	5.4				ug/L	646604	Standard
|	Sn	118	1706.8	1.5	0.0433	0.006	13.3	ug/L	864	Standard
|	Sb	123	526781.5	2.5	43.7272	1.488	3.4	ug/L	18	Standard
|	Ba	135	256323.3	3.1	51.0286	1.573	3.1	ug/L	39	Standard
|	Ce	140	1900.5	23.8				ug/L	46	Standard
>	Tb	159	811720.2	7.0				ug/L	695671	Standard
|	Ho	165	71.3	0.8				ug/L	9	Standard
|	Tl	203	743030.5	1.4	50.0305	2.237	4.5	ug/L	687	Standard
|	Tl	205	1731477.5	2.2	49.2145	2.270	4.6	ug/L	1624	Standard
|	Pb	206	579663.6	2.1	48.9157	2.441	5.0	ug/L	305	Standard
|	Pb	207	504300.6	2.0	49.8877	2.201	4.4	ug/L	231	Standard
|	Pb	208	2303902.4	2.1	48.9732	2.359	4.8	ug/L	1129	Standard
|	U	238	1364455.4	2.3	54.3880	2.907	5.3	ug/L	3	Standard
>	Bi	209	365691.6	5.7				ug/L	405108	Standard
|	Na	23	304473.1	2.3	67.0701	2.069	3.1	mg/L	118	Standard
|	Mg	24	47583320.6	2.5	69.2062	4.446	6.4	mg/L	377	Standard

Sample ID: L1205025908PS WG397653-01

Report Date/Time: Thursday, May 10, 2012 16:33:19

Page 1

Approved: May 11, 2012


K	39	23423.1	3.2	1.5567	0.041	2.6	mg/L	583	Standard
Ca	43	40609.4	1.3	77.2455	3.250	4.2	mg/L	73	Standard
Fe	54	1253.7	4.7	0.0249	0.010	40.7	mg/L	785	Standard
Fe	57	68045.9	3.6	0.2748	0.016	5.7	mg/L	6133	Standard
Sc-1	45	320985.7	5.3				mg/L	254529	Standard
Cl	35	7636027.1	1.0				ug/L	1641778	Standard
Kr	83	83.3	5.0				ug/L	60	Standard
Br	81	73165.5	2.9				ug/L	11554	Standard
P	31	95016.4	3.4				ug/L	45410	Standard
S	34	22633391.7	1.7				ug/L	568857	Standard
Sr	88	5249649.6	1.0				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.359	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		111.142	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		109.147	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		116.682	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025908PS WG397653-01
 Report Date/Time: Thursday, May 10, 2012 16:33:19
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	90.270
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025908PS WG397653-01
 Report Date/Time: Thursday, May 10, 2012 16:33:19
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025908SDL WG397653-02

Sample Date/Time: Thursday, May 10, 2012 16:33:39

Number of Replicates: 3

Autosampler Position: 428

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	66370.1	3.1	5619.9407	245.765	4.4	ug/L	12600	Standard
|	Be	9	1503.5	149.6	0.4591	0.709	154.5	ug/L	5	Standard
|	Al	27	51879.5	20.5	2.6334	0.766	29.1	ug/L	16102	Standard
>	Sc	45	248196.4	3.6				ug/L	254529	Standard
|	Ti	47	305.7	5.5	0.1636	0.020	12.2	ug/L	84	Standard
|	V	51	11347.8	79.2	0.5479	0.691	126.1	ug/L	5785	Standard
|	Cr	52	23493.5	28.2	1.2803	0.737	57.5	ug/L	12212	Standard
|	Cr	53	3217.0	41.0	0.5752	0.935	162.5	ug/L	5042	Standard
|	Mn	55	119327.1	16.8	6.5064	1.332	20.5	ug/L	1290	Standard
|	Co	59	5771.5	137.1	0.4500	0.638	141.7	ug/L	143	Standard
|	Ni	60	4671.8	39.8	1.7148	0.753	43.9	ug/L	79	Standard
|	Cu	65	1911.2	81.3	0.7418	0.668	90.1	ug/L	154	Standard
|	Zn	66	3588.1	23.0	3.0722	0.860	28.0	ug/L	194	Standard
>	Ge	72	206151.3	3.3				ug/L	232024	Standard
|	As	75	330.2	217.7	0.5681	0.732	128.9	ug/L	-297	Standard
|	Se	82	115.6	73.4	0.8740	0.791	90.5	ug/L	17	Standard
|	Se-1	77	186.3	42.2	0.7466	1.172	156.9	ug/L	180	Standard
|	Ga	71	179718.9	3.0				mg/L	210139	Standard
|	Rb	85	1370.1	4.7				ug/L	12	Standard
>	Y	89	193772.9	6.5				ug/L	214065	Standard
|	Rh	103	63.3	29.9				ug/L	0	Standard
|	Mo	98	170.4	15.9	0.0338	0.009	25.4	ug/L	6	Standard
|	Ag	107	2516.5	152.4	0.3103	0.488	157.2	ug/L	33	Standard
|	Cd	111	2034.9	132.6	0.3806	0.637	167.3	mg/L	437	Standard
|	Cd	114	5408.5	135.6	0.3826	0.663	173.3	ug/L	1160	Standard
>	In	115	638003.7	4.6				ug/L	646604	Standard
|	Sn	118	645.0	2.6	-0.0145	0.002	13.5	ug/L	864	Standard
|	Sb	123	5208.0	133.8	0.4936	0.673	136.4	ug/L	18	Standard
|	Ba	135	6687.7	47.1	1.4852	0.771	51.9	ug/L	39	Standard
|	Ce	140	363.7	3.3				ug/L	46	Standard
>	Tb	159	708109.9	2.9				ug/L	695671	Standard
|	Ho	165	19.3	31.6				ug/L	9	Standard
|	Tl	203	5677.2	144.1	0.3485	0.560	160.7	ug/L	687	Standard
|	Tl	205	13221.8	144.4	0.3432	0.551	160.7	ug/L	1624	Standard
|	Pb	206	5037.7	143.6	0.4054	0.620	153.0	ug/L	305	Standard
|	Pb	207	4441.6	144.1	0.4200	0.643	153.2	ug/L	231	Standard
|	Pb	208	20010.2	143.8	0.4057	0.621	153.2	ug/L	1129	Standard
|	U	238	24236.0	67.9	0.9602	0.682	71.0	ug/L	3	Standard
>	Bi	209	373912.8	3.7				ug/L	405108	Standard
|	Na	23	67875.4	6.3	19.3341	1.774	9.2	mg/L	118	Standard
|	Mg	24	9690281.1	7.7	18.2248	1.893	10.4	mg/L	377	Standard

Sample ID: L1205025908SDL WG397653-02

Report Date/Time: Thursday, May 10, 2012 16:36:12

Page 1

Approved: May 11, 2012

J. Y. H.


K	39	5597.7	7.2	0.4456	0.043	9.6	mg/L	583	Standard
Ca	43	8837.6	11.0	21.6355	3.053	14.1	mg/L	73	Standard
Fe	54	537.7	7.9	-0.0545	0.008	14.8	mg/L	785	Standard
Fe	57	20049.9	4.6	0.0834	0.007	8.0	mg/L	6133	Standard
Sc-1	45	248196.4	3.6				mg/L	254529	Standard
Cl	35	1935108.9	8.7				ug/L	1641778	Standard
Kr	83	54.6	6.8				ug/L	60	Standard
Br	81	23071.7	4.7				ug/L	11554	Standard
P	31	31592.9	0.8				ug/L	45410	Standard
S	34	5145966.2	5.6				ug/L	568857	Standard
Sr	88	926185.8	6.6				ug/L	240	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.849	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		90.521	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.670	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		101.788	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025908SDL WG397653-02
 Report Date/Time: Thursday, May 10, 2012 16:36:12
 Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	92.300
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025908SDL WG397653-02
 Report Date/Time: Thursday, May 10, 2012 16:36:12
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 16:36:34

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	14238.4	4.6	58.7998	42.406	72.1	ug/L	12600	Standard
|	Be	9	184761.8	2.3	50.3880	0.784	1.6	ug/L	5	Standard
|	Al	27	893037.0	4.3	51.3718	1.621	3.2	ug/L	16102	Standard
>	Sc	45	279908.8	1.3				ug/L	254529	Standard
|	Ti	47	160605.4	2.6	106.4904	3.113	2.9	ug/L	84	Standard
|	V	51	824056.2	3.3	53.7043	1.600	3.0	ug/L	5785	Standard
|	Cr	52	615726.1	3.5	53.4740	1.915	3.6	ug/L	12212	Standard
|	Cr	53	91791.6	3.6	52.0655	2.002	3.8	ug/L	5042	Standard
|	Mn	55	1076514.8	2.4	53.3570	1.890	3.5	ug/L	1290	Standard
|	Co	59	740767.2	2.0	51.7539	1.687	3.3	ug/L	143	Standard
|	Ni	60	153467.7	2.9	51.0606	1.910	3.7	ug/L	79	Standard
|	Cu	65	138538.7	2.4	50.8062	1.174	2.3	ug/L	154	Standard
|	Zn	66	61215.1	2.5	49.5519	1.560	3.1	ug/L	194	Standard
>	Ge	72	228482.0	2.0				ug/L	232024	Standard
|	As	75	57258.1	1.9	51.2513	0.952	1.9	ug/L	-297	Standard
|	Se	82	6799.2	1.0	53.7548	1.391	2.6	ug/L	17	Standard
|	Se-1	77	4330.6	3.9	51.5229	2.088	4.1	ug/L	180	Standard
|	Ga	71	205495.5	0.5				mg/L	210139	Standard
|	Rb	85	1053.4	8.8				ug/L	12	Standard
>	Y	89	218842.6	1.4				ug/L	214065	Standard
|	Rh	103	43.3	40.5				ug/L	0	Standard
|	Mo	98	418207.1	3.6	95.0722	1.898	2.0	ug/L	6	Standard
|	Ag	107	436080.7	3.7	49.0007	1.161	2.4	ug/L	33	Standard
|	Cd	111	234536.2	3.8	48.6974	1.048	2.2	mg/L	437	Standard
|	Cd	114	605681.5	3.1	48.1883	0.699	1.4	ug/L	1160	Standard
>	In	115	686997.4	1.6				ug/L	646604	Standard
|	Sn	118	818576.9	3.3	48.7385	0.850	1.7	ug/L	864	Standard
|	Sb	123	572399.0	3.3	48.7474	0.865	1.8	ug/L	18	Standard
|	Ba	135	245282.4	3.1	50.1081	0.768	1.5	ug/L	39	Standard
|	Ce	140	911.0	4.8				ug/L	46	Standard
>	Tb	159	788434.8	1.9				ug/L	695671	Standard
|	Ho	165	24.0	39.7				ug/L	9	Standard
|	Tl	203	853246.1	1.5	51.2237	0.520	1.0	ug/L	687	Standard
|	Tl	205	2040149.7	7.5	51.6676	2.936	5.7	ug/L	1624	Standard
|	Pb	206	679382.3	3.0	51.1038	0.864	1.7	ug/L	305	Standard
|	Pb	207	573495.4	3.7	50.5737	1.098	2.2	ug/L	231	Standard
|	Pb	208	2659879.4	3.5	50.3986	1.073	2.1	ug/L	1129	Standard
|	U	238	1400515.9	2.9	49.7548	0.548	1.1	ug/L	3	Standard
>	Bi	209	409509.5	1.9				ug/L	405108	Standard
|	Na	23	21290.0	4.5	5.3459	0.180	3.4	mg/L	118	Standard
|	Mg	24	3056680.5	2.0	5.0863	0.056	1.1	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 16:39:06

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	65616.8	0.8	5.1112	0.031	0.6	mg/L	583	Standard
Ca	43	2283.5	2.0	4.7940	0.121	2.5	mg/L	73	Standard
Fe	54	30011.6	5.4	4.7289	0.203	4.3	mg/L	785	Standard
Fe	57	941437.8	3.6	4.8630	0.111	2.3	mg/L	6133	Standard
Sc-1	45	279908.8	1.3				mg/L	254529	Standard
Cl	35	503339.2	31.2				ug/L	1641778	Standard
Kr	83	60.8	8.3				ug/L	60	Standard
Br	81	13790.4	0.4				ug/L	11554	Standard
P	31	64788.6	6.2				ug/L	45410	Standard
S	34	767707.3	4.7				ug/L	568857	Standard
Sr	88	728.4	1.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	102.744		
Sc	45			
Ti	47	106.490		
V	51	107.409		
Cr	52	106.948		
Cr	53			
Mn	55	106.714		
Co	59	103.508		
Ni	60	102.121		
Cu	65	101.612		
Zn	66	99.104		
Ge	72		98.474	
As	75	102.503		
Se	82	107.510		
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.232	
Rh	103			
Mo	98	95.072		
Ag	107	98.001		
Cd	111	97.395		
Cd	114			
In	115		106.247	
Sn	118	97.477		
Sb	123	97.495		
Ba	135	100.216		
Ce	140			
Tb	159		113.334	
Ho	165			
Tl	203	102.447		
Tl	205			
Pb	206	102.208		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 16:39:06

Page 2

Approved: May 11, 2012




Pb	207	101.147	
Pb	208	100.797	
U	238	99.510	
> Bi	209		101.086
Na	23	106.917	
Mg	24	101.726	
K	39	102.223	
Ca	43	95.880	
Fe	54	94.577	
Fe	57	97.260	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 16:39:06
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 16:39:26

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13539.4	4.8	105.1960	46.889	44.6	ug/L	12600	Standard
|	Be	9	16.7	17.3	-0.0095	0.001	11.6	ug/L	5	Standard
|	Al	27	14592.0	5.9	0.1336	0.016	11.7	ug/L	16102	Standard
>	Sc	45	257168.4	4.3				ug/L	254529	Standard
|	Ti	47	180.3	13.1	0.0640	0.016	24.5	ug/L	84	Standard
|	V	51	3968.2	2.5	-0.0175	0.012	71.0	ug/L	5785	Standard
|	Cr	52	11556.4	0.7	0.0338	0.027	81.0	ug/L	12212	Standard
|	Cr	53	875.9	1.9	-0.9891	0.012	1.2	ug/L	5042	Standard
|	Mn	55	1520.7	5.7	-0.0057	0.004	72.0	ug/L	1290	Standard
|	Co	59	181.3	12.8	0.0031	0.002	59.0	ug/L	143	Standard
|	Ni	60	72.7	13.4	0.0015	0.003	209.8	ug/L	79	Standard
|	Cu	65	305.7	5.2	0.0680	0.007	10.0	ug/L	154	Standard
|	Zn	66	304.0	0.6	0.0833	0.007	8.6	ug/L	194	Standard
>	Ge	72	217683.1	2.3				ug/L	232024	Standard
|	As	75	-226.4	9.7	0.0146	0.022	153.2	ug/L	-297	Standard
|	Se	82	35.0	4.6	0.1328	0.019	14.6	ug/L	17	Standard
|	Se-1	77	91.0	9.4	-0.6451	0.099	15.4	ug/L	180	Standard
|	Ga	71	198322.8	2.7				mg/L	210139	Standard
|	Rb	85	35.0	62.3				ug/L	12	Standard
>	Y	89	207439.7	5.4				ug/L	214065	Standard
|	Rh	103	23.3	81.1				ug/L	0	Standard
|	Mo	98	79.6	57.9	0.0109	0.011	97.7	ug/L	6	Standard
|	Ag	107	298.0	25.5	0.0280	0.008	28.7	ug/L	33	Standard
|	Cd	111	440.8	4.7	0.0044	0.002	36.7	mg/L	437	Standard
|	Cd	114	1168.1	6.3	-0.0012	0.004	311.8	ug/L	1160	Standard
>	In	115	647777.7	3.3				ug/L	646604	Standard
|	Sn	118	1040.4	3.0	0.0099	0.001	5.8	ug/L	864	Standard
|	Sb	123	321.1	38.4	0.0263	0.010	39.3	ug/L	18	Standard
|	Ba	135	57.7	12.5	0.0043	0.001	31.8	ug/L	39	Standard
|	Ce	140	40.7	37.6				ug/L	46	Standard
>	Tb	159	716460.2	4.2				ug/L	695671	Standard
|	Ho	165	13.3	17.3				ug/L	9	Standard
|	Tl	203	410.7	37.1	-0.0110	0.009	85.3	ug/L	687	Standard
|	Tl	205	984.0	45.8	-0.0097	0.012	121.3	ug/L	1624	Standard
|	Pb	206	339.7	10.1	0.0035	0.002	70.7	ug/L	305	Standard
|	Pb	207	289.3	11.9	0.0036	0.003	80.0	ug/L	231	Standard
|	Pb	208	1312.0	12.6	0.0029	0.003	104.9	ug/L	1129	Standard
|	U	238	97.3	57.9	0.0060	0.002	34.3	ug/L	3	Standard
>	Bi	209	393550.5	2.4				ug/L	405108	Standard
|	Na	23	200.0	22.9	0.0274	0.010	38.0	mg/L	118	Standard
|	Mg	24	1026.7	15.6	0.0010	0.000	24.8	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 16:41:59

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	636.7	3.5	0.0030	0.003	107.3	mg/L	583	Standard
Ca	43	61.7	28.5	-0.0471	0.036	76.5	mg/L	73	Standard
Fe	54	965.8	7.9	0.0177	0.008	46.7	mg/L	785	Standard
Fe	57	5489.3	3.4	-0.0032	0.001	32.8	mg/L	6133	Standard
Sc-1	45	257168.4	4.3				mg/L	254529	Standard
Cl	35	469323.0	32.6				ug/L	1641778	Standard
Kr	83	60.4	4.2				ug/L	60	Standard
Br	81	12596.9	2.0				ug/L	11554	Standard
P	31	63373.2	3.6				ug/L	45410	Standard
S	34	718234.0	4.6				ug/L	568857	Standard
Sr	88	325.0	1.5				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.819	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		96.905	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.182	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.988	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 16:41:59

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	97.147
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 16:41:59
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025909

Sample Date/Time: Thursday, May 10, 2012 16:42:21

Number of Replicates: 3

Autosampler Position: 429

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	75961.7	2.4	5323.7144	91.751	1.7	ug/L	12600	Standard
|	Be	9	125.0	18.3	0.0177	0.006	32.1	ug/L	5	Standard
|	Al	27	6729428.1	1.9	370.1902	8.840	2.4	ug/L	16102	Standard
>	Sc	45	296688.5	1.1				ug/L	254529	Standard
[	Ti	47	13083.6	2.9	9.0318	0.093	1.0	ug/L	84	Standard
|	V	51	20127.0	3.4	1.0910	0.011	1.0	ug/L	5785	Standard
|	Cr	52	49702.2	4.8	3.5682	0.107	3.0	ug/L	12212	Standard
|	Cr	53	7327.6	0.3	2.9584	0.133	4.5	ug/L	5042	Standard
|	Mn	55	3484701.8	1.2	181.1690	3.462	1.9	ug/L	1290	Standard
|	Co	59	15760.2	2.0	1.1434	0.008	0.7	ug/L	143	Standard
|	Ni	60	14048.8	3.7	4.8737	0.063	1.3	ug/L	79	Standard
|	Cu	65	5144.2	2.0	1.9289	0.016	0.8	ug/L	154	Standard
|	Zn	66	11453.3	3.2	9.5699	0.110	1.1	ug/L	194	Standard
>	Ge	72	218062.4	2.7				ug/L	232024	Standard
|	As	75	333.0	3.4	0.5373	0.007	1.3	ug/L	-297	Standard
|	Se	82	205.7	7.3	1.5499	0.110	7.1	ug/L	17	Standard
[	Se-1	77	151.7	3.3	0.1380	0.105	76.1	ug/L	180	Standard
|	Ga	71	199023.6	1.9				mg/L	210139	Standard
[	Rb	85	22451.7	6.4				ug/L	12	Standard
>	Y	89	224616.4	4.4				ug/L	214065	Standard
[	Rh	103	136.7	21.4				ug/L	0	Standard
[	Mo	98	1631.0	7.9	0.3922	0.025	6.3	ug/L	6	Standard
|	Ag	107	718.4	6.4	0.0798	0.004	5.1	ug/L	33	Standard
|	Cd	111	1017.6	2.3	0.1359	0.007	5.0	mg/L	437	Standard
|	Cd	114	2596.0	3.0	0.1236	0.004	2.9	ug/L	1160	Standard
>	In	115	635992.0	1.9				ug/L	646604	Standard
|	Sn	118	1748.8	1.8	0.0567	0.000	0.6	ug/L	864	Standard
|	Sb	123	466.1	8.4	0.0404	0.003	8.1	ug/L	18	Standard
[	Ba	135	125827.5	2.2	27.7658	0.112	0.4	ug/L	39	Standard
[	Ce	140	60620.4	2.2				ug/L	46	Standard
>	Tb	159	731403.4	1.9				ug/L	695671	Standard
[	Ho	165	1671.4	4.5				ug/L	9	Standard
|	Tl	203	888.0	1.7	0.0240	0.002	7.1	ug/L	687	Standard
|	Tl	205	2090.1	2.3	0.0247	0.000	1.6	ug/L	1624	Standard
|	Pb	206	5636.4	3.7	0.4597	0.012	2.5	ug/L	305	Standard
|	Pb	207	4587.4	2.4	0.4378	0.005	1.1	ug/L	231	Standard
|	Pb	208	21553.0	2.9	0.4421	0.006	1.3	ug/L	1129	Standard
|	U	238	150486.9	2.3	6.0878	0.047	0.8	ug/L	3	Standard
>	Bi	209	359763.1	1.6				ug/L	405108	Standard
[	Na	23	319715.6	2.1	76.1177	1.451	1.9	mg/L	118	Standard
|	Mg	24	9855057.2	2.8	15.4745	0.442	2.9	mg/L	377	Standard

Sample ID: L1205025909

Report Date/Time: Thursday, May 10, 2012 16:44:53

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	8465.7	0.4	0.5769	0.007	1.2	mg/L	583	Standard
Ca	43	16015.1	4.8	32.7970	1.480	4.5	mg/L	73	Standard
Fe	54	3808.5	5.9	0.4313	0.030	7.0	mg/L	785	Standard
Fe	57	118699.9	1.5	0.5483	0.006	1.1	mg/L	6133	Standard
Sc-1	45	296688.5	1.1				mg/L	254529	Standard
Cl	35	2232914.4	6.0				ug/L	1641778	Standard
Kr	83	65.1	7.9				ug/L	60	Standard
Br	81	93814.6	1.6				ug/L	11554	Standard
P	31	92177.1	1.9				ug/L	45410	Standard
S	34	3857224.1	2.1				ug/L	568857	Standard
Sr	88	3228176.6	3.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.983	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		104.929	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.359	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.136	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025909

Report Date/Time: Thursday, May 10, 2012 16:44:53

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	88.807
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205025909
 Report Date/Time: Thursday, May 10, 2012 16:44:53
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025911

Sample Date/Time: Thursday, May 10, 2012 16:45:13

Number of Replicates: 3

Autosampler Position: 430

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	47442.6	3.6	2790.8684	116.036	4.2	ug/L	12600	Standard
|	Be	9	13.3	43.3	-0.0110	0.001	13.5	ug/L	5	Standard
|	Al	27	93592.9	8.5	4.2816	0.426	9.9	ug/L	16102	Standard
>	Sc	45	301872.5	5.8				ug/L	254529	Standard
|	Ti	47	2780.6	5.5	1.8264	0.052	2.8	ug/L	84	Standard
|	V	51	8895.6	6.8	0.3059	0.025	8.2	ug/L	5785	Standard
|	Cr	52	24664.1	5.8	1.1946	0.075	6.3	ug/L	12212	Standard
|	Cr	53	2536.9	16.0	-0.0128	0.204	1599.1	ug/L	5042	Standard
|	Mn	55	5849359.6	4.3	297.1270	5.265	1.8	ug/L	1290	Standard
|	Co	59	3277.4	3.5	0.2242	0.003	1.6	ug/L	143	Standard
|	Ni	60	6989.9	5.0	2.3574	0.063	2.7	ug/L	79	Standard
|	Cu	65	973.7	1.7	0.3166	0.017	5.4	ug/L	154	Standard
|	Zn	66	2352.5	4.8	1.7800	0.039	2.2	ug/L	194	Standard
>	Ge	72	223101.4	2.9				ug/L	232024	Standard
|	As	75	6354.1	5.0	6.0224	0.135	2.2	ug/L	-297	Standard
|	Se	82	118.2	6.6	0.8006	0.038	4.8	ug/L	17	Standard
|	Se-1	77	194.3	9.2	0.6301	0.207	32.9	ug/L	180	Standard
|	Ga	71	203113.7	2.8				mg/L	210139	Standard
|	Rb	85	5844.5	5.1				ug/L	12	Standard
>	Y	89	216742.9	1.6				ug/L	214065	Standard
|	Rh	103	161.7	18.1				ug/L	0	Standard
|	Mo	98	1852.5	2.4	0.4317	0.005	1.1	ug/L	6	Standard
|	Ag	107	49.7	20.4	-0.0015	0.001	79.5	ug/L	33	Standard
|	Cd	111	472.4	4.7	0.0098	0.004	40.9	mg/L	437	Standard
|	Cd	114	1276.8	5.1	0.0063	0.002	39.4	ug/L	1160	Standard
>	In	115	657971.9	2.9				ug/L	646604	Standard
|	Sn	118	892.7	2.5	-0.0003	0.001	154.8	ug/L	864	Standard
|	Sb	123	273.9	6.4	0.0219	0.001	6.4	ug/L	18	Standard
|	Ba	135	997402.5	3.4	212.7863	1.664	0.8	ug/L	39	Standard
|	Ce	140	696.7	3.8				ug/L	46	Standard
>	Tb	159	761429.6	2.7				ug/L	695671	Standard
|	Ho	165	40.3	21.4				ug/L	9	Standard
|	Tl	203	711.7	2.5	0.0094	0.001	13.4	ug/L	687	Standard
|	Tl	205	1647.4	2.8	0.0094	0.001	6.4	ug/L	1624	Standard
|	Pb	206	513.3	3.9	0.0186	0.002	10.5	ug/L	305	Standard
|	Pb	207	411.3	5.3	0.0162	0.001	8.8	ug/L	231	Standard
|	Pb	208	1965.4	2.8	0.0172	0.001	4.8	ug/L	1129	Standard
|	U	238	1364.7	1.8	0.0547	0.001	1.9	ug/L	3	Standard
>	Bi	209	380102.4	2.1				ug/L	405108	Standard
|	Na	23	70197.4	3.3	16.4206	0.447	2.7	mg/L	118	Standard
|	Mg	24	14510172.9	3.9	22.4127	0.697	3.1	mg/L	377	Standard

Sample ID: L1205025911

Report Date/Time: Thursday, May 10, 2012 16:47:45

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	6453.0	2.0	0.4204	0.032	7.7	mg/L	583	Standard
Ca	43	25583.3	3.8	51.6544	1.570	3.0	mg/L	73	Standard
Fe	54	25266.9	4.1	3.6621	0.087	2.4	mg/L	785	Standard
Fe	57	811567.5	5.3	3.8819	0.038	1.0	mg/L	6133	Standard
Sc-1	45	301872.5	5.8				mg/L	254529	Standard
Cl	35	4726738.2	3.8				ug/L	1641778	Standard
Kr	83	66.9	10.0				ug/L	60	Standard
Br	81	57502.3	1.8				ug/L	11554	Standard
P	31	677735.8	4.1				ug/L	45410	Standard
S	34	1191220.2	4.3				ug/L	568857	Standard
Sr	88	4688514.9	1.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.155	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.251	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		101.758	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		109.452	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025911

Report Date/Time: Thursday, May 10, 2012 16:47:45

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	93.827
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1205025911
 Report Date/Time: Thursday, May 10, 2012 16:47:45
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025913

Sample Date/Time: Thursday, May 10, 2012 16:48:05

Number of Replicates: 3

Autosampler Position: 431

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	50935.6	4.9	3206.1236	88.654	2.8	ug/L	12600	Standard
|	Be	9	35.0	14.3	-0.0053	0.001	20.8	ug/L	5	Standard
|	Al	27	438209.8	4.5	23.6202	0.498	2.1	ug/L	16102	Standard
>	Sc	45	293507.8	3.5				ug/L	254529	Standard
|	Ti	47	3609.1	28.3	2.4355	0.719	29.5	ug/L	84	Standard
|	V	51	7469.3	4.5	0.2189	0.017	7.8	ug/L	5785	Standard
|	Cr	52	19976.8	3.1	0.8008	0.008	1.0	ug/L	12212	Standard
|	Cr	53	2379.4	7.9	-0.0811	0.072	88.4	ug/L	5042	Standard
|	Mn	55	2281807.6	4.6	117.7905	3.311	2.8	ug/L	1290	Standard
|	Co	59	2309.8	5.0	0.1577	0.003	2.1	ug/L	143	Standard
|	Ni	60	5449.6	6.5	1.8628	0.067	3.6	ug/L	79	Standard
|	Cu	65	1061.0	5.6	0.3555	0.011	3.1	ug/L	154	Standard
|	Zn	66	2816.6	3.6	2.2055	0.042	1.9	ug/L	194	Standard
>	Ge	72	219455.1	3.0				ug/L	232024	Standard
|	As	75	10719.9	3.6	10.1703	0.146	1.4	ug/L	-297	Standard
|	Se	82	92.8	12.6	0.6069	0.088	14.5	ug/L	17	Standard
|	Se-1	77	192.3	2.4	0.6458	0.036	5.6	ug/L	180	Standard
|	Ga	71	196405.3	2.6				mg/L	210139	Standard
|	Rb	85	6636.5	4.6				ug/L	12	Standard
>	Y	89	211255.1	3.0				ug/L	214065	Standard
|	Rh	103	131.7	21.6				ug/L	0	Standard
|	Mo	98	1903.2	4.0	0.4563	0.007	1.5	ug/L	6	Standard
|	Ag	107	52.3	23.9	-0.0011	0.002	145.0	ug/L	33	Standard
|	Cd	111	485.0	5.0	0.0154	0.003	18.2	mg/L	437	Standard
|	Cd	114	1249.5	6.1	0.0069	0.004	57.4	ug/L	1160	Standard
>	In	115	640009.5	2.5				ug/L	646604	Standard
|	Sn	118	864.4	2.9	-0.0006	0.002	395.5	ug/L	864	Standard
|	Sb	123	179.7	5.7	0.0139	0.001	3.9	ug/L	18	Standard
|	Ba	135	1190564.2	3.5	261.1047	2.712	1.0	ug/L	39	Standard
|	Ce	140	3335.1	54.2				ug/L	46	Standard
>	Tb	159	741253.9	3.4				ug/L	695671	Standard
|	Ho	165	69.7	20.8				ug/L	9	Standard
|	Tl	203	663.0	3.1	0.0072	0.001	8.8	ug/L	687	Standard
|	Tl	205	1565.1	0.6	0.0081	0.001	11.0	ug/L	1624	Standard
|	Pb	206	719.4	8.5	0.0365	0.004	11.3	ug/L	305	Standard
|	Pb	207	617.3	0.8	0.0371	0.002	4.6	ug/L	231	Standard
|	Pb	208	2886.4	1.9	0.0373	0.000	1.2	ug/L	1129	Standard
|	U	238	481.7	2.8	0.0213	0.001	2.8	ug/L	3	Standard
>	Bi	209	371779.6	2.6				ug/L	405108	Standard
|	Na	23	67970.6	3.8	16.3352	0.142	0.9	mg/L	118	Standard
|	Mg	24	13273689.6	3.5	21.0675	0.006	0.0	mg/L	377	Standard

Sample ID: L1205025913

Report Date/Time: Thursday, May 10, 2012 16:50:38

Page 1

Approved: May 11, 2012

J. J. H.

K	39	5265.9	3.3	0.3440	0.022	6.4	mg/L	583	Standard
Ca	43	26997.4	4.0	56.0231	0.837	1.5	mg/L	73	Standard
Fe	54	31471.3	3.1	4.7318	0.094	2.0	mg/L	785	Standard
Fe	57	1006253.1	4.0	4.9582	0.063	1.3	mg/L	6133	Standard
Sc-1	45	293507.8	3.5				mg/L	254529	Standard
Cl	35	5396032.2	2.7				ug/L	1641778	Standard
Kr	83	67.2	4.8				ug/L	60	Standard
Br	81	42840.5	4.1				ug/L	11554	Standard
P	31	594094.8	4.1				ug/L	45410	Standard
S	34	1230503.5	4.5				ug/L	568857	Standard
Sr	88	4687278.1	4.4				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.583	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		98.687	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.980	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.552	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025913

Report Date/Time: Thursday, May 10, 2012 16:50:38

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	91.773
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1205025913
 Report Date/Time: Thursday, May 10, 2012 16:50:38
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205024208

Sample Date/Time: Thursday, May 10, 2012 16:50:58

Number of Replicates: 3

Autosampler Position: 432

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	16437.2	2.8	237.4606	5.408	2.3	ug/L	12600	Standard
|	Be	9	21.7	26.6	-0.0086	0.001	16.4	ug/L	5	Standard
|	Al	27	435680.5	5.8	24.2552	0.861	3.5	ug/L	16102	Standard
>	Sc	45	284307.3	2.8				ug/L	254529	Standard
|	Ti	47	2524.5	2.4	1.6410	0.033	2.0	ug/L	84	Standard
|	V	51	8995.6	3.1	0.3085	0.005	1.7	ug/L	5785	Standard
|	Cr	52	18516.7	3.7	0.6255	0.003	0.5	ug/L	12212	Standard
|	Cr	53	1257.6	1.8	-0.7794	0.017	2.2	ug/L	5042	Standard
|	Mn	55	4230429.7	3.3	213.2938	0.947	0.4	ug/L	1290	Standard
|	Co	59	38345.2	4.0	2.7118	0.009	0.3	ug/L	143	Standard
|	Ni	60	1191.4	6.1	0.3788	0.011	2.8	ug/L	79	Standard
|	Cu	65	902.4	5.8	0.2868	0.016	5.5	ug/L	154	Standard
|	Zn	66	2452.5	5.0	1.8477	0.032	1.7	ug/L	194	Standard
>	Ge	72	224823.2	3.7				ug/L	232024	Standard
|	As	75	284.2	12.4	0.4833	0.023	4.8	ug/L	-297	Standard
|	Se	82	108.4	7.0	0.7144	0.030	4.2	ug/L	17	Standard
|	Se-1	77	114.7	7.9	-0.3843	0.124	32.3	ug/L	180	Standard
|	Ga	71	202146.3	3.5				mg/L	210139	Standard
|	Rb	85	11010.7	5.1				ug/L	12	Standard
>	Y	89	222656.8	3.1				ug/L	214065	Standard
|	Rh	103	28.3	27.0				ug/L	0	Standard
|	Mo	98	775.6	5.7	0.1780	0.005	3.1	ug/L	6	Standard
|	Ag	107	47.3	9.5	-0.0018	0.000	24.5	ug/L	33	Standard
|	Cd	111	481.0	7.8	0.0129	0.007	53.1	mg/L	437	Standard
|	Cd	114	1334.8	1.6	0.0125	0.002	15.5	ug/L	1160	Standard
>	In	115	650359.4	2.8				ug/L	646604	Standard
|	Sn	118	2530.5	2.8	0.1035	0.001	0.5	ug/L	864	Standard
|	Sb	123	227.9	7.2	0.0180	0.001	8.0	ug/L	18	Standard
|	Ba	135	95337.2	3.2	20.5711	0.249	1.2	ug/L	39	Standard
|	Ce	140	16891.4	3.2				ug/L	46	Standard
>	Tb	159	743521.7	2.2				ug/L	695671	Standard
|	Ho	165	470.3	6.4				ug/L	9	Standard
|	Tl	203	363.3	35.7	-0.0131	0.008	61.9	ug/L	687	Standard
|	Tl	205	784.7	38.7	-0.0141	0.008	57.4	ug/L	1624	Standard
|	Pb	206	1009.4	1.4	0.0593	0.001	2.0	ug/L	305	Standard
|	Pb	207	811.7	3.2	0.0547	0.001	1.0	ug/L	231	Standard
|	Pb	208	3780.5	3.5	0.0547	0.001	2.0	ug/L	1129	Standard
|	U	238	380.0	2.2	0.0170	0.000	2.4	ug/L	3	Standard
>	Bi	209	377655.5	2.5				ug/L	405108	Standard
|	Na	23	123893.0	2.7	30.7646	0.044	0.1	mg/L	118	Standard
|	Mg	24	671033.7	2.9	1.0987	0.005	0.4	mg/L	377	Standard

Sample ID: L1205024208

Report Date/Time: Thursday, May 10, 2012 16:53:30

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	8527.4	0.7	0.6093	0.021	3.5	mg/L	583	Standard
Ca	43	1126.7	14.3	2.2255	0.297	13.4	mg/L	73	Standard
Fe	54	29706.5	3.1	4.6059	0.032	0.7	mg/L	785	Standard
Fe	57	895957.8	4.6	4.5536	0.088	1.9	mg/L	6133	Standard
Sc-1	45	284307.3	2.8				mg/L	254529	Standard
Cl	35	750583.7	20.3				ug/L	1641778	Standard
Kr	83	54.1	6.3				ug/L	60	Standard
Br	81	52329.4	2.5				ug/L	11554	Standard
P	31	122235.3	5.3				ug/L	45410	Standard
S	34	718496.4	3.6				ug/L	568857	Standard
Sr	88	245827.1	6.6				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.897	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		104.014	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.581	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.878	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205024208

Report Date/Time: Thursday, May 10, 2012 16:53:30

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	93.223
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205024208
 Report Date/Time: Thursday, May 10, 2012 16:53:30
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205024210

Sample Date/Time: Thursday, May 10, 2012 16:53:50

Number of Replicates: 3

Autosampler Position: 433

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	20941.1	4.4	418.8928	66.646	15.9	ug/L	12600	Standard
|	Be	9	38.3	39.8	-0.0053	0.004	68.0	ug/L	5	Standard
|	Al	27	5016164.8	3.5	253.3419	4.548	1.8	ug/L	16102	Standard
>	Sc	45	322748.9	2.0				ug/L	254529	Standard
|	Ti	47	20791.6	3.5	13.6439	0.445	3.3	ug/L	84	Standard
|	V	51	89126.0	2.1	5.5122	0.065	1.2	ug/L	5785	Standard
|	Cr	52	31540.1	2.4	1.7339	0.008	0.4	ug/L	12212	Standard
|	Cr	53	3998.0	7.6	0.7914	0.129	16.3	ug/L	5042	Standard
|	Mn	55	138979.4	2.5	6.7682	0.062	0.9	ug/L	1290	Standard
|	Co	59	2691.2	2.7	0.1765	0.001	0.6	ug/L	143	Standard
|	Ni	60	1492.4	4.4	0.4694	0.011	2.3	ug/L	79	Standard
|	Cu	65	2239.5	4.2	0.7668	0.017	2.3	ug/L	154	Standard
|	Zn	66	9532.0	2.6	7.5159	0.029	0.4	ug/L	194	Standard
>	Ge	72	229941.9	2.3				ug/L	232024	Standard
|	As	75	90.7	26.8	0.3069	0.022	7.2	ug/L	-297	Standard
|	Se	82	42.0	15.9	0.1722	0.049	28.7	ug/L	17	Standard
|	Se-1	77	95.7	24.2	-0.6537	0.259	39.6	ug/L	180	Standard
|	Ga	71	210597.0	3.0				mg/L	210139	Standard
|	Rb	85	5481.0	5.2				ug/L	12	Standard
>	Y	89	223180.4	4.3				ug/L	214065	Standard
|	Rh	103	18.3	15.7				ug/L	0	Standard
|	Mo	98	269.1	5.9	0.0549	0.003	5.6	ug/L	6	Standard
|	Ag	107	85.7	15.9	0.0026	0.002	65.8	ug/L	33	Standard
|	Cd	111	517.1	0.5	0.0182	0.001	5.6	mg/L	437	Standard
|	Cd	114	1364.1	2.9	0.0123	0.005	38.5	ug/L	1160	Standard
>	In	115	666052.0	1.3				ug/L	646604	Standard
|	Sn	118	2384.2	3.9	0.0907	0.004	4.3	ug/L	864	Standard
|	Sb	123	577.8	5.1	0.0483	0.003	6.8	ug/L	18	Standard
|	Ba	135	49219.2	2.3	10.3653	0.106	1.0	ug/L	39	Standard
|	Ce	140	21384.4	3.6				ug/L	46	Standard
>	Tb	159	745235.7	2.1				ug/L	695671	Standard
|	Ho	165	355.7	3.9				ug/L	9	Standard
|	Tl	203	364.7	30.4	-0.0142	0.007	48.6	ug/L	687	Standard
|	Tl	205	853.4	33.2	-0.0134	0.008	56.1	ug/L	1624	Standard
|	Pb	206	4134.6	1.4	0.2958	0.004	1.2	ug/L	305	Standard
|	Pb	207	3480.7	2.3	0.2918	0.008	2.8	ug/L	231	Standard
|	Pb	208	15999.3	1.3	0.2879	0.005	1.7	ug/L	1129	Standard
|	U	238	1303.7	2.6	0.0499	0.002	4.2	ug/L	3	Standard
>	Bi	209	399638.2	1.7				ug/L	405108	Standard
|	Na	23	17094.6	3.4	3.7151	0.088	2.4	mg/L	118	Standard
|	Mg	24	1059394.0	1.3	1.5286	0.029	1.9	mg/L	377	Standard

Sample ID: L1205024210

Report Date/Time: Thursday, May 10, 2012 16:56:22

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	12313.3	2.0	0.7887	0.015	1.9	mg/L	583	Standard
Ca	43	4485.7	5.3	8.2987	0.298	3.6	mg/L	73	Standard
Fe	54	2498.9	4.9	0.1998	0.025	12.3	mg/L	785	Standard
Fe	57	58285.2	1.6	0.2287	0.003	1.4	mg/L	6133	Standard
Sc-1	45	322748.9	2.0				mg/L	254529	Standard
Cl	35	551078.4	26.5				ug/L	1641778	Standard
Kr	83	56.1	8.7				ug/L	60	Standard
Br	81	17310.7	5.4				ug/L	11554	Standard
P	31	106865.1	3.8				ug/L	45410	Standard
S	34	766269.9	1.8				ug/L	568857	Standard
Sr	88	651540.4	2.7				ug/L	240	Standard

QC Calculated Values

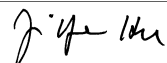
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.103	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		104.258	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.008	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.125	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205024210

Report Date/Time: Thursday, May 10, 2012 16:56:22

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	98.650
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205024210
 Report Date/Time: Thursday, May 10, 2012 16:56:22
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025701

Sample Date/Time: Thursday, May 10, 2012 16:56:42

Number of Replicates: 3

Autosampler Position: 434

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	110431.3	3.3	8899.1898	70.719	0.8	ug/L	12600	Standard
|	Be	9	20.0	75.0	-0.0090	0.004	45.1	ug/L	5	Standard
|	Al	27	162863.8	17.8	8.7193	1.496	17.2	ug/L	16102	Standard
>	Sc	45	279310.6	2.8				ug/L	254529	Standard
|	Ti	47	693.0	9.5	0.4067	0.046	11.4	ug/L	84	Standard
|	V	51	6480.7	6.8	0.1416	0.025	17.3	ug/L	5785	Standard
|	Cr	52	18286.7	5.0	0.6076	0.062	10.3	ug/L	12212	Standard
|	Cr	53	3413.7	2.1	0.5046	0.087	17.3	ug/L	5042	Standard
|	Mn	55	100462.5	2.9	4.9921	0.128	2.6	ug/L	1290	Standard
|	Co	59	300.3	6.7	0.0111	0.001	13.3	ug/L	143	Standard
|	Ni	60	957.0	5.1	0.3003	0.012	4.0	ug/L	79	Standard
|	Cu	65	2087.5	2.0	0.7307	0.025	3.4	ug/L	154	Standard
|	Zn	66	4085.6	2.3	3.2029	0.058	1.8	ug/L	194	Standard
>	Ge	72	224390.6	2.3				ug/L	232024	Standard
|	As	75	282.1	9.3	0.4825	0.026	5.3	ug/L	-297	Standard
|	Se	82	150.1	7.8	1.0531	0.088	8.3	ug/L	17	Standard
|	Se-1	77	240.3	4.4	1.1960	0.198	16.5	ug/L	180	Standard
|	Ga	71	202944.6	2.4				mg/L	210139	Standard
|	Rb	85	3760.5	7.9				ug/L	12	Standard
>	Y	89	212417.2	4.4				ug/L	214065	Standard
|	Rh	103	35.0	42.9				ug/L	0	Standard
|	Mo	98	24118.2	4.6	5.8779	0.237	4.0	ug/L	6	Standard
|	Ag	107	30.3	11.6	-0.0037	0.000	9.5	ug/L	33	Standard
|	Cd	111	485.7	3.3	0.0156	0.002	11.3	mg/L	437	Standard
|	Cd	114	1313.1	5.0	0.0124	0.005	41.0	ug/L	1160	Standard
>	In	115	640152.5	2.4				ug/L	646604	Standard
|	Sn	118	1217.7	4.7	0.0220	0.004	16.5	ug/L	864	Standard
|	Sb	123	122.2	2.7	0.0087	0.000	1.4	ug/L	18	Standard
|	Ba	135	144249.3	2.1	31.6365	0.888	2.8	ug/L	39	Standard
|	Ce	140	782.0	20.3				ug/L	46	Standard
>	Tb	159	730453.2	2.1				ug/L	695671	Standard
|	Ho	165	42.0	22.7				ug/L	9	Standard
|	Tl	203	552.3	3.0	0.0003	0.001	436.3	ug/L	687	Standard
|	Tl	205	1334.7	3.6	0.0022	0.001	52.4	ug/L	1624	Standard
|	Pb	206	698.7	2.2	0.0356	0.001	1.7	ug/L	305	Standard
|	Pb	207	544.0	3.8	0.0306	0.002	6.0	ug/L	231	Standard
|	Pb	208	2638.4	1.9	0.0329	0.000	1.2	ug/L	1129	Standard
|	U	238	307.7	5.9	0.0146	0.001	4.9	ug/L	3	Standard
>	Bi	209	366926.7	1.4				ug/L	405108	Standard
|	Na	23	259708.9	1.5	65.6895	0.852	1.3	mg/L	118	Standard
|	Mg	24	145541.7	4.7	0.2419	0.010	3.9	mg/L	377	Standard

Sample ID: L1205025701

Report Date/Time: Thursday, May 10, 2012 16:59:16

Page 1

Approved: May 11, 2012

K	39	2720.2	2.6	0.1631	0.010	6.1	mg/L	583	Standard
Ca	43	650.0	1.5	1.2306	0.057	4.6	mg/L	73	Standard
Fe	54	1013.3	5.4	0.0123	0.013	108.4	mg/L	785	Standard
Fe	57	8302.3	4.9	0.0089	0.001	10.5	mg/L	6133	Standard
Sc-1	45	279310.6	2.8				mg/L	254529	Standard
Cl	35	4543418.6	2.9				ug/L	1641778	Standard
Kr	83	61.7	10.8				ug/L	60	Standard
Br	81	87436.9	4.2				ug/L	11554	Standard
P	31	75294.4	4.4				ug/L	45410	Standard
S	34	737080.7	1.8				ug/L	568857	Standard
Sr	88	838425.9	3.9				ug/L	240	Standard

QC Calculated Values

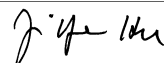
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.710	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.230	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		99.002	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.000	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025701

Report Date/Time: Thursday, May 10, 2012 16:59:16

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	90.575
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025701
 Report Date/Time: Thursday, May 10, 2012 16:59:16
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025703

Sample Date/Time: Thursday, May 10, 2012 16:59:36

Number of Replicates: 3

Autosampler Position: 435

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	121030.2	3.6	9236.7089	65.787	0.7	ug/L	12600	Standard
|	Be	9	10.0	132.3	-0.0119	0.003	28.3	ug/L	5	Standard
|	Al	27	114917.9	3.6	5.5491	0.022	0.4	ug/L	16102	Standard
>	Sc	45	296314.0	3.9				ug/L	254529	Standard
|	Ti	47	810.7	9.0	0.4705	0.028	6.0	ug/L	84	Standard
|	V	51	6347.4	4.9	0.1214	0.008	6.7	ug/L	5785	Standard
|	Cr	52	17758.1	3.1	0.5177	0.041	7.8	ug/L	12212	Standard
|	Cr	53	1216.7	16.6	-0.8237	0.095	11.6	ug/L	5042	Standard
|	Mn	55	1773048.7	4.0	87.0928	1.479	1.7	ug/L	1290	Standard
|	Co	59	853.7	6.9	0.0488	0.002	4.0	ug/L	143	Standard
|	Ni	60	2680.2	7.1	0.8587	0.014	1.6	ug/L	79	Standard
|	Cu	65	3470.1	4.7	1.2118	0.014	1.2	ug/L	154	Standard
|	Zn	66	5271.6	4.3	4.0657	0.090	2.2	ug/L	194	Standard
>	Ge	72	230752.8	5.6				ug/L	232024	Standard
|	As	75	-73.5	19.3	0.1613	0.014	8.7	ug/L	-297	Standard
|	Se	82	33.6	13.3	0.1074	0.049	45.4	ug/L	17	Standard
|	Se-1	77	125.7	15.5	-0.2931	0.163	55.7	ug/L	180	Standard
|	Ga	71	207905.8	4.8				mg/L	210139	Standard
|	Rb	85	19479.2	6.5				ug/L	12	Standard
>	Y	89	222473.1	0.7				ug/L	214065	Standard
|	Rh	103	250.0	8.7				ug/L	0	Standard
|	Mo	98	1347.1	2.7	0.3081	0.000	0.2	ug/L	6	Standard
|	Ag	107	88.0	16.8	0.0028	0.001	52.0	ug/L	33	Standard
|	Cd	111	533.2	1.0	0.0218	0.003	16.0	mg/L	437	Standard
|	Cd	114	1359.0	4.4	0.0119	0.003	28.2	ug/L	1160	Standard
>	In	115	665342.7	2.7				ug/L	646604	Standard
|	Sn	118	1094.7	3.1	0.0115	0.001	7.7	ug/L	864	Standard
|	Sb	123	141.9	6.4	0.0100	0.001	5.1	ug/L	18	Standard
|	Ba	135	529366.4	3.6	111.6779	1.737	1.6	ug/L	39	Standard
|	Ce	140	657.0	6.5				ug/L	46	Standard
>	Tb	159	752374.2	2.4				ug/L	695671	Standard
|	Ho	165	33.0	29.2				ug/L	9	Standard
|	Tl	203	373.0	40.7	-0.0131	0.009	69.2	ug/L	687	Standard
|	Tl	205	907.4	39.0	-0.0113	0.009	78.4	ug/L	1624	Standard
|	Pb	206	3065.0	3.6	0.2211	0.005	2.2	ug/L	305	Standard
|	Pb	207	2609.9	3.2	0.2209	0.002	1.1	ug/L	231	Standard
|	Pb	208	11922.2	3.4	0.2163	0.004	1.8	ug/L	1129	Standard
|	U	238	3927.2	5.6	0.1501	0.005	3.3	ug/L	3	Standard
>	Bi	209	386789.8	2.3				ug/L	405108	Standard
|	Na	23	52042.6	3.2	12.3859	0.151	1.2	mg/L	118	Standard
|	Mg	24	2922895.0	4.1	4.5943	0.011	0.2	mg/L	377	Standard

Sample ID: L1205025703

Report Date/Time: Thursday, May 10, 2012 17:02:09

Page 1

Approved: May 11, 2012

J. J. H.

K	39	8248.9	2.8	0.5617	0.008	1.5	mg/L	583	Standard
Ca	43	11996.4	4.9	24.5456	0.242	1.0	mg/L	73	Standard
Fe	54	1219.1	7.0	0.0340	0.006	17.7	mg/L	785	Standard
Fe	57	22329.8	3.3	0.0754	0.002	2.6	mg/L	6133	Standard
Sc-1	45	296314.0	3.9				mg/L	254529	Standard
Cl	35	529081.0	31.2				ug/L	1641778	Standard
Kr	83	63.0	5.1				ug/L	60	Standard
Br	81	16828.5	2.5				ug/L	11554	Standard
P	31	66875.9	5.3				ug/L	45410	Standard
S	34	1238313.9	2.8				ug/L	568857	Standard
Sr	88	10309368.5	2.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.452	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.928	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.898	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		108.151	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025703

Report Date/Time: Thursday, May 10, 2012 17:02:09

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	95.478
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1205025703
 Report Date/Time: Thursday, May 10, 2012 17:02:09
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025705

Sample Date/Time: Thursday, May 10, 2012 17:02:29

Number of Replicates: 3

Autosampler Position: 436

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	130024.0	2.2	10092.5239	91.171	0.9	ug/L	12600	Standard
|	Be	9	18.3	31.5	-0.0097	0.001	14.9	ug/L	5	Standard
|	Al	27	100214.1	4.4	4.7729	0.087	1.8	ug/L	16102	Standard
>	Sc	45	294319.3	2.8				ug/L	254529	Standard
|	Ti	47	1014.0	4.2	0.6191	0.036	5.8	ug/L	84	Standard
|	V	51	6069.4	3.5	0.1116	0.010	8.9	ug/L	5785	Standard
|	Cr	52	18382.5	1.9	0.6058	0.030	5.0	ug/L	12212	Standard
|	Cr	53	2066.0	25.1	-0.3040	0.317	104.3	ug/L	5042	Standard
|	Mn	55	114618.2	3.5	5.6675	0.124	2.2	ug/L	1290	Standard
|	Co	59	464.3	6.3	0.0225	0.002	7.3	ug/L	143	Standard
|	Ni	60	2484.5	6.1	0.8118	0.034	4.2	ug/L	79	Standard
|	Cu	65	13602.4	4.0	4.9985	0.075	1.5	ug/L	154	Standard
|	Zn	66	17888.9	4.0	14.5139	0.209	1.4	ug/L	194	Standard
>	Ge	72	225915.9	2.6				ug/L	232024	Standard
|	As	75	446.6	4.2	0.6292	0.024	3.8	ug/L	-297	Standard
|	Se	82	44.7	10.4	0.2007	0.046	23.0	ug/L	17	Standard
|	Se-1	77	128.3	13.7	-0.2181	0.256	117.4	ug/L	180	Standard
|	Ga	71	203006.2	3.2				mg/L	210139	Standard
|	Rb	85	11484.4	7.2				ug/L	12	Standard
>	Y	89	220163.2	1.2				ug/L	214065	Standard
|	Rh	103	253.3	8.9				ug/L	0	Standard
|	Mo	98	530.6	4.3	0.1172	0.007	5.7	ug/L	6	Standard
|	Ag	107	65.3	4.4	0.0003	0.000	160.7	ug/L	33	Standard
|	Cd	111	522.9	3.3	0.0202	0.005	23.4	mg/L	437	Standard
|	Cd	114	1297.5	1.9	0.0075	0.003	38.2	ug/L	1160	Standard
>	In	115	661640.3	2.2				ug/L	646604	Standard
|	Sn	118	1189.0	4.9	0.0177	0.002	12.1	ug/L	864	Standard
|	Sb	123	163.1	7.8	0.0119	0.001	6.9	ug/L	18	Standard
|	Ba	135	271961.4	3.5	57.6882	0.959	1.7	ug/L	39	Standard
|	Ce	140	493.3	12.7				ug/L	46	Standard
>	Tb	159	755160.1	0.9				ug/L	695671	Standard
|	Ho	165	27.3	28.4				ug/L	9	Standard
|	Tl	203	478.7	17.8	-0.0060	0.005	82.4	ug/L	687	Standard
|	Tl	205	1081.4	22.7	-0.0063	0.006	97.0	ug/L	1624	Standard
|	Pb	206	2820.9	3.8	0.2040	0.007	3.2	ug/L	305	Standard
|	Pb	207	2343.2	3.1	0.1982	0.006	2.9	ug/L	231	Standard
|	Pb	208	10868.2	4.0	0.1974	0.007	3.6	ug/L	1129	Standard
|	U	238	348.3	3.9	0.0156	0.001	3.2	ug/L	3	Standard
>	Bi	209	382827.9	1.6				ug/L	405108	Standard
|	Na	23	78618.6	2.9	18.8512	0.457	2.4	mg/L	118	Standard
|	Mg	24	1348484.4	1.8	2.1340	0.023	1.1	mg/L	377	Standard

Sample ID: L1205025705

Report Date/Time: Thursday, May 10, 2012 17:05:01

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	7218.4	2.0	0.4887	0.008	1.6	mg/L	583	Standard
Ca	43	8347.3	4.2	17.1374	0.269	1.6	mg/L	73	Standard
Fe	54	1441.7	5.7	0.0698	0.007	9.4	mg/L	785	Standard
Fe	57	28228.0	5.2	0.1053	0.004	3.8	mg/L	6133	Standard
Sc-1	45	294319.3	2.8				mg/L	254529	Standard
Cl	35	748371.6	19.1				ug/L	1641778	Standard
Kr	83	54.8	10.3				ug/L	60	Standard
Br	81	18304.4	3.3				ug/L	11554	Standard
P	31	67661.7	4.1				ug/L	45410	Standard
S	34	1309354.3	3.2				ug/L	568857	Standard
Sr	88	10513162.4	3.5				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.368	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.849	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.325	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		108.551	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025705

Report Date/Time: Thursday, May 10, 2012 17:05:01

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	94.500
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025705
 Report Date/Time: Thursday, May 10, 2012 17:05:01
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025707

Sample Date/Time: Thursday, May 10, 2012 17:05:21

Number of Replicates: 3

Autosampler Position: 437

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	30507.4	4.1	1508.4814	91.368	6.1	ug/L	12600	Standard
|	Be	9	316.7	15.2	0.0704	0.010	14.6	ug/L	5	Standard
|	Al	27	11687292.9	4.1	671.6335	16.429	2.4	ug/L	16102	Standard
>	Sc	45	284246.7	3.3				ug/L	254529	Standard
|	Ti	47	21153.8	4.1	13.9165	0.275	2.0	ug/L	84	Standard
|	V	51	22076.0	5.6	1.1500	0.049	4.3	ug/L	5785	Standard
|	Cr	52	22225.6	4.0	0.9196	0.034	3.7	ug/L	12212	Standard
|	Cr	53	2962.8	20.8	0.1943	0.330	170.0	ug/L	5042	Standard
|	Mn	55	904862.9	3.8	44.6502	0.743	1.7	ug/L	1290	Standard
|	Co	59	7923.4	2.8	0.5413	0.009	1.7	ug/L	143	Standard
|	Ni	60	4625.7	4.2	1.5095	0.032	2.1	ug/L	79	Standard
|	Cu	65	5348.3	3.5	1.9059	0.026	1.4	ug/L	154	Standard
|	Zn	66	15855.6	3.3	12.6535	0.148	1.2	ug/L	194	Standard
>	Ge	72	229294.9	2.3				ug/L	232024	Standard
|	As	75	208.6	18.7	0.4112	0.031	7.5	ug/L	-297	Standard
|	Se	82	53.5	10.7	0.2642	0.042	15.7	ug/L	17	Standard
|	Se-1	77	125.3	23.7	-0.2848	0.345	121.3	ug/L	180	Standard
|	Ga	71	208749.5	2.6				mg/L	210139	Standard
|	Rb	85	40659.5	2.8				ug/L	12	Standard
>	Y	89	248808.1	5.1				ug/L	214065	Standard
|	Rh	103	15.0	33.3				ug/L	0	Standard
|	Mo	98	1310.1	4.1	0.2980	0.008	2.5	ug/L	6	Standard
|	Ag	107	103.3	14.4	0.0045	0.001	30.9	ug/L	33	Standard
|	Cd	111	634.3	4.6	0.0428	0.005	12.8	mg/L	437	Standard
|	Cd	114	1595.9	3.8	0.0308	0.002	7.0	ug/L	1160	Standard
>	In	115	668383.1	2.9				ug/L	646604	Standard
|	Sn	118	1648.4	4.8	0.0451	0.004	8.4	ug/L	864	Standard
|	Sb	123	342.9	8.0	0.0275	0.002	5.7	ug/L	18	Standard
|	Ba	135	125784.5	3.9	26.4071	0.257	1.0	ug/L	39	Standard
|	Ce	140	102997.2	3.7				ug/L	46	Standard
>	Tb	159	747686.5	2.6				ug/L	695671	Standard
|	Ho	165	3459.1	2.5				ug/L	9	Standard
|	Tl	203	640.3	16.3	0.0027	0.006	224.3	ug/L	687	Standard
|	Tl	205	1480.4	21.5	0.0029	0.008	280.4	ug/L	1624	Standard
|	Pb	206	15538.0	4.1	1.1759	0.015	1.3	ug/L	305	Standard
|	Pb	207	12863.1	3.3	1.1410	0.009	0.7	ug/L	231	Standard
|	Pb	208	60279.0	3.9	1.1488	0.013	1.2	ug/L	1129	Standard
|	U	238	7573.2	5.2	0.2782	0.007	2.5	ug/L	3	Standard
>	Bi	209	399310.1	2.9				ug/L	405108	Standard
|	Na	23	4350.6	3.3	1.0543	0.013	1.3	mg/L	118	Standard
|	Mg	24	739962.4	3.8	1.2119	0.025	2.0	mg/L	377	Standard

Sample ID: L1205025707

Report Date/Time: Thursday, May 10, 2012 17:07:54

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	29204.8	1.7	2.2122	0.061	2.7	mg/L	583	Standard
Ca	43	2973.6	3.6	6.2026	0.191	3.1	mg/L	73	Standard
Fe	54	5908.5	6.2	0.7936	0.051	6.5	mg/L	785	Standard
Fe	57	153312.6	4.1	0.7512	0.023	3.1	mg/L	6133	Standard
Sc-1	45	284246.7	3.3				mg/L	254529	Standard
Cl	35	596142.2	25.1				ug/L	1641778	Standard
Kr	83	61.0	2.4				ug/L	60	Standard
Br	81	18640.6	3.0				ug/L	11554	Standard
P	31	225794.7	4.5				ug/L	45410	Standard
S	34	944104.6	3.8				ug/L	568857	Standard
Sr	88	538320.5	5.7				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.824	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		116.230	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.368	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.477	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025707

Report Date/Time: Thursday, May 10, 2012 17:07:54

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	98.569
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025707
 Report Date/Time: Thursday, May 10, 2012 17:07:54
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025709

Sample Date/Time: Thursday, May 10, 2012 17:08:14

Number of Replicates: 3

Autosampler Position: 438

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	31410.9	3.2	1522.9351	47.395	3.1	ug/L	12600	Standard
|	Be	9	280.0	17.6	0.0589	0.012	20.2	ug/L	5	Standard
|	Al	27	3168232.5	1.9	177.2377	2.326	1.3	ug/L	16102	Standard
>	Sc	45	291044.2	1.6				ug/L	254529	Standard
|	Ti	47	6107.9	3.4	3.9530	0.058	1.5	ug/L	84	Standard
|	V	51	10057.4	3.2	0.3625	0.019	5.4	ug/L	5785	Standard
|	Cr	52	17345.3	3.8	0.4813	0.046	9.6	ug/L	12212	Standard
|	Cr	53	1954.3	23.1	-0.4009	0.217	54.1	ug/L	5042	Standard
|	Mn	55	208162.9	2.7	10.1530	0.170	1.7	ug/L	1290	Standard
|	Co	59	3856.2	2.7	0.2567	0.006	2.3	ug/L	143	Standard
|	Ni	60	6214.6	3.1	2.0254	0.026	1.3	ug/L	79	Standard
|	Cu	65	3076.3	1.4	1.0698	0.037	3.5	ug/L	154	Standard
|	Zn	66	13241.5	4.0	10.4781	0.102	1.0	ug/L	194	Standard
>	Ge	72	230653.1	4.3				ug/L	232024	Standard
|	As	75	-55.6	35.4	0.1771	0.018	10.0	ug/L	-297	Standard
|	Se	82	44.3	4.2	0.1894	0.005	2.6	ug/L	17	Standard
|	Se-1	77	126.0	19.4	-0.2873	0.253	88.1	ug/L	180	Standard
|	Ga	71	211802.9	3.4				mg/L	210139	Standard
|	Rb	85	15184.3	5.6				ug/L	12	Standard
>	Y	89	244719.7	5.7				ug/L	214065	Standard
|	Rh	103	15.0	88.2				ug/L	0	Standard
|	Mo	98	342.5	7.1	0.0720	0.003	4.1	ug/L	6	Standard
|	Ag	107	79.7	16.7	0.0018	0.001	71.3	ug/L	33	Standard
|	Cd	111	553.0	5.0	0.0257	0.002	7.0	mg/L	437	Standard
|	Cd	114	1449.2	3.4	0.0191	0.001	5.8	ug/L	1160	Standard
>	In	115	666821.6	3.6				ug/L	646604	Standard
|	Sn	118	1038.0	6.3	0.0079	0.004	50.9	ug/L	864	Standard
|	Sb	123	244.9	6.1	0.0190	0.001	3.5	ug/L	18	Standard
|	Ba	135	140256.7	3.3	29.5235	0.295	1.0	ug/L	39	Standard
|	Ce	140	59052.9	2.6				ug/L	46	Standard
>	Tb	159	754671.2	3.7				ug/L	695671	Standard
|	Ho	165	3382.0	3.2				ug/L	9	Standard
|	Tl	203	490.7	20.4	-0.0065	0.006	90.7	ug/L	687	Standard
|	Tl	205	1128.7	25.5	-0.0063	0.007	113.9	ug/L	1624	Standard
|	Pb	206	4053.9	3.9	0.2902	0.006	2.2	ug/L	305	Standard
|	Pb	207	3444.7	1.1	0.2893	0.007	2.3	ug/L	231	Standard
|	Pb	208	15934.3	2.3	0.2873	0.001	0.4	ug/L	1129	Standard
|	U	238	1173.4	3.1	0.0452	0.001	1.5	ug/L	3	Standard
>	Bi	209	398754.0	2.0				ug/L	405108	Standard
|	Na	23	5601.0	1.2	1.3327	0.023	1.7	mg/L	118	Standard
|	Mg	24	1087714.6	2.5	1.7401	0.018	1.0	mg/L	377	Standard

Sample ID: L1205025709

Report Date/Time: Thursday, May 10, 2012 17:10:46

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	10030.0	4.1	0.7072	0.020	2.8	mg/L	583	Standard
Ca	43	2206.8	1.1	4.4419	0.038	0.9	mg/L	73	Standard
Fe	54	2507.4	2.6	0.2391	0.005	2.0	mg/L	785	Standard
Fe	57	54268.7	2.2	0.2372	0.003	1.2	mg/L	6133	Standard
Sc-1	45	291044.2	1.6				mg/L	254529	Standard
Cl	35	657340.6	26.4				ug/L	1641778	Standard
Kr	83	60.4	10.4				ug/L	60	Standard
Br	81	16739.2	3.6				ug/L	11554	Standard
P	31	93905.3	3.2				ug/L	45410	Standard
S	34	991290.6	1.2				ug/L	568857	Standard
Sr	88	504356.2	4.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.409	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		114.320	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.127	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		108.481	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025709

Report Date/Time: Thursday, May 10, 2012 17:10:46

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	98.432
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: L1205025709
 Report Date/Time: Thursday, May 10, 2012 17:10:46
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 17:11:08

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13552.7	2.0	82.5924	51.080	61.8	ug/L	12600	Standard
|	Be	9	172687.5	3.2	50.3443	1.366	2.7	ug/L	5	Standard
|	Al	27	864370.3	3.4	53.1833	1.109	2.1	ug/L	16102	Standard
>	Sc	45	262047.0	5.0				ug/L	254529	Standard
|	Ti	47	155466.8	4.2	102.4438	1.894	1.8	ug/L	84	Standard
|	V	51	804796.8	3.4	52.1290	0.466	0.9	ug/L	5785	Standard
|	Cr	52	596544.2	4.0	51.4523	0.792	1.5	ug/L	12212	Standard
|	Cr	53	89838.3	4.1	50.6038	0.990	2.0	ug/L	5042	Standard
|	Mn	55	1055875.1	3.2	52.0080	0.449	0.9	ug/L	1290	Standard
|	Co	59	740446.2	4.1	51.4037	0.960	1.9	ug/L	143	Standard
|	Ni	60	154553.7	3.8	51.1021	0.948	1.9	ug/L	79	Standard
|	Cu	65	140085.1	3.5	51.0645	0.491	1.0	ug/L	154	Standard
|	Zn	66	61408.7	4.9	49.3904	1.194	2.4	ug/L	194	Standard
>	Ge	72	229802.7	2.6				ug/L	232024	Standard
|	As	75	56204.0	2.8	50.0166	0.314	0.6	ug/L	-297	Standard
|	Se	82	6604.7	3.3	51.8886	0.573	1.1	ug/L	17	Standard
|	Se-1	77	4233.9	5.7	49.9971	1.643	3.3	ug/L	180	Standard
|	Ga	71	205564.4	3.8				mg/L	210139	Standard
|	Rb	85	1108.4	5.6				ug/L	12	Standard
>	Y	89	213855.7	4.6				ug/L	214065	Standard
|	Rh	103	26.7	39.0				ug/L	0	Standard
|	Mo	98	413359.5	3.7	99.4211	2.512	2.5	ug/L	6	Standard
|	Ag	107	425069.1	3.2	50.5387	1.298	2.6	ug/L	33	Standard
|	Cd	111	224702.4	3.2	49.3676	1.078	2.2	mg/L	437	Standard
|	Cd	114	580830.7	3.6	48.8909	1.220	2.5	ug/L	1160	Standard
>	In	115	649362.6	1.6				ug/L	646604	Standard
|	Sn	118	793638.7	4.6	49.9908	1.681	3.4	ug/L	864	Standard
|	Sb	123	542719.2	3.9	48.9006	1.461	3.0	ug/L	18	Standard
|	Ba	135	236420.8	3.6	51.0989	1.359	2.7	ug/L	39	Standard
|	Ce	140	905.4	4.5				ug/L	46	Standard
>	Tb	159	732354.0	2.8				ug/L	695671	Standard
|	Ho	165	18.0	9.6				ug/L	9	Standard
|	Tl	203	824011.9	3.1	51.8952	0.586	1.1	ug/L	687	Standard
|	Tl	205	1906709.5	2.3	50.6992	0.140	0.3	ug/L	1624	Standard
|	Pb	206	650887.9	2.9	51.3719	0.523	1.0	ug/L	305	Standard
|	Pb	207	550659.2	3.3	50.9533	0.709	1.4	ug/L	231	Standard
|	Pb	208	2547826.6	3.0	50.6550	0.508	1.0	ug/L	1129	Standard
|	U	238	1311693.6	3.5	48.8915	0.789	1.6	ug/L	3	Standard
>	Bi	209	390279.5	2.0				ug/L	405108	Standard
|	Na	23	19833.0	3.8	5.3231	0.104	2.0	mg/L	118	Standard
|	Mg	24	2917662.4	3.9	5.1883	0.085	1.6	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 17:13:41

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	63358.9	2.1	5.2782	0.155	2.9	mg/L	583	Standard
Ca	43	2341.8	2.4	5.2774	0.272	5.2	mg/L	73	Standard
Fe	54	31378.0	2.6	5.3061	0.174	3.3	mg/L	785	Standard
Fe	57	921655.1	5.0	5.0893	0.149	2.9	mg/L	6133	Standard
Sc-1	45	262047.0	5.0				mg/L	254529	Standard
Cl	35	404491.4	36.2				ug/L	1641778	Standard
Kr	83	55.3	8.1				ug/L	60	Standard
Br	81	12287.5	4.6				ug/L	11554	Standard
P	31	70689.9	5.8				ug/L	45410	Standard
S	34	740580.5	3.1				ug/L	568857	Standard
Sr	88	720.0	5.2				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	106.367		
Sc	45			
Ti	47	102.444		
V	51	104.258		
Cr	52	102.905		
Cr	53			
Mn	55	104.016		
Co	59	102.807		
Ni	60	102.204		
Cu	65	102.129		
Zn	66	98.781		
Ge	72		99.043	
As	75	100.033		
Se	82	103.777		
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.902	
Rh	103			
Mo	98	99.421		
Ag	107	101.077		
Cd	111	98.735		
Cd	114			
In	115		100.427	
Sn	118	99.982		
Sb	123	97.801		
Ba	135	102.198		
Ce	140			
Tb	159		105.273	
Ho	165			
Tl	203	103.790		
Tl	205			
Pb	206	102.744		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 17:13:41

Page 2

Approved: May 11, 2012




Pb	207	101.907	
Pb	208	101.310	
U	238	97.783	
> Bi	209		96.340
Na	23	106.463	
Mg	24	103.766	
K	39	105.564	
Ca	43	105.549	
Fe	54	106.123	
Fe	57	101.786	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6
 Report Date/Time: Thursday, May 10, 2012 17:13:41
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 17:14:00

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12840.5	6.6	76.5902	38.645	50.5	ug/L	12600	Standard
|	Be	9	15.0	33.3	-0.0098	0.002	15.3	ug/L	5	Standard
|	Al	27	15786.6	8.0	0.2428	0.063	25.9	ug/L	16102	Standard
>	Sc	45	248937.1	3.9				ug/L	254529	Standard
|	Ti	47	112.3	8.0	0.0172	0.003	17.9	ug/L	84	Standard
|	V	51	3619.4	3.4	-0.0395	0.013	33.4	ug/L	5785	Standard
|	Cr	52	11176.8	2.1	0.0069	0.024	345.3	ug/L	12212	Standard
|	Cr	53	694.2	11.3	-1.0976	0.039	3.5	ug/L	5042	Standard
|	Mn	55	1370.1	7.2	-0.0130	0.003	22.1	ug/L	1290	Standard
|	Co	59	150.0	23.7	0.0008	0.002	288.5	ug/L	143	Standard
|	Ni	60	79.3	13.1	0.0040	0.003	68.1	ug/L	79	Standard
|	Cu	65	182.7	15.1	0.0209	0.008	38.4	ug/L	154	Standard
|	Zn	66	214.3	7.7	0.0086	0.020	232.6	ug/L	194	Standard
>	Ge	72	216001.3	4.3				ug/L	232024	Standard
|	As	75	-241.2	3.1	-0.0014	0.017	1189.7	ug/L	-297	Standard
|	Se	82	26.1	22.0	0.0604	0.046	76.2	ug/L	17	Standard
|	Se-1	77	87.3	26.5	-0.6878	0.265	38.5	ug/L	180	Standard
|	Ga	71	196336.2	4.9				mg/L	210139	Standard
|	Rb	85	23.3	32.7				ug/L	12	Standard
>	Y	89	209255.7	6.4				ug/L	214065	Standard
|	Rh	103	3.3	86.6				ug/L	0	Standard
|	Mo	98	80.7	73.4	0.0115	0.014	121.9	ug/L	6	Standard
|	Ag	107	134.7	35.5	0.0089	0.005	59.2	ug/L	33	Standard
|	Cd	111	426.5	7.8	0.0033	0.004	116.3	mg/L	437	Standard
|	Cd	114	1175.8	7.8	0.0017	0.004	250.7	ug/L	1160	Standard
>	In	115	633188.6	3.8				ug/L	646604	Standard
|	Sn	118	1016.0	8.4	0.0097	0.003	32.7	ug/L	864	Standard
|	Sb	123	233.6	63.9	0.0188	0.013	69.6	ug/L	18	Standard
|	Ba	135	67.0	36.3	0.0066	0.005	76.1	ug/L	39	Standard
|	Ce	140	51.7	28.0				ug/L	46	Standard
>	Tb	159	699065.0	5.4				ug/L	695671	Standard
|	Ho	165	6.3	48.2				ug/L	9	Standard
|	Tl	203	323.3	63.3	-0.0161	0.012	76.3	ug/L	687	Standard
|	Tl	205	764.4	62.2	-0.0150	0.012	80.4	ug/L	1624	Standard
|	Pb	206	341.7	18.3	0.0045	0.004	91.2	ug/L	305	Standard
|	Pb	207	273.3	20.0	0.0029	0.004	143.8	ug/L	231	Standard
|	Pb	208	1273.0	18.1	0.0029	0.004	126.3	ug/L	1129	Standard
|	U	238	80.3	70.4	0.0054	0.002	37.3	ug/L	3	Standard
>	Bi	209	380522.5	4.1				ug/L	405108	Standard
|	Na	23	105.0	20.8	0.0025	0.006	226.2	mg/L	118	Standard
|	Mg	24	571.7	18.5	0.0002	0.000	80.1	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 17:16:33

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	611.7	4.5	0.0027	0.005	170.4	mg/L	583	Standard
Ca	43	38.3	32.8	-0.0993	0.028	28.1	mg/L	73	Standard
Fe	54	897.5	10.0	0.0115	0.022	189.7	mg/L	785	Standard
Fe	57	4499.0	4.0	-0.0080	0.001	15.3	mg/L	6133	Standard
Sc-1	45	248937.1	3.9				mg/L	254529	Standard
Cl	35	395440.7	36.2				ug/L	1641778	Standard
Kr	83	54.7	8.5				ug/L	60	Standard
Br	81	11868.0	4.0				ug/L	11554	Standard
P	31	66141.8	5.2				ug/L	45410	Standard
S	34	737525.0	2.8				ug/L	568857	Standard
Sr	88	306.7	34.0				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.095	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.753	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.925	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		100.488	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 17:16:33

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	93.931
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 17:16:33
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025711

Sample Date/Time: Thursday, May 10, 2012 17:16:55

Number of Replicates: 3

Autosampler Position: 439

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	148277.5	3.3	12295.6382	92.621	0.8	ug/L	12600	Standard
|	Be	9	48.3	26.0	-0.0013	0.003	249.8	ug/L	5	Standard
|	Al	27	115128.1	4.9	5.9041	0.098	1.7	ug/L	16102	Standard
>	Sc	45	281010.7	3.5				ug/L	254529	Standard
|	Ti	47	1662.4	10.4	1.0708	0.103	9.6	ug/L	84	Standard
|	V	51	5430.7	3.1	0.0750	0.005	6.5	ug/L	5785	Standard
|	Cr	52	15960.7	3.0	0.4114	0.016	4.0	ug/L	12212	Standard
|	Cr	53	1198.4	5.8	-0.8064	0.052	6.5	ug/L	5042	Standard
|	Mn	55	1382540.8	3.2	70.4101	0.985	1.4	ug/L	1290	Standard
|	Co	59	564.3	8.3	0.0302	0.003	9.2	ug/L	143	Standard
|	Ni	60	1554.1	6.8	0.5072	0.027	5.3	ug/L	79	Standard
|	Cu	65	1482.1	3.9	0.5093	0.022	4.3	ug/L	154	Standard
|	Zn	66	2698.9	1.8	2.0766	0.017	0.8	ug/L	194	Standard
>	Ge	72	222340.2	2.0				ug/L	232024	Standard
|	As	75	4524.0	4.1	4.3677	0.087	2.0	ug/L	-297	Standard
|	Se	82	89.7	8.3	0.5728	0.062	10.8	ug/L	17	Standard
|	Se-1	77	112.0	11.2	-0.4049	0.134	33.0	ug/L	180	Standard
|	Ga	71	200744.5	2.2				mg/L	210139	Standard
|	Rb	85	23131.0	5.7				ug/L	12	Standard
>	Y	89	211115.2	3.6				ug/L	214065	Standard
|	Rh	103	113.3	9.2				ug/L	0	Standard
|	Mo	98	4845.6	3.4	1.1762	0.012	1.1	ug/L	6	Standard
|	Ag	107	50.7	15.3	-0.0012	0.001	88.8	ug/L	33	Standard
|	Cd	111	507.8	4.3	0.0208	0.006	27.9	mg/L	437	Standard
|	Cd	114	1287.7	2.5	0.0104	0.000	2.3	ug/L	1160	Standard
>	In	115	639092.8	2.8				ug/L	646604	Standard
|	Sn	118	921.7	2.2	0.0032	0.002	67.8	ug/L	864	Standard
|	Sb	123	167.7	2.5	0.0129	0.000	0.5	ug/L	18	Standard
|	Ba	135	1707409.3	3.1	375.0334	1.481	0.4	ug/L	39	Standard
|	Ce	140	511.3	1.4				ug/L	46	Standard
>	Tb	159	722705.0	2.6				ug/L	695671	Standard
|	Ho	165	31.0	34.1				ug/L	9	Standard
|	Tl	203	594.0	10.9	0.0028	0.004	135.9	ug/L	687	Standard
|	Tl	205	1343.1	11.6	0.0022	0.004	190.2	ug/L	1624	Standard
|	Pb	206	404.0	3.8	0.0107	0.001	8.2	ug/L	305	Standard
|	Pb	207	339.3	8.5	0.0103	0.002	23.0	ug/L	231	Standard
|	Pb	208	1596.7	6.0	0.0106	0.001	14.0	ug/L	1129	Standard
|	U	238	257.3	2.5	0.0125	0.000	0.8	ug/L	3	Standard
>	Bi	209	369105.9	1.6				ug/L	405108	Standard
|	Na	23	111129.4	1.4	27.9305	0.642	2.3	mg/L	118	Standard
|	Mg	24	1145030.3	2.5	1.8980	0.038	2.0	mg/L	377	Standard

Sample ID: L1205025711

Report Date/Time: Thursday, May 10, 2012 17:19:28

Page 1

Approved: May 11, 2012

J. J. H.

K	39	7833.7	3.4	0.5625	0.014	2.6	mg/L	583	Standard
Ca	43	6599.8	2.1	14.1703	0.462	3.3	mg/L	73	Standard
Fe	54	4638.6	3.1	0.5987	0.005	0.9	mg/L	785	Standard
Fe	57	125237.6	3.6	0.6147	0.002	0.4	mg/L	6133	Standard
Sc-1	45	281010.7	3.5				mg/L	254529	Standard
Cl	35	978150.7	13.0				ug/L	1641778	Standard
Kr	83	58.2	7.6				ug/L	60	Standard
Br	81	48405.6	4.3				ug/L	11554	Standard
P	31	331545.1	2.9				ug/L	45410	Standard
S	34	782783.5	3.2				ug/L	568857	Standard
Sr	88	4074419.7	4.9				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.827	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		98.622	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.838	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		103.886	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025711

Report Date/Time: Thursday, May 10, 2012 17:19:28

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	91.113
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1205025711
 Report Date/Time: Thursday, May 10, 2012 17:19:28
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: L1205025713

Sample Date/Time: Thursday, May 10, 2012 17:19:48

Number of Replicates: 3

Autosampler Position: 440

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	105786.6	3.4	8271.3900	401.942	4.9	ug/L	12600	Standard
|	Be	9	23.3	24.7	-0.0081	0.002	22.1	ug/L	5	Standard
|	Al	27	59490.1	4.9	2.6146	0.109	4.2	ug/L	16102	Standard
>	Sc	45	285434.3	3.7				ug/L	254529	Standard
|	Ti	47	1368.4	4.0	0.8693	0.017	1.9	ug/L	84	Standard
|	V	51	4839.7	5.3	0.0345	0.010	28.7	ug/L	5785	Standard
|	Cr	52	14170.3	3.4	0.2461	0.013	5.1	ug/L	12212	Standard
|	Cr	53	1102.5	7.3	-0.8657	0.044	5.1	ug/L	5042	Standard
|	Mn	55	413778.9	3.0	20.9769	0.272	1.3	ug/L	1290	Standard
|	Co	59	490.0	7.2	0.0248	0.002	7.9	ug/L	143	Standard
|	Ni	60	1456.1	3.4	0.4731	0.008	1.7	ug/L	79	Standard
|	Cu	65	1014.4	5.2	0.3320	0.011	3.3	ug/L	154	Standard
|	Zn	66	12118.8	2.9	9.9191	0.079	0.8	ug/L	194	Standard
>	Ge	72	222756.0	2.7				ug/L	232024	Standard
|	As	75	16406.9	3.1	15.2206	0.176	1.2	ug/L	-297	Standard
|	Se	82	62.7	11.1	0.3516	0.058	16.5	ug/L	17	Standard
|	Se-1	77	97.3	4.9	-0.5917	0.034	5.7	ug/L	180	Standard
|	Ga	71	200909.7	2.2				mg/L	210139	Standard
|	Rb	85	29216.5	3.9				ug/L	12	Standard
>	Y	89	220132.5	3.8				ug/L	214065	Standard
|	Rh	103	106.7	36.4				ug/L	0	Standard
|	Mo	98	4924.2	3.8	1.1808	0.023	2.0	ug/L	6	Standard
|	Ag	107	43.3	9.3	-0.0022	0.000	18.1	ug/L	33	Standard
|	Cd	111	484.0	6.0	0.0141	0.005	36.3	mg/L	437	Standard
|	Cd	114	1254.0	3.8	0.0062	0.002	38.2	ug/L	1160	Standard
>	In	115	646848.5	2.1				ug/L	646604	Standard
|	Sn	118	20182.8	4.3	1.2217	0.029	2.4	ug/L	864	Standard
|	Sb	123	143.7	7.6	0.0105	0.001	9.4	ug/L	18	Standard
|	Ba	135	858738.5	2.6	186.3576	1.208	0.6	ug/L	39	Standard
|	Ce	140	238.7	4.9				ug/L	46	Standard
>	Tb	159	728927.3	3.6				ug/L	695671	Standard
|	Ho	165	31.0	48.8				ug/L	9	Standard
|	Tl	203	476.3	14.1	-0.0057	0.004	67.8	ug/L	687	Standard
|	Tl	205	1111.7	21.6	-0.0050	0.006	117.4	ug/L	1624	Standard
|	Pb	206	552.7	2.7	0.0221	0.000	0.1	ug/L	305	Standard
|	Pb	207	475.7	1.6	0.0227	0.001	4.4	ug/L	231	Standard
|	Pb	208	2205.7	3.2	0.0225	0.001	3.8	ug/L	1129	Standard
|	U	238	24.3	16.6	0.0033	0.000	5.4	ug/L	3	Standard
>	Bi	209	376980.3	2.7				ug/L	405108	Standard
|	Na	23	74928.3	3.0	18.5249	0.178	1.0	mg/L	118	Standard
|	Mg	24	1216232.6	3.3	1.9847	0.042	2.1	mg/L	377	Standard

Sample ID: L1205025713

Report Date/Time: Thursday, May 10, 2012 17:22:21

Page 1

Approved: May 11, 2012

K	39	6781.5	4.3	0.4720	0.026	5.6	mg/L	583	Standard
Ca	43	6099.6	1.7	12.8763	0.359	2.8	mg/L	73	Standard
Fe	54	8274.2	5.2	1.1673	0.052	4.4	mg/L	785	Standard
Fe	57	231855.9	4.3	1.1486	0.018	1.6	mg/L	6133	Standard
Sc-1	45	285434.3	3.7				mg/L	254529	Standard
Cl	35	761450.3	17.7				ug/L	1641778	Standard
Kr	83	56.4	7.1				ug/L	60	Standard
Br	81	33380.1	3.3				ug/L	11554	Standard
P	31	306307.6	1.8				ug/L	45410	Standard
S	34	738469.0	3.4				ug/L	568857	Standard
Sr	88	3496394.5	2.3				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.006	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		102.834	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.038	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.780	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205025713

Report Date/Time: Thursday, May 10, 2012 17:22:21

Page 2

Approved: May 11, 2012




Pb	207	
Pb	208	
U	238	
> Bi	209	93.057
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1205025713
 Report Date/Time: Thursday, May 10, 2012 17:22:21
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, May 10, 2012 17:22:44

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	13234.1	2.7	44.8075	36.154	80.7	ug/L	12600	Standard
|	Be	9	165786.6	4.4	48.0865	1.027	2.1	ug/L	5	Standard
|	Al	27	831671.9	4.5	50.8806	0.878	1.7	ug/L	16102	Standard
>	Sc	45	263319.3	5.4				ug/L	254529	Standard
|	Ti	47	153629.3	4.5	105.2936	1.700	1.6	ug/L	84	Standard
|	V	51	774047.5	4.4	52.1472	1.182	2.3	ug/L	5785	Standard
|	Cr	52	581707.4	5.0	52.1993	1.506	2.9	ug/L	12212	Standard
|	Cr	53	88427.5	3.2	51.8568	0.651	1.3	ug/L	5042	Standard
|	Mn	55	1030891.2	3.5	52.8165	0.441	0.8	ug/L	1290	Standard
|	Co	59	725856.5	3.1	52.4295	0.836	1.6	ug/L	143	Standard
|	Ni	60	150111.0	4.6	51.6227	1.285	2.5	ug/L	79	Standard
|	Cu	65	135808.2	3.9	51.4959	0.992	1.9	ug/L	154	Standard
|	Zn	66	59447.6	5.2	49.7328	1.255	2.5	ug/L	194	Standard
>	Ge	72	220960.5	3.5				ug/L	232024	Standard
|	As	75	55699.9	3.5	51.5489	0.675	1.3	ug/L	-297	Standard
|	Se	82	6486.8	5.4	52.9900	1.184	2.2	ug/L	17	Standard
|	Se-1	77	4101.9	5.0	50.4055	1.221	2.4	ug/L	180	Standard
|	Ga	71	203274.7	4.5				mg/L	210139	Standard
|	Rb	85	1018.4	7.2				ug/L	12	Standard
>	Y	89	208556.0	2.1				ug/L	214065	Standard
|	Rh	103	25.0	34.6				ug/L	0	Standard
|	Mo	98	403880.3	5.3	98.9688	2.322	2.3	ug/L	6	Standard
|	Ag	107	405815.0	4.7	49.1568	0.848	1.7	ug/L	33	Standard
|	Cd	111	216941.0	3.7	48.5685	0.356	0.7	mg/L	437	Standard
|	Cd	114	569498.4	3.8	48.8536	0.612	1.3	ug/L	1160	Standard
>	In	115	637334.0	3.9				ug/L	646604	Standard
|	Sn	118	774205.8	4.7	49.6934	0.956	1.9	ug/L	864	Standard
|	Sb	123	531907.1	4.6	48.8295	0.526	1.1	ug/L	18	Standard
|	Ba	135	232862.2	4.3	51.2821	0.353	0.7	ug/L	39	Standard
|	Ce	140	839.7	3.2				ug/L	46	Standard
>	Tb	159	719196.1	2.5				ug/L	695671	Standard
|	Ho	165	20.7	5.6				ug/L	9	Standard
|	Tl	203	799496.0	2.7	51.2352	0.149	0.3	ug/L	687	Standard
|	Tl	205	1859053.7	2.6	50.2954	0.278	0.6	ug/L	1624	Standard
|	Pb	206	634674.6	3.5	50.9631	0.627	1.2	ug/L	305	Standard
|	Pb	207	541110.5	4.5	50.9350	1.096	2.2	ug/L	231	Standard
|	Pb	208	2496949.3	3.9	50.5050	0.779	1.5	ug/L	1129	Standard
|	U	238	1293714.4	4.9	49.0531	1.219	2.5	ug/L	3	Standard
>	Bi	209	383585.3	2.4				ug/L	405108	Standard
|	Na	23	19399.1	4.5	5.1803	0.088	1.7	mg/L	118	Standard
|	Mg	24	2854397.6	5.4	5.0492	0.049	1.0	mg/L	377	Standard

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 17:25:16

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	61238.7	4.7	5.0713	0.036	0.7	mg/L	583	Standard
Ca	43	2195.2	6.2	4.9013	0.086	1.8	mg/L	73	Standard
Fe	54	30854.3	3.2	5.1884	0.133	2.6	mg/L	785	Standard
Fe	57	910055.3	5.6	4.9985	0.025	0.5	mg/L	6133	Standard
Sc-1	45	263319.3	5.4				mg/L	254529	Standard
Cl	35	391279.0	37.4				ug/L	1641778	Standard
Kr	83	57.1	7.4				ug/L	60	Standard
Br	81	12556.1	9.7				ug/L	11554	Standard
P	31	70049.1	2.3				ug/L	45410	Standard
S	34	708606.3	4.0				ug/L	568857	Standard
Sr	88	755.0	24.7				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	101.761		
Sc	45			
Ti	47	105.294		
V	51	104.294		
Cr	52	104.399		
Cr	53			
Mn	55	105.633		
Co	59	104.859		
Ni	60	103.245		
Cu	65	102.992		
Zn	66	99.466		
Ge	72		95.232	
As	75	103.098		
Se	82	105.980		
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.426	
Rh	103			
Mo	98	98.969		
Ag	107	98.314		
Cd	111	97.137		
Cd	114			
In	115		98.566	
Sn	118	99.387		
Sb	123	97.659		
Ba	135	102.564		
Ce	140			
Tb	159		103.382	
Ho	165			
Tl	203	102.470		
Tl	205			
Pb	206	101.926		

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 17:25:16

Page 2

Approved: May 11, 2012



Pb	207	101.870	
Pb	208	101.010	
U	238	98.106	
> Bi	209		94.687
Na	23	103.607	
Mg	24	100.984	
K	39	101.426	
Ca	43	98.026	
Fe	54	103.769	
Fe	57	99.970	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 6

Report Date/Time: Thursday, May 10, 2012 17:25:16

Page 3

Approved: May 11, 2012



Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, May 10, 2012 17:25:36

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12747.1	8.8	65.7475	49.452	75.2	ug/L	12600	Standard
|	Be	9	10.0	132.3	-0.0115	0.004	34.0	ug/L	5	Standard
|	Al	27	14176.6	6.5	0.1370	0.037	26.6	ug/L	16102	Standard
>	Sc	45	249154.0	6.4				ug/L	254529	Standard
|	Ti	47	123.3	6.1	0.0263	0.001	3.9	ug/L	84	Standard
|	V	51	3573.2	1.4	-0.0388	0.011	29.4	ug/L	5785	Standard
|	Cr	52	10736.8	1.2	-0.0182	0.040	218.6	ug/L	12212	Standard
|	Cr	53	643.3	12.3	-1.1232	0.033	2.9	ug/L	5042	Standard
|	Mn	55	1340.1	5.6	-0.0135	0.002	11.4	ug/L	1290	Standard
|	Co	59	137.3	19.0	0.0000	0.001	55117.9	ug/L	143	Standard
|	Ni	60	76.3	20.0	0.0033	0.005	136.3	ug/L	79	Standard
|	Cu	65	180.3	3.1	0.0215	0.005	25.1	ug/L	154	Standard
|	Zn	66	204.3	5.2	0.0028	0.016	576.3	ug/L	194	Standard
>	Ge	72	212718.8	4.9				ug/L	232024	Standard
|	As	75	-222.1	6.0	0.0138	0.008	58.1	ug/L	-297	Standard
|	Se	82	25.1	6.8	0.0564	0.024	43.4	ug/L	17	Standard
|	Se-1	77	88.7	14.7	-0.6475	0.168	25.9	ug/L	180	Standard
|	Ga	71	195239.9	5.0				mg/L	210139	Standard
|	Rb	85	28.3	56.7				ug/L	12	Standard
>	Y	89	200439.1	4.8				ug/L	214065	Standard
|	Rh	103	3.3	173.2				ug/L	0	Standard
|	Mo	98	71.5	59.0	0.0096	0.010	100.7	ug/L	6	Standard
|	Ag	107	97.7	18.0	0.0048	0.002	31.8	ug/L	33	Standard
|	Cd	111	434.9	1.8	0.0086	0.006	66.9	mg/L	437	Standard
|	Cd	114	1095.7	6.6	-0.0023	0.002	79.9	ug/L	1160	Standard
>	In	115	614350.7	5.8				ug/L	646604	Standard
|	Sn	118	945.4	7.7	0.0071	0.002	30.9	ug/L	864	Standard
|	Sb	123	207.4	33.6	0.0171	0.006	32.7	ug/L	18	Standard
|	Ba	135	67.0	18.1	0.0070	0.002	28.6	ug/L	39	Standard
|	Ce	140	47.7	6.7				ug/L	46	Standard
>	Tb	159	685012.4	4.3				ug/L	695671	Standard
|	Ho	165	8.0	12.5				ug/L	9	Standard
|	Tl	203	278.3	66.2	-0.0188	0.011	58.1	ug/L	687	Standard
|	Tl	205	682.0	67.8	-0.0171	0.012	68.0	ug/L	1624	Standard
|	Pb	206	292.3	19.7	0.0008	0.003	414.4	ug/L	305	Standard
|	Pb	207	261.7	9.6	0.0023	0.001	47.0	ug/L	231	Standard
|	Pb	208	1209.4	14.5	0.0020	0.002	112.9	ug/L	1129	Standard
|	U	238	72.0	57.8	0.0052	0.001	28.0	ug/L	3	Standard
>	Bi	209	374816.6	5.4				ug/L	405108	Standard
|	Na	23	128.3	20.0	0.0093	0.008	85.6	mg/L	118	Standard
|	Mg	24	568.3	16.0	0.0002	0.000	85.1	mg/L	377	Standard

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 17:28:09

Page 1

Approved: May 11, 2012

J. Y. H.

K	39	595.0	8.3	0.0012	0.006	508.0	mg/L	583	Standard
Ca	43	43.3	24.0	-0.0864	0.024	27.5	mg/L	73	Standard
Fe	54	899.0	7.0	0.0113	0.009	83.9	mg/L	785	Standard
Fe	57	4502.3	4.0	-0.0080	0.001	12.4	mg/L	6133	Standard
Sc-1	45	249154.0	6.4				mg/L	254529	Standard
Cl	35	298596.1	55.1				ug/L	1641778	Standard
Kr	83	50.9	9.5				ug/L	60	Standard
Br	81	11724.5	2.8				ug/L	11554	Standard
P	31	66821.1	8.9				ug/L	45410	Standard
S	34	719039.5	5.2				ug/L	568857	Standard
Sr	88	271.7	3.8				ug/L	240	Standard

QC Calculated Values


Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.680	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		93.635	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		95.012	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.468	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7

Report Date/Time: Thursday, May 10, 2012 17:28:09

Page 2

Approved: May 11, 2012




|	Pb	207	
|	Pb	208	
|	U	238	
|	> Bi	209	92.523
|	Na	23	
|	Mg	24	
|	K	39	
|	Ca	43	
|	Fe	54	
|	Fe	57	
|	> Sc-1	45	
|	Cl	35	
|	Kr	83	
|	Br	81	
|	P	31	
|	S	34	
|	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 7
 Report Date/Time: Thursday, May 10, 2012 17:28:09
 Page 3

Approved: May 11, 2012


Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, May 10, 2012 17:28:30

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
|	Li	7	12873.8	3.2	108.1629	13.812	12.8	ug/L	12600	Standard
|	Be	9	8.3	34.6	-0.0118	0.001	8.3	ug/L	5	Standard
|	Al	27	15536.4	10.5	0.2459	0.072	29.4	ug/L	16102	Standard
>	Sc	45	243951.4	3.5				ug/L	254529	Standard
|	Ti	47	99.0	17.0	0.0091	0.010	111.7	ug/L	84	Standard
|	V	51	9263.6	1.8	0.3642	0.005	1.4	ug/L	5785	Standard
|	Cr	52	19251.6	2.0	0.7982	0.012	1.5	ug/L	12212	Standard
|	Cr	53	1953.5	3.1	-0.2958	0.022	7.3	ug/L	5042	Standard
|	Mn	55	10819.2	3.2	0.4943	0.010	2.0	ug/L	1290	Standard
|	Co	59	5353.3	2.7	0.3932	0.009	2.4	ug/L	143	Standard
|	Ni	60	4517.7	5.0	1.5975	0.062	3.9	ug/L	79	Standard
|	Cu	65	2244.5	3.8	0.8388	0.016	2.0	ug/L	154	Standard
|	Zn	66	7170.0	2.8	6.1055	0.067	1.1	ug/L	194	Standard
>	Ge	72	211806.1	2.5				ug/L	232024	Standard
|	As	75	183.5	32.2	0.4020	0.054	13.3	ug/L	-297	Standard
|	Se	82	75.8	15.5	0.4888	0.093	19.0	ug/L	17	Standard
|	Se-1	77	117.3	11.9	-0.2644	0.146	55.4	ug/L	180	Standard
|	Ga	71	193118.5	2.7				mg/L	210139	Standard
|	Rb	85	18.3	68.6				ug/L	12	Standard
>	Y	89	204795.3	2.5				ug/L	214065	Standard
|	Rh	103	5.0	173.2				ug/L	0	Standard
|	Mo	98	35.7	38.6	0.0010	0.003	358.6	ug/L	6	Standard
|	Ag	107	3150.0	6.4	0.3929	0.018	4.6	ug/L	33	Standard
|	Cd	111	1427.7	3.3	0.2431	0.005	1.9	mg/L	437	Standard
|	Cd	114	3580.4	3.2	0.2230	0.006	2.6	ug/L	1160	Standard
>	In	115	607307.7	1.9				ug/L	646604	Standard
|	Sn	118	710.7	1.2	-0.0080	0.001	16.3	ug/L	864	Standard
|	Sb	123	4021.7	1.3	0.3851	0.003	0.9	ug/L	18	Standard
|	Ba	135	3329.4	5.2	0.7611	0.025	3.3	ug/L	39	Standard
|	Ce	140	43.7	30.8				ug/L	46	Standard
>	Tb	159	669143.2	2.6				ug/L	695671	Standard
|	Ho	165	9.7	23.9				ug/L	9	Standard
|	Tl	203	1489.1	13.5	0.0622	0.010	16.8	ug/L	687	Standard
|	Tl	205	3509.1	12.4	0.0628	0.009	14.9	ug/L	1624	Standard
|	Pb	206	2690.2	3.8	0.2012	0.002	1.2	ug/L	305	Standard
|	Pb	207	2328.2	5.7	0.2046	0.009	4.6	ug/L	231	Standard
|	Pb	208	10624.8	4.0	0.2002	0.004	2.2	ug/L	1129	Standard
|	U	238	9784.8	3.9	0.3875	0.011	2.7	ug/L	3	Standard
>	Bi	209	369644.7	2.8				ug/L	405108	Standard
|	Na	23	108.3	19.2	0.0043	0.007	161.0	mg/L	118	Standard
|	Mg	24	578.3	27.9	0.0002	0.000	119.2	mg/L	377	Standard

Sample ID: QC Std 8

Report Date/Time: Thursday, May 10, 2012 17:31:03

Page 1

Approved: May 11, 2012

J. J. H.

K	39	605.0	12.2	0.0030	0.006	209.1	mg/L	583	Standard
Ca	43	70.0	51.5	-0.0193	0.083	431.8	mg/L	73	Standard
Fe	54	912.2	7.5	0.0175	0.019	105.9	mg/L	785	Standard
Fe	57	4449.0	1.5	-0.0078	0.001	12.3	mg/L	6133	Standard
Sc-1	45	243951.4	3.5				mg/L	254529	Standard
Cl	35	330644.9	39.3				ug/L	1641778	Standard
Kr	83	56.7	14.7				ug/L	60	Standard
Br	81	11385.1	5.0				ug/L	11554	Standard
P	31	63231.1	5.1				ug/L	45410	Standard
S	34	699532.3	2.4				ug/L	568857	Standard
Sr	88	493.3	53.9				ug/L	240	Standard

QC Calculated Values

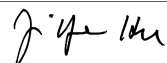
Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51	91.056		
Cr	52	99.774		
Cr	53			
Mn	55	98.854		
Co	59	98.298		
Ni	60	99.846		
Cu	65	104.846		
Zn	66	97.688		
Ge	72		91.286	
As	75	100.501		
Se	82	122.208		
Se-1	77			
Ga	71			
Rb	85			
Y	89		95.670	
Rh	103			
Mo	98			
Ag	107	98.232		
Cd	111	101.310		
Cd	114			
In	115		93.923	
Sn	118			
Sb	123	96.270		
Ba	135	101.482		
Ce	140			
Tb	159		96.187	
Ho	165			
Tl	203	77.737		
Tl	205			
Pb	206			

Sample ID: QC Std 8

Report Date/Time: Thursday, May 10, 2012 17:31:03

Page 2

Approved: May 11, 2012




Pb	207		
Pb	208	100.082	
U	238	96.884	
> Bi	209		91.246
Na	23		
Mg	24		
K	39		
Ca	43		
Fe	54		
Fe	57		
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

Sample ID: QC Std 8
 Report Date/Time: Thursday, May 10, 2012 17:31:03
 Page 3

Approved: May 11, 2012


2.3.3 Metals CVAA Data (Mercury)

2.3.3.1 Summary Data



Login Number: L12050099
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: WG397593 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46135

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink that reads "Sheri L. Pfalzgraf".

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-13-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:46
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: HY.051012.104626
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 #: L12050099-02	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-13-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:50
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: HY.051012.105016
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 #: L12050099-03	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-26-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:52
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: HY.051012.105200
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 #: L12050099-04	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-26-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:53
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: HY.051012.105352
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 #: L12050099-05	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-25-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:55
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: HY.051012.105546
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 #: L12050099-06	PrePrep Method: N/A	Instrument: HYDRA
Client ID: MW-25-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 10:57
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: HY.051012.105740
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 #: L12050099-07	PrePrep Method: N/A	Instrument: HYDRA
Client ID: PZ-03-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 11:03
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: HY.051012.110303
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 #: L12050099-08	PrePrep Method: N/A	Instrument: HYDRA
Client ID: PZ-03-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 11:04
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: HY.051012.110449
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 #: L12050099-09	PrePrep Method: N/A	Instrument: HYDRA
Client ID: DUP-GW-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 11:06
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: HY.051012.110635
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 #: L12050099-10	PrePrep Method: N/A	Instrument: HYDRA
Client ID: DUP-GW-050212	Prep Method: 7470A	Prep Date: 05/08/2012 10:41
Matrix: Water	Analytical Method: 7470A	Cal Date: 05/10/2012 09:40
Workgroup #: WG397593	Analyst: PDM	Run Date: 05/10/2012 11:08
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: HY.051012.110816
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

2.3.3.2 QC Summary

Example Cold Vapor Mercury Calculations
Hydra AA Mercury Analyzer

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and five standards.

2.0 Calculating the concentration (C) of an element in water using data from run log and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Diluted to Volume (mL)

Vi = Aliquot Volume (mL)

D = Manual dilution factor, if required (10X = 10)

Cx = Concentration of element in ppb (ug/L)

Example:

0.1

40

40

1

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:

Cs = Concentration computed by the data system (ug/L)

Vf = Diluted to volume (mL)

Ws = Aliquot weight (g)

D = Manual dilution factor

Cx = Concentration of element in ug/kg

Example:

0.1

40

0.6

1

6.67

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (ug/kg)

6.67

80

8.33

8.33 ug/kg = 0.00833 mg/kg

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG397323

Analyst: BRG

Spike Analyst: BRG

Method: 7470A

Run Date: 05/08/2012 10:41

Hotblock Start Temp: 92.9 @ 10:10

Hotblock End Temp: 96.5 @ 12:10

SOP: ME404 Revision 13

Spike Solution: STD51569

Spike Witness: VC

HNO3 Lot #: COA16033

KMnO4 1:1 Lot #: RGT17201

H2SO4 Lot #: COA16022

K2S2O8 1:1 Lot #: RGT16987

Digestion Tubes Lot #: COA16074

Mercury Water ICV Lot #: STD51571

HG H2O STDS 10PPM Lot #: STD51577

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG397323-02	BLANK	1	40 mL	40 mL		
2	WG397260-01	FBLK	17	4 mL	40 mL		
3	WG397323-03	LCS	1	40 mL	40 mL	4 mL	
4	L12050099-01	SAMP	1	40 mL	40 mL		05/17/12
5	L12050099-02	SAMP	1	40 mL	40 mL		05/17/12
6	L12050099-03	SAMP	1	40 mL	40 mL		05/17/12
7	L12050099-04	SAMP	1	40 mL	40 mL		05/17/12
8	L12050099-05	SAMP	1	40 mL	40 mL		05/17/12
9	L12050099-06	SAMP	1	40 mL	40 mL		05/17/12
10	L12050099-07	SAMP	1	40 mL	40 mL		05/17/12
11	L12050099-08	SAMP	1	40 mL	40 mL		05/17/12
12	L12050099-09	SAMP	1	40 mL	40 mL		05/17/12
13	L12050099-10	SAMP	1	40 mL	40 mL		05/17/12
14	L12050109-02	SAMP	17	4 mL	40 mL		05/10/12
15	L12050109-04	SAMP	17	4 mL	40 mL		05/10/12
16	L12050109-06	SAMP	17	4 mL	40 mL		05/10/12
17	WG397323-01	REF	17	4 mL	40 mL		
18	L12050169-01	SAMP	17	4 mL	40 mL		05/11/12
19	L12050223-05	SAMP	1	40 mL	40 mL		05/11/12
20	WG397323-04	MS	1	4 mL	40 mL	4 mL	
21	WG397323-05	MSD	1	4 mL	40 mL	4 mL	

Analyst: Brenda Gregory

Reviewer: Vicki Collier



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HYDRA Dataset: 051012B.PRN
 Analyst1: PDM Analyst2: N/A
 Method: 7470 SOP: ME404 Rev: 13
 Maintenance Log ID: 41666

Calibration Std: STD51577 ICV Std: STD51571 Post Spike: STD51577
 ICSA: N/A ICSAB: N/A Int. Std: _____
 CCV: _____ LLCCV: _____

Workgroups: _____

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.051012.093025	WG397668-01	Calibration Point		1		05/10/12 09:30
2	HY.051012.093209	WG397668-02	Calibration Point		1		05/10/12 09:32
3	HY.051012.093411	WG397668-03	Calibration Point		1		05/10/12 09:34
4	HY.051012.093555	WG397668-04	Calibration Point		1		05/10/12 09:35
5	HY.051012.093823	WG397668-05	Calibration Point		1		05/10/12 09:38
6	HY.051012.094017	WG397668-06	Calibration Point		1		05/10/12 09:40
7	HY.051012.094923	WG397668-07	Initial Calibration Verification		1		05/10/12 09:49
8	HY.051012.095110	WG397668-08	Initial Calib Blank		1		05/10/12 09:51
9	HY.051012.095304	WG397668-09	CCV		1		05/10/12 09:53
10	HY.051012.095449	WG397668-10	CCB		1		05/10/12 09:54
11	HY.051012.104119	WG397323-02	Method/Prep Blank	40/40	1		05/10/12 10:41
12	HY.051012.104303	WG397323-03	Laboratory Control S	40/40	1		05/10/12 10:43
13	HY.051012.104444	WG397260-01	Fluid Blank		1		05/10/12 10:44
14	HY.051012.104626	L12050099-01	MW-13-050212	40/40	1		05/10/12 10:46
15	HY.051012.104823	WG397593-01	Post Digestion Spike		1	L12050099-01	05/10/12 10:48
16	HY.051012.105016	L12050099-02	MW-13-050212	40/40	1		05/10/12 10:50
17	HY.051012.105200	L12050099-03	MW-26-050212	40/40	1		05/10/12 10:52
18	HY.051012.105352	L12050099-04	MW-26-050212	40/40	1		05/10/12 10:53
19	HY.051012.105546	L12050099-05	MW-25-050212	40/40	1		05/10/12 10:55
20	HY.051012.105740	L12050099-06	MW-25-050212	40/40	1		05/10/12 10:57
21	HY.051012.105924	WG397668-11	CCV		1		05/10/12 10:59
22	HY.051012.110118	WG397668-12	CCB		1		05/10/12 11:01
23	HY.051012.110303	L12050099-07	PZ-03-050212	40/40	1		05/10/12 11:03
24	HY.051012.110449	L12050099-08	PZ-03-050212	40/40	1		05/10/12 11:04
25	HY.051012.110635	L12050099-09	DUP-GW-050212	40/40	1		05/10/12 11:06
26	HY.051012.110816	L12050099-10	DUP-GW-050212	40/40	1		05/10/12 11:08
27	HY.051012.110959	L12050109-02	ARC-145686-SOILCHAR-001	4/40	1		05/10/12 11:09
28	HY.051012.111141	WG397593-02	Post Digestion Spike		1	L12050109-02	05/10/12 11:11
29	HY.051012.111333	L12050109-04	ARC-145686-SOILCHAR-002	4/40	1		05/10/12 11:13
30	HY.051012.111518	L12050109-06	ARC-145686-SOILCHAR-003	4/40	1		05/10/12 11:15
31	HY.051012.111700	L12050169-01	WWTP FILTER CAKE	4/40	1	WG397323-01	05/10/12 11:17
32	HY.051012.111843	WG397323-04	Matrix Spike	4/40	1	L12050169-01	05/10/12 11:18
33	HY.051012.112036	WG397668-13	CCV		1		05/10/12 11:20
34	HY.051012.112218	WG397668-14	CCB		1		05/10/12 11:22

Page: 1 Approved: May 10, 2012

Maren Beery

Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
 Analyst: PDM
 Analyst: NA
 Method: 7470
 Instrument: HYDRA
 Curve Workgroup: 397688
 Runlog ID: 46670
 Analytical Workgroups: 397593,397594

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0153,0171,0099,0109,0169,0230
Client Forms	X
Level X	
Level 3	
Level 4	0153,0171,0099,0109
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
10-MAY-2012

Secondary Reviewer:
10-MAY-2012

Pierce Morris

Maren Beery



Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method:7470A
 Login Number:L12050099

AAB#:WG397593

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-13-050212	01	05/02/12					05/08/12	6	28		05/10/12	8	28	
MW-26-050212	03	05/02/12					05/08/12	6	28		05/10/12	8	28	
MW-25-050212	05	05/02/12					05/08/12	5.9	28		05/10/12	7.9	28	
PZ-03-050212	07	05/02/12					05/08/12	5.8	28		05/10/12	7.9	28	
DUP-GW-050212	09	05/02/12					05/08/12	6	28		05/10/12	8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2409656
 Report generated 05/10/2012 13:22



Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method:7470A
 Login Number:L12050099

AAB#:WG397593

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-13-050212	02	05/02/12					05/08/12	6	28		05/10/12	8	28	
MW-26-050212	04	05/02/12					05/08/12	6	28		05/10/12	8	28	
MW-25-050212	06	05/02/12					05/08/12	5.9	28		05/10/12	7.9	28	
PZ-03-050212	08	05/02/12					05/08/12	5.8	28		05/10/12	7.9	28	
DUP-GW-050212	10	05/02/12					05/08/12	6	28		05/10/12	8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2409667
 Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/08/12 10:41 Sample ID: WG397323-02
Instrument ID: HYDRA Run Date: 05/10/12 10:41 Prep Method: 7470A
File ID: HY.051012.104119 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397593 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-10-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

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

Report Name: BLANK
PDF ID: 2409658
10-MAY-2012 13:22



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/08/12 10:41 Sample ID: WG397323-02
Instrument ID: HYDRA Run Date: 05/10/12 10:41 Prep Method: 7470A
File ID: HY.051012.104119 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397593 Matrix: Water Units: mg/L
Contract #: _____ Cal ID: HYDRA-10-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury, Dissolved	0.000100	0.000200	0.000100	1	U

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

Report Name: BLANK
PDF ID: 2409669
10-MAY-2012 13:23



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397323-03
Instrument ID: HYDRA Run Time: 10:43 Prep Method: 7470A
File ID: HY.051012.104303 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397593 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51569 Cal ID: HYDRA-10-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00405	101	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2409659
Report generated: 05/10/2012 13:22



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397323-03
Instrument ID: HYDRA Run Time: 10:43 Prep Method: 7470A
File ID: HY.051012.104303 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397593 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51569 Cal ID: HYDRA-10-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, Dissolved	0.00400	0.00405	101	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2409670
Report generated: 05/10/2012 13:23



Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050099

Worknum: WG397593

Instrument ID: HYDRA

Method: 7470A

Post Spike ID: WG397593-01

File ID: HY.051012.104823

Dil: 1

Units: ug/L

Sample ID: L12050099-01

File ID: HY.051012.104626

Dil: 1

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.01		0	U	1	101.0	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: 2409655
Report generated: 05/10/2012 13:22



Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050099

Worknum: WG397593

Instrument ID: HYDRA

Method: 7470A

Post Spike ID: WG397593-01

File ID: HY.051012.104823

Dil: 1

Units: ug/L

Sample ID: L12050099-01

File ID: HY.051012.104626

Dil: 1

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.01		0	U	1	101.0	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: 2409666
Report generated: 05/10/2012 13:23



Microbac Laboratories Inc.
 INITIAL CALIBRATION SUMMARY

Login Number: L12050099 Workgroup (AAB#): WG397593
 Analytical Method: 7470A Instrument ID: HYDRA
 ICAL Worknum: WG397668 Initial Calibration Date: 05/10/2012 09:40

Analyte	WG397668-01		WG397668-02		WG397668-03		WG397668-04		WG397668-05		WG397668-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	234	0.200	841	1.00	3432	2.00	6909	5.00	16640	10.0	32345

INT = Instrument intensity
 R = Coefficient of correlation
 Q = Data Qualifier
 * = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
 PDF File ID: 2409660
 Report generated 05/10/2012 13:23



Login Number:L12050099
Analytical Method:7470A
ICAL Worknum:WG397668

Workgroup (AAB#):WG397593
Instrument ID:HYDRA
Initial Calibration Date:05/10/2012 09:40

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
 INITIAL CALIBRATION SUMMARY

Login Number: L12050099
 Analytical Method: 7470A
 ICAL Worknum: WG397668

Workgroup (AAB#): WG397593
 Instrument ID: HYDRA
 Initial Calibration Date: 05/10/2012 09:40

Analyte	WG397668-01		WG397668-02		WG397668-03		WG397668-04		WG397668-05		WG397668-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	234	0.200	841	1.00	3432	2.00	6909	5.00	16640	10.0	32345

INT = Instrument intensity
 R = Coefficient of correlation
 Q = Data Qualifier
 * = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
 PDF File ID: 2409671
 Report generated 05/10/2012 13:23



Login Number: L12050099
Analytical Method: 7470A
ICAL Worknum: WG397668

Workgroup (AAB#): WG397593
Instrument ID: HYDRA
Initial Calibration Date: 05/10/2012 09:40

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 2409671
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-08
Instrument ID: HYDRA Run Time: 09:51 Method: 7470A
File ID: HY.051012.095110 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2409662
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-08
Instrument ID: HYDRA Run Time: 09:51 Method: 7470A
File ID: HY.051012.095110 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2409673
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-10
Instrument ID: HYDRA Run Time: 09:54 Method: 7470A
File ID: HY.051012.095449 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.127	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2409664
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-12
Instrument ID: HYDRA Run Time: 11:01 Method: 7470A
File ID: HY.051012.110118 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.118	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2409664
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-14
Instrument ID: HYDRA Run Time: 11:22 Method: 7470A
File ID: HY.051012.112218 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.145	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2409664
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-10
Instrument ID: HYDRA Run Time: 09:54 Method: 7470A
File ID: HY.051012.095449 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.127	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2409675
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-12
Instrument ID: HYDRA Run Time: 11:01 Method: 7470A
File ID: HY.051012.110118 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.118	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2409675
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-14
Instrument ID: HYDRA Run Time: 11:22 Method: 7470A
File ID: HY.051012.112218 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.145	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2409675
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-07
Instrument ID: HYDRA Run Time: 09:49 Method: 7470A
File ID: HY.051012.094923 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
QC Key: WATERLOO

Analyte	Expected	Found	%REC	LIMITS	Q
Mercury	2	1.81	90.5	90 - 110	

* Exceeds LIMITS Limit



Microbac Laboratories Inc.
INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-07
Instrument ID: HYDRA Run Time: 09:49 Method: 7470A
File ID: HY.051012.094923 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
QC Key: WATERLOO

Analyte	Expected	Found	%REC	LIMITS	Q
Mercury	2	1.81	90.5	90 - 110	

* Exceeds LIMITS Limit



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-09
 Instrument ID: HYDRA Run Time: 09:53 Method: 7470A
 File ID: HY.051012.095304 Analyst: PDM QC Key: WATERLOO
 Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00210	mg/L	105	80 - 120	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2409663
 Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-11
Instrument ID: HYDRA Run Time: 10:59 Method: 7470A
File ID: HY.051012.105924 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00216	mg/L	108	80 - 120	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2409663
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-13
Instrument ID: HYDRA Run Time: 11:20 Method: 7470A
File ID: HY.051012.112036 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00210	mg/L	105	80 - 120	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2409663
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-09
Instrument ID: HYDRA Run Time: 09:53 Method: 7470A
File ID: HY.051012.095304 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00210	mg/L	105	80 - 120	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2409674
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-11
Instrument ID: HYDRA Run Time: 10:59 Method: 7470A
File ID: HY.051012.105924 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00216	mg/L	108	80 - 120	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2409674
Report generated 05/10/2012 13:23



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050099 Run Date: 05/10/2012 Sample ID: WG397668-13
 Instrument ID: HYDRA Run Time: 11:20 Method: 7470A
 File ID: HY.051012.112036 Analyst: PDM QC Key: WATERLOO
 Workgroup (AAB#): WG397593 Cal ID: HYDRA - 10-MAY-12
 Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00210	mg/L	105	80 - 120	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2409674
 Report generated 05/10/2012 13:23



2.3.3.3 Raw Data

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1								
Hg	.000	ppb	234	Seq: 10		09:30:25	10 May 12	HG
*** Standard: 2 Rep: 1								
Hg	.200	ppb	841	Seq: 11		09:32:09	10 May 12	HG
*** Standard: 3 Rep: 1								
Hg	1.00	ppb	3432	Seq: 12		09:34:11	10 May 12	HG
*** Standard: 4 Rep: 1								
Hg	2.00	ppb	6909	Seq: 13		09:35:55	10 May 12	HG
*** Standard: 5 Rep: 1								
Hg	5.00	ppb	16640	Seq: 14		09:38:23	10 May 12	HG
*** Standard: 6 Rep: 1								
Hg	10.0	ppb	32345	Seq: 15		09:40:17	10 May 12	HG
*** Check Standard: 2 Ck2ICV								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		90.3	1.81	2.00	ppb	.000		
*** Check Standard: 3 Ck3ICB								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		-67.2	-.134	.200	ppb	.000		
*** Check Standard: 4 Ck4CCV								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		105.	2.10	2.00	ppb	.000		
*** Check Standard: 5 Ck5CCB								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		-63.3	-.127	.200	ppb	.000		
*** Sample ID: WG39732302 051012B\								
Hg	.064	ppb	.000	.064	Seq: 20	10:41:19	10 May 12	HG
=====								
*** Sample ID: WG39732303 051012B\								
Hg	4.05	ppb	.000	4.05	Seq: 21	10:43:03	10 May 12	HG
=====								

Approved: 05/10/2012 14:00
Pierce Morris

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: WG39726001 051012B\ Seq: 22 10:44:44 10 May 12 HG								
TCLP BLANK								
Hg	-.140	ppb	.000		-.140			
=====								
*** Sample ID: 1205009901 051012B\ Seq: 23 10:46:26 10 May 12 HG								
Hg	-.095	ppb	.000		-.095			
=====								
*** Sample ID: WG39759301 051012B\ Seq: 24 10:48:23 10 May 12 HG								
1205009901PS.9								
Hg	1.01	ppb	.000		1.01			
=====								
*** Sample ID: 1205009902 051012B\ Seq: 25 10:50:16 10 May 12 HG								
Hg	-.110	ppb	.000		-.110			
=====								
*** Sample ID: 1205009903 051012B\ Seq: 26 10:52:00 10 May 12 HG								
Hg	-.070	ppb	.000		-.070			
=====								
*** Sample ID: 1205009904 051012B\ Seq: 27 10:53:52 10 May 12 HG								
Hg	-.077	ppb	.000		-.077			
=====								
*** Sample ID: 1205009905 051012B\ Seq: 28 10:55:46 10 May 12 HG								
Hg	-.060	ppb	.000		-.060			
=====								
*** Sample ID: 1205009906 051012B\ Seq: 29 10:57:40 10 May 12 HG								
Hg	-.050	ppb	.000		-.050			
=====								
*** Check Standard: 4 Ck4CCV Seq: 30 10:59:24 10 May 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		108.	2.16	2.00	ppb	.000		
=====								
*** Check Standard: 5 Ck5CCB Seq: 31 11:01:18 10 May 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		-59.1	-.118	.200	ppb	.000		
=====								

Approved: 05/10/2012 14:00
Pierce Morris

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 1205009907 051012B\ Seq: 32 11:03:03 10 May 12 HG								
Hg	-.089	ppb	.000	-.089				
=====								
*** Sample ID: 1205009908 051012B\ Seq: 33 11:04:49 10 May 12 HG								
Hg	-.073	ppb	.000	-.073				
=====								
*** Sample ID: 1205009909 051012B\ Seq: 34 11:06:35 10 May 12 HG								
Hg	-.063	ppb	.000	-.063				
=====								
*** Sample ID: 1205009910 051012B\ Seq: 35 11:08:16 10 May 12 HG								
Hg	-.090	ppb	.000	-.090				
=====								
*** Sample ID: 1205010902 051012B\ Seq: 36 11:09:59 10 May 12 HG								
Hg	-.091	ppb	.000	-.091				
=====								
*** Sample ID: WG39759302 051012B\ Seq: 37 11:11:41 10 May 12 HG 1205010902PS.9								
Hg	.976	ppb	.000	.976				
=====								
*** Sample ID: 1205010904 051012B\ Seq: 38 11:13:33 10 May 12 HG								
Hg	-.091	ppb	.000	-.091				
=====								
*** Sample ID: 1205010906 051012B\ Seq: 39 11:15:18 10 May 12 HG								
Hg	-.086	ppb	.000	-.086				
=====								
*** Sample ID: 1205016901 051012B\ Seq: 40 11:17:00 10 May 12 HG WG39732301								
Hg	-.097	ppb	.000	-.097				
=====								
*** Sample ID: WG39732304 051012B\ Seq: 41 11:18:43 10 May 12 HG 1205016901S								
Hg	3.71	ppb	.000	3.71				
=====								

Approved: 05/10/2012 14:00
Pierce Morris

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Check Standard: 4 Ck4CCV Seq: 42 11:20:36 10 May 12 HG									
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		105.	2.10	2.00	ppb	.000			
*** Check Standard: 5 Ck5CCB Seq: 43 11:22:18 10 May 12 HG									
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		-72.4	-.145	.200	ppb	.000			
*** Sample ID: WG39732305 051012B\ Seq: 44 11:24:12 10 May 12 HG									
Hg	4.16	ppb	.000	4.16					
=====									
*** Sample ID: 1205022305 051012B\ Seq: 45 11:26:10 10 May 12 HG									
Hg	-.081	ppb	.000	-.081					
*** Check Standard: 4 Ck4CCV Seq: 46 11:28:03 10 May 12 HG									
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		103.	2.06	2.00	ppb	.000			
*** Check Standard: 5 Ck5CCB Seq: 47 11:30:09 10 May 12 HG									
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		-42.6	-.085	.200	ppb	.000			
*** Sample ID: WG39734803 051012B\ Seq: 48 11:31:53 10 May 12 HG									
Hg	-.098	ppb	.000	-.098					
=====									
*** Sample ID: WG39734804 051012B\ Seq: 49 11:33:36 10 May 12 HG									
Hg	3.89	ppb	.000	3.89					
=====									
*** Sample ID: 1205015301 051012B\ Seq: 50 11:35:21 10 May 12 HG									
Hg	-.034	ppb	.000	-.034					
=====									
*** Sample ID: WG39759401 051012B\ Seq: 51 11:37:05 10 May 12 HG									
Hg	1.10	ppb	.000	1.10					
=====									
*** Sample ID: 1205015302 051012B\ Seq: 52 11:38:51 10 May 12 HG									
Hg	-.041	ppb	.000	-.041					
=====									

Approved: 05/10/2012 14:00
Pierce Morris

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 1205015303 051012B\ Seq: 53 11:40:45 10 May 12 HG								
Hg	-.090	ppb	.000	-.090				
=====								
*** Sample ID: 1205015304 051012B\ Seq: 54 11:42:38 10 May 12 HG								
Hg	-.098	ppb	.000	-.098				
=====								
*** Sample ID: 1205015305 051012B\ Seq: 55 11:44:26 10 May 12 HG								
Hg	-.069	ppb	.000	-.069				
=====								
*** Sample ID: 1205015306 051012B\ Seq: 56 11:46:11 10 May 12 HG								
Hg	-.092	ppb	.000	-.092				
=====								
*** Sample ID: 1205015307 051012B\ Seq: 57 11:47:54 10 May 12 HG								
Hg	-.081	ppb	.000	-.081				
=====								
*** Check Standard: 4 Ck4CCV Seq: 58 11:49:37 10 May 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		104.	2.08	2.00	ppb	.000		
=====								
*** Check Standard: 5 Ck5CCB Seq: 59 11:51:43 10 May 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		-50.4	-.101	.200	ppb	.000		
=====								
*** Sample ID: 1205015308 051012B\ Seq: 60 11:53:51 10 May 12 HG								
Hg	-.088	ppb	.000	-.088				
=====								
*** Sample ID: 1205017101 051012B\ Seq: 61 11:55:38 10 May 12 HG								
					WG39734801			
Hg	-.061	ppb	.000	-.061				
=====								
*** Sample ID: 1205017102 051012B\ Seq: 62 11:57:50 10 May 12 HG								
					WG39734802			
Hg	-.081	ppb	.000	-.081				
=====								

Approved: 05/10/2012 14:00


Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: WG39734805 051012B\ Seq: 63 11:59:45 10 May 12 HG								
Hg	3.92	ppb	.000	3.92				
=====								
*** Sample ID: WG39734807 051012B\ Seq: 64 12:01:29 10 May 12 HG								
Hg	3.74	ppb	.000	3.74				
=====								
*** Sample ID: WG39734806 051012B\ Seq: 65 12:03:13 10 May 12 HG								
Hg	4.28	ppb	.000	4.28				
=====								
*** Sample ID: WG39734808 051012B\ Seq: 66 12:04:58 10 May 12 HG								
Hg	4.27	ppb	.000	4.27				
=====								
*** Sample ID: 1205017107 051012B\ Seq: 67 12:07:23 10 May 12 HG								
Hg	-.040	ppb	.000	-.040				
=====								
*** Sample ID: 1205017108 051012B\ Seq: 68 12:09:07 10 May 12 HG								
Hg	-.089	ppb	.000	-.089				
=====								
*** Sample ID: 1205023001 051012B\ Seq: 69 12:10:50 10 May 12 HG								
Hg	.319	ppb	.000	.319				
=====								
*** Check Standard: 4 Ck4CCV Seq: 70 12:12:35 10 May 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		105.	2.10	2.00	ppb	.000		
=====								
*** Check Standard: 5 Ck5CCB Seq: 71 12:14:18 10 May 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		-66.4	-.133	.200	ppb	.000		
=====								

Approved: 05/10/2012 14:00
Pierce Morris

2.4 General Chemistry Data

2.4.1 Alkalinity Data

2.4.1.1 Summary Data



Login Number: L12050099
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 310.2 (Alkalinity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46563

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-13-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:56
Collect Date: 05/02/2012 11:30	Dilution: 2	File ID: SC120504007.022
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		306		40.0	20.0

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-26-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:57
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: SC120504007.023
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		263		20.0	10.0

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:58
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: SC120504007.024
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		182		20.0	10.0

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: PZ-03-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:58
Collect Date: 05/02/2012 14:30	Dilution: 2	File ID: SC120504007.025
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		390		40.0	20.0

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: DUP-GW-050212	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 05/04/2012 16:48
Workgroup #: WG397079	Analyst: DIH	Run Date: 05/04/2012 16:59
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: SC120504007.026
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		263		20.0	10.0

2.4.1.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
 $y = mx + b$

Step 2: Calculate the instrument concentration, x

Where:

$$x = (y - b)/m$$

Step 3: Solve for analyte concentration in sample, Cx

$$Cx = (x) (D)$$

Example Calculation (LCS):

Value of m from plot:	7.809
Value of b from plot:	0.0004135
Absorbance of unknown from quantitation report (y):	0.31
Calculated concentration (x):	0.03964483
Dilution factor (D):	1.00
Concentration of analyte in sample, Cy:	0.0396 mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

A, B, C = constants from the ICAL quadratic regression

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

$$y = Ax^2 + Bx + C$$

Step 3: Solve for analyte concentration in sample, Cy

$$Cy = (y) (D)$$

Example Calculation (LCS):

Value of A from plot:	101.2796
Value of B from plot:	318.9056
Value of C from plot:	-2.2712
Absorbance of unknown from quantitation report (x):	0.1583
Calculated concentration (y):	50.7495108
Dilution factor (D):	1.00
Concentration of analyte in sample, Cy:	50.75 mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
 Analyst: DIH
 Analyst: NA
 Method: ALK
 Instrument: SC
 Curve Workgroup: NA
 Runlog ID: _____
 Analytical Workgroups: WG397057 WG397067 WG397079 WG397052

Calibration/Linearity	5/4/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
05-MAY-2012

Secondary Reviewer:
05-MAY-2012





Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method: 310.2
 Login Number: L12050099

AAB#: WG397079

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-13-050212	01	05/02/12								14	05/04/12	2.2	14	
MW-26-050212	03	05/02/12								14	05/04/12	2.3	14	
MW-25-050212	05	05/02/12								14	05/04/12	2.1	14	
PZ-03-050212	07	05/02/12								14	05/04/12	2.1	14	
DUP-GW-050212	09	05/02/12								14	05/04/12	2.3	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2403315
 Report generated 05/05/2012 10:12



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397079
Blank File ID: SC120504007.036 Blank Sample ID: WG397079-01
Prep Date: 05/04/12 17:05 Instrument ID: SMARTCHEM
Analyzed Date: 05/04/12 17:05 Method: 310.2
Analyst: DIH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397079-02	SC120504007.011	05/04/12 16:49	01
LCS2	WG397079-03	SC120504007.012	05/04/12 16:50	01
MW-13-050212	L12050099-01	SC120504007.022	05/04/12 16:56	DL01
MW-26-050212	L12050099-03	SC120504007.023	05/04/12 16:57	01
MW-25-050212	L12050099-05	SC120504007.024	05/04/12 16:58	01
PZ-03-050212	L12050099-07	SC120504007.025	05/04/12 16:58	DL01
DUP-GW-050212	L12050099-09	SC120504007.026	05/04/12 16:59	01
DUP	WG397079-05	SC120504007.027	05/04/12 16:59	01

Report Name: BLANK_SUMMARY
PDF File ID: 2403316
Report generated 05/05/2012 10:12



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/04/12 17:05 Sample ID: WG397079-01
Instrument ID: SMARTCHEM Run Date: 05/04/12 17:05 Prep Method: 310.2
File ID: SC120504007.036 Analyst: DIH Method: 310.2
Workgroup (AAB#): WG397079 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: 2403317
05-MAY-2012 10:12



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: DIH Prep Method: 310.2
 Instrument ID: SMARTCHEM Matrix: Water Method: 310.2
 Workgroup (AAB#): WG397079 Units: mg/L
 QC Key: WATERLOO Lot #: STD51238
 Sample ID: WG397079-02 LCS File ID: SC120504007.011 Run Date: 05/04/2012 16:49
 Sample ID: WG397079-03 LCS2 File ID: SC120504007.012 Run Date: 05/04/2012 16:50

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Alkalinity, Total (as CaCO3)	200	201	100	200	200	100	0.478	85 - 115	25	

LCS_LCS2 - Modified 03/06/2008
 PDF File ID: 2403318
 Report generated: 05/05/2012 10:12



2.4.1.3 Raw Data

SMARTCHEM RUN LOG

A
 397057
 397067
 397079

Daily Check

- Lamp On
- Probe Rinse Full
- DI Water > 1/2 Full
- Wash Solution > 1/2 Full
- NO3 Reagent bottle connected / purged
- NO3 pH adj to pH 5-9
- Syringe filter lot # _____
- WBL Run
- Reagents Full
- Dilution H₂O Full
- Waste Container Check

- 1) Workgroup A
Plan # 20120504003
- 2) Workgroup B
Plan # 20120504004
- 3) Workgroup C
Plan # 20120504006
- D 20120504007

Analyte	1	2	3
Run 1	ALK		
	Dilution		
SC Prepared Curve			
Position			
1-1	ICV 250		
1-2	BIK		
1-3	LCS 200		
1-4	LSDUP		
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	04-018-02	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	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	

Position	Analyte	1	2	3
2-4	Run 2			
2-5	ICV			
2-6	BIK			
2-7	LCS 200			
2-8	LCS DUP			
2-9	04-963-01	1/2		
2-10	03			
2-11	05	1/100	color	
2-12	07	1/2		
2-13	05-010-01			
2-14	DUP 01			
2-15	MS 02			
2-16	MSD 03			
2-17	04			
2-18	MS 05			
2-19	MSD 06			
2-20	07			
2-21	MS 08			
2-22	MSD 09			
2-23	10			
2-24	11			
2-25	12			
2-26	13			
3-1	14			
3-2	15			
3-3	04-052-01	1/2	1/5	
4	02			
5	03			
6	04			
7	05			
8	06	1/3		
9	07			
10				
11				

NOTES:
 * Run NO2 std on NO3 runs
 * LCS/LCS Dup all parameters
 * MS(10% sample): NO3, TKN, NH3

2-4 04-928-01 1/2
 2-5 DUP 928-01 1/5

DCN#90758

Pg 1



SMARTCHEM RUN LOG

Analyte		1	2	3
Position	Run 3			
3-3	1 ICV250			
3-4	2 BIK			
3-5	3 LCS200			
3-6	4 LCSDUP			
3-7	5 05-052-08			
3-8	6 09 unit 2 -			
3-9	7 10			
3-10	8 11			
3-11	9 14 1/3			
3-12	10 15			
3-13	11 16			
3-14	12 17 1/3			
3-15	13 05-011-01 unit 4 1/2			

Analyte		1	2	3
Position				
3-16	14 05-011-03 unit 4 1/2			
3-17	15 05-089-01 1/4			
3-18	16 02			
3-19	17 03 1/50			color
3-20	18 04 unit 4 -			
3-21	19 06 1/3			color
3-22	20 07 1/3			
3-23	21 08			
3-24	22 11			
3-25	1 12 1/2 1/10			color
3-26	2 13			
3-27	3 DUP 13			
3-28	4			

- Chloride EPA 325.2/SM 4500-Cl-E
- Sulfate EPA 375.4/SM 426C(15th)
- 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	143102 R14	R6+17318
Curve Stock (SC made)	std 50178	
Curve ID (user made)	std 50179 dup 5/4/12	
ICV	std 51237	
CCV	std 51236	
LCS	std 51238	
MS	std 50179 Dilution 0.25/(2500)=100	

Comments: _____

Analyst: Deanne Lesson

Date: 5/4/12

DCN#90758

pg 2



SMARTCHEM RUN LOG

Daily Check

- Lamp On
- Probe Rinse Full
- DI Water > 1/2 Full
- Wash Solution > 1/2 Full
- NO3 Reagent bottle connected / purged
- NO3 pH adj to pH 5-9
- Syringe filter lot # _____
- WBL Run
- Reagents Full
- Dilution H₂O Full
- Waste Container Check

- 1) Workgroup _____
Plan # _____
- 2) Workgroup _____
Plan # _____
- 3) Workgroup _____
Plan # _____

Analyte		1	2	3
Run 4				
SC Prepared Curve				
Position				
1-1	ICV 250			
1-2	BIK			
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		
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	Fluoridation	
2-1	09	1/5	↓	
2-2	R BIK			
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	-0.4684	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	356.6X	-0.5722	0.00	>,LH	1:17:52 PM
12	L12050018-02 (5)	255.8	-0.3995	0.00		1:18:46 PM
13	L12050018-03 (5)	172.7	-0.2632	0.00		1:19:04 PM
14	L12050018-05 (5)	183.6	-0.2808	0.00		1:19:58 PM
15	L12050018-06 (5)	148.7	-0.2248	0.00		1:20:16 PM
16	L12050018-07 (100)	111.6	-0.1661	0.00		1:21:10 PM
17	L12040898-01 (100)	161.0	-0.2444	0.00		1:21:28 PM
18	L12040898-03 (4)	89.2	-0.1312	0.00		1:22:22 PM
19	L12040898-05 (5)	196.0	-0.3010	0.00		1:22:40 PM

Report Date :05/04/2012 Run Date :5/4/2012 Operator : WESTCO Plan # :20120504003
Plan Description : ALK-A-DIH/5/4/2012

MICROBAC (OVD)
SMARTCHEM REPORT (VER3.0.53)
NH3, TKN, NO3NO2 (MG/L N)
ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

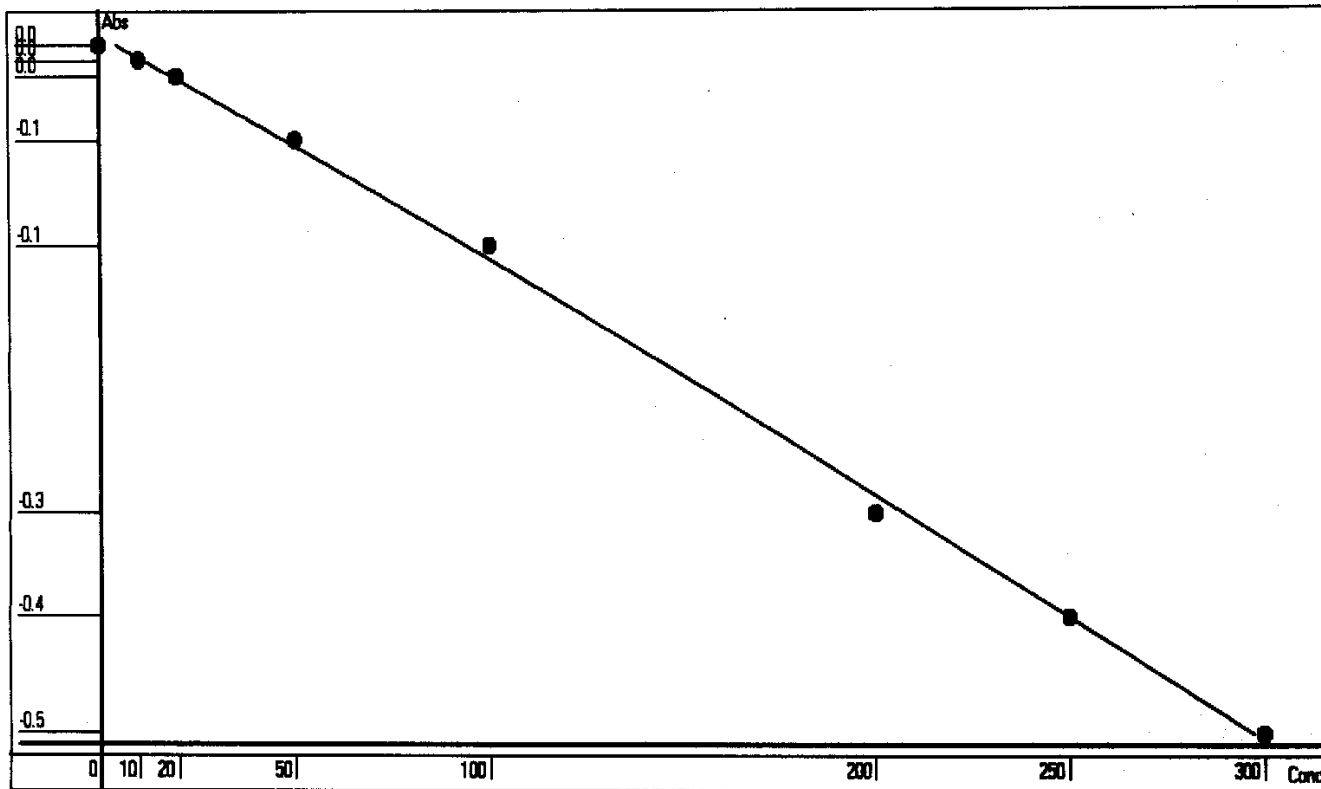
Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20	L12040898-08 (4)	170.1	-0.2591	0.00		1:23:34 PM
ST-2	CCV (150 mg/L)	162.5	-0.2468	108.30		1:23:52 PM
ST-3	CCB (0 mg/L)	6.6	-0.0048	0.00		1:24:46 PM
21	L12040898-10 (4) (50)	76.4	-0.1113	0.00		1:25:04 PM
22	L12040898-12 (4)	176.1	-0.2688	0.00		1:25:58 PM
23	L12040928-01 (5)	145.3	-0.2194	0.00		1:26:16 PM
24	L12040928-08 (5) MS	158.7	-0.2408	0.00		1:27:10 PM
25	L12040928-10 (5)	154.9	-0.2347	0.00		1:27:28 PM
26	L12040928-03 (2)	202.3	-0.3113	0.00		1:28:22 PM
27	WG397052-05 (5) DUP	139.3	-0.2099	0.00		1:28:40 PM
28	ID 28	11.9	-0.0128	0.00		1:29:34 PM
29	ID 29	6.5	-0.0047	0.00		1:29:52 PM
ST-2	CCV (150 mg/L)	163.7	-0.2488	109.13		1:30:46 PM
ST-3	CCB (0 mg/L)	13.1	-0.0146	0.00		1:31:05 PM
11-[1/2]	L12040913-01	481.6	-0.3746	0.00	LH	1:38:45 PM
ST-2	CCV (150 mg/L)	165.8	-0.2521	110.50		1:38:45 PM
ST-3	CCB (0 mg/L)	16.9	-0.0204	0.00		1:39:39 PM

Report Date : 05/04/2012 Run Date : 5/4/2012 Operator : WESTCO Plan # : 20120504003
Plan Description : ALK-A-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan #: 20120504003 Description: [ALK-A-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0016	0	4.4266	442.66
2	-0.0118	10	11.2015	12.02
3	-0.0229	20	18.5543	-7.23
4	-0.0666	50	47.3008	-5.40
5	-0.1386	100	93.9642	-6.04
6	-0.3196	200	207.4272	3.71
7	-0.3898	250	249.9531	-0.02
8	-0.4694	300	297.1725	-0.94
Conc = -83.9371*Abso^2 -665.3272*Abso +3.3623 R ² =0.9987				RBL 0.7362 0

Report Date 5/4/2012 Run Date 5/4/2012

MICROBAC (OVD)
SMARTCHEM REPORT (VER3.0.53)
NH3, TKN, NO3NO2 (MG/L N)
ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#[/Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.0	0.6646	0.00		1:55:47 PM
DIL-1	RBL	0.0	0.6664	0.00		1:56:05 PM
DIL-1	RBL	0.0	0.6628	0.00		1:56:59 PM
DIL-1	Std-1	0.0	-0.0021	0.00		1:57:17 PM
SR5-1	Std-2	10.0	-0.0123	0.00		1:58:11 PM
SR5-2	Std-3	20.0	-0.0187	0.00		1:58:29 PM
SR5-3	Std-4	50.0	-0.0638	0.00		1:59:23 PM
SR5-4	Std-5	100.0	-0.1313	0.00		1:59:41 PM
SR5-5	Std-6	200.0	-0.2859	0.00		2:00:36 PM
SR5-6	Std-7	250.0	-0.3598	0.00		2:00:53 PM
SR5-7	Std-8	300.0	-0.4329	0.00		2:01:48 PM
1	ICV 750 ^{ams/siz} 250	257.3	-0.3689	0.00		2:02:05 PM
2	WG397057-01 BLK	-11.8	0.0193	0.00	INV,>,LL	2:03:00 PM
3	WG397057-02 LCS	200.1	-0.2816	0.00		2:03:18 PM
4	WG397057-03 LCSDUP	203.5	-0.2868	0.00		2:04:12 PM
5	L12040963-01 (2)	197.8	-0.2782	0.00		2:04:30 PM
6	L12040963-03	323.3 ^X	-0.4734	0.00	>,<,LH	2:05:24 PM
7	L12040963-05 (100)	28.7	-0.0359	0.00		2:05:42 PM
8	L12040963-07 (2)	197.7	-0.2780	0.00		2:06:36 PM
9	L12050010-01	17.7	-0.0208	0.00		2:06:54 PM
10	WG397057-05 DUP	16.2	-0.0187	0.00		2:07:48 PM
ST-2	CCV (150 mg/L)	151.1	-0.2091	100.72		2:08:06 PM
ST-3	CCB (0 mg/L)	-2.2	0.0063	0.00	INV,>,LL	2:09:00 PM
11	L12050010-02 MS	102.5	-0.1390	0.00		2:09:18 PM
12	L12050010-03 MSD	104.4	-0.1418	0.00		2:10:12 PM
13	L12050010-04	79.4	-0.1063	0.00		2:10:30 PM
14	L12050010-05 MS	160.7	-0.2232	0.00		2:11:24 PM
15	L12050010-06 MSD	160.8	-0.2233	0.00		2:11:42 PM
16	L12050010-07	176.2	-0.2461	0.00		2:12:36 PM
17	L12050010-08 MS	251.4	-0.3597	0.00		2:12:54 PM
18	L12050010-09 MSD	249.0	-0.3560	0.00		2:13:48 PM
19	L12050010-10	187.8	-0.2633	0.00		2:14:06 PM

Report Date : 05/04/2012 Run Date : 5/4/2012 Operator : WESTCO Plan # : 20120504004
Plan Description : ALK-B-DIH/5/4/2012

MICROBAC (OVD)
SMARTCHEM REPORT (VER3.0.53)
NH3, TKN, NO3NO2 (MG/L N)
ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

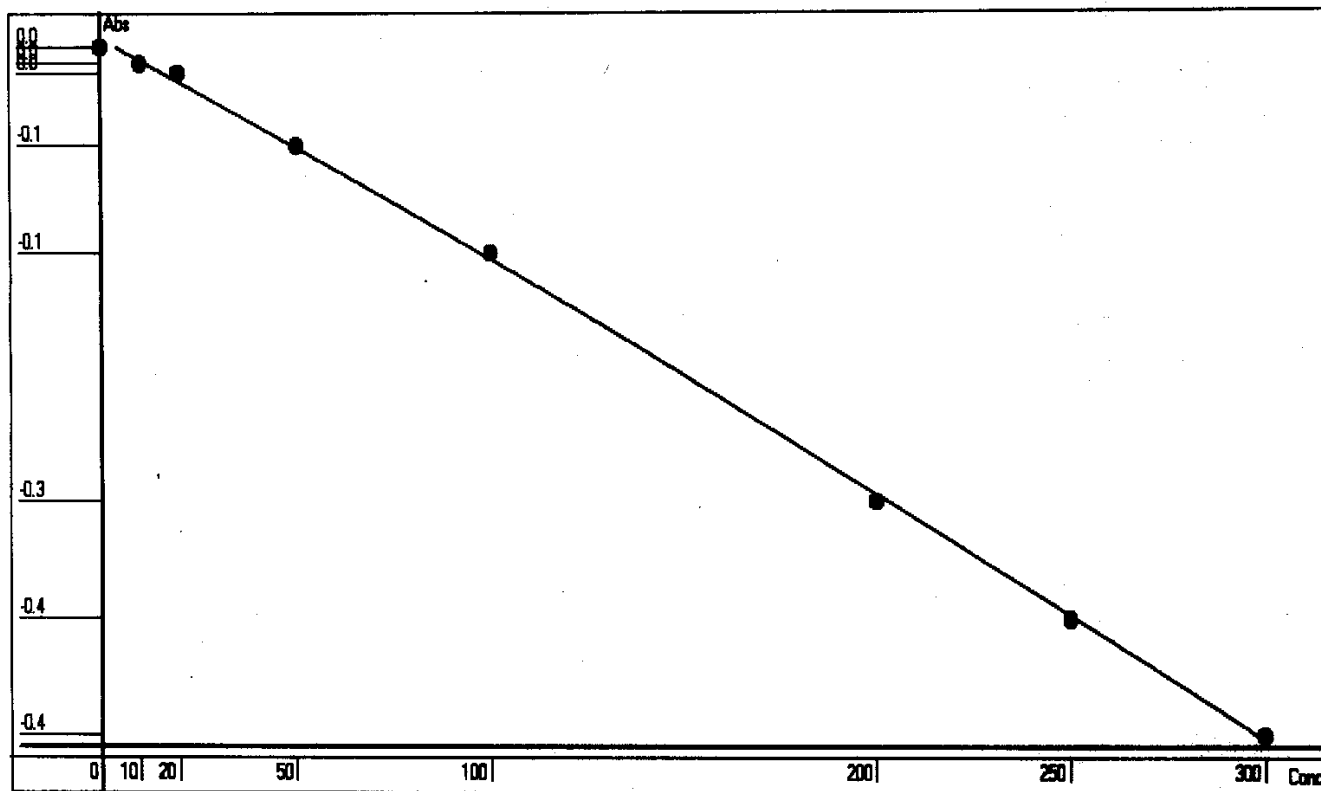
Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20	L12050010-11	136.1	-0.1873	0.00		2:15:00 PM
ST-2	CCV (150 mg/L)	156.5	-0.2171	104.36		2:15:18 PM
ST-3	CCB (0 mg/L)	12.9	-0.0142	0.00		2:16:12 PM
21	L12050010-12	64.5	-0.0855	0.00		2:16:30 PM
22	L12050010-13	114.9	-0.1567	0.00		2:17:24 PM
23	L12050010-14	117.9	-0.1611	0.00		2:17:42 PM
24	L12050010-15	157.6	-0.2186	0.00		2:18:36 PM
25	L12050052-01 (5)	101.6	-0.1378	0.00		2:18:54 PM
26	L12050052-02	64.5	-0.0854	0.00		2:19:48 PM
27	L12050052-03	352.6 X	-0.5213	0.00	X,LH	2:20:06 PM
28	L12050052-04	140.6	-0.1938	0.00		2:21:00 PM
29	L12050052-05	131.6	-0.1808	0.00		2:21:18 PM
30	L12050052-06 (3)	148.9	-0.2059	0.00		2:22:12 PM
ST-2	CCV (150 mg/L)	163.0	-0.2265	108.63		2:22:30 PM
ST-3	CCB (0 mg/L)	10.3	-0.0107	0.00		2:23:24 PM
31	L12050052-07	36.6	-0.0467	0.00		2:23:42 PM
32	ID 32	21.1 X	-0.0254	0.00		2:24:37 PM
33	ID 33	24.2 X	-0.0297	0.00		2:24:54 PM
ST-2	CCV (150 mg/L)	164.2	-0.2283	109.45		2:25:48 PM
ST-3	CCB (0 mg/L)	16.2	-0.0188	0.00		2:26:07 PM
6-[1/2]	L12040963-03	395.6 X	-0.2782	0.00	LH	2:33:47 PM
27-[1/2]	L12050052-03	495.5 X	-0.3541	0.00	LH	2:34:59 PM
ST-2	CCV (150 mg/L)	176.3 X	-0.2462	117.54		2:34:59 PM
ST-3	CCB (0 mg/L)	30.4 X	-0.0382	0.00		2:35:53 PM

Report Date :05/04/2012 Run Date :5/4/2012 Operator : WESTCO Plan # :20120504004
Plan Description : ALK-B-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan #: 20120504004 Description: [ALK-B-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0021	0	3.9760	397.60
2	-0.0123	10	11.4757	14.76
3	-0.0187	20	16.1681	-19.16
4	-0.0638	50	48.9442	-2.11
5	-0.1313	100	97.0478	-2.95
6	-0.2859	200	202.9238	1.46
7	-0.3598	250	251.4193	0.57
8	-0.4329	300	298.0445	-0.65
Conc = -125.197*Abso^2 - 737.071*Abso + 2.4287 R²=0.9994				RBL 0.0655 0

Report Date 5/4/2012 Run Date 5/4/2012

MICROBAC (OVD)
 SMARTCHEM REPORT (VER3.0.53)
 NH3, TKN, NO3NO2 (MG/L N)
 ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#[/Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.0	0.5302	0.00		3:52:36 PM
DIL-1	RBL	0.0	0.5257	0.00		3:52:54 PM
DIL-1	RBL	0.0	0.5339	0.00		3:53:48 PM
DIL-1	Std-1	0.0	-0.0027	0.00		3:54:06 PM
SR5-1	Std-2	10.0	-0.0114	0.00		3:55:00 PM
SR5-2	Std-3	20.0	-0.0186	0.00		3:55:18 PM
SR5-3	Std-4	50.0	-0.0464	0.00		3:56:12 PM
SR5-4	Std-5	100.0	-0.1007	0.00		3:56:30 PM
SR5-5	Std-6	200.0	-0.2282	0.00		3:57:24 PM
SR5-6	Std-7	250.0	-0.2930	0.00		3:57:42 PM
SR5-7	Std-8	300.0	-0.3445	0.00		3:58:36 PM
1	ICV 25	248.8	-0.2843	0.00		3:58:54 PM
2	WG397067-01 BLK	-9.4	0.0114	0.00	INV,><,LL	3:59:48 PM
3	WG397067-02 LCS	208.9	-0.2344	0.00		4:00:06 PM
4	WG397067-03 LCSDUP	216.3	-0.2435	0.00		4:01:00 PM
5	L12050052-08	118.3	-0.1273	0.00		4:01:19 PM
6	L12050052-09	64.6	-0.0674	0.00		4:02:13 PM
7	L12050052-10	133.7	-0.1449	0.00		4:02:31 PM
8	L12050052-11	46.0	-0.0472	0.00		4:03:25 PM
9	L12050052-14 (3)	261.1	-0.3001	0.00		4:03:43 PM
10	L12050052-15	84.0	-0.0888	0.00		4:04:37 PM
ST-2	CCV (150 mg/L)	163.7	-0.1799	109.13		4:04:55 PM
ST-3	CCB (0 mg/L)	10.0	-0.0089	0.00		4:05:49 PM
11	L12050052-16	88.4	-0.0937	0.00		4:06:07 PM
12	L12050052-17 (3)	163.8	-0.1800	0.00		4:07:01 PM
13	L12050011-01 (2)	179.5	-0.1987	0.00		4:07:19 PM
14	L12050011-03 (2)	180.6	-0.2000	0.00		4:08:13 PM
15	L12050089-01 (4)	189.3	-0.2105	0.00		4:08:31 PM
16	L12050089-02	237.8	-0.2704	0.00		4:09:25 PM
17	L12050089-03 (50)	30.4	-0.0304	0.00		4:09:43 PM
18	L12050089-04	67.0	-0.0700	0.00		4:10:37 PM
19	L12050089-06 (3)	167.1	-0.1839	0.00		4:10:55 PM

Handwritten: ST5/12

Report Date : 05/04/2012	Run Date : 5/4/2012	Operator : WESTCO	Plan # : 20120504006
Plan Description : ALK-D-DIH/5/4/2012			

MICROBAC (OVD)
SMARTCHEM REPORT (VER3.0.53)
NH3, TKN, NO3NO2 (MG/L N)
ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

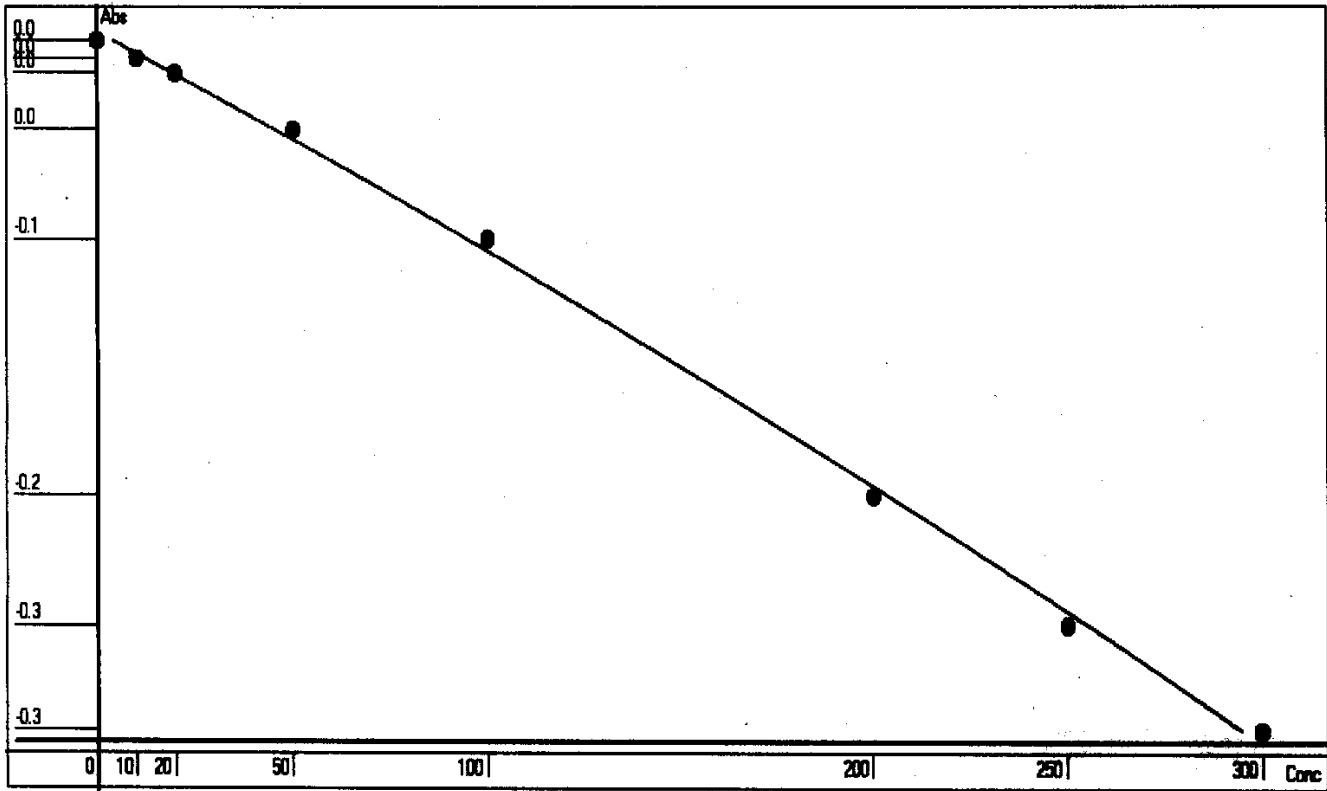
Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20	L12050089-07 (3)	110.4	-0.1183	0.00		4:11:49 PM
ST-2	CCV (150 mg/L)	169.2	-0.1864	112.79		4:12:07 PM
ST-3	CCB (0 mg/L)	14.9	-0.0139	0.00		4:13:01 PM
21	L12050089-08	285.4	-0.3319	0.00		4:13:19 PM
22	L12050089-11	263.2	-0.3029	0.00		4:14:13 PM
23	L12050089-12 (10)	57.1	-0.0592	0.00		4:14:31 PM
24	L12050089-13	57.9	-0.0601	0.00		4:15:25 PM
25	WG397067-05 DUP	52.1	-0.0538	0.00		4:15:43 PM
26	ID 26	13.0X	-0.0120	0.00		4:16:37 PM
27	ID 27	10.9X	-0.0098	0.00		4:16:55 PM
ST-2	CCV (150 mg/L)	173.7	-0.1918	115.82		4:17:49 PM
ST-3	CCB (0 mg/L)	7.2	-0.0060	0.00		4:18:07 PM

Report Date : 05/04/2012 Run Date : 5/4/2012 Operator : WESTCO Plan # : 20120504006
Plan Description : ALK-D-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan #: 20120504006 Description: [ALK-D-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0027	0	4.1498	414.98
2	-0.0114	10	12.4314	24.31
3	-0.0186	20	19.2503	-3.75
4	-0.0464	50	45.2826	-9.43
5	-0.1007	100	94.7724	-5.23
6	-0.2282	200	203.9207	1.96
7	-0.2930	250	255.5999	2.24
8	-0.3445	300	294.8485	-1.72

Conc= -304.4592*Abso^2 -956.2017*Abso +1.5703 R²=0.9985

RBL
0.5321
0

Report Date 5/4/2012 Run Date 5/4/2012

MICROBAC (OVD)
 SMARTCHEM REPORT (VER3.0.53)
 NH3, TKN, NO3NO2 (MG/L N)
 ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#[/Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.0	0.4640	0.00		4:42:25 PM
DIL-1	RBL	0.0	0.4621	0.00		4:42:43 PM
DIL-1	RBL	0.0	0.4624	0.00		4:43:37 PM
DIL-1	Std-1	0.0	-0.0010	0.00		4:43:55 PM
SR5-1	Std-2	10.0	-0.0115	0.00		4:44:40 PM
SR5-2	Std-3	20.0	-0.0254	0.00		4:45:07 PM
SR5-3	Std-4	50.0	-0.0507	0.00		4:46:01 PM
SR5-4	Std-5	100.0	-0.0988	0.00		4:46:19 PM
SR5-5	Std-6	200.0	-0.2095	0.00		4:47:13 PM
SR5-6	Std-7	250.0	-0.2637	0.00		4:47:31 PM
SR5-7	Std-8	300.0	-0.3091	0.00		4:48:25 PM
1	ICV 250	254.7	-0.2647	0.00		4:48:43 PM
2	WG397079-01 BLK	-18.1X	0.0171	0.00	INV,>,LL	4:49:38 PM
3	WG397079-02 LCS	200.9	-0.2083	0.00		4:49:56 PM
4	WG397079-03 LCSDUP	200.0	-0.2073	0.00		4:50:50 PM
5	L12040963-03 (2)	170.8	-0.1769	0.00		4:51:08 PM
6	L12050052-03 (2)	211.6	-0.2194	0.00		4:52:02 PM
7	L12050089-14 (50)	3.8	-0.0051	0.00		4:52:20 PM
8	L12050050-01	304.3X	-0.3171	0.00	>,LH	4:53:14 PM
9	L12050050-03	313.6X	-0.3269	0.00	>,LH	4:53:32 PM
10	L12050050-05 (5)	382.3X	-0.4003	0.00	>,LH	4:54:26 PM
ST-2	CCV (150 mg/L)	154.3	-0.1597	102.85		4:54:44 PM
ST-3	CCB (0 mg/L)	-14.5	0.0135	0.00	INV,>,LL	4:55:38 PM
11	L12050050-07	165.8	-0.1715	0.00		4:55:56 PM
12	L12050099-01 (2)	152.8	-0.1582	0.00		4:56:50 PM
13	L12050099-03	263.4	-0.2738	0.00		4:57:08 PM
14	L12050099-05	182.2	-0.1887	0.00		4:58:02 PM
15	L12050099-07 (2)	195.0	-0.2021	0.00		4:58:20 PM
16	L12050099-09	263.0	-0.2734	0.00		4:59:14 PM
17	WG397079-05 DUP	180.0	-0.1865	0.00		4:59:32 PM
18	05-152-02 (5)	92.9	-0.0963	0.00		5:00:26 PM
19	152-03 (5)	60.6	-0.0631	0.00		5:00:44 PM

Report Date :05/04/2012 Run Date :5/4/2012 Operator : WESTCO Plan # :20120504007
 Plan Description : ALK-E-DIH/5/4/2012

MICROBAC (OVD)
 SMARTCHEM REPORT (VER3.0.53)
 NH3, TKN, NO3NO2 (MG/L N)
 ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

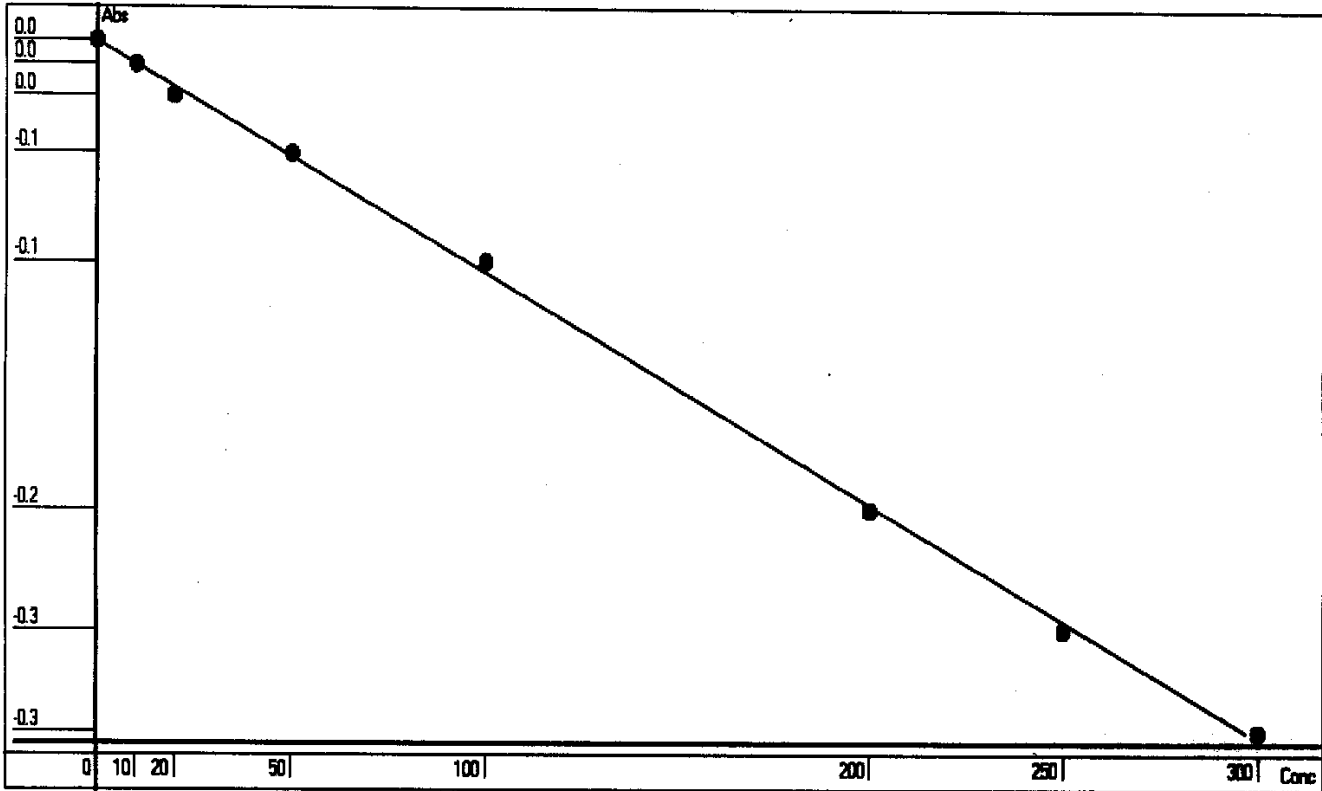
Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20 05-152	-05 (5)	184.8	-0.2019	0.00		5:01:38 PM
ST-2	CCV (150 mg/L)	157.2	-0.1627	104.77		5:01:56 PM
ST-3	CCB (0 mg/L)	-7.2	0.0061	0.00	INV,><,LL	5:02:50 PM
21 05-152	-06 (5)	84.3	-0.0875	0.00		5:03:08 PM
22 152	-08 (5) (25)	39.6	-0.0417	0.00		5:04:02 PM
23 152	-09 (5)	121.4	-0.1257	0.00		5:04:20 PM
24	ID 24 Blank	-6.5	0.0053	0.00	INV,><,LL	5:05:14 PM
25	ID 25	-9.2	0.0080	0.00	INV,><,LL	5:05:32 PM
ST-2	CCV (150 mg/L)	157.5	-0.1631	105.03		5:06:26 PM
ST-3	CCB (0 mg/L)	-4.5	0.0033	0.00	INV,><,LL	5:06:44 PM
8-[1/2]	L12050050-01	344.2	-0.1782	0.00	LH	5:14:24 PM
9-[1/2]	L12050050-03	358.4	-0.1856	0.00	LH	5:15:36 PM
10-[1/2]	L12050050-05 (5)	689.1	-0.3599	0.00	><,LH	5:16:48 PM
ST-2	CCV (150 mg/L)	155.9	-0.1614	103.94		5:16:48 PM
ST-3	CCB (0 mg/L)	-6.6	0.0053	0.00	INV,><,LL	5:17:42 PM
10-[1/4]	L12050050-05 (5)	874.9	-0.2269	0.00	LH	5:25:23 PM
ST-2	CCV (150 mg/L)	160.0	-0.1657	106.70		5:25:23 PM
ST-3	CCB (0 mg/L)	-1.6	0.0003	0.00	INV,><,LL	5:26:17 PM

Report Date :05/04/2012 Run Date :5/4/2012 Operator : WESTCO Plan # :20120504007
 Plan Description : ALK-E-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan #: 20120504007 Description: [ALK-E-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0010	0	-0.2946	-29.46
2	-0.0115	10	10.0381	0.38
3	-0.0254	20	23.6941	18.47
4	-0.0507	50	48.4842	-3.03
5	-0.0988	100	95.3808	-4.62
6	-0.2095	200	202.1461	1.07
7	-0.2637	250	253.8272	1.53
8	-0.3091	300	296.8176	-1.06
Conc = -66.2797*Abso^2 - 984.8902*Abso - 1.2794 R²=0.9993				RBL 0.4623 0

Report Date 5/4/2012 Run Date 5/4/2012

2.4.2 Nitrate Data

2.4.2.1 Summary Data



Login Number: L12050099
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 353.2/SM4500-NO3 F (Nitrate)

HOLDING TIMES

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

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46566

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-13-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: SC12050708512501
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.0940		0.0500	0.0250

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-26-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: SC12050708512701
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8		U	0.0500	0.0250
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: SC12050708513501
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.844		0.0500	0.0250

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: PZ-03-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: SC12050708513901
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8		U	0.0500	0.0250
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: DUP-GW-050212	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 05/03/2012 11:25
Workgroup #: WG396946	Analyst: DIH	Run Date: 05/03/2012 14:47
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: SC12050708514501
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8		U	0.0500	0.0250
U	Not detected at or above adjusted sample detection limit.				

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: 03-MAY-2012
 Analyst: DIH
 Analyst: NA
 Method: NO3
 Instrument: SC
 Curve Workgroup: NA
 Runlog ID: _____
 Analytical Workgroups: WG396946

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	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
05-MAY-2012

Secondary Reviewer:
05-MAY-2012





Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method: 353.2
 Login Number: L12050099

AAB#: WG396946

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-13-050212	01	05/02/12								2	05/03/12	1.1	2	
MW-26-050212	03	05/02/12								2	05/03/12	1.2	2	
MW-25-050212	05	05/02/12								2	05/03/12	1	2	
PZ-03-050212	07	05/02/12								2	05/03/12	1	2	
DUP-GW-050212	09	05/02/12								2	05/03/12	1.2	2	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2404972
 Report generated 05/08/2012 08:22



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG396946
 Blank File ID: SC12050708454601 Blank Sample ID: WG396946-01
 Prep Date: 05/03/12 14:47 Instrument ID: SMARTCHEM
 Analyzed Date: 05/03/12 14:47 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	WG396946-05	SC12050708461001	05/03/12 14:47	
LCS	WG396946-02	SC12050708455301	05/03/12 14:47	
MW-25-050212	L12050099-05	SC12050708513501	05/03/12 14:47	
MW-13-050212	L12050099-01	SC12050708512501	05/03/12 14:47	
LCS2	WG396946-03	SC12050708455701	05/03/12 14:47	
PZ-03-050212	L12050099-07	SC12050708513901	05/03/12 14:47	
MW-26-050212	L12050099-03	SC12050708512701	05/03/12 14:47	
DUP-GW-050212	L12050099-09	SC12050708514501	05/03/12 14:47	

Report Name: BLANK_SUMMARY
 PDF File ID: 2404973
 Report generated 05/08/2012 08:22



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/03/12 14:47 Sample ID: WG396946-01
Instrument ID: SMARTCHEM Run Date: 05/03/12 14:47 Prep Method: 353.2
File ID: SC12050708454601 Analyst: DIH Method: 353.2
Workgroup (AAB#): WG396946 Matrix: Water Units: mg/L
Contract #: _____ Cal ID: SMARTC-03-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: 2404974
08-MAY-2012 08:22



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: DIH Prep Method: 353.2
Instrument ID: SMARTCHEM Matrix: Water Method: 353.2
Workgroup (AAB#): WG396946 Units: mg/L
QC Key: WATERLOO Lot #: STD48249
Sample ID: WG396946-02 LCS File ID: SC12050708455301 Run Date: 05/03/2012 14:47
Sample ID: WG396946-03 LCS2 File ID: SC12050708455701 Run Date: 05/03/2012 14:47

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Nitrate (as N)	1.00	0.991	99.1	1.00	1.01	101	1.40	90 - 110	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2404975
Report generated: 05/08/2012 08:22



2.4.2.3 Raw Data

SMARTCHEM RUN LOG

Daily Check

- Lamp On
- Probe Rinse Full
- DI Water > 1/2 Full
- Wash Solution > 1/2 Full
- NO3 Reagent bottle connected / purged
- NO3 pH adj to pH 5-9
- Syringe filter lot # 141872
- WBL Run
- Reagents Full
- Dilution H₂O Full
- Waste Container Check

- 1) Workgroup _____
Plan # 20120503003
- 2) Workgroup _____
Plan # _____
- 3) Workgroup _____
Plan # _____

Analyte	1	2	3
	NO3		
	Dilution		
SC Prepared Curve			
Position			
1-1	ICV	1.5	
1-2	BIK		
1-3	LCS 1		
1-4	LCS DUP		
1-5	NO2 L		
1-6	05-028-01-01	1/10	color
1-7	090-02	1/20	auto 12 ↓
1-8	03	1/20	auto 12 ↓
1-9	08		
1-10	09		
1-11	05-054-01		
1-12	02		
1-13	03		
1-14	04		
1-15	05		
1-16	05-055-01-06		
1-17	02 07		
1-18	03 08		
1-19	05-068-01-11		
1-20	05-083-01 18		
1-21	05-099-01 13		
1-22	03		
2-1	05		
2-2	07		
2-3	09		

Position	Analyte	1	2	3
2-4	DUP 068-01			
2-5	MS ↓			
2-6	MS 099-01-05			
2-7 R	NO2			
2-8 R	LCS			
2-9 R				
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#90744



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	NO3	Reagents
SOP & Revision	K 3532 R10	R6+ 17254
Curve Stock (SC made)	std 50996	R0+ 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:

Deanna Lesar

Date:

5/3/12

DCN#90744



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	0.0674	0.00		2:35:39 PM
DIL-1	RBL	0.000	0.0255	0.00		2:36:51 PM
DIL-1	RBL	0.000	0.0199	0.00		2:38:03 PM
DIL-1	RBL	0.000	0.0188	0.00		2:39:15 PM
DIL-1	Std-1	0.000	-0.0040	0.00	INV	2:40:27 PM
SR5-1	Std-2	0.040	0.0087	0.00		2:41:39 PM
SR5-2	Std-3	0.100	0.0228	0.00		2:42:51 PM
SR5-3	Std-4	0.500	0.1520	0.00		2:44:03 PM
SR5-4	Std-5	1.000	0.3041	0.00		2:45:15 PM
ST-1	Std-6	2.000	0.6399	0.00		2:46:27 PM
1	ICV 1.5	1.530	0.4839	0.00		2:47:39 PM
2	WG396946-01 BLK	-0.003	-0.0087	0.00	INV,>,LL	2:48:51 PM
3	WG396946-02 LCS	0.991	0.3109	0.00		2:50:03 PM
4	WG396946-03 LCSDUP	1.005	0.3153	0.00		2:51:15 PM
5	NO2	0.772 X	0.2403	0.00		2:52:27 PM
6	L12050090-01 (10)	0.338	0.1009	0.00	0.073	2:53:39 PM
7	L12050090-02 (20)	14.352 X	4.6053	0.00	X,LH	2:54:51 PM
8	L12050090-03 (20)	14.397 X	4.6198	0.00	X,LH	2:56:03 PM
9	L12050090-08	0.084	-0.0193	0.00	0	2:57:15 PM
10	L12050090-09	0.033	0.0027	0.00	0	2:58:28 PM
ST-2	CCV (1 mg/L)	0.928	0.2905	92.79		2:59:39 PM
ST-3	CCB (0 mg/L)	-0.004	-0.0089	0.00	INV,>,LL	3:00:51 PM
11	L12050054-01	0.133	0.0351	0.00	0.005	3:02:04 PM
12	L12050054-02	0.120	0.0309	0.00	0.007	3:03:16 PM
13	L12050054-03	3.192 X	1.0182	0.00	X,LH	3:04:28 PM
14	L12050054-04	0.012	-0.0038	0.00	INV 0	3:05:40 PM
15	L12050054-05	0.013	-0.0036	0.00	INV	3:06:52 PM
16	L12050055-01	1.866	0.5921	0.00	0.118	3:08:04 PM
17	L12050055-02	1.860	0.5901	0.00	0.120	3:09:16 PM
18	L12050055-03	2.849 X	0.9078	0.00	X,LH	3:10:28 PM
19	L12050068-01	0.077	0.0169	0.00	0	3:11:40 PM
20	L12050083-01	0.042	0.0056	0.00	0	3:12:52 PM

Report Date :05/03/2012 Run Date :5/3/2012 Operator : WESTCO Plan # :20120503003
 Plan Description : NO3-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 : WNO3 - EPA 353.2 Nitrate-Nitrite

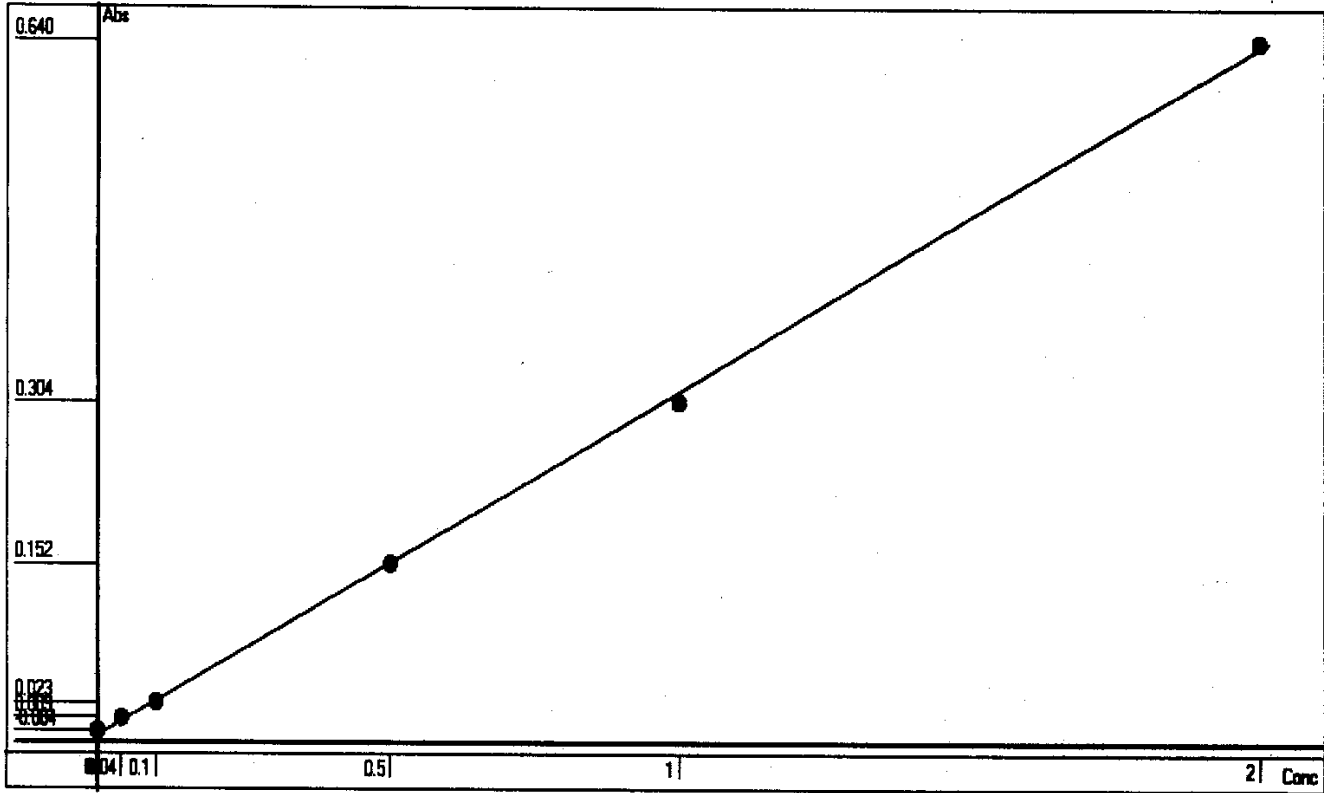
Smp#[/Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
ST-2	CCV (1 mg/L)	0.957	0.2997	95.65		3:14:04 PM
ST-3	CCB (0 mg/L)	0.001	-0.0073	0.00	INV,X	3:15:16 PM
21	L12050099-01	0.094	0.0223	0.00		3:16:28 PM
22	L12050099-03	0.004	-0.0065	0.00	INV,X 0	3:17:40 PM
23	L12050099-05	0.844	0.2634	0.00		3:18:52 PM
24	L12050099-07	0.010	-0.0044	0.00	INV,X 0	3:20:04 PM
25	L12050099-09	0.001	-0.0075	0.00	INV,X 0	3:21:16 PM
26	DUP 068-01	0.072	0.0153	0.00		3:22:28 PM
27	MS 068-01	0.532	0.1631	0.00		3:23:40 PM
28	MS 099-01	1.327	0.4187	0.00		3:24:52 PM
29	ID 29 <i>NO2</i>	1.093	0.3435	0.00		3:26:04 PM
30	ID 30	1.022 <i>X</i>	0.3207	0.00		3:27:16 PM
ST-2	CCV (1 mg/L)	0.946	0.2964	94.63		3:28:28 PM
ST-3	CCB (0 mg/L)	0.002	-0.0072	0.00	INV,X	3:29:40 PM
7-[1/4]	L12050090-02 <i>(2)(20)</i>	9.609 <i>X</i>	0.7644	0.00	X,LH	3:38:50 PM
8-[1/4]	L12050090-03 <i>(2)(20)</i>	9.750 <i>X</i>	0.7757	0.00	X,LH	3:40:56 PM
13-[1/4]	L12050054-03	3.564	0.2786	0.00	LH 0.030	3:43:02 PM
18-[1/4]	L12050055-03	3.106	0.2418	0.00	LH 0.134	3:45:09 PM
ST-2	CCV (1 mg/L)	0.940	0.2944	94.00		3:46:02 PM
ST-3	CCB (0 mg/L)	-0.002	-0.0084	0.00	INV,X,LL	3:47:14 PM
7-[1/8]	L12050090-02 <i>(2)(20)</i>	10.213	0.4026	0.00	LH 1.46	3:56:25 PM
8-[1/8]	L12050090-03 <i>(2)(20)</i>	10.196	0.4019	0.00	LH 1.12	3:58:30 PM
ST-2	CCV (1 mg/L)	0.929	0.2909	92.91		3:59:25 PM
ST-3	CCB (0 mg/L)	-0.002	-0.0085	0.00	INV,X,LL	4:00:37 PM

Report Date :05/03/2012 Run Date :5/3/2012 Operator : WESTCO Plan # :20120503003
 Plan Description : NO3-A-DIH/5/3/2012

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan #: 20120503003 Description: [NO3-A-DIH/5/3/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0040	0	0.0117	1.17
2	0.0087	0.04	0.0512	28.00
3	0.0228	0.1	0.0950	-5.00
4	0.1520	0.5	0.4970	-0.60
5	0.3041	1	0.9702	-2.98
6	0.6399	2	2.0150	0.75

Conc= +3.1112*Abso +0.0241 R²=0.9995

RBL
0.0227
0

Report Date 5/3/2012 Run Date 5/3/2012

2.4.3 Phosphorus Data

2.4.3.1 Summary Data



Login Number: L12050099
Department: Conventionals
Analyst: Jeremy Kinney

METHOD

Analysis EPA 365.4 (Phosphorus)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46564

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-13-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:43
Collect Date: 05/02/2012 11:30	Dilution: 1	File ID: SC120515001.011
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	0.159		0.200	0.100

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-26-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:44
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: SC120515001.012
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 #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:44
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: SC120515001.013
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 #: L12050099-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: PZ-03-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:45
Collect Date: 05/02/2012 14:30	Dilution: 1	File ID: SC120515001.014
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	0.204		0.200	0.100

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: DUP-GW-050212	Prep Method: 365.4	Prep Date: N/A
Matrix: Water	Analytical Method: 365.4	Cal Date: 05/15/2012 08:40
Workgroup #: WG397809	Analyst: JBK	Run Date: 05/15/2012 08:45
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: SC120515001.015
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0		U	0.200	0.100
U	Not detected at or above adjusted sample detection limit.				

2.4.3.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
 $y = mx + b$

Step 2: Calculate the instrument concentration, x

Where:

$$x = (y - b)/m$$

Step 3: Solve for analyte concentration in sample, Cx

$$Cx = (x) (D)$$

Example Calculation (LCS):

Value of m from plot:	7.809
Value of b from plot:	0.0004135
Absorbance of unknown from quantitation report (y):	0.31
Calculated concentration (x):	0.03964483
Dilution factor (D):	1.00
Concentration of analyte in sample, Cy:	0.0396 mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

A, B, C = constants from the ICAL quadratic regression

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

$$y = Ax^2 + Bx + C$$

Step 3: Solve for analyte concentration in sample, Cy

$$Cy = (y) (D)$$

Example Calculation (LCS):

Value of A from plot:	101.2796
Value of B from plot:	318.9056
Value of C from plot:	-2.2712
Absorbance of unknown from quantitation report (x):	0.1583
Calculated concentration (y):	50.7495108
Dilution factor (D):	1.00
Concentration of analyte in sample, Cy:	50.75 mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 15-MAY-2012
 Analyst: JBK
 Analyst: NA
 Method: PHOS
 Instrument: SC
 Curve Workgroup: NA
 Runlog ID: _____
 Analytical Workgroups: WG397809

Calibration/Linearity	05/15/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JBK
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
16-MAY-2012



Secondary Reviewer:
16-MAY-2012




Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method: 365.4
 Login Number: L12050099

AAB#: WG397809

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-13-050212	01	05/02/12								28	05/15/12	12.9	28	
MW-26-050212	03	05/02/12								28	05/15/12	12.9	28	
MW-25-050212	05	05/02/12								28	05/15/12	12.8	28	
PZ-03-050212	07	05/02/12								28	05/15/12	12.8	28	
DUP-GW-050212	09	05/02/12								28	05/15/12	12.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2417189
 Report generated 05/16/2012 14:42



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397809
 Blank File ID: SC120515001.008 Blank Sample ID: WG397809-01
 Prep Date: 05/15/12 08:41 Instrument ID: SMARTCHEM
 Analyzed Date: 05/15/12 08:41 Method: 365.4
 Analyst: JBK

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397809-02	SC120515001.009	05/15/12 08:42	01
MW-13-050212	L12050099-01	SC120515001.011	05/15/12 08:43	01
MW-26-050212	L12050099-03	SC120515001.012	05/15/12 08:44	01
MW-25-050212	L12050099-05	SC120515001.013	05/15/12 08:44	01
PZ-03-050212	L12050099-07	SC120515001.014	05/15/12 08:45	01
DUP-GW-050212	L12050099-09	SC120515001.015	05/15/12 08:45	01
DUP	WG397809-04	SC120515001.023	05/15/12 08:50	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2417191
 Report generated 05/16/2012 14:42



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/15/12 08:41 Sample ID: WG397809-01
Instrument ID: SMARTCHEM Run Date: 05/15/12 08:41 Prep Method: 365.4
File ID: SC120515001.008 Analyst: JBK Method: 365.4
Workgroup (AAB#): WG397809 Matrix: Water Units: mg/L
Contract #: _____ Cal ID: SMARTC-15-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Phosphorus, Total	0.100	0.200	0.100	1	U

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

Report Name: BLANK
PDF ID: 2417192
16-MAY-2012 14:42



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Run Date: 05/15/2012 Sample ID: WG397809-02
Instrument ID: SMARTCHEM Run Time: 08:42 Prep Method: 365.4
File ID: SC120515001.009 Analyst: JBK Method: 365.4
Workgroup (AAB#): WG397809 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51133 Cal ID: SMARTC-15-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Phosphorus, Total	1.00	0.973	97.3	70 - 130	

LCS - Modified 03/06/2008
PDF File ID: 2417194
Report generated: 05/16/2012 14:42



2.4.3.3 Raw Data

SMARTCHEM RUN LOG

Daily Check

- Lamp On
- Probe Rinse Full
- DI Water > 1/2 Full
- Wash Solution > 1/2 Full
- NO3 Reagent bottle connected / purged
- NO3 pH adj to pH 5-9
- Syringe filter lot # _____
- WBL Run
- Reagents Full
- Dilution H₂O Full
- Waste Container Check

- 1) Workgroup _____
Plan # 26/20515001
- 2) Workgroup _____
Plan # _____
- 3) Workgroup _____
Plan # _____

Analyte	1	2	3
<i>Dios</i>	Dilution		
SC Prepared Curve			
Position			
1-1	<i>TCU 15</i>		
1-2	<i>Blank</i>		
1-3	<i>LCS 1</i>		
1-4	<i>05-274-03</i>	<i>1/250</i>	
1-5	<i>05-099-01</i>		
1-6	<i>-03</i>		
1-7	<i>-05</i>		
1-8	<i>-07</i>		
1-9	<i>-09</i>		
1-10	<i>05-153-01</i>		
1-11	<i>-03</i>		
1-12	<i>-05</i>		
1-13	<i>-07</i>		
1-14	<i>05-171-01</i>		
1-15	<i>Dup -01</i>		
1-16	<i>MS -02</i>		
1-17	<i>SD -05</i>		
1-18	<i>-07</i>		<i>✓</i>
1-19	<i>05-220-01</i>		
1-20	<i>-03</i>		
1-21	<i>-05</i>		
1-22	<i>-07</i>		
2-1	<i>05-284-01</i>		
2-2	<i>-03</i>		
2-3	<i>-05</i>		

Position	Analyte	1	2	3
2-4	<i>05-284-07</i>			
2-5	<i>MS ↓</i>			
2-6				
2-7				
2-8				
2-9				
2-10				
2-11				
2-12				
2-13				
2-14				
2-15				
2-16				
2-17				
2-18				
2-19				
2-20				
2-21				
2-22				
2-23				
2-24				
2-25				
2-26				
3-1				
3-2				

NOTES:
 * Run NO2 std on NO3 runs
 * LCS/LCS Dup all parameters
 *MS(10% sample): NO3, TKN, NH3

DCN#90873



SMARTCHEM RUN LOG

Analyte	1	2	3
Position			
3-3			
3-4			
3-5			
3-6			
3-7			
3-8			
3-9			
3-10			
3-11			
3-12			
3-13			
3-14			
3-15			

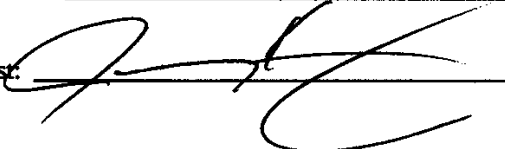
Analyte	1	2	3
Position			
3-16			
3-17			
3-18			
3-19			
3-20			
3-21			
3-22			
3-23			
3-24			
3-25			
3-26			
3-27			
3-28			

- Chloride EPA 325.2/SM 4500-Cl E
- 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	123454214	17274
Curve Stock (SC made)		14897
Curve ID (user made)	See	17324
ICV		
CCV	Digest	
LCS		
MS	Dilution 10x	

Comments: _____

Analyst: 

Date: 5/15/12

DCN#90873



TKN/Phosphorus Digestion Log

TKN WG: 397809982/5/11
 TKN Std: _____
 TKN CCV: _____
 TKN ICV: _____
 TKN LCS: _____

Phos WG: 397809
 Phos Std: STD 51519
 Phos CCV: ↓ 1/2(2) = 1
 Phos ICV: STD 51132
 Phos LCS: STD 51133


MS/MSD: STD 51384

Daily Dilution: 1/25(25) = 1

Block Digester Temperature: 380 °C

Digest Reagent: RG17224

	Sample	Volume	TKN Dilution	Phos Dilution		Sample	Volume	TKN Dilution	Phos Dilution
1	STD				26	05-28403			
2	CCV				27	-05			
3	ICV				28	-07			
4	Blank				29	MS ↓			
5	LCS				30				
6	05-274-03			1/250	31				
7	05-099-01				32				
8	-03				33				
9	-05				34				
10	-07				35				
11	-09				36				
12	05-153-01				37				
13	-03				38				
14	-05				39				
15	-07				40				
16	05-171-01				41				
17	DUP-01				42				
18	MS-03				43				
19	SD-05				44				
20	-07				45				
21	05-224-01				46				
22	-03				47				
23	-05				48				
24	-07				49				
25	05-284-01				50				

Analyst:  Date: 5/12/12

MICROBAC (OVD)
 SMARTCHEM REPORT (VER3.0.53)
 NH3, TKN, NO3NO2 (MG/L N)
 ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WTPH - EPA 365.4 TOTAL PHOSPHORUS

Smp#[[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.000	0.0246	0.00		8:35:47 AM
DIL-1	RBL	0.000	0.0238	0.00		8:36:05 AM
DIL-1	RBL	0.000	0.0243	0.00		8:36:59 AM
SR5-1	Std-1	0.010	0.0023	0.00		8:37:17 AM
SR5-2	Std-2	0.200	0.0308	0.00		8:38:11 AM
SR5-3	Std-3	0.500	0.0704	0.00		8:38:29 AM
SR5-4	Std-4	1.000	0.1340	0.00		8:39:24 AM
SR5-5	Std-5	1.500	0.2111	0.00		8:39:41 AM
ST-1	Std-6	2.000	0.2749	0.00		8:40:36 AM
1	ICV 1.5	1.439	0.1989	0.00		8:40:53 AM
2	WG397809-01 BLANK	-0.008	0.0004	0.00	>,LL	8:41:47 AM
3	WG397809-02 LCS1	0.973	0.1349	0.00		8:42:05 AM
4	L12050274-03 (250)	1.290	0.1784	0.00		8:42:59 AM
5	L12050099-01	0.159	0.0233	0.00		8:43:17 AM
6	L12050099-03	-0.025	-0.0021	0.00	INV,>,LL	8:44:11 AM
7	L12050099-05	-0.039	-0.0040	0.00	INV,>,LL	8:44:29 AM
8	L12050099-07	0.204	0.0294	0.00		8:45:23 AM
9	L12050099-09	-0.049	-0.0054	0.00	INV,>,LL	8:45:41 AM
10	L12050153-01	-0.025	-0.0019	0.00	INV,>,LL	8:46:35 AM
ST-2	CCV (1 mg/L)	0.999	0.1385	99.88		8:46:53 AM
ST-3	CCB (0 mg/L)	-0.066	-0.0077	0.00	INV,>,LL	8:47:47 AM
11	L12050153-03	-0.021	-0.0015	0.00	INV,>,LL	8:48:05 AM
12	L12050153-05	-0.027	-0.0023	0.00	INV,>,LL	8:49:00 AM
13	L12050153-07	-0.073	-0.0087	0.00	INV,>,LL	8:49:17 AM
14	L12050171-01	0.110	0.0186	0.00		8:50:11 AM
15	WG397809-04 DUP	0.162	0.0237	0.00		8:50:29 AM
16	L12050171-03 MS	1.000	0.1387	0.00	EPL	8:51:24 AM
17	L12050171-05 SD	1.041	0.1443	0.00		8:51:41 AM
18	L12050171-07	2.720	0.3747	0.00	>,LH	8:52:36 AM
19	L12050226-01	0.471	0.0660	0.00		8:52:53 AM
20	L12050226-03	-0.005	0.0007	0.00	>,LL	8:53:48 AM
ST-2	CCV (1 mg/L)	0.951	0.1320	95.14		8:54:05 AM

Report Date :05/15/2012 Run Date :5/15/2012 Operator : WESTCO Plan # :20120515001
 Plan Description : PHOS-A-JBK/05/15/2012

MICROBAC (OVD)
 SMARTCHEM REPORT (VER3.0.53)
 NH3, TKN, NO3NO2 (MG/L N)
 ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WTPH - EPA 365.4 TOTAL PHOSPHORUS

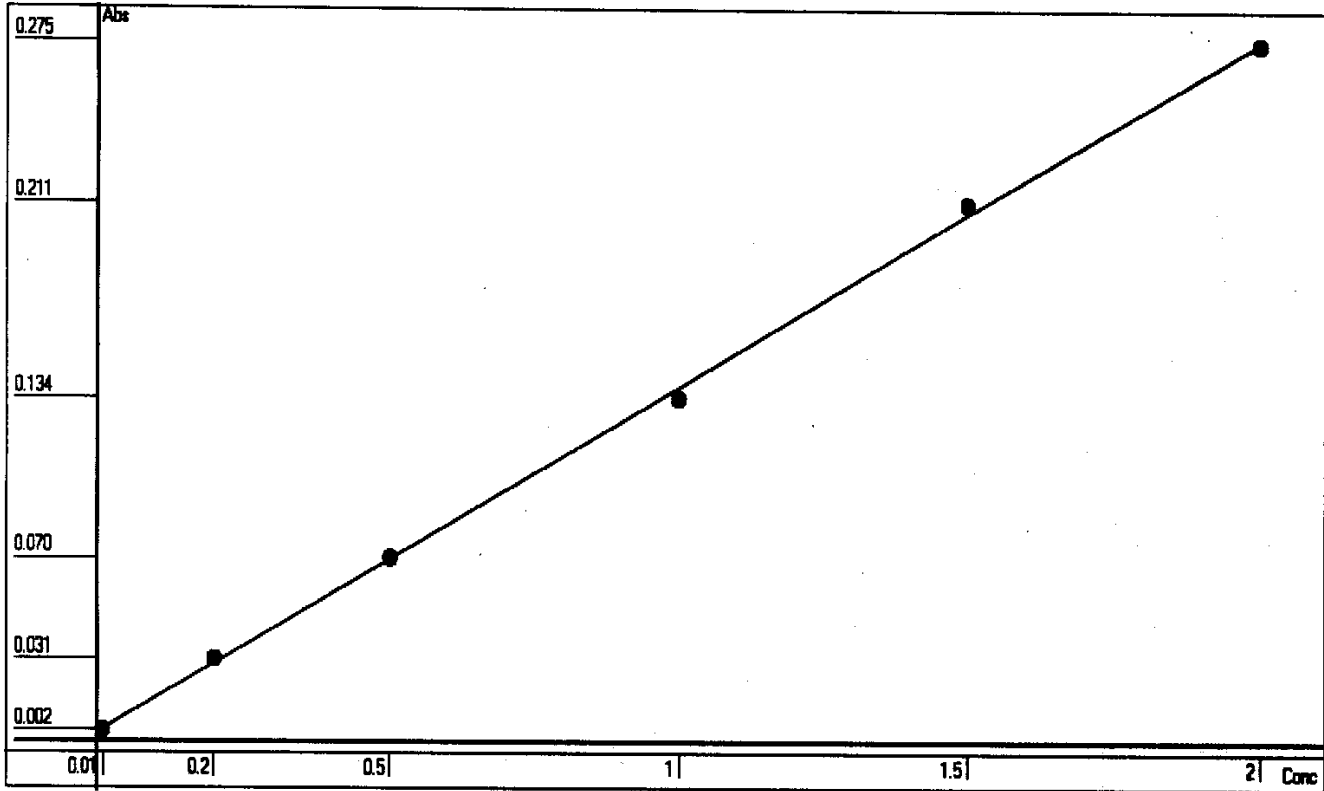
Smp#[/Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
ST-3	CCB (0 mg/L)	-0.066	-0.0077	0.00	INV,>,LL	8:54:59 AM
21	L12050226-05	-0.071	-0.0084	0.00	INV,>,LL	8:55:17 AM
22	L12050226-07	0.591	0.0826	0.00		8:56:11 AM
23	L12050284-01	0.658	0.0918	0.00		8:56:29 AM
24	L12050284-03	0.082	0.0127	0.00		8:57:23 AM
25	L12050284-05	-0.033	-0.0032	0.00	INV,>,LL	8:57:41 AM
26	L12050284-07	0.062	0.0098	0.00		8:58:35 AM
27	WG397809-08 MS	0.724	0.1008	0.00	EPL	8:58:53 AM
28	ID 28	0.836	0.1161	0.00		8:59:47 AM
ST-2	CCV (1 mg/L)	0.985	0.1366	98.50		9:00:05 AM
ST-3	CCB (0 mg/L)	-0.046	-0.0050	0.00	INV,>,LL	9:00:59 AM
18-[1/2]	L12050171-07	2.639	0.1825	0.00	LH	9:08:40 AM
ST-2	CCV (1 mg/L)	0.984	0.1364	98.35		9:08:40 AM
ST-3	CCB (0 mg/L)	-0.038	-0.0038	0.00	INV,>,LL	9:09:34 AM

Report Date :05/15/2012 Run Date :5/15/2012 Operator : WESTCO Plan # :20120515001
 Plan Description : PHOS-A-JBK/05/15/2012

Calibrant Report - WTPH -

Calib Lot #:010104 Exp Date:6/18/2020 User:MICROBAC

Plan #: 20120515001 Description: [PHOS-A-JBK/05/15/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0023	0.01	0.0065	-35.00
2	0.0308	0.2	0.2142	7.10
3	0.0704	0.5	0.5028	0.56
4	0.1340	1	0.9664	-3.36
5	0.2111	1.5	1.5283	1.89
6	0.2749	2	1.9933	-0.34

Conc= +7.2886*Abso -0.0103 R²=0.9993

RBL
0.0245
0

Report Date 5/15/2012 Run Date 5/15/2012

2.4.4 Sulfate Data

2.4.4.1 Summary Data



Login Number: L12050099
Department: Conventionals
Analyst: Deanna Hesson

METHOD

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

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46565

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-13-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:12
Collect Date: 05/02/2012 11:30	Dilution: 2	File ID: SC120507003.015
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	46.9		10.0	5.00

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-26-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:13
Collect Date: 05/02/2012 10:55	Dilution: 2	File ID: SC120507003.016
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	46.4		10.0	5.00

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: MW-25-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:14
Collect Date: 05/02/2012 14:10	Dilution: 2	File ID: SC120507003.017
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	38.0		10.0	5.00

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: PZ-03-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:24
Collect Date: 05/02/2012 14:30	Dilution: 10	File ID: SC120507003.034
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	255		50.0	25.0

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: DUP-GW-050212	Prep Method: 375.4	Prep Date: N/A
Matrix: Water	Analytical Method: 375.4	Cal Date: 05/07/2012 14:08
Workgroup #: WG397213	Analyst: DIH	Run Date: 05/07/2012 14:16
Collect Date: 05/02/2012 10:05	Dilution: 2	File ID: SC120507003.020
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	54.4		10.0	5.00

2.4.4.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
 $y = mx + b$

Step 2: Calculate the instrument concentration, x

Where:

$$x = (y - b)/m$$

Step 3: Solve for analyte concentration in sample, Cx

$$Cx = (x) (D)$$

Example Calculation (LCS):

Value of m from plot:	7.809
Value of b from plot:	0.0004135
Absorbance of unknown from quantitation report (y):	0.31
Calculated concentration (x):	0.03964483
Dilution factor (D):	1.00
Concentration of analyte in sample, Cy:	0.0396 mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

A, B, C = constants from the ICAL quadratic regression

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

$$y = Ax^2 + Bx + C$$

Step 3: Solve for analyte concentration in sample, Cy

$$Cy = (y) (D)$$

Example Calculation (LCS):

Value of A from plot:	101.2796
Value of B from plot:	318.9056
Value of C from plot:	-2.2712
Absorbance of unknown from quantitation report (x):	0.1583
Calculated concentration (y):	50.7495108
Dilution factor (D):	1.00
Concentration of analyte in sample, Cy:	50.75 mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 07-MAY-2012
 Analyst: DIH
 Analyst: NA
 Method: SO4
 Instrument: SC
 Curve Workgroup: NA
 Runlog ID: _____
 Analytical Workgroups: WG397213

Calibration/Linearity	5/7/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
09-MAY-2012

Secondary Reviewer:
09-MAY-2012





Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method: 375.4
 Login Number: L12050099

AAB#: WG397213

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-13-050212	01	05/02/12								28	05/07/12	5.1	28	
MW-26-050212	03	05/02/12								28	05/07/12	5.1	28	
MW-25-050212	05	05/02/12								28	05/07/12	5	28	
PZ-03-050212	07	05/02/12								28	05/07/12	5	28	
DUP-GW-050212	09	05/02/12								28	05/07/12	5.2	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2407635
 Report generated 05/09/2012 12:34



METHOD BLANK SUMMARY

Login Number: L12050099
 Blank File ID: SC120507003.010
 Prep Date: 05/07/12 14:10
 Analyzed Date: 05/07/12 14:10
 Analyst: DIH

Work Group: WG397213
 Blank Sample ID: WG397213-01
 Instrument ID: SMARTCHEM
 Method: 375.4

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397213-02	SC120507003.011	05/07/12 14:10	01
LCS2	WG397213-03	SC120507003.012	05/07/12 14:11	01
MW-13-050212	L12050099-01	SC120507003.015	05/07/12 14:12	DL01
MW-26-050212	L12050099-03	SC120507003.016	05/07/12 14:13	DL01
MW-25-050212	L12050099-05	SC120507003.017	05/07/12 14:14	DL01
DUP-GW-050212	L12050099-09	SC120507003.020	05/07/12 14:16	DL01
DUP	WG397213-05	SC120507003.027	05/07/12 14:20	DL01
PZ-03-050212	L12050099-07	SC120507003.034	05/07/12 14:24	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2407636
 Report generated 05/09/2012 12:34



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/07/12 14:10 Sample ID: WG397213-01
Instrument ID: SMARTCHEM Run Date: 05/07/12 14:10 Prep Method: 375.4
File ID: SC120507003.010 Analyst: DIH Method: 375.4
Workgroup (AAB#): WG397213 Matrix: Water Units: mg/L
Contract #: _____ Cal ID: SMARTC-07-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Sulfate	2.50	5.00	2.50	1	U

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

Report Name: BLANK
PDF ID: 2407637
09-MAY-2012 12:34



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: DIH Prep Method: 375.4
 Instrument ID: SMARTCHEM Matrix: Water Method: 375.4
 Workgroup (AAB#): WG397213 Units: mg/L
 QC Key: WATERLOO Lot #: STD51193
 Sample ID: WG397213-02 LCS File ID: SC120507003.011 Run Date: 05/07/2012 14:10
 Sample ID: WG397213-03 LCS2 File ID: SC120507003.012 Run Date: 05/07/2012 14:11

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Sulfate	20.0	20.2	101	20.0	19.4	96.8	4.29	85 - 115	10	

LCS_LCS2 - Modified 03/06/2008
 PDF File ID: 2407638
 Report generated: 05/09/2012 12:34



2.4.4.3 Raw Data

SMARTCHEM RUN LOG

Daily Check

- Lamp On
- Probe Rinse Full
- DI Water > 1/2 Full
- Wash Solution > 1/2 Full
- NO3 Reagent bottle connected / purged
- NO3 pH adj to pH 5-9
- Syringe filter lot # 144930
- WBL Run
- Reagents Full
- Dilution H₂O Full
- Waste Container Check

- 1) Workgroup _____
Plan # 20120507003
- 2) Workgroup _____
Plan # _____
- 3) Workgroup _____
Plan # _____

Analyte	1	2	3
	504		
	Dilution		
SC Prepared Curve			
Position			
1-1	ICV 30		
1-2	BLK		
1-3	LCS 20		
1-4	LCS DUP		
1-5	05-150-30	1/5	color
1-6	05-09-01	1/2	
1-7	03	1/2	
1-8	05	1/2	
1-9	07	1/50	
1-10	09	1/2	
1-11	05-153-01	1/2	
1-12	03	1/10	
1-13	05	1/2	
1-14	07	1/5	
1-15	05-171-01	1/5	
1-16	DUP 01	1/5	
1-17	MS03	1/5	
1-18	MS05	1/5	
1-19	07	1/2	
1-20			
1-21			
1-22			
2-1	R05-099-07	1/10	
2-2			
2-3			

Position	Analyte	1	2	3
2-4				
2-5				
2-6				
2-7				
2-8				
2-9				
2-10				
2-11				
2-12				
2-13				
2-14				
2-15				
2-16				
2-17				
2-18				
2-19				
2-20				
2-21				
2-22				
2-23				
2-24				
2-25				
2-26				
3-1				
3-2				

NOTES:
 • Run NO2 std on NO3 runs
 • LCS/LCS Dup all parameters
 • MS(10% sample): NO3, TKN, NEE

DCN#90780



SMARTCHEM RUN LOG

Analyte	1	2	3
Position			
3-3			
3-4			
3-5			
3-6			
3-7			
3-8			
3-9			
3-10			
3-11			
3-12			
3-13			
3-14			
3-15			

Analyte	1	2	3
Position			
3-16			
3-17			
3-18			
3-19			
3-20			
3-21			
3-22			
3-23			
3-24			
3-25			
3-26			
3-27			
3-28			

- 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	14 3754 R 16	R6+ 17164
Curve Stock (SC made)	std 50590	R6+ 16922
Curve ID (user made)		
ICV	std 51192	
CCV	std 51191	
LCS	std 51193	
MS	std 49132	
	Dilution 0.1/1000 = 10	

Comments: _____

Analyst: Deanna Johnson

Date: 5/7/12

DCN#90780



MICROBAC (OVD)
 SMARTCHEM REPORT (VER3.0.53)
 NH3, TKN, NO3NO2 (MG/L N)
 ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WSO4 - EPA 375.4/SM 426 C (15TH)

Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.00	0.0005	0.00		2:02:54 PM
DIL-1	RBL	0.00	-0.0032	0.00	R	2:03:12 PM
DIL-1	RBL	0.00	0.0007	0.00		2:04:06 PM
DIL-1	Std-1	0.00	-0.0024	0.00	INV	2:04:24 PM
SR5-1	Std-2	5.00	0.0199	0.00		2:05:18 PM
SR5-2	Std-3	10.00	0.0491	0.00		2:05:36 PM
SR5-3	Std-4	15.00	0.0703	0.00		2:06:30 PM
SR5-4	Std-5	20.00	0.0849	0.00		2:06:48 PM
SR5-5	Std-6	25.00	0.1073	0.00		2:07:42 PM
SR5-6	Std-7	30.00	0.1171	0.00		2:08:00 PM
SR5-7	Std-8	35.00	0.1309	0.00		2:08:55 PM
1	ICV 30	29.46	0.1166	0.00		2:09:12 PM
2	WG397213-01 BLK	0.67	-0.0015	0.00	INV	2:10:07 PM
3	WG397213-02 LCS	20.21	0.0877	0.00		2:10:25 PM
4	WG397213-03 LCSDUP	19.36	0.0848	0.00		2:11:19 PM
R-3	CCV (30 mg/L)	30.79	0.1204	102.62		2:11:37 PM
5	L12050150-30 (5)	3.19	0.0146	0.00		2:12:31 PM
6	L12050099-01 (2)	23.47	0.0984	0.00		2:12:49 PM
7	L12050099-03 (2)	23.19	0.0975	0.00		2:13:43 PM
8	L12050099-05 (2)	19.01	0.0836	0.00		2:14:01 PM
R-3	CCV (30 mg/L)	33.18	0.1271	110.60		2:14:55 PM
9	L12050099-07 (50)	4.87X	0.0240	0.00		2:15:13 PM
10	L12050099-09 (2)	27.22	0.1100	0.00		2:16:07 PM
11	L12050153-01 (2)	26.92	0.1091	0.00		2:16:25 PM
12	L12050153-03 (10)	24.42	0.1014	0.00		2:17:19 PM
R-3	CCV (30 mg/L)	31.67	0.1229	105.56		2:17:37 PM
13	L12050153-05 (2)	34.31	0.1302	0.00		2:18:31 PM
14	L12050153-07 (5)	50.89X	0.1713	0.00	>,LH	2:18:49 PM
15	L12050171-01 (5)	22.78	0.0962	0.00		2:19:43 PM
16	WG397213-05 (5) DUP	22.81	0.0963	0.00		2:20:01 PM
R-3	CCV (30 mg/L)	32.38	0.1249	107.95		2:20:55 PM
17	L12050171-03 (5) MS	25.19	0.1038	0.00		2:21:13 PM

Report Date : 05/07/2012 Run Date : 5/7/2012 Operator : WESTCO Plan # : 20120507003
 Plan Description : SO4-A-DIH/5/7/2012

MICROBAC (OVD)
SMARTCHEM REPORT (VER3.0.53)
NH3, TKN, NO3NO2 (MG/L N)
ALK (MG/L CaCO3) CL, SO4 (MG/L)

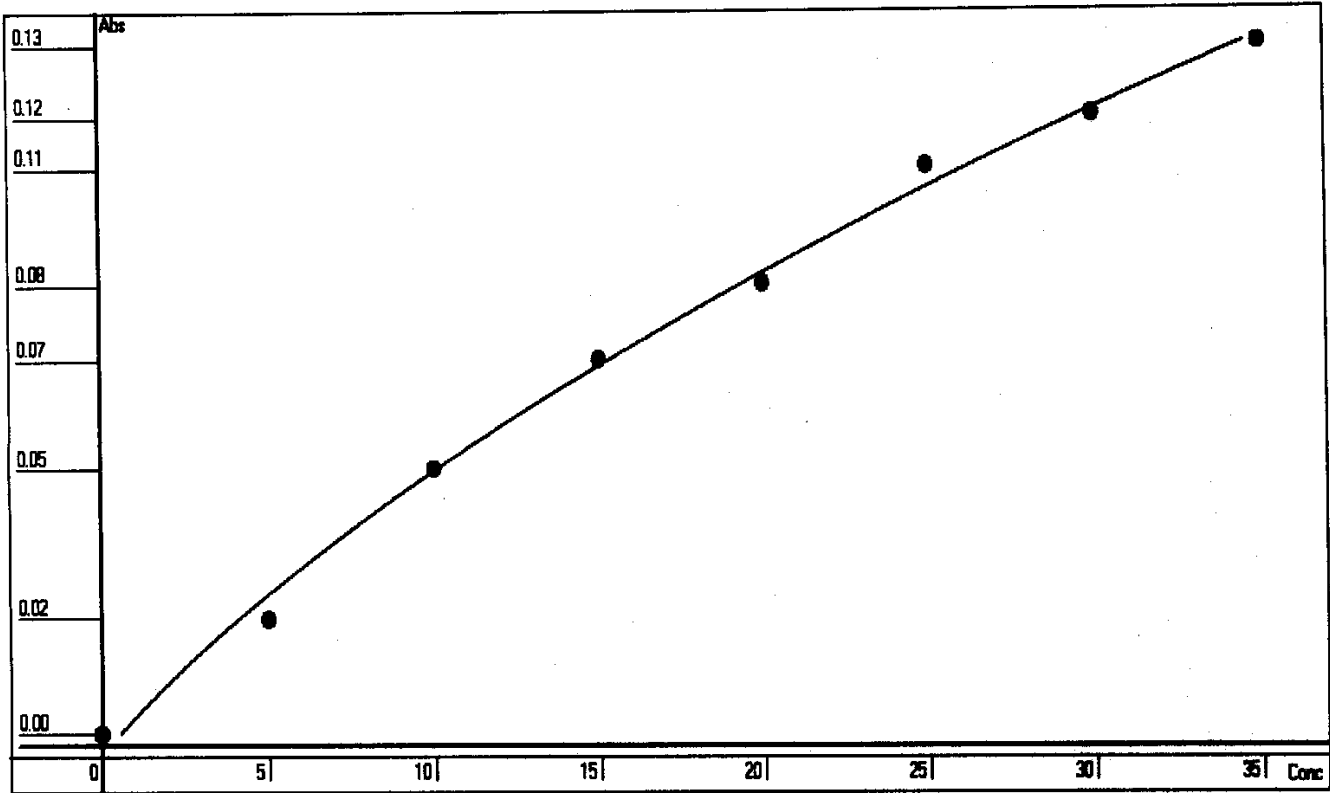
Method : WSO4 - EPA 375.4/SM 426 C (15TH)

Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
18	L12050171-05 (5) MSD	25.58	0.1050	0.00		2:22:07 PM
19	L12050171-07 (2)	44.59 ✓	0.1565	0.00	>,LH	2:22:25 PM
20	ID 20	19.94 ✓	0.0868	0.00		2:23:19 PM
R-3	CCV (30 mg/L)	31.74	0.1231	105.80		2:23:37 PM
23	Add-ID 23 <i>05-099-07 (10)</i>	25.51	0.1048	0.00		2:24:31 PM
24	Add-ID 24	0.79 ✓	-0.0007	0.00	INV	2:24:49 PM
R-3	Add-CCV (30 mg/L)	31.42	0.1222	104.74		2:25:43 PM
14-[1/2]	L12050153-07 (5)	55.38 ✓	0.1114	0.00	LH	2:33:41 PM
19-[1/2]	L12050171-07 (2)	42.20 ✓	0.0907	0.00	LH	2:34:53 PM
R-3	CCV (30 mg/L)	32.78	0.1260	109.27		2:34:53 PM

Report Date : 05/07/2012 Run Date : 5/7/2012 Operator : WESTCO Plan # : 20120507003
Plan Description : SO4-A-DIH/5/7/2012

Calibrant Report - WSO4 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC
 Plan #: 20120507003 Description: [SO4-A-DIH/5/7/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0024	0	0.5472	54.72
2	0.0199	5	4.1185	-17.63
3	0.0491	10	10.0830	0.83
4	0.0703	15	15.3287	2.19
5	0.0849	20	19.3891	-3.05
6	0.1073	25	26.3287	5.31
7	0.1171	30	29.6351	-1.22
8	0.1309	35	34.5700	-1.23

Conc = +856.645*Abso^2 +145.1565*Abso +0.8906 R²=0.9965

RBL
0.0006
0

Report Date 5/7/2012 Run Date 5/7/2012

2.4.5 Total Organic Carbon Data

2.4.5.1 Summary Data



Login Number: L12050099
Department: Conventionals
Analyst: Jeremy Kinney

METHOD

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

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QAI/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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

Narrative ID: 46567

Approved By: Deanna Hesson

A handwritten signature in cursive script that reads "Deanna Hesson".

Certificate of Analysis

Sample #: L12050099-01	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: MW-13-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397767	Analyst: JBK	Run Date: 05/13/2012 07:20
Collect Date: 05/02/2012 11:30	Dilution: 2	File ID: TC05122012.045
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		6.35		2.00	1.00

Sample #: L12050099-03	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: MW-26-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397595	Analyst: JBK	Run Date: 05/10/2012 19:07
Collect Date: 05/02/2012 10:55	Dilution: 1	File ID: TC05102012.017
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		4.19		1.00	0.500

Sample #: L12050099-05	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: MW-25-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397595	Analyst: JBK	Run Date: 05/10/2012 19:21
Collect Date: 05/02/2012 14:10	Dilution: 1	File ID: TC05102012.018
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		3.11		1.00	0.500

Sample #: L12050099-07	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: PZ-03-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397595	Analyst: JBK	Run Date: 05/10/2012 19:34
Collect Date: 05/02/2012 14:30	Dilution: 4	File ID: TC05102012.019
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		9.94		4.00	2.00

Certificate of Analysis

Sample #: L12050099-09	PrePrep Method: N/A	Instrument: TOC-VWP
Client ID: DUP-GW-050212	Prep Method: 415.1	Prep Date: N/A
Matrix: Water	Analytical Method: 415.1	Cal Date: 12/06/2011 09:40
Workgroup #: WG397595	Analyst: JBK	Run Date: 05/10/2012 19:47
Collect Date: 05/02/2012 10:05	Dilution: 1	File ID: TC05102012.020
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		2.52		1.00	0.500

2.4.5.2 QC Summary Data

**Total Organic Carbon Example Calculations
(Direct Readout Parameter)**

$$(\text{Readout})/(\text{dilution}) = \text{mg/L}$$

where:

Readout = direct readout from the instrument

dilution = dilution in decimal form (ex. 1/5 dilution = 0.2)

Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
 Analyst: JBK
 Analyst: NA
 Method: TOC
 Instrument: TOC
 Curve Workgroup: NA
 Runlog ID: _____
 Analytical Workgroups: WG397595 WG397597

Calibration/Linearity	12/06/2011
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JBK
Secondary Reviewer	JBK
Comments	

Primary Reviewer:
11-MAY-2012



Secondary Reviewer:
11-MAY-2012




Microbac Laboratories Inc.

Data Checklist

Date: 12-MAY-2012
 Analyst: JBK
 Analyst: NA
 Method: TOC
 Instrument: TOC
 Curve Workgroup: NA
 Runlog ID: _____
 Analytical Workgroups: WG397767 WG397599

Calibration/Linearity	12/06/2011
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JBK
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
15-MAY-2012



Secondary Reviewer:
16-MAY-2012




Microbac Laboratories Inc.
HOLDING TIMES
 EQUIVALENT TO AFCEE FORM 9

Analytical Method: 415.1
 Login Number: L12050099

AAB#: WG397595

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-26-050212	03	05/02/12							28		05/10/12	8.3	28	
MW-25-050212	05	05/02/12							28		05/10/12	8.2	28	
PZ-03-050212	07	05/02/12							28		05/10/12	8.2	28	
DUP-GW-050212	09	05/02/12							28		05/10/12	8.4	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
 PDF File ID: 2416100
 Report generated 05/15/2012 19:12



Microbac Laboratories Inc.
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 415.1
Login Number: L12050099

AAB#: WG397767

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-13-050212	01	05/02/12							28		05/13/12	10.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2416100
Report generated 05/15/2012 19:12



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397595
 Blank File ID: TC05102012.003 Blank Sample ID: WG397595-01
 Prep Date: 05/10/12 16:04 Instrument ID: TOC-VWP
 Analyzed Date: 05/10/12 16:04 Method: 415.1
 Analyst: JBK

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397595-02	TC05102012.004	05/10/12 16:16	01
LCS2	WG397595-03	TC05102012.005	05/10/12 16:28	01
MW-26-050212	L12050099-03	TC05102012.017	05/10/12 19:07	01
MW-25-050212	L12050099-05	TC05102012.018	05/10/12 19:21	01
PZ-03-050212	L12050099-07	TC05102012.019	05/10/12 19:34	DL01
DUP-GW-050212	L12050099-09	TC05102012.020	05/10/12 19:47	01
DUP	WG397595-05	TC05102012.030	05/10/12 22:07	01

Report Name: BLANK_SUMMARY
 PDF File ID: 2416101
 Report generated 05/15/2012 19:12



METHOD BLANK SUMMARY

Login Number: L12050099 Work Group: WG397767
Blank File ID: TC05122012.042 Blank Sample ID: WG397767-01
Prep Date: 05/13/12 06:42 Instrument ID: TOC-VWP
Analyzed Date: 05/13/12 06:42 Method: 415.1
Analyst: JBK

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397767-02	TC05122012.043	05/13/12 06:55	01
LCS2	WG397767-03	TC05122012.044	05/13/12 07:08	01
MW-13-050212	L12050099-01	TC05122012.045	05/13/12 07:20	DL01
DUP	WG397767-05	TC05122012.065	05/13/12 11:25	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2416101
Report generated 05/15/2012 19:12



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/10/12 16:04 Sample ID: WG397595-01
Instrument ID: TOC-VWP Run Date: 05/10/12 16:04 Prep Method: 415.1
File ID: TC05102012.003 Analyst: JBK Method: 415.1
Workgroup (AAB#): WG397595 Matrix: Water Units: mg/L
Contract #: _____ Cal ID: TOC-VW-06-DEC-11

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

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

Report Name: BLANK
PDF ID: 2416102
15-MAY-2012 19:12



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050099 Prep Date: 05/13/12 06:42 Sample ID: WG397767-01
Instrument ID: TOC-VWP Run Date: 05/13/12 06:42 Prep Method: 415.1
File ID: TC05122012.042 Analyst: JBK Method: 415.1
Workgroup (AAB#): WG397767 Matrix: Water Units: mg/L
Contract #: _____ Cal ID: TOC-VW-06-DEC-11

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

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

Report Name: BLANK
PDF ID: 2416102
15-MAY-2012 19:12



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: JBK Prep Method: 415.1
 Instrument ID: TOC-VWP Matrix: Water Method: 415.1
 Workgroup (AAB#): WG397767 Units: mg/L
 QC Key: WATERLOO Lot #: STD50986
 Sample ID: WG397767-02 LCS File ID: TC05122012.043 Run Date: 05/13/2012 06:55
 Sample ID: WG397767-03 LCS2 File ID: TC05122012.044 Run Date: 05/13/2012 07:08

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	23.9	95.4	25.0	26.8	107	11.8	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
 PDF File ID: 2416103
 Report generated: 05/15/2012 19:12



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050099 Analyst: JBK Prep Method: 415.1
 Instrument ID: TOC-VWP Matrix: Water Method: 415.1
 Workgroup (AAB#): WG397595 Units: mg/L
 QC Key: WATERLOO Lot #: STD50986
 Sample ID: WG397595-02 LCS File ID: TC05102012.004 Run Date: 05/10/2012 16:16
 Sample ID: WG397595-03 LCS2 File ID: TC05102012.005 Run Date: 05/10/2012 16:28

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	21.7	86.9	25.0	22.2	88.8	2.18	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
 PDF File ID: 2416103
 Report generated: 05/15/2012 19:12



2.4.5.3 Raw Data

WG384145

TC/TIC CURVES

Total Organic Carbon

MAKE DAILY

CCV (TOC): $(5/200)(1000) = 25\text{mg/L}$ LCS (TOC): $(5/200)(1000) = 25\text{mg/L}$

CCV (TIC): $(5/200)(1000) = 25\text{mg/L}$ MS (TOC): See Below

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

drain reservoir filled
 ASI water bottle full
 dilution water bottle full

DAILY CHECK
 3rd bottle full
 sufficient gas
 sufficient persulfate

sufficient acid
 waste container

Position	Sample ID	Dilution	Position	Sample ID	Dilution	Position	Sample ID	Dilution
1	TC Curve		26	TC Curve		51		
2	TIC Curve		27	STD 47722		52		
3	TC ICV		28			53		
4	TIC ICV		29	TIC Curve		54		
5			30	STD 47189		55		
6			31			56		
7			32			57		
8			33			58		
9			34			59		
10			35			60		
11			36			61		
12			37	TC ICV		62		
13			38	STD 47544		63		
14			39			64		
15			40	TIC ICV		65		
16			41	STD 47190		66		
17			42			67		
18			43			68		
19	All points analyzed in duplicate		44			69		
20			45			70		
21			46			71		
22			47			72		
23			48			73		
24			49			74		
25			50			75		

See SOP for
curve points

$5/200(1000)$
 $= 25\text{mg/L}$

Analyst: [Signature] Date/Time: 12/04/2011

DCN#89227



	Analys	Sample Name	Result	Status	Date / Time	Vial
1	TC	TC CURVE		Comple	12/06/2011 09:48:27 AM	0, 1, 2, 3, 4, 5
2	IC	TIC CURVE		Comple	12/06/2011 05:00:56 PM	0, 6, 7, 8, 9, 10
3	TC	TC ICV	✓ 93.08% TC:23.27mg/L	Comple	12/06/2011 05:13:38 PM	11
4	IC	TIC ICV	✓ 104.24% IC:26.21mg/L	Comple	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

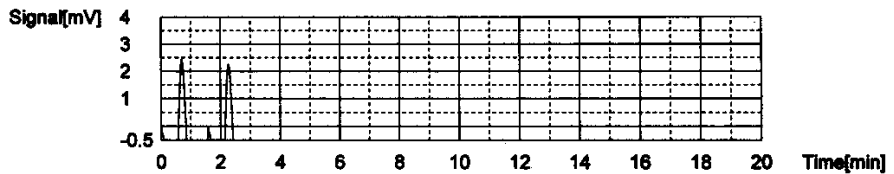
Sample Name: TC CURVE
Sample ID: Untitled
Cal. Curve: TCCURVE-12-06-2011.2011_12_06_08_40_57.cal
Status: Completed

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

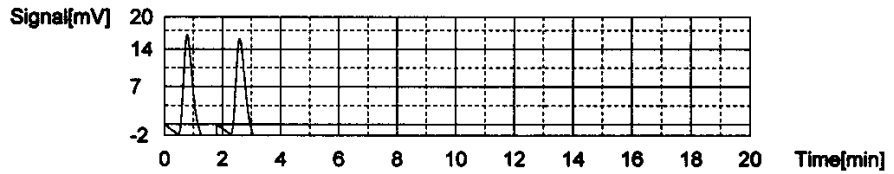
Acid Add. 0.000%
Mean Area 5.716



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

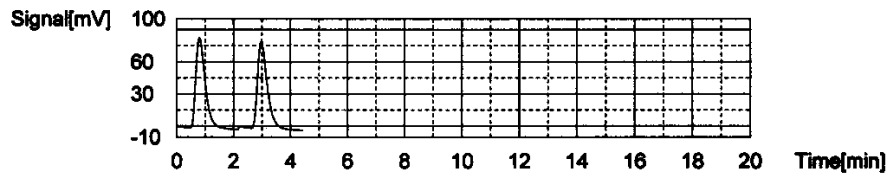
Acid Add. 0.000%
Mean Area 39.48



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

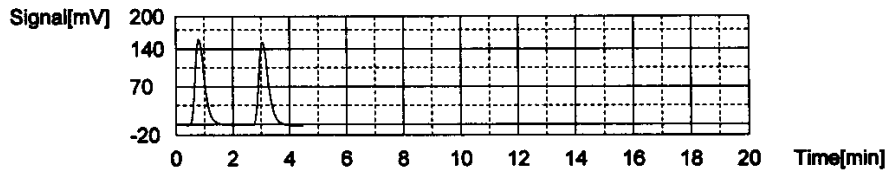
Acid Add. 0.000%
Mean Area 190.6



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	387.0	500uL	1	*****		12/06/2011 09:15:00 AM
2	387.7	500uL	1	*****		12/06/2011 09:20:28 AM

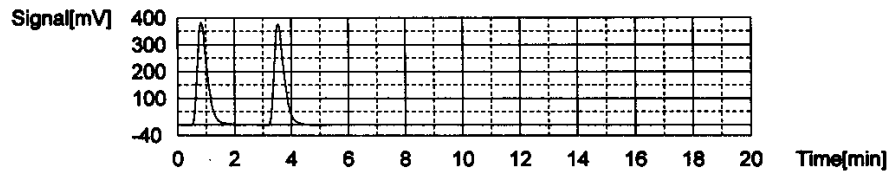
Acid Add. 0.000%
Mean Area 367.4



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

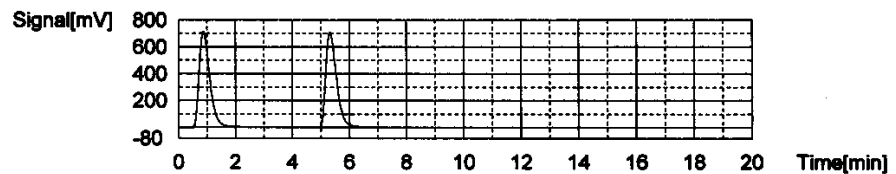
Acid Add. 0.000%
Mean Area 933.4



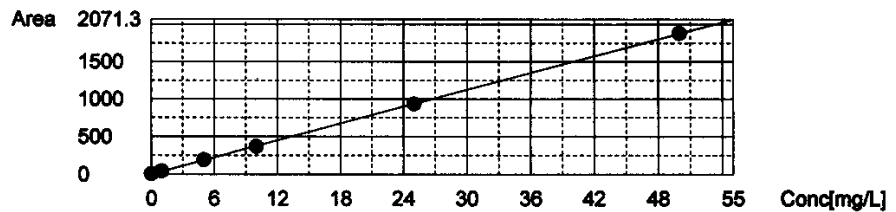
Conc: 50.00mg/L

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

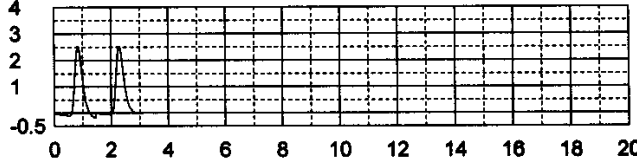
Type	Anal.
Standard	IC

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

Signal[mV]

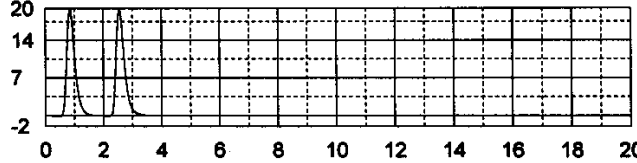


Conc: 1.000mg/L

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

Signal[mV]

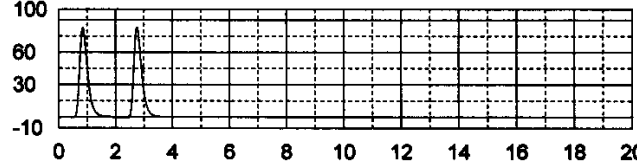


Conc: 5.000mg/L

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

Signal[mV]

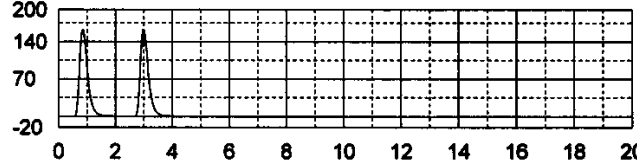


Conc: 10.00mg/L

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

Signal[mV]

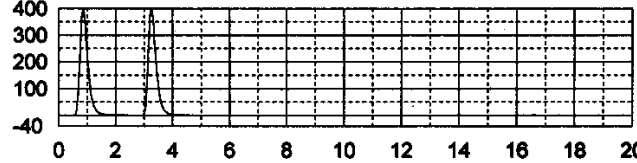


Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	785.1	500uL	1	*****		12/06/2011 04:41:31 PM
2	785.8	500uL	1	*****		12/06/2011 04:46:44 PM

Acid Add. 10.00%
Mean Area 785.5

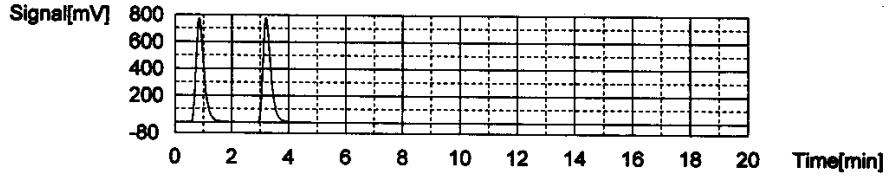
Signal[mV]



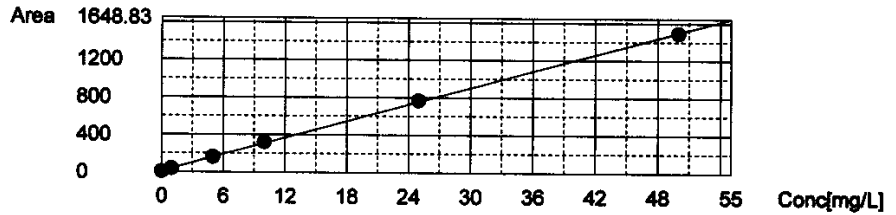
Conc: 50.00mg/L

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
r²: 0.999826 ✓
Zero Shift: No



Sample

Sample Name: TC ICV
Sample ID: Untitled
Origin: TCCURVE-12-06-2011.cal
Status: Completed
Chk. Result:

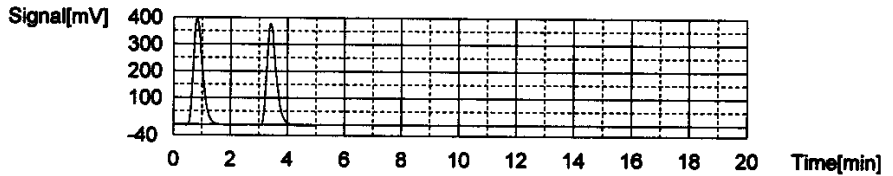
Type	Anal.	Dil.	Result
Unknown	TC	1.000	TC:23.27mg/L

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_51	12/06/2011 05:08:57 PM
2	859.5	22.87mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_51	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:

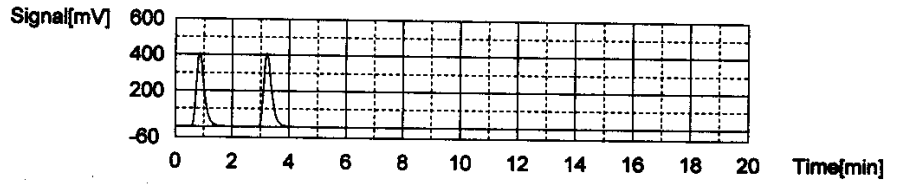
Type	Anal.	Dil.	Result
Unknown	IC	1.000	IC:26.21mg/L

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



Total Organic Carbon

MAKE DAILY

CCV (TOC): STD 49750
 $(5/200)(1000) = 25\text{mg/L}$

LCS (TOC): STD 50986
 $(5/200)(1000) = 25\text{mg/L}$

CCV (TIC): STD 50244
 $(5/200)(1000) = 25\text{mg/L}$

MS (TOC): STD 50986
 $0.4/40 (1000) = 10$

Calibration Curve Date: 12/6/11

Reagent: RGT 17216
RGT 17230

SM5310-C : Matrix 2 WG 397597
 EPA 415.1/9060A(mod): Matrix 1 WG 397595
 WG

SOP: K 4151 Rev. 14
 Instrument: Shimadza TOC-VWP/ASI

- drain reservoir filled
- ASI water bottle full
- dilution water bottle full

- DAILY CHECK
- 3rd bottle full
 - sufficient gas
 - sufficient persulfate

- sufficient acid
- waste container

Position	Sample ID	Dilution
1	CCV 25	
2	TIC 25	
20	Blank	
4	LCS 25	
5	LCS DWP	
6	05-052-14	1/10
7	05-151-11	1/50
8	-11	1/100
9	05-254-01	1/5
10	-02	
11	-03	
12	-01	
13	-05	
14	CCV	
170	CCB	
16	05-099-01	
17	-03	
18	-05	
19	-07	1/4
20	-09	
21	05-153-01	
22	-03	1/4
23	-05	
24	-07	
25	05-245-04	

Position	Sample ID	Dilution
26	CCV	
270	CCB	
28	05-245-12	
29	-14	
30	DUP	
31	MS	
320	Blank	
33	LCS 25	
34	LCS DWP	
35	05-119-01	1/10 HA
36	-02	1/10 HA
37	-03	1/10 HA
38	CCV	
390	CCB	
40	05-269-01	
41	-03	
42	-05	
43	-07	
44	-09	
45	-11	
46	-13	
47	DUP 269-09	
48	MS	
490	Blank	
50	CCV	

Position	Sample ID	Dilution
210	CCB	
(52)	LCS 25	
(53)	LCS DWP	
54	05-267-01	CCV
55	-03	CCB
56	-09	
57	-07	
58	-09	
59	-11	
60	-13	
61	05-266-01	
62	CCV	
630	CCB	
64	05-266-02	
65	05-265-01	
66	05-266-04	
67	-05	
68	-04	
3 69	-07	
15 70	05-171-01	
27 71	DUP-01	
22 72	MS-03	
39 73	STD-05	
1 74	CCV	
0 75	CCB	

Analyst: [Signature] Date/Time: 5/10/12

49 05-171-07
 14 CCB
 0 CCB

DCN#90824



	Analys	Sample Name	Result	Status	Date / Time	Vial
1	TOC	CCV 25	TOC:21.74mg/L TC:22.19mg/L IC:0.4483mg/L	Completed	05/10/2012 03:45:55 F	1
2	TOC	TIC 25	TOC:1.189mg/L TC:25.22mg/L IC:24.03mg/L	Completed	05/10/2012 03:59:22 F	2
3	TOC	WG397595-01 BLANK	!!Error!! TOC:0.3661mg/L TC:0.2112mg/L IC:-0.1549mg/L	Completed	05/10/2012 04:06:29 F	0
4	TOC	WG397595-02 LCS25	!!Error!! TOC:21.73mg/L TC:21.46mg/L IC:-0.2719mg/L	Completed	05/10/2012 04:20:40 F	4
5	TOC	WG397595-03 LCSDU	!!Error!! TOC:22.21mg/L TC:21.93mg/L IC:-0.2807mg/L	Completed	05/10/2012 04:32:44 F	5
6	TOC	L12050052-14 (10)	TOC:7.362mg/L TC:17.97mg/L IC:10.61mg/L	Completed	05/10/2012 04:45:52 F	6
7	TOC	L12050151-11 (50)	TOC:8.190mg/L TC:8.991mg/L IC:0.8009mg/L	Completed	05/10/2012 04:58:26 F	7
8	TOC	L12050151-11 (100)	TOC:4.268mg/L TC:4.442mg/L IC:0.1741mg/L	Completed	05/10/2012 06:10:27 F	8
9	TOC	L12050254-01 (15)	TOC:12.95mg/L TC:18.27mg/L IC:3.315mg/L	Completed	05/10/2012 05:25:31 F	9
10	TOC		TOC:6.906mg/L TC:88.10mg/L IC:81.19mg/L	Completed	05/10/2012 05:41:12 F	10
11	TOC		TOC:13.30mg/L TC:87.47mg/L IC:54.17mg/L	Completed	05/10/2012 05:55:44 F	11
12	TOC		TOC:4.461mg/L TC:53.15mg/L IC:48.69mg/L	Completed	05/10/2012 06:09:49 F	12
13	TOC		TOC:6.676mg/L TC:67.95mg/L IC:61.27mg/L	Completed	05/10/2012 06:23:57 F	13
14	TOC	CCV	TOC:24.07mg/L TC:24.51mg/L IC:0.4399mg/L	Completed	05/10/2012 06:36:34 F	14
15	TOC	CCB	!!Error!! TOC:0.3202mg/L TC:0.1007mg/L IC:-0.2196mg/L	Completed	05/10/2012 06:45:44 F	0
16	TOC		TOC:7.214mg/L TC:80.82mg/L IC:53.60mg/L	Completed	05/10/2012 06:59:42 F	16
17	TOC	L12050099-03	TOC:4.187mg/L TC:43.99mg/L IC:39.81mg/L	Completed	05/10/2012 07:13:38 F	17
18	TOC	L12050099-05	TOC:3.110mg/L TC:28.58mg/L IC:25.47mg/L	Completed	05/10/2012 07:26:48 F	18
19	TOC	L12050099-07 (4)	TOC:2.485mg/L TC:24.05mg/L IC:21.56mg/L	Completed	05/10/2012 07:40:00 F	19
20	TOC	L12050099-09	TOC:2.524mg/L TC:40.48mg/L IC:37.96mg/L	Completed	05/10/2012 07:53:23 F	20
21	TOC	L12050153-01	TOC:4.560mg/L TC:21.07mg/L IC:16.51mg/L	Completed	05/10/2012 08:06:28 F	21
22	TOC	L12050153-03 (4)	TOC:2.686mg/L TC:22.81mg/L IC:20.12mg/L	Completed	05/10/2012 08:19:50 F	22
23	TOC		TOC:5.032mg/L TC:57.36mg/L IC:52.32mg/L	Completed	05/10/2012 08:33:38 F	23
24	TOC		!!Error!! TOC:-5.070mg/L TC:77.77mg/L IC:82.84mg/L	Completed	05/10/2012 08:48:43 F	24
25	TOC		TOC:42.00mg/L TC:150.8mg/L IC:108.8mg/L	Completed	05/10/2012 09:05:53 F	25
26	TOC	CCV	TOC:24.55mg/L TC:25.08mg/L IC:0.5287mg/L	Completed	05/10/2012 09:19:04 F	26
27	TOC	CCB	!!Error!! TOC:0.2931mg/L TC:0.1155mg/L IC:-0.1776mg/L	Completed	05/10/2012 09:28:16 F	0
28	TOC		!!Error!! TOC:-3.075mg/L TC:85.89mg/L IC:88.96mg/L	Completed	05/10/2012 09:43:09 F	28
29	TOC	WG397595-04	TOC:42.98mg/L TC:89.75mg/L IC:46.77mg/L	Completed	05/10/2012 09:57:55 F	29
30	TOC	WG397595-05	TOC:43.95mg/L TC:90.12mg/L IC:46.17mg/L	Completed	05/10/2012 10:13:25 F	30
31	TOC	WG397595-06	TOC:44.73mg/L TC:99.94mg/L IC:55.22mg/L	Completed	05/10/2012 10:28:02 F	31
32	TOC	WG397597-01 BLANK	!!Error!! TOC:0.2770mg/L TC:0.1349mg/L IC:-0.1421mg/L	Completed	05/10/2012 10:45:00 F	0
33	TOC		!!Error!! TOC:20.17mg/L TC:20.10mg/L IC:-0.06631mg/L	Completed	05/10/2012 11:06:14 F	33
34	TOC		!!Error!! TOC:21.03mg/L TC:20.92mg/L IC:-0.1081mg/L	Completed	05/10/2012 11:27:18 F	34
35	TOC	L12050119-01 (10)	TOC:0.8545mg/L TC:2.451mg/L IC:1.597mg/L	Completed	05/10/2012 11:48:26 F	35
36	TOC	L12050119-02 (10)	TOC:1.333mg/L TC:3.531mg/L IC:2.197mg/L	Completed	05/11/2012 12:09:59 A	36
37	TOC	L12050119-03 (10)	TOC:1.033mg/L TC:1.627mg/L IC:0.5940mg/L	Completed	05/11/2012 12:31:13 A	37
38	TOC	CCV	!!Error!! TOC:23.08mg/L TC:22.85mg/L IC:-0.2290mg/L	Completed	05/11/2012 12:43:30 A	38
39	TOC	CCB	!!Error!! TOC:0.4837mg/L TC:0.2365mg/L IC:-0.2472mg/L	Completed	05/11/2012 12:52:40 A	0
40	TOC	L12050269-01	TOC:14.82mg/L TC:22.91mg/L IC:8.091mg/L	Completed	05/11/2012 01:15:57 A	40
41	TOC	L12050269-03	TOC:3.180mg/L TC:18.59mg/L IC:15.43mg/L	Completed	05/11/2012 01:38:14 A	41
42	TOC	L12050269-05	TOC:1.192mg/L TC:4.486mg/L IC:3.294mg/L	Completed	05/11/2012 02:00:10 A	42
43	TOC	L12050269-07	TOC:6.690mg/L TC:21.52mg/L IC:14.83mg/L	Completed	05/11/2012 02:23:24 A	43
44	TOC	L12050269-09	TOC:1.372mg/L TC:8.697mg/L IC:7.325mg/L	Completed	05/11/2012 02:45:24 A	44
45	TOC	L12050269-11	TOC:1.891mg/L TC:9.917mg/L IC:8.027mg/L	Completed	05/11/2012 03:07:40 A	45
46	TOC	L12050269-13	!!Error!! TOC:0.7796mg/L TC:0.5670mg/L IC:-0.2126mg/L	Completed	05/11/2012 03:27:14 A	46
47	TOC	WG397597-05 DUP	TOC:2.041mg/L TC:7.573mg/L IC:5.532mg/L	Completed	05/11/2012 03:48:50 A	47
48	TOC	WG397597-06 MS	TOC:11.27mg/L TC:30.02mg/L IC:18.75mg/L	Completed	05/11/2012 04:13:25 A	48
49	TOC		!!Error!! TOC:23.83mg/L TC:23.70mg/L IC:-0.1297mg/L	Completed	05/11/2012 04:25:40 A	49
50	TOC	CCV	!!Error!! TOC:24.29mg/L TC:24.14mg/L IC:-0.1506mg/L	Completed	05/11/2012 04:37:57 A	50
51	TOC	CCB	!!Error!! TOC:0.3257mg/L TC:0.08990mg/L IC:-0.2358mg/L	Completed	05/11/2012 04:47:03 A	0
52	TOC	CCV	TOC:23.09mg/L TC:23.14mg/L IC:0.05734mg/L	Completed	05/11/2012 07:00:12 A	1
53	TOC	CCB	!!Error!! TOC:0.2946mg/L TC:0.06459mg/L IC:-0.2300mg/L	Completed	05/11/2012 07:09:27 A	0
54	TOC	WG397597-02 LCS	!!Error!! TOC:22.68mg/L TC:22.65mg/L IC:-0.03283mg/L	Completed	05/11/2012 07:30:47 A	3
55	TOC	WG397597-03 LCS2	!!Error!! TOC:22.40mg/L TC:22.38mg/L IC:-0.01853mg/L	Completed	05/11/2012 07:51:55 A	4
56	TOC	CCV	TOC:22.14mg/L TC:22.15mg/L IC:0.01057mg/L	Completed	05/11/2012 08:04:14 A	5
57	TOC	CCB	!!Error!! TOC:0.3152mg/L TC:0.07867mg/L IC:-0.2385mg/L	Completed	05/11/2012 08:13:28 A	0

05/11/2012 08:27:45 AM

1/1

Instr.Information

System TOCVW ASI
 Detector Wet Chemical

Sample

Sample Name: CCV 25
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

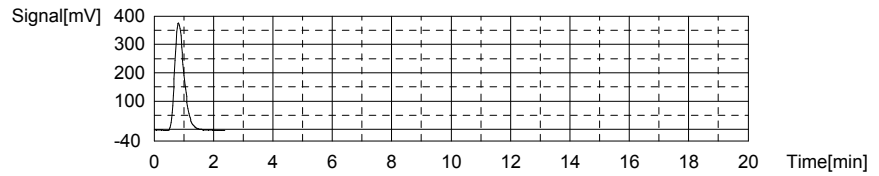
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:21.74mg/L TC:22.19mg/L IC:0.4483mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	833.6	22.19mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 03:41:21 PM

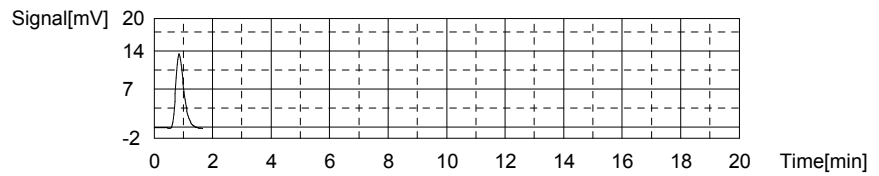
Mean Area 833.6
 Mean Conc. 22.19mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.21	0.4483mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 03:45:55 PM

Mean Area 26.21
 Mean Conc. 0.4483mg/L



Sample

Sample Name: TIC 25
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

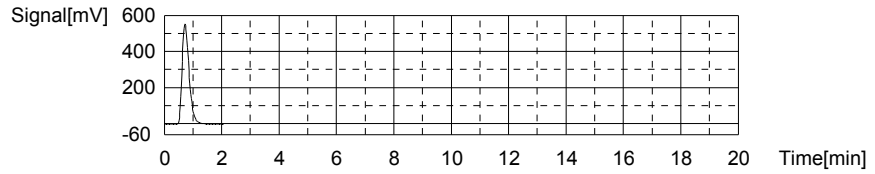
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.189mg/L TC:25.22mg/L IC:24.03mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	947.5	25.22mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 03:53:25 PM

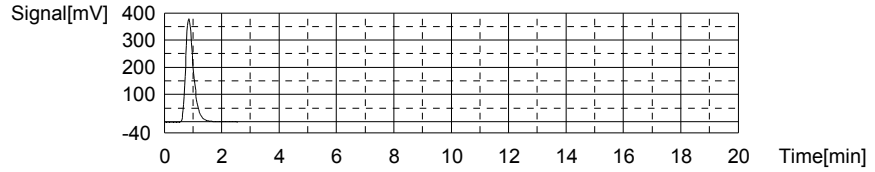
Mean Area 947.5
Mean Conc. 25.22mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	727.0	24.03mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 03:59:22 PM

Mean Area 727.0
Mean Conc. 24.03mg/L



Sample

Sample Name: WG397595-01 BLANK
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

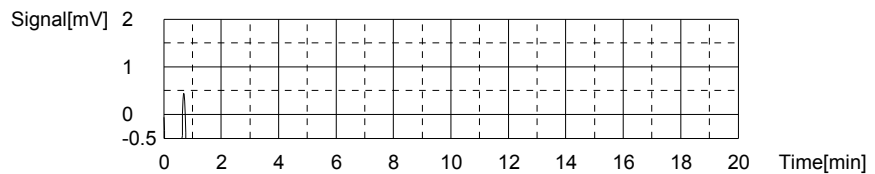
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3661mg/L TC:0.2112mg/L IC:-0.1549mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.029	0.2112mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 04:04:32 PM

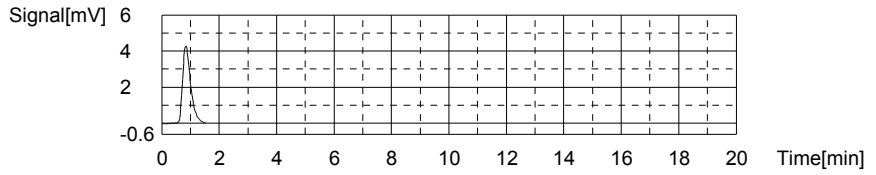
Mean Area 8.029
Mean Conc. 0.2112mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.282	-0.1549mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 04:08:29 PM

Mean Area 8.282
 Mean Conc. -0.1549mg/L



Sample

Sample Name: WG397595-02 LCS25
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

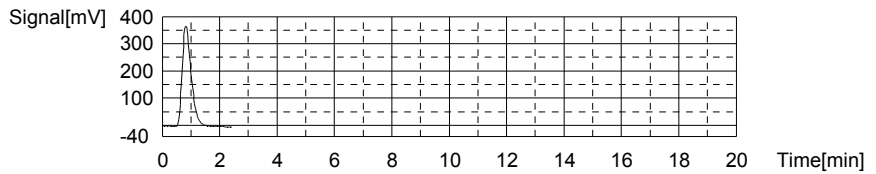
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:21.73mg/L TC:21.46mg/L IC:-0.2719mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	806.2	21.46mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 04:16:21 PM

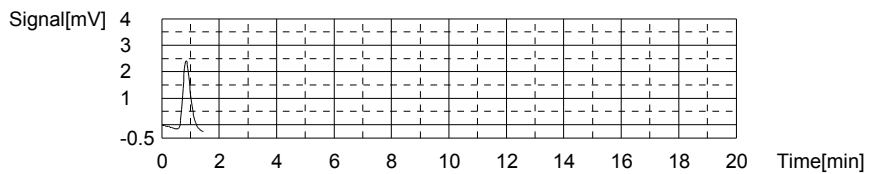
Mean Area 806.2
 Mean Conc. 21.46mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.805	-0.2719mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 04:20:40 PM

Mean Area 4.805
 Mean Conc. -0.2719mg/L



Sample

Sample Name: WG397595-03 LCSDUP
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

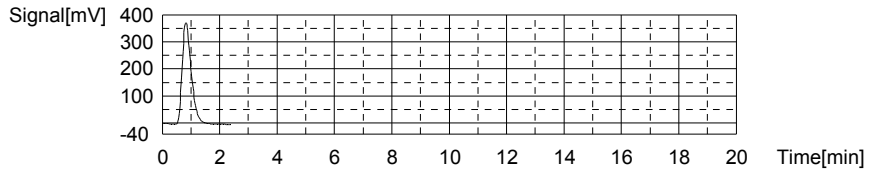
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.21mg/L TC:21.93mg/L IC:-0.2807mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	824.1	21.93mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 04:28:29 PM

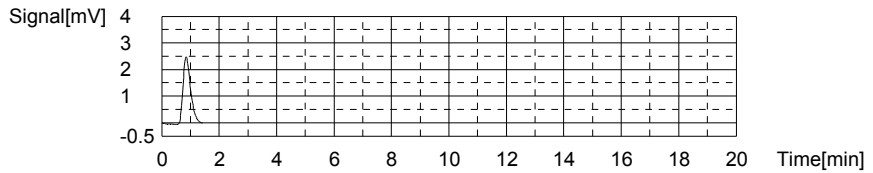
Mean Area 824.1
Mean Conc. 21.93mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.544	-0.2807mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 04:32:44 PM

Mean Area 4.544
Mean Conc. -0.2807mg/L



Sample

Sample Name: L12050052-14 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

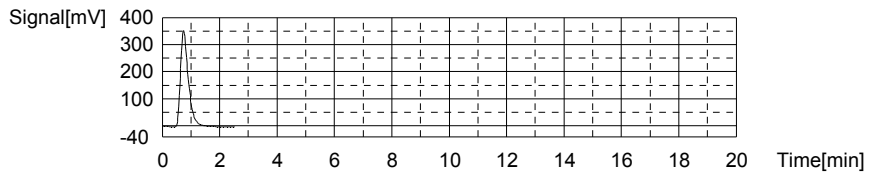
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.362mg/L TC:17.97mg/L IC:10.61mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	675.4	17.97mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 04:40:42 PM

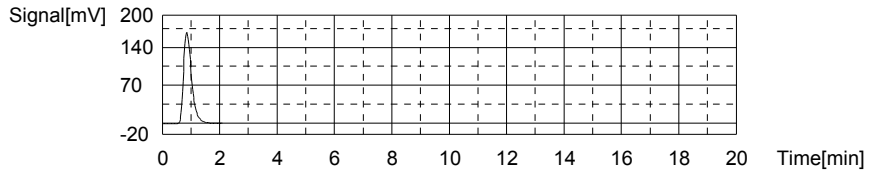
Mean Area 675.4
Mean Conc. 17.97mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	328.3	10.61mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 04:45:52 PM

Mean Area 328.3
 Mean Conc. 10.61mg/L



Sample

Sample Name: L12050151-11 (50)
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

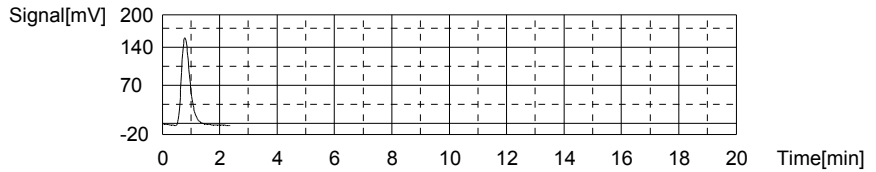
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.190mg/L TC:8.991mg/L IC:0.8009mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	337.9	8.991mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40	5/10/2012 04:53:44 PM

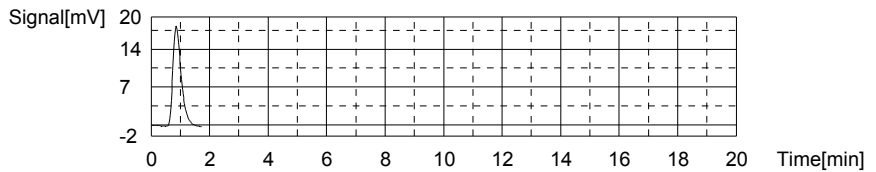
Mean Area 337.9
 Mean Conc. 8.991mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.69	0.8009mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 04:58:25 PM

Mean Area 36.69
 Mean Conc. 0.8009mg/L



Sample

Sample Name: L12050151-11 (100)
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

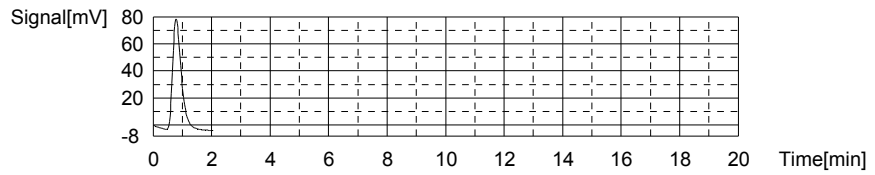
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.268mg/L TC:4.442mg/L IC:0.1741mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	167.0	4.442mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 05:05:54 PM

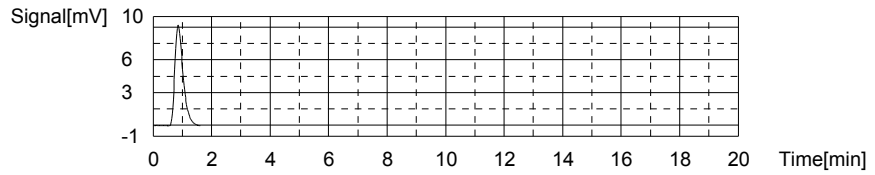
Mean Area 167.0
Mean Conc. 4.442mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.06	0.1741mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 05:10:27 PM

Mean Area 18.06
Mean Conc. 0.1741mg/L



Sample

Sample Name: L12050254-01 (15)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

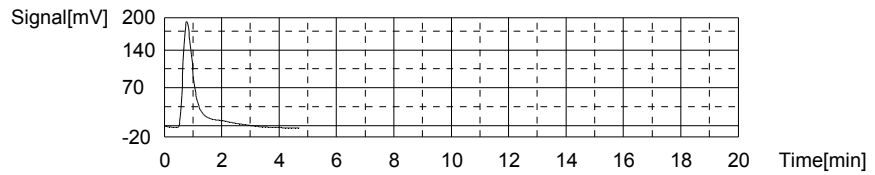
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.95mg/L TC:16.27mg/L IC:3.315mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	611.2	16.27mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 05:20:36 PM

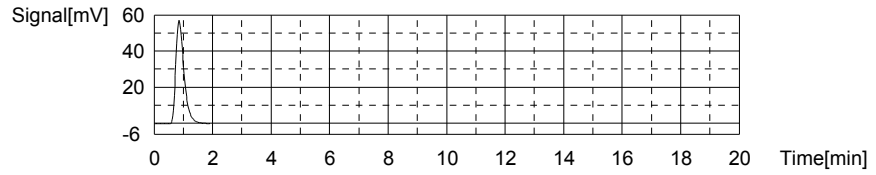
Mean Area 611.2
Mean Conc. 16.27mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	111.4	3.315mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 05:25:31 PM

Mean Area 111.4
Mean Conc. 3.315mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

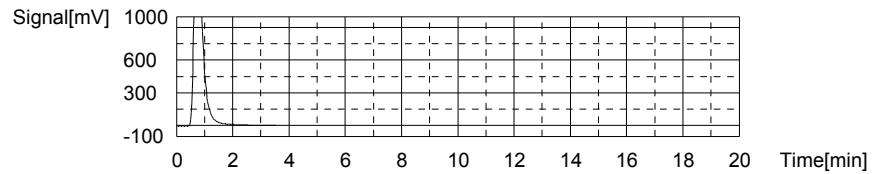
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.906mg/L TC:88.10mg/L IC:81.19mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3310	88.10mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	5/10/2012 05:34:29 PM

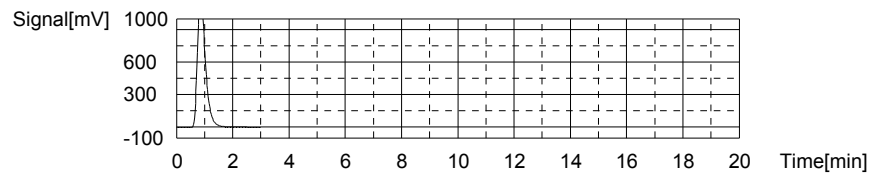
Mean Area 3310
Mean Conc. 88.10mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2426	81.19mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 05:41:12 PM

Mean Area 2426
Mean Conc. 81.19mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

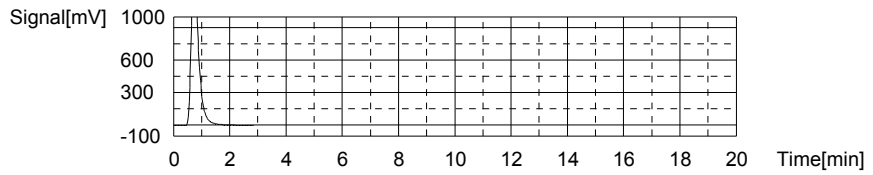
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:13.30mg/L TC:67.47mg/L IC:54.17mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2535	67.47mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 05:49:28 PM

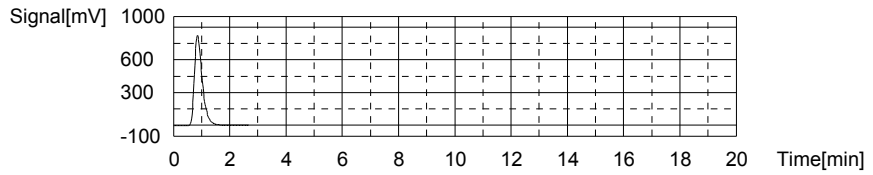
Mean Area 2535
Mean Conc. 67.47mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1623	54.17mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 05:55:44 PM

Mean Area 1623
Mean Conc. 54.17mg/L



Sample

Sample Name:

Sample ID:

Origin:

TOC-12-06-2011.met

Status

Completed

Chk. Result

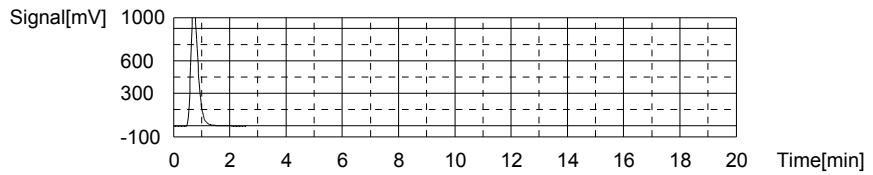
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.461mg/L TC:53.15mg/L IC:48.69mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1997	53.15mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 06:03:45 PM

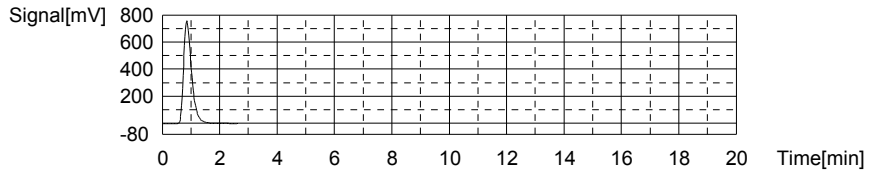
Mean Area 1997
Mean Conc. 53.15mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1460	48.69mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 06:09:49 PM

Mean Area 1460
 Mean Conc. 48.69mg/L



Sample

Sample Name:
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

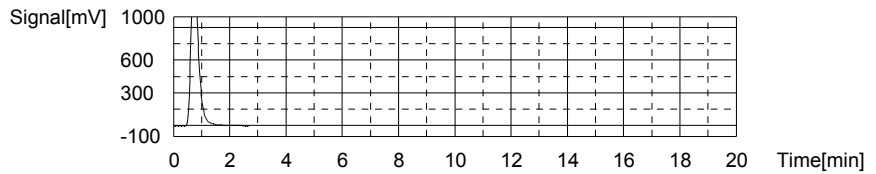
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.676mg/L TC:67.95mg/L IC:61.27mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2553	67.95mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 06:17:56 PM

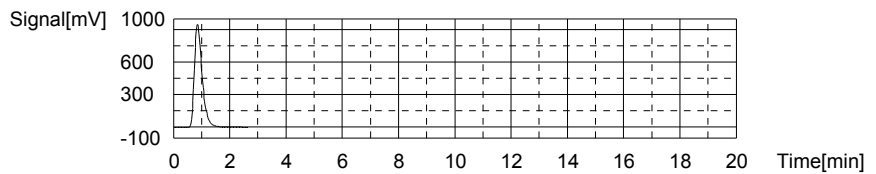
Mean Area 2553
 Mean Conc. 67.95mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1834	61.27mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 06:23:57 PM

Mean Area 1834
 Mean Conc. 61.27mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

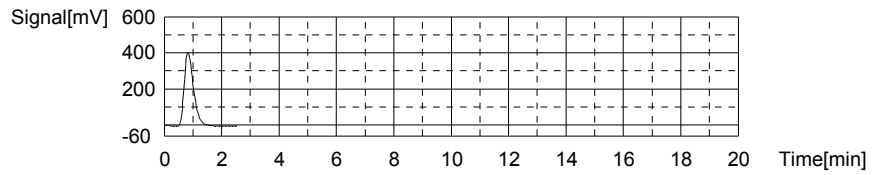
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.07mg/L TC:24.51mg/L IC:0.4399mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	920.9	24.51mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 06:31:56 PM

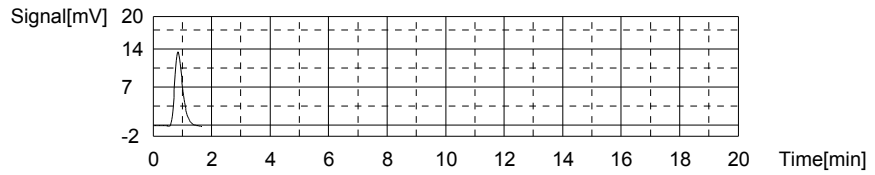
Mean Area 920.9
Mean Conc. 24.51mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.96	0.4399mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 06:36:34 PM

Mean Area 25.96
Mean Conc. 0.4399mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

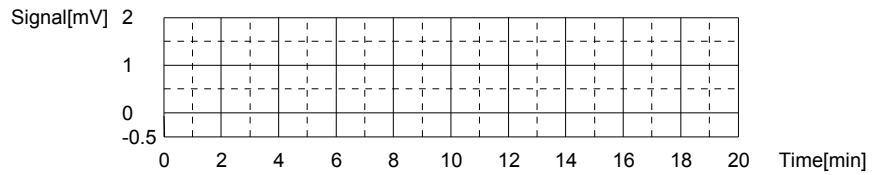
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3202mg/L TC:0.1007mg/L IC:-0.2196mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.875	0.1007mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 06:41:49 PM

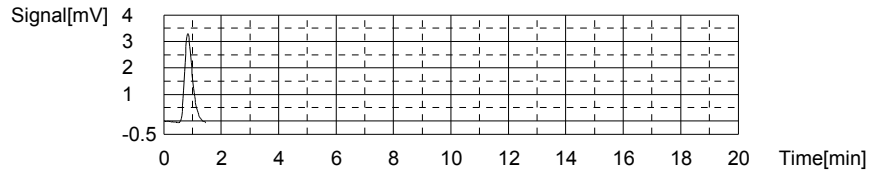
Mean Area 3.875
Mean Conc. 0.1007mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.360	-0.2196mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 06:45:44 PM

Mean Area 6.360
 Mean Conc. -0.2196mg/L



Sample

Sample Name:
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

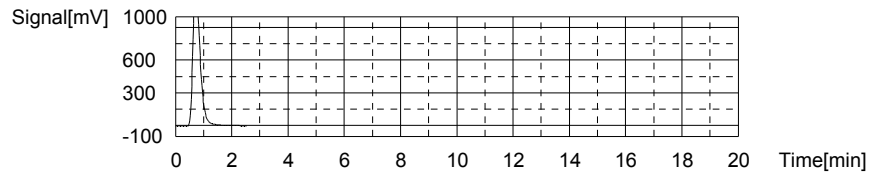
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.214mg/L TC:60.82mg/L IC:53.60mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2285	60.82mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 06:53:41 PM

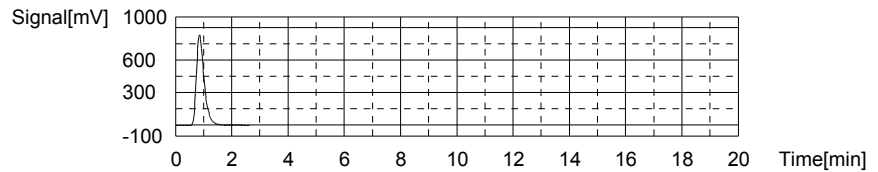
Mean Area 2285
 Mean Conc. 60.82mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1606	53.60mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 06:59:42 PM

Mean Area 1606
 Mean Conc. 53.60mg/L



Sample

Sample Name: L12050099-03
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

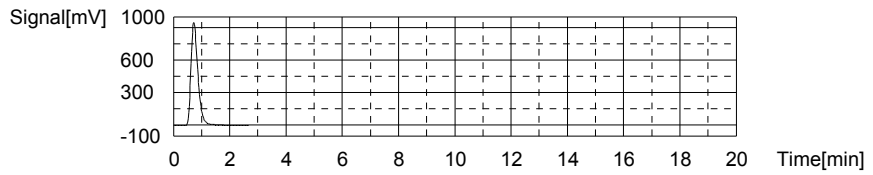
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.187mg/L TC:43.99mg/L IC:39.81mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1653	43.99mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 07:07:49 PM

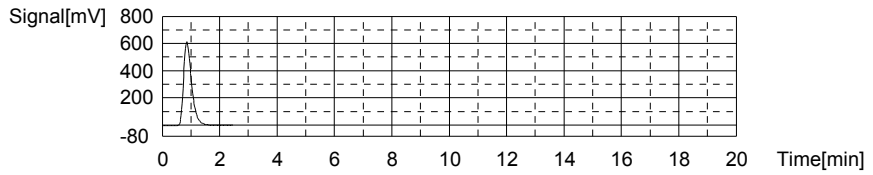
Mean Area 1653
Mean Conc. 43.99mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1196	39.81mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 07:13:38 PM

Mean Area 1196
Mean Conc. 39.81mg/L



Sample

Sample Name: L12050099-05
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

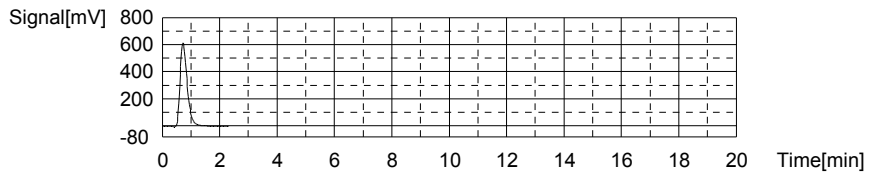
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.110mg/L TC:28.58mg/L IC:25.47mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1074	28.58mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 07:21:22 PM

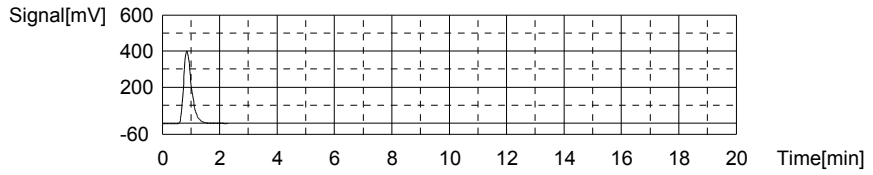
Mean Area 1074
Mean Conc. 28.58mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	770.0	25.47mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 07:26:48 PM

Mean Area 770.0
 Mean Conc. 25.47mg/L



Sample

Sample Name: L12050099-07 (4)
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

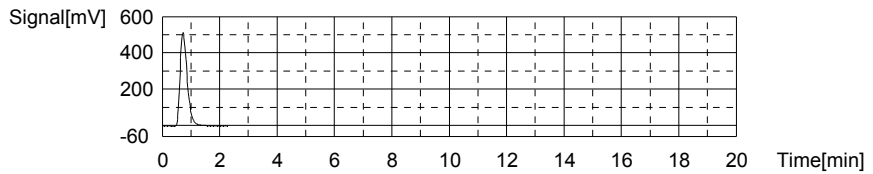
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.485mg/L TC:24.05mg/L IC:21.56mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	903.5	24.05mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 07:34:31 PM

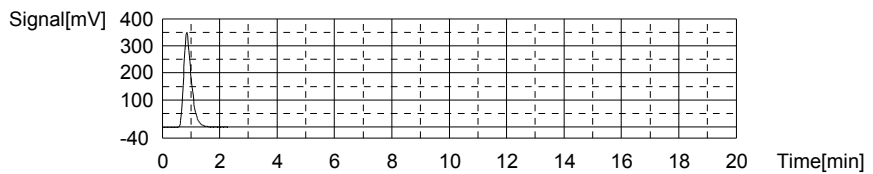
Mean Area 903.5
 Mean Conc. 24.05mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	653.7	21.56mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 07:40:00 PM

Mean Area 653.7
 Mean Conc. 21.56mg/L



Sample

Sample Name: L12050099-09
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

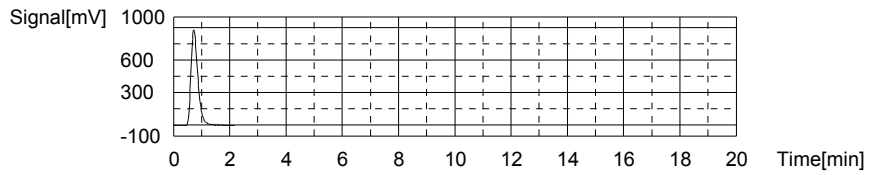
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.524mg/L TC:40.48mg/L IC:37.96mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1521	40.48mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 07:47:36 PM

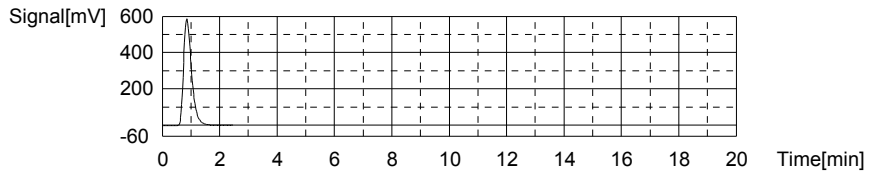
Mean Area 1521
Mean Conc. 40.48mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1141	37.96mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 07:53:23 PM

Mean Area 1141
Mean Conc. 37.96mg/L



Sample

Sample Name: L12050153-01
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

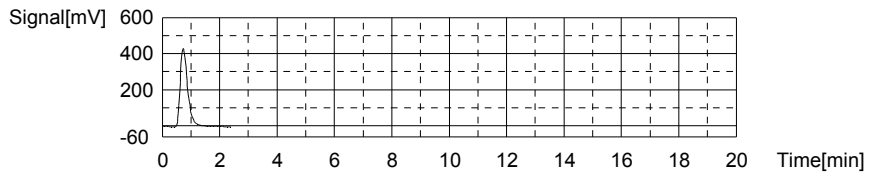
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.560mg/L TC:21.07mg/L IC:16.51mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	791.6	21.07mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 08:01:12 PM

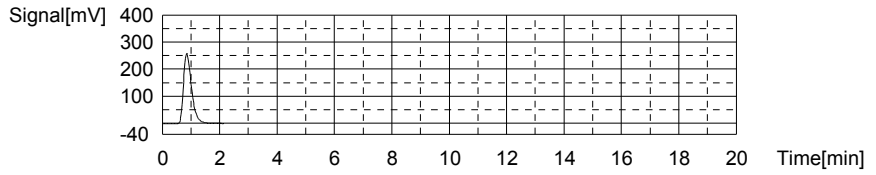
Mean Area 791.6
Mean Conc. 21.07mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	503.5	16.51mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 08:06:28 PM

Mean Area 503.5
 Mean Conc. 16.51mg/L



Sample

Sample Name: L12050153-03 (4)
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

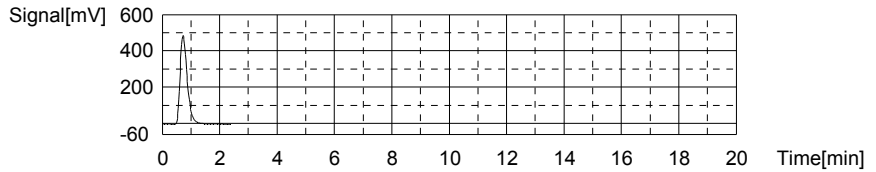
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.686mg/L TC:22.81mg/L IC:20.12mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	857.1	22.81mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 08:14:18 PM

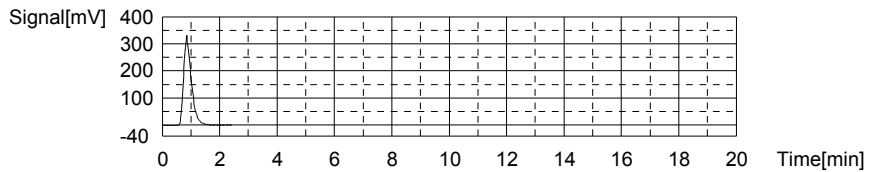
Mean Area 857.1
 Mean Conc. 22.81mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	611.0	20.12mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 08:19:50 PM

Mean Area 611.0
 Mean Conc. 20.12mg/L



Sample

Sample Name:
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

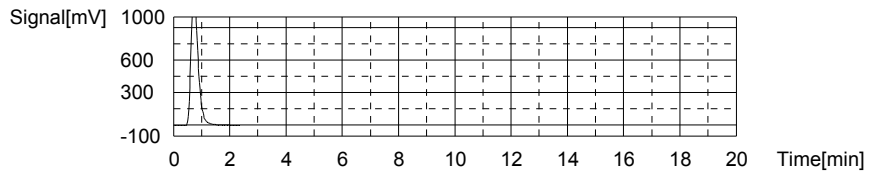
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.032mg/L TC:57.36mg/L IC:52.32mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2155	57.36mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 08:27:36 PM

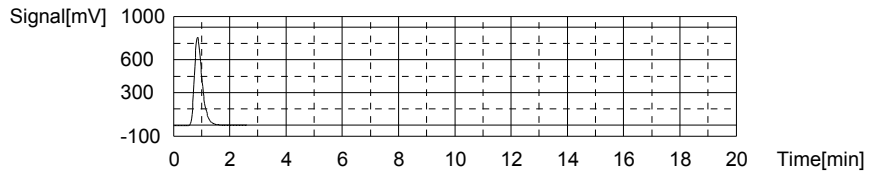
Mean Area 2155
Mean Conc. 57.36mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1568	52.32mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 08:33:38 PM

Mean Area 1568
Mean Conc. 52.32mg/L



Sample

Sample Name:

Sample ID:

Origin:

TOC-12-06-2011.met

Status

Completed

Chk. Result

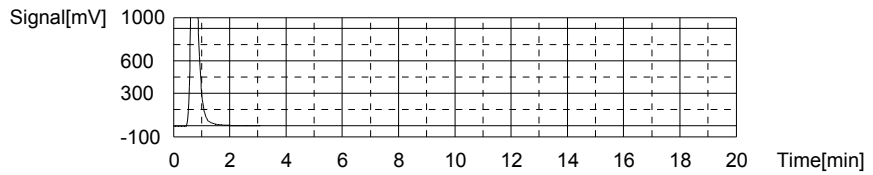
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-5.070mg/L TC:77.77mg/L IC:82.84mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2922	77.77mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 08:42:10 PM

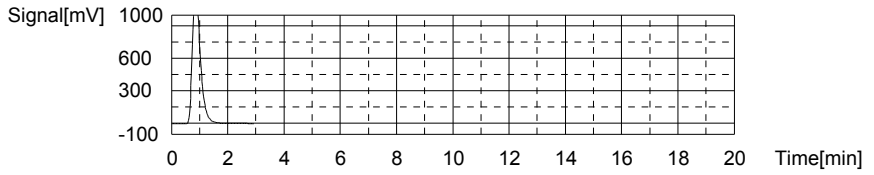
Mean Area 2922
Mean Conc. 77.77mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2475	82.84mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 08:48:43 PM

Mean Area 2475
 Mean Conc. 82.84mg/L



Sample

Sample Name:
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

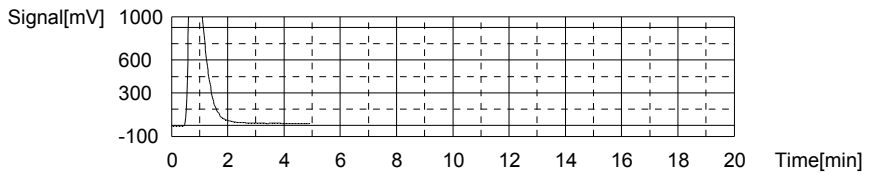
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:42.00mg/L TC:150.8mg/L IC:108.8mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5665	150.8mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40	5/10/2012 08:59:03 PM

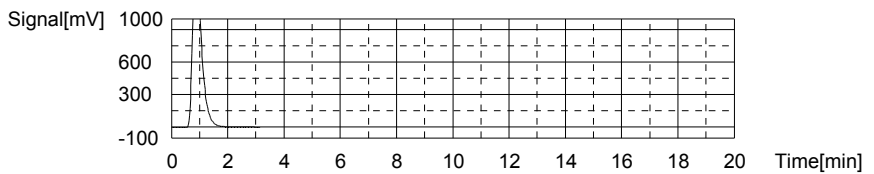
Mean Area 5665
 Mean Conc. 150.8mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3246	108.8mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 09:05:53 PM

Mean Area 3246
 Mean Conc. 108.8mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

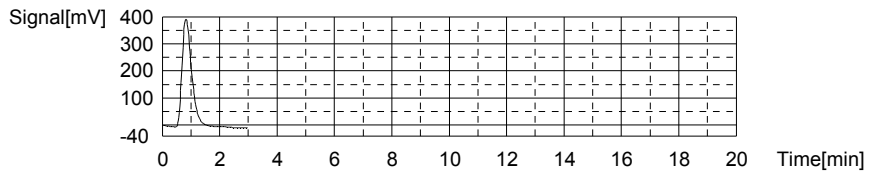
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.55mg/L TC:25.08mg/L IC:0.5287mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	942.4	25.08mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 09:14:17 PM

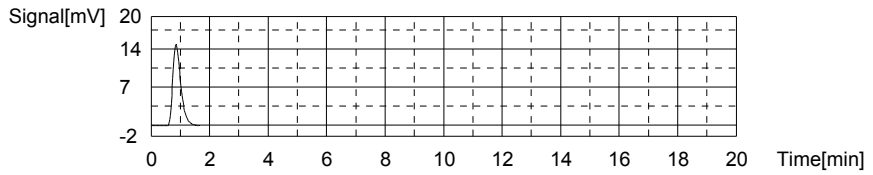
Mean Area 942.4
Mean Conc. 25.08mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.60	0.5287mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 09:19:04 PM

Mean Area 28.60
Mean Conc. 0.5287mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

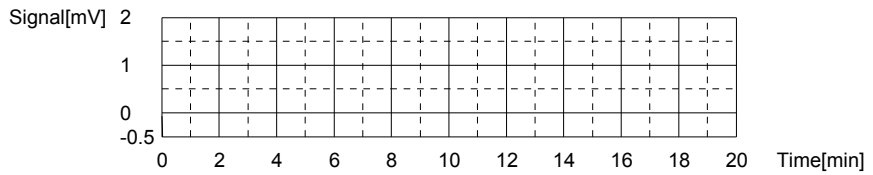
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.2931mg/L TC:0.1155mg/L IC:-0.1776mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.432	0.1155mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 09:24:19 PM

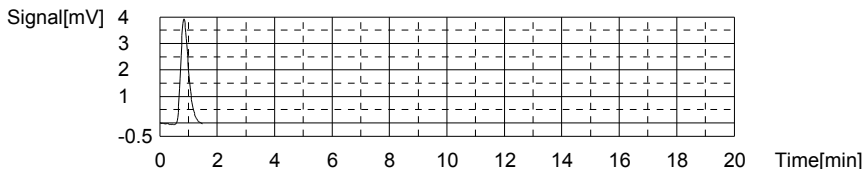
Mean Area 4.432
Mean Conc. 0.1155mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.608	-0.1776mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 09:28:16 PM

Mean Area 7.608
 Mean Conc. -0.1776mg/L



Sample

Sample Name:
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

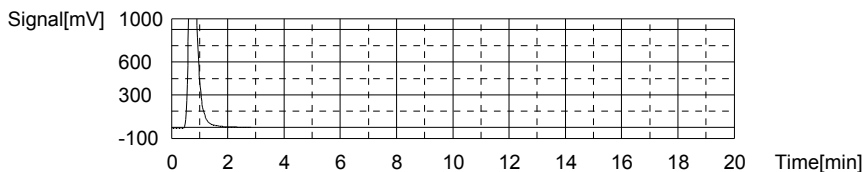
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-3.075mg/L TC:85.89mg/L IC:88.96mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3227	85.89mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 09:36:31 PM

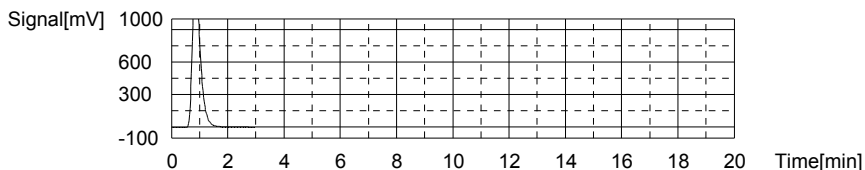
Mean Area 3227
 Mean Conc. 85.89mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2657	88.96mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 09:43:09 PM

Mean Area 2657
 Mean Conc. 88.96mg/L



Sample

Sample Name: WG397595-04
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

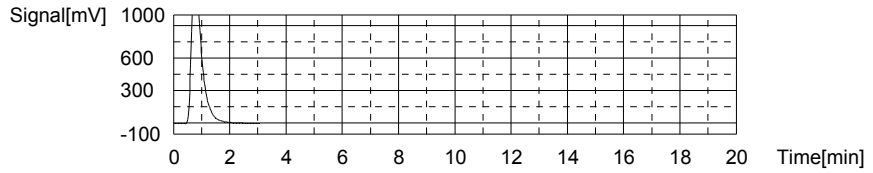
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:42.98mg/L TC:89.75mg/L IC:46.77mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3372	89.75mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 09:51:40 PM

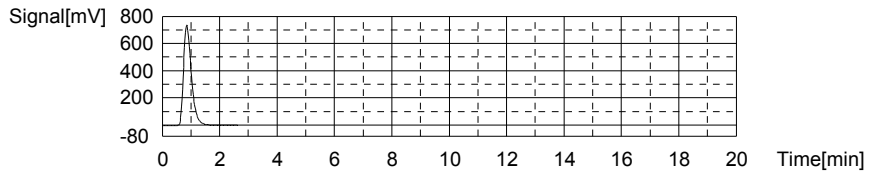
Mean Area 3372
Mean Conc. 89.75mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1403	46.77mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 09:57:55 PM

Mean Area 1403
Mean Conc. 46.77mg/L



Sample

Sample Name: WG397595-05
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

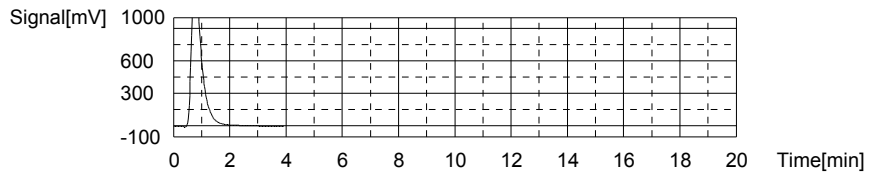
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:43.95mg/L TC:90.12mg/L IC:46.17mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3386	90.12mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 10:07:17 PM

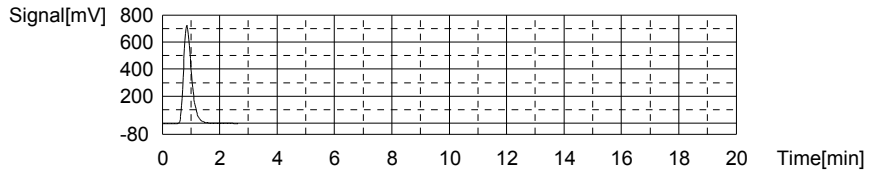
Mean Area 3386
Mean Conc. 90.12mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1385	46.17mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 10:13:25 PM

Mean Area 1385
Mean Conc. 46.17mg/L



Sample

Sample Name: WG397595-06
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

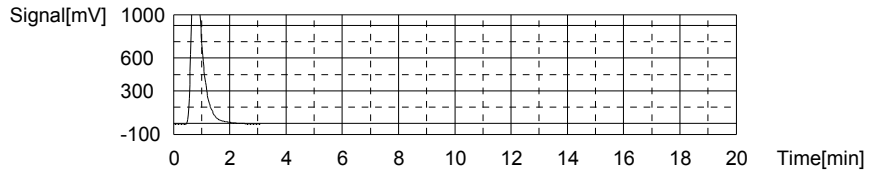
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:44.73mg/L TC:99.94mg/L IC:55.22mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3755	99.94mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40	5/10/2012 10:21:58 PM

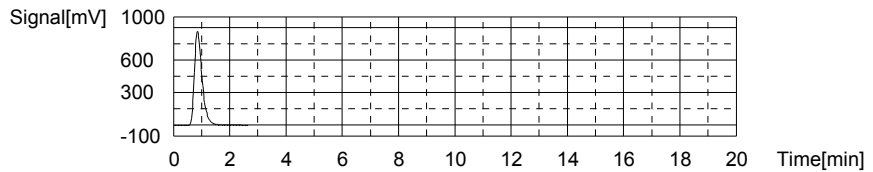
Mean Area 3755
Mean Conc. 99.94mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1654	55.22mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 10:28:02 PM

Mean Area 1654
Mean Conc. 55.22mg/L



Sample

Sample Name: WG397597-01 BLANK
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.2770mg/L TC:0.1349mg/L IC:-0.1421mg/L

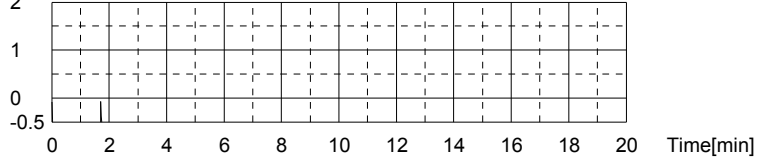
1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.397	0.1678mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 10:33:22 PM
2	3.925	0.1020mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 10:37:08 PM

Mean Area 5.161
Mean Conc. 0.1349mg/L

Signal[mV] 2

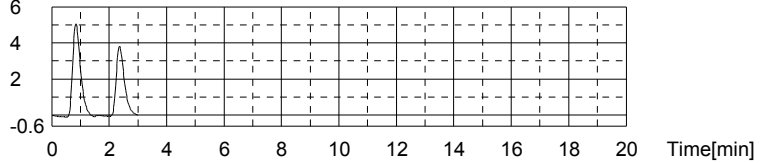


Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.923	-0.09969mg/L	500uL	1		TICCURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 10:41:12 PM
2	7.399	-0.1846mg/L	500uL	1		TICCURVE-12-06-2011B.2011 12 06 15 47	05/10/2012 10:45:09 PM

Mean Area 8.661
Mean Conc. -0.1421mg/L

Signal[mV] 6



Sample

Sample Name:
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:20.17mg/L TC:20.10mg/L IC:-0.06631mg/L

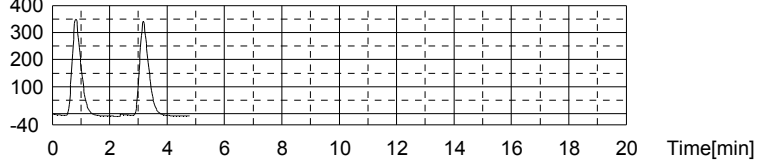
1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	756.7	20.14mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 10:52:57 PM
2	754.2	20.07mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/10/2012 10:57:38 PM

Mean Area 755.5
Mean Conc. 20.10mg/L

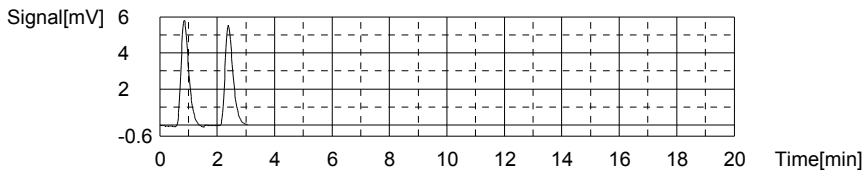
Signal[mV] 400



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.26	-0.05470mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:02:04 PM
2	10.57	-0.07792mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:06:14 PM

Mean Area 10.91
 Mean Conc. -0.06631mg/L



Sample

Sample Name:
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

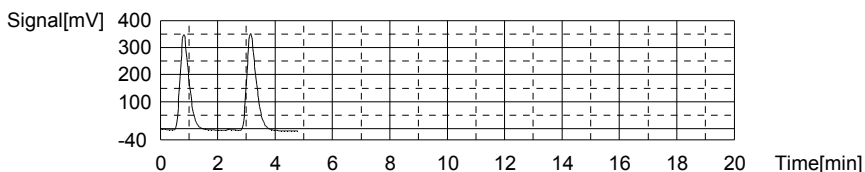
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:21.03mg/L TC:20.92mg/L IC:-0.1081mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	760.4	20.24mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 11:14:00 PM
2	812.0	21.61mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 11:18:47 PM

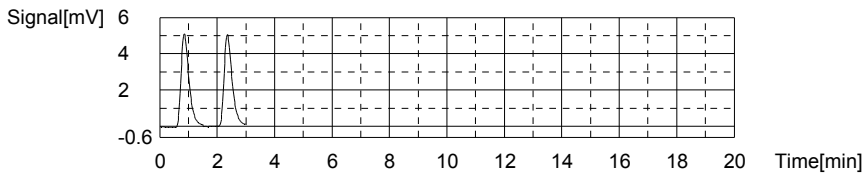
Mean Area 786.2
 Mean Conc. 20.92mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.765	-0.1050mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:23:09 PM
2	9.579	-0.1113mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:27:18 PM

Mean Area 9.672
 Mean Conc. -0.1081mg/L



Sample

Sample Name: L12050119-01 (10)
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

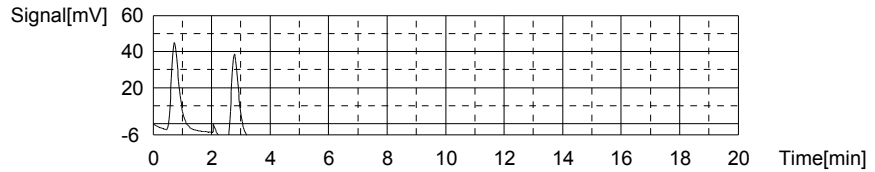
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8545mg/L TC:2.451mg/L IC:1.597mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.14	2.423mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_50	05/10/2012 11:34:48 PM
2	93.24	2.479mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_50	05/10/2012 11:39:15 PM

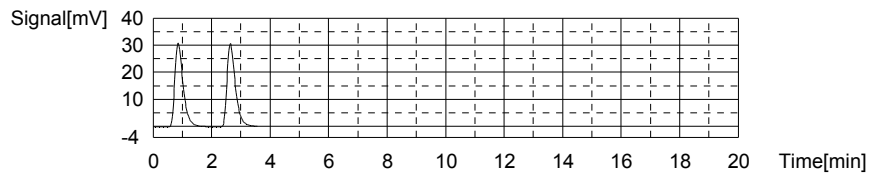
Mean Area 92.19
 Mean Conc. 2.451mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.50	1.602mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:43:57 PM
2	60.19	1.592mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:48:26 PM

Mean Area 60.34
 Mean Conc. 1.597mg/L



Sample

Sample Name: L12050119-02 (10)
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

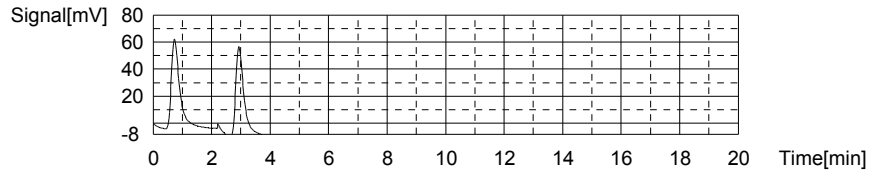
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.333mg/L TC:3.531mg/L IC:2.197mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	133.6	3.553mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_50	05/10/2012 11:56:05 PM
2	131.9	3.508mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_50	05/11/2012 12:00:45 AM

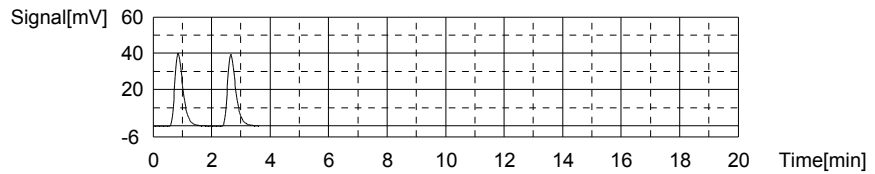
Mean Area 132.8
Mean Conc. 3.531mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	78.75	2.216mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:05:29 AM
2	77.64	2.179mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:09:59 AM

Mean Area 78.19
Mean Conc. 2.197mg/L



Sample

Sample Name: L12050119-03 (10)
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

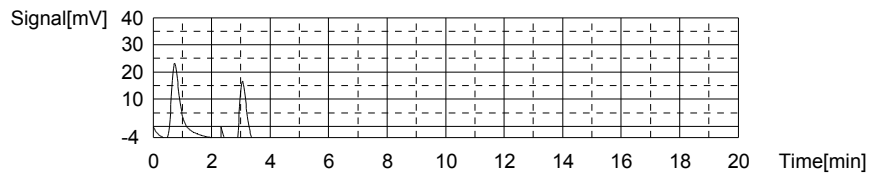
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.033mg/L TC:1.627mg/L IC:0.5940mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.02	1.675mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 12:17:45 AM
2	59.44	1.580mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 12:22:19 AM

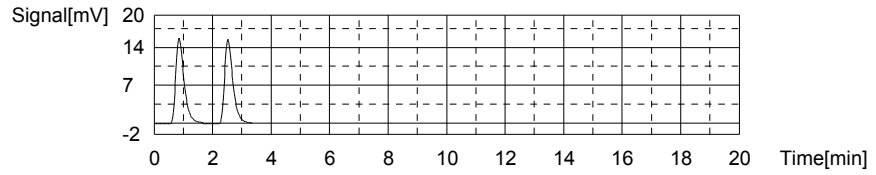
Mean Area 61.23
Mean Conc. 1.627mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.71	0.5997mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:26:51 AM
2	30.37	0.5883mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:31:13 AM

Mean Area 30.54
Mean Conc. 0.5940mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

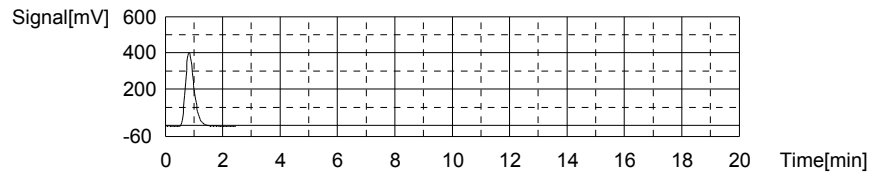
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.08mg/L TC:22.85mg/L IC:-0.2290mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	858.5	22.85mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/11/2012 12:39:08 AM

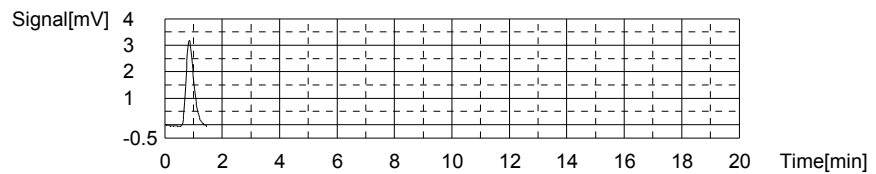
Mean Area 858.5
Mean Conc. 22.85mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.079	-0.2290mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/11/2012 12:43:30 AM

Mean Area 6.079
Mean Conc. -0.2290mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

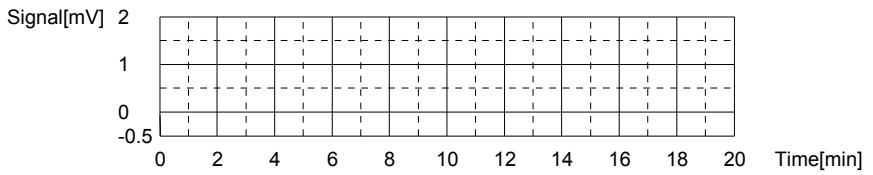
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4837mg/L TC:0.2365mg/L IC:-0.2472mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.977	0.2365mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 12:48:47 AM

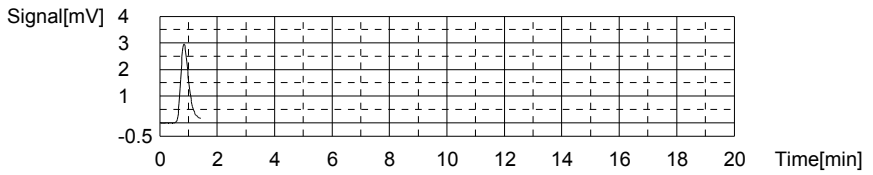
Mean Area 8.977
Mean Conc. 0.2365mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.538	-0.2472mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:52:40 AM

Mean Area 5.538
Mean Conc. -0.2472mg/L



Sample

Sample Name: L12050269-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

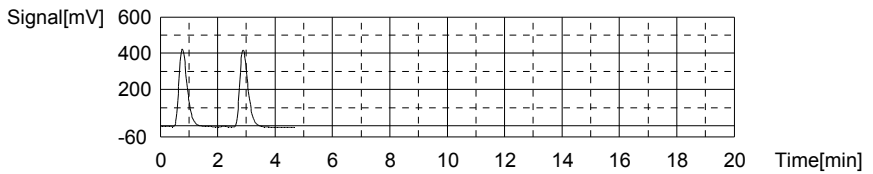
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:14.82mg/L TC:22.91mg/L IC:8.091mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	862.2	22.95mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:00:14 AM
2	859.4	22.87mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:06:15 AM

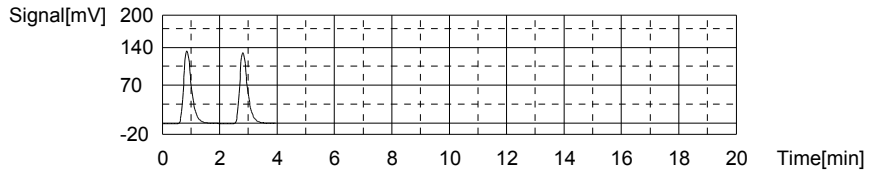
Mean Area 860.8
Mean Conc. 22.91mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	255.4	8.160mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:11:11 AM
2	251.3	8.022mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:15:57 AM

Mean Area 253.4
 Mean Conc. 8.091mg/L



Sample

Sample Name: L12050269-03
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

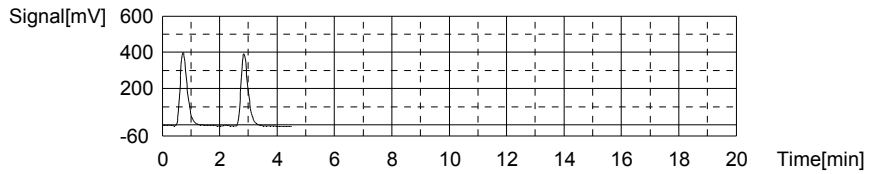
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.160mg/L TC:18.59mg/L IC:15.43mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	704.0	18.74mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	5/05/11/2012 01:23:31 AM
2	693.4	18.45mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	5/05/11/2012 01:29:00 AM

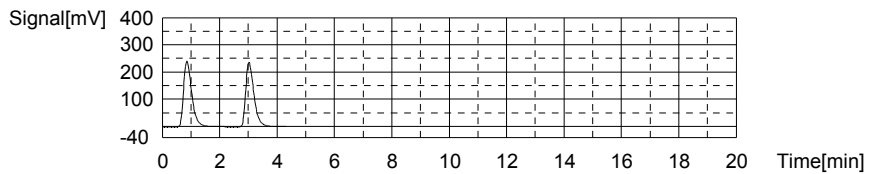
Mean Area 698.7
 Mean Conc. 18.59mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	475.3	15.56mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:34:14 AM
2	467.9	15.31mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:39:14 AM

Mean Area 471.6
 Mean Conc. 15.43mg/L



Sample

Sample Name: L12050269-05
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

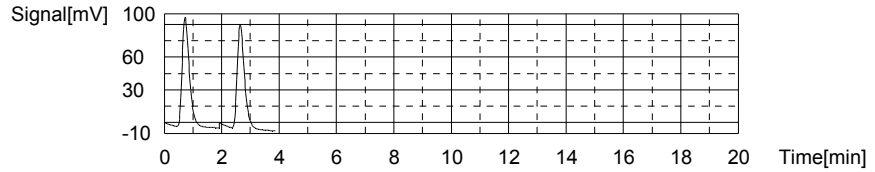
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.192mg/L TC:4.486mg/L IC:3.294mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	174.1	4.631mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:46:37 AM
2	163.2	4.341mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:50:49 AM

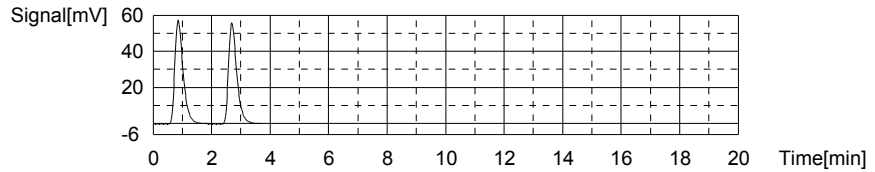
Mean Area 168.7
Mean Conc. 4.486mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	112.2	3.342mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:55:38 AM
2	109.4	3.247mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:00:10 AM

Mean Area 110.8
Mean Conc. 3.294mg/L



Sample

Sample Name: L12050269-07
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

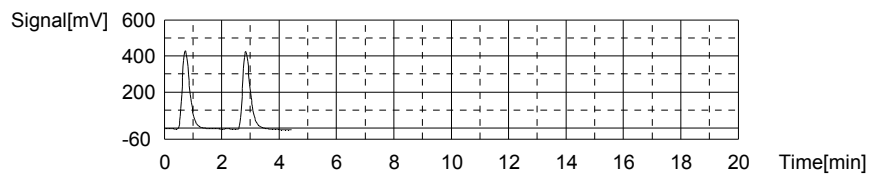
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.690mg/L TC:21.52mg/L IC:14.83mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	802.6	21.36mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:07:43 AM
2	814.5	21.68mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:13:10 AM

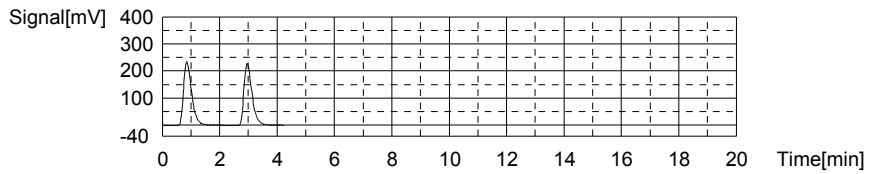
Mean Area 808.5
Mean Conc. 21.52mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	459.3	15.02mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:18:22 AM
2	447.9	14.64mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:23:24 AM

Mean Area 453.6
Mean Conc. 14.83mg/L



Sample

Sample Name: L12050269-09
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

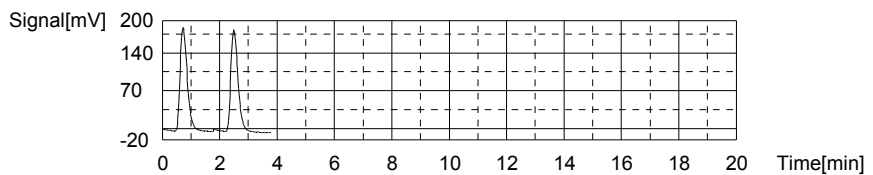
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.372mg/L TC:8.697mg/L IC:7.325mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	330.1	8.784mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:30:37 AM
2	323.6	8.611mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:35:42 AM

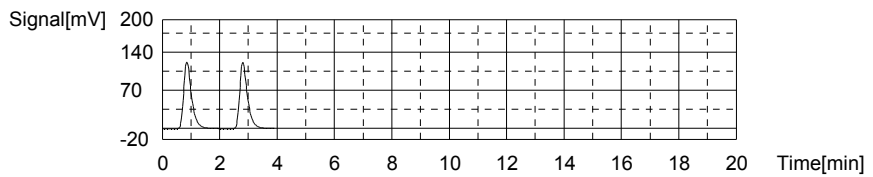
Mean Area 326.9
Mean Conc. 8.697mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	231.1	7.342mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:40:39 AM
2	230.1	7.308mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:45:24 AM

Mean Area 230.6
Mean Conc. 7.325mg/L



Sample

Sample Name: L12050269-11
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

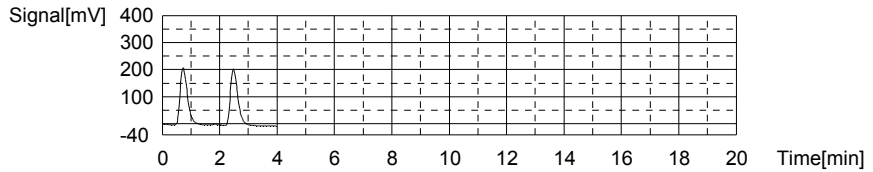
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.891mg/L TC:9.917mg/L IC:8.027mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	373.4	9.936mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:52:37 AM
2	372.0	9.899mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:57:55 AM

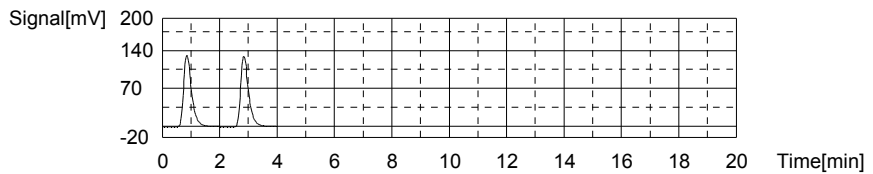
Mean Area 372.7
 Mean Conc. 9.917mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	252.5	8.062mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:02:54 AM
2	250.4	7.991mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:07:40 AM

Mean Area 251.4
 Mean Conc. 8.027mg/L



Sample

Sample Name: L12050269-13
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

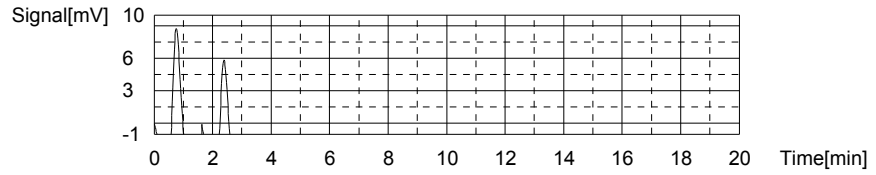
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.7796mg/L TC:0.5670mg/L IC:-0.2126mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.22	0.6156mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:14:44 AM
2	19.57	0.5184mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:18:44 AM

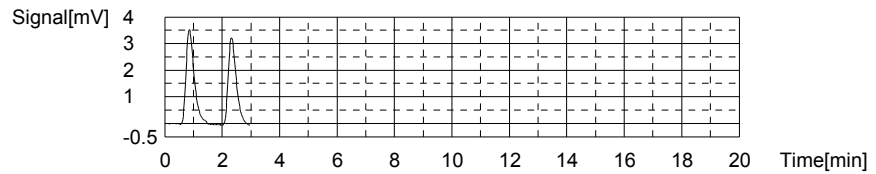
Mean Area 21.40
Mean Conc. 0.5670mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.779	-0.2055mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:23:04 AM
2	6.356	-0.2197mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:27:14 AM

Mean Area 6.567
Mean Conc. -0.2126mg/L



Sample

Sample Name: WG397597-05 DUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

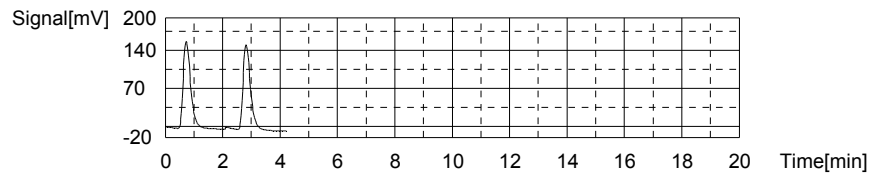
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.041mg/L TC:7.573mg/L IC:5.532mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	288.2	7.668mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:34:46 AM
2	281.0	7.477mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:39:16 AM

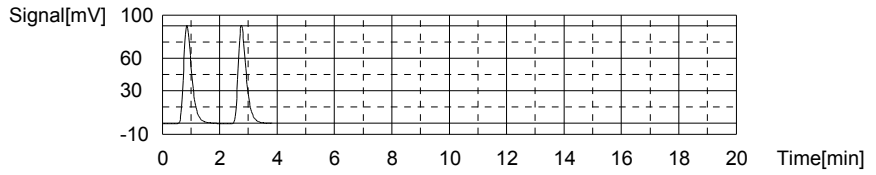
Mean Area 284.6
Mean Conc. 7.573mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	177.1	5.525mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:44:09 AM
2	177.5	5.539mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:48:50 AM

Mean Area 177.3
 Mean Conc. 5.532mg/L



Sample

Sample Name: WG3975597-06 MS
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

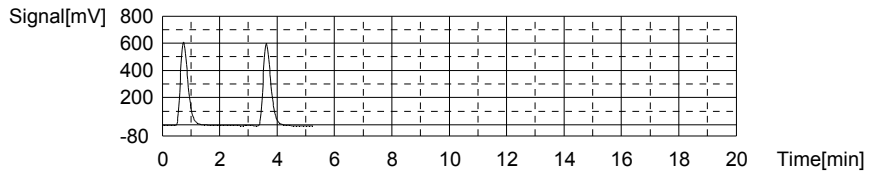
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:11.27mg/L TC:30.02mg/L IC:18.75mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1132	30.13mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	05/11/2012 03:57:12 AM
2	1124	29.91mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	05/11/2012 04:02:58 AM

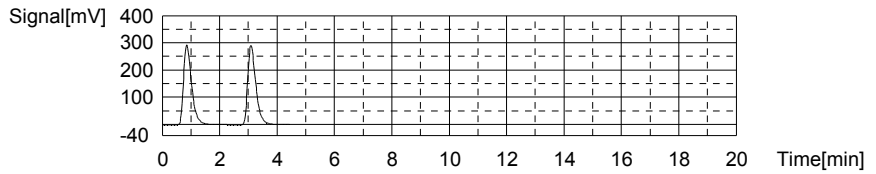
Mean Area 1128
 Mean Conc. 30.02mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	570.7	18.77mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:08:20 AM
2	569.4	18.72mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:13:25 AM

Mean Area 570.0
 Mean Conc. 18.75mg/L



Sample

Sample Name:
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

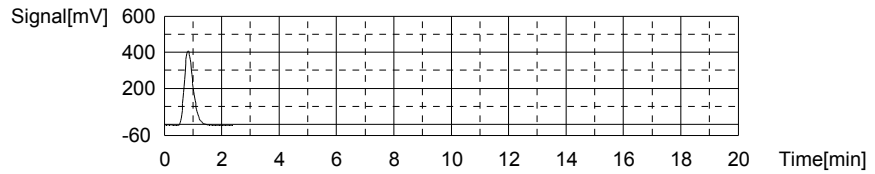
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.83mg/L TC:23.70mg/L IC:-0.1297mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	890.7	23.70mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 04:21:16 AM

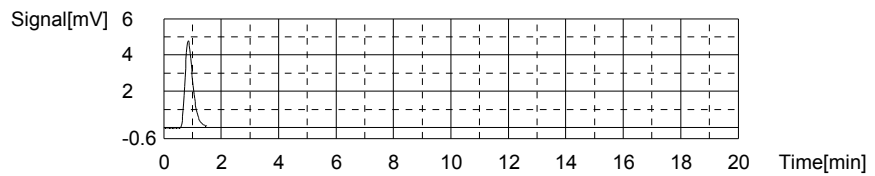
Mean Area 890.7
Mean Conc. 23.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.031	-0.1297mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:25:40 AM

Mean Area 9.031
Mean Conc. -0.1297mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

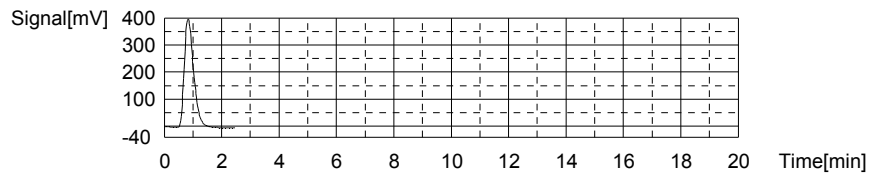
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.29mg/L TC:24.14mg/L IC:-0.1506mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	907.0	24.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 04:33:35 AM

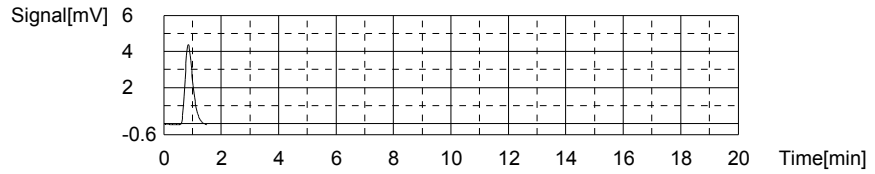
Mean Area 907.0
Mean Conc. 24.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.411	-0.1506mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:37:57 AM

Mean Area 8.411
Mean Conc. -0.1506mg/L



Sample

Sample Name: CCB
Sample ID: TOC-12-06-2011.met
Origin: Completed
Status: Completed
Chk. Result

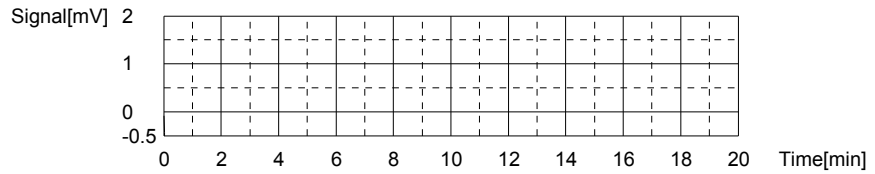
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3257mg/L TC:0.08990mg/L IC:-0.2358mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.471	0.08990mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 04:43:11 AM

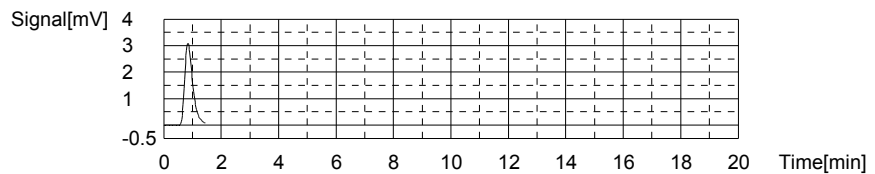
Mean Area 3.471
Mean Conc. 0.08990mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.878	-0.2358mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:47:03 AM

Mean Area 5.878
Mean Conc. -0.2358mg/L



Sample

Sample Name: CCV
Sample ID: TOC-12-06-2011.met
Origin: Completed
Status: Completed
Chk. Result

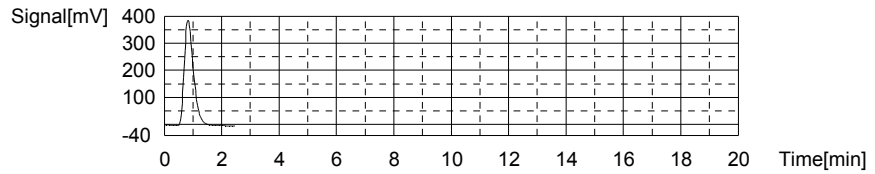
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:23.09mg/L TC:23.14mg/L IC:0.05734mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	869.6	23.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 06:55:36 AM

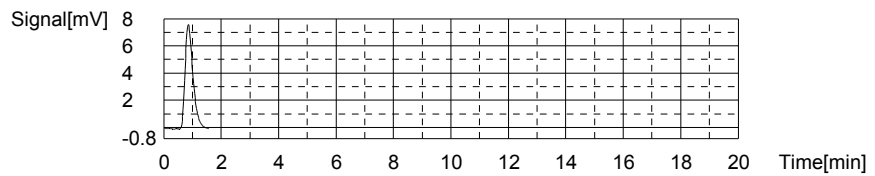
Mean Area 869.6
Mean Conc. 23.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.59	0.05734mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:00:12 AM

Mean Area 14.59
Mean Conc. 0.05734mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

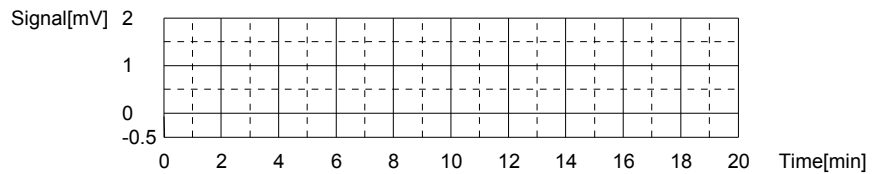
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.2946mg/L TC:0.06459mg/L IC:-0.2300mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.520	0.06459mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:05:29 AM

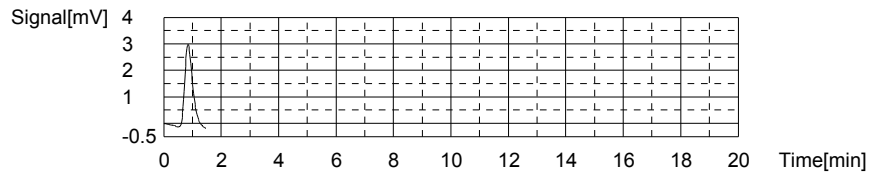
Mean Area 2.520
Mean Conc. 0.06459mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.050	-0.2300mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:09:27 AM

Mean Area 6.050
Mean Conc. -0.2300mg/L



Sample

Sample Name: WG397597-02 LCS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

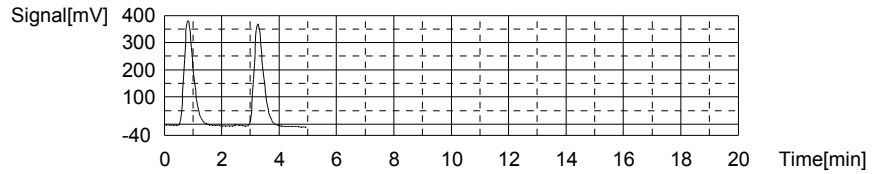
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.68mg/L TC:22.65mg/L IC:-0.03283mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	861.6	22.93mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:17:20 AM
2	840.7	22.37mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:22:07 AM

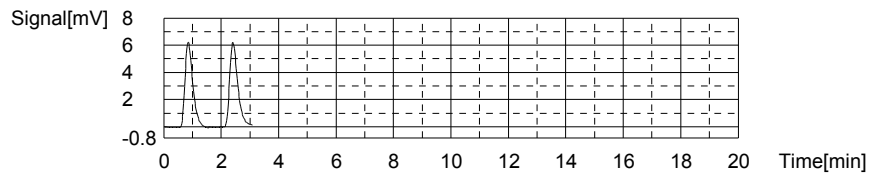
Mean Area 851.2
Mean Conc. 22.65mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.01	-0.02947mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:26:34 AM
2	11.81	-0.03620mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:30:47 AM

Mean Area 11.91
Mean Conc. -0.03283mg/L



Sample

Sample Name: WG397597-03 LCS2
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

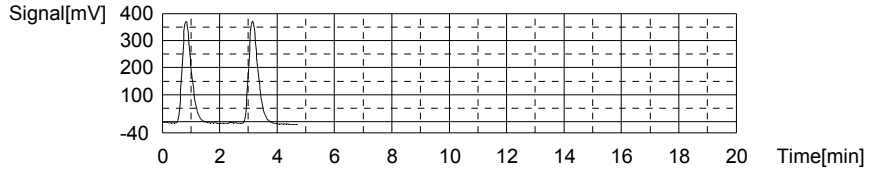
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.40mg/L TC:22.38mg/L IC:-0.01853mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	833.0	22.17mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_50	05/11/2012 07:38:33 AM
2	848.6	22.58mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_50	05/11/2012 07:43:17 AM

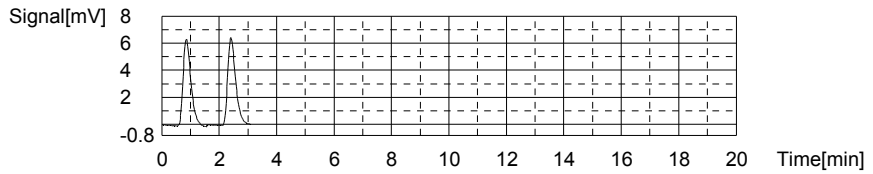
Mean Area 840.8
 Mean Conc. 22.38mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.29	-0.02004mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:47:42 AM
2	12.38	-0.01702mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:51:55 AM

Mean Area 12.34
 Mean Conc. -0.01853mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

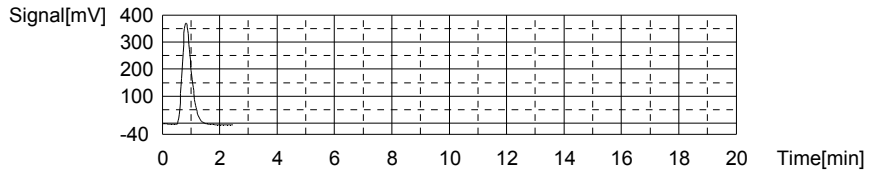
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:22.14mg/L TC:22.15mg/L IC:0.01057mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	832.4	22.15mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_50	05/11/2012 07:59:48 AM

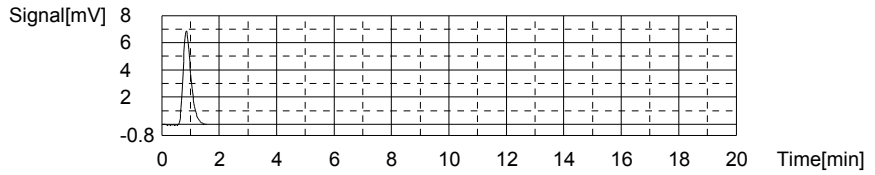
Mean Area 832.4
Mean Conc. 22.15mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.20	0.01057mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 08:04:14 AM

Mean Area 13.20
Mean Conc. 0.01057mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

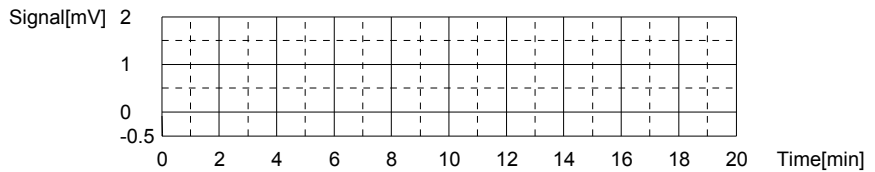
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3152mg/L TC:0.07867mg/L IC:-0.2365mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.049	0.07867mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_50	05/11/2012 08:09:30 AM

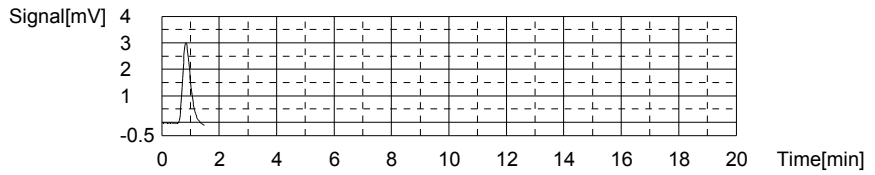
Mean Area 3.049
Mean Conc. 0.07867mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.857	-0.2365mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 08:13:28 AM

Mean Area 5.857
Mean Conc. -0.2365mg/L



Total Organic Carbon

397764
397767

MAKE DAILY

CCV (TOC): $\frac{STD\ 48750}{(5/200)(1000)} = 25mg/L$ LCS (TOC): $\frac{STD\ 50984}{(5/200)(1000)} = 25mg/L$

CCV (TIC): $\frac{STD\ 50244}{(5/200)(1000)} = 25mg/L$ MS (TOC): $\frac{STD\ 50984}{0.4/40\ (1000)} = 10$

Calibration Curve Date: 12/4/11 Reagent: RGT 17216
RGT 17230

SM5310-C : Matrix 2 WG 397764
 EPA 415.1/9060A(mod): Matrix T WG 397599 SOP: K 4151 Rev. 14
WG 397767 Instrument: Shimadzu TOC-VWP/ASI

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> drain reservoir filled | <input checked="" type="checkbox"/> DAILY CHECK | <input checked="" type="checkbox"/> sufficient acid |
| <input checked="" type="checkbox"/> ASI water bottle full | <input checked="" type="checkbox"/> 3 rd bottle full | <input checked="" type="checkbox"/> waste container |
| <input checked="" type="checkbox"/> dilution water bottle full | <input checked="" type="checkbox"/> sufficient gas | |
| | <input checked="" type="checkbox"/> sufficient persulfate | |

Position	Sample ID	Dilution
1	CCV25	
2	TIC25	
3	Blank	
4	LCS25	
5	LCS Dup	
6	OS-257-01	
7	-03	
8	-05	
9	-07	
10	-09	
11	-11	
12	-13	
13	OS-264-01	
14	CCV	
15	COB	
16	OS-264-02	
17	OS-285-01	
18	OS-286-04	1/4
19	-05	1/4
20	-04	1/4
21	-07	1/4
22	OS-171-01	
23	DUP -01	
24	MS -03	
25	SD -05	

Position	Sample ID	Dilution
26	CCV	
27	COB	
28	OS-171-07	1/10
29	OS-254-02 204-01	1/20
30	-03	-03 1/5
31	-04	-05 1/2
32	AG 11 -05	-07 1/20
33	Blank	
34	LCS25	
35	LCS Dup	
36	OS-314-01	
37	-02	
38	CCV	
39	COB	
40	DUP 314-02	
41	MS ↓	
42	Blank	
43	LCS25	
44	LCS Dup	
45	OS-099-01	1/2
46	OS-254-02	1/3
47	-03	1/2
48	-04	1/2
49	-05	1/2
50	CCV	

Position	Sample ID	Dilution
51	COB	
52	OS-153-05	1/2
53	-07	1/2
54	OS-245-04	1/5
55	-0-12	1/5
56	-14	1/5
57	OS-341-04	1/3
58	-05	1/3
59	-06	1/10
60	-07	1/5
61	-08	1/4
62	CCV	
63	COB	
64	OS-341-10	1/4
65	DUP -10	
66	MS -11	
67	SD -12	
68	-13	1/2
69	CCV	
70	COB	
71		
72		
73		
74		
75		

Analyst: [Signature] Date/Time: 5/12/12

DCN#90847



	Analys	Sample Name	Result	Status	Date / Time	Val
1	TOC	CCV 25	!!Error!! TOC:23.68mg/L TC:23.51mg/L IC:-0.1656mg/L	Completed	05/12/2012 10:29:30 A	1
2	TOC	TIC 25	TOC:1.862mg/L TC:25.94mg/L IC:24.08mg/L	Completed	05/12/2012 10:43:37 A	2
3	TOC	WG397599-01 BLANK	!!Error!! TOC:0.4364mg/L TC:0.2839mg/L IC:-0.1525mg/L	Completed	05/12/2012 10:52:39 A	0
4	TOC	WG397599-02 LCS25	!!Error!! TOC:23.26mg/L TC:22.98mg/L IC:-0.2778mg/L	Completed	05/12/2012 11:04:53 A	4
5	TOC	WG397599-03 LCS25	!!Error!! TOC:23.04mg/L TC:22.76mg/L IC:-0.2833mg/L	Completed	05/12/2012 11:17:05 A	5
6	TOC	L12050257-01	TOC:5.869mg/L TC:43.49mg/L IC:37.62mg/L	Completed	05/12/2012 11:30:57 A	6
7	TOC	L12050257-03	TOC:6.842mg/L TC:44.90mg/L IC:38.06mg/L	Completed	05/12/2012 11:45:17 A	7
8	TOC	L12050257-05	TOC:5.248mg/L TC:42.40mg/L IC:37.15mg/L	Completed	05/12/2012 11:59:02 A	8
9	TOC	L12050257-07	TOC:6.813mg/L TC:20.43mg/L IC:13.62mg/L	Completed	05/12/2012 12:12:49 F	9
10	TOC	L12050257-09	TOC:6.736mg/L TC:20.88mg/L IC:14.14mg/L	Completed	05/12/2012 12:25:51 F	10
11	TOC	L12050257-11 X	TOC:7.170mg/L TC:51.55mg/L IC:44.38mg/L	Completed	05/12/2012 12:40:17 F	11
12	TOC	L12050257-13	TOC:6.484mg/L TC:43.83mg/L IC:37.35mg/L	Completed	05/12/2012 12:54:41 F	12
13	TOC	L12050266-01	TOC:2.711mg/L TC:9.148mg/L IC:6.437mg/L	Completed	05/12/2012 10:06:06 F	13
14	TOC	CCV	!!Error!! TOC:25.83mg/L TC:25.67mg/L IC:-0.1642mg/L	Completed	05/12/2012 01:20:22 F	14
15	TOC	CCB	!!Error!! TOC:0.4375mg/L TC:0.2406mg/L IC:-0.1969mg/L	Completed	05/12/2012 01:28:19 F	0
16	TOC	L12050266-02	TOC:3.780mg/L TC:9.231mg/L IC:5.451mg/L	Completed	05/12/2012 01:43:02 F	16
17	TOC	L12050285-01	TOC:3.003mg/L TC:21.14mg/L IC:18.14mg/L	Completed	05/12/2012 02:58:06 F	17
18	TOC	L12050286-04 (4)	TOC:6.402mg/L TC:19.15mg/L IC:12.75mg/L	Completed	05/12/2012 02:09:02 F	18
19	TOC	L12050286-05 (4)	TOC:8.066mg/L TC:28.82mg/L IC:20.76mg/L	Completed	05/12/2012 02:21:59 F	19
20	TOC	L12050286-06 (4)	TOC:8.125mg/L TC:28.39mg/L IC:18.26mg/L	Completed	05/12/2012 02:35:32 F	20
21	TOC	L12050286-07 (4)	TOC:8.810mg/L TC:43.44mg/L IC:34.63mg/L	Completed	05/12/2012 02:49:28 F	21
22	TOC	L12050171-01	TOC:5.890mg/L TC:39.20mg/L IC:33.31mg/L	Completed	05/12/2012 03:02:50 F	22
23	TOC	WG397599-05 DUP	TOC:4.271mg/L TC:35.98mg/L IC:31.71mg/L	Completed	05/12/2012 03:16:48 F	23
24	TOC	L12050171-03 MS	TOC:15.15mg/L TC:51.02mg/L IC:35.87mg/L	Completed	05/12/2012 03:30:44 F	24
25	TOC	L12050171-05 MSD	TOC:15.20mg/L TC:47.03mg/L IC:31.83mg/L	Completed	05/12/2012 03:44:30 F	25
26	TOC	CCV	!!Error!! TOC:25.00mg/L TC:24.92mg/L IC:-0.07186mg/L	Completed	05/12/2012 03:55:46 F	26
27	TOC	CCB	!!Error!! TOC:0.4377mg/L TC:0.2516mg/L IC:-0.1861mg/L	Completed	05/12/2012 04:06:54 F	0
28	TOC	L12050171-07 (10)	TOC:1.372mg/L TC:25.07mg/L IC:23.70mg/L	Completed	05/12/2012 04:18:52 F	28
29	TOC	L12050226-01 (200)	TOC:31.25mg/L TC:31.59mg/L IC:0.3460mg/L	Completed	05/12/2012 04:31:19 F	29
30	TOC	L12050226-03 (5)	TOC:1.808mg/L TC:7.072mg/L IC:5.263mg/L	Completed	05/12/2012 04:44:11 F	30
31	TOC	L12050226-05 (2)	TOC:3.580mg/L TC:40.56mg/L IC:36.98mg/L	Completed	05/12/2012 04:58:23 F	31
32	TOC	L12050226-07 (20) X	TOC:17.81mg/L TC:66.54mg/L IC:48.93mg/L	Completed	05/12/2012 05:13:06 F	32
33	TOC	WG397764-01 BLANK	!!Error!! TOC:0.4759mg/L TC:0.3571mg/L IC:-0.1188mg/L	Completed	05/12/2012 05:29:54 F	0
34	TOC	WG397764-02 LCS25	!!Error!! TOC:23.29mg/L TC:23.06mg/L IC:-0.2312mg/L	Completed	05/12/2012 05:51:05 F	34
35	TOC	WG397764-03 LCS25	!!Error!! TOC:23.48mg/L TC:23.22mg/L IC:-0.2415mg/L	Completed	05/12/2012 06:11:57 F	35
36	TOC	L12050314-01 X	!!Error!! TOC:266.2mg/L TC:266.1mg/L IC:-0.08946mg/L	Completed	05/13/2012 04:36:40 A	36
37	TOC	L12050314-02 X	TOC:109.4mg/L TC:169.2mg/L IC:59.81mg/L	Completed	05/13/2012 05:06:52 A	37
38	TOC	CCV	TOC:22.63mg/L TC:22.79mg/L IC:0.1556mg/L	Completed	05/13/2012 05:19:34 A	38
39	TOC	CCB	!!Error!! TOC:0.6383mg/L TC:0.5022mg/L IC:-0.1362mg/L	Completed	05/13/2012 05:28:00 A	0
40	TOC	WG397764-05 DUP	TOC:146.6mg/L TC:266.1mg/L IC:119.5mg/L	Completed	05/13/2012 06:04:34 A	40
41	TOC	WG397764-06 MS	TOC:194.4mg/L TC:266.1mg/L IC:71.69mg/L	Completed	05/13/2012 06:35:53 A	41
42	TOC	WG397767-01 BLANK	!!Error!! TOC:-0.1954mg/L TC:-0.00248mg/L IC:0.1929mg/L	Completed	05/13/2012 06:46:53 A	0
43	TOC	WG397767-02 LCS25	!!Error!! TOC:23.86mg/L TC:23.80mg/L IC:-0.06042mg/L	Completed	05/13/2012 07:00:01 A	43
44	TOC	WG397767-03 LCS25	!!Error!! TOC:26.84mg/L TC:26.69mg/L IC:-0.1497mg/L	Completed	05/13/2012 07:12:55 A	44
45	TOC	L12050099-01 (2)	TOC:3.173mg/L TC:7.793mg/L IC:4.620mg/L	Completed	05/13/2012 07:25:34 A	45
46	TOC	L12050254-02 (3)	TOC:6.855mg/L TC:7.857mg/L IC:1.003mg/L	Completed	05/13/2012 07:38:01 A	46
47	TOC	L12050254-03 (2)	TOC:6.246mg/L TC:9.957mg/L IC:3.712mg/L	Completed	05/13/2012 07:50:38 A	47
48	TOC	L12050254-04 (2)	TOC:1.808mg/L TC:3.769mg/L IC:1.960mg/L	Completed	05/13/2012 08:02:45 A	48
49	TOC	L12050254-05 (2)	TOC:5.135mg/L TC:9.005mg/L IC:3.870mg/L	Completed	05/13/2012 08:15:51 A	49
50	TOC	CCV	!!Error!! TOC:24.73mg/L TC:24.70mg/L IC:-0.03317mg/L	Completed	05/13/2012 08:28:19 A	50
51	TOC	CCB	!!Error!! TOC:0.4010mg/L TC:0.2358mg/L IC:-0.1652mg/L	Completed	05/13/2012 08:37:29 A	0
52	TOC	L12050153-05 (2)	TOC:1.599mg/L TC:3.609mg/L IC:2.011mg/L	Completed	05/13/2012 08:49:32 A	52
53	TOC	L12050153-07 (2)	TOC:3.863mg/L TC:7.056mg/L IC:3.194mg/L	Completed	05/13/2012 08:52:02 A	53
54	TOC	L12050245-04 (5)	TOC:17.09mg/L TC:19.12mg/L IC:2.029mg/L	Completed	05/13/2012 09:14:57 A	54
55	TOC	L12050245-12 (5)	TOC:3.885mg/L TC:6.207mg/L IC:2.322mg/L	Completed	05/13/2012 09:27:23 A	55
56	TOC	L12050245-14 (5)	TOC:10.13mg/L TC:10.93mg/L IC:0.8018mg/L	Completed	05/13/2012 09:39:50 A	56
57	TOC	L12050341-04 (3)	TOC:4.739mg/L TC:5.390mg/L IC:0.6505mg/L	Completed	05/13/2012 09:52:07 A	57
58	TOC	L12050341-05 (3)	TOC:8.336mg/L TC:8.659mg/L IC:0.3221mg/L	Completed	05/13/2012 10:04:40 A	58
59	TOC	L12050341-06 (10) X	TOC:23.94mg/L TC:67.82mg/L IC:43.88mg/L	Completed	05/13/2012 10:18:52 A	59
60	TOC	L12050341-07 (5)	TOC:7.553mg/L TC:12.19mg/L IC:4.640mg/L	Completed	05/13/2012 10:31:56 A	60
61	TOC	L12050341-08	!!Error!! TOC:2.645mg/L TC:2.488mg/L IC:-0.1570mg/L	Completed	05/13/2012 10:43:36 A	61
62	TOC	CCV	TOC:24.51mg/L TC:24.52mg/L IC:0.01024mg/L	Completed	05/13/2012 10:56:07 A	62
63	TOC	CCB	!!Error!! TOC:0.3839mg/L TC:0.2189mg/L IC:-0.1651mg/L	Completed	05/13/2012 11:05:17 A	0
64	TOC	L12050341-10 (4)	TOC:5.602mg/L TC:6.958mg/L IC:1.356mg/L	Completed	05/13/2012 11:17:53 A	64
65	TOC	WG397767-05 (4) DUP	TOC:5.149mg/L TC:6.793mg/L IC:1.644mg/L	Completed	05/13/2012 11:30:21 A	65
66	TOC	L12050341-11 (4) MS	TOC:9.559mg/L TC:11.24mg/L IC:1.684mg/L	Completed	05/13/2012 11:42:58 A	66
67	TOC	L12050341-12 (4) MSD	TOC:8.308mg/L TC:9.260mg/L IC:0.9517mg/L	Completed	05/13/2012 11:55:28 A	67

	Analys	Sample Name	Result	Status	Date / Time	Vis
68	TOC	L12050341-13 (2)	TOC:9.188mg/L TC:11.70mg/L IC:2.518mg/L	Completed	05/13/2012 12:08:16 F	68
69	TOC	CCV	TOC:24.82mg/L TC:24.86mg/L IC:0.04388mg/L	Completed	05/13/2012 12:20:33 F	1
70	TOC	CCB	||Error! TOC:0.3926mg/L TC:0.2204mg/L IC:-0.1722mg/L	Completed	05/13/2012 12:28:44 F	0

05/14/2012 03:03:14 PM

2/2

Instr.Information

System TOCVW ASI
 Detector Wet Chemical

Sample

Sample Name: CCV 25
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

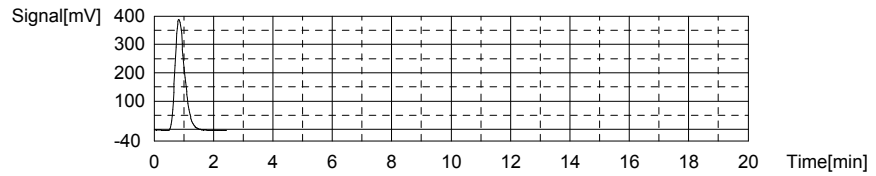
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.68mg/L TC:23.51mg/L IC:-0.1659mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	883.5	23.51mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 10:25:24 AM

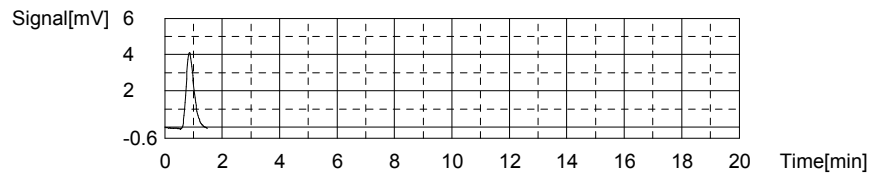
Mean Area 883.5
 Mean Conc. 23.51mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.954	-0.1659mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 10:29:50 AM

Mean Area 7.954
 Mean Conc. -0.1659mg/L



Sample

Sample Name: TIC 25
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

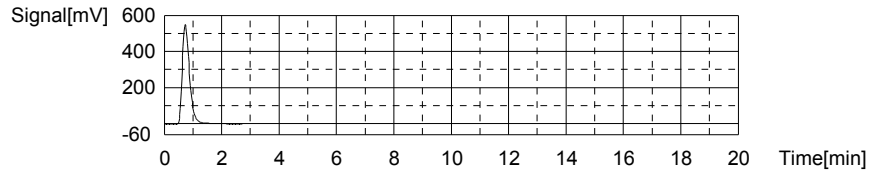
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.862mg/L TC:25.94mg/L IC:24.08mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	974.8	25.94mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 10:37:58 AM

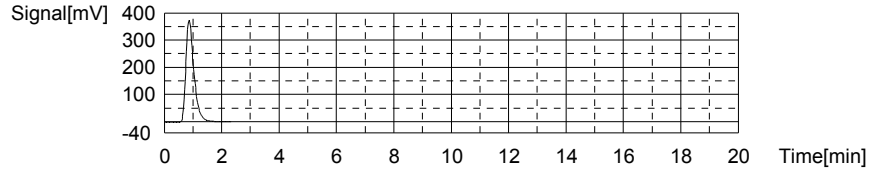
Mean Area 974.8
Mean Conc. 25.94mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	728.6	24.08mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 10:43:33 AM

Mean Area 728.6
Mean Conc. 24.08mg/L



Sample

Sample Name: WG397599-01 BLANK
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

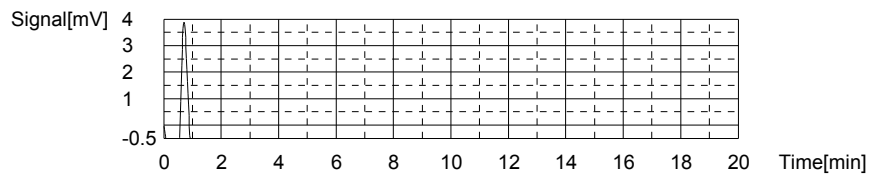
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4364mg/L TC:0.2839mg/L IC:-0.1525mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.76	0.2839mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 10:48:40 AM

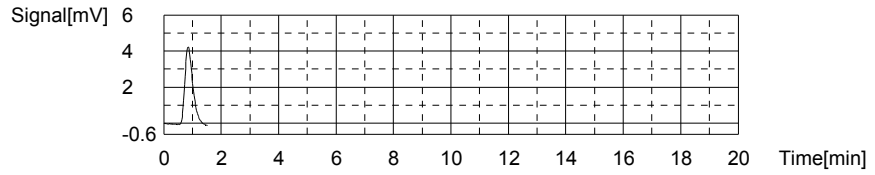
Mean Area 10.76
Mean Conc. 0.2839mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.353	-0.1525mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 10:52:39 AM

Mean Area 8.353
Mean Conc. -0.1525mg/L



Sample

Sample Name: WG397599-02 LCS25
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

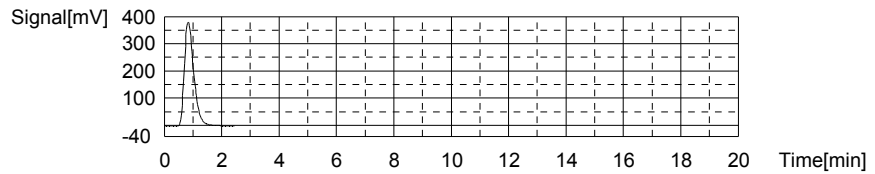
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.26mg/L TC:22.98mg/L IC:-0.2778mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	863.5	22.98mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 11:00:32 AM

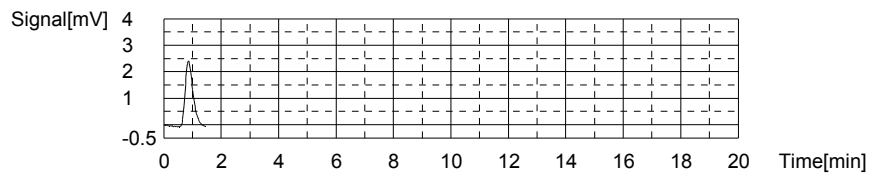
Mean Area 863.5
Mean Conc. 22.98mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.628	-0.2778mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 11:04:53 AM

Mean Area 4.628
Mean Conc. -0.2778mg/L



Sample

Sample Name: WG397599-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

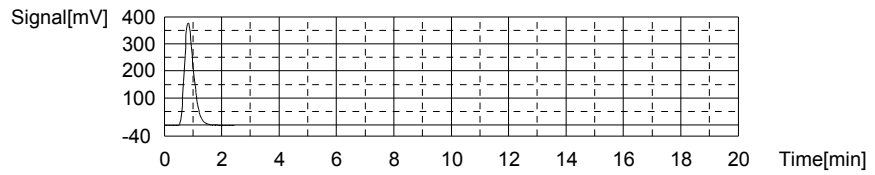
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.04mg/L TC:22.76mg/L IC:-0.2833mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	855.2	22.76mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 11:12:45 AM

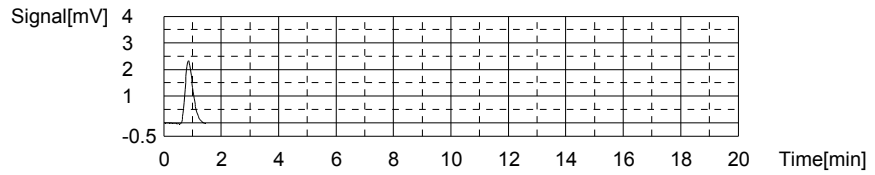
Mean Area 855.2
Mean Conc. 22.76mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.467	-0.2833mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 11:17:05 AM

Mean Area 4.467
Mean Conc. -0.2833mg/L



Sample

Sample Name: L12050257-01
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

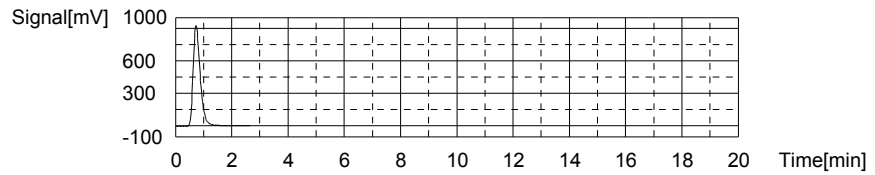
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.869mg/L TC:43.49mg/L IC:37.62mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1634	43.49mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 11:25:10 AM

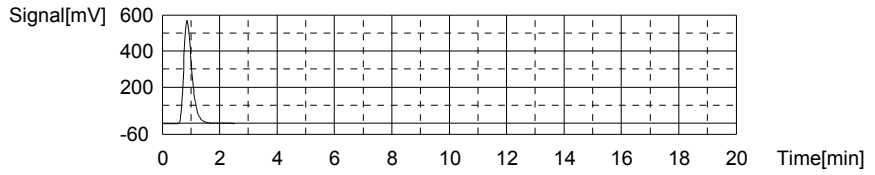
Mean Area 1634
Mean Conc. 43.49mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1131	37.62mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 11:30:57 AM

Mean Area 1131
 Mean Conc. 37.62mg/L



Sample

Sample Name: L12050257-03
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

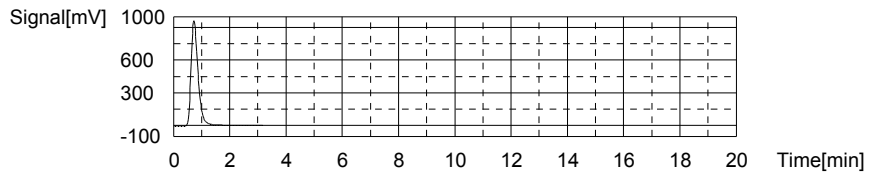
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.842mg/L TC:44.90mg/L IC:38.06mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1687	44.90mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 11:39:33 AM

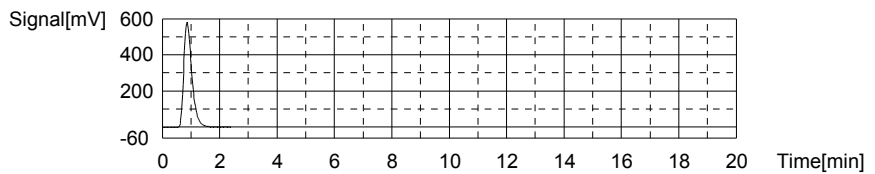
Mean Area 1687
 Mean Conc. 44.90mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1144	38.06mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 11:45:17 AM

Mean Area 1144
 Mean Conc. 38.06mg/L



Sample

Sample Name: L12050257-05
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

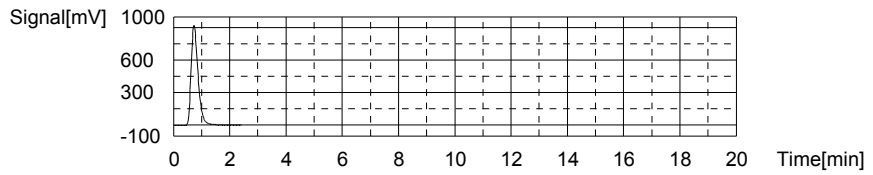
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.248mg/L TC:42.40mg/L IC:37.15mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1593	42.40mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 11:53:07 AM

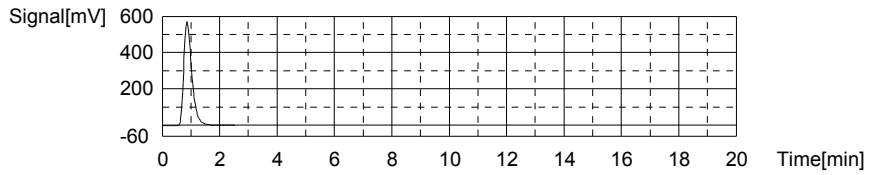
Mean Area 1593
Mean Conc. 42.40mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1117	37.15mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 11:59:02 AM

Mean Area 1117
Mean Conc. 37.15mg/L



Sample

Sample Name: L12050257-07
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

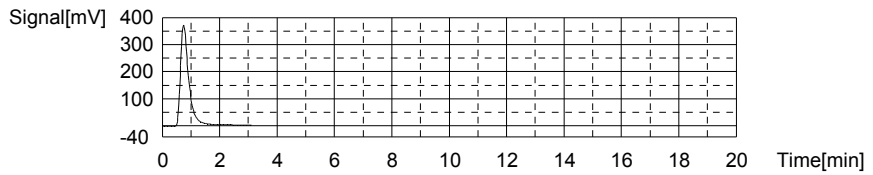
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.813mg/L TC:20.43mg/L IC:13.62mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	767.8	20.43mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 12:07:35 PM

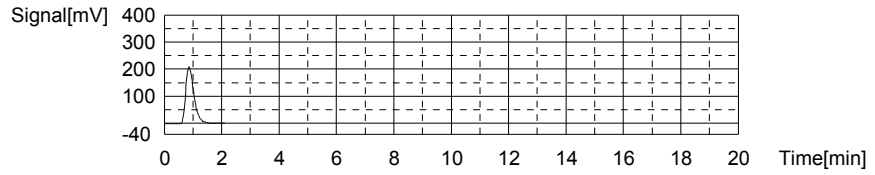
Mean Area 767.8
Mean Conc. 20.43mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	417.7	13.62mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 12:12:48 PM

Mean Area 417.7
Mean Conc. 13.62mg/L



Sample

Sample Name: L12050257-09
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

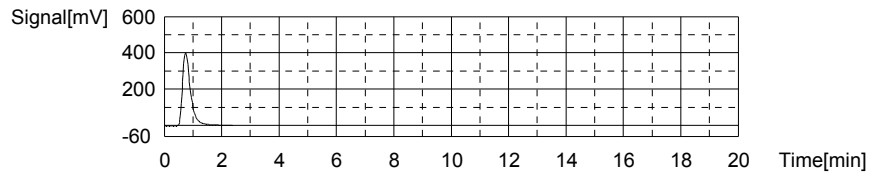
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.736mg/L TC:20.88mg/L IC:14.14mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	784.5	20.88mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 12:20:37 PM

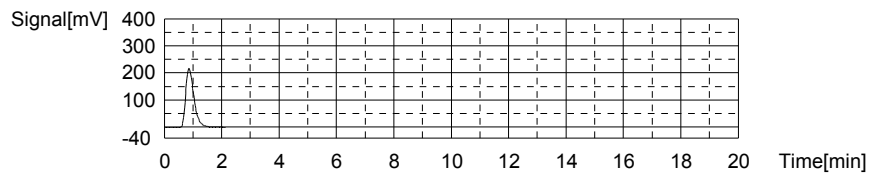
Mean Area 784.5
Mean Conc. 20.88mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	433.2	14.14mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 12:25:51 PM

Mean Area 433.2
Mean Conc. 14.14mg/L



Sample

Sample Name: L12050257-11
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

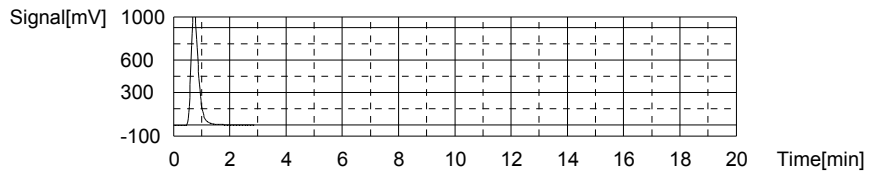
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.170mg/L TC:51.55mg/L IC:44.38mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1937	51.55mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 12:34:09 PM

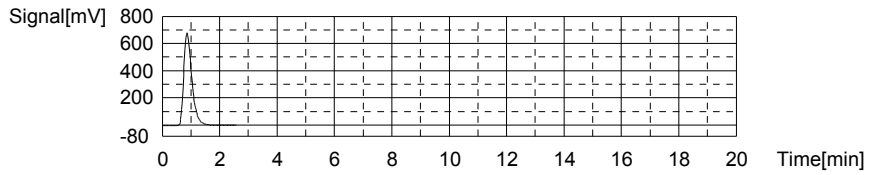
Mean Area 1937
Mean Conc. 51.55mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1332	44.38mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 12:40:17 PM

Mean Area 1332
Mean Conc. 44.38mg/L



Sample

Sample Name: L12050257-13
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

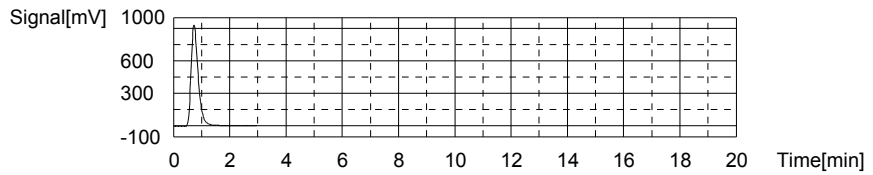
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.484mg/L TC:43.83mg/L IC:37.35mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1647	43.83mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 12:48:41 PM

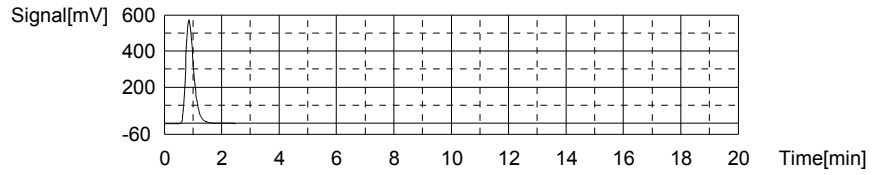
Mean Area 1647
Mean Conc. 43.83mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1123	37.35mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 12:54:41 PM

Mean Area 1123
 Mean Conc. 37.35mg/L



Sample

Sample Name: L12050266-01
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

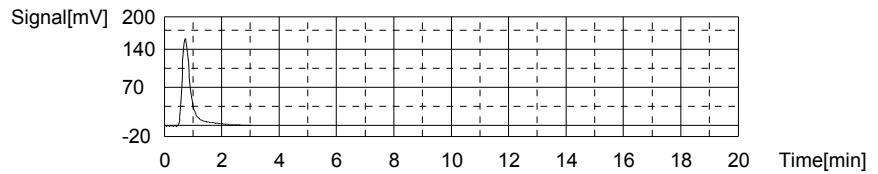
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.711mg/L TC:9.148mg/L IC:6.437mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	343.8	9.148mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 01:03:07 PM

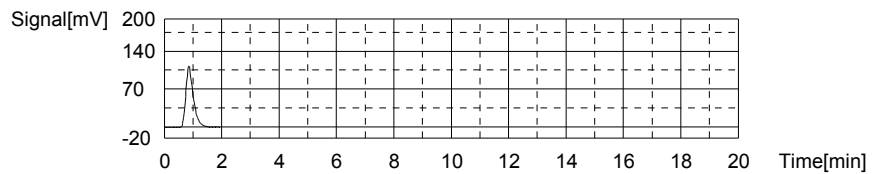
Mean Area 343.8
 Mean Conc. 9.148mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	204.2	6.437mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 01:08:06 PM

Mean Area 204.2
 Mean Conc. 6.437mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

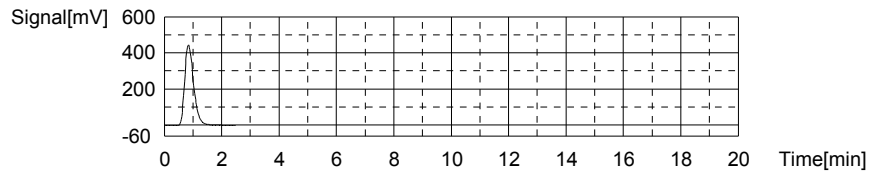
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.83mg/L TC:25.67mg/L IC:-0.1642mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	964.5	25.67mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 01:16:01 PM

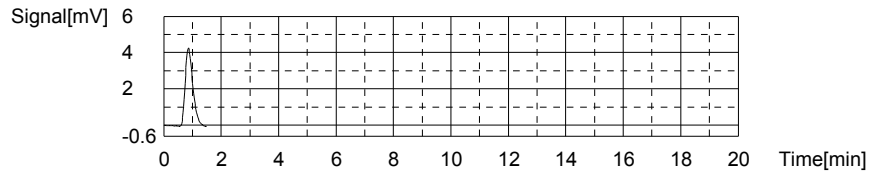
Mean Area 964.5
Mean Conc. 25.67mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.007	-0.1642mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 01:20:22 PM

Mean Area 8.007
Mean Conc. -0.1642mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

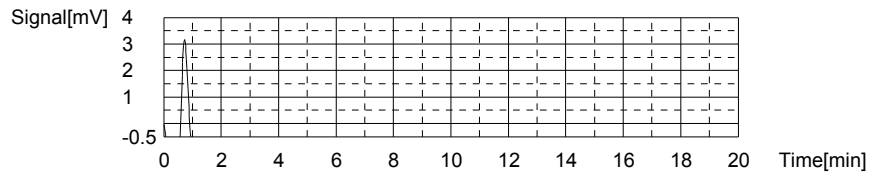
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4375mg/L TC:0.2406mg/L IC:-0.1969mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.133	0.2406mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 01:25:28 PM

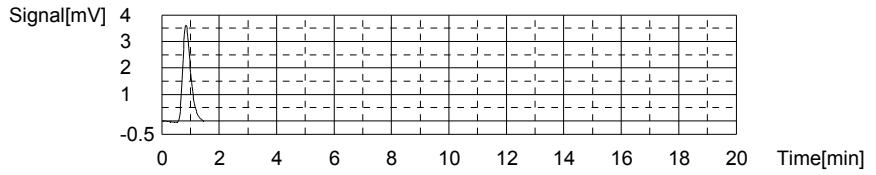
Mean Area 9.133
Mean Conc. 0.2406mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.034	-0.1969mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 01:29:19 PM

Mean Area 7.034
 Mean Conc. -0.1969mg/L



Sample

Sample Name: L12050266-02
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

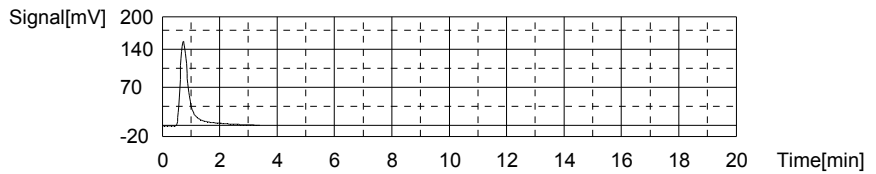
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.780mg/L TC:9.231mg/L IC:5.451mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	346.9	9.231mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 01:38:09 PM

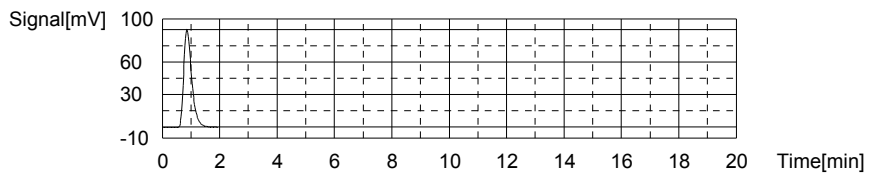
Mean Area 346.9
 Mean Conc. 9.231mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	174.9	5.451mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 01:43:02 PM

Mean Area 174.9
 Mean Conc. 5.451mg/L



Sample

Sample Name: L12050285-01
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

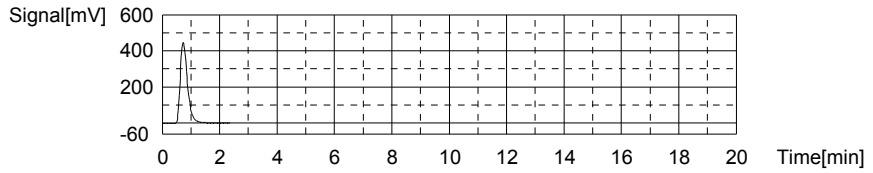
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.003mg/L TC:21.14mg/L IC:18.14mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	794.4	21.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 01:50:50 PM

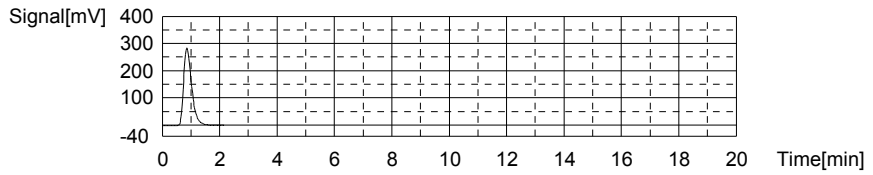
Mean Area 794.4
Mean Conc. 21.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	552.0	18.14mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 01:56:08 PM

Mean Area 552.0
Mean Conc. 18.14mg/L



Sample

Sample Name: L12050286-04 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

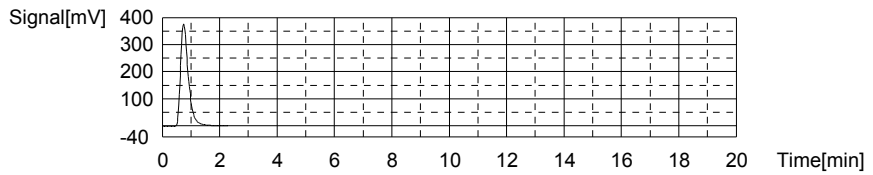
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.402mg/L TC:19.15mg/L IC:12.75mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	719.5	19.15mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 02:03:52 PM

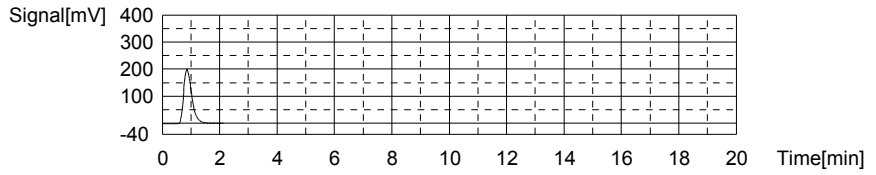
Mean Area 719.5
Mean Conc. 19.15mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	391.7	12.75mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 02:09:02 PM

Mean Area 391.7
 Mean Conc. 12.75mg/L



Sample

Sample Name: L12050286-05 (4)
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

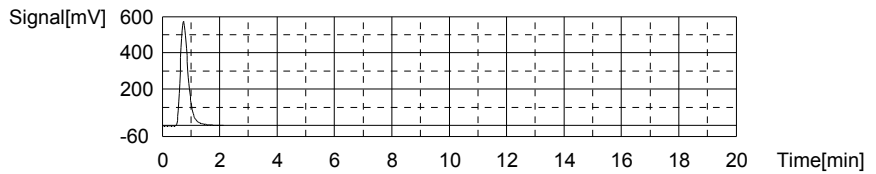
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.066mg/L TC:28.82mg/L IC:20.76mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1083	28.82mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 02:16:35 PM

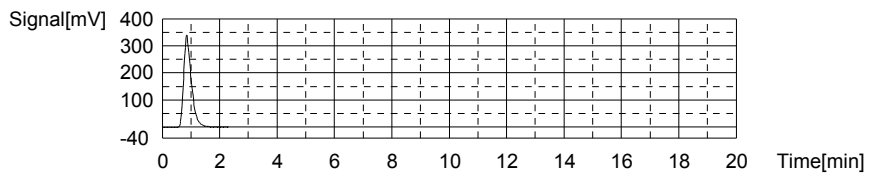
Mean Area 1083
 Mean Conc. 28.82mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	629.8	20.76mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 02:21:59 PM

Mean Area 629.8
 Mean Conc. 20.76mg/L



Sample

Sample Name: L12050286-06 (4)
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

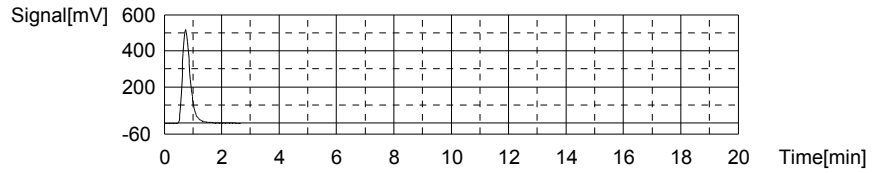
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.125mg/L TC:26.39mg/L IC:18.26mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	991.4	26.39mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 02:30:05 PM

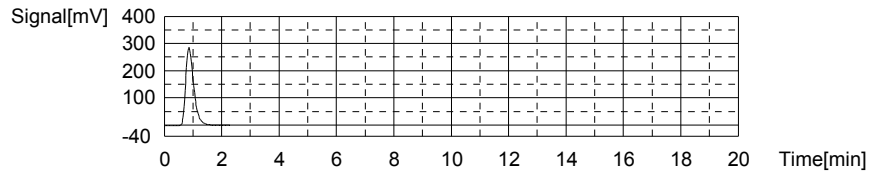
Mean Area 991.4
Mean Conc. 26.39mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	555.6	18.26mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 02:35:32 PM

Mean Area 555.6
Mean Conc. 18.26mg/L



Sample

Sample Name: L12050286-07 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

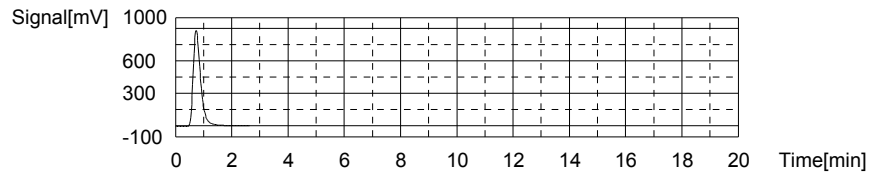
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.810mg/L TC:43.44mg/L IC:34.63mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1632	43.44mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 02:43:35 PM

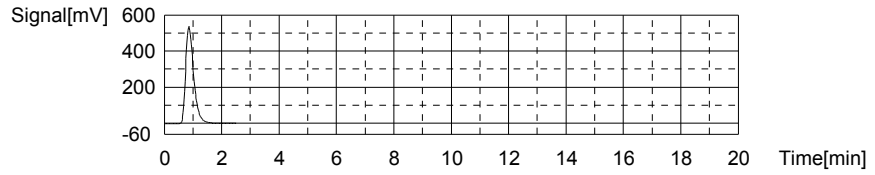
Mean Area 1632
Mean Conc. 43.44mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1042	34.63mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 02:49:28 PM

Mean Area 1042
Mean Conc. 34.63mg/L



Sample

Sample Name: L12050171-01
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

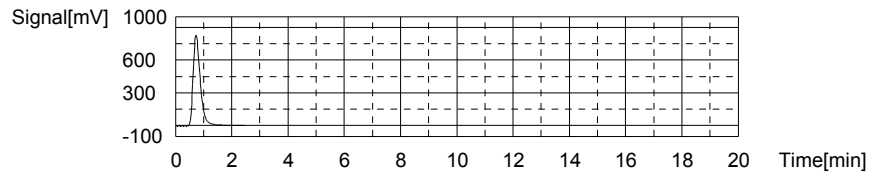
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.890mg/L TC:39.20mg/L IC:33.31mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1473	39.20mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 02:57:21 PM

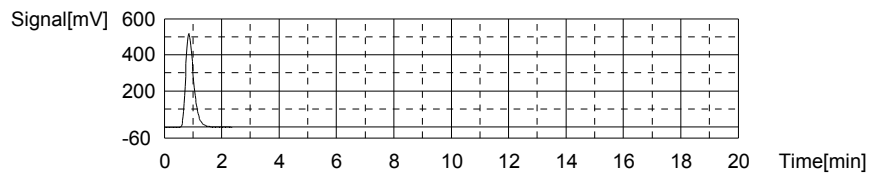
Mean Area 1473
Mean Conc. 39.20mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1003	33.31mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 03:02:59 PM

Mean Area 1003
Mean Conc. 33.31mg/L



Sample

Sample Name: WG397599-05 DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

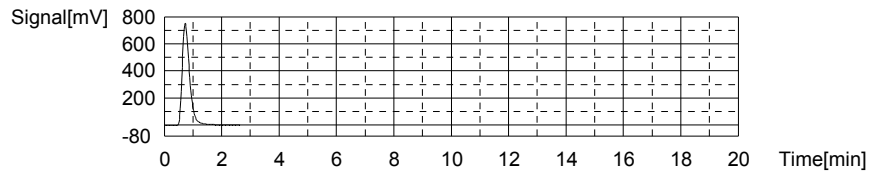
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.271mg/L TC:35.98mg/L IC:31.71mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1352	35.98mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 03:11:04 PM

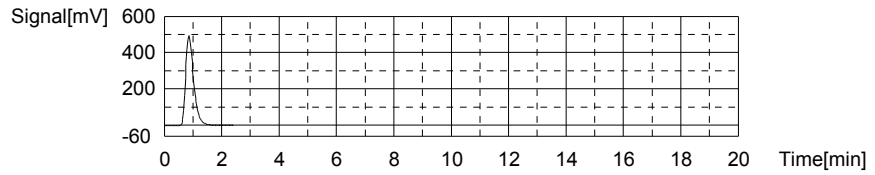
Mean Area 1352
Mean Conc. 35.98mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	955.4	31.71mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 03:16:48 PM

Mean Area 955.4
Mean Conc. 31.71mg/L



Sample

Sample Name: L12050171-03 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

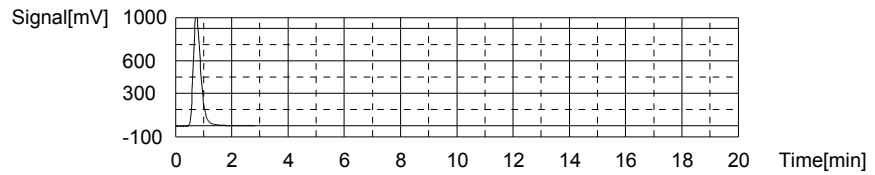
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.15mg/L TC:51.02mg/L IC:35.87mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1917	51.02mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 03:25:04 PM

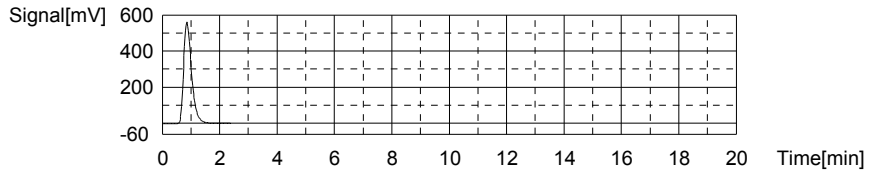
Mean Area 1917
Mean Conc. 51.02mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1079	35.87mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 03:30:44 PM

Mean Area 1079
 Mean Conc. 35.87mg/L



Sample

Sample Name: L12050171-05 MSD
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

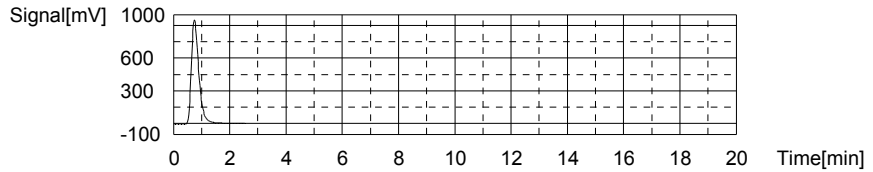
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.20mg/L TC:47.03mg/L IC:31.83mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1767	47.03mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 03:38:42 PM

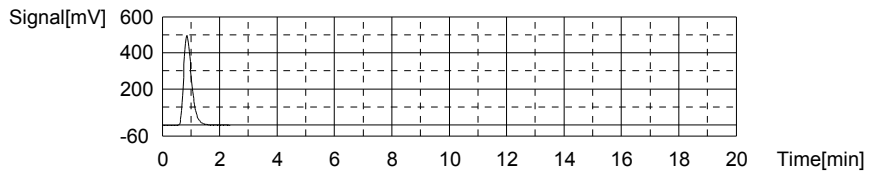
Mean Area 1767
 Mean Conc. 47.03mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	959.0	31.83mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 03:44:30 PM

Mean Area 959.0
 Mean Conc. 31.83mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

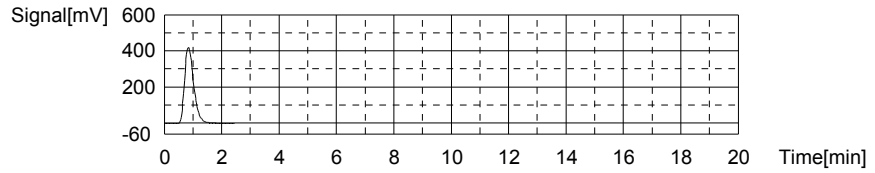
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.00mg/L TC:24.92mg/L IC:-0.07186mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	936.5	24.92mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 03:52:22 PM

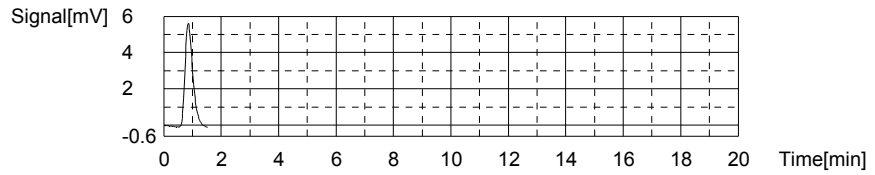
Mean Area 936.5
Mean Conc. 24.92mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.75	-0.07186mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 03:56:48 PM

Mean Area 10.75
Mean Conc. -0.07186mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

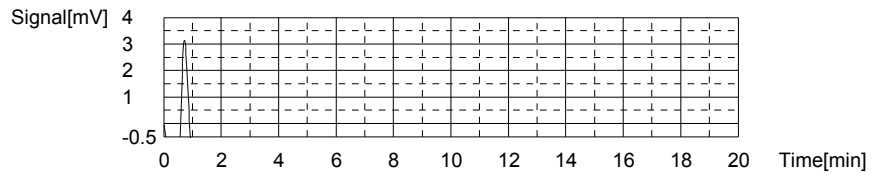
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4377mg/L TC:0.2516mg/L IC:-0.1861mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.546	0.2516mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 04:02:00 PM

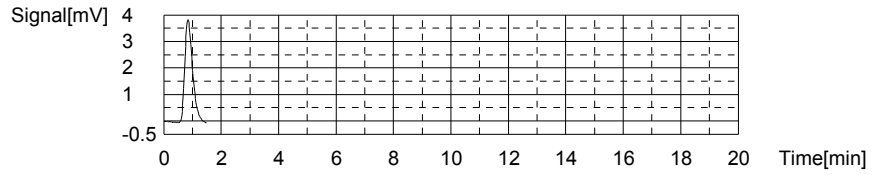
Mean Area 9.546
Mean Conc. 0.2516mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.356	-0.1861mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 04:05:54 PM

Mean Area 7.356
Mean Conc. -0.1861mg/L



Sample

Sample Name: L12050171-07 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

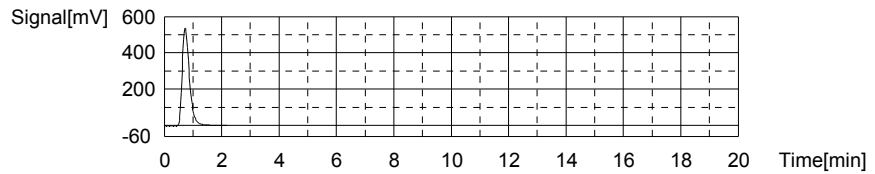
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.372mg/L TC:25.07mg/L IC:23.70mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	942.1	25.07mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 04:13:32 PM

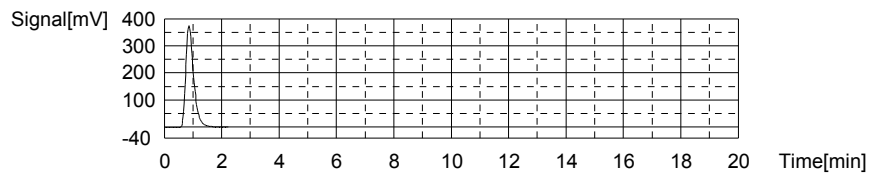
Mean Area 942.1
Mean Conc. 25.07mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	717.3	23.70mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 04:18:52 PM

Mean Area 717.3
Mean Conc. 23.70mg/L



Sample

Sample Name: L12050226-01 (200)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

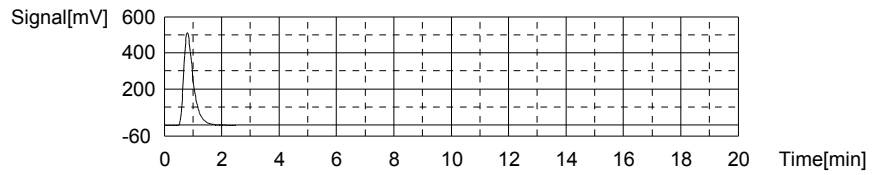
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:31.25mg/L TC:31.59mg/L IC:0.3460mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1187	31.59mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 04:26:48 PM

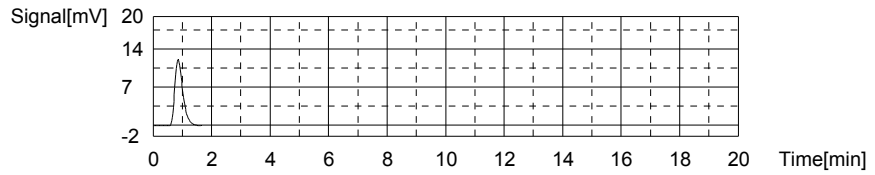
Mean Area 1187
Mean Conc. 31.59mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.17	0.3460mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 04:31:19 PM

Mean Area 23.17
Mean Conc. 0.3460mg/L



Sample

Sample Name: L12050226-03 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

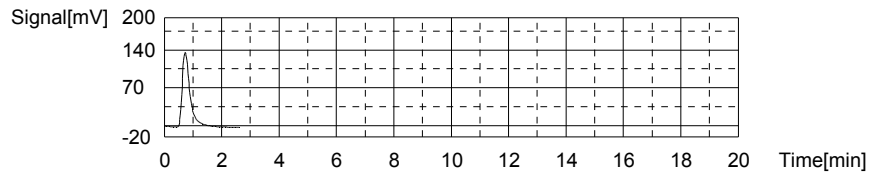
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.809mg/L TC:7.072mg/L IC:5.263mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	265.8	7.072mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 04:39:23 PM

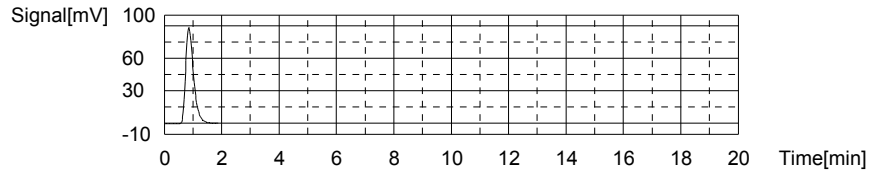
Mean Area 265.8
Mean Conc. 7.072mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	169.3	5.263mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 04:44:11 PM

Mean Area 169.3
 Mean Conc. 5.263mg/L



Sample

Sample Name: L12050226-05 (2)
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

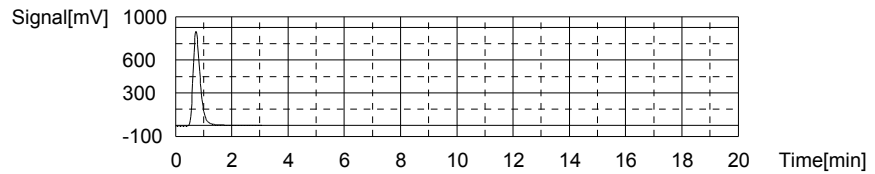
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.580mg/L TC:40.56mg/L IC:36.98mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1524	40.56mg/L	500uL	1		TCCURVE-12-06-2011.2011 12 06 08 40 5	05/12/2012 04:52:43 PM

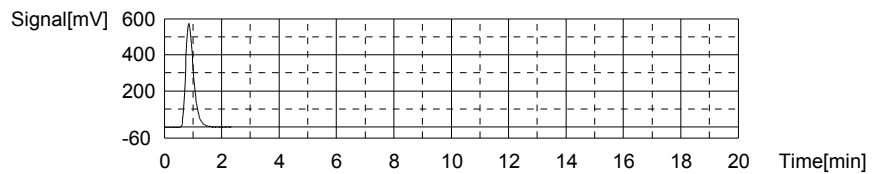
Mean Area 1524
 Mean Conc. 40.56mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1112	36.98mg/L	500uL	1		TICURVE-12-06-2011B.2011 12 06 15 47	05/12/2012 04:58:23 PM

Mean Area 1112
 Mean Conc. 36.98mg/L



Sample

Sample Name: L12050226-07 (20)
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

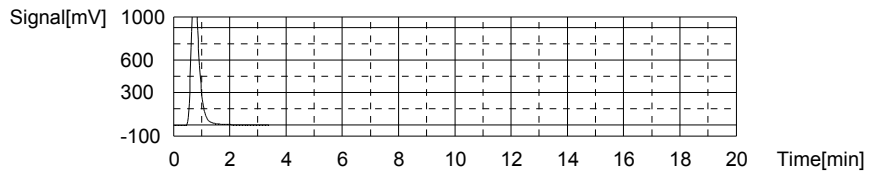
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:17.61mg/L TC:66.54mg/L IC:48.93mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2500	66.54mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:07:13 PM

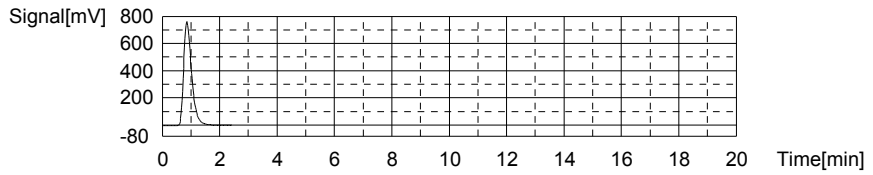
Mean Area 2500
Mean Conc. 66.54mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1467	48.93mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:13:06 PM

Mean Area 1467
Mean Conc. 48.93mg/L



Sample

Sample Name: WG397764-01 BLANK
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

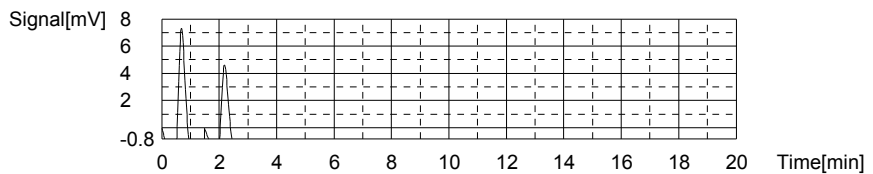
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4759mg/L TC:0.3571mg/L IC:-0.1188mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.82	0.4186mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:18:16 PM
2	11.20	0.2956mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:21:54 PM

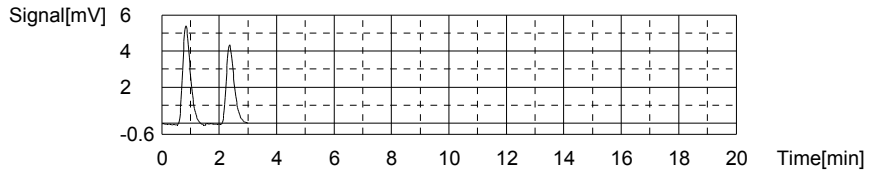
Mean Area 13.51
Mean Conc. 0.3571mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.39	-0.08397mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:25:56 PM
2	8.322	-0.1536mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:29:54 PM

Mean Area 9.356
 Mean Conc. -0.1188mg/L



Sample

Sample Name: WG397764-02 LCS25
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

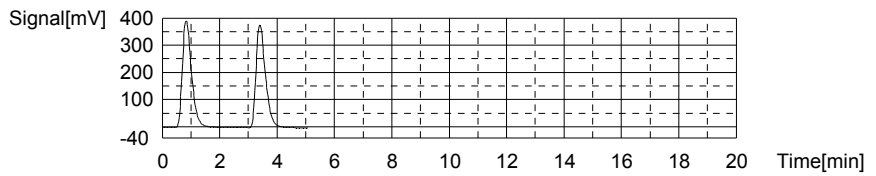
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.29mg/L TC:23.06mg/L IC:-0.2312mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	871.5	23.19mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	05/12/2012 05:37:56 PM
2	861.2	22.92mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	05/12/2012 05:42:42 PM

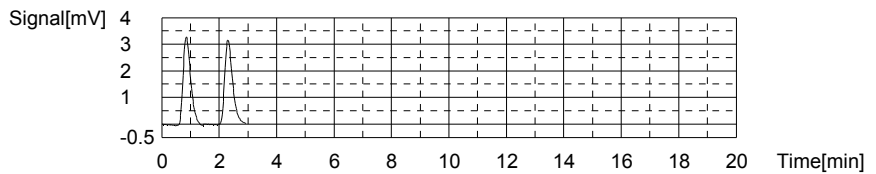
Mean Area 866.4
 Mean Conc. 23.06mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.118	-0.2277mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:46:58 PM
2	5.911	-0.2347mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:51:05 PM

Mean Area 6.015
 Mean Conc. -0.2312mg/L



Sample

Sample Name: WG397764-03 LCSDUP
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result

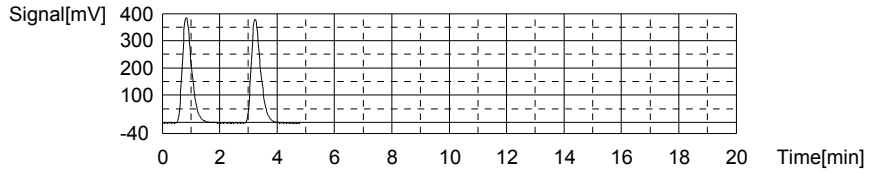
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.46mg/L TC:23.22mg/L IC:-0.2415mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	878.4	23.38mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:58:56 PM
2	866.7	23.07mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 06:03:35 PM

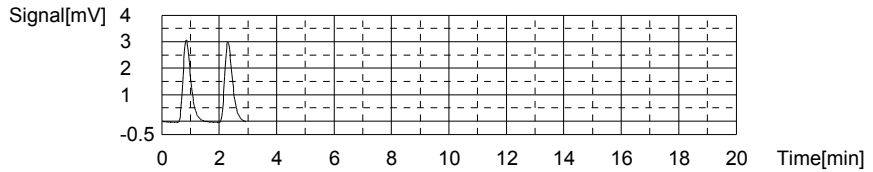
Mean Area 872.6
Mean Conc. 23.22mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.751	-0.2401mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 06:07:52 PM
2	5.663	-0.2430mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 06:11:57 PM

Mean Area 5.707
Mean Conc. -0.2415mg/L



Sample

Sample Name: L12050314-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

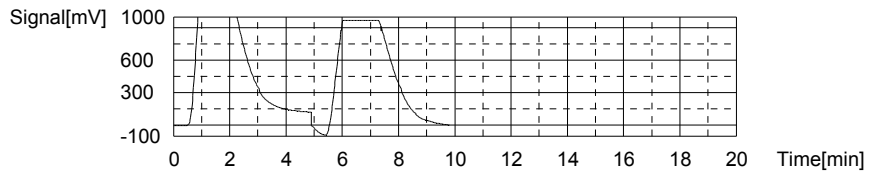
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:266.2mg/L TC:266.1mg/L IC:-0.08946mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 06:22:19 PM
2	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 06:31:28 PM

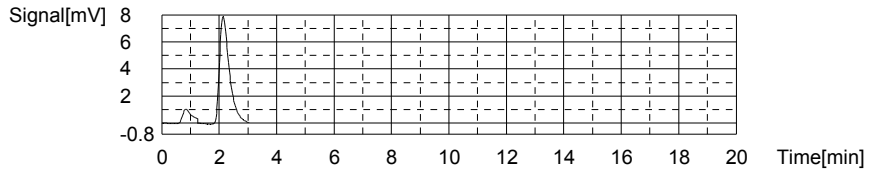
Mean Area 9999
Mean Conc. 266.1mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.634	-0.3786mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 04:31:02 AM
2	18.82	0.1997mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 04:35:40 AM

Mean Area 10.23
Mean Conc. -0.08946mg/L



Sample

Sample Name: L12050314-02
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

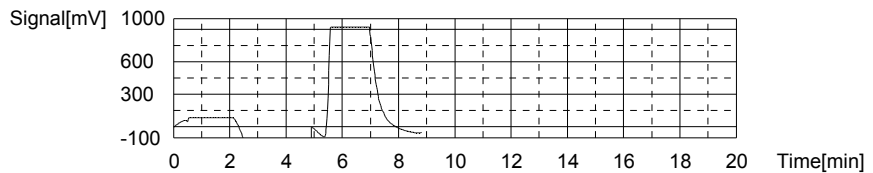
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:109.4mg/L TC:169.2mg/L IC:59.81mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2714	72.23mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 04:46:02 AM
2	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 04:54:51 AM

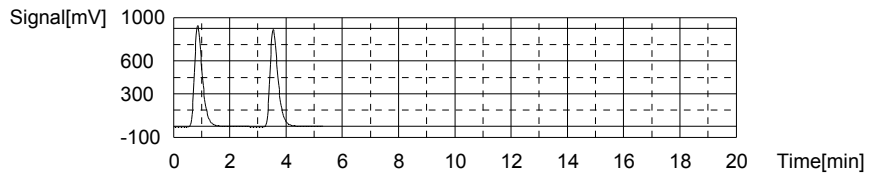
Mean Area 6357
Mean Conc. 169.2mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1812	60.53mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:01:02 AM
2	1769	59.09mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:06:52 AM

Mean Area 1791
Mean Conc. 59.81mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

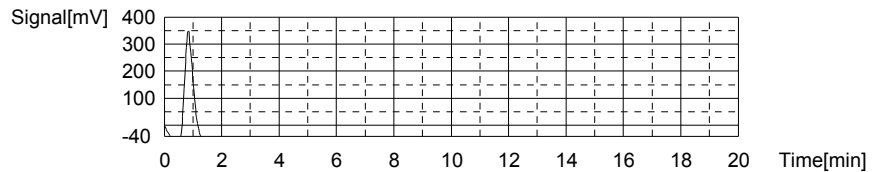
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:22.63mg/L TC:22.79mg/L IC:0.1556mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	856.2	22.79mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 05:14:59 AM

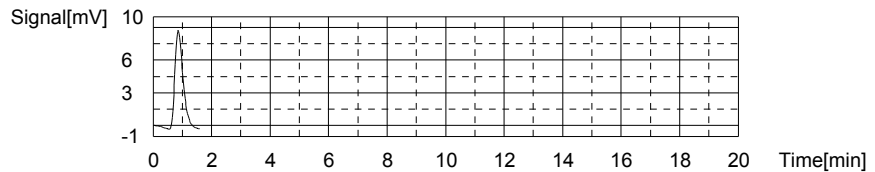
Mean Area 856.2
 Mean Conc. 22.79mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.51	0.1556mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:19:34 AM

Mean Area 17.51
 Mean Conc. 0.1556mg/L



Sample

Sample Name: CCB
 Sample ID:
 Origin: TOC-12-06-2011.met
 Status: Completed
 Chk. Result

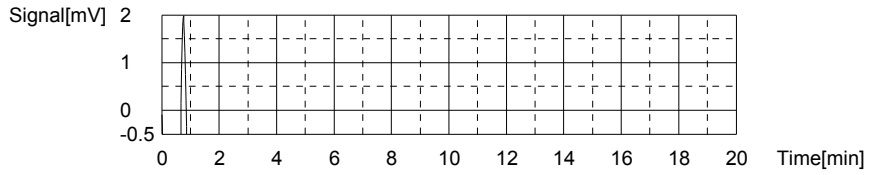
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.6383mg/L TC:0.5022mg/L IC:-0.1362mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.96	0.5022mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 05:25:09 AM

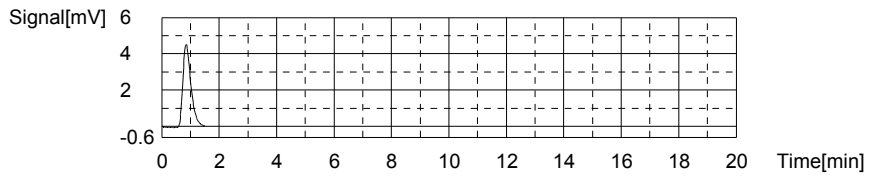
Mean Area 18.96
 Mean Conc. 0.5022mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.839	-0.1362mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:29:08 AM

Mean Area 8.839
 Mean Conc. -0.1362mg/L



Sample

Sample Name: WG397764-05 DUP
 Sample ID: <Untitled>
 Origin: TOC-12-06-2011A.met
 Status: Completed
 Chk. Result:

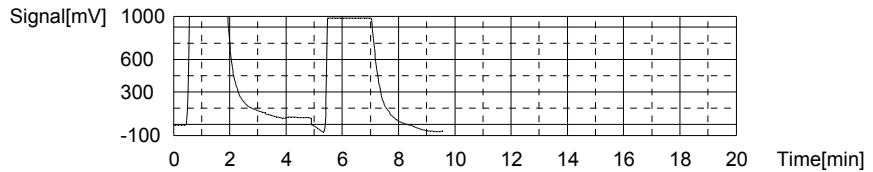
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:146.6mg/L TC:266.1mg/L IC:119.5mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 05:39:30 AM
2	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 05:49:51 AM

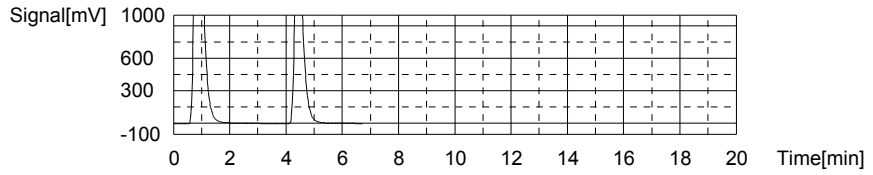
Mean Area 9999
 Mean Conc. 266.1mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4020	134.8mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:57:36 AM
2	3109	104.2mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 06:04:34 AM

Mean Area 3565
Mean Conc. 119.5mg/L



Sample

Sample Name: WG397764-06 MS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status: Completed
Chk. Result

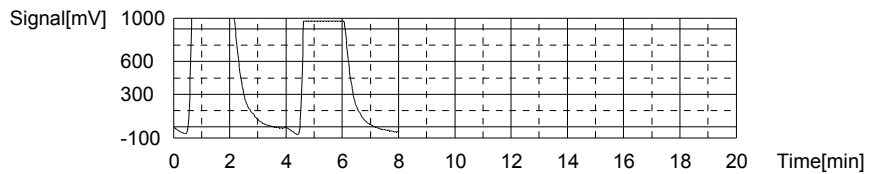
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:194.4mg/L TC:266.1mg/L IC:71.69mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	5/05/13/2012 06:14:00 AM
2	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40	5/05/13/2012 06:23:16 AM

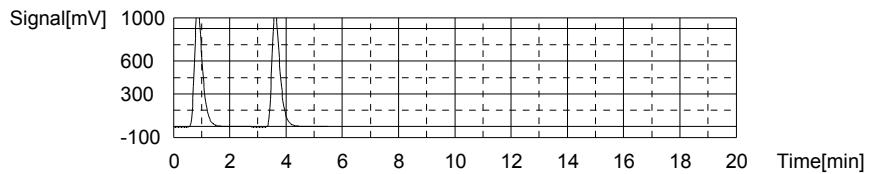
Mean Area 9999
Mean Conc. 266.1mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2160	72.24mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 06:29:48 AM
2	2127	71.13mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 06:35:53 AM

Mean Area 2144
Mean Conc. 71.69mg/L



Sample

Sample Name: WG397767-01 BLANK
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-0.1954mg/L TC:-0.00248mg/L IC:0.1929mg/L

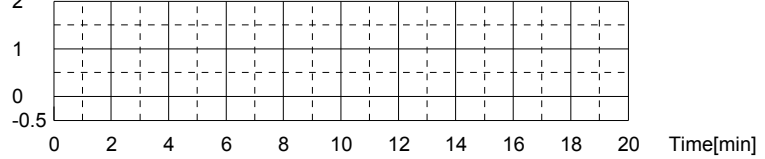
1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.00248mg/L	500uL	1		TCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 06:42:24 AM

Mean Area 0.000
Mean Conc. -0.00248mg/L

Signal[mV] 2

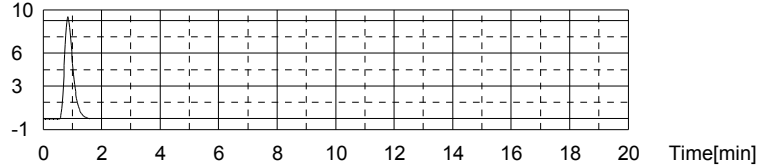


Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.62	0.1929mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 06:46:53 AM

Mean Area 18.62
Mean Conc. 0.1929mg/L

Signal[mV] 10



Sample

Sample Name: WG397767-02 LCS25
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result:

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.86mg/L TC:23.80mg/L IC:-0.06042mg/L

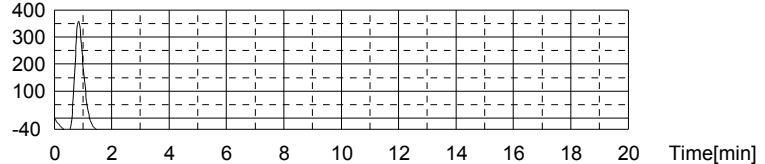
1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	894.3	23.80mg/L	500uL	1		TCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 06:55:30 AM

Mean Area 894.3
Mean Conc. 23.80mg/L

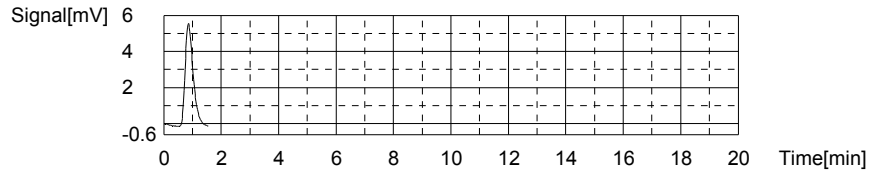
Signal[mV] 400



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.09	-0.06042mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:00:01 AM

Mean Area 11.09
Mean Conc. -0.06042mg/L



Sample

Sample Name: WG397767-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

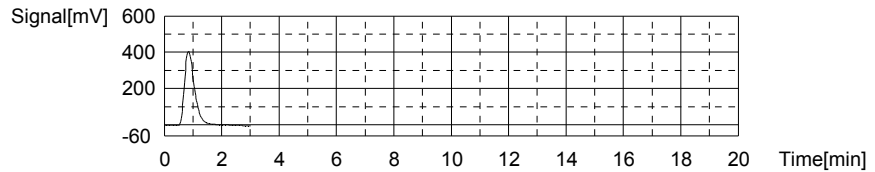
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:26.84mg/L TC:26.69mg/L IC:-0.1497mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1003	26.69mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:08:29 AM

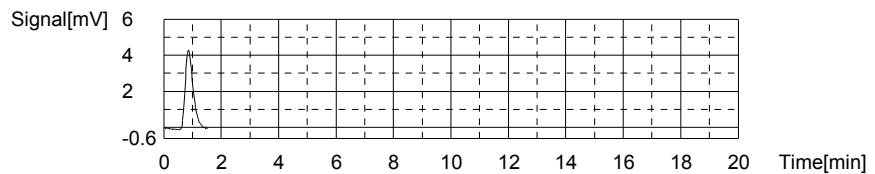
Mean Area 1003
Mean Conc. 26.69mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.436	-0.1497mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:12:55 AM

Mean Area 8.436
Mean Conc. -0.1497mg/L



Sample

Sample Name: L12050099-01 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

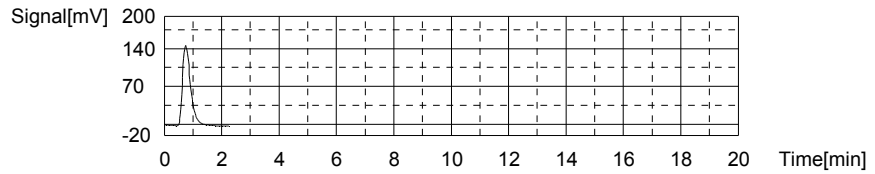
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.173mg/L TC:7.793mg/L IC:4.620mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	292.9	7.793mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:20:37 AM

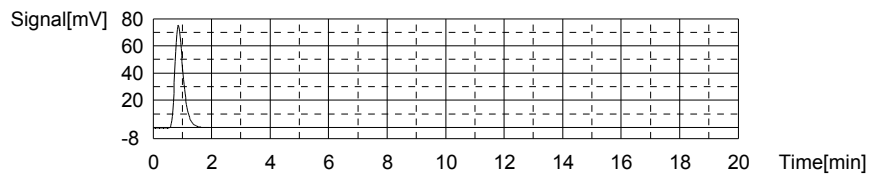
Mean Area 292.9
Mean Conc. 7.793mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	150.2	4.620mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:25:34 AM

Mean Area 150.2
Mean Conc. 4.620mg/L



Sample

Sample Name: L12050254-02 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

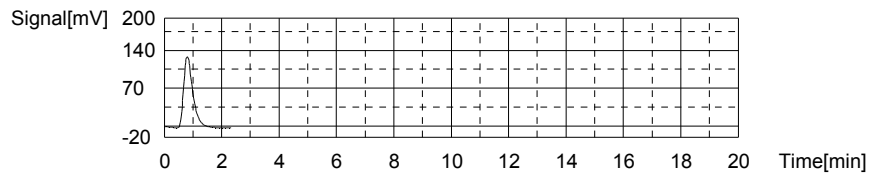
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.855mg/L TC:7.857mg/L IC:1.003mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	295.3	7.857mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:33:21 AM

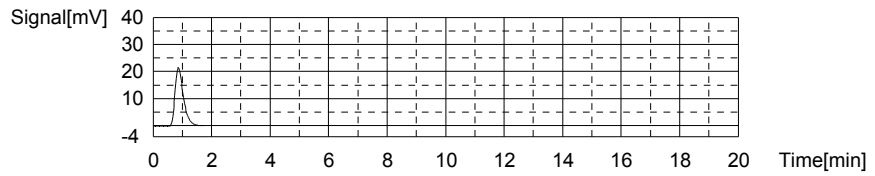
Mean Area 295.3
Mean Conc. 7.857mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	42.69	1.003mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:38:01 AM

Mean Area 42.69
Mean Conc. 1.003mg/L



Sample

Sample Name: L12050254-03 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

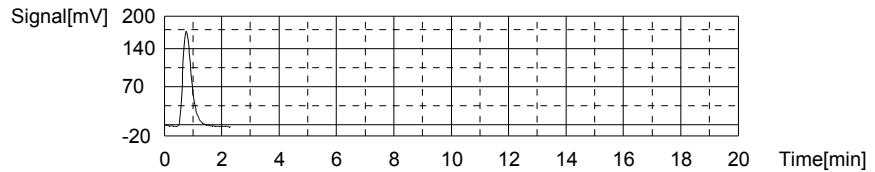
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.246mg/L TC:9.957mg/L IC:3.712mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	374.2	9.957mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_50	05/13/2012 07:45:48 AM

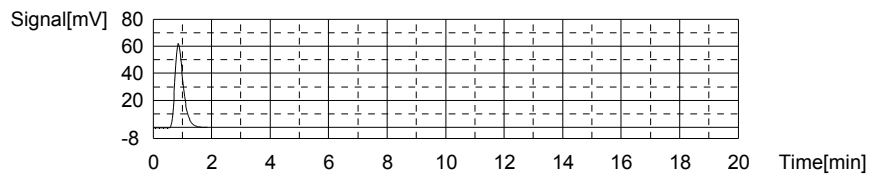
Mean Area 374.2
Mean Conc. 9.957mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	123.2	3.712mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:50:38 AM

Mean Area 123.2
Mean Conc. 3.712mg/L



Sample

Sample Name: L12050254-04 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

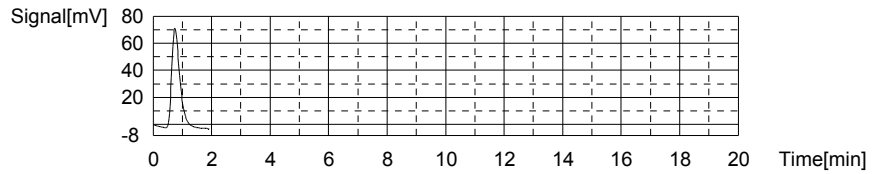
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.809mg/L TC:3.769mg/L IC:1.960mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	141.7	3.769mg/L	500uL	1		TC:CURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:58:02 AM

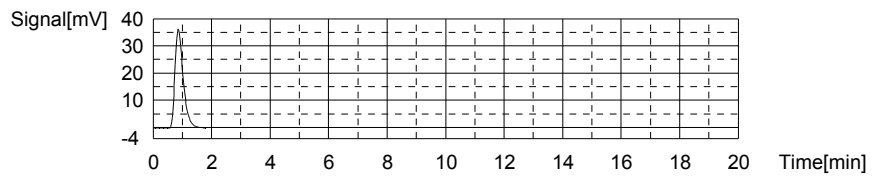
Mean Area 141.7
Mean Conc. 3.769mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	71.14	1.960mg/L	500uL	1		TC:CURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:02:45 AM

Mean Area 71.14
Mean Conc. 1.960mg/L



Sample

Sample Name: L12050254-05 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

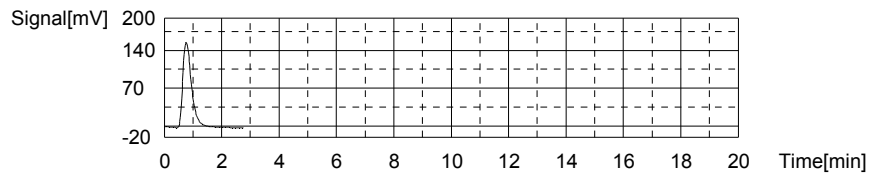
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.135mg/L TC:9.005mg/L IC:3.870mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	338.4	9.005mg/L	500uL	1		TC:CURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 08:10:59 AM

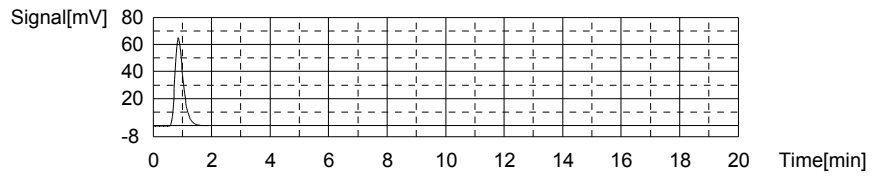
Mean Area 338.4
Mean Conc. 9.005mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	127.9	3.870mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:15:51 AM

Mean Area 127.9
Mean Conc. 3.870mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

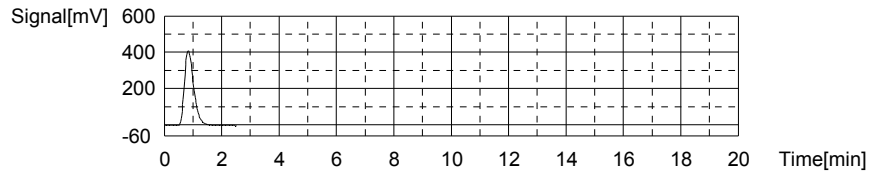
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.73mg/L TC:24.70mg/L IC:-0.03317mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	928.0	24.70mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_50	05/13/2012 08:23:50 AM

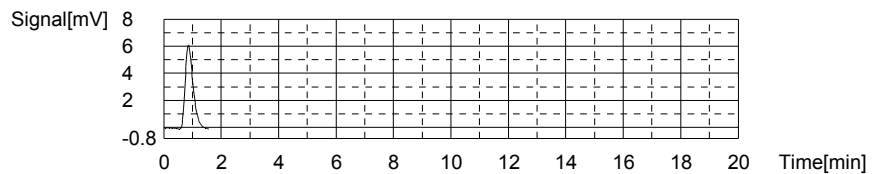
Mean Area 928.0
Mean Conc. 24.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.90	-0.03317mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:28:19 AM

Mean Area 11.90
Mean Conc. -0.03317mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4010mg/L TC:0.2358mg/L IC:-0.1652mg/L

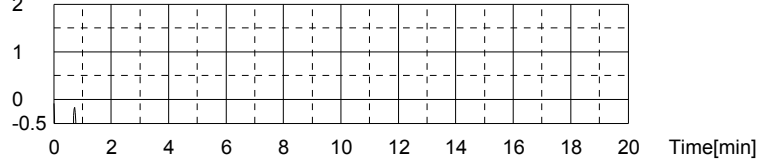
1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.951	0.2358mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 08:33:30 AM

Mean Area 8.951
Mean Conc. 0.2358mg/L

Signal[mV] 2

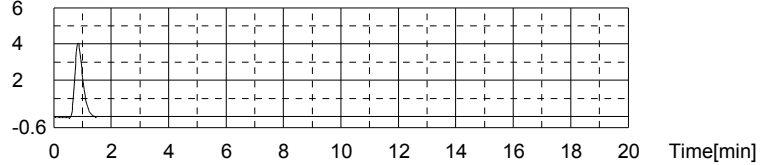


Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.976	-0.1652mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:37:29 AM

Mean Area 7.976
Mean Conc. -0.1652mg/L

Signal[mV] 6



Sample

Sample Name: L12050153-05 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.599mg/L TC:3.609mg/L IC:2.011mg/L

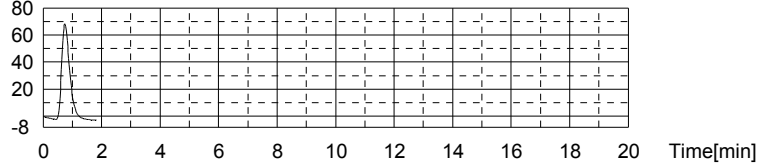
1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	135.7	3.609mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 08:44:47 AM

Mean Area 135.7
Mean Conc. 3.609mg/L

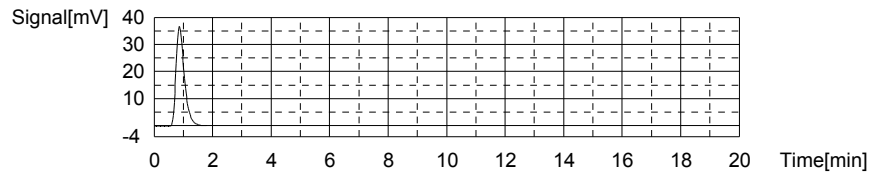
Signal[mV] 80



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.65	2.011mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:49:32 AM

Mean Area 72.65
Mean Conc. 2.011mg/L



Sample

Sample Name: L12050153-07 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

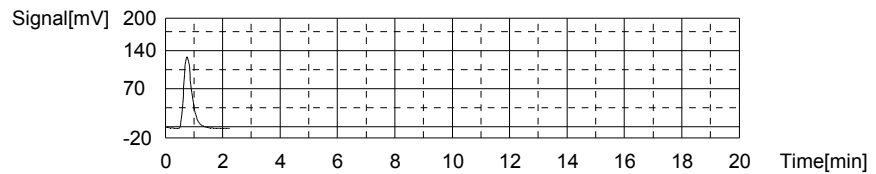
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.863mg/L TC:7.056mg/L IC:3.194mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	265.2	7.056mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_50	05/13/2012 08:57:14 AM

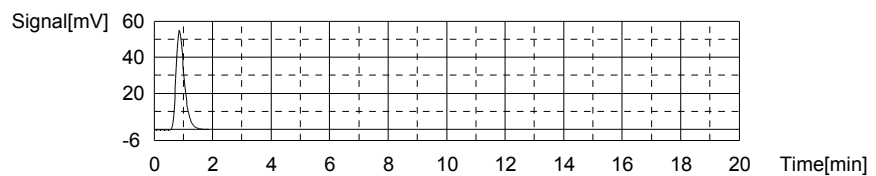
Mean Area 265.2
Mean Conc. 7.056mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	107.8	3.194mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:02:02 AM

Mean Area 107.8
Mean Conc. 3.194mg/L



Sample

Sample Name: L12050245-04 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

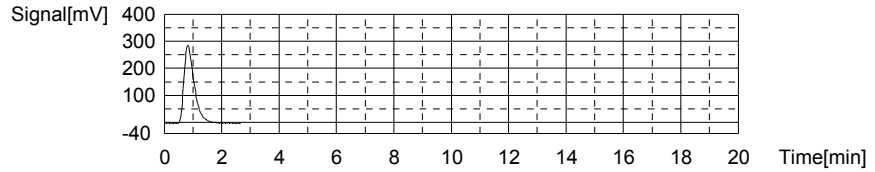
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:17.09mg/L TC:19.12mg/L IC:2.029mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	718.4	19.12mg/L	500uL	1		TC:CURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 09:10:10 AM

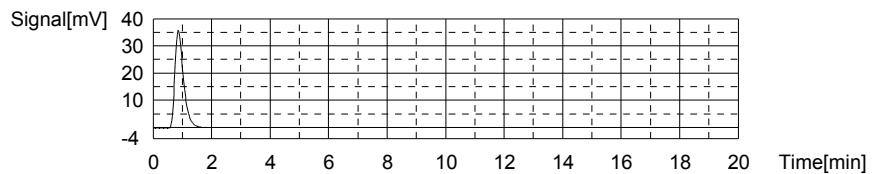
Mean Area 718.4
Mean Conc. 19.12mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.20	2.029mg/L	500uL	1		TC:CURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:14:57 AM

Mean Area 73.20
Mean Conc. 2.029mg/L



Sample

Sample Name: L12050245-12 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

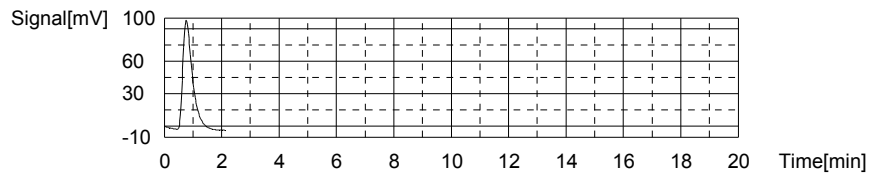
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.885mg/L TC:6.207mg/L IC:2.322mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	233.3	6.207mg/L	500uL	1		TC:CURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 09:22:34 AM

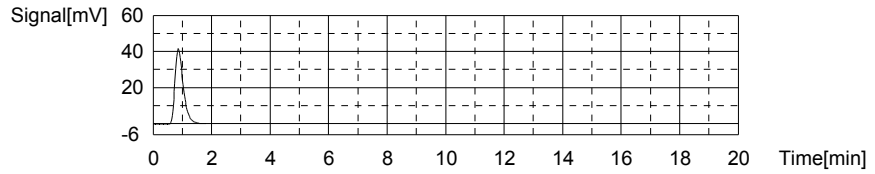
Mean Area 233.3
Mean Conc. 6.207mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.91	2.322mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:27:23 AM

Mean Area 81.91
Mean Conc. 2.322mg/L



Sample

Sample Name: L12050245-14 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

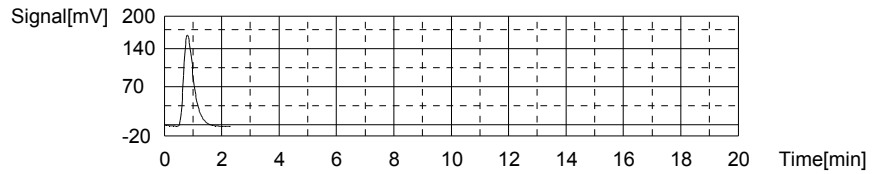
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.13mg/L TC:10.93mg/L IC:0.8016mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	410.8	10.93mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_50	05/13/2012 09:35:09 AM

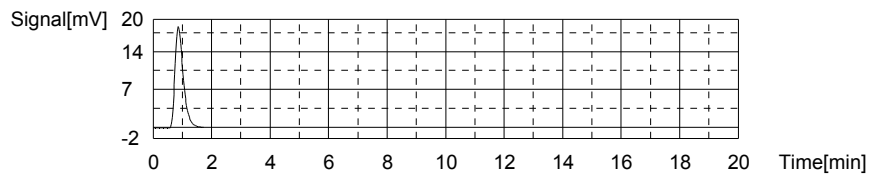
Mean Area 410.8
Mean Conc. 10.93mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.71	0.8016mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:39:50 AM

Mean Area 36.71
Mean Conc. 0.8016mg/L



Sample

Sample Name: L12050341-04 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

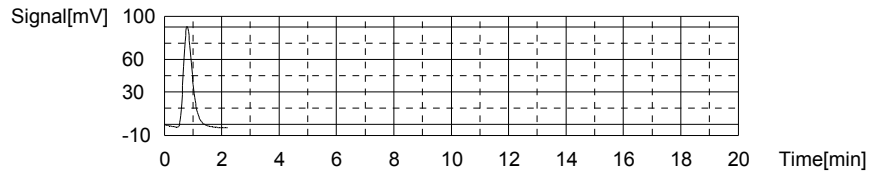
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.739mg/L TC:5.390mg/L IC:0.6505mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	202.6	5.390mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 09:47:31 AM

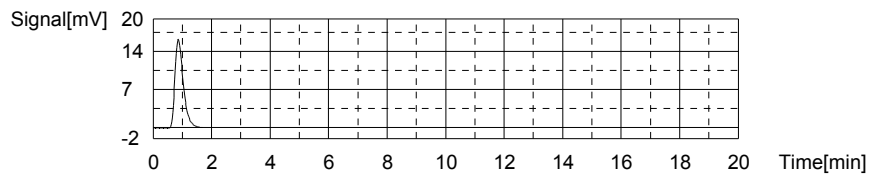
Mean Area 202.6
Mean Conc. 5.390mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.22	0.6505mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:52:07 AM

Mean Area 32.22
Mean Conc. 0.6505mg/L



Sample

Sample Name: L12050341-05 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

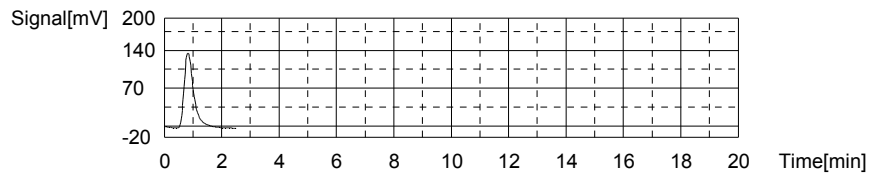
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.336mg/L TC:8.659mg/L IC:0.3221mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	325.4	8.659mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 10:00:05 AM

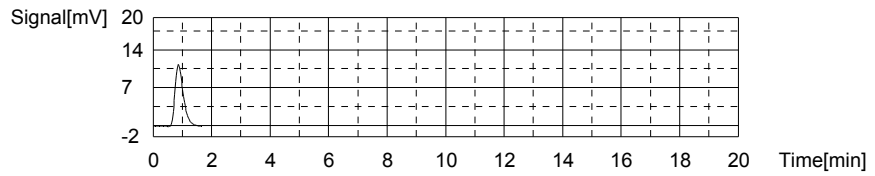
Mean Area 325.4
Mean Conc. 8.659mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.46	0.3221mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:04:40 AM

Mean Area 22.46
Mean Conc. 0.3221mg/L



Sample

Sample Name: L12050341-06 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

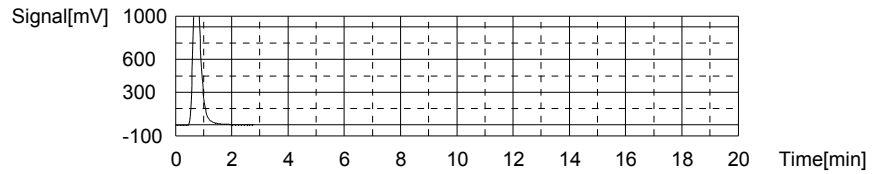
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:23.94mg/L TC:67.82mg/L IC:43.88mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2548	67.82mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_50	05/13/2012 10:12:54 AM

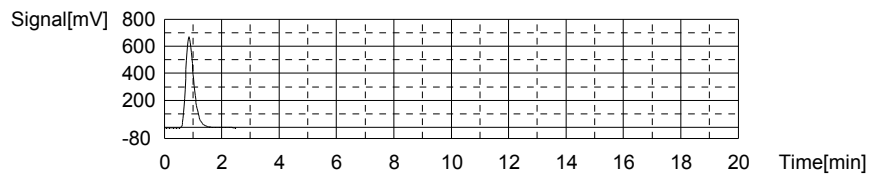
Mean Area 2548
Mean Conc. 67.82mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1317	43.88mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:18:52 AM

Mean Area 1317
Mean Conc. 43.88mg/L



Sample

Sample Name: L12050341-07 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

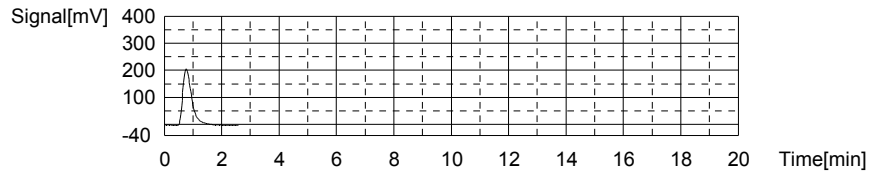
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.553mg/L TC:12.19mg/L IC:4.640mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	458.2	12.19mg/L	500uL	1		TC:CURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 10:26:55 AM

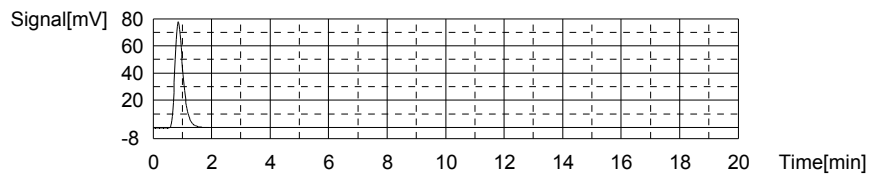
Mean Area 458.2
Mean Conc. 12.19mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	150.8	4.640mg/L	500uL	1		TC:CURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:31:56 AM

Mean Area 150.8
Mean Conc. 4.640mg/L



Sample

Sample Name: L12050341-08
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

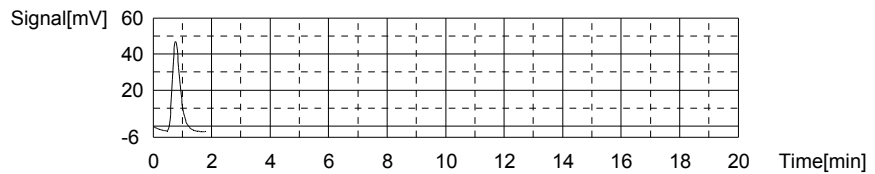
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:2.645mg/L TC:2.488mg/L IC:-0.1570mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.58	2.488mg/L	500uL	1		TC:CURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 10:39:11 AM

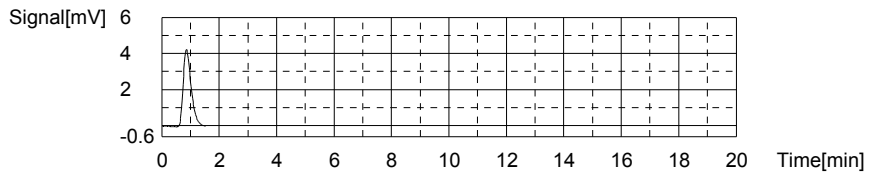
Mean Area 93.58
Mean Conc. 2.488mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.221	-0.1570mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:43:36 AM

Mean Area 8.221
Mean Conc. -0.1570mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

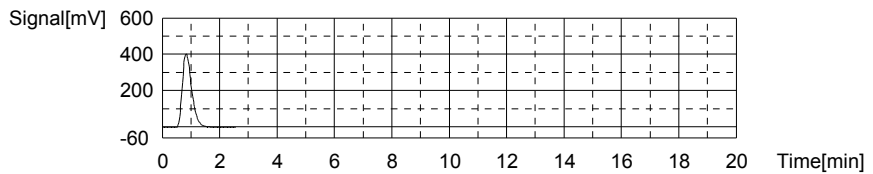
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.51mg/L TC:24.52mg/L IC:0.01024mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	921.3	24.52mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_50	05/13/2012 10:51:39 AM

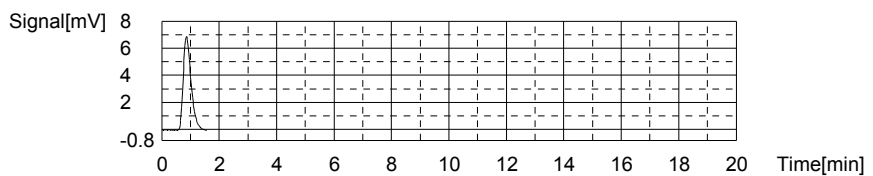
Mean Area 921.3
Mean Conc. 24.52mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.19	0.01024mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:56:07 AM

Mean Area 13.19
Mean Conc. 0.01024mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3839mg/L TC:0.2189mg/L IC:-0.1651mg/L

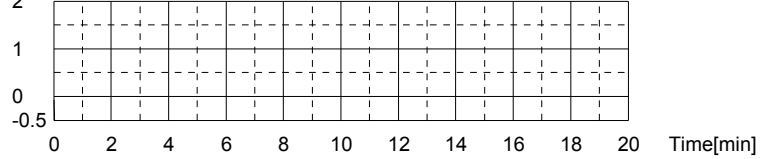
1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.317	0.2189mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:01:18 AM

Mean Area 8.317
Mean Conc. 0.2189mg/L

Signal[mV] 2

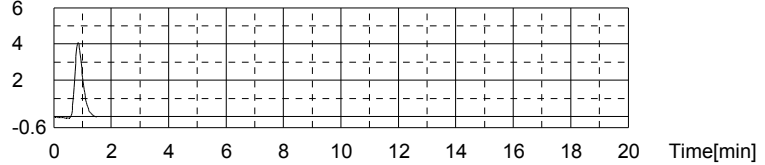


Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.980	-0.1651mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:05:17 AM

Mean Area 7.980
Mean Conc. -0.1651mg/L

Signal[mV] 6



Sample

Sample Name: L12050341-10 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.602mg/L TC:6.958mg/L IC:1.356mg/L

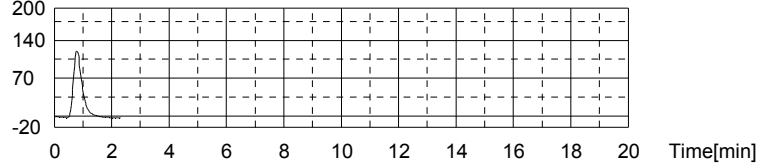
1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	261.5	6.958mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:13:07 AM

Mean Area 261.5
Mean Conc. 6.958mg/L

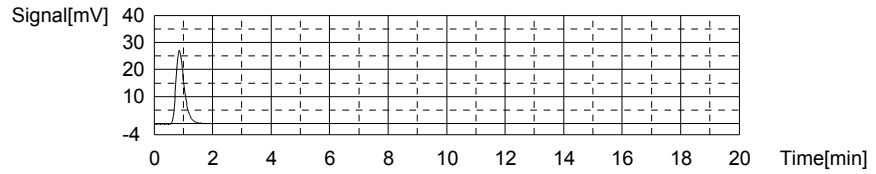
Signal[mV] 200



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.18	1.356mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:17:53 AM

Mean Area 53.18
Mean Conc. 1.356mg/L



Sample

Sample Name: WG397767-05 (4) DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

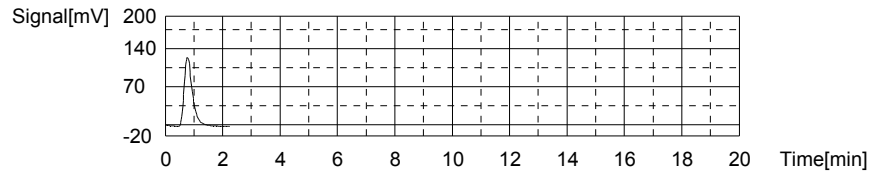
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.149mg/L TC:6.793mg/L IC:1.644mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	255.3	6.793mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:25:37 AM

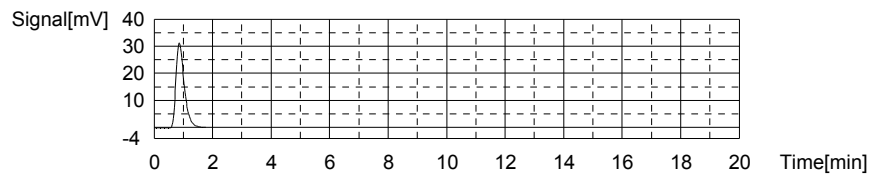
Mean Area 255.3
Mean Conc. 6.793mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.75	1.644mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:30:21 AM

Mean Area 61.75
Mean Conc. 1.644mg/L



Sample

Sample Name: L12050341-11 (4) MS
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

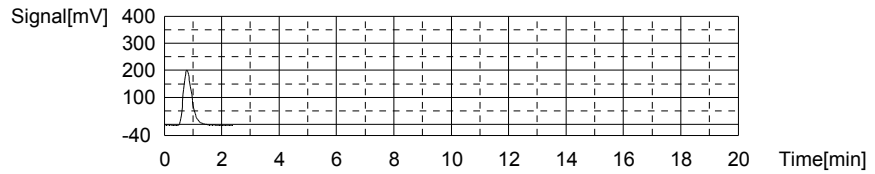
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.559mg/L TC:11.24mg/L IC:1.684mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	422.5	11.24mg/L	500uL	1		TC:CURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:38:13 AM

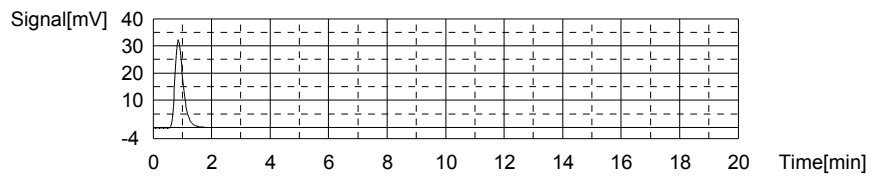
Mean Area 422.5
Mean Conc. 11.24mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.94	1.684mg/L	500uL	1		TIC:CURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:42:58 AM

Mean Area 62.94
Mean Conc. 1.684mg/L



Sample

Sample Name: L12050341-12 (4) MSD
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result:

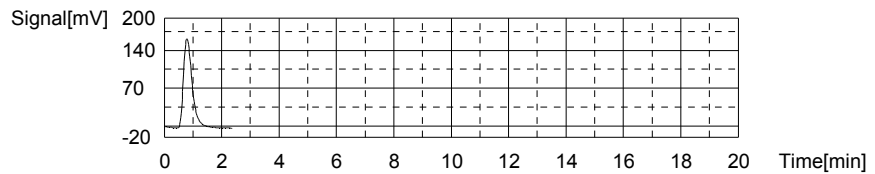
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.308mg/L TC:9.260mg/L IC:0.9517mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	348.0	9.260mg/L	500uL	1		TC:CURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:50:49 AM

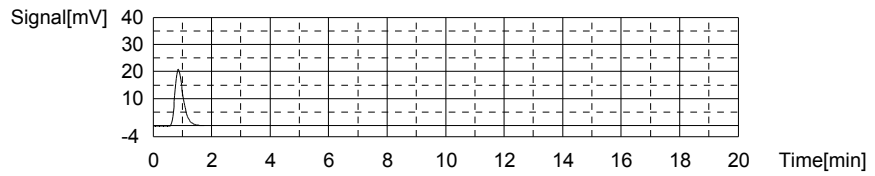
Mean Area 348.0
Mean Conc. 9.260mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	41.17	0.9517mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:55:28 AM

Mean Area 41.17
Mean Conc. 0.9517mg/L



Sample

Sample Name: L12050341-13 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

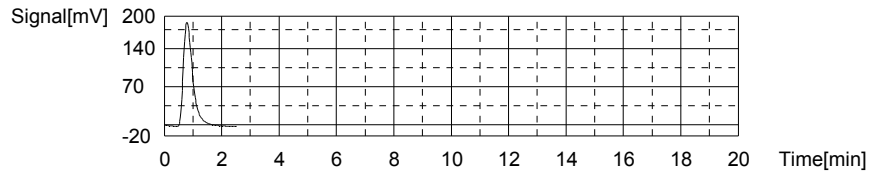
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.186mg/L TC:11.70mg/L IC:2.518mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	439.8	11.70mg/L	500uL	1		TICCURVE-12-06-2011.2011_12_06_08_40_50	05/13/2012 12:03:29 PM

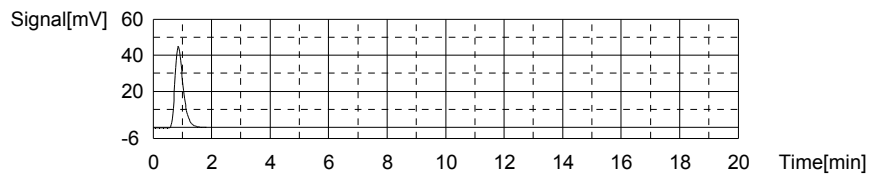
Mean Area 439.8
Mean Conc. 11.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.72	2.518mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 12:08:16 PM

Mean Area 87.72
Mean Conc. 2.518mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

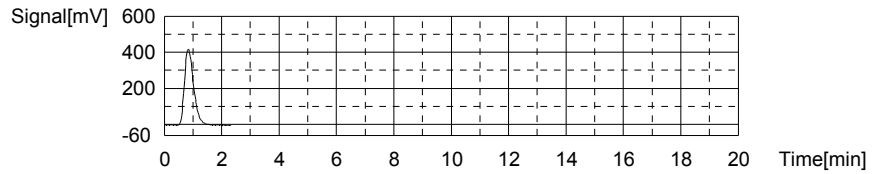
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.82mg/L TC:24.86mg/L IC:0.04388mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	934.2	24.86mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 12:16:04 PM

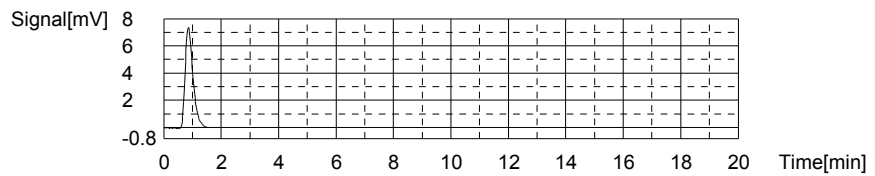
Mean Area 934.2
Mean Conc. 24.86mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.19	0.04388mg/L	500uL	1		TICURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 12:20:33 PM

Mean Area 14.19
Mean Conc. 0.04388mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status: Completed
Chk. Result

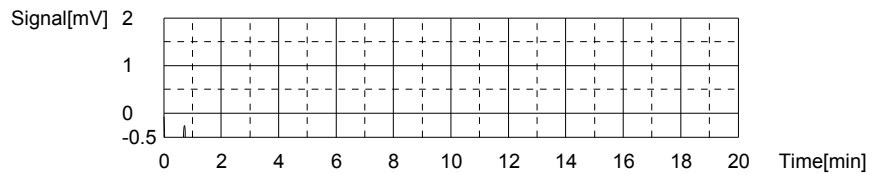
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3926mg/L TC:0.2204mg/L IC:-0.1722mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.374	0.2204mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 12:25:46 PM

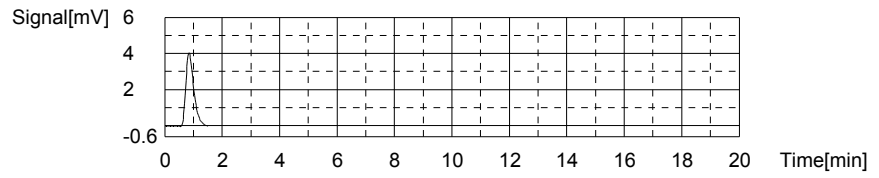
Mean Area 8.374
Mean Conc. 0.2204mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.769	-0.1722mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 12:29:44 PM

Mean Area 7.769
Mean Conc. -0.1722mg/L



3.0 Attachments

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
May 17, 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

May 17, 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



Internal Chain of Custody Report

Login: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-01 966956

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-01 966957 826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

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: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-01 966958

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:31	CSH	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	08-MAY-2012 08:41	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-01 966959

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	10-MAY-2012 08:40	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-01 966960 ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:54	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: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-01 966961 NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	03-MAY-2012 14:07	DIH	JKS	
3	STORE	WET	W1	14-MAY-2012 08:04	RLK	JDH	

Samplenum **Container ID** **Products**
L12050099-01 966962 PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 15:05	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum **Container ID** **Products**
L12050099-01 966963 AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE F

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

Samplenum **Container ID** **Products**
L12050099-02 966964 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	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Microbac Laboratories Inc.
Internal Chain of Custody Report

Login: L12050099
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-03 966965

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-03 966966 826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

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: L12050099
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-03 966967

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:31	CSH	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	08-MAY-2012 08:42	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-03 966968

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	10-MAY-2012 08:39	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-03 966969 ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:54	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: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-03 966970 NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	03-MAY-2012 14:07	DIH	JKS	
3	STORE	WET	W1	14-MAY-2012 08:04	RLK	JDH	

Samplenum **Container ID** **Products**
L12050099-03 966971 PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 15:05	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum **Container ID** **Products**
L12050099-03 966972 AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE F

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	BRG	

**Sample extract/digestate/leachate*

Samplenum **Container ID** **Products**
L12050099-04 966973 CU-D FE-D HG-D K-D MG-D MN-D NA-D NI-D PB-MSD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Microbac Laboratories Inc.
Internal Chain of Custody Report

Login: L12050099
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-05 966974

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-05 966975 826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

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: L12050099
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-05 966976

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:31	CSH	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	08-MAY-2012 08:42	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-05 966977

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	10-MAY-2012 08:39	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-05 966978 ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:54	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: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-05 966979 NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	03-MAY-2012 14:07	DIH	JKS	
3	STORE	WET	W1	14-MAY-2012 08:04	RLK	JDH	

Samplenum **Container ID** **Products**
L12050099-05 966980 PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 15:05	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum **Container ID** **Products**
L12050099-05 966981 AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE F

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

Samplenum **Container ID** **Products**
L12050099-06 966982 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	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-07 966983

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-07 966984 826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

- 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: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-07 966985

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:31	CSH	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	08-MAY-2012 08:42	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-07 966986

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	10-MAY-2012 08:40	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-07 966987 ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:54	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: L12050099
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 17-MAY-2012

Samplenum Container ID Products
L12050099-07 966988 NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	03-MAY-2012 14:07	DIH	JKS	
3	STORE	WET	W1	14-MAY-2012 08:04	RLK	JDH	

Samplenum Container ID Products
L12050099-07 966989 PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 15:05	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum Container ID Products
L12050099-07 966990 AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE F

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

Samplenum Container ID Products
L12050099-08 966991 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	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

- A1 - Sample Archive (COLD)
- A2 - Sample Archive (AMBIENT)
- F1 - Volatiles Freezer in Login
- V1 - Volatiles Refrigerator in Login
- W1 - Walkin Cooler in Login



Microbac Laboratories Inc.
Internal Chain of Custody Report

Login: L12050099
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-09 966992

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Comments:Products cancelled.

Samplenum **Container ID** **Products**
L12050099-09 966993 826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:49	MRT	JKT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:49	MRT	JKT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		
2	ANALYZ	V1	ORG4	04-MAY-2012 07:48	MRT	JKT	

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: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum Container ID Products
L12050099-09 966994

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:31	CSH	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	08-MAY-2012 08:42	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum Container ID Products
L12050099-09 966995

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	10-MAY-2012 08:39	RLB	RLB	
---	------	-----	------	-------------------	-----	-----	--

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	

Comments:Products cancelled.

Samplenum Container ID Products
L12050099-09 966996 ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 07:54	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: L12050099

Account: 2736

Project: 2736.061

Samples: 11

Due Date: 17-MAY-2012

Samplenum Container ID Products
L12050099-09 966997 NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	ANALYZ	W1	WET	03-MAY-2012 14:07	DIH	JKS	
3	STORE	WET	A2	14-MAY-2012 08:05	RLK	JDH	

Samplenum Container ID Products
L12050099-09 966998 PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 15:05	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum Container ID Products
L12050099-09 966999 AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE F

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

Samplenum Container ID Products
L12050099-10 967000 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	03-MAY-2012 13:28	RLK		
2	PREP	W1	DIG	04-MAY-2012 06:05	REK	AZH	
3	ANALYZ*	DIG	METALS	07-MAY-2012 13:52	KHR	REK	
4	STORE	DIG	A2	08-MAY-2012 13:41	JKS	BRG	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Microbac Laboratories Inc.
Internal Chain of Custody Report

Login: L12050099
Account: 2736
Project: 2736.061
Samples: 11
Due Date: 17-MAY-2012

Samplenum **Container ID** **Products**
L12050099-11 967001 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	03-MAY-2012 13:28	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 07:52	MRT	JKT	
3	STORE	ORG4	A2	17-MAY-2012 09:11	JKT	MRT	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



NELAP Addendum - March 4, 2011

Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
Total Halide by Bomb Combustion (TX)
Particle Sizing - 200 Mesh (PS200)
Sulfate (SO₄) - 9038
Specific Gravity/Density (SPGRAV)
Total Residual Chlorine (CL-TRL)
Total Volatile Solids (all forms) (TVS)
Total Coliform Bacteria (all methods)
Fecal Coliform Bacteria (all methods)
Sulfite (SO₃)
Thiodiglycol (TDG-LCMS)

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL HPLC02/HPLC-UV

Nitroglycerin
Nitroguanidine
Acetic acid
Butyric acid
Lactic acid
Propionic acid
Pyruvic acid

OVL KNITRO-C-WUV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene
1,4-Dioxane
Atrazine
Benzaldehyde
Biphenyl
Caprolactam
Hexamethylphosphoramide (HMPA)
Pentachlorobenzene
Pentachloroethane

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL MSV01/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 RSK01/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 MSS01/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

NELAP Accreditation by Laboratory SOP

SOLID AND HAZARDOUS CHEMICALS

OVL MSV01/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)