New Jersey
ACCUTEST LABORATORIES

03/25/13

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

Accutest Job Number: JB30345

Sampling Date: 03/02/13

Report to:

Anderson, Mulholland & Associates

ttaylor@amaiconsult.com

ATTN: Terry Taylor

Total number of pages in report: **286**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **5**
Section 4: Sample Results **6**
4.1: JB30345-1: AREAD-15 BOT 7
Section 5: Misc. Forms **8**
5.1: Chain of Custody 9
5.2: Sample Tracking Chronicle 13
5.3: Internal Chain of Custody 14
Section 6: GC/MS Volatiles - QC Data Summaries **15**
6.1: Method Blank Summary 16
6.2: Blank Spike Summary 17
6.3: Matrix Spike/Matrix Spike Duplicate Summary 18
6.4: Instrument Performance Checks (BFB) 19
6.5: Internal Standard Area Summaries 23
6.6: Surrogate Recovery Summaries 25
6.7: Initial and Continuing Calibration Summaries 26
Section 7: GC/MS Volatiles - Raw Data **54**
7.1: Samples 55
7.2: Method Blanks 66
7.3: Blank Spikes 68
7.4: Matrix Spike/Matrix Spike Duplicates 72
7.5: Instrument Performance Checks (BFB) 80
7.6: Initial and Continuing Calibarations 88
7.7: Instrument Run Logs 277
Section 8: General Chemistry - QC Data Summaries **283**
8.1: Percent Solids Raw Data Summary 284
Section 9: Misc. Raw Data **285**
9.1: VOA Soil Prep Log 286

Accutest LabLink@720494 09:59 25-Mar-2013

Sample Summary

Anderson, Mulholland & Associates

Job No: JB30345

BMSMC, Building 5 Area, PR
Project No: SM04.00.06

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB30345-1	03/02/13	12:15	NMR	03/05/13	SO	Soil	AREAD-15 BOT

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JB30345
Site:	BMSMC, Building 5 Area, PR	**Report Date**	3/19/2013 3:48:32 PM

On 03/05/2013, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 2.5 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB30345 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: SO **Batch ID:** VA7250

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB30917-2MS, JB30917-2MSD were used as the QC samples indicated.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN81473

- The data for SM2540 G-97 meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: JB30345
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 03/02/13

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB30345-1	**AREAD-15 BOT**					
Acetone		66.1	12	2.0	ug/kg	SW846 8260B
Benzene		0.78 J	1.2	0.14	ug/kg	SW846 8260B
Ethylbenzene		3.3	1.2	0.31	ug/kg	SW846 8260B
4-Methyl-2-pentanone(MIBK)		42.9	5.9	0.88	ug/kg	SW846 8260B
Xylene (total)		11.8	1.2	0.16	ug/kg	SW846 8260B

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Sample Results

Report of Analysis

Accutest LabLink@720494 09:59 25-Mar-2013

Report of Analysis

Client Sample ID:	AREAD-15 BOT		
Lab Sample ID:	JB30345-1	**Date Sampled:**	03/02/13
Matrix:	SO - Soil	**Date Received:**	03/05/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	80.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A192525.D	1	03/12/13	OTR	03/05/13 13:00	n/a	VA7250
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	66.1	12	2.0	ug/kg	
71-43-2	Benzene	0.78	1.2	0.14	ug/kg	J
100-41-4	Ethylbenzene	3.3	1.2	0.31	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	42.9	5.9	0.88	ug/kg	
108-88-3	Toluene	ND	1.2	0.12	ug/kg	
1330-20-7	Xylene (total)	11.8	1.2	0.16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
17060-07-0	1,2-Dichloroethane-D4	90%		70-122%
2037-26-5	Toluene-D8	109%		81-127%
460-00-4	4-Bromofluorobenzene	108%		66-132%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

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CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking # 7748 8491 0625
Bottle Order Control #
Accutest Quote #
Accutest Job # JB30345

Client / Reporting Information

Company Name: AMAI
Street Address: 110 Corporate Park Dr.
City / State / Zip: White Plains, NY 10604
Project Contact: Terry Taylor ttaylor@amaiconsult.com
Phone #: 914-251-0400
Fax #:
Sampler(s) Name(s): Nestor M. Rivera
Phone #:

Project Information

Project Name: BMS-Building 5 Area D ICM
Street:
City / State: Humacao PR
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis (see TEST CODE sheet): Building 5 Special List; % Solids

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Building 5 Special List	% Solids	LAB USE ONLY
-1	AREAD-15BOT		3/2/13	1215	NMR		4					✓			✓	✓	✓	
																		H3T6
																		14K6
																		4955

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☒ Std. 10 Business Days (by Contract only)
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☑ FULLT1 (Level 3+4)
- ☑ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

3 weeks
3/5/11

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Nestor M. Rivera	3/4/13 1552	1 FEDEX	2 FEDEX	3-5-13 1000	2
	Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
	Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 374 ☒ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☑ Cooler Temp. 25°C

1A

5.1 5

JB30345: Chain of Custody
Page 1 of 4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB30345 **Client:** AMAI **Project:** BMS BUILDING 5 AREA D ICM

Date / Time Received: 3/5/2013 1000 **Delivery Method:** FedEx **Airbill #'s:** 7948 8491 0025

Cooler Temps (Initial/Adjusted): #1: (2.5/2.5); 0

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:		
3. Cooler media:		
4. No, Coolers		

Quality Control _Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☐	☐
2. Trip Blank listed on COC:	☐	☐	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☐

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☐	☑
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments Encores received out of hold.

Accutest Laboratories
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JB30345: Chain of Custody
Page 2 of 4

Sample Receipt Summary - Problem Resolution

Accutest Job Number: JB30345

CSR: Michelle **Response Date:** 3/5/2013

Response: Please proceed as noted per Terry Taylor

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

Job Change Order: JB30345_3_15_2013

Requested Date:	3/15/2013	**Received Date:**	3/5/2013
Account Name:	Anderson, Mulholland &	**Due Date:**	3/19/2013
Project	BMSMC, Building 5 Area, PR	**Deliverable:**	FULT1
CSR:	michello	**TAT (Days):**	14

==========

Sample #: JB30345-All
Dept:
Dept:

Change:
Please relog for D8015IPA & DGC+METH. OK to run out of hold time.

==========

Above Changes Per: Terry Taylor **Date:** 3/15/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 1 of 1

5.1 5

JB30345: Chain of Custody
Page 4 of 4

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JB30345

BMSMC, Building 5 Area, PR
Project No: SM04.00.06

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB30345-1	Collected: 02-MAR-13 12:15 By: NMR		Received: 05-MAR-13 By: TH			
AREAD-15 BOT						
JB30345-1	SW846 8260B	12-MAR-13 16:04	OTR			V8260SL3
JB30345-1	SM2540 G-97	14-MAR-13 14:50	CV			%SOL

Accutest Internal Chain of Custody

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/05/13

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB30345-1.1	Secured Storage	Alfredo Crespo	03/14/13 11:07	Retrieve from Storage
JB30345-1.1	Alfredo Crespo	Beatrice Marcelino	03/14/13 11:10	Custody Transfer
JB30345-1.1	Beatrice Marcelino	Caitie Van Sciver	03/14/13 12:02	Custody Transfer
JB30345-1.1	Caitie Van Sciver	Secured Storage	03/14/13 13:09	Return to Storage
JB30345-1.1	Secured Storage	Alfredo Crespo	03/19/13 12:43	Retrieve from Storage
JB30345-1.1	Alfredo Crespo	Xu Liu	03/19/13 12:45	Custody Transfer
JB30345-1.1	Xu Liu	Secured Storage	03/19/13 16:44	Return to Storage
JB30345-1.3	Secured Storage	Jayna Patel	03/05/13 13:59	Retrieve from Storage
JB30345-1.3	Jayna Patel	Secured Storage	03/05/13 13:59	Return to Storage
JB30345-1.3	Secured Storage	Oksana Treglazova	03/11/13 15:21	Retrieve from Storage
JB30345-1.3	Oksana Treglazova	Secured Storage	03/11/13 15:43	Return to Storage
JB30345-1.4	Secured Storage	Jayna Patel	03/05/13 13:59	Retrieve from Storage
JB30345-1.4	Jayna Patel	Secured Storage	03/05/13 13:59	Return to Storage
JB30345-1.4	Secured Storage	Jayna Patel	03/05/13 14:55	Retrieve from Storage
JB30345-1.4	Jayna Patel	Secured Storage	03/05/13 15:18	Return to Storage
JB30345-1.5	Secured Storage	Jayna Patel	03/05/13 13:59	Retrieve from Storage
JB30345-1.5	Jayna Patel	Secured Storage	03/05/13 13:59	Return to Storage
JB30345-1.5	Secured Storage	Jayna Patel	03/05/13 14:55	Retrieve from Storage
JB30345-1.5	Jayna Patel	Secured Storage	03/05/13 15:18	Return to Storage
JB30345-1.5	Secured Storage	Oksana Treglazova	03/12/13 14:31	Retrieve from Storage
JB30345-1.5	Oksana Treglazova	GCMSA	03/12/13 14:31	Load on Instrument
JB30345-1.5	GCMSA	Oksana Treglazova	03/13/13 08:08	Unload from Instrument
JB30345-1.5	Oksana Treglazova	Secured Storage	03/13/13 08:08	Return to Storage

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GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA7250-MB	A192517.D	1	03/12/13	OTR	n/a	n/a	VA7250

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB30345-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	1.7	ug/kg	
71-43-2	Benzene	ND	1.0	0.12	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.26	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.75	ug/kg	
108-88-3	Toluene	ND	1.0	0.11	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.14	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	70-122%
2037-26-5	Toluene-D8	107%	81-127%
460-00-4	4-Bromofluorobenzene	108%	66-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Blank Spike Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA7250-BS	A192518.D	1	03/12/13	OTR	n/a	n/a	VA7250

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB30345-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	57.9	116	31-168
71-43-2	Benzene	50	51.5	103	76-117
100-41-4	Ethylbenzene	50	50.4	101	74-119
108-10-1	4-Methyl-2-pentanone(MIBK)	50	53.1	106	68-134
108-88-3	Toluene	50	52.3	105	77-121
1330-20-7	Xylene (total)	150	151	101	76-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	70-122%
2037-26-5	Toluene-D8	109%	81-127%
460-00-4	4-Bromofluorobenzene	99%	66-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB30917-2MS	A192519.D	1	03/12/13	OTR	n/a	n/a	VA7250
JB30917-2MSD	A192520.D	1	03/12/13	OTR	n/a	n/a	VA7250
JB30917-2	A192522.D	1	03/12/13	OTR	n/a	n/a	VA7250

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB30345-1

CAS No.	Compound	JB30917-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	31.7		65.7	79.7	73	85.3	82	7	10-198/35
71-43-2	Benzene	ND		65.7	61.5	94	71.8	109	15	44-130/21
100-41-4	Ethylbenzene	ND		65.7	60.4	92	69.8	106	14	29-137/25
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		65.7	54.7	83	64.4	98	16	39-143/22
108-88-3	Toluene	0.83	J	65.7	63.0	95	74.1	112	16	40-135/22
1330-20-7	Xylene (total)	0.49	J	197	180	91	209	106	15	28-139/25

CAS No.	Surrogate Recoveries	MS	MSD	JB30917-2	Limits
1868-53-7	Dibromofluoromethane	103%	104%	103%	70-130%
17060-07-0	1,2-Dichloroethane-D4	90%	91%	88%	70-122%
2037-26-5	Toluene-D8	108%	111%	108%	81-127%
460-00-4	4-Bromofluorobenzene	102%	99%	106%	66-132%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: VA7222-BFB
Lab File ID: A191856.D
Instrument ID: GCMSA
Injection Date: 02/20/13
Injection Time: 12:14

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	9740	17.5		Pass
75	30.0 - 60.0% of mass 95	24837	44.5		Pass
95	Base peak, 100% relative abundance	55805	100.0		Pass
96	5.0 - 9.0% of mass 95	3797	6.80		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	51915	93.0		Pass
175	5.0 - 9.0% of mass 174	4176	7.48	(8.04) [a]	Pass
176	95.0 - 101.0% of mass 174	50803	91.0	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	3296	5.91	(6.49) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA7222-IC7222	A191857.D	02/20/13	12:54	00:40	Initial cal 0.5
VA7222-IC7222	A191858.D	02/20/13	13:21	01:07	Initial cal 1
VA7222-IC7222	A191859.D	02/20/13	13:53	01:39	Initial cal 2
VA7222-IC7222	A191860.D	02/20/13	14:25	02:11	Initial cal 5
VA7222-IC7222	A191861.D	02/20/13	14:55	02:41	Initial cal 10
VA7222-IC7222	A191862.D	02/20/13	15:24	03:10	Initial cal 20
VA7222-ICC7222	A191863.D	02/20/13	16:09	03:55	Initial cal 50
VA7222-IC7222	A191864.D	02/20/13	16:38	04:24	Initial cal 100
VA7222-IC7222	A191865.D	02/20/13	17:08	04:54	Initial cal 200
VA7222-ICV7222	A191868.D	02/20/13	18:45	06:31	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: VA7250-BFB
Lab File ID: A192514.D
Instrument ID: GCMSA
Injection Date: 03/12/13
Injection Time: 09:18

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	8453	18.7		Pass
75	30.0 - 60.0% of mass 95	21608	47.9		Pass
95	Base peak, 100% relative abundance	45088	100.0		Pass
96	5.0 - 9.0% of mass 95	3034	6.73		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	45891	101.8		Pass
175	5.0 - 9.0% of mass 174	3758	8.33	(8.19) [a]	Pass
176	95.0 - 101.0% of mass 174	45035	99.9	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	2842	6.30	(6.31) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA7250-CC7222	A192516.D	03/12/13	11:08	01:50	Continuing cal 20
VA7250-MB	A192517.D	03/12/13	11:50	02:32	Method Blank
VA7250-BS	A192518.D	03/12/13	12:12	02:54	Blank Spike
JB30917-2MS	A192519.D	03/12/13	12:46	03:28	Matrix Spike
JB30917-2MSD	A192520.D	03/12/13	13:31	04:13	Matrix Spike Duplicate
JB30917-2	A192522.D	03/12/13	14:35	05:17	(used for QC only; not part of job JB30345)
ZZZZZZ	A192523.D	03/12/13	15:05	05:47	(unrelated sample)
ZZZZZZ	A192524.D	03/12/13	15:34	06:16	(unrelated sample)
JB30345-1	A192525.D	03/12/13	16:04	06:46	AREAD-15 BOT
ZZZZZZ	A192526.D	03/12/13	16:45	07:27	(unrelated sample)
ZZZZZZ	A192528.D	03/12/13	17:44	08:26	(unrelated sample)
ZZZZZZ	A192529.D	03/12/13	18:14	08:56	(unrelated sample)
ZZZZZZ	A192530.D	03/12/13	18:43	09:25	(unrelated sample)
ZZZZZZ	A192531.D	03/12/13	19:13	09:55	(unrelated sample)
ZZZZZZ	A192532.D	03/12/13	19:57	10:39	(unrelated sample)
ZZZZZZ	A192533.D	03/12/13	20:27	11:09	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: VE8801-BFB
Lab File ID: E200194.D
Instrument ID: GCMSE
Injection Date: 02/22/13
Injection Time: 08:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	6576	16.7		Pass
75	30.0 - 60.0% of mass 95	17805	45.3		Pass
95	Base peak, 100% relative abundance	39293	100.0		Pass
96	5.0 - 9.0% of mass 95	2733	6.96		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	38072	96.9		Pass
175	5.0 - 9.0% of mass 174	2908	7.40	(7.64) [a]	Pass
176	95.0 - 101.0% of mass 174	36725	93.5	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	2537	6.46	(6.91) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VE8801-IC8801	E200198.D	02/22/13	10:38	02:15	Initial cal 5
VE8801-IC8801	E200199.D	02/22/13	12:19	03:56	Initial cal 10
VE8801-IC8801	E200200.D	02/22/13	12:49	04:26	Initial cal 20
VE8801-ICC8801	E200201.D	02/22/13	13:19	04:56	Initial cal 50
VE8801-IC8801	E200202.D	02/22/13	13:50	05:27	Initial cal 100
VE8801-IC8801	E200203.D	02/22/13	14:20	05:57	Initial cal 200
VE8801-IC8801	E200206.D	02/22/13	15:50	07:27	Initial cal 1
VE8801-IC8801	E200207.D	02/22/13	16:19	07:56	Initial cal 0.5
VE8801-IC8801	E200208.D	02/22/13	16:49	08:26	Initial cal 2
VE8801-ICV8801	E200209.D	02/22/13	17:19	08:56	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: VE8827-BFB
Lab File ID: E200744.D
Instrument ID: GCMSE
Injection Date: 03/11/13
Injection Time: 22:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10742	17.3		Pass
75	30.0 - 60.0% of mass 95	27928	45.0		Pass
95	Base peak, 100% relative abundance	62008	100.0		Pass
96	5.0 - 9.0% of mass 95	4139	6.67		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	59130	95.4		Pass
175	5.0 - 9.0% of mass 174	4697	7.57	(7.94) [a]	Pass
176	95.0 - 101.0% of mass 174	58688	94.6	(99.3) [a]	Pass
177	5.0 - 9.0% of mass 176	3928	6.33	(6.69) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VE8827-CC8801	E200745.D	03/11/13	23:09	00:31	Continuing cal 50
VE8827-MB	E200747.D	03/12/13	00:09	01:31	Method Blank
VE8827-BS	E200748.D	03/12/13	00:40	02:02	Blank Spike
JB30345-1MS	E200749.D	03/12/13	01:10	02:32	Matrix Spike
JB30345-1MSD	E200750.D	03/12/13	01:40	03:02	Matrix Spike Duplicate
JB30345-1	E200752.D	03/12/13	02:40	04:02	AREAD-15 BOT
ZZZZZZ	E200754.D	03/12/13	03:40	05:02	(unrelated sample)
ZZZZZZ	E200756.D	03/12/13	04:40	06:02	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	VA7250-CC7222	**Injection Date:**	03/12/13
Lab File ID:	A192516.D	**Injection Time:**	11:08
Instrument ID:	GCMSA	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	65887	7.03	174685	9.35	237400	10.30	218721	13.74	128007	16.37
Upper Limit [a]	131774	7.53	349370	9.85	474800	10.80	437442	14.24	256014	16.87
Lower Limit [b]	32944	6.53	87343	8.85	118700	9.80	109361	13.24	64004	15.87

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VA7250-MB	84616	7.02	182872	9.35	251139	10.30	242405	13.74	127310	16.38
VA7250-BS	70804	7.02	181400	9.35	254735	10.30	244989	13.74	149710	16.38
JB30917-2MS	62885	7.01	195351	9.35	273435	10.30	263103	13.74	152992	16.38
JB30917-2MSD	68415	7.03	190023	9.36	264457	10.30	250483	13.74	150814	16.38
JB30917-2	68673	7.03	193169	9.36	272380	10.31	265776	13.75	139599	16.39
ZZZZZZ	65860	7.04	182964	9.35	253327	10.31	234119	13.75	135951	16.38
ZZZZZZ	75073	7.03	195884	9.36	269799	10.31	267079	13.75	140181	16.39
JB30345-1	67405	7.02	189870	9.36	267428	10.31	261876	13.75	134207	16.38
ZZZZZZ	73021	7.03	199905	9.36	279813	10.31	265553	13.75	163620	16.38
ZZZZZZ	77719	7.03	210031	9.36	288866	10.31	271832	13.75	147435	16.39
ZZZZZZ	72810	7.03	193156	9.36	265186	10.31	261730	13.75	134699	16.38
ZZZZZZ	80487	7.03	202265	9.36	277523	10.30	251922	13.74	105942	16.38
ZZZZZZ	65442	7.02	188735	9.36	260289	10.30	262816	13.74	144590	16.38
ZZZZZZ	83057	7.02	205254	9.36	283454	10.30	267581	13.74	142164	16.38
ZZZZZZ	70276	7.02	208667	9.35	290955	10.30	279958	13.74	159286	16.37

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	VE8827-CC8801	**Injection Date:**	03/11/13
Lab File ID:	E200745.D	**Injection Time:**	23:09
Instrument ID:	GCMSE	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	108546	7.68	198818	9.91	278642	10.83	263077	14.15	148418	16.72
Upper Limit [a]	217092	8.18	397636	10.41	557284	11.33	526154	14.65	296836	17.22
Lower Limit [b]	54273	7.18	99409	9.41	139321	10.33	131539	13.65	74209	16.22

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VE8827-MB	95082	7.68	215995	9.91	290567	10.83	270936	14.15	160798	16.72
VE8827-BS	106977	7.68	198137	9.91	276962	10.83	260693	14.15	147888	16.72
JB30345-1MS	113047	7.68	195150	9.91	276384	10.82	257666	14.15	147603	16.72
JB30345-1MSD	86602	7.68	196580	9.91	279379	10.83	260082	14.15	150769	16.72
JB30345-1 [c]	95453	7.68	216714	9.91	290080	10.82	270809	14.15	163128	16.72
ZZZZZZ	101994	7.68	205850	9.91	265607	10.82	238269	14.15	145257	16.72
ZZZZZZ	97401	7.68	221082	9.91	298657	10.82	276802	14.15	161693	16.72

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample used for QC purposes only. Confirmation run.

Volatile Surrogate Recovery Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8260B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JB30345-1	E200752.D				
JB30345-1	A192525.D	103.0	90.0	109.0	108.0
JB30917-2MS	A192519.D	103.0	90.0	108.0	102.0
JB30917-2MSD	A192520.D	104.0	91.0	111.0	99.0
VA7250-BS	A192518.D	103.0	97.0	109.0	99.0
VA7250-MB	A192517.D	104.0	97.0	107.0	108.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = 1,2-Dichloroethane-D4	70-122%
S3 = Toluene-D8	81-127%
S4 = 4-Bromofluorobenzene	66-132%

Initial Calibration Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: VA7222-ICC7222
Lab FileID: A191863.D

Response Factor Report MSA

```
Method       : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title        : SW 846  8260bB ZB624 60m x 0.25mm x 1.4um
Last Update  : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration

Calibration Files
5   =A191860.D   2   =A191859.D   20  =A191862.D   50  =A191863.D
100 =A191864.D   1   =A191858.D   200 =A191865.D   0.5 =A191857.D
10  =A191861.D       =
```

Compound	5	2	20	50	100	1	200	0.5	10	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------											
2) 1,4-dioxane	0.073	0.093	0.091	0.098		0.096		0.085		0.089	10.51
3) ethanol										0.000#	-1.00
4) tertiary butyl alcohol	0.985	0.840	0.988	0.966	1.006	1.013		0.952		0.964	6.09
5) I pentafluorobenzene ----------ISTD----------											
6) chlorotrifluoroethene										0.000#	-1.00
7) chlorodifluoromethane	0.279	0.273	0.277	0.269	0.300	0.262	0.307		0.319	0.286	7.08
8) dichlorodifluoromethane	0.392	0.361	0.396	0.362	0.425	0.388	0.391		0.334	0.381	7.23
9) chloromethane	0.516	0.536	0.483	0.471	0.519	0.594	0.501	0.672	0.431	0.525	13.60
10) vinyl chloride	0.476	0.504	0.470	0.448	0.475	0.594	0.470	0.483	0.419	0.482	9.96
11) bromomethane	0.353	0.386	0.324	0.296	0.303	0.423		0.381	0.285	0.344	14.49
12) chloroethane	0.234	0.244	0.235	0.222	0.237	0.255	0.208		0.203	0.230	7.61
13) vinyl bromide										0.000#	-1.00
14) trichlorofluoromethane	0.484	0.489	0.497	0.469	0.517	0.537	0.495		0.424	0.489	6.84
15) pentane	0.728	0.604	0.628	0.608	0.662	0.886	0.647	0.579	0.658	0.667	13.92
16) ethyl ether	0.201	0.179	0.196	0.188	0.190	0.236	0.200		0.176	0.196	9.53
17) Freon 123a										0.000#	-1.00
18) acrolein	0.061	0.067	0.060	0.059		0.067			0.047	0.060	12.08
19) 1,1-dichloroethene	0.298	0.244	0.319	0.308	0.311	0.278	0.316	0.223	0.328	0.292	12.47
20) acetone	0.098		0.068	0.074	0.082	0.092			0.077	0.082	13.70
21) allyl chloride	0.181		0.213	0.215	0.216	0.218			0.218	0.210	6.81
22) acetonitrile	0.019		0.020	0.024	0.026	0.029			0.020	0.023	17.22

----- Linear regression ----- Coefficient = 0.9977

```
                Response Ratio = -0.03162 + 0.02891 *A

23)  iodomethane
           0.625 0.538 0.682 0.668 0.664 0.571 0.683 0.730 0.676   0.649    9.29
24)  iso-butyl alcohol
           0.012       0.010 0.010 0.012       0.014       0.011   0.011   12.56
25)  carbon disulfide
           1.042 0.947 1.198 1.141 1.145 0.927 1.168 1.119 1.170   1.095    9.11
26)  methylene chloride
           0.407 0.401 0.401 0.392 0.391 0.553 0.394       0.401   0.418   13.20
27)  methyl acetate
           0.226       0.192 0.204 0.225       0.249       0.189   0.214   10.77
28)  methyl tert butyl ether
           1.011 0.796 0.997 0.984 0.987 0.918 1.030 1.137 0.934   0.977    9.44
29)  trans-1,2-dichloroethene
           0.322 0.277 0.361 0.343 0.350 0.300 0.352 0.303 0.348   0.328    8.88
30)  di-isopropyl ether
           1.204 1.158 1.253 1.237 1.291 1.103 1.328 1.200 1.245   1.224    5.54
31)  t-butyl formate
           0.253 0.199 0.253 0.261 0.281       0.298       0.240   0.255   12.39
32)  3,3-dimethyl-1-butanol
           0.034 0.025 0.032 0.035 0.039 0.032 0.044       0.030   0.034   17.00
            ----- Linear regression -----  Coefficient =  0.9949
              Response Ratio = -0.03444 + 0.04394 *A

33)  ethyl tert-butyl ether
           1.110 1.026 1.148 1.138 1.179 1.013 1.232 1.045 1.137   1.114    6.60
34)  2-butanone
                       0.028 0.031 0.034       0.038       0.022   0.031   20.07
            ----- Linear regression -----  Coefficient =  0.9977
              Response Ratio = -0.00374 + 0.03753 *A

35)  1,1-dichloroethane
           0.625 0.533 0.678 0.670 0.660 0.563 0.671 0.585 0.668   0.628    8.68
36)  chloroprene
           0.410 0.403 0.456 0.434 0.470 0.374 0.479       0.459   0.436    8.53
37)  acrylonitrile
           0.107       0.092 0.102 0.107       0.116       0.099   0.104    7.94
38)  vinyl acetate
                       0.038 0.045 0.049       0.053       0.026   0.042   25.07
            ----- Linear regression -----  Coefficient =  0.9992
              Response Ratio = -0.00778 + 0.05460 *A

39)  ethyl acetate
           0.034       0.036 0.039 0.043       0.047       0.031   0.038   16.43
            ----- Linear regression -----  Coefficient =  0.9979
              Response Ratio = -0.00498 + 0.04790 *A

40)  ethyl acrylate
                                                                   0.000#  -1.00
41)  2,2-dichloropropane
           0.428 0.352 0.490 0.475 0.469 0.417 0.474 0.536 0.495   0.460   11.63
42)  cis-1,2-dichloroethene
           0.359 0.325 0.397 0.388 0.394 0.335 0.398 0.408 0.394   0.378    7.99
43)  propionitrile
           0.041       0.036 0.040 0.042       0.046       0.037   0.040    9.28
44)  bromochloromethane
           0.188 0.146 0.194 0.197 0.198 0.163 0.204       0.183   0.184   10.79
45)  tetrahydrofuran
           0.163 0.149 0.121 0.121 0.124       0.126       0.124   0.133   12.44
```

Initial Calibration Summary

Job Number: JB30345 **Sample:** VA7222-ICC7222
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** A191863.D
Project: BMSMC, Building 5 Area, PR

```
46)  chloroform
           0.579 0.503 0.639 0.627 0.630 0.600 0.637 0.680 0.636   0.615    8.15
47)  dibromofluoromethane (s)
           0.391 0.421 0.344 0.343 0.365       0.371       0.369   0.372    7.37
48)  1,2-dichloroethane-d4 (s)
           0.430 0.436 0.379 0.380 0.397 0.511 0.407       0.386   0.416   10.66
49)  freon 113
           0.198 0.191 0.233 0.223 0.234       0.242       0.246   0.224    9.52
50)  methacrylonitrile
           0.152       0.163 0.179 0.188       0.205       0.141   0.171   13.88
51)  cyclohexane
           0.451 0.381 0.517 0.497 0.501 0.448 0.512       0.527   0.479   10.26
52)  1,1,1-trichloroethane
           0.454 0.393 0.509 0.497 0.502 0.400 0.514 0.443 0.515   0.470   10.41
53)  tert-amyl methyl ether
           1.080 1.009 1.081 1.061 1.108 0.989 1.168 0.988 1.064   1.061    5.54

54) I   1,4-difluorobenzene   ----------------ISTD---------------------
55)  Di-isobutylene
                                                                   0.000#  -1.00
56)  epichlorohydrin
           0.021       0.019 0.020 0.022       0.024       0.019   0.021    8.97
57)  n-butyl alcohol
           0.005 0.004 0.006 0.007 0.007       0.009       0.004   0.006#  28.54
            ----- Linear regression -----  Coefficient =  0.9953
              Response Ratio = -0.04971 + 0.00855 *A

58)  carbon tetrachloride
           0.280 0.247 0.320 0.316 0.309 0.272 0.316 0.294 0.312   0.296    8.49
59)  1,1-dichloropropene
           0.295 0.262 0.344 0.333 0.328 0.291 0.335 0.318 0.333   0.315    8.60
60)  hexane
           0.243 0.263 0.258 0.256 0.267 0.245 0.266       0.285   0.260    5.15
61)  benzene
           0.964 0.809 1.042 1.020 1.006 0.926 1.021 1.145 1.034   0.996    9.24
62)  Iso-octane
           0.782 0.735 0.902 0.859 0.900 0.674 0.936 0.685 0.953   0.825   13.15
63)  heptane
           0.156 0.151 0.179 0.172 0.182 0.143 0.188       0.187   0.170   10.17
64)  tert amyl alcohol
           0.012       0.009 0.010 0.010       0.012       0.009   0.010   12.42
65)  isopropyl acetate
           0.405       0.421 0.436 0.469       0.507       0.379   0.436   10.51
66)  1,2-dichloroethane
           0.298 0.231 0.316 0.320 0.314 0.258 0.321 0.338 0.305   0.300   11.37
67)  trichloroethene
           0.217 0.195 0.256 0.246 0.247 0.205 0.249 0.246 0.249   0.234    9.66
68)  2-nitropropane
                                                                   0.000#  -1.00
69)  tert-amyl ethyl ether
           0.348 0.312 0.368 0.386 0.404 0.344 0.417 0.272 0.345   0.355   12.70
70)  methylcyclohexane
           0.338 0.332 0.390 0.371 0.399 0.273 0.411 0.308 0.405   0.358   13.48
71)  2-chloroethyl vinyl ether
           0.130 0.109 0.138 0.143 0.149       0.157       0.130   0.136   11.33
72)  methyl methacrylate
           0.146       0.139 0.146 0.151       0.171       0.127   0.147    9.90
73)  1,2-dichloropropane
           0.266 0.223 0.288 0.290 0.290 0.261 0.297 0.295 0.288   0.278    8.60
74)  dibromomethane
```

```
            0.148 0.108 0.152 0.155 0.154 0.119 0.163       0.144   0.143   13.34
 75)  bromodichloromethane
            0.318 0.272 0.349 0.346 0.350 0.287 0.361 0.363 0.332   0.331    9.82
 76)  cis-1,3-dichloropropene
            0.399 0.328 0.439 0.445 0.441 0.333 0.460 0.459 0.421   0.414   12.29
 77)  toluene-d8 (s)
            0.932 0.936 0.900 0.876 0.926 1.170 0.940       0.917   0.949    9.63
 78)  4-methyl-2-pentanone
            0.084 0.065 0.092 0.095 0.096       0.105       0.083   0.089   14.40
 79)  toluene
            0.577 0.505 0.649 0.639 0.641 0.539 0.664 0.739 0.647   0.622   11.35
 80)  3-methyl-1-butanol
            0.011 0.007 0.010 0.011 0.012       0.014       0.009   0.011   19.65
             ----- Linear regression -----  Coefficient =  0.9962
               Response Ratio = -0.02422 + 0.01377 *A

 81)  trans-1,3-dichloropropene
            0.347 0.284 0.384 0.387 0.387 0.286 0.407 0.326 0.355   0.351   12.84
 82)  ethyl methacrylate
            0.260       0.290 0.304 0.314       0.341       0.258   0.295   10.96
 83)  1,1,2-trichloroethane
            0.192 0.144 0.190 0.191 0.193 0.160 0.204 0.196 0.179   0.183   10.37
 84)  2-hexanone
            0.074       0.073 0.083 0.085       0.098       0.065   0.080   14.49

 85) I   chlorobenzene-d5      ----------------ISTD---------------------
 86)  tetrachloroethene
            0.219 0.205 0.260 0.249 0.249 0.212 0.257 0.237 0.256   0.238    8.87
 87)  1,3-dichloropropane
            0.403 0.331 0.405 0.410 0.410 0.380 0.438 0.456 0.395   0.403    8.72
 88)  butyl acetate
            0.151       0.150 0.159 0.179       0.196       0.137   0.162   13.30
 89)  dibromochloromethane
            0.293 0.237 0.306 0.311 0.320 0.244 0.339 0.309 0.291   0.294   11.44
 90)  1,2-dibromoethane
            0.241 0.184 0.246 0.247 0.256 0.217 0.275 0.208 0.237   0.234   11.69
 91)  n-butyl ether
                                                                    0.000#  -1.00
 92)  chlorobenzene
            0.789 0.680 0.851 0.839 0.847 0.731 0.863 0.977 0.840   0.824   10.27
 93)  1,1,1,2-tetrachloroethane
            0.293 0.248 0.320 0.313 0.320 0.261 0.332 0.349 0.304   0.304   10.72
 94)  ethylbenzene
            1.236 1.062 1.386 1.349 1.376 1.167 1.396 1.439 1.372   1.309    9.61
 95)  m,p-xylene
            0.485 0.425 0.547 0.535 0.542 0.464 0.551 0.579 0.553   0.520    9.70
 96)  o-xylene
            0.502 0.420 0.557 0.543 0.552 0.490 0.567 0.620 0.550   0.533   10.58
 97)  styrene
            0.802 0.668 0.917 0.933 0.953 0.735 0.993 0.858 0.884   0.860   12.41
 98)  bromoform
            0.218 0.172 0.217 0.223 0.230 0.195 0.251 0.245 0.202   0.217   11.34

 99) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
100)  isopropylbenzene
            2.077 1.812 2.368 2.291 2.304 2.029 2.294 2.519 2.327   2.225    9.59
101)  cyclohexanone
            0.017       0.017 0.017 0.017       0.018       0.022   0.018   11.27
102)  4-bromofluorobenzene (s)
            0.731 0.848 0.667 0.644 0.688       0.698       0.692   0.710    9.35
```

Initial Calibration Summary

Job Number: JB30345 **Sample:** VA7222-ICC7222
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** A191863.D
Project: BMSMC, Building 5 Area, PR

103)	bromobenzene										
	0.628	0.557	0.658	0.665	0.666	0.583	0.681	0.725	0.648	0.646	7.84
104)	1,1,2,2-tetrachloroethane										
	0.649	0.533	0.606	0.613	0.621	0.661	0.646	0.861	0.603	0.644	13.93
105)	trans-1,4-dichloro-2-butene										
	0.131	0.119	0.142	0.149	0.153		0.162		0.132	0.141	10.40
106)	1,2,3-trichloropropane										
	0.150	0.111	0.136	0.136	0.140	0.128	0.150	0.171	0.134	0.139	12.02
107)	n-propylbenzene										
	2.469	2.160	2.772	2.716	2.732	2.315	2.713		2.772	2.581	9.17
108)	2-chlorotoluene										
	0.561	0.486	0.622	0.603	0.610	0.518	0.614	0.687	0.610	0.590	10.16
109)	4-chlorotoluene										
	1.634	1.486	1.763	1.758	1.759	1.677	1.773	2.106	1.741	1.744	9.42
110)	p-ethyltoluene										
	2.133	2.085	2.236	2.243	2.391	2.205	2.380	1.943	2.204	2.202	6.34
111)	1,3,5-trimethylbenzene										
	1.898	1.647	2.123	2.058	2.075	1.850	2.051		2.094	1.975	8.29
112)	tert-butylbenzene										
	1.542	1.375	1.761	1.739	1.732	1.506	1.734	1.791	1.731	1.657	8.75
113)	pentachloroethane										
	0.403	0.370	0.444	0.452	0.454	0.380	0.468	0.544	0.426	0.438	11.98
114)	1,2,4-trimethylbenzene										
	1.865	1.673	2.149	2.086	2.070	1.871	2.089	2.402	2.079	2.032	10.20
115)	sec-butylbenzene										
	2.416	2.134	2.744	2.667	2.627	2.455	2.640	3.009	2.741	2.604	9.48
116)	1,3-dichlorobenzene										
	1.177	1.052	1.290	1.270	1.274	1.215	1.300		1.274	1.232	6.77
117)	p-isopropyltoluene										
	2.011	1.774	2.295	2.219	2.224	1.864	2.228	2.520	2.252	2.154	10.73
118)	1,2,3-trimethylbenzene										
										0.000#	-1.00
119)	1,4-dichlorobenzene										
	1.265	1.169	1.330	1.312	1.311	1.356	1.338		1.333	1.302	4.62
120)	p-diethylbenzene										
	1.247	1.243	1.337	1.322	1.425	1.301	1.413	1.097	1.297	1.298	7.58
121)	1,2-dichlorobenzene										
	1.206	1.064	1.254	1.249	1.241	1.187	1.257		1.222	1.210	5.29
122)	n-butylbenzene										
	1.103	0.980	1.274	1.225	1.244	1.058	1.247	1.231	1.273	1.182	9.04
123)	1,2,4,5-tetramethylbenzene										
	1.998	1.952	2.175	2.162	2.266	2.074	2.257	1.730	2.058	2.075	8.14
124)	1,2-dibromo-3-chloropropane										
	0.103	0.071	0.090	0.097	0.096	0.087	0.107		0.089	0.093	12.21
125)	1,3,5-trichlorobenzene										
	0.988	0.890	1.097	1.052	1.038	1.024	1.053		1.073	1.027	6.23
126)	1,2,4-trichlorobenzene										
	0.815	0.736	0.921	0.910	0.901	0.795	0.934		0.881	0.862	8.25
127)	hexachlorobutadiene										
	0.502	0.446	0.574	0.531	0.522	0.509	0.543		0.570	0.525	7.82
128)	naphthalene										
	1.618	1.346	1.687	1.727	1.700	1.604	1.795		1.560	1.630	8.39
129)	1,2,3-trichlorobenzene										
	0.760	0.652	0.838	0.822	0.779	0.767	0.798		0.791	0.776	7.29
130)	hexachloroethane										
	0.372	0.305	0.427	0.427	0.430	0.352	0.440	0.427	0.407	0.399	11.47
131)	Ethylenimine										
										0.000#	-1.00
132)	Bis(chloromethyl)ether										
										0.000#	-1.00

Initial Calibration Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: VA7222-ICC7222
Lab FileID: A191863.D

```
133)  2-methylnaphthalene
                                                                    0.000#  -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MA7222.M          Thu Feb 21 08:15:50 2013   MSA
```

Initial Calibration Verification

Job Number: JB30345 **Sample:** VA7222-ICV7222
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** A191868.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\A191868.D                    Vial: 100
Acq On    : 20 Feb 2013   6:45 pm                    Operator: Oksanat
Sample    : icv7222-50                               Inst    : MSA
Misc      : MS43382,VA7222,5,,,,1                    Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title        : SW 846  8260bB ZB624 60m x 0.25mm x 1.4um
Last Update  : Thu Feb 21 08:12:37 2013
Response via : Multiple Level Calibration

Min. RRF     :   0.010  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)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	109	0.00	7.02
2	M	1,4-dioxane	0.089	0.095	-6.7	115	0.00	11.06
3	M	ethanol		----------NA----------				
4	M	tertiary butyl alcohol	0.964	1.061	-10.1	120	-0.01	7.14
5	I	pentafluorobenzene	1.000	1.000	0.0	96	0.00	9.35
6		chlorotrifluoroethene		----------NA----------				
7	M	chlorodifluoromethane	0.286	0.267	6.6	95	0.00	3.70
8	M	dichlorodifluoromethane	0.381	0.344	9.7	91	0.00	3.68
9	M	chloromethane	0.525	0.554	-5.5	113	0.00	3.98
10	M	vinyl chloride	0.482	0.476	1.2	102	0.00	4.23
11	M	bromomethane	0.344	0.339	1.5	110	0.00	4.82
12	M	chloroethane	0.230	0.253	-10.0	109	0.00	4.99
13		vinyl bromide		----------NA----------				
14	M	trichlorofluoromethane	0.489	0.475	2.9	97	0.00	5.48
15	m	pentane	0.667	0.640	4.0	101	0.00	5.52
16	M	ethyl ether	0.196	0.203	-3.6	104	0.00	5.86
17		Freon 123a		----------NA----------				
18	M	acrolein	0.060	0.065	-8.3	105	0.00	6.11
19	M	1,1-dichloroethene	0.292	0.308	-5.5	96	0.00	6.29
20	M	acetone	0.082	0.097	-18.3	125	-0.02	6.36
21	M	allyl chloride	0.210	0.217	-3.3	97	0.00	6.82
		----------	True	Calc.	% Drift	----------		
22	M	acetonitrile	500.000	493.625	1.3	103	0.00	6.81
		----------	AvgRF	CCRF	% Dev	----------		
23	M	iodomethane	0.649	0.677	-4.3	97	0.00	6.56
24	M	iso-butyl alcohol	0.011	0.012	-9.1	112	0.00	9.67
25	M	carbon disulfide	1.095	1.101	-0.5	92	0.00	6.68
26	M	methylene chloride	0.418	0.407	2.6	99	0.00	7.02
27	M	methyl acetate	0.214	0.215	-0.5	101	0.00	6.84
28	M	methyl tert butyl ether	0.977	1.036	-6.0	101	0.00	7.37
29	M	trans-1,2-dichloroethene	0.328	0.347	-5.8	97	0.00	7.41
30	M	di-isopropyl ether	1.224	1.331	-8.7	103	0.00	8.00
31	m	t-butyl formate	0.255	0.304	-19.2	111	0.00	9.20
		----------	True	Calc.	% Drift	----------		
32	m	3,3-dimethyl-1-butanol	500.000	638.717	-27.7#	144	0.00	13.00
		----------	AvgRF	CCRF	% Dev	----------		
33	M	ethyl tert-butyl ether	1.114	1.200	-7.7	101	0.00	8.50

Initial Calibration Verification

Job Number: JB30345 **Sample:** VA7222-ICV7222
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Project: BMSMC, Building 5 Area, PR

			True	Calc.	% Drift			
34	M	2-butanone	50.000	53.550	-7.1	111	-0.01	8.78

			AvgRF	CCRF	% Dev			
35	M	1,1-dichloroethane	0.628	0.681	-8.4	97	0.00	8.00
36	M	chloroprene	0.436	0.426	2.3	94	0.00	8.12
37	M	acrylonitrile	0.104	0.118	-13.5	110	0.00	7.37

			True	Calc.	% Drift			
38	M	vinyl acetate	50.000	52.552	-5.1	107	-0.02	8.02
39	M	ethyl acetate	50.000	57.431	-14.9	123	-0.02	8.79

			AvgRF	CCRF	% Dev			
40		ethyl acrylate		----------NA----------				
41	M	2,2-dichloropropane	0.460	0.458	0.4	92	0.00	8.78
42	M	cis-1,2-dichloroethene	0.378	0.404	-6.9	100	0.00	8.79
43	M	propionitrile	0.040	0.047	-17.5	112	0.00	8.85
44	M	bromochloromethane	0.184	0.204	-10.9	99	-0.01	9.11
45	M	tetrahydrofuran	0.133	0.138	-3.8	110	0.00	9.17
46	M	chloroform	0.615	0.650	-5.7	99	0.00	9.17
47	S	dibromofluoromethane (s)	0.372	0.377	-1.3	105	0.00	9.38
48	S	1,2-dichloroethane-d4 (s)	0.416	0.418	-0.5	105	0.00	9.82
49	M	freon 113	0.224	0.192	14.3	83	-0.01	6.25
50	M	methacrylonitrile	0.171	0.189	-10.5	101	0.00	9.05
51		cyclohexane	0.479	0.481	-0.4	93	0.00	9.50
52	M	1,1,1-trichloroethane	0.470	0.495	-5.3	95	0.00	9.42
53	M	tert-amyl methyl ether	1.061	1.162	-9.5	105	-0.01	9.94
54	I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00	10.30
55	M	Di-isobutylene		----------NA----------				
56	M	epichlorohydrin	0.021	0.024	-14.3	112	0.00	11.64

			True	Calc.	% Drift			
57	M	n-butyl alcohol	2500.000	2685.037	-7.4	120	0.00	10.46

			AvgRF	CCRF	% Dev			
58	M	carbon tetrachloride	0.296	0.304	-2.7	93	0.00	9.64
59	M	1,1-dichloropropene	0.315	0.325	-3.2	95	0.00	9.62
60	M	hexane	0.260	0.228	12.3	86	0.00	7.73
61	M	benzene	0.996	1.041	-4.5	99	0.00	9.89
62	M	Iso-octane	0.825	0.771	6.5	87	0.00	9.91
63	M	heptane	0.170	0.162	4.7	91	0.00	10.09
64	m	tert amyl alcohol	0.010	0.012	-15.0	113	-0.02	9.79
65	M	isopropyl acetate	0.436	0.520	-19.3	115	0.00	9.84
66	M	1,2-dichloroethane	0.300	0.334	-11.3	101	0.00	9.91
67	M	trichloroethene	0.234	0.250	-6.8	98	0.00	10.65
68	M	2-nitropropane		----------NA----------				
69	m	tert-amyl ethyl ether	0.355	0.403	-14.0	101	0.00	10.83
70	m	methylcyclohexane	0.358	0.339	5.3	88	0.00	10.87
71	M	2-chloroethyl vinyl ether	0.136	0.161	-18.4	109	0.00	11.51
72	M	methyl methacrylate	0.147	0.167	-13.6	110	0.00	10.96
73	M	1,2-dichloropropane	0.278	0.301	-8.3	100	0.00	10.92
74	M	dibromomethane	0.143	0.171	-19.6	107	0.00	11.10
75	M	bromodichloromethane	0.331	0.370	-11.8	103	0.00	11.24
76	M	cis-1,3-dichloropropene	0.414	0.439	-6.0	95	0.00	11.74
77	S	toluene-d8 (s)	0.949	0.937	1.3	103	0.00	12.05
78	M	4-methyl-2-pentanone	0.089	0.104	-16.9	106	0.00	11.85
79	M	toluene	0.622	0.642	-3.2	97	0.00	12.13

Initial Calibration Verification

Job Number: JB30345 **Sample:** VA7222-ICV7222
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** A191868.D
Project: BMSMC, Building 5 Area, PR

			True	Calc.	% Drift			
80	M	3-methyl-1-butanol	1000.000	1056.178	-5.6	115	0.00	11.89

			AvgRF	CCRF	% Dev			
81	M	trans-1,3-dichloropropene	0.351	0.401	-14.2	100	0.00	12.36
82	M	ethyl methacrylate	0.295	0.321	-8.8	102	0.00	12.36
83	M	1,1,2-trichloroethane	0.183	0.208	-13.7	105	0.00	12.59
84	M	2-hexanone	0.080	0.091	-13.7	106	0.00	12.80
85	I	chlorobenzene-d5	1.000	1.000	0.0	95	0.00	13.74
86	M	tetrachloroethene	0.238	0.242	-1.7	93	0.00	12.78
87	M	1,3-dichloropropane	0.403	0.443	-9.9	103	0.00	12.79
88	M	butyl acetate	0.162	0.191	-17.9	115	0.00	12.89
89	M	dibromochloromethane	0.294	0.325	-10.5	100	0.00	13.09
90	M	1,2-dibromoethane	0.234	0.266	-13.7	102	0.00	13.25
91	M	n-butyl ether		----------NA----------				
92	M	chlorobenzene	0.824	0.855	-3.8	97	0.00	13.78
93	M	1,1,1,2-tetrachloroethane	0.304	0.330	-8.6	100	0.00	13.84
94	M	ethylbenzene	1.309	1.360	-3.9	96	0.00	13.84
95	M	m,p-xylene	0.520	0.536	-3.1	96	0.00	13.96
96	M	o-xylene	0.533	0.563	-5.6	99	0.00	14.43
97	M	styrene	0.860	0.950	-10.5	97	0.00	14.45
98	M	bromoform	0.217	0.239	-10.1	102	0.00	14.74
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	16.38
100	M	isopropylbenzene	2.225	2.238	-0.6	96	0.00	14.82
101	m	cyclohexanone	0.018	0.017	5.6	99	0.00	15.00
102	S	4-bromofluorobenzene (s)	0.710	0.683	3.8	104	0.00	15.05
103	M	bromobenzene	0.646	0.674	-4.3	99	0.00	15.27
104	M	1,1,2,2-tetrachloroethane	0.644	0.630	2.2	101	0.00	15.17
105	M	trans-1,4-dichloro-2-bute	0.141	0.147	-4.3	96	0.00	15.22
106	M	1,2,3-trichloropropane	0.139	0.145	-4.3	105	0.00	15.25
107	M	n-propylbenzene	2.581	2.695	-4.4	97	0.00	15.28
108	M	2-chlorotoluene	0.590	0.600	-1.7	97	0.00	15.45
109	M	4-chlorotoluene	1.744	1.726	1.0	96	0.00	15.56
110	m	p-ethyltoluene		----------NA----------				
111	M	1,3,5-trimethylbenzene	1.975	1.970	0.3	94	0.00	15.46
112	M	tert-butylbenzene	1.657	1.684	-1.6	95	0.00	15.85
113	M	pentachloroethane	0.438	0.465	-6.2	101	0.00	15.94
114	M	1,2,4-trimethylbenzene	2.032	2.075	-2.1	97	0.00	15.90
115	M	sec-butylbenzene	2.604	2.568	1.4	94	0.00	16.09
116	M	1,3-dichlorobenzene	1.232	1.271	-3.2	98	0.00	16.31
117	M	p-isopropyltoluene	2.154	2.253	-4.6	99	0.00	16.23
118	M	1,2,3-trimethylbenzene		----------NA----------				
119	M	1,4-dichlorobenzene	1.302	1.304	-0.2	97	0.00	16.40
120	m	p-diethylbenzene		----------NA----------				
121	M	1,2-dichlorobenzene	1.210	1.269	-4.9	100	0.00	16.84
122	M	n-butylbenzene	1.182	1.199	-1.4	96	0.00	16.70
123	m	1,2,4,5-tetramethylbenzen		----------NA----------				
124	M	1,2-dibromo-3-chloropropa	0.093	0.105	-12.9	106	0.00	17.70
125	M	1,3,5-trichlorobenzene	1.027	1.001	2.5	93	0.00	17.91
126	M	1,2,4-trichlorobenzene	0.862	0.933	-8.2	100	0.00	18.61
127	M	hexachlorobutadiene	0.525	0.534	-1.7	99	0.00	18.73
128	M	naphthalene	1.630	1.797	-10.2	102	0.00	18.91
129	M	1,2,3-trichlorobenzene	0.776	0.819	-5.5	98	0.00	19.19
130	M	hexachloroethane	0.399	0.425	-6.5	98	0.00	17.13
131		Ethylenimine		----------NA----------				
132		Bis(chloromethyl)ether		----------NA----------				
133		2-methylnaphthalene		----------NA----------				

Initial Calibration Verification

Job Number: JB30345
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Project: BMSMC, Building 5 Area, PR

Sample: VA7222-ICV7222
Lab FileID: A191868.D

```
-----------------------------------------------------------------------------

   (#) = Out of Range                SPCC's out = 0  CCC's out = 0
    A191863.D  MA7222.M         Thu Feb 21 08:15:53 2013   MSA
```

Continuing Calibration Summary

Job Number: JB30345 **Sample:** VA7250-CC7222
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** A192516.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\A192516.D                    Vial: 100
Acq On    : 12 Mar 2013  11:08 am                    Operator: Oksanat
Sample    : cc7222-20                                Inst    : MSA
Misc      : MS44197,VA7250,5,,,,1                    Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title        : SW 846  8260bB ZB624 60m x 0.25mm x 1.4um
Last Update  : Thu Feb 21 15:26:34 2013
Response via : Multiple Level Calibration

Min. RRF     :   0.010  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)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	81	0.00	7.03
2	M	1,4-dioxane	0.089	0.092	-3.4	80	0.00	11.06
3	M	ethanol		----------NA----------				
4	M	tertiary butyl alcohol	0.964	1.086	-12.7	89	0.00	7.15
5	I	pentafluorobenzene	1.000	1.000	0.0	73	0.00	9.35
6		chlorotrifluoroethene		----------NA----------				
7	M	chlorodifluoromethane	0.286	0.282	1.4	75	0.00	3.71
8	M	dichlorodifluoromethane	0.381	0.478	-25.5#	88	0.00	3.67
9	M	chloromethane	0.525	0.539	-2.7	82	-0.03	3.96
10	M	vinyl chloride	0.482	0.515	-6.8	80	-0.03	4.20
11	M	bromomethane	0.344	0.353	-2.6	80	0.00	4.82
12	M	chloroethane	0.230	0.253	-10.0	79	0.00	5.00
13		vinyl bromide		----------NA----------				
14	M	trichlorofluoromethane	0.489	0.577	-18.0	85	0.00	5.47
15	m	pentane		----------NA----------				
16	M	ethyl ether	0.196	0.200	-2.0	75	0.00	5.88
17		Freon 123a		----------NA----------				
18	M	acrolein	0.060	0.055	8.3	68	0.00	6.12
19	M	1,1-dichloroethene	0.292	0.340	-16.4	78	0.00	6.28
20	M	acetone	0.082	0.099	-20.7#	106	0.03	6.41
21	M	allyl chloride	0.210	0.232	-10.5	80	0.00	6.82
		----------	True	Calc.	% Drift	----------		
22	M	acetonitrile	200.000	203.926	-2.0	80	0.00	6.82
		----------	AvgRF	CCRF	% Dev	----------		
23	M	iodomethane	0.649	0.765	-17.9	82	0.00	6.56
24	M	iso-butyl alcohol	0.011	0.011	0.0	80	0.00	9.68
25	M	carbon disulfide	1.095	1.250	-14.2	76	0.00	6.69
26	M	methylene chloride	0.418	0.421	-0.7	77	0.00	7.03
27	M	methyl acetate	0.214	0.173	19.2	66	0.02	6.86
28	M	methyl tert butyl ether	0.977	1.118	-14.4	82	0.00	7.38
29	M	trans-1,2-dichloroethene	0.328	0.368	-12.2	75	0.00	7.42
30	M	di-isopropyl ether	1.224	1.227	-0.2	72	0.00	8.00
31	m	t-butyl formate	0.255	0.303	-18.8	88	0.00	9.21
		----------	True	Calc.	% Drift	----------		
32	m	3,3-dimethyl-1-butanol	200.000	206.875	-3.4	83	0.00	13.00
		----------	AvgRF	CCRF	% Dev	----------		
33	M	ethyl tert-butyl ether	1.114	1.131	-1.5	72	0.00	8.50

Continuing Calibration Summary

Job Number: JB30345 **Sample:** VA7250-CC7222
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** A192516.D
Project: BMSMC, Building 5 Area, PR

			True	Calc.	% Drift			
34	M	2-butanone	20.000	22.046	-10.2	85	0.02	8.81

			AvgRF	CCRF	% Dev			
35	M	1,1-dichloroethane	0.628	0.729	-16.1	79	0.00	8.01
36	M	chloroprene	0.436	0.469	-7.6	75	0.00	8.12
37	M	acrylonitrile	0.104	0.096	7.7	76	0.01	7.39

			True	Calc.	% Drift			
38	M	vinyl acetate	20.000	18.246	8.8	58	0.03	8.07
39	M	ethyl acetate	20.000	20.453	-2.3	75	0.01	8.83

			AvgRF	CCRF	% Dev			
40		ethyl acrylate		----------NA----------				
41	M	2,2-dichloropropane	0.460	0.576	-25.2#	86	0.00	8.78
42	M	cis-1,2-dichloroethene	0.378	0.422	-11.6	78	0.00	8.79
43	M	propionitrile	0.040	0.039	2.5	77	0.00	8.87
44	M	bromochloromethane	0.184	0.206	-12.0	78	0.00	9.11
45	M	tetrahydrofuran	0.133	0.134	-0.8	81	0.00	9.18
46	M	chloroform	0.615	0.704	-14.5	81	0.00	9.18
47	S	dibromofluoromethane (s)	0.372	0.374	-0.5	80	0.00	9.38
48	S	1,2-dichloroethane-d4 (s)	0.416	0.373	10.3	72	0.00	9.82
49	M	freon 113	0.224	0.230	-2.7	72	0.00	6.27
50	M	methacrylonitrile	0.171	0.182	-6.4	81	0.00	9.07
51		cyclohexane	0.479	0.513	-7.1	72	0.00	9.51
52	M	1,1,1-trichloroethane	0.470	0.591	-25.7#	85	0.00	9.43
53	M	tert-amyl methyl ether	1.061	1.079	-1.7	73	0.00	9.94
54	I	1,4-difluorobenzene	1.000	1.000	0.0	70	0.00	10.30
55	M	Di-isobutylene		----------NA----------				
56	M	epichlorohydrin	0.021	0.022	-4.8	82	0.00	11.66

			True	Calc.	% Drift			
57	M	n-butyl alcohol	1000.000	1050.537	-5.1	82	0.00	10.47

			AvgRF	CCRF	% Dev			
58	M	carbon tetrachloride	0.296	0.385	-30.1#	85	0.00	9.65
59	M	1,1-dichloropropene	0.315	0.375	-19.0	77	0.00	9.63
60	M	hexane	0.260	0.253	2.7	69	0.00	7.74
61	M	benzene	0.996	1.121	-12.6	76	0.00	9.90
62	M	Iso-octane	0.825	0.924	-12.0	72	0.00	9.90
63	M	heptane	0.170	0.170	0.0	67	0.00	10.10
64	m	tert amyl alcohol		----------NA----------				
65	M	isopropyl acetate	0.436	0.413	5.3	69	0.00	9.85
66	M	1,2-dichloroethane	0.300	0.379	-26.3#	84	0.00	9.91
67	M	trichloroethene	0.234	0.279	-19.2	77	0.00	10.66
68	M	2-nitropropane		----------NA----------				
69	m	tert-amyl ethyl ether		----------NA----------				
70	m	methylcyclohexane	0.358	0.377	-5.3	68	0.00	10.88
71	M	2-chloroethyl vinyl ether	0.136	0.149	-9.6	76	0.00	11.51
72	M	methyl methacrylate	0.147	0.144	2.0	73	0.00	10.97
73	M	1,2-dichloropropane	0.278	0.307	-10.4	75	0.00	10.93
74	M	dibromomethane	0.143	0.173	-21.0#	80	0.00	11.10
75	M	bromodichloromethane	0.331	0.396	-19.6	80	0.00	11.25
76	M	cis-1,3-dichloropropene	0.414	0.480	-15.9	77	0.00	11.74
77	S	toluene-d8 (s)	0.949	1.015	-7.0	79	0.00	12.06
78	M	4-methyl-2-pentanone	0.089	0.096	-7.9	74	0.00	11.86
79	M	toluene	0.622	0.683	-9.8	74	0.00	12.14

Continuing Calibration Summary

Job Number: JB30345 **Sample:** VA7250-CC7222
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** A192516.D
Project: BMSMC, Building 5 Area, PR

			True	Calc.	% Drift			
80	M	3-methyl-1-butanol	400.000	430.105	-7.5	80	0.00	11.90

			AvgRF	CCRF	% Dev			
81	M	trans-1,3-dichloropropene	0.351	0.410	-16.8	75	0.00	12.37
82	M	ethyl methacrylate	0.295	0.317	-7.5	77	0.00	12.37
83	M	1,1,2-trichloroethane	0.183	0.208	-13.7	77	0.00	12.59
84	M	2-hexanone	0.080	0.081	-1.3	78	0.00	12.81
85	I	chlorobenzene-d5	1.000	1.000	0.0	71	0.00	13.74
86	M	tetrachloroethene	0.238	0.283	-18.9	77	0.00	12.78
87	M	1,3-dichloropropane	0.403	0.433	-7.4	76	0.00	12.80
88	M	butyl acetate	0.162	0.158	2.5	75	0.00	12.90
89	M	dibromochloromethane	0.294	0.347	-18.0	81	0.00	13.09
90	M	1,2-dibromoethane	0.234	0.275	-17.5	79	0.00	13.26
91	M	n-butyl ether		----------NA----------				
92	M	chlorobenzene	0.824	0.910	-10.4	76	0.00	13.78
93	M	1,1,1,2-tetrachloroethane	0.304	0.354	-16.4	79	0.00	13.84
94	M	ethylbenzene	1.309	1.434	-9.5	74	0.00	13.85
95	M	m,p-xylene	0.520	0.568	-9.2	74	0.00	13.97
96	M	o-xylene	0.533	0.583	-9.4	74	0.00	14.44
97	M	styrene	0.860	0.950	-10.5	74	0.00	14.45
98	M	bromoform	0.217	0.256	-18.0	84	0.00	14.74
99	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	69	0.00	16.37
100	M	isopropylbenzene	2.225	2.503	-12.5	73	0.00	14.82
101	m	cyclohexanone	0.018	0.058	-222.2#	238#	0.00	15.00
102	S	4-bromofluorobenzene (s)	0.710	0.721	-1.5	75	0.00	15.05
103	M	bromobenzene	0.646	0.747	-15.6	78	0.00	15.27
104	M	1,1,2,2-tetrachloroethane	0.644	0.688	-6.8	78	0.00	15.18
105	M	trans-1,4-dichloro-2-bute	0.141	0.150	-6.4	73	0.00	15.22
106	M	1,2,3-trichloropropane	0.139	0.164	-18.0	83	0.00	15.25
107	M	n-propylbenzene	2.581	2.878	-11.5	72	0.00	15.29
108	M	2-chlorotoluene	0.590	0.663	-12.4	74	0.00	15.45
109	M	4-chlorotoluene	1.744	1.860	-6.7	73	0.00	15.57
110	m	p-ethyltoluene		----------NA----------				
111	M	1,3,5-trimethylbenzene	1.975	2.180	-10.4	71	0.00	15.46
112	M	tert-butylbenzene	1.657	1.904	-14.9	75	0.00	15.85
113	M	pentachloroethane	0.438	0.497	-13.5	77	0.00	15.95
114	M	1,2,4-trimethylbenzene	2.032	2.237	-10.1	72	0.00	15.91
115	M	sec-butylbenzene	2.604	2.842	-9.1	72	0.00	16.10
116	M	1,3-dichlorobenzene	1.232	1.361	-10.5	73	0.00	16.31
117	M	p-isopropyltoluene	2.154	2.391	-11.0	72	0.00	16.24
118	M	1,2,3-trimethylbenzene		----------NA----------				
119	M	1,4-dichlorobenzene	1.302	1.388	-6.6	72	0.00	16.40
120	m	p-diethylbenzene		----------NA----------				
121	M	1,2-dichlorobenzene	1.210	1.344	-11.1	74	0.00	16.85
122	M	n-butylbenzene	1.182	1.173	0.8	64	0.00	16.70
123	m	1,2,4,5-tetramethylbenzen		----------NA----------				
124	M	1,2-dibromo-3-chloropropa	0.093	0.116	-24.7#	89	0.00	17.71
125	M	1,3,5-trichlorobenzene	1.027	1.187	-15.6	75	0.00	17.92
126	M	1,2,4-trichlorobenzene	0.862	0.929	-7.8	70	0.00	18.61
127	M	hexachlorobutadiene	0.525	0.667	-27.0#	80	0.00	18.73
128	M	naphthalene	1.630	1.682	-3.2	69	0.00	18.91
129	M	1,2,3-trichlorobenzene	0.776	0.873	-12.5	72	0.00	19.19
130	M	hexachloroethane	0.399	0.497	-24.6#	80	0.00	17.14
131		Ethylenimine		----------NA----------				
132		Bis(chloromethyl)ether		----------NA----------				
133		2-methylnaphthalene		----------NA----------				

Continuing Calibration Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: VA7250-CC7222
Lab FileID: A192516.D

```
-----------------------------------------------------------------------------

   (#) = Out of Range                SPCC's out = 0  CCC's out = 0
    A191862.D  MA7222.M         Tue Mar 12 16:15:24 2013   MSA
```

Initial Calibration Summary

Job Number: JB30345 **Sample:** VE8801-ICC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200201.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSE

```
Method       : C:\MSDCHEM\1\METHODS\ME8801.M (RTE Integrator)
Title        : SW846  8260B,ZB624 60m x 0.25mm x 1.4um
Last Update  : Fri Feb 22 18:41:55 2013
Response via : Initial Calibration

Calibration Files
5   =E200198.D   2   =E200208.D   20  =E200200.D   50  =E200201.D
100 =E200202.D   1   =E200206.D   200 =E200203.D   0.5 =E200207.D
10  =E200199.D       =

 Compound
           5     2     20    50    100   1     200   0.5   10      Avg    %RSD
-------------------------------------------------------------------------------

1)     Tert Butyl Alcohol-d9 ----------------ISTD---------------------
2)  1,4-dioxane
          0.060       0.094 0.103 0.102       0.099       0.072   0.088   20.14
           ----- Linear regression -----  Coefficient =  0.9994
             Response Ratio = -0.00503 + 0.10041 *A

3)  tertiary butyl alcohol
          1.046 1.174 1.252 1.237 1.204       1.100       1.210   1.175    6.42
4)  ethanol
                                                                  0.000#  -1.00

5) I   pentafluorobenzene    ----------------ISTD---------------------
6)  freon 23
                                                                  0.000#  -1.00
7)  freon 115
                                                                  0.000#  -1.00
8)  freon 143a
                                                                  0.000#  -1.00
9)  freon 152a
                                                                  0.000#  -1.00
10)  chlorotrifluoroethene
                                                                  0.000#  -1.00
11)  chlorodifluoromethane
          0.463 0.430 0.589 0.607 0.583       0.561       0.618   0.550   13.38
12)  dichlorodifluoromethane
          0.589 0.626 0.753 0.802 0.764 0.784 0.748       0.796   0.733   10.98
13)  freon 114
                                                                  0.000#  -1.00
14)  freon 142b
                                                                  0.000#  -1.00
15)  chloromethane
          0.703 0.724 0.843 0.871 0.825 0.889 0.799       0.892   0.818    8.81
16)  vinyl chloride
          0.697 0.746 0.861 0.879 0.816 0.897 0.789       0.869   0.819    8.65
17)  1,3-Butadiene
                                                                  0.000#  -1.00
18)  acetaldehyde
                                                                  0.000    1.00
19)  bromomethane
          0.460 0.465 0.499 0.498 0.459 0.626 0.433 0.493 0.529   0.496   11.42
20)  chloroethane
          0.339 0.328 0.400 0.409 0.376 0.384 0.351       0.404   0.374    8.35
21)  vinyl bromide
                                                                  0.000#  -1.00
```

Initial Calibration Summary

Job Number: JB30345 **Sample:** VE8801-ICC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200201.D
Project: BMSMC, Building 5 Area, PR

```
22)  trichlorofluoromethane
           0.703 0.688 0.857 0.883 0.817 0.884 0.793       0.883   0.813    9.82
23)  pentane
           0.866 1.016 1.076 1.089 1.015 1.103 0.989       1.205   1.045    9.49
24)  ethyl ether
           0.315 0.282 0.346 0.328 0.326 0.309 0.315 0.280 0.343   0.316    7.38
25)  freon 141b
                                                                   0.000#  -1.00
26)  freon 123a
                                                                   0.000#  -1.00
27)  freon 123
                                                                   0.000#  -1.00
28)  2-chloropropane
           0.844 0.861 1.046 1.021 0.984 0.807 0.961       1.036   0.945    9.98
29)  acrolein
           0.121 0.114 0.130 0.128       0.116             0.127   0.123    5.44
30)  1,1-dichloroethene
           0.445 0.435 0.539 0.525 0.502 0.345 0.491       0.530   0.476   13.76
31)  isopropyl alcohol
                                                                   0.000#  -1.00
32)  acetone
           0.028       0.053 0.050 0.050       0.048       0.044   0.045   20.12
            ----- Linear regression -----  Coefficient =  0.9986
              Response Ratio = 0.00076 + 0.04797 *A

33)  allyl chloride
           0.778 0.976 0.953 0.957 0.920 0.873 0.882       0.967   0.913    7.33
34)  acetonitrile
           0.028       0.034 0.029 0.026       0.022       0.032   0.029   15.33
            ----- Linear regression -----  Coefficient =  0.9906
              Response Ratio = 0.04112 + 0.02186 *A

35)  iodomethane
           0.893 0.862 1.058 1.053 1.022 0.785 1.002       1.039   0.964   10.71
36)  iso-butyl alcohol
           0.003       0.005 0.005 0.004       0.004       0.005   0.004#  16.56
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = 0.00065 + 0.00447 *A

37)  carbon disulfide
           1.506 1.535 1.822 1.823 1.711 1.441 1.503 1.279 1.804   1.603   12.17
38)  methylene chloride
           0.534 0.662 0.601 0.585 0.573 0.807 0.558       0.604   0.615   13.96
39)  1-chloropropane
           0.832 0.918 0.989 0.953 0.915 0.837 0.875 0.989 0.982   0.921    6.77
40)  methyl acetate
           0.369 0.365 0.477 0.448 0.439 0.388 0.426       0.455   0.421   10.01
41)  methyl tert butyl ether
           1.508 1.458 1.687 1.626 1.590 1.441 1.538 1.168 1.708   1.525   10.71
42)  trans-1,2-dichloroethene
           0.481 0.454 0.547 0.536 0.513 0.405 0.493 0.341 0.545   0.480   14.53
43)  di-isopropyl ether
           1.607 1.718 1.848 1.803 1.727 1.780 1.636 1.939 1.821   1.764    5.91
44)  ethyl tert-butyl ether
           1.595 1.708 1.821 1.806 1.772 1.784 1.719 1.843 1.775   1.758    4.28
45)  2-butanone
           0.034       0.063 0.068 0.070       0.064       0.056   0.059   22.16
            ----- Linear regression -----  Coefficient =  0.9972
              Response Ratio = 0.00040 + 0.06503 *A
```

Initial Calibration Summary

Job Number: JB30345 **Sample:** VE8801-ICC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200201.D
Project: BMSMC, Building 5 Area, PR

```
46)  1,1-dichloroethane
           0.868 0.862 1.010 0.982 0.937 0.793 0.892 0.617 1.004   0.885   14.01
47)  chloroprene
           0.607 0.556 0.741 0.735 0.708 0.607 0.677       0.724   0.669   10.50
48)  acrylonitrile
           0.199 0.190 0.226 0.216 0.215 0.159 0.208       0.225   0.205   10.78
49)  vinyl acetate
           0.051       0.090 0.090 0.090       0.089       0.078   0.081   19.20
            ----- Linear regression -----  Coefficient =  0.9998
              Response Ratio = -0.00136 + 0.08979 *A

50)  ethyl acetate
           0.057       0.079 0.076 0.079       0.077       0.079   0.075   11.81
51)  2,2-dichloropropane
           0.667 0.702 0.765 0.758 0.707 0.626 0.675       0.793   0.712    7.94
52)  cis-1,2-dichloroethene
           0.545 0.519 0.605 0.579 0.562 0.470 0.540       0.602   0.553    8.11
53)  methyl acrylate
           0.436       0.517 0.497 0.505       0.490       0.513   0.493    6.02
54)  propionitrile
           0.076 0.072 0.088 0.082 0.082 0.060 0.079       0.086   0.078   11.27
55)  bromochloromethane
           0.261 0.239 0.303 0.300 0.298       0.293       0.300   0.285    8.67
56)  tetrahydrofuran
           0.189 0.179 0.211 0.200 0.201       0.195       0.212   0.198    5.81
57)  chloroform
           0.822 0.804 0.946 0.915 0.880 0.791 0.858 0.630 0.941   0.843   11.65
58)  t-butyl formate
           0.423 0.422 0.504 0.510 0.499 0.443 0.498       0.488   0.474    7.87
59)  Iso-octane
           1.216 1.276 1.518 1.541 1.446 1.412 1.407       1.485   1.412    8.09
60)  dibromofluoromethane (s)
           0.485 0.423 0.486 0.504 0.496 0.370 0.489       0.500   0.469   10.11
61)  1,2-dichloroethane-d4 (s)
           0.520 0.475 0.551 0.543 0.535 0.409 0.507       0.585   0.516   10.44
62)  freon 113
           0.311 0.273 0.408 0.413 0.387       0.375       0.386   0.365   14.42
63)  methacrylonitrile
           0.303 0.284 0.351 0.343 0.345       0.345       0.348   0.331    8.04
64)  1,1,1-trichloroethane
           0.673 0.681 0.831 0.819 0.791 0.605 0.774       0.815   0.749   11.24
65)  tert-amyl methyl ether
           1.521 1.627 1.707 1.666 1.617 1.835 1.555 1.850 1.671   1.672    6.72

66) I   1,4-difluorobenzene   ----------------ISTD---------------------
67)  Di-isobutylene
                                                                   0.000#  -1.00
68)  tert amyl alcohol
           0.014 0.012 0.017 0.016 0.014       0.013       0.016   0.015   12.94
69)  epichlorohydrin
           0.036 0.036 0.042 0.041 0.041       0.040       0.040   0.039    6.10
70)  n-butyl alcohol
           0.010 0.009 0.013 0.012 0.011 0.013 0.011       0.011   0.011   12.38
71)  tert-amyl ethyl ether
           0.540 0.493 0.624 0.604 0.575 0.580 0.568 0.381 0.582   0.550   13.35
72)  carbon tetrachloride
           0.439 0.435 0.534 0.519 0.493 0.400 0.480 0.337 0.519   0.462   14.05
73)  1,1-dichloropropene
           0.422 0.450 0.529 0.504 0.484 0.404 0.470       0.517   0.473    9.49
74)  hexane
```

Initial Calibration Summary

Job Number: JB30345 **Sample:** VE8801-ICC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200201.D
Project: BMSMC, Building 5 Area, PR

```
            0.320 0.301 0.400 0.402 0.384       0.371       0.398   0.368   11.12
 75)  benzene
            1.345 1.407 1.558 1.465 1.404 1.361 1.346 1.182 1.539   1.401    8.12
 76)  heptane
            0.186 0.169 0.216 0.220 0.209 0.182 0.204       0.226   0.202   10.08
 77)  isopropyl acetate
            0.676 0.698 0.755 0.719 0.713 0.804 0.687       0.745   0.725    5.77
 78)  1,2-dichloroethane
            0.452 0.434 0.500 0.469 0.460 0.379 0.441       0.486   0.453    8.19
 79)  ethyl acrylate
                                                                    0.000#  -1.00
 80)  trichloroethene
            0.322 0.326 0.402 0.387 0.373 0.283 0.361       0.386   0.355   11.51
 81)  2-nitropropane
                                                                    0.000#  -1.00
 82)  2-chloroethyl vinyl ether
            0.218 0.224 0.258 0.252 0.248 0.245 0.234       0.244   0.240    5.71
 83)  methylcyclohexane
            0.493 0.499 0.603 0.589 0.552 0.542 0.533 0.475 0.594   0.542    8.66
 84)  methyl methacrylate
            0.333 0.301 0.390 0.381 0.375 0.280 0.359       0.381   0.350   11.73
 85)  1,2-dichloropropane
            0.353 0.370 0.419 0.390 0.379 0.314 0.364       0.405   0.374    8.69
 86)  dibromomethane
            0.208 0.209 0.244 0.233 0.235 0.150 0.230       0.235   0.218   13.84
 87)  bromodichloromethane
            0.444 0.433 0.518 0.498 0.495 0.429 0.487       0.499   0.476    7.24
 88)  cis-1,3-dichloropropene
            0.557 0.538 0.665 0.654 0.645 0.493 0.626       0.638   0.602   10.59
 89)  toluene-d8 (s)
            1.285 1.236 1.398 1.363 1.310 1.118 1.240 1.081 1.363   1.266    8.66
 90)  4-methyl-2-pentanone
            0.153 0.152 0.169 0.163 0.162       0.156       0.164   0.160    3.97
 91)  toluene
            0.825 0.827 0.970 0.930 0.900 0.763 0.872 0.599 0.964   0.850   13.72
 92)  3-methyl-1-butanol
            0.017 0.018 0.020 0.019 0.019 0.025 0.018       0.019   0.019   13.17
 93)  trans-1,3-dichloropropene
            0.493 0.475 0.587 0.574 0.568 0.405 0.552       0.557   0.526   11.94
 94)  ethyl methacrylate
            0.427 0.392 0.516 0.516 0.510 0.364 0.490       0.493   0.464   13.07
 95)  1,1,2-trichloroethane
            0.270 0.251 0.303 0.292 0.293 0.219 0.284       0.295   0.276   10.24
 96)  2-hexanone
            0.118       0.146 0.149 0.151       0.151       0.138   0.142    9.11

 97) I   chlorobenzene-d5      ----------------ISTD---------------------
 98)  cyclohexanone
            0.014       0.015 0.015 0.014       0.013       0.014   0.014    6.52
 99)  tetrachloroethene
            0.436 0.491 0.508 0.478 0.456 0.393 0.427       0.508   0.462    9.03
100)  1,3-dichloropropane
            0.615 0.603 0.663 0.629 0.621 0.568 0.580 0.454 0.664   0.600   10.62
101)  butyl acetate
            0.235 0.233 0.280 0.269 0.271 0.262 0.257       0.266   0.259    6.50
102)  3,3-dimethyl-1-butanol
            0.042 0.045 0.049 0.045 0.042       0.039       0.044   0.044    7.15
103)  dibromochloromethane
            0.420 0.395 0.476 0.459 0.463 0.373 0.442       0.461   0.436    8.37
104)  1,2-dibromoethane
```

```
            0.381 0.380 0.421 0.396 0.400 0.311 0.382       0.417   0.386    8.89
105)  n-butyl ether
                                                                    0.000#  -1.00
106)  chlorobenzene
            1.071 1.089 1.204 1.154 1.124 1.041 1.067 0.810 1.205   1.085   10.95
107)  1,1,1,2-tetrachloroethane
            0.404 0.397 0.455 0.436 0.418 0.352 0.401 0.287 0.451   0.400   13.19
108)  ethylbenzene
            1.715 1.743 1.967 1.833 1.757 1.589 1.640 1.420 1.961   1.736   10.08
109)  m,p-xylene
            0.679 0.670 0.775 0.731 0.706 0.626 0.670 0.518 0.765   0.682   11.48
110)  o-xylene
            0.687 0.701 0.800 0.751 0.728 0.578 0.701 0.556 0.786   0.699   12.04
111)  butyl acrylate
                                                                    0.000#  -1.00
112)  styrene
            1.121 1.085 1.318 1.238 1.213 0.873 1.159       1.269   1.160   11.99
113)  bromoform
            0.317 0.300 0.366 0.352 0.358 0.258 0.355       0.346   0.332   11.17

114) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
115)  isopropylbenzene
            3.085 3.213 3.641 3.447 3.258 2.964 3.138 2.705 3.496   3.216    8.94
116)  4-bromofluorobenzene (s)
            0.970 0.866 1.016 0.993 0.964 0.796 0.942 0.724 0.978   0.917   10.88
117)  bromobenzene
            0.922 0.880 1.021 0.947 0.916 0.824 0.889 0.643 0.987   0.892   12.33
118)  1,1,2,2-tetrachloroethane
            0.925 0.896 0.986 0.938 0.904 0.850 0.887 0.791 0.957   0.904    6.44
119)  trans-1,4-dichloro-2-butene
            0.185       0.235 0.239 0.242       0.241       0.217   0.227    9.96
120)  1,2,3-trichloropropane
            0.241 0.201 0.263 0.245 0.237       0.238       0.249   0.239    7.91
121)  n-propylbenzene
            3.480 3.631 4.001 3.741 3.557 3.437 3.413 3.031 3.943   3.582    8.25
122)  p-ethyltoluene
            3.128 2.699 3.456 3.296 3.097 3.592 3.055 2.507 3.236   3.119   10.98
123)  2-chlorotoluene
            0.794 0.809 0.875 0.828 0.792 0.758 0.779 0.658 0.841   0.793    7.75
124)  4-chlorotoluene
            2.259 2.344 2.561 2.418 2.310 2.204 2.272 2.127 2.473   2.330    5.83
125)  1,3,5-trimethylbenzene
            2.754 2.773 2.945 2.757 2.608 2.861 2.497 2.527 2.946   2.741    6.08
126)  tert-butylbenzene
            2.262 2.265 2.640 2.542 2.405 2.319 2.333 1.826 2.561   2.350   10.20
127)  pentachloroethane
            0.585 0.550 0.657 0.623 0.599 0.536 0.593 0.491 0.624   0.584    8.76
128)  1,2,4-trimethylbenzene
            2.679 2.592 3.022 2.840 2.712 2.636 2.604 2.423 2.884   2.710    6.64
129)  sec-butylbenzene
            3.134 3.267 3.727 3.578 3.393 3.231 3.234 2.887 3.617   3.341    7.93
130)  1,3-dichlorobenzene
            1.578 1.584 1.799 1.728 1.680 1.584 1.621 1.477 1.739   1.643    6.13
131)  p-isopropyltoluene
            2.645 2.630 3.161 3.033 2.859 2.586 2.720 2.303 3.029   2.774    9.76
132)  1,4-dichlorobenzene
            1.613 1.647 1.816 1.770 1.722 1.545 1.658 1.452 1.768   1.666    7.06
133)  benzyl chloride
            1.350 1.449 1.627 1.743 1.715 1.893 1.662 1.903 1.499   1.649   11.54
134)  p-diethylbenzene
```

Initial Calibration Summary

Job Number: JB30345 **Sample:** VE8801-ICC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200201.D
Project: BMSMC, Building 5 Area, PR

```
            1.577 1.297 1.820 1.831 1.697 1.598 1.620 1.191 1.695   1.592   13.68
135)  1,2-dichlorobenzene
            1.579 1.470 1.774 1.714 1.643 1.481 1.579 1.342 1.697   1.587    8.66
136)  n-butylbenzene
            1.201 1.182 1.529 1.475 1.417 1.066 1.343       1.441   1.332   12.33
137)  1,2,4,5-tetramethylbenzene
            2.505 2.016 3.029 2.967 2.567 2.774 2.331       2.753   2.618   12.86
138)  1,2-dibromo-3-chloropropane
            0.135       0.161 0.160 0.146       0.140       0.149   0.148    7.14
139)  1,3,5-trichlorobenzene
            1.015 0.961 1.377 1.350 1.193 1.005 1.078       1.264   1.155   14.13
140)  1,2,4-trichlorobenzene
            0.721       1.032 1.056 0.966       0.895       0.925   0.933   12.90
141)  hexachlorobutadiene
            0.490 0.540 0.617 0.584 0.490 0.580 0.425 0.444 0.579   0.528   12.88
142)  naphthalene
            1.555       2.068 2.084 1.881       1.806       1.826   1.870   10.43
143)  MMT
                                                                    0.000#  -1.00
144)  1,2,3-trichlorobenzene
            0.598       0.833 0.829 0.742       0.690       0.753   0.741   11.96
145)  hexachloroethane
            0.484 0.477 0.615 0.596 0.572 0.430 0.545       0.561   0.535   12.07
146)  Cyclohexane
            0.961 1.008 1.195 1.104 1.038 0.915 1.008       1.186   1.052    9.64
147)  ethyleinimine
                                                                    0.000#  -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          ME8801.M          Mon Feb 25 09:59:04 2013
```

6.7.4

6

Initial Calibration Verification

Job Number: JB30345 **Sample:** VE8801-ICV8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200209.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e-core initial\E200209.D   Vial: 16
Acq On    : 22 Feb 2013   5:19 pm                        Operator: OksanaT
Sample    : icv8801-50                                   Inst    : MSE
Misc      : MS43512,VE8801,5,,100,5,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\ME8801.M (RTE Integrator)
Title        : SW846  8260B,ZB624 60m x 0.25mm x 1.4um
Last Update  : Fri Feb 22 18:41:55 2013
Response via : Multiple Level Calibration

Min. RRF     :   0.010  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)	R.T.
1		Tert Butyl Alcohol-d9	1.000	1.000	0.0	102	0.01	7.68
		----------	True	Calc.	% Drift	----------		
2	M	1,4-dioxane	1250.000	1187.360	5.0	93	0.00	11.54
		----------	AvgRF	CCRF	% Dev	----------		
3	M	tertiary butyl alcohol	1.175	1.191	-1.4	98	0.00	7.80
4		ethanol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	9.91
6		freon 23		----------NA----------				
7		freon 115		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.550	0.568	-3.3	97	0.00	4.32
12	M	dichlorodifluoromethane	0.733	0.739	-0.8	96	0.00	4.32
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15	M	chloromethane	0.818	0.915	-11.9	109	0.00	4.66
16	M	vinyl chloride	0.819	0.827	-1.0	98	0.00	4.96
17		1,3-Butadiene		----------NA----------				
18	M	acetaldehyde		----------NA----------				
19	M	bromomethane	0.496	0.500	-0.8	104	0.00	5.59
20	M	chloroethane	0.374	0.421	-12.6	107	0.00	5.77
21	M	vinyl bromide		----------NA----------				
22	M	trichlorofluoromethane	0.813	0.823	-1.2	97	0.00	6.28
23	M	pentane	1.045	1.046	-0.1	100	0.00	6.34
24	M	ethyl ether	0.316	0.323	-2.2	102	0.00	6.65
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		freon 123		----------NA----------				
28	m	2-chloropropane	0.945	0.994	-5.2	101	0.00	6.84
29	M	acrolein	0.123	0.124	-0.8	101	0.00	6.85
30	M	1,1-dichloroethene	0.476	0.494	-3.8	98	0.00	7.09
31	M	isopropyl alcohol		----------NA----------				
		----------	True	Calc.	% Drift	----------		
32	M	acetone	50.000	51.965	-3.9	105	0.00	7.07
		----------	AvgRF	CCRF	% Dev	----------		
33	M	allyl chloride	0.913	0.871	4.6	95	0.00	7.58

Initial Calibration Verification

Job Number: JB30345 **Sample:** VE8801-ICV8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200209.D
Project: BMSMC, Building 5 Area, PR

			True	Calc.	% Drift			
34	M	acetonitrile	500.000	549.696	-9.9	99	0.00	7.46
			AvgRF	CCRF	% Dev			
35	M	iodomethane	0.964	0.978	-1.5	96	0.00	7.35
			True	Calc.	% Drift			
36	M	iso-butyl alcohol	500.000	495.545	0.9	100	0.00	10.22
			AvgRF	CCRF	% Dev			
37	M	carbon disulfide	1.603	1.533	4.4	87	0.00	7.50
38	M	methylene chloride	0.615	0.558	9.3	99	0.00	7.75
39	m	1-chloropropane	0.921	0.922	-0.1	100	0.00	7.81
40	M	methyl acetate	0.421	0.388	7.8	90	0.00	7.54
41	M	methyl tert butyl ether	1.525	1.507	1.2	96	0.00	8.10
42	M	trans-1,2-dichloroethene	0.480	0.501	-4.4	97	0.00	8.14
43	M	di-isopropyl ether	1.764	1.708	3.2	98	0.00	8.69
44	M	ethyl tert-butyl ether	1.758	1.640	6.7	94	0.00	9.15
			True	Calc.	% Drift			
45	M	2-butanone	50.000	46.842	6.3	94	0.00	9.33
			AvgRF	CCRF	% Dev			
46	M	1,1-dichloroethane	0.885	0.968	-9.4	102	0.00	8.68
47	M	chloroprene	0.669	0.648	3.1	91	0.00	8.81
48	M	acrylonitrile	0.205	0.223	-8.8	107	0.00	8.01
			True	Calc.	% Drift			
49	M	vinyl acetate	50.000	51.515	-3.0	105	0.00	8.65
			AvgRF	CCRF	% Dev			
50	M	ethyl acetate	0.075	0.076	-1.3	104	0.00	9.37
51	M	2,2-dichloropropane	0.712	0.676	5.1	93	0.00	9.43
52	M	cis-1,2-dichloroethene	0.553	0.562	-1.6	101	0.00	9.41
53	m	methyl acrylate	0.493	0.493	0.0	103	0.00	9.45
54	M	propionitrile	0.078	0.083	-6.4	105	0.00	9.40
55	M	bromochloromethane	0.285	0.291	-2.1	101	0.00	9.71
56	M	tetrahydrofuran	0.198	0.206	-4.0	107	0.00	9.77
57	M	chloroform	0.843	0.884	-4.9	100	0.00	9.76
58	m	t-butyl formate	0.474	0.486	-2.5	99	0.00	9.80
59	M	Iso-octane	1.412	1.195	15.4	81	0.00	10.53
60	S	dibromofluoromethane (s)	0.469	0.490	-4.5	101	0.00	9.95
61	S	1,2-dichloroethane-d4 (s)	0.516	0.522	-1.2	100	0.00	10.36
62	M	freon 113	0.365	0.324	11.2	81	0.00	7.06
63	M	methacrylonitrile	0.331	0.340	-2.7	103	0.00	9.60
64	M	1,1,1-trichloroethane	0.749	0.785	-4.8	99	0.00	10.05
65	M	tert-amyl methyl ether	1.672	1.525	8.8	95	0.00	10.52
66	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	10.83
67	M	Di-isobutylene		----------NA----------				
68	M	tert amyl alcohol	0.015	0.016	-3.3	103	0.00	10.30
69	M	epichlorohydrin	0.039	0.039	0.0	98	0.00	12.06
70	M	n-butyl alcohol	0.011	0.012	-9.1	101	0.00	10.90
71	M	tert-amyl ethyl ether	0.550	0.568	-3.3	97	0.00	11.36
72	M	carbon tetrachloride	0.462	0.499	-8.0	99	0.00	10.27
73	M	1,1-dichloropropene	0.473	0.489	-3.4	100	0.00	10.22
74	M	hexane	0.368	0.298	19.0	77	0.00	8.48
75	M	benzene	1.401	1.433	-2.3	101	0.00	10.48
76	M	heptane	0.202	0.172	14.9	81	0.00	10.68

Initial Calibration Verification

Job Number: JB30345 **Sample:** VE8801-ICV8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200209.D
Project: BMSMC, Building 5 Area, PR

77	M	isopropyl acetate	0.725	0.689	5.0	99	0.00	10.36
78	M	1,2-dichloroethane	0.453	0.458	-1.1	101	0.00	10.45
79		ethyl acrylate		----------NA----------				
80	M	trichloroethene	0.355	0.377	-6.2	101	0.00	11.19
81	M	2-nitropropane		----------NA----------				
82	M	2-chloroethyl vinyl ether	0.240	0.243	-1.3	99	0.00	11.95
83	M	methylcyclohexane	0.542	0.470	13.3	82	0.00	11.45
84	M	methyl methacrylate	0.350	0.360	-2.9	97	0.00	11.43
85	M	1,2-dichloropropane	0.374	0.386	-3.2	102	0.00	11.43
86	M	dibromomethane	0.218	0.233	-6.9	103	0.00	11.59
87	M	bromodichloromethane	0.476	0.497	-4.4	103	0.00	11.72
88	M	cis-1,3-dichloropropene	0.602	0.605	-0.5	96	0.00	12.20
89	S	toluene-d8 (s)	1.266	1.325	-4.7	100	0.00	12.53
90	M	4-methyl-2-pentanone	0.160	0.164	-2.5	104	0.00	12.27
91	M	toluene	0.850	0.903	-6.2	100	0.00	12.60
92	M	3-methyl-1-butanol	0.019	0.018	5.3	100	0.00	12.28
93	M	trans-1,3-dichloropropene	0.526	0.551	-4.8	99	0.00	12.77
94	M	ethyl methacrylate	0.464	0.482	-3.9	96	0.00	12.78
95	M	1,1,2-trichloroethane	0.276	0.292	-5.8	104	0.00	13.00
96	M	2-hexanone	0.142	0.144	-1.4	100	0.00	13.18
97	I	chlorobenzene-d5	1.000	1.000	0.0	101	0.00	14.15
98	M	cyclohexanone	0.014	0.014	0.0	94	0.00	15.35
99	M	tetrachloroethene	0.462	0.466	-0.9	99	0.00	13.25
100	M	1,3-dichloropropane	0.600	0.627	-4.5	101	0.00	13.20
101	M	butyl acetate	0.259	0.266	-2.7	100	0.00	13.27
102	m	3,3-dimethyl-1-butanol	0.044	0.053	-20.5#	120	0.00	13.36
103	M	dibromochloromethane	0.436	0.448	-2.8	99	0.00	13.50
104	M	1,2-dibromoethane	0.386	0.397	-2.8	101	0.00	13.67
105	M	n-butyl ether		----------NA----------				
106	M	chlorobenzene	1.085	1.144	-5.4	100	0.00	14.19
107	M	1,1,1,2-tetrachloroethane	0.400	0.425	-6.2	98	0.00	14.25
108	M	ethylbenzene	1.736	1.830	-5.4	101	0.00	14.25
109	M	m,p-xylene	0.682	0.725	-6.3	100	0.00	14.37
110	M	o-xylene	0.699	0.748	-7.0	101	0.00	14.83
111	M	butyl acrylate		----------NA----------				
112	M	styrene	1.160	1.221	-5.3	100	0.00	14.83
113	M	bromoform	0.332	0.348	-4.8	100	0.00	15.11
114	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	16.72
115	M	isopropylbenzene	3.216	3.343	-3.9	101	0.00	15.20
116	S	4-bromofluorobenzene (s)	0.917	0.955	-4.1	100	0.00	15.42
117	M	bromobenzene	0.892	0.915	-2.6	100	0.00	15.65
118	M	1,1,2,2-tetrachloroethane	0.904	0.886	2.0	98	0.00	15.50
119	M	trans-1,4-dichloro-2-bute	0.227	0.214	5.7	93	0.00	15.54
120	M	1,2,3-trichloropropane	0.239	0.236	1.3	100	0.00	15.59
121	M	n-propylbenzene	3.582	3.715	-3.7	103	0.00	15.66
122	M	p-ethyltoluene		----------NA----------				
123	M	2-chlorotoluene	0.793	0.785	1.0	99	0.00	15.83
124	M	4-chlorotoluene	2.330	2.328	0.1	100	0.00	15.93
125	M	1,3,5-trimethylbenzene	2.741	2.631	4.0	99	0.00	15.83
126	M	tert-butylbenzene	2.350	2.474	-5.3	101	0.00	16.22
127	M	pentachloroethane	0.584	0.607	-3.9	101	0.00	16.30
128	M	1,2,4-trimethylbenzene	2.710	2.804	-3.5	103	0.00	16.26
129	M	sec-butylbenzene	3.341	3.448	-3.2	100	0.00	16.45
130	M	1,3-dichlorobenzene	1.643	1.664	-1.3	100	0.00	16.66
131	M	p-isopropyltoluene	2.774	3.009	-8.5	103	0.00	16.58
132	M	1,4-dichlorobenzene	1.666	1.675	-0.5	98	0.00	16.75
133		benzyl chloride	1.649	1.482	10.1	88	0.00	16.86
134	M	p-diethylbenzene		----------NA----------				

Initial Calibration Verification

Job Number: JB30345 **Sample:** VE8801-ICV8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200209.D
Project: BMSMC, Building 5 Area, PR

135	M	1,2-dichlorobenzene	1.587	1.652	-4.1	100	0.00	17.19
136	M	n-butylbenzene	1.332	1.444	-8.4	102	0.00	17.04
137	M	1,2,4,5-tetramethylbenzen		----------NA----------				
138	M	1,2-dibromo-3-chloropropa	0.148	0.155	-4.7	101	0.00	18.00
139	m	1,3,5-trichlorobenzene	1.155	1.252	-8.4	96	0.00	18.25
140	M	1,2,4-trichlorobenzene	0.933	1.047	-12.2	103	0.00	18.96
141	M	hexachlorobutadiene	0.528	0.549	-4.0	98	0.00	19.10
142	M	naphthalene	1.870	1.992	-6.5	99	0.00	19.27
143		MMT		----------NA----------				
144	M	1,2,3-trichlorobenzene	0.741	0.784	-5.8	98	0.00	19.54
145	M	hexachloroethane	0.535	0.585	-9.3	102	0.00	17.50
146	M	Cyclohexane	1.052	1.065	-1.2	100	0.00	10.16
147		ethyleinimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
E200201.D ME8801.M Mon Feb 25 09:59:18 2013

Continuing Calibration Summary

Job Number: JB30345 **Sample:** VE8827-CC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200745.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E200745.D                    Vial: 23
Acq On    : 11 Mar 2013  11:09 pm                     Operator: OksanaT
Sample    : cc8801-50                                 Inst    : MSE
Misc      : MS44353,VE8827,5,,100,5,1                 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\ME8801.M (RTE Integrator)
Title        : SW846  8260B,ZB624 60m x 0.25mm x 1.4um
Last Update  : Mon Feb 25 11:43:47 2013
Response via : Multiple Level Calibration

Min. RRF     :   0.010  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)	R.T.
1		Tert Butyl Alcohol-d9	1.000	1.000	0.0	164	0.00	7.68
		----------	True	Calc.	% Drift	----------		
2	M	1,4-dioxane	1250.000	1180.790	5.5	148	0.00	11.54
		----------	AvgRF	CCRF	% Dev	----------		
3	M	tertiary butyl alcohol	1.175	1.153	1.9	153	0.00	7.79
4		ethanol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	161	0.00	9.91
6		freon 23		----------NA----------				
7		freon 115		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.550	0.445	19.1	118	0.00	4.32
12	M	dichlorodifluoromethane	0.733	0.716	2.3	143	0.00	4.32
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15	M	chloromethane	0.818	0.798	2.4	147	0.00	4.66
16	M	vinyl chloride	0.819	0.763	6.8	140	0.00	4.96
17		1,3-Butadiene		----------NA----------				
18	M	acetaldehyde		----------NA----------				
19	M	bromomethane	0.496	0.441	11.1	142	0.00	5.60
20	M	chloroethane	0.374	0.360	3.7	142	0.00	5.77
21	M	vinyl bromide		----------NA----------				
22	M	trichlorofluoromethane	0.813	0.775	4.7	141	0.00	6.28
23	M	pentane		----------NA----------				
24	M	ethyl ether	0.316	0.305	3.5	150	0.00	6.65
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		freon 123		----------NA----------				
28	m	2-chloropropane	0.945	0.894	5.4	141	0.00	6.84
29	M	acrolein	0.123	0.111	9.8	139	0.00	6.85
30	M	1,1-dichloroethene	0.476	0.442	7.1	135	0.00	7.09
31	M	isopropyl alcohol		----------NA----------				
		----------	True	Calc.	% Drift	----------		
32	M	acetone	50.000	50.235	-0.5	157	0.00	7.06
		----------	AvgRF	CCRF	% Dev	----------		
33	M	allyl chloride	0.913	0.813	11.0	137	0.00	7.58

Continuing Calibration Summary

Job Number: JB30345 **Sample:** VE8827-CC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200745.D
Project: BMSMC, Building 5 Area, PR

			True	Calc.	% Drift			
34	M	acetonitrile	500.000	475.211	5.0	136	0.00	7.46

			AvgRF	CCRF	% Dev			
35	M	iodomethane	0.964	0.933	3.2	143	0.00	7.35

			True	Calc.	% Drift			
36	M	iso-butyl alcohol	500.000	434.625	13.1	136	0.00	10.23

			AvgRF	CCRF	% Dev			
37	M	carbon disulfide	1.603	1.365	14.8	120	0.00	7.50
38	M	methylene chloride	0.615	0.516	16.1	142	0.00	7.76
39	m	1-chloropropane	0.921	0.832	9.7	140	0.00	7.81
40	M	methyl acetate	0.421	0.376	10.7	135	0.00	7.54
41	M	methyl tert butyl ether	1.525	1.427	6.4	141	0.00	8.10
42	M	trans-1,2-dichloroethene	0.480	0.452	5.8	135	0.00	8.15
43	M	di-isopropyl ether	1.764	1.518	13.9	135	0.00	8.69
44	M	ethyl tert-butyl ether	1.758	1.538	12.5	137	0.00	9.15

			True	Calc.	% Drift			
45	M	2-butanone	50.000	50.172	-0.3	156	0.00	9.35

			AvgRF	CCRF	% Dev			
46	M	1,1-dichloroethane	0.885	0.850	4.0	139	0.00	8.69
47	M	chloroprene	0.669	0.605	9.6	132	0.00	8.81
48	M	acrylonitrile	0.205	0.204	0.5	151	0.00	8.02

			True	Calc.	% Drift			
49	M	vinyl acetate	50.000	43.095	13.8	136	0.00	8.65

			AvgRF	CCRF	% Dev			
50	M	ethyl acetate	0.075	0.073	2.7	154	0.01	9.38
51	M	2,2-dichloropropane	0.712	0.586	17.7	124	0.00	9.43
52	M	cis-1,2-dichloroethene	0.553	0.502	9.2	139	0.00	9.41
53	m	methyl acrylate	0.493	0.469	4.9	152	0.00	9.46
54	M	propionitrile	0.078	0.079	-1.3	153	0.00	9.40
55	M	bromochloromethane	0.285	0.274	3.9	146	0.00	9.71
56	M	tetrahydrofuran	0.198	0.194	2.0	156	0.00	9.77
57	M	chloroform	0.843	0.793	5.9	139	0.00	9.76
58	m	t-butyl formate	0.474	0.449	5.3	142	0.00	9.80
59	M	Iso-octane	1.412	1.233	12.7	129	0.00	10.52
60	S	dibromofluoromethane (s)	0.469	0.411	12.4	131	0.00	9.95
61	S	1,2-dichloroethane-d4 (s)	0.516	0.433	16.1	128	0.00	10.37
62	M	freon 113	0.365	0.318	12.9	124	0.00	7.07
63	M	methacrylonitrile	0.331	0.343	-3.6	161	0.00	9.61
64	M	1,1,1-trichloroethane	0.749	0.695	7.2	137	0.00	10.05
65	M	tert-amyl methyl ether	1.672	1.363	18.5	131	0.00	10.52
66	I	1,4-difluorobenzene	1.000	1.000	0.0	159	0.00	10.83
67	M	Di-isobutylene		----------NA----------				
68	M	tert amyl alcohol		----------NA----------				
69	M	epichlorohydrin	0.039	0.041	-5.1	159	0.00	12.06
70	M	n-butyl alcohol	0.011	0.012	-9.1	153	0.00	10.90
71	M	tert-amyl ethyl ether		----------NA----------				
72	M	carbon tetrachloride	0.462	0.441	4.5	136	0.00	10.27
73	M	1,1-dichloropropene	0.473	0.431	8.9	136	0.00	10.23
74	M	hexane	0.368	0.346	6.0	137	0.00	8.48
75	M	benzene	1.401	1.283	8.4	139	0.00	10.48
76	M	heptane	0.202	0.193	4.5	140	0.00	10.68

Continuing Calibration Summary

Job Number: JB30345 **Sample:** VE8827-CC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200745.D
Project: BMSMC, Building 5 Area, PR

77	M	isopropyl acetate	0.725	0.677	6.6	150	0.00	10.36
78	M	1,2-dichloroethane	0.453	0.424	6.4	144	0.00	10.45
79		ethyl acrylate		----------NA----------				
80	M	trichloroethene	0.355	0.338	4.8	139	0.00	11.19
81	M	2-nitropropane		----------NA----------				
82	M	2-chloroethyl vinyl ether	0.240	0.232	3.3	146	0.00	11.95
83	M	methylcyclohexane	0.542	0.464	14.4	125	0.00	11.45
84	M	methyl methacrylate	0.350	0.348	0.6	145	0.00	11.43
85	M	1,2-dichloropropane	0.374	0.365	2.4	149	0.00	11.43
86	M	dibromomethane	0.218	0.223	-2.3	152	0.00	11.59
87	M	bromodichloromethane	0.476	0.465	2.3	149	0.00	11.72
88	M	cis-1,3-dichloropropene	0.602	0.595	1.2	145	0.00	12.20
89	S	toluene-d8 (s)	1.266	1.140	10.0	133	0.00	12.53
90	M	4-methyl-2-pentanone	0.160	0.157	1.9	153	0.00	12.27
91	M	toluene	0.850	0.809	4.8	139	0.00	12.60
92	M	3-methyl-1-butanol	0.019	0.018	5.3	154	0.00	12.28
93	M	trans-1,3-dichloropropene	0.526	0.519	1.3	144	0.00	12.77
94	M	ethyl methacrylate	0.464	0.473	-1.9	146	0.00	12.77
95	M	1,1,2-trichloroethane	0.276	0.278	-0.7	152	0.00	13.00
96	M	2-hexanone	0.142	0.147	-3.5	157	0.00	13.18
97	I	chlorobenzene-d5	1.000	1.000	0.0	160	0.00	14.15
98	M	cyclohexanone	0.014	0.014	0.0	148	0.00	15.35
99	M	tetrachloroethene	0.462	0.413	10.6	138	0.00	13.25
100	M	1,3-dichloropropane	0.600	0.579	3.5	147	0.00	13.20
101	M	butyl acetate	0.259	0.263	-1.5	157	0.00	13.27
102	m	3,3-dimethyl-1-butanol	0.044	0.044	0.0	158	0.00	13.36
103	M	dibromochloromethane	0.436	0.434	0.5	152	0.00	13.50
104	M	1,2-dibromoethane	0.386	0.381	1.3	154	0.00	13.67
105	M	n-butyl ether		----------NA----------				
106	M	chlorobenzene	1.085	0.985	9.2	137	0.00	14.19
107	M	1,1,1,2-tetrachloroethane	0.400	0.373	6.8	137	0.00	14.24
108	M	ethylbenzene	1.736	1.533	11.7	134	0.00	14.25
109	M	m,p-xylene	0.682	0.620	9.1	136	0.00	14.37
110	M	o-xylene	0.699	0.653	6.6	139	0.00	14.83
111	M	butyl acrylate		----------NA----------				
112	M	styrene	1.160	1.074	7.4	139	0.00	14.83
113	M	bromoform	0.332	0.344	-3.6	157	0.00	15.11
114	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	162	0.00	16.72
115	M	isopropylbenzene	3.216	2.939	8.6	138	0.00	15.20
116	S	4-bromofluorobenzene (s)	0.917	0.835	8.9	136	0.00	15.42
117	M	bromobenzene	0.892	0.826	7.4	141	0.00	15.65
118	M	1,1,2,2-tetrachloroethane	0.904	0.885	2.1	153	0.00	15.50
119	M	trans-1,4-dichloro-2-bute	0.227	0.214	5.7	145	0.00	15.54
120	M	1,2,3-trichloropropane	0.239	0.229	4.2	152	0.00	15.58
121	M	n-propylbenzene	3.582	3.131	12.6	136	0.00	15.66
122	M	p-ethyltoluene		----------NA----------				
123	M	2-chlorotoluene	0.793	0.715	9.8	140	0.00	15.83
124	M	4-chlorotoluene	2.330	2.086	10.5	140	0.00	15.93
125	M	1,3,5-trimethylbenzene	2.741	2.360	13.9	139	0.00	15.82
126	M	tert-butylbenzene	2.350	2.206	6.1	141	0.00	16.21
127	M	pentachloroethane	0.584	0.551	5.7	143	0.00	16.30
128	M	1,2,4-trimethylbenzene	2.710	2.394	11.7	137	0.00	16.26
129	M	sec-butylbenzene	3.341	3.051	8.7	138	0.00	16.45
130	M	1,3-dichlorobenzene	1.643	1.502	8.6	141	0.00	16.66
131	M	p-isopropyltoluene	2.774	2.570	7.4	137	0.00	16.58
132	M	1,4-dichlorobenzene	1.666	1.512	9.2	139	0.00	16.75
133		benzyl chloride	1.649	1.502	8.9	140	0.00	16.86
134	M	p-diethylbenzene		----------NA----------				

Continuing Calibration Summary

Job Number: JB30345 **Sample:** VE8827-CC8801
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E200745.D
Project: BMSMC, Building 5 Area, PR

135	M	1,2-dichlorobenzene	1.587	1.530	3.6	145	0.00	17.18
136	M	n-butylbenzene	1.332	1.281	3.8	141	0.00	17.04
137	M	1,2,4,5-tetramethylbenzen		----------NA----------				
138	M	1,2-dibromo-3-chloropropa	0.148	0.161	-8.8	163	0.00	18.00
139	m	1,3,5-trichlorobenzene	1.155	1.212	-4.9	146	0.00	18.25
140	M	1,2,4-trichlorobenzene	0.933	0.988	-5.9	152	0.00	18.96
141	M	hexachlorobutadiene	0.528	0.504	4.5	140	0.00	19.10
142	M	naphthalene	1.870	2.038	-9.0	158	0.00	19.27
143		MMT		----------NA----------				
144	M	1,2,3-trichlorobenzene	0.741	0.803	-8.4	157	0.00	19.54
145	M	hexachloroethane	0.535	0.551	-3.0	150	0.00	17.49
146	M	Cyclohexane	1.052	0.909	13.6	133	0.00	10.16
147		ethyleinimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
E200201.D ME8801.M Tue Mar 12 12:47:18 2013 RPT1

New Jersey

ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 03/19/13 12:43

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192525.D Vial: 100
Acq On : 12 Mar 2013 4:04 pm Operator: Oksanat
Sample : jb30345-1 Inst : MSA
Misc : MS44341,VA7250,5.3,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:31 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.02	65	67405	500.00	ug/L	0.00
5) pentafluorobenzene	9.36	168	189870	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.31	114	267428	50.00	ug/L	0.01
85) chlorobenzene-d5	13.75	117	261876	50.00	ug/L	0.01
99) 1,4-dichlorobenzene-d4	16.38	152	134207	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.39	113	72579	51.37	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 102.74%			
48) 1,2-dichloroethane-d4 (s)	9.83	65	70871	44.90	ug/L	0.01
Spiked Amount 50.000	Range 74 - 127		Recovery = 89.80%			
77) toluene-d8 (s)	12.06	98	276024	54.35	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 108.70%			
102) 4-bromofluorobenzene (s)	15.06	95	103271	54.21	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 108.42%			

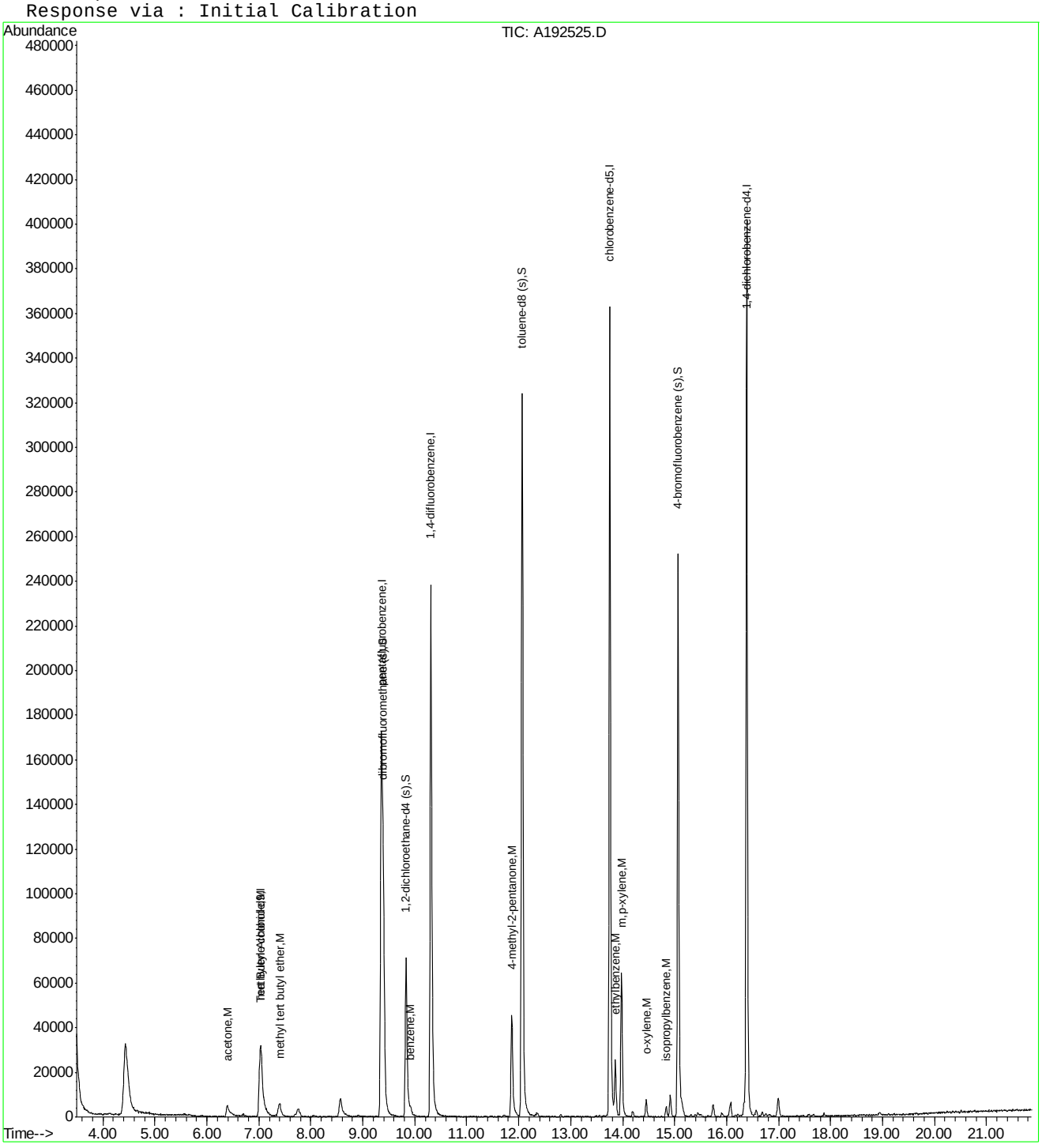
Target Compounds						Qvalue
20) acetone	6.40	43	17560	56.37	ug/L	99
26) methylene chloride	7.03	84	6920	4.36	ug/L	92
28) methyl tert butyl ether	7.40	73	11750m	3.17	ug/L	
61) benzene	9.91	78	3524	0.66	ug/L	96
78) 4-methyl-2-pentanone	11.86	58	17312	36.55	ug/L #	73
94) ethylbenzene	13.86	91	19354	2.82	ug/L	98
95) m,p-xylene	13.98	106	24624	9.04	ug/L	96
96) o-xylene	14.46	106	2738	0.98	ug/L	95
100) isopropylbenzene	14.84	105	4612	0.77	ug/L	93

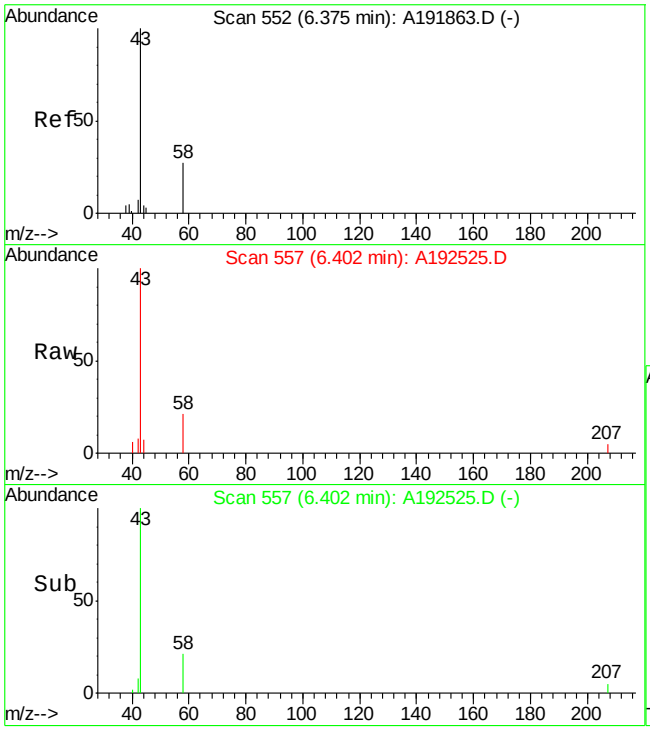
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A192525.D Vial: 100
Acq On : 12 Mar 2013 4:04 pm Operator: Oksanat
Sample : jb30345-1 Inst : MSA
Misc : MS44341,VA7250,5.3,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:31 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration

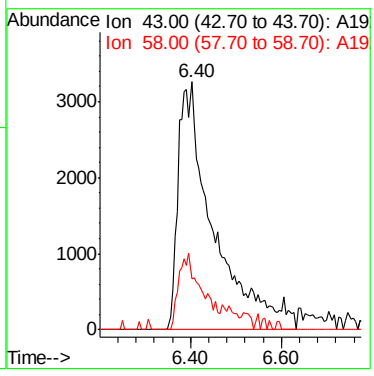


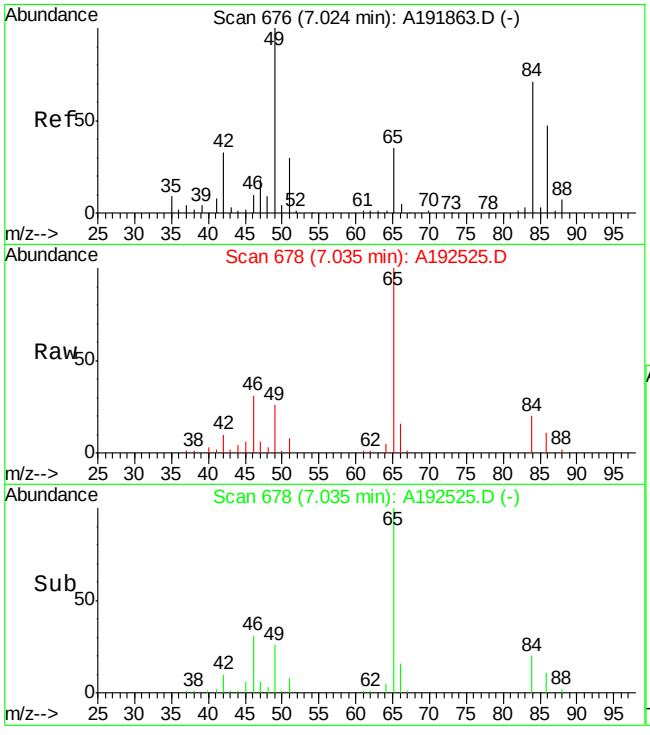


#20
acetone
Concen: 56.37 ug/L
RT: 6.40 min Scan# 557
Delta R.T. 0.03 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion: 43 Resp: 17560

Ion	Ratio	Lower	Upper
43	100		
58	20.2	0.0	50.9

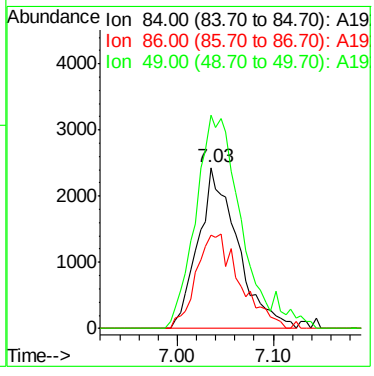


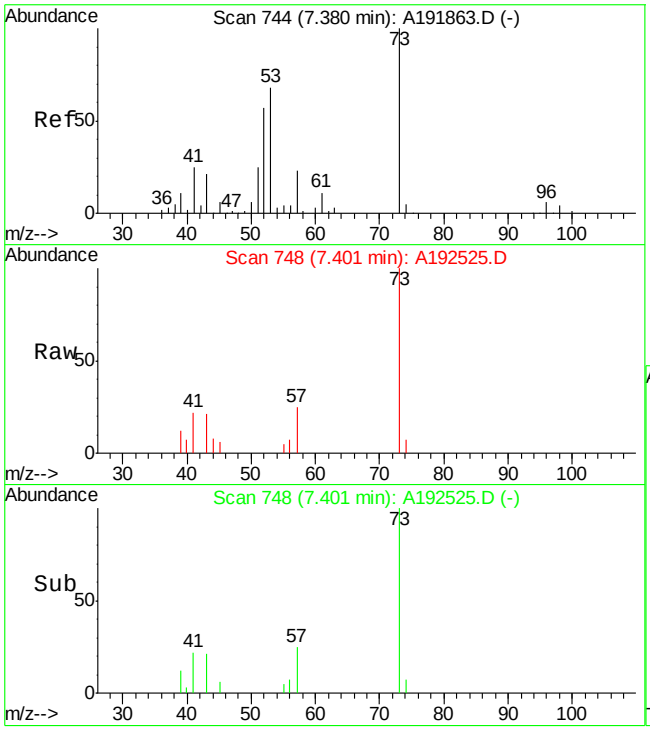


#26
methylene chloride
Concen: 4.36 ug/L
RT: 7.03 min Scan# 678
Delta R.T. 0.01 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion: 84 Resp: 6920

Ion	Ratio	Lower	Upper
84	100		
86	57.7	35.9	95.9
49	132.4	110.0	170.0

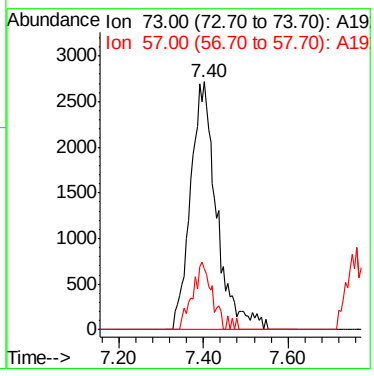


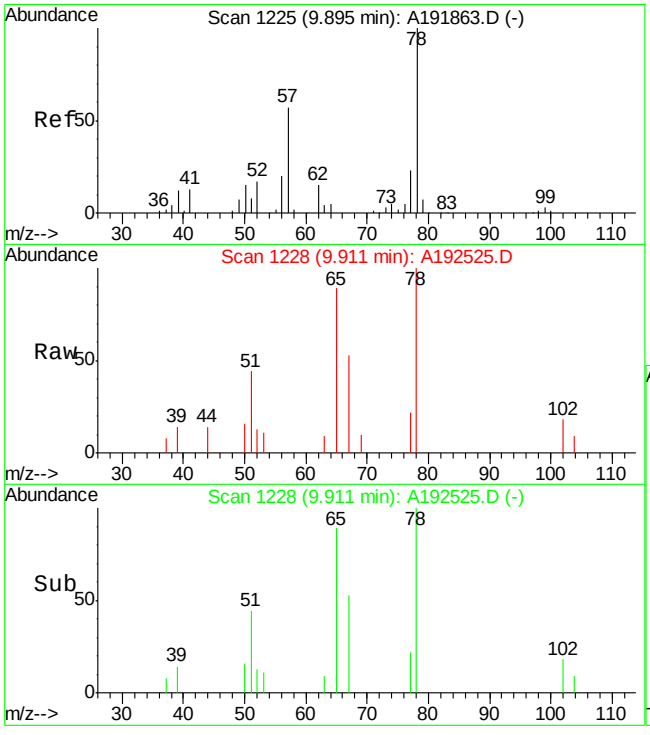


#28
methyl tert butyl ether
Concen: 3.17 ug/L m
RT: 7.40 min Scan# 748
Delta R.T. 0.02 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion: 73 Resp: 11750

Ion	Ratio	Lower	Upper
73	100		
57	20.2	0.0	53.4

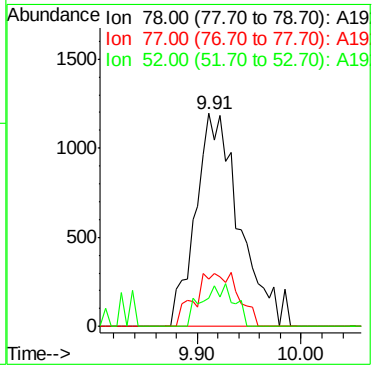


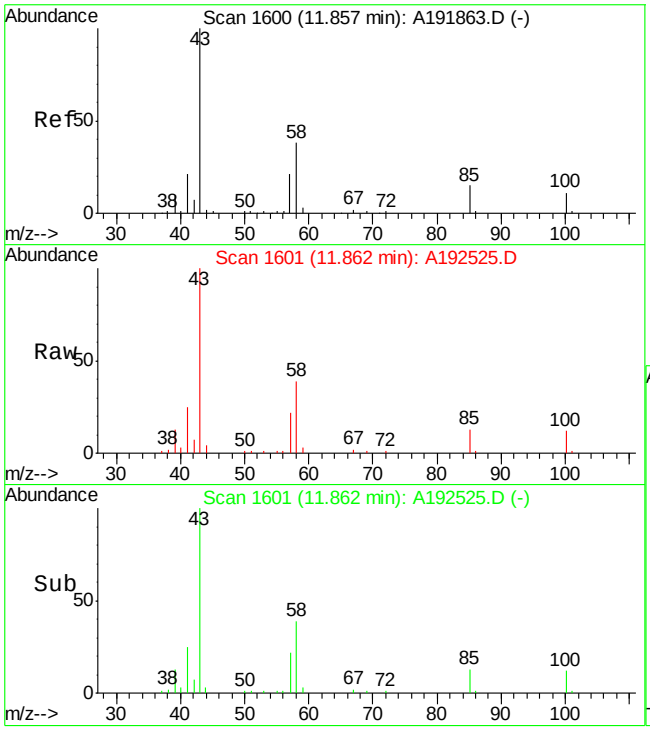


#61
benzene
Concen: 0.66 ug/L
RT: 9.91 min Scan# 1228
Delta R.T. 0.02 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion: 78 Resp: 3524

Ion	Ratio	Lower	Upper
78	100		
77	22.4	0.0	52.8
52	13.3	0.0	47.0

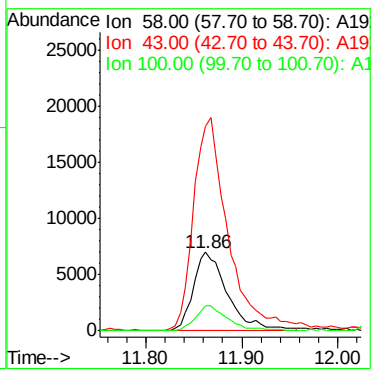


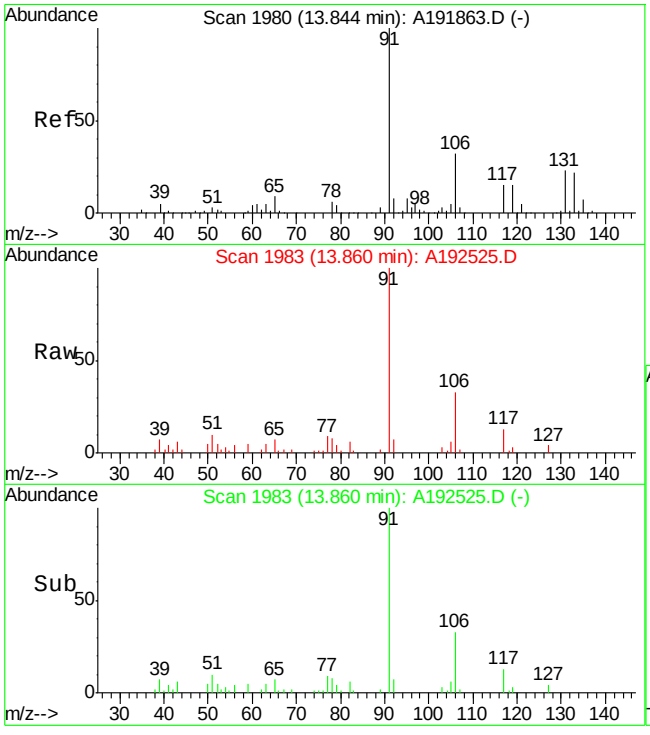


#78
4-methyl-2-pentanone
Concen: 36.55 ug/L
RT: 11.86 min Scan# 1601
Delta R.T. 0.01 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion: 58 Resp: 17312

Ion	Ratio	Lower	Upper
58	100		
43	278.6	199.1	259.1#
100	30.0	0.0	59.0

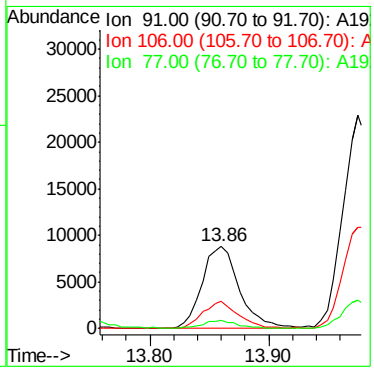


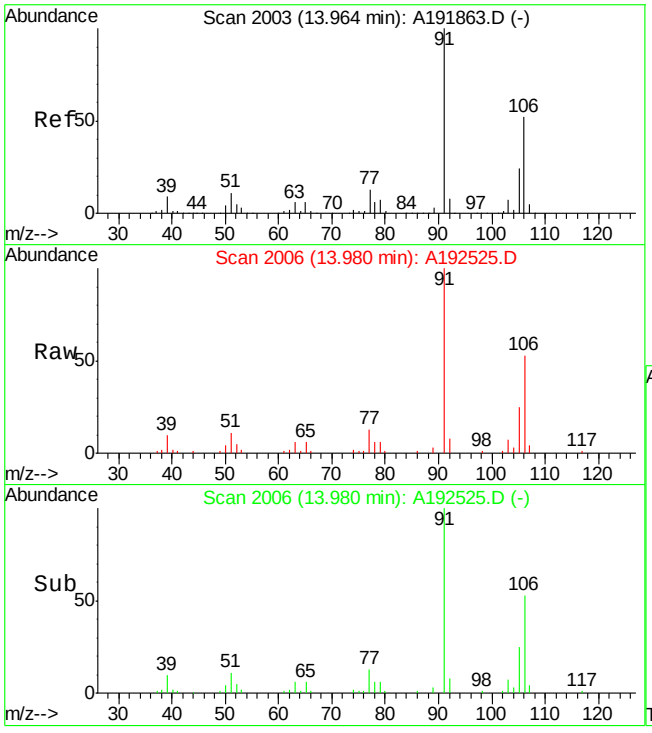


#94
ethylbenzene
Concen: 2.82 ug/L
RT: 13.86 min Scan# 1983
Delta R.T. 0.02 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion: 91 Resp: 19354

Ion	Ratio	Lower	Upper
91	100		
106	32.7	1.9	61.9
77	9.5	0.0	38.4

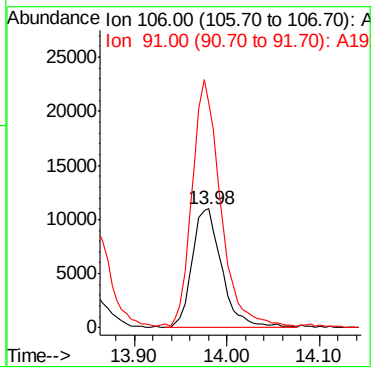


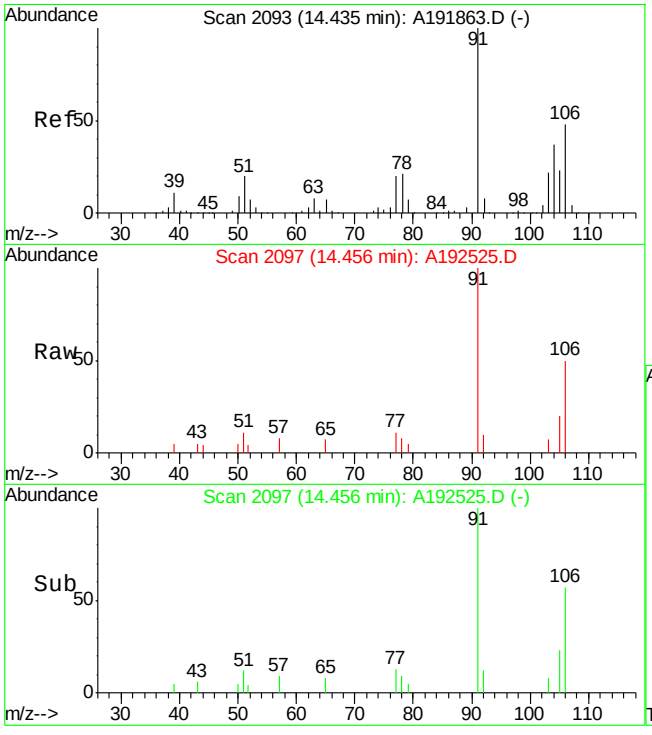


#95
m,p-xylene
Concen: 9.04 ug/L
RT: 13.98 min Scan# 2006
Delta R.T. 0.02 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion:106 Resp: 24624

Ion	Ratio	Lower	Upper
106	100		
91	187.7	164.0	224.0

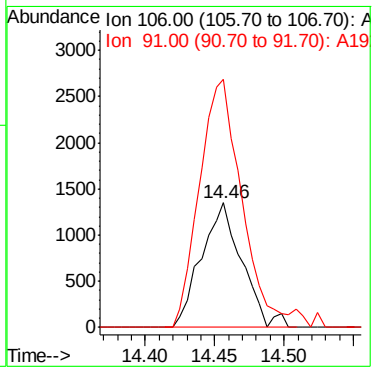


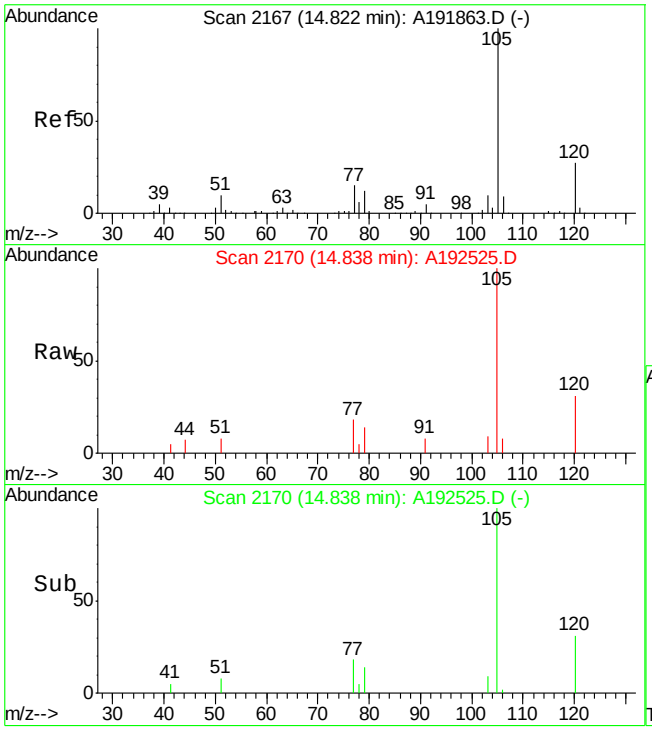


#96
o-xylene
Concen: 0.98 ug/L
RT: 14.46 min Scan# 2097
Delta R.T. 0.02 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion:106 Resp: 2738

Ion	Ratio	Lower	Upper
106	100		
91	199.3	176.4	236.4

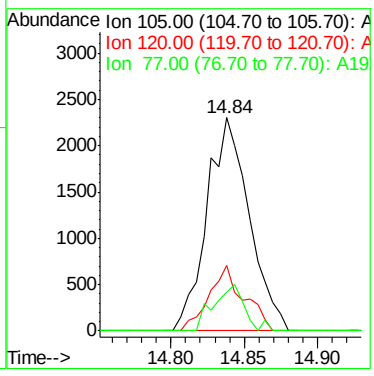




#100
isopropylbenzene
Concen: 0.77 ug/L
RT: 14.84 min Scan# 2170
Delta R.T. 0.02 min
Lab File: A192525.D
Acq: 12 Mar 2013 4:04 pm

Tgt Ion:105 Resp: 4612

Ion	Ratio	Lower	Upper
105	100		
120	30.8	0.0	56.9
77	17.9	0.0	44.9



Manual Integration Approval Summary

Sample Number:	JB30345-1	**Method:**	SW846 8260B
Lab FileID:	A192525.D	**Analyst approved:**	03/19/13 12:40 Kanya Veerawat
Injection Time:	03/12/13 16:04	**Supervisor approved:**	03/19/13 12:43 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Tert Butyl Ether	1634-04-4		7.40	Poor instrument integration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E200752.D
Acq On : 12 Mar 2013 2:40 am
Operator : OksanaT
Sample : jb30345-1
Misc : MS44341,VE8827,5.1,,100,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 12 12:53:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Feb 25 11:43:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.676	65	95453	500.00	ug/L	0.00
5) pentafluorobenzene	9.909	168	216714	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.824	114	290080	50.00	ug/L	0.00
97) chlorobenzene-d5	14.151	117	270809	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.724	152	163128	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.951	113	84112	41.36	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 82.72%			
61) 1,2-dichloroethane-d4 (s)	10.364	65	95161	42.56	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 85.12%			
89) toluene-d8 (s)	12.524	98	332810	45.31	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 90.62%			
116) 4-bromofluorobenzene (s)	15.422	95	132202	44.21	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 88.42%			

Target Compounds						Qvalue
109) m,p-xylene	14.376	106	1119	0.30	ug/L	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

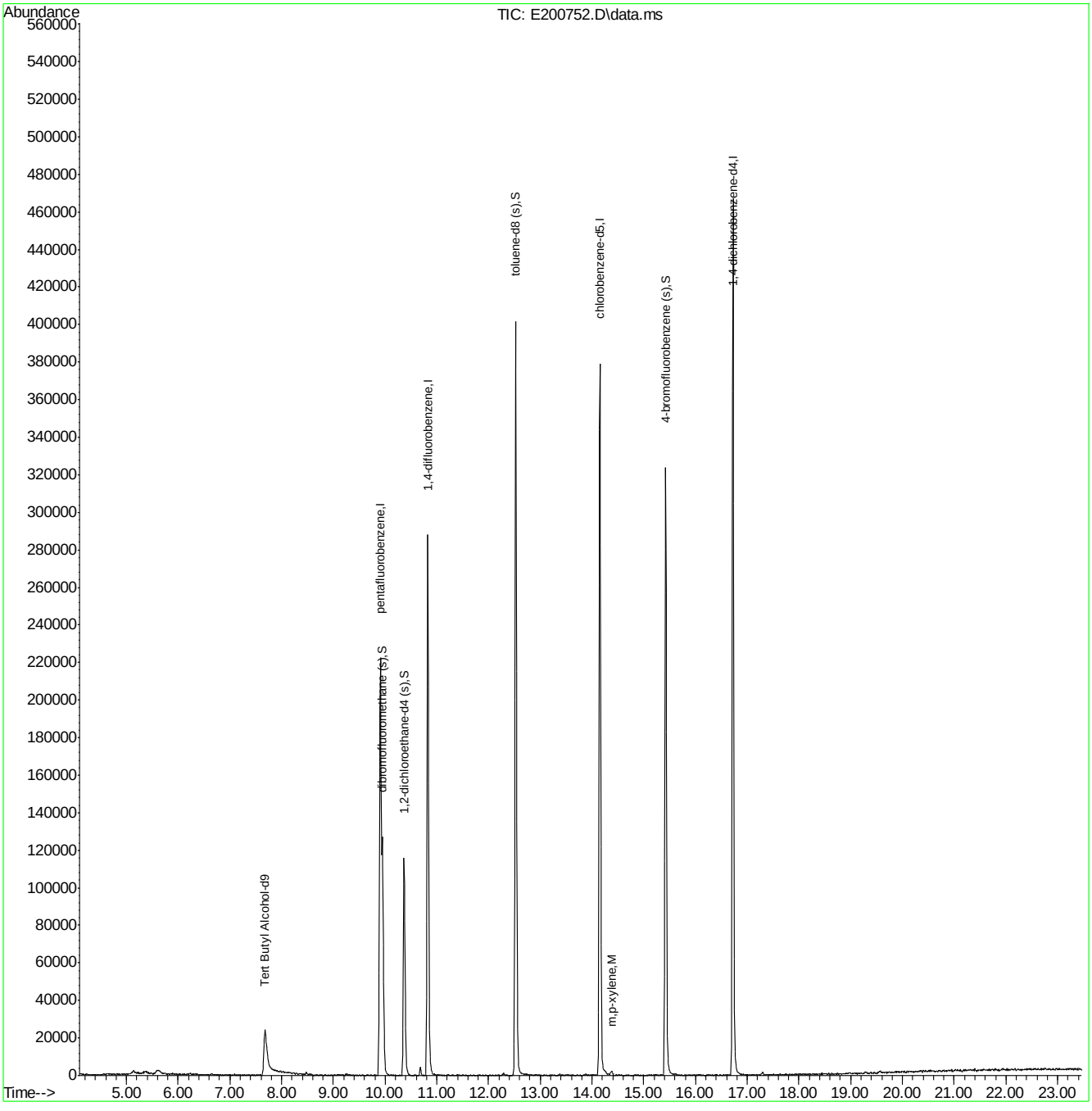
7.1.2

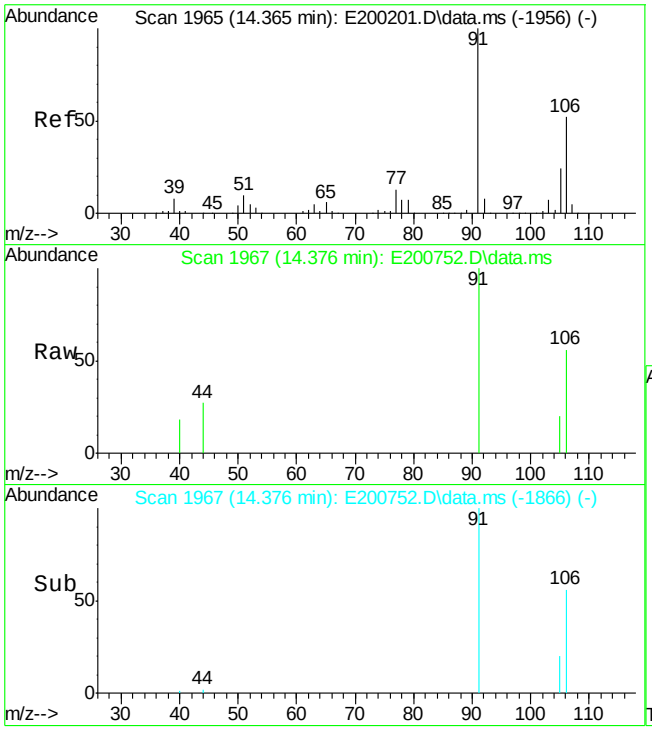
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E200752.D
Acq On : 12 Mar 2013 2:40 am
Operator : OksanaT
Sample : jb30345-1
Misc : MS44341,VE8827,5.1,,100,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Mar 12 12:53:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Feb 25 11:43:47 2013
Response via : Initial Calibration

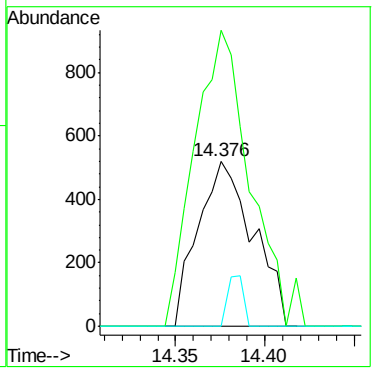




#109
m,p-xylene
Concen: 0.30 ug/L
RT: 14.376 min Scan# 1967
Delta R.T. 0.011 min
Lab File: E200752.D
Acq: 12 Mar 2013 2:40 am

Tgt Ion:106 Resp: 1119

Ion	Ratio	Lower	Upper
106	100		
91	179.4	161.1	221.1
77	0.0	0.0	54.5



7.1.2

7

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192517.D Vial: 100
Acq On : 12 Mar 2013 11:50 am Operator: Oksanat
Sample : mb Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:16 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.02	65	84616	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	182872	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	251139	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	242405	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	127310	50.00	ug/L	0.00

System Monitoring Compounds

47) dibromofluoromethane (s)	9.38	113	71014	52.19	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 104.38%			
48) 1,2-dichloroethane-d4 (s)	9.82	65	74036	48.70	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 97.40%			
77) toluene-d8 (s)	12.06	98	254302	53.32	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 106.64%			
102) 4-bromofluorobenzene (s)	15.06	95	97438	53.91	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 107.82%			

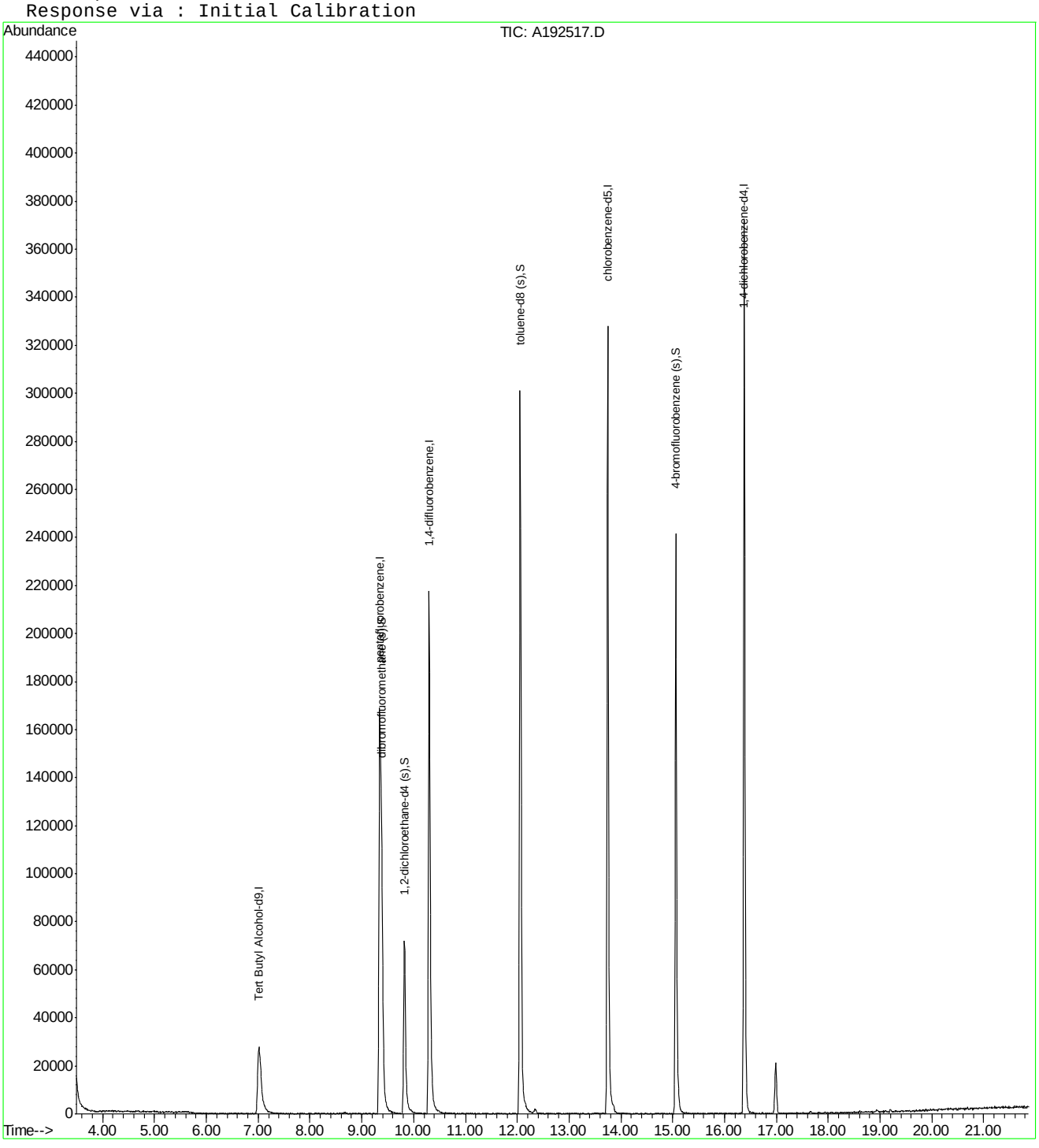
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
A192517.D MA7222.M Tue Mar 12 16:17:07 2013 MSA Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A192517.D Vial: 100
Acq On : 12 Mar 2013 11:50 am Operator: Oksanat
Sample : mb Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:16 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192518.D Vial: 100
Acq On : 12 Mar 2013 12:12 pm Operator: Oksanat
Sample : bs Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:18 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.02	65	70804	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	181400	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	254735	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	244989	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	149710	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.38	113	69730	51.66	ug/L	0.00
Spiked Amount 50.000 Range 81 - 121 Recovery = 103.32%						
48) 1,2-dichloroethane-d4 (s)	9.82	65	73021	48.42	ug/L	0.00
Spiked Amount 50.000 Range 74 - 127 Recovery = 96.84%						
77) toluene-d8 (s)	12.06	98	263551	54.48	ug/L	0.00
Spiked Amount 50.000 Range 80 - 122 Recovery = 108.96%						
102) 4-bromofluorobenzene (s)	15.06	95	105224	49.51	ug/L	0.00
Spiked Amount 50.000 Range 78 - 116 Recovery = 99.02%						

Target Compounds						Qvalue
2) 1,4-dioxane	11.06	88	15219	1206.87	ug/L	84
4) tertiary butyl alcohol	7.14	59	36721	268.94	ug/L	100
7) chlorodifluoromethane	3.70	51	70512	67.98	ug/L	92
8) dichlorodifluoromethane	3.68	85	70246	50.78	ug/L	99
9) chloromethane	3.97	50	101208	53.15	ug/L	99
10) vinyl chloride	4.21	62	88742	50.74	ug/L	99
11) bromomethane	4.83	94	65545	52.53	ug/L	98
12) chloroethane	5.00	64	47720	57.27	ug/L	97
14) trichlorofluoromethane	5.48	101	99877	56.29	ug/L	98
16) ethyl ether	5.86	74	34356	48.37	ug/L	94
18) acrolein	6.12	56	106449	487.77	ug/L	99
19) 1,1-dichloroethene	6.28	96	57800	54.59	ug/L	98
20) acetone	6.37	43	17233	57.91	ug/L	84
21) allyl chloride	6.82	76	40065	52.48	ug/L	94
22) acetonitrile	6.81	40	45177	485.41	ug/L	97
23) iodomethane	6.56	142	130088	55.29	ug/L	99
24) iso-butyl alcohol	9.67	41	20468	501.18	ug/L	97
25) carbon disulfide	6.69	76	211762	53.30	ug/L	98
26) methylene chloride	7.02	84	72603	47.93	ug/L	96
27) methyl acetate	6.84	43	34954	45.00	ug/L	93
28) methyl tert butyl ether	7.38	73	385385	108.71	ug/L	98
29) trans-1,2-dichloroethene	7.41	96	64020	53.73	ug/L	97
30) di-isopropyl ether	8.00	45	241410	54.34	ug/L	96
31) t-butyl formate	9.21	59	59643	64.51	ug/L	92
32) 3,3-dimethyl-1-butanol	13.00	57	72241	492.37	ug/L	96
33) ethyl tert-butyl ether	8.50	59	216533	53.57	ug/L	98
34) 2-butanone	8.79	72	6618	53.58	ug/L #	86
35) 1,1-dichloroethane	8.01	63	126091	55.33	ug/L	97
36) chloroprene	8.12	53	87085	55.10	ug/L	97
37) acrylonitrile	7.37	53	90904	241.22	ug/L	91
38) vinyl acetate	8.04	86	8867	51.88	ug/L	92
39) ethyl acetate	8.80	45	7594	48.90	ug/L	44
41) 2,2-dichloropropane	8.78	77	96029	57.58	ug/L	98

(#) = qualifier out of range (m) = manual integration
A192518.D MA7222.M Tue Mar 12 16:18:36 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192518.D Vial: 100
Acq On : 12 Mar 2013 12:12 pm Operator: Oksanat
Sample : bs Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:18 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	cis-1,2-dichloroethene	8.79	96	72486	52.92 ug/L	95
43)	propionitrile	8.86	54	72425	494.20 ug/L	97
44)	bromochloromethane	9.11	128	35920	53.79 ug/L	91
45)	tetrahydrofuran	9.18	42	25439	52.88 ug/L	96
46)	chloroform	9.18	83	123312	55.30 ug/L	97
49)	freon 113	6.26	151	41524	51.09 ug/L	92
50)	methacrylonitrile	9.06	41	32563	52.41 ug/L	90
51)	cyclohexane	9.51	84	88754	51.05 ug/L	99
52)	1,1,1-trichloroethane	9.43	97	98871	58.02 ug/L	98
53)	tert-amyl methyl ether	9.94	73	204459	53.12 ug/L	99
56)	epichlorohydrin	11.64	57	28961	274.08 ug/L	97
57)	n-butyl alcohol	10.46	56	88531	2322.63 ug/L	94
58)	carbon tetrachloride	9.65	117	89476	59.27 ug/L	96
59)	1,1-dichloropropene	9.63	75	84660	52.69 ug/L	98
60)	hexane	7.74	57	65195	49.17 ug/L	91
61)	benzene	9.89	78	261451	51.50 ug/L	99
62)	Iso-octane	9.91	57	228183	54.29 ug/L	97
63)	heptane	10.10	71	46041	53.25 ug/L	96
64)	tert amyl alcohol	9.80	55	12996	248.16 ug/L	89
65)	isopropyl acetate	9.84	43	120585	54.26 ug/L	98
66)	1,2-dichloroethane	9.91	62	90094	58.93 ug/L	97
67)	trichloroethene	10.66	95	65440	54.78 ug/L	99
69)	tert-amyl ethyl ether	10.84	87	98729	54.56 ug/L	100
70)	methylcyclohexane	10.88	83	97277	53.27 ug/L	99
71)	2-chloroethyl vinyl ether	11.51	63	199646	287.26 ug/L	99
72)	methyl methacrylate	10.96	69	41241	55.19 ug/L	96
73)	1,2-dichloropropane	10.93	63	75421	53.34 ug/L	100
74)	dibromomethane	11.10	93	43089	59.22 ug/L	97
75)	bromodichloromethane	11.25	83	99086	58.79 ug/L	98
76)	cis-1,3-dichloropropene	11.74	75	115036	54.55 ug/L	95
78)	4-methyl-2-pentanone	11.85	58	23953	53.09 ug/L	91
79)	toluene	12.14	92	165785	52.30 ug/L	98
80)	3-methyl-1-butanol	11.90	55	60665	952.92 ug/L	99
81)	trans-1,3-dichloropropene	12.37	75	106676	59.60 ug/L	98
82)	ethyl methacrylate	12.37	69	78668	52.41 ug/L	99
83)	1,1,2-trichloroethane	12.60	83	52595	56.37 ug/L	99
84)	2-hexanone	12.80	58	23316	57.53 ug/L	95
86)	tetrachloroethene	12.79	164	62841	53.87 ug/L	96
87)	1,3-dichloropropane	12.80	76	102153	51.71 ug/L	99
88)	butyl acetate	12.89	56	40767	51.36 ug/L	99
89)	dibromochloromethane	13.09	129	78850	54.66 ug/L	98
90)	1,2-dibromoethane	13.25	107	63892	55.61 ug/L	93
92)	chlorobenzene	13.78	112	204295	50.60 ug/L	99
93)	1,1,1,2-tetrachloroethane	13.85	131	79987	53.61 ug/L	99
94)	ethylbenzene	13.85	91	323226	50.39 ug/L	99
95)	m,p-xylene	13.97	106	257252	100.96 ug/L	100
96)	o-xylene	14.44	106	131749	50.40 ug/L	98
97)	styrene	14.45	104	222726	52.84 ug/L	97
98)	bromoform	14.75	173	59709	56.21 ug/L	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192518.D Vial: 100
Acq On : 12 Mar 2013 12:12 pm Operator: Oksanat
Sample : bs Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:18 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

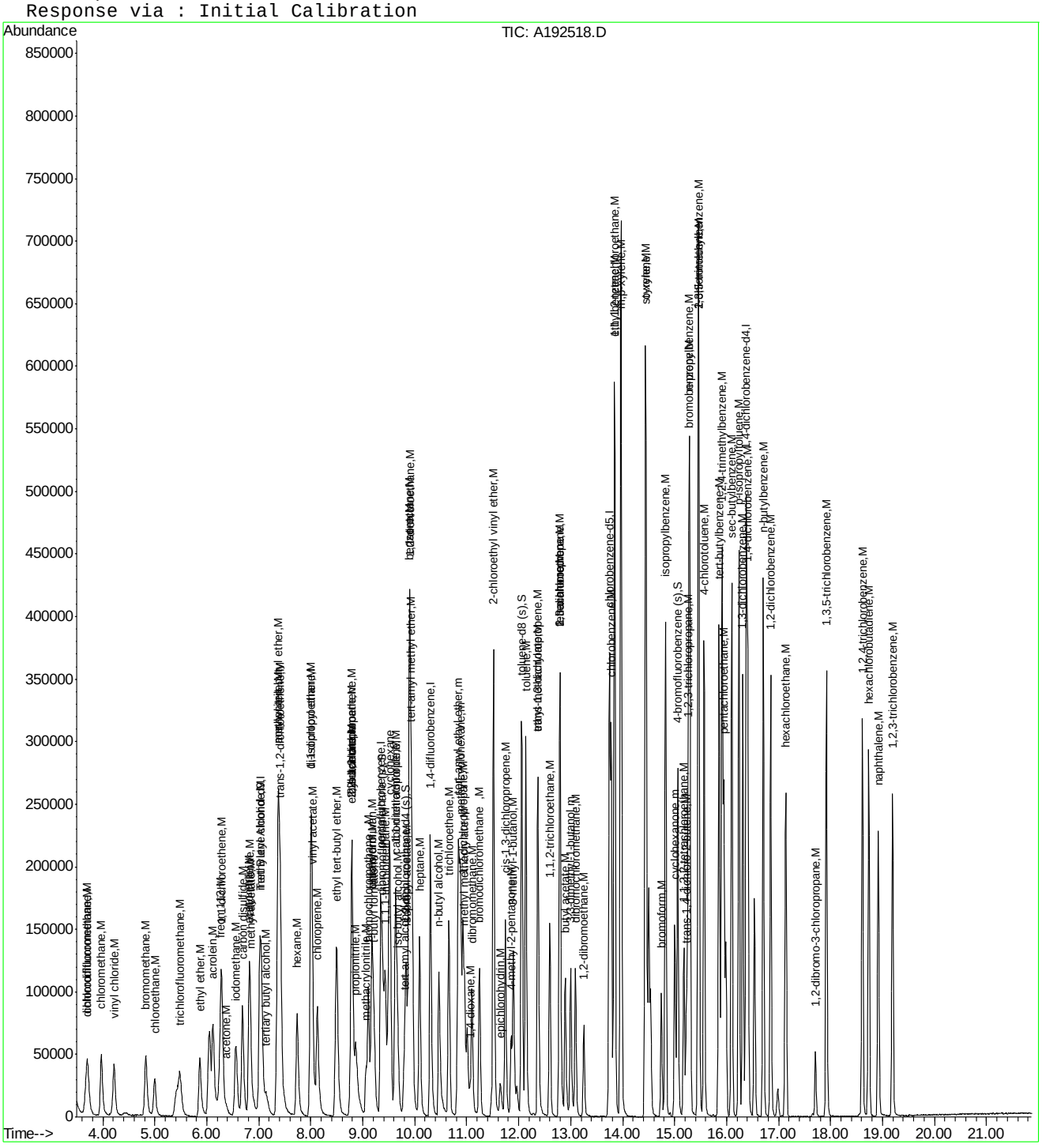
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) isopropylbenzene	14.82	105	326733	49.05	ug/L	99
101) cyclohexanone	15.00	55	79366	1464.94	ug/L	98
103) bromobenzene	15.27	156	101429	52.46	ug/L	94
104) 1,1,2,2-tetrachloroethane	15.18	83	86826	45.05	ug/L	99
105) trans-1,4-dichloro-2-buten	15.23	53	19997	47.26	ug/L	93
106) 1,2,3-trichloropropane	15.25	110	20995	50.27	ug/L	97
107) n-propylbenzene	15.29	91	394595	51.06	ug/L	99
108) 2-chlorotoluene	15.46	126	89502	50.66	ug/L	90
109) 4-chlorotoluene	15.57	91	249372	47.75	ug/L	99
111) 1,3,5-trimethylbenzene	15.47	105	290788	49.18	ug/L	99
112) tert-butylbenzene	15.85	119	245130	49.41	ug/L	99
113) pentachloroethane	15.94	167	66319	50.60	ug/L	95
114) 1,2,4-trimethylbenzene	15.91	105	298601	49.09	ug/L	99
115) sec-butylbenzene	16.10	105	372466	47.78	ug/L	99
116) 1,3-dichlorobenzene	16.31	146	183617	49.79	ug/L	100
117) p-isopropyltoluene	16.24	119	325658	50.49	ug/L	99
119) 1,4-dichlorobenzene	16.40	146	185380	47.56	ug/L	97
121) 1,2-dichlorobenzene	16.85	146	180886	49.93	ug/L	99
122) n-butylbenzene	16.71	92	159103	44.97	ug/L	94
124) 1,2-dibromo-3-chloropropan	17.71	75	15091	54.48	ug/L	91
125) 1,3,5-trichlorobenzene	17.92	180	150270	48.88	ug/L	98
126) 1,2,4-trichlorobenzene	18.61	180	128411	49.77	ug/L	99
127) hexachlorobutadiene	18.74	225	85485	54.42	ug/L	99
128) naphthalene	18.92	128	224865	46.08	ug/L	98
129) 1,2,3-trichlorobenzene	19.20	180	110762	47.68	ug/L	99
130) hexachloroethane	17.14	201	65380	54.78	ug/L	98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A192518.D Vial: 100
Acq On : 12 Mar 2013 12:12 pm Operator: Oksanat
Sample : bs Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:18 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192519.D Vial: 100
Acq On : 12 Mar 2013 12:46 pm Operator: Oksanat
Sample : jb30917-2ms Inst : MSA
Misc : MS44556,VA7250,4.5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:19 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.01	65	62885	500.00	ug/L	-0.01
5) pentafluorobenzene	9.35	168	195351	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	273435	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	263103	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	152992	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.38	113	74701	51.39	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 102.78%			
48) 1,2-dichloroethane-d4 (s)	9.82	65	73356	45.17	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 90.34%			
77) toluene-d8 (s)	12.06	98	281226	54.16	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 108.32%			
102) 4-bromofluorobenzene (s)	15.06	95	110772	51.00	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 102.00%			

Target Compounds						Qvalue
2) 1,4-dioxane	11.07	88	13543	1209.20	ug/L	81
4) tertiary butyl alcohol	7.15	59	31717	261.54	ug/L	100
7) chlorodifluoromethane	3.71	51	58140	52.05	ug/L	95
8) dichlorodifluoromethane	3.68	85	86843	58.29	ug/L	98
9) chloromethane	3.98	50	99235	48.40	ug/L	97
10) vinyl chloride	4.23	62	98244	52.16	ug/L	98
11) bromomethane	4.83	94	63792	47.48	ug/L	95
12) chloroethane	4.99	64	46663	52.00	ug/L	99
14) trichlorofluoromethane	5.48	101	107215	56.11	ug/L	97
16) ethyl ether	5.86	74	30771	40.23	ug/L	93
18) acrolein	6.12	56	84617	360.04	ug/L	100
19) 1,1-dichloroethene	6.28	96	56825	49.84	ug/L	93
20) acetone	6.38	43	19436	60.65	ug/L	91
21) allyl chloride	6.83	76	39093	47.55	ug/L	95
22) acetonitrile	6.82	40	37953	390.70	ug/L #	50
23) iodomethane	6.56	142	127275	50.23	ug/L	97
24) iso-butyl alcohol	9.68	41	20193	459.13	ug/L	97
25) carbon disulfide	6.68	76	206676	48.30	ug/L	99
26) methylene chloride	7.02	84	68008	41.69	ug/L	96
27) methyl acetate	6.85	43	31781	37.99	ug/L	87
28) methyl tert butyl ether	7.37	73	174129	45.61	ug/L	99
29) trans-1,2-dichloroethene	7.41	96	63684	49.63	ug/L	97
30) di-isopropyl ether	8.01	45	215741	45.10	ug/L	91
31) t-butyl formate	9.21	59	48289	48.50	ug/L	94
32) 3,3-dimethyl-1-butanol	13.00	57	61062	394.89	ug/L	95
33) ethyl tert-butyl ether	8.50	59	195971	45.02	ug/L	98
34) 2-butanone	8.79	72	4980	38.94	ug/L	95
35) 1,1-dichloroethane	8.01	63	123717	50.42	ug/L	96
36) chloroprene	8.12	53	87564	51.44	ug/L	93
37) acrylonitrile	7.38	53	71351	175.81	ug/L	96
38) vinyl acetate	8.03	86	5871	34.64	ug/L	48
39) ethyl acetate	8.80	45	5998	37.25	ug/L	84
41) 2,2-dichloropropane	8.79	77	93812	52.23	ug/L	97

(#) = qualifier out of range (m) = manual integration
A192519.D MA7222.M Tue Mar 12 16:19:23 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192519.D Vial: 100
Acq On : 12 Mar 2013 12:46 pm Operator: Oksanat
Sample : jb30917-2ms Inst : MSA
Misc : MS44556,VA7250,4.5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:19 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	cis-1,2-dichloroethene	8.79	96	70903	48.06 ug/L		96
43)	propionitrile	8.87	54	55797	353.55 ug/L		95
44)	bromochloromethane	9.11	128	33388	46.43 ug/L		88
45)	tetrahydrofuran	9.17	42	18495	35.70 ug/L		99
46)	chloroform	9.18	83	116460	48.50 ug/L		96
49)	freon 113	6.27	151	44062	50.34 ug/L		93
50)	methacrylonitrile	9.07	41	27247	40.72 ug/L		91
51)	cyclohexane	9.51	84	88056	47.03 ug/L		97
52)	1,1,1-trichloroethane	9.43	97	100049	54.51 ug/L		99
53)	tert-amyl methyl ether	9.94	73	186602	45.02 ug/L		96
56)	epichlorohydrin	11.65	57	24260	213.89 ug/L		95
57)	n-butyl alcohol	10.47	56	78051	1959.58 ug/L		99
58)	carbon tetrachloride	9.64	117	89968	55.52 ug/L		92
59)	1,1-dichloropropene	9.62	75	86247	50.01 ug/L		94
60)	hexane	7.74	57	59862	42.06 ug/L		93
61)	benzene	9.90	78	255112	46.81 ug/L		99
62)	Iso-octane	9.90	57	203813	45.18 ug/L		98
63)	heptane	10.09	71	39018	42.04 ug/L		94
65)	isopropyl acetate	9.85	43	97377	40.82 ug/L		97
66)	1,2-dichloroethane	9.92	62	80402	48.99 ug/L		98
67)	trichloroethene	10.66	95	64161	50.04 ug/L		97
70)	methylcyclohexane	10.88	83	92413	47.14 ug/L	#	67
71)	2-chloroethyl vinyl ether	11.52	63	173726	232.87 ug/L		99
72)	methyl methacrylate	10.97	69	31941	39.82 ug/L		97
73)	1,2-dichloropropane	10.93	63	70019	46.13 ug/L		99
74)	dibromomethane	11.10	93	36012	46.11 ug/L		94
75)	bromodichloromethane	11.24	83	87681	48.47 ug/L		98
76)	cis-1,3-dichloropropene	11.74	75	106006	46.83 ug/L		95
78)	4-methyl-2-pentanone	11.86	58	20155	41.62 ug/L		92
79)	toluene	12.14	92	163125	47.94 ug/L		99
80)	3-methyl-1-butanol	11.90	55	53220	794.88 ug/L		99
81)	trans-1,3-dichloropropene	12.37	75	92116	47.94 ug/L		98
82)	ethyl methacrylate	12.37	69	69699	43.26 ug/L		99
83)	1,1,2-trichloroethane	12.60	83	44037	43.97 ug/L		94
84)	2-hexanone	12.81	58	17371	39.93 ug/L		91
86)	tetrachloroethene	12.79	164	63199	50.45 ug/L		98
87)	1,3-dichloropropane	12.80	76	88462	41.69 ug/L		98
88)	butyl acetate	12.90	56	35176	41.27 ug/L		100
89)	dibromochloromethane	13.09	129	70404	45.44 ug/L		99
90)	1,2-dibromoethane	13.25	107	54518	44.19 ug/L		100
92)	chlorobenzene	13.78	112	193729	44.68 ug/L		98
93)	1,1,1,2-tetrachloroethane	13.85	131	72851	45.47 ug/L		98
94)	ethylbenzene	13.84	91	316834	45.99 ug/L		99
95)	m,p-xylene	13.97	106	254635	93.05 ug/L		99
96)	o-xylene	14.44	106	124239	44.26 ug/L		97
97)	styrene	14.46	104	209573	46.29 ug/L		98
98)	bromoform	14.74	173	49903	43.74 ug/L		95
100)	isopropylbenzene	14.83	105	309822	45.52 ug/L		99
101)	cyclohexanone	15.01	55	35016	632.46 ug/L		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192519.D Vial: 100
Acq On : 12 Mar 2013 12:46 pm Operator: Oksanat
Sample : jb30917-2ms Inst : MSA
Misc : MS44556,VA7250,4.5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:19 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

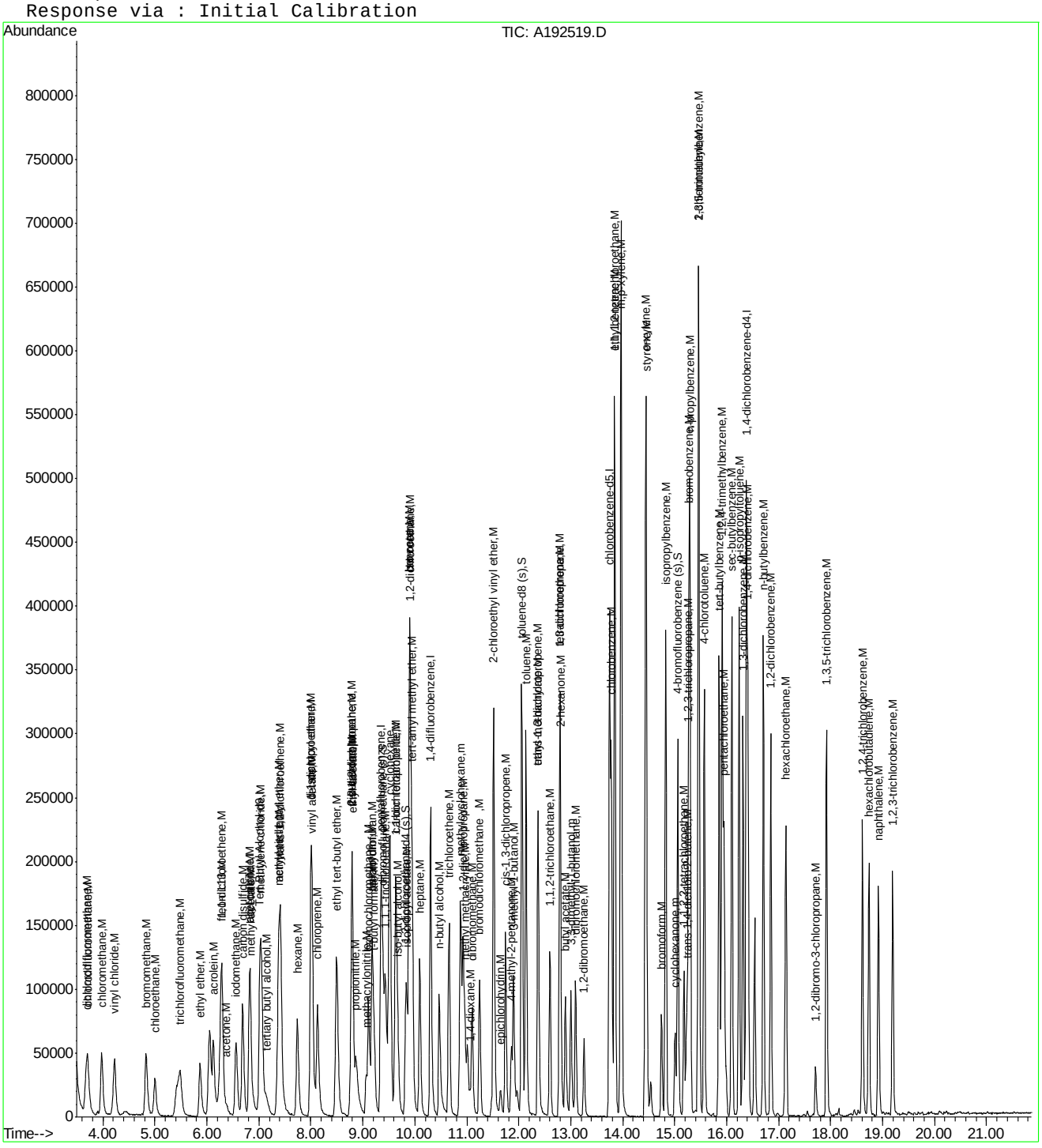
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
103)	bromobenzene	15.27	156	90623	45.86 ug/L	99
104)	1,1,2,2-tetrachloroethane	15.18	83	73371	37.25 ug/L	96
105)	trans-1,4-dichloro-2-buten	15.23	53	16687	38.59 ug/L	95
106)	1,2,3-trichloropropane	15.26	110	17437	40.85 ug/L	98
107)	n-propylbenzene	15.29	91	368241	46.63 ug/L	99
108)	2-chlorotoluene	15.46	126	83290	46.13 ug/L	93
109)	4-chlorotoluene	15.57	91	232311	43.53 ug/L	98
111)	1,3,5-trimethylbenzene	15.47	105	268749	44.48 ug/L	99
112)	tert-butylbenzene	15.85	119	225304	44.44 ug/L	98
113)	pentachloroethane	15.95	167	57775	43.13 ug/L	96
114)	1,2,4-trimethylbenzene	15.91	105	274983	44.24 ug/L	97
115)	sec-butylbenzene	16.10	105	339889	42.66 ug/L	99
116)	1,3-dichlorobenzene	16.31	146	163430	43.36 ug/L	99
117)	p-isopropyltoluene	16.24	119	287803	43.66 ug/L	99
119)	1,4-dichlorobenzene	16.41	146	162606	40.82 ug/L	99
121)	1,2-dichlorobenzene	16.85	146	153777	41.54 ug/L	99
122)	n-butylbenzene	16.71	92	140638	38.90 ug/L	98
124)	1,2-dibromo-3-chloropropan	17.71	75	11008	38.89 ug/L	84
125)	1,3,5-trichlorobenzene	17.92	180	126061	40.13 ug/L	96
126)	1,2,4-trichlorobenzene	18.61	180	96046	36.43 ug/L	98
127)	hexachlorobutadiene	18.74	225	59680	37.18 ug/L	97
128)	naphthalene	18.92	128	172240	34.54 ug/L	98
129)	1,2,3-trichlorobenzene	19.19	180	83060	34.99 ug/L	99
130)	hexachloroethane	17.14	201	56578	46.39 ug/L	98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A192519.D Vial: 100
Acq On : 12 Mar 2013 12:46 pm Operator: Oksanat
Sample : jb30917-2ms Inst : MSA
Misc : MS44556,VA7250,4.5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:19 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192520.D Vial: 100
Acq On : 12 Mar 2013 1:31 pm Operator: Oksanat
Sample : jb30917-2msd Inst : MSA
Misc : MS44556,VA7250,4.5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:20 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.03	65	68415	500.00	ug/L	0.00
5) pentafluorobenzene	9.36	168	190023	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	264457	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	250483	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	150814	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.39	113	73771	52.17	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 104.34%			
48) 1,2-dichloroethane-d4 (s)	9.83	65	72181	45.69	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 91.38%			
77) toluene-d8 (s)	12.06	98	278725	55.50	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 111.00%			
102) 4-bromofluorobenzene (s)	15.06	95	105819	49.43	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 98.86%			

Target Compounds						Qvalue
2) 1,4-dioxane	11.07	88	15276	1253.69	ug/L	98
4) tertiary butyl alcohol	7.15	59	36491	276.59	ug/L	100
7) chlorodifluoromethane	3.70	51	67256	61.90	ug/L	91
8) dichlorodifluoromethane	3.69	85	100049	69.04	ug/L	100
9) chloromethane	3.98	50	113940	57.13	ug/L	97
10) vinyl chloride	4.23	62	109815	59.94	ug/L	96
11) bromomethane	4.83	94	71055	54.37	ug/L	99
12) chloroethane	5.00	64	52198	59.80	ug/L	96
14) trichlorofluoromethane	5.49	101	123574	66.49	ug/L	99
16) ethyl ether	5.87	74	35217	47.33	ug/L	90
18) acrolein	6.12	56	94006	411.21	ug/L	98
19) 1,1-dichloroethene	6.29	96	66208	59.70	ug/L	93
20) acetone	6.37	43	20257	64.98	ug/L	89
21) allyl chloride	6.84	76	44812	56.04	ug/L #	90
22) acetonitrile	6.82	40	41793	435.07	ug/L #	58
23) iodomethane	6.56	142	143655	58.29	ug/L	98
24) iso-butyl alcohol	9.68	41	21329	498.56	ug/L	96
25) carbon disulfide	6.69	76	237361	57.03	ug/L	97
26) methylene chloride	7.03	84	78039	49.18	ug/L	95
27) methyl acetate	6.84	43	46252	56.84	ug/L	87
28) methyl tert butyl ether	7.38	73	197157	53.09	ug/L	98
29) trans-1,2-dichloroethene	7.42	96	73903	59.21	ug/L	98
30) di-isopropyl ether	8.01	45	245664	52.79	ug/L	89
31) t-butyl formate	9.21	59	52980	54.70	ug/L	90
32) 3,3-dimethyl-1-butanol	13.00	57	70286	460.10	ug/L	96
33) ethyl tert-butyl ether	8.50	59	224564	53.03	ug/L	97
34) 2-butanone	8.81	72	6202	48.46	ug/L #	69
35) 1,1-dichloroethane	8.01	63	137813	57.73	ug/L	99
36) chloroprene	8.13	53	96458	58.26	ug/L	99
37) acrylonitrile	7.38	53	84671	214.48	ug/L	97
38) vinyl acetate	8.04	86	6195	36.98	ug/L	47
39) ethyl acetate	8.81	45	7169	44.58	ug/L	81
41) 2,2-dichloropropane	8.79	77	104113	59.59	ug/L	98

(#) = qualifier out of range (m) = manual integration
A192520.D MA7222.M Tue Mar 12 16:20:12 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192520.D Vial: 100
Acq On : 12 Mar 2013 1:31 pm Operator: Oksanat
Sample : jb30917-2msd Inst : MSA
Misc : MS44556,VA7250,4.5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:20 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	cis-1,2-dichloroethene	8.79	96	80601	56.17 ug/L	99
43)	propionitrile	8.87	54	64858	422.49 ug/L	99
44)	bromochloromethane	9.12	128	39167	56.00 ug/L	99
45)	tetrahydrofuran	9.18	42	21151	41.97 ug/L	98
46)	chloroform	9.18	83	134344	57.52 ug/L	98
49)	freon 113	6.27	151	52021	61.10 ug/L	96
50)	methacrylonitrile	9.06	41	30459	46.80 ug/L	98
51)	cyclohexane	9.51	84	99212	54.47 ug/L	96
52)	1,1,1-trichloroethane	9.44	97	114524	64.15 ug/L	99
53)	tert-amyl methyl ether	9.95	73	207047	51.35 ug/L	97
56)	epichlorohydrin	11.65	57	27186	247.82 ug/L	97
57)	n-butyl alcohol	10.47	56	88902	2256.13 ug/L	99
58)	carbon tetrachloride	9.65	117	103420	65.99 ug/L	92
59)	1,1-dichloropropene	9.63	75	100074	60.00 ug/L	100
60)	hexane	7.74	57	64450	46.82 ug/L	90
61)	benzene	9.89	78	287988	54.64 ug/L	99
62)	Iso-octane	9.91	57	198922	45.59 ug/L	97
63)	heptane	10.10	71	38524	42.91 ug/L	95
65)	isopropyl acetate	9.85	43	100038	43.36 ug/L	99
66)	1,2-dichloroethane	9.92	62	89823	56.59 ug/L	98
67)	trichloroethene	10.66	95	73613	59.36 ug/L	99
70)	methylcyclohexane	10.88	83	97411	51.38 ug/L #	67
71)	2-chloroethyl vinyl ether	11.52	63	197442	273.64 ug/L	99
72)	methyl methacrylate	10.97	69	37154	47.89 ug/L	98
73)	1,2-dichloropropane	10.93	63	77999	53.14 ug/L	96
74)	dibromomethane	11.10	93	41046	54.34 ug/L	97
75)	bromodichloromethane	11.25	83	98630	56.37 ug/L	99
76)	cis-1,3-dichloropropene	11.75	75	121381	55.44 ug/L	96
78)	4-methyl-2-pentanone	11.86	58	22972	49.05 ug/L	98
79)	toluene	12.14	92	185778	56.45 ug/L	99
80)	3-methyl-1-butanol	11.90	55	61916	938.30 ug/L	96
81)	trans-1,3-dichloropropene	12.37	75	104457	56.21 ug/L	99
82)	ethyl methacrylate	12.37	69	77596	49.79 ug/L	99
83)	1,1,2-trichloroethane	12.60	83	49881	51.50 ug/L	97
84)	2-hexanone	12.81	58	19968	47.46 ug/L	100
86)	tetrachloroethene	12.79	164	72564	60.84 ug/L	98
87)	1,3-dichloropropane	12.80	76	99055	49.04 ug/L	98
88)	butyl acetate	12.90	56	34620	42.66 ug/L	99
89)	dibromochloromethane	13.09	129	78877	53.48 ug/L	99
90)	1,2-dibromoethane	13.26	107	61116	52.03 ug/L	97
92)	chlorobenzene	13.78	112	210951	51.10 ug/L	99
93)	1,1,1,2-tetrachloroethane	13.85	131	81903	53.69 ug/L	97
94)	ethylbenzene	13.84	91	348361	53.12 ug/L	98
95)	m,p-xylene	13.97	106	279925	107.45 ug/L	100
96)	o-xylene	14.44	106	139112	52.05 ug/L	97
97)	styrene	14.46	104	227197	52.71 ug/L	98
98)	bromoform	14.75	173	55127	50.76 ug/L	98
100)	isopropylbenzene	14.83	105	341150	50.84 ug/L	99
101)	cyclohexanone	15.01	55	40666	745.12 ug/L	99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192520.D Vial: 100
Acq On : 12 Mar 2013 1:31 pm Operator: Oksanat
Sample : jb30917-2msd Inst : MSA
Misc : MS44556,VA7250,4.5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:20 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

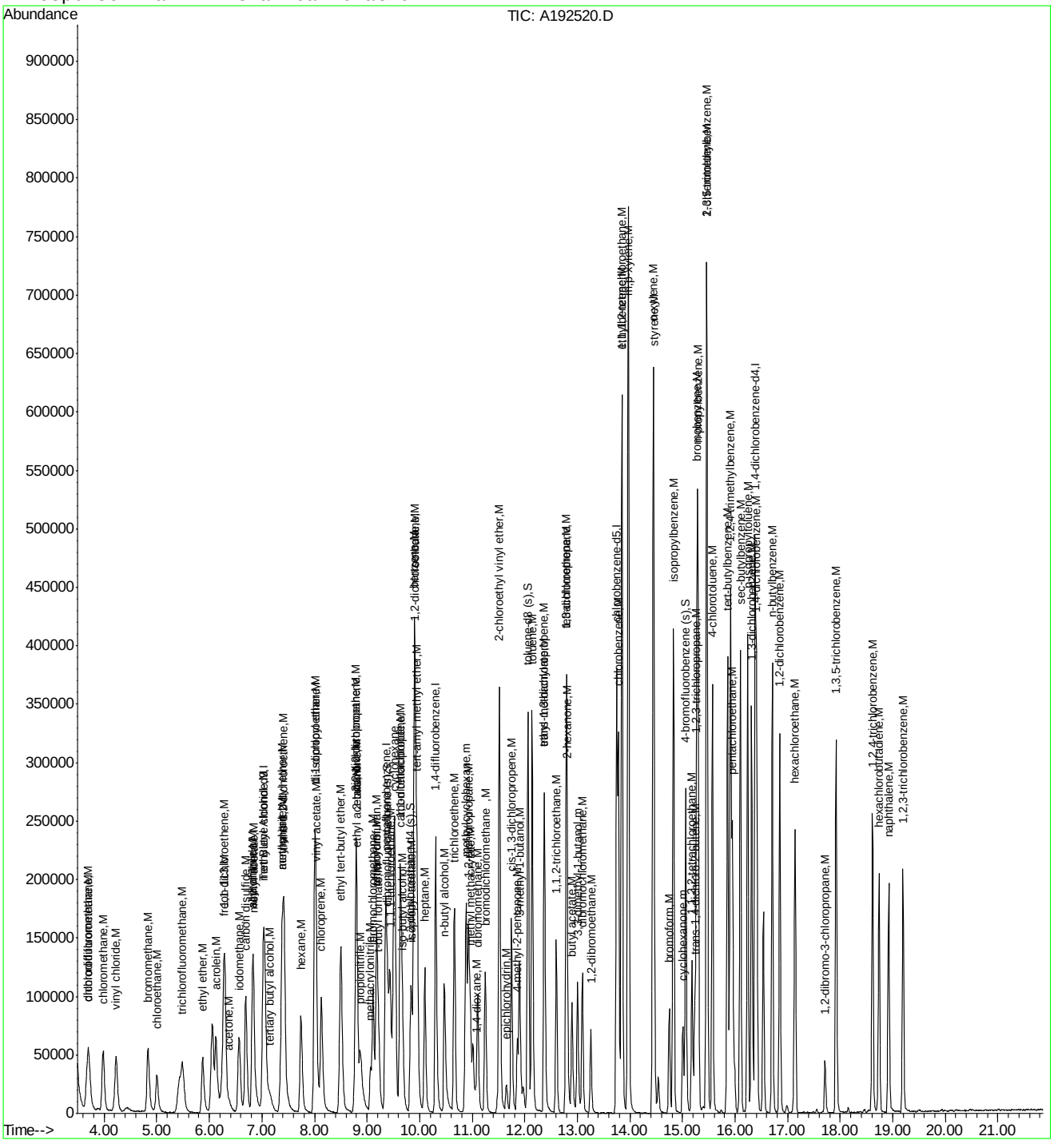
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
103) bromobenzene	15.28	156	100423	51.56 ug/L	95
104) 1,1,2,2-tetrachloroethane	15.18	83	82034	42.25 ug/L	98
105) trans-1,4-dichloro-2-buten	15.23	53	18423	43.22 ug/L	93
106) 1,2,3-trichloropropane	15.26	110	19599	46.58 ug/L	95
107) n-propylbenzene	15.29	91	391461	50.28 ug/L	99
108) 2-chlorotoluene	15.45	126	91109	51.19 ug/L	88
109) 4-chlorotoluene	15.57	91	250247	47.56 ug/L	100
111) 1,3,5-trimethylbenzene	15.46	105	289834	48.66 ug/L	98
112) tert-butylbenzene	15.86	119	243812	48.79 ug/L	99
113) pentachloroethane	15.95	167	61848	46.84 ug/L	97
114) 1,2,4-trimethylbenzene	15.91	105	292150	47.68 ug/L	98
115) sec-butylbenzene	16.10	105	357938	45.58 ug/L	99
116) 1,3-dichlorobenzene	16.31	146	178707	48.10 ug/L	98
117) p-isopropyltoluene	16.24	119	300503	46.25 ug/L	100
119) 1,4-dichlorobenzene	16.41	146	178372	45.43 ug/L	97
121) 1,2-dichlorobenzene	16.85	146	171002	46.86 ug/L	98
122) n-butylbenzene	16.71	92	146029	40.97 ug/L	99
124) 1,2-dibromo-3-chloropropan	17.71	75	12607	45.18 ug/L	89
125) 1,3,5-trichlorobenzene	17.92	180	132276	42.71 ug/L	99
126) 1,2,4-trichlorobenzene	18.61	180	103255	39.73 ug/L	99
127) hexachlorobutadiene	18.74	225	59321	37.49 ug/L	96
128) naphthalene	18.92	128	189879	38.63 ug/L	99
129) 1,2,3-trichlorobenzene	19.20	180	88417	37.78 ug/L	98
130) hexachloroethane	17.14	201	60282	50.14 ug/L	98

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

Quantitation Report

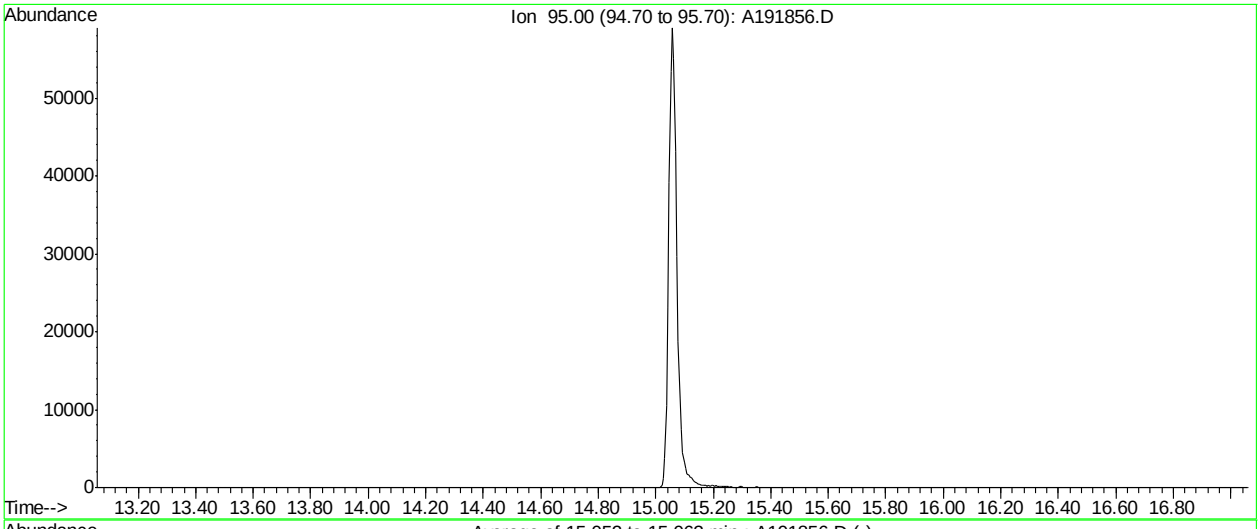
Data File : C:\HPCHEM\1\DATA\A192520.D Vial: 100
Acq On : 12 Mar 2013 1:31 pm Operator: Oksanat
Sample : jb30917-2msd Inst : MSA
Misc : MS44556,VA7250,4.5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:20 2013 Quant Results File: MA7222.RES

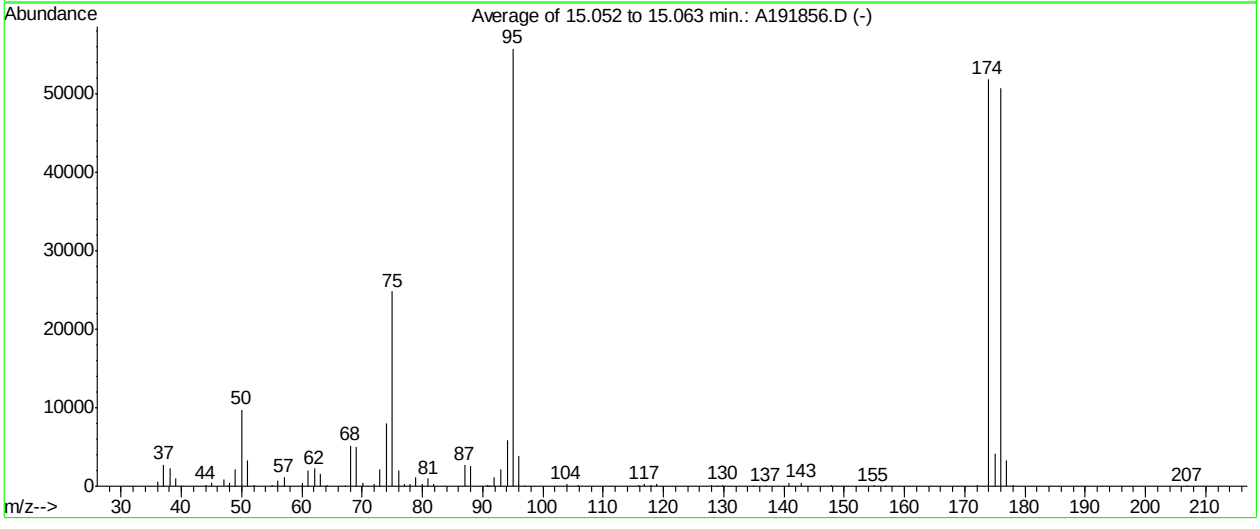
Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration



SW-846 Method 8260

Data File : C:\HPCHEM\1\DATA\A191856.D Vial: 100
Acq On : 20 Feb 2013 12:14 pm Operator: Oksanat
Sample : bfb Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2211, 2212, 2213; Background Corrected with Scan 2202

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.5	9740	PASS
75	95	30	60	44.5	24837	PASS
95	95	100	100	100.0	55805	PASS
96	95	5	9	6.8	3797	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	93.0	51915	PASS
175	174	5	9	8.0	4176	PASS
176	174	95	101	97.9	50803	PASS
177	176	5	9	6.5	3296	PASS

A191856.D MA7222.M Thu Feb 21 08:32:01 2013 MSA

Average of 15.052 to 15.063 min.: A191856.D
bfb
Modified:subtracted

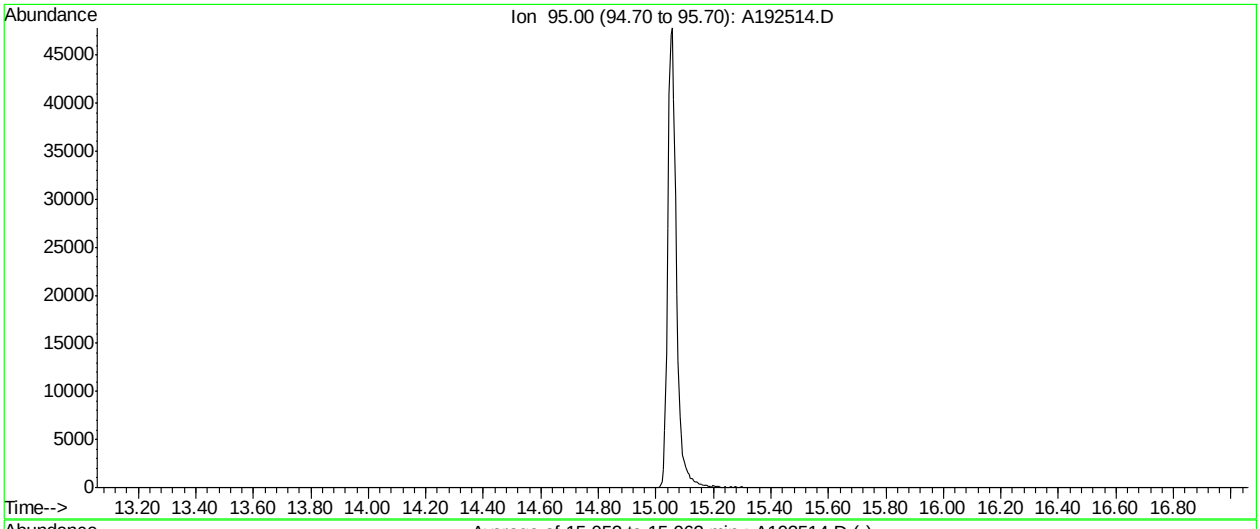
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	558	50.00	9740	67.10	64	78.90	1079
37.05	2737	51.05	3250	68.00	5173	79.95	340
38.05	2331	52.05	130	69.00	5002	80.95	995
39.10	947	55.05	155	70.05	372	81.90	236
40.00	42	56.00	678	72.05	327	87.00	2692
44.00	167	57.05	1202	73.00	2173	87.95	2619
45.05	446	60.00	486	74.00	7946	90.85	104
47.00	831	61.05	1957	75.00	24837	91.00	49
47.70	71	62.05	2240	76.05	2055	91.20	37
48.05	369	63.00	1637	76.95	342	91.95	1174
49.00	2092	64.10	139	78.00	324	93.00	2168

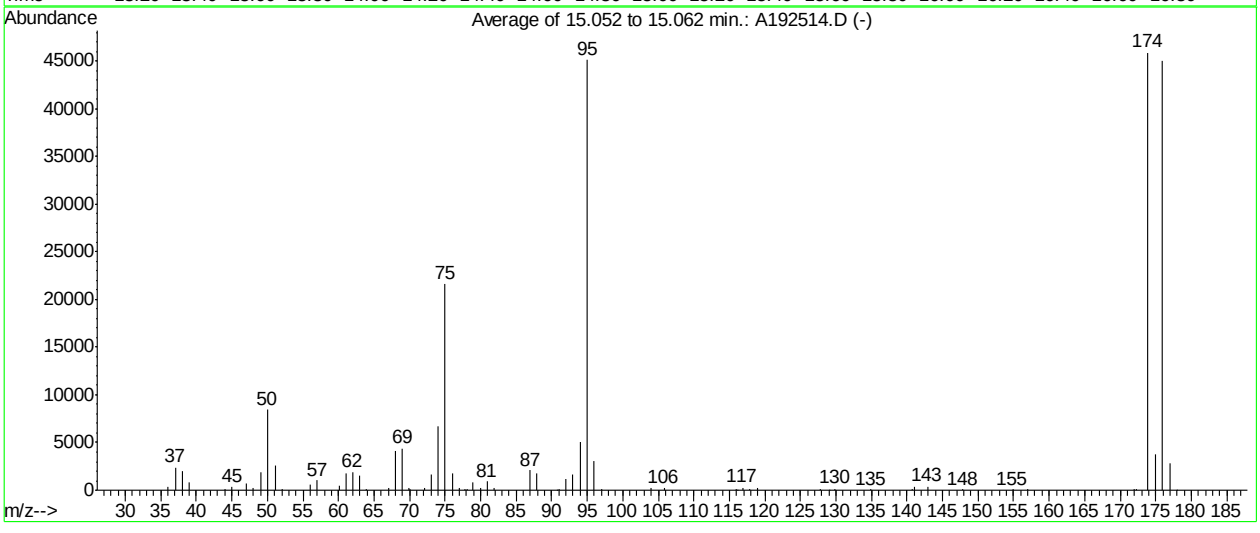
Average of 15.052 to 15.063 min.: A191856.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	5833	129.00	40	174.95	4176		
95.00	55805	129.90	205	175.90	50803		
96.05	3797	134.80	35	176.95	3296		
97.00	51	137.00	39	177.95	123		
103.95	230	140.90	478	206.90	38		
105.90	123	142.90	493				
115.85	168	147.85	84				
116.90	240	154.95	142				
117.90	119	156.80	72				
118.90	229	172.00	163				
127.95	179	173.90	51915				

SW-846 Method 8260

Data File : C:\HPCHEM\1\DATA\A192514.D Vial: 100
Acq On : 12 Mar 2013 9:18 am Operator: Oksanat
Sample : bfb Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2211, 2212, 2213; Background Corrected with Scan 2201

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	8453	PASS
75	95	30	60	47.9	21608	PASS
95	95	100	100	100.0	45088	PASS
96	95	5	9	6.7	3034	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	101.8	45891	PASS
175	174	5	9	8.2	3758	PASS
176	174	95	101	98.1	45035	PASS
177	176	5	9	6.3	2842	PASS

A192514.D MA7222.M Tue Mar 12 16:12:55 2013 MSA

Average of 15.052 to 15.062 min.: A192514.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	408	52.05	131	69.90	200	80.05	278
37.05	2356	56.05	651	70.10	82	80.90	928
38.05	2027	57.00	1038	72.05	249	81.90	227
39.05	839	60.05	442	73.00	1695	86.95	2109
44.00	146	61.00	1818	74.05	6688	87.95	1790
45.00	330	62.00	1908	75.00	21608	90.80	51
47.05	656	63.00	1475	76.00	1782	91.00	96
48.05	252	63.95	113	76.95	262	92.00	1122
49.05	1850	67.05	210	77.85	161	93.00	1659
50.00	8453	68.00	4139	78.05	112	94.00	5051
51.05	2602	69.00	4385	78.90	882	95.00	45088

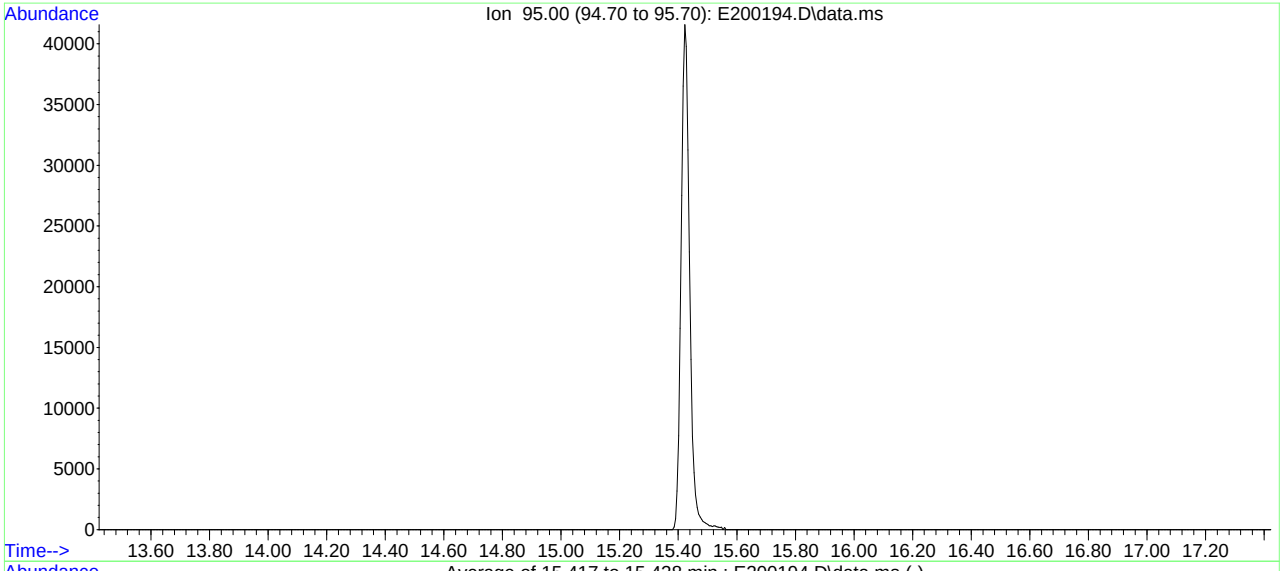
Average of 15.052 to 15.062 min.: A192514.D
bfb
Modified:subtracted

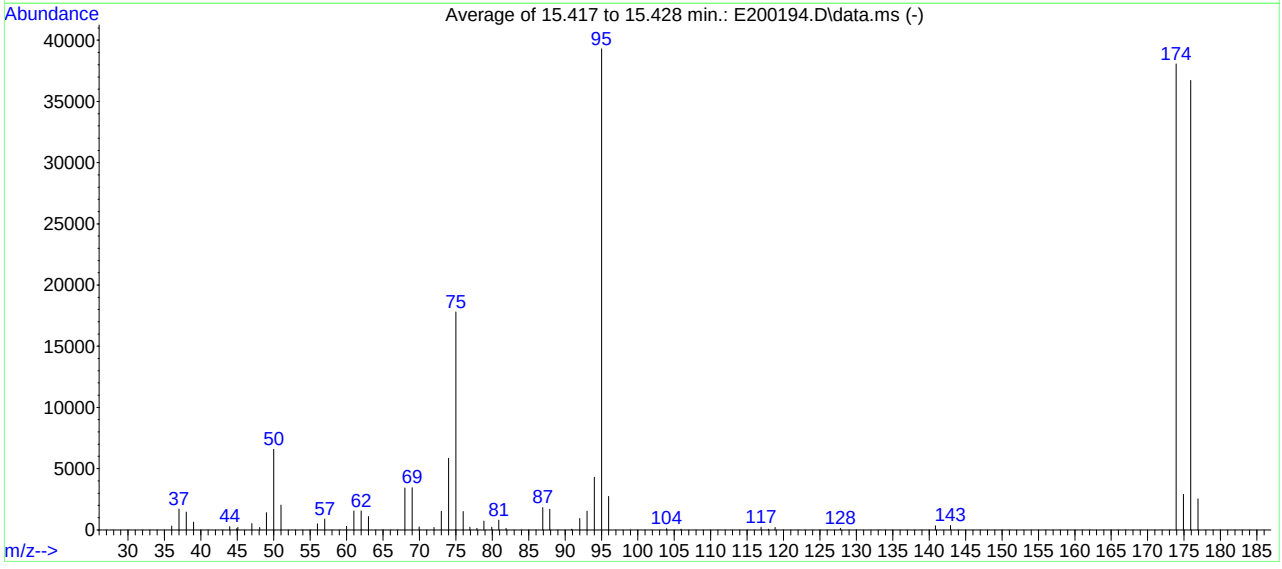
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	3034	129.85	171	174.95	3758		
97.00	76	134.95	77	175.90	45035		
103.90	184	140.80	115	176.95	2842		
105.85	192	141.00	308	177.90	36		
115.90	84	142.90	362				
116.10	55	147.85	81				
116.90	237	154.85	110				
117.85	131	157.00	105				
118.95	190	171.95	169				
127.80	137	172.20	87				
129.10	34	173.90	45891				

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\e-core initial\E200194.D Vial: 1
Acq On : 22 Feb 2013 8:23 am Operator: OksanaT
Sample : bfb Inst : MSE
Misc : MS43512,VE8801,5,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\ME8801.M (RTE Integrator)
Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2166, 2167, 2168; Background Corrected with Scan 2157

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	6576	PASS
75	95	30	60	45.3	17805	PASS
95	95	100	100	100.0	39293	PASS
96	95	5	9	7.0	2733	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	96.9	38072	PASS
175	174	5	9	7.6	2908	PASS
176	174	95	101	96.5	36725	PASS
177	176	5	9	6.9	2537	PASS

E200194.D ME8801.M Fri Feb 22 14:29:05 2013

Average of 15.417 to 15.428 min.: E200194.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	317	51.00	2017	73.00	1518	87.90	1693
37.00	1700	56.00	490	74.00	5844	90.90	52
38.00	1464	57.00	890	75.00	17805	92.00	930
39.00	622	60.00	292	76.00	1497	93.00	1534
43.95	256	61.00	1544	76.95	220	94.00	4302
44.90	100	62.00	1555	77.90	124	95.00	39293
45.05	187	63.00	1098	78.85	712	96.00	2733
47.00	520	68.00	3417	79.95	219	103.95	102
48.05	206	69.00	3453	80.90	790	105.90	51
49.00	1417	69.95	253	81.90	116	116.90	213
50.00	6576	72.00	191	86.95	1811	117.90	51

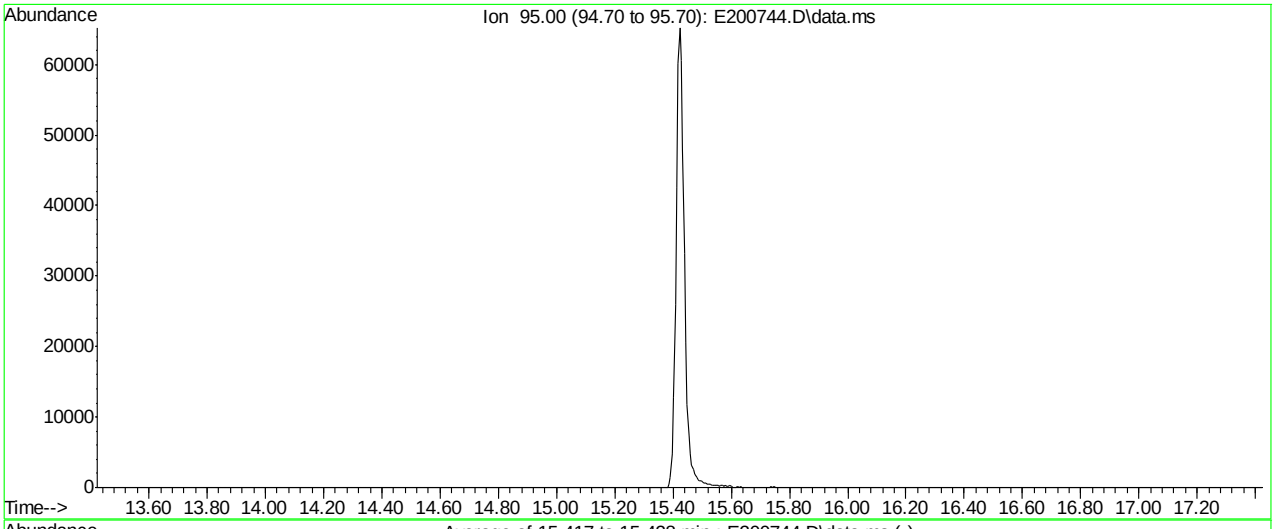
Average of 15.417 to 15.428 min.: E200194.D\data.ms
bfb
Modified:subtracted

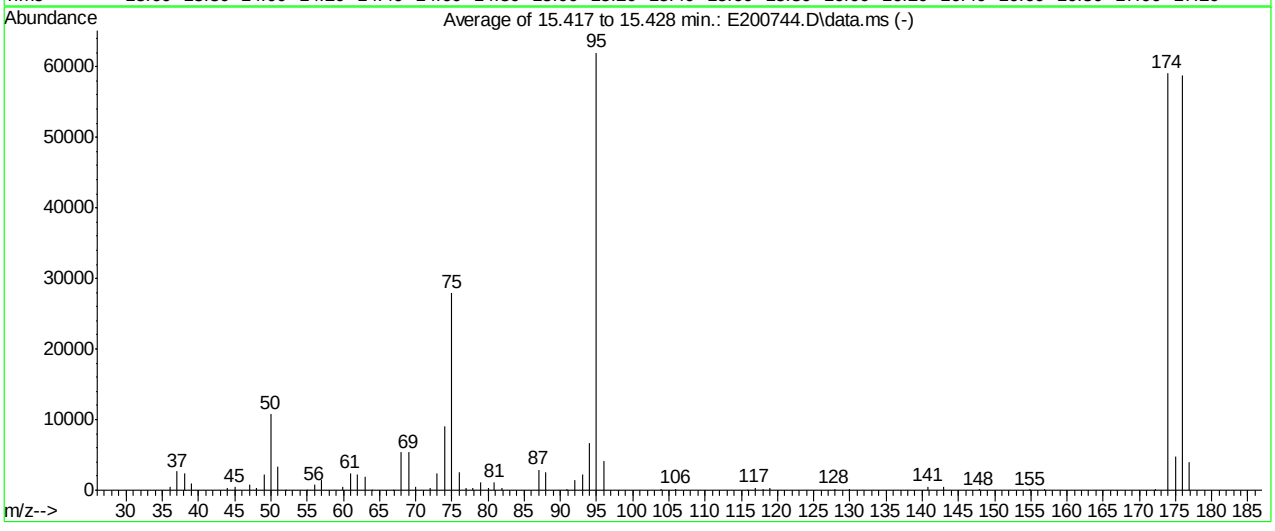
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.85	197						
127.80	119						
140.85	337						
142.95	349						
173.90	38072						
174.90	2908						
175.90	36725						
176.90	2537						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\E200744.D Vial: 22
Acq On : 11 Mar 2013 10:38 pm Operator: OksanaT
Sample : bfb Inst : MSE
Misc : MS44353,VE8827,5,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\ME8801.M (RTE Integrator)
Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2166, 2167, 2168; Background Corrected with Scan 2157

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	10742	PASS
75	95	30	60	45.0	27928	PASS
95	95	100	100	100.0	62008	PASS
96	95	5	9	6.7	4139	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	95.4	59130	PASS
175	174	5	9	7.9	4697	PASS
176	174	95	101	99.3	58688	PASS
177	176	5	9	6.7	3928	PASS

E200744.D ME8801.M Tue Mar 12 12:45:31 2013 RPT1

Average of 15.417 to 15.428 min.: E200744.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	555	52.00	63	69.00	5397	80.90	1125
37.00	2648	55.00	72	69.95	424	81.85	295
38.05	2416	56.00	756	72.00	266	87.00	2891
39.05	957	57.00	1419	73.00	2406	87.95	2485
44.00	250	59.95	505	74.00	9033	90.95	203
45.00	457	61.00	2411	75.00	27928	92.00	1375
47.05	795	62.00	2261	76.00	2514	93.00	2288
47.95	292	63.00	1936	77.00	328	94.00	6620
49.00	2276	64.00	60	77.95	357	95.00	62008
50.00	10742	66.90	59	78.90	1060	96.00	4139
51.00	3275	68.00	5380	80.00	341	103.95	204

Average of 15.417 to 15.428 min.: E200744.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.95	216	156.90	103				
115.90	72	172.30	88				
116.90	394	173.90	59130				
117.95	121	175.00	4697				
118.90	267	175.90	58688				
127.85	219	176.95	3928				
129.95	139						
140.85	505						
142.90	471						
147.85	123						
154.90	122						

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 02/25/13 12:35

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:17 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.01	65	72419	500.00 ug/L	-0.01
5) pentafluorobenzene	9.35	168	202588	50.00 ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	281752	50.00 ug/L	0.00
85) chlorobenzene-d5	13.74	117	261449	50.00 ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	149446	50.00 ug/L	0.00

System Monitoring Compounds

47) dibromofluoromethane (s)	0.00	113	0d	0.00 ug/L	
Spiked Amount 50.000	Range 81 - 121		Recovery	= 0.00%#	
48) 1,2-dichloroethane-d4 (s)	0.00	65	0d	0.00 ug/L	
Spiked Amount 50.000	Range 74 - 127		Recovery	= 0.00%#	
77) toluene-d8 (s)	0.00	98	0d	0.00 ug/L	
Spiked Amount 50.000	Range 80 - 122		Recovery	= 0.00%#	
102) 4-bromofluorobenzene (s)	0.00	95	0d	0.00 ug/L	
Spiked Amount 50.000	Range 78 - 116		Recovery	= 0.00%#	

Target Compounds

						Qvalue
9) chloromethane	3.98	50	1362m	0.57 ug/L		
10) vinyl chloride	4.21	62	978	0.49 ug/L		82
11) bromomethane	4.83	94	772	0.59 ug/L	#	62
15) pentane	5.53	43	1173	0.42 ug/L	#	78
16) ethyl ether	5.88	74	562m	0.60 ug/L		
19) 1,1-dichloroethene	6.27	96	452	0.35 ug/L		88
23) iodomethane	6.57	142	1479	0.54 ug/L	#	43
25) carbon disulfide	6.69	76	2267	0.45 ug/L		88
28) methyl tert butyl ether	7.39	73	2303m	0.46 ug/L		
29) trans-1,2-dichloroethene	7.43	96	614	0.41 ug/L	#	45
30) di-isopropyl ether	8.03	45	2432	0.37 ug/L		89
33) ethyl tert-butyl ether	8.51	59	2117	0.36 ug/L		89
35) 1,1-dichloroethane	8.02	63	1186	0.40 ug/L		85
41) 2,2-dichloropropane	8.79	77	1085	0.48 ug/L		77
42) cis-1,2-dichloroethene	8.80	96	827m	0.49 ug/L		
46) chloroform	9.19	83	1378	0.48 ug/L		84
52) 1,1,1-trichloroethane	9.42	97	898m	0.41 ug/L		
53) tert-amyl methyl ether	9.96	73	2002	0.36 ug/L		88
58) carbon tetrachloride	9.65	117	828m	0.48 ug/L		
59) 1,1-dichloropropene	9.65	75	897	0.47 ug/L		90
61) benzene	9.91	78	3226	0.55 ug/L		91
62) Iso-octane	9.89	57	1929m	0.33 ug/L		
66) 1,2-dichloroethane	9.94	62	953	0.46 ug/L		82
67) trichloroethene	10.67	95	693	0.50 ug/L		83
69) tert-amyl ethyl ether	10.85	87	767m	0.32 ug/L		
70) methylcyclohexane	10.89	83	868	0.37 ug/L	#	12
73) 1,2-dichloropropane	10.95	63	830	0.48 ug/L		80
75) bromodichloromethane	11.26	83	1023	0.49 ug/L		79
76) cis-1,3-dichloropropene	11.76	75	1292	0.49 ug/L		74
79) toluene	12.16	92	2082	0.57 ug/L		87
81) trans-1,3-dichloropropene	12.39	75	918	0.38 ug/L	#	70
83) 1,1,2-trichloroethane	12.61	83	551	0.46 ug/L		82
86) tetrachloroethene	12.80	164	619	0.52 ug/L		76

(#) = qualifier out of range (m) = manual integration
A191857.D MA7222.M Thu Feb 21 08:17:37 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:17 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

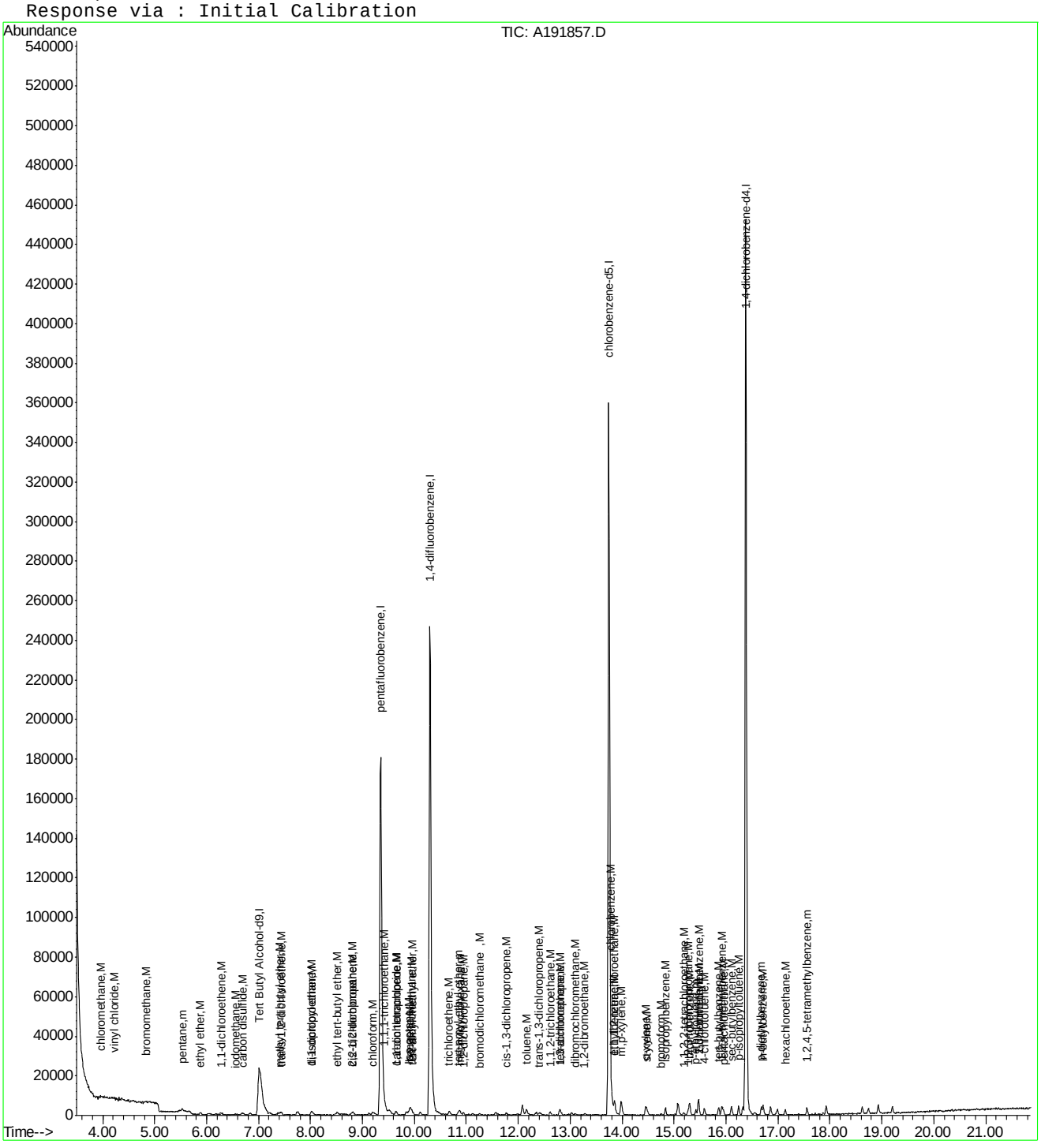
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
87)	1,3-dichloropropane	12.82	76	1192	0.51	ug/L		79
89)	dibromochloromethane	13.09	129	807	0.49	ug/L		71
90)	1,2-dibromoethane	13.27	107	543	0.40	ug/L		96
92)	chlorobenzene	13.78	112	2555	0.58	ug/L		94
93)	1,1,1,2-tetrachloroethane	13.85	131	912	0.57	ug/L		84
94)	ethylbenzene	13.86	91	3761	0.53	ug/L		96
95)	m,p-xylene	13.98	106	3025	1.11	ug/L	#	60
96)	o-xylene	14.45	106	1620	0.59	ug/L	#	81
97)	styrene	14.47	104	2243	0.46	ug/L		92
98)	bromoform	14.75	173	640	0.58	ug/L	#	37
100)	isopropylbenzene	14.84	105	3765	0.52	ug/L		90
103)	bromobenzene	15.28	156	1083	0.53	ug/L		86
104)	1,1,2,2-tetrachloroethane	15.19	83	1287	0.59	ug/L		80
106)	1,2,3-trichloropropane	15.26	110	256	0.53	ug/L	#	17
108)	2-chlorotoluene	15.47	126	1026	0.56	ug/L	#	74
109)	4-chlorotoluene	15.58	91	3148	0.55	ug/L		92
110)	p-ethyltoluene	15.42	105	2904	0.38	ug/L		97
111)	1,3,5-trimethylbenzene	15.47	105	3820	0.59	ug/L		92
112)	tert-butylbenzene	15.87	119	2677	0.51	ug/L		80
113)	pentachloroethane	15.96	167	813	0.62	ug/L		83
114)	1,2,4-trimethylbenzene	15.92	105	3590	0.54	ug/L		88
115)	sec-butylbenzene	16.11	105	4497	0.56	ug/L		93
117)	p-isopropyltoluene	16.24	119	3766	0.57	ug/L		89
120)	p-diethylbenzene	16.68	119	1640	0.40	ug/L		91
122)	n-butylbenzene	16.71	92	1840	0.49	ug/L		91
123)	1,2,4,5-tetramethylbenzene	17.56	119	2585	0.37	ug/L	#	96
130)	hexachloroethane	17.15	201	638	0.55	ug/L		92

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:17 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Manual Integration Approval Summary

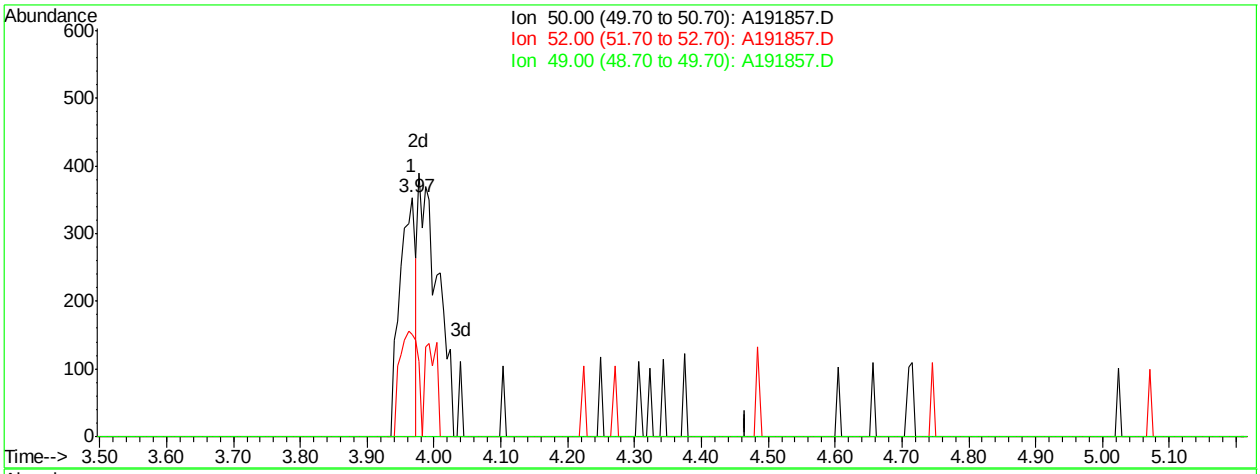
Sample Number:	VA7222-IC7222	**Method:**	SW846 8260B
Lab FileID:	A191857.D	**Analyst approved:**	02/21/13 08:34 Ying Li
Injection Time:	02/20/13 12:54	**Supervisor approved:**	02/25/13 12:35 Kanya Veerawat

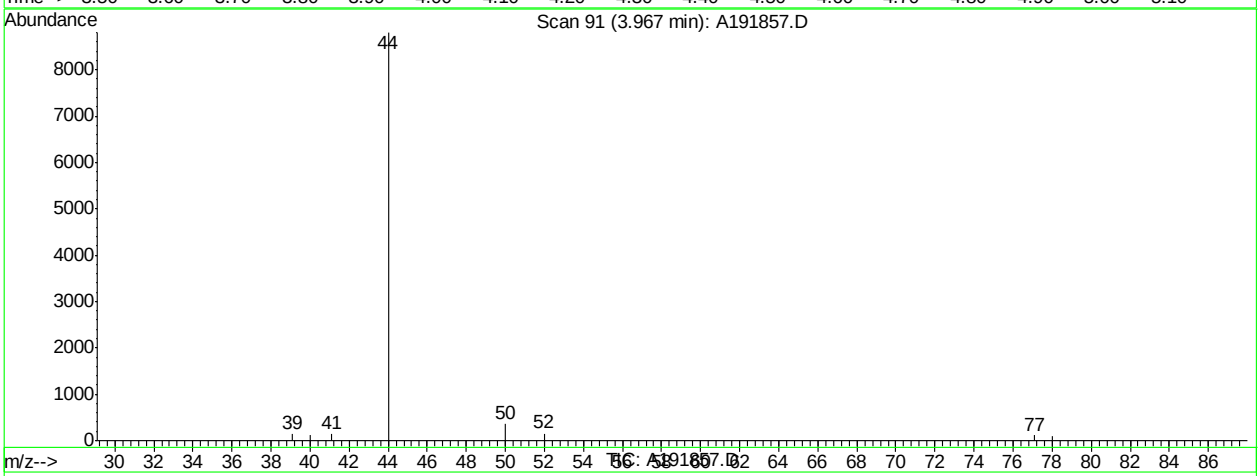
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chloromethane	74-87-3		3.98	Split peak
Ethyl Ether	60-29-7		5.88	Split peak
Methyl Tert Butyl Ether	1634-04-4		7.39	Split peak
cis-1,2-Dichloroethene	156-59-2		8.80	Split peak
1,1,1-Trichloroethane	71-55-6		9.42	Split peak
Carbon tetrachloride	56-23-5		9.65	Split peak
2,2,4-Trimethylpentane	540-84-1		9.89	Split peak
tert-amyl ethyl ether	919-94-8		10.85	Split peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:14 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(9) chloromethane (M)

3.97min 0.24ug/L

response 567

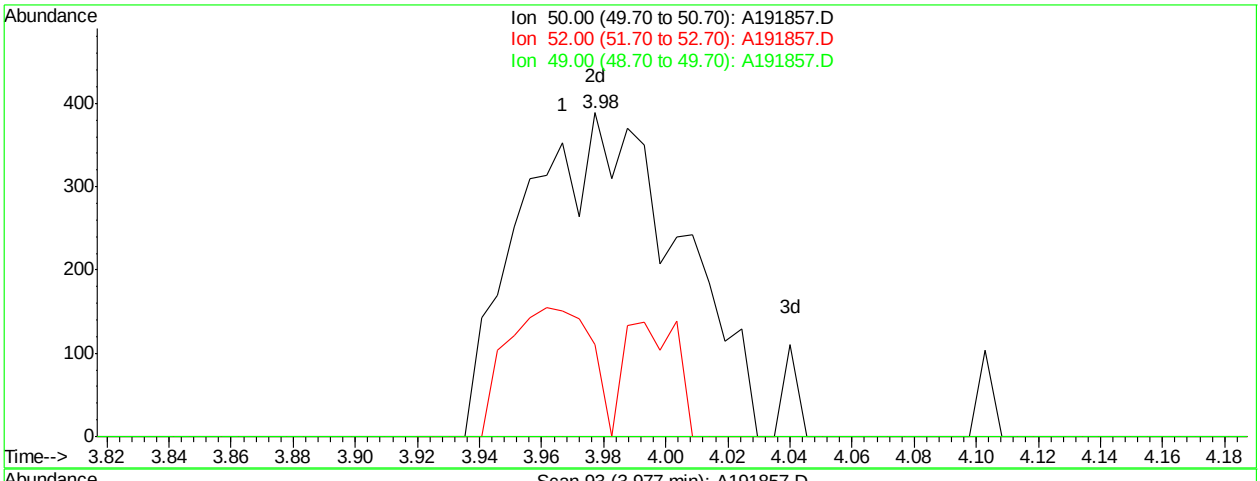
Ion	Exp%	Act%
50.00	100	100
52.00	32.70	42.78
49.00	10.10	0.00
0.00	0.00	0.00

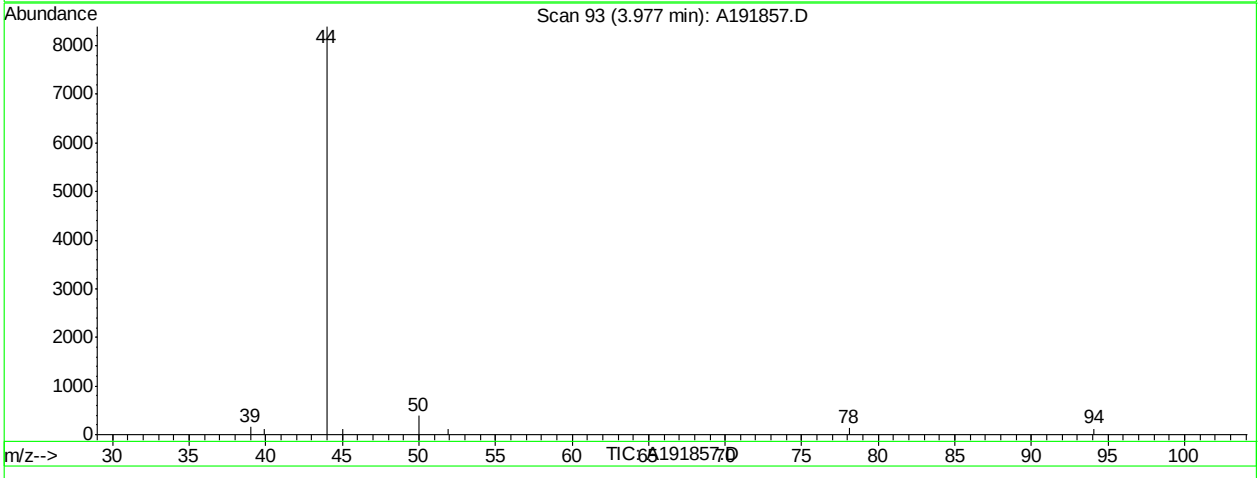
A191857.D MA7222.M Wed Feb 20 17:15:04 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:15 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(9) chloromethane (M)

3.98min 0.57ug/L m

response 1362

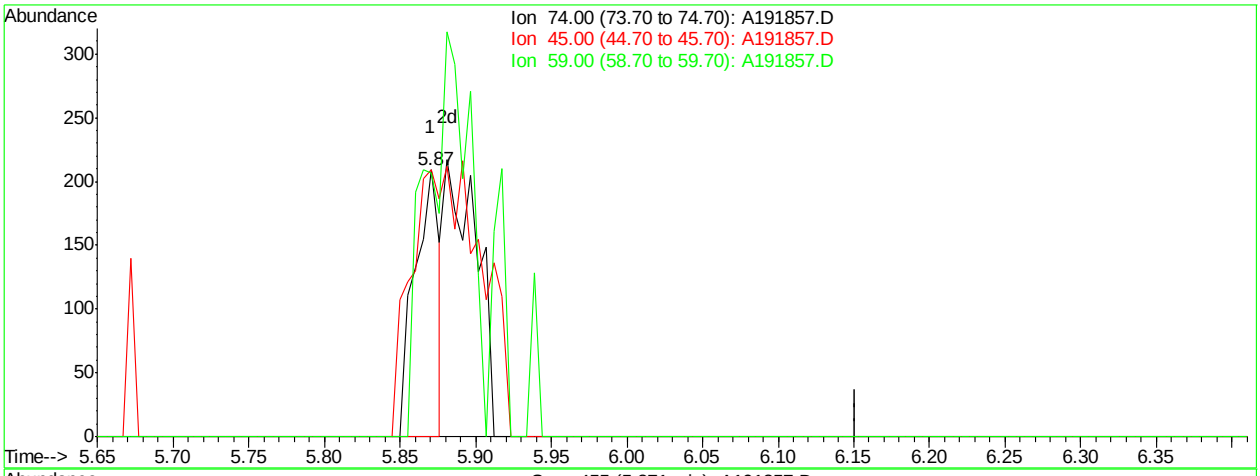
Ion	Exp%	Act%
50.00	100	100
52.00	32.70	28.53
49.00	10.10	0.00
0.00	0.00	0.00

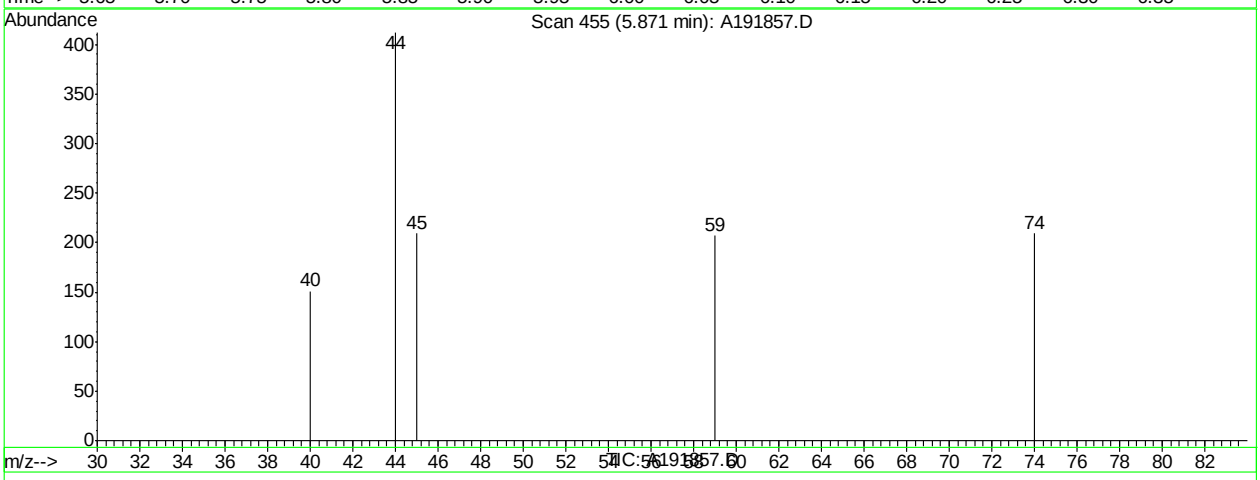
A191857.D MA7222.M Wed Feb 20 17:15:09 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:15 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(16) ethyl ether (M)

5.87min 0.26ug/L

response 239

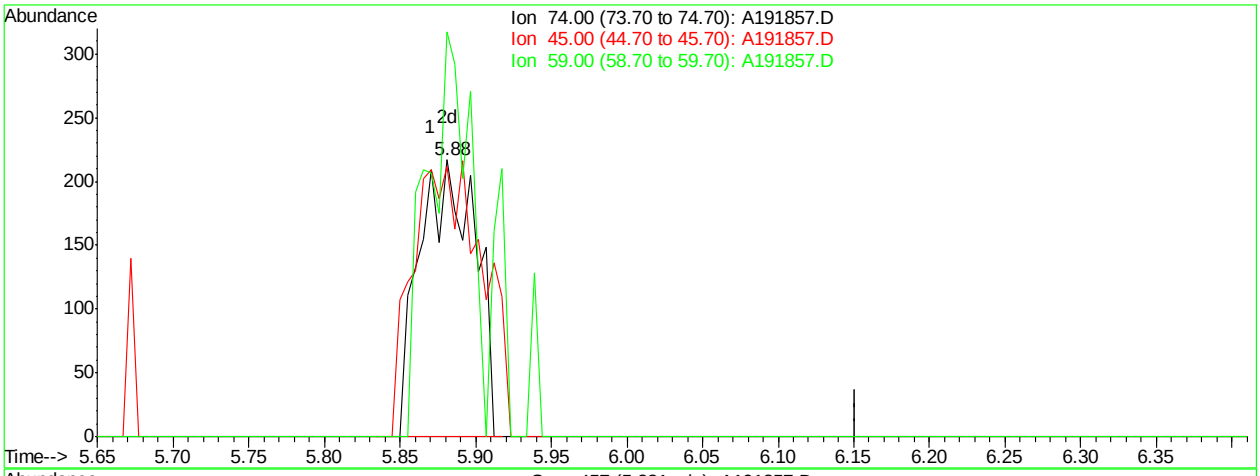
Ion	Exp%	Act%
74.00	100	100
45.00	129.50	100.00
59.00	158.90	99.04#
0.00	0.00	0.00

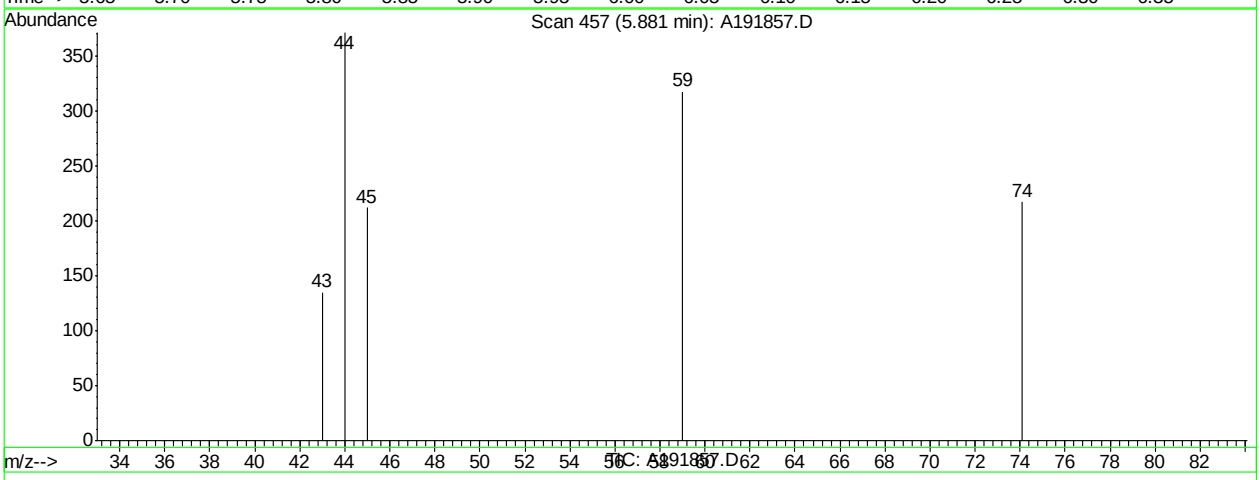
A191857.D MA7222.M Wed Feb 20 17:15:36 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:15 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(16) ethyl ether (M)

5.88min 0.60ug/L m

response 562

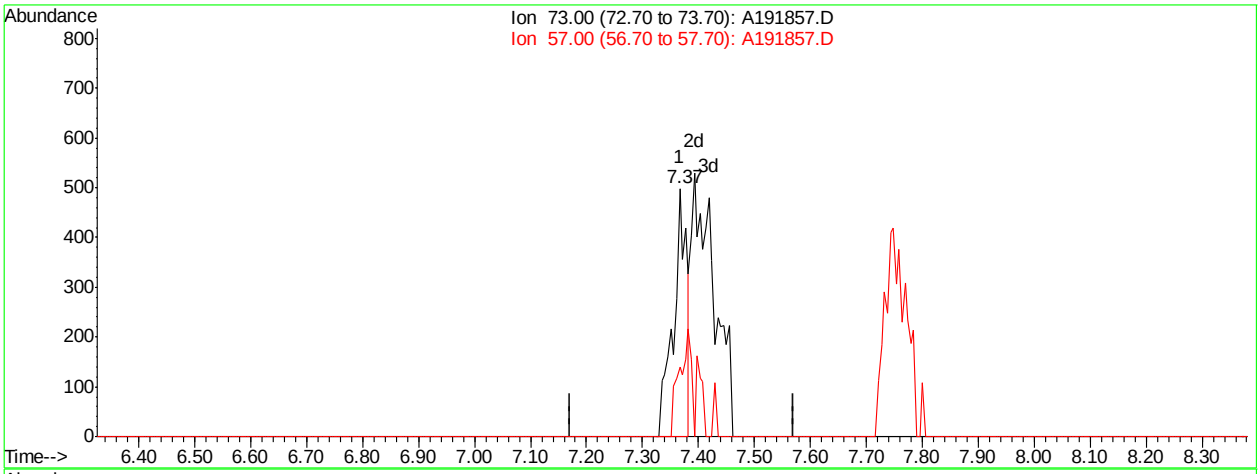
Ion	Exp%	Act%
74.00	100	100
45.00	129.50	97.70#
59.00	158.90	146.08
0.00	0.00	0.00

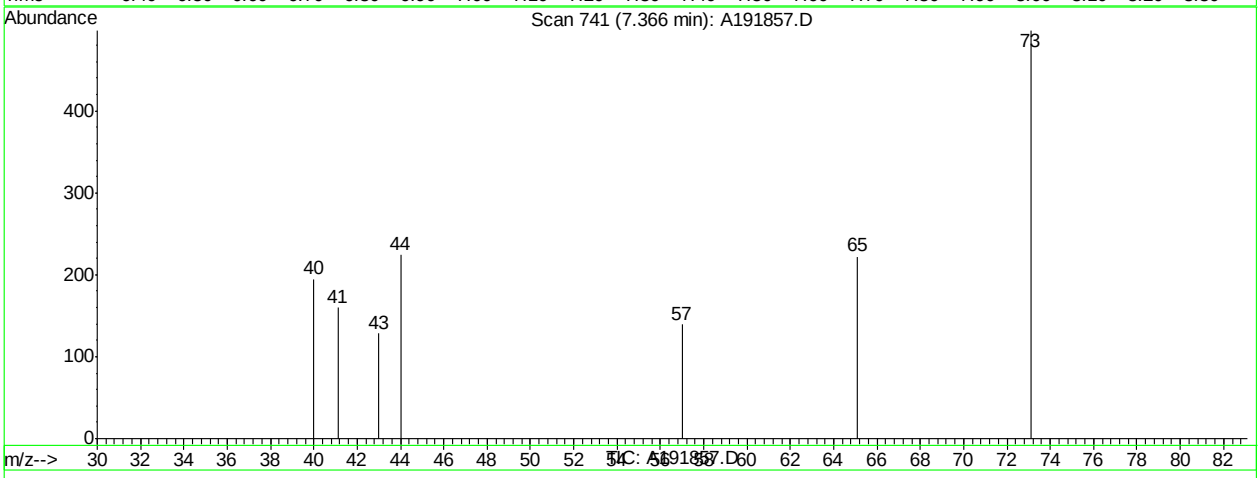
A191857.D MA7222.M Wed Feb 20 17:15:43 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:16 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(28) methyl tert butyl ether (M)

7.37min 0.17ug/L

response 833

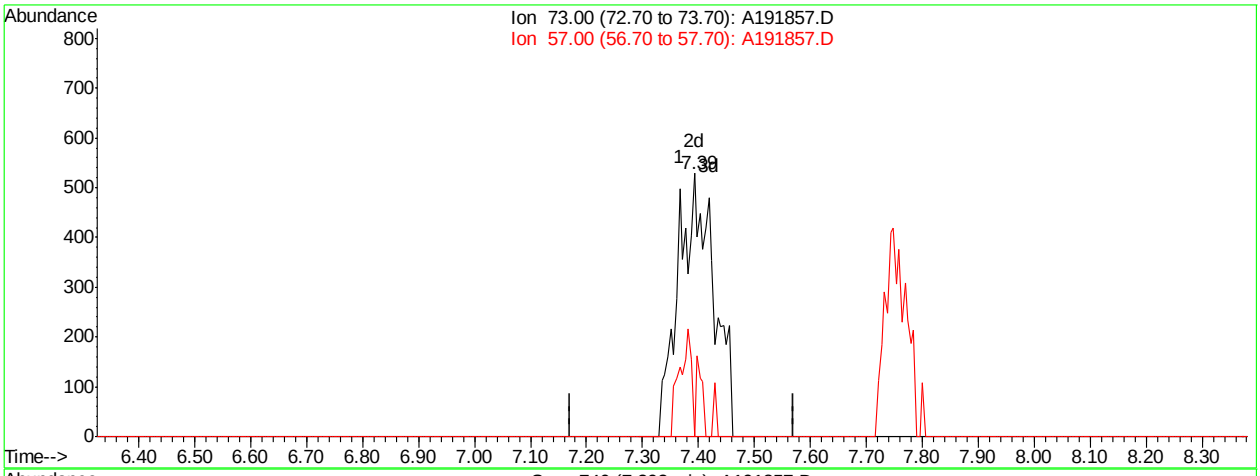
Ion	Exp%	Act%
73.00	100	100
57.00	23.90	37.94
0.00	0.00	0.00
0.00	0.00	0.00

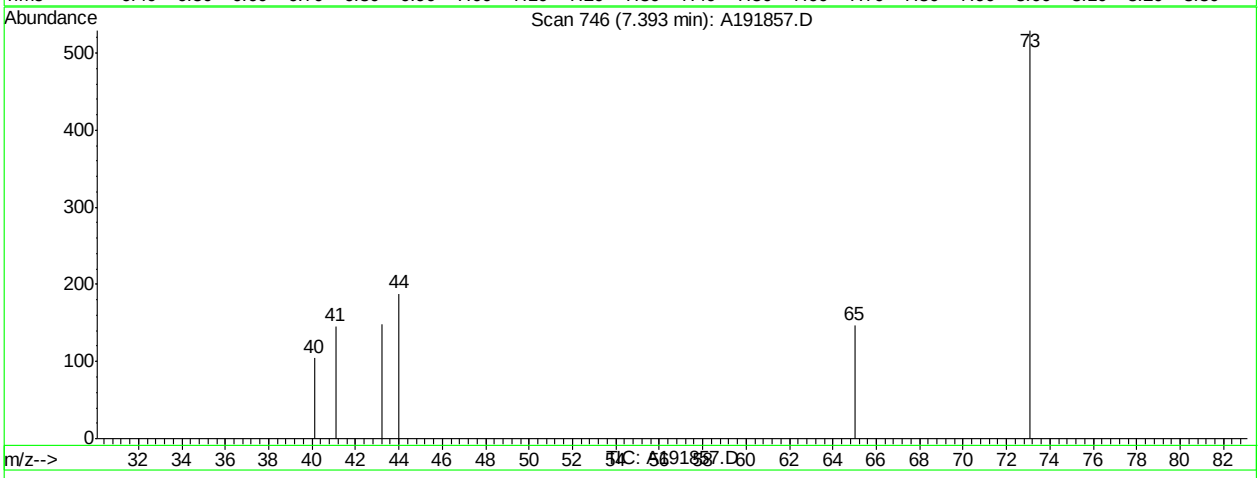
A191857.D MA7222.M Wed Feb 20 17:16:18 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:16 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(28) methyl tert butyl ether (M)

7.39min 0.46ug/L m

response 2303

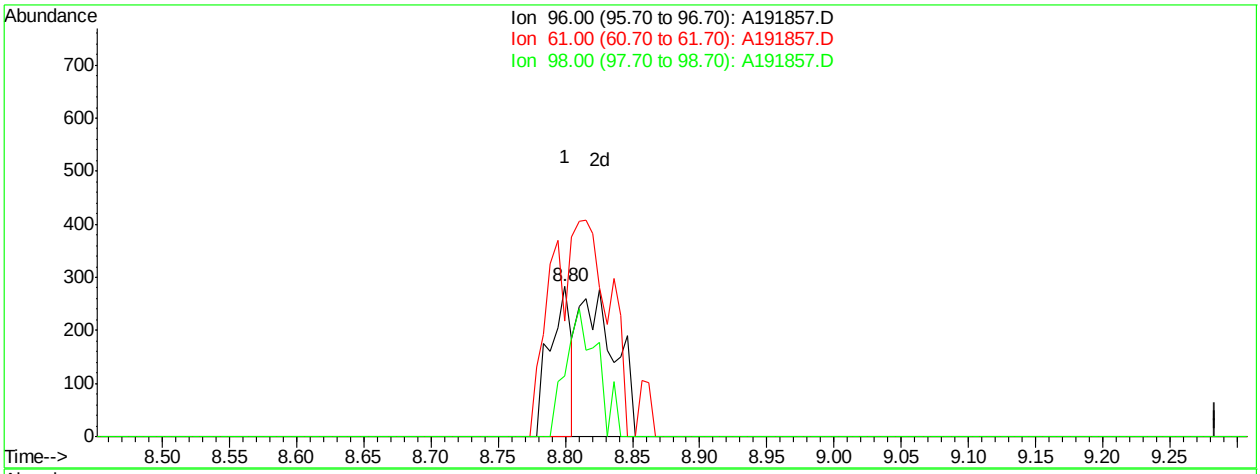
Ion	Exp%	Act%
73.00	100	100
57.00	23.90	13.72
0.00	0.00	0.00
0.00	0.00	0.00

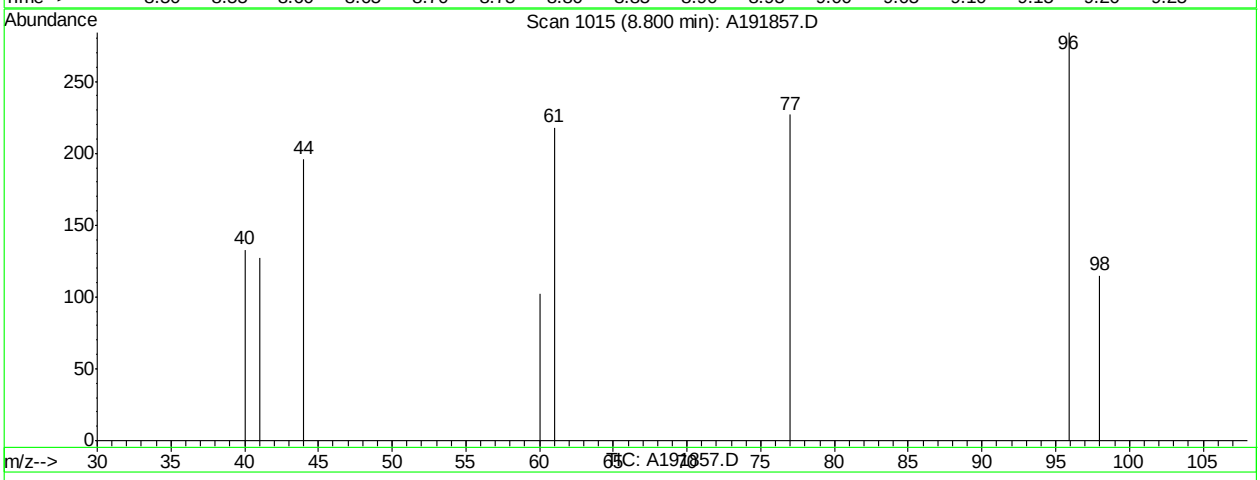
A191857.D MA7222.M Wed Feb 20 17:16:21 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:16 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(42) cis-1,2-dichloroethene (M)

8.80min 0.19ug/L

response 317

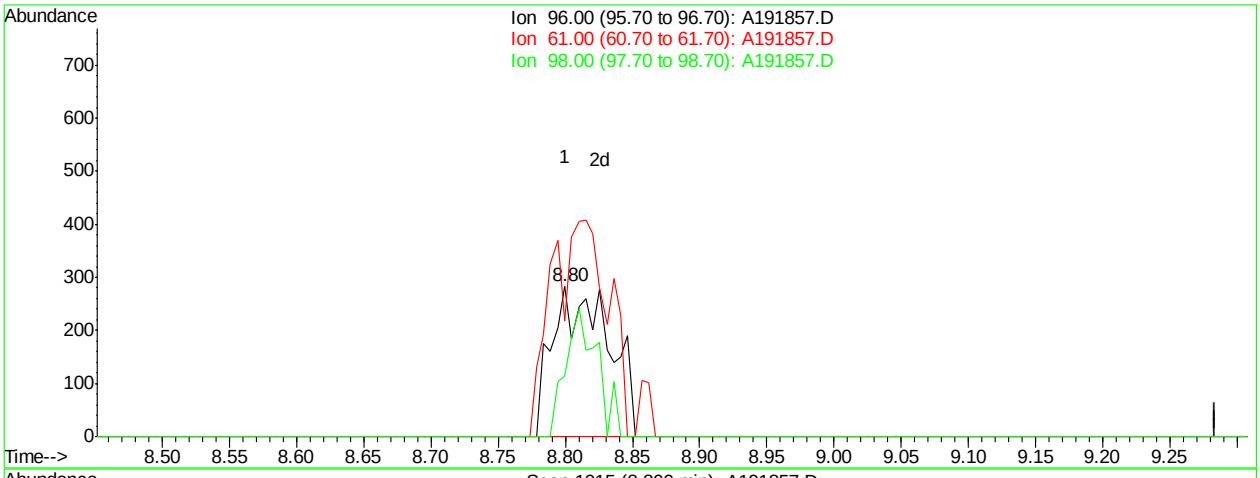
Ion	Exp%	Act%
96.00	100	100
61.00	166.50	76.76#
98.00	65.80	40.49
0.00	0.00	0.00

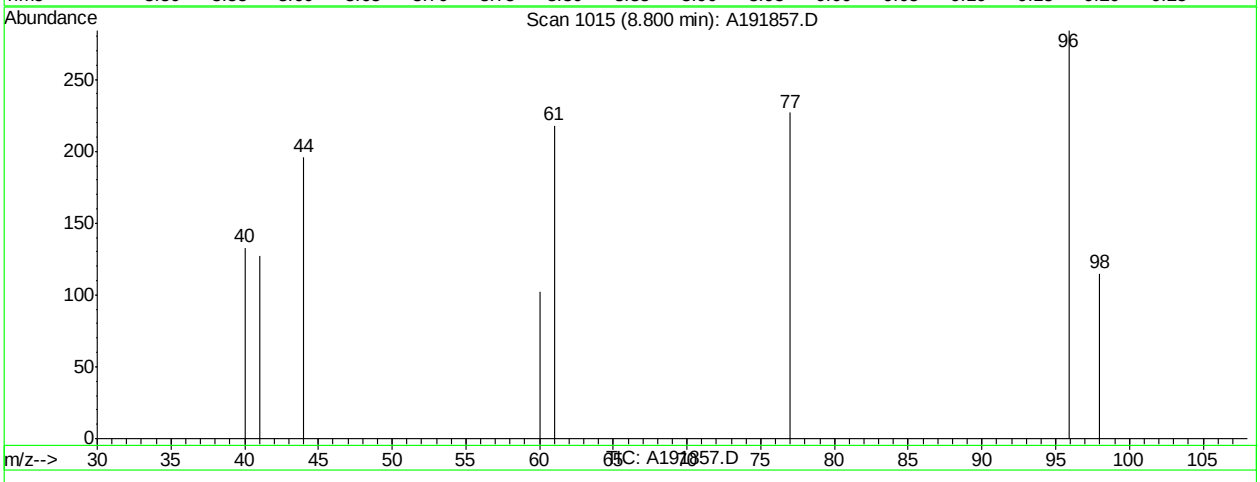
A191857.D MA7222.M Wed Feb 20 17:16:59 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:17 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(42) cis-1,2-dichloroethene (M)

8.80min 0.49ug/L m

response 827

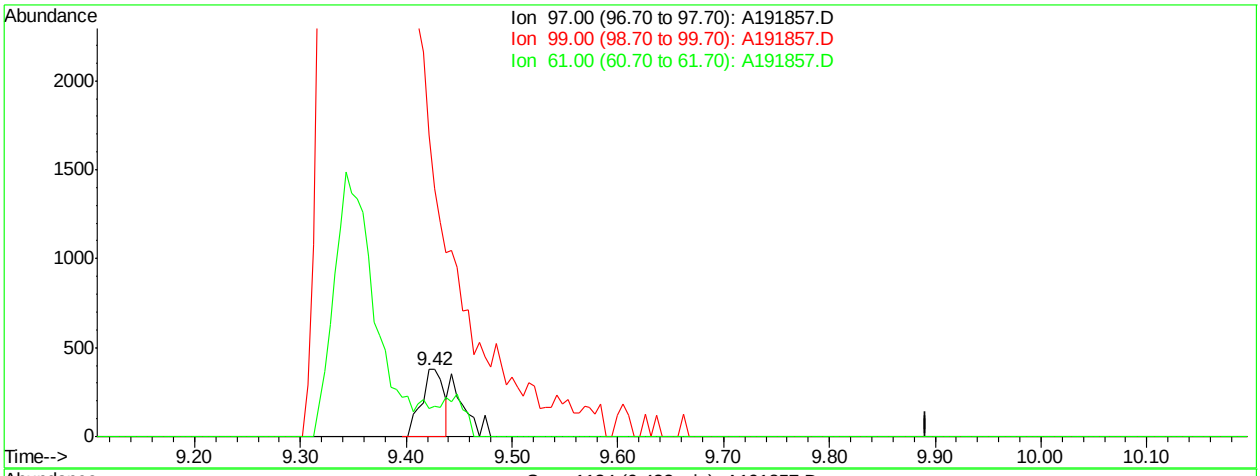
Ion	Exp%	Act%
96.00	100	100
61.00	166.50	76.76#
98.00	65.80	40.49
0.00	0.00	0.00

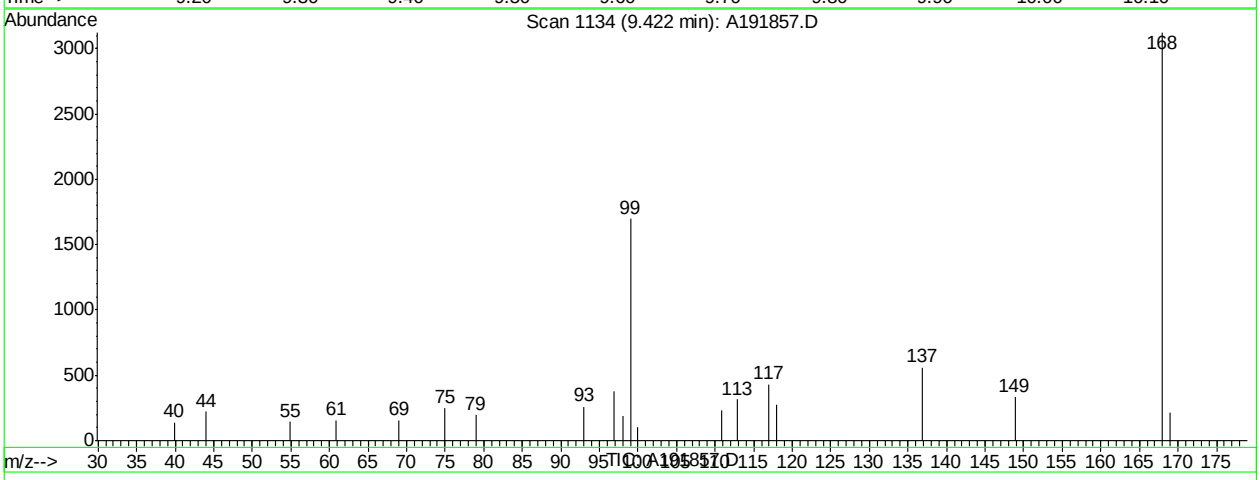
A191857.D MA7222.M Wed Feb 20 17:17:05 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:17 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(52) 1,1,1-trichloroethane (M)

9.42min 0.25ug/L

response 553

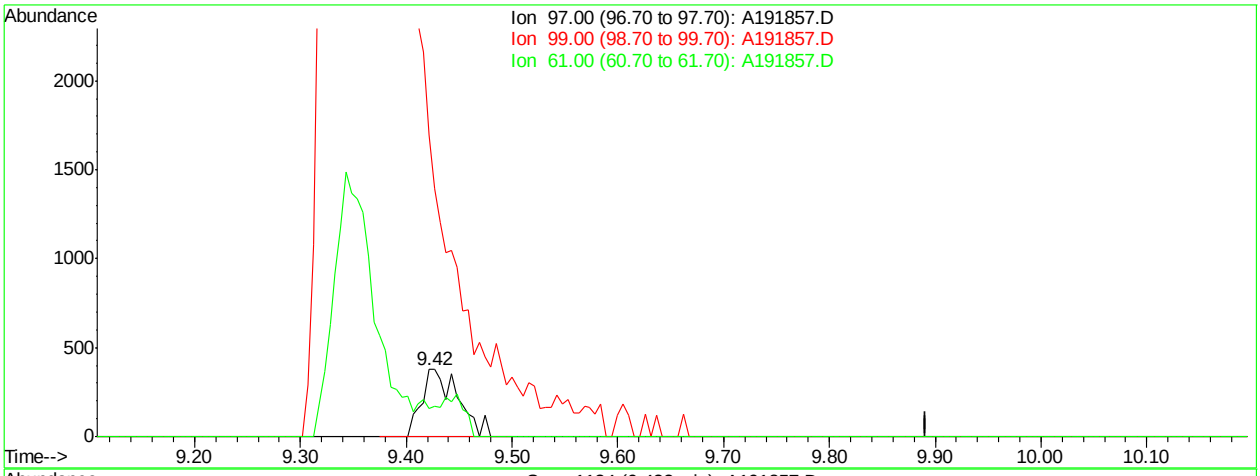
Ion	Exp%	Act%
97.00	100	100
99.00	65.20	175.66#
61.00	48.70	0.00#
0.00	0.00	0.00

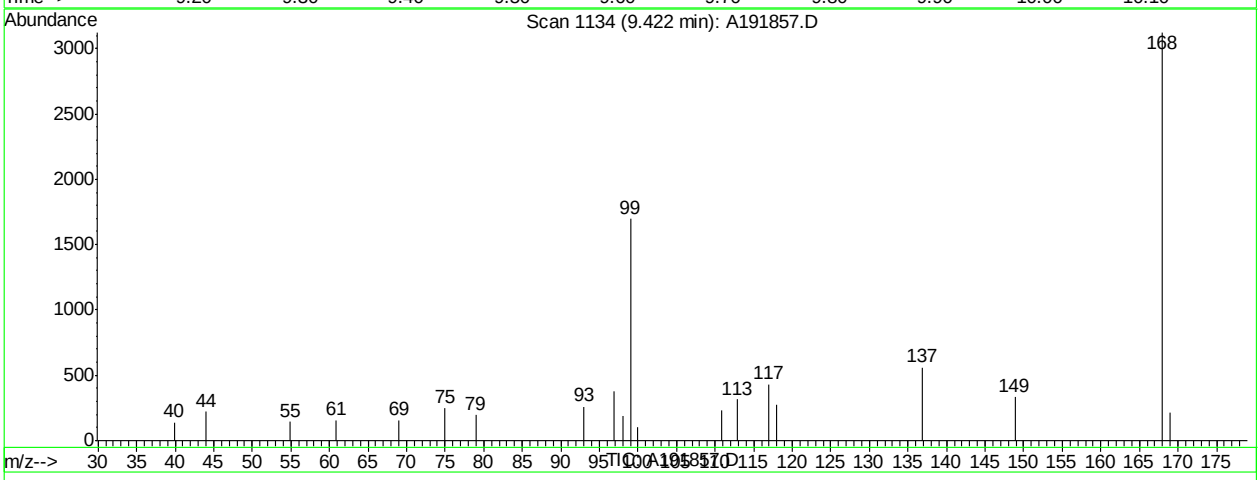
A191857.D MA7222.M Wed Feb 20 17:17:30 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:17 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(52) 1,1,1-trichloroethane (M)

9.42min 0.41ug/L m

response 898

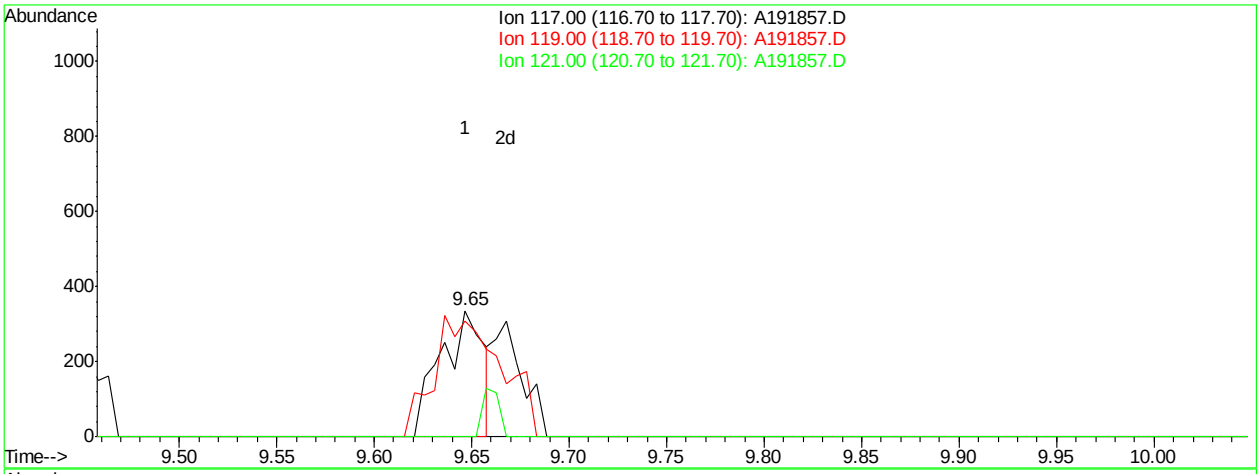
Ion	Exp%	Act%
97.00	100	100
99.00	65.20	448.94#
61.00	48.70	41.80
0.00	0.00	0.00

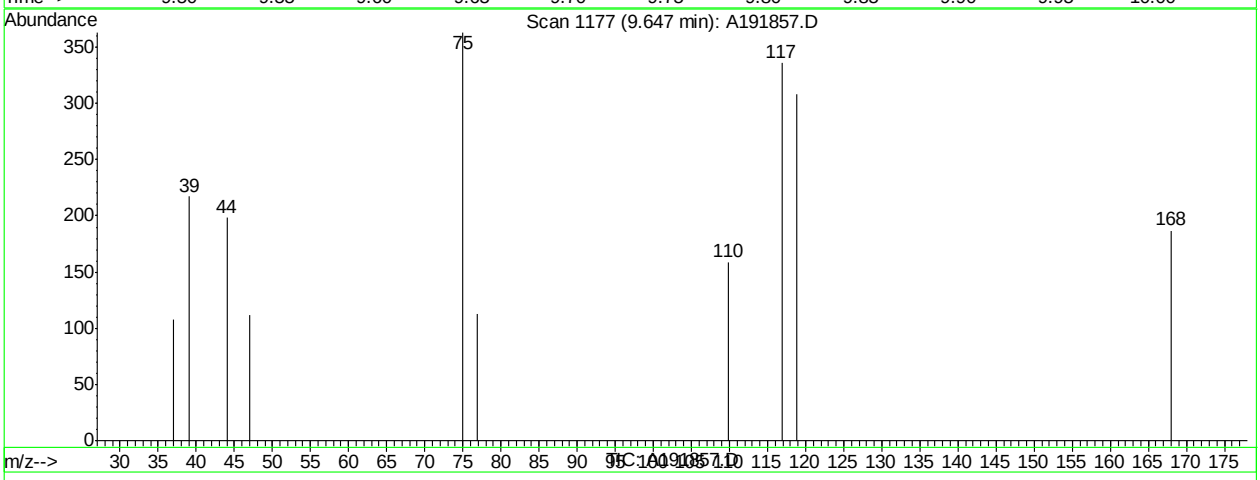
A191857.D MA7222.M Wed Feb 20 17:17:34 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:17 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(58) carbon tetrachloride (M)

9.65min 0.29ug/L

response 511

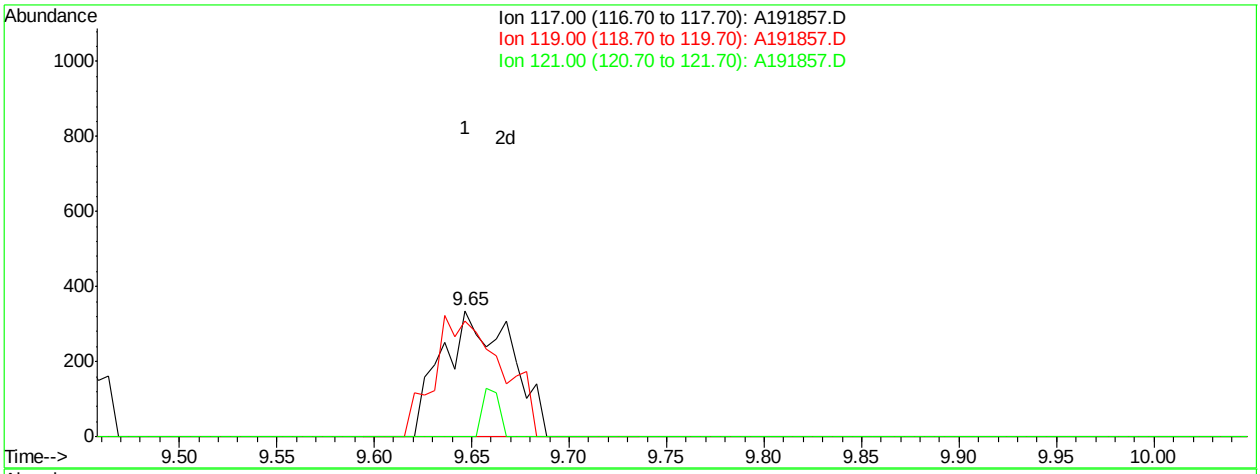
Ion	Exp%	Act%
117.00	100	100
119.00	95.70	91.67
121.00	29.80	0.00
0.00	0.00	0.00

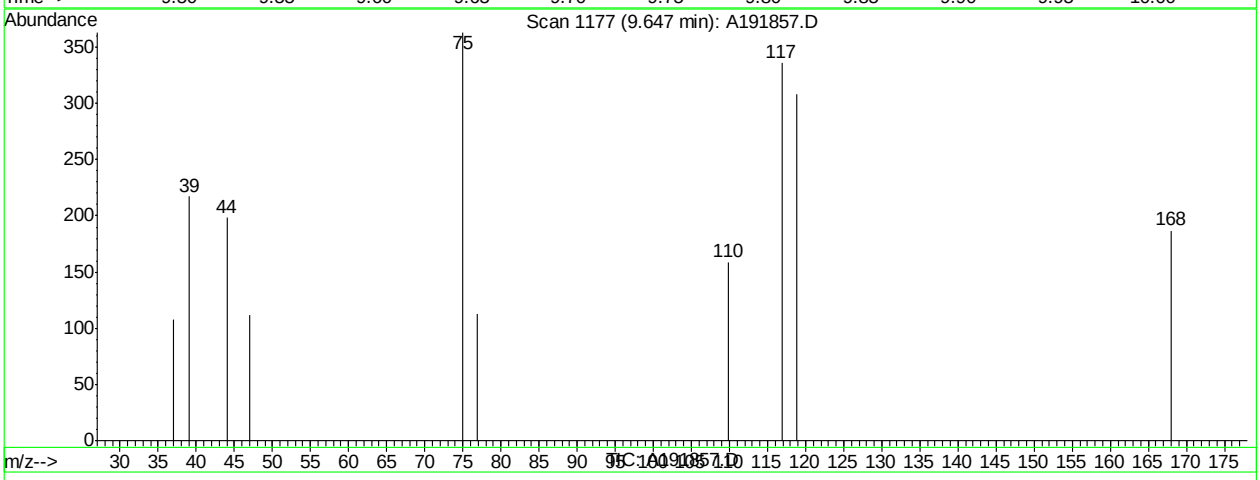
A191857.D MA7222.M Wed Feb 20 17:18:03 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:18 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(58) carbon tetrachloride (M)

9.65min 0.48ug/L m

response 828

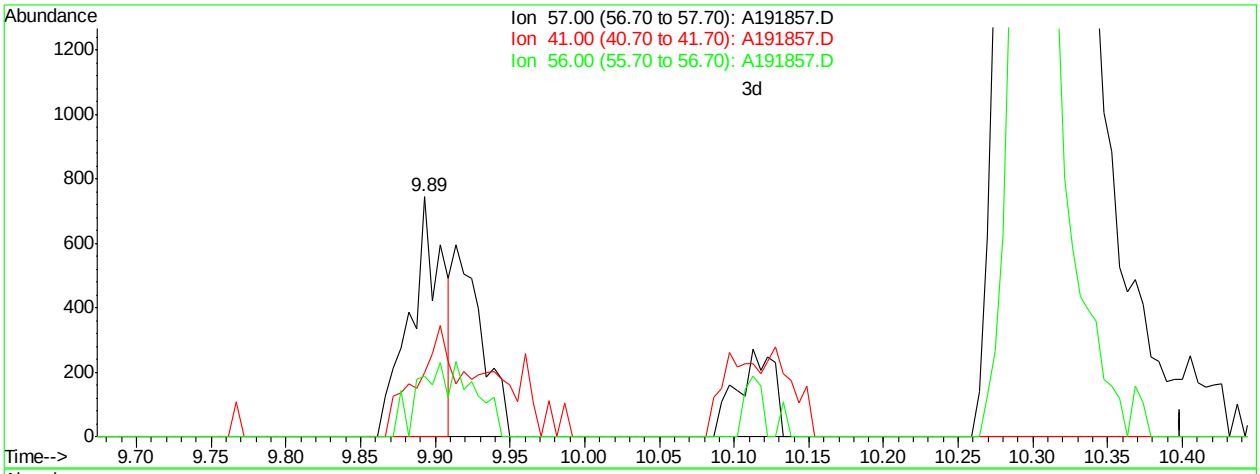
Ion	Exp%	Act%
117.00	100	100
119.00	95.70	91.67
121.00	29.80	0.00
0.00	0.00	0.00

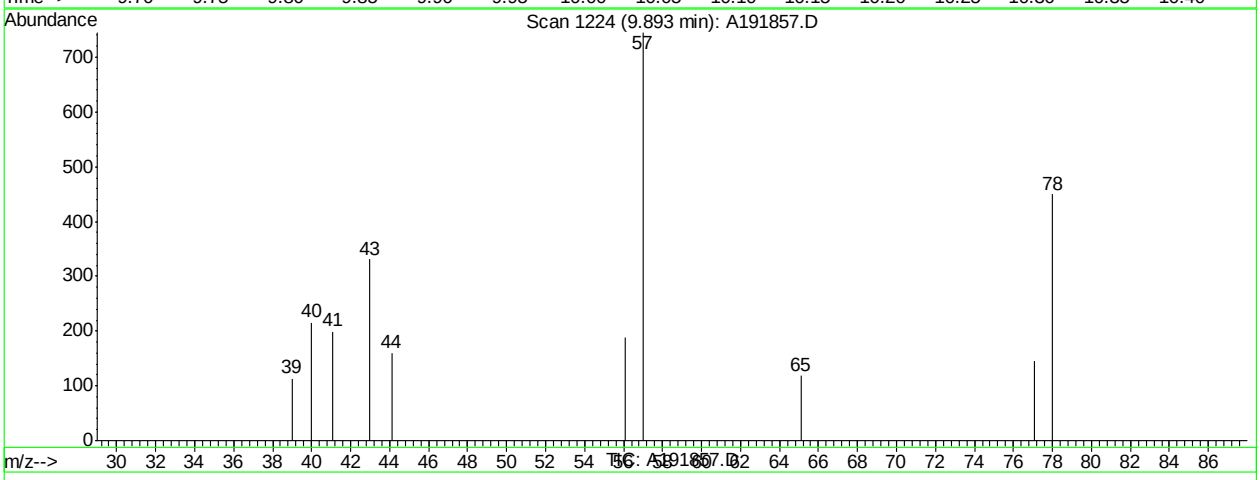
A191857.D MA7222.M Wed Feb 20 17:18:06 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:18 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(62) Iso-octane (M)

9.89min 0.19ug/L

response 1125

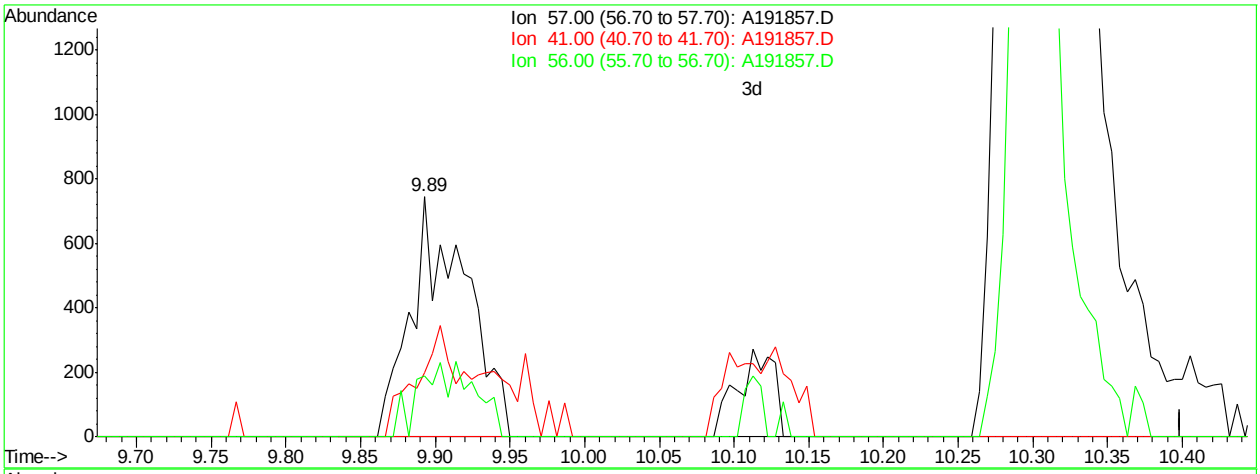
Ion	Exp%	Act%
57.00	100	100
41.00	30.20	26.71
56.00	33.70	25.37
0.00	0.00	0.00

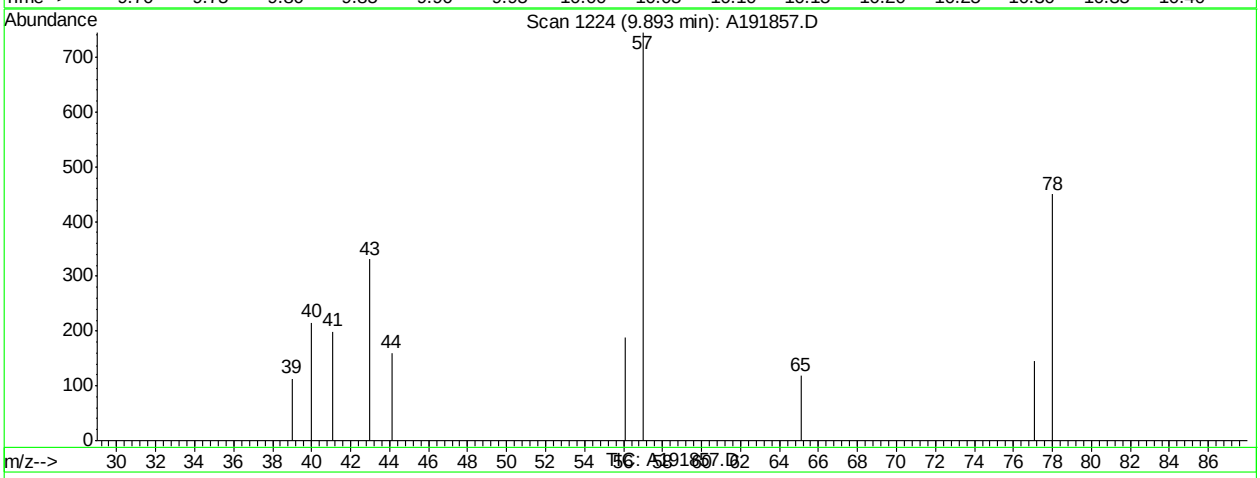
A191857.D MA7222.M Wed Feb 20 17:18:23 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:18 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(62) Iso-octane (M)

9.89min 0.33ug/L m

response 1929

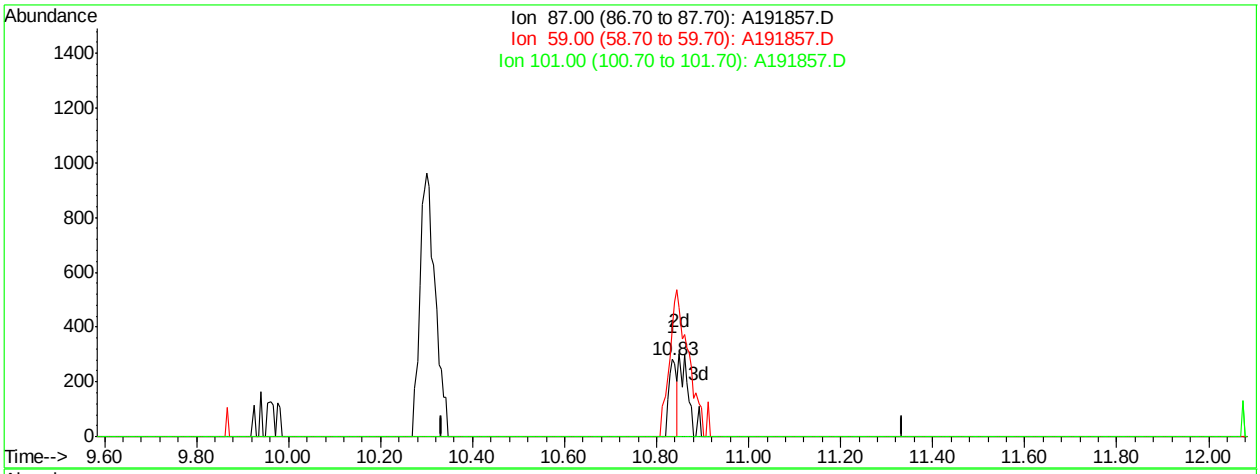
Ion	Exp%	Act%
57.00	100	100
41.00	30.20	26.71
56.00	33.70	25.37
0.00	0.00	0.00

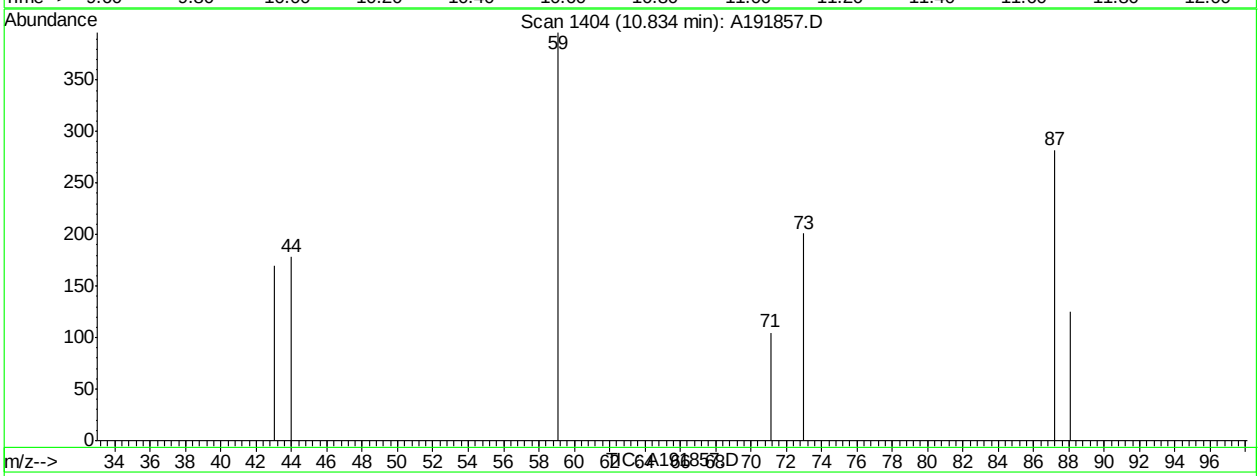
A191857.D MA7222.M Wed Feb 20 17:18:27 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:18 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(69) tert-amyl ethyl ether (m)

10.83min 0.14ug/L

response 351

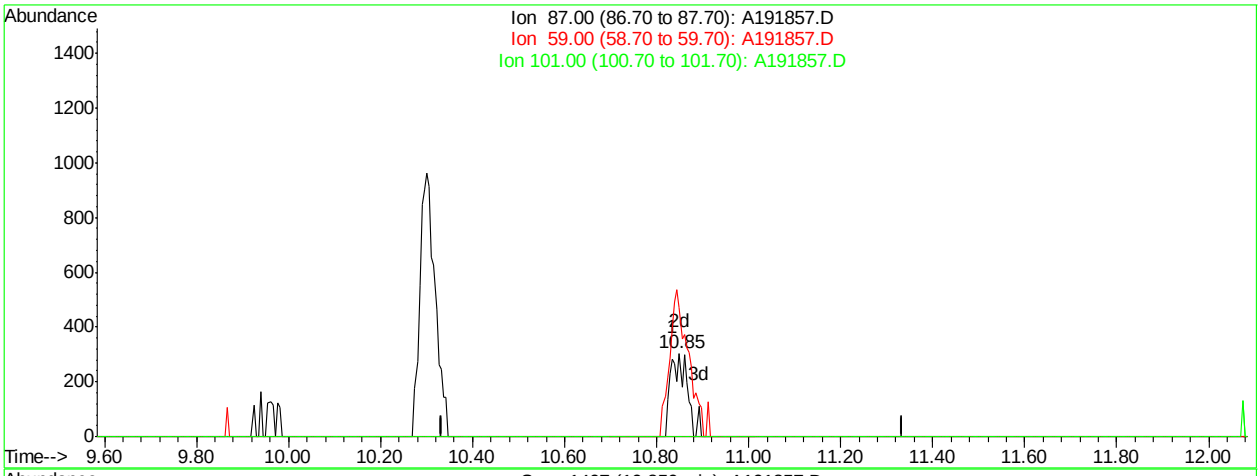
Ion	Exp%	Act%
87.00	100	100
59.00	186.60	0.00#
101.00	14.00	0.00#
0.00	0.00	0.00

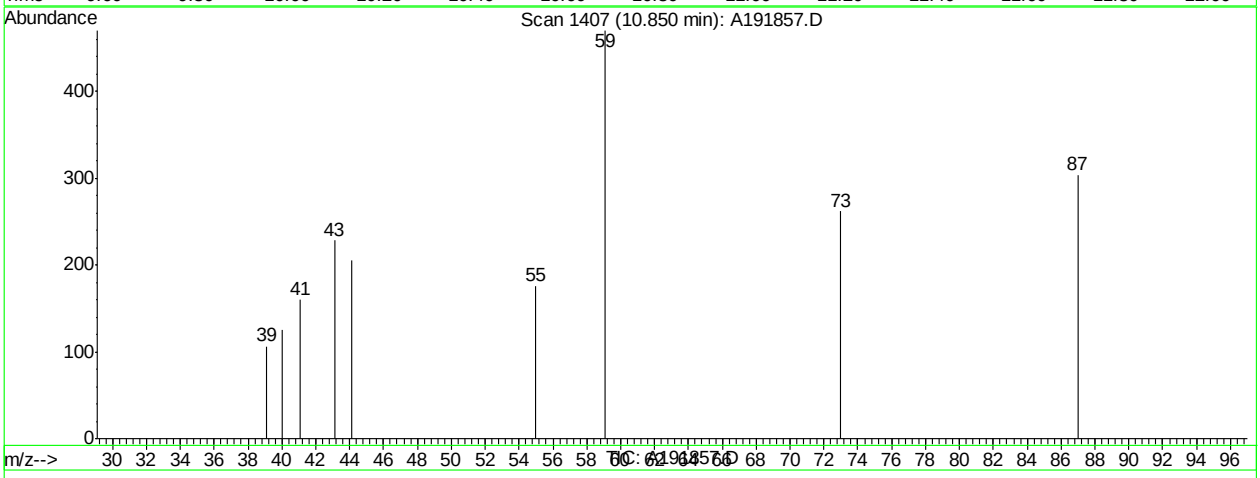
A191857.D MA7222.M Wed Feb 20 17:18:53 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191857.D Vial: 100
Acq On : 20 Feb 2013 12:54 pm Operator: Oksanat
Sample : ic7222-0.5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:18 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(69) tert-amyl ethyl ether (m)

10.85min 0.32ug/L m

response 767

Ion	Exp%	Act%
87.00	100	100
59.00	186.60	0.00#
101.00	14.00	0.00#
0.00	0.00	0.00

A191857.D MA7222.M Wed Feb 20 17:19:00 2013 MSA

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 02/25/13 12:35

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:20 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.03	65	85343	500.00	ug/L	0.01
5) pentafluorobenzene	9.35	168	234990	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	337463	50.00	ug/L	0.00
85) chlorobenzene-d5	13.75	117	308650	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	178878	50.00	ug/L	0.00

System Monitoring Compounds

47) dibromofluoromethane (s)	0.00	113	0d	0.00	ug/L	
Spiked Amount 50.000	Range 81 - 121		Recovery	=	0.00%#	
48) 1,2-dichloroethane-d4 (s)	9.85	65	2403	0.97	ug/L	0.03
Spiked Amount 50.000	Range 74 - 127		Recovery	=	1.94%#	
77) toluene-d8 (s)	12.07	98	7894	1.13	ug/L	0.02
Spiked Amount 50.000	Range 80 - 122		Recovery	=	2.26%#	
102) 4-bromofluorobenzene (s)	0.00	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 78 - 116		Recovery	=	0.00%#	

Target Compounds

						Qvalue
7) chlorodifluoromethane	3.72	51	1233m	0.73	ug/L	
8) dichlorodifluoromethane	3.69	85	1824m	0.99	ug/L	
9) chloromethane	3.98	50	2793	1.01	ug/L	81
10) vinyl chloride	4.23	62	2790	1.21	ug/L	74
11) bromomethane	4.83	94	1988	1.32	ug/L	81
12) chloroethane	5.00	64	1197	1.11	ug/L	57
14) trichlorofluoromethane	5.49	101	2524	1.08	ug/L	81
15) pentane	5.53	43	4166	1.30	ug/L #	76
16) ethyl ether	5.88	74	1109	1.03	ug/L #	77
18) acrolein	6.11	56	314929	850.20	ug/L	98
19) 1,1-dichloroethene	6.29	96	1308	0.88	ug/L #	52
23) iodomethane	6.56	142	2683	0.84	ug/L	94
25) carbon disulfide	6.69	76	4358	0.74	ug/L	97
26) methylene chloride	7.04	84	2600	1.25	ug/L	83
28) methyl tert butyl ether	7.39	73	4315	0.74	ug/L	99
29) trans-1,2-dichloroethene	7.43	96	1409m	0.82	ug/L	
30) di-isopropyl ether	8.02	45	5183	0.68	ug/L #	66
31) t-butyl formate	9.23	59	861	0.50	ug/L #	51
32) 3,3-dimethyl-1-butanol	13.01	57	1491	7.42	ug/L #	77
33) ethyl tert-butyl ether	8.50	59	4760	0.69	ug/L	92
35) 1,1-dichloroethane	8.02	63	2648	0.78	ug/L	96
36) chloroprene	8.15	53	1757	0.65	ug/L	76
41) 2,2-dichloropropane	8.78	77	1960m	0.76	ug/L	
42) cis-1,2-dichloroethene	8.81	96	1574	0.80	ug/L #	70
44) bromochloromethane	9.12	128	765	0.80	ug/L #	59
46) chloroform	9.19	83	2820	0.85	ug/L	79
51) cyclohexane	9.51	84	2107	0.86	ug/L #	24
52) 1,1,1-trichloroethane	9.45	97	1880	0.74	ug/L #	66
53) tert-amyl methyl ether	9.95	73	4646	0.73	ug/L	82
58) carbon tetrachloride	9.65	117	1839	0.88	ug/L	93
59) 1,1-dichloropropene	9.64	75	1961	0.86	ug/L	90
60) hexane	7.76	57	1652	0.74	ug/L	79
61) benzene	9.92	78	6251	0.89	ug/L	97

(#) = qualifier out of range (m) = manual integration
A191858.D MA7222.M Thu Feb 21 08:20:32 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:20 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
62)	Iso-octane	9.91	57	4546	0.65 ug/L		98
63)	heptane	10.11	71	965	0.72 ug/L		82
66)	1,2-dichloroethane	9.94	62	1739	0.71 ug/L		95
67)	trichloroethene	10.67	95	1381	0.82 ug/L		85
69)	tert-amyl ethyl ether	10.85	87	2323	0.80 ug/L	#	96
70)	methylcyclohexane	10.88	83	1842	0.66 ug/L	#	89
73)	1,2-dichloropropane	10.95	63	1759	0.86 ug/L		73
74)	dibromomethane	11.13	93	805	0.71 ug/L		96
75)	bromodichloromethane	11.25	83	1936	0.77 ug/L		93
76)	cis-1,3-dichloropropene	11.77	75	2249	0.71 ug/L		90
79)	toluene	12.16	92	3637	0.83 ug/L		94
80)	3-methyl-1-butanol	11.95	55	1013	11.15 ug/L		70
81)	trans-1,3-dichloropropene	12.40	75	1927	0.66 ug/L		85
83)	1,1,2-trichloroethane	12.61	83	1081	0.76 ug/L		87
86)	tetrachloroethene	12.79	164	1307	0.93 ug/L		93
87)	1,3-dichloropropane	12.82	76	2346	0.85 ug/L		93
89)	dibromochloromethane	13.10	129	1508	0.77 ug/L		92
90)	1,2-dibromoethane	13.27	107	1337	0.83 ug/L		87
92)	chlorobenzene	13.78	112	4511	0.87 ug/L		97
93)	1,1,1,2-tetrachloroethane	13.85	131	1614	0.85 ug/L		89
94)	ethylbenzene	13.85	91	7204	0.85 ug/L		86
95)	m,p-xylene	13.98	106	5734	1.78 ug/L		97
96)	o-xylene	14.45	106	3024	0.93 ug/L		100
97)	styrene	14.47	104	4540	0.79 ug/L		91
98)	bromoform	14.75	173	1206	0.92 ug/L		93
100)	isopropylbenzene	14.83	105	7258	0.84 ug/L		93
103)	bromobenzene	15.28	156	2087	0.86 ug/L		90
104)	1,1,2,2-tetrachloroethane	15.19	83	2363	0.90 ug/L		87
106)	1,2,3-trichloropropane	15.26	110	457	0.78 ug/L	#	62
107)	n-propylbenzene	15.30	91	8281	0.80 ug/L		92
108)	2-chlorotoluene	15.46	126	1852	0.85 ug/L		96
109)	4-chlorotoluene	15.58	91	6001	0.87 ug/L		96
110)	p-ethyltoluene	15.41	105	7888	0.86 ug/L		97
111)	1,3,5-trimethylbenzene	15.47	105	6620	0.86 ug/L		94
112)	tert-butylbenzene	15.86	119	5388	0.86 ug/L		95
113)	pentachloroethane	15.95	167	1359	0.87 ug/L		97
114)	1,2,4-trimethylbenzene	15.92	105	6692	0.84 ug/L		91
115)	sec-butylbenzene	16.10	105	8782	0.91 ug/L		95
116)	1,3-dichlorobenzene	16.32	146	4348	0.95 ug/L		96
117)	p-isopropyltoluene	16.24	119	6668	0.84 ug/L		98
119)	1,4-dichlorobenzene	16.41	146	4851	1.00 ug/L		87
120)	p-diethylbenzene	16.67	119	4654	0.94 ug/L		97
121)	1,2-dichlorobenzene	16.85	146	4245	0.92 ug/L		88
122)	n-butylbenzene	16.71	92	3786	0.85 ug/L		91
123)	1,2,4,5-tetramethylbenzene	17.56	119	7419	0.89 ug/L	#	98
124)	1,2-dibromo-3-chloropropan	17.72	75	310	0.69 ug/L		86
125)	1,3,5-trichlorobenzene	17.92	180	3663	1.07 ug/L		85
126)	1,2,4-trichlorobenzene	18.62	180	2843	0.93 ug/L		91
127)	hexachlorobutadiene	18.74	225	1821	0.98 ug/L	#	79

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:20 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

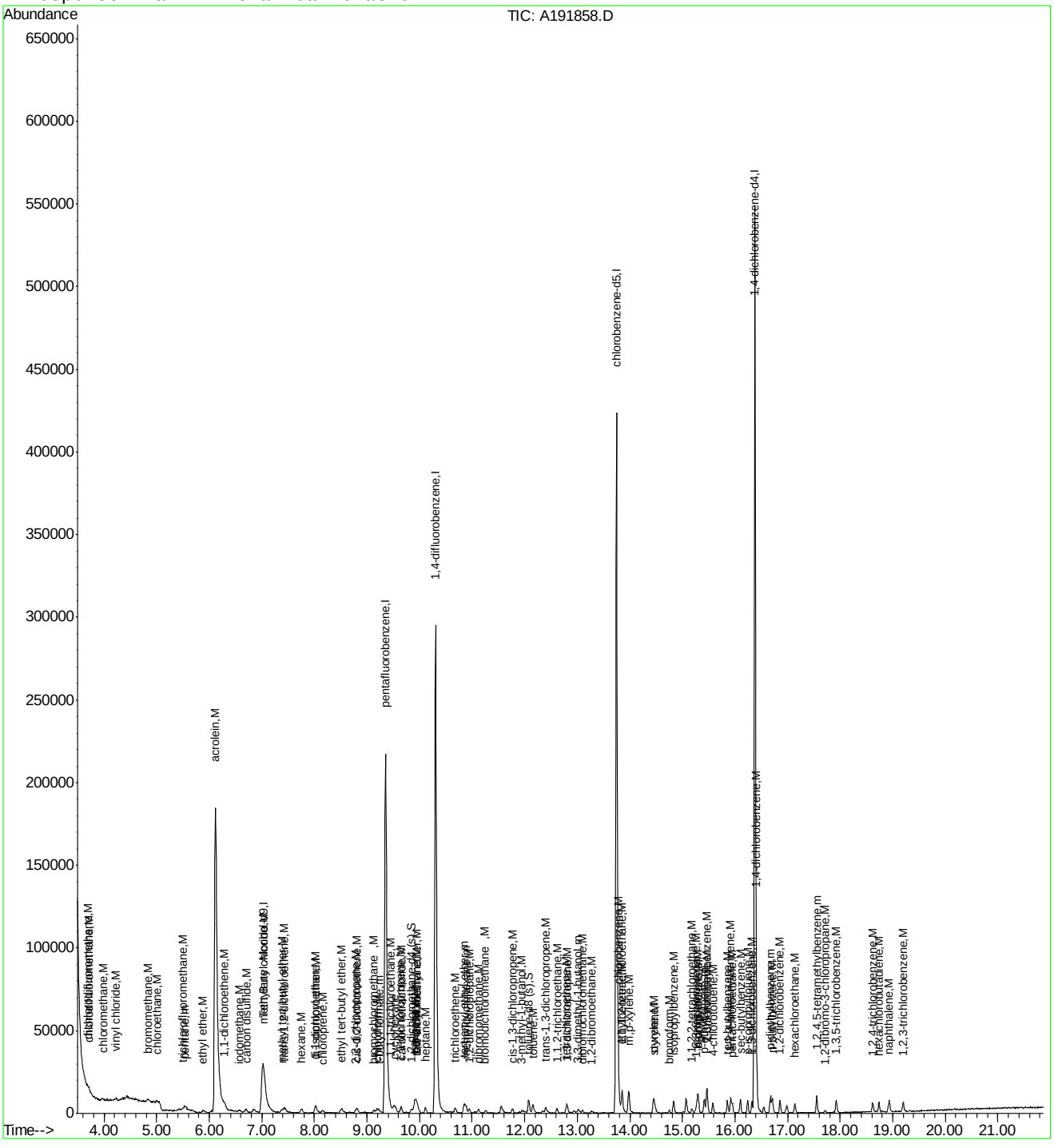
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
128) naphthalene	18.93	128	5739	0.95 ug/L	96
129) 1,2,3-trichlorobenzene	19.19	180	2744	1.01 ug/L	76
130) hexachloroethane	17.14	201	1260	0.91 ug/L	94

(#) = qualifier out of range (m) = manual integration
A191858.D MA7222.M Thu Feb 21 08:20:32 2013 MSA

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:20 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Manual Integration Approval Summary

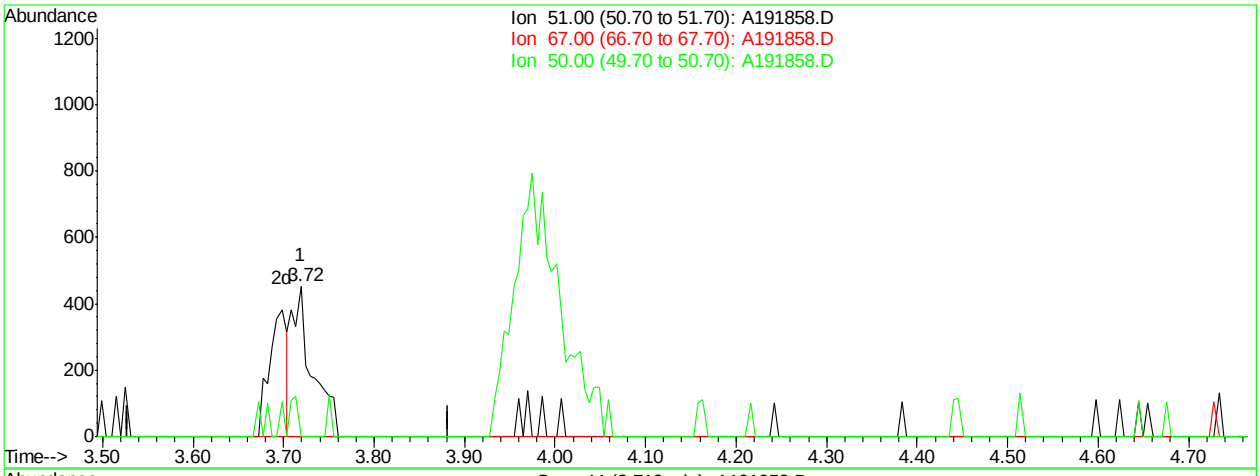
Sample Number:	VA7222-IC7222	**Method:**	SW846 8260B
Lab FileID:	A191858.D	**Analyst approved:**	02/21/13 08:34 Ying Li
Injection Time:	02/20/13 13:21	**Supervisor approved:**	02/25/13 12:35 Kanya Veerawat

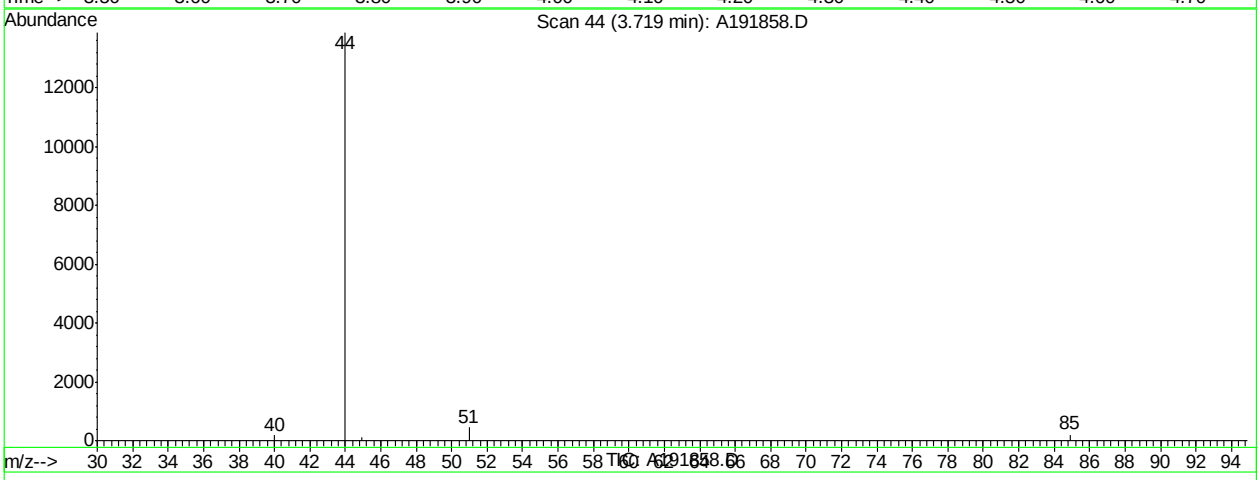
Parameter	CAS	Sig#	R.T. (min.)	Reason
Dichlorodifluoromethane	75-71-8		3.69	Split peak
Chlorodifluoromethane	75-45-6		3.72	Split peak
trans-1,2-Dichloroethene	156-60-5		7.43	Split peak
2,2-Dichloropropane	594-20-7		8.78	Split peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:21 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(7) chlorodifluoromethane (M)

3.72min 0.42ug/L

response 713

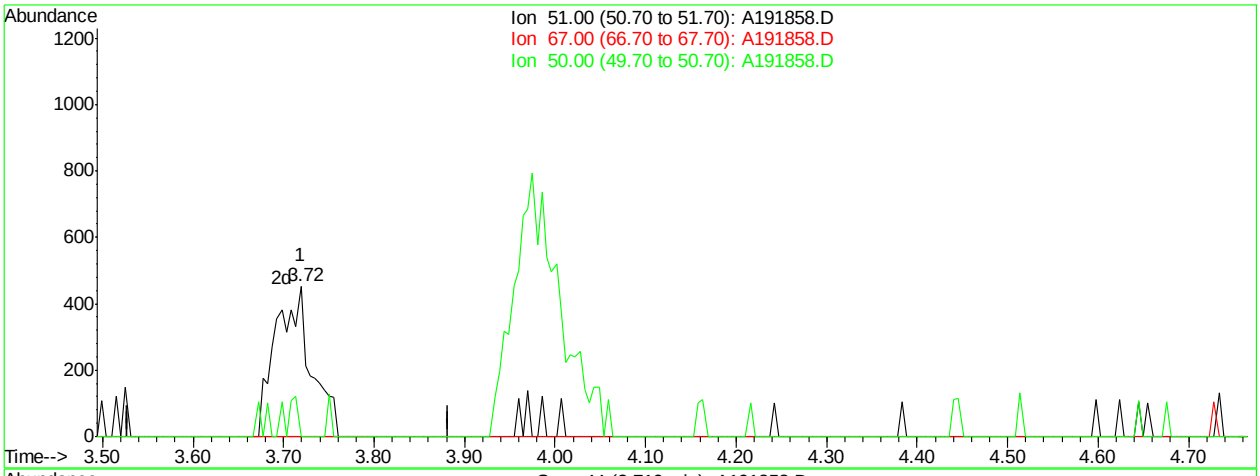
Ion	Exp%	Act%
51.00	100	100
67.00	14.70	0.00
50.00	12.10	0.00
0.00	0.00	0.00

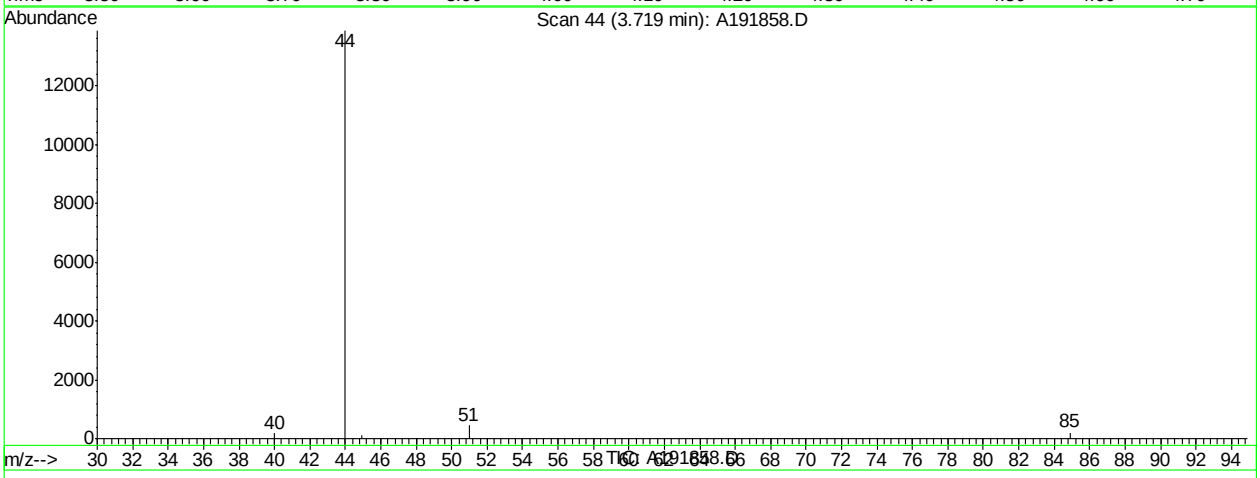
A191858.D MA7222.M Wed Feb 20 17:21:12 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:21 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(7) chlorodifluoromethane (M)

3.72min 0.73ug/L m

response 1233

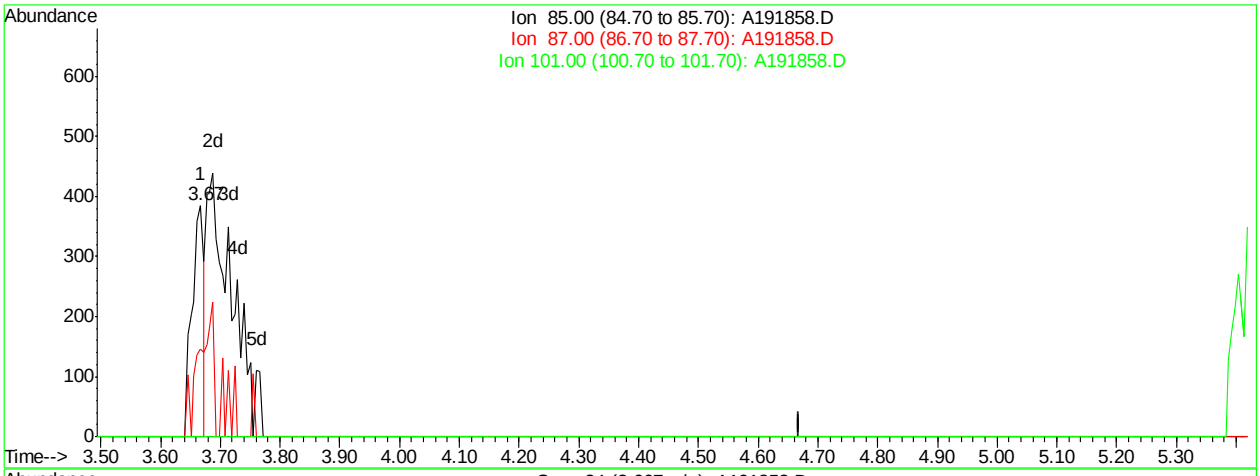
Ion	Exp%	Act%
51.00	100	100
67.00	14.70	0.00
50.00	12.10	0.00
0.00	0.00	0.00

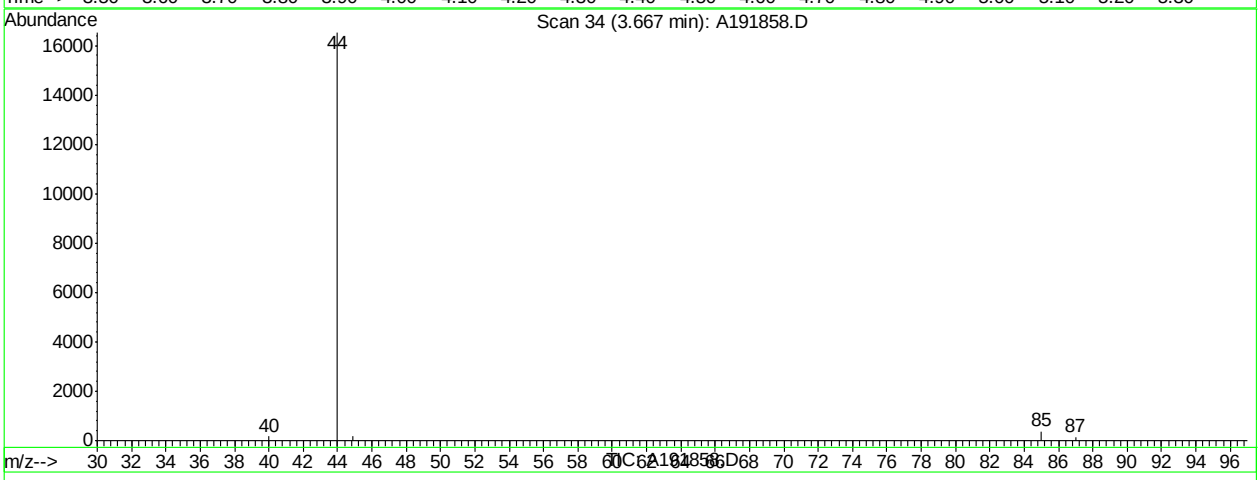
A191858.D MA7222.M Wed Feb 20 17:21:16 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:21 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(8) dichlorodifluoromethane (M)

3.67min 0.28ug/L

response 513

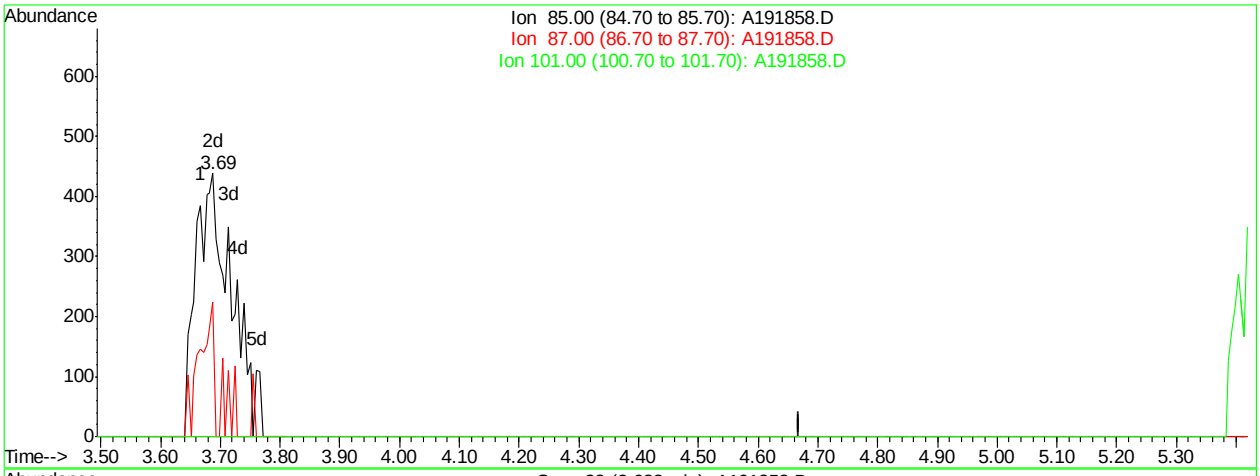
Ion	Exp%	Act%
85.00	100	100
87.00	32.40	37.92
101.00	8.70	0.00
0.00	0.00	0.00

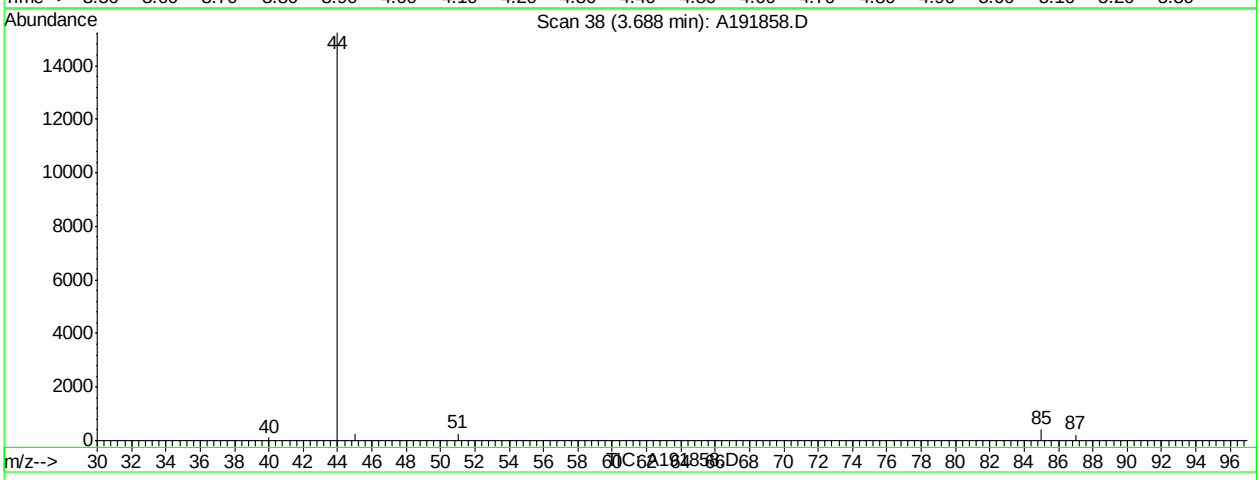
A191858.D MA7222.M Wed Feb 20 17:21:20 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:21 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(8) dichlorodifluoromethane (M)

3.69min 0.99ug/L m

response 1824

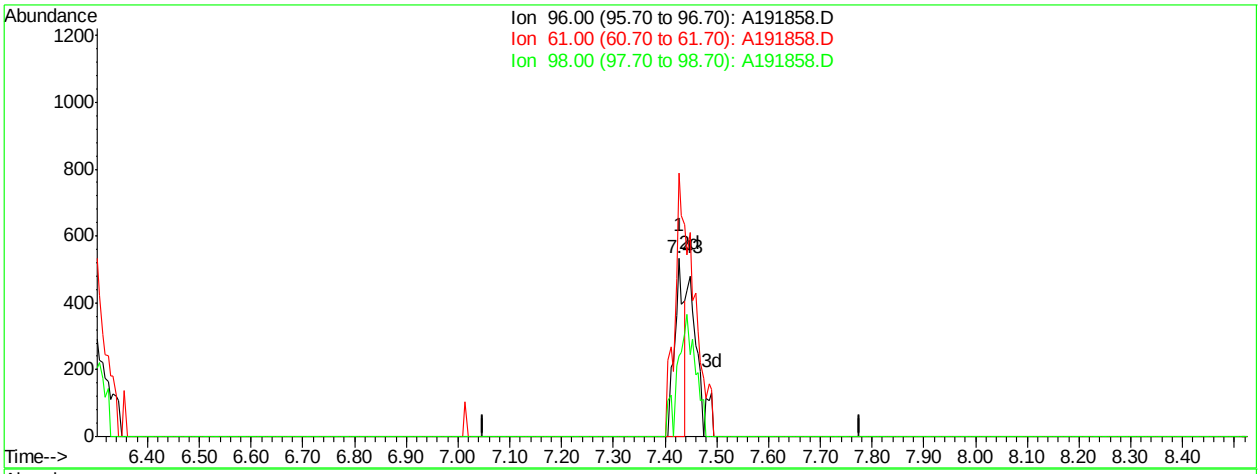
Ion	Exp%	Act%
85.00	100	100
87.00	32.40	51.25
101.00	8.70	0.00
0.00	0.00	0.00

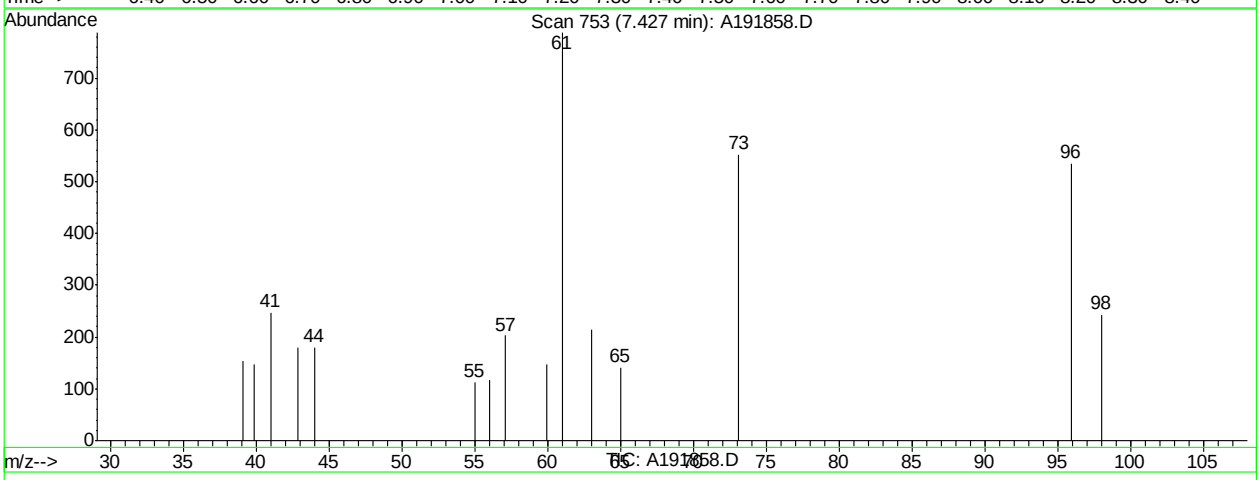
A191858.D MA7222.M Wed Feb 20 17:21:23 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:23 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(29) trans-1,2-dichloroethene (M)

7.43min 0.39ug/L

response 668

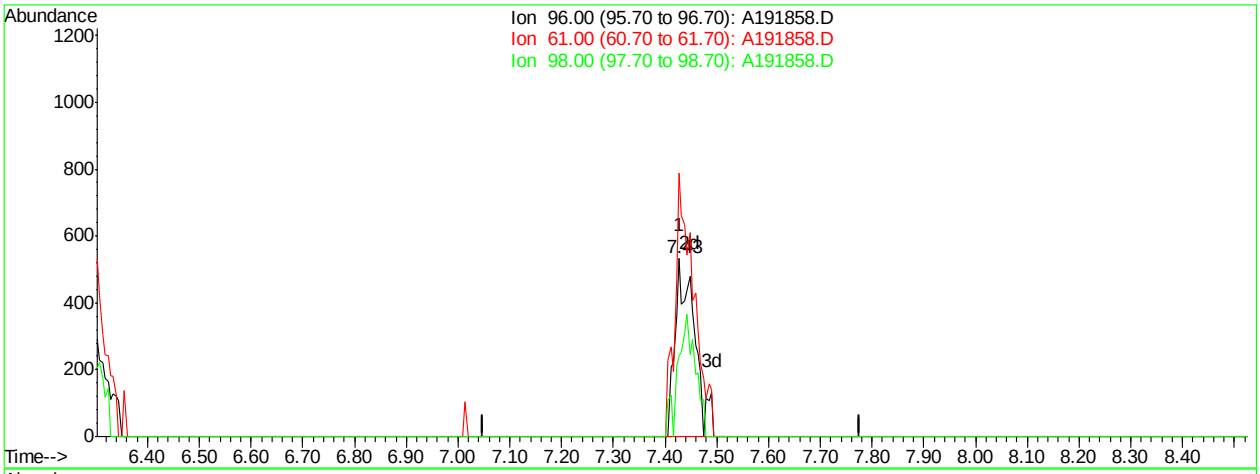
Ion	Exp%	Act%
96.00	100	100
61.00	161.50	147.29
98.00	63.30	45.42
0.00	0.00	0.00

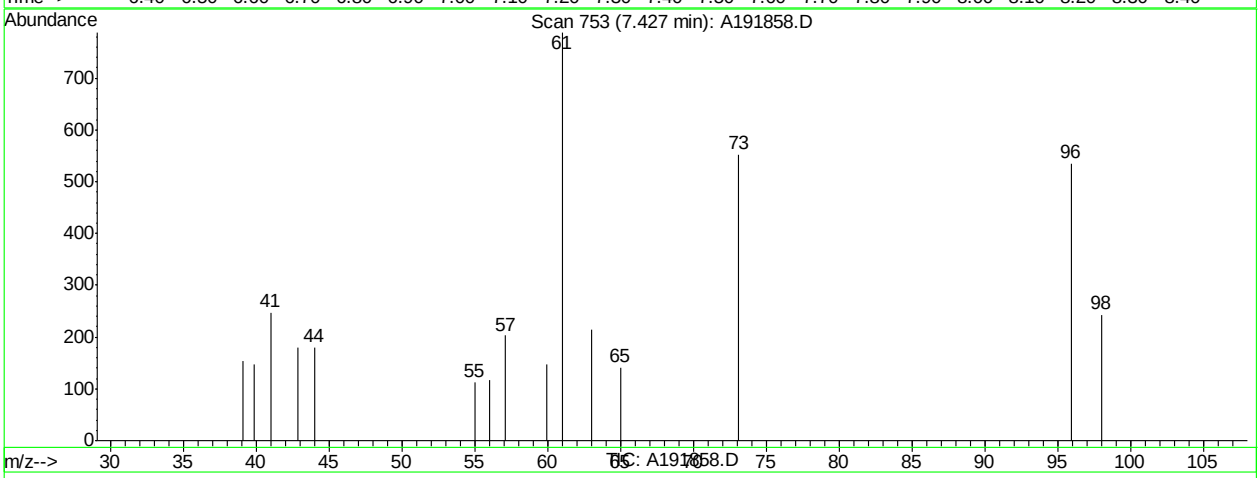
A191858.D MA7222.M Wed Feb 20 17:23:19 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:23 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(29) trans-1,2-dichloroethene (M)

7.43min 0.82ug/L m

response 1409

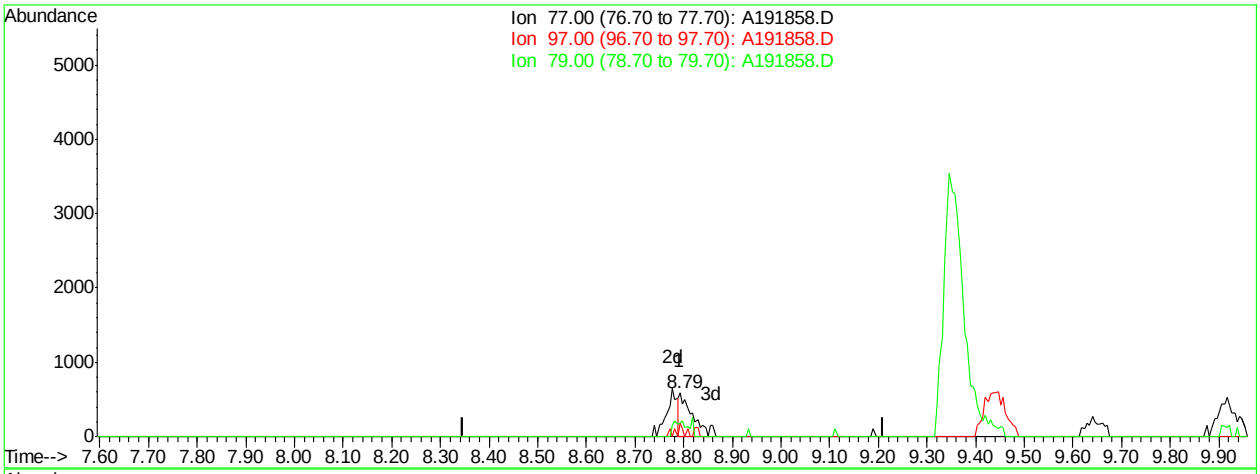
Ion	Exp%	Act%
96.00	100	100
61.00	161.50	147.29
98.00	63.30	45.42
0.00	0.00	0.00

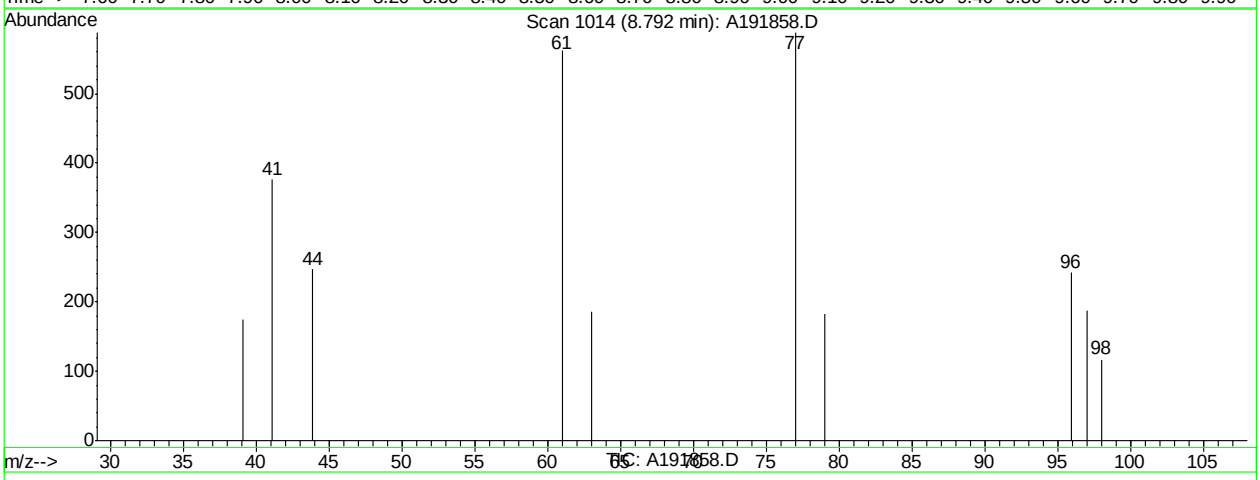
A191858.D MA7222.M Wed Feb 20 17:23:23 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:24 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(41) 2,2-dichloropropane (M)

8.79min 0.40ug/L

response 1045

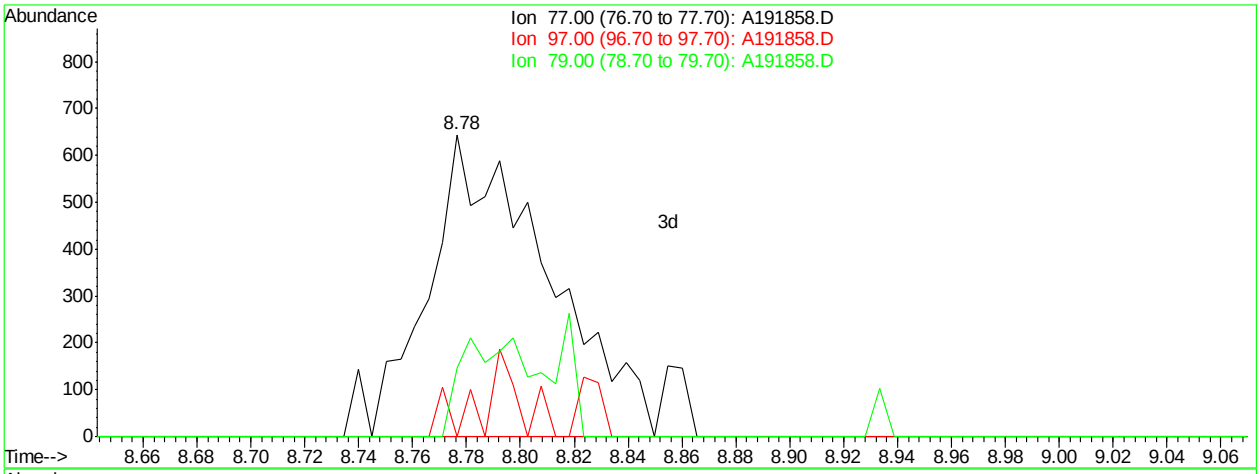
Ion	Exp%	Act%
77.00	100	100
97.00	23.70	31.80
79.00	32.20	30.95
0.00	0.00	0.00

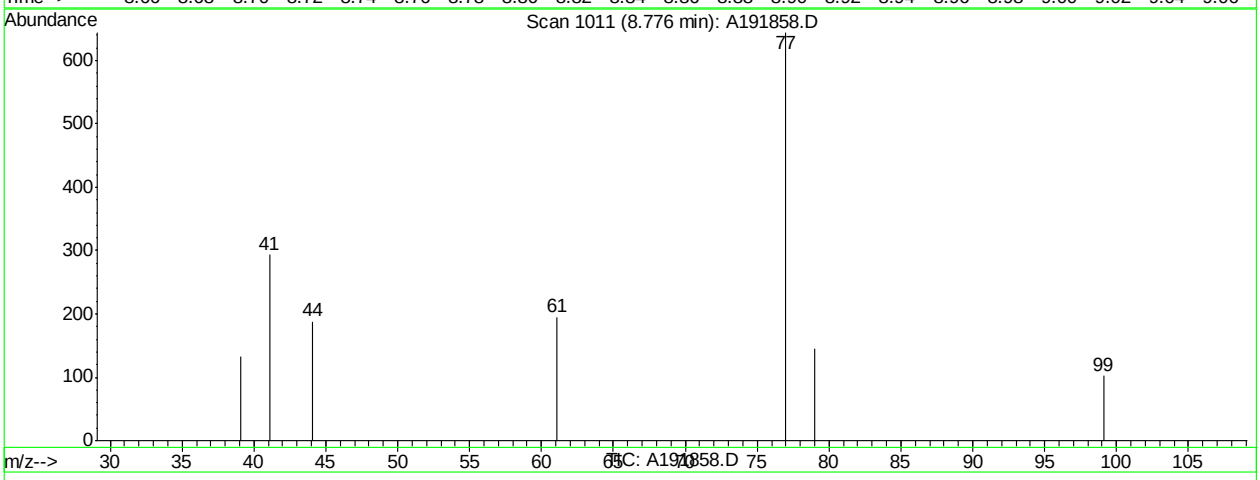
A191858.D MA7222.M Wed Feb 20 17:24:07 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:24 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(41) 2,2-dichloropropane (M)

8.78min 0.76ug/L m

response 1960

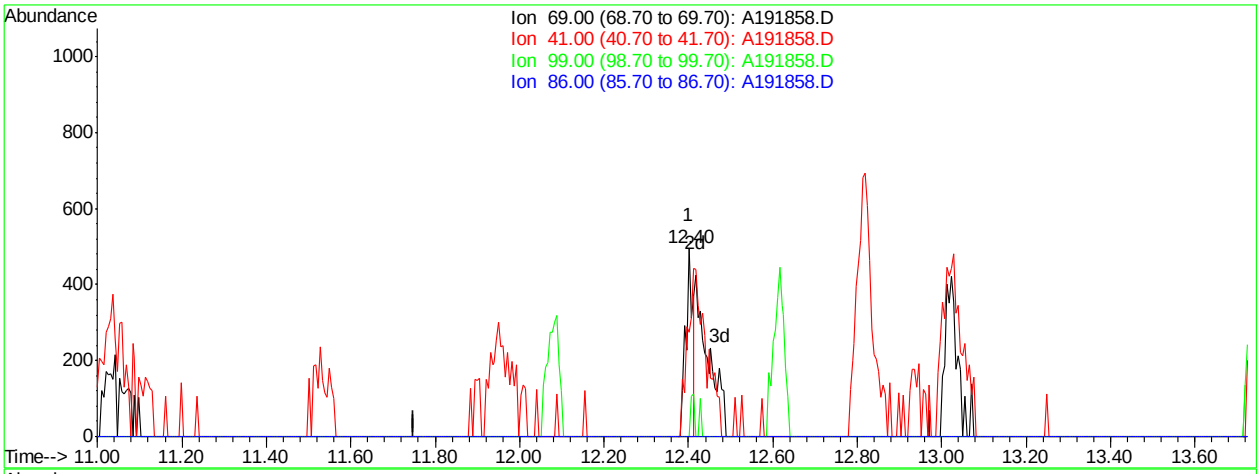
Ion	Exp%	Act%
77.00	100	100
97.00	23.70	0.00
79.00	32.20	22.67
0.00	0.00	0.00

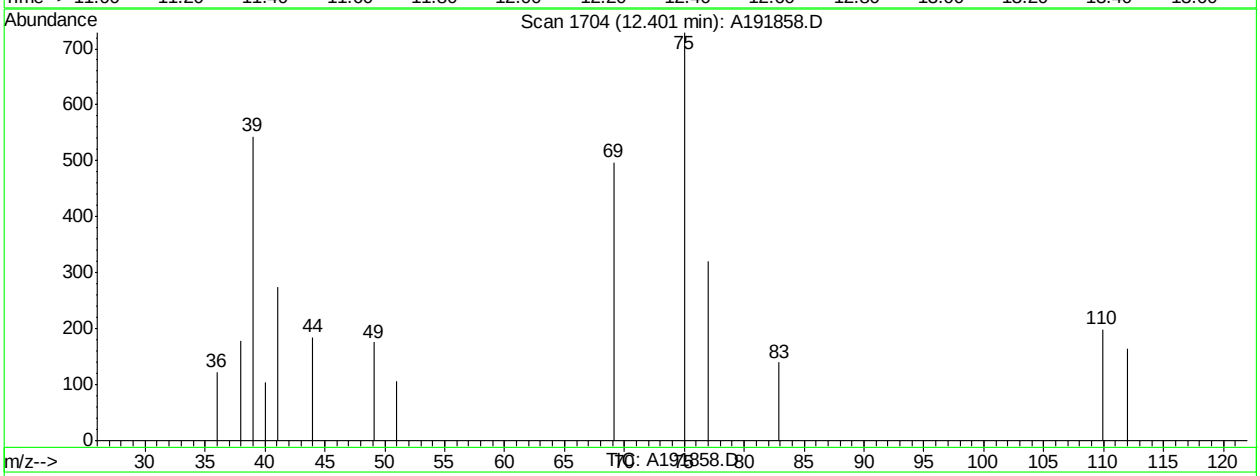
A191858.D MA7222.M Wed Feb 20 17:24:19 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:25 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(82) ethyl methacrylate (M)

12.40min 0.24ug/L

response 570

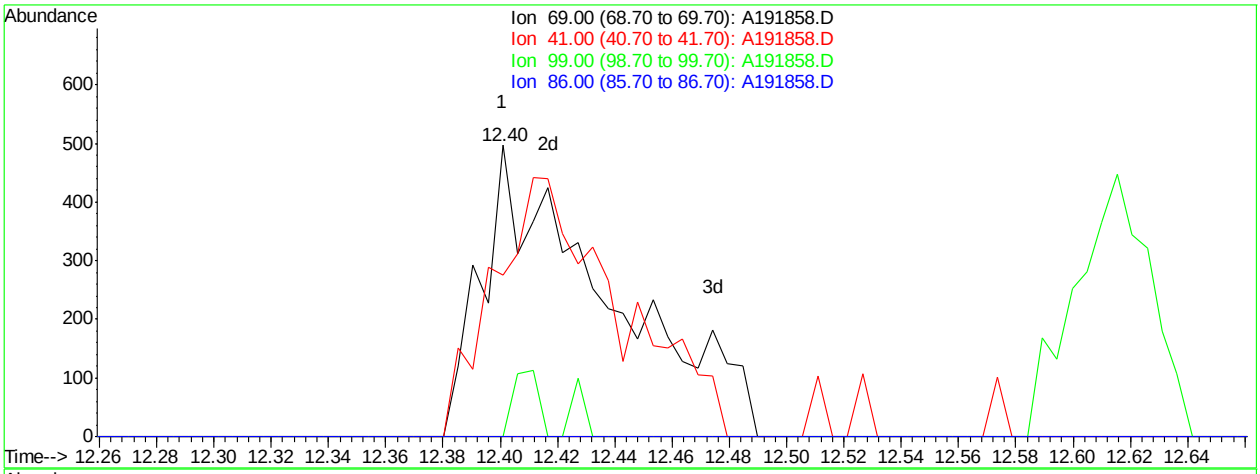
Ion	Exp%	Act%
69.00	100	100
41.00	83.40	55.33
99.00	17.30	0.00
86.00	15.30	0.00

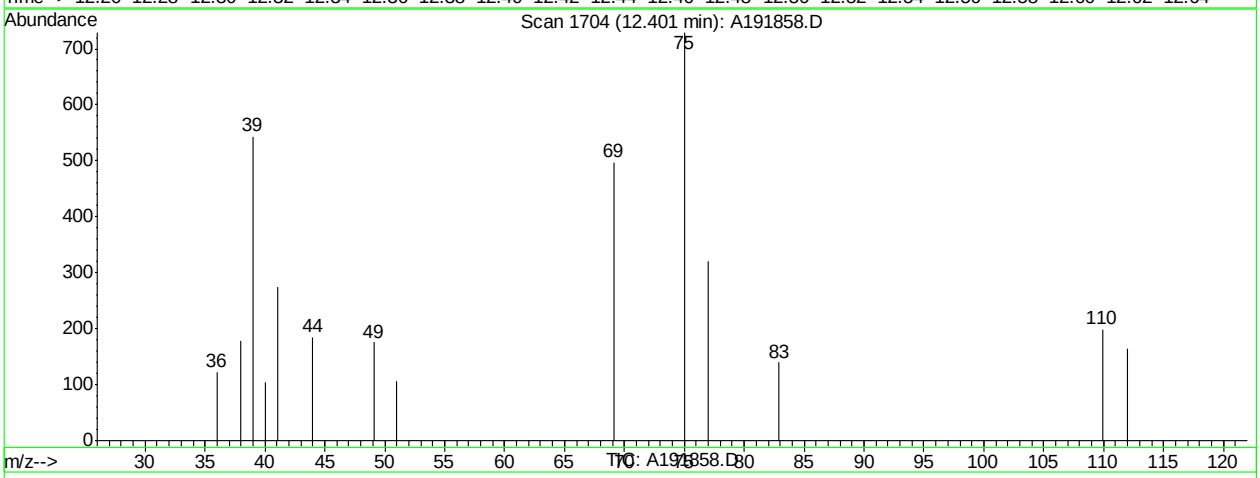
A191858.D MA7222.M Wed Feb 20 17:25:56 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191858.D Vial: 100
Acq On : 20 Feb 2013 1:21 pm Operator: Oksanat
Sample : ic7222-1 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:25 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(82) ethyl methacrylate (M)

12.40min 0.64ug/L m

response 1509

Ion	Exp%	Act%
69.00	100	100
41.00	83.40	55.33
99.00	17.30	0.00
86.00	15.30	0.00

A191858.D MA7222.M Wed Feb 20 17:26:00 2013 MSA

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 02/25/13 12:35

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:22 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.02	65	72242	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	228672	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	328791	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	293938	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	171562	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.39	113	3855	1.97	ug/L	0.01
Spiked Amount 50.000	Range 81 - 121		Recovery = 3.94%#			
48) 1,2-dichloroethane-d4 (s)	9.85	65	3991	1.66	ug/L	0.03
Spiked Amount 50.000	Range 74 - 127		Recovery = 3.32%#			
77) toluene-d8 (s)	12.07	98	12308	1.80	ug/L	0.02
Spiked Amount 50.000	Range 80 - 122		Recovery = 3.60%#			
102) 4-bromofluorobenzene (s)	15.06	95	5817	2.10	ug/L	0.01
Spiked Amount 50.000	Range 78 - 116		Recovery = 4.20%#			

Target Compounds						Qvalue
4) tertiary butyl alcohol	7.17	59	1214m	8.36	ug/L	
7) chlorodifluoromethane	3.70	51	2497	1.52	ug/L	66
8) dichlorodifluoromethane	3.67	85	3304m	1.85	ug/L	
9) chloromethane	3.98	50	4899	1.82	ug/L	98
10) vinyl chloride	4.22	62	4611	2.05	ug/L	80
11) bromomethane	4.83	94	3535	2.40	ug/L	79
12) chloroethane	4.99	64	2230	2.13	ug/L	85
14) trichlorofluoromethane	5.47	101	4473	1.96	ug/L	98
15) pentane	5.53	43	5529	1.77	ug/L #	86
16) ethyl ether	5.88	74	1640	1.56	ug/L #	76
18) acrolein	6.11	56	608781	1688.90	ug/L	99
19) 1,1-dichloroethene	6.29	96	2228	1.55	ug/L	98
20) acetone	6.39	43	3551	6.95	ug/L	65
21) allyl chloride	6.84	76	1160	1.03	ug/L #	23
23) iodomethane	6.56	142	4925	1.58	ug/L	91
24) iso-butyl alcohol	9.75	41	857m	12.93	ug/L	
25) carbon disulfide	6.69	76	8658	1.52	ug/L	94
26) methylene chloride	7.04	84	3670	1.81	ug/L #	73
28) methyl tert butyl ether	7.39	73	7280	1.28	ug/L	76
29) trans-1,2-dichloroethene	7.43	96	2533	1.51	ug/L	84
30) di-isopropyl ether	8.02	45	10593	1.43	ug/L	77
31) t-butyl formate	9.24	59	1816m	1.09	ug/L	
32) 3,3-dimethyl-1-butanol	13.01	57	2292	11.73	ug/L #	81
33) ethyl tert-butyl ether	8.50	59	9381	1.40	ug/L	97
35) 1,1-dichloroethane	8.01	63	4872	1.47	ug/L	88
36) chloroprene	8.14	53	3683	1.40	ug/L	85
41) 2,2-dichloropropane	8.79	77	3222	1.28	ug/L	97
42) cis-1,2-dichloroethene	8.81	96	2973	1.55	ug/L #	77
44) bromochloromethane	9.13	128	1335	1.44	ug/L #	43
45) tetrahydrofuran	9.21	42	1362m	1.84	ug/L	
46) chloroform	9.19	83	4603	1.43	ug/L	92
49) freon 113	6.26	151	1750m	1.60	ug/L	
51) cyclohexane	9.51	84	3487	1.47	ug/L	90

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:22 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
52)	1,1,1-trichloroethane	9.44	97	3593	1.45 ug/L	#	53
53)	tert-amyl methyl ether	9.95	73	9231	1.48 ug/L		95
57)	n-butyl alcohol	10.55	56	2712m	55.95 ug/L		
58)	carbon tetrachloride	9.64	117	3246	1.60 ug/L		96
59)	1,1-dichloropropene	9.64	75	3442	1.55 ug/L		95
60)	hexane	7.75	57	3454	1.58 ug/L		86
61)	benzene	9.91	78	10644	1.55 ug/L		94
62)	Iso-octane	9.90	57	9661	1.42 ug/L		94
63)	heptane	10.11	71	1992	1.53 ug/L		84
66)	1,2-dichloroethane	9.94	62	3040	1.27 ug/L		88
67)	trichloroethene	10.68	95	2561	1.57 ug/L		94
69)	tert-amyl ethyl ether	10.85	87	4108	1.45 ug/L		95
70)	methylcyclohexane	10.88	83	4363	1.61 ug/L	#	99
71)	2-chloroethyl vinyl ether	11.54	63	7191	7.68 ug/L		94
72)	methyl methacrylate	11.04	69	1072m	0.92 ug/L		
73)	1,2-dichloropropane	10.94	63	2939	1.47 ug/L		91
74)	dibromomethane	11.11	93	1422	1.29 ug/L		85
75)	bromodichloromethane	11.25	83	3577	1.47 ug/L		93
76)	cis-1,3-dichloropropene	11.76	75	4309	1.40 ug/L		89
78)	4-methyl-2-pentanone	11.89	58	857m	1.15 ug/L		
79)	toluene	12.16	92	6647	1.56 ug/L		95
80)	3-methyl-1-butanol	11.94	55	1901	21.47 ug/L	#	63
81)	trans-1,3-dichloropropene	12.39	75	3734	1.32 ug/L		76
83)	1,1,2-trichloroethane	12.61	83	1900	1.37 ug/L		83
86)	tetrachloroethene	12.79	164	2408	1.80 ug/L		90
87)	1,3-dichloropropane	12.81	76	3894	1.47 ug/L		94
89)	dibromochloromethane	13.10	129	2788	1.50 ug/L		91
90)	1,2-dibromoethane	13.26	107	2166	1.41 ug/L		75
92)	chlorobenzene	13.78	112	7995	1.62 ug/L		93
93)	1,1,1,2-tetrachloroethane	13.86	131	2912	1.61 ug/L		93
94)	ethylbenzene	13.86	91	12489	1.55 ug/L		95
95)	m,p-xylene	13.98	106	9986	3.26 ug/L		99
96)	o-xylene	14.44	106	4944	1.60 ug/L		95
97)	styrene	14.47	104	7853	1.44 ug/L		92
98)	bromoform	14.75	173	2017	1.62 ug/L		94
100)	isopropylbenzene	14.83	105	12434	1.50 ug/L		96
103)	bromobenzene	15.28	156	3822	1.64 ug/L		90
104)	1,1,2,2-tetrachloroethane	15.18	83	3660	1.45 ug/L		81
105)	trans-1,4-dichloro-2-buten	15.24	53	820	1.32 ug/L		91
106)	1,2,3-trichloropropane	15.26	110	761	1.36 ug/L		84
107)	n-propylbenzene	15.30	91	14824	1.48 ug/L		98
108)	2-chlorotoluene	15.46	126	3337	1.59 ug/L		90
109)	4-chlorotoluene	15.57	91	10201	1.54 ug/L		100
110)	p-ethyltoluene	15.41	105	14307	1.62 ug/L		99
111)	1,3,5-trimethylbenzene	15.47	105	11305	1.53 ug/L		97
112)	tert-butylbenzene	15.85	119	9438	1.57 ug/L		95
113)	pentachloroethane	15.95	167	2539	1.70 ug/L		97
114)	1,2,4-trimethylbenzene	15.91	105	11484	1.50 ug/L		95
115)	sec-butylbenzene	16.10	105	14643	1.58 ug/L		95

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:22 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

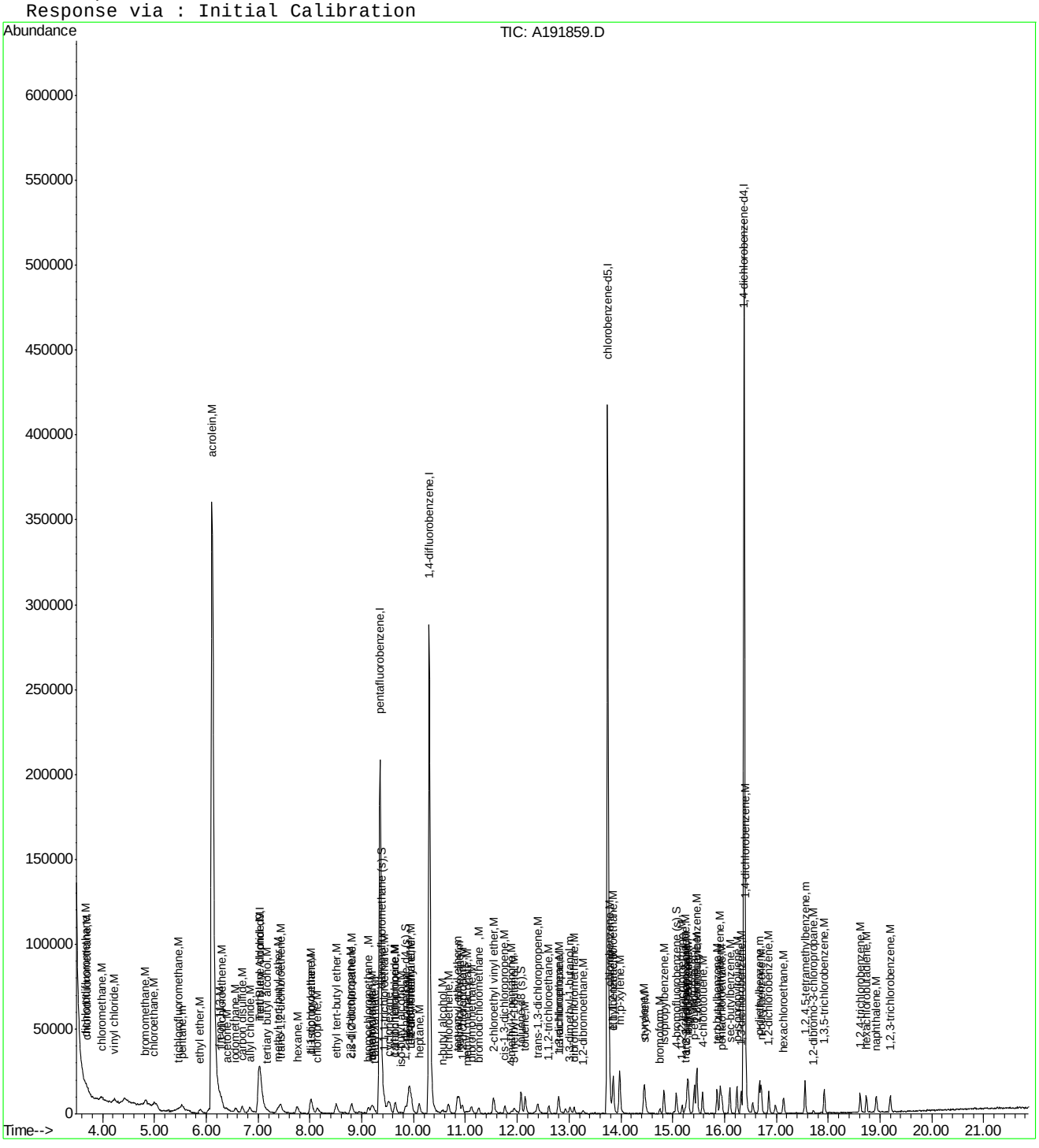
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
116) 1,3-dichlorobenzene	16.32	146	7221	1.64	ug/L	93
117) p-isopropyltoluene	16.24	119	12172	1.61	ug/L	99
119) 1,4-dichlorobenzene	16.41	146	8019	1.73	ug/L	96
120) p-diethylbenzene	16.67	119	8532	1.80	ug/L	97
121) 1,2-dichlorobenzene	16.85	146	7301	1.66	ug/L	93
122) n-butylbenzene	16.71	92	6725	1.57	ug/L	99
123) 1,2,4,5-tetramethylbenzene	17.56	119	13394	1.67	ug/L	99
124) 1,2-dibromo-3-chloropropan	17.72	75	484	1.13	ug/L #	68
125) 1,3,5-trichlorobenzene	17.92	180	6111	1.86	ug/L	92
126) 1,2,4-trichlorobenzene	18.61	180	5052	1.73	ug/L	92
127) hexachlorobutadiene	18.74	225	3061	1.72	ug/L	98
128) naphthalene	18.93	128	9240	1.60	ug/L	95
129) 1,2,3-trichlorobenzene	19.19	180	4474	1.71	ug/L	97
130) hexachloroethane	17.14	201	2096	1.57	ug/L	97

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:22 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Manual Integration Approval Summary

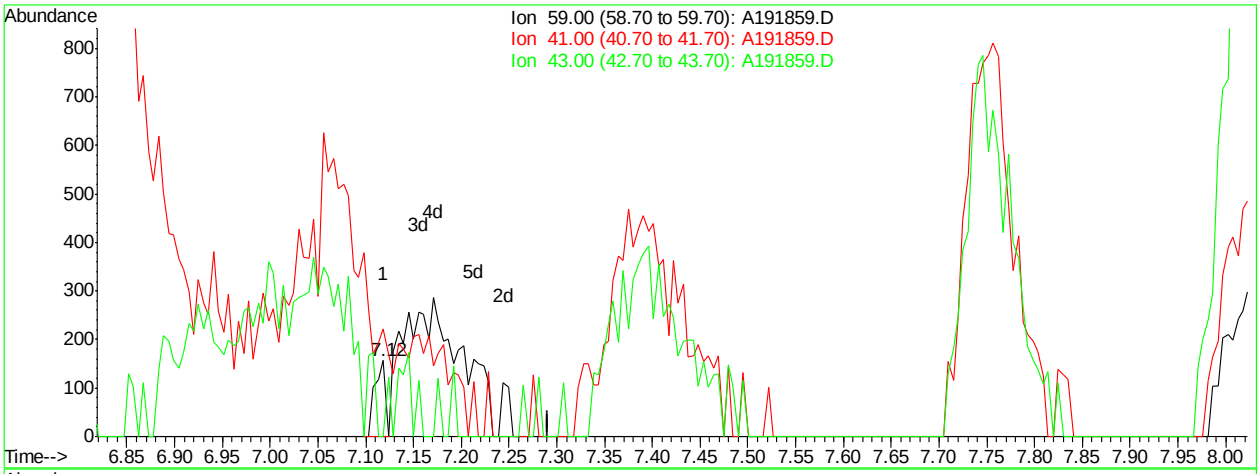
Sample Number:	VA7222-IC7222	**Method:**	SW846 8260B
Lab FileID:	A191859.D	**Analyst approved:**	02/21/13 08:34 Ying Li
Injection Time:	02/20/13 13:53	**Supervisor approved:**	02/25/13 12:35 Kanya Veerawat

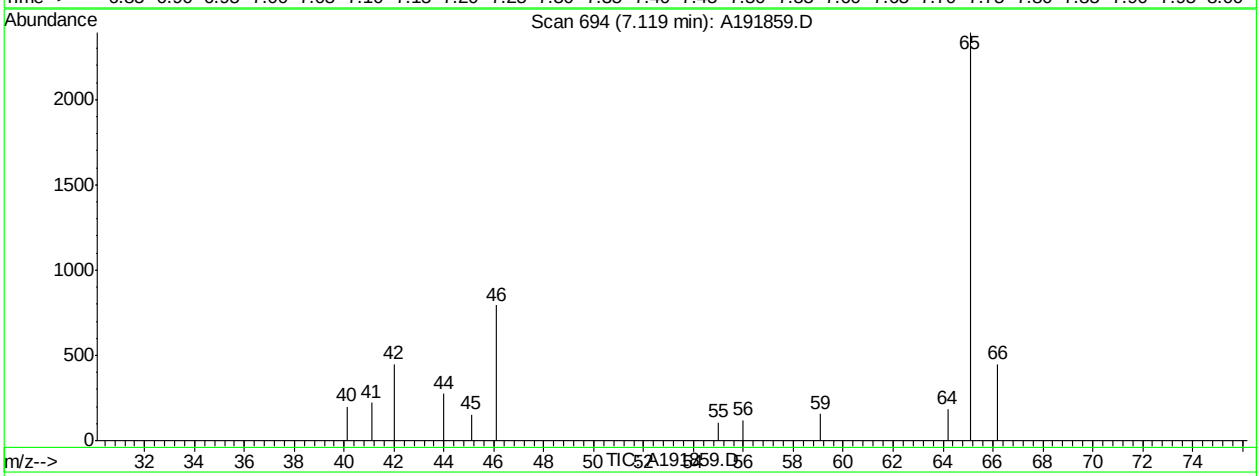
Parameter	CAS	Sig#	R.T. (min.)	Reason
Dichlorodifluoromethane	75-71-8		3.67	Split peak
Freon 113	76-13-1		6.26	Split peak
Tert Butyl Alcohol	75-65-0		7.17	Split peak
Tetrahydrofuran	109-99-9		9.21	Split peak
tert-Butyl Formate	762-75-4		9.24	Split peak
Isobutyl alcohol	78-83-1		9.75	Split peak
n-Butyl Alcohol	71-36-3		10.55	Split peak
Methyl methacrylate	80-62-6		11.04	Split peak
4-Methyl-2-pentanone(MIBK)	108-10-1		11.89	Split peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:27 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(4) tertiary butyl alcohol (M)

7.12min 0.81ug/L

response 118

Ion	Exp%	Act%
59.00	100	100
41.00	0.00	0.00
43.00	0.00	0.00
0.00	0.00	0.00

A191859.D MA7222.M Wed Feb 20 17:27:14 2013 MSA

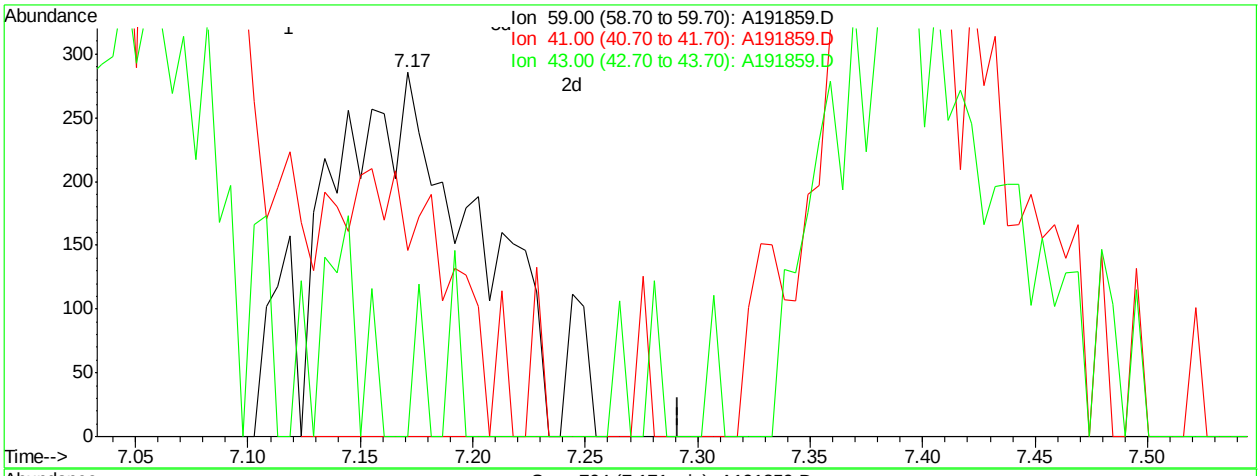
7.6.3.2

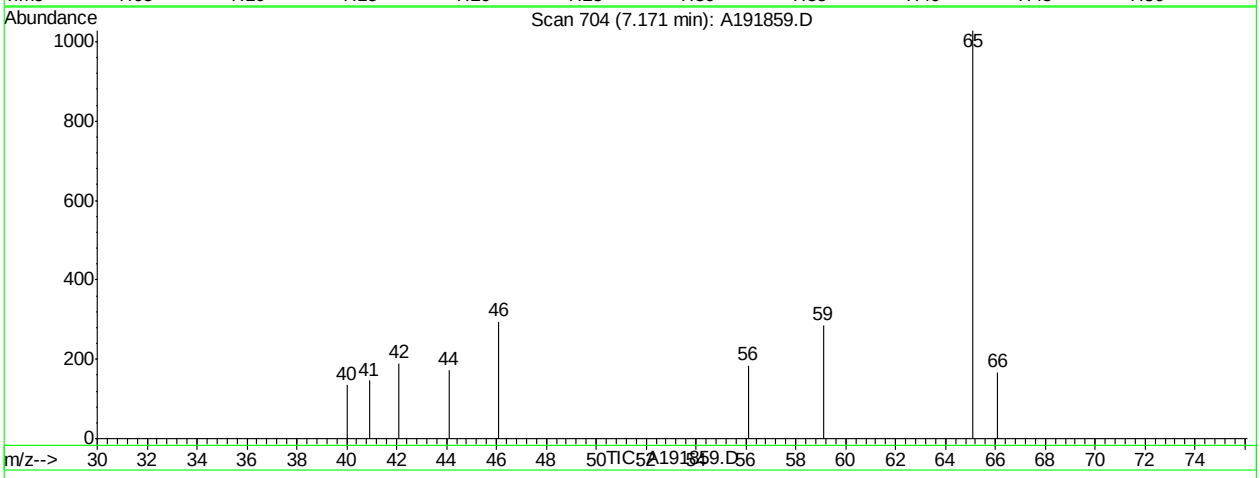
7

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:27 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(4) tertiary butyl alcohol (M)

7.17min 8.36ug/L m

response 1214

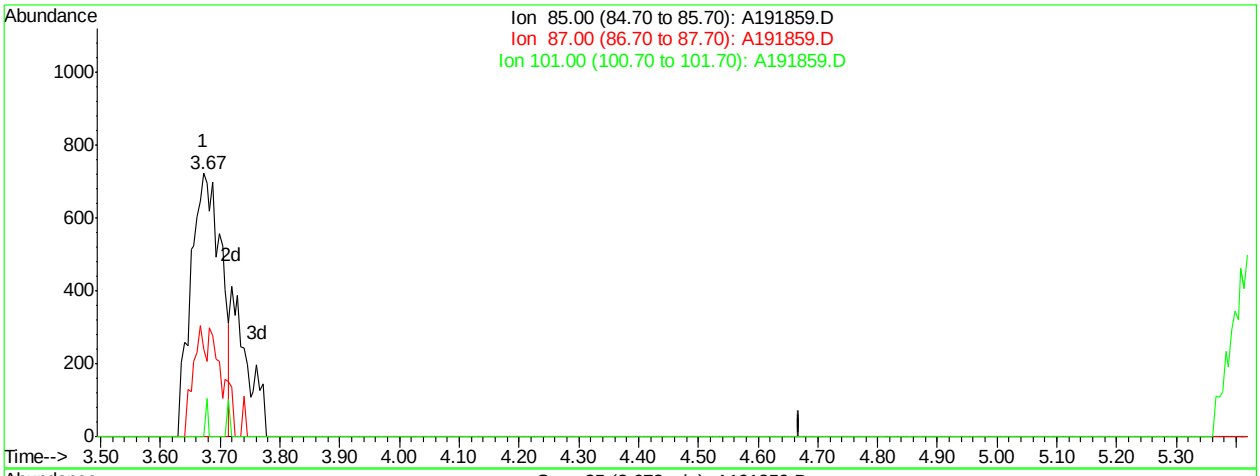
Ion	Exp%	Act%
59.00	100	100
41.00	0.00	51.05#
43.00	0.00	0.00
0.00	0.00	0.00

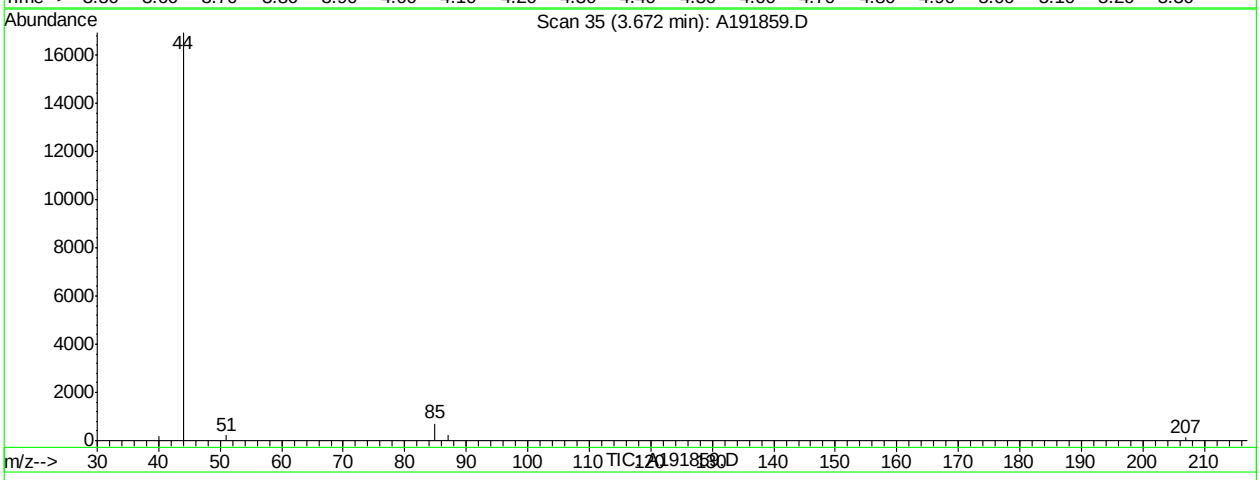
A191859.D MA7222.M Wed Feb 20 17:27:21 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:27 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(8) dichlorodifluoromethane (M)

3.67min 1.41ug/L

response 2515

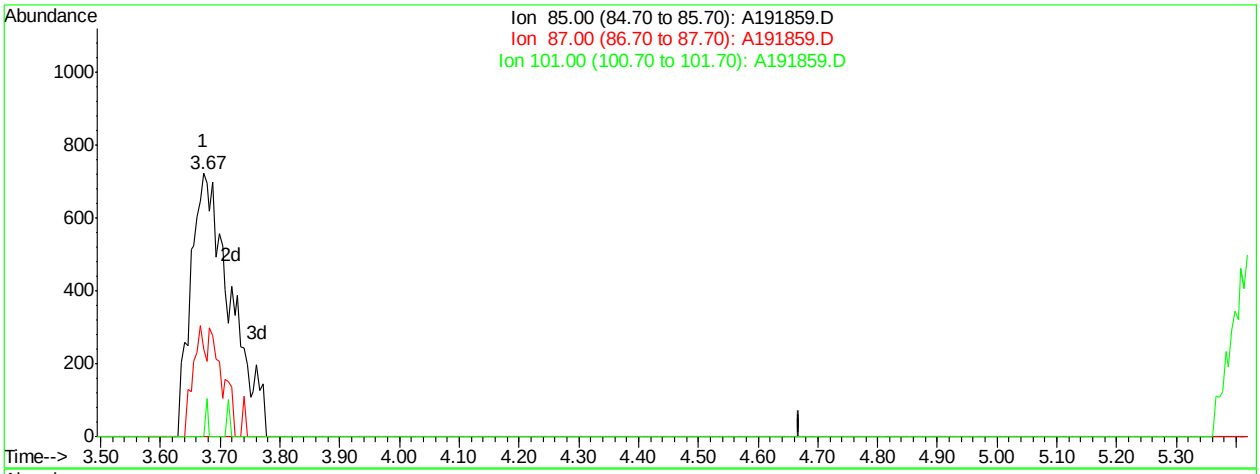
Ion	Exp%	Act%
85.00	100	100
87.00	32.40	33.10
101.00	8.70	0.00
0.00	0.00	0.00

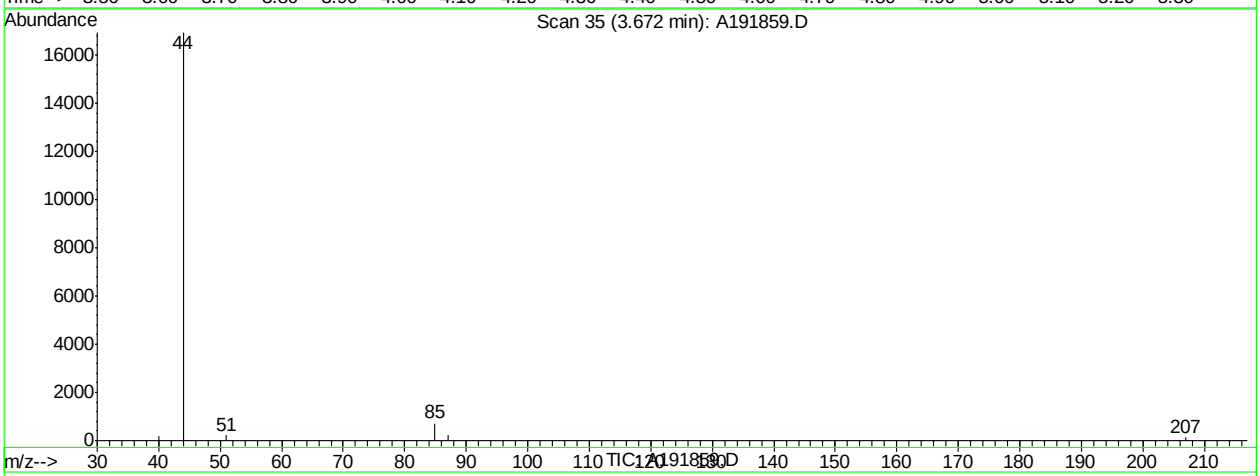
A191859.D MA7222.M Wed Feb 20 17:27:27 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:27 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(8) dichlorodifluoromethane (M)

3.67min 1.85ug/L m

response 3304

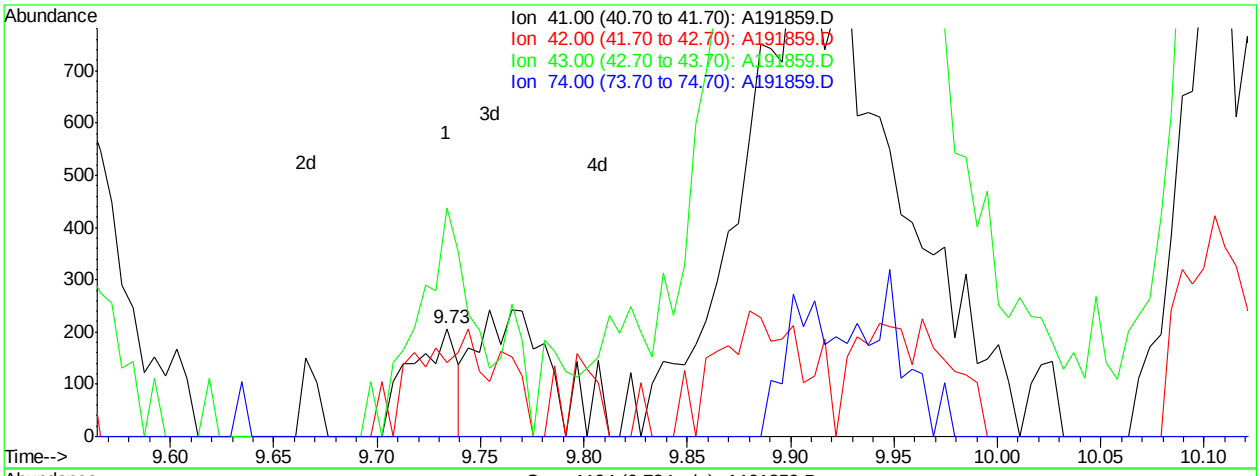
Ion	Exp%	Act%
85.00	100	100
87.00	32.40	33.10
101.00	8.70	0.00
0.00	0.00	0.00

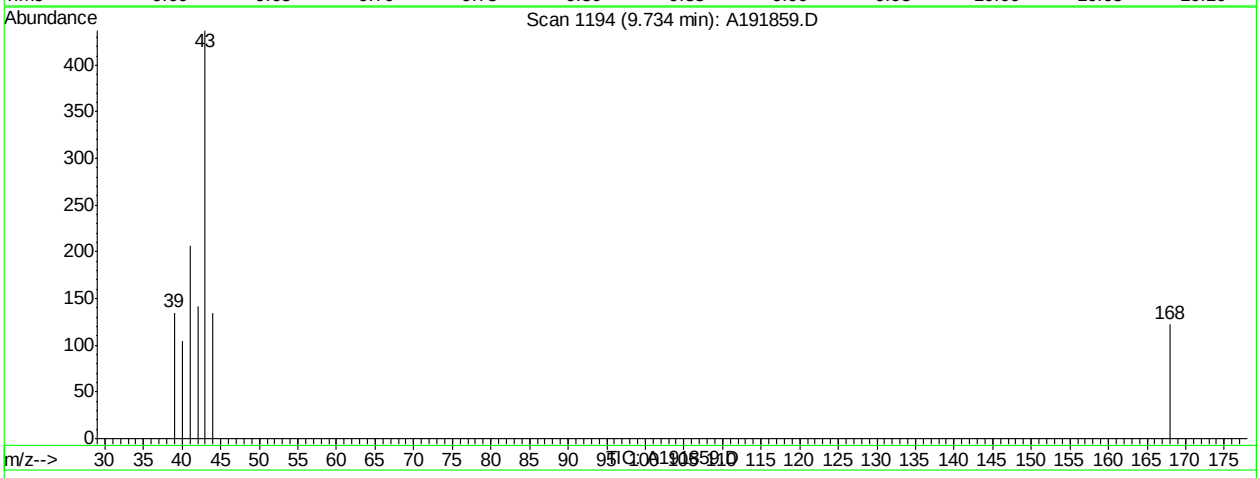
A191859.D MA7222.M Wed Feb 20 17:27:31 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:27 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(24) iso-butyl alcohol (M)

9.73min 4.87ug/L

response 323

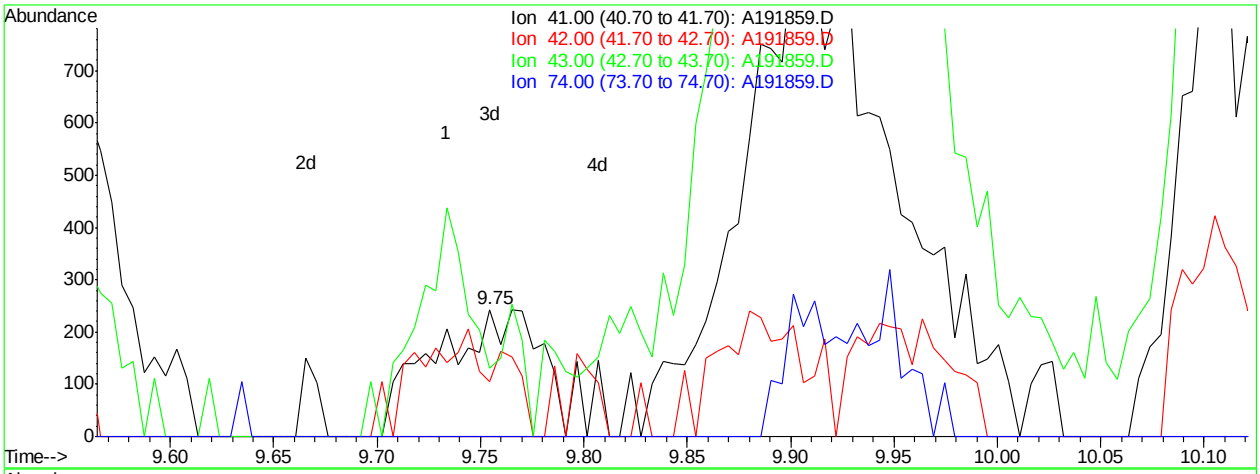
Ion	Exp%	Act%
41.00	100	100
42.00	83.50	68.93
43.00	133.70	161.17
74.00	11.80	0.00

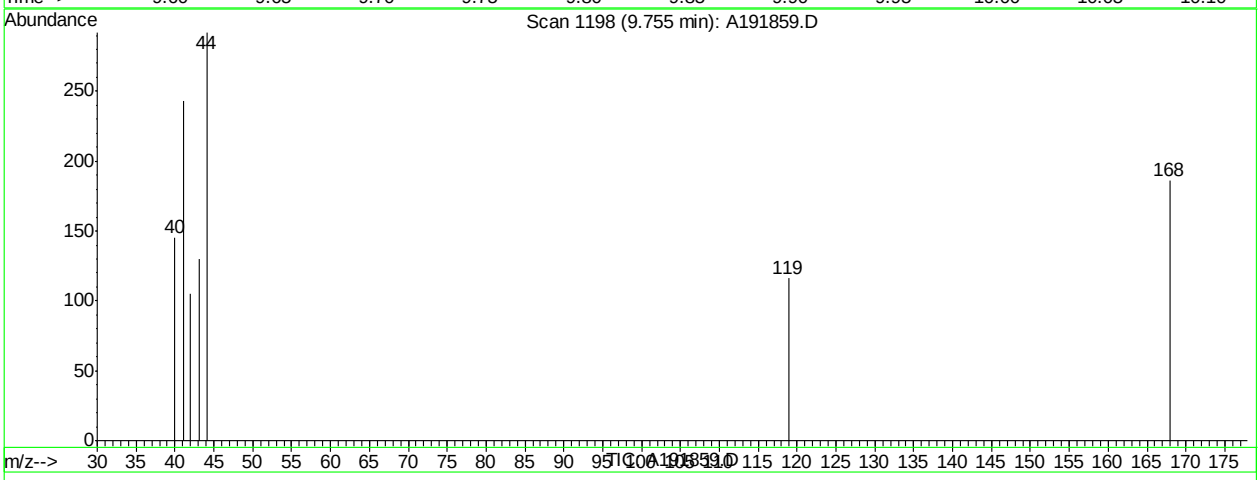
A191859.D MA7222.M Wed Feb 20 17:27:55 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:27 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(24) iso-butyl alcohol (M)

9.75min 12.93ug/L m

response 857

Ion	Exp%	Act%
41.00	100	100
42.00	83.50	43.21#
43.00	133.70	53.50#
74.00	11.80	0.00

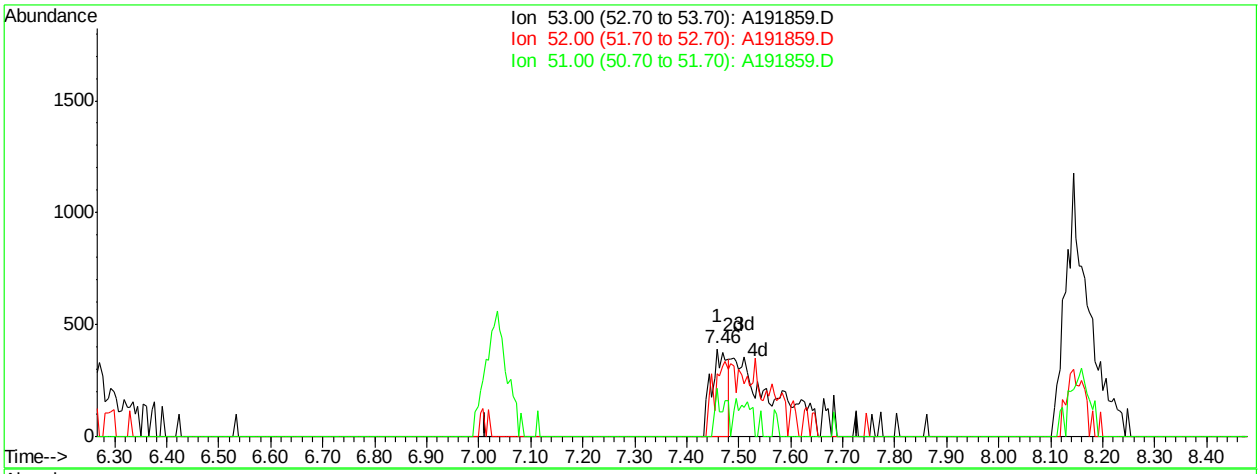
A191859.D MA7222.M Wed Feb 20 17:28:00 2013 MSA

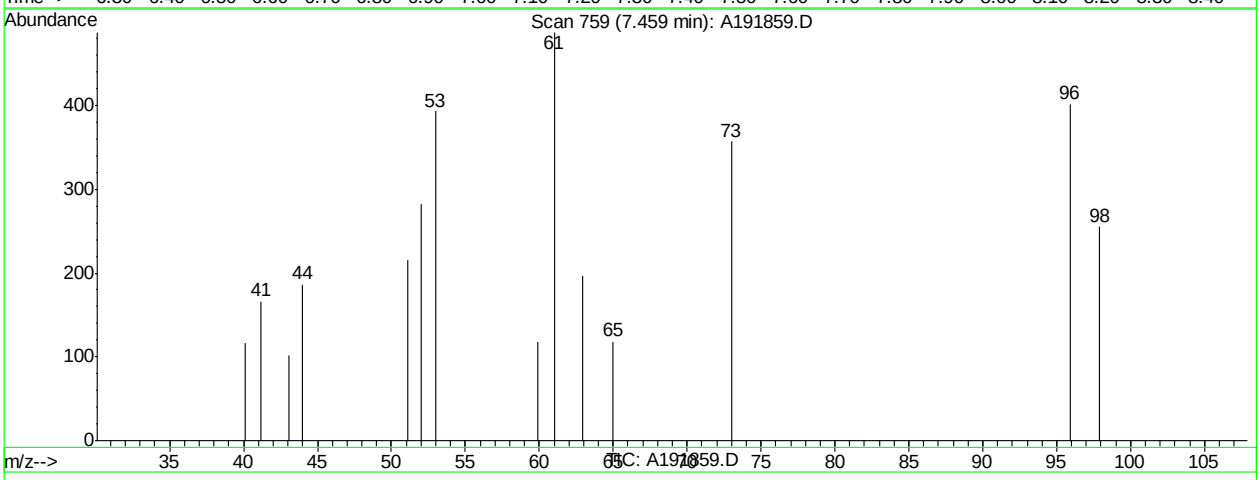
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D
Acq On : 20 Feb 2013 1:53 pm
Sample : ic7222-2
Misc : MS43382,VA7222,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:28 2013

Vial: 100
Operator: Oksanat
Inst : MSA
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(37) acrylonitrile (M)

7.46min 1.40ug/L

response 831

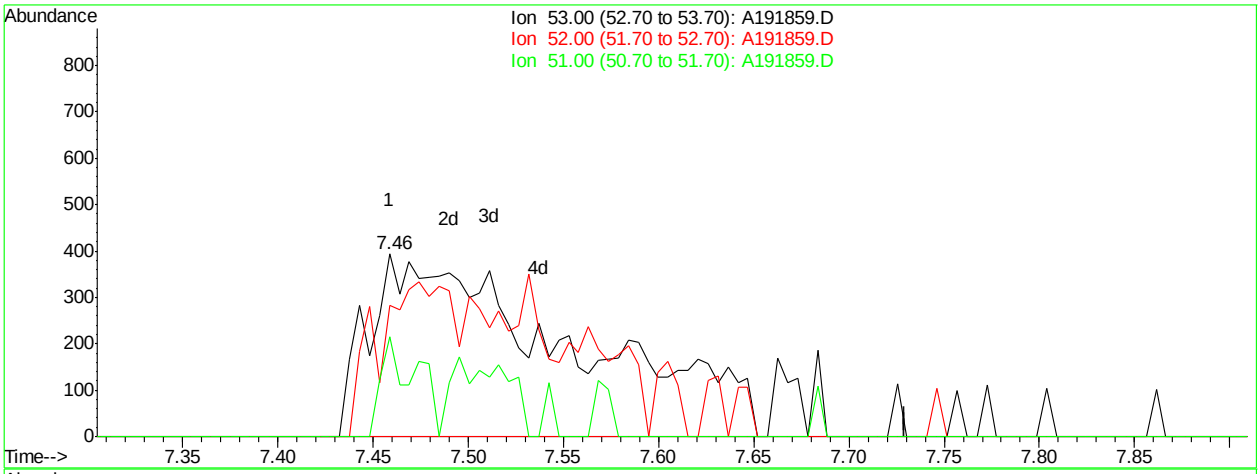
Ion	Exp%	Act%
53.00	100	100
52.00	84.10	71.76
51.00	38.00	54.71
0.00	0.00	0.00

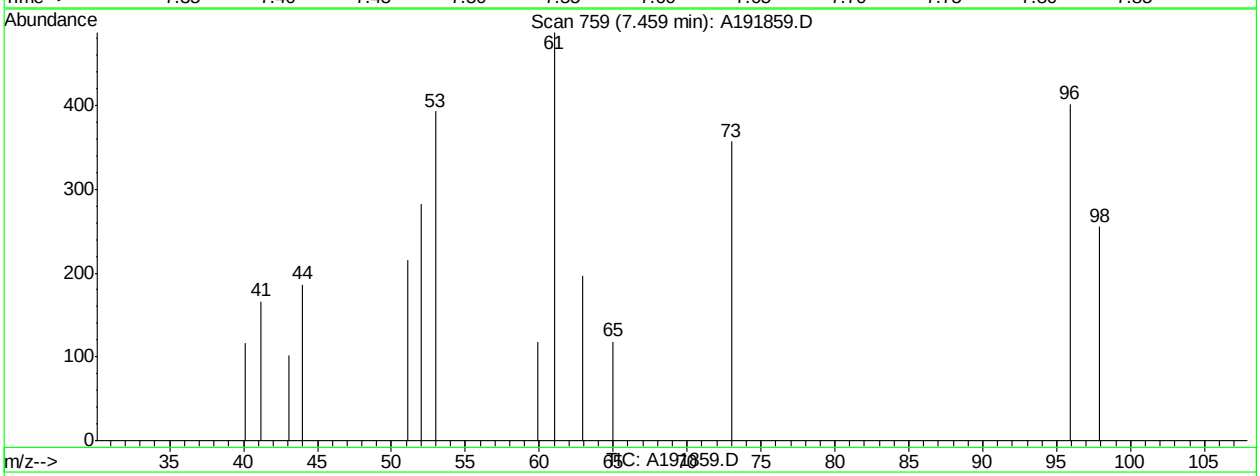
A191859.D MA7222.M Wed Feb 20 17:28:26 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:28 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(37) acrylonitrile (M)

7.46min 4.80ug/L m

response 2856

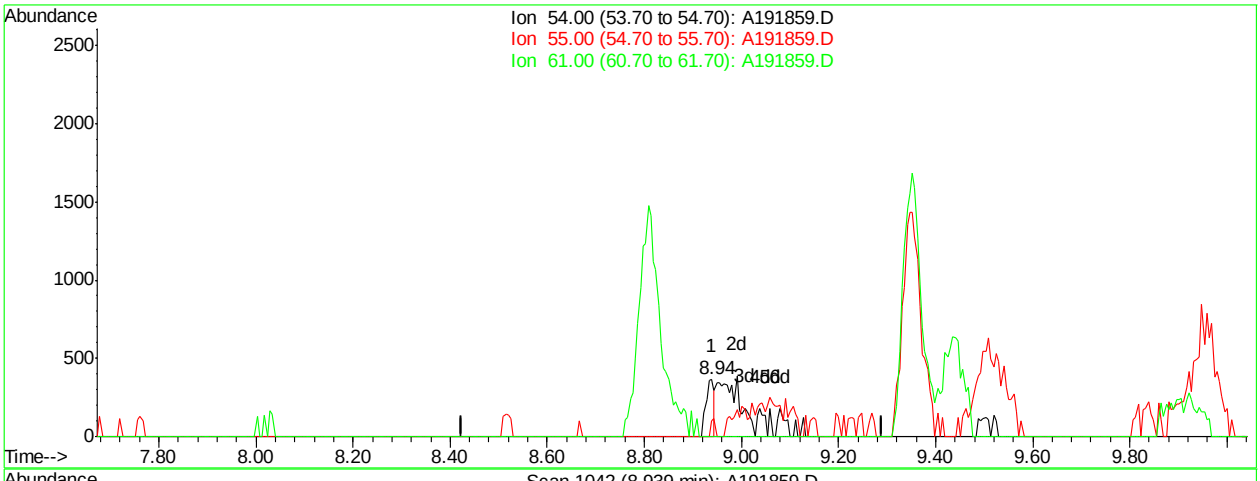
Ion	Exp%	Act%
53.00	100	100
52.00	84.10	71.76
51.00	38.00	54.71
0.00	0.00	0.00

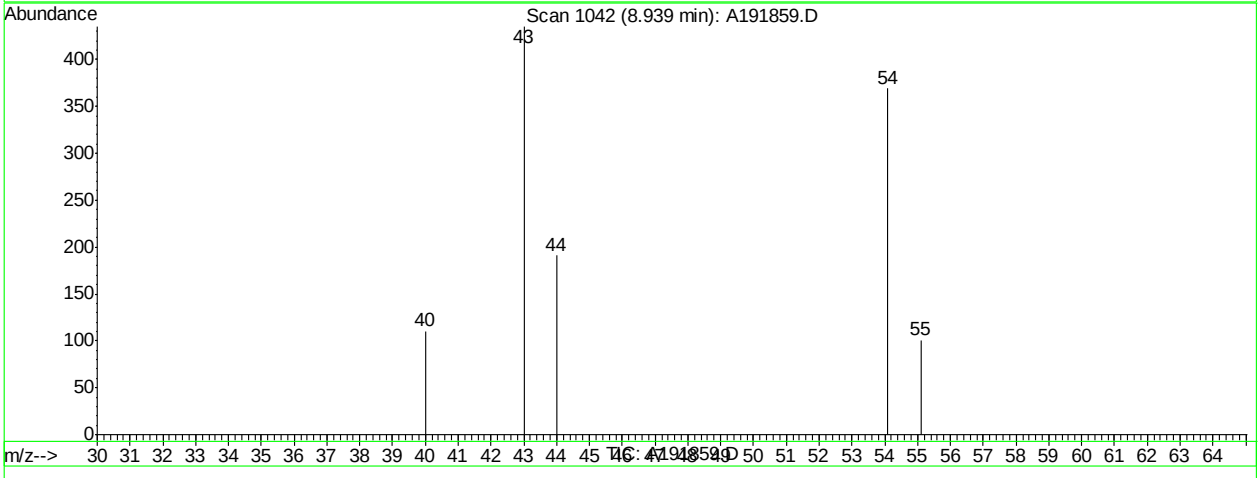
A191859.D MA7222.M Wed Feb 20 17:28:33 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:28 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(43) propionitrile (M)

8.94min 1.91ug/L

response 444

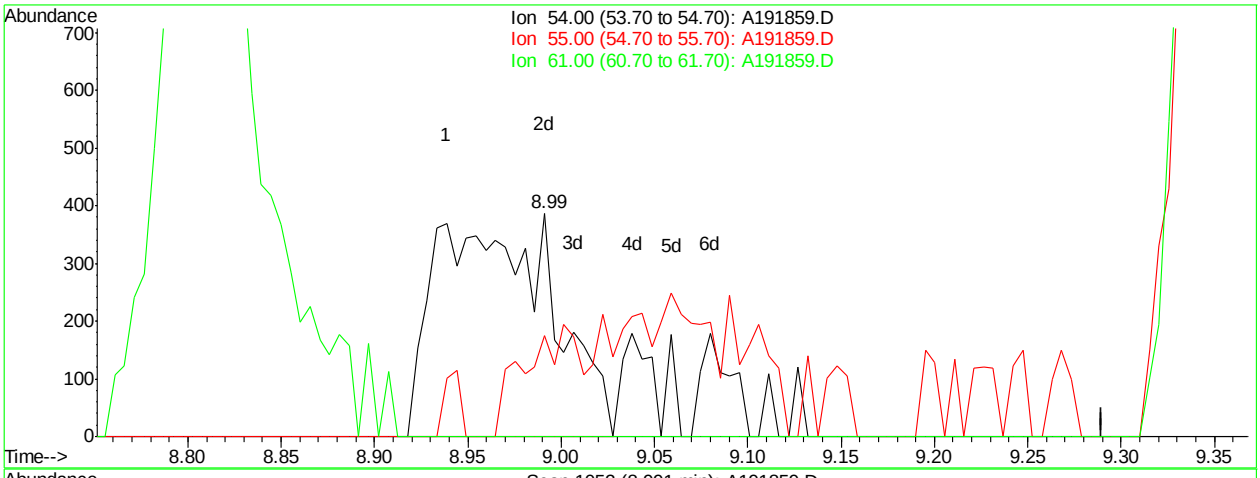
Ion	Exp%	Act%
54.00	100	100
55.00	30.90	27.37
61.00	6.10	0.00
0.00	0.00	0.00

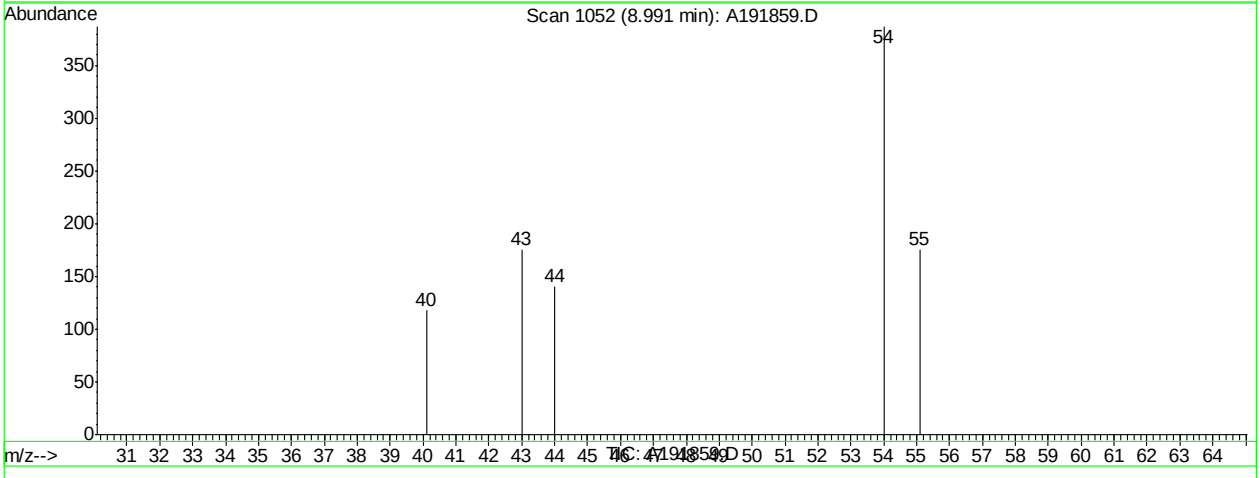
A191859.D MA7222.M Wed Feb 20 17:28:41 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:28 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(43) propionitrile (M)

8.99min 7.00ug/L m

response 1629

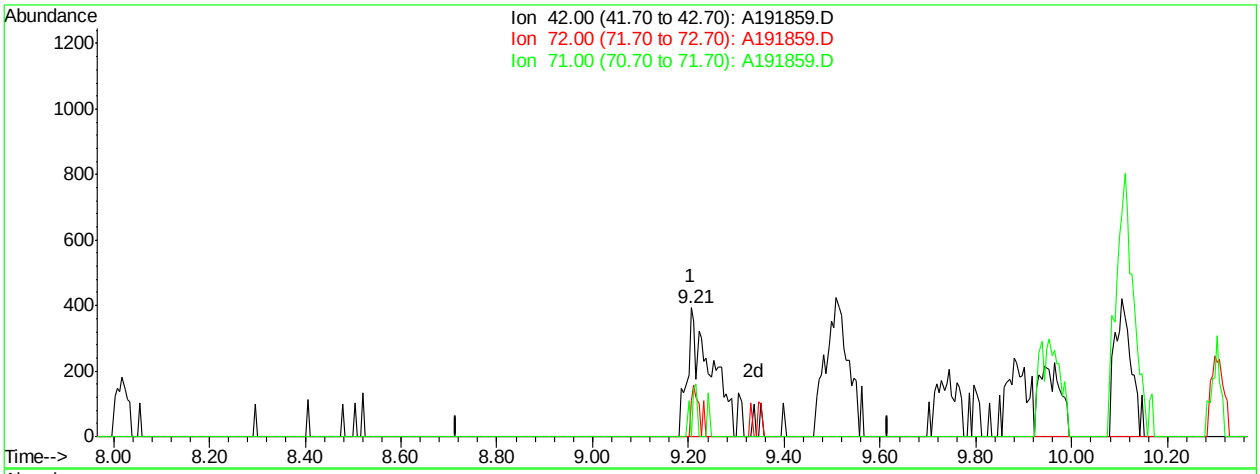
Ion	Exp%	Act%
54.00	100	100
55.00	30.90	45.22
61.00	6.10	0.00
0.00	0.00	0.00

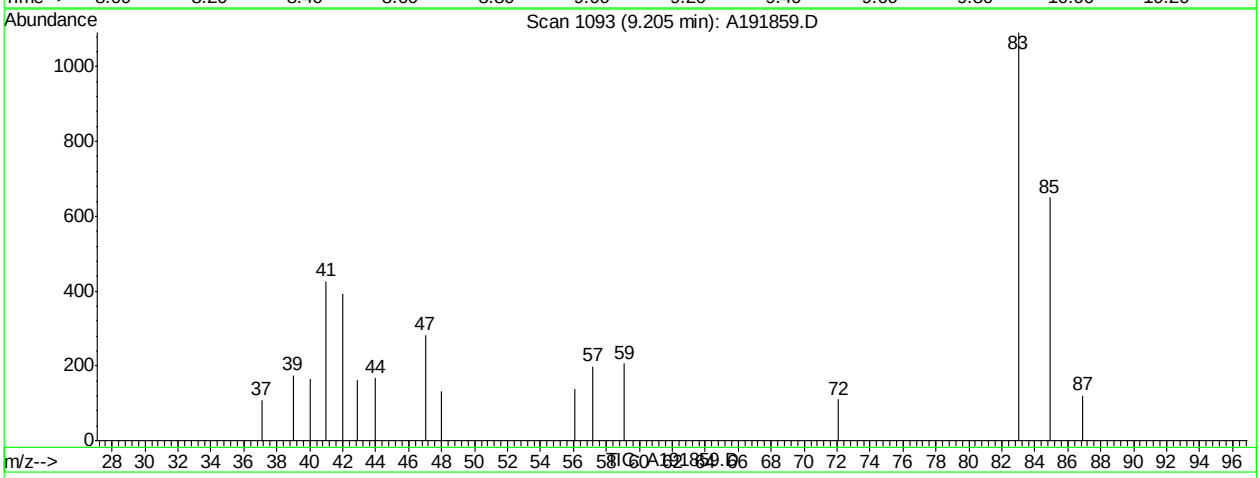
A191859.D MA7222.M Wed Feb 20 17:28:48 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:28 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(45) tetrahydrofuran (M)

9.21min 1.84ug/L

response 1362

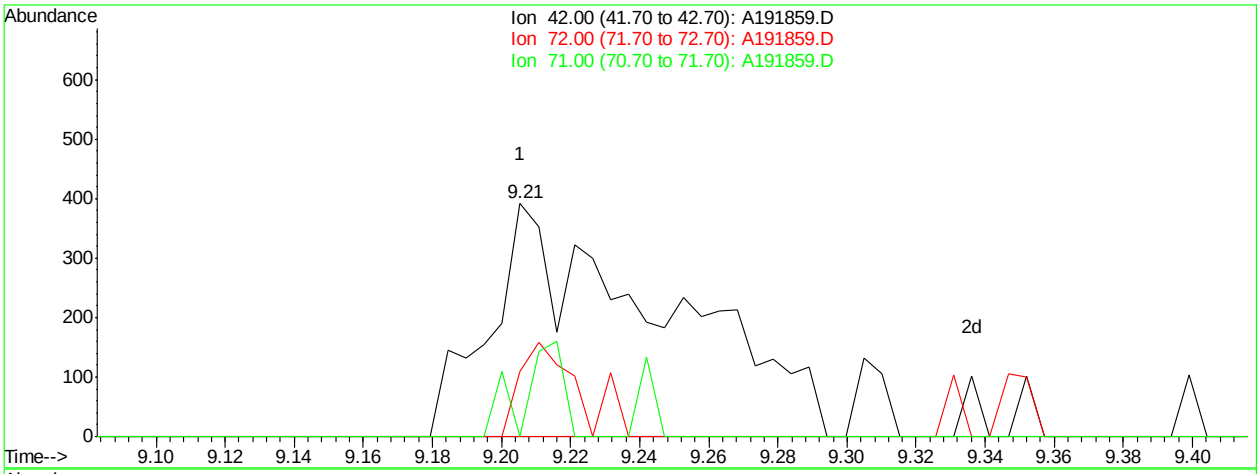
Ion	Exp%	Act%
42.00	100	100
72.00	32.10	13.80
71.00	27.80	9.54
0.00	0.00	0.00

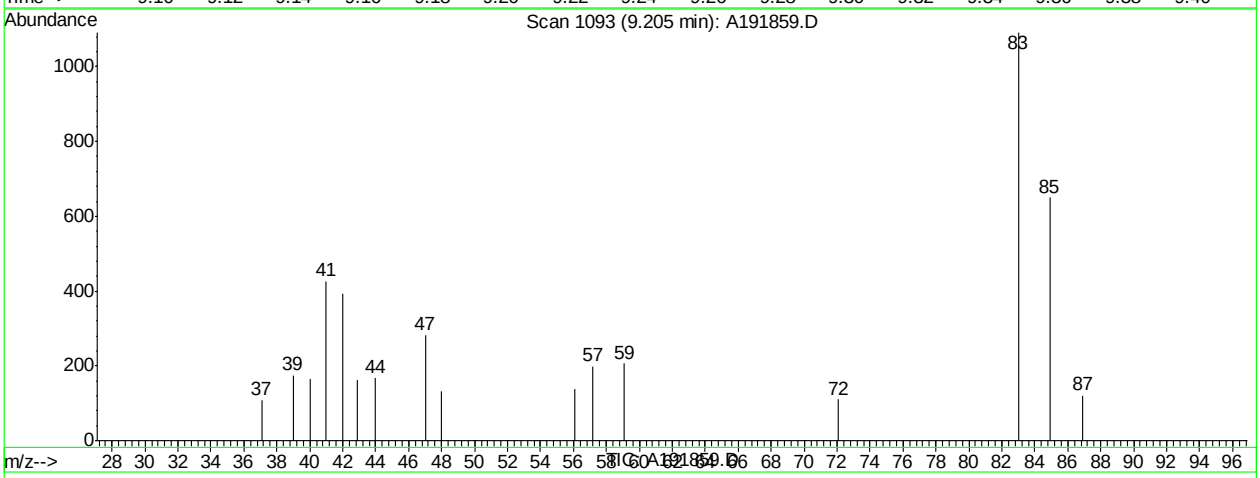
A191859.D MA7222.M Wed Feb 20 17:28:54 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:28 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(45) tetrahydrofuran (M)

9.21min 1.84ug/L m

response 1362

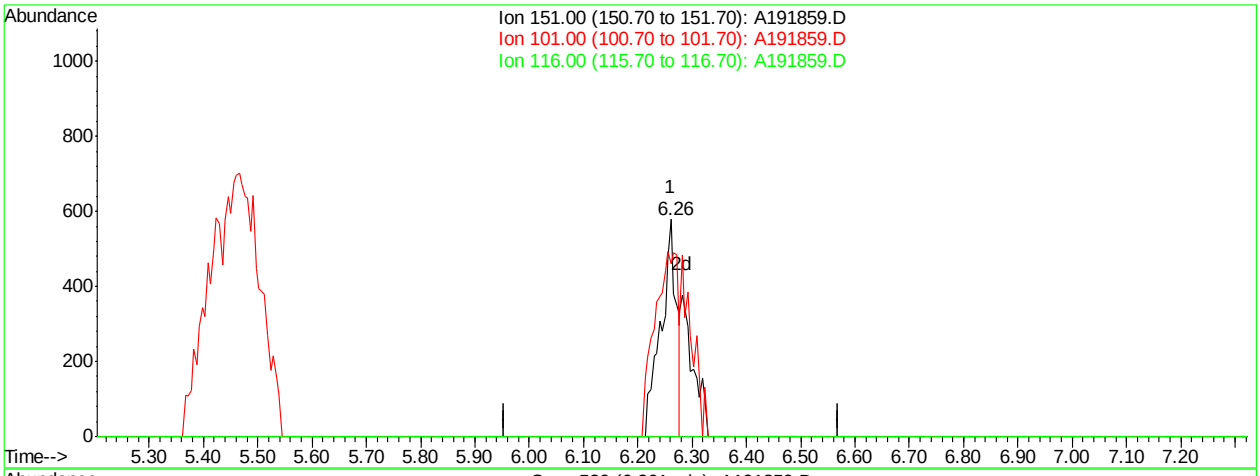
Ion	Exp%	Act%
42.00	100	100
72.00	32.10	13.80
71.00	27.80	9.54
0.00	0.00	0.00

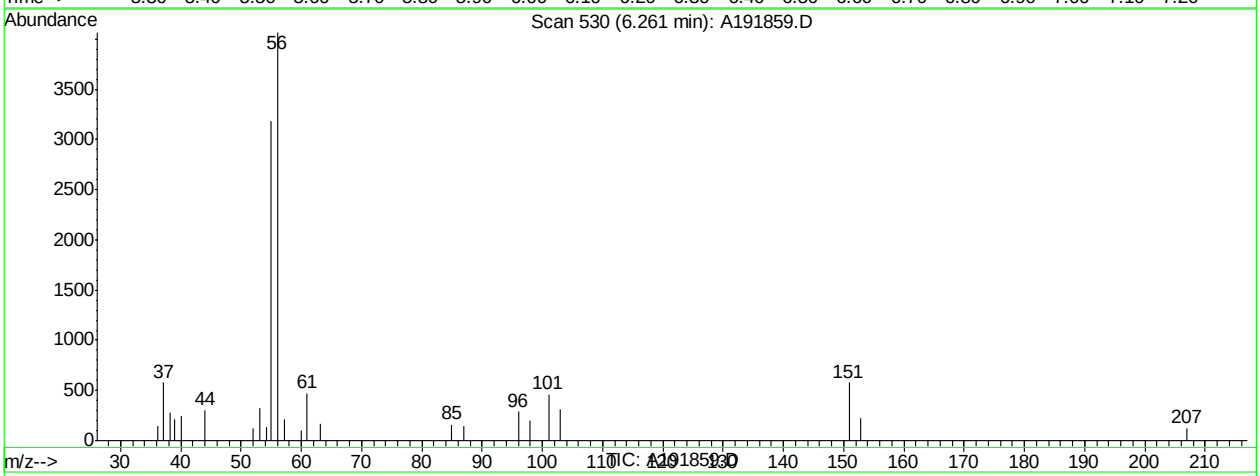
A191859.D MA7222.M Wed Feb 20 17:29:00 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:28 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(49) freon 113 (M)

6.26min 1.06ug/L

response 1159

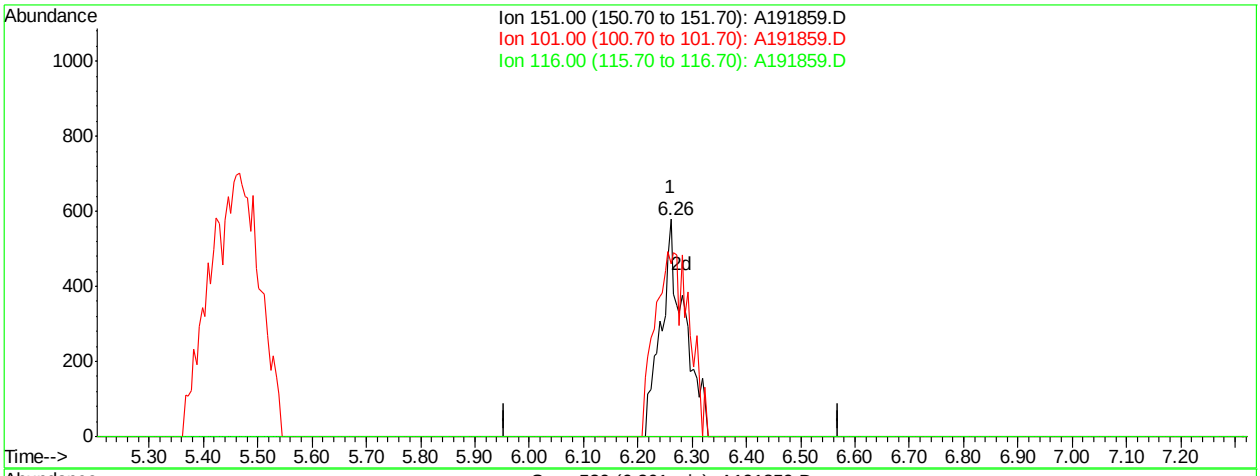
Ion	Exp%	Act%
151.00	100	100
101.00	134.30	79.45#
116.00	11.90	0.00#
0.00	0.00	0.00

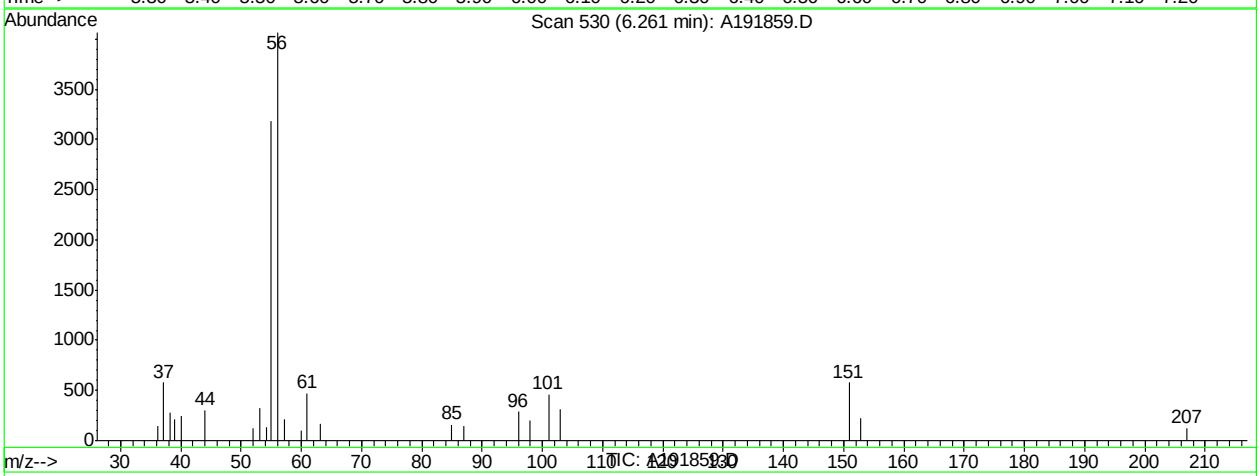
A191859.D MA7222.M Wed Feb 20 17:29:06 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:29 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(49) freon 113 (M)

6.26min 1.60ug/L m

response 1750

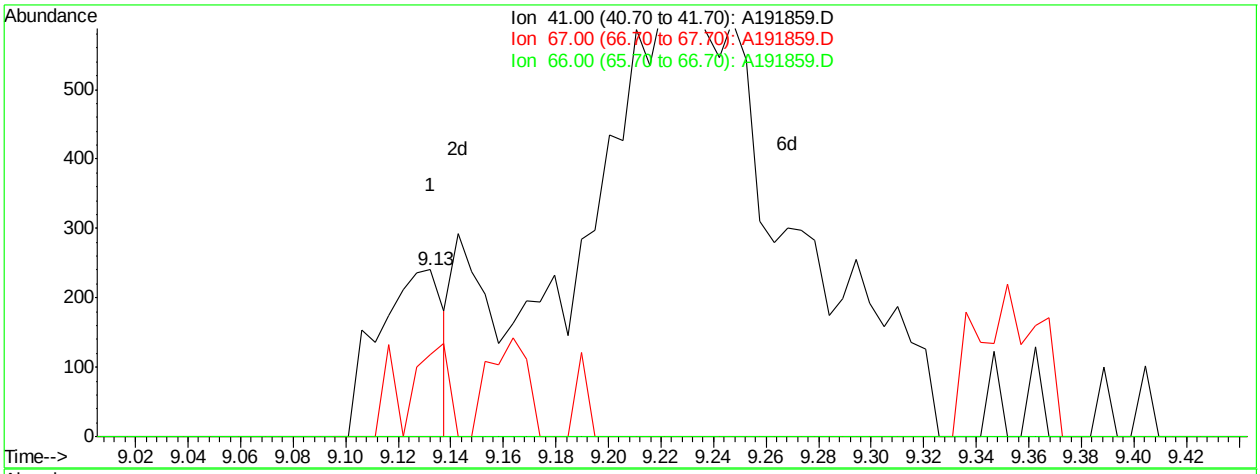
Ion	Exp%	Act%
151.00	100	100
101.00	134.30	79.45#
116.00	11.90	0.00#
0.00	0.00	0.00

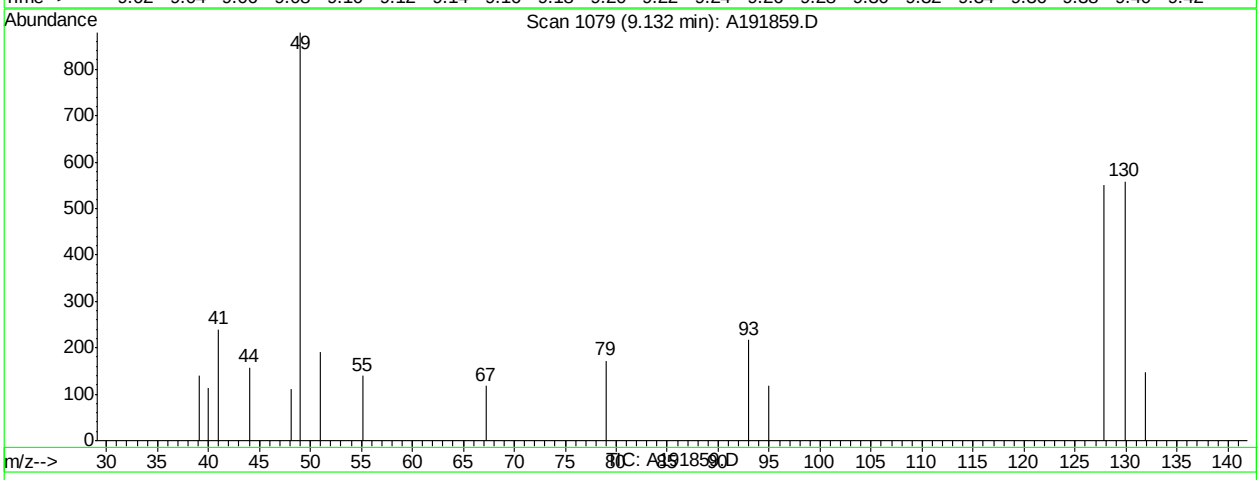
A191859.D MA7222.M Wed Feb 20 17:29:10 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:29 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(50) methacrylonitrile (M)

9.13min 0.41ug/L

response 418

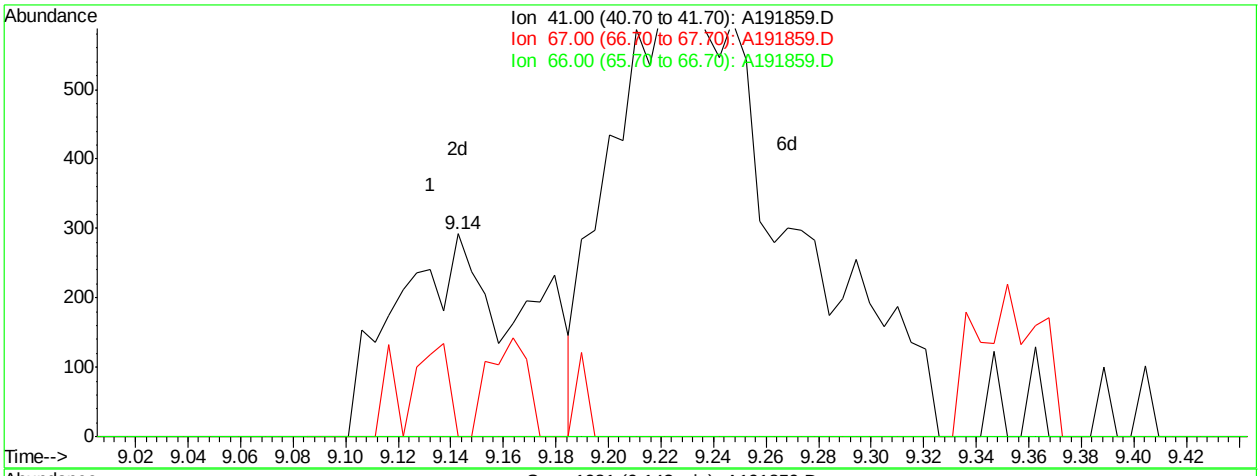
Ion	Exp%	Act%
41.00	100	100
67.00	59.20	49.17
66.00	19.40	0.00
0.00	0.00	0.00

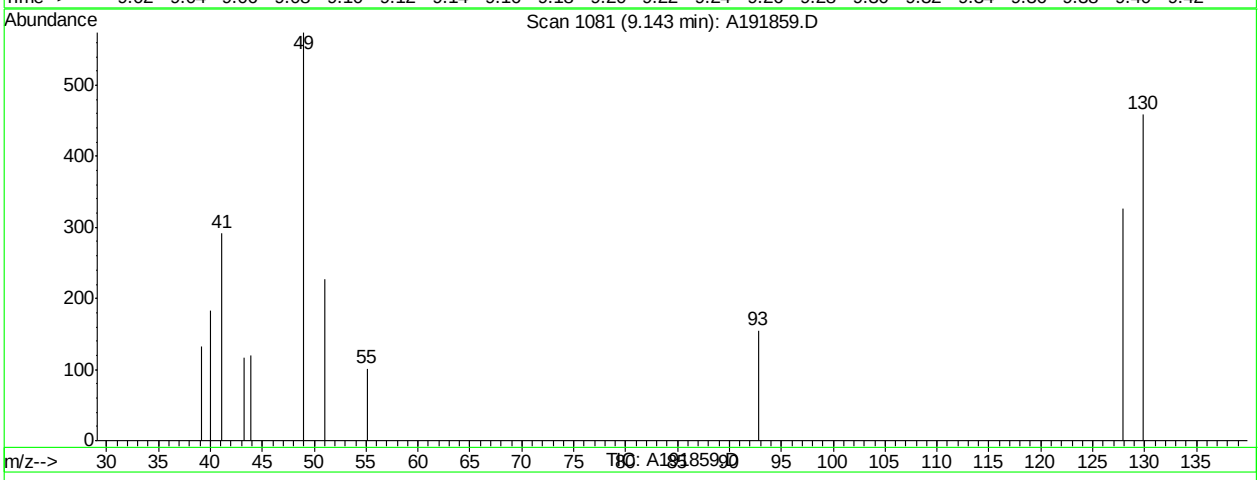
A191859.D MA7222.M Wed Feb 20 17:29:17 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:29 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(50) methacrylonitrile (M)

9.14min 0.97ug/L m

response 983

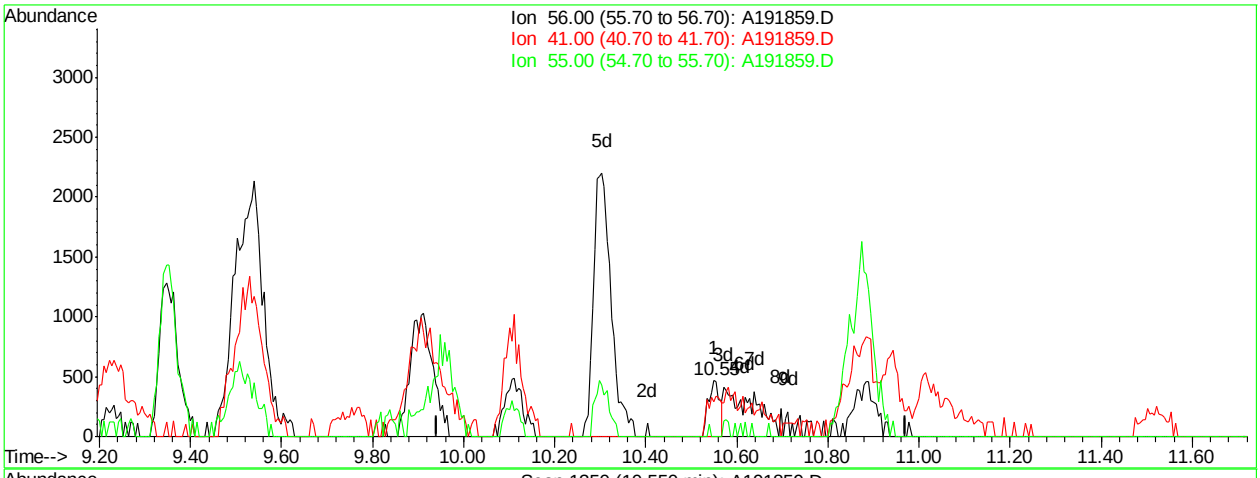
Ion	Exp%	Act%
41.00	100	100
67.00	59.20	0.00#
66.00	19.40	0.00
0.00	0.00	0.00

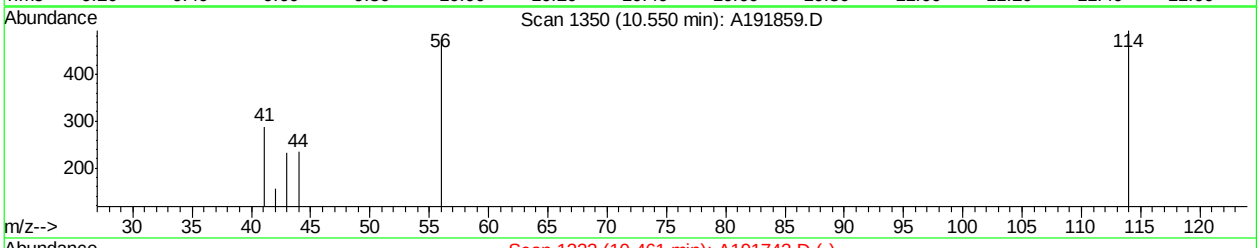
A191859.D MA7222.M Wed Feb 20 17:29:22 2013 MSA

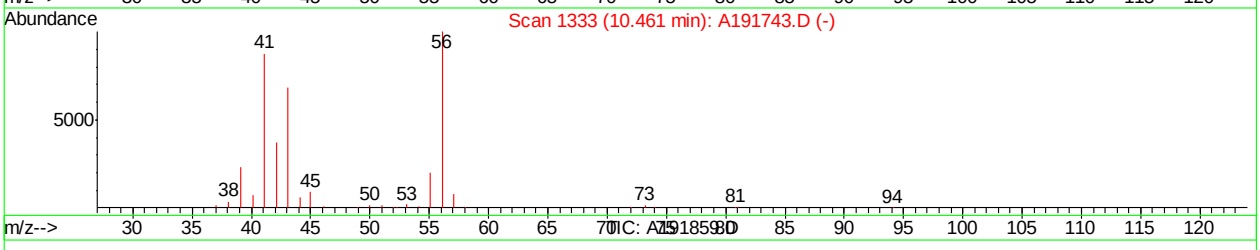
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:29 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration







(57) n-butyl alcohol (M)

10.55min 16.88ug/L

response 818

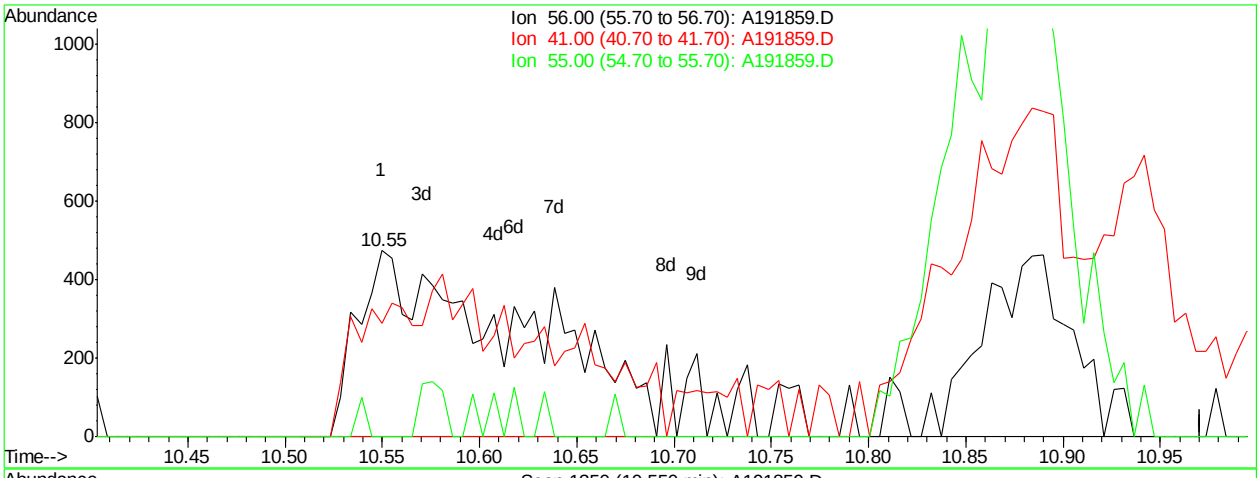
Ion	Exp%	Act%
56.00	100	100
41.00	81.80	60.89
55.00	18.60	0.00
0.00	0.00	0.00

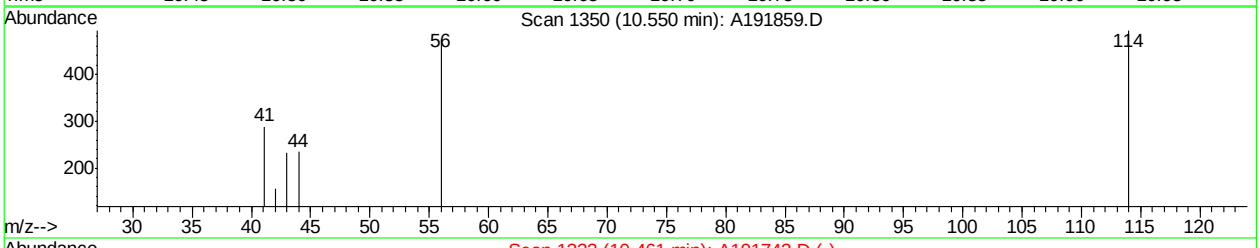
A191859.D MA7222.M Wed Feb 20 17:29:58 2013 MSA

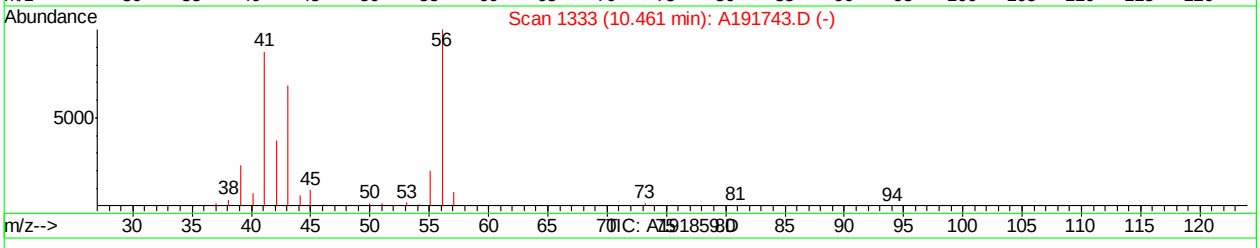
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:30 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration







(57) n-butyl alcohol (M)

10.55min 55.95ug/L m

response 2712

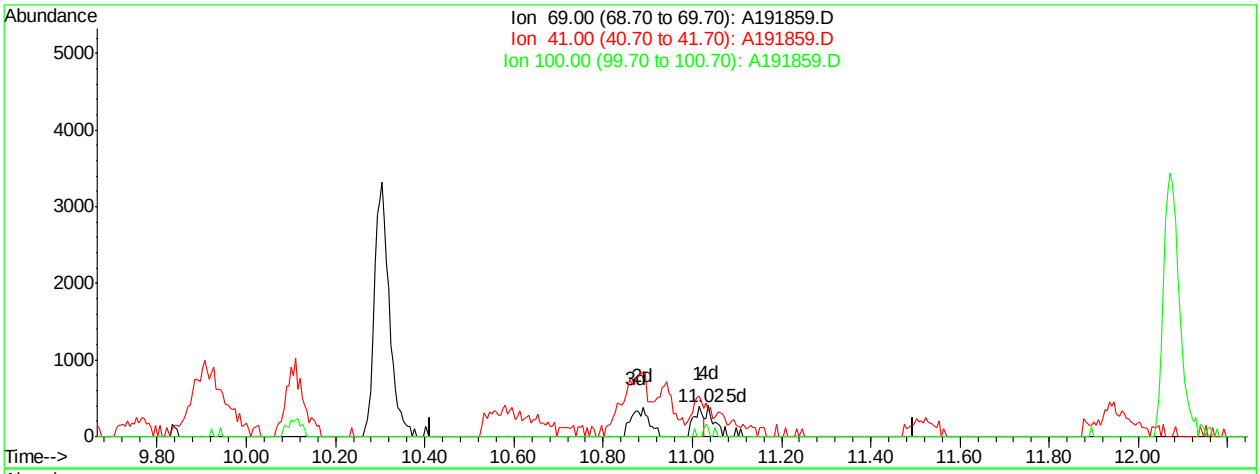
Ion	Exp%	Act%
56.00	100	100
41.00	81.80	60.89
55.00	18.60	0.00
0.00	0.00	0.00

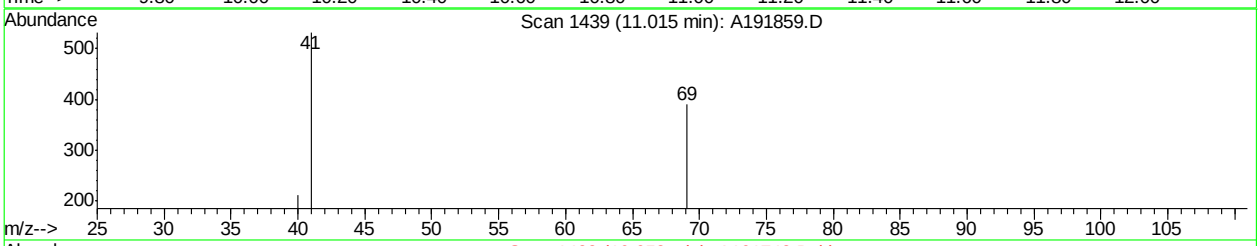
A191859.D MA7222.M Wed Feb 20 17:30:05 2013 MSA

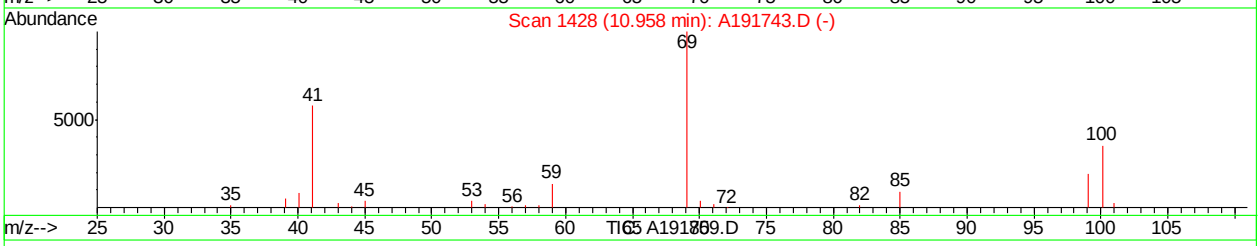
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:30 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration







(72) methyl methacrylate (M)

11.02min 0.50ug/L

response 585

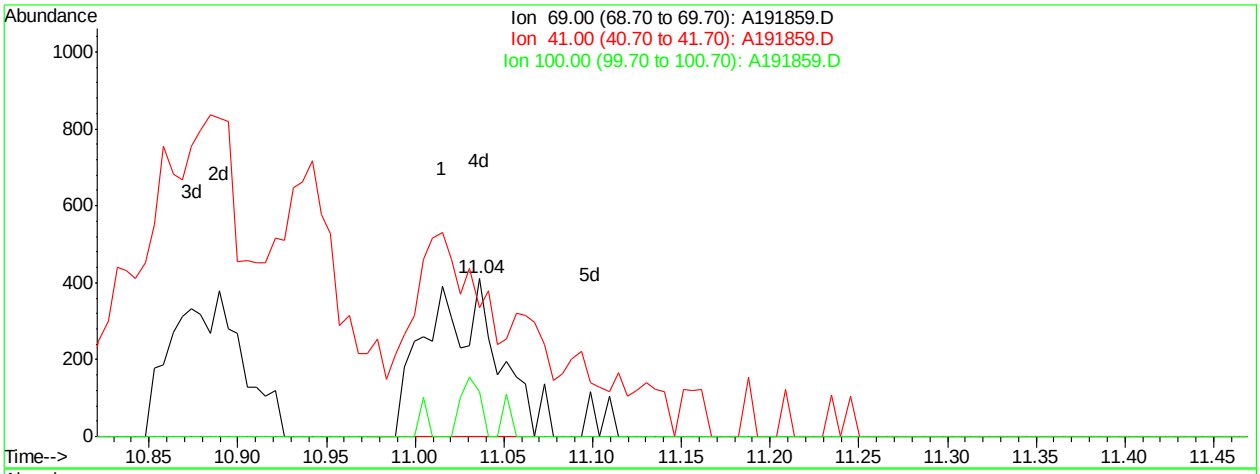
Ion	Exp%	Act%
69.00	100	100
41.00	173.90	98.46#
100.00	35.90	0.00#
0.00	0.00	0.00

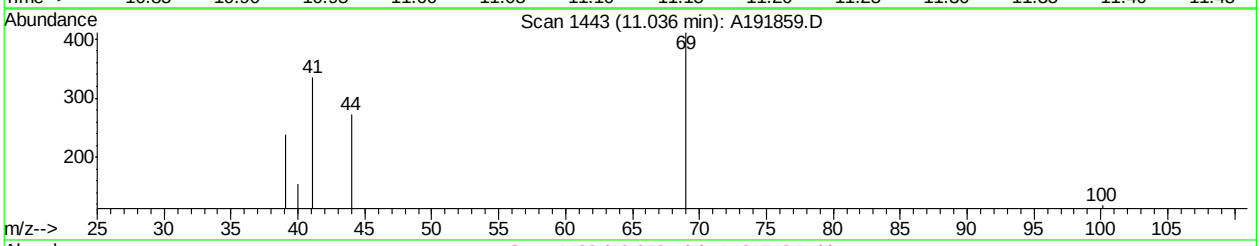
A191859.D MA7222.M Wed Feb 20 17:30:43 2013 MSA

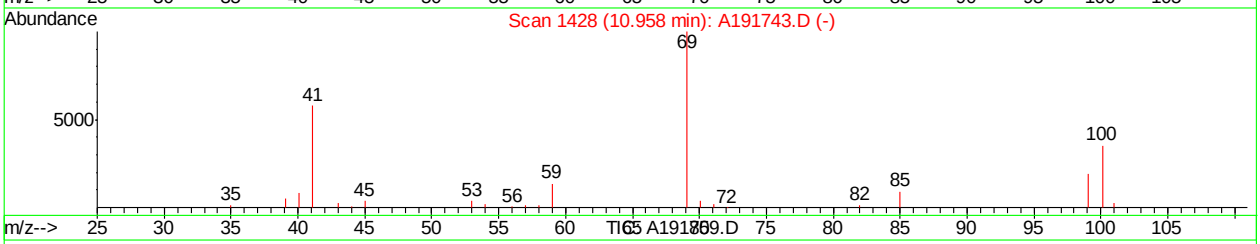
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:30 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration







(72) methyl methacrylate (M)

11.04min 0.92ug/L m

response 1072

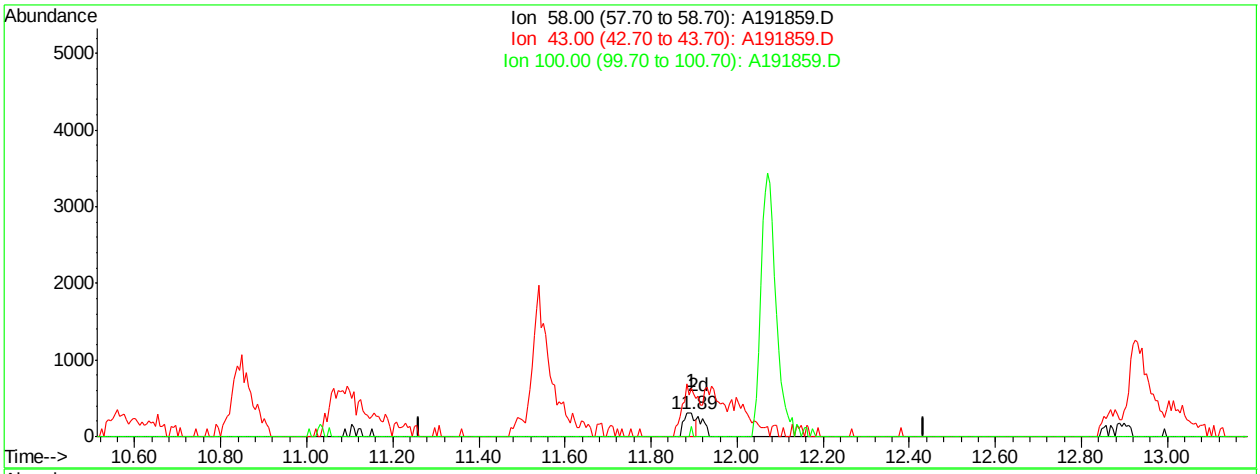
Ion	Exp%	Act%
69.00	100	100
41.00	173.90	81.51#
100.00	35.90	28.71
0.00	0.00	0.00

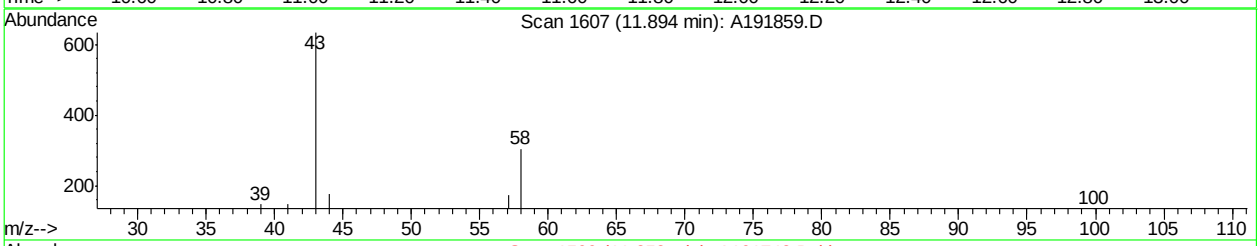
A191859.D MA7222.M Wed Feb 20 17:30:51 2013 MSA

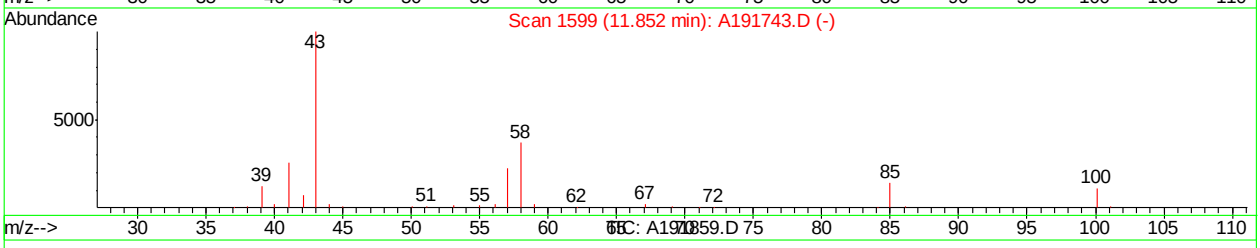
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:30 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration







(78) 4-methyl-2-pentanone (M)

11.89min 0.74ug/L

response 550

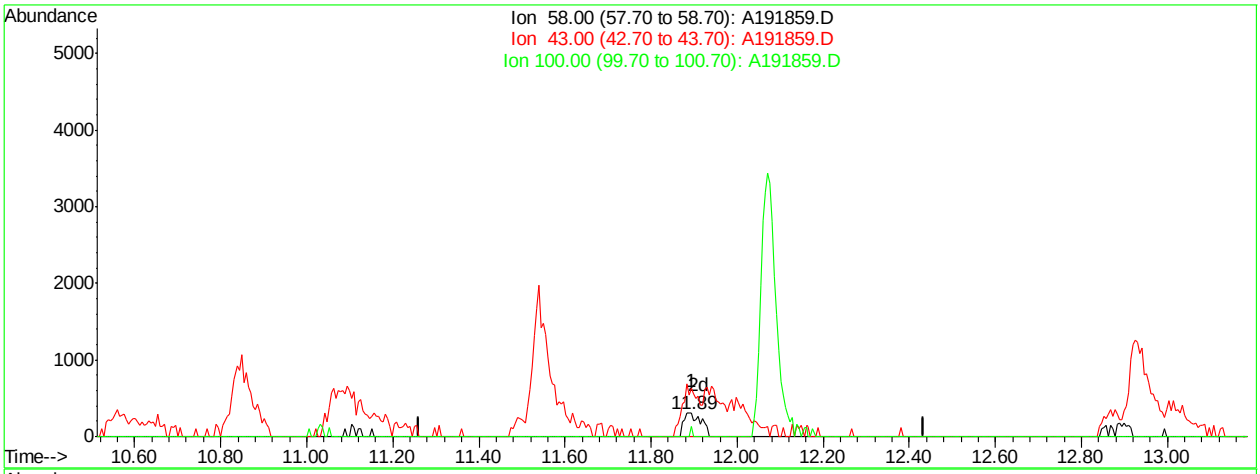
Ion	Exp%	Act%
58.00	100	100
43.00	245.50	302.36#
100.00	28.00	7.64
0.00	0.00	0.00

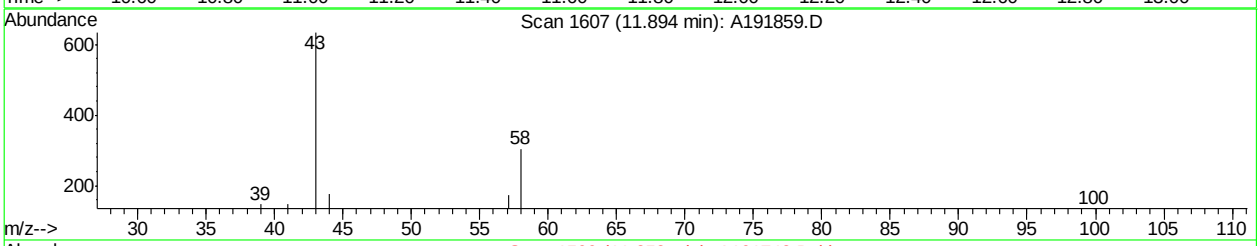
A191859.D MA7222.M Wed Feb 20 17:31:03 2013 MSA

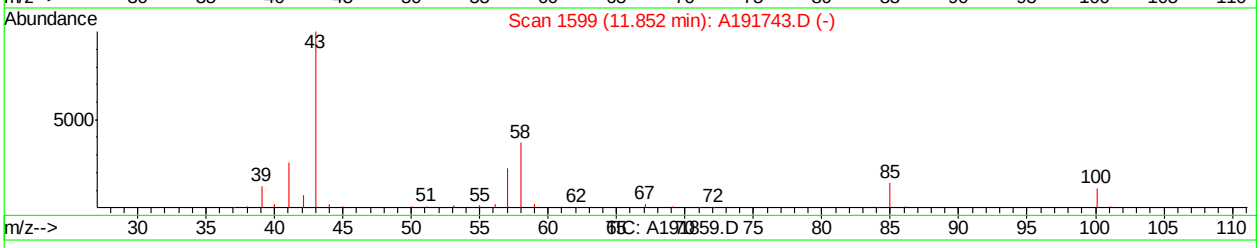
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:31 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration







(78) 4-methyl-2-pentanone (M)

11.89min 1.15ug/L m

response 857

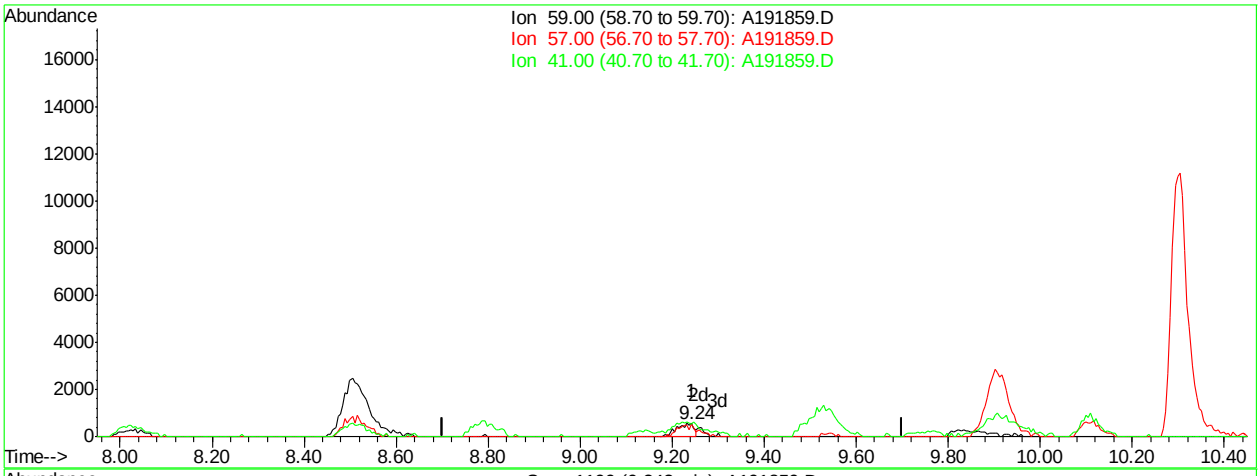
Ion	Exp%	Act%
58.00	100	100
43.00	245.50	194.05#
100.00	28.00	4.90
0.00	0.00	0.00

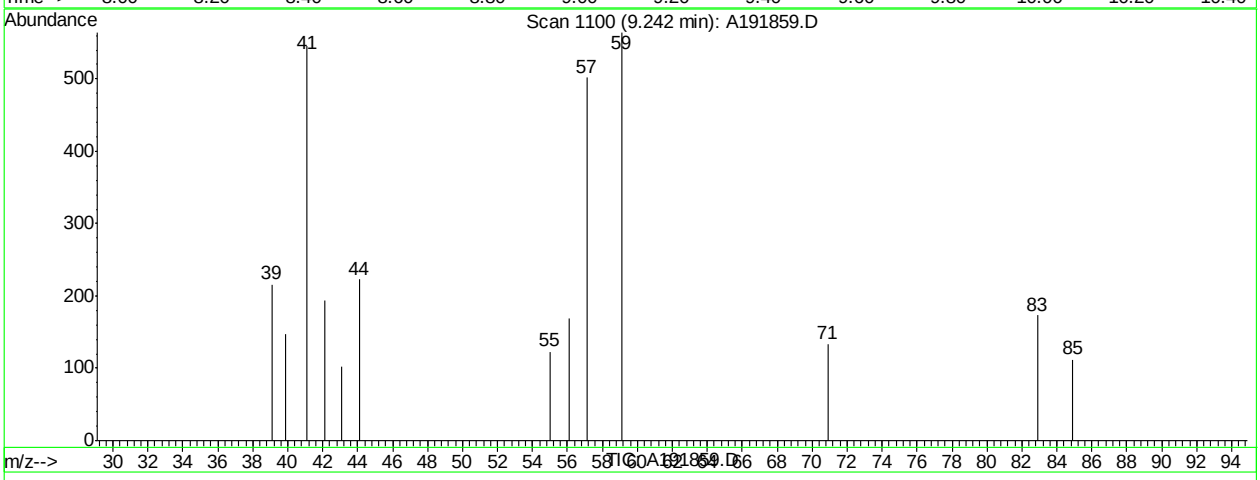
A191859.D MA7222.M Wed Feb 20 17:31:07 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:31 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Multiple Level Calibration





(31) t-butyl formate (m)

9.24min 0.88ug/L

response 1465

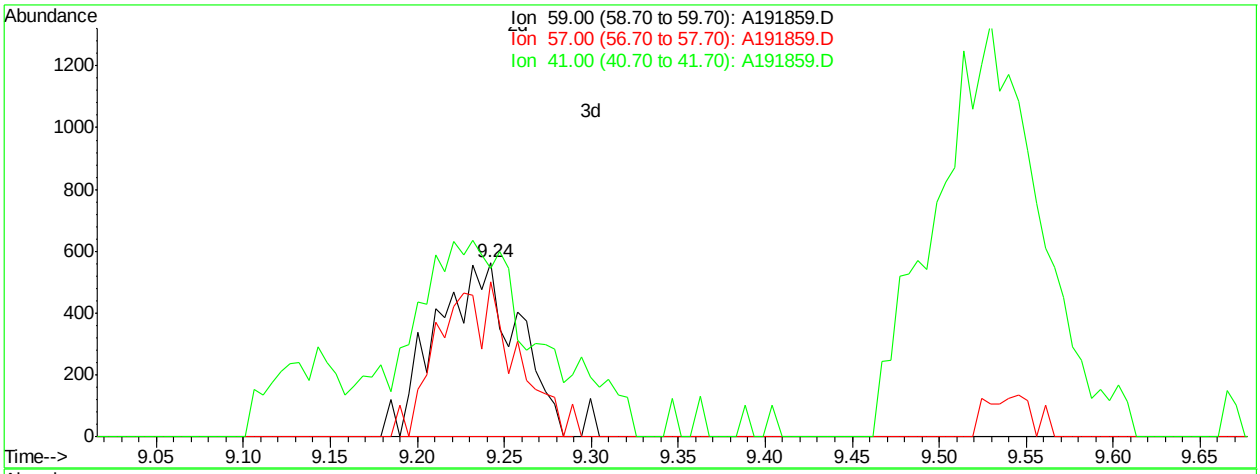
Ion	Exp%	Act%
59.00	100	100
57.00	79.80	44.51#
41.00	93.10	0.00#
0.00	0.00	0.00

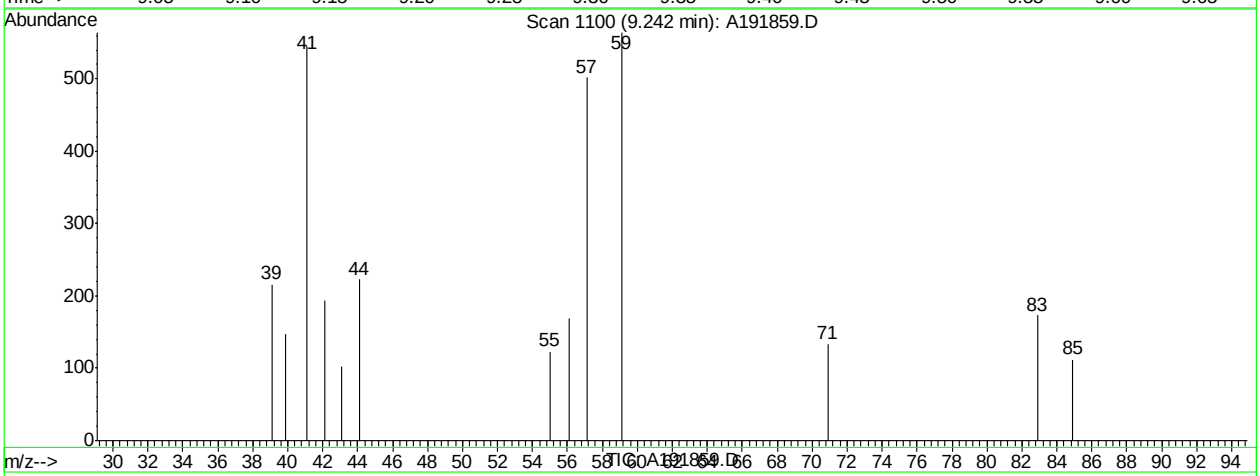
A191859.D MA7222.M Wed Feb 20 17:56:02 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191859.D Vial: 100
Acq On : 20 Feb 2013 1:53 pm Operator: Oksanat
Sample : ic7222-2 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:56 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Multiple Level Calibration





(31) t-butyl formate (m)

9.24min 1.09ug/L m

response 1816

Ion	Exp%	Act%
59.00	100	100
57.00	79.80	35.90#
41.00	93.10	0.00#
0.00	0.00	0.00

A191859.D MA7222.M Wed Feb 20 17:56:10 2013 MSA

7.6.3.25

7

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 02/25/13 17:30

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:23 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.01	65	96161	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	240233	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	338858	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	307905	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	184954	50.00	ug/L	0.00

System Monitoring Compounds

47) dibromofluoromethane (s)	9.39	113	9404	4.58	ug/L	0.01
Spiked Amount 50.000	Range 81 - 121		Recovery = 9.16%#			
48) 1,2-dichloroethane-d4 (s)	9.83	65	10323	4.09	ug/L	0.01
Spiked Amount 50.000	Range 74 - 127		Recovery = 8.18%#			
77) toluene-d8 (s)	12.07	98	31571	4.49	ug/L	0.01
Spiked Amount 50.000	Range 80 - 122		Recovery = 8.98%#			
102) 4-bromofluorobenzene (s)	15.06	95	13516	4.53	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 9.06%#			

Target Compounds

							Qvalue
2) 1,4-dioxane	11.08	88	1743	107.54	ug/L	#	58
4) tertiary butyl alcohol	7.14	59	4737m	24.50	ug/L		
7) chlorodifluoromethane	3.70	51	6713	3.90	ug/L		94
8) dichlorodifluoromethane	3.67	85	9425	5.01	ug/L		99
9) chloromethane	3.97	50	12398	4.37	ug/L		96
10) vinyl chloride	4.22	62	11433	4.84	ug/L		96
11) bromomethane	4.83	94	8481	5.49	ug/L		89
12) chloroethane	5.01	64	5622	5.11	ug/L		97
14) trichlorofluoromethane	5.47	101	11622	4.86	ug/L		96
15) pentane	5.53	43	17477	5.32	ug/L		96
16) ethyl ether	5.88	74	4834	4.38	ug/L		87
18) acrolein	6.14	56	14716	38.86	ug/L		95
19) 1,1-dichloroethene	6.29	96	7169	4.73	ug/L		94
20) acetone	6.40	43	2358m	4.39	ug/L		
21) allyl chloride	6.84	76	4358	3.67	ug/L	#	57
22) acetonitrile	6.84	40	4509	29.18	ug/L		88
23) iodomethane	6.57	142	15003	4.59	ug/L		90
24) iso-butyl alcohol	9.70	41	2838m	40.76	ug/L		
25) carbon disulfide	6.69	76	25023	4.17	ug/L		95
26) methylene chloride	7.03	84	9781	4.59	ug/L		97
27) methyl acetate	6.89	43	5423	3.46	ug/L	#	69
28) methyl tert butyl ether	7.37	73	24295	4.07	ug/L		73
29) trans-1,2-dichloroethene	7.42	96	7744	4.39	ug/L		95
30) di-isopropyl ether	8.02	45	28920	3.71	ug/L		77
31) t-butyl formate	9.22	59	6074	3.47	ug/L	#	50
32) 3,3-dimethyl-1-butanol	13.01	57	8137	39.63	ug/L		90
33) ethyl tert-butyl ether	8.50	59	26671	3.79	ug/L		96
35) 1,1-dichloroethane	8.02	63	15004	4.30	ug/L		99
36) chloroprene	8.14	53	9840	3.56	ug/L		95
37) acrylonitrile	7.43	53	12850m	20.56	ug/L		
39) ethyl acetate	8.84	45	809m	3.38	ug/L		
41) 2,2-dichloropropane	8.79	77	10287	3.88	ug/L		98
42) cis-1,2-dichloroethene	8.80	96	8634	4.30	ug/L	#	81

(#) = qualifier out of range (m) = manual integration
A191860.D MA7222.M Thu Feb 21 08:23:14 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:23 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	propionitrile	8.91	54	9754m	39.89 ug/L		
44)	bromochloromethane	9.12	128	4519	4.65 ug/L	#	71
45)	tetrahydrofuran	9.19	42	3912	5.03 ug/L	#	52
46)	chloroform	9.18	83	13918	4.12 ug/L		99
49)	freon 113	6.28	151	4767m	4.14 ug/L		
50)	methacrylonitrile	9.11	41	3656m	3.42 ug/L		
51)	cyclohexane	9.51	84	10825	4.34 ug/L		91
52)	1,1,1-trichloroethane	9.44	97	10908	4.18 ug/L		93
53)	tert-amyl methyl ether	9.95	73	25955	3.97 ug/L		96
56)	epichlorohydrin	11.67	57	3528	21.09 ug/L		77
57)	n-butyl alcohol	10.51	56	8863	177.42 ug/L		94
58)	carbon tetrachloride	9.64	117	9487	4.53 ug/L		94
59)	1,1-dichloropropene	9.63	75	9996	4.38 ug/L		94
60)	hexane	7.75	57	8235	3.65 ug/L		95
61)	benzene	9.90	78	32675	4.63 ug/L		98
62)	Iso-octane	9.91	57	26497	3.78 ug/L		93
63)	heptane	10.10	71	5295	3.95 ug/L		91
64)	tert amyl alcohol	9.82	55	2026m	24.10 ug/L		
65)	isopropyl acetate	9.86	43	13738	3.56 ug/L		92
66)	1,2-dichloroethane	9.92	62	10082	4.08 ug/L		93
67)	trichloroethene	10.66	95	7354	4.37 ug/L		83
69)	tert-amyl ethyl ether	10.84	87	11791	4.03 ug/L		98
70)	methylcyclohexane	10.88	83	11452	4.10 ug/L	#	99
71)	2-chloroethyl vinyl ether	11.53	63	21988	22.80 ug/L		97
72)	methyl methacrylate	10.98	69	4939m	4.09 ug/L		
73)	1,2-dichloropropane	10.93	63	9000	4.37 ug/L		96
74)	dibromomethane	11.11	93	5009	4.40 ug/L		92
75)	bromodichloromethane	11.25	83	10772	4.29 ug/L		95
76)	cis-1,3-dichloropropene	11.75	75	13527	4.25 ug/L		95
78)	4-methyl-2-pentanone	11.87	58	2842	3.71 ug/L		84
79)	toluene	12.14	92	19567	4.46 ug/L		95
80)	3-methyl-1-butanol	11.92	55	7384	80.93 ug/L		91
81)	trans-1,3-dichloropropene	12.37	75	11751	4.03 ug/L		87
82)	ethyl methacrylate	12.39	69	8795	3.71 ug/L		94
83)	1,1,2-trichloroethane	12.60	83	6495	4.56 ug/L		88
84)	2-hexanone	12.85	58	2515	3.68 ug/L	#	66
86)	tetrachloroethene	12.79	164	6740	4.82 ug/L		90
87)	1,3-dichloropropane	12.80	76	12402	4.48 ug/L		87
88)	butyl acetate	12.91	56	4647m	3.80 ug/L		
89)	dibromochloromethane	13.09	129	9021	4.64 ug/L		98
90)	1,2-dibromoethane	13.26	107	7419	4.62 ug/L		98
92)	chlorobenzene	13.78	112	24301	4.71 ug/L		94
93)	1,1,1,2-tetrachloroethane	13.85	131	9014	4.76 ug/L		98
94)	ethylbenzene	13.85	91	38050	4.51 ug/L		97
95)	m,p-xylene	13.97	106	29840	9.30 ug/L		94
96)	o-xylene	14.44	106	15450	4.76 ug/L		94
97)	styrene	14.46	104	24692	4.33 ug/L		98
98)	bromoform	14.74	173	6699	5.13 ug/L		96
100)	isopropylbenzene	14.83	105	38419	4.31 ug/L		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:23 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

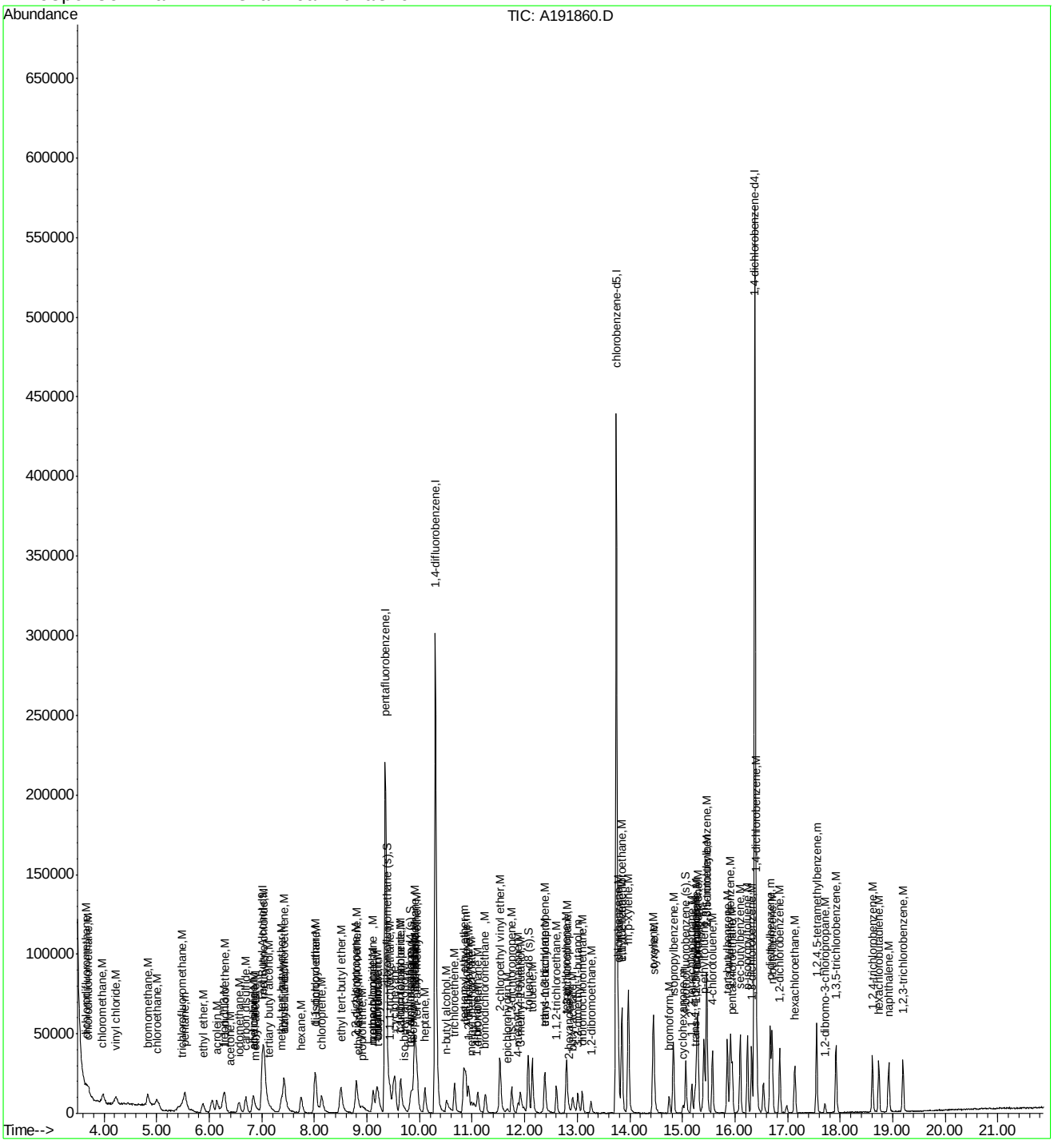
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101)	cyclohexanone	15.02	55	3082	12.08	ug/L	95
103)	bromobenzene	15.28	156	11624	4.62	ug/L	90
104)	1,1,2,2-tetrachloroethane	15.18	83	12007	4.41	ug/L	97
105)	trans-1,4-dichloro-2-buten	15.23	53	2427	3.63	ug/L	91
106)	1,2,3-trichloropropane	15.26	110	2774	4.60	ug/L	85
107)	n-propylbenzene	15.29	91	45671	4.24	ug/L	100
108)	2-chlorotoluene	15.46	126	10369	4.59	ug/L	93
109)	4-chlorotoluene	15.57	91	30225	4.24	ug/L	97
110)	p-ethyltoluene	15.41	105	39448	4.14	ug/L	100
111)	1,3,5-trimethylbenzene	15.47	105	35108	4.39	ug/L	99
112)	tert-butylbenzene	15.85	119	28518	4.41	ug/L	93
113)	pentachloroethane	15.95	167	7453	4.62	ug/L	94
114)	1,2,4-trimethylbenzene	15.91	105	34485	4.19	ug/L	95
115)	sec-butylbenzene	16.10	105	44681	4.47	ug/L	99
116)	1,3-dichlorobenzene	16.31	146	21769	4.58	ug/L	96
117)	p-isopropyltoluene	16.24	119	37187	4.56	ug/L	98
119)	1,4-dichlorobenzene	16.41	146	23401	4.68	ug/L	97
120)	p-diethylbenzene	16.67	119	23057	4.51	ug/L	98
121)	1,2-dichlorobenzene	16.85	146	22300	4.69	ug/L	98
122)	n-butylbenzene	16.71	92	20405	4.43	ug/L	99
123)	1,2,4,5-tetramethylbenzene	17.55	119	36947	4.27	ug/L	98
124)	1,2-dibromo-3-chloropropan	17.71	75	1913	4.14	ug/L	95
125)	1,3,5-trichlorobenzene	17.92	180	18266	5.16	ug/L	99
126)	1,2,4-trichlorobenzene	18.61	180	15077	4.79	ug/L	96
127)	hexachlorobutadiene	18.73	225	9284	4.83	ug/L	97
128)	naphthalene	18.92	128	29923	4.81	ug/L	97
129)	1,2,3-trichlorobenzene	19.20	180	14050	5.00	ug/L	93
130)	hexachloroethane	17.14	201	6881	4.78	ug/L	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:23 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Manual Integration Approval Summary

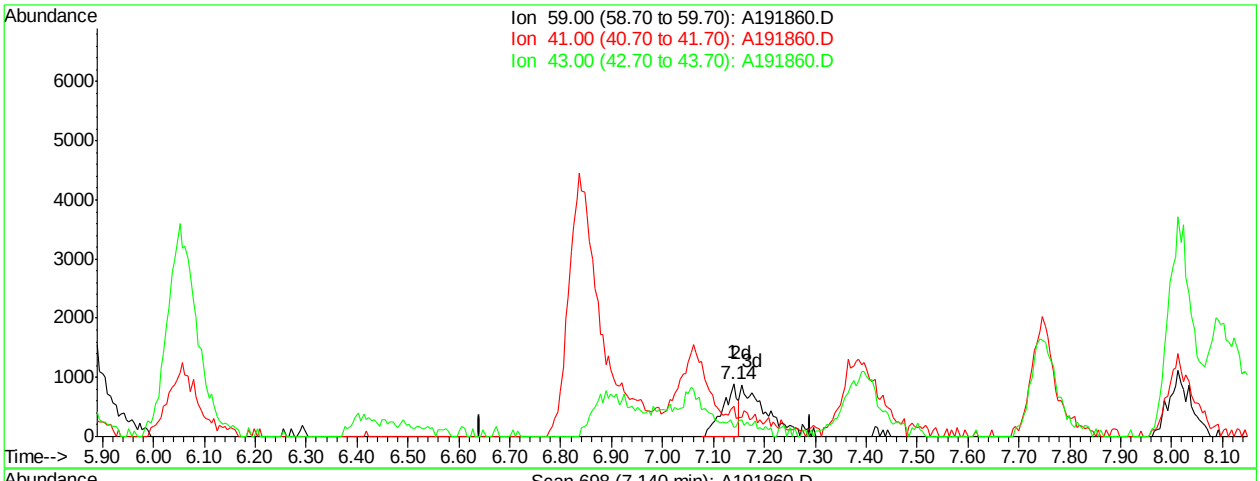
Sample Number:	VA7222-IC7222	**Method:**	SW846 8260B
Lab FileID:	A191860.D	**Analyst approved:**	02/21/13 08:34 Ying Li
Injection Time:	02/20/13 14:25	**Supervisor approved:**	02/25/13 17:30 Kanya Veerawat

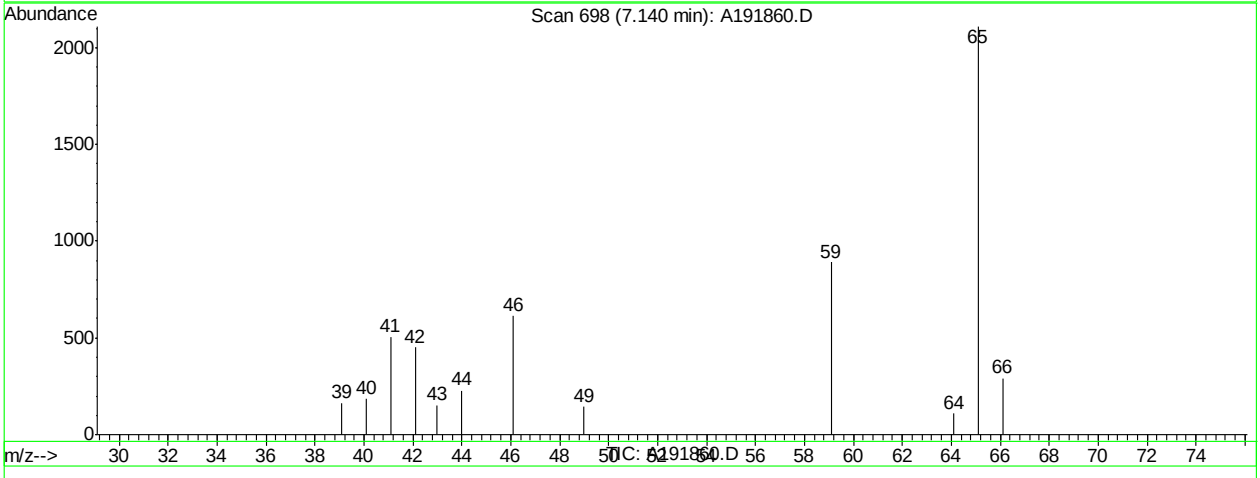
Parameter	CAS	Sig#	R.T. (min.)	Reason
Freon 113	76-13-1		6.28	Split peak
Acetone	67-64-1		6.40	Split peak
Tert Butyl Alcohol	75-65-0		7.14	Split peak
Acrylonitrile	107-13-1		7.43	Split peak
Ethyl Acetate	141-78-6		8.84	Split peak
Propionitrile	107-12-0		8.91	Split peak
Methacrylonitrile	126-98-7		9.11	Split peak
Isobutyl alcohol	78-83-1		9.70	Split peak
Tert Amyl Alcohol	75-85-4		9.82	Split peak
Methyl methacrylate	80-62-6		10.98	Split peak
Butyl Acetate	123-86-4		12.91	Split peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:32 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(4) tertiary butyl alcohol (M)

7.14min 9.72ug/L

response 1879

Ion	Exp%	Act%
59.00	100	100
41.00	0.00	0.00
43.00	0.00	0.00
0.00	0.00	0.00

A191860.D MA7222.M Wed Feb 20 17:32:10 2013 MSA

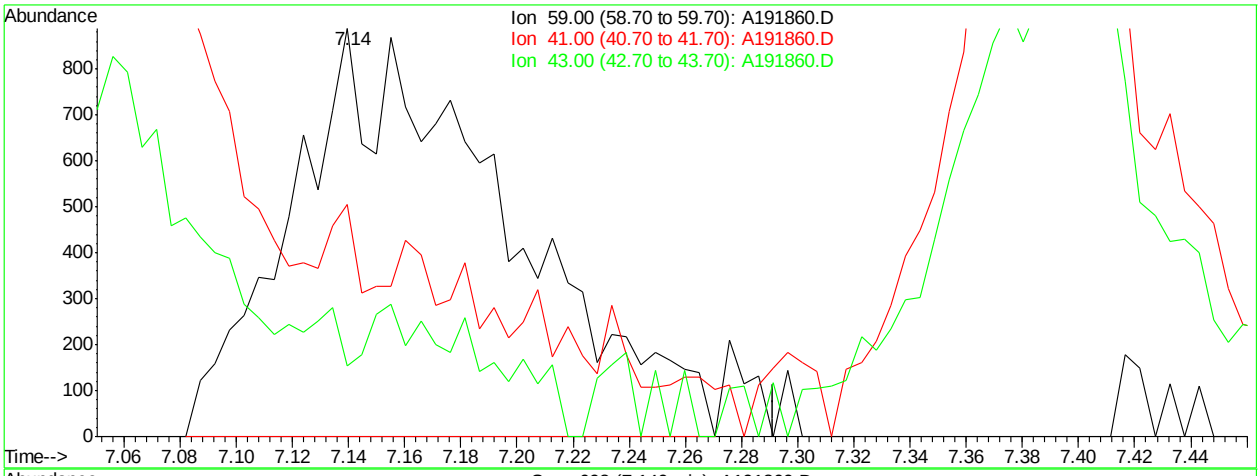
7.6.4.2

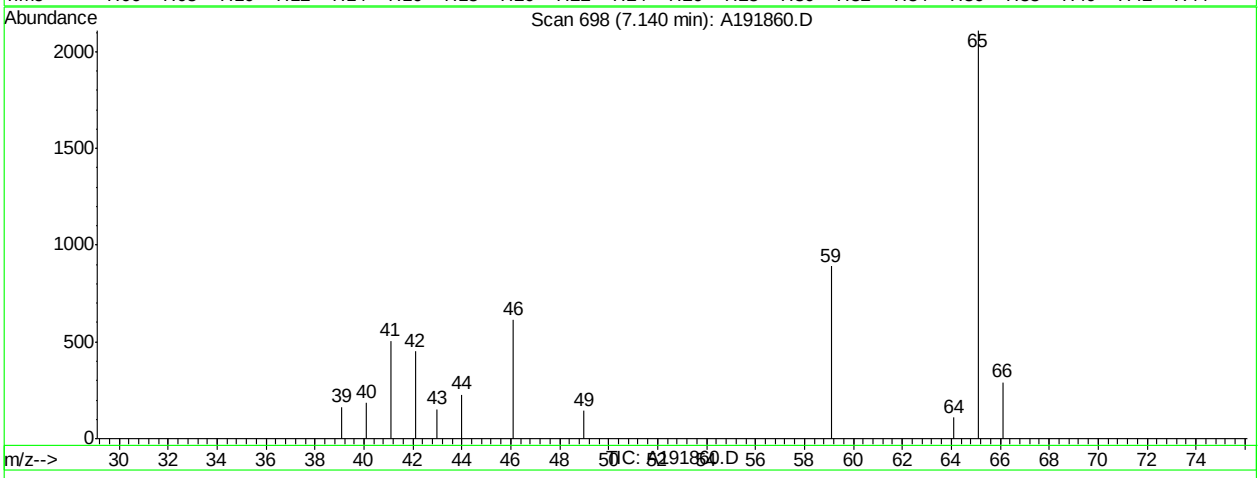
7

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:32 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(4) tertiary butyl alcohol (M)

7.14min 24.50ug/L m

response 4737

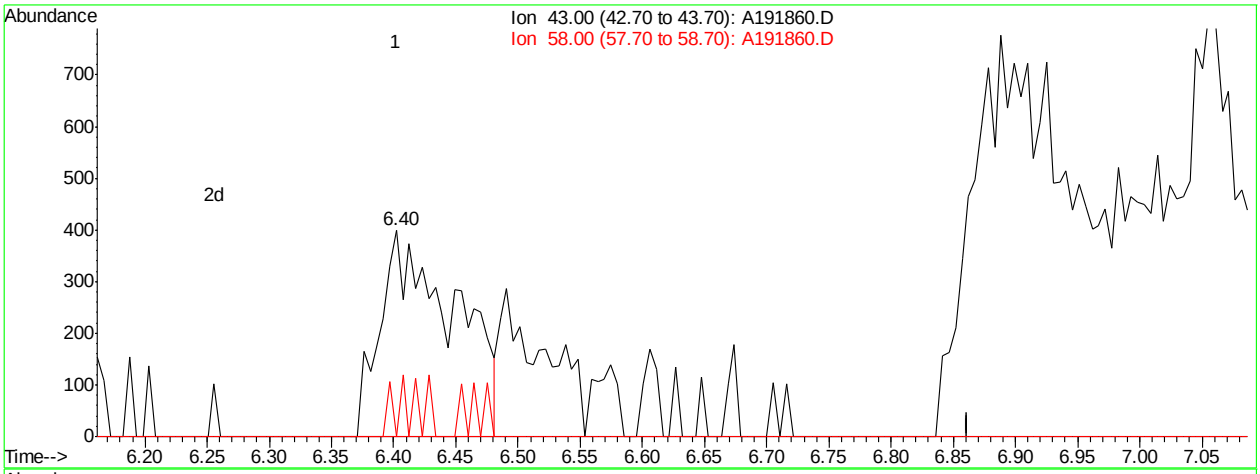
Ion	Exp%	Act%
59.00	100	100
41.00	0.00	56.74#
43.00	0.00	17.19
0.00	0.00	0.00

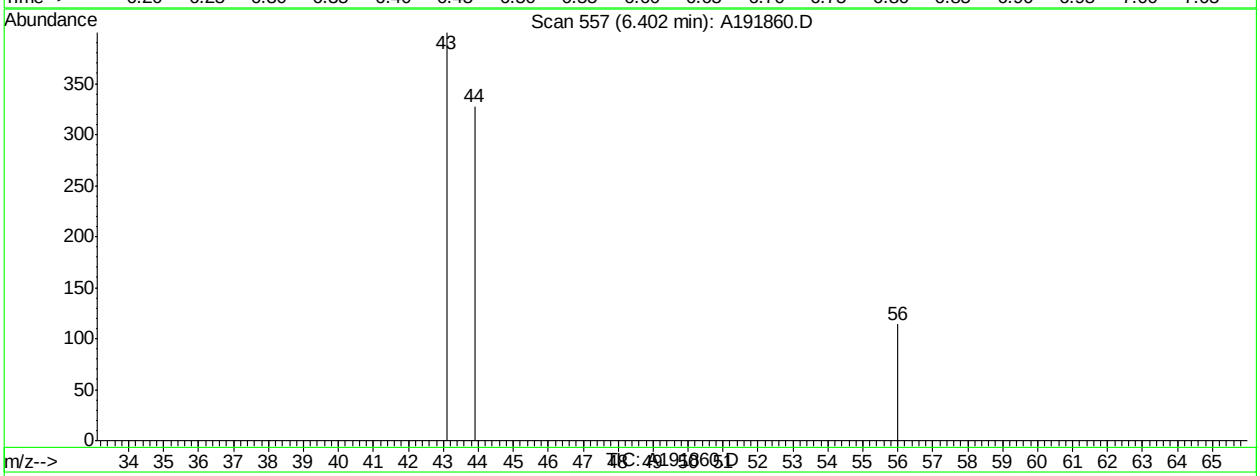
A191860.D MA7222.M Wed Feb 20 17:32:25 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:32 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(20) acetone (M)

6.40min 3.07ug/L

response 1648

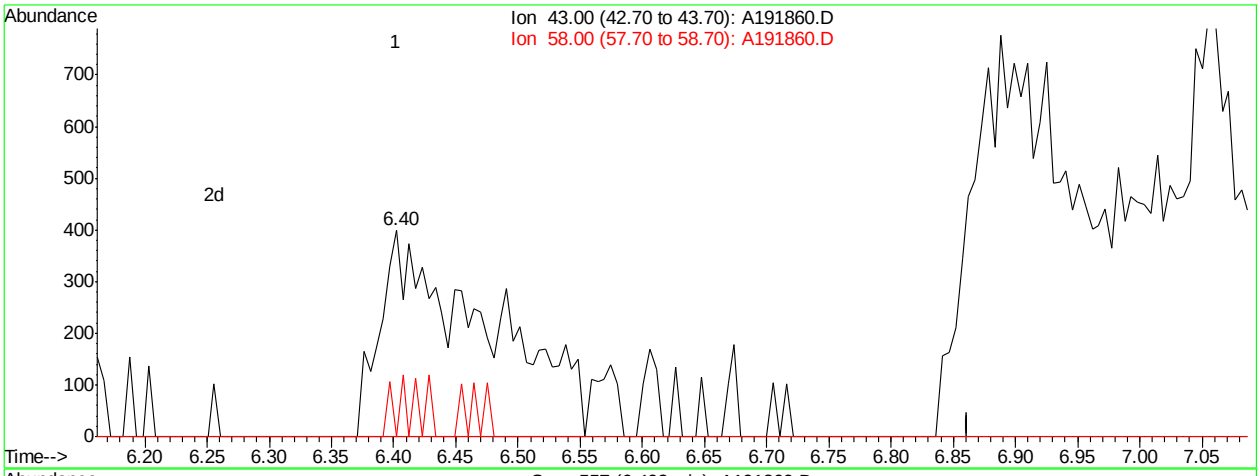
Ion	Exp%	Act%
43.00	100	100
58.00	24.90	2.25
0.00	0.00	0.00
0.00	0.00	0.00

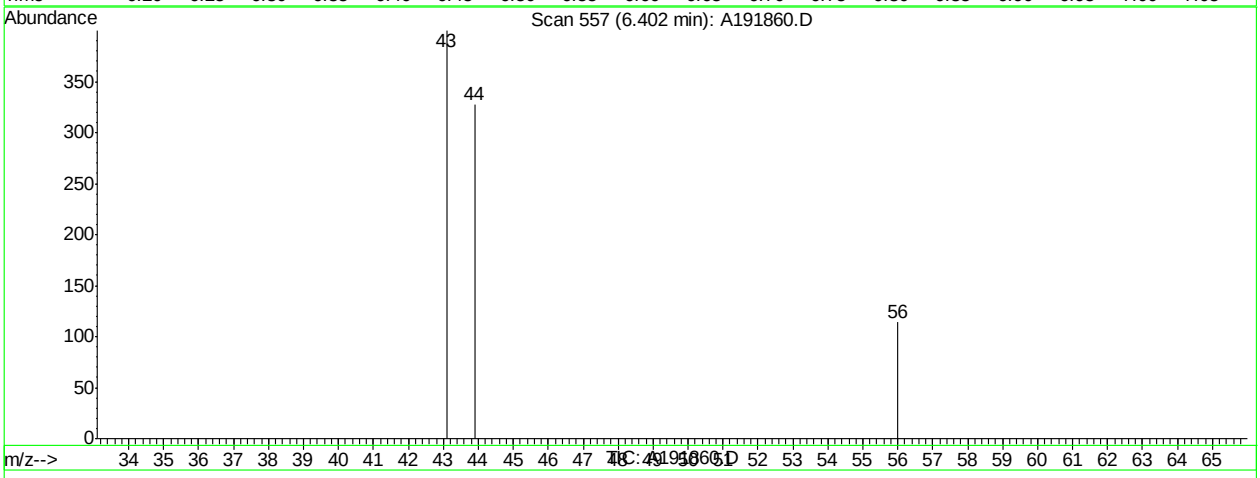
A191860.D MA7222.M Wed Feb 20 17:32:50 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:32 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(20) acetone (M)

6.40min 4.39ug/L m

response 2358

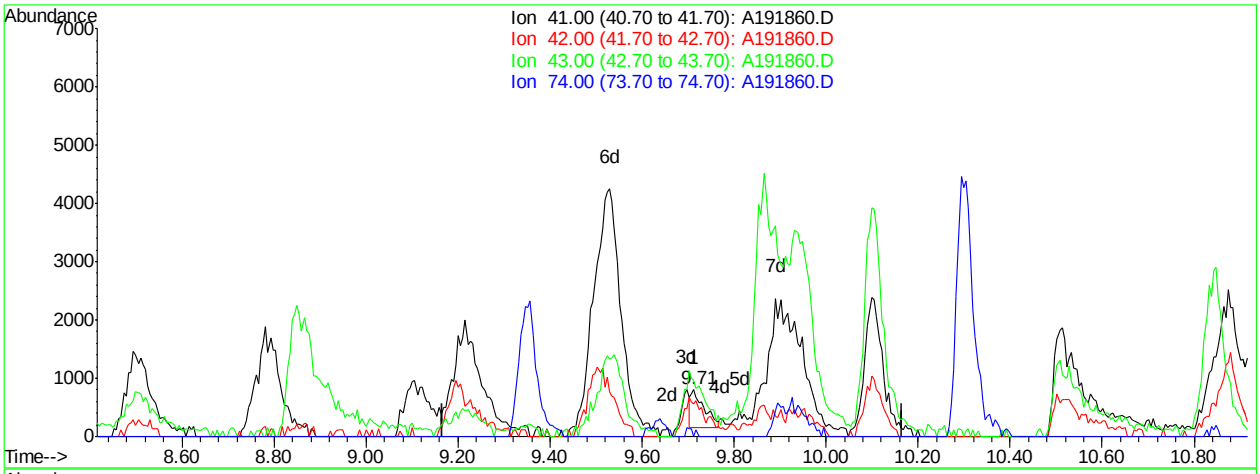
Ion	Exp%	Act%
43.00	100	100
58.00	24.90	1.57
0.00	0.00	0.00
0.00	0.00	0.00

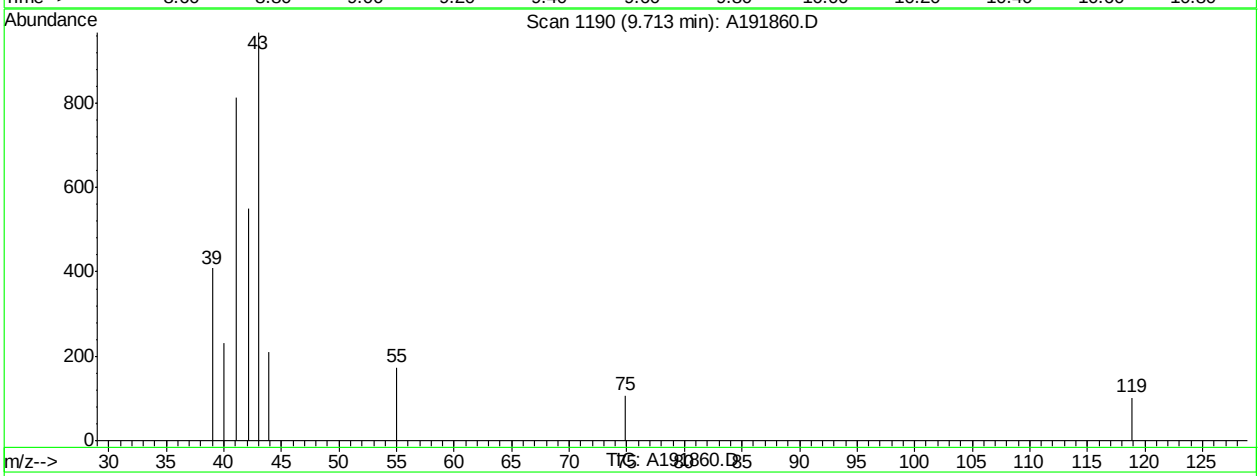
A191860.D MA7222.M Wed Feb 20 17:32:57 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:32 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(24) iso-butyl alcohol (M)

9.71min 18.26ug/L

response 1271

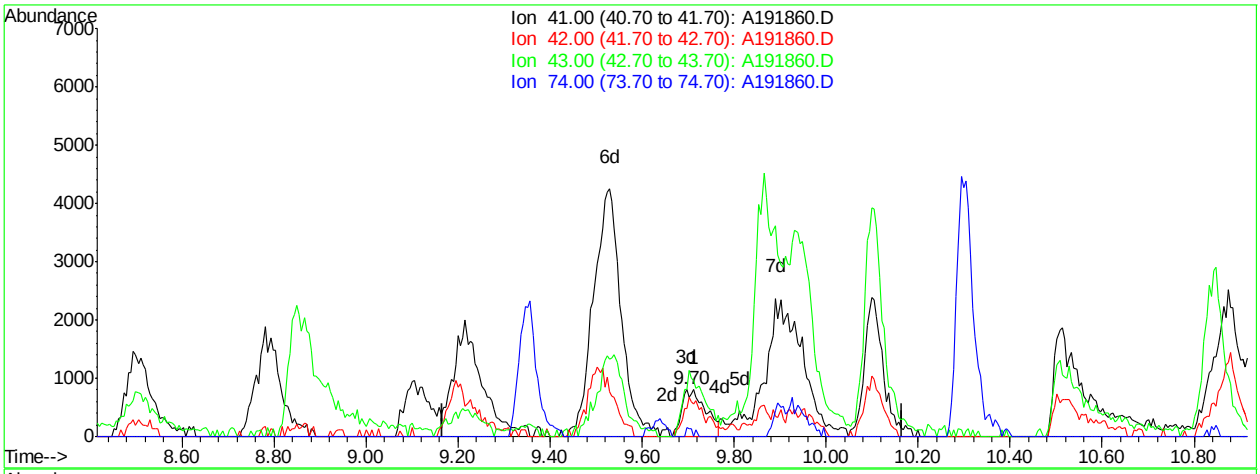
Ion	Exp%	Act%
41.00	100	100
42.00	83.50	67.74
43.00	133.70	108.24
74.00	11.80	0.00

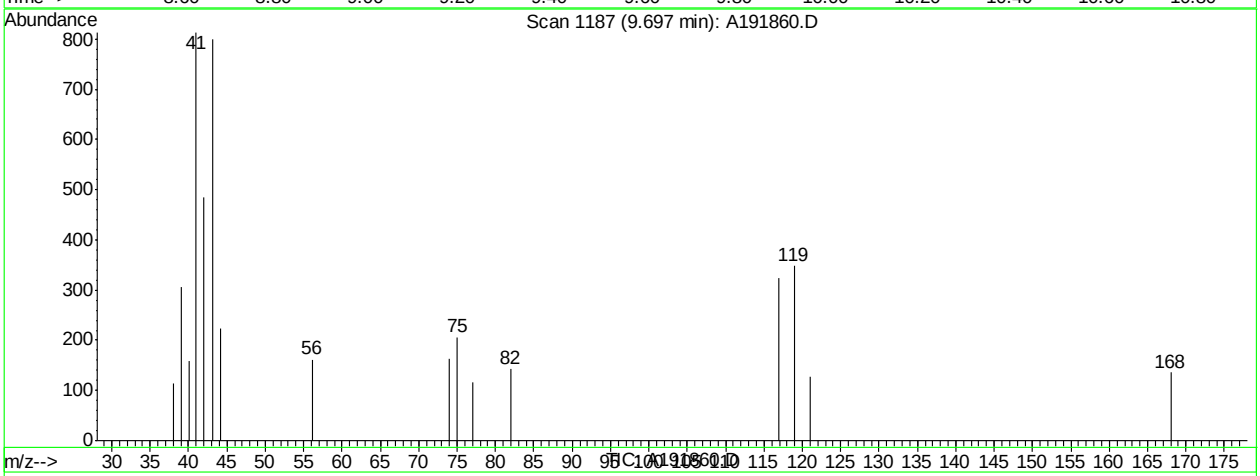
A191860.D MA7222.M Wed Feb 20 17:33:06 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:33 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(24) iso-butyl alcohol (M)

9.70min 40.76ug/L m

response 2838

Ion	Exp%	Act%
41.00	100	100
42.00	83.50	59.53
43.00	133.70	98.40#
74.00	11.80	20.17

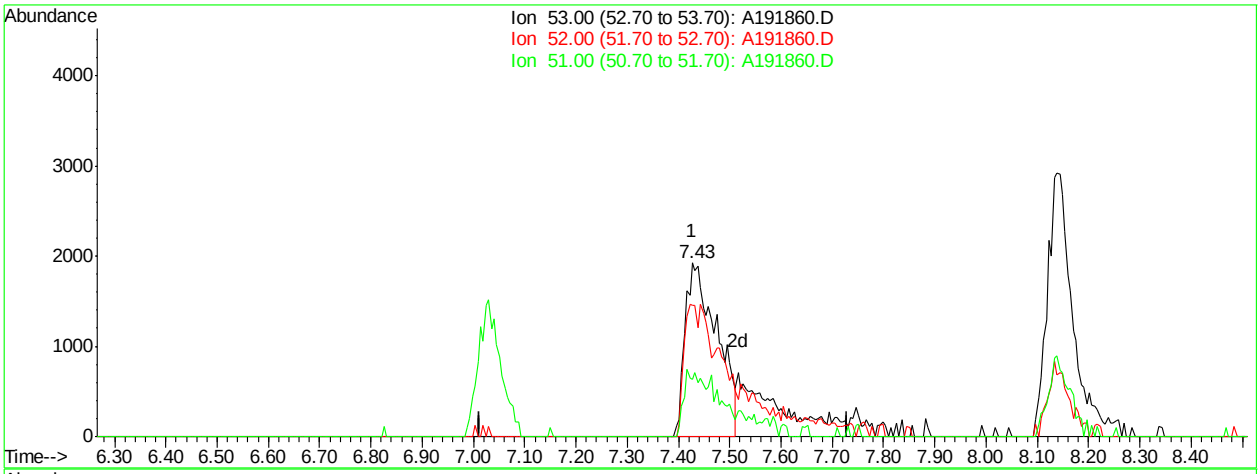
A191860.D MA7222.M Wed Feb 20 17:33:17 2013 MSA

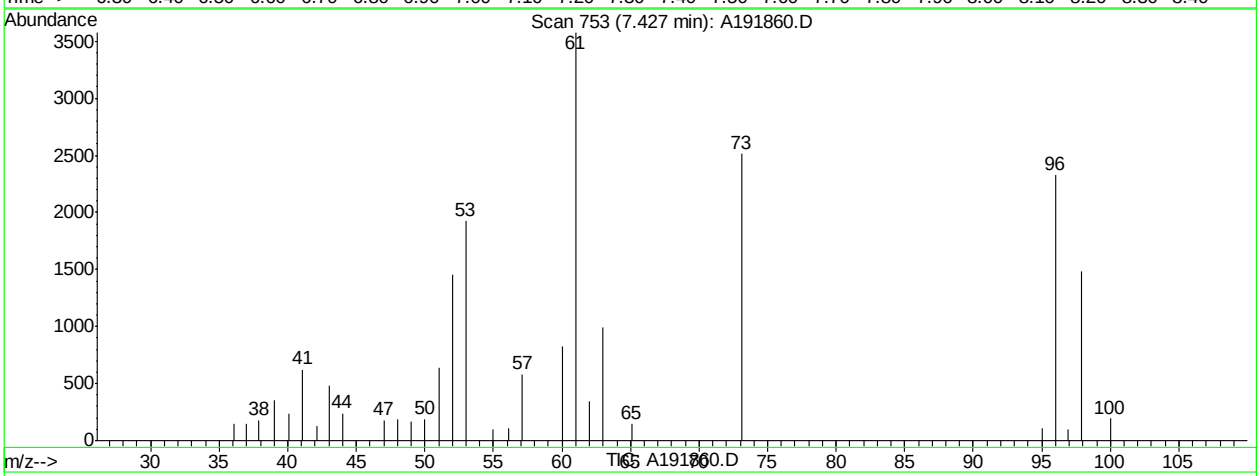
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D
Acq On : 20 Feb 2013 2:25 pm
Sample : ic7222-5
Misc : MS43382,VA7222,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:33 2013

Vial: 100
Operator: Oksanat
Inst : MSA
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(37) acrylonitrile (M)

7.43min 13.31ug/L

response 8319

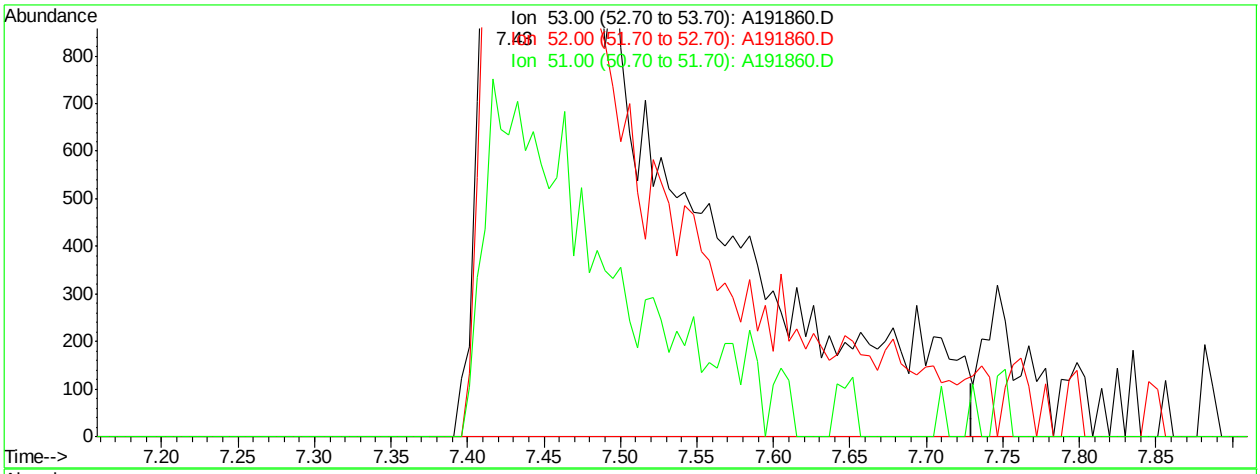
Ion	Exp%	Act%
53.00	100	100
52.00	84.10	75.42
51.00	38.00	33.00
0.00	0.00	0.00

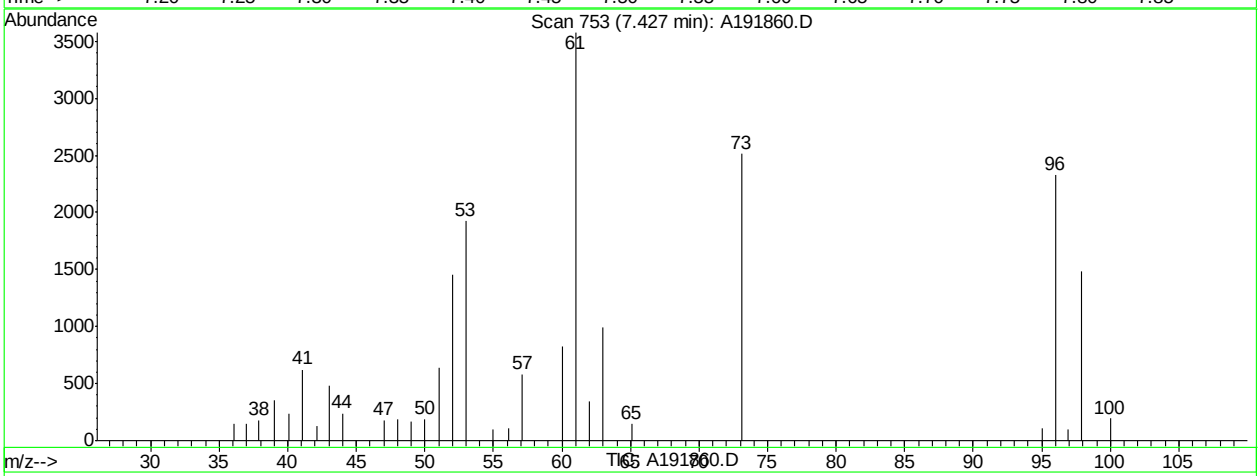
A191860.D MA7222.M Wed Feb 20 17:33:42 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:33 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(37) acrylonitrile (M)

7.43min 20.56ug/L m

response 12850

Ion	Exp%	Act%
53.00	100	100
52.00	84.10	75.42
51.00	38.00	33.00
0.00	0.00	0.00

A191860.D MA7222.M Wed Feb 20 17:33:57 2013 MSA

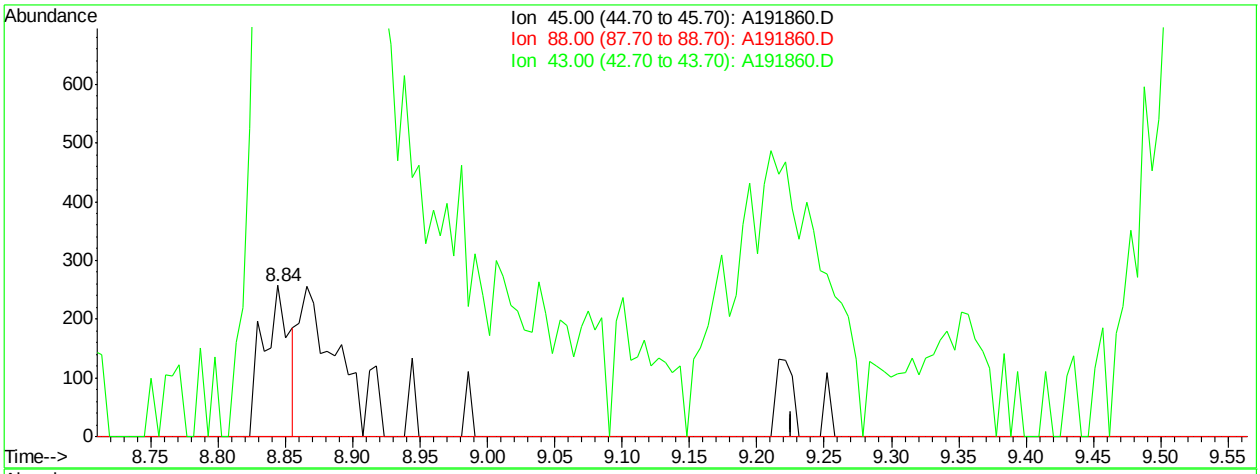
7.6.4.9

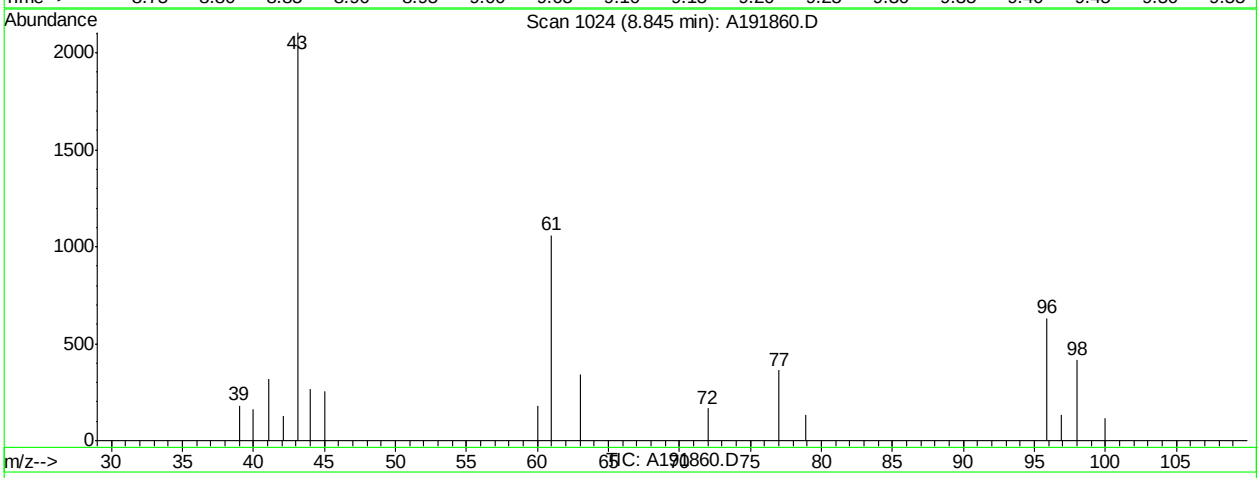
7

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:34 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(39) ethyl acetate (M)

8.84min 1.45ug/L

response 347

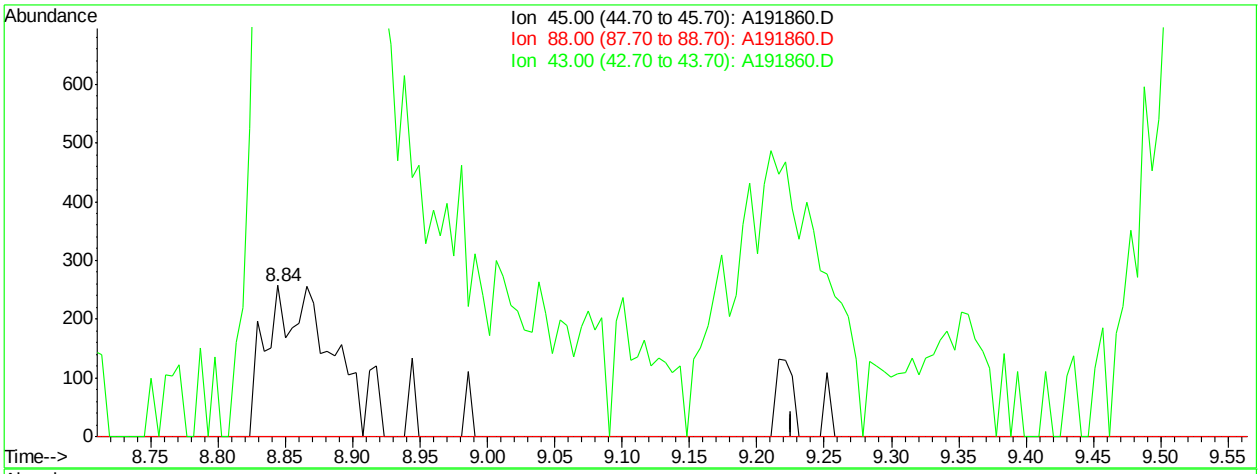
Ion	Exp%	Act%
45.00	100	100
88.00	20.30	0.00#
43.00	874.50	733.46
0.00	0.00	0.00

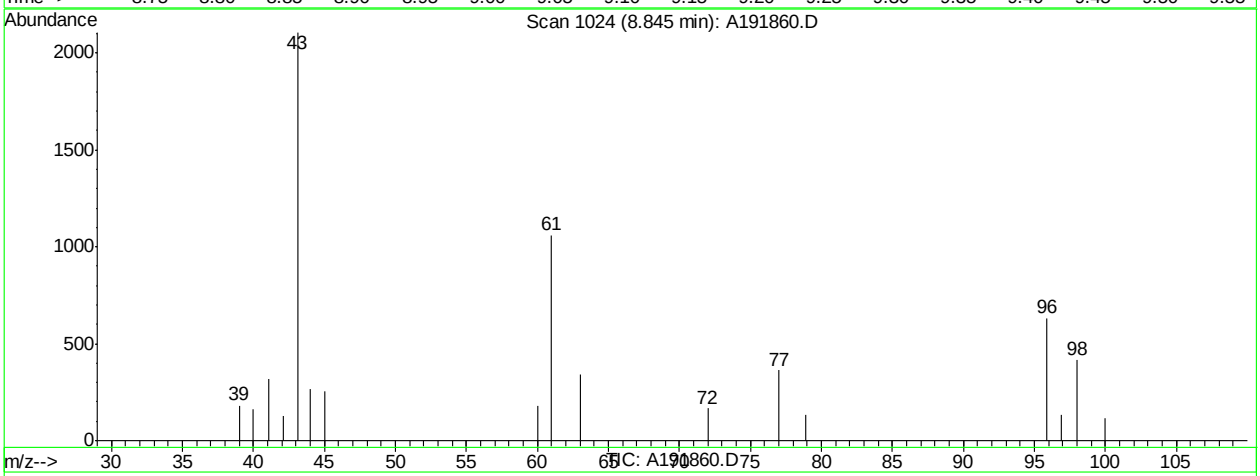
A191860.D MA7222.M Wed Feb 20 17:34:09 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:34 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(39) ethyl acetate (M)

8.84min 3.38ug/L m

response 809

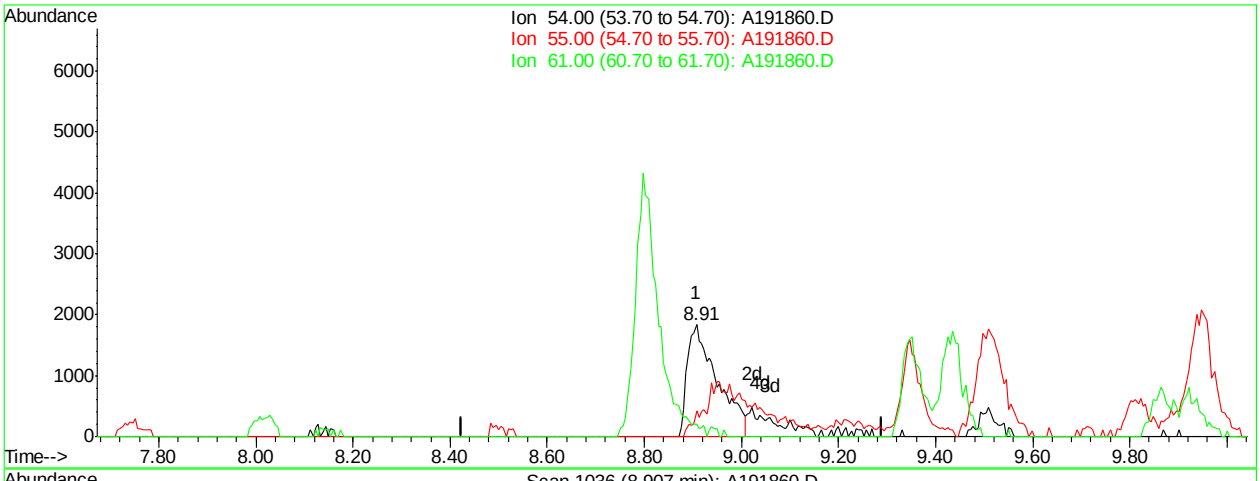
Ion	Exp%	Act%
45.00	100	100
88.00	20.30	0.00#
43.00	874.50	819.07
0.00	0.00	0.00

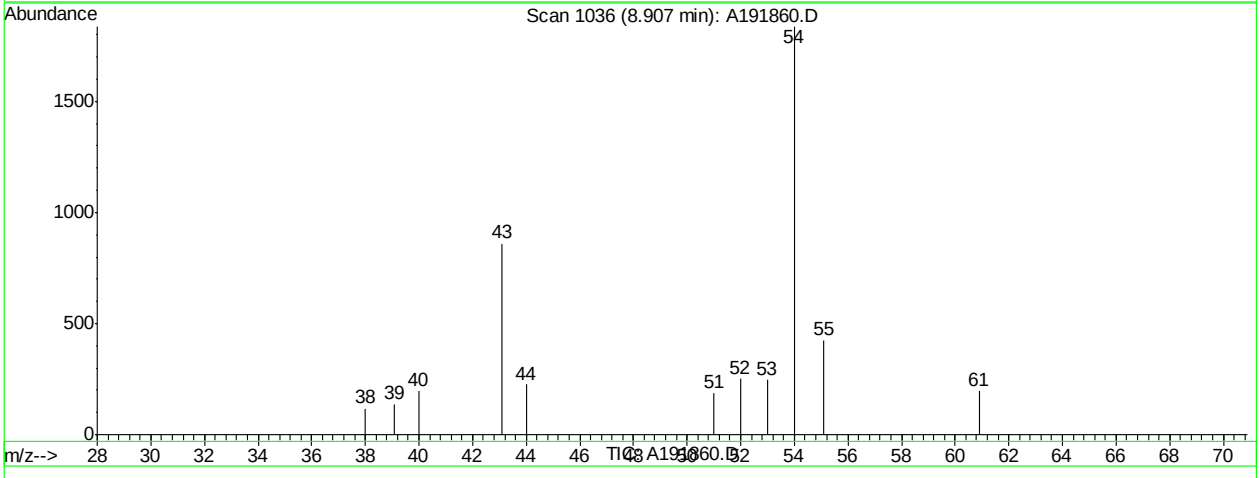
A191860.D MA7222.M Wed Feb 20 17:34:13 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:34 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(43) propionitrile (M)

8.91min 32.07ug/L

response 7842

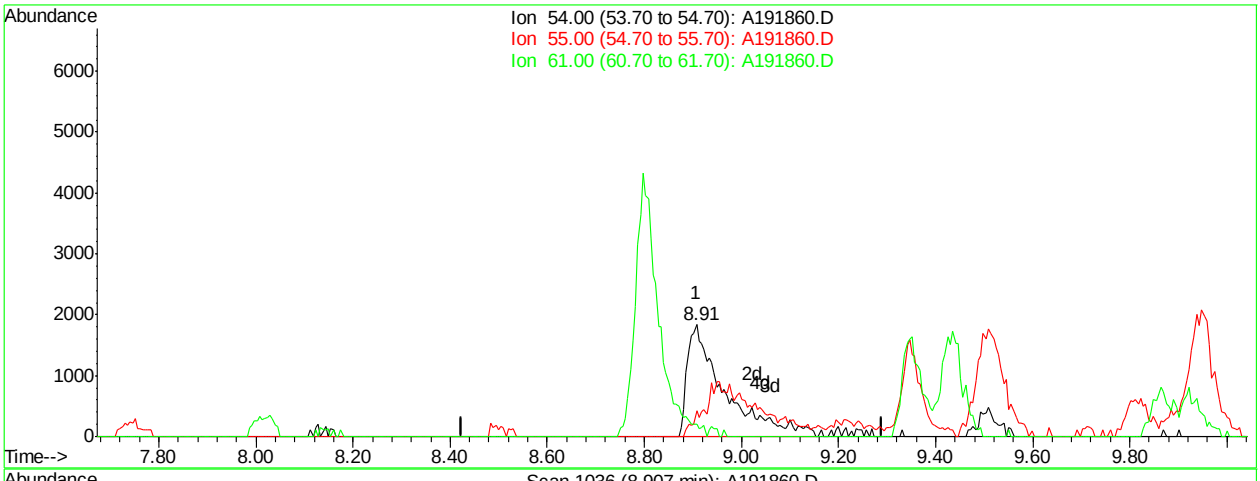
Ion	Exp%	Act%
54.00	100	100
55.00	30.90	23.14
61.00	6.10	10.67
0.00	0.00	0.00

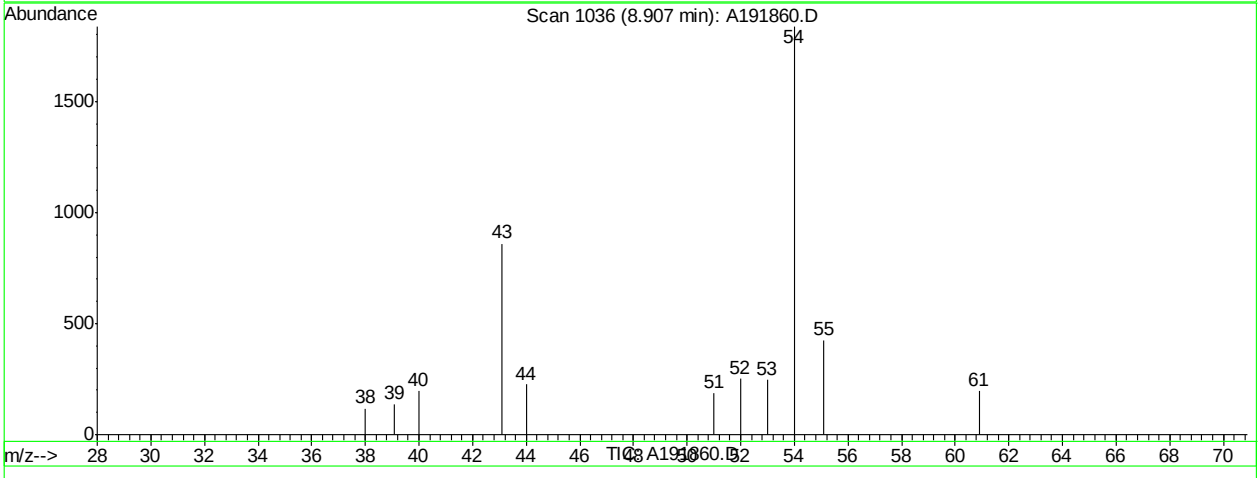
A191860.D MA7222.M Wed Feb 20 17:34:23 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:34 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(43) propionitrile (M)

8.91min 39.89ug/L m

response 9754

Ion	Exp%	Act%
54.00	100	100
55.00	30.90	23.14
61.00	6.10	10.67
0.00	0.00	0.00

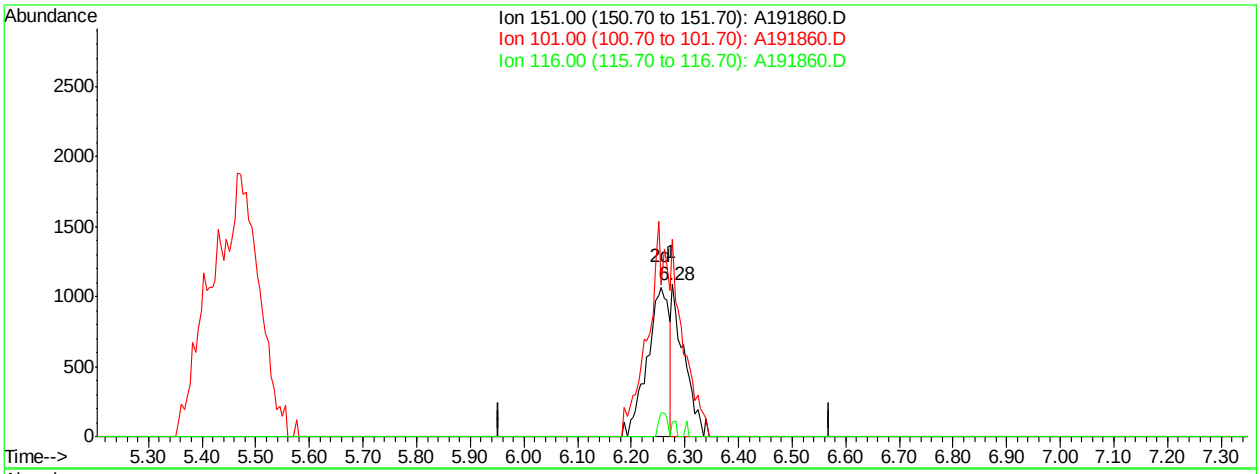
A191860.D MA7222.M Wed Feb 20 17:34:28 2013 MSA

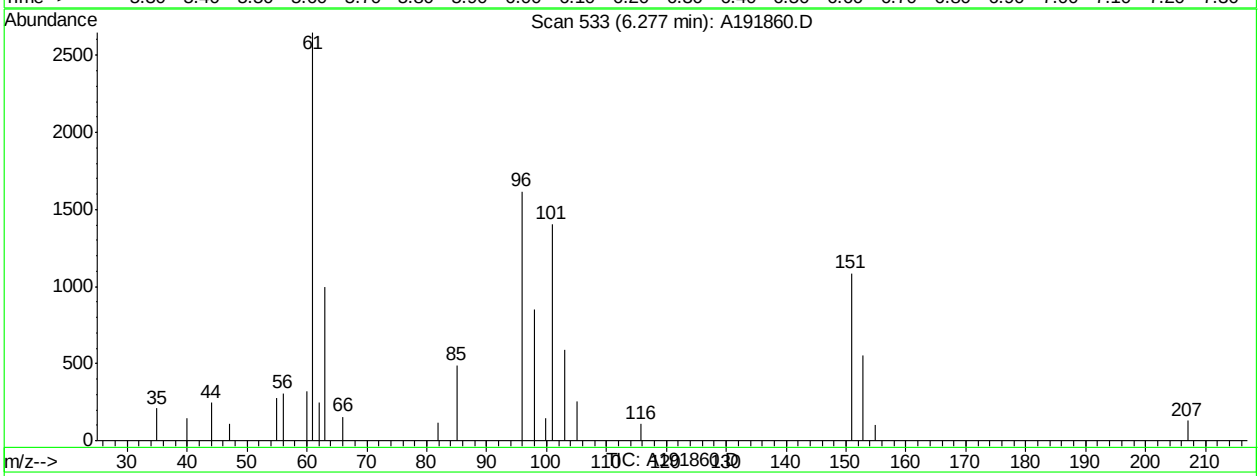
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D
Acq On : 20 Feb 2013 2:25 pm
Sample : ic7222-5
Misc : MS43382,VA7222,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:34 2013

Vial: 100
Operator: Oksanat
Inst : MSA
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(49) freon 113 (M)

6.28min 1.58ug/L

response 1815

Ion	Exp%	Act%
151.00	100	100
101.00	134.30	129.56
116.00	11.90	9.85
0.00	0.00	0.00

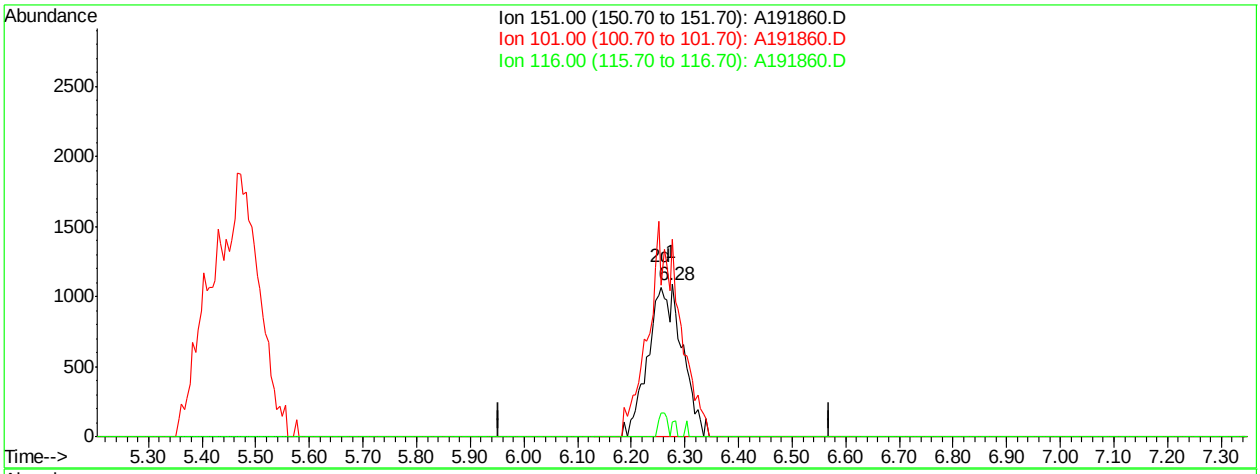
A191860.D MA7222.M Wed Feb 20 17:34:39 2013 MSA

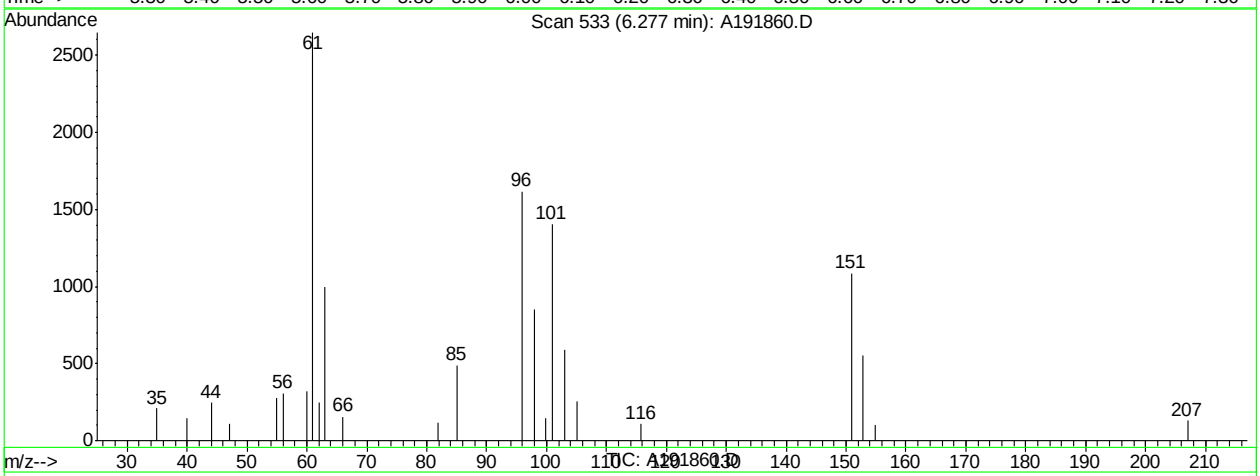
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D
Acq On : 20 Feb 2013 2:25 pm
Sample : ic7222-5
Misc : MS43382,VA7222,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:34 2013

Vial: 100
Operator: Oksanat
Inst : MSA
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(49) freon 113 (M)

6.28min 4.14ug/L m

response 4767

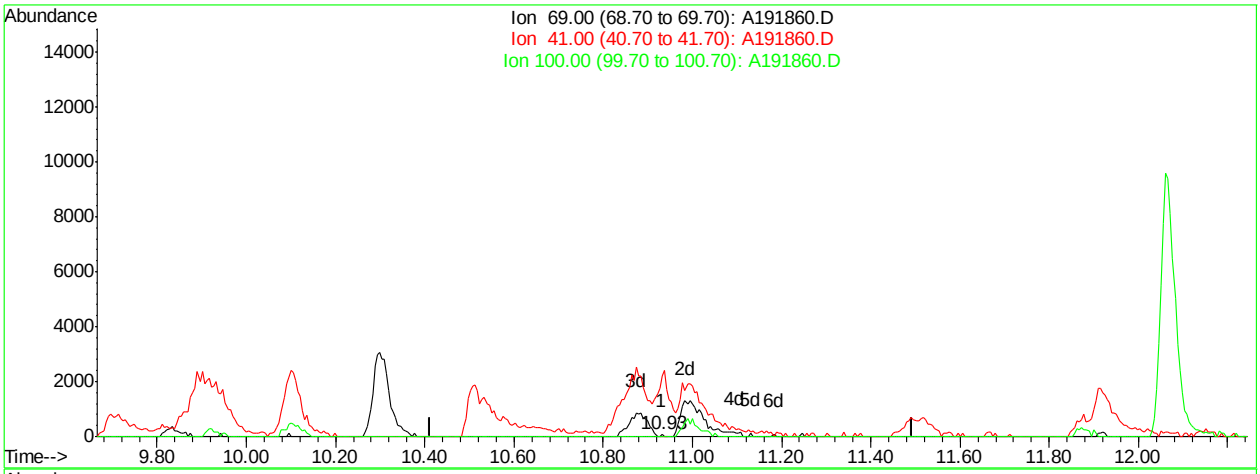
Ion	Exp%	Act%
151.00	100	100
101.00	134.30	129.56
116.00	11.90	9.85
0.00	0.00	0.00

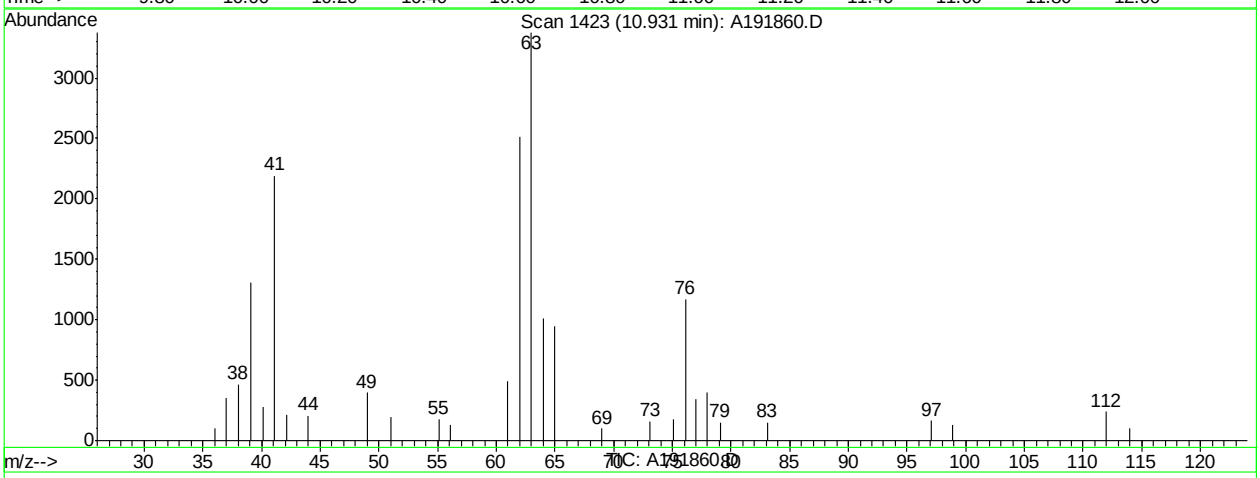
A191860.D MA7222.M Wed Feb 20 17:34:42 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:34 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(72) methyl methacrylate (M)

10.93min 0.03ug/L

response 32

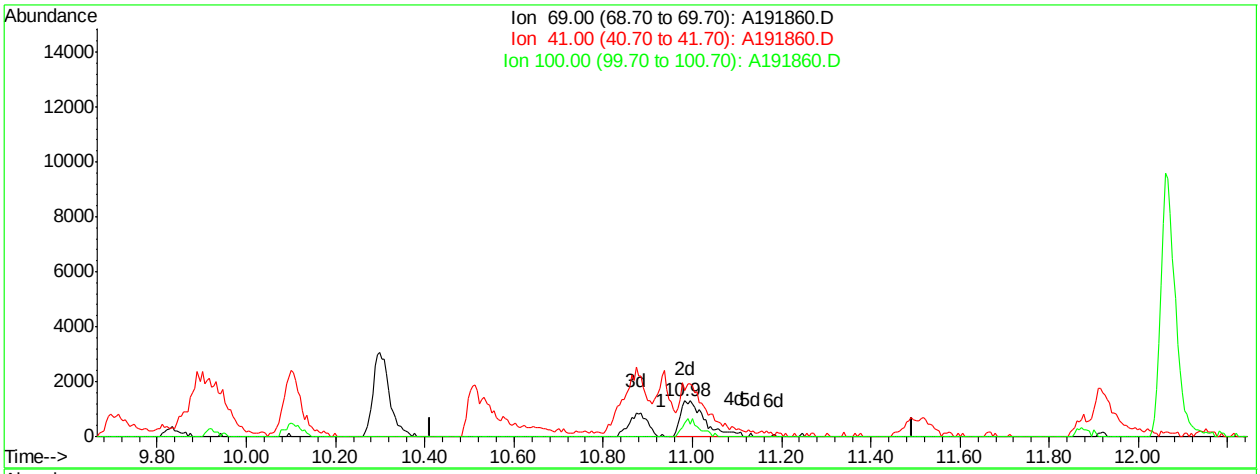
Ion	Exp%	Act%
69.00	100	100
41.00	173.90	450.98#
100.00	35.90	0.00#
0.00	0.00	0.00

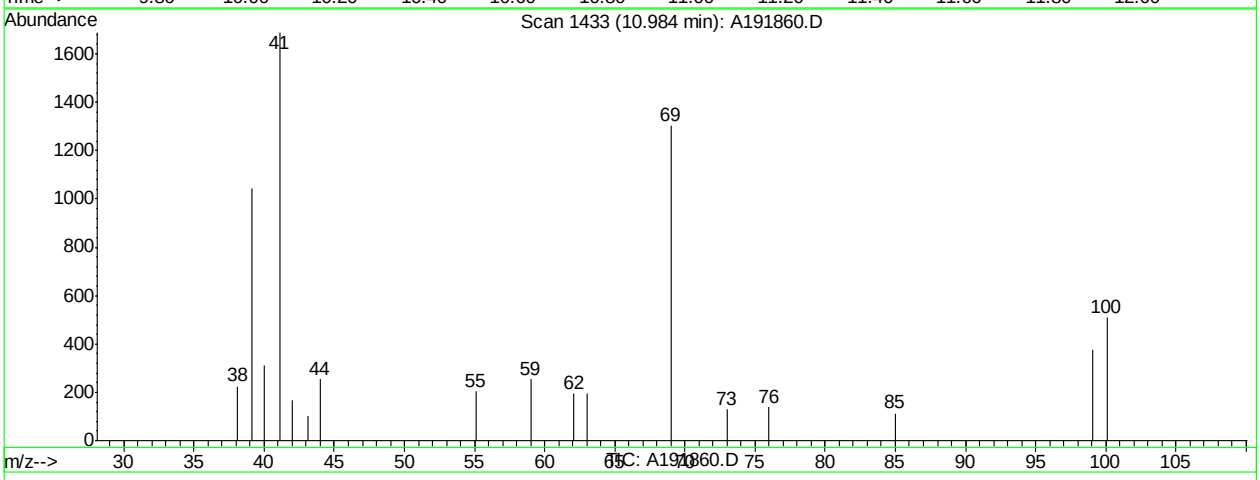
A191860.D MA7222.M Wed Feb 20 17:35:20 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:35 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(72) methyl methacrylate (M)

10.98min 4.09ug/L m

response 4939

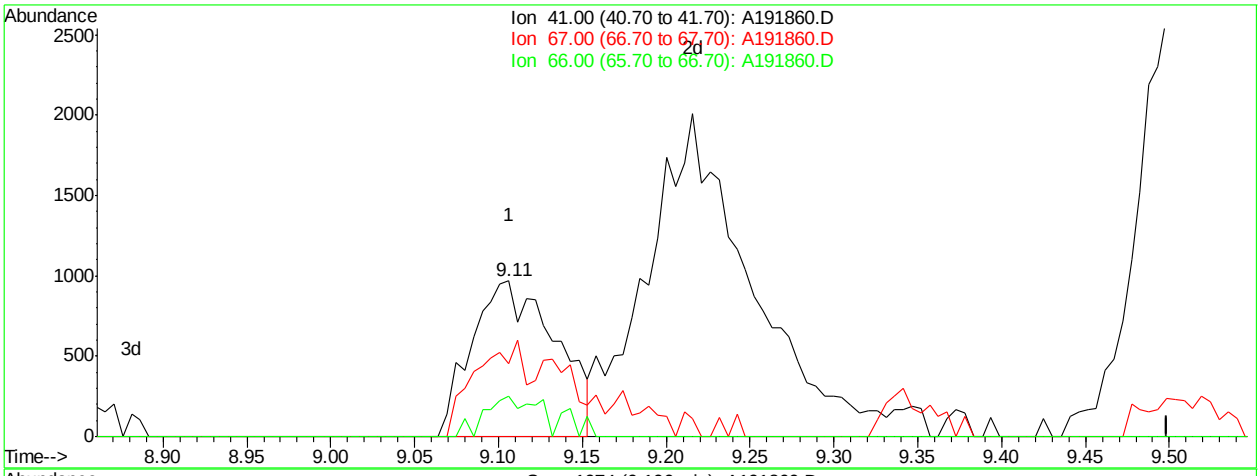
Ion	Exp%	Act%
69.00	100	100
41.00	173.90	129.75
100.00	35.90	39.12
0.00	0.00	0.00

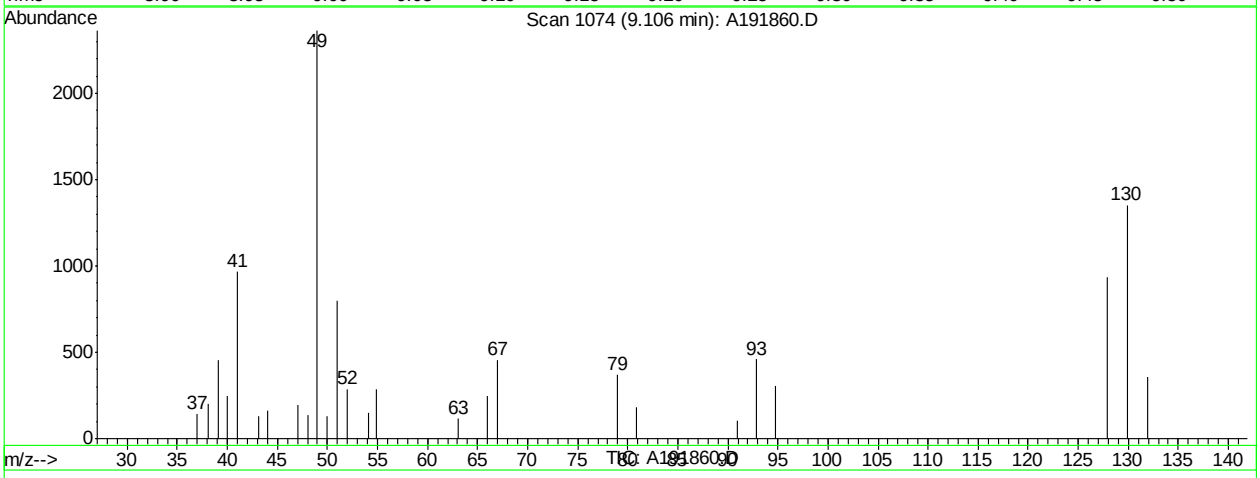
A191860.D MA7222.M Wed Feb 20 17:35:31 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:35 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Multiple Level Calibration





(50) methacrylonitrile (M)

9.11min 3.16ug/L

response 3378

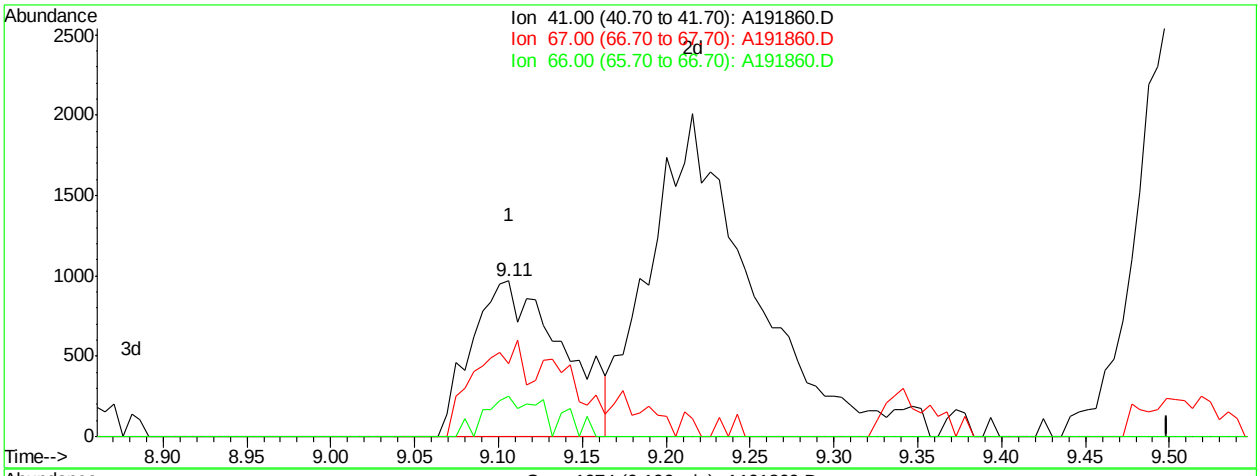
Ion	Exp%	Act%
41.00	100	100
67.00	59.20	47.26
66.00	19.40	25.65
0.00	0.00	0.00

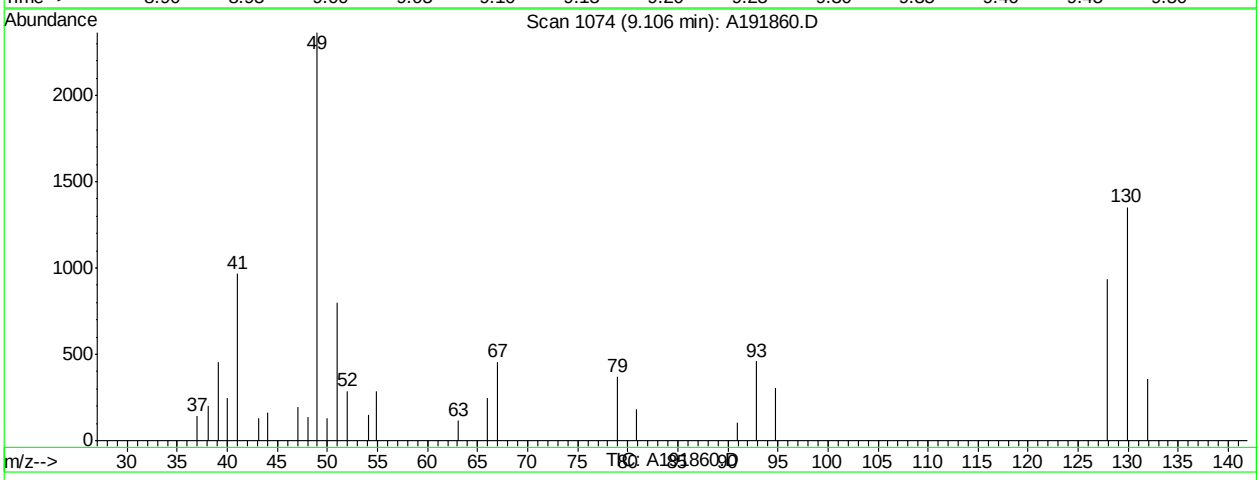
A191860.D MA7222.M Wed Feb 20 18:03:18 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 18:03 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Multiple Level Calibration





(50) methacrylonitrile (M)

9.11min 3.42ug/L m

response 3656

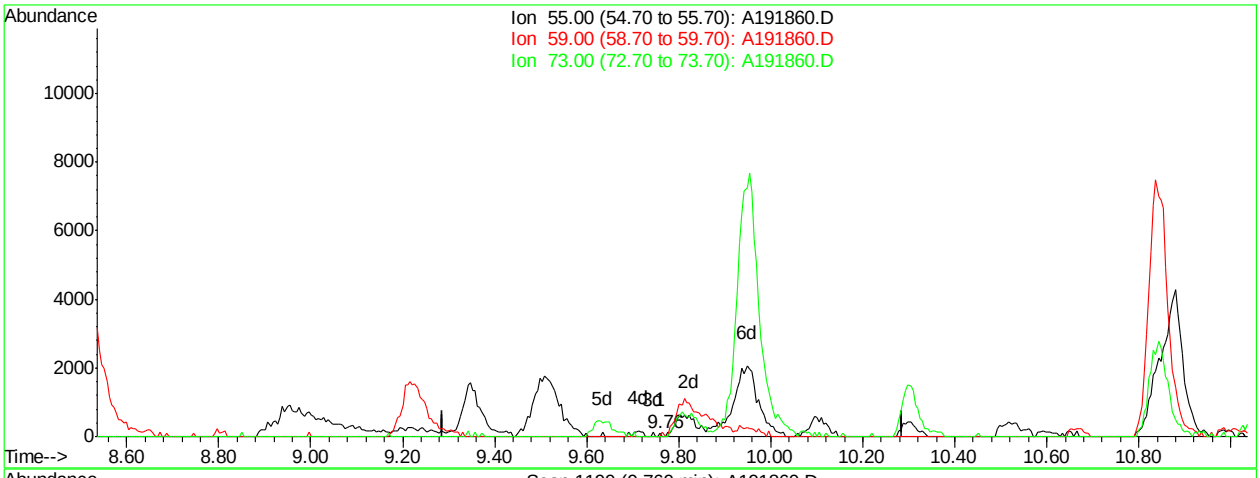
Ion	Exp%	Act%
41.00	100	100
67.00	59.20	47.26
66.00	19.40	25.65
0.00	0.00	0.00

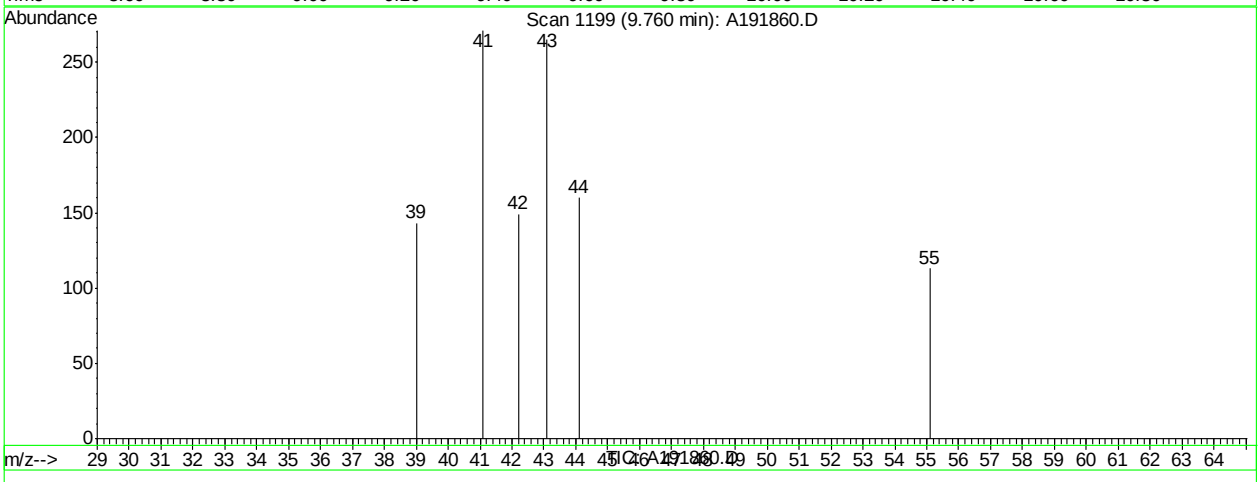
A191860.D MA7222.M Wed Feb 20 18:03:24 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 18:03 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Single Level Calibration





(64) tert amyl alcohol (m)

9.76min 0.42ug/L

response 35

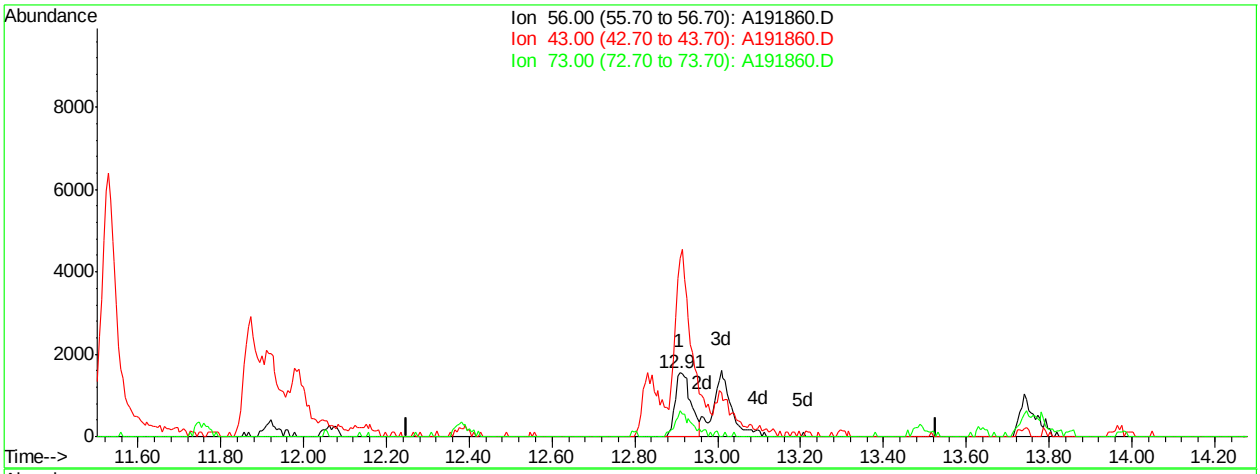
Ion	Exp%	Act%
55.00	100	100
59.00	312.80	0.00#
73.00	127.00	0.00#
0.00	0.00	0.00

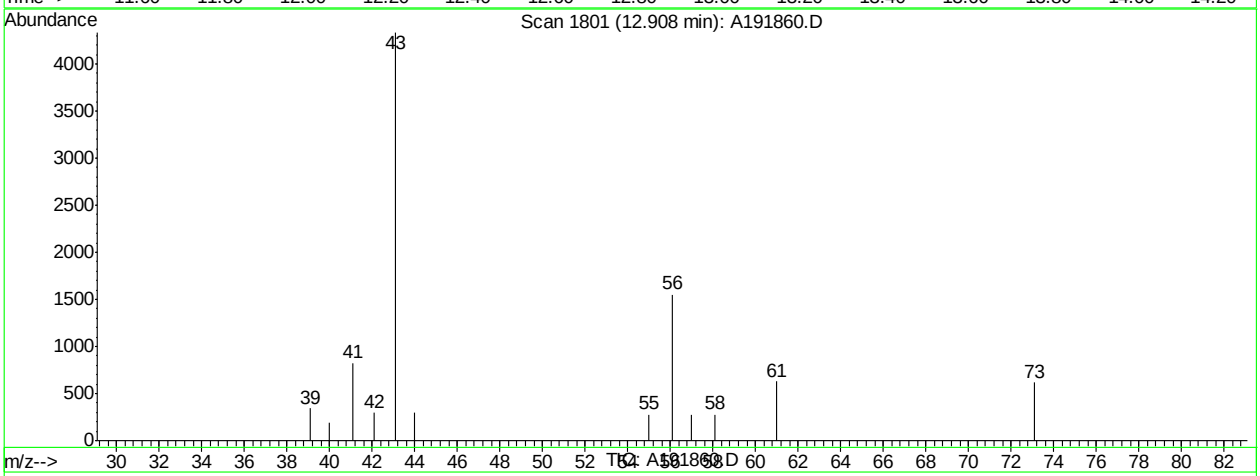
A191860.D MA7222.M Wed Feb 20 18:06:23 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 18:06 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Multiple Level Calibration





(88) butyl acetate (M)

12.91min 3.38ug/L

response 4132

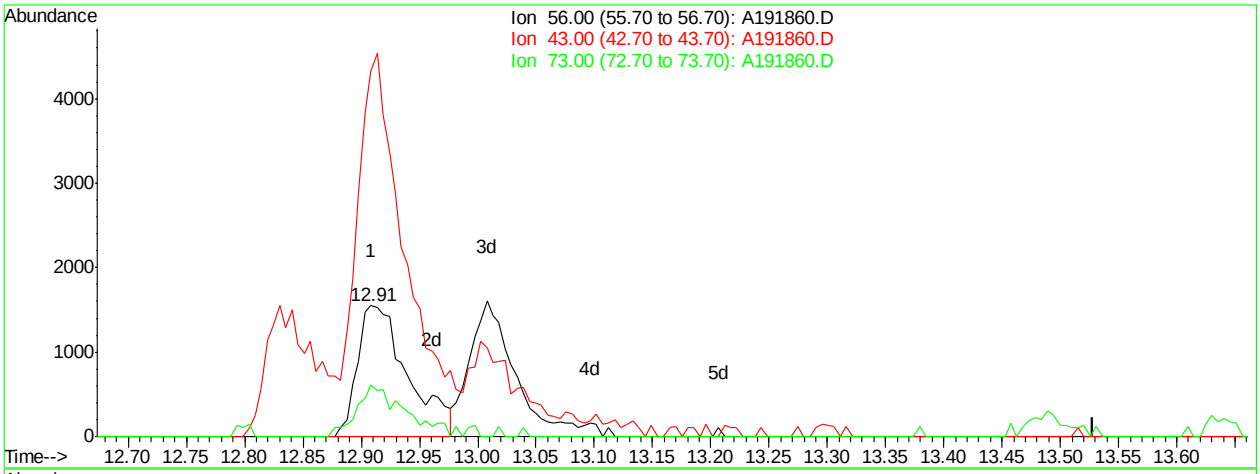
Ion	Exp%	Act%
56.00	100	100
43.00	252.20	233.29
73.00	31.40	39.61
0.00	0.00	0.00

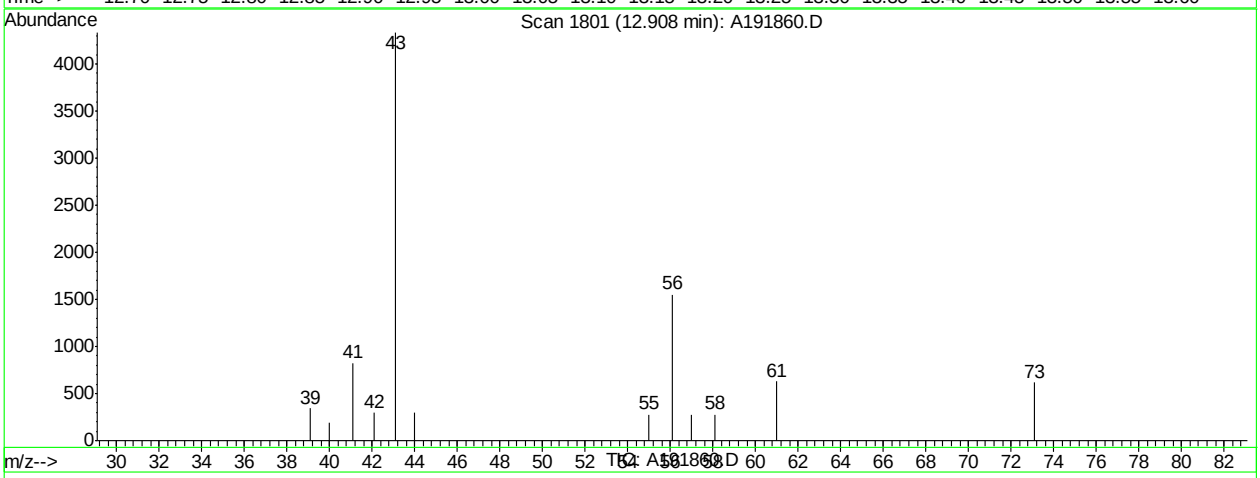
A191860.D MA7222.M Wed Feb 20 18:09:26 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 18:09 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Multiple Level Calibration





(88) butyl acetate (M)

12.91min 3.80ug/L m

response 4647

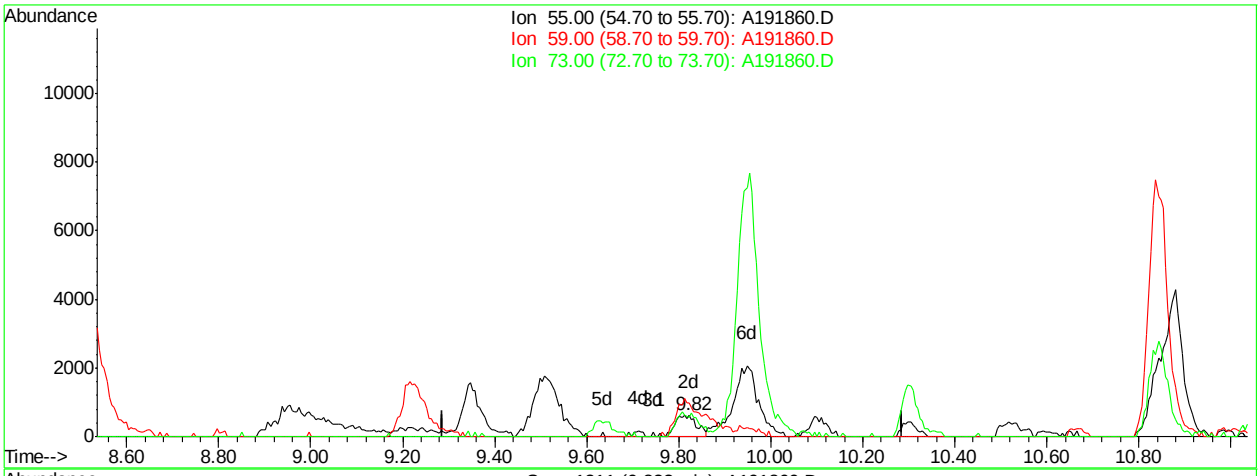
Ion	Exp%	Act%
56.00	100	100
43.00	252.20	279.48
73.00	31.40	39.61
0.00	0.00	0.00

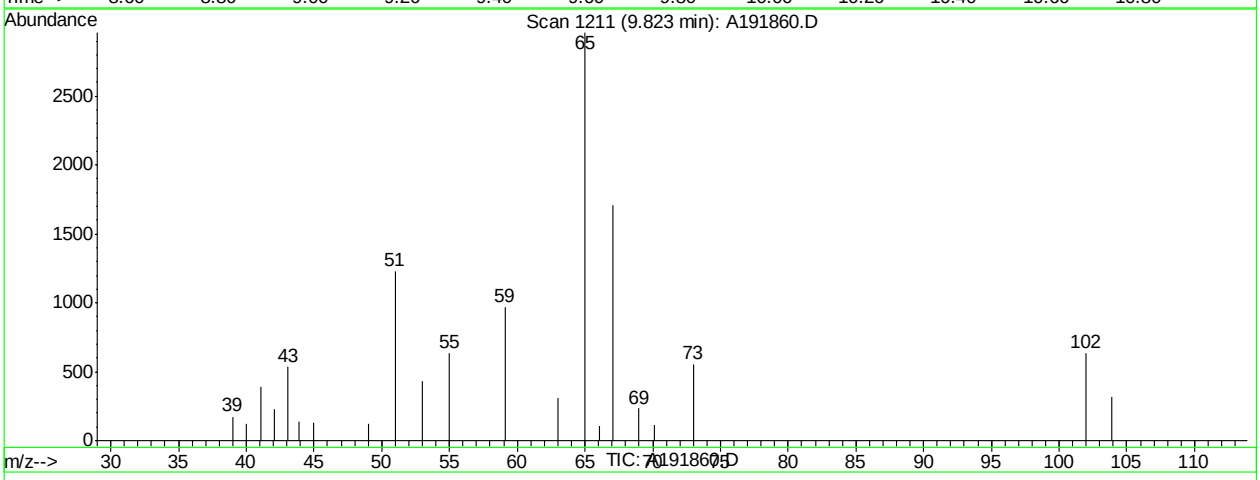
A191860.D MA7222.M Wed Feb 20 18:09:33 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\VA7216-VA7224\A191860.D Vial: 100
Acq On : 20 Feb 2013 2:25 pm Operator: Oksanat
Sample : ic7222-5 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:23 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Single Level Calibration





(64) tert amyl alcohol (m)

9.82min 24.10ug/L m

response 2026

Ion	Exp%	Act%
55.00	100	100
59.00	312.80	0.00#
73.00	127.00	0.00#
0.00	0.00	0.00

A191860.D MA7222.M Mon Feb 25 17:20:39 2013 MSA

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 02/25/13 17:30

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:51 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.02	65	77073	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	236951	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	333637	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	301194	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.37	152	180483	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.39	113	17476	8.63	ug/L	0.01
Spiked Amount 50.000	Range 81 - 121		Recovery = 17.26%#			
48) 1,2-dichloroethane-d4 (s)	9.83	65	18311	7.35	ug/L	0.01
Spiked Amount 50.000	Range 74 - 127		Recovery = 14.70%#			
77) toluene-d8 (s)	12.06	98	61215	8.84	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 17.68%#			
102) 4-bromofluorobenzene (s)	15.06	95	24992	8.58	ug/L	0.01
Spiked Amount 50.000	Range 78 - 116		Recovery = 17.16%#			

Target Compounds						Qvalue
2) 1,4-dioxane	11.08	88	3262	251.12	ug/L #	57
4) tertiary butyl alcohol	7.15	59	7334m	47.33	ug/L	
7) chlorodifluoromethane	3.70	51	15123	8.90	ug/L	92
8) dichlorodifluoromethane	3.67	85	15852	8.55	ug/L	96
9) chloromethane	3.97	50	20437	7.31	ug/L	98
10) vinyl chloride	4.23	62	19869	8.53	ug/L	99
11) bromomethane	4.83	94	13511	8.87	ug/L	99
12) chloroethane	5.00	64	9642	8.89	ug/L	96
14) trichlorofluoromethane	5.46	101	20104	8.52	ug/L	98
15) pentane	5.53	43	31196	9.63	ug/L	98
16) ethyl ether	5.87	74	8320	7.64	ug/L #	80
18) acrolein	6.13	56	22255	59.58	ug/L	99
19) 1,1-dichloroethene	6.29	96	15563	10.42	ug/L	92
20) acetone	6.40	43	3639	6.88	ug/L	64
21) allyl chloride	6.83	76	10333	8.83	ug/L #	57
22) acetonitrile	6.84	40	9492	62.28	ug/L #	73
23) iodomethane	6.56	142	32034	9.93	ug/L	95
24) iso-butyl alcohol	9.70	41	5002m	72.84	ug/L	
25) carbon disulfide	6.69	76	55434	9.37	ug/L	96
26) methylene chloride	7.03	84	19000	9.04	ug/L	95
27) methyl acetate	6.87	43	8967	5.80	ug/L	83
28) methyl tert butyl ether	7.38	73	44273	7.53	ug/L	99
29) trans-1,2-dichloroethene	7.42	96	16515	9.50	ug/L	90
30) di-isopropyl ether	8.01	45	59016	7.67	ug/L	80
31) t-butyl formate	9.22	59	11366	6.59	ug/L	85
32) 3,3-dimethyl-1-butanol	13.01	57	14226	70.24	ug/L	98
33) ethyl tert-butyl ether	8.50	59	53882	7.77	ug/L	99
34) 2-butanone	8.84	72	1035	5.43	ug/L	94
35) 1,1-dichloroethane	8.01	63	31666	9.20	ug/L	95
36) chloroprene	8.13	53	21773	7.98	ug/L	95
37) acrylonitrile	7.41	53	23347m	37.88	ug/L	
38) vinyl acetate	8.08	86	1236	5.69	ug/L #	1
39) ethyl acetate	8.84	45	1447	6.13	ug/L #	69

(#) = qualifier out of range (m) = manual integration
A191861.D MA7222.M Thu Feb 21 08:23:21 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:51 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	2,2-dichloropropane	8.79	77	23479	8.97	ug/L		96
42)	cis-1,2-dichloroethene	8.80	96	18687	9.43	ug/L		86
43)	propionitrile	8.89	54	17413m	72.19	ug/L		
44)	bromochloromethane	9.11	128	8682	9.05	ug/L		87
45)	tetrahydrofuran	9.19	42	5876	7.66	ug/L		76
46)	chloroform	9.18	83	30120	9.04	ug/L		91
49)	freon 113	6.28	151	11673m	10.28	ug/L		
50)	methacrylonitrile	9.08	41	6664	6.32	ug/L		87
51)	cyclohexane	9.51	84	24957	10.14	ug/L		85
52)	1,1,1-trichloroethane	9.43	97	24410	9.48	ug/L		93
53)	tert-amyl methyl ether	9.95	73	50445	7.83	ug/L		98
56)	epichlorohydrin	11.66	57	6223	37.78	ug/L		98
57)	n-butyl alcohol	10.50	56	13201	268.40	ug/L		94
58)	carbon tetrachloride	9.65	117	20795	10.09	ug/L		93
59)	1,1-dichloropropene	9.63	75	22237	9.90	ug/L		98
60)	hexane	7.74	57	19032	8.57	ug/L		91
61)	benzene	9.90	78	69011	9.93	ug/L		98
62)	Iso-octane	9.91	57	63590	9.20	ug/L		97
63)	heptane	10.09	71	12478	9.45	ug/L		96
64)	tert amyl alcohol	9.80	55	2928m	35.38	ug/L		
65)	isopropyl acetate	9.86	43	25302	6.66	ug/L		99
66)	1,2-dichloroethane	9.93	62	20362	8.36	ug/L		97
67)	trichloroethene	10.66	95	16621	10.03	ug/L		91
69)	tert-amyl ethyl ether	10.84	87	23031	8.00	ug/L		95
70)	methylcyclohexane	10.88	83	27049	9.83	ug/L	#	90
71)	2-chloroethyl vinyl ether	11.52	63	43231	45.52	ug/L		97
72)	methyl methacrylate	10.98	69	8463	7.12	ug/L		75
73)	1,2-dichloropropane	10.94	63	19219	9.47	ug/L		94
74)	dibromomethane	11.11	93	9599	8.57	ug/L		92
75)	bromodichloromethane	11.24	83	22122	8.94	ug/L		98
76)	cis-1,3-dichloropropene	11.75	75	28109	8.97	ug/L		96
78)	4-methyl-2-pentanone	11.87	58	5547	7.35	ug/L		91
79)	toluene	12.14	92	43144	9.98	ug/L		98
80)	3-methyl-1-butanol	11.91	55	12243	136.29	ug/L		96
81)	trans-1,3-dichloropropene	12.37	75	23692	8.26	ug/L		82
82)	ethyl methacrylate	12.38	69	17233	7.39	ug/L		95
83)	1,1,2-trichloroethane	12.60	83	11941	8.51	ug/L		95
84)	2-hexanone	12.82	58	4326	6.42	ug/L		95
86)	tetrachloroethene	12.79	164	15444	11.30	ug/L		89
87)	1,3-dichloropropane	12.80	76	23800	8.79	ug/L		99
88)	butyl acetate	12.91	56	8246	6.90	ug/L		96
89)	dibromochloromethane	13.09	129	17513	9.21	ug/L		97
90)	1,2-dibromoethane	13.26	107	14247	9.07	ug/L		97
92)	chlorobenzene	13.78	112	50583	10.02	ug/L		97
93)	1,1,1,2-tetrachloroethane	13.85	131	18333	9.90	ug/L		96
94)	ethylbenzene	13.84	91	82637	10.01	ug/L		97
95)	m,p-xylene	13.97	106	66682	21.24	ug/L		92
96)	o-xylene	14.44	106	33123	10.43	ug/L		97
97)	styrene	14.46	104	53273	9.56	ug/L		99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:51 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

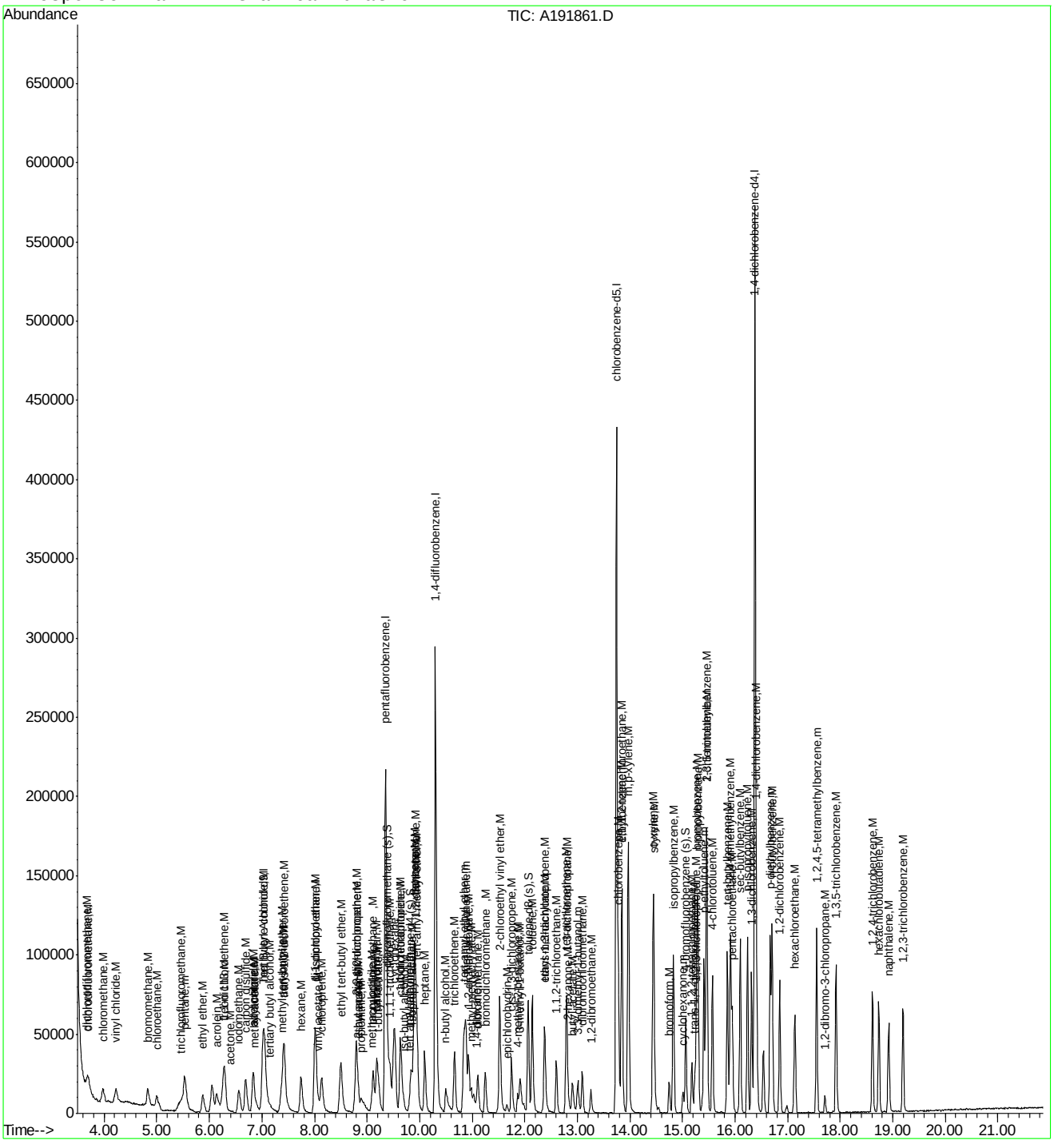
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	bromoform	14.74	173	12198	9.55	ug/L	97
100)	isopropylbenzene	14.83	105	83979	9.65	ug/L	96
101)	cyclohexanone	15.02	55	7958	31.98	ug/L	97
103)	bromobenzene	15.28	156	23387	9.52	ug/L	94
104)	1,1,2,2-tetrachloroethane	15.17	83	21781	8.20	ug/L	92
105)	trans-1,4-dichloro-2-buten	15.22	53	4762	7.30	ug/L	91
106)	1,2,3-trichloropropane	15.25	110	4835	8.23	ug/L	95
107)	n-propylbenzene	15.29	91	100049	9.52	ug/L	99
108)	2-chlorotoluene	15.45	126	22012	9.98	ug/L	94
109)	4-chlorotoluene	15.57	91	62840	9.04	ug/L	96
110)	p-ethyltoluene	15.41	105	79543	8.55	ug/L	98
111)	1,3,5-trimethylbenzene	15.46	105	75569	9.69	ug/L	99
112)	tert-butylbenzene	15.85	119	62494	9.91	ug/L	97
113)	pentachloroethane	15.95	167	15365	9.77	ug/L	92
114)	1,2,4-trimethylbenzene	15.91	105	75060	9.34	ug/L	98
115)	sec-butylbenzene	16.10	105	98942	10.14	ug/L	98
116)	1,3-dichlorobenzene	16.31	146	45995	9.92	ug/L	98
117)	p-isopropyltoluene	16.24	119	81302	10.21	ug/L	100
119)	1,4-dichlorobenzene	16.41	146	48124	9.86	ug/L	98
120)	p-diethylbenzene	16.67	119	46805	9.38	ug/L	100
121)	1,2-dichlorobenzene	16.85	146	44104	9.51	ug/L	98
122)	n-butylbenzene	16.70	92	45939	10.22	ug/L	96
123)	1,2,4,5-tetramethylbenzene	17.55	119	74289	8.79	ug/L	98
124)	1,2-dibromo-3-chloropropan	17.71	75	3229	7.16	ug/L	89
125)	1,3,5-trichlorobenzene	17.92	180	38720	11.20	ug/L	99
126)	1,2,4-trichlorobenzene	18.61	180	31803	10.36	ug/L	93
127)	hexachlorobutadiene	18.73	225	20560	10.96	ug/L	95
128)	naphthalene	18.92	128	56325	9.29	ug/L	97
129)	1,2,3-trichlorobenzene	19.19	180	28565	10.41	ug/L	99
130)	hexachloroethane	17.13	201	14684	10.45	ug/L	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:51 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Manual Integration Approval Summary

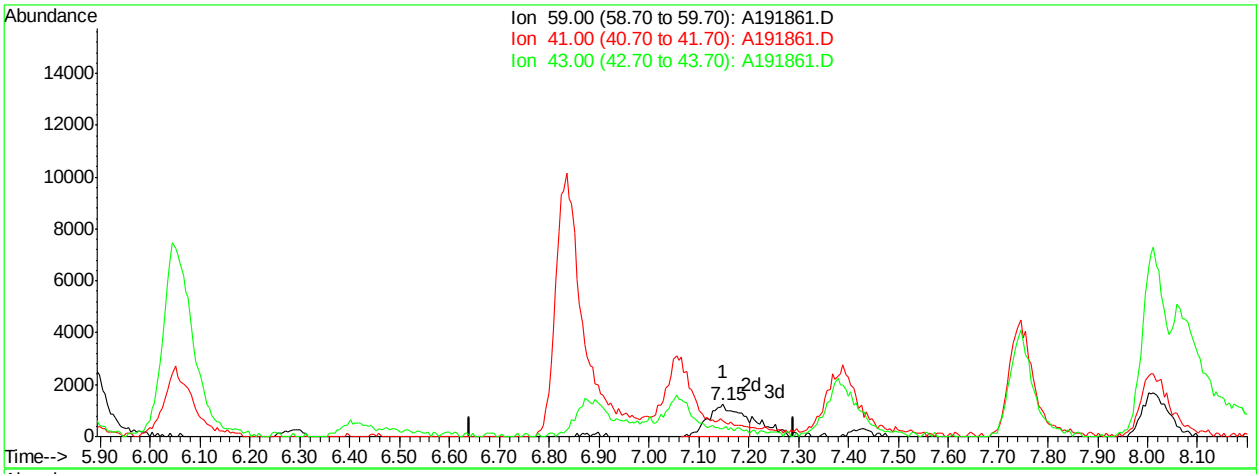
Sample Number:	VA7222-IC7222	**Method:**	SW846 8260B
Lab FileID:	A191861.D	**Analyst approved:**	02/21/13 08:34 Ying Li
Injection Time:	02/20/13 14:55	**Supervisor approved:**	02/25/13 17:30 Kanya Veerawat

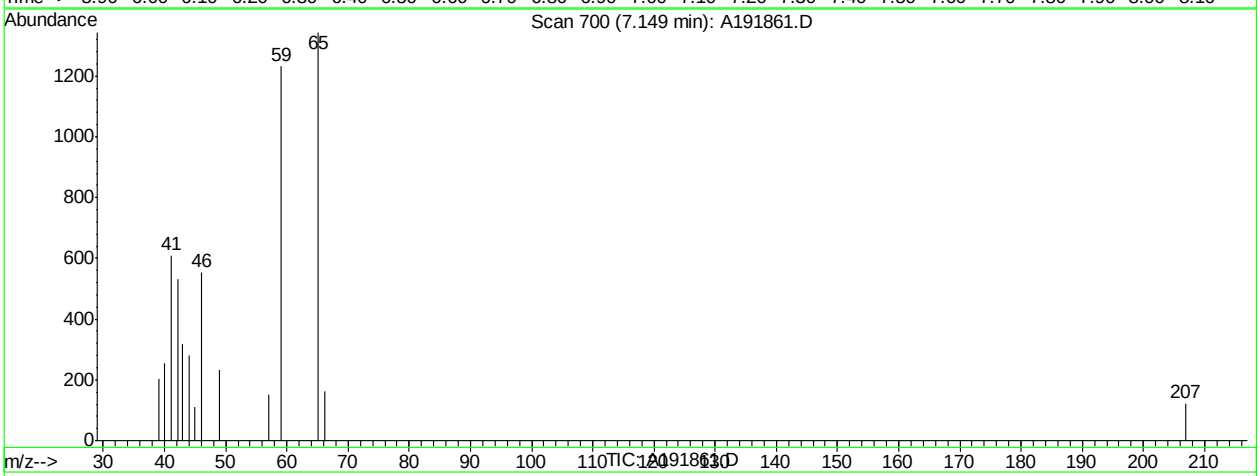
Parameter	CAS	Sig#	R.T. (min.)	Reason
Freon 113	76-13-1		6.28	Split peak
Tert Butyl Alcohol	75-65-0		7.15	Split peak
Acrylonitrile	107-13-1		7.41	Split peak
Propionitrile	107-12-0		8.89	Split peak
Isobutyl alcohol	78-83-1		9.70	Split peak
Tert Amyl Alcohol	75-85-4		9.80	Split peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:36 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(4) tertiary butyl alcohol (M)

7.15min 35.76ug/L

response 5541

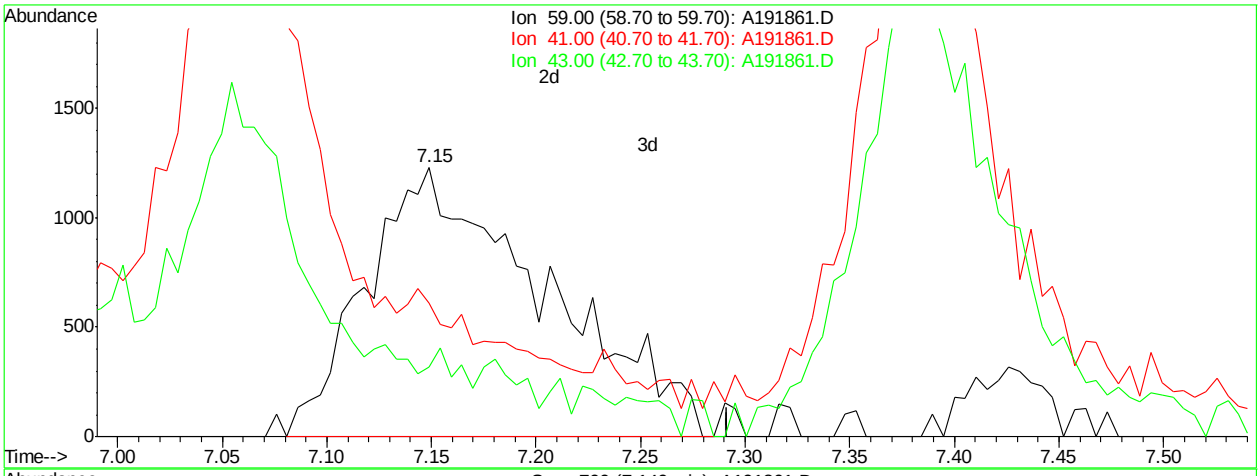
Ion	Exp%	Act%
59.00	100	100
41.00	0.00	0.00
43.00	0.00	0.00
0.00	0.00	0.00

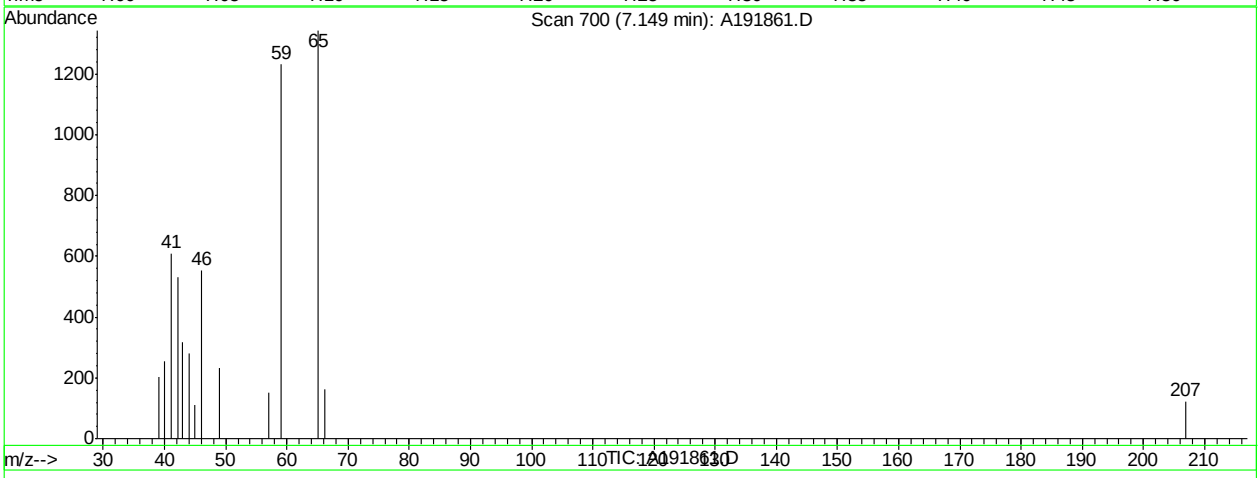
A191861.D MA7222.M Wed Feb 20 17:36:27 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:36 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(4) tertiary butyl alcohol (M)

7.15min 47.33ug/L m

response 7334

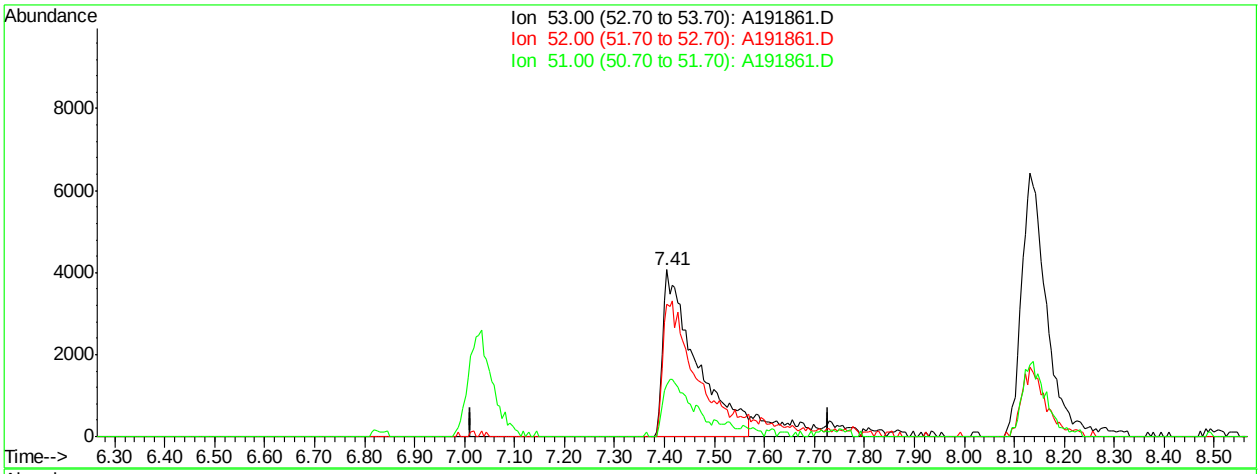
Ion	Exp%	Act%
59.00	100	100
41.00	0.00	49.47#
43.00	0.00	25.63
0.00	0.00	0.00

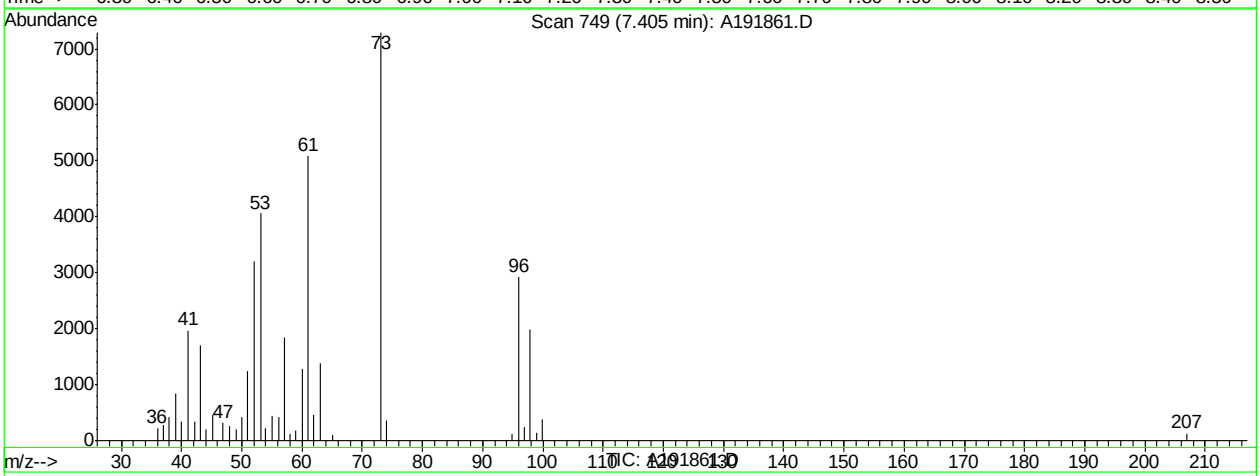
A191861.D MA7222.M Wed Feb 20 17:36:38 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:36 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(37) acrylonitrile (M)

7.41min 30.31ug/L

response 18682

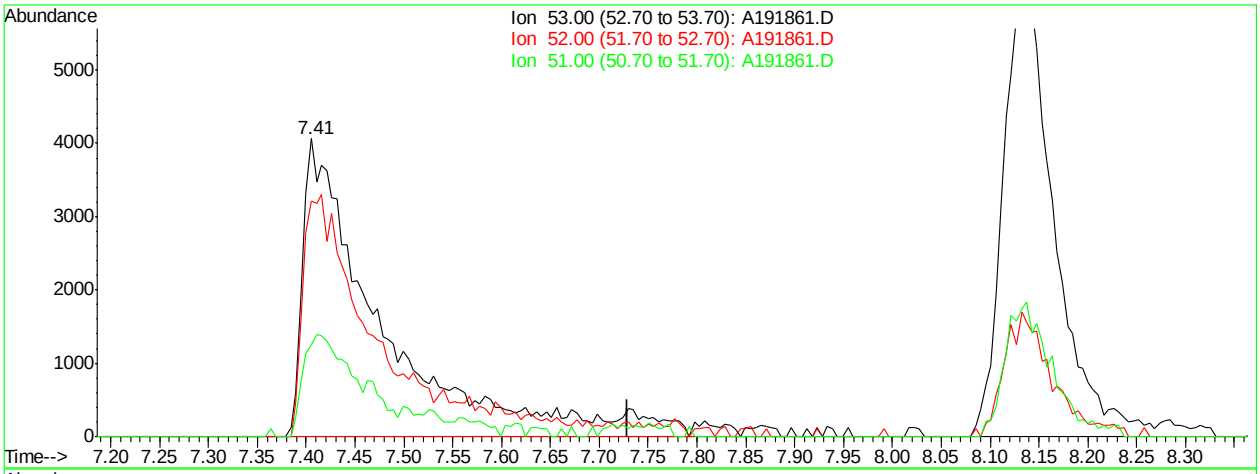
Ion	Exp%	Act%
53.00	100	100
52.00	84.10	79.09
51.00	38.00	30.77
0.00	0.00	0.00

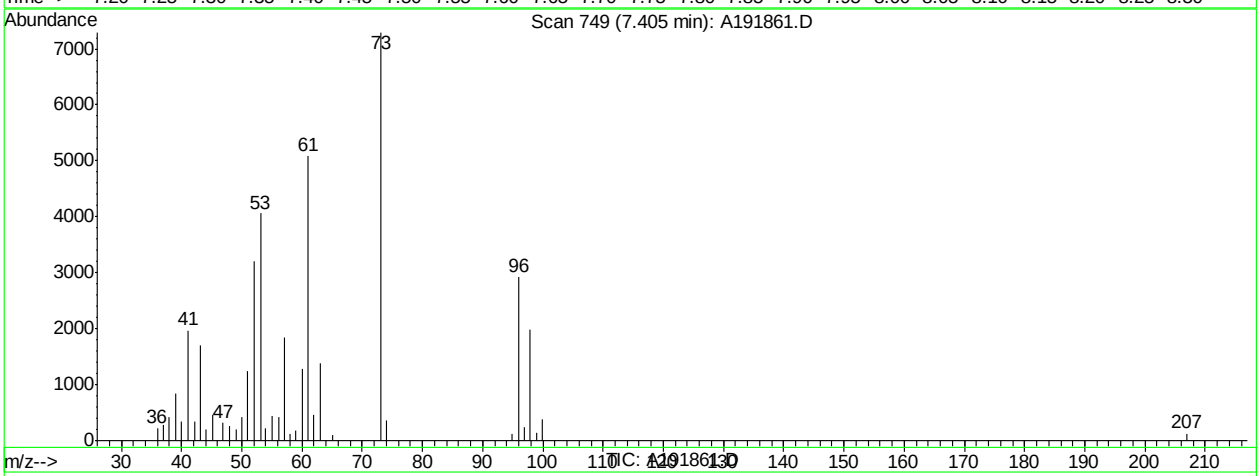
A191861.D MA7222.M Wed Feb 20 17:37:32 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:37 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(37) acrylonitrile (M)

7.41min 37.88ug/L m

response 23347

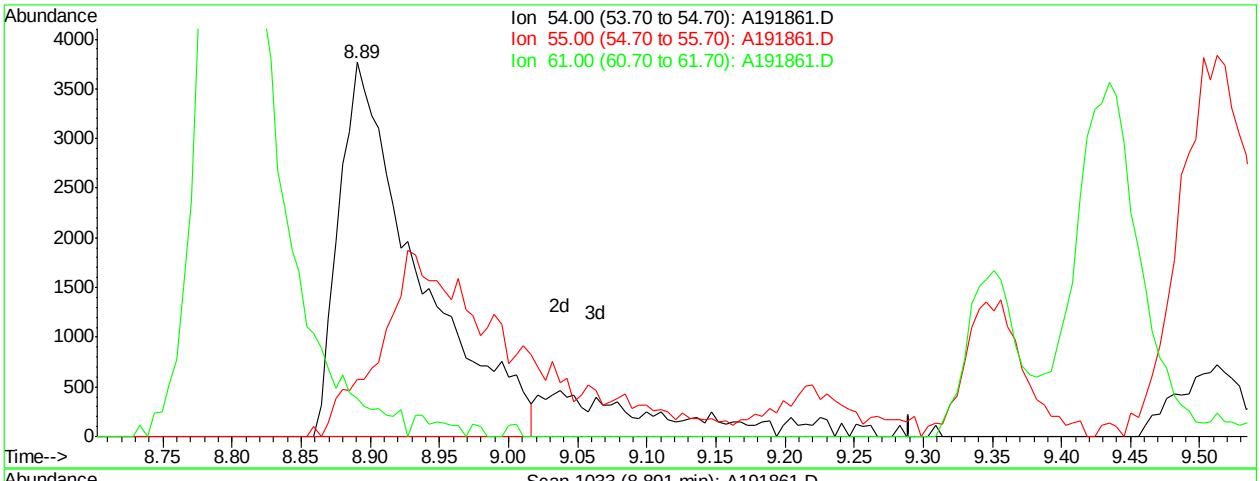
Ion	Exp%	Act%
53.00	100	100
52.00	84.10	79.09
51.00	38.00	30.77
0.00	0.00	0.00

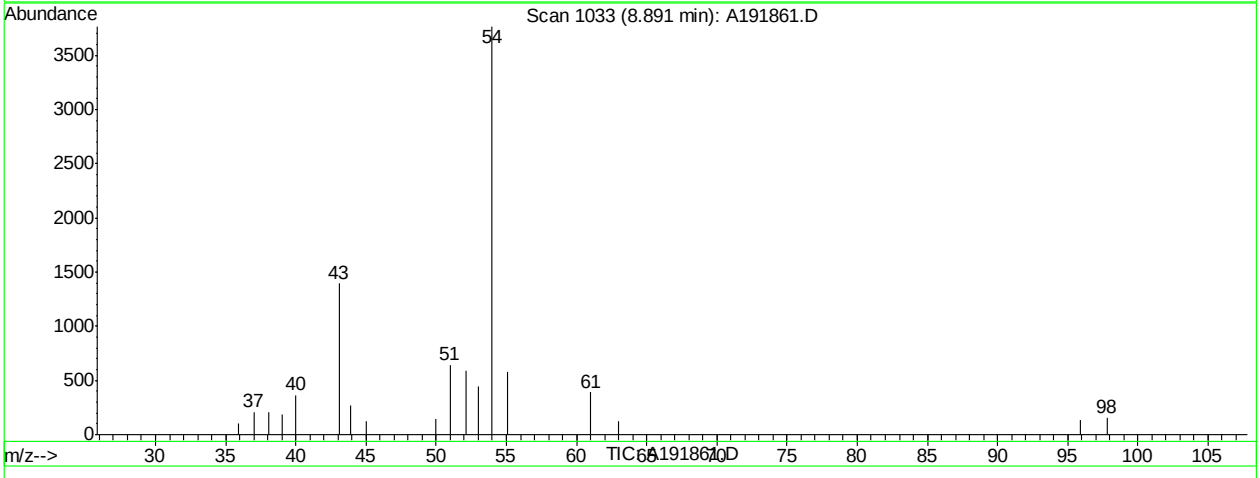
A191861.D MA7222.M Wed Feb 20 17:37:44 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:37 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(43) propionitrile (M)

8.89min 61.73ug/L

response 14888

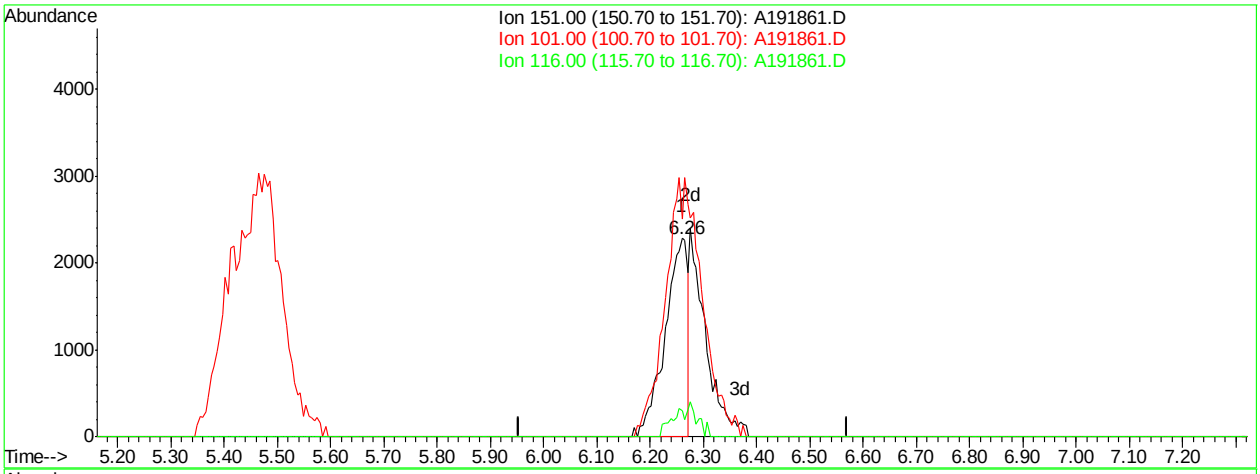
Ion	Exp%	Act%
54.00	100	100
55.00	30.90	15.27
61.00	6.10	10.33
0.00	0.00	0.00

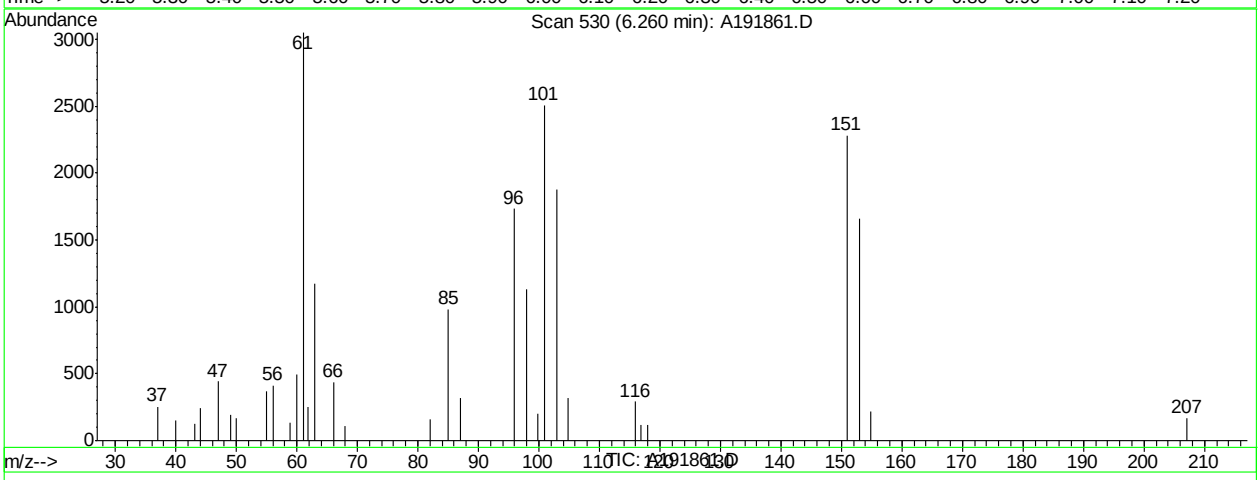
A191861.D MA7222.M Wed Feb 20 17:38:21 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:38 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(49) freon 113 (M)

6.26min 5.82ug/L

response 6606

Ion	Exp%	Act%
151.00	100	100
101.00	134.30	109.86
116.00	11.90	12.75
0.00	0.00	0.00

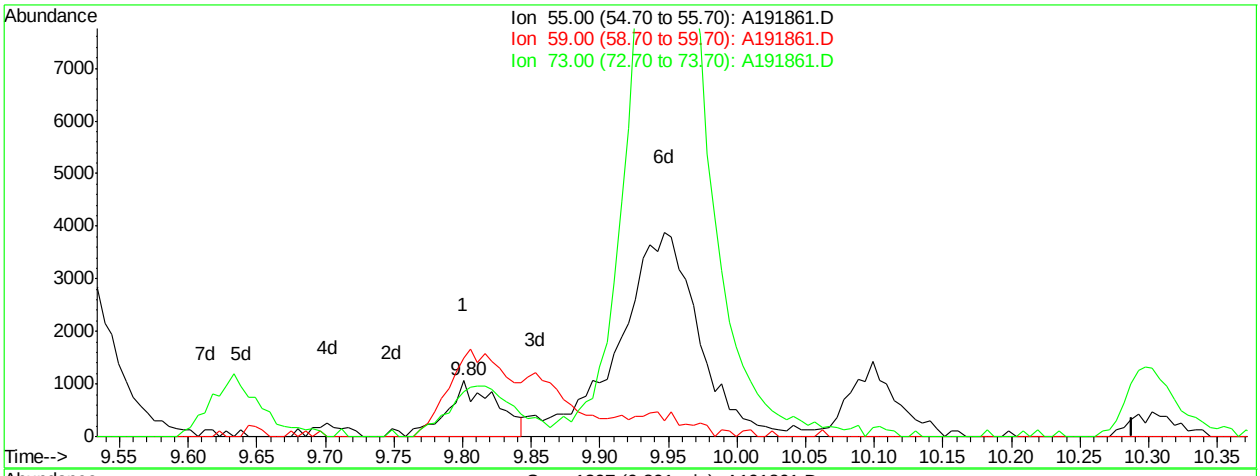
A191861.D MA7222.M Wed Feb 20 17:38:42 2013 MSA

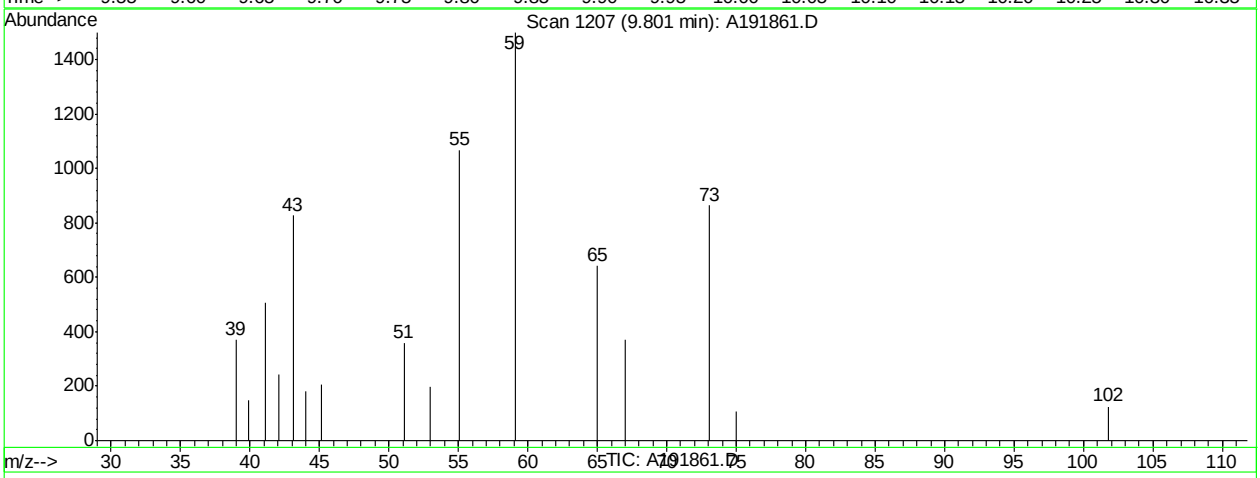
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D
Acq On : 20 Feb 2013 2:55 pm
Sample : ic7222-10
Misc : MS43382,VA7222,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:39 2013

Vial: 100
Operator: Oksanat
Inst : MSA
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(64) tert amyl alcohol (m)

9.80min 31.19ug/L

response 2582

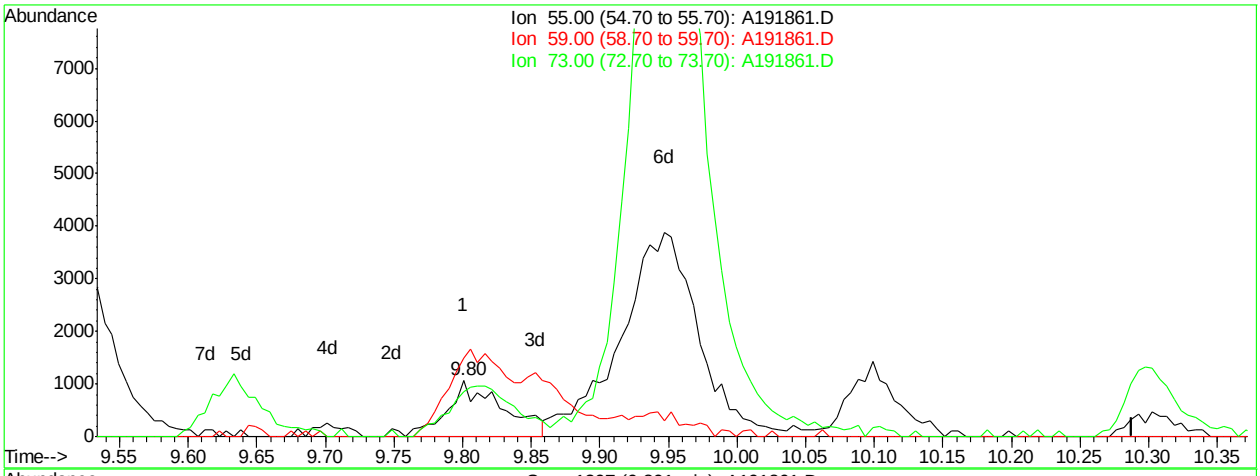
Ion	Exp%	Act%
55.00	100	100
59.00	312.80	191.56#
73.00	127.00	125.37
0.00	0.00	0.00

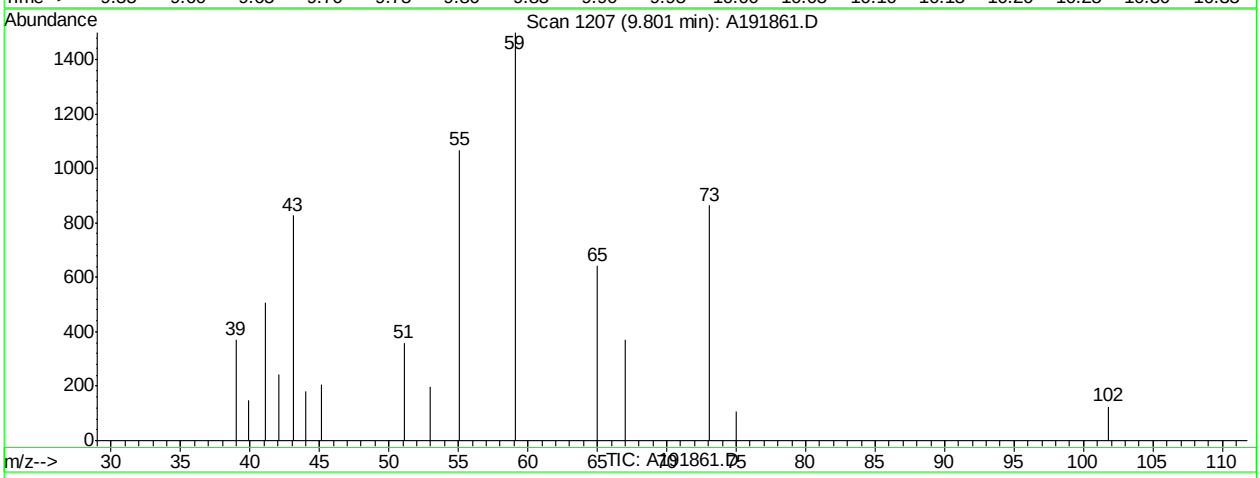
A191861.D MA7222.M Wed Feb 20 17:39:23 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:39 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Single Level Calibration





(64) tert amyl alcohol (m)

9.80min 35.38ug/L m

response 2928

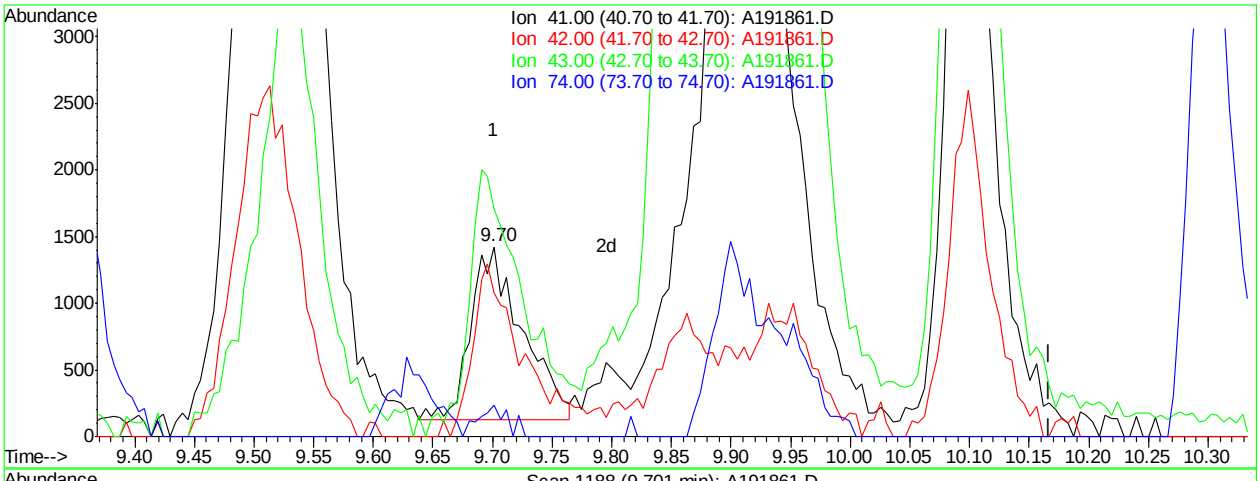
Ion	Exp%	Act%
55.00	100	100
59.00	312.80	168.92#
73.00	127.00	110.55
0.00	0.00	0.00

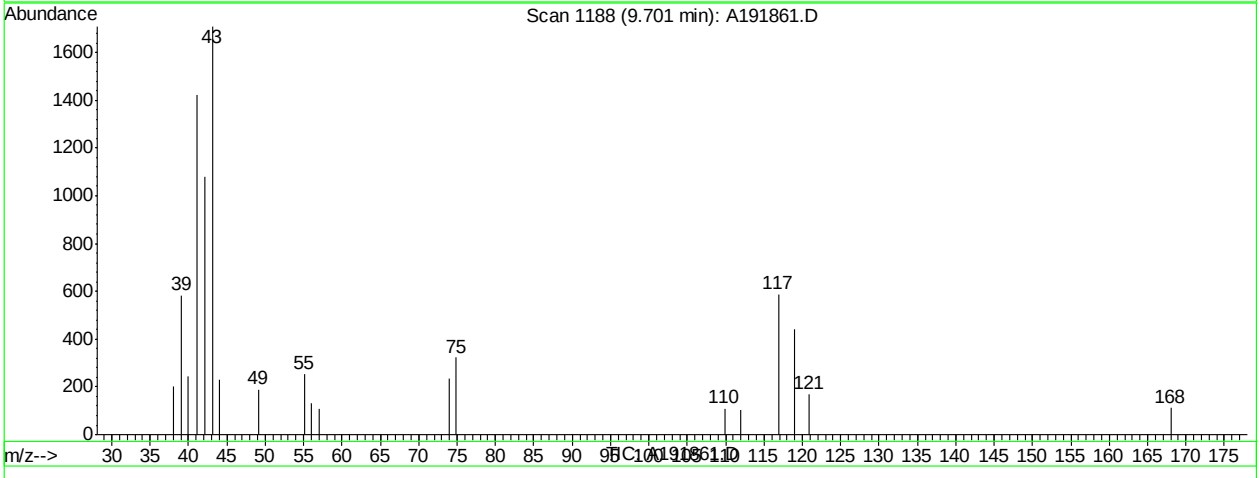
A191861.D MA7222.M Wed Feb 20 17:39:36 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:40 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Single Level Calibration





(24) iso-butyl alcohol (M)

9.70min 56.34ug/L

response 3869

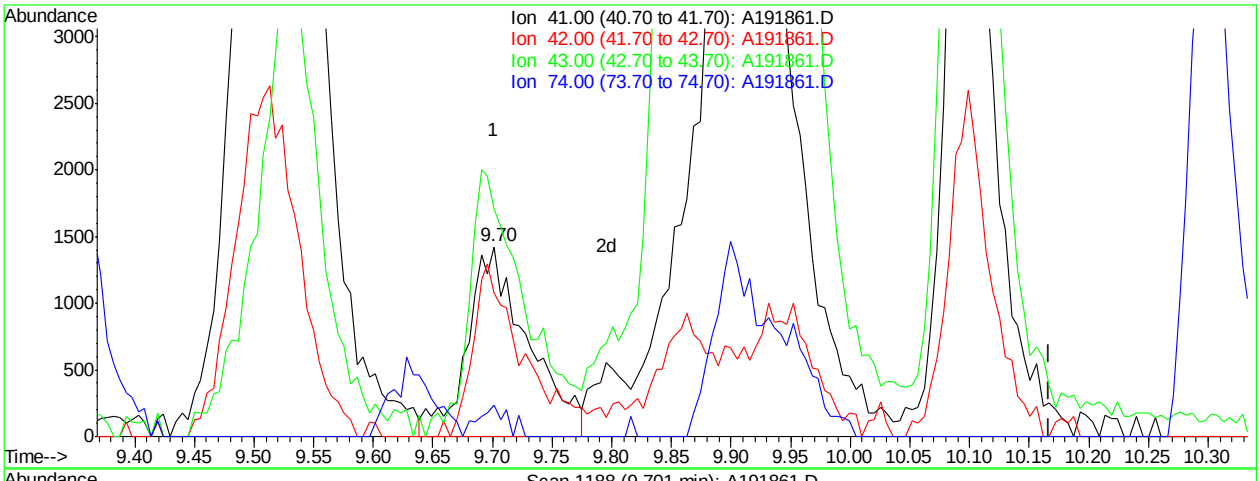
Ion	Exp%	Act%
41.00	100	100
42.00	83.50	83.24
43.00	133.70	119.31
74.00	11.80	18.15

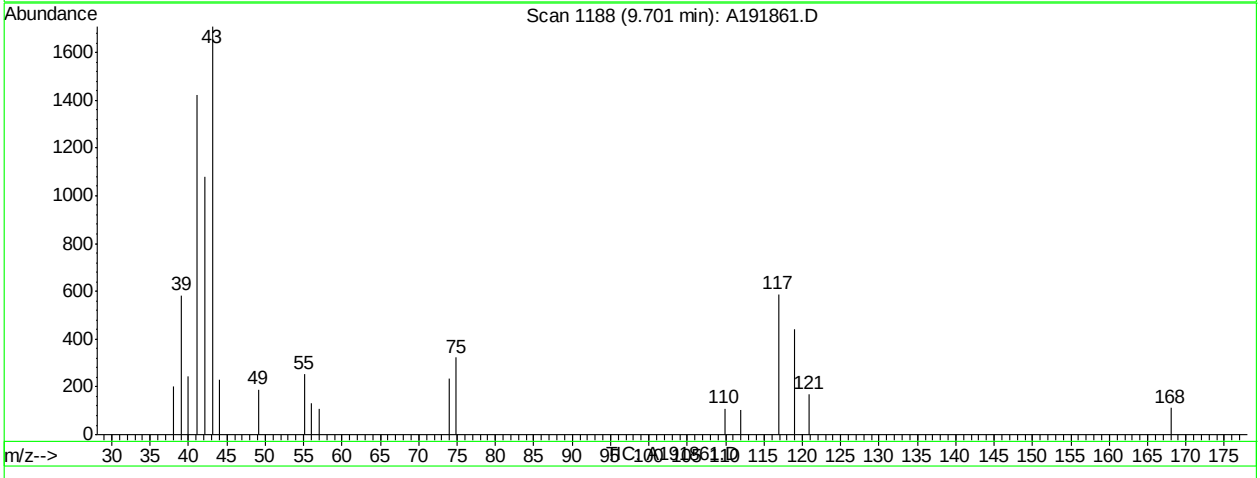
A191861.D MA7222.M Wed Feb 20 17:51:52 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:51 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 17:47:11 2013
Response via : Single Level Calibration





(24) iso-butyl alcohol (M)

9.70min 72.84ug/L m

response 5002

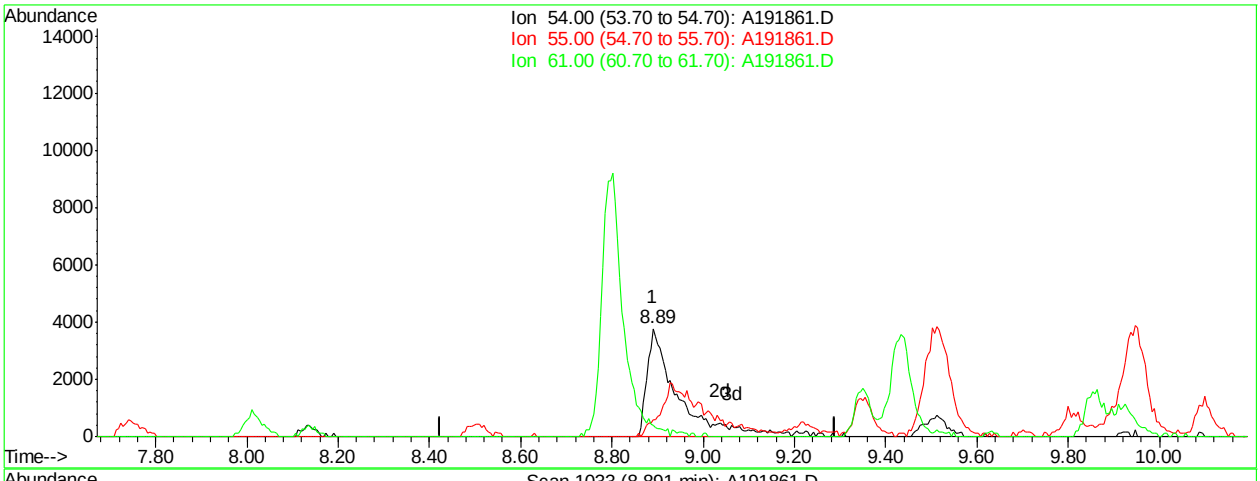
Ion	Exp%	Act%
41.00	100	100
42.00	83.50	75.70
43.00	133.70	119.94
74.00	11.80	16.50

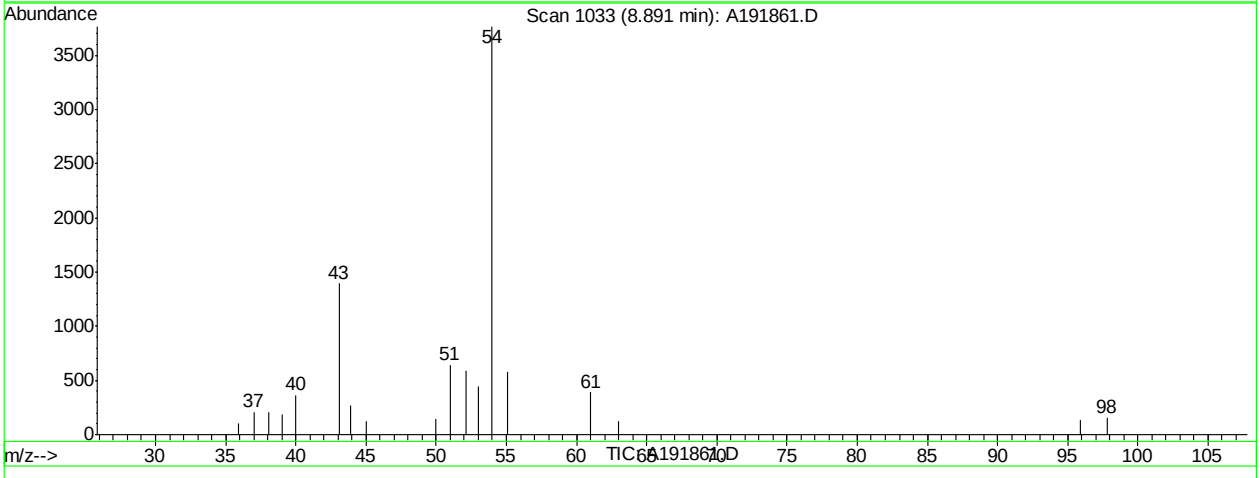
A191861.D MA7222.M Wed Feb 20 17:52:01 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\VA7216-VA7224\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:51 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Multiple Level Calibration





(43) propionitrile (M)

8.89min 72.19ug/L m

response 17413

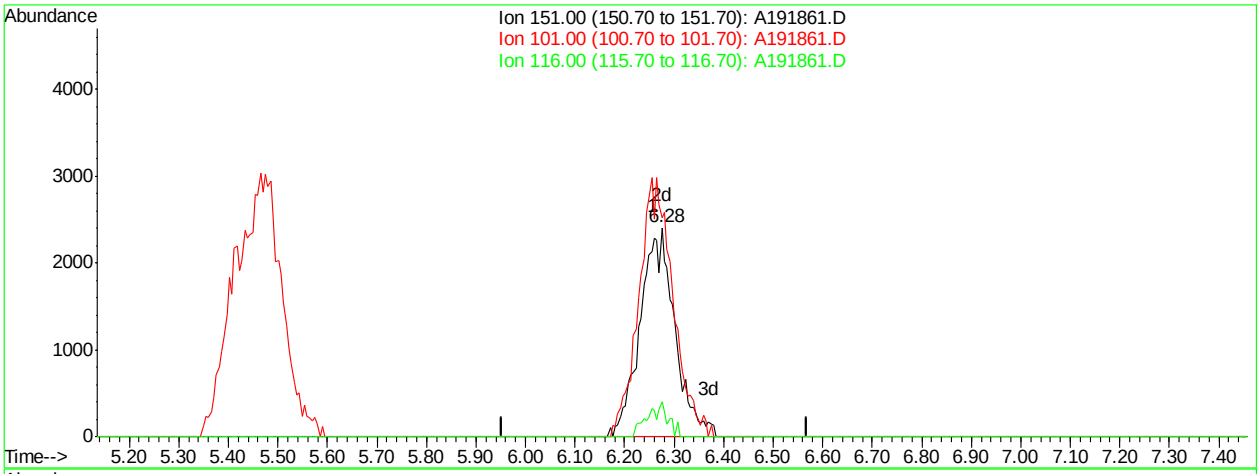
Ion	Exp%	Act%
54.00	100	100
55.00	30.90	15.27
61.00	6.10	10.33
0.00	0.00	0.00

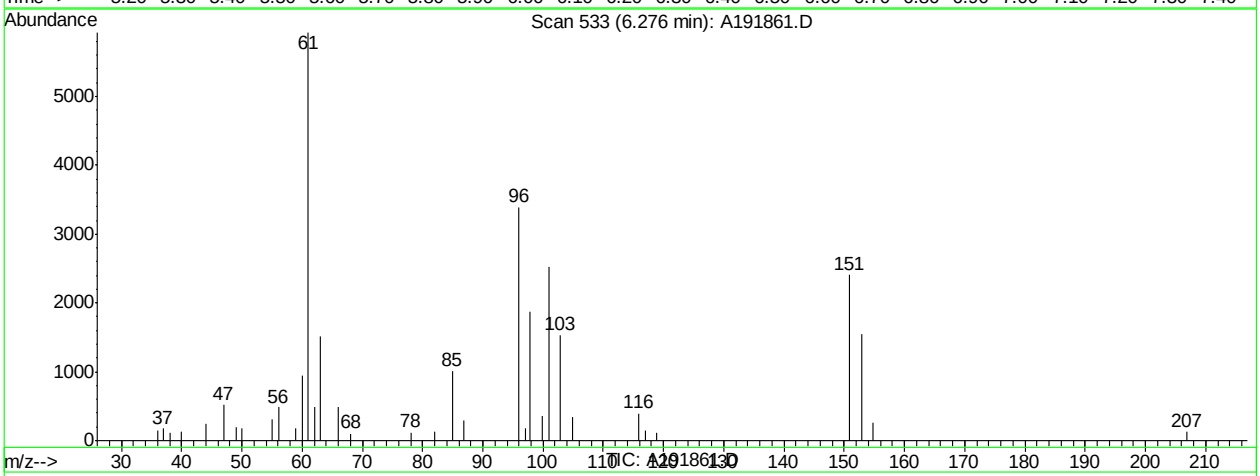
A191861.D MA7222.M Mon Feb 25 17:20:54 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\VA7216-VA7224\A191861.D Vial: 100
Acq On : 20 Feb 2013 2:55 pm Operator: Oksanat
Sample : ic7222-10 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:51 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Multiple Level Calibration





(49) freon 113 (M)

6.28min 10.28ug/L m

response 11673

Ion	Exp%	Act%
151.00	100	100
101.00	134.30	104.95
116.00	11.90	16.56#
0.00	0.00	0.00

A191861.D MA7222.M Mon Feb 25 17:21:10 2013 MSA

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 02/25/13 12:35

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191862.D Vial: 100
Acq On : 20 Feb 2013 3:24 pm Operator: Oksanat
Sample : ic7222-20 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:42 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.02	65	81408	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	238907	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	336975	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	307533	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.37	152	185346	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	9.39	113	32852	16.09	ug/L	0.00
Spiked Amount 50.000 Range 81 - 121 Recovery = 32.18%#						
48) 1,2-dichloroethane-d4 (s)	9.83	65	36183	14.41	ug/L	0.01
Spiked Amount 50.000 Range 74 - 127 Recovery = 28.82%#						
77) toluene-d8 (s)	12.06	98	121252	17.34	ug/L	0.00
Spiked Amount 50.000 Range 80 - 122 Recovery = 34.68%#						
102) 4-bromofluorobenzene (s)	15.06	95	49469	16.54	ug/L	0.00
Spiked Amount 50.000 Range 78 - 116 Recovery = 33.08%#						

Target Compounds						Qvalue
2) 1,4-dioxane	11.08	88	7545	549.90	ug/L	91
4) tertiary butyl alcohol	7.16	59	16079m	98.24	ug/L	
7) chlorodifluoromethane	3.70	51	26465	15.45	ug/L	98
8) dichlorodifluoromethane	3.67	85	37868	20.26	ug/L	96
9) chloromethane	3.98	50	46154	16.37	ug/L	95
10) vinyl chloride	4.23	62	44930	19.13	ug/L	98
11) bromomethane	4.83	94	30946	20.15	ug/L	97
12) chloroethane	5.00	64	22414	20.49	ug/L	97
14) trichlorofluoromethane	5.48	101	47493	19.97	ug/L	97
15) pentane	5.53	43	60006	18.38	ug/L	99
16) ethyl ether	5.87	74	18719	17.05	ug/L	99
18) acrolein	6.12	56	57012	151.39	ug/L	92
19) 1,1-dichloroethene	6.29	96	30460	20.22	ug/L	87
20) acetone	6.40	43	6541	12.26	ug/L	80
21) allyl chloride	6.83	76	20369	17.26	ug/L	91
22) acetonitrile	6.84	40	18923	123.15	ug/L #	81
23) iodomethane	6.56	142	65138	20.03	ug/L	94
24) iso-butyl alcohol	9.69	41	9170	132.44	ug/L	95
25) carbon disulfide	6.69	76	114478	19.19	ug/L	96
26) methylene chloride	7.03	84	38324	18.08	ug/L	94
27) methyl acetate	6.87	43	18336	11.77	ug/L	82
28) methyl tert butyl ether	7.38	73	95299	16.07	ug/L	98
29) trans-1,2-dichloroethene	7.42	96	34494	19.67	ug/L	85
30) di-isopropyl ether	8.01	45	119698	15.42	ug/L	77
31) t-butyl formate	9.21	59	24170	13.90	ug/L	90
32) 3,3-dimethyl-1-butanol	13.01	57	30910	151.37	ug/L	98
33) ethyl tert-butyl ether	8.50	59	109670	15.68	ug/L	98
34) 2-butanone	8.81	72	2645	13.76	ug/L #	1
35) 1,1-dichloroethane	8.01	63	64750	18.67	ug/L	99
36) chloroprene	8.13	53	43590	15.85	ug/L	99
37) acrylonitrile	7.39	53	44026	70.84	ug/L	95
38) vinyl acetate	8.05	86	3665	16.74	ug/L	31
39) ethyl acetate	8.82	45	3405	14.31	ug/L	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191862.D Vial: 100
Acq On : 20 Feb 2013 3:24 pm Operator: Oksanat
Sample : ic7222-20 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:42 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41)	2,2-dichloropropane	8.78	77	46865	17.76 ug/L		97
42)	cis-1,2-dichloroethene	8.80	96	37944	18.98 ug/L		85
43)	propionitrile	8.87	54	34785	143.04 ug/L		79
44)	bromochloromethane	9.12	128	18537	19.16 ug/L		91
45)	tetrahydrofuran	9.18	42	11603	15.00 ug/L		99
46)	chloroform	9.18	83	61046	18.17 ug/L		98
49)	freon 113	6.27	151	22263	19.44 ug/L		88
50)	methacrylonitrile	9.07	41	15573	14.64 ug/L		96
51)	cyclohexane	9.50	84	49436	19.93 ug/L		89
52)	1,1,1-trichloroethane	9.43	97	48666	18.75 ug/L		95
53)	tert-amyl methyl ether	9.95	73	103347	15.91 ug/L		99
56)	epichlorohydrin	11.65	57	12899	77.54 ug/L		88
57)	n-butyl alcohol	10.48	56	37728	759.47 ug/L		96
58)	carbon tetrachloride	9.65	117	43144	20.72 ug/L		100
59)	1,1-dichloropropene	9.63	75	46347	20.43 ug/L		98
60)	hexane	7.74	57	34747	15.50 ug/L		96
61)	benzene	9.90	78	140502	20.02 ug/L		99
62)	Iso-octane	9.91	57	121631	17.43 ug/L		97
63)	heptane	10.10	71	24171	18.12 ug/L		92
64)	tert amyl alcohol	9.80	55	6277	75.09 ug/L		90
65)	isopropyl acetate	9.85	43	56698	14.78 ug/L		99
66)	1,2-dichloroethane	9.92	62	42590	17.32 ug/L		97
67)	trichloroethene	10.66	95	34514	20.62 ug/L		98
69)	tert-amyl ethyl ether	10.84	87	49636	17.07 ug/L		94
70)	methylcyclohexane	10.88	83	52514	18.90 ug/L	#	89
71)	2-chloroethyl vinyl ether	11.52	63	92988	96.94 ug/L		97
72)	methyl methacrylate	10.97	69	18770	15.64 ug/L		79
73)	1,2-dichloropropane	10.93	63	38865	18.97 ug/L		94
74)	dibromomethane	11.11	93	20440	18.06 ug/L		92
75)	bromodichloromethane	11.24	83	47095	18.84 ug/L		97
76)	cis-1,3-dichloropropene	11.75	75	59236	18.72 ug/L		95
78)	4-methyl-2-pentanone	11.86	58	12369	16.23 ug/L		91
79)	toluene	12.14	92	87486	20.03 ug/L		99
80)	3-methyl-1-butanol	11.91	55	27979	308.37 ug/L		94
81)	trans-1,3-dichloropropene	12.37	75	51757	17.86 ug/L		88
82)	ethyl methacrylate	12.37	69	39156	16.61 ug/L		98
83)	1,1,2-trichloroethane	12.60	83	25620	18.07 ug/L		96
84)	2-hexanone	12.81	58	9791	14.39 ug/L		89
86)	tetrachloroethene	12.79	164	31941	22.88 ug/L		93
87)	1,3-dichloropropane	12.80	76	49823	18.03 ug/L		100
88)	butyl acetate	12.90	56	18512	15.17 ug/L		97
89)	dibromochloromethane	13.09	129	37598	19.37 ug/L		98
90)	1,2-dibromoethane	13.25	107	30271	18.87 ug/L		99
92)	chlorobenzene	13.78	112	104654	20.30 ug/L		94
93)	1,1,1,2-tetrachloroethane	13.85	131	39374	20.82 ug/L		93
94)	ethylbenzene	13.84	91	170503	20.24 ug/L		97
95)	m,p-xylene	13.97	106	134658	42.01 ug/L		96
96)	o-xylene	14.44	106	68503	21.12 ug/L		92
97)	styrene	14.45	104	112760	19.81 ug/L		97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191862.D Vial: 100
Acq On : 20 Feb 2013 3:24 pm Operator: Oksanat
Sample : ic7222-20 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:42 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

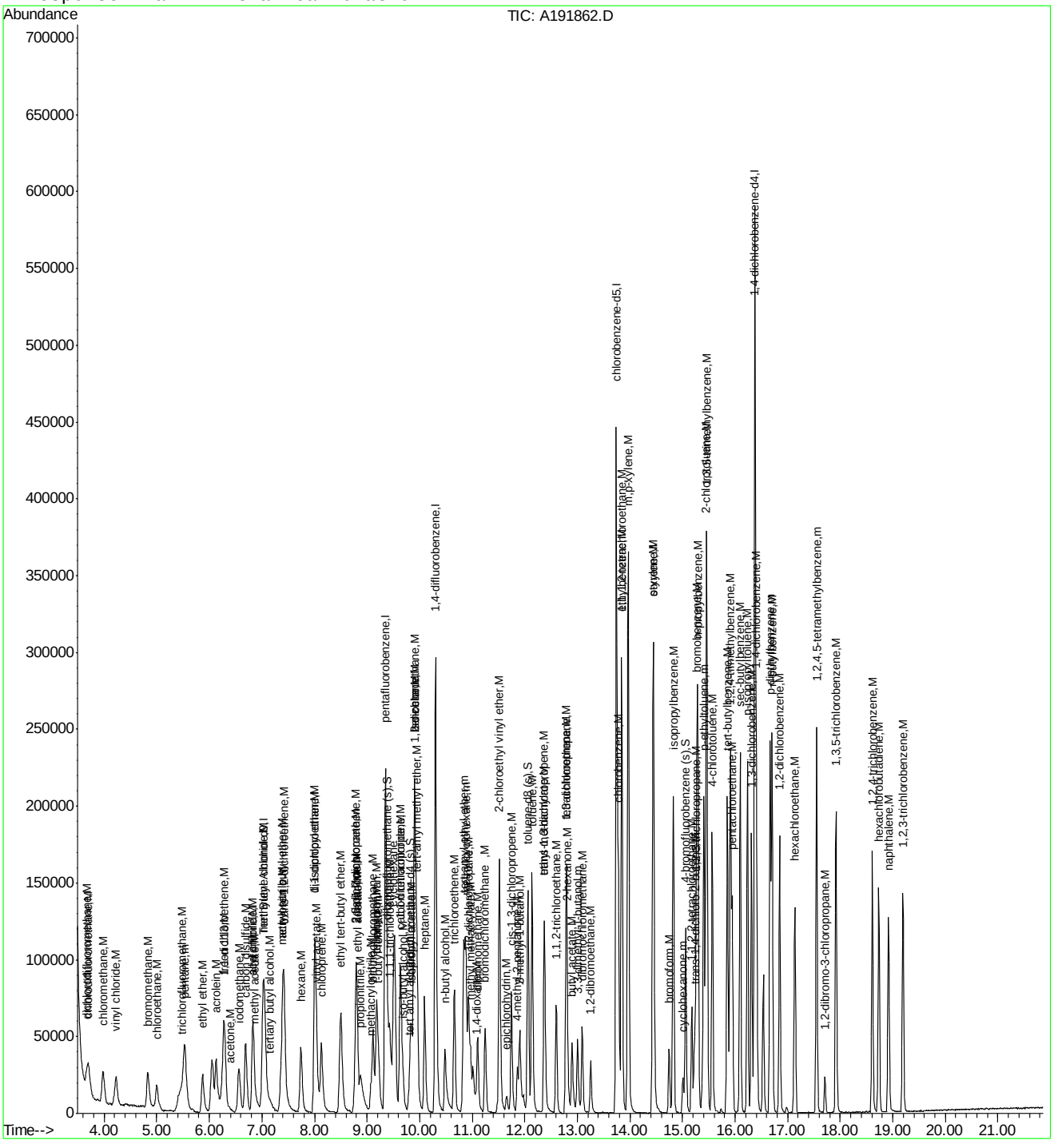
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
98)	bromoform	14.75	173	26646	20.43 ug/L	95
100)	isopropylbenzene	14.83	105	175573	19.65 ug/L	96
101)	cyclohexanone	15.01	55	12492	48.88 ug/L	97
103)	bromobenzene	15.27	156	48801	19.35 ug/L	99
104)	1,1,2,2-tetrachloroethane	15.18	83	44925	16.48 ug/L	98
105)	trans-1,4-dichloro-2-buten	15.23	53	10559	15.75 ug/L	81
106)	1,2,3-trichloropropane	15.25	110	10053	16.65 ug/L	98
107)	n-propylbenzene	15.29	91	205528	19.04 ug/L	99
108)	2-chlorotoluene	15.45	126	46143	20.38 ug/L	87
109)	4-chlorotoluene	15.56	91	130710	18.30 ug/L	99
110)	p-ethyltoluene	15.41	105	165809	17.35 ug/L	97
111)	1,3,5-trimethylbenzene	15.46	105	157409	19.66 ug/L	100
112)	tert-butylbenzene	15.85	119	130567	20.17 ug/L	93
113)	pentachloroethane	15.95	167	32903	20.37 ug/L	98
114)	1,2,4-trimethylbenzene	15.91	105	159315	19.31 ug/L	98
115)	sec-butylbenzene	16.10	105	203434	20.29 ug/L	96
116)	1,3-dichlorobenzene	16.31	146	95670	20.10 ug/L	98
117)	p-isopropyltoluene	16.23	119	170177	20.81 ug/L	99
119)	1,4-dichlorobenzene	16.41	146	98625	19.67 ug/L	99
120)	p-diethylbenzene	16.67	119	99105	19.33 ug/L	99
121)	1,2-dichlorobenzene	16.85	146	92971	19.52 ug/L	98
122)	n-butylbenzene	16.70	92	94431	20.45 ug/L	98
123)	1,2,4,5-tetramethylbenzene	17.55	119	161233	18.58 ug/L	98
124)	1,2-dibromo-3-chloropropan	17.70	75	6638	14.33 ug/L	87
125)	1,3,5-trichlorobenzene	17.92	180	81348	22.92 ug/L	98
126)	1,2,4-trichlorobenzene	18.61	180	68253	21.65 ug/L	98
127)	hexachlorobutadiene	18.74	225	42562	22.09 ug/L	99
128)	naphthalene	18.92	128	125046	20.08 ug/L	98
129)	1,2,3-trichlorobenzene	19.19	180	62127	22.04 ug/L	97
130)	hexachloroethane	17.14	201	31675	21.96 ug/L	98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191862.D Vial: 100
Acq On : 20 Feb 2013 3:24 pm Operator: Oksanat
Sample : ic7222-20 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:42 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Manual Integration Approval Summary

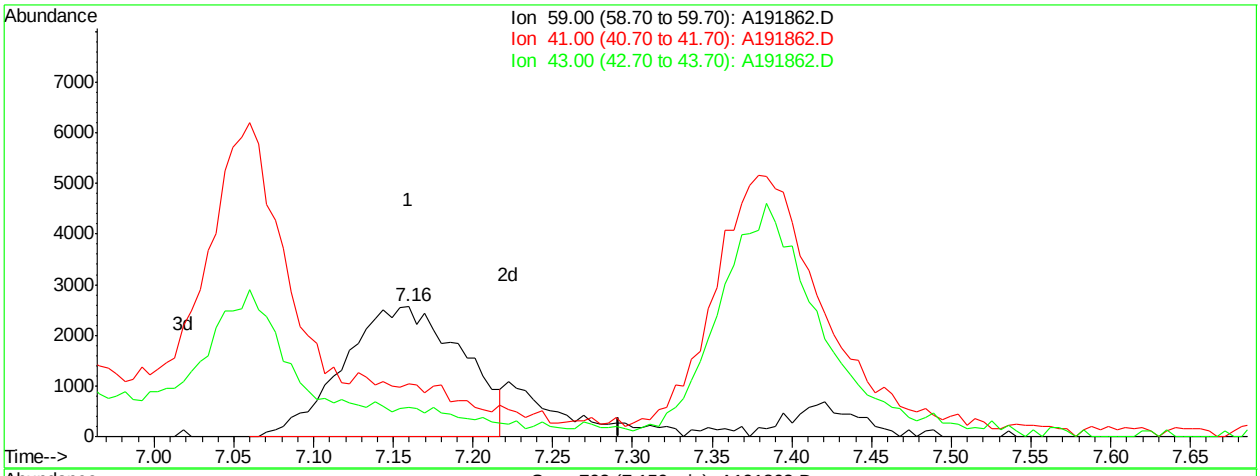
Sample Number:	VA7222-IC7222	**Method:**	SW846 8260B
Lab FileID:	A191862.D	**Analyst approved:**	02/21/13 08:34 Ying Li
Injection Time:	02/20/13 15:24	**Supervisor approved:**	02/25/13 12:35 Kanya Veerawat

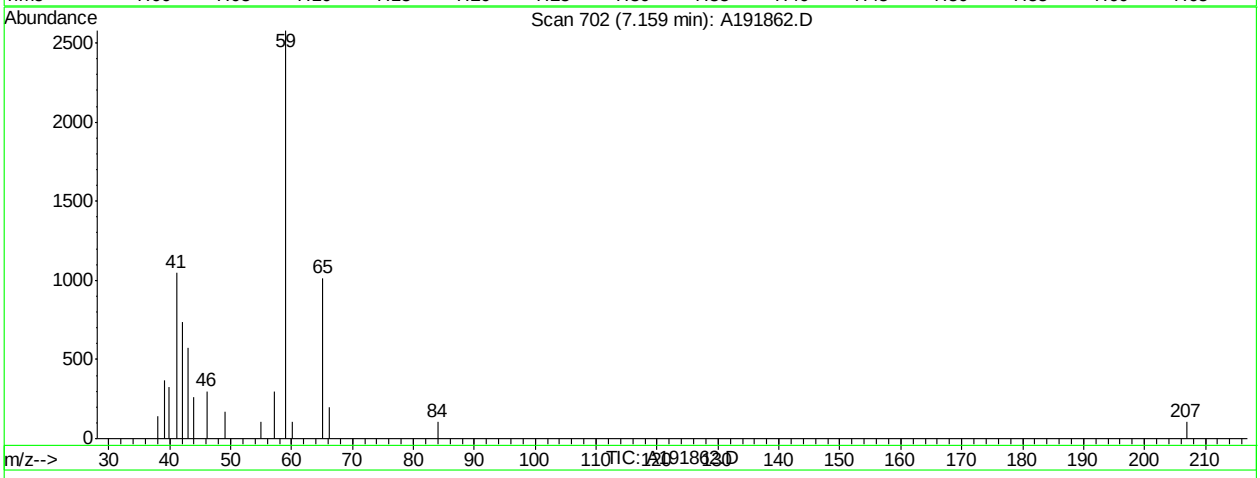
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tert Butyl Alcohol	75-65-0		7.16	Split peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191862.D Vial: 100
Acq On : 20 Feb 2013 3:24 pm Operator: Oksanat
Sample : ic7222-20 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:40 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(4) tertiary butyl alcohol (M)

7.16min 81.29ug/L

response 13304

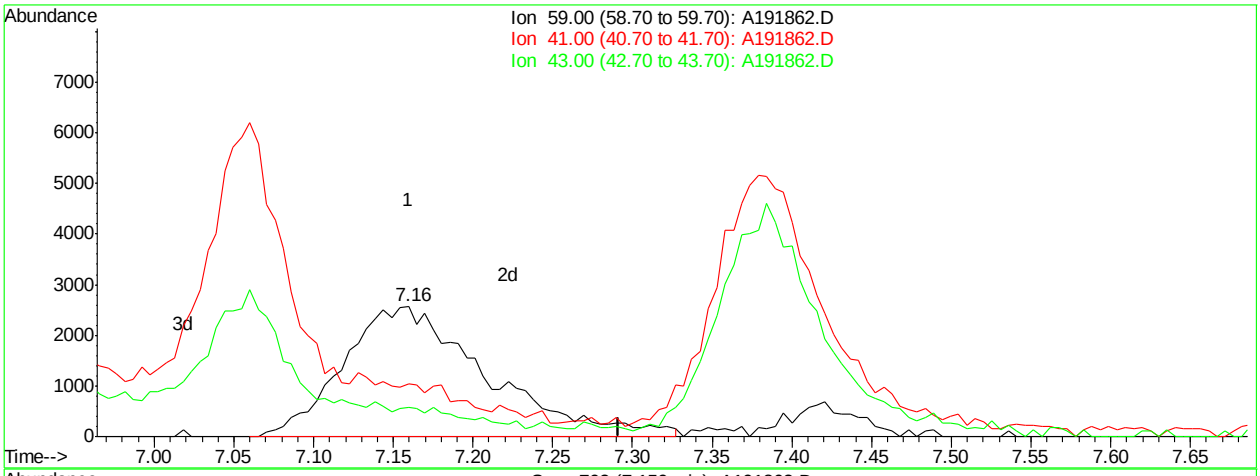
Ion	Exp%	Act%
59.00	100	100
41.00	0.00	0.00
43.00	0.00	0.00
0.00	0.00	0.00

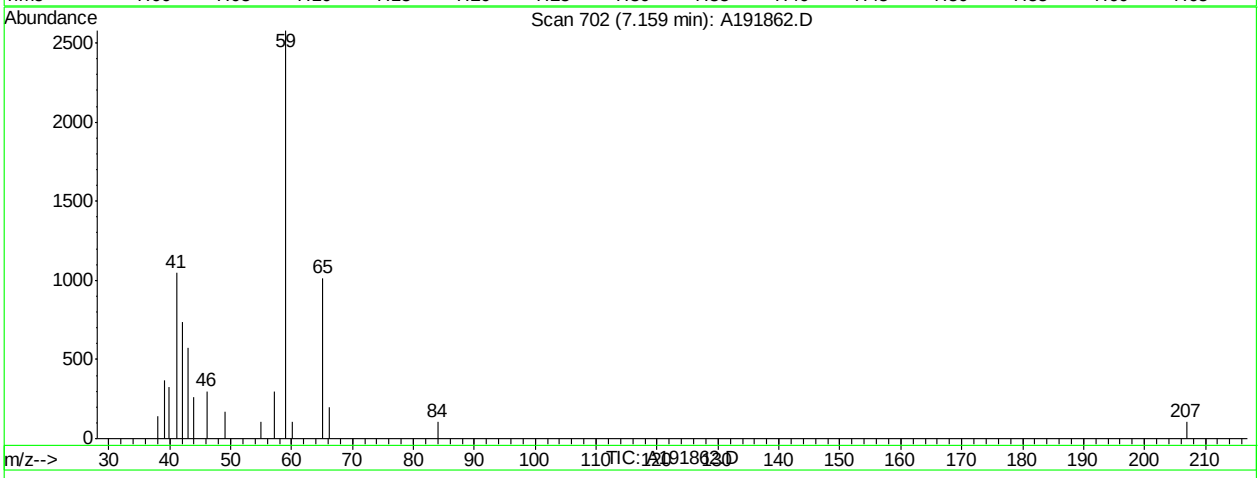
A191862.D MA7222.M Wed Feb 20 17:40:45 2013 MSA

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\A191862.D Vial: 100
Acq On : 20 Feb 2013 3:24 pm Operator: Oksanat
Sample : ic7222-20 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:40 2013 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Multiple Level Calibration





(4) tertiary butyl alcohol (M)

7.16min 98.24ug/L m

response 16079

Ion	Exp%	Act%
59.00	100	100
41.00	0.00	40.61#
43.00	0.00	22.30
0.00	0.00	0.00

A191862.D MA7222.M Wed Feb 20 17:40:54 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191863.D Vial: 100
Acq On : 20 Feb 2013 4:09 pm Operator: Oksanat
Sample : icc7222-50 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:14 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.02	65	87337	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	252548	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	354215	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	324438	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	195706	50.00	ug/L	0.00

System Monitoring Compounds

47) dibromofluoromethane (s)	9.39	113	86678	40.15	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 80.30%#			
48) 1,2-dichloroethane-d4 (s)	9.82	65	95889	36.13	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 72.26%#			
77) toluene-d8 (s)	12.06	98	310283	42.22	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 84.44%			
102) 4-bromofluorobenzene (s)	15.06	95	126110	39.93	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 79.86%			

Target Compounds						Qvalue
2) 1,4-dioxane	11.07	88	19761	1342.46	ug/L	89
4) tertiary butyl alcohol	7.15	59	42164	240.14	ug/L	100
7) chlorodifluoromethane	3.70	51	68023	37.56	ug/L	98
8) dichlorodifluoromethane	3.67	85	91512	46.32	ug/L	99
9) chloromethane	3.99	50	118927	39.91	ug/L	99
10) vinyl chloride	4.23	62	113065	45.54	ug/L	98
11) bromomethane	4.83	94	74704	46.02	ug/L	98
12) chloroethane	5.00	64	56033	48.47	ug/L	97
14) trichlorofluoromethane	5.47	101	118465	47.12	ug/L	99
15) pentane	5.52	43	153587	44.50	ug/L	100
16) ethyl ether	5.87	74	47443	40.89	ug/L	94
18) acrolein	6.12	56	150206	377.31	ug/L	98
19) 1,1-dichloroethene	6.28	96	77850	48.88	ug/L	98
20) acetone	6.38	43	18769	33.27	ug/L	92
21) allyl chloride	6.82	76	54373	43.60	ug/L #	84
22) acetonitrile	6.81	40	59506	366.34	ug/L	90
23) iodomethane	6.56	142	168588	49.04	ug/L	95
24) iso-butyl alcohol	9.68	41	26107	356.70	ug/L	99
25) carbon disulfide	6.68	76	288206	45.71	ug/L	97
26) methylene chloride	7.02	84	98960	44.16	ug/L	93
27) methyl acetate	6.84	43	51552	31.31	ug/L #	68
28) methyl tert butyl ether	7.38	73	248555	39.64	ug/L	99
29) trans-1,2-dichloroethene	7.42	96	86567	46.70	ug/L	93
30) di-isopropyl ether	8.01	45	312501	38.09	ug/L	89
31) t-butyl formate	9.21	59	65936	35.88	ug/L	95
32) 3,3-dimethyl-1-butanol	13.00	57	88491	409.95	ug/L	98
33) ethyl tert-butyl ether	8.50	59	287524	38.89	ug/L	97
34) 2-butanone	8.79	72	7949	39.12	ug/L #	83
35) 1,1-dichloroethane	8.01	63	169260	46.16	ug/L	99
36) chloroprene	8.12	53	109691	37.74	ug/L	96
37) acrylonitrile	7.37	53	129105	196.51	ug/L	98
38) vinyl acetate	8.03	86	11248	48.60	ug/L	34
39) ethyl acetate	8.81	45	9830	39.08	ug/L	62

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191863.D Vial: 100
Acq On : 20 Feb 2013 4:09 pm Operator: Oksanat
Sample : icc7222-50 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:14 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) 2,2-dichloropropane	8.78	77	119889	42.98 ug/L	96
42) cis-1,2-dichloroethene	8.79	96	97931	46.35 ug/L	90
43) propionitrile	8.86	54	100641	391.49 ug/L	91
44) bromochloromethane	9.12	128	49691	48.59 ug/L #	83
45) tetrahydrofuran	9.17	42	30586	37.40 ug/L	96
46) chloroform	9.17	83	158265	44.56 ug/L	95
49) freon 113	6.27	151	56307	46.52 ug/L	90
50) methacrylonitrile	9.06	41	45282	40.28 ug/L	92
51) cyclohexane	9.50	84	125531	47.86 ug/L	87
52) 1,1,1-trichloroethane	9.43	97	125414	45.71 ug/L	97
53) tert-amyl methyl ether	9.95	73	267837	39.01 ug/L	98
56) epichlorohydrin	11.65	57	36225	207.17 ug/L	93
57) n-butyl alcohol	10.47	56	116346	2228.08 ug/L	95
58) carbon tetrachloride	9.64	117	112029	51.18 ug/L	97
59) 1,1-dichloropropene	9.63	75	117785	49.38 ug/L	98
60) hexane	7.74	57	90766	38.51 ug/L	89
61) benzene	9.90	78	361148	48.96 ug/L	98
62) Iso-octane	9.90	57	304129	41.45 ug/L	97
63) heptane	10.09	71	60764	43.34 ug/L	99
64) tert amyl alcohol	9.80	55	17099	194.58 ug/L	94
65) isopropyl acetate	9.84	43	154397	38.28 ug/L	97
66) 1,2-dichloroethane	9.92	62	113228	43.79 ug/L	99
67) trichloroethene	10.65	95	87300	49.63 ug/L	93
69) tert-amyl ethyl ether	10.84	87	136571	44.69 ug/L	94
70) methylcyclohexane	10.88	83	131381	44.98 ug/L	92
71) 2-chloroethyl vinyl ether	11.51	63	252513	250.44 ug/L	98
72) methyl methacrylate	10.96	69	51807	41.06 ug/L	93
73) 1,2-dichloropropane	10.93	63	102873	47.76 ug/L	99
74) dibromomethane	11.10	93	54753	46.02 ug/L	96
75) bromodichloromethane	11.24	83	122593	46.66 ug/L	97
76) cis-1,3-dichloropropene	11.74	75	157596	47.39 ug/L	94
78) 4-methyl-2-pentanone	11.86	58	33627	41.99 ug/L	91
79) toluene	12.13	92	226265	49.29 ug/L	98
80) 3-methyl-1-butanol	11.90	55	79417	832.70 ug/L	98
81) trans-1,3-dichloropropene	12.36	75	137050	44.99 ug/L	91
82) ethyl methacrylate	12.37	69	107844	43.53 ug/L	95
83) 1,1,2-trichloroethane	12.59	83	67555	45.34 ug/L	98
84) 2-hexanone	12.80	58	29223	40.86 ug/L	99
86) tetrachloroethene	12.79	164	80623	54.75 ug/L	97
87) 1,3-dichloropropane	12.79	76	133136	45.67 ug/L	99
88) butyl acetate	12.89	56	51560	40.06 ug/L	98
89) dibromochloromethane	13.09	129	101016	49.32 ug/L	99
90) 1,2-dibromoethane	13.25	107	80283	47.44 ug/L	97
92) chlorobenzene	13.78	112	272301	50.07 ug/L	95
93) 1,1,1,2-tetrachloroethane	13.84	131	101536	50.88 ug/L	97
94) ethylbenzene	13.84	91	437738	49.25 ug/L	97
95) m,p-xylene	13.96	106	347030	102.62 ug/L	96
96) o-xylene	14.44	106	176157	51.49 ug/L	94
97) styrene	14.45	104	302618	50.40 ug/L	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191863.D Vial: 100
Acq On : 20 Feb 2013 4:09 pm Operator: Oksanat
Sample : icc7222-50 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:14 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

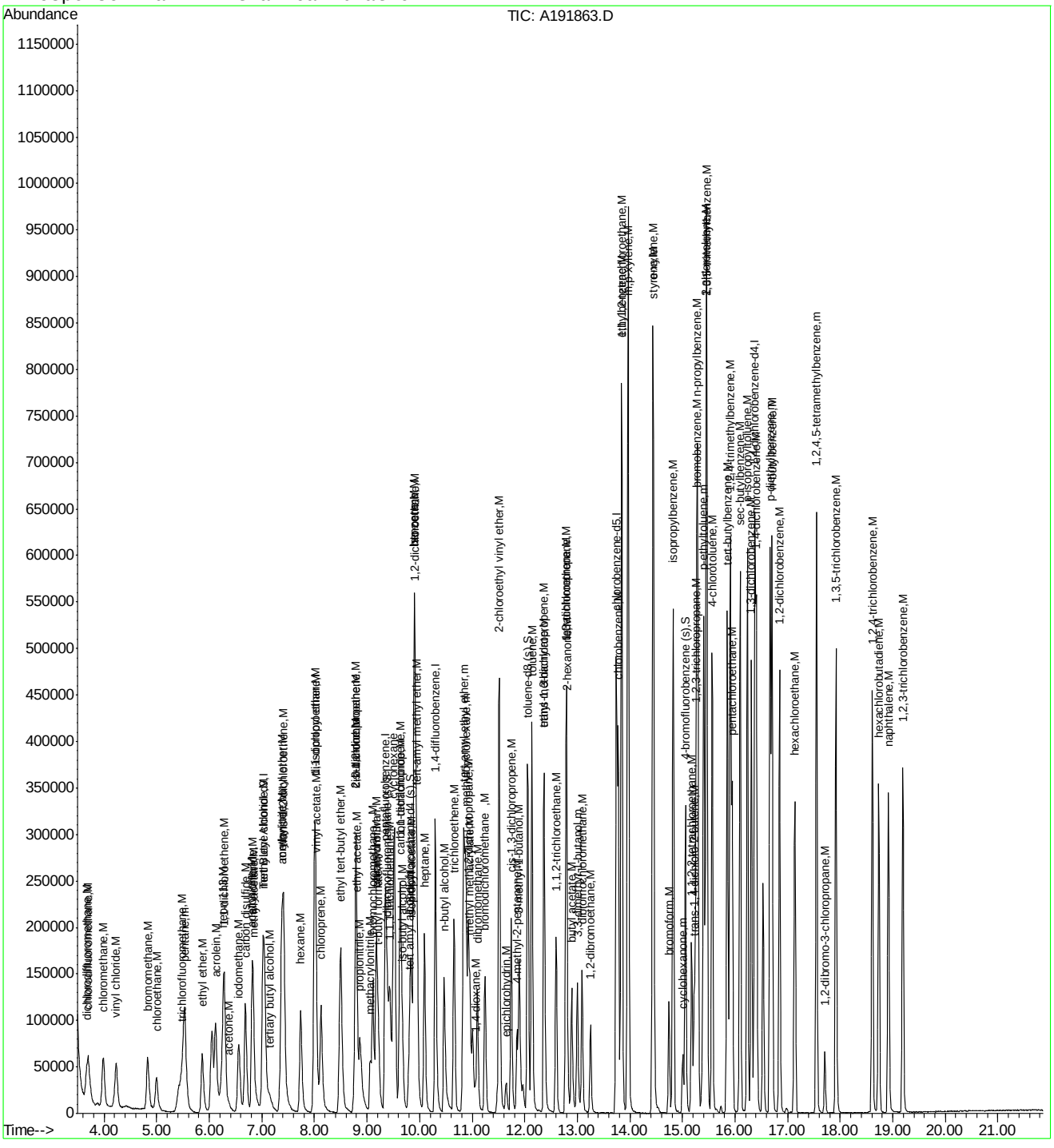
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	bromoform	14.74	173	72192	52.46	ug/L	97
100)	isopropylbenzene	14.82	105	448426	47.52	ug/L	97
101)	cyclohexanone	15.00	55	33384	123.70	ug/L	96
103)	bromobenzene	15.27	156	130118	48.86	ug/L	96
104)	1,1,2,2-tetrachloroethane	15.17	83	119914	41.66	ug/L	97
105)	trans-1,4-dichloro-2-buten	15.22	53	29201	41.25	ug/L	95
106)	1,2,3-trichloropropane	15.25	110	26552	41.66	ug/L	93
107)	n-propylbenzene	15.29	91	531537	46.64	ug/L	98
108)	2-chlorotoluene	15.45	126	118063	49.39	ug/L	95
109)	4-chlorotoluene	15.56	91	344133	45.64	ug/L	96
110)	p-ethyltoluene	15.41	105	438879	43.49	ug/L	98
111)	1,3,5-trimethylbenzene	15.46	105	402745	47.63	ug/L	98
112)	tert-butylbenzene	15.85	119	340313	49.78	ug/L	95
113)	pentachloroethane	15.95	167	88426	51.85	ug/L	95
114)	1,2,4-trimethylbenzene	15.90	105	408215	46.85	ug/L	99
115)	sec-butylbenzene	16.10	105	522039	49.32	ug/L	97
116)	1,3-dichlorobenzene	16.31	146	248639	49.47	ug/L	98
117)	p-isopropyltoluene	16.23	119	434262	50.28	ug/L	97
119)	1,4-dichlorobenzene	16.41	146	256767	48.49	ug/L	99
120)	p-diethylbenzene	16.67	119	258702	47.79	ug/L	97
121)	1,2-dichlorobenzene	16.85	146	244434	48.62	ug/L	97
122)	n-butylbenzene	16.70	92	239700	49.17	ug/L	97
123)	1,2,4,5-tetramethylbenzene	17.55	119	423152	46.18	ug/L	98
124)	1,2-dibromo-3-chloropropan	17.70	75	19070	38.99	ug/L	93
125)	1,3,5-trichlorobenzene	17.92	180	205848	54.93	ug/L	98
126)	1,2,4-trichlorobenzene	18.61	180	178020	53.48	ug/L	99
127)	hexachlorobutadiene	18.73	225	103896	51.06	ug/L	98
128)	naphthalene	18.92	128	337957	51.39	ug/L	98
129)	1,2,3-trichlorobenzene	19.19	180	160816	54.03	ug/L	98
130)	hexachloroethane	17.14	201	83593	54.88	ug/L	97

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191863.D Vial: 100
Acq On : 20 Feb 2013 4:09 pm Operator: Oksanat
Sample : icc7222-50 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:14 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191864.D Vial: 100
Acq On : 20 Feb 2013 4:38 pm Operator: Oksanat
Sample : ic7222-100 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:44 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.03	65	91649	500.00	ug/L	0.02
5) pentafluorobenzene	9.35	168	251443	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	358750	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	322507	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.37	152	196722	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.38	113	183363	85.31	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 170.62%#			
48) 1,2-dichloroethane-d4 (s)	9.82	65	199496	75.50	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 151.00%#			
77) toluene-d8 (s)	12.05	98	664371	89.25	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 178.50%#			
102) 4-bromofluorobenzene (s)	15.06	95	270855	85.33	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 170.66%#			

Target Compounds						Qvalue
2) 1,4-dioxane	11.06	88	45065	2917.45	ug/L	91
4) tertiary butyl alcohol	7.14	59	92216	500.49	ug/L	100
7) chlorodifluoromethane	3.70	51	150733	83.61	ug/L	97
8) dichlorodifluoromethane	3.67	85	213535	108.55	ug/L	99
9) chloromethane	3.99	50	260785	87.91	ug/L	100
10) vinyl chloride	4.24	62	238657	96.54	ug/L	96
11) bromomethane	4.83	94	152312	94.24	ug/L	94
12) chloroethane	4.99	64	119108	103.48	ug/L	99
14) trichlorofluoromethane	5.47	101	260217	103.95	ug/L	99
15) pentane	5.53	43	333147	96.94	ug/L	100
16) ethyl ether	5.86	74	95731	82.87	ug/L	92
19) 1,1-dichloroethene	6.28	96	156553	98.73	ug/L	93
20) acetone	6.36	43	41449	73.79	ug/L	95
21) allyl chloride	6.82	76	108766	87.59	ug/L #	80
22) acetonitrile	6.81	40	130707	808.22	ug/L	89
23) iodomethane	6.56	142	333990	97.58	ug/L	95
24) iso-butyl alcohol	9.67	41	58599	804.16	ug/L	94
25) carbon disulfide	6.68	76	575659	91.70	ug/L	97
26) methylene chloride	7.02	84	196623	88.12	ug/L	93
27) methyl acetate	6.83	43	113187	69.04	ug/L	96
28) methyl tert butyl ether	7.38	73	496346	79.50	ug/L	99
29) trans-1,2-dichloroethene	7.41	96	175860	95.30	ug/L	93
30) di-isopropyl ether	8.01	45	649436	79.50	ug/L	81
31) t-butyl formate	9.21	59	141073	77.10	ug/L	98
32) 3,3-dimethyl-1-butanol	13.00	57	193779	901.66	ug/L	97
33) ethyl tert-butyl ether	8.50	59	592891	80.54	ug/L	98
34) 2-butanone	8.78	72	17287	85.46	ug/L #	85
35) 1,1-dichloroethane	8.01	63	331755	90.87	ug/L	98
36) chloroprene	8.13	53	236391	81.69	ug/L	95
37) acrylonitrile	7.37	53	269604	412.17	ug/L	98
38) vinyl acetate	8.02	86	24797	107.61	ug/L	65
39) ethyl acetate	8.80	45	21836	87.19	ug/L	71
41) 2,2-dichloropropane	8.78	77	236028	84.98	ug/L	99

(#) = qualifier out of range (m) = manual integration
A191864.D MA7222.M Thu Feb 21 08:23:42 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191864.D Vial: 100
Acq On : 20 Feb 2013 4:38 pm Operator: Oksanat
Sample : ic7222-100 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:44 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	cis-1,2-dichloroethene	8.79	96	198022	94.14 ug/L	93
43)	propionitrile	8.85	54	212636	830.78 ug/L	99
44)	bromochloromethane	9.11	128	99567	97.80 ug/L	88
45)	tetrahydrofuran	9.17	42	62215	76.41 ug/L	96
46)	chloroform	9.17	83	317003	89.64 ug/L	98
49)	freon 113	6.26	151	117923	97.85 ug/L	89
50)	methacrylonitrile	9.05	41	94428	84.37 ug/L	94
51)	cyclohexane	9.51	84	251882	96.46 ug/L	86
52)	1,1,1-trichloroethane	9.43	97	252531	92.44 ug/L	97
53)	tert-amyl methyl ether	9.95	73	557054	81.50 ug/L	99
56)	epichlorohydrin	11.64	57	77208	435.97 ug/L	95
57)	n-butyl alcohol	10.46	56	266849	5045.67 ug/L	94
58)	carbon tetrachloride	9.64	117	221846	100.07 ug/L	99
59)	1,1-dichloropropene	9.62	75	235588	97.52 ug/L	96
60)	hexane	7.73	57	191247	80.11 ug/L	96
61)	benzene	9.89	78	721853	96.62 ug/L	98
62)	Iso-octane	9.90	57	645720	86.90 ug/L	97
63)	heptane	10.09	71	130351	91.79 ug/L	99
64)	tert amyl alcohol	9.79	55	37222	418.22 ug/L	98
65)	isopropyl acetate	9.84	43	336713	82.43 ug/L	99
66)	1,2-dichloroethane	9.91	62	225618	86.16 ug/L	99
67)	trichloroethene	10.65	95	177044	99.37 ug/L	97
69)	tert-amyl ethyl ether	10.84	87	289774	93.63 ug/L	94
70)	methylcyclohexane	10.88	83	286162	96.72 ug/L	88
71)	2-chloroethyl vinyl ether	11.51	63	534111	523.02 ug/L	98
72)	methyl methacrylate	10.96	69	108371	84.80 ug/L	92
73)	1,2-dichloropropane	10.92	63	207852	95.27 ug/L	99
74)	dibromomethane	11.10	93	110488	91.70 ug/L	92
75)	bromodichloromethane	11.24	83	250832	94.26 ug/L	99
76)	cis-1,3-dichloropropene	11.74	75	316289	93.91 ug/L	96
78)	4-methyl-2-pentanone	11.85	58	68865	84.90 ug/L	98
79)	toluene	12.13	92	459979	98.93 ug/L	99
80)	3-methyl-1-butanol	11.89	55	174795	1809.59 ug/L	97
81)	trans-1,3-dichloropropene	12.36	75	277356	89.90 ug/L	90
82)	ethyl methacrylate	12.37	69	225109	89.72 ug/L	93
83)	1,1,2-trichloroethane	12.59	83	138411	91.71 ug/L	98
84)	2-hexanone	12.80	58	61291	84.61 ug/L	97
86)	tetrachloroethene	12.79	164	160373	109.56 ug/L	94
87)	1,3-dichloropropane	12.79	76	264734	91.36 ug/L	99
88)	butyl acetate	12.89	56	115450	90.24 ug/L	96
89)	dibromochloromethane	13.09	129	206479	101.42 ug/L	98
90)	1,2-dibromoethane	13.25	107	165025	98.10 ug/L	98
92)	chlorobenzene	13.77	112	546066	101.01 ug/L	96
93)	1,1,1,2-tetrachloroethane	13.85	131	206293	104.00 ug/L	99
94)	ethylbenzene	13.84	91	887282	100.42 ug/L	97
95)	m,p-xylene	13.96	106	699053	207.95 ug/L	96
96)	o-xylene	14.43	106	356286	104.77 ug/L	94
97)	styrene	14.45	104	614884	103.02 ug/L	98
98)	bromoform	14.74	173	148139	108.29 ug/L	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191864.D Vial: 100
Acq On : 20 Feb 2013 4:38 pm Operator: Oksanat
Sample : ic7222-100 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:44 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

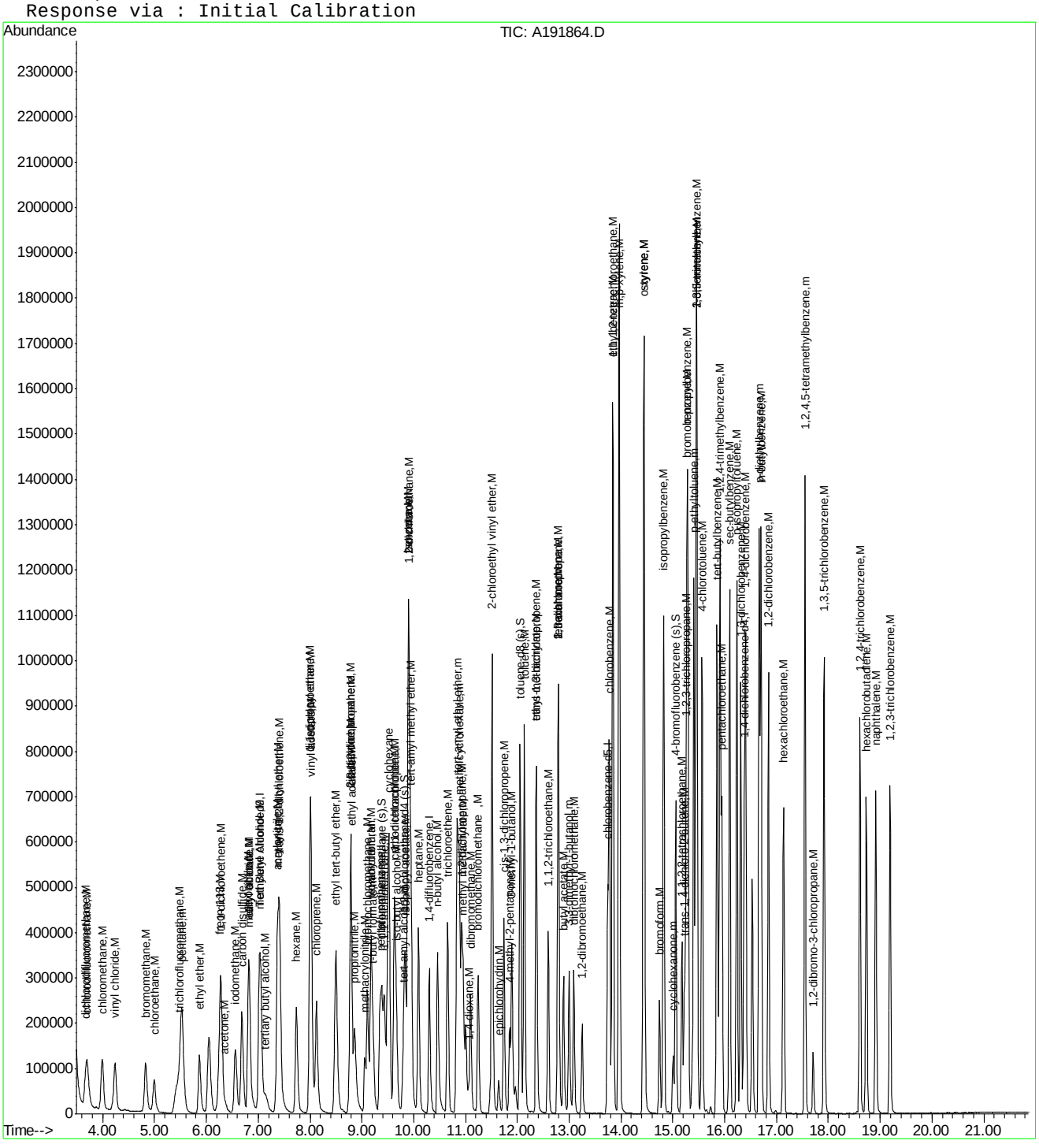
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
100) isopropylbenzene	14.82	105	906551	95.57 ug/L	97
101) cyclohexanone	15.00	55	68785	253.57 ug/L	95
103) bromobenzene	15.27	156	262126	97.92 ug/L	88
104) 1,1,2,2-tetrachloroethane	15.18	83	244447	84.48 ug/L	98
105) trans-1,4-dichloro-2-buten	15.22	53	60060	84.41 ug/L	97
106) 1,2,3-trichloropropane	15.25	110	55216	86.18 ug/L	95
107) n-propylbenzene	15.29	91	1074888	93.83 ug/L	98
108) 2-chlorotoluene	15.45	126	239900	99.83 ug/L	91
109) 4-chlorotoluene	15.56	91	691917	91.29 ug/L	96
110) p-ethyltoluene	15.41	105	940767	92.75 ug/L	98
111) 1,3,5-trimethylbenzene	15.46	105	816531	96.07 ug/L	98
112) tert-butylbenzene	15.85	119	681252	99.14 ug/L	96
113) pentachloroethane	15.95	167	178563	104.16 ug/L	96
114) 1,2,4-trimethylbenzene	15.91	105	814366	92.99 ug/L	97
115) sec-butylbenzene	16.10	105	1033571	97.14 ug/L	98
116) 1,3-dichlorobenzene	16.31	146	501346	99.23 ug/L	98
117) p-isopropyltoluene	16.23	119	874986	100.79 ug/L	98
119) 1,4-dichlorobenzene	16.41	146	515976	96.94 ug/L	99
120) p-diethylbenzene	16.67	119	560711	103.04 ug/L	98
121) 1,2-dichlorobenzene	16.84	146	488341	96.62 ug/L	99
122) n-butylbenzene	16.70	92	489514	99.89 ug/L	99
123) 1,2,4,5-tetramethylbenzene	17.55	119	891598	96.79 ug/L	97
124) 1,2-dibromo-3-chloropropan	17.71	75	37918	77.12 ug/L	72
125) 1,3,5-trichlorobenzene	17.92	180	408218	108.37 ug/L	99
126) 1,2,4-trichlorobenzene	18.61	180	354615	105.97 ug/L	98
127) hexachlorobutadiene	18.74	225	205433	100.44 ug/L	95
128) naphthalene	18.92	128	668916	101.20 ug/L	99
129) 1,2,3-trichlorobenzene	19.19	180	306548	102.47 ug/L	100
130) hexachloroethane	17.14	201	169006	110.39 ug/L	96

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191864.D Vial: 100
Acq On : 20 Feb 2013 4:38 pm Operator: Oksanat
Sample : ic7222-100 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:44 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191865.D Vial: 100
Acq On : 20 Feb 2013 5:08 pm Operator: Oksanat
Sample : ic7222-200 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:44 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.05	65	107547	500.00	ug/L	0.03
5) pentafluorobenzene	9.35	168	260178	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	371295	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	336249	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.37	152	210660	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.38	113	386113	173.61	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 347.22%#			
48) 1,2-dichloroethane-d4 (s)	9.82	65	423294	154.82	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 309.64%#			
77) toluene-d8 (s)	12.05	98	1395677	181.16	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 362.32%#			
102) 4-bromofluorobenzene (s)	15.05	95	587926	172.96	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 345.92%#			

Target Compounds						Qvalue
2) 1,4-dioxane	11.06	88	102844	5673.78	ug/L	83
4) tertiary butyl alcohol	7.14	59	217936	1007.96	ug/L	100
7) chlorodifluoromethane	3.70	51	319816	171.44	ug/L	99
8) dichlorodifluoromethane	3.67	85	406925	199.92	ug/L	98
9) chloromethane	4.00	50	521862	170.01	ug/L	100
10) vinyl chloride	4.24	62	489651	191.42	ug/L	99
11) bromomethane	4.82	94	223688	133.75	ug/L	95
12) chloroethane	4.97	64	216509	181.78	ug/L	96
14) trichlorofluoromethane	5.46	101	514973	198.82	ug/L	100
15) pentane	5.52	43	673029	189.27	ug/L	99
16) ethyl ether	5.86	74	208165	174.15	ug/L	93
19) 1,1-dichloroethene	6.28	96	329232	200.66	ug/L	93
20) acetone	6.35	43	95778	164.80	ug/L	94
21) allyl chloride	6.81	76	227182	176.81	ug/L #	79
22) acetonitrile	6.79	40	297346	1776.90	ug/L #	32
23) iodomethane	6.55	142	711313	200.84	ug/L	93
24) iso-butyl alcohol	9.67	41	141397	1875.26	ug/L	95
25) carbon disulfide	6.68	76	1215389	187.10	ug/L	97
26) methylene chloride	7.02	84	410002	177.59	ug/L	94
27) methyl acetate	6.82	43	258708	152.50	ug/L	95
28) methyl tert butyl ether	7.38	73	1071547	165.88	ug/L	98
29) trans-1,2-dichloroethene	7.41	96	365963	191.65	ug/L	92
30) di-isopropyl ether	8.00	45	1381976	163.49	ug/L #	68
31) t-butyl formate	9.21	59	310349	163.92	ug/L	97
32) 3,3-dimethyl-1-butanol	13.00	57	461393	2074.80	ug/L	96
33) ethyl tert-butyl ether	8.50	59	1281994	168.31	ug/L	97
34) 2-butanone	8.76	72	39257	187.55	ug/L #	83
35) 1,1-dichloroethane	8.00	63	698410	184.87	ug/L	99
36) chloroprene	8.12	53	498771	166.57	ug/L	95
37) acrylonitrile	7.36	53	604296	892.84	ug/L	98
38) vinyl acetate	8.01	86	55256	231.75	ug/L	66
39) ethyl acetate	8.79	45	49284	190.19	ug/L	94
41) 2,2-dichloropropane	8.78	77	493737	171.79	ug/L	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191865.D Vial: 100
Acq On : 20 Feb 2013 5:08 pm Operator: Oksanat
Sample : ic7222-200 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:44 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42)	cis-1,2-dichloroethene	8.78	96	413924	190.17 ug/L	93
43)	propionitrile	8.85	54	483763	1826.64 ug/L	85
44)	bromochloromethane	9.10	128	211903	201.15 ug/L	88
45)	tetrahydrofuran	9.16	42	131303	155.85 ug/L	90
46)	chloroform	9.17	83	663180	181.24 ug/L	96
49)	freon 113	6.25	151	251678	201.83 ug/L	89
50)	methacrylonitrile	9.05	41	213005	183.92 ug/L	96
51)	cyclohexane	9.51	84	532651	197.13 ug/L	84
52)	1,1,1-trichloroethane	9.43	97	535350	189.40 ug/L	96
53)	tert-amyl methyl ether	9.95	73	1215631	171.87 ug/L	99
56)	epichlorohydrin	11.64	57	177135	966.43 ug/L	93
57)	n-butyl alcohol	10.46	56	632443	11554.41 ug/L	94
58)	carbon tetrachloride	9.64	117	469942	204.82 ug/L	97
59)	1,1-dichloropropene	9.62	75	497057	198.81 ug/L	96
60)	hexane	7.73	57	394620	159.72 ug/L	96
61)	benzene	9.89	78	1517086	196.20 ug/L	99
62)	Iso-octane	9.91	57	1390219	180.77 ug/L	98
63)	heptane	10.09	71	278518	189.50 ug/L	99
64)	tert amyl alcohol	9.79	55	86127	935.02 ug/L	99
65)	isopropyl acetate	9.84	43	752677	178.04 ug/L	97
66)	1,2-dichloroethane	9.91	62	476801	175.94 ug/L	99
67)	trichloroethene	10.65	95	370455	200.91 ug/L	92
69)	tert-amyl ethyl ether	10.84	87	619368	193.37 ug/L	93
70)	methylcyclohexane	10.88	83	609938	199.20 ug/L	88
71)	2-chloroethyl vinyl ether	11.51	63	1164245	1101.55 ug/L	98
72)	methyl methacrylate	10.95	69	253764	191.86 ug/L	92
73)	1,2-dichloropropane	10.92	63	441066	195.34 ug/L	100
74)	dibromomethane	11.10	93	242371	194.36 ug/L	92
75)	bromodichloromethane	11.24	83	536023	194.63 ug/L	98
76)	cis-1,3-dichloropropene	11.74	75	683594	196.11 ug/L	95
78)	4-methyl-2-pentanone	11.85	58	155995	185.81 ug/L	97
79)	toluene	12.13	92	985704	204.84 ug/L	95
80)	3-methyl-1-butanol	11.89	55	409467	4095.84 ug/L	96
81)	trans-1,3-dichloropropene	12.36	75	605083	189.51 ug/L	90
82)	ethyl methacrylate	12.36	69	506992	195.24 ug/L	94
83)	1,1,2-trichloroethane	12.59	83	302371	193.58 ug/L	98
84)	2-hexanone	12.80	58	145042	193.46 ug/L	95
86)	tetrachloroethene	12.78	164	346209	226.84 ug/L	96
87)	1,3-dichloropropane	12.79	76	589225	195.03 ug/L	98
88)	butyl acetate	12.89	56	263254	197.36 ug/L	98
89)	dibromochloromethane	13.09	129	455972	214.82 ug/L	98
90)	1,2-dibromoethane	13.25	107	369792	210.84 ug/L	100
92)	chlorobenzene	13.78	112	1160200	205.83 ug/L	95
93)	1,1,1,2-tetrachloroethane	13.84	131	447165	216.23 ug/L	97
94)	ethylbenzene	13.84	91	1877466	203.80 ug/L	97
95)	m,p-xylene	13.96	106	1481094	422.58 ug/L	95
96)	o-xylene	14.43	106	763126	215.23 ug/L	92
97)	styrene	14.45	104	1335331	214.58 ug/L	98
98)	bromoform	14.74	173	337083	236.35 ug/L	98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191865.D Vial: 100
Acq On : 20 Feb 2013 5:08 pm Operator: Oksanat
Sample : ic7222-200 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:44 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Wed Feb 20 14:40:03 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

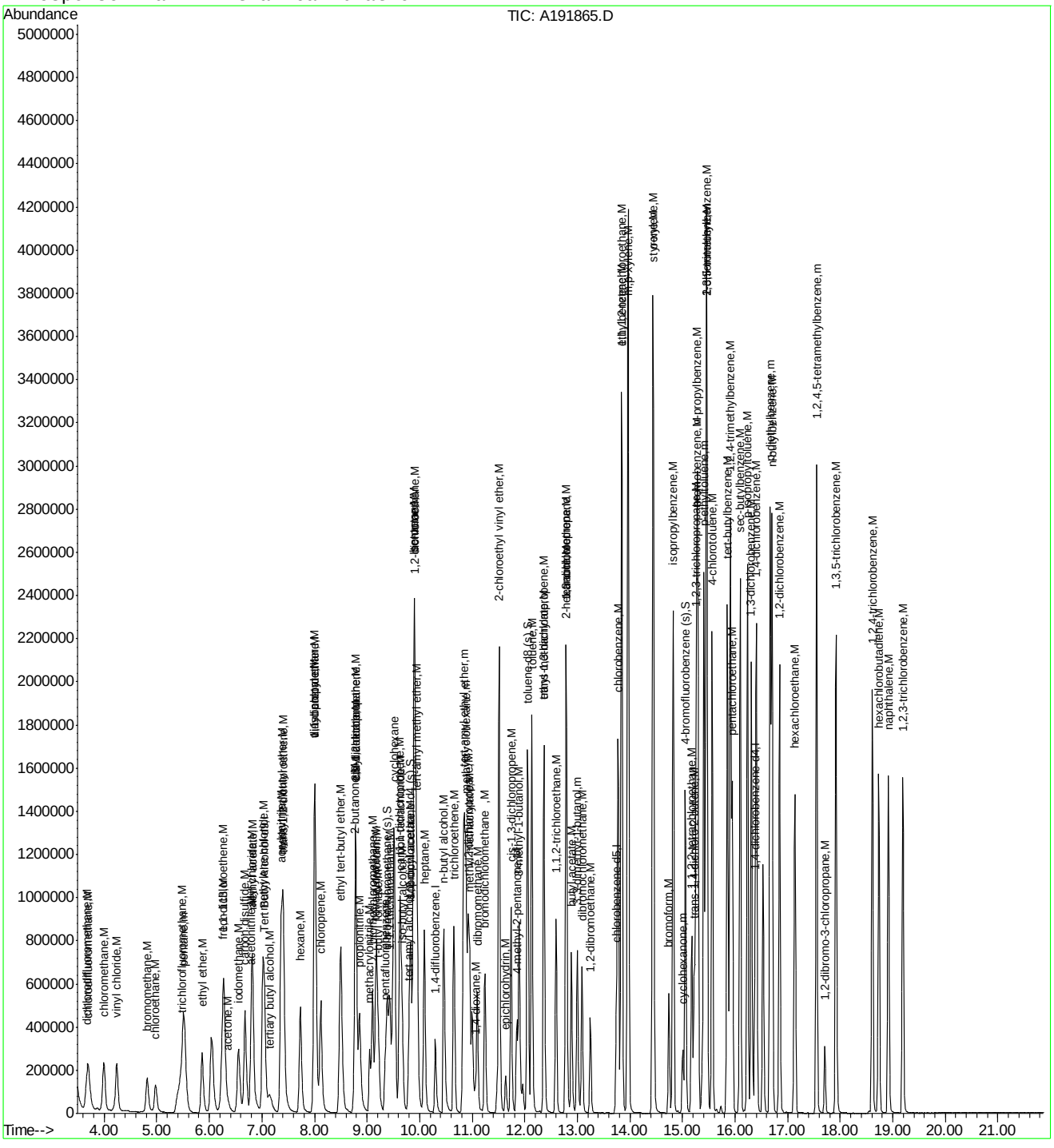
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
100)	isopropylbenzene	14.82	105	1932768	190.27 ug/L	96
101)	cyclohexanone	15.00	55	155576	535.57 ug/L	95
103)	bromobenzene	15.27	156	573874	200.20 ug/L	92
104)	1,1,2,2-tetrachloroethane	15.18	83	544377	175.69 ug/L	99
105)	trans-1,4-dichloro-2-buten	15.22	53	136725	179.45 ug/L	92
106)	1,2,3-trichloropropane	15.26	110	126339	184.14 ug/L	94
107)	n-propylbenzene	15.29	91	2285992	186.35 ug/L	97
108)	2-chlorotoluene	15.45	126	517699	201.18 ug/L	90
109)	4-chlorotoluene	15.56	91	1494262	184.10 ug/L	96
110)	p-ethyltoluene	15.41	105	2005783	184.66 ug/L	98
111)	1,3,5-trimethylbenzene	15.46	105	1728079	189.87 ug/L	97
112)	tert-butylbenzene	15.85	119	1461290	198.59 ug/L	96
113)	pentachloroethane	15.95	167	394157	214.70 ug/L	96
114)	1,2,4-trimethylbenzene	15.91	105	1760631	187.74 ug/L	96
115)	sec-butylbenzene	16.10	105	2224214	195.22 ug/L	97
116)	1,3-dichlorobenzene	16.31	146	1095223	202.43 ug/L	98
117)	p-isopropyltoluene	16.24	119	1877803	202.00 ug/L	97
119)	1,4-dichlorobenzene	16.41	146	1127223	197.77 ug/L	99
120)	p-diethylbenzene	16.67	119	1190827	204.36 ug/L	98
121)	1,2-dichlorobenzene	16.85	146	1059334	195.73 ug/L	98
122)	n-butylbenzene	16.70	92	1050523	200.18 ug/L	98
123)	1,2,4,5-tetramethylbenzene	17.55	119	1901906	192.81 ug/L	96
124)	1,2-dibromo-3-chloropropan	17.71	75	89855	170.67 ug/L	77
125)	1,3,5-trichlorobenzene	17.92	180	887078	219.92 ug/L	99
126)	1,2,4-trichlorobenzene	18.61	180	787334	219.72 ug/L	97
127)	hexachlorobutadiene	18.74	225	457708	208.98 ug/L	97
128)	naphthalene	18.92	128	1512540	213.68 ug/L	99
129)	1,2,3-trichlorobenzene	19.19	180	672722	209.99 ug/L	98
130)	hexachloroethane	17.14	201	370691	226.11 ug/L	96

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191865.D Vial: 100
Acq On : 20 Feb 2013 5:08 pm Operator: Oksanat
Sample : ic7222-200 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 20 17:44 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191868.D Vial: 100
Acq On : 20 Feb 2013 6:45 pm Operator: Oksanat
Sample : icv7222-50 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:15 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.02	65	95564	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	241917	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	342327	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	309031	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.38	152	191753	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.38	113	91231	50.68	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 101.36%			
48) 1,2-dichloroethane-d4 (s)	9.82	65	101052	50.24	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 100.48%			
77) toluene-d8 (s)	12.05	98	320709	49.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 98.68%			
102) 4-bromofluorobenzene (s)	15.05	95	131059	48.15	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 96.30%			

Target Compounds						Qvalue
2) 1,4-dioxane	11.06	88	22770	1337.83	ug/L	94
4) tertiary butyl alcohol	7.14	59	50709	275.16	ug/L	100
7) chlorodifluoromethane	3.70	51	64668	46.75	ug/L	99
8) dichlorodifluoromethane	3.68	85	83103	45.05	ug/L	98
9) chloromethane	3.98	50	133969	52.76	ug/L	98
10) vinyl chloride	4.23	62	115107	49.35	ug/L	99
11) bromomethane	4.82	94	81944	49.25	ug/L	97
12) chloroethane	4.99	64	61279	55.15	ug/L	98
14) trichlorofluoromethane	5.48	101	114887	48.55	ug/L	98
15) pentane	5.52	43	154867	48.01	ug/L #	79
16) ethyl ether	5.86	74	49198	51.94	ug/L	95
18) acrolein	6.11	56	158153	543.40	ug/L	97
19) 1,1-dichloroethene	6.29	96	74503	52.76	ug/L	92
20) acetone	6.36	43	23502	59.22	ug/L	93
21) allyl chloride	6.82	76	52520	51.59	ug/L #	87
22) acetonitrile	6.81	40	61397	493.62	ug/L	97
23) iodomethane	6.56	142	163770	52.19	ug/L	97
24) iso-butyl alcohol	9.67	41	29365	539.16	ug/L	97
25) carbon disulfide	6.68	76	266347	50.27	ug/L	99
26) methylene chloride	7.02	84	98444	48.73	ug/L	98
27) methyl acetate	6.84	43	52077	50.27	ug/L	90
28) methyl tert butyl ether	7.37	73	501231	106.02	ug/L	100
29) trans-1,2-dichloroethene	7.41	96	83944	52.83	ug/L	96
30) di-isopropyl ether	8.00	45	321984	54.35	ug/L	100
31) t-butyl formate	9.20	59	73466	59.58	ug/L	98
32) 3,3-dimethyl-1-butanol	13.00	57	127452	638.72	ug/L	98
33) ethyl tert-butyl ether	8.50	59	290399	53.87	ug/L	97
34) 2-butanone	8.78	72	8820	53.55	ug/L	99
35) 1,1-dichloroethane	8.00	63	164805	54.23	ug/L	98
36) chloroprene	8.12	53	103029	48.88	ug/L	97
37) acrylonitrile	7.37	53	142446	283.43	ug/L	98
38) vinyl acetate	8.02	86	12002	52.55	ug/L	63
39) ethyl acetate	8.79	45	12104	57.43	ug/L	57

(#) = qualifier out of range (m) = manual integration
A191868.D MA7222.M Thu Feb 21 08:16:04 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191868.D Vial: 100
Acq On : 20 Feb 2013 6:45 pm Operator: Oksanat
Sample : icv7222-50 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:15 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) 2,2-dichloropropane	8.78	77	110778	49.80 ug/L	98
42) cis-1,2-dichloroethene	8.79	96	97742	53.50 ug/L	98
43) propionitrile	8.85	54	112809	577.21 ug/L	95
44) bromochloromethane	9.11	128	49297	55.36 ug/L	93
45) tetrahydrofuran	9.17	42	33497	52.21 ug/L	99
46) chloroform	9.17	83	157318	52.90 ug/L	99
49) freon 113	6.25	151	46552	42.94 ug/L	98
50) methacrylonitrile	9.05	41	45751	55.22 ug/L	93
51) cyclohexane	9.50	84	116476	50.23 ug/L	99
52) 1,1,1-trichloroethane	9.42	97	119632	52.64 ug/L	98
53) tert-amyl methyl ether	9.94	73	281110	54.76 ug/L	98
56) epichlorohydrin	11.64	57	40391	284.44 ug/L	98
57) n-butyl alcohol	10.46	56	140192	2685.04 ug/L	99
58) carbon tetrachloride	9.64	117	104216	51.37 ug/L	99
59) 1,1-dichloropropene	9.62	75	111408	51.60 ug/L	98
60) hexane	7.73	57	77992	43.77 ug/L	91
61) benzene	9.89	78	356369	52.23 ug/L	99
62) Iso-octane	9.91	57	263815	46.71 ug/L	97
63) heptane	10.09	71	55318	47.61 ug/L	97
64) tert amyl alcohol	9.79	55	38566	547.99 ug/L	89
65) isopropyl acetate	9.84	43	177957	59.59 ug/L	99
66) 1,2-dichloroethane	9.91	62	114490	55.72 ug/L	98
67) trichloroethene	10.65	95	85713	53.40 ug/L	98
69) tert-amyl ethyl ether	10.83	87	276013	113.50 ug/L	100
70) methylcyclohexane	10.87	83	116208	47.35 ug/L #	59
71) 2-chloroethyl vinyl ether	11.51	63	276106	295.62 ug/L	100
72) methyl methacrylate	10.96	69	57185	56.95 ug/L	97
73) 1,2-dichloropropane	10.92	63	103107	54.26 ug/L	96
74) dibromomethane	11.10	93	58370	59.70 ug/L	94
75) bromodichloromethane	11.24	83	126791	55.98 ug/L	99
76) cis-1,3-dichloropropene	11.74	75	150317	53.04 ug/L	98
78) 4-methyl-2-pentanone	11.85	58	35663	58.82 ug/L	97
79) toluene	12.13	92	219780	51.59 ug/L	99
80) 3-methyl-1-butanol	11.89	55	91258	1056.18 ug/L	99
81) trans-1,3-dichloropropene	12.36	75	137128	57.01 ug/L	99
82) ethyl methacrylate	12.36	69	109782	54.42 ug/L	98
83) 1,1,2-trichloroethane	12.59	83	71087	56.70 ug/L	99
84) 2-hexanone	12.80	58	31068	57.05 ug/L	97
86) tetrachloroethene	12.78	164	74705	50.77 ug/L	98
87) 1,3-dichloropropane	12.79	76	136971	54.96 ug/L	97
88) butyl acetate	12.89	56	59147	59.08 ug/L	98
89) dibromochloromethane	13.09	129	100588	55.27 ug/L	99
90) 1,2-dibromoethane	13.25	107	82174	56.70 ug/L	99
92) chlorobenzene	13.78	112	264119	51.86 ug/L	98
93) 1,1,1,2-tetrachloroethane	13.84	131	101904	54.15 ug/L	98
94) ethylbenzene	13.84	91	420242	51.94 ug/L	99
95) m,p-xylene	13.96	106	331422	103.11 ug/L	99
96) o-xylene	14.43	106	173901	52.74 ug/L	100
97) styrene	14.45	104	293650	55.22 ug/L	99

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A191868.D Vial: 100
Acq On : 20 Feb 2013 6:45 pm Operator: Oksanat
Sample : icv7222-50 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:15 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

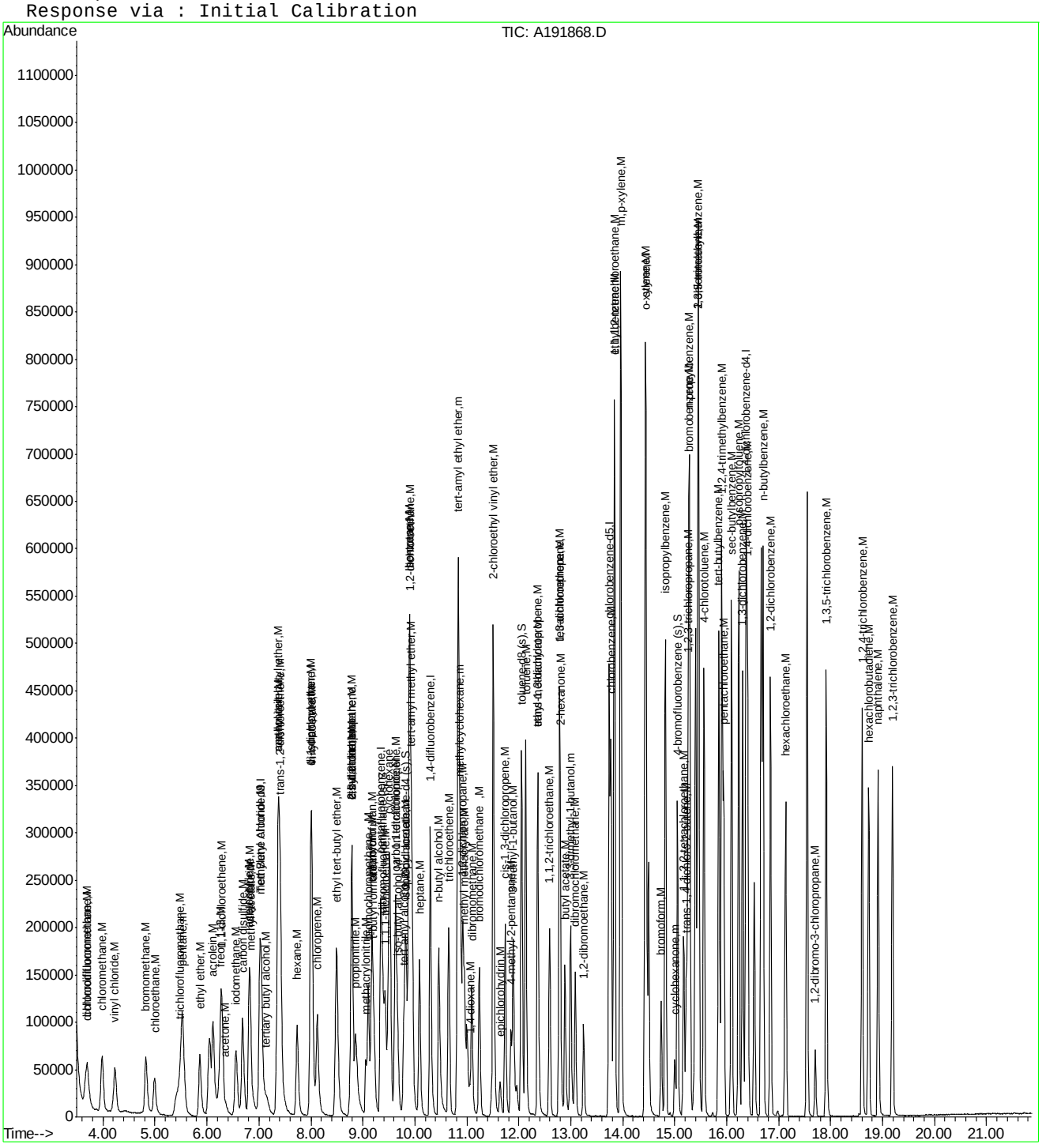
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	bromoform	14.74	173	73858	55.12	ug/L	96
100)	isopropylbenzene	14.82	105	429165	50.30	ug/L	100
101)	cyclohexanone	15.00	55	33146	477.67	ug/L	99
103)	bromobenzene	15.27	156	129311	52.22	ug/L	96
104)	1,1,2,2-tetrachloroethane	15.17	83	120812	48.94	ug/L	97
105)	trans-1,4-dichloro-2-buten	15.22	53	28133	51.91	ug/L	97
106)	1,2,3-trichloropropane	15.25	110	27779	51.93	ug/L	98
107)	n-propylbenzene	15.28	91	516760	52.20	ug/L	100
108)	2-chlorotoluene	15.45	126	114961	50.80	ug/L	94
109)	4-chlorotoluene	15.56	91	330927	49.47	ug/L	99
111)	1,3,5-trimethylbenzene	15.46	105	377831	49.89	ug/L	99
112)	tert-butylbenzene	15.85	119	322889	50.82	ug/L	100
113)	pentachloroethane	15.94	167	89199	53.13	ug/L	96
114)	1,2,4-trimethylbenzene	15.90	105	397860	51.07	ug/L	98
115)	sec-butylbenzene	16.09	105	492501	49.32	ug/L	99
116)	1,3-dichlorobenzene	16.31	146	243787	51.61	ug/L	100
117)	p-isopropyltoluene	16.23	119	431965	52.29	ug/L	99
119)	1,4-dichlorobenzene	16.40	146	250111	50.10	ug/L	100
121)	1,2-dichlorobenzene	16.84	146	243429	52.46	ug/L	98
122)	n-butylbenzene	16.70	92	229943	50.74	ug/L	98
124)	1,2-dibromo-3-chloropropan	17.70	75	20208	56.96	ug/L	82
125)	1,3,5-trichlorobenzene	17.91	180	191891	48.73	ug/L	100
126)	1,2,4-trichlorobenzene	18.61	180	178837	54.12	ug/L	99
127)	hexachlorobutadiene	18.73	225	102452	50.92	ug/L	99
128)	naphthalene	18.91	128	344664	55.15	ug/L	99
129)	1,2,3-trichlorobenzene	19.19	180	157137	52.81	ug/L	97
130)	hexachloroethane	17.13	201	81537	53.34	ug/L	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A191868.D Vial: 100
Acq On : 20 Feb 2013 6:45 pm Operator: Oksanat
Sample : icv7222-50 Inst : MSA
Misc : MS43382,VA7222,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Feb 21 8:15 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 08:12:37 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192516.D Vial: 100
Acq On : 12 Mar 2013 11:08 am Operator: Oksanat
Sample : cc7222-20 Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:14 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.03	65	65887	500.00	ug/L	0.00
5) pentafluorobenzene	9.35	168	174685	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.30	114	237400	50.00	ug/L	0.00
85) chlorobenzene-d5	13.74	117	218721	50.00	ug/L	0.00
99) 1,4-dichlorobenzene-d4	16.37	152	128007	50.00	ug/L	0.00

System Monitoring Compounds						
47) dibromofluoromethane (s)	9.38	113	65412	50.32	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 100.64%			
48) 1,2-dichloroethane-d4 (s)	9.82	65	65105	44.83	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 89.66%			
77) toluene-d8 (s)	12.06	98	240874	53.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 106.86%			
102) 4-bromofluorobenzene (s)	15.05	95	92264	50.77	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 101.54%			

Target Compounds						Qvalue
2) 1,4-dioxane	11.06	88	6048	515.40	ug/L #	71
4) tertiary butyl alcohol	7.15	59	14305	112.59	ug/L	100
7) chlorodifluoromethane	3.71	51	19722	19.74	ug/L	87
8) dichlorodifluoromethane	3.67	85	33407	25.08	ug/L	98
9) chloromethane	3.96	50	37640	20.53	ug/L	98
10) vinyl chloride	4.20	62	35959	21.35	ug/L	98
11) bromomethane	4.82	94	24645	20.51	ug/L	97
12) chloroethane	5.00	64	17695	22.05	ug/L	94
14) trichlorofluoromethane	5.47	101	40303	23.59	ug/L	97
16) ethyl ether	5.88	74	14000	20.47	ug/L	95
18) acrolein	6.12	56	38520	183.29	ug/L	99
19) 1,1-dichloroethene	6.28	96	23750	23.29	ug/L	91
20) acetone	6.41	43	6902	24.08	ug/L	69
21) allyl chloride	6.82	76	16202	22.04	ug/L #	86
22) acetonitrile	6.82	40	15074	203.93	ug/L #	87
23) iodomethane	6.56	142	53472	23.60	ug/L	95
24) iso-butyl alcohol	9.68	41	7355	187.02	ug/L	94
25) carbon disulfide	6.69	76	87369	22.84	ug/L	97
26) methylene chloride	7.03	84	29445	20.18	ug/L	92
27) methyl acetate	6.86	43	12104	16.18	ug/L	98
28) methyl tert butyl ether	7.38	73	78154	22.89	ug/L	99
29) trans-1,2-dichloroethene	7.42	96	25730	22.43	ug/L	98
30) di-isopropyl ether	8.00	45	85714	20.04	ug/L	87
31) t-butyl formate	9.21	59	21162	23.77	ug/L	94
32) 3,3-dimethyl-1-butanol	13.00	57	25741	206.88	ug/L	95
33) ethyl tert-butyl ether	8.50	59	79006	20.30	ug/L	95
34) 2-butanone	8.81	72	2238	22.05	ug/L	97
35) 1,1-dichloroethane	8.01	63	50960	23.22	ug/L	98
36) chloroprene	8.12	53	32805	21.55	ug/L	93
37) acrylonitrile	7.39	53	33403	92.04	ug/L	93
38) vinyl acetate	8.07	86	2122	18.25	ug/L #	1
39) ethyl acetate	8.83	45	2552	20.45	ug/L	92
41) 2,2-dichloropropane	8.78	77	40242	25.06	ug/L	92

(#) = qualifier out of range (m) = manual integration
A192516.D MA7222.M Tue Mar 12 16:15:36 2013 MSA

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192516.D Vial: 100
Acq On : 12 Mar 2013 11:08 am Operator: Oksanat
Sample : cc7222-20 Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:14 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	cis-1,2-dichloroethene	8.79	96	29520	22.38 ug/L		97
43)	propionitrile	8.87	54	26951	190.97 ug/L		79
44)	bromochloromethane	9.11	128	14374	22.35 ug/L		97
45)	tetrahydrofuran	9.18	42	9368	20.22 ug/L		81
46)	chloroform	9.18	83	49217	22.92 ug/L		99
49)	freon 113	6.27	151	16062	20.52 ug/L		99
50)	methacrylonitrile	9.07	41	12688	21.21 ug/L		96
51)	cyclohexane	9.51	84	35821	21.39 ug/L		96
52)	1,1,1-trichloroethane	9.43	97	41262	25.14 ug/L		97
53)	tert-amyl methyl ether	9.94	73	75362	20.33 ug/L		98
56)	epichlorohydrin	11.66	57	10572	107.36 ug/L		95
57)	n-butyl alcohol	10.47	56	30854	1050.54 ug/L		99
58)	carbon tetrachloride	9.65	117	36533	25.97 ug/L		96
59)	1,1-dichloropropene	9.63	75	35577	23.76 ug/L		95
60)	hexane	7.74	57	24001	19.42 ug/L		94
61)	benzene	9.90	78	106436	22.50 ug/L		99
62)	Iso-octane	9.90	57	87708	22.39 ug/L		97
63)	heptane	10.10	71	16142	20.03 ug/L		92
65)	isopropyl acetate	9.85	43	39225	18.94 ug/L		98
66)	1,2-dichloroethane	9.91	62	35973	25.25 ug/L		97
67)	trichloroethene	10.66	95	26491	23.80 ug/L		96
70)	methylcyclohexane	10.88	83	35801	21.04 ug/L	#	66
71)	2-chloroethyl vinyl ether	11.51	63	70882	109.43 ug/L		96
72)	methyl methacrylate	10.97	69	13718	19.70 ug/L		77
73)	1,2-dichloropropane	10.93	63	29145	22.12 ug/L		97
74)	dibromomethane	11.10	93	16427	24.23 ug/L		89
75)	bromodichloromethane	11.25	83	37637	23.96 ug/L		97
76)	cis-1,3-dichloropropene	11.74	75	45575	23.19 ug/L		96
78)	4-methyl-2-pentanone	11.86	58	9156	21.78 ug/L		96
79)	toluene	12.14	92	64872	21.96 ug/L		93
80)	3-methyl-1-butanol	11.90	55	22363	430.11 ug/L		97
81)	trans-1,3-dichloropropene	12.37	75	38937	23.34 ug/L		98
82)	ethyl methacrylate	12.37	69	30078	21.50 ug/L		97
83)	1,1,2-trichloroethane	12.59	83	19746	22.71 ug/L		97
84)	2-hexanone	12.81	58	7659	20.28 ug/L		98
86)	tetrachloroethene	12.78	164	24736	23.75 ug/L		98
87)	1,3-dichloropropane	12.80	76	37881	21.48 ug/L		98
88)	butyl acetate	12.90	56	13806	19.48 ug/L		94
89)	dibromochloromethane	13.09	129	30348	23.56 ug/L		97
90)	1,2-dibromoethane	13.26	107	24026	23.42 ug/L		100
92)	chlorobenzene	13.78	112	79587	22.08 ug/L		98
93)	1,1,1,2-tetrachloroethane	13.84	131	30988	23.27 ug/L		93
94)	ethylbenzene	13.85	91	125480	21.91 ug/L		98
95)	m,p-xylene	13.97	106	99305	43.65 ug/L		98
96)	o-xylene	14.44	106	50983	21.85 ug/L		100
97)	styrene	14.45	104	83080	22.08 ug/L		98
98)	bromoform	14.74	173	22375	23.59 ug/L		98
100)	isopropylbenzene	14.82	105	128160	22.50 ug/L		98
101)	cyclohexanone	15.00	55	29726	641.71 ug/L		98

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A192516.D Vial: 100
Acq On : 12 Mar 2013 11:08 am Operator: Oksanat
Sample : cc7222-20 Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:14 2013 Quant Results File: MA7222.RES

Quant Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration
DataAcq Meth : MA7222

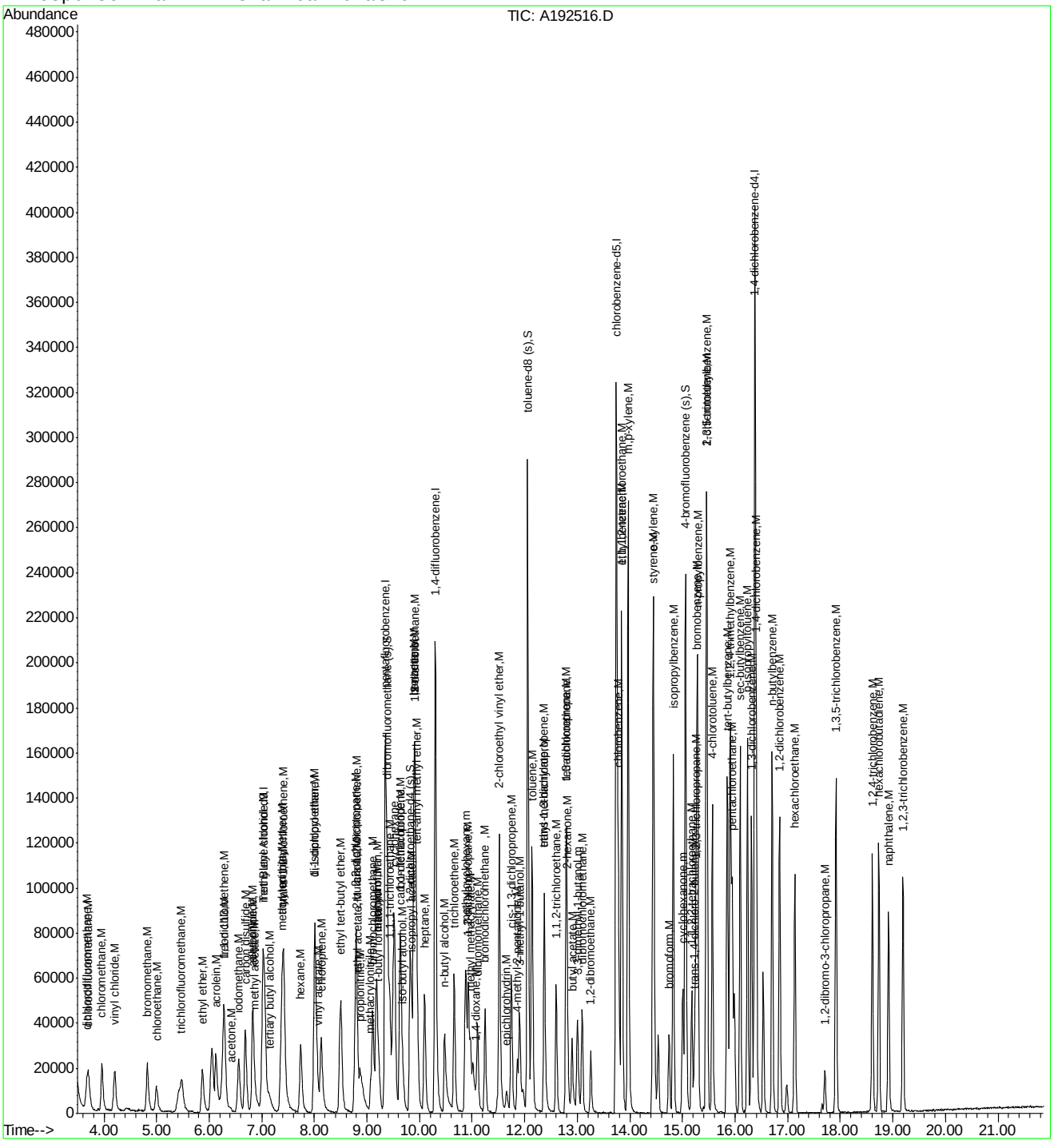
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
103) bromobenzene	15.27	156	38235	23.13 ug/L	98
104) 1,1,2,2-tetrachloroethane	15.18	83	35243	21.38 ug/L	100
105) trans-1,4-dichloro-2-buten	15.22	53	7693	21.26 ug/L #	80
106) 1,2,3-trichloropropane	15.25	110	8382	23.47 ug/L	94
107) n-propylbenzene	15.29	91	147372	22.30 ug/L	99
108) 2-chlorotoluene	15.45	126	33936	22.46 ug/L	98
109) 4-chlorotoluene	15.57	91	95249	21.33 ug/L	98
111) 1,3,5-trimethylbenzene	15.46	105	111613	22.08 ug/L	99
112) tert-butylbenzene	15.85	119	97479	22.98 ug/L	99
113) pentachloroethane	15.95	167	25430	22.69 ug/L	94
114) 1,2,4-trimethylbenzene	15.91	105	114547	22.02 ug/L	97
115) sec-butylbenzene	16.10	105	145527	21.83 ug/L	99
116) 1,3-dichlorobenzene	16.31	146	69664	22.09 ug/L	100
117) p-isopropyltoluene	16.24	119	122417	22.20 ug/L	99
119) 1,4-dichlorobenzene	16.40	146	71077	21.33 ug/L	98
121) 1,2-dichlorobenzene	16.85	146	68808	22.21 ug/L	98
122) n-butylbenzene	16.70	92	60045	19.85 ug/L	98
124) 1,2-dibromo-3-chloropropan	17.71	75	5940	25.08 ug/L	92
125) 1,3,5-trichlorobenzene	17.92	180	60766	23.12 ug/L	93
126) 1,2,4-trichlorobenzene	18.61	180	47553	21.56 ug/L	97
127) hexachlorobutadiene	18.73	225	34163	25.44 ug/L	97
128) naphthalene	18.91	128	86104	20.64 ug/L	99
129) 1,2,3-trichlorobenzene	19.19	180	44678	22.49 ug/L	96
130) hexachloroethane	17.14	201	25441	24.93 ug/L	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A192516.D Vial: 100
Acq On : 12 Mar 2013 11:08 am Operator: Oksanat
Sample : cc7222-20 Inst : MSA
Misc : MS44197,VA7250,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 12 16:14 2013 Quant Results File: MA7222.RES

Method : C:\HPCHEM\1\METHODS\MA7222.M (RTE Integrator)
Title : SW 846 8260bB ZB624 60m x 0.25mm x 1.4um
Last Update : Thu Feb 21 15:26:34 2013
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat
03/01/13 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200198.D
Acq On : 22 Feb 2013 10:38 am
Operator : OksanaT
Sample : ic8801-5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 15:01:01 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.676	65	73626	500.00 ug/L	0.00
5) pentafluorobenzene	9.909	168	136452	50.00 ug/L	0.00
66) 1,4-difluorobenzene	10.825	114	189082	50.00 ug/L	0.00
97) chlorobenzene-d5	14.151	117	170339	50.00 ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.724	152	95510	50.00 ug/L	0.00

System Monitoring Compounds					
60) dibromofluoromethane (s)	9.956	113	6615	5.26 ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 10.52%#		
61) 1,2-dichloroethane-d4 (s)	10.375	65	7100	4.36 ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 8.72%#		
89) toluene-d8 (s)	12.530	98	24288	5.14 ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 10.28%#		
116) 4-bromofluorobenzene (s)	15.432	95	9265	4.64 ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 9.28%#		

Target Compounds					Qvalue
2) 1,4-dioxane	11.546	88	1110	94.48 ug/L #	77
3) tertiary butyl alcohol	7.796	59	3849	23.07 ug/L	97
11) chlorodifluoromethane	4.323	51	6312	3.43 ug/L	94
12) dichlorodifluoromethane	4.318	85	8033	3.26 ug/L	86
15) chloromethane	4.653	50	9595	3.79 ug/L	95
16) vinyl chloride	4.914	62	9507	4.24 ug/L	94
19) bromomethane	5.594	94	6278	4.70 ug/L	89
20) chloroethane	5.772	64	4622	4.42 ug/L	92
22) trichlorofluoromethane	6.280	101	9596	4.10 ug/L	91
23) pentane	6.348	43	11820	4.21 ug/L #	77
24) ethyl ether	6.646	74	4296	4.49 ug/L	97
28) 2-chloropropane	6.829	43	11523m	4.14 ug/L	
29) acrolein	6.865	56	16524	47.00 ug/L	100
30) 1,1-dichloroethene	7.085	96	6076	4.61 ug/L #	79
32) acetone	7.085	58	381	2.71 ug/L #	1
33) allyl chloride	7.577	41	10617	3.71 ug/L	90
34) acetonitrile	7.482	40	3803	37.17 ug/L	87
35) iodomethane	7.346	142	12189	4.90 ug/L	90
36) iso-butyl alcohol	10.223	74	407	26.50 ug/L #	100
37) carbon disulfide	7.498	76	20545	4.39 ug/L	93
38) methylene chloride	7.749	84	7286	4.62 ug/L	95
39) 1-chloropropane	7.812	42	11354	3.65 ug/L	94
40) methyl acetate	7.550	43	5033	3.59 ug/L	92
41) methyl tert butyl ether	8.105	73	20579	4.28 ug/L	98
42) trans-1,2-dichloroethene	8.147	96	6567	4.72 ug/L	85
43) di-isopropyl ether	8.691	45	21929	4.23 ug/L	80
44) ethyl tert-butyl ether	9.151	59	21766	4.32 ug/L	93
45) 2-butanone	9.365	72	467	2.49 ug/L #	36
46) 1,1-dichloroethane	8.685	63	11845	4.42 ug/L	99
47) chloroprene	8.816	53	8285	3.66 ug/L	95
48) acrylonitrile	8.032	53	13595	19.90 ug/L	96
49) vinyl acetate	8.670	86	695	3.06 ug/L	82
50) ethyl acetate	9.402	45	775m	2.72 ug/L	
51) 2,2-dichloropropane	9.433	77	9103	4.53 ug/L	99
52) cis-1,2-dichloroethene	9.418	96	7430	4.85 ug/L	81
53) methyl acrylate	9.475	55	5948	4.36 ug/L #	77
54) propionitrile	9.407	54	10433	40.50 ug/L	73
55) bromochloromethane	9.711	128	3560	4.97 ug/L #	80
56) tetrahydrofuran	9.773	42	2585	3.92 ug/L	98
57) chloroform	9.763	83	11216	4.17 ug/L	97
58) t-butyl formate	9.805	59	5778	3.83 ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200198.D
Acq On : 22 Feb 2013 10:38 am
Operator : OksanaT
Sample : ic8801-5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 15:01:01 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
59) Iso-octane	10.516	57	16586	3.28 ug/L	98
62) freon 113	7.064	151	4246	4.22 ug/L	88
63) methacrylonitrile	9.622	41	4129	3.90 ug/L	93
64) 1,1,1-trichloroethane	10.050	97	9190	4.21 ug/L	96
65) tert-amyl methyl ether	10.516	73	20756	4.57 ug/L	98
68) tert amyl alcohol	10.307	55	1337	17.58 ug/L	91
69) epichlorohydrin	12.069	57	3373	17.85 ug/L	92
70) n-butyl alcohol	10.913	56	9358	186.58 ug/L	97
71) tert-amyl ethyl ether	11.363	87	10208	4.60 ug/L	96
72) carbon tetrachloride	10.270	117	8299	4.77 ug/L	97
73) 1,1-dichloropropene	10.228	75	7983	4.47 ug/L	93
74) hexane	8.476	57	6056	3.01 ug/L	93
75) benzene	10.479	78	25427	4.66 ug/L	95
76) heptane	10.683	57	3522	3.62 ug/L	80
77) isopropyl acetate	10.375	43	12791	4.16 ug/L	99
78) 1,2-dichloroethane	10.458	62	8538	4.45 ug/L	97
79) ethyl acrylate	11.358	55	3215	1.55 ug/L #	76
80) trichloroethene	11.196	95	6081	4.47 ug/L	98
82) 2-chloroethyl vinyl ether	11.954	63	20652	22.02 ug/L	98
83) methylcyclohexane	11.452	83	9313	4.10 ug/L	96
84) methyl methacrylate	11.442	69	6294	4.03 ug/L	86
85) 1,2-dichloropropane	11.436	63	6669	4.49 ug/L	94
86) dibromomethane	11.593	93	3938	4.41 ug/L	85
87) bromodichloromethane	11.719	83	8403	4.06 ug/L	98
88) cis-1,3-dichloropropene	12.200	75	10535	4.34 ug/L	96
90) 4-methyl-2-pentanone	12.279	58	2889	4.42 ug/L	99
91) toluene	12.608	92	15603	4.78 ug/L	97
92) 3-methyl-1-butanol	12.289	55	6341	77.40 ug/L	99
93) trans-1,3-dichloropropene	12.781	75	9313	4.35 ug/L	96
94) ethyl methacrylate	12.781	69	8069	3.98 ug/L	95
95) 1,1,2-trichloroethane	13.006	83	5105	4.14 ug/L	96
96) 2-hexanone	13.199	58	2222	3.58 ug/L	85
98) cyclohexanone	15.349	55	2390	39.33 ug/L	88
99) tetrachloroethene	13.251	166	7423	5.34 ug/L	96
100) 1,3-dichloropropane	13.204	76	10481	4.82 ug/L	99
101) butyl acetate	13.283	56	3998	3.94 ug/L	84
102) 3,3-dimethyl-1-butanol	13.366	57	7111	37.75 ug/L	96
103) dibromochloromethane	13.502	129	7160	4.79 ug/L	96
104) 1,2-dibromoethane	13.670	107	6494	4.88 ug/L	98
106) chlorobenzene	14.188	112	18238	5.29 ug/L	87
107) 1,1,1,2-tetrachloroethane	14.245	131	6883	5.31 ug/L	96
108) ethylbenzene	14.250	91	29213	4.89 ug/L	99
109) m,p-xylene	14.371	106	23125	10.12 ug/L	99
110) o-xylene	14.831	106	11697	4.87 ug/L	98
112) styrene	14.831	104	19100	4.78 ug/L	99
113) bromoform	15.113	173	5407	5.10 ug/L	99
115) isopropylbenzene	15.207	105	29463	4.57 ug/L	100
117) bromobenzene	15.652	156	8810	5.47 ug/L	94
118) 1,1,2,2-tetrachloroethane	15.500	83	8834	4.58 ug/L	94
119) trans-1,4-dichloro-2-b...	15.553	53	1763	3.20 ug/L	93
120) 1,2,3-trichloropropane	15.589	110	2304	5.03 ug/L	96
121) n-propylbenzene	15.662	91	33236	4.69 ug/L	98
122) p-ethyltoluene	15.772	105	29880	4.72 ug/L	97
123) 2-chlorotoluene	15.830	126	7586	5.34 ug/L	89
124) 4-chlorotoluene	15.929	91	21571	4.51 ug/L	95
125) 1,3,5-trimethylbenzene	15.825	105	26308	4.84 ug/L	98
126) tert-butylbenzene	16.217	119	21608	4.67 ug/L	96
127) pentachloroethane	16.300	167	5589	5.33 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200198.D
Acq On : 22 Feb 2013 10:38 am
Operator : OksanaT
Sample : ic8801-5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 15:01:01 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
128) 1,2,4-trimethylbenzene	16.264	105	25587	4.66 ug/L	99
129) sec-butylbenzene	16.457	105	29934	4.43 ug/L	96
130) 1,3-dichlorobenzene	16.667	146	15072	4.93 ug/L	96
131) p-isopropyltoluene	16.588	119	25266	4.56 ug/L	96
132) 1,4-dichlorobenzene	16.750	146	15404	5.24 ug/L	97
133) benzyl chloride	16.865	91	12896	4.12 ug/L	100
134) p-diethylbenzene	17.007	119	15064	4.50 ug/L	95
135) 1,2-dichlorobenzene	17.184	146	15084	5.07 ug/L	98
136) n-butylbenzene	17.043	92	11475	4.20 ug/L	88
137) 1,2,4,5-tetramethylben...	17.870	119	23924	4.42 ug/L	99
138) 1,2-dibromo-3-chloropr...	18.006	75	1288	3.77 ug/L	91
139) 1,3,5-trichlorobenzene	18.251	180	9697	4.29 ug/L	94
140) 1,2,4-trichlorobenzene	18.963	180	6891	3.66 ug/L	97
141) hexachlorobutadiene	19.104	225	4681	4.69 ug/L	79
142) naphthalene	19.271	128	14854	3.61 ug/L	99
144) 1,2,3-trichlorobenzene	19.548	180	5712	3.71 ug/L	93
145) hexachloroethane	17.503	119	4621	4.40 ug/L	92
146) Cyclohexane	10.166	84	9179	4.81 ug/L #	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

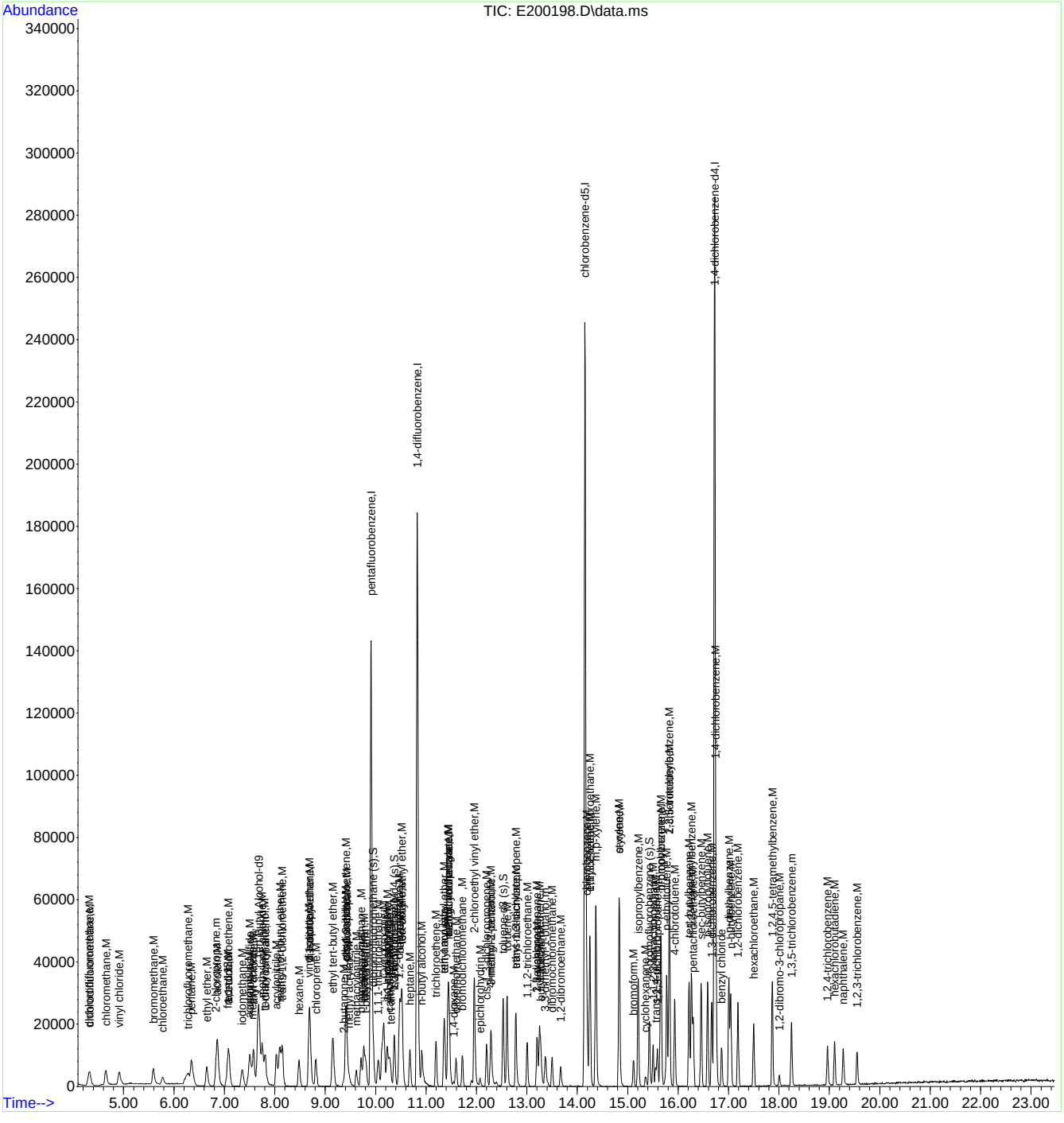
7.6.12

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200198.D
Acq On : 22 Feb 2013 10:38 am
Operator : OksanaT
Sample : ic8801-5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 15:01:01 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration



Manual Integration Approval Summary

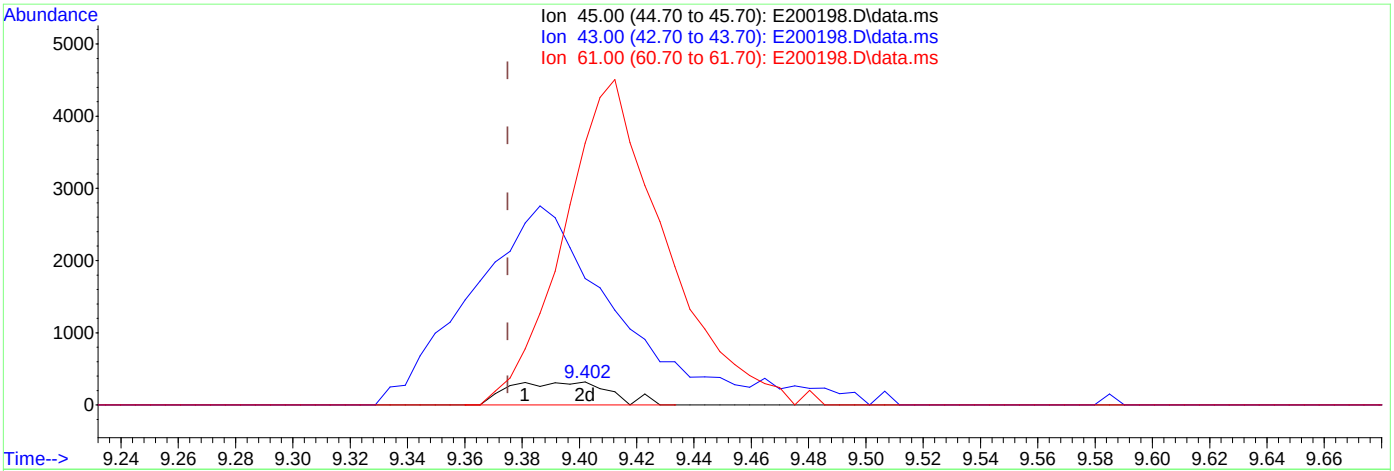
Sample Number:	VE8801-IC8801	**Method:**	SW846 8260B
Lab FileID:	E200198.D	**Analyst approved:**	02/25/13 10:03 Ying Li
Injection Time:	02/22/13 10:38	**Supervisor approved:**	03/01/13 15:48 Kanya Veerawat

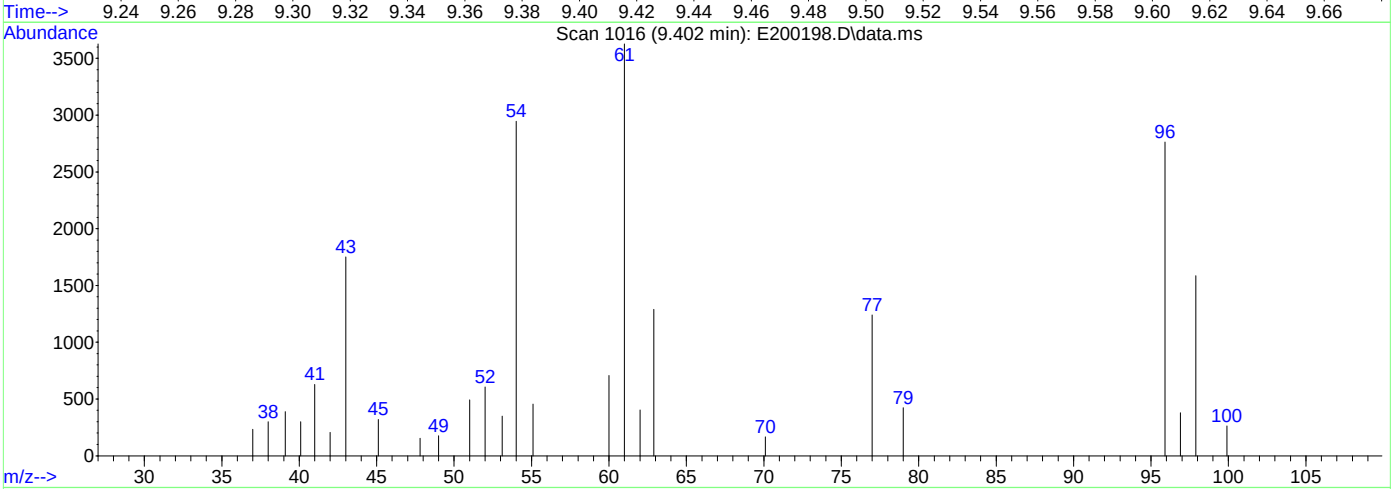
Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Chloropropane	75-29-6		6.83	Split peak
Ethyl Acetate	141-78-6		9.40	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200198.D
Acq On : 22 Feb 2013 10:38 am
Operator : OksanaT
Sample : ic8801-5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 14:32:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration





TIC: E200198.D\data.ms

(50) ethyl acetate (M)

9.402min (+0.027) 2.72ug/L m

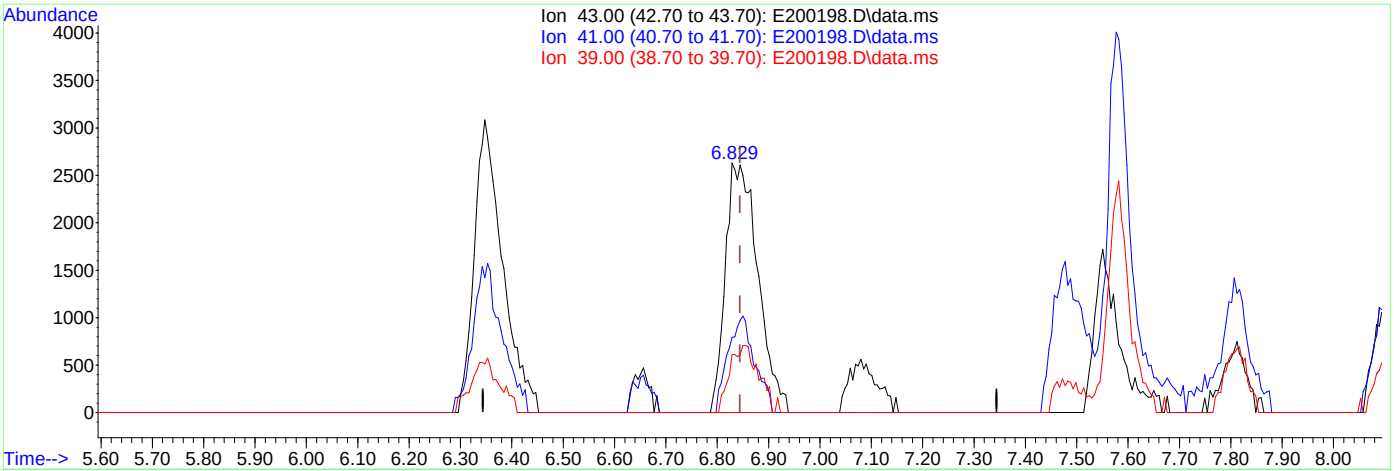
response 775

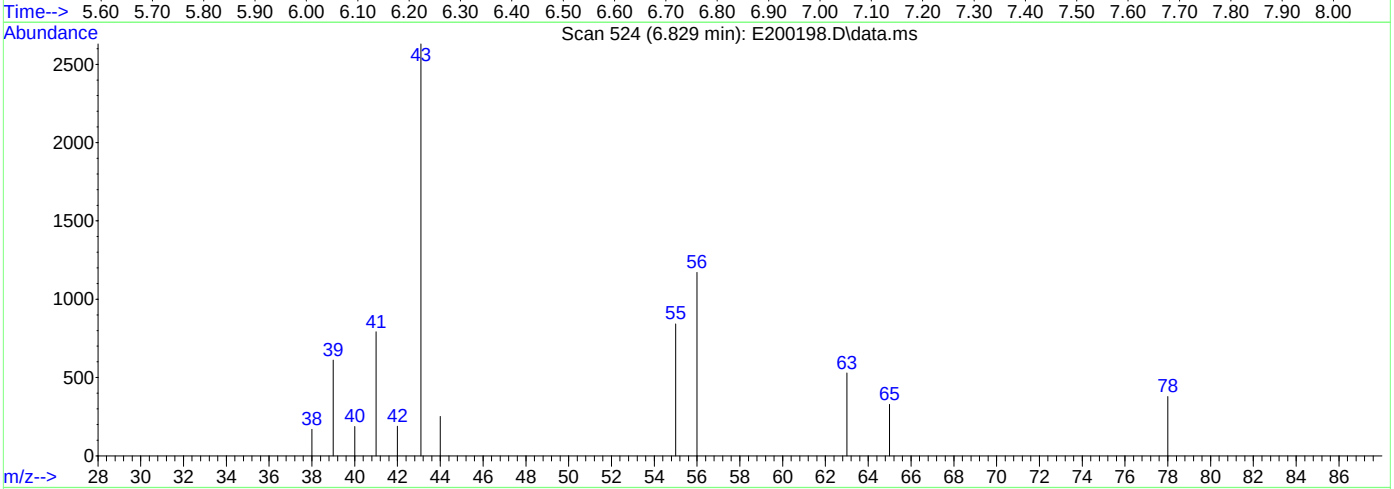
Ion	Exp%	Act%
45.00	100	100
43.00	693.10	548.59
61.00	116.90	1137.30#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200198.D
Acq On : 22 Feb 2013 10:38 am
Operator : OksanaT
Sample : ic8801-5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 14:41:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration





TIC: E200198.D\data.ms

(28) 2-chloropropane (m)

6.829min (-0.015) 4.14ug/L m

response 11523

Ion	Exp%	Act%
43.00	100	100
41.00	34.20	31.93
39.00	25.40	23.72
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200199.D
Acq On : 22 Feb 2013 12:19 pm
Operator : OksanaT
Sample : ic8801-10
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 22 14:43:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.680	65	74003	500.00	ug/L	0.00
5) pentafluorobenzene	9.909	168	136007	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.829	114	189787	50.00	ug/L	0.00
97) chlorobenzene-d5	14.150	117	170574	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.723	152	97352	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.956	113	13598	10.85	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 21.70%#			
61) 1,2-dichloroethane-d4 (s)	10.369	65	15923	9.81	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 19.62%#			
89) toluene-d8 (s)	12.529	98	51737	10.92	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 21.84%#			
116) 4-bromofluorobenzene (s)	15.426	95	19044	9.35	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 18.70%#			

Target Compounds						Qvalue
2) 1,4-dioxane	11.551	88	2674	226.45	ug/L	91
3) tertiary butyl alcohol	7.801	59	8954	53.38	ug/L	76
11) chlorodifluoromethane	4.318	51	16811	9.16	ug/L	93
12) dichlorodifluoromethane	4.302	85	21661	8.83	ug/L	91
15) chloromethane	4.652	50	24257	9.61	ug/L	96
16) vinyl chloride	4.914	62	23644	10.57	ug/L	94
19) bromomethane	5.594	94	14388	10.81	ug/L	97
20) chloroethane	5.771	64	10997	10.56	ug/L	80
22) trichlorofluoromethane	6.279	101	24020	10.28	ug/L	96
23) pentane	6.342	43	32786	11.71	ug/L	97
24) ethyl ether	6.650	74	9330	9.78	ug/L	89
28) 2-chloropropane	6.844	43	28189	10.16	ug/L	96
29) acrolein	6.854	56	34565	98.64	ug/L	99
30) 1,1-dichloroethene	7.079	96	14420	10.97	ug/L	82
32) acetone	7.074	58	1191	8.51	ug/L #	70
33) allyl chloride	7.581	41	26305	9.22	ug/L	94
34) acetonitrile	7.466	40	8796	86.25	ug/L	95
35) iodomethane	7.351	142	28263	11.39	ug/L	97
36) iso-butyl alcohol	10.228	74	1302	85.06	ug/L	100
37) carbon disulfide	7.503	76	49076	10.52	ug/L	94
38) methylene chloride	7.748	84	16420	10.43	ug/L	89
39) 1-chloropropane	7.806	42	26719	8.61	ug/L	92
40) methyl acetate	7.545	43	12388	8.85	ug/L	96
41) methyl tert butyl ether	8.104	73	46455	9.69	ug/L	97
42) trans-1,2-dichloroethene	8.146	96	14814	10.68	ug/L	89
43) di-isopropyl ether	8.690	45	49541	9.59	ug/L	89
44) ethyl tert-butyl ether	9.145	59	48279	9.61	ug/L	98
45) 2-butanone	9.354	72	1525	8.15	ug/L #	61
46) 1,1-dichloroethane	8.685	63	27304	10.22	ug/L	96
47) chloroprene	8.810	53	19687	8.72	ug/L	93
48) acrylonitrile	8.020	53	30540	44.86	ug/L	98
49) vinyl acetate	8.659	86	2126	9.38	ug/L	78
50) ethyl acetate	9.386	45	2156	7.59	ug/L #	39
51) 2,2-dichloropropane	9.427	77	21569	10.77	ug/L	97
52) cis-1,2-dichloroethene	9.412	96	16362	10.71	ug/L	86
53) methyl acrylate	9.464	55	13954	10.27	ug/L #	96
54) propionitrile	9.401	54	23349	90.93	ug/L	84
55) bromochloromethane	9.705	128	8156	11.43	ug/L	92
56) tetrahydrofuran	9.773	42	5768	8.77	ug/L	96
57) chloroform	9.762	83	25604	9.54	ug/L	97
58) t-butyl formate	9.804	59	13267	8.82	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200199.D
Acq On : 22 Feb 2013 12:19 pm
Operator : OksanaT
Sample : ic8801-10
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 22 14:43:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
59) Iso-octane	10.526	57	40401	8.02 ug/L	99
62) freon 113	7.074	151	10497	10.47 ug/L	81
63) methacrylonitrile	9.610	41	9479	8.98 ug/L	94
64) 1,1,1-trichloroethane	10.050	97	22181	10.20 ug/L	97
65) tert-amyl methyl ether	10.520	73	45448	10.03 ug/L	99
68) tert amyl alcohol	10.301	55	3063	40.12 ug/L	94
69) epichlorohydrin	12.074	57	7500	39.53 ug/L	94
70) n-butyl alcohol	10.913	56	21015	417.45 ug/L	98
71) tert-amyl ethyl ether	11.363	87	22097	9.93 ug/L	97
72) carbon tetrachloride	10.275	117	19702	11.29 ug/L	95
73) 1,1-dichloropropene	10.228	75	19641	10.97 ug/L	98
74) hexane	8.475	57	15092	7.48 ug/L	98
75) benzene	10.479	78	58411	10.67 ug/L	98
76) heptane	10.677	57	8596	8.81 ug/L	97
77) isopropyl acetate	10.369	43	28288	9.17 ug/L	98
78) 1,2-dichloroethane	10.458	62	18455	9.57 ug/L	98
80) trichloroethene	11.195	95	14636	10.72 ug/L	94
82) 2-chloroethyl vinyl ether	11.954	63	46375	49.26 ug/L	98
83) methylcyclohexane	11.451	83	22532	9.89 ug/L	93
84) methyl methacrylate	11.436	69	14465	9.24 ug/L	91
85) 1,2-dichloropropane	11.436	63	15366	10.31 ug/L	99
86) dibromomethane	11.593	93	8903	9.93 ug/L	89
87) bromodichloromethane	11.723	83	18946	9.13 ug/L	99
88) cis-1,3-dichloropropene	12.199	75	24218	9.95 ug/L	98
90) 4-methyl-2-pentanone	12.278	58	6207	9.45 ug/L	95
91) toluene	12.607	92	36601	11.16 ug/L	99
92) 3-methyl-1-butanol	12.288	55	14500	176.34 ug/L	95
93) trans-1,3-dichloropropene	12.780	75	21137	9.83 ug/L	91
94) ethyl methacrylate	12.780	69	18728	9.20 ug/L	98
95) 1,1,2-trichloroethane	13.005	83	11200	9.05 ug/L	99
96) 2-hexanone	13.188	58	5221	8.39 ug/L	89
98) cyclohexanone	15.353	55	4626	76.02 ug/L	93
99) tetrachloroethene	13.256	166	17346	12.47 ug/L	93
100) 1,3-dichloropropane	13.204	76	22663	10.41 ug/L	98
101) butyl acetate	13.277	56	9085	8.94 ug/L	98
102) 3,3-dimethyl-1-butanol	13.366	57	15160	80.36 ug/L	99
103) dibromochloromethane	13.502	129	15715	10.51 ug/L	96
104) 1,2-dibromoethane	13.669	107	14240	10.68 ug/L	96
106) chlorobenzene	14.192	112	41111	11.92 ug/L	90
107) 1,1,1,2-tetrachloroethane	14.244	131	15402	11.87 ug/L	95
108) ethylbenzene	14.250	91	66887	11.19 ug/L	98
109) m,p-xylene	14.370	106	52222	22.82 ug/L	99
110) o-xylene	14.825	106	26827	11.15 ug/L	96
112) styrene	14.830	104	43307	10.81 ug/L	98
113) bromoform	15.113	173	11807	11.12 ug/L	98
115) isopropylbenzene	15.207	105	68062	10.35 ug/L	98
117) bromobenzene	15.651	156	19227	11.71 ug/L	96
118) 1,1,2,2-tetrachloroethane	15.505	83	18624	9.48 ug/L	98
119) trans-1,4-dichloro-2-b...	15.547	53	4221	7.53 ug/L	92
120) 1,2,3-trichloropropane	15.588	110	4843	10.38 ug/L	97
121) n-propylbenzene	15.656	91	76773	10.62 ug/L	100
122) p-ethyltoluene	15.772	105	63004	9.75 ug/L	100
123) 2-chlorotoluene	15.829	126	16379	11.31 ug/L	95
124) 4-chlorotoluene	15.928	91	48150	9.88 ug/L	100
125) 1,3,5-trimethylbenzene	15.824	105	57351	10.34 ug/L	97
126) tert-butylbenzene	16.216	119	49862	10.57 ug/L	97
127) pentachloroethane	16.300	167	12147	11.36 ug/L	98
128) 1,2,4-trimethylbenzene	16.263	105	56151	10.03 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200199.D
Acq On : 22 Feb 2013 12:19 pm
Operator : OksanaT
Sample : ic8801-10
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 22 14:43:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
129) sec-butylbenzene	16.457	105	70428	10.22 ug/L	98
130) 1,3-dichlorobenzene	16.666	146	33861	10.88 ug/L	95
131) p-isopropyltoluene	16.587	119	58979	10.44 ug/L	95
132) 1,4-dichlorobenzene	16.755	146	34424	11.49 ug/L	98
133) benzyl chloride	16.865	91	29178	9.14 ug/L	98
134) p-diethylbenzene	17.006	119	33004	9.66 ug/L	98
135) 1,2-dichlorobenzene	17.184	146	33045	10.89 ug/L	99
136) n-butylbenzene	17.042	92	28052	10.08 ug/L	97
137) 1,2,4,5-tetramethylben...	17.869	119	53606	9.71 ug/L	99
138) 1,2-dibromo-3-chloropr...	18.005	75	2904	8.35 ug/L	91
139) 1,3,5-trichlorobenzene	18.251	180	24603	10.69 ug/L	94
140) 1,2,4-trichlorobenzene	18.957	180	18011	9.38 ug/L	97
141) hexachlorobutadiene	19.108	225	11271	11.09 ug/L	93
142) naphthalene	19.270	128	35562	8.47 ug/L	99
144) 1,2,3-trichlorobenzene	19.548	180	14663	9.35 ug/L	99
145) hexachloroethane	17.497	119	10930	10.21 ug/L	96
146) Cyclohexane	10.165	84	23084	11.86 ug/L #	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

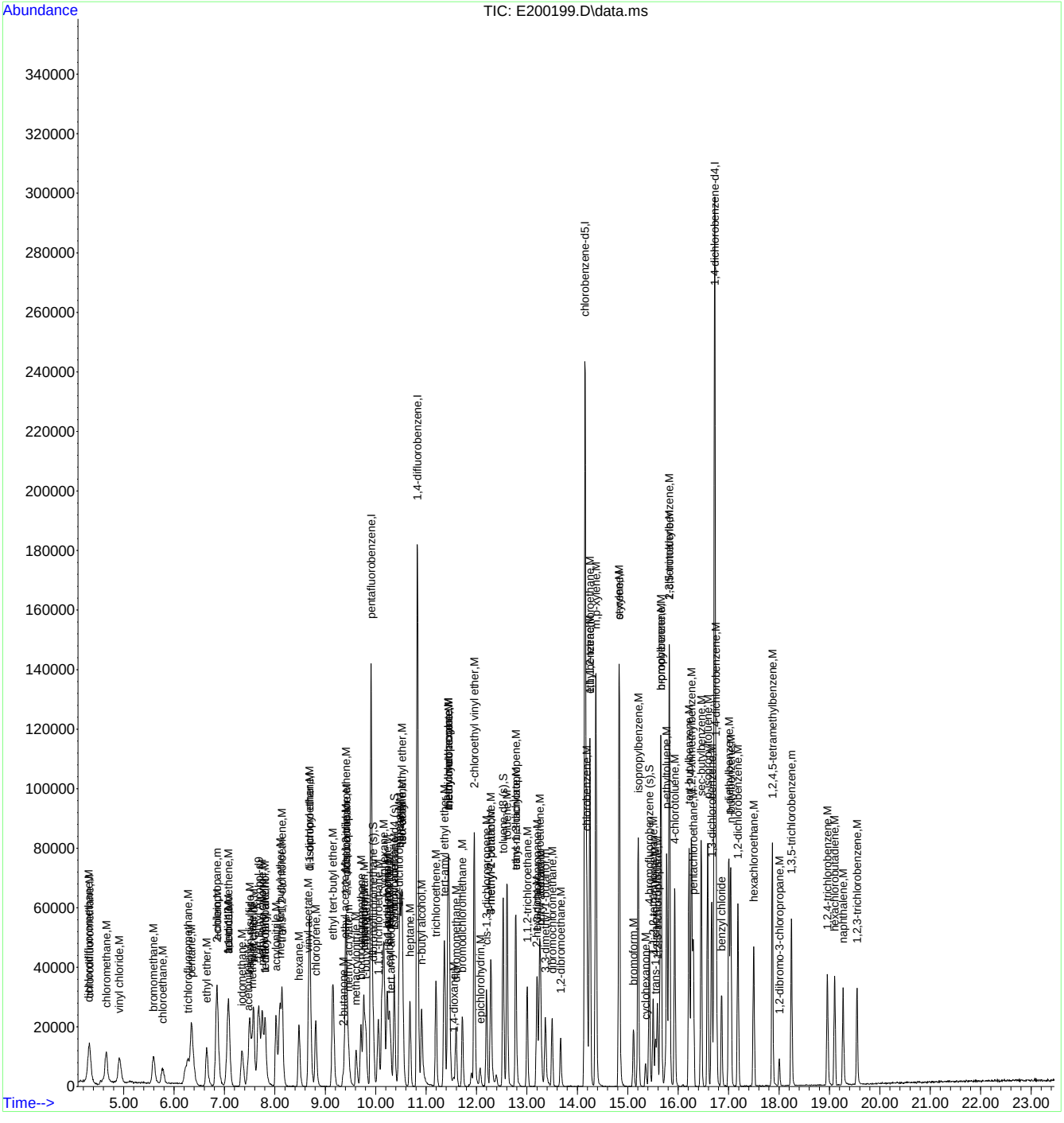
7.6.13

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200199.D
Acq On : 22 Feb 2013 12:19 pm
Operator : OksanaT
Sample : ic8801-10
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 22 14:43:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 03/01/13 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200200.D
Acq On : 22 Feb 2013 12:49 pm
Operator : OksanaT
Sample : ic8801-20
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 15:08:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.681	65	70664	500.00 ug/L	0.00
5) pentafluorobenzene	9.909	168	129392	50.00 ug/L	0.00
66) 1,4-difluorobenzene	10.824	114	179380	50.00 ug/L	0.00
97) chlorobenzene-d5	14.151	117	163578	50.00 ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.724	152	91797	50.00 ug/L	0.00

System Monitoring Compounds					
60) dibromofluoromethane (s)	9.951	113	25164	21.10 ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 42.20%#		
61) 1,2-dichloroethane-d4 (s)	10.369	65	28532	18.47 ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 36.94%#		
89) toluene-d8 (s)	12.524	98	100302	22.39 ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 44.78%#		
116) 4-bromofluorobenzene (s)	15.421	95	37317	19.43 ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 38.86%#		

Target Compounds					Qvalue
2) 1,4-dioxane	11.541	88	6660	590.66 ug/L	87
3) tertiary butyl alcohol	7.791	59	17693	110.47 ug/L	91
11) chlorodifluoromethane	4.323	51	30459	17.45 ug/L	96
12) dichlorodifluoromethane	4.323	85	38983	16.69 ug/L	97
15) chloromethane	4.658	50	43641	18.17 ug/L	99
16) vinyl chloride	4.935	62	44558	20.94 ug/L	99
19) bromomethane	5.594	94	25805	20.38 ug/L	92
20) chloroethane	5.777	64	20704	20.90 ug/L	95
22) trichlorofluoromethane	6.279	101	44333	19.95 ug/L	100
23) pentane	6.347	43	55668	20.89 ug/L	98
24) ethyl ether	6.651	74	17882	19.70 ug/L	89
28) 2-chloropropane	6.839	43	54130	20.51 ug/L	96
29) acrolein	6.854	56	67317	201.92 ug/L	98
30) 1,1-dichloroethene	7.085	96	27874	22.30 ug/L	90
32) acetone	7.064	58	2747m	20.63 ug/L	
33) allyl chloride	7.576	41	49345	18.17 ug/L	89
34) acetonitrile	7.472	40	17784	183.29 ug/L	96
35) iodomethane	7.351	142	54755	23.19 ug/L	97
36) iso-butyl alcohol	10.228	74	2612	179.36 ug/L	100
37) carbon disulfide	7.503	76	94280	21.25 ug/L	95
38) methylene chloride	7.749	84	31126	20.79 ug/L	89
39) 1-chloropropane	7.812	42	51176	17.33 ug/L	95
40) methyl acetate	7.545	43	24710	18.56 ug/L	99
41) methyl tert butyl ether	8.099	73	87321	19.15 ug/L	97
42) trans-1,2-dichloroethene	8.146	96	28324	21.46 ug/L	90
43) di-isopropyl ether	8.690	45	95634	19.45 ug/L	96
44) ethyl tert-butyl ether	9.150	59	94238	19.73 ug/L	97
45) 2-butanone	9.349	72	3284	18.45 ug/L #	83
46) 1,1-dichloroethane	8.685	63	52251	20.56 ug/L	98
47) chloroprene	8.811	53	38354	17.85 ug/L	95
48) acrylonitrile	8.021	53	58593	90.46 ug/L	99
49) vinyl acetate	8.654	86	4659	21.60 ug/L	62
50) ethyl acetate	9.381	45	4067	15.05 ug/L #	62
51) 2,2-dichloropropane	9.433	77	39611	20.79 ug/L	99
52) cis-1,2-dichloroethene	9.407	96	31320	21.55 ug/L	90
53) methyl acrylate	9.459	55	26750	20.69 ug/L	98
54) propionitrile	9.402	54	45532	186.38 ug/L	85
55) bromochloromethane	9.710	128	15672	23.08 ug/L	88
56) tetrahydrofuran	9.768	42	10901	17.43 ug/L	95
57) chloroform	9.762	83	48946	19.18 ug/L	98
58) t-butyl formate	9.804	59	26069	18.22 ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200200.D
Acq On : 22 Feb 2013 12:49 pm
Operator : OksanaT
Sample : ic8801-20
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 15:08:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
59) Iso-octane	10.521	57	78541	16.39 ug/L	99
62) freon 113	7.074	151	21107	22.14 ug/L	87
63) methacrylonitrile	9.606	41	18162	18.09 ug/L	96
64) 1,1,1-trichloroethane	10.050	97	42991	20.77 ug/L	96
65) tert-amyl methyl ether	10.516	73	88347	20.50 ug/L	99
68) tert amyl alcohol	10.296	55	6245	86.54 ug/L	91
69) epichlorohydrin	12.069	57	14969	83.48 ug/L	96
70) n-butyl alcohol	10.903	56	45836	963.33 ug/L	98
71) tert-amyl ethyl ether	11.363	87	44748	21.28 ug/L	94
72) carbon tetrachloride	10.270	117	38288	23.22 ug/L	97
73) 1,1-dichloropropene	10.228	75	37989	22.44 ug/L	97
74) hexane	8.481	57	28700	15.06 ug/L	95
75) benzene	10.479	78	111811	21.62 ug/L	98
76) heptane	10.678	57	15532	16.83 ug/L	98
77) isopropyl acetate	10.364	43	54159	18.57 ug/L	98
78) 1,2-dichloroethane	10.458	62	35870	19.69 ug/L	95
79) ethyl acrylate	11.358	55	14017	7.10 ug/L #	72
80) trichloroethene	11.190	95	28818	22.33 ug/L	96
82) 2-chloroethyl vinyl ether	11.954	63	92393	103.83 ug/L	98
83) methylcyclohexane	11.452	83	43287	20.10 ug/L	95
84) methyl methacrylate	11.431	69	27953	18.89 ug/L	92
85) 1,2-dichloropropane	11.431	63	30044	21.33 ug/L	98
86) dibromomethane	11.588	93	17477	20.63 ug/L	92
87) bromodichloromethane	11.719	83	37201	18.97 ug/L	99
88) cis-1,3-dichloropropene	12.194	75	47743	20.75 ug/L	92
90) 4-methyl-2-pentanone	12.278	58	12143	19.56 ug/L	94
91) toluene	12.602	92	69578	22.45 ug/L	97
92) 3-methyl-1-butanol	12.283	55	28673	368.93 ug/L	97
93) trans-1,3-dichloropropene	12.775	75	42151	20.74 ug/L	90
94) ethyl methacrylate	12.775	69	37050	19.25 ug/L	96
95) 1,1,2-trichloroethane	13.005	83	21741	18.60 ug/L	97
96) 2-hexanone	13.183	58	10496	17.85 ug/L	91
98) cyclohexanone	15.348	55	10118	173.39 ug/L	95
99) tetrachloroethene	13.251	166	33268	24.94 ug/L	96
100) 1,3-dichloropropane	13.204	76	43398	20.78 ug/L	97
101) butyl acetate	13.277	56	18293	18.78 ug/L	88
102) 3,3-dimethyl-1-butanol	13.361	57	31786	175.70 ug/L	99
103) dibromochloromethane	13.497	129	31132	21.70 ug/L	99
104) 1,2-dibromoethane	13.664	107	27541	21.53 ug/L	93
106) chlorobenzene	14.187	112	78792	23.82 ug/L	94
107) 1,1,1,2-tetrachloroethane	14.245	131	29748	23.91 ug/L	97
108) ethylbenzene	14.250	91	128701	22.45 ug/L	100
109) m,p-xylene	14.365	106	101425	46.22 ug/L	100
110) o-xylene	14.825	106	52318	22.68 ug/L	99
112) styrene	14.830	104	86234	22.46 ug/L	97
113) bromoform	15.113	173	23919	23.48 ug/L	99
115) isopropylbenzene	15.207	105	133676	21.56 ug/L	98
117) bromobenzene	15.646	156	37477	24.20 ug/L	93
118) 1,1,2,2-tetrachloroethane	15.505	83	36214	19.56 ug/L	100
119) trans-1,4-dichloro-2-b...	15.547	53	8644	16.34 ug/L	94
120) 1,2,3-trichloropropane	15.584	110	9652	21.95 ug/L	95
121) n-propylbenzene	15.657	91	146913	21.55 ug/L	97
122) p-ethyltoluene	15.772	105	126889	20.83 ug/L	98
123) 2-chlorotoluene	15.824	126	32133	23.53 ug/L	92
124) 4-chlorotoluene	15.929	91	94038	20.47 ug/L	99
125) 1,3,5-trimethylbenzene	15.824	105	108123	20.68 ug/L	99
126) tert-butylbenzene	16.216	119	96940	21.79 ug/L	96
127) pentachloroethane	16.300	167	24130	23.94 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200200.D
Acq On : 22 Feb 2013 12:49 pm
Operator : OksanaT
Sample : ic8801-20
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 15:08:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
128) 1,2,4-trimethylbenzene	16.263	105	110980	21.02 ug/L	98
129) sec-butylbenzene	16.457	105	136856	21.06 ug/L	99
130) 1,3-dichlorobenzene	16.661	146	66044	22.50 ug/L	98
131) p-isopropyltoluene	16.583	119	116060	21.78 ug/L	97
132) 1,4-dichlorobenzene	16.750	146	66682	23.60 ug/L	97
133) benzyl chloride	16.860	91	59752	19.85 ug/L	97
134) p-diethylbenzene	17.006	119	66821	20.75 ug/L	96
135) 1,2-dichlorobenzene	17.184	146	65137	22.77 ug/L	99
136) n-butylbenzene	17.043	92	56158	21.41 ug/L	97
137) 1,2,4,5-tetramethylben...	17.864	119	111216	21.36 ug/L	100
138) 1,2-dibromo-3-chloropr...	18.005	75	5924	18.06 ug/L	73
139) 1,3,5-trichlorobenzene	18.246	180	50573	23.30 ug/L	93
140) 1,2,4-trichlorobenzene	18.962	180	37910	20.94 ug/L	99
141) hexachlorobutadiene	19.103	225	22647	23.63 ug/L	92
142) naphthalene	19.271	128	75945	19.18 ug/L	99
144) 1,2,3-trichlorobenzene	19.548	180	30573	20.68 ug/L	94
145) hexachloroethane	17.498	119	22568	22.35 ug/L	96
146) Cyclohexane	10.160	84	43867	23.90 ug/L #	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

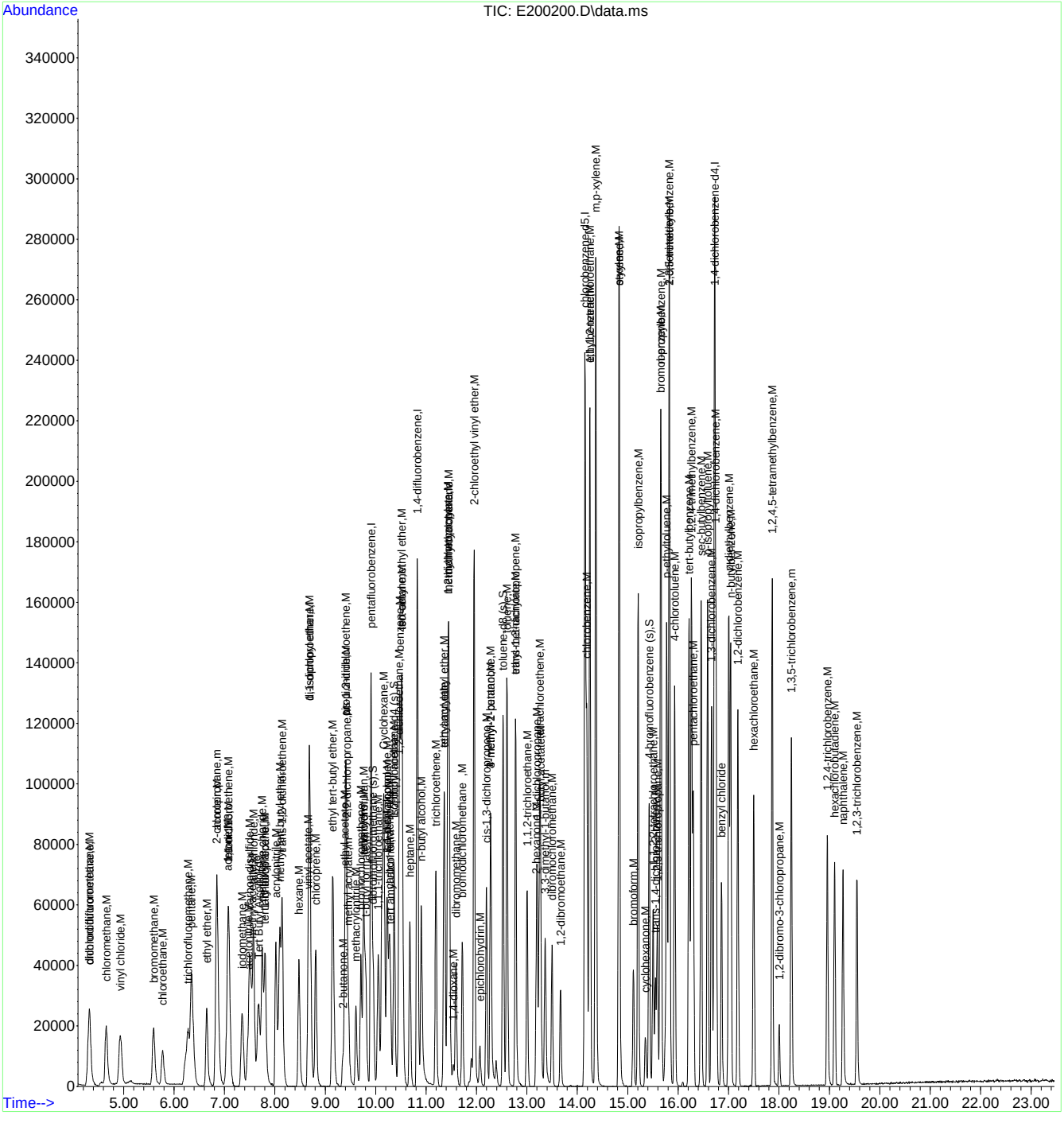
7.6.14

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200200.D
Acq On : 22 Feb 2013 12:49 pm
Operator : OksanaT
Sample : ic8801-20
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 15:08:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration



Manual Integration Approval Summary

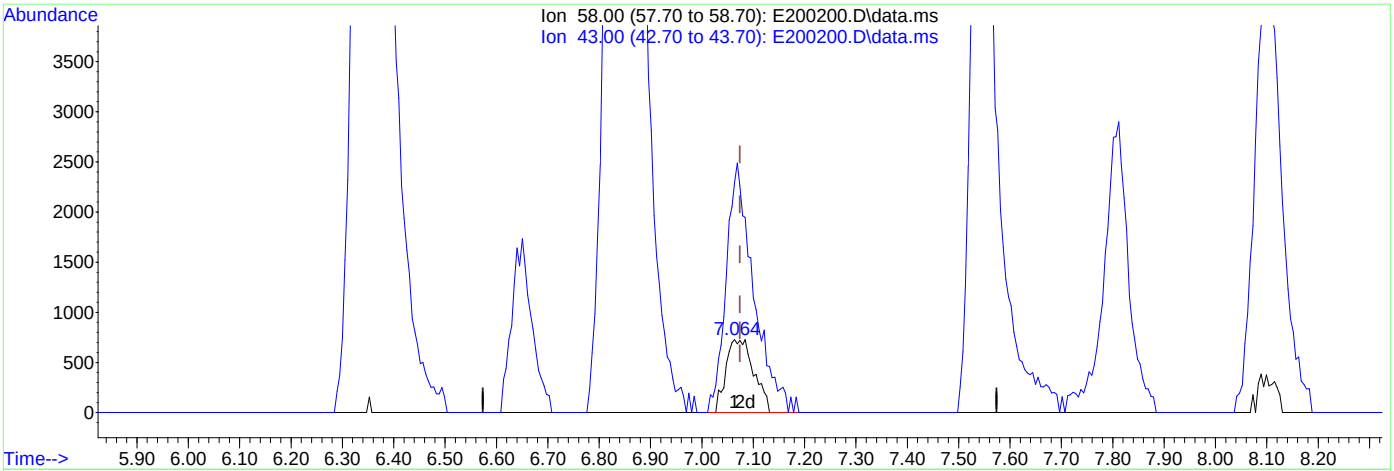
Sample Number:	VE8801-IC8801	**Method:**	SW846 8260B
Lab FileID:	E200200.D	**Analyst approved:**	02/25/13 10:03 Ying Li
Injection Time:	02/22/13 12:49	**Supervisor approved:**	03/01/13 15:48 Kanya Veerawat

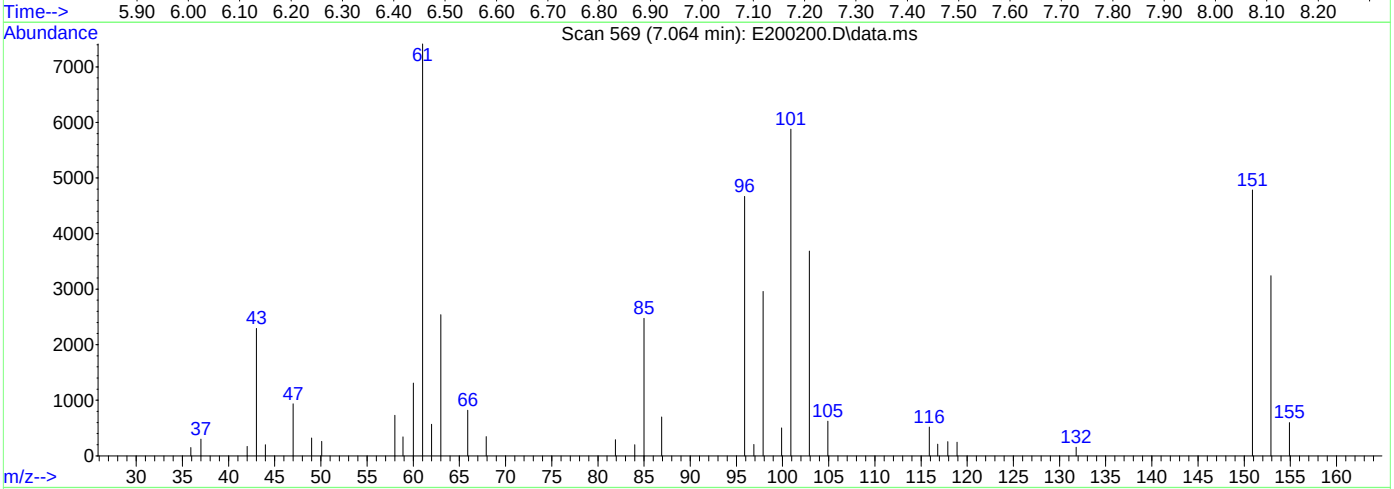
Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetone	67-64-1		7.06	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200200.D
Acq On : 22 Feb 2013 12:49 pm
Operator : OksanaT
Sample : ic8801-20
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 14:44:21 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration





TIC: E200200.D\data.ms

(32) acetone (M)

7.064min (-0.010) 20.63ug/L m

response 2747

Ion	Exp%	Act%
58.00	100	100
43.00	323.00	334.26
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200201.D
Acq On : 22 Feb 2013 1:19 pm
Operator : OksanaT
Sample : icc8801-50
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:45:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.670	65	66288	500.00 ug/L	-0.02
5) pentafluorobenzene	9.909	168	123650	50.00 ug/L	0.00
66) 1,4-difluorobenzene	10.824	114	174967	50.00 ug/L	0.00
97) chlorobenzene-d5	14.150	117	164241	50.00 ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.724	152	91577	50.00 ug/L	0.00

System Monitoring Compounds					
60) dibromofluoromethane (s)	9.951	113	62345	54.71 ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 109.42%		
61) 1,2-dichloroethane-d4 (s)	10.364	65	67200	45.52 ug/L	-0.01
Spiked Amount 50.000	Range 74 - 127		Recovery = 91.04%		
89) toluene-d8 (s)	12.524	98	238504	54.59 ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 109.18%		
116) 4-bromofluorobenzene (s)	15.421	95	90893	47.45 ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 94.90%		

Target Compounds					Qvalue
2) 1,4-dioxane	11.541	88	17014	1608.55 ug/L	90
3) tertiary butyl alcohol	7.796	59	40991	272.84 ug/L #	70
11) chlorodifluoromethane	4.318	51	75005	44.97 ug/L	97
12) dichlorodifluoromethane	4.313	85	99165	44.44 ug/L	99
15) chloromethane	4.658	50	107728	46.93 ug/L	98
16) vinyl chloride	4.951	62	108739	53.47 ug/L	98
19) bromomethane	5.594	94	61522	50.84 ug/L	98
20) chloroethane	5.772	64	50553	53.40 ug/L	93
22) trichlorofluoromethane	6.279	101	109130	51.40 ug/L	98
23) pentane	6.342	43	134657	52.89 ug/L	98
24) ethyl ether	6.645	74	40569	46.78 ug/L	92
28) 2-chloropropane	6.839	43	126231	50.05 ug/L	96
29) acrolein	6.849	56	158085	496.21 ug/L	98
30) 1,1-dichloroethene	7.085	96	64880	54.31 ug/L	93
32) acetone	7.064	58	6181	48.58 ug/L	90
33) allyl chloride	7.576	41	118320	45.60 ug/L	90
34) acetonitrile	7.461	40	36406	392.64 ug/L	94
35) iodomethane	7.346	142	130159	57.69 ug/L	95
36) iso-butyl alcohol	10.223	74	5776	415.04 ug/L	100
37) carbon disulfide	7.498	76	225467	53.17 ug/L	95
38) methylene chloride	7.749	84	72374	50.59 ug/L	92
39) 1-chloropropane	7.806	42	117796	41.75 ug/L	95
40) methyl acetate	7.534	43	55455	43.59 ug/L	96
41) methyl tert butyl ether	8.099	73	201038	46.13 ug/L	98
42) trans-1,2-dichloroethene	8.146	96	66337	52.60 ug/L	90
43) di-isopropyl ether	8.690	45	222939	47.46 ug/L	97
44) ethyl tert-butyl ether	9.145	59	223366	48.93 ug/L	99
45) 2-butanone	9.339	72	8370	49.21 ug/L #	82
46) 1,1-dichloroethane	8.680	63	121364	49.96 ug/L	99
47) chloroprene	8.810	53	90881	44.27 ug/L	96
48) acrylonitrile	8.016	53	133807	216.17 ug/L	98
49) vinyl acetate	8.654	86	11109	53.90 ug/L	82
50) ethyl acetate	9.370	45	9391	36.36 ug/L	88
51) 2,2-dichloropropane	9.428	77	93762	51.49 ug/L	98
52) cis-1,2-dichloroethene	9.407	96	71587	51.54 ug/L	92
53) methyl acrylate	9.454	55	61468	49.74 ug/L	98
54) propionitrile	9.396	54	101801	436.07 ug/L	92
55) bromochloromethane	9.705	128	37139	57.24 ug/L	92
56) tetrahydrofuran	9.768	42	24716	41.36 ug/L	92
57) chloroform	9.757	83	113155	46.39 ug/L	96
58) t-butyl formate	9.804	59	63021	46.09 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200201.D
Acq On : 22 Feb 2013 1:19 pm
Operator : OksanaT
Sample : icc8801-50
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:45:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
59) Iso-octane	10.521	57	190511	41.61 ug/L	99
62) freon 113	7.064	151	51105	56.09 ug/L	89
63) methacrylonitrile	9.605	41	42469	44.26 ug/L	97
64) 1,1,1-trichloroethane	10.050	97	101248	51.19 ug/L	97
65) tert-amyl methyl ether	10.516	73	206034	50.03 ug/L	99
68) tert amyl alcohol	10.296	55	13613	193.40 ug/L	94
69) epichlorohydrin	12.064	57	35793	204.64 ug/L	96
70) n-butyl alcohol	10.903	56	105160	2265.88 ug/L	99
71) tert-amyl ethyl ether	11.363	87	105597	51.48 ug/L	95
72) carbon tetrachloride	10.270	117	90744	56.41 ug/L	98
73) 1,1-dichloropropene	10.228	75	88128	53.38 ug/L	96
74) hexane	8.476	57	70294	37.81 ug/L	99
75) benzene	10.479	78	256335	50.81 ug/L	98
76) heptane	10.678	57	38451	42.73 ug/L	99
77) isopropyl acetate	10.359	43	125817	44.23 ug/L	97
78) 1,2-dichloroethane	10.458	62	82057	46.18 ug/L	97
80) trichloroethene	11.190	95	67752	53.83 ug/L	94
82) 2-chloroethyl vinyl ether	11.949	63	220763	254.35 ug/L	98
83) methylcyclohexane	11.452	83	103136	49.09 ug/L	94
84) methyl methacrylate	11.431	69	66748	46.23 ug/L	97
85) 1,2-dichloropropane	11.431	63	68324	49.72 ug/L	99
86) dibromomethane	11.588	93	40797	49.37 ug/L	88
87) bromodichloromethane	11.718	83	87168	45.56 ug/L	98
88) cis-1,3-dichloropropene	12.194	75	114343	50.96 ug/L	93
90) 4-methyl-2-pentanone	12.273	58	28500	47.08 ug/L	92
91) toluene	12.602	92	162762	53.83 ug/L	98
92) 3-methyl-1-butanol	12.278	55	66529	877.60 ug/L	96
93) trans-1,3-dichloropropene	12.775	75	100376	50.65 ug/L	91
94) ethyl methacrylate	12.775	69	90245	48.08 ug/L	95
95) 1,1,2-trichloroethane	13.005	83	51005	44.73 ug/L	97
96) 2-hexanone	13.178	58	26045	45.41 ug/L	89
98) cyclohexanone	15.348	55	23935	408.51 ug/L	91
99) tetrachloroethene	13.251	166	78536	58.64 ug/L	95
100) 1,3-dichloropropane	13.204	76	103266	49.25 ug/L	99
101) butyl acetate	13.272	56	44145	45.14 ug/L	93
102) 3,3-dimethyl-1-butanol	13.361	57	73609	405.23 ug/L	98
103) dibromochloromethane	13.497	129	75318	52.30 ug/L	99
104) 1,2-dibromoethane	13.664	107	64987	50.60 ug/L	99
106) chlorobenzene	14.187	112	189528	57.06 ug/L	95
107) 1,1,1,2-tetrachloroethane	14.239	131	71553	57.28 ug/L	94
108) ethylbenzene	14.250	91	301067	52.31 ug/L	98
109) m,p-xylene	14.365	106	240005	108.94 ug/L	97
110) o-xylene	14.825	106	123425	53.29 ug/L	97
112) styrene	14.830	104	203313	52.73 ug/L	97
113) bromoform	15.113	173	57833	56.55 ug/L	99
115) isopropylbenzene	15.207	105	315661	51.03 ug/L	99
117) bromobenzene	15.646	156	86679	56.11 ug/L	94
118) 1,1,2,2-tetrachloroethane	15.500	83	85893	46.49 ug/L	99
119) trans-1,4-dichloro-2-b...	15.547	53	21904	41.51 ug/L	83
120) 1,2,3-trichloropropane	15.589	110	22403	51.06 ug/L	92
121) n-propylbenzene	15.657	91	342624	50.37 ug/L	97
122) p-ethyltoluene	15.772	105	301878	49.68 ug/L	99
123) 2-chlorotoluene	15.824	126	75786	55.62 ug/L #	87
124) 4-chlorotoluene	15.929	91	221425	48.32 ug/L	97
125) 1,3,5-trimethylbenzene	15.824	105	252433	48.40 ug/L	98
126) tert-butylbenzene	16.216	119	232808	52.46 ug/L	96
127) pentachloroethane	16.300	167	57061	56.75 ug/L	97
128) 1,2,4-trimethylbenzene	16.263	105	260114	49.37 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200201.D
Acq On : 22 Feb 2013 1:19 pm
Operator : OksanaT
Sample : icc8801-50
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:45:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
129) sec-butylbenzene	16.457	105	327629	50.53 ug/L	99
130) 1,3-dichlorobenzene	16.661	146	158205	54.02 ug/L	98
131) p-isopropyltoluene	16.582	119	277782	52.26 ug/L	98
132) 1,4-dichlorobenzene	16.750	146	162047	57.50 ug/L	98
133) benzyl chloride	16.860	91	159659	53.17 ug/L	96
134) p-diethylbenzene	17.001	119	167691	52.20 ug/L	100
135) 1,2-dichlorobenzene	17.184	146	156939	55.00 ug/L	98
136) n-butylbenzene	17.038	92	135054	51.61 ug/L	98
137) 1,2,4,5-tetramethylben...	17.864	119	271752	52.32 ug/L	98
138) 1,2-dibromo-3-chloropr...	18.005	75	14643	44.75 ug/L #	74
139) 1,3,5-trichlorobenzene	18.246	180	123615	57.09 ug/L	94
140) 1,2,4-trichlorobenzene	18.957	180	96685	53.54 ug/L	98
141) hexachlorobutadiene	19.103	225	53463	55.92 ug/L	93
142) naphthalene	19.266	128	190890	48.32 ug/L	99
144) 1,2,3-trichlorobenzene	19.543	180	75906	51.48 ug/L	96
145) hexachloroethane	17.498	119	54604	54.20 ug/L	95
146) Cyclohexane	10.155	84	101136	55.24 ug/L #	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

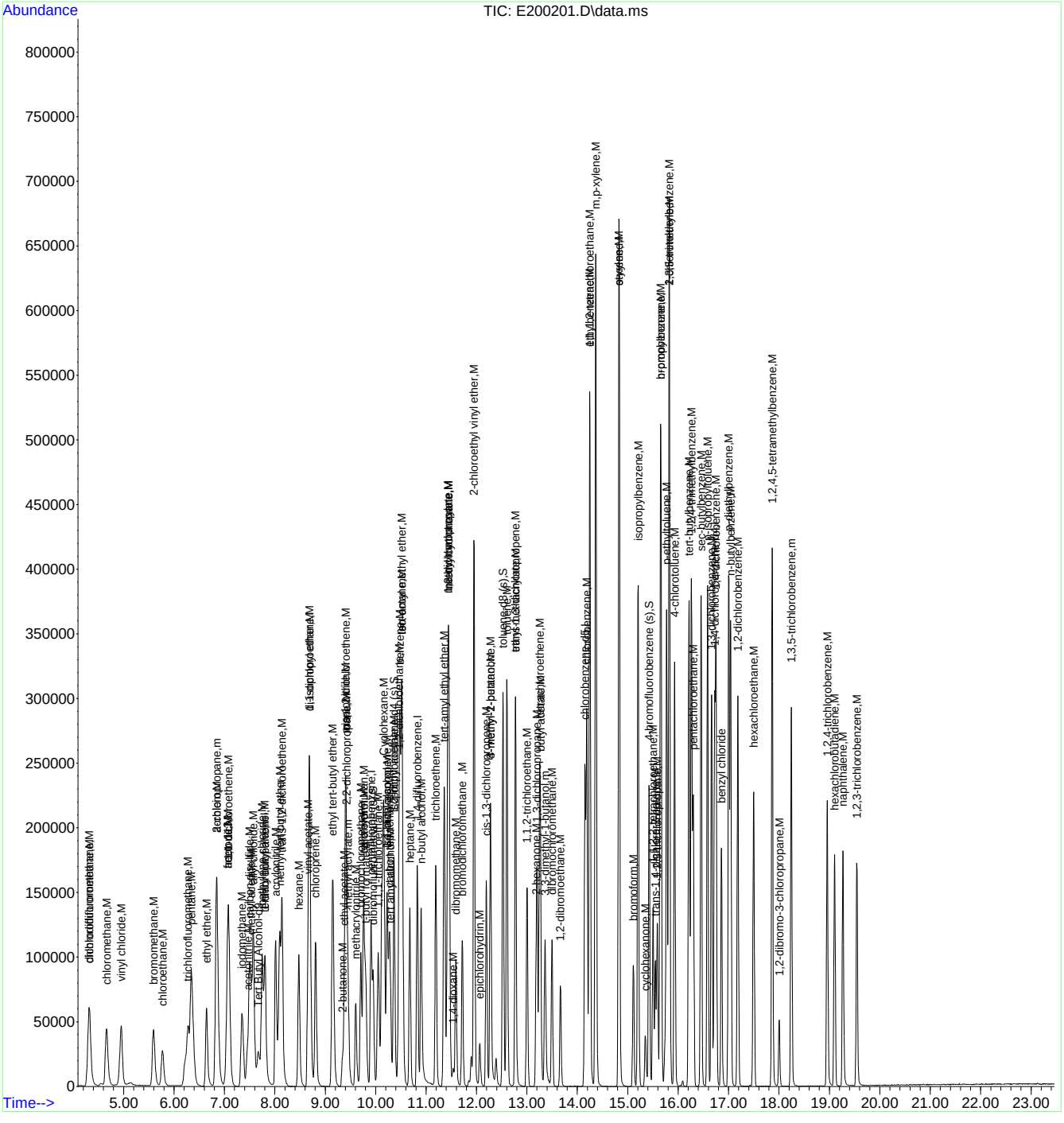
7.6.15

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200201.D
Acq On : 22 Feb 2013 1:19 pm
Operator : OksanaT
Sample : icc8801-50
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:45:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200202.D
Acq On : 22 Feb 2013 1:50 pm
Operator : OksanaT
Sample : ic8801-100
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:46:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.675	65	64583	500.00	ug/L	-0.01
5) pentafluorobenzene	9.909	168	126799	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.824	114	179672	50.00	ug/L	0.00
97) chlorobenzene-d5	14.150	117	168983	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.724	152	96016	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.951	113	125780	107.64	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 215.28%#			
61) 1,2-dichloroethane-d4 (s)	10.369	65	135592	89.58	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 179.16%#			
89) toluene-d8 (s)	12.524	98	470783	104.94	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 209.88%#			
116) 4-bromofluorobenzene (s)	15.421	95	185109	92.16	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 184.32%#			

Target Compounds						Qvalue
2) 1,4-dioxane	11.535	88	32932	3195.68	ug/L	91
3) tertiary butyl alcohol	7.791	59	77772	531.32	ug/L #	44
11) chlorodifluoromethane	4.323	51	147844	86.45	ug/L	98
12) dichlorodifluoromethane	4.313	85	193664	84.63	ug/L	98
15) chloromethane	4.673	50	209115	88.83	ug/L	99
16) vinyl chloride	4.961	62	207013	99.27	ug/L	99
19) bromomethane	5.599	94	116485	93.87	ug/L	97
20) chloroethane	5.772	64	95453	98.33	ug/L	96
22) trichlorofluoromethane	6.274	101	207068	95.10	ug/L	99
23) pentane	6.347	43	257336	98.56	ug/L	97
24) ethyl ether	6.645	74	82594	92.87	ug/L	98
28) 2-chloropropane	6.844	43	249611	96.51	ug/L #	90
29) acrolein	6.860	56	58	0.18	ug/L	92
30) 1,1-dichloroethene	7.090	96	127342	103.94	ug/L	90
32) acetone	7.069	58	12796	98.08	ug/L	95
33) allyl chloride	7.576	41	233401	87.72	ug/L	91
34) acetonitrile	7.461	40	65578	689.69	ug/L	93
35) iodomethane	7.351	142	259210	112.04	ug/L	96
36) iso-butyl alcohol	10.228	74	11284	790.68	ug/L	100
37) carbon disulfide	7.503	76	433891	99.78	ug/L	95
38) methylene chloride	7.749	84	145292	99.04	ug/L	95
39) 1-chloropropane	7.806	42	231993	80.18	ug/L	93
40) methyl acetate	7.539	43	111380	85.38	ug/L	95
41) methyl tert butyl ether	8.099	73	403139	90.22	ug/L	98
42) trans-1,2-dichloroethene	8.146	96	130048	100.56	ug/L	92
43) di-isopropyl ether	8.690	45	437883	90.89	ug/L	96
44) ethyl tert-butyl ether	9.150	59	449288	95.98	ug/L	98
45) 2-butanone	9.339	72	17732	101.67	ug/L #	83
46) 1,1-dichloroethane	8.680	63	237739	95.44	ug/L	98
47) chloroprene	8.805	53	179640	85.32	ug/L	97
48) acrylonitrile	8.015	53	272072	428.62	ug/L	100
49) vinyl acetate	8.654	86	22860	108.16	ug/L	78
50) ethyl acetate	9.375	45	20157	76.11	ug/L #	80
51) 2,2-dichloropropane	9.433	77	179384	96.07	ug/L	98
52) cis-1,2-dichloroethene	9.407	96	142421	100.00	ug/L	91
53) methyl acrylate	9.454	55	128004	101.01	ug/L	98
54) propionitrile	9.396	54	208093	869.24	ug/L	94
55) bromochloromethane	9.710	128	75502	113.48	ug/L	87
56) tetrahydrofuran	9.762	42	50850	82.97	ug/L	93
57) chloroform	9.762	83	223187	89.22	ug/L	97
58) t-butyl formate	9.799	59	126634	90.32	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200202.D
Acq On : 22 Feb 2013 1:50 pm
Operator : OksanaT
Sample : ic8801-100
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:46:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
59) Iso-octane	10.526	57	366790	78.12 ug/L	99
62) freon 113	7.064	151	98257	105.16 ug/L	90
63) methacrylonitrile	9.600	41	87479	88.91 ug/L	97
64) 1,1,1-trichloroethane	10.050	97	200631	98.91 ug/L	98
65) tert-amyl methyl ether	10.515	73	409961	97.08 ug/L	98
68) tert amyl alcohol	10.291	55	25052	346.59 ug/L	92
69) epichlorohydrin	12.064	57	74081	412.46 ug/L	95
70) n-butyl alcohol	10.897	56	198927	4174.04 ug/L	99
71) tert-amyl ethyl ether	11.357	87	206702	98.12 ug/L	95
72) carbon tetrachloride	10.270	117	177144	107.23 ug/L	100
73) 1,1-dichloropropene	10.228	75	174049	102.66 ug/L	98
74) hexane	8.476	57	137992	72.28 ug/L	98
75) benzene	10.479	78	504395	97.36 ug/L	98
76) heptane	10.678	57	75281	81.46 ug/L	98
77) isopropyl acetate	10.364	43	256258	87.73 ug/L	97
78) 1,2-dichloroethane	10.458	62	165390	90.63 ug/L	97
80) trichloroethene	11.195	95	133935	103.62 ug/L	91
82) 2-chloroethyl vinyl ether	11.954	63	446011	500.40 ug/L	97
83) methylcyclohexane	11.452	83	198232	91.89 ug/L	93
84) methyl methacrylate	11.425	69	134583	90.78 ug/L	93
85) 1,2-dichloropropane	11.431	63	136281	96.58 ug/L	98
86) dibromomethane	11.593	93	84282	99.32 ug/L	90
87) bromodichloromethane	11.718	83	177949	90.57 ug/L	99
88) cis-1,3-dichloropropene	12.194	75	231865	100.63 ug/L	95
90) 4-methyl-2-pentanone	12.273	58	58232	93.67 ug/L	89
91) toluene	12.602	92	323322	104.13 ug/L	96
92) 3-methyl-1-butanol	12.278	55	134852	1732.28 ug/L	95
93) trans-1,3-dichloropropene	12.775	75	204182	100.33 ug/L	92
94) ethyl methacrylate	12.775	69	183413	95.15 ug/L	96
95) 1,1,2-trichloroethane	13.000	83	105245	89.88 ug/L	99
96) 2-hexanone	13.178	58	54184	91.99 ug/L	92
98) cyclohexanone	15.348	55	46064	764.14 ug/L	95
99) tetrachloroethene	13.251	166	153978	111.75 ug/L	97
100) 1,3-dichloropropane	13.198	76	209954	97.33 ug/L	100
101) butyl acetate	13.272	56	91550	90.99 ug/L	95
102) 3,3-dimethyl-1-butanol	13.361	57	141815	758.81 ug/L	98
103) dibromochloromethane	13.497	129	156450	105.58 ug/L	97
104) 1,2-dibromoethane	13.664	107	135058	102.21 ug/L	100
106) chlorobenzene	14.187	112	379872	111.16 ug/L	95
107) 1,1,1,2-tetrachloroethane	14.245	131	141373	110.00 ug/L	99
108) ethylbenzene	14.250	91	593917	100.29 ug/L	99
109) m,p-xylene	14.365	106	477131	210.49 ug/L	94
110) o-xylene	14.825	106	246096	103.28 ug/L	94
112) styrene	14.830	104	410088	103.37 ug/L	98
113) bromoform	15.113	173	121158	115.15 ug/L	98
115) isopropylbenzene	15.207	105	625723	96.48 ug/L	98
117) bromobenzene	15.646	156	175964	108.64 ug/L	92
118) 1,1,2,2-tetrachloroethane	15.500	83	173571	89.61 ug/L	99
119) trans-1,4-dichloro-2-b...	15.547	53	46411	83.89 ug/L	91
120) 1,2,3-trichloropropane	15.589	110	45581	99.08 ug/L	88
121) n-propylbenzene	15.662	91	683149	95.79 ug/L	95
122) p-ethyltoluene	15.772	105	594638	93.34 ug/L	99
123) 2-chlorotoluene	15.824	126	152095	106.47 ug/L	89
124) 4-chlorotoluene	15.929	91	443587	92.33 ug/L	97
125) 1,3,5-trimethylbenzene	15.824	105	500862	91.58 ug/L	98
126) tert-butylbenzene	16.216	119	461852	99.27 ug/L	96
127) pentachloroethane	16.300	167	114994	109.08 ug/L	97
128) 1,2,4-trimethylbenzene	16.263	105	520789	94.29 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200202.D
Acq On : 22 Feb 2013 1:50 pm
Operator : OksanaT
Sample : ic8801-100
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:46:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

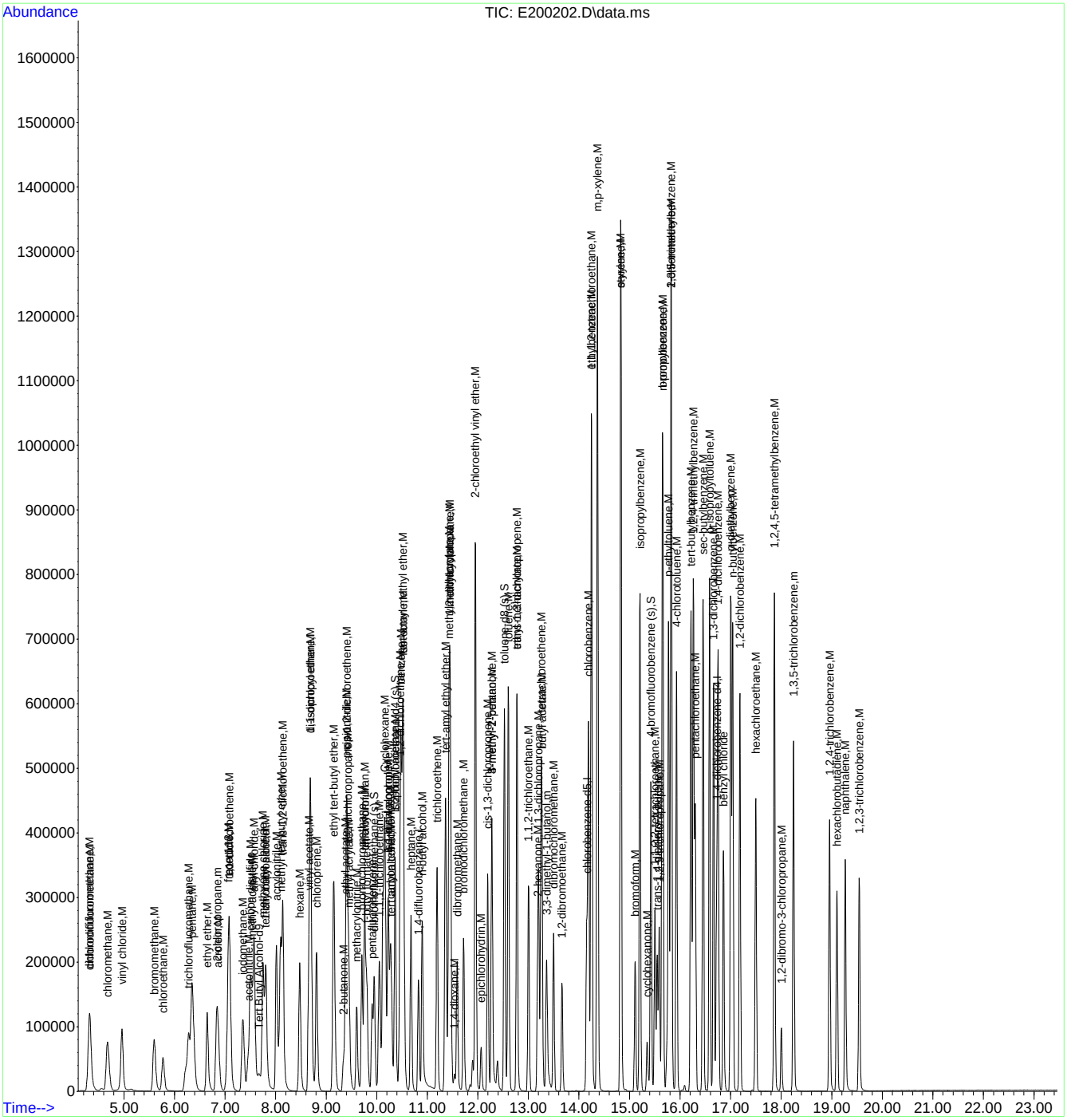
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
129) sec-butylbenzene	16.457	105	651511	95.83 ug/L	98
130) 1,3-dichlorobenzene	16.661	146	322552	105.04 ug/L	98
131) p-isopropyltoluene	16.582	119	549065	98.52 ug/L	97
132) 1,4-dichlorobenzene	16.750	146	330773	111.94 ug/L	99
133) benzyl chloride	16.860	91	329304	104.60 ug/L	97
134) p-diethylbenzene	17.001	119	325874	96.75 ug/L	99
135) 1,2-dichlorobenzene	17.184	146	315565	105.48 ug/L	98
136) n-butylbenzene	17.037	92	272096	99.18 ug/L	97
137) 1,2,4,5-tetramethylben...	17.864	119	492953	90.51 ug/L	98
138) 1,2-dibromo-3-chloropr...	18.005	75	27977	81.54 ug/L #	71
139) 1,3,5-trichlorobenzene	18.246	180	229099	100.91 ug/L	94
140) 1,2,4-trichlorobenzene	18.957	180	185592	98.03 ug/L	99
141) hexachlorobutadiene	19.103	225	94130	93.91 ug/L	94
142) naphthalene	19.265	128	361179	87.21 ug/L	100
144) 1,2,3-trichlorobenzene	19.543	180	142547	92.20 ug/L	98
145) hexachloroethane	17.498	119	109778	103.93 ug/L	96
146) Cyclohexane	10.160	84	199361	103.85 ug/L #	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200202.D
Acq On : 22 Feb 2013 1:50 pm
Operator : OksanaT
Sample : ic8801-100
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:46:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200203.D
Acq On : 22 Feb 2013 2:20 pm
Operator : OksanaT
Sample : ic8801-200
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 17:27:02 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 15:12:13 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.687	65	62656	500.00	ug/L	0.02
5) pentafluorobenzene	9.910	168	125621	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.825	114	178882	50.00	ug/L	0.00
97) chlorobenzene-d5	14.152	117	172789	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.725	152	96910	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.952	113	245623	197.82	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery	=	395.64%#	
61) 1,2-dichloroethane-d4 (s)	10.365	65	254956	185.51	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery	=	371.02%#	
89) toluene-d8 (s)	12.525	98	887260	184.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery	=	369.12%#	
116) 4-bromofluorobenzene (s)	15.423	95	365338	191.52	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery	=	383.04%#	

Target Compounds						Qvalue
2) 1,4-dioxane	11.542	88	62066	5739.56	ug/L	96
3) tertiary butyl alcohol	7.792	59	137871	924.81	ug/L #	39
11) chlorodifluoromethane	4.319	51	281688	196.10	ug/L	99
12) dichlorodifluoromethane	4.309	85	375648	201.84	ug/L	96
15) chloromethane	4.701	50	401702	193.38	ug/L	98
16) vinyl chloride	4.962	62	396352	191.33	ug/L	96
19) bromomethane	5.595	94	217372	176.97	ug/L	99
20) chloroethane	5.763	64	176524	182.19	ug/L	97
22) trichlorofluoromethane	6.280	101	398584	191.51	ug/L	99
23) pentane	6.348	43	496944	188.34	ug/L	99
24) ethyl ether	6.641	74	158302	190.11	ug/L	95
28) 2-chloropropane	6.840	43	482928	194.87	ug/L #	94
30) 1,1-dichloroethene	7.086	96	246919	193.40	ug/L	93
32) acetone	7.060	58	23898	211.16	ug/L #	81
33) allyl chloride	7.572	41	442947	192.65	ug/L	90
34) acetonitrile	7.452	40	111625	1482.26	ug/L	96
35) iodomethane	7.353	142	503535	197.85	ug/L	99
36) iso-butyl alcohol	10.224	74	22520	2043.03	ug/L	86
37) carbon disulfide	7.510	76	755231	173.44	ug/L	99
38) methylene chloride	7.750	84	280336	192.56	ug/L	96
39) 1-chloropropane	7.808	42	439924	187.45	ug/L	97
40) methyl acetate	7.541	43	214214	194.72	ug/L	99
41) methyl tert butyl ether	8.101	73	772743	189.42	ug/L	100
42) trans-1,2-dichloroethene	8.142	96	247777	188.03	ug/L	98
43) di-isopropyl ether	8.692	45	822186	185.81	ug/L	97
44) ethyl tert-butyl ether	9.152	59	863579	195.99	ug/L	97
45) 2-butanone	9.335	72	32102	219.28	ug/L #	93
46) 1,1-dichloroethane	8.681	63	448088	185.77	ug/L	99
47) chloroprene	8.807	53	340165	192.58	ug/L	99
48) acrylonitrile	8.012	53	522391	961.52	ug/L	98
49) vinyl acetate	8.650	86	44770	223.25	ug/L	82
50) ethyl acetate	9.371	45	38891	209.14	ug/L	86
51) 2,2-dichloropropane	9.429	77	339022	182.79	ug/L	98
52) cis-1,2-dichloroethene	9.403	96	271591	186.91	ug/L	99
53) methyl acrylate	9.455	55	245972	198.38	ug/L	100
54) propionitrile	9.392	54	397959	1909.98	ug/L	94
55) bromochloromethane	9.706	128	147123	200.32	ug/L	97
56) tetrahydrofuran	9.764	42	98137	192.89	ug/L	99
57) chloroform	9.758	83	431145	190.50	ug/L	99
58) t-butyl formate	9.806	59	250445	205.63	ug/L	98
59) Iso-octane	10.522	57	706889	195.24	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200203.D
Acq On : 22 Feb 2013 2:20 pm
Operator : OksanaT
Sample : ic8801-200
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 17:27:02 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 15:12:13 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
62) freon 113	7.065	151	188508	196.86 ug/L	97
63) methacrylonitrile	9.602	41	173359	204.10 ug/L	98
64) 1,1,1-trichloroethane	10.051	97	388833	196.92 ug/L	98
65) tert-amyl methyl ether	10.517	73	781459	190.08 ug/L	98
68) tert amyl alcohol	10.297	55	47412	858.40 ug/L	89
69) epichlorohydrin	12.065	57	142055	997.32 ug/L	95
70) n-butyl alcohol	10.899	56	393357	9671.82 ug/L	98
71) tert-amyl ethyl ether	11.359	87	406721	194.37 ug/L	98
72) carbon tetrachloride	10.271	117	343717	191.90 ug/L	99
73) 1,1-dichloropropene	10.229	75	336398	191.34 ug/L	95
74) hexane	8.472	57	265807	195.14 ug/L	99
75) benzene	10.480	78	963042	184.10 ug/L	100
76) heptane	10.679	57	145984	192.75 ug/L	99
77) isopropyl acetate	10.360	43	491296	190.26 ug/L	100
78) 1,2-dichloroethane	10.454	62	315792	186.46 ug/L	100
80) trichloroethene	11.192	95	258113	193.03 ug/L	97
82) 2-chloroethyl vinyl ether	11.955	63	837989	959.24 ug/L	98
83) methylcyclohexane	11.453	83	381312	188.27 ug/L	100
84) methyl methacrylate	11.427	69	257078	193.21 ug/L	89
85) 1,2-dichloropropane	11.432	63	260783	187.29 ug/L	98
86) dibromomethane	11.589	93	164519	199.22 ug/L	95
87) bromodichloromethane	11.720	83	348202	198.19 ug/L	100
88) cis-1,3-dichloropropene	12.196	75	447728	198.06 ug/L	98
90) 4-methyl-2-pentanone	12.274	58	111803	192.79 ug/L	93
91) toluene	12.604	92	623820	189.98 ug/L	97
92) 3-methyl-1-butanol	12.279	55	250604	3740.87 ug/L	98
93) trans-1,3-dichloropropene	12.771	75	394877	198.60 ug/L	99
94) ethyl methacrylate	12.771	69	350282	198.78 ug/L	99
95) 1,1,2-trichloroethane	13.001	83	203269	195.59 ug/L	99
96) 2-hexanone	13.179	58	107777	214.88 ug/L	95
98) cyclohexanone	15.349	55	88662	1800.24 ug/L	98
99) tetrachloroethene	13.252	166	295078	178.90 ug/L	97
100) 1,3-dichloropropane	13.200	76	401150	181.78 ug/L	99
101) butyl acetate	13.268	56	177672	194.71 ug/L	96
102) 3,3-dimethyl-1-butanol	13.362	57	268060	1750.65 ug/L	99
103) dibromochloromethane	13.498	129	305508	194.02 ug/L	99
104) 1,2-dibromoethane	13.665	107	264305	189.79 ug/L	99
106) chlorobenzene	14.188	112	737606	185.35 ug/L	98
107) 1,1,1,2-tetrachloroethane	14.246	131	277315	185.40 ug/L	97
108) ethylbenzene	14.251	91	1133822	177.67 ug/L	98
109) m,p-xylene	14.366	106	926012	366.49 ug/L	94
110) o-xylene	14.826	106	484187	186.70 ug/L	96
112) styrene	14.832	104	800996	188.14 ug/L	100
113) bromoform	15.109	173	245046	203.80 ug/L	100
115) isopropylbenzene	15.208	105	1216454	185.40 ug/L	97
117) bromobenzene	15.648	156	344515	185.41 ug/L	94
118) 1,1,2,2-tetrachloroethane	15.501	83	343753	188.30 ug/L	98
119) trans-1,4-dichloro-2-b...	15.548	53	93595	216.03 ug/L	96
120) 1,2,3-trichloropropane	15.585	110	92261	192.75 ug/L	96
121) n-propylbenzene	15.658	91	1323056	182.30 ug/L	98
122) p-ethyltoluene	15.773	105	1184273	188.43 ug/L	98
123) 2-chlorotoluene	15.825	126	301999	188.63 ug/L	100
124) 4-chlorotoluene	15.930	91	880867	189.04 ug/L	99
125) 1,3,5-trimethylbenzene	15.825	105	968062	178.26 ug/L	98
126) tert-butylbenzene	16.218	119	904265	187.96 ug/L	99
127) pentachloroethane	16.301	167	229720	191.90 ug/L	97
128) 1,2,4-trimethylbenzene	16.265	105	1009461	184.20 ug/L	100
129) sec-butylbenzene	16.458	105	1253475	185.32 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200203.D
Acq On : 22 Feb 2013 2:20 pm
Operator : OksanaT
Sample : ic8801-200
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 17:27:02 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 15:12:13 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
130) 1,3-dichlorobenzene	16.662	146	628548	190.25 ug/L	99
131) p-isopropyltoluene	16.584	119	1054374	184.68 ug/L	99
132) 1,4-dichlorobenzene	16.751	146	642779	190.84 ug/L	99
133) benzyl chloride	16.861	91	644387	209.51 ug/L	99
134) p-diethylbenzene	17.002	119	627806	187.88 ug/L	98
135) 1,2-dichlorobenzene	17.185	146	612016	187.79 ug/L	97
136) n-butylbenzene	17.039	92	520719	190.18 ug/L	96
137) 1,2,4,5-tetramethylben...	17.865	119	903438	168.62 ug/L	98
138) 1,2-dibromo-3-chloropr...	18.001	75	54269	186.43 ug/L	97
139) 1,3,5-trichlorobenzene	18.247	180	417698	173.82 ug/L	99
140) 1,2,4-trichlorobenzene	18.958	180	346864	190.34 ug/L	99
141) hexachlorobutadiene	19.105	225	164760	154.01 ug/L	99
142) naphthalene	19.267	128	700261	191.87 ug/L	100
144) 1,2,3-trichlorobenzene	19.544	180	267524	183.79 ug/L	96
145) hexachloroethane	17.499	119	211257	192.73 ug/L	98
146) Cyclohexane	10.161	84	390885	183.88 ug/L #	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

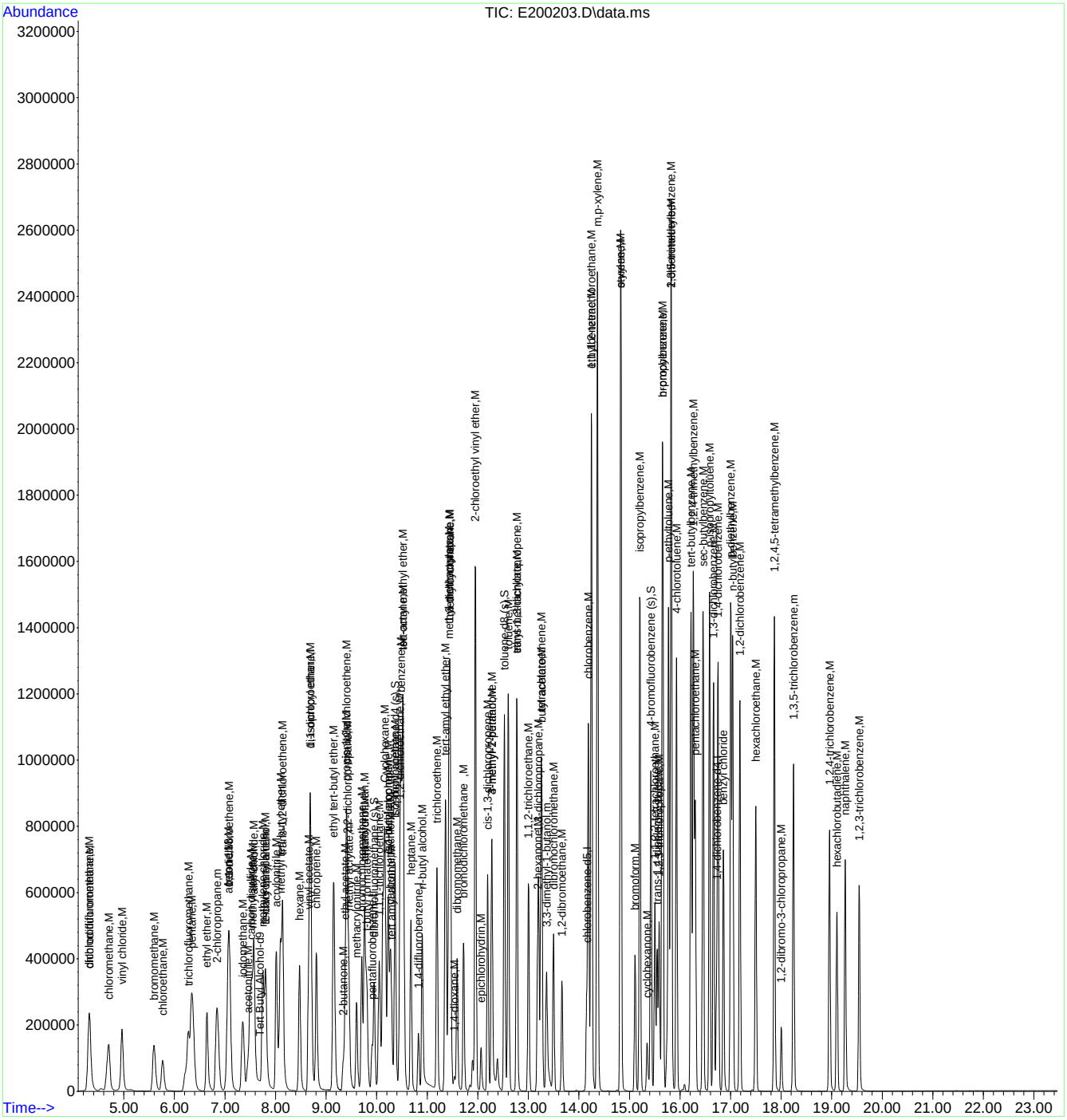
7.6.17

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200203.D
Acq On : 22 Feb 2013 2:20 pm
Operator : OksanaT
Sample : ic8801-200
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 17:27:02 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 15:12:13 2013
Response via : Initial Calibration



E200206.D

Manual Integrations APPROVED (compounds with "m" flag)

Kanya Veerawat 03/01/13 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200206.D
Acq On : 22 Feb 2013 3:50 pm
Operator : OksanaT
Sample : ic8801-1
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 25 09:50:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.681	65	73733	500.00	ug/L	0.00
5) pentafluorobenzene	9.909	168	139595	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.825	114	189305	50.00	ug/L	0.00
97) chlorobenzene-d5	14.151	117	173543	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.724	152	94134	50.00	ug/L	0.00
System Monitoring Compounds						
60) dibromofluoromethane (s)	9.956	113	1033	0.80	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery	=	1.60%#	
61) 1,2-dichloroethane-d4 (s)	10.380	65	1143	0.69	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery	=	1.38%#	
89) toluene-d8 (s)	12.530	98	4232	0.90	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery	=	1.80%#	
116) 4-bromofluorobenzene (s)	15.427	95	1498	0.76	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery	=	1.52%#	

Target Compounds						Qvalue
11) chlorodifluoromethane	4.329	51	1163	0.62	ug/L	63
12) dichlorodifluoromethane	4.324	85	2190	0.87	ug/L	86
15) chloromethane	4.648	50	2481	0.96	ug/L	92
16) vinyl chloride	4.909	62	2503	1.09	ug/L	94
19) bromomethane	5.600	94	1748	1.28	ug/L	75
20) chloroethane	5.778	64	1073	1.00	ug/L #	43
22) trichlorofluoromethane	6.274	101	2467	1.03	ug/L	84
23) pentane	6.348	43	3080	1.07	ug/L #	72
24) ethyl ether	6.656	74	863	0.88	ug/L #	72
28) 2-chloropropane	6.845	43	2253	0.79	ug/L #	1
29) acrolein	6.850	56	323320	898.94	ug/L	98
30) 1,1-dichloroethene	7.075	96	962m	0.71	ug/L	
33) allyl chloride	7.571	41	2437	0.83	ug/L	96
35) iodomethane	7.357	142	2192	0.86	ug/L	90
37) carbon disulfide	7.514	76	4022	0.84	ug/L	84
38) methylene chloride	7.755	84	2252	1.39	ug/L	80
39) 1-chloropropane	7.812	42	2337	0.73	ug/L #	91
40) methyl acetate	7.556	43	1083	0.75	ug/L #	64
41) methyl tert butyl ether	8.100	73	4023	0.82	ug/L	87
42) trans-1,2-dichloroethene	8.147	96	1131	0.79	ug/L	72
43) di-isopropyl ether	8.696	45	4969	0.94	ug/L #	67
44) ethyl tert-butyl ether	9.151	59	4980	0.97	ug/L	95
46) 1,1-dichloroethane	8.685	63	2213	0.81	ug/L	88
47) chloroprene	8.816	53	1696	0.73	ug/L	90
48) acrylonitrile	8.037	53	2226	3.19	ug/L	93
51) 2,2-dichloropropane	9.439	77	1749	0.85	ug/L	78
52) cis-1,2-dichloroethene	9.412	96	1313	0.84	ug/L	88
54) propionitrile	9.418	54	1689	6.41	ug/L #	51
57) chloroform	9.763	83	2207	0.80	ug/L	91
58) t-butyl formate	9.810	59	1238	0.80	ug/L #	81
59) Iso-octane	10.516	57	3943	0.76	ug/L	93
64) 1,1,1-trichloroethane	10.061	97	1688	0.76	ug/L	88
65) tert-amyl methyl ether	10.521	73	5124	1.10	ug/L	99
70) n-butyl alcohol	10.929	56	2528	50.35	ug/L	98
71) tert-amyl ethyl ether	11.358	87	2196	0.99	ug/L #	95
72) carbon tetrachloride	10.275	117	1516	0.87	ug/L	94
73) 1,1-dichloropropene	10.228	75	1530	0.86	ug/L	87
75) benzene	10.479	78	5153	0.94	ug/L	99
76) heptane	10.683	57	690	0.71	ug/L #	79
77) isopropyl acetate	10.375	43	3043	0.99	ug/L	89
78) 1,2-dichloroethane	10.459	62	1434	0.75	ug/L	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200206.D
Acq On : 22 Feb 2013 3:50 pm
Operator : OksanaT
Sample : ic8801-1
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 25 09:50:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) trichloroethene	11.201	95	1071	0.79 ug/L	94
82) 2-chloroethyl vinyl ether	11.965	63	4633	4.93 ug/L	98
83) methylcyclohexane	11.452	83	2053	0.90 ug/L	97
84) methyl methacrylate	11.447	69	1060	0.68 ug/L #	67
85) 1,2-dichloropropane	11.437	63	1189	0.80 ug/L	80
86) dibromomethane	11.599	93	568	0.64 ug/L	81
87) bromodichloromethane	11.719	83	1626	0.79 ug/L	93
88) cis-1,3-dichloropropene	12.200	75	1866	0.77 ug/L	92
91) toluene	12.613	92	2888	0.88 ug/L	99
92) 3-methyl-1-butanol	12.294	55	1888	23.02 ug/L	98
93) trans-1,3-dichloropropene	12.786	75	1535	0.72 ug/L	89
94) ethyl methacrylate	12.796	69	1377	0.68 ug/L	85
95) 1,1,2-trichloroethane	13.011	83	829	0.67 ug/L	86
99) tetrachloroethene	13.257	166	1363	0.96 ug/L	91
100) 1,3-dichloropropane	13.215	76	1970	0.89 ug/L	92
101) butyl acetate	13.288	56	911	0.88 ug/L #	63
103) dibromochloromethane	13.508	129	1296	0.85 ug/L	90
104) 1,2-dibromoethane	13.680	107	1078	0.79 ug/L	88
106) chlorobenzene	14.193	112	3612	1.03 ug/L	94
107) 1,1,1,2-tetrachloroethane	14.245	131	1223	0.93 ug/L #	81
108) ethylbenzene	14.256	91	5516	0.91 ug/L	97
109) m,p-xylene	14.371	106	4346	1.87 ug/L	96
110) o-xylene	14.831	106	2006	0.82 ug/L	93
112) styrene	14.847	104	3030	0.74 ug/L	88
113) bromoform	15.119	173	896	0.83 ug/L	86
115) isopropylbenzene	15.207	105	5581	0.88 ug/L	99
117) bromobenzene	15.652	156	1552	0.98 ug/L	89
118) 1,1,2,2-tetrachloroethane	15.506	83	1601	0.84 ug/L	95
121) n-propylbenzene	15.662	91	6470	0.93 ug/L	99
122) p-ethyltoluene	15.778	105	6763	1.08 ug/L	98
123) 2-chlorotoluene	15.830	126	1427	1.02 ug/L	94
124) 4-chlorotoluene	15.940	91	4150	0.88 ug/L	97
125) 1,3,5-trimethylbenzene	15.825	105	5387	1.00 ug/L	99
126) tert-butylbenzene	16.217	119	4366	0.96 ug/L	98
127) pentachloroethane	16.306	167	1009	0.98 ug/L	95
128) 1,2,4-trimethylbenzene	16.269	105	4963	0.92 ug/L	96
129) sec-butylbenzene	16.457	105	6083	0.91 ug/L	99
130) 1,3-dichlorobenzene	16.672	146	2982	0.99 ug/L	90
131) p-isopropyltoluene	16.588	119	4869	0.89 ug/L	95
132) 1,4-dichlorobenzene	16.756	146	2908	1.00 ug/L	98
133) benzyl chloride	16.871	91	3563	1.15 ug/L	99
134) p-diethylbenzene	17.012	119	3009	0.91 ug/L	94
135) 1,2-dichlorobenzene	17.190	146	2788	0.95 ug/L	92
136) n-butylbenzene	17.054	92	2007	0.75 ug/L	97
137) 1,2,4,5-tetramethylben...	17.870	119	5222	0.98 ug/L	95
139) 1,3,5-trichlorobenzene	18.257	180	1892	0.85 ug/L #	78
141) hexachlorobutadiene	19.114	225	1092	1.11 ug/L	84
145) hexachloroethane	17.498	119	810	0.78 ug/L	96
146) Cyclohexane	10.160	84	1723	0.92 ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

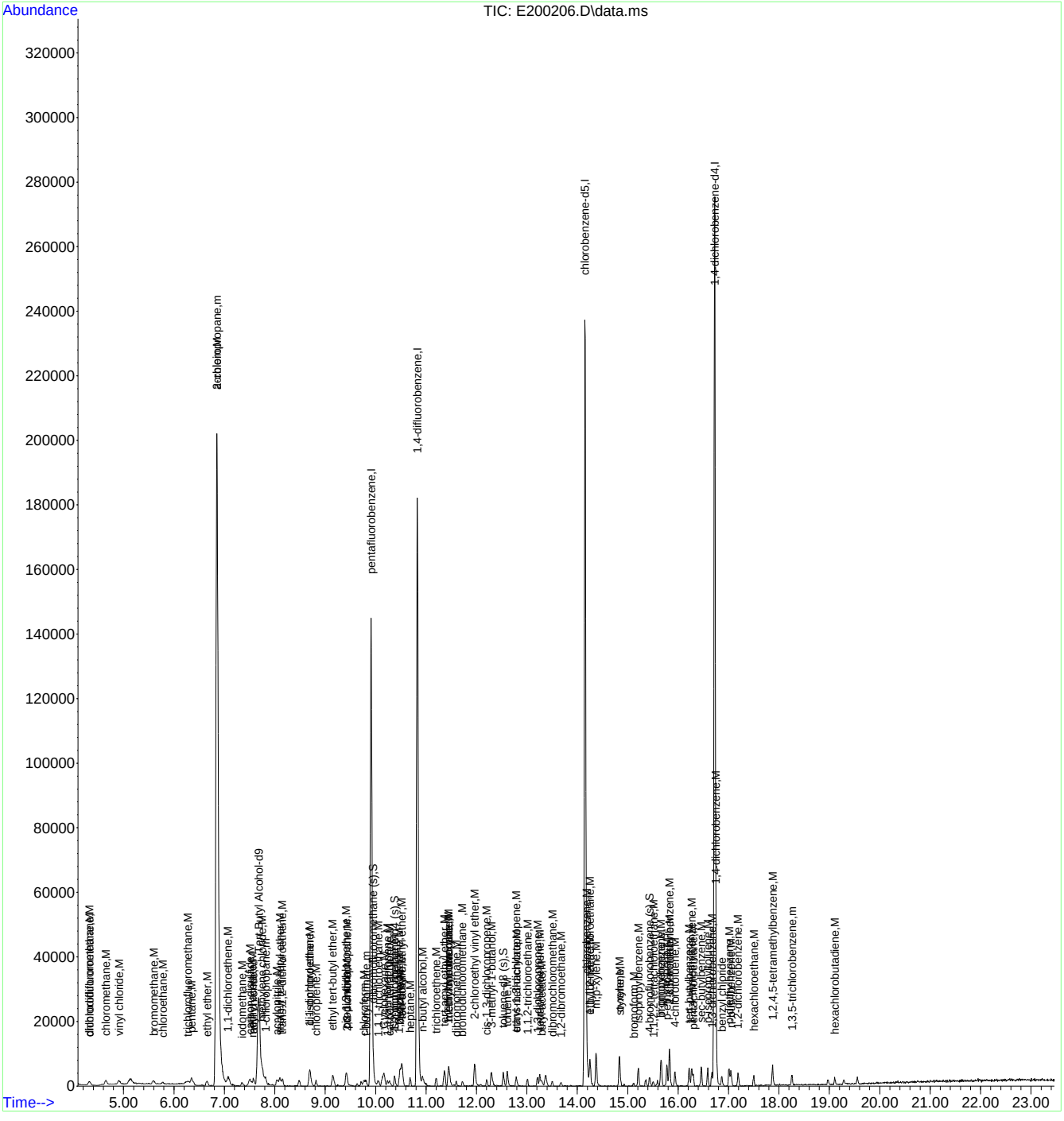
7.6.18

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200206.D
Acq On : 22 Feb 2013 3:50 pm
Operator : OksanaT
Sample : ic8801-1
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 25 09:50:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration



Manual Integration Approval Summary

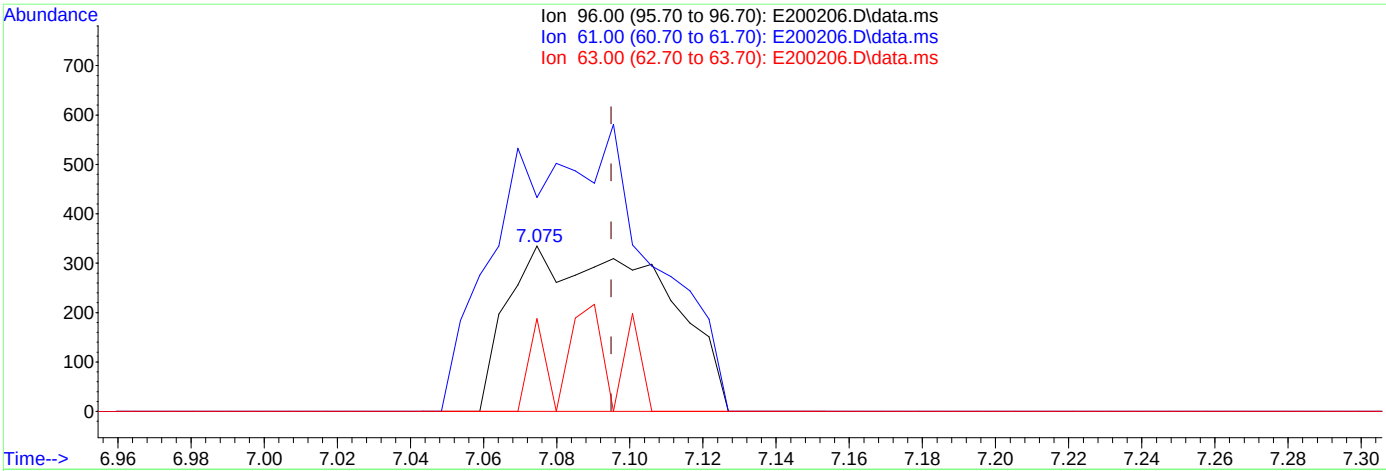
Sample Number:	VE8801-IC8801	**Method:**	SW846 8260B
Lab FileID:	E200206.D	**Analyst approved:**	02/25/13 10:03 Ying Li
Injection Time:	02/22/13 15:50	**Supervisor approved:**	03/01/13 15:48 Kanya Veerawat

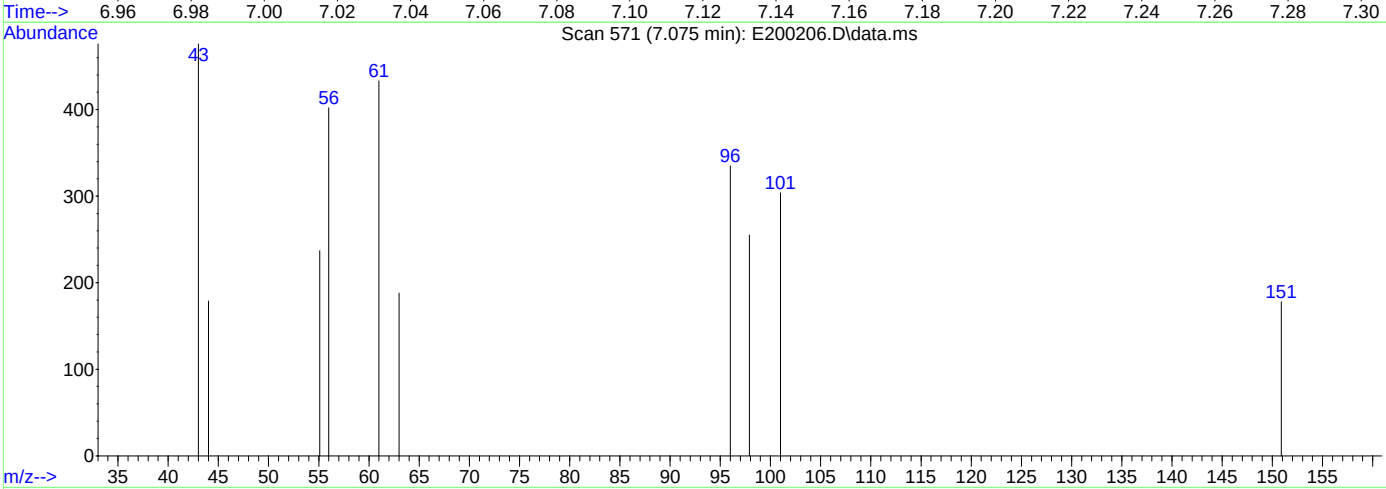
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,1-Dichloroethene	75-35-4		7.07	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200206.D
Acq On : 22 Feb 2013 3:50 pm
Operator : OksanaT
Sample : ic8801-1
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 22 17:01:03 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration





TIC: E200206.D\data.ms

(30) 1,1-dichloroethene (M)

7.075min (-0.020) 0.71ug/L m

response 962

Ion	Exp%	Act%
96.00	100	100
61.00	172.20	129.25#
63.00	55.00	56.12
0.00	0.00	0.00

Manual Integrations
APPROVED
(compounds with "m" flag)
Kanya Veerawat
03/01/13 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200207.D
Acq On : 22 Feb 2013 4:19 pm
Operator : OksanaT
Sample : ic8801-0.5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 25 09:53:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.677	65	76628	500.00 ug/L	0.00
5) pentafluorobenzene	9.910	168	138905	50.00 ug/L	0.00
66) 1,4-difluorobenzene	10.825	114	189780	50.00 ug/L	0.00
97) chlorobenzene-d5	14.151	117	172067	50.00 ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.725	152	93933	50.00 ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	0.000	113	0d	0.00 ug/L	
Spiked Amount 50.000	Range 81 - 121		Recovery	= 0.00%#	
61) 1,2-dichloroethane-d4 (s)	0.000	65	0d	0.00 ug/L	
Spiked Amount 50.000	Range 74 - 127		Recovery	= 0.00%#	
89) toluene-d8 (s)	12.535	98	2052	0.43 ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery	= 0.86%#	
116) 4-bromofluorobenzene (s)	15.433	95	680	0.35 ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery	= 0.70%#	

Target Compounds					Qvalue
19) bromomethane	5.595	94	685	0.50 ug/L #	11
24) ethyl ether	6.646	74	389	0.40 ug/L	87
37) carbon disulfide	7.504	76	1776	0.37 ug/L	56
39) 1-chloropropane	7.807	42	1374	0.43 ug/L #	72
41) methyl tert butyl ether	8.116	73	1623m	0.33 ug/L	
42) trans-1,2-dichloroethene	8.163	96	473	0.33 ug/L #	44
43) di-isopropyl ether	8.691	45	2693	0.51 ug/L	86
44) ethyl tert-butyl ether	9.157	59	2560	0.50 ug/L	93
46) 1,1-dichloroethane	8.686	63	857	0.31 ug/L #	49
57) chloroform	9.758	83	875	0.32 ug/L	68
65) tert-amyl methyl ether	10.522	73	2570	0.56 ug/L	95
71) tert-amyl ethyl ether	11.364	87	723	0.32 ug/L #	81
72) carbon tetrachloride	10.276	117	639	0.37 ug/L #	60
75) benzene	10.485	78	2244	0.41 ug/L	83
83) methylcyclohexane	11.458	83	901	0.40 ug/L	86
91) toluene	12.614	92	1136	0.35 ug/L	96
100) 1,3-dichloropropane	13.205	76	781	0.36 ug/L #	50
106) chlorobenzene	14.188	112	1394	0.40 ug/L	90
107) 1,1,1,2-tetrachloroethane	14.246	131	494	0.38 ug/L	74
108) ethylbenzene	14.256	91	2443	0.41 ug/L	82
109) m,p-xylene	14.376	106	1781	0.77 ug/L #	77
110) o-xylene	14.831	106	957	0.39 ug/L #	80
115) isopropylbenzene	15.208	105	2541	0.40 ug/L	98
117) bromobenzene	15.663	156	604	0.38 ug/L	87
118) 1,1,2,2-tetrachloroethane	15.506	83	743	0.39 ug/L	82
121) n-propylbenzene	15.673	91	2847	0.41 ug/L	93
122) p-ethyltoluene	15.778	105	2355	0.38 ug/L	89
123) 2-chlorotoluene	15.836	126	618	0.44 ug/L #	21
124) 4-chlorotoluene	15.940	91	1998	0.43 ug/L	81
125) 1,3,5-trimethylbenzene	15.825	105	2374	0.44 ug/L	83
126) tert-butylbenzene	16.223	119	1715	0.38 ug/L	98
127) pentachloroethane	16.301	167	461	0.45 ug/L #	68
128) 1,2,4-trimethylbenzene	16.270	105	2276	0.42 ug/L	92
129) sec-butylbenzene	16.458	105	2712	0.41 ug/L	95
130) 1,3-dichlorobenzene	16.667	146	1387	0.46 ug/L	88
131) p-isopropyltoluene	16.594	119	2163	0.40 ug/L	89
132) 1,4-dichlorobenzene	16.756	146	1364	0.47 ug/L	86
133) benzyl chloride	16.871	91	1788	0.58 ug/L #	83
134) p-diethylbenzene	17.007	119	1119	0.34 ug/L	87
135) 1,2-dichlorobenzene	17.190	146	1261	0.43 ug/L	98
141) hexachlorobutadiene	19.104	225	417	0.43 ug/L	46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200207.D
Acq On : 22 Feb 2013 4:19 pm
Operator : OksanaT
Sample : ic8801-0.5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 25 09:53:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

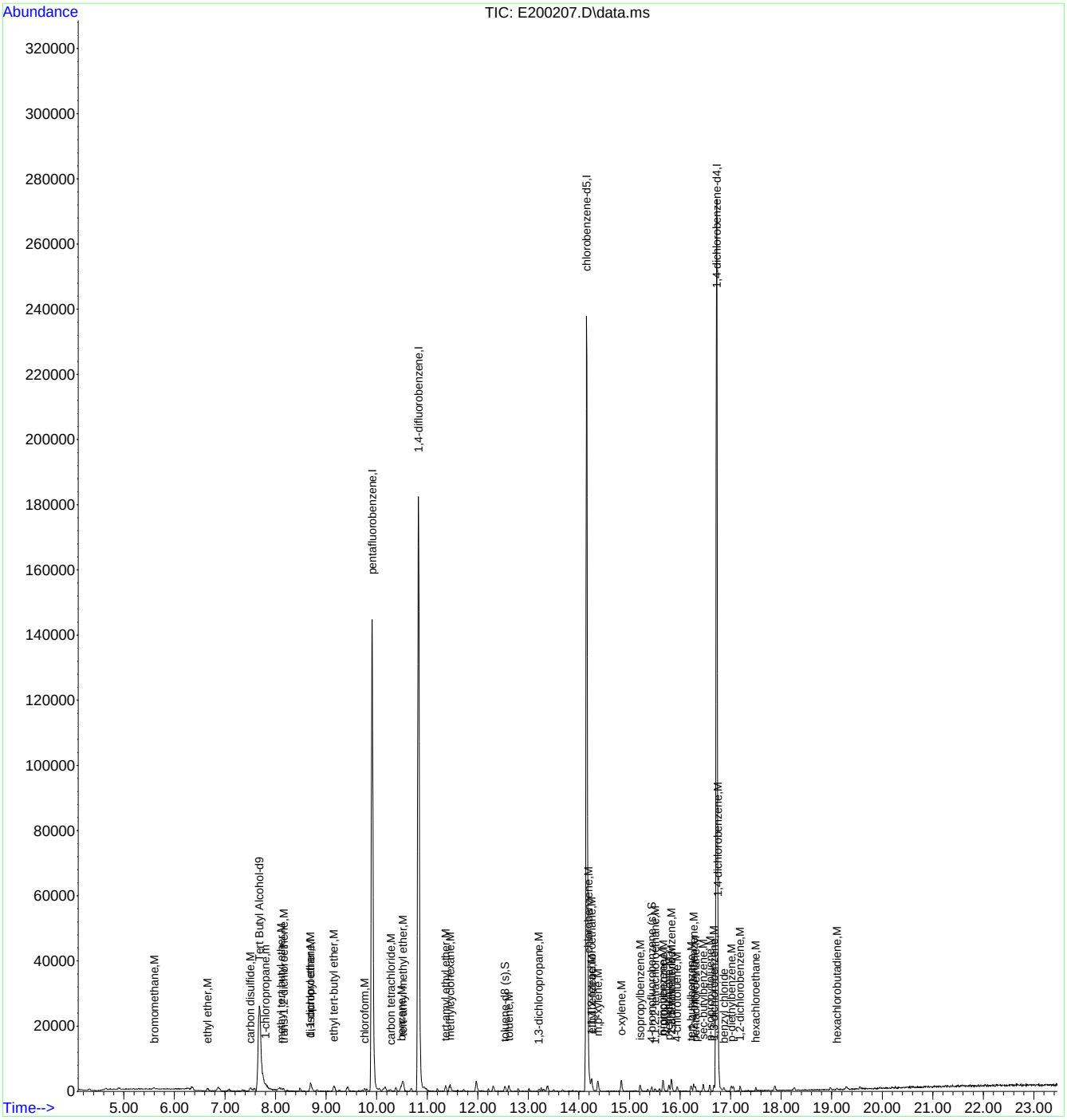
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
145) hexachloroethane	17.494	119	311	0.30	ug/L #	21

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200207.D
Acq On : 22 Feb 2013 4:19 pm
Operator : OksanaT
Sample : ic8801-0.5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 25 09:53:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration



Manual Integration Approval Summary

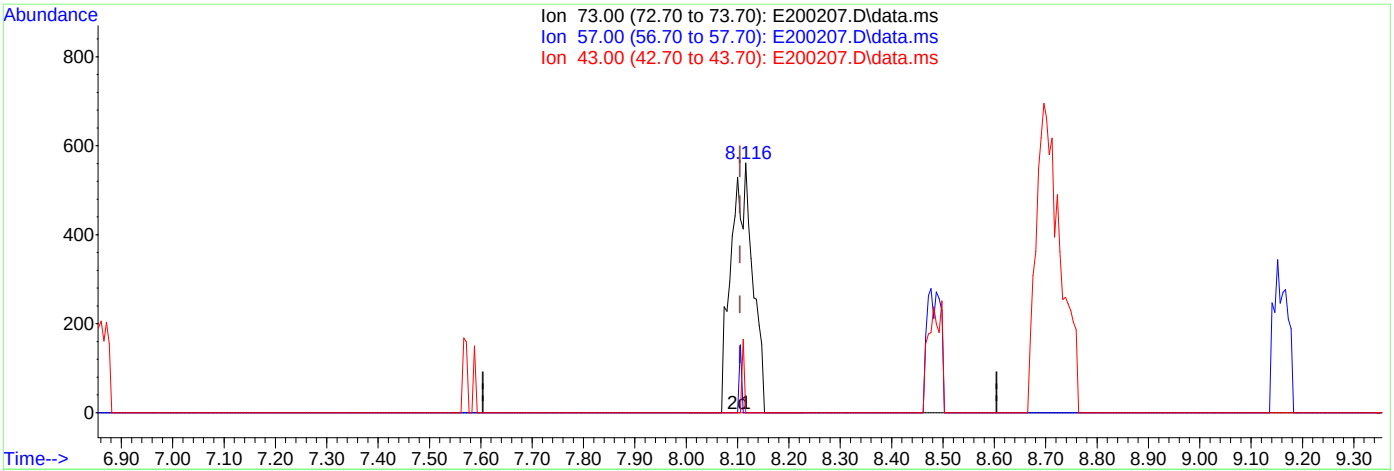
Sample Number:	VE8801-IC8801	**Method:**	SW846 8260B
Lab FileID:	E200207.D	**Analyst approved:**	02/25/13 10:03 Ying Li
Injection Time:	02/22/13 16:19	**Supervisor approved:**	03/01/13 15:48 Kanya Veerawat

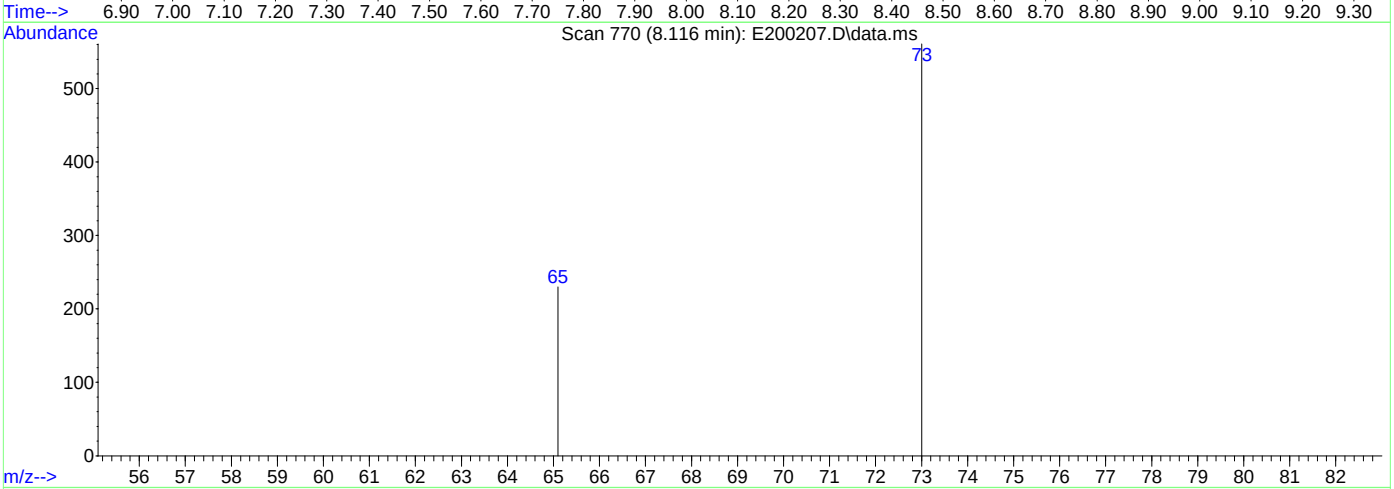
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl Tert Butyl Ether	1634-04-4		8.12	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200207.D
Acq On : 22 Feb 2013 4:19 pm
Operator : OksanaT
Sample : ic8801-0.5
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 17:34:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration





TIC: E200207.D\data.ms

(41) methyl tert butyl ether (M)

8.116min (+0.012) 0.33ug/L m

response 1623

Ion	Exp%	Act%
73.00	100	100
57.00	23.40	2.96
43.00	20.80	3.20
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat
03/01/13 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200208.D
Acq On : 22 Feb 2013 4:49 pm
Operator : OksanaT
Sample : ic8801-2
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 25 09:56:29 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.682	65	72488	500.00	ug/L	0.00
5) pentafluorobenzene	9.910	168	136181	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.825	114	188072	50.00	ug/L	0.00
97) chlorobenzene-d5	14.152	117	169997	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.725	152	96520	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.957	113	2306	1.84	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery	=	3.68%#	
61) 1,2-dichloroethane-d4 (s)	10.375	65	2586	1.59	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery	=	3.18%#	
89) toluene-d8 (s)	12.530	98	9298	1.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery	=	3.96%#	
116) 4-bromofluorobenzene (s)	15.428	95	3344	1.66	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery	=	3.32%#	

Target Compounds						Qvalue
3) tertiary butyl alcohol	7.802	59	1702	10.36	ug/L	81
11) chlorodifluoromethane	4.324	51	2344	1.28	ug/L	70
12) dichlorodifluoromethane	4.309	85	3409	1.39	ug/L	86
15) chloromethane	4.648	50	3943	1.56	ug/L	91
16) vinyl chloride	4.900	62	4063	1.81	ug/L	93
19) bromomethane	5.590	94	2535	1.90	ug/L	91
20) chloroethane	5.789	64	1785	1.71	ug/L #	67
22) trichlorofluoromethane	6.270	101	3749	1.60	ug/L	93
23) pentane	6.354	43	5536	1.97	ug/L #	77
24) ethyl ether	6.657	74	1535	1.61	ug/L #	78
28) 2-chloropropane	6.835	43	4691	1.69	ug/L #	1
29) acrolein	6.850	56	621954	1772.59	ug/L	99
30) 1,1-dichloroethene	7.096	96	2367	1.80	ug/L	82
33) allyl chloride	7.583	41	5318	1.86	ug/L	98
34) acetonitrile	7.488	40	1937m	18.97	ug/L	
35) iodomethane	7.352	142	4694	1.89	ug/L	89
37) carbon disulfide	7.509	76	8360	1.79	ug/L	91
38) methylene chloride	7.755	84	3604	2.29	ug/L	94
39) 1-chloropropane	7.807	42	4999	1.61	ug/L #	94
40) methyl acetate	7.556	43	1988	1.42	ug/L #	69
41) methyl tert butyl ether	8.106	73	7940	1.65	ug/L	95
42) trans-1,2-dichloroethene	8.153	96	2475	1.78	ug/L	93
43) di-isopropyl ether	8.697	45	9361	1.81	ug/L	83
44) ethyl tert-butyl ether	9.157	59	9302	1.85	ug/L	95
46) 1,1-dichloroethane	8.686	63	4693	1.75	ug/L	96
47) chloroprene	8.817	53	3027	1.34	ug/L	93
48) acrylonitrile	8.043	53	5167	7.58	ug/L	82
51) 2,2-dichloropropane	9.439	77	3826	1.91	ug/L	89
52) cis-1,2-dichloroethene	9.413	96	2825	1.85	ug/L	93
54) propionitrile	9.424	54	3910	15.21	ug/L	75
55) bromochloromethane	9.711	128	1304	1.82	ug/L	97
56) tetrahydrofuran	9.779	42	977	1.48	ug/L #	64
57) chloroform	9.758	83	4377	1.63	ug/L	98
58) t-butyl formate	9.805	59	2301	1.53	ug/L #	32
59) Iso-octane	10.522	57	6948	1.38	ug/L	95
62) freon 113	7.054	151	1486m	1.48	ug/L	
63) methacrylonitrile	9.633	41	1547	1.46	ug/L	85
64) 1,1,1-trichloroethane	10.056	97	3708	1.70	ug/L	95
65) tert-amyl methyl ether	10.517	73	8864	1.95	ug/L	96
68) tert amyl alcohol	10.313	55	444	5.87	ug/L	87
69) epichlorohydrin	12.081	57	1366	7.27	ug/L	55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200208.D
Acq On : 22 Feb 2013 4:49 pm
Operator : OksanaT
Sample : ic8801-2
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 25 09:56:29 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
70) n-butyl alcohol	10.919	56	3444	69.04 ug/L	95
71) tert-amyl ethyl ether	11.364	87	3710	1.68 ug/L #	95
72) carbon tetrachloride	10.281	117	3269	1.89 ug/L	90
73) 1,1-dichloropropene	10.224	75	3388	1.91 ug/L	89
74) hexane	8.482	57	2266	1.13 ug/L	93
75) benzene	10.480	78	10584	1.95 ug/L	92
76) heptane	10.689	57	1273	1.32 ug/L	85
77) isopropyl acetate	10.375	43	5248	1.72 ug/L	95
78) 1,2-dichloroethane	10.464	62	3265	1.71 ug/L	95
79) ethyl acrylate	11.369	55	1102	0.53 ug/L #	75
80) trichloroethene	11.202	95	2451	1.81 ug/L	97
82) 2-chloroethyl vinyl ether	11.960	63	8427	9.03 ug/L	96
83) methylcyclohexane	11.458	83	3755	1.66 ug/L	93
84) methyl methacrylate	11.453	69	2265	1.46 ug/L #	77
85) 1,2-dichloropropane	11.442	63	2781	1.88 ug/L	93
86) dibromomethane	11.599	93	1573	1.77 ug/L	92
87) bromodichloromethane	11.725	83	3260	1.59 ug/L	91
88) cis-1,3-dichloropropene	12.201	75	4045	1.68 ug/L	96
90) 4-methyl-2-pentanone	12.284	58	1143	1.76 ug/L	92
91) toluene	12.609	92	6221	1.91 ug/L	98
92) 3-methyl-1-butanol	12.295	55	2659	32.63 ug/L	96
93) trans-1,3-dichloropropene	12.787	75	3576	1.68 ug/L	89
94) ethyl methacrylate	12.787	69	2950	1.46 ug/L	96
95) 1,1,2-trichloroethane	13.006	83	1890	1.54 ug/L	85
99) tetrachloroethene	13.257	166	3340	2.41 ug/L	85
100) 1,3-dichloropropane	13.205	76	4102	1.89 ug/L	92
101) butyl acetate	13.294	56	1586	1.57 ug/L #	78
102) 3,3-dimethyl-1-butanol	13.367	57	3063	16.29 ug/L	96
103) dibromochloromethane	13.503	129	2685	1.80 ug/L	95
104) 1,2-dibromoethane	13.670	107	2583	1.94 ug/L	91
106) chlorobenzene	14.188	112	7402	2.15 ug/L	87
107) 1,1,1,2-tetrachloroethane	14.251	131	2698	2.09 ug/L	94
108) ethylbenzene	14.251	91	11853	1.99 ug/L	97
109) m,p-xylene	14.371	106	9113	4.00 ug/L	97
110) o-xylene	14.832	106	4768	1.99 ug/L	99
112) styrene	14.842	104	7376	1.85 ug/L	90
113) bromoform	15.119	173	2042	1.93 ug/L	94
115) isopropylbenzene	15.208	105	12405	1.90 ug/L	98
117) bromobenzene	15.653	156	3399	2.09 ug/L	93
118) 1,1,2,2-tetrachloroethane	15.506	83	3459	1.78 ug/L	93
119) trans-1,4-dichloro-2-b...	15.559	53	588	1.06 ug/L	87
120) 1,2,3-trichloropropane	15.595	110	776	1.68 ug/L	85
121) n-propylbenzene	15.663	91	14017	1.96 ug/L	98
122) p-ethyltoluene	15.778	105	10421	1.63 ug/L	98
123) 2-chlorotoluene	15.825	126	3122	2.17 ug/L #	82
124) 4-chlorotoluene	15.935	91	9048	1.87 ug/L	97
125) 1,3,5-trimethylbenzene	15.825	105	10705	1.95 ug/L	98
126) tert-butylbenzene	16.218	119	8743	1.87 ug/L	97
127) pentachloroethane	16.301	167	2123	2.00 ug/L	94
128) 1,2,4-trimethylbenzene	16.270	105	10007	1.80 ug/L	91
129) sec-butylbenzene	16.458	105	12612	1.85 ug/L	99
130) 1,3-dichlorobenzene	16.667	146	6116	1.98 ug/L	98
131) p-isopropyltoluene	16.584	119	10153	1.81 ug/L	96
132) 1,4-dichlorobenzene	16.756	146	6360	2.14 ug/L	95
133) benzyl chloride	16.866	91	5595	1.77 ug/L	98
134) p-diethylbenzene	17.007	119	5009	1.48 ug/L	97
135) 1,2-dichlorobenzene	17.185	146	5676	1.89 ug/L	95
136) n-butylbenzene	17.044	92	4564	1.65 ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200208.D
Acq On : 22 Feb 2013 4:49 pm
Operator : OksanaT
Sample : ic8801-2
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 25 09:56:29 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
137) 1,2,4,5-tetramethylben...	17.870	119	7784	1.42 ug/L	99
139) 1,3,5-trichlorobenzene	18.247	180	3709	1.63 ug/L	93
141) hexachlorobutadiene	19.105	225	2083	2.07 ug/L	99
145) hexachloroethane	17.494	119	1842	1.73 ug/L	96
146) Cyclohexane	10.161	84	3891	2.02 ug/L #	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

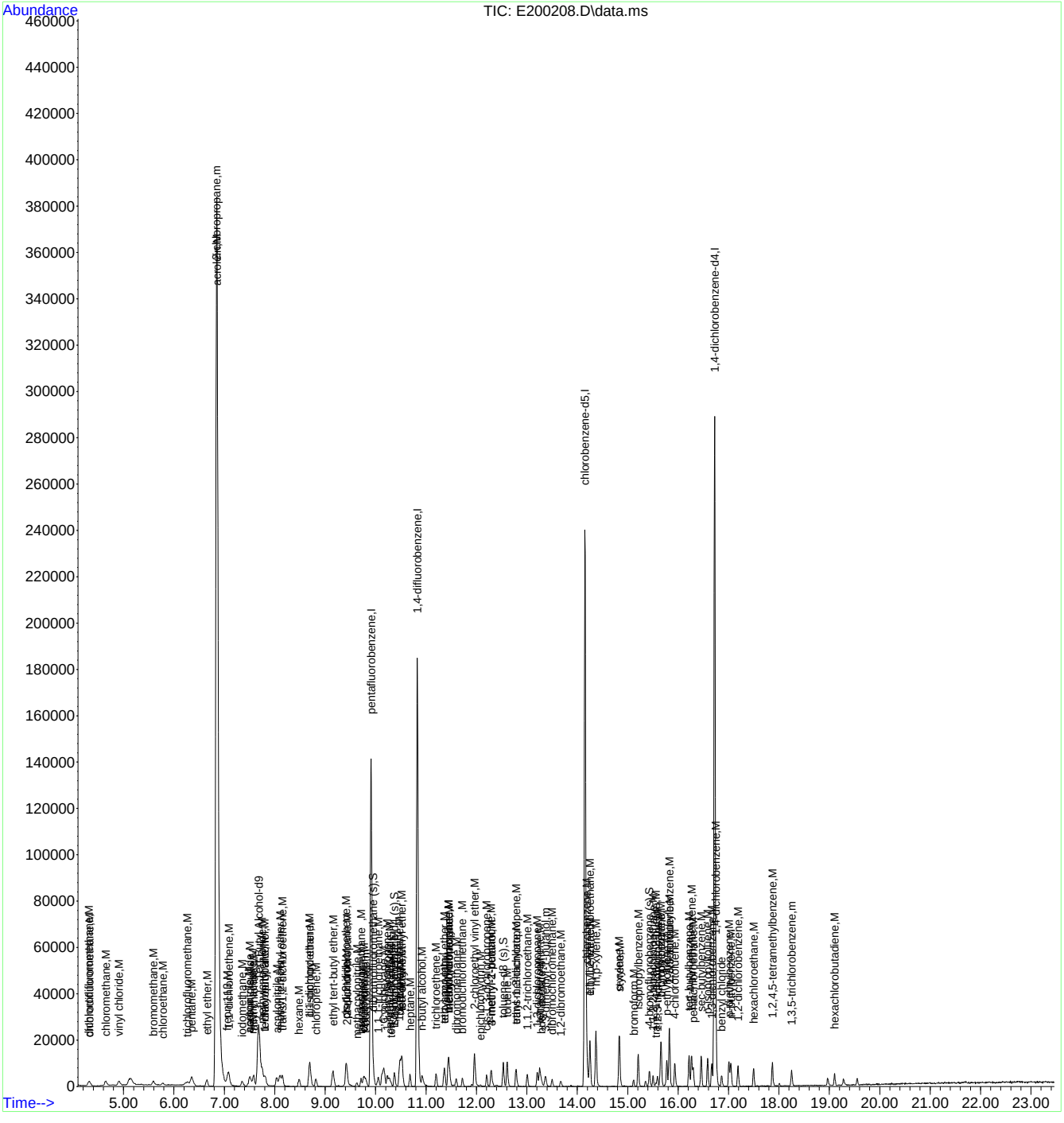
7.6.20

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200208.D
Acq On : 22 Feb 2013 4:49 pm
Operator : OksanaT
Sample : ic8801-2
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 25 09:56:29 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration



Manual Integration Approval Summary

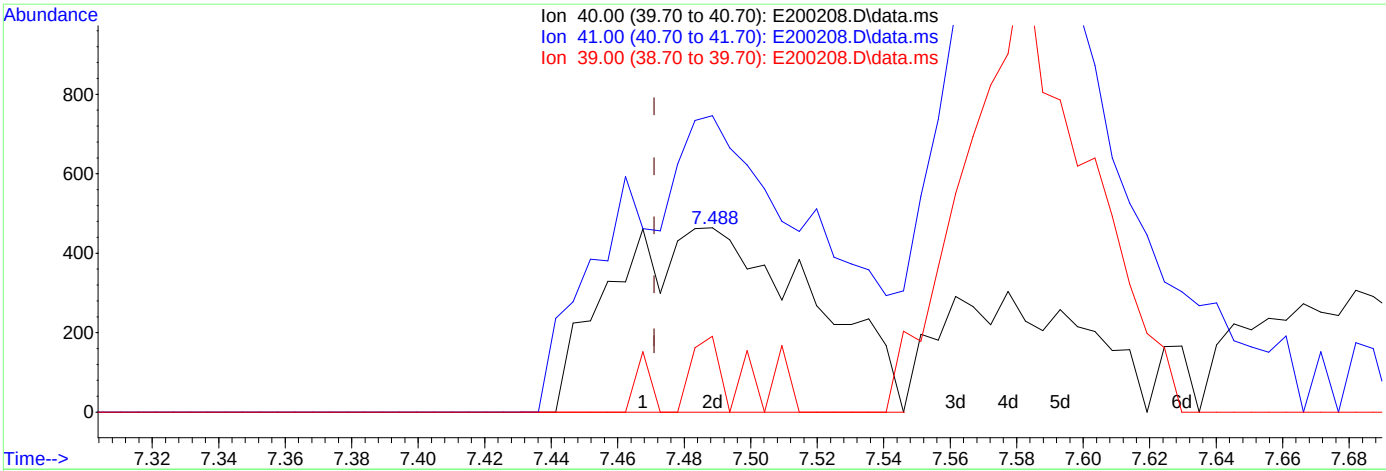
Sample Number:	VE8801-IC8801	**Method:**	SW846 8260B
Lab FileID:	E200208.D	**Analyst approved:**	02/25/13 10:03 Ying Li
Injection Time:	02/22/13 16:49	**Supervisor approved:**	03/01/13 15:48 Kanya Veerawat

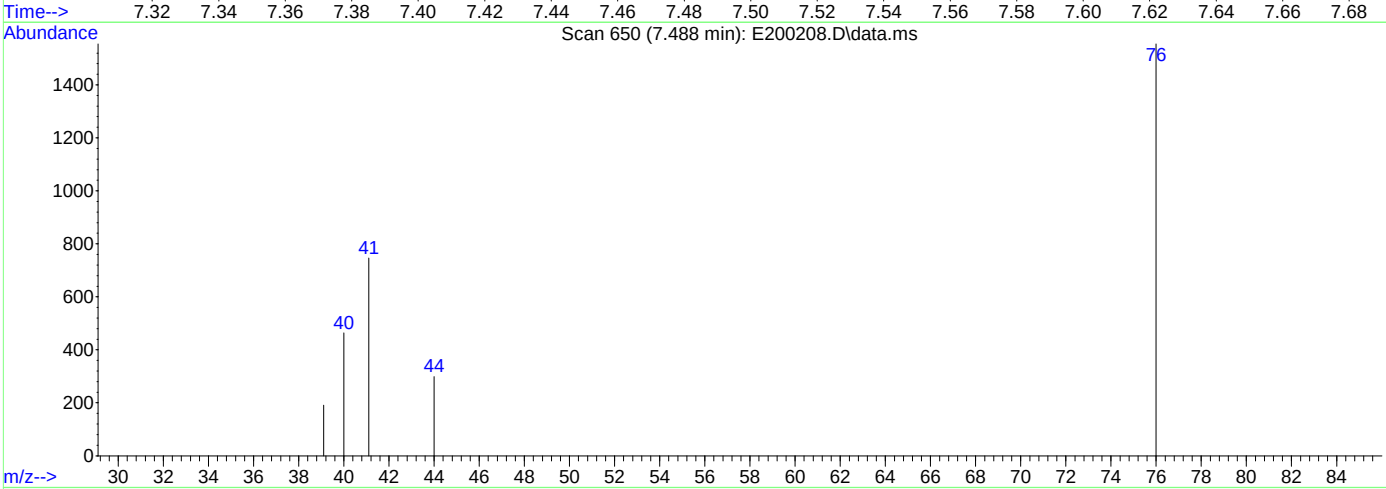
Parameter	CAS	Sig#	R.T. (min.)	Reason
Freon 113	76-13-1		7.05	Split peak
Acetonitrile	75-05-8		7.49	Split peak

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200208.D
Acq On    : 22 Feb 2013   4:49 pm
Operator  : OksanaT
Sample    : ic8801-2
Misc      : MS43512,VE8801,5,,100,5,1
ALS Vial  : 15   Sample Multiplier: 1

Quant Time: Feb 22 17:21:48 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title  : SW846  8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration
```





(34) acetonitrile (M)

7.488min (+0.017) 18.97ug/L m

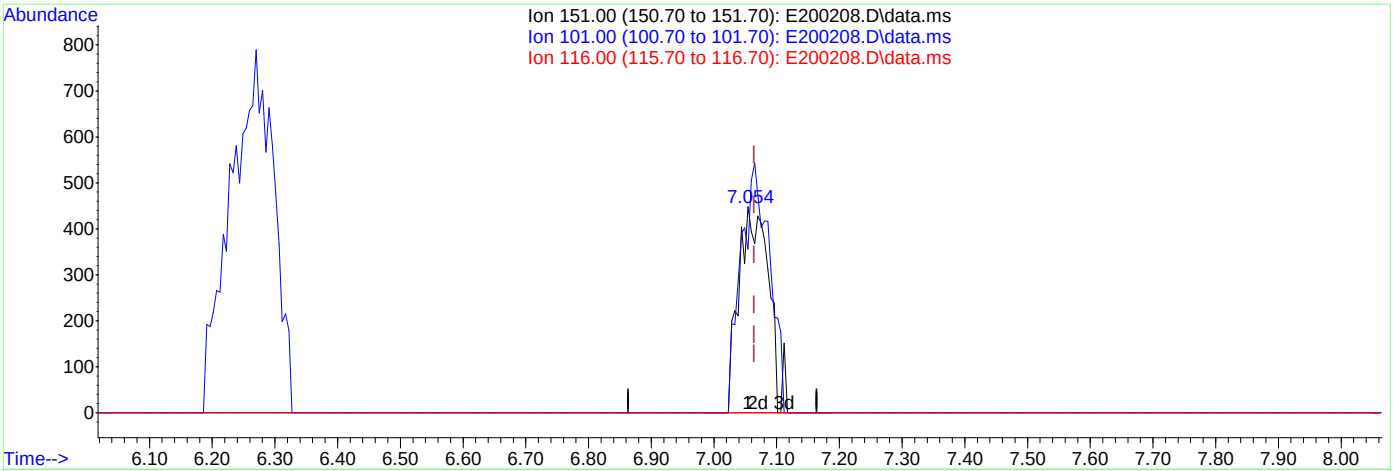
response 1937

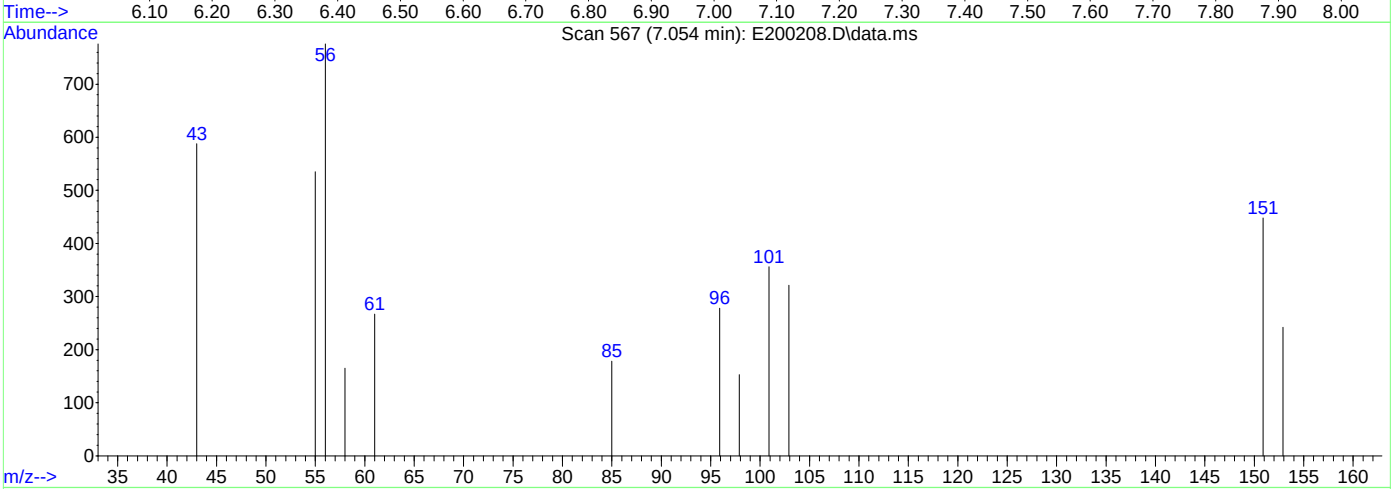
Ion	Exp%	Act%
40.00	100	100
41.00	176.90	160.78
39.00	36.30	41.16
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200208.D
Acq On : 22 Feb 2013 4:49 pm
Operator : OksanaT
Sample : ic8801-2
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 17:21:48 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 09:30:48 2013
Response via : Initial Calibration





TIC: E200208.D\data.ms

(62) freon 113 (M)

7.054min (-0.009) 1.48ug/L m

response 1486

Ion	Exp%	Act%
151.00	100	100
101.00	126.70	79.46#
116.00	13.60	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200209.D
Acq On : 22 Feb 2013 5:19 pm
Operator : OksanaT
Sample : icv8801-50
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 25 09:58:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 18:41:55 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.682	65	67582	500.00	ug/L	0.01
5) pentafluorobenzene	9.910	168	128364	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.825	114	180523	50.00	ug/L	0.00
97) chlorobenzene-d5	14.152	117	165950	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.725	152	95113	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.952	113	62906	52.23	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 104.46%			
61) 1,2-dichloroethane-d4 (s)	10.365	65	67017	50.61	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 101.22%			
89) toluene-d8 (s)	12.525	98	239218	52.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 104.68%			
116) 4-bromofluorobenzene (s)	15.422	95	90830	52.09	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 104.18%			

Target Compounds						Qvalue
2) 1,4-dioxane	11.537	88	15774	1187.36	ug/L	98
3) tertiary butyl alcohol	7.797	59	40244	253.47	ug/L	89
11) chlorodifluoromethane	4.324	51	72921	51.65	ug/L	99
12) dichlorodifluoromethane	4.319	85	94920	50.46	ug/L	96
15) chloromethane	4.664	50	117473	55.92	ug/L	99
16) vinyl chloride	4.957	62	106128	50.46	ug/L	99
19) bromomethane	5.590	94	64140	50.40	ug/L	97
20) chloroethane	5.773	64	54014	56.26	ug/L	96
22) trichlorofluoromethane	6.280	101	105687	50.61	ug/L	100
23) pentane	6.343	43	134323	50.07	ug/L	100
24) ethyl ether	6.646	74	41404	51.05	ug/L	95
28) 2-chloropropane	6.840	43	127548	52.57	ug/L	100
29) acrolein	6.850	56	159189	505.45	ug/L	98
30) 1,1-dichloroethene	7.091	96	63457	51.88	ug/L	95
32) acetone	7.070	58	6497	51.97	ug/L	98
33) allyl chloride	7.577	41	111829	47.69	ug/L	97
34) acetonitrile	7.462	40	36132	549.70	ug/L	99
35) iodomethane	7.347	142	125494	50.69	ug/L	99
36) iso-butyl alcohol	10.224	74	5764	495.55	ug/L	92
37) carbon disulfide	7.504	76	196759	47.83	ug/L	96
38) methylene chloride	7.750	84	71649	45.35	ug/L	98
39) 1-chloropropane	7.807	42	118382	50.06	ug/L	99
40) methyl acetate	7.541	43	49829	46.10	ug/L	99
41) methyl tert butyl ether	8.100	73	386919	98.84	ug/L	100
42) trans-1,2-dichloroethene	8.142	96	64283	52.22	ug/L	96
43) di-isopropyl ether	8.691	45	219226	48.40	ug/L	99
44) ethyl tert-butyl ether	9.152	59	210580	46.66	ug/L	99
45) 2-butanone	9.335	72	7871	46.84	ug/L #	94
46) 1,1-dichloroethane	8.681	63	124230	54.69	ug/L	99
47) chloroprene	8.812	53	83138	48.37	ug/L	100
48) acrylonitrile	8.011	53	143194	272.36	ug/L	96
49) vinyl acetate	8.655	86	11701	51.51	ug/L	91
50) ethyl acetate	9.371	45	9778	51.07	ug/L	91
51) 2,2-dichloropropane	9.429	77	86804	47.50	ug/L	98
52) cis-1,2-dichloroethene	9.408	96	72134	50.84	ug/L	98
53) methyl acrylate	9.455	55	63224	49.97	ug/L	100
54) propionitrile	9.397	54	106936	532.20	ug/L	98
55) bromochloromethane	9.706	128	37391	51.13	ug/L	95
56) tetrahydrofuran	9.769	42	26482	52.05	ug/L	99
57) chloroform	9.758	83	113437	52.42	ug/L	95
58) t-butyl formate	9.800	59	62415	51.34	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200209.D
Acq On : 22 Feb 2013 5:19 pm
Operator : OksanaT
Sample : icv8801-50
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 25 09:58:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 18:41:55 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
59) Iso-octane	10.527	57	153375	42.30 ug/L	98
62) freon 113	7.059	151	41540	44.35 ug/L	99
63) methacrylonitrile	9.601	41	43610	51.27 ug/L	97
64) 1,1,1-trichloroethane	10.051	97	100727	52.41 ug/L	99
65) tert-amyl methyl ether	10.517	73	195725	45.59 ug/L	99
68) tert amyl alcohol	10.297	55	28057	532.01 ug/L	97
69) epichlorohydrin	12.065	57	35070	247.17 ug/L	95
70) n-butyl alcohol	10.898	56	106435	2610.41 ug/L	97
71) tert-amyl ethyl ether	11.359	87	205133	103.37 ug/L	98
72) carbon tetrachloride	10.271	117	90017	54.00 ug/L	96
73) 1,1-dichloropropene	10.224	75	88285	51.73 ug/L	97
74) hexane	8.477	57	53775	40.47 ug/L	96
75) benzene	10.480	78	258762	51.16 ug/L	99
76) heptane	10.679	57	31022	42.59 ug/L	99
77) isopropyl acetate	10.360	43	124332	47.53 ug/L	99
78) 1,2-dichloroethane	10.454	62	82646	50.57 ug/L	99
80) trichloroethene	11.191	95	68134	53.19 ug/L	98
82) 2-chloroethyl vinyl ether	11.950	63	219066	252.30 ug/L	99
83) methylcyclohexane	11.453	83	84844	43.34 ug/L	98
84) methyl methacrylate	11.432	69	64916	51.37 ug/L	91
85) 1,2-dichloropropane	11.432	63	69648	51.54 ug/L	99
86) dibromomethane	11.594	93	42104	53.52 ug/L	98
87) bromodichloromethane	11.720	83	89720	52.25 ug/L	99
88) cis-1,3-dichloropropene	12.195	75	109275	50.28 ug/L	98
90) 4-methyl-2-pentanone	12.274	58	29545	51.21 ug/L	98
91) toluene	12.603	92	163043	53.13 ug/L	99
92) 3-methyl-1-butanol	12.279	55	66531	958.87 ug/L	99
93) trans-1,3-dichloropropene	12.771	75	99398	52.30 ug/L	99
94) ethyl methacrylate	12.776	69	86930	51.95 ug/L	99
95) 1,1,2-trichloroethane	13.001	83	52792	53.01 ug/L	98
96) 2-hexanone	13.179	58	25973	50.68 ug/L	95
98) cyclohexanone	15.349	55	22463	482.94 ug/L	97
99) tetrachloroethene	13.252	166	77404	50.46 ug/L	98
100) 1,3-dichloropropane	13.200	76	104013	52.25 ug/L	99
101) butyl acetate	13.273	56	44201	51.39 ug/L	96
102) 3,3-dimethyl-1-butanol	13.357	57	88157	608.86 ug/L	99
103) dibromochloromethane	13.498	129	74285	51.33 ug/L	99
104) 1,2-dibromoethane	13.665	107	65873	51.42 ug/L	99
106) chlorobenzene	14.188	112	189857	52.72 ug/L	99
107) 1,1,1,2-tetrachloroethane	14.246	131	70470	53.06 ug/L	93
108) ethylbenzene	14.251	91	303607	52.69 ug/L	98
109) m,p-xylene	14.366	106	240525	106.24 ug/L	99
110) o-xylene	14.826	106	124139	53.53 ug/L	99
112) styrene	14.831	104	202658	52.66 ug/L	100
113) bromoform	15.114	173	57702	52.43 ug/L	98
115) isopropylbenzene	15.203	105	317993	51.97 ug/L	99
117) bromobenzene	15.647	156	87013	51.27 ug/L	98
118) 1,1,2,2-tetrachloroethane	15.501	83	84226	48.99 ug/L	99
119) trans-1,4-dichloro-2-b...	15.543	53	20351	47.23 ug/L	86
120) 1,2,3-trichloropropane	15.590	110	22405	49.26 ug/L	97
121) n-propylbenzene	15.658	91	353299	51.86 ug/L	100
123) 2-chlorotoluene	15.825	126	74710	49.55 ug/L	96
124) 4-chlorotoluene	15.930	91	221426	49.96 ug/L	99
125) 1,3,5-trimethylbenzene	15.825	105	250269	48.00 ug/L	99
126) tert-butylbenzene	16.217	119	235301	52.63 ug/L	99
127) pentachloroethane	16.301	167	57763	51.98 ug/L	98
128) 1,2,4-trimethylbenzene	16.265	105	266744	51.74 ug/L	99
129) sec-butylbenzene	16.453	105	327937	51.60 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200209.D
Acq On : 22 Feb 2013 5:19 pm
Operator : OksanaT
Sample : icv8801-50
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 25 09:58:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 18:41:55 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
130) 1,3-dichlorobenzene	16.662	146	158278	50.63 ug/L	99
131) p-isopropyltoluene	16.584	119	286158	54.23 ug/L	100
132) 1,4-dichlorobenzene	16.751	146	159273	50.27 ug/L	99
133) benzyl chloride	16.861	91	140922	44.92 ug/L	98
135) 1,2-dichlorobenzene	17.185	146	157159	52.07 ug/L	98
136) n-butylbenzene	17.039	92	137300	54.19 ug/L	98
138) 1,2-dibromo-3-chloropr...	18.001	75	14764	52.27 ug/L	92
139) 1,3,5-trichlorobenzene	18.247	180	119068	54.18 ug/L	100
140) 1,2,4-trichlorobenzene	18.958	180	99603	56.14 ug/L	98
141) hexachlorobutadiene	19.105	225	52180	51.99 ug/L	99
142) naphthalene	19.267	128	189423	53.24 ug/L	99
144) 1,2,3-trichlorobenzene	19.544	180	74544	52.89 ug/L	100
145) hexachloroethane	17.499	119	55625	54.66 ug/L	97
146) Cyclohexane	10.161	84	101339	50.64 ug/L #	86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

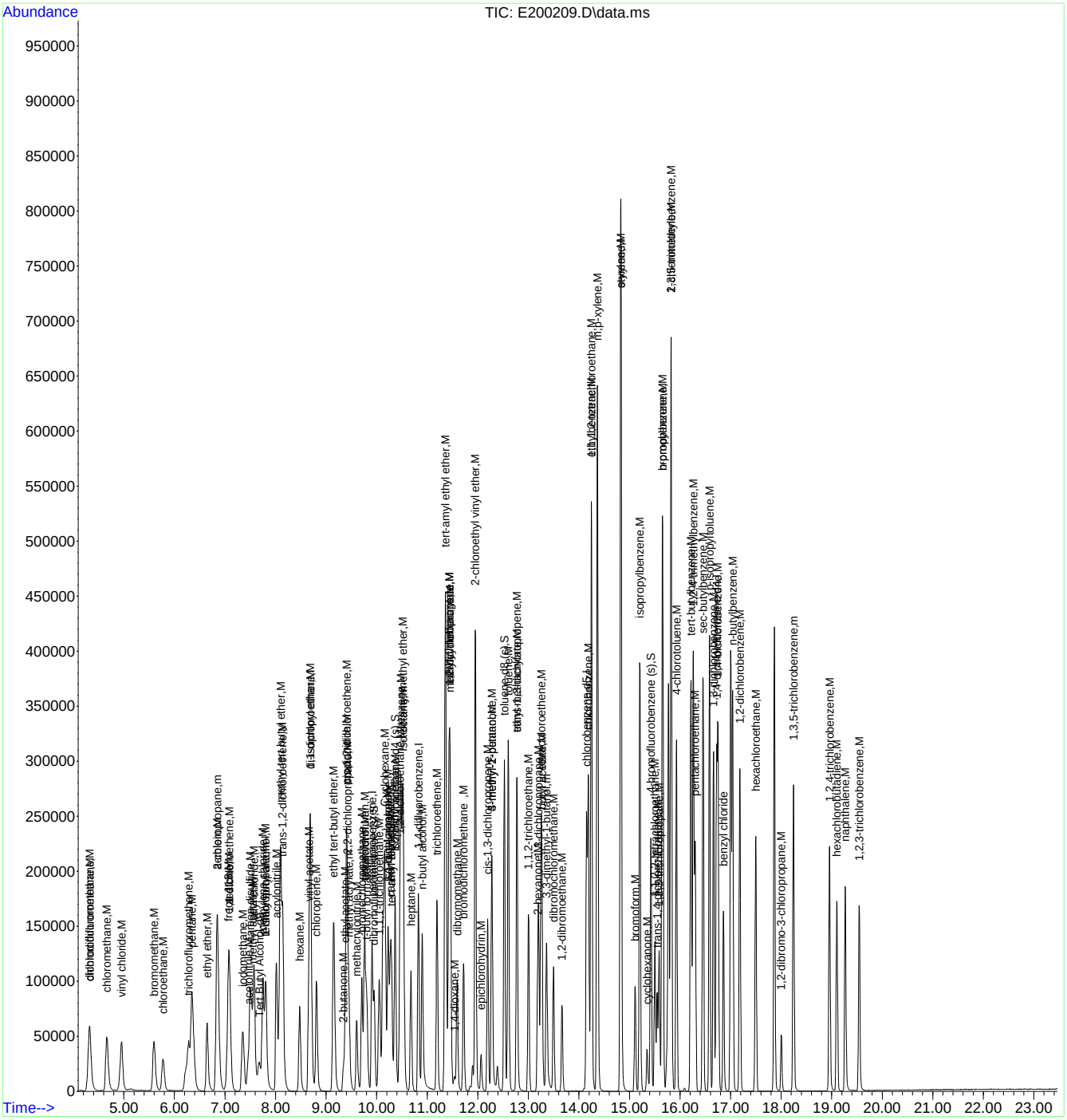
7.6.21

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e-core initial\
Data File : E200209.D
Acq On : 22 Feb 2013 5:19 pm
Operator : OksanaT
Sample : icv8801-50
Misc : MS43512,VE8801,5,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 25 09:58:52 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Fri Feb 22 18:41:55 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E200745.D
Acq On : 11 Mar 2013 11:09 pm
Operator : OksanaT
Sample : cc8801-50
Misc : MS44353,VE8827,5,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 12 12:46:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Feb 25 11:43:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.677	65	108546	500.00	ug/L	0.00
5) pentafluorobenzene	9.910	168	198818	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.825	114	278642	50.00	ug/L	0.00
97) chlorobenzene-d5	14.152	117	263077	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.720	152	148418	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.952	113	81616	43.75	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 87.50%			
61) 1,2-dichloroethane-d4 (s)	10.365	65	86060	41.96	ug/L	0.00
Spiked Amount 50.000	Range 74 - 127		Recovery = 83.92%			
89) toluene-d8 (s)	12.525	98	317722	45.03	ug/L	0.00
Spiked Amount 50.000	Range 80 - 122		Recovery = 90.06%			
116) 4-bromofluorobenzene (s)	15.423	95	123858	45.52	ug/L	0.00
Spiked Amount 50.000	Range 78 - 116		Recovery = 91.04%			

Target Compounds						Qvalue
2) 1,4-dioxane	11.537	88	25192	1180.79	ug/L	94
3) tertiary butyl alcohol	7.787	59	62561	245.33	ug/L #	14
11) chlorodifluoromethane	4.324	51	88378	40.42	ug/L	97
12) dichlorodifluoromethane	4.319	85	142301	48.84	ug/L	96
15) chloromethane	4.664	50	158719	48.78	ug/L	99
16) vinyl chloride	4.957	62	151763	46.59	ug/L	98
19) bromomethane	5.595	94	87662	44.47	ug/L	99
20) chloroethane	5.768	64	71604	48.15	ug/L	98
22) trichlorofluoromethane	6.275	101	154175	47.67	ug/L	98
24) ethyl ether	6.646	74	60694	48.32	ug/L	94
28) 2-chloropropane	6.840	43	177790	47.31	ug/L	98
29) acrolein	6.850	56	220350	451.71	ug/L	99
30) 1,1-dichloroethene	7.091	96	87899	46.40	ug/L	97
32) acetone	7.065	58	9733	50.24	ug/L	89
33) allyl chloride	7.577	41	161717	44.53	ug/L	98
34) acetonitrile	7.462	40	49488	475.21	ug/L	97
35) iodomethane	7.353	142	185554	48.39	ug/L	99
36) iso-butyl alcohol	10.229	74	7846	434.62	ug/L	77
37) carbon disulfide	7.504	76	271296	42.57	ug/L	98
38) methylene chloride	7.755	84	102582	41.92	ug/L	98
39) 1-chloropropane	7.808	42	165458	45.17	ug/L	99
40) methyl acetate	7.541	43	74664	44.59	ug/L	99
41) methyl tert butyl ether	8.095	73	283697	46.79	ug/L	100
42) trans-1,2-dichloroethene	8.148	96	89884	47.14	ug/L	97
43) di-isopropyl ether	8.691	45	301707	43.00	ug/L	98
44) ethyl tert-butyl ether	9.146	59	305738	43.74	ug/L	100
45) 2-butanone	9.345	72	13052	50.17	ug/L #	97
46) 1,1-dichloroethane	8.686	63	169079	48.06	ug/L	99
47) chloroprene	8.812	53	120263	45.18	ug/L	98
48) acrylonitrile	8.017	53	202532	248.71	ug/L	98
49) vinyl acetate	8.655	86	15117	43.10	ug/L	89
50) ethyl acetate	9.382	45	14506	48.92	ug/L #	63
51) 2,2-dichloropropane	9.429	77	116452	41.14	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E200745.D
Acq On : 11 Mar 2013 11:09 pm
Operator : OksanaT
Sample : cc8801-50
Misc : MS44353,VE8827,5,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 12 12:46:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Feb 25 11:43:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) cis-1,2-dichloroethene	9.408	96	99819	45.42	ug/L	95
53) methyl acrylate	9.460	55	93247	47.58	ug/L	99
54) propionitrile	9.398	54	156191	501.88	ug/L	99
55) bromochloromethane	9.706	128	54404	48.04	ug/L	96
56) tetrahydrofuran	9.769	42	38486	48.84	ug/L	99
57) chloroform	9.758	83	157632	47.03	ug/L	97
58) t-butyl formate	9.795	59	89334	47.45	ug/L	98
59) Iso-octane	10.522	57	245073	43.63	ug/L	100
62) freon 113	7.070	151	63246	43.60	ug/L	99
63) methacrylonitrile	9.607	41	68239	51.79	ug/L	95
64) 1,1,1-trichloroethane	10.046	97	138246	46.44	ug/L	98
65) tert-amyl methyl ether	10.517	73	270903	40.74	ug/L	100
69) epichlorohydrin	12.065	57	56870	259.68	ug/L	93
70) n-butyl alcohol	10.899	56	160753	2554.28	ug/L	98
72) carbon tetrachloride	10.271	117	122974	47.80	ug/L	99
73) 1,1-dichloropropene	10.229	75	120140	45.60	ug/L	97
74) hexane	8.477	57	96322	46.96	ug/L	98
75) benzene	10.480	78	357433	45.79	ug/L	99
76) heptane	10.679	57	53787	47.84	ug/L	98
77) isopropyl acetate	10.360	43	188677	46.73	ug/L	99
78) 1,2-dichloroethane	10.454	62	118079	46.81	ug/L	100
80) trichloroethene	11.191	95	94075	47.58	ug/L	97
82) 2-chloroethyl vinyl ether	11.950	63	323264	241.20	ug/L	100
83) methylcyclohexane	11.453	83	129250	42.78	ug/L	98
84) methyl methacrylate	11.427	69	96957	49.71	ug/L	91
85) 1,2-dichloropropane	11.432	63	101809	48.81	ug/L	97
86) dibromomethane	11.589	93	62013	51.07	ug/L	95
87) bromodichloromethane	11.720	83	129697	48.93	ug/L	98
88) cis-1,3-dichloropropene	12.196	75	165697	49.39	ug/L	98
90) 4-methyl-2-pentanone	12.274	58	43692	49.06	ug/L	99
91) toluene	12.604	92	225455	47.60	ug/L	98
92) 3-methyl-1-butanol	12.279	55	102420	956.32	ug/L	99
93) trans-1,3-dichloropropene	12.771	75	144606	49.29	ug/L	98
94) ethyl methacrylate	12.771	69	131924	51.07	ug/L	98
95) 1,1,2-trichloroethane	13.001	83	77378	50.34	ug/L	100
96) 2-hexanone	13.179	58	40928	51.74	ug/L	97
98) cyclohexanone	15.349	55	35543	482.03	ug/L	95
99) tetrachloroethene	13.252	166	108531	44.63	ug/L	98
100) 1,3-dichloropropane	13.200	76	152234	48.24	ug/L	99
101) butyl acetate	13.273	56	69110	50.69	ug/L	98
102) 3,3-dimethyl-1-butanol	13.357	57	116284	506.61	ug/L	99
103) dibromochloromethane	13.498	129	114180	49.76	ug/L	98
104) 1,2-dibromoethane	13.665	107	100213	49.35	ug/L	100
106) chlorobenzene	14.188	112	259243	45.41	ug/L	98
107) 1,1,1,2-tetrachloroethane	14.241	131	98244	46.66	ug/L	98
108) ethylbenzene	14.251	91	403239	44.14	ug/L	99
109) m,p-xylene	14.366	106	326397	90.94	ug/L	98
110) o-xylene	14.826	106	171678	46.70	ug/L	97
112) styrene	14.826	104	282442	46.29	ug/L	98
113) bromoform	15.109	173	90548	51.90	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E200745.D
Acq On : 11 Mar 2013 11:09 pm
Operator : OksanaT
Sample : cc8801-50
Misc : MS44353,VE8827,5,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 12 12:46:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Feb 25 11:43:47 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
115) isopropylbenzene	15.203	105	436266	45.70 ug/L	99
117) bromobenzene	15.648	156	122630	46.30 ug/L	96
118) 1,1,2,2-tetrachloroethane	15.501	83	131354	48.97 ug/L	98
119) trans-1,4-dichloro-2-b...	15.543	53	31800	47.29 ug/L	94
120) 1,2,3-trichloropropane	15.585	110	34044	47.96 ug/L	92
121) n-propylbenzene	15.658	91	464657	43.71 ug/L	99
123) 2-chlorotoluene	15.825	126	106070	45.08 ug/L	98
124) 4-chlorotoluene	15.930	91	309655	44.78 ug/L	99
125) 1,3,5-trimethylbenzene	15.820	105	350307	43.06 ug/L	99
126) tert-butylbenzene	16.212	119	327473	46.94 ug/L	99
127) pentachloroethane	16.301	167	81712	47.12 ug/L	95
128) 1,2,4-trimethylbenzene	16.265	105	355305	44.16 ug/L	99
129) sec-butylbenzene	16.453	105	452875	45.67 ug/L	98
130) 1,3-dichlorobenzene	16.662	146	222913	45.70 ug/L	99
131) p-isopropyltoluene	16.584	119	381489	46.33 ug/L	99
132) 1,4-dichlorobenzene	16.751	146	224449	45.40 ug/L	99
133) benzyl chloride	16.856	91	222901	45.54 ug/L	99
135) 1,2-dichlorobenzene	17.180	146	227124	48.22 ug/L	98
136) n-butylbenzene	17.039	92	190071	48.08 ug/L	96
138) 1,2-dibromo-3-chloropr...	18.001	75	23841	54.09 ug/L	94
139) 1,3,5-trichlorobenzene	18.247	180	179904	52.46 ug/L	100
140) 1,2,4-trichlorobenzene	18.958	180	146597	52.95 ug/L	98
141) hexachlorobutadiene	19.105	225	74783	47.75 ug/L	97
142) naphthalene	19.267	128	302513	54.49 ug/L	99
144) 1,2,3-trichlorobenzene	19.544	180	119224	54.21 ug/L	99
145) hexachloroethane	17.494	119	81710	51.45 ug/L	99
146) Cyclohexane	10.161	84	134850	43.19 ug/L #	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

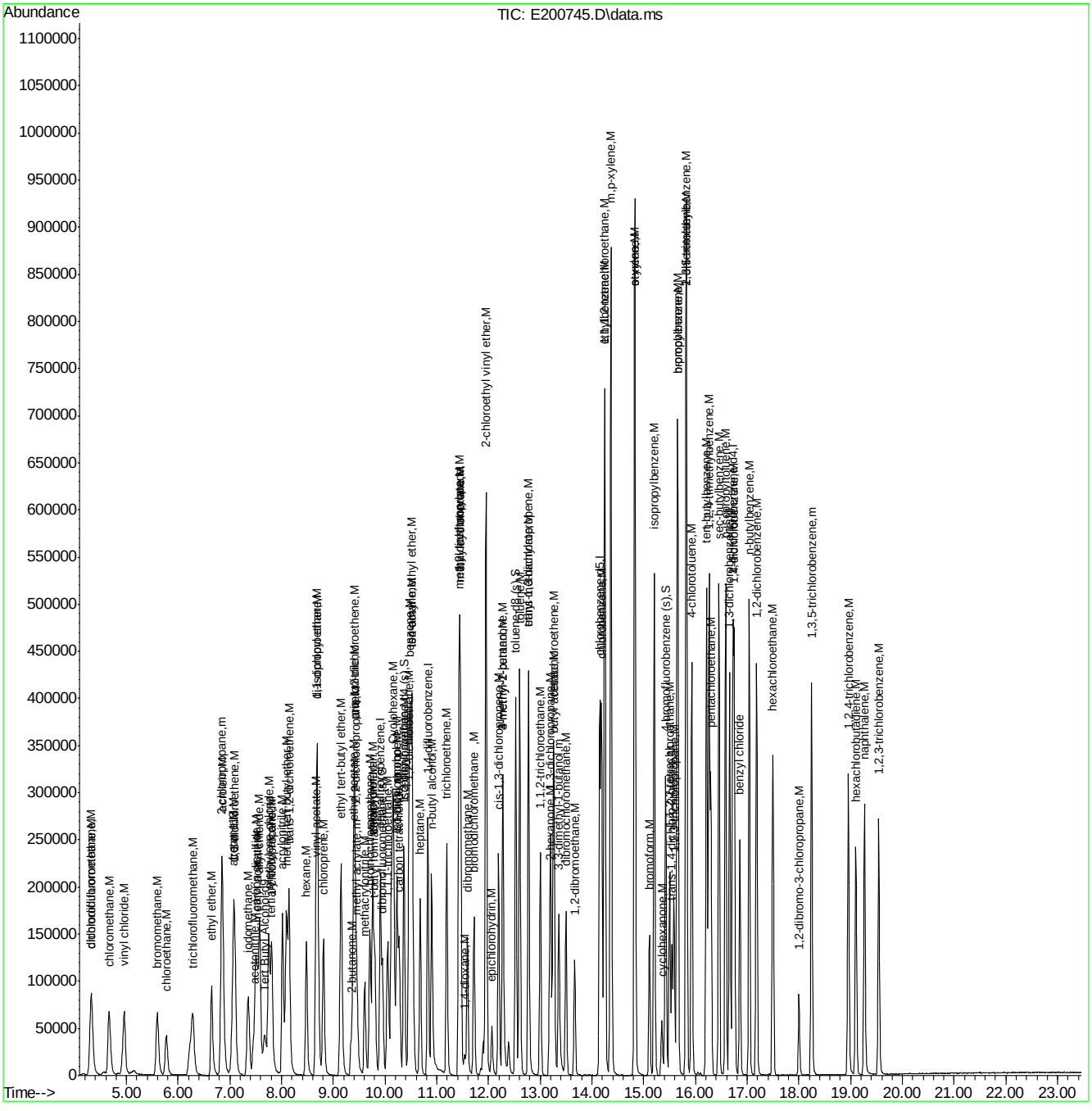
7.6.22

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E200745.D
Acq On : 11 Mar 2013 11:09 pm
Operator : OksanaT
Sample : cc8801-50
Misc : MS44353,VE8827,5,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 12 12:46:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME8801.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Feb 25 11:43:47 2013
Response via : Initial Calibration



ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VA 7222

Print Analyst Name: Ousama

Analyst Signature: O. Parashenova

Date: 2/20/2013

Columns: 624 (60m x 0.25mm x 1.4u)

Method V8260

Initial Cal. Method MA 7222

Standard Data

Lot #	Description	Conc.
1472 114	Exotic	100 ppm
1472 128	Exotic	
1472	Exotic	↓
1472 117	Exotics	100 ppm
1472 141	Surr	↓

Standard Data

Lot #	Description	Conc.
1472 131	Int Std	250/250 ppm
1472 104	A std	100 ppm
1472 11	B	
1578-09	C	↓
1578-13	Parent std	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ **Date:** 2/21/2013

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	191856	BFB	8260			1	5ml						ok		
	191857	IC7222-0.5				2							ok	A B C D S Surr Acr 0.5ml 0.5ml 0.5ml 0.5ml 0.5ml 0.5ml 0.5ml	
	191858	IC7222 -1				3							ok	1ml 1ml 1ml 1ml 1ml 1ml 1ml	
	191859	IC7222 -2				4							ok	2ml 2ml 2ml 2ml 2ml 2ml 2ml	
	191860	IC7222 -5				5							ok	5ml 5ml 5ml 5ml 5ml 5ml 5ml	
	191861	IC7222 -10				6							ok	10ml 10ml 10ml 10ml 10ml 10ml 10ml	
	191862	IC7222 -20				7							ok	20ml 20ml 20ml 20ml 20ml 20ml 20ml	
	191863	IC7222 -50				8							ok	25ml 25ml 25ml	
	191864	IC7222 -100				9							ok		
	191865	IC7222-200				10							ok		
	191866	IB				11							clip		
	191867	IB				12							↓		
	191868	ICV7222-50				13							ok	Surr Exotics Exotics Exotics P.S. Surr 25ml 25ml	
														XL 2/21/2013	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

77

7.7.1

7

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VA 7250

Date: 3/12/2013

Print Analyst Name: Ousama

Analyst Signature: O. Parasiewicz

Columns: ZB-624 (60m x 0.25mm x 1.4um)

Method VOAD

Initial Cal. Method MA 7202

Standard Data

Lot #	Description	Conc.
2013-1518 27	Ext A	1000ppm
2013-1518 21	Ext B	↓
2013-1518 60	Ext C	↓
013-1518 46	Extacr	1000ppm
112-1472 195	acrolein	↓

Standard Data

Lot #	Description	Conc.
2013-1518 19	Int Stand	200/200ppm
2013-1518 22	A Std	200ppm
2013-1518 29	B	↓
2013-1518 54	C	↓

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 3/13/2013

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
7A	192514	BPB				1							ok	9:18am	
	192515	cc 7222-20				2							ok	A.B.C.Acr. 10ul→soup target compl	
	192516	cc 7222-20				3							ok	↓	
	192517	BMB				4				✓	✓		ok		
	192518	BS				5					✓		ok	Ext A · Ext B · Ext C · Extacr 10ul→soup	
	192519	B30917-2mg	44556 MBWO	S	2	6	4.5				✓		ok	A.B.C.Acr. 10ul→soup ↓	
	192520	B30917-2mg				7					✓		ok		1:31pm
	192521	BB				8					✓		chg		
	192522	B30917-2				9					✓		ok		
	192523	B30917-1				10	4.4				✓		ok		
	192524	B30917-3				11	4.4				✓		ok		
	192525	B30345-1	44341 SC3	S	5	12	5.3			✓	✓		ok		TR
	192526	B30421-3	44363 recall-7	S	5	13	5.9			✓	✓		ok	RR MED / RR LIA	
	192527	B30437-3A	44353 recall-7	S	4	14	4.6				✓		ok	Rec/o	
	192528	B30382-8A	44296 recall	S	4	15	5.1			✓	✓		ok		1:55
	192529	B30382-1A	↓	↓	↓	16	3.6			✓	✓		ok		
	192530	B30720-1	44606 SC ESB	S	4	17	8.7				✓		ok	on 1/2	

X = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
nple Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; computer miscalculation; 4 = analyst's correction error

m: OR001-9
. Date: 2/14/2007

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VA 7250

Date: 3/12/2013

Print Analyst Name: Oksana

Analyst Signature: O Parasiuna

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see pg 195	

Columns: ZB-624 (60m x 0.18mm x 1.4um)

Method 8260

Initial Cal. Method VA 7222

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 3/13/2013

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
7A	192531	B30720-4	44606 SLEDM	S	4	18	13.1					W	OK		
	192532	B30720-3	↓	↓	↓	19	10.3					W	OK		
	192533	B29946-9 EY	44248 FOIL	S	2	20	4.3					W	OK	8:27pm	
	192534	EY				4						W	clip		8:35
	192535	EY				22						W			
	192536	EY				23						W	↓		
														YL 3/13/2013	

TX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
ample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

l strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
= computer miscalculation; 4 = analyst's correction error

rm: OR001-9

v. Date: 2/14/2007

197

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VE 8801

Date: 2/22/2013

Print Analyst Name: Ousama

Analyst Signature: O. Farasuliova

Columns: ZB-624/60m x 0.32mm x 1.8µm

Method 8260

Initial Cal. Method MB8730 8801

Standard Data

Lot #	Description	Conc.
2012-1472-114	Ext A	100ppm
2012-1472-128	Ext B	
2013-1518-14	Ext C	
2012-1472-117	Spike	1000 ppm
2012-1472-145	acrolein	
2013-1519-14	S Std	100ppm

Standard Data

Lot #	Description	Conc.
2012-1472-126	Int std	
2012-1472-104	A std/Sel pm 99	
2012-1472-112	B	
2013-1518-03	C	
2013-1518-04	Surr	
2013-1518-15	Recovery	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 2/25/2013

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
7B	200194	BFB	8260			1	5ml						ok	5ml S→5ml	
	200195	IC8801-0.5				2							~~MG~~	A B C Sur S 0.5ml 0.5ml 0.5ml 0.5ml 0.5ml	A 0.5ml
	200196	IC8801 -1				3							MG	1ml 1ml 1ml 1ml 1ml 1ml 100ml	
	200197	IC8801 -2				4							HG	2ml 2ml 2ml 2ml 2ml 2ml 200ml	100 ml
	200198	IC8801 -5				5							ok	5ml 5ml 5ml 5ml 5ml 5ml 500ml	
	200199	IC8801 -10				6							ok	10ml 10ml 10ml 10ml 10ml 10ml 10ml	
	200200	IC8801 -20				7							ok	10ml 10ml 10ml 10ml 10ml 10ml 10ml	
	200201	IC8801 -50				8							ok	20ml 20ml 20ml 20ml 20ml 20ml 20ml	
	200202	IC8801 -100				9							ok	20ml 20ml 20ml 20ml 20ml 20ml 20ml	20ml
	200203	IC8801 -200				10							ok	20ml 20ml 20ml 20ml 20ml 20ml	
	200204	IB				11							clip		
	200205	IB				12							↓		
	200206	IC8801-~~0.5~~ 1				13							ok	0.5ml 0.5ml 0.5ml 0.5ml 0.5ml 0.5ml 0.5ml	
	200207	IC8801-X 0.5				14							ok	1ml 1ml 1ml 1ml 1ml 1ml 100ml	100 ml
	200208	IC8801 -2				15							ok	2ml 2ml 2ml 2ml 2ml 2ml 200ml	
	200209	ICV8801-50				16							ok	Ext A. Ext B. Ext C. Spike. Surr. S. Rect 20ml→20ml	
	200210	IB				17								YL 2/25/2013	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

101

7.7.3

7

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VE 8827

Date: 3/11/2013

Print Analyst Name: Dusana

Analyst Signature: O. Paraschiva

Columns: ZB-624 (60m x 0.25mm x 1.4 µm)

Method 8260

Initial Cal. Method ME 8801

Standard Data

Lot #	Description	Conc.
2013-1578 27	524A	100ppm
2013-1578 21	524B	↓
2013-1578 43	524C	↓
2012-1472 117	524acr	1000ppm
2012-1472 145	acrolein	↓

Standard Data

Lot #	Description	Conc.
2012-1472/135	Int/Surr	200/400ppm
2013-1578 22	A Std	100ppm
2013-1578 29	B	↓
2013-1578 42	C	↓
DH379	methanol	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 3/12/2013

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
7R	200744	DFTPP				26							ok	10:38pm	
	200745	ce 8801-50				27							ok	A.B.C.Ar. emulsion	
	200746	↓				28					W				
	200747	↓				29					W		ok	#23	
	200748	↓				30					W		ok	524A.524B.524C.Acrolein emulsion	
	200749	JB30345-1	44341 SCB	S	3	31	5.1/5mL	100µL			W		ok	A.B.C.Ar. emulsion	
	200750	JB30345-1	↓		↓	32	↓	↓			W		ok	↓	
	200751	↓				33					W		clip		
	200752	JB30345-1				34					W		ok/R	RRL "A" QC only	
	200753	JB30437-3A	44353 NPT441	S	3	35	4.6/5mL	100µL			W		HG/R	RRL A C	
	200754	JB30437-2A				36	3.9/5mL	100µL			W		ok	non target comp	
	200755	JB30437-1A				37	4.5/5mL	10µL			W		NG	R 1x c/o	
	200756	JB29835-4	44448 TCE 1x	S	3	38	5.7/5mL	100µL			W		ok	matrix	
	200757	JB29946-1	44348 TCE 1x	S	1	39	4.0/10mL	1µL			W		HG/R	R 10x	
	200758	JB29946-3			2	40	5/10mL	1µL			W		HG	R 1x	
	200759	JB29946-5				41	5/10mL	1µL			W		HG	R 1x	
	200760	JB29946-7				42	5/10mL	1µL			W		HG/R	R 20x	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

203

7.7.4

7

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VE 8827

Date: 3/11/2013

Print Analyst Name: Ousama

Analyst Signature: O. Parasiuvoia

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see pg 203	

Columns: RTX-624 (60mx0.18mmx1.4u)

Method VE8260

Initial Cal. Method ME8801

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 3/12/2013

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
7B	200761	339946 -8	4+2+4 +C11	S/C	2	43	5/10ml	1ml			W		HG/R	R1x	
	200762	339946 -9	↓	↓	↓	44	↓	1ml			W		HG/R	R1x 7:4/am	
	200763	~~339946~~ -10	↓			45							not Run		
	200764	↓	↓			46							↓		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

205

New Jersey

ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JB30345
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: JB30345-1 **Analyzed:** 14-MAR-13 by CV **Method:** SM2540 G-97
ClientID: AREAD-15 BOT

Wet Weight (Total)	34.75	g
Tare Weight	25.64	g
Dry Weight (Total)	32.96	g
Solids, Percent	80.4	%

New Jersey

ACCUTEST LABORATORIES

Misc. Raw Data

Raw Data

Methanol Prep Log

Vial Track #:	Lims ID:	Initial Tare Wt (g)	Total Wt (g)	Weight of Sample (g)	Date Prepared	Lot #:	Prep By	Vial Desc:	Comments
3/1/2013-552	JB30345-1.3	32.7900	37.8600	5.0700	3/5/2013 1:59:07 PM	DH379	ts	5ml MeOH	
3/4/2013-847	JB30345-1.4	29.8600	35.3200	5.4600	3/5/2013 1:59:12 PM	di	jp	DI water	
3/4/2013-846	JB30345-1.5	29.8100	35.1000	5.2900	3/5/2013 1:59:19 PM	di	jp	DI water	