New Jersey
ACCUTEST LABORATORIES

12/10/13

Technical Report for

Anderson, Mulholland & Associates

BMS-ICM, Humacao, PR

Biopile Phase 5

Accutest Job Number: JB53758

Sampling Date: 11/20/13

Report to:

Anderson, Mulholland & Associates

arice@amaiconsult.com

ATTN: Addison Rice

Total number of pages in report: **337**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program 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, DoD ELAP (L-A-B L2248)

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Sections: 1 2 3 4 5 6 7 8 9

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: JB53758-1: A-2-9 (5.7-6.2) 7
4.2: JB53758-2: A-2-9 (5.7-6.2)D 8
4.3: JB53758-3: TB 112013 9
Section 5: Misc. Forms **10**
5.1: Chain of Custody 11
5.2: Sample Tracking Chronicle 13
5.3: Internal Chain of Custody 14
Section 6: GC/MS Volatiles - QC Data Summaries **16**
6.1: Method Blank Summary 17
6.2: Blank Spike Summary 19
6.3: Matrix Spike Summary 22
6.4: Matrix Spike/Matrix Spike Duplicate Summary 23
6.5: Duplicate Summary 24
6.6: Instrument Performance Checks (BFB) 25
6.7: Internal Standard Area Summaries 31
6.8: Surrogate Recovery Summaries 35
6.9: Initial and Continuing Calibration Summaries 36
Section 7: GC/MS Volatiles - Raw Data **69**
7.1: Samples 70
7.2: Method Blanks 94
7.3: Blank Spikes 98
7.4: Matrix Spike/Matrix Spike Duplicates 110
7.5: Duplicates 122
7.6: Instrument Performance Checks (BFB) 124
7.7: Initial and Continuing Calibarations 136
7.8: Instrument Run Logs 324
Section 8: General Chemistry - QC Data Summaries **334**
8.1: Percent Solids Raw Data Summary 335
Section 9: Misc. Raw Data **336**
9.1: VOA Soil Prep Log 337

Accutest LabLink@768543 15:19 10-Dec-2013

Sample Summary

Anderson, Mulholland & Associates

Job No: JB53758

BMS-ICM, Humacao, PR
Project No: Biopile Phase 5

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB53758-1	11/20/13	13:41	NR	11/21/13	SO	Soil	A-2-9 (5.7-6.2)
JB53758-1D	11/20/13	13:58	NR	11/21/13	SO	Soil Dup/MSD	A-2-9 (5.7-6.2)MSD
JB53758-1S	11/20/13	13:51	NR	11/21/13	SO	Soil Matrix Spike	A-2-9 (5.7-6.2)MS
JB53758-2	11/20/13	13:46	NR	11/21/13	SO	Soil	A-2-9 (5.7-6.2)D
JB53758-3	11/20/13	13:58	NR	11/21/13	SO	Trip Blank Soil	TB 112013

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JB53758
Site:	BMS-ICM, Humacao, PR	**Report Date**	12/4/2013 11:42:37 A

On 11/21/2013, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 1.1 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB53758 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:** VE9217

- The data for SW846 8260B meets quality control requirements.
- JB53758-2: Confirmation run.
- JB53758-1: Confirmation run.

Matrix: SO **Batch ID:** VE9218

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB54013-1MS, JB54013-1MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** VX6159

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB53799-1MS, JB53799-3DUP were used as the QC samples indicated.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN95673

- 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: JB53758
Account: Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR
Collected: 11/20/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB53758-1	**A-2-9 (5.7-6.2)**					
Xylene (total)		632000	5900	1100	ug/kg	SW846 8260B
JB53758-2	**A-2-9 (5.7-6.2)D**					
Xylene (total)		1080000	3000	530	ug/kg	SW846 8260B
JB53758-3	**TB 112013**					

No hits reported in this sample.

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Sample Results

Report of Analysis

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Report of Analysis

Client Sample ID:	A-2-9 (5.7-6.2)		
Lab Sample ID:	JB53758-1	**Date Sampled:**	11/20/13
Matrix:	SO - Soil	**Date Received:**	11/21/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	84.0
Project:	BMS-ICM, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E210118.D	1	11/25/13	DP	11/22/13 09:00	n/a	VE9218
Run #2 [a]	E210085.D	1	11/24/13	DP	11/22/13 09:00	n/a	VE9217

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.0 g	5.0 ml	1.0 ul
Run #2	6.0 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	632000	5900	1100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	107%	59-130%
17060-07-0	1,2-Dichloroethane-D4	100%	104%	65-123%
2037-26-5	Toluene-D8	99%	105%	80-124%
460-00-4	4-Bromofluorobenzene	117%	113%	71-132%

(a) Confirmation run.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	A-2-9 (5.7-6.2)D		
Lab Sample ID:	JB53758-2	**Date Sampled:**	11/20/13
Matrix:	SO - Soil	**Date Received:**	11/21/13
Method:	SW846 8260B SW846 5035	**Percent Solids:**	83.8
Project:	BMS-ICM, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E210119.D	1	11/25/13	DP	11/22/13 09:00	n/a	VE9218
Run #2 [a]	E210086.D	1	11/24/13	DP	11/22/13 09:00	n/a	VE9217

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.0 g	5.0 ml	2.0 ul
Run #2	6.0 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	1080000	3000	530	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	106%	59-130%
17060-07-0	1,2-Dichloroethane-D4	100%	103%	65-123%
2037-26-5	Toluene-D8	100%	106%	80-124%
460-00-4	4-Bromofluorobenzene	118%	117%	71-132%

(a) Confirmation run.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest LabLink@768543 15:19 10-Dec-2013

Report of Analysis

Client Sample ID:	TB 112013		
Lab Sample ID:	JB53758-3	**Date Sampled:**	11/20/13
Matrix:	SO - Trip Blank Soil	**Date Received:**	11/21/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	BMS-ICM, Humacao, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X142335.D	1	11/24/13	NT	n/a	n/a	VX6159
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	ND	1.0	0.18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		59-130%
17060-07-0	1,2-Dichloroethane-D4	95%		65-123%
2037-26-5	Toluene-D8	103%		80-124%
460-00-4	4-Bromofluorobenzene	103%		71-132%

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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Sec SSTB

CHAIN OF CUSTODY

PAGE 1 OF 1

2235 Route 130, Dayton, NJ 08810
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FED-EX Tracking # 7972 0617 9540
Bottle Order Control # KP-11/12/2013-54
Accutest Quote #
Accutest Job # JB53758

Client / Reporting Information

Company Name: Anderson Mulholland & Assoc.
Street Address: 110 Corporate Park Dr.
City / State / Zip: White Plains, NY 10604
Project Contact: Terry Taylor
E-mail:
Phone #: 914-257-0400, ext. 309
Fax #:
Sampler(s) Name(s): Nestor M. Rivera
Phone #:

Project Information

Project Name: BMS - Biopile Phase 5
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)

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 # (11/21 TR)	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	VOC 8260 (See Note)	% Solids		* 3 (water) 24 h @ 11/21/13							LAB USE ONLY
-1	A-2-9 (5.7-6.2)		11/20/13	1341		SO	4									✓	✓		*			-1				
-2	A-2-9 (5.7-6.2) D			1346		SO	4									✓	✓					-2				M32T3
-3	A-2-9 (5.7-6.2) MS			1351		SO	4									✓	✓					-1				14K3
-4	A-2-9 (5.7-6.2) MSD			1358		SO	4									✓	✓					-1				4021
-5	TB 11 2013	835	11/20/13	1403		TB	1							✓		✓						-3				

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☒ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☐ other _____

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

Lab TB 11/4/2013 Vial # 835
Voc: Xylene

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 [signature]	11/20/13 1417	1 [signature]	2 [signature]	11/20/13	2 Fed Ex
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3 FEDEX	11/21/13 0845	3 [signature]	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal # 302 ☑ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☑ Cooler Temp. 1.1°C IP
5		5			

2A

JK

JB53758: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB53758 **Client:** _____ **Project:** _____

Date / Time Received: 11/21/2013 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted): #1: (1.1/1.1); 0

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	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	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

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

Sample Integrity - Instructions	Y	or	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

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5.1

5

JB53758: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JB53758

BMS-ICM, Humacao, PR
Project No: Biopile Phase 5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB53758-1	Collected: 20-NOV-13 13:41 By: NR		Received: 21-NOV-13 By: TH			
A-2-9 (5.7-6.2)						
JB53758-1	SW846 8260B	24-NOV-13 01:34	DP			
JB53758-1	SW846 8260B	25-NOV-13 16:15	DP			V8260XYL
JB53758-1	SM2540 G-97	26-NOV-13 10:57	AR			%SOL
JB53758-2	Collected: 20-NOV-13 13:46 By: NR		Received: 21-NOV-13 By: TH			
A-2-9 (5.7-6.2)D						
JB53758-2	SW846 8260B	24-NOV-13 02:03	DP			
JB53758-2	SW846 8260B	25-NOV-13 16:44	DP			V8260XYL
JB53758-2	SM2540 G-97	26-NOV-13 10:57	AR			%SOL
JB53758-3	Collected: 20-NOV-13 13:58 By: NR		Received: 21-NOV-13 By: TH			
TB 112013						
JB53758-3	SW846 8260B	24-NOV-13 12:47	NT			V8260XYL

Accutest Internal Chain of Custody

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR
Received: 11/21/13

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB53758-1.2	Secured Storage	Bernadette Vassilatos	11/26/13 07:32	Retrieve from Storage
JB53758-1.2	Bernadette Vassilatos	Secured Staging Area	11/26/13 07:32	Return to Storage
JB53758-1.2	Secured Staging Area	Arayna Ramkelawan	11/26/13 08:14	Retrieve from Storage
JB53758-1.2	Arayna Ramkelawan	Secured Storage	11/26/13 11:16	Return to Storage
JB53758-1.5	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.5	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-1.5	Secured Storage	Divya Patel	11/23/13 11:53	Retrieve from Storage
JB53758-1.5	Divya Patel	VOA Prep Storage	11/23/13 15:33	Return to Storage
JB53758-1.5	VOA Prep Storage	Divya Patel	11/25/13 17:09	Retrieve from Storage
JB53758-1.5	Divya Patel	Secured Storage	11/25/13 17:09	Return to Storage
JB53758-1.6	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.6	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-1.7	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.7	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-1.8	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.8	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-1.9	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.9	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-1.10	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.10	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-1.11	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.11	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-1.12	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.12	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-1.13	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-1.13	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-2.1	Secured Storage	Bernadette Vassilatos	11/26/13 07:32	Retrieve from Storage
JB53758-2.1	Bernadette Vassilatos	Secured Staging Area	11/26/13 07:32	Return to Storage
JB53758-2.1	Secured Staging Area	Arayna Ramkelawan	11/26/13 08:14	Retrieve from Storage
JB53758-2.1	Arayna Ramkelawan	Secured Storage	11/26/13 11:16	Return to Storage
JB53758-2.3	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-2.3	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-2.3	Secured Storage	Divya Patel	11/23/13 11:53	Retrieve from Storage

Accutest Internal Chain of Custody

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR
Received: 11/21/13

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB53758-2.3	Divya Patel	VOA Prep Storage	11/23/13 15:33	Return to Storage
JB53758-2.3	VOA Prep Storage	Divya Patel	11/25/13 17:09	Retrieve from Storage
JB53758-2.3	Divya Patel	Secured Storage	11/25/13 17:09	Return to Storage
JB53758-2.4	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-2.4	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-2.5	Secured Storage	Frank Zhu	11/22/13 09:01	Retrieve from Storage
JB53758-2.5	Frank Zhu	Secured Storage	11/22/13 10:00	Return to Storage
JB53758-3.5	Secured Storage	Nathaniel Tuvera	11/22/13 17:35	Retrieve from Storage
JB53758-3.5	Nathaniel Tuvera	VOA Prep Storage	11/22/13 17:35	Return to Storage
JB53758-3.5	VOA Prep Storage	Divya Patel	11/23/13 09:18	Retrieve from Storage
JB53758-3.5	Divya Patel	GCMSX	11/23/13 09:18	Load on Instrument
JB53758-3.5	GCMSX	Nathaniel Tuvera	11/25/13 13:42	Unload from Instrument
JB53758-3.5	Nathaniel Tuvera		11/25/13 13:42	Depleted

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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: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX6159-MB	X142331C.D	1	11/24/13	NT	n/a	n/a	VX6159

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

JB53758-3

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	ND	1.0	0.18	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	59-130%
17060-07-0	1,2-Dichloroethane-D4	95%	65-123%
2037-26-5	Toluene-D8	103%	80-124%
460-00-4	4-Bromofluorobenzene	103%	71-132%

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

Method Blank Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE9218-MB	E210116.D	1	11/25/13	DP	n/a	n/a	VE9218

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

JB53758-1, JB53758-2

CAS No.	Compound	Result	RL	MDL	Units	Q
1330-20-7	Xylene (total)	ND	50	8.9	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	59-130%
17060-07-0	1,2-Dichloroethane-D4	100%	65-123%
2037-26-5	Toluene-D8	98%	80-124%
460-00-4	4-Bromofluorobenzene	116%	71-132%

Blank Spike Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX6159-BS	X142332C.D	1	11/24/13	NT	n/a	n/a	VX6159

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

JB53758-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
1330-20-7	Xylene (total)	150	149	99	76-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	59-130%
17060-07-0	1,2-Dichloroethane-D4	98%	65-123%
2037-26-5	Toluene-D8	104%	80-124%
460-00-4	4-Bromofluorobenzene	97%	71-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX6159-BS	X142364.D	1	11/25/13	NT	n/a	n/a	VX6159

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

JB53758-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
1330-20-7	Xylene (total)	150	148	99	76-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	59-130%
17060-07-0	1,2-Dichloroethane-D4	98%	65-123%
2037-26-5	Toluene-D8	105%	80-124%
460-00-4	4-Bromofluorobenzene	96%	71-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE9218-BS	E210117.D	1	11/25/13	DP	n/a	n/a	VE9218

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

JB53758-1, JB53758-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
1330-20-7	Xylene (total)	7500	8380	112	76-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	59-130%
17060-07-0	1,2-Dichloroethane-D4	99%	65-123%
2037-26-5	Toluene-D8	99%	80-124%
460-00-4	4-Bromofluorobenzene	109%	71-132%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB53799-1MS	X142338.D	1	11/24/13	NT	n/a	n/a	VX6159
JB53799-1	X142335A.D	1	11/24/13	NT	n/a	n/a	VX6159

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

JB53758-3

CAS No.	Compound	JB53799-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
1330-20-7	Xylene (total)	ND		158	167	106	25-140

CAS No.	Surrogate Recoveries	MS	JB53799-1	Limits
1868-53-7	Dibromofluoromethane	95%	97%	59-130%
17060-07-0	1,2-Dichloroethane-D4	86%	98%	65-123%
2037-26-5	Toluene-D8	104%	104%	80-124%
460-00-4	4-Bromofluorobenzene	97%	102%	71-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB54013-1MS	E210126.D	1	11/25/13	DP	n/a	n/a	VE9218
JB54013-1MSD	E210127.D	1	11/25/13	DP	n/a	n/a	VE9218
JB54013-1 [a]	E210129.D	1	11/25/13	DP	n/a	n/a	VE9218

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

JB53758-1, JB53758-2

CAS No.	Compound	JB54013-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
1330-20-7	Xylene (total)	ND		13200	11700	89	11400	86	3	25-140/29

CAS No.	Surrogate Recoveries	MS	MSD	JB54013-1	Limits
1868-53-7	Dibromofluoromethane	102%	101%	102%	59-130%
17060-07-0	1,2-Dichloroethane-D4	93%	91%	95%	65-123%
2037-26-5	Toluene-D8	99%	99%	99%	80-124%
460-00-4	4-Bromofluorobenzene	105%	102%	108%	71-132%

(a) Dilution required due to matrix interference.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB53799-3DUP	X142340.D	1	11/24/13	NT	n/a	n/a	VX6159
JB53799-3	X142336.D	1	11/24/13	NT	n/a	n/a	VX6159

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

JB53758-3

CAS No.	Compound	JB53799-3 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
1330-20-7	Xylene (total)	ND		ND		nc	22

CAS No.	Surrogate Recoveries	DUP	JB53799-3	Limits
1868-53-7	Dibromofluoromethane	98%	97%	59-130%
17060-07-0	1,2-Dichloroethane-D4	97%	97%	65-123%
2037-26-5	Toluene-D8	102%	103%	80-124%
460-00-4	4-Bromofluorobenzene	105%	103%	71-132%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample: VE9161-BFB
Lab File ID: E208760.D
Instrument ID: GCMSE
Injection Date: 10/22/13
Injection Time: 22:21

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8397	18.8		Pass
75	30.0 - 60.0% of mass 95	20978	47.0		Pass
95	Base peak, 100% relative abundance	44605	100.0		Pass
96	5.0 - 9.0% of mass 95	3021	6.77		Pass
173	Less than 2.0% of mass 174	129	0.29	(0.31) [a]	Pass
174	50.0 - 120.0% of mass 95	42274	94.8		Pass
175	5.0 - 9.0% of mass 174	3202	7.18	(7.57) [a]	Pass
176	95.0 - 101.0% of mass 174	41496	93.0	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	2709	6.07	(6.53) [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
VE9161-IC9161	E208761.D	10/22/13	22:51	00:30	Initial cal 0.5
ZZZZZZ	E208761.D	10/22/13	22:51	00:30	(unrelated sample)
ZZZZZZ	E208762.D	10/22/13	23:21	01:00	(unrelated sample)
VE9161-IC9161	E208762.D	10/22/13	23:21	01:00	Initial cal 1
VE9161-IC9161	E208763.D	10/22/13	23:50	01:29	Initial cal 2
VE9161-IC9161	E208764.D	10/23/13	00:20	01:59	Initial cal 5
VE9161-IC9161	E208765.D	10/23/13	00:49	02:28	Initial cal 10
VE9161-IC9161	E208766.D	10/23/13	01:19	02:58	Initial cal 20
VE9161-ICC9161	E208767.D	10/23/13	01:49	03:28	Initial cal 50
VE9161-IC9161	E208768.D	10/23/13	02:18	03:57	Initial cal 100
VE9161-IC9161	E208769.D	10/23/13	02:48	04:27	Initial cal 200
VE9161-ICV9161	E208772.D	10/23/13	04:19	05:58	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample: VE9217-BFB
Lab File ID: E210077.D
Instrument ID: GCMSE
Injection Date: 11/23/13
Injection Time: 21:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8006	18.7		Pass
75	30.0 - 60.0% of mass 95	20349	47.4		Pass
95	Base peak, 100% relative abundance	42904	100.0		Pass
96	5.0 - 9.0% of mass 95	2736	6.38		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	37762	88.0		Pass
175	5.0 - 9.0% of mass 174	2874	6.70	(7.61) [a]	Pass
176	95.0 - 101.0% of mass 174	37445	87.3	(99.2) [a]	Pass
177	5.0 - 9.0% of mass 176	2421	5.64	(6.47) [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
VE9217-CC9161	E210078.D	11/23/13	22:06	00:30	Continuing cal 50
VE9217-MB	E210080.D	11/23/13	23:06	01:30	Method Blank
ZZZZZZ	E210080.D	11/23/13	23:06	01:30	(unrelated sample)
VE9217-BS	E210081.D	11/23/13	23:36	02:00	Blank Spike
JB53758-1MS	E210082.D	11/24/13	00:05	02:29	Matrix Spike
JB53758-1MSD	E210083.D	11/24/13	00:35	02:59	Matrix Spike Duplicate
JB53758-1	E210085.D	11/24/13	01:34	03:58	A-2-9 (5.7-6.2)
JB53758-2	E210086.D	11/24/13	02:03	04:27	A-2-9 (5.7-6.2)D
ZZZZZZ	E210091.D	11/24/13	04:31	06:55	(unrelated sample)
ZZZZZZ	E210092.D	11/24/13	05:01	07:25	(unrelated sample)
ZZZZZZ	E210093.D	11/24/13	05:31	07:55	(unrelated sample)
ZZZZZZ	E210094.D	11/24/13	06:00	08:24	(unrelated sample)
ZZZZZZ	E210095.D	11/24/13	06:30	08:54	(unrelated sample)
ZZZZZZ	E210100.D	11/24/13	08:59	11:23	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample: VE9218-BFB
Lab File ID: E210113.D
Instrument ID: GCMSE
Injection Date: 11/25/13
Injection Time: 12:59

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10751	17.6		Pass
75	30.0 - 60.0% of mass 95	29074	47.5		Pass
95	Base peak, 100% relative abundance	61170	100.0		Pass
96	5.0 - 9.0% of mass 95	4066	6.65		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	53045	86.7		Pass
175	5.0 - 9.0% of mass 174	3816	6.24	(7.19) [a]	Pass
176	95.0 - 101.0% of mass 174	51498	84.2	(97.1) [a]	Pass
177	5.0 - 9.0% of mass 176	3397	5.55	(6.60) [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
VE9218-CC9161	E210115.D	11/25/13	14:13	01:14	Continuing cal 20
ZZZZZZ	E210116.D	11/25/13	14:53	01:54	(unrelated sample)
VE9218-MB	E210116.D	11/25/13	14:53	01:54	Method Blank
VE9218-BS	E210117.D	11/25/13	15:34	02:35	Blank Spike
JB53758-1	E210118.D	11/25/13	16:15	03:16	A-2-9 (5.7-6.2)
JB53758-2	E210119.D	11/25/13	16:44	03:45	A-2-9 (5.7-6.2)D
ZZZZZZ	E210122.D	11/25/13	18:13	05:14	(unrelated sample)
ZZZZZZ	E210123.D	11/25/13	18:43	05:44	(unrelated sample)
ZZZZZZ	E210124.D	11/25/13	19:12	06:13	(unrelated sample)
JB54013-1MS	E210126.D	11/25/13	20:12	07:13	Matrix Spike
JB54013-1MSD	E210127.D	11/25/13	20:41	07:42	Matrix Spike Duplicate
JB54013-1	E210129.D	11/25/13	21:40	08:41	(used for QC only; not part of job JB53758)
ZZZZZZ	E210130.D	11/25/13	22:10	09:11	(unrelated sample)
ZZZZZZ	E210133.D	11/25/13	23:38	10:39	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample: VX6084-BFB
Lab File ID: X140614.D
Instrument ID: GCMSX
Injection Date: 10/11/13
Injection Time: 09:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	11475	17.2		Pass
75	30.0 - 80.0% of mass 95	30568	45.9		Pass
95	Base peak, 100% relative abundance	66568	100.0		Pass
96	5.0 - 9.0% of mass 95	4524	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	58725	88.2		Pass
175	5.0 - 9.0% of mass 174	4805	7.22	(8.18) [a]	Pass
176	95.0 - 101.0% of mass 174	56819	85.4	(96.8) [a]	Pass
177	5.0 - 9.0% of mass 176	3745	5.63	(6.59) [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
VX6084-IC6084	X140615.D	10/11/13	10:22	00:34	Initial cal 10
VX6084-IC6084	X140616.D	10/11/13	10:51	01:03	Initial cal 5
VX6084-IC6084	X140617.D	10/11/13	11:21	01:33	Initial cal 2
VX6084-IC6084	X140618.D	10/11/13	11:50	02:02	Initial cal 1
VX6084-IC6084	X140619.D	10/11/13	12:20	02:32	Initial cal 0.5
VX6084-IC6084	X140620.D	10/11/13	12:50	03:02	Initial cal 20
VX6084-ICC6084	X140621.D	10/11/13	13:19	03:31	Initial cal 50
VX6084-IC6084	X140622.D	10/11/13	13:48	04:00	Initial cal 100
VX6084-IC6084	X140623.D	10/11/13	14:18	04:30	Initial cal 200
VX6084-ICV6084	X140625.D	10/11/13	15:18	05:30	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample: VX6159-BFB
Lab File ID: X142328C.D
Instrument ID: GCMSX
Injection Date: 11/24/13
Injection Time: 08:45

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10678	16.6		Pass
75	30.0 - 60.0% of mass 95	29736	46.3		Pass
95	Base peak, 100% relative abundance	64178	100.0		Pass
96	5.0 - 9.0% of mass 95	4253	6.63		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	60026	93.5		Pass
175	5.0 - 9.0% of mass 174	4911	7.65	(8.18) [a]	Pass
176	95.0 - 101.0% of mass 174	59170	92.2	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	3837	5.98	(6.48) [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
VX6159-CC6084	X142329D.D	11/24/13	09:50	01:05	Continuing cal 20
VX6159-MB	X142331C.D	11/24/13	11:00	02:15	Method Blank
VX6159-BS	X142332C.D	11/24/13	11:35	02:50	Blank Spike
JB53758-3	X142335.D	11/24/13	12:47	04:02	TB 112013
JB53799-1	X142335A.D	11/24/13	13:16	04:31	(used for QC only; not part of job JB53758)
JB53799-3	X142336.D	11/24/13	13:45	05:00	(used for QC only; not part of job JB53758)
ZZZZZZ	X142337.D	11/24/13	14:15	05:30	(unrelated sample)
JB53799-1MS	X142338.D	11/24/13	14:44	05:59	Matrix Spike
JB53799-3DUP	X142340.D	11/24/13	15:44	06:59	Duplicate
ZZZZZZ	X142341.D	11/24/13	16:14	07:29	(unrelated sample)
ZZZZZZ	X142342.D	11/24/13	16:43	07:58	(unrelated sample)
ZZZZZZ	X142343.D	11/24/13	17:13	08:28	(unrelated sample)
ZZZZZZ	X142344.D	11/24/13	17:42	08:57	(unrelated sample)
ZZZZZZ	X142345.D	11/24/13	18:12	09:27	(unrelated sample)
ZZZZZZ	X142346.D	11/24/13	18:41	09:56	(unrelated sample)
ZZZZZZ	X142347.D	11/24/13	19:11	10:26	(unrelated sample)
ZZZZZZ	X142348.D	11/24/13	19:41	10:56	(unrelated sample)
ZZZZZZ	X142349.D	11/24/13	20:10	11:25	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample: VX6160-BFB
Lab File ID: X142361.D
Instrument ID: GCMSX
Injection Date: 11/25/13
Injection Time: 12:24

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9754	16.8		Pass
75	30.0 - 60.0% of mass 95	28064	48.2		Pass
95	Base peak, 100% relative abundance	58168	100.0		Pass
96	5.0 - 9.0% of mass 95	3919	6.74		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	52973	91.1		Pass
175	5.0 - 9.0% of mass 174	4225	7.26	(7.98) [a]	Pass
176	95.0 - 101.0% of mass 174	51994	89.4	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	3367	5.79	(6.48) [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
VX6160-CC6084	X142362.D	11/25/13	12:54	00:30	Continuing cal 20
VX6160-MB1	X142363.D	11/25/13	13:46	01:22	Method Blank
VX6159-BS	X142364.D	11/25/13	14:24	02:00	Blank Spike
VX6160-BS	X142364.D	11/25/13	14:24	02:00	Blank Spike
JB53089-2R	X142366.D	11/25/13	15:22	02:58	(used for QC only; not part of job JB53758)
JB53089-4R	X142367.D	11/25/13	15:51	03:27	(used for QC only; not part of job JB53758)
JB53089-2RDUP	X142368.D	11/25/13	16:21	03:57	Duplicate
JB53089-4RMS	X142369.D	11/25/13	16:50	04:26	Matrix Spike
ZZZZZZ	X142371.D	11/25/13	17:49	05:25	(unrelated sample)
ZZZZZZ	X142372.D	11/25/13	18:19	05:55	(unrelated sample)
ZZZZZZ	X142373.D	11/25/13	18:48	06:24	(unrelated sample)
ZZZZZZ	X142374.D	11/25/13	19:18	06:54	(unrelated sample)
ZZZZZZ	X142375.D	11/25/13	19:47	07:23	(unrelated sample)
ZZZZZZ	X142376.D	11/25/13	20:17	07:53	(unrelated sample)
ZZZZZZ	X142378.D	11/25/13	21:15	08:51	(unrelated sample)
ZZZZZZ	X142379.D	11/25/13	21:45	09:21	(unrelated sample)
ZZZZZZ	X142380.D	11/25/13	22:14	09:50	(unrelated sample)
ZZZZZZ	X142381.D	11/25/13	22:43	10:19	(unrelated sample)
ZZZZZZ	X142382.D	11/25/13	23:13	10:49	(unrelated sample)
ZZZZZZ	X142383.D	11/25/13	23:43	11:19	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Check Std:	VE9217-CC9161	**Injection Date:**	11/23/13
Lab File ID:	E210078.D	**Injection Time:**	22:06
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	39208	7.62	122601	9.85	182840	10.77	170263	14.10	97792	16.67
Upper Limit [a]	78416	8.12	245202	10.35	365680	11.27	340526	14.60	195584	17.17
Lower Limit [b]	19604	7.12	61301	9.35	91420	10.27	85132	13.60	48896	16.17

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VE9217-MB	34428	7.63	115138	9.85	171592	10.77	156986	14.10	81313	16.67
ZZZZZZ	34428	7.63	115138	9.85	171592	10.77	156986	14.10	81313	16.67
VE9217-BS	33021	7.62	117069	9.85	173558	10.77	162439	14.09	90953	16.67
JB53758-1MS	37337	7.63	116050	9.85	173909	10.77	164097	14.09	99923	16.67
JB53758-1MSD	41566	7.63	118674	9.85	176516	10.76	165753	14.10	103724	16.67
JB53758-1 [c]	33484	7.62	112766	9.85	168128	10.77	162159	14.10	96085	16.67
JB53758-2 [c]	38356	7.63	117408	9.85	174249	10.77	169220	14.10	101785	16.67
ZZZZZZ	38313	7.63	111385	9.85	171453	10.77	165040	14.09	110298	16.67
ZZZZZZ	56420	7.62	131053	9.85	198819	10.76	194154	14.10	114799	16.67
ZZZZZZ	43676	7.63	125648	9.85	182140	10.76	166668	14.09	104004	16.67
ZZZZZZ	46032	7.63	126388	9.85	186736	10.77	173518	14.09	104085	16.67
ZZZZZZ	45016	7.62	126758	9.85	187784	10.76	169046	14.10	104394	16.67
ZZZZZZ	40708	7.62	115413	9.85	170108	10.76	155192	14.10	86286	16.67

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) Confirmation run.

Volatile Internal Standard Area Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Check Std:	VE9218-CC9161	**Injection Date:**	11/25/13
Lab File ID:	E210115.D	**Injection Time:**	14:13
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	74451	7.62	165304	9.85	247481	10.77	227058	14.10	123968	16.67
Upper Limit [a]	148902	8.12	330608	10.35	494962	11.27	454116	14.60	247936	17.17
Lower Limit [b]	37226	7.12	82652	9.35	123741	10.27	113529	13.60	61984	16.17

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VE9218-MB	70352	7.62	162221	9.85	243767	10.77	221258	14.10	113727	16.67
ZZZZZZ	70352	7.62	162221	9.85	243767	10.77	221258	14.10	113727	16.67
VE9218-BS	76862	7.62	167752	9.85	253604	10.76	232639	14.09	131056	16.67
JB53758-1	75182	7.62	160294	9.85	240566	10.76	220538	14.09	114147	16.67
JB53758-2	75836	7.63	162054	9.85	242978	10.76	225058	14.09	116036	16.67
ZZZZZZ	80973	7.62	172573	9.85	253862	10.76	235549	14.09	132817	16.67
ZZZZZZ	83295	7.64	170215	9.85	252444	10.77	232462	14.09	129752	16.67
ZZZZZZ	74990	7.66	172150	9.84	252923	10.77	231272	14.10	123293	16.67
JB54013-1MS	92519	7.68	179897	9.84	263299	10.76	245815	14.10	144597	16.67
JB54013-1MSD	80895	7.63	176508	9.85	258236	10.76	239962	14.09	144958	16.67
JB54013-1	74500	7.63	172918	9.85	255803	10.76	237455	14.09	133475	16.67
ZZZZZZ	75890	7.63	174714	9.85	258875	10.76	236776	14.09	132094	16.67
ZZZZZZ	76893	7.62	177678	9.85	267519	10.76	245109	14.09	135552	16.67

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: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Check Std:	VX6159-CC6084	**Injection Date:**	11/24/13
Lab File ID:	X142329D.D	**Injection Time:**	09:50
Instrument ID:	GCMSX	**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	64349	6.92	201609	9.59	287699	10.74	267696	15.00	140238	17.85
Upper Limit [a]	128698	7.42	403218	10.09	575398	11.24	535392	15.50	280476	18.35
Lower Limit [b]	32175	6.42	100805	9.09	143850	10.24	133848	14.50	70119	17.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VX6159-MB	58480	6.94	197041	9.59	279245	10.75	254481	15.00	121897	17.86
VX6159-BS	74169	6.92	199116	9.59	285372	10.74	265007	15.00	142080	17.85
JB53758-3	59504	6.93	194010	9.59	278415	10.75	257797	15.00	122661	17.86
JB53799-1	72687	6.93	205690	9.60	295962	10.75	269986	15.00	130544	17.86
JB53799-3	63990	6.93	201424	9.60	290023	10.75	261916	15.00	122677	17.86
ZZZZZZ	59546	6.93	179967	9.59	258594	10.75	240295	15.00	114214	17.85
JB53799-1MS	39755	6.93	194855	9.59	279430	10.75	255762	15.00	135218	17.85
JB53799-3DUP	60151	6.93	196478	9.59	283439	10.74	254413	15.00	118770	17.85
ZZZZZZ	63170	6.93	198354	9.59	283803	10.74	259501	15.00	126428	17.85
ZZZZZZ	60993	6.93	190036	9.59	273041	10.74	248369	15.00	117655	17.85
ZZZZZZ	60429	6.93	176919	9.59	254206	10.74	233806	15.00	111337	17.85
ZZZZZZ	59967	6.92	193078	9.59	279432	10.74	257704	14.99	117437	17.85
ZZZZZZ	53318	6.93	190694	9.59	276064	10.74	252327	14.99	121695	17.85
ZZZZZZ	50688	6.93	190913	9.59	275581	10.74	256513	14.99	117943	17.85
ZZZZZZ	48458	6.92	190639	9.58	272858	10.74	250365	14.99	119673	17.85
ZZZZZZ	54706	6.92	185238	9.58	265289	10.74	242787	14.99	116249	17.85
ZZZZZZ	50468	6.92	192923	9.59	277771	10.74	255903	14.99	123920	17.85

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: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Check Std:	VX6160-CC6084	**Injection Date:**	11/25/13
Lab File ID:	X142362.D	**Injection Time:**	12:54
Instrument ID:	GCMSX	**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	54309	6.92	183964	9.58	270998	10.73	258105	14.99	131470	17.85
Upper Limit [a]	108618	7.42	367928	10.08	541996	11.23	516210	15.49	262940	18.35
Lower Limit [b]	27155	6.42	91982	9.08	135499	10.23	129053	14.49	65735	17.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VX6160-MB1	61345	6.92	187377	9.58	268097	10.73	245065	14.99	118008	17.85
VX6160-BS	58523	6.92	183991	9.58	265448	10.73	248992	14.99	133170	17.85
VX6159-BS	58523	6.92	184250	9.58	265448	10.73	248992	14.99	133170	17.85
JB53089-2R	63185	6.92	192536	9.59	279522	10.74	256785	14.99	125257	17.85
JB53089-4R	60375	6.92	198194	9.58	285629	10.74	260319	14.99	125145	17.85
JB53089-2RDUP	73295	6.92	201828	9.58	292758	10.74	272267	14.99	129412	17.85
JB53089-4RMS	63583	6.92	196957	9.59	287788	10.74	274755	14.99	146682	17.85
ZZZZZZ	64644	6.92	200948	9.58	294142	10.74	271966	14.99	131016	17.85
ZZZZZZ	70809	6.93	197842	9.59	288315	10.74	265437	14.99	128350	17.85
ZZZZZZ	57649	6.92	204892	9.59	296996	10.74	273630	14.99	127602	17.85
ZZZZZZ	68266	6.93	201748	9.59	293464	10.74	268447	14.99	127084	17.85
ZZZZZZ	66269	6.92	195632	9.59	283143	10.74	265212	14.99	126945	17.85
ZZZZZZ	64408	6.91	195487	9.58	284473	10.74	266953	14.99	137266	17.85
ZZZZZZ	62815	6.93	199937	9.59	289228	10.74	263090	14.99	125753	17.85
ZZZZZZ	60075	6.93	203477	9.59	292685	10.74	259648	14.99	120575	17.85
ZZZZZZ	63800	6.92	198234	9.58	289821	10.74	269722	14.99	137082	17.85
ZZZZZZ	55527	6.93	202752	9.59	288684	10.74	274780	15.00	137340	17.85
ZZZZZZ	61171	6.91	211074	9.59	307249	10.74	294137	14.99	147928	17.85
ZZZZZZ	69071	6.92	212200	9.59	306213	10.74	287127	14.99	139230	17.85

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 Surrogate Recovery Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, 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
JB53758-1	E210118.D	106.0	100.0	99.0	117.0
JB53758-1	E210085.D	107.0	104.0	105.0	113.0
JB53758-2	E210119.D	107.0	100.0	100.0	118.0
JB53758-2	E210086.D	106.0	103.0	106.0	117.0
JB53758-3	X142335.D	96.0	95.0	103.0	103.0
JB53799-1MS	X142338.D	95.0	86.0	104.0	97.0
JB53799-3DUP	X142340.D	98.0	97.0	102.0	105.0
JB54013-1MS	E210126.D	102.0	93.0	99.0	105.0
JB54013-1MSD	E210127.D	101.0	91.0	99.0	102.0
VE9218-BS	E210117.D	106.0	99.0	99.0	109.0
VE9218-MB	E210116.D	104.0	100.0	98.0	116.0
VX6159-BS	X142332C.D	97.0	98.0	104.0	97.0
VX6159-BS	X142364.D	99.0	98.0	105.0	96.0
VX6159-MB	X142331C.D	95.0	95.0	103.0	103.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	59-130%
S2 = 1,2-Dichloroethane-D4	65-123%
S3 = Toluene-D8	80-124%
S4 = 4-Bromofluorobenzene	71-132%

Initial Calibration Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR
Sample: VE9161-ICC9161
Lab FileID: E208767.D

```
                         Response Factor Report  MSE

 Method       : C:\MSDCHEM\1\METHODS\ME9161.M (RTE Integrator)
 Title        : SW846  8260B,ZB624 60m x 0.25mm x 1.4um
 Last Update  : Wed Oct 23 10:07:58 2013
 Response via : Initial Calibration

 Calibration Files
 5   =E208764.D   2   =E208763.D   20  =E208766.D   50  =E208767.D
 100 =E208768.D   1   =E208762.D   200 =E208769.D   0.5 =E208761.D
 10  =E208765.D       =

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

 1)     Tert Butyl Alcohol-d9 ----------------ISTD---------------------
 2)  1,4-dioxane
           0.063       0.112 0.105 0.095       0.087       0.085   0.091   19.12
            ----- Linear regression -----  Coefficient =  0.9950
              Response Ratio = 0.01723 + 0.08702 *A

 3)  tertiary butyl alcohol
           1.101       1.228 1.175 1.136       0.980       1.249   1.145    8.56
 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
           0.669       0.551 0.551 0.545       0.533       0.591   0.573    8.87
12)  dichlorodifluoromethane
           0.688 0.677 0.675 0.602 0.589 0.695 0.575       0.669   0.646    7.57
13)  freon 114
                                                                   0.000#  -1.00
14)  freon 142b
                                                                   0.000#  -1.00
15)  chloromethane
           0.855 0.909 0.857 0.791 0.762 0.986 0.745       0.851   0.845    9.41
16)  vinyl chloride
           0.747 0.685 0.802 0.753 0.715 0.597 0.704 0.595 0.767   0.707   10.21
17)  1,3-Butadiene
                                                                   0.000#  -1.00
18)  acetaldehyde
                                                                   0.000#  -1.00
19)  bromomethane
           0.660       0.569 0.476 0.439       0.420       0.507   0.512   17.56
            ----- Linear regression -----  Coefficient =  0.9990
              Response Ratio = 0.04257 + 0.41178 *A

20)  chloroethane
```

Initial Calibration Summary

Job Number: JB53758 **Sample:** VE9161-ICC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E208767.D
Project: BMS-ICM, Humacao, PR

```
            0.382 0.330 0.386 0.360 0.344 0.316 0.329       0.384   0.354    7.88
21)  vinyl bromide
                                                                    0.000#  -1.00
22)  trichlorofluoromethane
            0.797 0.704 0.824 0.779 0.756       0.740       0.800   0.772    5.29
23)  pentane
                                                                    0.000#  -1.00
24)  ethyl ether
            0.262 0.249 0.296 0.284 0.278 0.179 0.275       0.285   0.264   14.07
25)  freon 141b
                                                                    0.000#  -1.00
26)  freon 123a
                                                                    0.000#  -1.00
27)  freon 123
                                                                    0.000#  -1.00
28)  2-chloropropane
            0.999 1.054 1.048 0.999 0.938 1.061 0.955 1.002 1.000   1.006    4.23
29)  acrolein
            0.130 0.130 0.131 0.125       0.129             0.132   0.129    1.95
30)  1,1-dichloroethene
            0.471 0.486 0.509 0.495 0.459 0.439 0.473 0.435 0.487   0.473    5.24
31)  isopropyl alcohol
                                                                    0.000#  -1.00
32)  acetone
                        0.054 0.054 0.049       0.049       0.045   0.050    8.07
33)  allyl chloride
            1.041 1.117 1.128 1.063 0.984 1.034 0.974 1.027 1.080   1.050    5.07
34)  acetonitrile
                        0.033 0.031 0.032       0.032       0.030   0.032    2.90
35)  iodomethane
            0.815 0.747 0.900 0.883 0.827 0.684 0.851 0.643 0.859   0.801   11.25
36)  iso-butyl alcohol
            0.004       0.018 0.018 0.005       0.005       0.006   0.009#  73.88
             ----- Linear regression -----  Coefficient =  0.5872
               Response Ratio = 0.04011 + 0.00404 *A

37)  carbon disulfide
            1.646 1.609 1.849 1.780 1.714 1.499 1.730 1.667 1.771   1.696    6.14
38)  methylene chloride
            0.524 0.589 0.574 0.556 0.527 0.647 0.535 0.601 0.557   0.568    7.03
39)  1-chloropropane
            0.991       1.090 1.015 0.981       0.976       1.051   1.017    4.43
40)  methyl acetate
            0.393 0.315 0.484 0.454 0.457       0.449       0.423   0.425   13.29
41)  methyl tert butyl ether
            1.454 1.531 1.608 1.539 1.462 1.473 1.488 1.601 1.524   1.520    3.73
42)  trans-1,2-dichloroethene
            0.519 0.511 0.550 0.523 0.511 0.484 0.512 0.614 0.520   0.527    6.99
43)  di-isopropyl ether
            1.790 1.881 1.980 1.911 1.897 1.817 1.877 2.330 1.904   1.932    8.23
44)  ethyl tert-butyl ether
            1.684 1.791 1.810 1.761 1.736 1.635 1.699 1.820 1.747   1.743    3.54
45)  2-butanone
                        0.061 0.064 0.060       0.061       0.049   0.059   10.11
46)  1,1-dichloroethane
            0.891 0.862 0.988 0.957 0.925 0.826 0.927 0.902 0.947   0.914    5.45
47)  chloroprene
            0.783 0.861 0.829 0.794 0.802 0.770 0.785 1.021 0.815   0.829    9.31
48)  acrylonitrile
            0.221 0.232 0.235 0.228 0.214 0.258 0.214 0.266 0.231   0.233    7.79
```

Initial Calibration Summary

Job Number: JB53758 **Sample:** VE9161-ICC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E208767.D
Project: BMS-ICM, Humacao, PR

```
49)  vinyl acetate
                        0.092 0.092 0.091       0.091       0.092   0.091    0.66
50)  ethyl acetate
           0.094        0.088 0.081 0.079       0.078       0.090   0.085    7.59
51)  2,2-dichloropropane
           0.711 0.799 0.719 0.677 0.631 0.920 0.640       0.701   0.725   13.05
52)  cis-1,2-dichloroethene
           0.542 0.520 0.581 0.563 0.543 0.506 0.545 0.661 0.556   0.557    7.98
53)  methyl acrylate
           0.421 0.381 0.521 0.514 0.491       0.495       0.480   0.472   10.97
54)  propionitrile
           0.084 0.090 0.095 0.091 0.084 0.102 0.083 0.117 0.090   0.093   11.69
55)  bromochloromethane
           0.244 0.205 0.274 0.271 0.265       0.266       0.257   0.255    9.50
56)  tetrahydrofuran
           0.210        0.214 0.206 0.194       0.194       0.204   0.204    4.06
57)  chloroform
           0.882 0.901 0.926 0.894 0.864 1.098 0.869       0.886   0.915    8.35
58)  t-butyl formate
           0.515 0.577 0.559 0.541 0.532 0.531 0.524 0.593 0.538   0.545    4.74
59)  Iso-octane
           1.880 2.204 2.141 2.055 2.098 1.858 2.117 2.129 2.021   2.056    5.74
60)  dibromofluoromethane (s)
           0.469 0.431 0.482 0.473 0.470 0.478 0.461 0.547 0.474   0.476    6.44
61)  1,2-dichloroethane-d4 (s)
           0.584 0.552 0.574 0.573 0.564 0.596 0.555 0.786 0.567   0.595   12.26
62)  freon 113
           0.353        0.391 0.372 0.370       0.374       0.374   0.372    3.24
63)  methacrylonitrile
           0.344 0.388 0.380 0.361 0.350 0.330 0.345       0.372   0.359    5.54
64)  1,1,1-trichloroethane
           0.724 0.747 0.800 0.769 0.744 0.687 0.759 0.772 0.765   0.752    4.30
65)  tert-amyl methyl ether
           1.525 1.634 1.677 1.612 1.595 1.491 1.604 1.847 1.625   1.623    6.23

66) I   1,4-difluorobenzene   ----------------ISTD---------------------
67)  Di-isobutylene
                                                                   0.000#  -1.00
68)  tert amyl alcohol
           0.016        0.015 0.014 0.014       0.013       0.015   0.015    7.74
69)  epichlorohydrin
                        0.046 0.042 0.041       0.039       0.043   0.042    6.32
70)  n-butyl alcohol
           0.012 0.012 0.013 0.013 0.012       0.011       0.013   0.012    7.01
71)  tert-amyl ethyl ether
           0.533 0.498 0.567 0.554 0.553 0.514 0.555 0.461 0.567   0.534    6.78
72)  carbon tetrachloride
           0.435 0.419 0.483 0.465 0.451 0.363 0.456 0.380 0.456   0.434    9.22
73)  1,1-dichloropropene
           0.478 0.447 0.510 0.494 0.482 0.407 0.477 0.372 0.495   0.463    9.86
74)  hexane
           0.533 0.554 0.515 0.464 0.469 0.433 0.443       0.514   0.491    9.03
75)  benzene
           1.397 1.384 1.518 1.469 1.439 1.356 1.427 1.539 1.462   1.443    4.19
76)  heptane
           0.316        0.276 0.268 0.279       0.263       0.278   0.280    6.69
77)  isopropyl acetate
           0.724 0.786 0.828 0.841 0.768 0.639 0.734       0.821   0.768    8.78
78)  1,2-dichloroethane
           0.430 0.398 0.490 0.476 0.465 0.340 0.456 0.355 0.464   0.430   12.57
```

Initial Calibration Summary

Job Number: JB53758 **Sample:** VE9161-ICC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E208767.D
Project: BMS-ICM, Humacao, PR

```
 79)  ethyl acrylate
            0.515 0.468 0.519 0.498 0.504 0.406 0.495       0.479   0.485    7.52
 80)  trichloroethene
            0.343 0.354 0.371 0.358 0.349 0.360 0.348 0.482 0.355   0.369   11.73
 81)  2-nitropropane
                                                                    0.000#  -1.00
 82)  2-chloroethyl vinyl ether
            0.230 0.236 0.266 0.256 0.259 0.204 0.253 0.215 0.260   0.242    9.08
 83)  methylcyclohexane
            0.607 0.656 0.647 0.618 0.623 0.700 0.618       0.616   0.636    4.85
 84)  methyl methacrylate
            0.390 0.383 0.410 0.400 0.392 0.488 0.387       0.394   0.406    8.46
 85)  1,2-dichloropropane
            0.370 0.365 0.404 0.395 0.384 0.352 0.379 0.405 0.393   0.383    4.77
 86)  dibromomethane
            0.214 0.186 0.226 0.221 0.216 0.190 0.215 0.144 0.212   0.203   12.66
 87)  bromodichloromethane
            0.478 0.520 0.500 0.494 0.478 0.579 0.476 0.674 0.496   0.522   12.55
 88)  cis-1,3-dichloropropene
            0.563 0.555 0.623 0.620 0.603 0.497 0.596 0.508 0.610   0.575    8.24
 89)  toluene-d8 (s)
            1.347 1.273 1.329 1.323 1.310 1.339 1.284 1.600 1.301   1.345    7.35
 90)  4-methyl-2-pentanone
            0.157 0.150 0.162 0.160 0.150 0.143 0.146       0.160   0.154    4.57
 91)  toluene
            0.839 0.827 0.947 0.920 0.907 0.787 0.908 0.760 0.909   0.867    7.58
 92)  3-methyl-1-butanol
            0.021 0.022 0.022 0.020 0.019 0.016 0.017       0.021   0.020   11.51
 93)  trans-1,3-dichloropropene
            0.509 0.493 0.586 0.571 0.557 0.455 0.557 0.455 0.552   0.526    9.42
 94)  ethyl methacrylate
            0.489 0.454 0.518 0.509 0.499 0.559 0.496       0.488   0.501    5.93
 95)  1,1,2-trichloroethane
            0.279 0.305 0.292 0.282 0.272 0.368 0.272       0.292   0.295   10.68
 96)  2-hexanone
            0.127 0.119 0.156 0.147 0.140 0.110 0.137       0.141   0.135   11.13

 97) I   chlorobenzene-d5      ----------------ISTD---------------------
 98)  cyclohexanone
                        0.023 0.020 0.017       0.018       0.024   0.020   15.35
              ----- Linear regression -----  Coefficient =  0.9978
                Response Ratio = 0.01799 + 0.01704 *A

 99)  tetrachloroethene
            0.432 0.391 0.466 0.439 0.427 0.302 0.417       0.446   0.415   12.15
100)  1,3-dichloropropane
            0.554 0.530 0.610 0.585 0.558 0.493 0.533 0.487 0.583   0.548    7.59
101)  butyl acetate
            0.266 0.294 0.290 0.277 0.269 0.337 0.257       0.292   0.285    8.74
102)  3,3-dimethyl-1-butanol
            0.047 0.053 0.049 0.046 0.042 0.041 0.037       0.058   0.047   14.80
103)  dibromochloromethane
            0.385 0.373 0.424 0.413 0.396 0.356 0.381 0.386 0.411   0.392    5.50
104)  1,2-dibromoethane
            0.340 0.318 0.374 0.364 0.348 0.317 0.333 0.263 0.361   0.335    9.99
105)  n-butyl ether
                                                                    0.000#  -1.00
106)  chlorobenzene
            1.032 0.983 1.101 1.056 1.020 0.920 0.990 0.947 1.059   1.012    5.70
107)  1,1,1,2-tetrachloroethane
```

```
            0.377 0.363 0.406 0.394 0.380 0.362 0.374 0.324 0.399   0.376    6.57
108)  ethylbenzene
            1.781 1.773 1.936 1.864 1.822 1.658 1.794 1.895 1.873   1.822    4.54
109)  m,p-xylene
            0.669 0.644 0.744 0.716 0.697 0.605 0.685 0.563 0.718   0.671    8.70
110)  o-xylene
            0.678 0.641 0.735 0.714 0.690 0.551 0.676 0.603 0.705   0.666    8.73
111)  butyl acrylate
                                                                    0.000#  -1.00
112)  styrene
            1.122 1.068 1.286 1.240 1.212 1.027 1.200 0.913 1.219   1.143   10.53
113)  bromoform
            0.284 0.268 0.321 0.312 0.305 0.285 0.296 0.227 0.299   0.289    9.71

114) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
115)  isopropylbenzene
            3.103 3.006 3.379 3.076 2.954 2.795 2.738 3.006 3.267   3.036    6.71
116)  4-bromofluorobenzene (s)
            1.000 1.037 0.947 0.889 0.858       0.782       0.922   0.919    9.37
117)  bromobenzene
            0.785 0.722 0.897 0.826 0.804 0.721 0.744 0.643 0.840   0.776    9.86
118)  1,1,2,2-tetrachloroethane
            0.888 1.006 0.929 0.821 0.773       0.707       0.900   0.861   11.70
119)  trans-1,4-dichloro-2-butene
            0.239       0.251 0.225 0.214       0.192       0.239   0.227    9.38
120)  1,2,3-trichloropropane
            0.217 0.204 0.235 0.210 0.203 0.230 0.183       0.228   0.214    8.12
121)  n-propylbenzene
            3.528 3.407 3.910 3.604 3.507 3.322 3.286 3.637 3.731   3.548    5.61
122)  p-ethyltoluene
            2.953 2.751 3.263 2.877 2.942 2.840 2.797 3.008 3.211   2.960    5.96
123)  2-chlorotoluene
            0.720 0.676 0.797 0.744 0.721 0.628 0.678 0.599 0.754   0.702    8.96
124)  4-chlorotoluene
            2.231 2.242 2.409 2.269 2.190 2.323 2.045 2.454 2.338   2.278    5.36
125)  1,3,5-trimethylbenzene
            2.586 2.557 2.839 2.669 2.508 2.495 2.331 2.859 2.704   2.616    6.50
126)  tert-butylbenzene
            2.213 2.119 2.445 2.303 2.176 2.094 2.054 2.292 2.344   2.227    5.79
127)  pentachloroethane
            0.528 0.503 0.587 0.542 0.520 0.553 0.481 0.461 0.557   0.526    7.49
128)  1,2,4-trimethylbenzene
            2.581 2.535 2.896 2.673 2.568 2.427 2.401 2.867 2.748   2.633    6.73
129)  sec-butylbenzene
            3.292 3.118 3.643 3.414 3.299 2.962 3.093 3.286 3.486   3.288    6.40
130)  1,3-dichlorobenzene
            1.471 1.372 1.649 1.556 1.503 1.424 1.412 1.366 1.549   1.478    6.42
131)  p-isopropyltoluene
            2.714 2.610 3.014 2.840 2.723 2.387 2.566 2.641 2.895   2.710    6.95
132)  1,4-dichlorobenzene
            1.552 1.417 1.737 1.634 1.569 1.513 1.463 1.514 1.653   1.561    6.41
133)  benzyl chloride
            1.560 1.634 1.662 1.501 1.454 1.453 1.300 1.937 1.637   1.571   11.39
134)  p-diethylbenzene
            1.645 1.557 1.875 1.696 1.725 1.494 1.595 1.535 1.830   1.661    7.93
135)  1,2-dichlorobenzene
            1.471 1.361 1.609 1.507 1.459 1.504 1.356 1.423 1.480   1.463    5.34
136)  n-butylbenzene
            1.391 1.269 1.575 1.480 1.452 1.128 1.356 1.303 1.485   1.382    9.80
137)  1,2,4,5-tetramethylbenzene
```

Initial Calibration Summary

Job Number: JB53758 **Sample:** VE9161-ICC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E208767.D
Project: BMS-ICM, Humacao, PR

```
            2.452 2.308 2.740 2.448 2.457 2.409 2.248 2.533 2.705   2.478    6.57
138)  1,2-dibromo-3-chloropropane
            0.164 0.159 0.159 0.146 0.135 0.119 0.123       0.158   0.146   12.10
139)  1,3,5-trichlorobenzene
            1.122 1.041 1.255 1.154 1.148 0.940 1.053 0.972 1.186   1.097    9.38
140)  1,2,4-trichlorobenzene
            0.920 0.854 1.054 0.991 0.961 0.870 0.873 0.788 0.985   0.922    9.02
141)  hexachlorobutadiene
            0.538 0.522 0.602 0.552 0.533 0.446 0.482 0.413 0.560   0.517   11.50
142)  naphthalene
            2.201 2.013 2.376 2.223 2.135 2.393 1.914 2.657 2.248   2.240    9.81
143)  MMT
                                                                    0.000#  -1.00
144)  1,2,3-trichlorobenzene
            0.816 0.778 0.920 0.847 0.802 0.797 0.716 0.753 0.866   0.811    7.54
145)  hexachloroethane
            0.501 0.503 0.553 0.521 0.496 0.435 0.463 0.473 0.535   0.498    7.37
146)  Cyclohexane
            1.055 1.181 1.121 0.975 0.925 0.897 0.843 1.098 1.076   1.019   11.20
147)  ethyleinimine
                                                                    0.000#  -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          ME9161.M          Wed Oct 23 10:13:46 2013   RPT1
```

6.9.1

6

Initial Calibration Verification

Job Number: JB53758 **Sample:** VE9161-ICV9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E208772.D
Project: BMS-ICM, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E208772.D                    Vial: 23
Acq On    : 23 Oct 2013   4:19 am                     Operator: DivyaP
Sample    : icv9161-50                                Inst    : MSE
Misc      : MS57101,VE9161,5.0,,100,5,1               Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\ME9161.M (RTE Integrator)
Title        : SW846  8260B,ZB624 60m x 0.25mm x 1.4um
Last Update  : Wed Oct 23 10:07:58 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	100	0.00	7.65
		----------	True	Calc.	% Drift		----------	
2	M	1,4-dioxane	1250.000	1294.970	-3.6	93	-0.02	11.50
		----------	AvgRF	CCRF	% Dev		----------	
3	M	tertiary butyl alcohol	1.145	1.148	-0.3	98	0.01	7.76
4		ethanol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	9.86
6		freon 23		----------NA----------				
7		freon 115		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.573	0.519	9.4	95	0.00	4.30
12	M	dichlorodifluoromethane	0.646	0.590	8.7	99	0.00	4.30
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15	M	chloromethane	0.845	0.801	5.2	102	0.00	4.63
16	M	vinyl chloride	0.707	0.758	-7.2	102	0.00	4.90
17		1,3-Butadiene		----------NA----------				
18	M	acetaldehyde		----------NA----------				
		----------	True	Calc.	% Drift		----------	
19	M	bromomethane	50.000	53.319	-6.6	102	0.00	5.55
		----------	AvgRF	CCRF	% Dev		----------	
20	M	chloroethane	0.354	0.360	-1.7	101	0.00	5.72
21	M	vinyl bromide		----------NA----------				
22	M	trichlorofluoromethane	0.772	0.772	0.0	100	0.00	6.23
23	M	pentane		----------NA----------				
24	M	ethyl ether	0.264	0.274	-3.8	98	0.00	6.60
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		freon 123		----------NA----------				
28	m	2-chloropropane	1.006	0.962	4.4	97	0.00	6.79
29	M	acrolein	0.129	0.121	6.2	98	0.00	6.81
30	M	1,1-dichloroethene	0.473	0.471	0.4	96	0.00	7.04
31	M	isopropyl alcohol		----------NA----------				
32	M	acetone	0.050	0.051	-2.0	95	-0.02	7.01
33	M	allyl chloride	1.050	1.016	3.2	97	0.00	7.52

Initial Calibration Verification

Job Number: JB53758 **Sample:** VE9161-ICV9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E208772.D
Project: BMS-ICM, Humacao, PR

34	M	acetonitrile	0.032	0.032	0.0	104	0.00	7.42
35	M	iodomethane	0.801	0.845	-5.5	97	0.00	7.31
		----------	True	Calc.	% Drift	----------		
36	M	iso-butyl alcohol	500.000	1661.326	-232.3#	100	0.00	10.43
		----------	AvgRF	CCRF	% Dev	----------		
37	M	carbon disulfide	1.696	1.793	-5.7	102	0.00	7.48
38	M	methylene chloride	0.568	0.542	4.6	99	0.00	7.71
39	m	1-chloropropane	1.017	1.008	0.9	100	0.00	7.76
40	M	methyl acetate	0.425	0.444	-4.5	99	0.00	7.49
41	M	methyl tert butyl ether	1.520	1.509	0.7	99	0.00	8.06
42	M	trans-1,2-dichloroethene	0.527	0.506	4.0	98	0.00	8.10
43	M	di-isopropyl ether	1.932	1.923	0.5	102	0.00	8.64
44	M	ethyl tert-butyl ether	1.743	1.749	-0.3	100	0.00	9.10
45	M	2-butanone	0.059	0.062	-5.1	98	0.00	9.29
46	M	1,1-dichloroethane	0.914	0.924	-1.1	98	0.00	8.63
47	M	chloroprene	0.829	0.817	1.4	104	0.00	8.75
48	M	acrylonitrile	0.233	0.219	6.0	97	0.00	7.96
49	M	vinyl acetate	0.091	0.091	0.0	101	0.00	8.60
50	M	ethyl acetate	0.085	0.081	4.7	102	0.00	9.32
51	M	2,2-dichloropropane	0.725	0.620	14.5	93	0.00	9.38
52	M	cis-1,2-dichloroethene	0.557	0.542	2.7	97	0.00	9.35
53	m	methyl acrylate	0.472	0.501	-6.1	99	0.00	9.41
54	M	propionitrile	0.093	0.087	6.5	97	0.00	9.34
55	M	bromochloromethane	0.255	0.260	-2.0	97	0.00	9.65
56	M	tetrahydrofuran	0.204	0.202	1.0	99	0.00	9.72
57	M	chloroform	0.915	0.860	6.0	97	0.00	9.70
58	m	t-butyl formate	0.545	0.543	0.4	102	0.00	9.75
59	M	Iso-octane	2.056	2.035	1.0	100	0.00	10.47
60	S	dibromofluoromethane (s)	0.476	0.450	5.5	96	0.00	9.89
61	S	1,2-dichloroethane-d4 (s)	0.595	0.541	9.1	96	0.00	10.31
62	M	freon 113	0.372	0.385	-3.5	105	0.00	7.02
63	M	methacrylonitrile	0.359	0.346	3.6	97	0.00	9.55
64	M	1,1,1-trichloroethane	0.752	0.746	0.8	98	0.00	10.00
65	M	tert-amyl methyl ether	1.623	1.702	-4.9	107	0.00	10.47
66	I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	10.77
67	M	Di-isobutylene		----------NA----------				
68	M	tert amyl alcohol	0.015	0.015	0.0	106	0.00	10.25
69	M	epichlorohydrin	0.042	0.042	0.0	101	0.00	12.01
70	M	n-butyl alcohol	0.012	0.013	-8.3	101	0.00	10.86
71	M	tert-amyl ethyl ether	0.534	0.552	-3.4	101	0.00	11.31
72	M	carbon tetrachloride	0.434	0.449	-3.5	98	0.00	10.22
73	M	1,1-dichloropropene	0.463	0.473	-2.2	97	0.00	10.18
74	M	hexane	0.491	0.489	0.4	107	0.00	8.42
75	M	benzene	1.443	1.415	1.9	98	0.00	10.43
76	M	heptane	0.280	0.275	1.8	104	0.00	10.63
77	M	isopropyl acetate	0.768	0.797	-3.8	96	0.00	10.31
78	M	1,2-dichloroethane	0.430	0.452	-5.1	97	0.00	10.40
79		ethyl acrylate	0.485	0.499	-2.9	102	0.00	11.10
80	M	trichloroethene	0.369	0.344	6.8	98	0.00	11.14
81	M	2-nitropropane		----------NA----------				
82	M	2-chloroethyl vinyl ether	0.242	0.244	-0.8	97	0.00	11.90
83	M	methylcyclohexane	0.636	0.677	-6.4	111	0.00	11.40
84	M	methyl methacrylate	0.406	0.394	3.0	100	0.00	11.38
85	M	1,2-dichloropropane	0.383	0.378	1.3	97	0.00	11.38
86	M	dibromomethane	0.203	0.211	-3.9	97	0.00	11.54
87	M	bromodichloromethane	0.522	0.467	10.5	96	0.00	11.67
88	M	cis-1,3-dichloropropene	0.575	0.587	-2.1	96	0.00	12.14

Initial Calibration Verification

Job Number: JB53758 **Sample:** VE9161-ICV9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E208772.D
Project: BMS-ICM, Humacao, PR

89	S	toluene-d8 (s)	1.345	1.258	6.5	97	0.00	12.48
90	M	4-methyl-2-pentanone	0.154	0.153	0.6	98	0.00	12.23
91	M	toluene	0.867	0.893	-3.0	99	0.00	12.55
92	M	3-methyl-1-butanol	0.020	0.020	0.0	102	0.00	12.24
93	M	trans-1,3-dichloropropene	0.526	0.543	-3.2	97	0.00	12.72
94	M	ethyl methacrylate	0.501	0.512	-2.2	102	0.00	12.72
95	M	1,1,2-trichloroethane	0.295	0.273	7.5	98	0.00	12.95
96	M	2-hexanone	0.135	0.142	-5.2	98	0.00	13.13
97	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.10
		----------	True	Calc.	% Drift	----------		
98	M	cyclohexanone	500.000	544.986	-9.0	105	0.00	15.30
		----------	AvgRF	CCRF	% Dev	----------		
99	M	tetrachloroethene	0.415	0.428	-3.1	100	0.00	13.20
100	M	1,3-dichloropropane	0.548	0.556	-1.5	98	0.00	13.15
101	M	butyl acetate	0.285	0.280	1.8	104	0.00	13.22
102	m	3,3-dimethyl-1-butanol	0.047	0.047	0.0	104	0.00	13.31
103	M	dibromochloromethane	0.392	0.386	1.5	96	0.00	13.44
104	M	1,2-dibromoethane	0.335	0.340	-1.5	96	0.00	13.61
105	M	n-butyl ether		----------NA----------				
106	M	chlorobenzene	1.012	1.012	0.0	98	0.00	14.13
107	M	1,1,1,2-tetrachloroethane	0.376	0.375	0.3	98	0.00	14.19
108	M	ethylbenzene	1.822	1.786	2.0	98	0.00	14.20
109	M	m,p-xylene	0.671	0.683	-1.8	98	0.00	14.32
110	M	o-xylene	0.666	0.674	-1.2	97	0.00	14.78
111	M	butyl acrylate		----------NA----------				
112	M	styrene	1.143	1.190	-4.1	98	0.00	14.78
113	M	bromoform	0.289	0.293	-1.4	96	0.00	15.06
114	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	16.67
115	M	isopropylbenzene	3.036	2.963	2.4	98	0.00	15.16
116	S	4-bromofluorobenzene (s)	0.919	0.839	8.7	96	0.00	15.37
117	M	bromobenzene	0.776	0.783	-0.9	97	0.00	15.59
118	M	1,1,2,2-tetrachloroethane	0.861	0.783	9.1	97	0.00	15.45
119	M	trans-1,4-dichloro-2-bute	0.227	0.208	8.4	94	0.00	15.49
120	M	1,2,3-trichloropropane	0.214	0.198	7.5	97	0.00	15.54
121	M	n-propylbenzene	3.548	3.463	2.4	98	0.00	15.61
122	M	p-ethyltoluene	2.960	2.912	1.6	103	0.00	15.72
123	M	2-chlorotoluene	0.702	0.710	-1.1	97	0.00	15.78
124	M	4-chlorotoluene	2.278	2.160	5.2	97	0.00	15.88
125	M	1,3,5-trimethylbenzene	2.616	2.477	5.3	95	0.00	15.78
126	M	tert-butylbenzene	2.227	2.164	2.8	96	0.00	16.17
127	M	pentachloroethane	0.526	0.507	3.6	95	0.00	16.25
128	M	1,2,4-trimethylbenzene	2.633	2.548	3.2	97	0.00	16.22
129	M	sec-butylbenzene	3.288	3.266	0.7	98	0.00	16.41
130	M	1,3-dichlorobenzene	1.478	1.482	-0.3	97	0.00	16.61
131	M	p-isopropyltoluene	2.710	2.702	0.3	97	0.00	16.54
132	M	1,4-dichlorobenzene	1.561	1.558	0.2	97	0.00	16.70
133		benzyl chloride	1.571	1.344	14.4	91	0.00	16.81
134	M	p-diethylbenzene	1.661	1.672	-0.7	101	0.00	16.95
135	M	1,2-dichlorobenzene	1.463	1.423	2.7	96	0.00	17.13
136	M	n-butylbenzene	1.382	1.409	-2.0	97	0.00	16.99
137	M	1,2,4,5-tetramethylbenzen	2.478	2.437	1.7	102	0.00	17.82
138	M	1,2-dibromo-3-chloropropa	0.146	0.138	5.5	96	0.00	17.95
139	m	1,3,5-trichlorobenzene	1.097	1.107	-0.9	98	0.00	18.19
140	M	1,2,4-trichlorobenzene	0.922	0.939	-1.8	97	0.00	18.90
141	M	hexachlorobutadiene	0.517	0.534	-3.3	99	0.00	19.06
142	M	naphthalene	2.240	2.095	6.5	96	0.00	19.21

Initial Calibration Verification

Job Number: JB53758 **Sample:** VE9161-ICV9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E208772.D
Project: BMS-ICM, Humacao, PR

143		MMT		----------NA----------				
144	M	1,2,3-trichlorobenzene	0.811	0.808	0.4	97	0.00	19.49
145	M	hexachloroethane	0.498	0.489	1.8	96	0.00	17.45
146	M	Cyclohexane	1.019	0.945	7.3	99	0.00	10.11
147		ethyleinimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
E208767.D ME9161.M Wed Oct 23 10:13:35 2013 RPT1

6.9.2
6

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VE9217-CC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E210078.D
Project: BMS-ICM, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E210078.D                    Vial: 25
Acq On    : 23 Nov 2013  10:06 pm                     Operator: DivyaP
Sample    : CC9161-50                                 Inst    : MSE
Misc      : MS58538,VE9217,5.0,,100,5,1               Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\ME9161.M (RTE Integrator)
Title        : SW846  8260B,ZB624 60m x 0.25mm x 1.4um
Last Update  : Wed Oct 23 10:07:58 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	52	-0.02	7.62
		----------	True	Calc.	% Drift	----------		
2	M	1,4-dioxane	1250.000	483.370	61.3#	20	-0.04	11.48
		----------	AvgRF	CCRF	% Dev	----------		
3	M	tertiary butyl alcohol	1.145	1.066	6.9	47#	-0.02	7.73
4		ethanol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	92	0.00	9.85
6		freon 23		----------NA----------				
7		freon 115		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.573	0.547	4.5	92	0.00	4.30
12	M	dichlorodifluoromethane	0.646	0.503	22.1#	77	0.00	4.30
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15	M	chloromethane	0.845	0.808	4.4	94	0.00	4.62
16	M	vinyl chloride	0.707	0.755	-6.8	93	0.00	4.89
17		1,3-Butadiene		----------NA----------				
18	M	acetaldehyde		----------NA----------				
		----------	True	Calc.	% Drift	----------		
19	M	bromomethane	50.000	56.699	-13.4	99	0.00	5.54
		----------	AvgRF	CCRF	% Dev	----------		
20	M	chloroethane	0.354	0.383	-8.2	98	0.00	5.72
21	M	vinyl bromide		----------NA----------				
22	M	trichlorofluoromethane	0.772	0.821	-6.3	97	0.00	6.23
23	M	pentane		----------NA----------				
24	M	ethyl ether	0.264	0.312	-18.2	101	0.00	6.59
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		freon 123		----------NA----------				
28	m	2-chloropropane	1.006	0.976	3.0	90	0.00	6.79
29	M	acrolein	0.129	0.241	-86.8#	178	0.00	6.80
30	M	1,1-dichloroethene	0.473	0.488	-3.2	91	0.00	7.03
31	M	isopropyl alcohol		----------NA----------				
32	M	acetone	0.050	0.043	14.0	73	-0.02	7.01
33	M	allyl chloride	1.050	0.950	9.5	83	0.00	7.52

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VE9217-CC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E210078.D
Project: BMS-ICM, Humacao, PR

34	M	acetonitrile	0.032	0.030	6.3	88	-0.01	7.41
35	M	iodomethane	0.801	0.934	-16.6	98	0.00	7.30
		----------	True	Calc.	% Drift	----------		
36	M	iso-butyl alcohol	500.000	1064.043	-112.8#	66	0.00	10.42
		----------	AvgRF	CCRF	% Dev	----------		
37	M	carbon disulfide	1.696	1.827	-7.7	95	-0.01	7.46
38	M	methylene chloride	0.568	0.595	-4.8	99	0.00	7.70
39	m	1-chloropropane	1.017	1.017	0.0	93	0.00	7.75
40	M	methyl acetate	0.425	0.447	-5.2	91	0.00	7.48
41	M	methyl tert butyl ether	1.520	1.639	-7.8	98	0.00	8.05
42	M	trans-1,2-dichloroethene	0.527	0.524	0.6	93	0.00	8.09
43	M	di-isopropyl ether	1.932	2.022	-4.7	98	0.00	8.64
44	M	ethyl tert-butyl ether	1.743	1.611	7.6	85	0.00	9.10
45	M	2-butanone	0.059	0.047	20.3#	68	0.00	9.28
46	M	1,1-dichloroethane	0.914	1.007	-10.2	97	0.00	8.62
47	M	chloroprene	0.829	0.796	4.0	93	0.00	8.75
48	M	acrylonitrile	0.233	0.195	16.3	79	0.00	7.95
49	M	vinyl acetate	0.091	0.096	-5.5	97	-0.01	8.59
50	M	ethyl acetate	0.085	0.076	10.6	87	0.00	9.32
51	M	2,2-dichloropropane	0.725	0.736	-1.5	101	0.00	9.37
52	M	cis-1,2-dichloroethene	0.557	0.584	-4.8	96	0.00	9.35
53	m	methyl acrylate	0.472	0.450	4.7	81	0.00	9.40
54	M	propionitrile	0.093	0.067	28.0#	68	-0.01	9.33
55	M	bromochloromethane	0.255	0.295	-15.7	100	0.00	9.65
56	M	tetrahydrofuran	0.204	0.184	9.8	83	0.00	9.71
57	M	chloroform	0.915	0.932	-1.9	96	0.00	9.70
58	m	t-butyl formate	0.545	0.548	-0.6	94	0.00	9.75
59	M	Iso-octane	2.056	1.618	21.3#	73	0.00	10.47
60	S	dibromofluoromethane (s)	0.476	0.517	-8.6	101	0.00	9.89
61	S	1,2-dichloroethane-d4 (s)	0.595	0.606	-1.8	98	0.00	10.31
62	M	freon 113	0.372	0.380	-2.2	94	0.00	7.02
63	M	methacrylonitrile	0.359	0.338	5.8	87	0.00	9.54
64	M	1,1,1-trichloroethane	0.752	0.801	-6.5	96	0.00	9.99
65	M	tert-amyl methyl ether	1.623	1.752	-7.9	100	0.00	10.46
66	I	1,4-difluorobenzene	1.000	1.000	0.0	95	0.00	10.77
67	M	Di-isobutylene		----------NA----------				
68	M	tert amyl alcohol		----------NA----------				
69	M	epichlorohydrin	0.042	0.029	31.0#	67	0.00	12.00
70	M	n-butyl alcohol	0.012	0.004#	66.7#	30#	-0.01	10.85
71	M	tert-amyl ethyl ether		----------NA----------				
72	M	carbon tetrachloride	0.434	0.481	-10.8	99	0.00	10.21
73	M	1,1-dichloropropene	0.463	0.473	-2.2	91	0.00	10.17
74	M	hexane	0.491	0.348	29.1#	71	0.00	8.42
75	M	benzene	1.443	1.396	3.3	90	0.00	10.42
76	M	heptane	0.280	0.201	28.2#	71	0.00	10.62
77	M	isopropyl acetate	0.768	0.729	5.1	83	0.00	10.31
78	M	1,2-dichloroethane	0.430	0.497	-15.6	99	0.00	10.39
79		ethyl acrylate		----------NA----------				
80	M	trichloroethene	0.369	0.345	6.5	92	0.00	11.13
81	M	2-nitropropane		----------NA----------				
82	M	2-chloroethyl vinyl ether	0.242	0.258	-6.6	96	0.00	11.89
83	M	methylcyclohexane	0.636	0.546	14.2	84	0.00	11.40
84	M	methyl methacrylate	0.406	0.364	10.3	87	0.00	11.37
85	M	1,2-dichloropropane	0.383	0.397	-3.7	96	0.00	11.37
86	M	dibromomethane	0.203	0.229	-12.8	98	0.00	11.53
87	M	bromodichloromethane	0.522	0.496	5.0	95	0.00	11.66
88	M	cis-1,3-dichloropropene	0.575	0.611	-6.3	94	0.00	12.14

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VE9217-CC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E210078.D
Project: BMS-ICM, Humacao, PR

89	S	toluene-d8 (s)	1.345	1.367	-1.6	98	0.00	12.47
90	M	4-methyl-2-pentanone	0.154	0.139	9.7	83	0.00	12.22
91	M	toluene	0.867	0.876	-1.0	91	0.00	12.55
92	M	3-methyl-1-butanol	0.020	0.009#	55.0#	41#	0.00	12.23
93	M	trans-1,3-dichloropropene	0.526	0.581	-10.5	97	0.00	12.72
94	M	ethyl methacrylate	0.501	0.501	0.0	94	0.00	12.72
95	M	1,1,2-trichloroethane	0.295	0.280	5.1	94	0.00	12.95
96	M	2-hexanone	0.135	0.120	11.1	77	0.00	13.13
97	I	chlorobenzene-d5	1.000	1.000	0.0	92	0.00	14.10
		----------	True	Calc.	% Drift	----------		
98	M	cyclohexanone	500.000	263.275	47.3#	50	-0.01	15.29
		----------	AvgRF	CCRF	% Dev	----------		
99	M	tetrachloroethene	0.415	0.410	1.2	86	0.00	13.20
100	M	1,3-dichloropropane	0.548	0.612	-11.7	96	0.00	13.14
101	M	butyl acetate	0.285	0.276	3.2	91	0.00	13.22
102	m	3,3-dimethyl-1-butanol	0.047	0.027	42.6#	53	0.00	13.31
103	M	dibromochloromethane	0.392	0.440	-12.2	98	0.00	13.44
104	M	1,2-dibromoethane	0.335	0.370	-10.4	93	0.00	13.61
105	M	n-butyl ether		----------NA----------				
106	M	chlorobenzene	1.012	1.086	-7.3	94	0.00	14.13
107	M	1,1,1,2-tetrachloroethane	0.376	0.422	-12.2	98	0.00	14.19
108	M	ethylbenzene	1.822	1.856	-1.9	91	0.00	14.20
109	M	m,p-xylene	0.671	0.725	-8.0	93	0.00	14.31
110	M	o-xylene	0.666	0.739	-11.0	95	0.00	14.77
111	M	butyl acrylate		----------NA----------				
112	M	styrene	1.143	1.228	-7.4	91	0.00	14.78
113	M	bromoform	0.289	0.298	-3.1	88	0.00	15.05
114	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	86	0.00	16.67
115	M	isopropylbenzene	3.036	3.111	-2.5	87	0.00	15.15
116	S	4-bromofluorobenzene (s)	0.919	0.985	-7.2	95	0.00	15.37
117	M	bromobenzene	0.776	0.862	-11.1	90	0.00	15.59
118	M	1,1,2,2-tetrachloroethane	0.861	0.862	-0.1	90	0.00	15.44
119	M	trans-1,4-dichloro-2-bute	0.227	0.219	3.5	84	0.00	15.49
120	M	1,2,3-trichloropropane	0.214	0.225	-5.1	92	0.00	15.53
121	M	n-propylbenzene	3.548	3.656	-3.0	87	0.00	15.61
122	M	p-ethyltoluene		----------NA----------				
123	M	2-chlorotoluene	0.702	0.809	-15.2	94	0.00	15.77
124	M	4-chlorotoluene	2.278	2.293	-0.7	87	0.00	15.87
125	M	1,3,5-trimethylbenzene	2.616	2.699	-3.2	87	0.00	15.77
126	M	tert-butylbenzene	2.227	2.239	-0.5	84	0.00	16.16
127	M	pentachloroethane	0.526	0.569	-8.2	90	0.00	16.24
128	M	1,2,4-trimethylbenzene	2.633	2.673	-1.5	86	0.00	16.21
129	M	sec-butylbenzene	3.288	3.192	2.9	81	0.00	16.40
130	M	1,3-dichlorobenzene	1.478	1.588	-7.4	88	0.00	16.61
131	M	p-isopropyltoluene	2.710	2.726	-0.6	83	0.00	16.53
132	M	1,4-dichlorobenzene	1.561	1.661	-6.4	88	0.00	16.70
133		benzyl chloride	1.571	1.482	5.7	85	0.00	16.80
134	M	p-diethylbenzene		----------NA----------				
135	M	1,2-dichlorobenzene	1.463	1.563	-6.8	89	0.00	17.13
136	M	n-butylbenzene	1.382	1.311	5.1	76	0.00	16.99
137	M	1,2,4,5-tetramethylbenzen		----------NA----------				
138	M	1,2-dibromo-3-chloropropa	0.146	0.140	4.1	82	0.00	17.95
139	m	1,3,5-trichlorobenzene	1.097	1.095	0.2	82	0.00	18.19
140	M	1,2,4-trichlorobenzene	0.922	0.874	5.2	76	0.00	18.90
141	M	hexachlorobutadiene	0.517	0.436	15.7	68	0.00	19.05
142	M	naphthalene	2.240	1.841	17.8	71	0.00	19.21

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VE9217-CC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E210078.D
Project: BMS-ICM, Humacao, PR

143		MMT		----------NA----------				
144	M	1,2,3-trichlorobenzene	0.811	0.680	16.2	69	0.00	19.49
145	M	hexachloroethane	0.498	0.524	-5.2	87	0.00	17.44
146	M	Cyclohexane	1.019	0.941	7.7	83	0.00	10.10
147		ethyleinimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
E208767.D ME9161.M Mon Nov 25 09:25:11 2013 RPT1

6.9.3

6

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VE9218-CC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E210115.D
Project: BMS-ICM, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E210115.D                    Vial: 3
Acq On    : 25 Nov 2013   2:13 pm                     Operator: DivyaP
Sample    : CC9161-20                                 Inst    : MSE
Misc      : MS58394,VE9218,5.0,,100,5,1               Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\ME9161.M (RTE Integrator)
Title        : SW846  8260B,ZB624 60m x 0.25mm x 1.4um
Last Update  : Wed Oct 23 10:07:58 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	104	-0.03	7.62
		----------	True	Calc.	% Drift	----------		
2	M	1,4-dioxane	500.000	406.646	18.7	81	-0.03	11.48
		----------	AvgRF	CCRF	% Dev	----------		
3	M	tertiary butyl alcohol	1.145	1.348	-17.7	114	-0.02	7.73
4		ethanol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	127	0.00	9.85
6		freon 23		----------NA----------				
7		freon 115		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.573	0.495	13.6	114	0.00	4.30
12	M	dichlorodifluoromethane	0.646	0.402	37.8#	76	0.00	4.29
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15	M	chloromethane	0.845	0.651	23.0#	96	-0.02	4.61
16	M	vinyl chloride	0.707	0.620	12.3	98	-0.01	4.89
17		1,3-Butadiene		----------NA----------				
18	M	acetaldehyde		----------NA----------				
		----------	True	Calc.	% Drift	----------		
19	M	bromomethane	20.000	17.405	13.0	104	-0.01	5.54
		----------	AvgRF	CCRF	% Dev	----------		
20	M	chloroethane	0.354	0.330	6.8	109	0.00	5.72
21	M	vinyl bromide		----------NA----------				
22	M	trichlorofluoromethane	0.772	0.679	12.0	105	0.00	6.23
23	M	pentane		----------NA----------				
24	M	ethyl ether	0.264	0.296	-12.1	127	0.00	6.59
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		freon 123		----------NA----------				
28	m	2-chloropropane	1.006	0.801	20.4#	97	0.00	6.79
29	M	acrolein	0.129	0.123	4.7	119	-0.01	6.79
30	M	1,1-dichloroethene	0.473	0.434	8.2	108	-0.01	7.03
31	M	isopropyl alcohol		----------NA----------				
32	M	acetone	0.050	0.059	-18.0	138	-0.02	7.01
33	M	allyl chloride	1.050	0.809	23.0#	91	0.00	7.52

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VE9218-CC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E210115.D
Project: BMS-ICM, Humacao, PR

34	M	acetonitrile	0.032	0.038	-18.7	146	-0.01	7.41
35	M	iodomethane	0.801	0.853	-6.5	120	-0.01	7.30
		----------	True	Calc.	% Drift	----------		
36	M	iso-butyl alcohol	200.000	339.541	-69.8#	118	0.00	10.42
		----------	AvgRF	CCRF	% Dev	----------		
37	M	carbon disulfide	1.696	1.662	2.0	114	-0.01	7.46
38	M	methylene chloride	0.568	0.554	2.5	123	0.00	7.70
39	m	1-chloropropane	1.017	0.828	18.6	96	0.00	7.75
40	M	methyl acetate	0.425	0.441	-3.8	116	0.00	7.49
41	M	methyl tert butyl ether	1.520	1.645	-8.2	130	0.00	8.05
42	M	trans-1,2-dichloroethene	0.527	0.486	7.8	112	0.00	8.09
43	M	di-isopropyl ether	1.932	1.826	5.5	117	0.00	8.64
44	M	ethyl tert-butyl ether	1.743	1.579	9.4	111	-0.01	9.09
45	M	2-butanone	0.059	0.060	-1.7	123	0.00	9.29
46	M	1,1-dichloroethane	0.914	0.876	4.2	113	0.00	8.62
47	M	chloroprene	0.829	0.692	16.5	106	0.00	8.75
48	M	acrylonitrile	0.233	0.203	12.9	110	0.00	7.95
49	M	vinyl acetate	0.091	0.090	1.1	125	0.00	8.60
50	M	ethyl acetate	0.085	0.074	12.9	108	0.00	9.32
51	M	2,2-dichloropropane	0.725	0.756	-4.3	134	-0.01	9.37
52	M	cis-1,2-dichloroethene	0.557	0.532	4.5	116	0.00	9.34
53	m	methyl acrylate	0.472	0.459	2.8	112	0.00	9.40
54	M	propionitrile	0.093	0.075	19.4	101	0.00	9.33
55	M	bromochloromethane	0.255	0.267	-4.7	124	0.00	9.65
56	M	tetrahydrofuran	0.204	0.181	11.3	108	0.00	9.71
57	M	chloroform	0.915	0.860	6.0	118	0.00	9.70
58	m	t-butyl formate	0.545	0.532	2.4	121	0.00	9.74
59	M	Iso-octane	2.056	1.551	24.6#	92	0.00	10.46
60	S	dibromofluoromethane (s)	0.476	0.499	-4.8	132	0.00	9.89
61	S	1,2-dichloroethane-d4 (s)	0.595	0.583	2.0	129	0.00	10.31
62	M	freon 113	0.372	0.330	11.3	107	0.00	7.02
63	M	methacrylonitrile	0.359	0.324	9.7	108	0.00	9.54
64	M	1,1,1-trichloroethane	0.752	0.723	3.9	115	0.00	9.99
65	M	tert-amyl methyl ether	1.623	1.726	-6.3	131	0.00	10.46
66	I	1,4-difluorobenzene	1.000	1.000	0.0	130	0.00	10.77
67	M	Di-isobutylene		----------NA----------				
68	M	tert amyl alcohol		----------NA----------				
69	M	epichlorohydrin	0.042	0.039	7.1	110	0.00	12.01
70	M	n-butyl alcohol	0.012	0.009#	25.0#	89	-0.01	10.85
71	M	tert-amyl ethyl ether	0.534	0.005#	99.1#	1#	0.17	11.48
72	M	carbon tetrachloride	0.434	0.418	3.7	113	0.00	10.21
73	M	1,1-dichloropropene	0.463	0.414	10.6	106	0.00	10.17
74	M	hexane	0.491	0.316	35.6#	80	0.00	8.42
75	M	benzene	1.443	1.300	9.9	112	0.00	10.42
76	M	heptane	0.280	0.195	30.4#	92	0.00	10.62
77	M	isopropyl acetate	0.768	0.712	7.3	112	0.00	10.31
78	M	1,2-dichloroethane	0.430	0.460	-7.0	122	0.00	10.40
79		ethyl acrylate		----------NA----------				
80	M	trichloroethene	0.369	0.314	14.9	110	0.00	11.13
81	M	2-nitropropane		----------NA----------				
82	M	2-chloroethyl vinyl ether	0.242	0.229	5.4	112	0.00	11.90
83	M	methylcyclohexane	0.636	0.485	23.7#	98	0.00	11.39
84	M	methyl methacrylate	0.406	0.333	18.0	106	0.00	11.37
85	M	1,2-dichloropropane	0.383	0.346	9.7	112	0.00	11.37
86	M	dibromomethane	0.203	0.215	-5.9	124	0.00	11.53
87	M	bromodichloromethane	0.522	0.456	12.6	119	0.00	11.66
88	M	cis-1,3-dichloropropene	0.575	0.575	0.0	120	0.00	12.14

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VE9218-CC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E210115.D
Project: BMS-ICM, Humacao, PR

89	S	toluene-d8 (s)	1.345	1.331	1.0	130	0.00	12.47
90	M	4-methyl-2-pentanone	0.154	0.139	9.7	112	0.00	12.22
91	M	toluene	0.867	0.809	6.7	111	0.00	12.54
92	M	3-methyl-1-butanol	0.020	0.016	20.0	95	-0.01	12.23
93	M	trans-1,3-dichloropropene	0.526	0.534	-1.5	119	0.00	12.72
94	M	ethyl methacrylate	0.501	0.457	8.8	115	0.00	12.72
95	M	1,1,2-trichloroethane	0.295	0.266	9.8	119	-0.01	12.94
96	M	2-hexanone	0.135	0.127	5.9	106	0.00	13.13
97	I	chlorobenzene-d5	1.000	1.000	0.0	126	0.00	14.10
		----------	True	Calc.	% Drift	----------		
98	M	cyclohexanone	200.000	787.530	-293.8#	387	-0.01	15.29
		----------	AvgRF	CCRF	% Dev	----------		
99	M	tetrachloroethene	0.415	0.377	9.2	102	0.00	13.20
100	M	1,3-dichloropropane	0.548	0.587	-7.1	122	0.00	13.15
101	M	butyl acetate	0.285	0.249	12.6	109	0.00	13.22
102	m	3,3-dimethyl-1-butanol	0.047	0.042	10.6	107	0.00	13.31
103	M	dibromochloromethane	0.392	0.396	-1.0	118	0.00	13.44
104	M	1,2-dibromoethane	0.335	0.363	-8.4	123	0.00	13.61
105	M	n-butyl ether		----------NA----------				
106	M	chlorobenzene	1.012	1.025	-1.3	118	0.00	14.13
107	M	1,1,1,2-tetrachloroethane	0.376	0.391	-4.0	122	0.00	14.19
108	M	ethylbenzene	1.822	1.709	6.2	112	0.00	14.20
109	M	m,p-xylene	0.671	0.660	1.6	112	0.00	14.31
110	M	o-xylene	0.666	0.666	0.0	115	0.00	14.77
111	M	butyl acrylate		----------NA----------				
112	M	styrene	1.143	1.108	3.1	109	0.00	14.78
113	M	bromoform	0.289	0.282	2.4	111	0.00	15.05
114	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	119	0.00	16.67
115	M	isopropylbenzene	3.036	3.105	-2.3	109	0.00	15.15
116	S	4-bromofluorobenzene (s)	0.919	1.031	-12.2	130	0.00	15.37
117	M	bromobenzene	0.776	0.865	-11.5	115	0.00	15.59
118	M	1,1,2,2-tetrachloroethane	0.861	0.895	-3.9	115	0.00	15.45
119	M	trans-1,4-dichloro-2-bute	0.227	0.222	2.2	105	0.00	15.49
120	M	1,2,3-trichloropropane	0.214	0.245	-14.5	124	0.00	15.53
121	M	n-propylbenzene	3.548	3.583	-1.0	109	0.00	15.60
122	M	p-ethyltoluene		----------NA----------				
123	M	2-chlorotoluene	0.702	0.785	-11.8	117	0.00	15.77
124	M	4-chlorotoluene	2.278	2.354	-3.3	116	0.00	15.87
125	M	1,3,5-trimethylbenzene	2.616	2.726	-4.2	114	0.00	15.77
126	M	tert-butylbenzene	2.227	2.309	-3.7	113	0.00	16.16
127	M	pentachloroethane	0.526	0.566	-7.6	115	0.00	16.25
128	M	1,2,4-trimethylbenzene	2.633	2.757	-4.7	113	0.00	16.21
129	M	sec-butylbenzene	3.288	3.371	-2.5	110	0.00	16.40
130	M	1,3-dichlorobenzene	1.478	1.582	-7.0	114	0.00	16.61
131	M	p-isopropyltoluene	2.710	2.812	-3.8	111	0.00	16.53
132	M	1,4-dichlorobenzene	1.561	1.654	-6.0	113	0.00	16.70
133		benzyl chloride	1.571	1.881	-19.7	135	0.00	16.80
134	M	p-diethylbenzene		----------NA----------				
135	M	1,2-dichlorobenzene	1.463	1.578	-7.9	117	0.00	17.13
136	M	n-butylbenzene	1.382	1.446	-4.6	109	0.00	16.99
137	M	1,2,4,5-tetramethylbenzen		----------NA----------				
138	M	1,2-dibromo-3-chloropropa	0.146	0.152	-4.1	114	0.00	17.95
139	m	1,3,5-trichlorobenzene	1.097	1.194	-8.8	113	0.00	18.19
140	M	1,2,4-trichlorobenzene	0.922	0.898	2.6	102	0.00	18.90
141	M	hexachlorobutadiene	0.517	0.502	2.9	99	0.00	19.05
142	M	naphthalene	2.240	2.031	9.3	102	0.00	19.21

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VE9218-CC9161
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** E210115.D
Project: BMS-ICM, Humacao, PR

143		MMT		----------NA----------				
144	M	1,2,3-trichlorobenzene	0.811	0.755	6.9	98	0.00	19.49
145	M	hexachloroethane	0.498	0.529	-6.2	114	0.00	17.44
146	M	Cyclohexane	1.019	0.877	13.9	93	-0.01	10.10
147		ethyleinimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
E208766.D ME9161.M Tue Nov 26 09:29:24 2013 RPT1

6.9.4

6

Initial Calibration Summary

Job Number: JB53758 **Sample:** VX6084-ICC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X140621.D
Project: BMS-ICM, Humacao, PR

Response Factor Report ACC-VOA-M

```
Method       : C:\MSDCHEM\1\METHODS\MX6084.M (RTE Integrator)
Title        : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update  : Mon Oct 14 09:42:03 2013
Response via : Initial Calibration

Calibration Files
1   =X140618.D   2   =X140617.D   100 =X140622.D   50  =X140621.D
20  =X140620.D   200 =X140623.D   5   =X140616.D   10  =X140615.D
0.5 =X140619.D       =

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

1) I   tert butyl alcohol-d9 ----------------ISTD---------------------
2)  tertiary butyl alcohol
                1.108 1.043 1.154 1.168 1.366 1.240 1.192         1.181    8.69
3)  ethyl alcohol
                0.124 0.067 0.081 0.091 0.073 0.113 0.095         0.092   22.79
           ----- Linear regression -----  Coefficient =  0.9964
             Response Ratio = 0.04278 + 0.07083 *A

4)  1,4-dioxane
                      0.089 0.103 0.102 0.114 0.105 0.107         0.103    8.04

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
           0.320 0.370 0.279 0.310 0.293 0.317 0.386 0.279 0.371   0.325   12.57
12)  dichlorodifluoromethane
           0.357 0.388 0.329 0.374 0.366 0.379 0.414 0.379 0.293   0.364    9.66
13)  freon 114
                                                                  0.000   -1.00
14)  freon 142b
                                                                  0.000   -1.00
15)  chloromethane
           0.666 0.639 0.447 0.517 0.526 0.513 0.578 0.546 0.647   0.564   13.05
16)  vinyl chloride
           0.493 0.529 0.410 0.459 0.466 0.471 0.518 0.476 0.462   0.476    7.34
17)  acetaldehyde
                                                                  0.000   -1.00
18)  bromomethane
                      0.251 0.307 0.328       0.361 0.344         0.318   13.42
19)  chloroethane
           0.281 0.310 0.205 0.247 0.272 0.211 0.290 0.273         0.261   14.24
20)  vinyl bromide
                                                                  0.000   -1.00
21)  trichlorofluoromethane
           0.608 0.650 0.493 0.564 0.579 0.570 0.623 0.587 0.512   0.576    8.68
```

Initial Calibration Summary

Job Number: JB53758 **Sample:** VX6084-ICC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X140621.D
Project: BMS-ICM, Humacao, PR

22)	pentane										0.000	-1.00
23)	ethyl ether	0.224	0.215	0.186	0.203	0.200	0.214	0.204	0.186		0.204	6.66
24)	freon 141b										0.000	-1.00
25)	freon 123a										0.000	-1.00
26)	freon 123										0.000	-1.00
27)	acrolein	0.069	0.079		0.068	0.068		0.064	0.063		0.068	8.18
28)	1,1-dichloroethene	0.394	0.386	0.298	0.328	0.318	0.340	0.390	0.285	0.310	0.339	12.28
29)	acetone			0.029	0.032	0.028	0.031	0.021	0.028		0.028	13.43
30)	allyl chloride	0.205	0.242	0.200	0.207	0.215	0.224	0.256	0.204		0.219	9.20
31)	acetonitrile			0.025	0.027	0.028	0.028	0.030	0.030		0.028	6.53
32)	iodomethane	0.780	0.749	0.618	0.685	0.653	0.715	0.761	0.611	0.668	0.693	8.91
33)	iso-butyl alcohol			0.021	0.017	0.017	0.017	0.018	0.018		0.018	7.31
34)	carbon disulfide	1.383	1.365	1.083	1.203	1.129	1.240	1.424	1.062	1.061	1.217	11.88
35)	methylene chloride			0.562	0.382	0.431	0.424	0.441	0.497	0.425	0.452	13.16
36)	methyl acetate			0.284	0.243	0.251	0.244	0.267	0.236	0.252	0.254	6.54
37)	methyl tert butyl ether	1.115	1.201	0.971	1.075	1.027	1.090	1.108	0.993	1.187	1.085	7.30
38)	trans-1,2-dichloroethene	0.481	0.461	0.349	0.390	0.377	0.400	0.457	0.342	0.365	0.402	12.83
39)	di-isopropyl ether	1.375	1.504	1.205	1.346	1.302	1.393	1.458	1.253	1.670	1.390	10.15
40)	2-butanone			0.039	0.041	0.039	0.043		0.035		0.040	6.90
41)	1,1-dichloroethane	0.805	0.804	0.644	0.718	0.701	0.739	0.819	0.649	0.727	0.734	8.88
42)	chloroprene	0.512	0.598	0.485	0.537	0.520	0.564	0.620	0.469	0.597	0.545	9.78
43)	acrylonitrile	0.096	0.124	0.117	0.123	0.120	0.128	0.112	0.114		0.117	8.54
44)	vinyl acetate			0.055	0.059	0.055	0.063	0.048	0.047		0.054	11.40
45)	ethyl tert-butyl ether	1.210	1.387	1.152	1.280	1.218	1.341	1.348	1.179	1.385	1.278	7.12
46)	ethyl acetate			0.041	0.042	0.042	0.045	0.032	0.034		0.039	12.44
47)	2,2-dichloropropane	0.647	0.632	0.474	0.523	0.519	0.536	0.659	0.493		0.561	13.14
48)	cis-1,2-dichloroethene	0.514	0.502	0.406	0.446	0.434	0.466	0.518	0.406	0.447	0.460	9.40
49)	propionitrile	0.042	0.051	0.047	0.050	0.048	0.052	0.043	0.046		0.047	7.85
50)	tert-Butyl Formate	0.270	0.325	0.297	0.319	0.307	0.335	0.307	0.298	0.252	0.301	8.74
51)	bromochloromethane	0.200	0.230	0.197	0.215	0.204	0.229	0.224	0.197	0.187	0.209	7.39

Initial Calibration Summary

Job Number: JB53758 **Sample:** VX6084-ICC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X140621.D
Project: BMS-ICM, Humacao, PR

52)	tetrahydrofuran			0.044	0.046	0.044	0.049	0.042	0.042	0.045	6.24
53)	chloroform	0.887	0.827	0.652	0.714	0.697	0.756	0.822	0.668	0.767	11.75
54)	dibromofluoromethane (s)		0.532	0.383	0.425	0.429	0.445	0.508	0.420	0.449	11.70
55)	1,2-dichloroethane-d4 (s)		0.517	0.400	0.441	0.440	0.458	0.496	0.433	0.455	8.76
56)	freon 113			0.233	0.260	0.238	0.271	0.318	0.222	0.257	13.60
57)	methacrylonitrile	0.157	0.232	0.189	0.198	0.194	0.213	0.199	0.188	0.196	11.03
58)	1,1,1-trichloroethane	0.682	0.657	0.517	0.565	0.543	0.590	0.677	0.506	0.539	0.586	11.79
59)	cyclohexane	0.653	0.643	0.499	0.556	0.506	0.569	0.671	0.479	0.572	13.21
60)	tert amyl alcohol			0.036	0.036	0.037	0.037	0.031	0.033	0.035	7.67
61)	iso-octane	1.384	1.650	1.249	1.400	1.328	1.426	1.669	1.288	1.645	1.449	11.31
62) I	1,4-difluorobenzene	----------ISTD----------									
63)	di-isobutylene									0.000	-1.00
64)	epichlorohydrin	0.020	0.027	0.023	0.024	0.024	0.026	0.023	0.023	0.024	9.15
65)	n-butyl alcohol		0.007	0.007	0.007	0.007	0.008	0.006	0.007	0.007	8.94
66)	carbon tetrachloride	0.416	0.385	0.308	0.338	0.318	0.360	0.402	0.291	0.312	0.348	12.87
67)	1,1-dichloropropene	0.414	0.403	0.320	0.350	0.337	0.371	0.416	0.312	0.326	0.361	11.44
68)	hexane	0.354	0.387	0.290	0.323	0.309	0.340	0.400	0.287	0.336	12.54
69)	benzene	1.324	1.246	0.983	1.099	1.066	1.148	1.275	1.000	1.158	1.144	10.47
70)	tert-amyl methyl ether	0.752	0.864	0.719	0.790	0.751	0.845	0.842	0.749	0.900	0.801	7.86
71)	heptane	0.196	0.232	0.183	0.201	0.195	0.216	0.249	0.186	0.220	0.209	10.71
72)	isopropyl acetate	0.487	0.548	0.396	0.413	0.438	0.440	0.483	0.414	0.452	11.16
73)	1,2-dichloroethane	0.366	0.375	0.315	0.349	0.334	0.369	0.362	0.318	0.320	0.345	6.98
74)	trichloroethene	0.293	0.299	0.251	0.274	0.265	0.297	0.324	0.245	0.222	0.275	11.66
75)	ethyl acrylate									0.000	-1.00
76)	tert amyl ethyl ether									0.000	-1.00
77)	2-nitropropane									0.000	-1.00
78)	2-chloroethyl vinyl ether	0.153	0.187	0.162	0.172	0.169	0.183	0.171	0.163	0.175	0.170	6.22
79)	methyl methacrylate	0.117	0.170	0.161	0.173	0.165	0.182	0.168	0.158	0.162	12.09
80)	1,2-dichloropropane	0.340	0.327	0.272	0.298	0.292	0.321	0.330	0.273	0.290	0.305	8.33
81)	dibromomethane	0.175	0.181	0.157	0.172	0.163	0.184	0.176	0.155	0.120	0.165	11.84

Initial Calibration Summary

Job Number: JB53758 **Sample:** VX6084-ICC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X140621.D
Project: BMS-ICM, Humacao, PR

```
 82)  methylcyclohexane
            0.389 0.486 0.375 0.417 0.393 0.445 0.491 0.372 0.483   0.428   11.48
 83)  bromodichloromethane
            0.409 0.411 0.351 0.383 0.362 0.417 0.409 0.350 0.397   0.388    6.99
 84)  cis-1,3-dichloropropene
            0.517 0.511 0.440 0.481 0.462 0.523 0.511 0.448 0.448   0.482    6.98
 85)  toluene-d8 (s)
                  1.346 0.966 1.076 1.099 1.138 1.343 1.044         1.145   12.82
 86)  4-methyl-2-pentanone
                  0.101 0.094 0.099 0.096 0.105 0.086 0.089         0.096    7.06
 87)  toluene
            0.809 0.780 0.632 0.700 0.680 0.738 0.813 0.638 0.759   0.728    9.47
 88)  3-methyl-1-butanol
            0.010 0.012 0.012 0.012 0.012 0.013 0.010 0.011 0.009   0.011   11.20
 89)  trans-1,3-dichloropropene
            0.437 0.441 0.396 0.431 0.408 0.462 0.441 0.389 0.408   0.424    5.78
 90)  ethyl methacrylate
            0.319 0.346 0.324 0.346 0.331 0.371 0.348 0.312 0.280   0.331    7.89
 91)  1,1,2-trichloroethane
            0.227 0.233 0.195 0.209 0.204 0.225 0.218 0.196 0.185   0.210    7.86
 92)  2-hexanone
                  0.079 0.091 0.095 0.091 0.101 0.082 0.084         0.089    8.68

 93) I   chlorobenzene-d5      ----------------ISTD---------------------
 94)  3,3-Dimethyl-1-butanol
            0.023 0.033 0.029 0.029 0.029 0.031 0.025 0.027 0.029   0.028   10.02
 95)  tetrachloroethene
            0.304 0.301 0.251 0.271 0.261 0.296 0.326 0.243 0.253   0.279   10.45
 96)  1,3-dichloropropane
            0.491 0.468 0.408 0.439 0.431 0.469 0.474 0.415 0.469   0.452    6.45
 97)  butyl acetate
            0.154 0.203 0.181 0.188 0.188 0.202 0.181 0.181 0.122   0.178   14.20
 98)  dibromochloromethane
            0.331 0.365 0.313 0.334 0.327 0.366 0.346 0.309 0.330   0.336    5.96
 99)  1,2-dibromoethane
            0.292 0.301 0.263 0.281 0.275 0.301 0.290 0.262 0.269   0.282    5.43
100)  n-butyl ether
                                                                    0.000   -1.00
101)  chlorobenzene
            1.049 0.986 0.806 0.878 0.866 0.944 1.036 0.832 0.956   0.928    9.43
102)  1,1,1,2-tetrachloroethane
            0.371 0.351 0.299 0.332 0.318 0.350 0.366 0.302 0.332   0.336    7.76
103)  ethylbenzene
            1.766 1.657 1.346 1.475 1.467 1.558 1.774 1.363 1.527   1.548   10.16
104)  m,p-xylene
            0.691 0.646 0.510 0.563 0.559 0.585 0.673 0.524 0.629   0.598   10.88
105)  o-xylene
            0.677 0.642 0.507 0.564 0.556 0.591 0.656 0.524 0.594   0.590    9.96
106)  styrene
            1.107 1.058 0.907 0.997 0.965 1.053 1.101 0.914 1.008   1.012    7.32
107)  bromoform
            0.202 0.236 0.225 0.239 0.221 0.261 0.225 0.213 0.223   0.227    7.39

108) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
109)  isopropylbenzene
            3.533 3.346 2.463 2.740 2.799 2.877 3.604 2.678 3.135   3.019   13.34
110)  Cyclohexanone
            0.079 0.094 0.067 0.077 0.079 0.075 0.080 0.093 0.086   0.081   10.61
111)  4-bromofluorobenzene (s)
                        0.810 0.909 0.989 0.950       1.102         0.952   11.24
```

Initial Calibration Summary

Job Number: JB53758 **Sample:** VX6084-ICC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X140621.D
Project: BMS-ICM, Humacao, PR

112)	bromobenzene											
		0.948	0.893	0.707	0.783	0.787	0.838	0.909	0.749	0.864	0.831	9.58
113)	1,1,2,2-tetrachloroethane											
		0.814	0.827	0.650	0.709	0.711	0.738	0.756	0.698	0.822	0.747	8.37
114)	trans-1,4-dichloro-2-butene											
				0.163	0.172	0.170	0.186	0.174	0.163		0.171	5.11
115)	1,2,3-trichloropropane											
		0.163	0.179	0.156	0.169	0.172	0.177	0.172	0.163		0.169	4.49
116)	n-propylbenzene											
		4.167	3.901	2.923	3.252	3.303	3.389	4.214	3.143	3.818	3.568	13.11
117)	4-ethyltoluene											
											0.000	-1.00
118)	2-chlorotoluene											
		0.904	0.838	0.625	0.698	0.701	0.736	0.877	0.674	0.798	0.761	12.76
119)	4-chlorotoluene											
		2.652	2.514	1.876	2.083	2.129	2.204	2.613	2.063	2.577	2.301	12.54
120)	1,3,5-trimethylbenzene											
		3.080	2.837	2.121	2.373	2.407	2.483	2.995	2.311	2.717	2.592	12.73
121)	tert-butylbenzene											
			2.409	1.782	1.975	2.006	2.083	2.566	1.895		2.102	13.46
122)	pentachloroethane											
		0.561	0.517	0.432	0.478	0.491	0.507	0.563	0.478	0.540	0.507	8.45
123)	1,2,4-trimethylbenzene											
		3.115	2.838	2.170	2.403	2.436	2.541	2.993	2.395	2.912	2.645	12.33
124)	1,2,3-trimethylbenzene											
											0.000	-1.00
125)	sec-butylbenzene											
		3.967	3.668	2.720	3.037	3.093	3.174	3.926	2.912	3.454	3.328	13.45
126)	1,3-dichlorobenzene											
		1.751	1.669	1.307	1.449	1.427	1.540	1.752	1.395	1.689	1.553	10.75
127)	p-isopropyltoluene											
		3.132	2.940	2.251	2.500	2.534	2.626	3.223	2.445	2.753	2.712	12.08
128)	1,4-dichlorobenzene											
		1.920	1.720	1.350	1.477	1.496	1.575	1.767	1.429	1.753	1.610	11.74
129)	1,2-dichlorobenzene											
		1.619	1.546	1.262	1.381	1.390	1.489	1.593	1.342	1.519	1.460	8.35
130)	benzyl chloride											
		1.250	1.466	1.289	1.368	1.436	1.478	1.485	1.441	1.504	1.413	6.42
131)	1,4-diethylbenzene											
											0.000	-1.00
132)	n-butylbenzene											
		1.564	1.485	1.196	1.315	1.332	1.379	1.661	1.270	1.302	1.389	10.85
133)	1,2,4,5-tetramethylbenzene											
											0.000	-1.00
134)	1,2-dibromo-3-chloropropane											
			0.110	0.108	0.112	0.112	0.120	0.104	0.110		0.111	4.33
135)	1,3,5-trichlorobenzene											
		1.129	1.119	1.017	1.098	1.113	1.183	1.220	1.062	0.973	1.102	6.95
136)	hexachlorobutadiene											
		0.601	0.590	0.513	0.563	0.563	0.587	0.689	0.544	0.496	0.572	9.82
137)	naphthalene											
				1.714	1.789	1.675	1.873	1.389	1.505		1.657	10.89
138)	1,2,4-trichlorobenzene											
				0.829	0.878	0.835	0.964	0.771	0.769		0.841	8.69
139)	1,2,3-trichlorobenzene											
				0.681	0.734	0.691	0.734	0.596	0.604		0.673	9.01
140)	hexachloroethane											
		0.535	0.543	0.429	0.469	0.467	0.509	0.568	0.439	0.426	0.487	10.93

(#) = Out of Range ### Number of calibration levels exceeded format ###

6.9.5

6

Initial Calibration Summary

Job Number: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR
Sample: VX6084-ICC6084
Lab FileID: X140621.D

MX6084.M Mon Oct 14 09:45:17 2013 GCMSX

Initial Calibration Verification

Job Number: JB53758 **Sample:** VX6084-ICV6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X140625.D
Project: BMS-ICM, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\X140625.D                    Vial: 12
Acq On    : 11 Oct 2013   3:18 pm                     Operator: natet
Sample    : icv6084-50                                Inst    : ACC-VOA-M
Misc      : MS55872,VX6084,5.0,,,,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MX6084.M (RTE Integrator)
Title        : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
Last Update  : Mon Oct 14 09:42:03 2013
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	109	0.00	6.94
2		tertiary butyl alcohol	1.181	1.371	-16.1	129	0.00	7.07
		----------	True	Calc.	% Drift	----------		
3		ethyl alcohol	5000.000	5711.243	-14.2	115	0.00	5.61
		----------	AvgRF	CCRF	% Dev	----------		
4		1,4-dioxane	0.103	0.111	-7.8	118	0.00	11.71
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	9.61
6	m	freon 23		----------NA----------				
7	m	freon 115		----------NA----------				
8	m	freon 143a		----------NA----------				
9	m	freon 152a		----------NA----------				
10	m	chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.325	0.381	-17.2	129	-0.01	3.57
12		dichlorodifluoromethane	0.364	0.346	4.9	97	0.00	3.57
13	m	freon 114		----------NA----------				
14	m	freon 142b		----------NA----------				
15		chloromethane	0.564	0.515	8.7	105	-0.01	3.85
16		vinyl chloride	0.476	0.457	4.0	104	-0.01	4.09
17	m	acetaldehyde		----------NA----------				
18		bromomethane	0.318	0.308	3.1	105	0.00	4.71
19		chloroethane	0.261	0.247	5.4	105	-0.01	4.88
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.576	0.540	6.2	100	-0.01	5.34
22		pentane		----------NA----------				
23		ethyl ether	0.204	0.226	-10.8	117	-0.01	5.75
24	m	freon 141b		----------NA----------				
25	m	freon 123a		----------NA----------				
26	m	freon 123		----------NA----------				
27		acrolein	0.068	0.074	-8.8	114	0.00	6.01
28		1,1-dichloroethene	0.339	0.369	-8.8	118	-0.01	6.19
29		acetone	0.028	0.032	-14.3	107	0.00	6.25
30		allyl chloride	0.219	0.256	-16.9	130	0.00	6.75
31		acetonitrile	0.028	0.030	-7.1	114	0.00	6.72
32		iodomethane	0.693	0.753	-8.7	115	-0.01	6.48
33		iso-butyl alcohol	0.018	0.019	-5.6	119	0.00	9.99
34		carbon disulfide	1.217	1.344	-10.4	117	0.00	6.61
35		methylene chloride	0.452	0.456	-0.9	111	0.00	6.97
36		methyl acetate	0.254	0.253	0.4	106	0.00	6.75
37		methyl tert butyl ether	1.085	1.108	-2.1	108	0.00	7.34

Initial Calibration Verification

Job Number: JB53758 **Sample:** VX6084-ICV6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X140625.D
Project: BMS-ICM, Humacao, PR

38		trans-1,2-dichloroethene	0.402	0.435	-8.2	117	0.00	7.39
39		di-isopropyl ether	1.390	1.413	-1.7	110	0.00	8.03
40		2-butanone	0.040	0.046	-15.0	119	0.00	8.91
41		1,1-dichloroethane	0.734	0.807	-9.9	118	-0.01	8.03
42		chloroprene	0.545	0.611	-12.1	119	0.00	8.16
43		acrylonitrile	0.117	0.129	-10.3	110	0.00	7.33
44		vinyl acetate	0.054	0.067	-24.1#	119	0.00	8.04
45		ethyl tert-butyl ether	1.278	1.318	-3.1	108	0.00	8.59
46		ethyl acetate	0.039	0.047	-20.5#	117	0.00	8.94
47		2,2-dichloropropane	0.561	0.611	-8.9	122	0.00	8.92
48		cis-1,2-dichloroethene	0.460	0.491	-6.7	116	0.00	8.93
49		propionitrile	0.047	0.054	-14.9	113	0.00	9.01
50		tert-Butyl Formate	0.301	0.343	-14.0	113	0.00	9.43
51		bromochloromethane	0.209	0.228	-9.1	111	0.00	9.31
52		tetrahydrofuran	0.045	0.051	-13.3	115	0.00	9.36
53		chloroform	0.767	0.793	-3.4	117	0.00	9.39
54	S	dibromofluoromethane (s)	0.449	0.432	3.8	106	0.00	9.64
55	S	1,2-dichloroethane-d4 (s)	0.455	0.433	4.8	103	0.00	10.17
56		freon 113	0.257	0.299	-16.3	121	0.00	6.17
57		methacrylonitrile	0.196	0.215	-9.7	114	0.00	9.24
58		1,1,1-trichloroethane	0.586	0.643	-9.7	119	-0.01	9.69
59		cyclohexane	0.572	0.560	2.1	106	0.00	9.78
60	m	tert amyl alcohol	0.035	0.039	-11.4	115	0.00	10.14
61	m	iso-octane	1.449	1.541	-6.3	116	0.00	10.28
62	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	10.76
63		di-isobutylene		----------NA----------				
64		epichlorohydrin	0.024	0.025	-4.2	108	0.00	12.45
65		n-butyl alcohol	0.007	0.008	-14.3	120	0.00	10.97
66		carbon tetrachloride	0.348	0.383	-10.1	118	0.00	9.95
67		1,1-dichloropropene	0.361	0.384	-6.4	114	0.00	9.92
68		hexane	0.336	0.403	-19.9	130	0.00	7.74
69		benzene	1.144	1.238	-8.2	117	0.00	10.25
70		tert-amyl methyl ether	0.801	0.857	-7.0	113	0.00	10.33
71		heptane	0.209	0.231	-10.5	119	0.00	10.52
72		isopropyl acetate	0.452	0.445	1.5	112	0.00	10.21
73		1,2-dichloroethane	0.345	0.372	-7.8	111	0.00	10.28
74		trichloroethene	0.275	0.325	-18.2	124	0.00	11.20
75	m	ethyl acrylate		----------NA----------				
76	m	tert amyl ethyl ether		----------NA----------				
77		2-nitropropane		----------NA----------				
78		2-chloroethyl vinyl ether	0.170	0.175	-2.9	106	0.00	12.31
79		methyl methacrylate	0.162	0.190	-17.3	114	0.00	11.60
80		1,2-dichloropropane	0.305	0.334	-9.5	117	0.00	11.54
81		dibromomethane	0.165	0.184	-11.5	112	0.00	11.75
82		methylcyclohexane	0.428	0.499	-16.6	125	0.00	11.48
83		bromodichloromethane	0.388	0.416	-7.2	113	0.00	11.95
84		cis-1,3-dichloropropene	0.482	0.487	-1.0	105	0.00	12.58
85	S	toluene-d8 (s)	1.145	1.147	-0.2	111	0.00	12.97
86		4-methyl-2-pentanone	0.096	0.107	-11.5	113	0.00	12.74
87		toluene	0.728	0.781	-7.3	116	0.00	13.07
88		3-methyl-1-butanol	0.011	0.013	-18.2	119	0.00	12.79
89		trans-1,3-dichloropropene	0.424	0.465	-9.7	112	0.00	13.36
90		ethyl methacrylate	0.331	0.367	-10.9	111	0.00	13.39
91		1,1,2-trichloroethane	0.210	0.228	-8.6	114	0.00	13.65
92		2-hexanone	0.089	0.104	-16.9	114	0.00	13.91
93	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	15.01
94		3,3-Dimethyl-1-butanol	0.028	0.031	-10.7	113	0.00	14.16
95		tetrachloroethene	0.279	0.300	-7.5	115	0.00	13.86

Initial Calibration Verification

Job Number: JB53758 **Sample:** VX6084-ICV6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X140625.D
Project: BMS-ICM, Humacao, PR

96		1,3-dichloropropane	0.452	0.472	-4.4	112	0.00	13.89
97		butyl acetate	0.178	0.206	-15.7	114	0.00	14.04
98		dibromochloromethane	0.336	0.363	-8.0	113	0.00	14.23
99		1,2-dibromoethane	0.282	0.297	-5.3	110	0.00	14.42
100	m	n-butyl ether		----------NA----------				
101		chlorobenzene	0.928	0.985	-6.1	117	0.00	15.05
102		1,1,1,2-tetrachloroethane	0.336	0.353	-5.1	111	0.00	15.14
103		ethylbenzene	1.548	1.674	-8.1	118	0.00	15.15
104		m,p-xylene	0.598	0.636	-6.4	118	0.00	15.29
105		o-xylene	0.590	0.626	-6.1	115	0.00	15.84
106		styrene	1.012	1.104	-9.1	115	0.00	15.85
107		bromoform	0.227	0.251	-10.6	109	0.00	16.18
108	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	17.87
109		isopropylbenzene	3.019	3.077	-1.9	117	0.00	16.29
110		Cyclohexanone	0.081	0.026	67.9#	35#	0.00	16.48
111	S	4-bromofluorobenzene (s)	0.952	0.935	1.8	108	0.00	16.54
112		bromobenzene	0.831	0.843	-1.4	112	0.00	16.76
113		1,1,2,2-tetrachloroethane	0.747	0.732	2.0	108	0.00	16.69
114		trans-1,4-dichloro-2-bute	0.171	0.192	-12.3	117	0.00	16.74
115		1,2,3-trichloropropane	0.169	0.175	-3.6	108	0.00	16.76
116		n-propylbenzene	3.568	3.745	-5.0	120	0.00	16.81
117	m	4-ethyltoluene		----------NA----------				
118		2-chlorotoluene	0.761	0.767	-0.8	115	0.00	16.96
119		4-chlorotoluene	2.301	2.312	-0.5	116	0.00	17.08
120		1,3,5-trimethylbenzene	2.592	2.653	-2.4	117	0.00	16.99
121		tert-butylbenzene	2.102	2.185	-3.9	116	0.00	17.38
122		pentachloroethane	0.507	0.536	-5.7	117	0.00	17.46
123		1,2,4-trimethylbenzene	2.645	2.696	-1.9	117	0.00	17.43
124	m	1,2,3-trimethylbenzene		----------NA----------				
125		sec-butylbenzene	3.328	3.361	-1.0	116	0.00	17.62
126		1,3-dichlorobenzene	1.553	1.616	-4.1	117	0.00	17.80
127		p-isopropyltoluene	2.712	2.908	-7.2	122	0.00	17.75
128		1,4-dichlorobenzene	1.610	1.623	-0.8	115	0.00	17.89
129		1,2-dichlorobenzene	1.460	1.494	-2.3	113	0.00	18.29
130		benzyl chloride	1.413	1.650	-16.8	126	0.00	18.01
131	m	1,4-diethylbenzene		----------NA----------				
132		n-butylbenzene	1.389	1.494	-7.6	119	0.00	18.18
133	m	1,2,4,5-tetramethylbenzen		----------NA----------				
134		1,2-dibromo-3-chloropropa	0.111	0.119	-7.2	112	0.00	19.02
135		1,3,5-trichlorobenzene	1.102	1.274	-15.6	121	0.00	19.20
136		hexachlorobutadiene	0.572	0.612	-7.0	114	0.00	19.90
137		naphthalene	1.657	1.960	-18.3	115	0.00	20.05
138		1,2,4-trichlorobenzene	0.841	1.009	-20.0	120	0.00	19.79
139	m	1,2,3-trichlorobenzene	0.673	0.824	-22.4#	117	0.00	20.28
140		hexachloroethane	0.487	0.531	-9.0	119	0.00	18.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
X140621.D MX6084.M Mon Oct 14 09:45:16 2013 GCMSX

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VX6159-CC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X142329D.D
Project: BMS-ICM, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\X142329D.D                    Vial: 2
Acq On    : 24 Nov 2013   9:50 am                       Operator: natet
Sample    : CC6084-20                                   Inst    : ACC-VOA-M
Misc      : MS59034,VX6159,5.0,,,,1                     Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MX6084.M (RTE Integrator)
Title        : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
Last Update  : Mon Nov 11 13:17:14 2013
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	92	-0.03	6.92
2		tertiary butyl alcohol	1.181	1.156	2.1	91	-0.02	7.06
		----------	True	Calc.	% Drift		----------	
3		ethyl alcohol		----------NA----------				
		----------	AvgRF	CCRF	% Dev		----------	
4		1,4-dioxane	0.103	0.105	-1.9	95	-0.01	11.70
5	I	pentafluorobenzene	1.000	1.000	0.0	101	-0.02	9.59
6	m	freon 23		----------NA----------				
7	m	freon 115		----------NA----------				
8	m	freon 143a		----------NA----------				
9	m	freon 152a		----------NA----------				
10	m	chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.325	0.217	33.2#	75	-0.03	3.55
12		dichlorodifluoromethane	0.364	0.398	-9.3	110	-0.02	3.55
13	m	freon 114		----------NA----------				
14	m	freon 142b		----------NA----------				
15		chloromethane	0.564	0.466	17.4	89	-0.03	3.83
16		vinyl chloride	0.476	0.442	7.1	96	-0.02	4.08
17	m	acetaldehyde		----------NA----------				
18		bromomethane	0.318	0.359	-12.9	111	-0.02	4.69
19		chloroethane	0.261	0.223	14.6	83	-0.01	4.88
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.576	0.626	-8.7	109	0.00	5.35
22		pentane		----------NA----------				
23		ethyl ether	0.204	0.173	15.2	87	-0.03	5.74
24	m	freon 141b		----------NA----------				
25	m	freon 123a		----------NA----------				
26	m	freon 123		----------NA----------				
27		acrolein	0.068	0.053	22.1#	78	-0.02	6.00
28		1,1-dichloroethene	0.339	0.310	8.6	98	-0.03	6.17
29		acetone	0.028	0.028	0.0	102	0.00	6.24
30		allyl chloride	0.219	0.192	12.3	90	-0.02	6.74
31		acetonitrile	0.028	0.023	17.9	81	0.00	6.71
32		iodomethane	0.693	0.644	7.1	99	-0.02	6.47
33		iso-butyl alcohol	0.018	0.013	27.8#	76	-0.02	9.98
34		carbon disulfide	1.217	1.033	15.1	92	-0.02	6.60
35		methylene chloride	0.452	0.391	13.5	93	-0.02	6.95
36		methyl acetate	0.254	0.186	26.8#	77	-0.02	6.74
37		methyl tert butyl ether	1.085	1.000	7.8	98	-0.02	7.32

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VX6159-CC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X142329D.D
Project: BMS-ICM, Humacao, PR

38		trans-1,2-dichloroethene	0.402	0.377	6.2	101	-0.02	7.37
39		di-isopropyl ether	1.390	1.033	25.7#	80	-0.03	8.01
40		2-butanone	0.040	0.040	0.0	102	-0.02	8.89
41		1,1-dichloroethane	0.734	0.648	11.7	93	-0.02	8.02
42		chloroprene	0.545	0.491	9.9	95	-0.02	8.14
43		acrylonitrile	0.117	0.096	17.9	81	-0.02	7.32
44		vinyl acetate	0.054	0.045	16.7	82	-0.02	8.02
45		ethyl tert-butyl ether	1.278	0.962	24.7#	80	-0.03	8.57
46		ethyl acetate	0.039	0.036	7.7	86	-0.03	8.92
47		2,2-dichloropropane	0.561	0.568	-1.2	110	-0.02	8.91
48		cis-1,2-dichloroethene	0.460	0.421	8.5	98	-0.02	8.91
49		propionitrile	0.047	0.040	14.9	83	-0.02	8.99
50		tert-Butyl Formate	0.301	0.282	6.3	93	-0.02	9.42
51		bromochloromethane	0.209	0.210	-0.5	104	-0.01	9.30
52		tetrahydrofuran	0.045	0.039	13.3	91	-0.03	9.34
53		chloroform	0.767	0.717	6.5	104	-0.02	9.37
54	S	dibromofluoromethane (s)	0.449	0.440	2.0	103	-0.03	9.62
55	S	1,2-dichloroethane-d4 (s)	0.455	0.438	3.7	100	-0.02	10.15
56		freon 113	0.257	0.253	1.6	107	0.00	6.17
57		methacrylonitrile	0.196	0.159	18.9	82	-0.02	9.22
58		1,1,1-trichloroethane	0.586	0.617	-5.3	115	-0.02	9.68
59		cyclohexane	0.572	0.479	16.3	96	-0.02	9.77
60	m	tert amyl alcohol		----------NA----------				
61	m	iso-octane	1.449	1.209	16.6	92	-0.02	10.26
62	I	1,4-difluorobenzene	1.000	1.000	0.0	97	-0.02	10.74
63		di-isobutylene		----------NA----------				
64		epichlorohydrin	0.024	0.020	16.7	80	-0.02	12.44
65		n-butyl alcohol	0.007	0.006	14.3	81	-0.02	10.96
66		carbon tetrachloride	0.348	0.397	-14.1	121	-0.02	9.93
67		1,1-dichloropropene	0.361	0.355	1.7	102	-0.02	9.91
68		hexane	0.336	0.223	33.6#	70	-0.02	7.72
69		benzene	1.144	1.046	8.6	95	-0.02	10.24
70		tert-amyl methyl ether	0.801	0.733	8.5	94	-0.03	10.30
71		heptane	0.209	0.162	22.5#	81	-0.02	10.50
72		isopropyl acetate	0.452	0.486	-7.5	107	-0.02	10.19
73		1,2-dichloroethane	0.345	0.358	-3.8	104	-0.02	10.26
74		trichloroethene	0.275	0.294	-6.9	107	-0.02	11.18
75	m	ethyl acrylate		----------NA----------				
76	m	tert amyl ethyl ether		----------NA----------				
77		2-nitropropane		----------NA----------				
78		2-chloroethyl vinyl ether	0.170	0.115	32.4#	66	-0.02	12.29
79		methyl methacrylate	0.162	0.151	6.8	88	-0.02	11.59
80		1,2-dichloropropane	0.305	0.265	13.1	88	-0.02	11.52
81		dibromomethane	0.165	0.169	-2.4	100	-0.02	11.73
82		methylcyclohexane	0.428	0.382	10.7	94	-0.02	11.46
83		bromodichloromethane	0.388	0.396	-2.1	106	-0.02	11.93
84		cis-1,3-dichloropropene	0.482	0.467	3.1	98	-0.02	12.56
85	S	toluene-d8 (s)	1.145	1.178	-2.9	104	-0.02	12.95
86		4-methyl-2-pentanone	0.096	0.085	11.5	86	-0.02	12.72
87		toluene	0.728	0.708	2.7	101	-0.02	13.05
88		3-methyl-1-butanol	0.011	0.009	18.2	77	0.00	12.79
89		trans-1,3-dichloropropene	0.424	0.432	-1.9	103	-0.02	13.35
90		ethyl methacrylate	0.331	0.310	6.3	91	-0.01	13.38
91		1,1,2-trichloroethane	0.210	0.203	3.3	96	-0.02	13.63
92		2-hexanone	0.089	0.083	6.7	88	-0.01	13.90
93	I	chlorobenzene-d5	1.000	1.000	0.0	101	-0.02	15.00
94		3,3-Dimethyl-1-butanol	0.028	0.020	28.6#	72	-0.01	14.16
95		tetrachloroethene	0.279	0.287	-2.9	111	-0.01	13.85

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VX6159-CC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X142329D.D
Project: BMS-ICM, Humacao, PR

96		1,3-dichloropropane	0.452	0.411	9.1	96	-0.02	13.87
97		butyl acetate	0.178	0.151	15.2	81	-0.01	14.03
98		dibromochloromethane	0.336	0.357	-6.2	110	-0.01	14.22
99		1,2-dibromoethane	0.282	0.276	2.1	101	-0.02	14.41
100	m	n-butyl ether		----------NA----------				
101		chlorobenzene	0.928	0.888	4.3	104	-0.02	15.04
102		1,1,1,2-tetrachloroethane	0.336	0.343	-2.1	109	-0.01	15.13
103		ethylbenzene	1.548	1.524	1.6	105	-0.01	15.13
104		m,p-xylene	0.598	0.579	3.2	105	-0.02	15.28
105		o-xylene	0.590	0.571	3.2	104	-0.02	15.82
106		styrene	1.012	1.000	1.2	105	-0.01	15.84
107		bromoform	0.227	0.246	-8.4	113	-0.02	16.16
108	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	-0.01	17.85
109		isopropylbenzene	3.019	2.848	5.7	107	-0.01	16.28
110		Cyclohexanone	0.081	0.082	-1.2	110	-0.01	16.47
111	S	4-bromofluorobenzene (s)	0.952	0.931	2.2	99	-0.01	16.53
112		bromobenzene	0.831	0.786	5.4	105	-0.01	16.75
113		1,1,2,2-tetrachloroethane	0.747	0.661	11.5	98	-0.01	16.68
114		trans-1,4-dichloro-2-bute	0.171	0.163	4.7	101	-0.01	16.73
115		1,2,3-trichloropropane	0.169	0.168	0.6	103	-0.01	16.75
116		n-propylbenzene	3.568	3.250	8.9	104	-0.01	16.80
117	m	4-ethyltoluene		----------NA----------				
118		2-chlorotoluene	0.761	0.705	7.4	106	-0.02	16.95
119		4-chlorotoluene	2.301	2.106	8.5	104	-0.01	17.07
120		1,3,5-trimethylbenzene	2.592	2.484	4.2	109	-0.01	16.98
121		tert-butylbenzene	2.102	2.081	1.0	110	-0.01	17.37
122		pentachloroethane	0.507	0.516	-1.8	111	-0.01	17.45
123		1,2,4-trimethylbenzene	2.645	2.444	7.6	106	-0.01	17.42
124	m	1,2,3-trimethylbenzene		----------NA----------				
125		sec-butylbenzene	3.328	3.158	5.1	108	-0.01	17.61
126		1,3-dichlorobenzene	1.553	1.491	4.0	110	-0.01	17.79
127		p-isopropyltoluene	2.712	2.647	2.4	110	-0.01	17.74
128		1,4-dichlorobenzene	1.610	1.468	8.8	104	0.00	17.88
129		1,2-dichlorobenzene	1.460	1.367	6.4	104	-0.01	18.28
130		benzyl chloride	1.413	1.254	11.3	92	0.00	18.01
131	m	1,4-diethylbenzene		----------NA----------				
132		n-butylbenzene	1.389	1.273	8.4	101	-0.01	18.17
133	m	1,2,4,5-tetramethylbenzen		----------NA----------				
134		1,2-dibromo-3-chloropropa	0.111	0.104	6.3	98	-0.01	19.02
135		1,3,5-trichlorobenzene	1.102	1.068	3.1	101	0.00	19.19
136		hexachlorobutadiene	0.572	0.584	-2.1	109	-0.01	19.89
137		naphthalene	1.657	1.446	12.7	91	0.00	20.04
138		1,2,4-trichlorobenzene	0.841	0.818	2.7	103	-0.01	19.78
139	m	1,2,3-trichlorobenzene	0.673	0.633	5.9	97	-0.01	20.27
140		hexachloroethane	0.487	0.506	-3.9	114	0.00	18.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
X140620.D MX6084.M Mon Nov 25 14:22:30 2013 GCMSX

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VX6160-CC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X142362.D
Project: BMS-ICM, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\X142362.D                    Vial: 2
Acq On    : 25 Nov 2013  12:54 pm                     Operator: natet
Sample    : cc6084-20                                 Inst    : ACC-VOA-M
Misc      : MS58857,VX6160,5.0,,,,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MX6084.M (RTE Integrator)
Title        : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
Last Update  : Mon Nov 11 13:17:14 2013
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	78	-0.03	6.92
2		tertiary butyl alcohol	1.181	1.194	-1.1	80	-0.02	7.06
		----------	True	Calc.	% Drift		----------	
3		ethyl alcohol		----------NA----------				
		----------	AvgRF	CCRF	% Dev		----------	
4		1,4-dioxane	0.103	0.112	-8.7	86	-0.02	11.69
5	I	pentafluorobenzene	1.000	1.000	0.0	92	-0.03	9.58
6	m	freon 23		----------NA----------				
7	m	freon 115		----------NA----------				
8	m	freon 143a		----------NA----------				
9	m	freon 152a		----------NA----------				
10	m	chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.325	0.230	29.2#	72	-0.02	3.56
12		dichlorodifluoromethane	0.364	0.345	5.2	87	-0.03	3.54
13	m	freon 114		----------NA----------				
14	m	freon 142b		----------NA----------				
15		chloromethane	0.564	0.441	21.8#	77	-0.03	3.82
16		vinyl chloride	0.476	0.406	14.7	80	-0.03	4.06
17	m	acetaldehyde		----------NA----------				
18		bromomethane	0.318	0.353	-11.0	99	-0.03	4.69
19		chloroethane	0.261	0.214	18.0	72	-0.02	4.86
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.576	0.573	0.5	91	-0.02	5.33
22		pentane		----------NA----------				
23		ethyl ether	0.204	0.181	11.3	83	-0.03	5.74
24	m	freon 141b		----------NA----------				
25	m	freon 123a		----------NA----------				
26	m	freon 123		----------NA----------				
27		acrolein	0.068	0.058	14.7	79	-0.03	5.99
28		1,1-dichloroethene	0.339	0.302	10.9	88	-0.03	6.17
29		acetone	0.028	0.027	3.6	87	-0.02	6.23
30		allyl chloride	0.219	0.200	8.7	86	-0.03	6.74
31		acetonitrile	0.028	0.023	17.9	74	-0.02	6.70
32		iodomethane	0.693	0.650	6.2	92	-0.03	6.45
33		iso-butyl alcohol	0.018	0.012	33.3#	65	-0.02	9.97
34		carbon disulfide	1.217	1.018	16.4	83	-0.03	6.59
35		methylene chloride	0.452	0.400	11.5	87	-0.02	6.95
36		methyl acetate	0.254	0.192	24.4#	73	-0.03	6.73
37		methyl tert butyl ether	1.085	1.026	5.4	92	-0.03	7.31

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VX6160-CC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X142362.D
Project: BMS-ICM, Humacao, PR

38		trans-1,2-dichloroethene	0.402	0.378	6.0	92	-0.03	7.35
39		di-isopropyl ether	1.390	1.106	20.4#	78	-0.03	8.01
40		2-butanone	0.040	0.038	5.0	88	-0.02	8.88
41		1,1-dichloroethane	0.734	0.668	9.0	88	-0.03	8.01
42		chloroprene	0.545	0.502	7.9	89	-0.03	8.14
43		acrylonitrile	0.117	0.100	14.5	77	-0.03	7.30
44		vinyl acetate	0.054	0.048	11.1	80	-0.03	8.02
45		ethyl tert-butyl ether	1.278	1.028	19.6	78	-0.04	8.56
46		ethyl acetate	0.039	0.037	5.1	81	-0.04	8.91
47		2,2-dichloropropane	0.561	0.550	2.0	97	-0.02	8.90
48		cis-1,2-dichloroethene	0.460	0.431	6.3	91	-0.03	8.90
49		propionitrile	0.047	0.040	14.9	76	-0.02	8.99
50		tert-Butyl Formate	0.301	0.288	4.3	86	-0.03	9.41
51		bromochloromethane	0.209	0.213	-1.9	96	-0.02	9.28
52		tetrahydrofuran	0.045	0.039	13.3	82	-0.03	9.34
53		chloroform	0.767	0.757	1.3	100	-0.03	9.37
54	S	dibromofluoromethane (s)	0.449	0.448	0.2	96	-0.03	9.61
55	S	1,2-dichloroethane-d4 (s)	0.455	0.452	0.7	95	-0.03	10.14
56		freon 113	0.257	0.242	5.8	93	-0.01	6.16
57		methacrylonitrile	0.196	0.166	15.3	78	-0.02	9.22
58		1,1,1-trichloroethane	0.586	0.623	-6.3	105	-0.04	9.67
59		cyclohexane	0.572	0.460	19.6	84	-0.03	9.76
60	m	tert amyl alcohol		----------NA----------				
61	m	iso-octane	1.449	1.249	13.8	87	-0.03	10.25
62	I	1,4-difluorobenzene	1.000	1.000	0.0	91	-0.03	10.73
63		di-isobutylene		----------NA----------				
64		epichlorohydrin	0.024	0.020	16.7	74	-0.03	12.43
65		n-butyl alcohol	0.007	0.006	14.3	71	-0.03	10.95
66		carbon tetrachloride	0.348	0.377	-8.3	108	-0.03	9.92
67		1,1-dichloropropene	0.361	0.344	4.7	93	-0.03	9.90
68		hexane	0.336	0.240	28.6#	71	-0.03	7.72
69		benzene	1.144	1.056	7.7	90	-0.03	10.23
70		tert-amyl methyl ether	0.801	0.749	6.5	91	-0.03	10.30
71		heptane	0.209	0.165	21.1#	77	-0.03	10.49
72		isopropyl acetate	0.452	0.508	-12.4	106	-0.02	10.19
73		1,2-dichloroethane	0.345	0.377	-9.3	103	-0.03	10.26
74		trichloroethene	0.275	0.282	-2.5	97	-0.03	11.17
75	m	ethyl acrylate		----------NA----------				
76	m	tert amyl ethyl ether		----------NA----------				
77		2-nitropropane		----------NA----------				
78		2-chloroethyl vinyl ether	0.170	0.119	30.0#	64	-0.03	12.28
79		methyl methacrylate	0.162	0.154	4.9	85	-0.03	11.58
80		1,2-dichloropropane	0.305	0.278	8.9	87	-0.03	11.51
81		dibromomethane	0.165	0.174	-5.5	97	-0.03	11.73
82		methylcyclohexane	0.428	0.372	13.1	86	-0.03	11.45
83		bromodichloromethane	0.388	0.417	-7.5	105	-0.03	11.92
84		cis-1,3-dichloropropene	0.482	0.478	0.8	94	-0.03	12.55
85	S	toluene-d8 (s)	1.145	1.201	-4.9	100	-0.03	12.94
86		4-methyl-2-pentanone	0.096	0.087	9.4	83	-0.02	12.72
87		toluene	0.728	0.713	2.1	96	-0.02	13.05
88		3-methyl-1-butanol	0.011	0.008	27.3#	67	-0.02	12.78
89		trans-1,3-dichloropropene	0.424	0.443	-4.5	99	-0.03	13.34
90		ethyl methacrylate	0.331	0.323	2.4	89	-0.02	13.37
91		1,1,2-trichloroethane	0.210	0.210	0.0	94	-0.03	13.62
92		2-hexanone	0.089	0.080	10.1	80	-0.02	13.89
93	I	chlorobenzene-d5	1.000	1.000	0.0	98	-0.03	14.99
94		3,3-Dimethyl-1-butanol	0.028	0.018	35.7#	61	-0.02	14.15
95		tetrachloroethene	0.279	0.273	2.2	102	-0.03	13.83

Continuing Calibration Summary

Job Number: JB53758 **Sample:** VX6160-CC6084
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** X142362.D
Project: BMS-ICM, Humacao, PR

96		1,3-dichloropropane	0.452	0.419	7.3	95	-0.03	13.86
97		butyl acetate	0.178	0.149	16.3	77	-0.02	14.02
98		dibromochloromethane	0.336	0.359	-6.8	107	-0.03	14.21
99		1,2-dibromoethane	0.282	0.274	2.8	97	-0.03	14.39
100	m	n-butyl ether		----------NA----------				
101		chlorobenzene	0.928	0.889	4.2	100	-0.03	15.03
102		1,1,1,2-tetrachloroethane	0.336	0.346	-3.0	106	-0.02	15.12
103		ethylbenzene	1.548	1.495	3.4	99	-0.02	15.12
104		m,p-xylene	0.598	0.574	4.0	100	-0.03	15.27
105		o-xylene	0.590	0.567	3.9	99	-0.02	15.82
106		styrene	1.012	0.968	4.3	98	-0.02	15.83
107		bromoform	0.227	0.237	-4.4	105	-0.02	16.16
108	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	99	-0.02	17.85
109		isopropylbenzene	3.019	2.822	6.5	100	-0.02	16.27
110		Cyclohexanone	0.081	0.076	6.2	95	-0.02	16.46
111	S	4-bromofluorobenzene (s)	0.952	0.948	0.4	95	-0.02	16.52
112		bromobenzene	0.831	0.805	3.1	101	-0.02	16.74
113		1,1,2,2-tetrachloroethane	0.747	0.652	12.7	91	-0.02	16.67
114		trans-1,4-dichloro-2-bute	0.171	0.160	6.4	93	-0.02	16.73
115		1,2,3-trichloropropane	0.169	0.165	2.4	95	-0.02	16.74
116		n-propylbenzene	3.568	3.263	8.5	98	-0.02	16.78
117	m	4-ethyltoluene		----------NA----------				
118		2-chlorotoluene	0.761	0.707	7.1	100	-0.02	16.94
119		4-chlorotoluene	2.301	2.143	6.9	100	-0.02	17.06
120		1,3,5-trimethylbenzene	2.592	2.457	5.2	101	-0.02	16.97
121		tert-butylbenzene	2.102	2.078	1.1	103	-0.02	17.36
122		pentachloroethane	0.507	0.521	-2.8	105	-0.02	17.44
123		1,2,4-trimethylbenzene	2.645	2.483	6.1	101	-0.02	17.41
124	m	1,2,3-trimethylbenzene		----------NA----------				
125		sec-butylbenzene	3.328	3.031	8.9	97	-0.02	17.60
126		1,3-dichlorobenzene	1.553	1.461	5.9	101	-0.02	17.78
127		p-isopropyltoluene	2.712	2.511	7.4	98	-0.02	17.74
128		1,4-dichlorobenzene	1.610	1.501	6.8	99	-0.02	17.87
129		1,2-dichlorobenzene	1.460	1.375	5.8	98	-0.02	18.26
130		benzyl chloride	1.413	1.118	20.9#	77	-0.02	18.00
131	m	1,4-diethylbenzene		----------NA----------				
132		n-butylbenzene	1.389	1.251	9.9	93	-0.02	18.16
133	m	1,2,4,5-tetramethylbenzen		----------NA----------				
134		1,2-dibromo-3-chloropropa	0.111	0.106	4.5	93	-0.02	19.01
135		1,3,5-trichlorobenzene	1.102	1.098	0.4	98	-0.02	19.18
136		hexachlorobutadiene	0.572	0.586	-2.4	103	-0.02	19.88
137		naphthalene	1.657	1.395	15.8	82	-0.02	20.03
138		1,2,4-trichlorobenzene	0.841	0.833	1.0	99	-0.02	19.77
139	m	1,2,3-trichlorobenzene	0.673	0.612	9.1	88	-0.02	20.26
140		hexachloroethane	0.487	0.505	-3.7	107	-0.02	18.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
X140620.D MX6084.M Tue Nov 26 12:09:16 2013 GCMSX

New Jersey

ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210118.D
Acq On : 25 Nov 2013 4:15 pm
Operator : DivyaP
Sample : JB53758-1
Misc : MS59034,VE9218,6.0,,1,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 26 09:31:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.622	65	75182	500.00	ug/L	-0.02
5) pentafluorobenzene	9.849	168	160294	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.764	114	240566	50.00	ug/L	0.00
97) chlorobenzene-d5	14.094	117	220538	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.667	152	114147	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.886	113	80942	53.01	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 106.02%			
61) 1,2-dichloroethane-d4 (s)	10.304	65	95130	49.90	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 99.80%			
89) toluene-d8 (s)	12.469	98	321514	49.68	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 99.36%			
116) 4-bromofluorobenzene (s)	15.370	95	122745	58.49	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 116.98%			

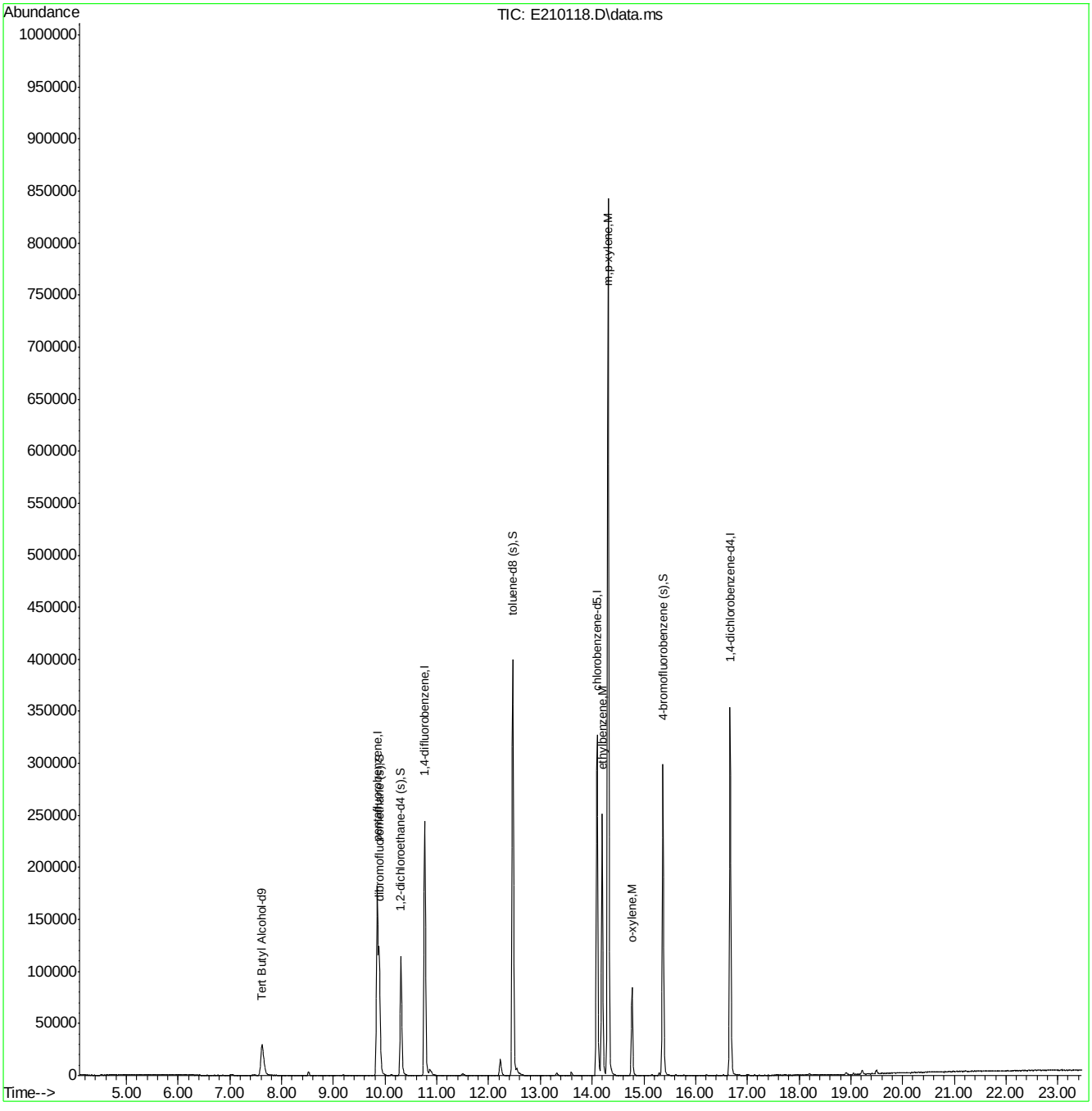
Target Compounds						Qvalue
108) ethylbenzene	14.194	91	211166	26.28	ug/L	99
109) m,p-xylene	14.309	106	288141	97.31	ug/L	100
110) o-xylene	14.774	106	28147	9.58	ug/L	98

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

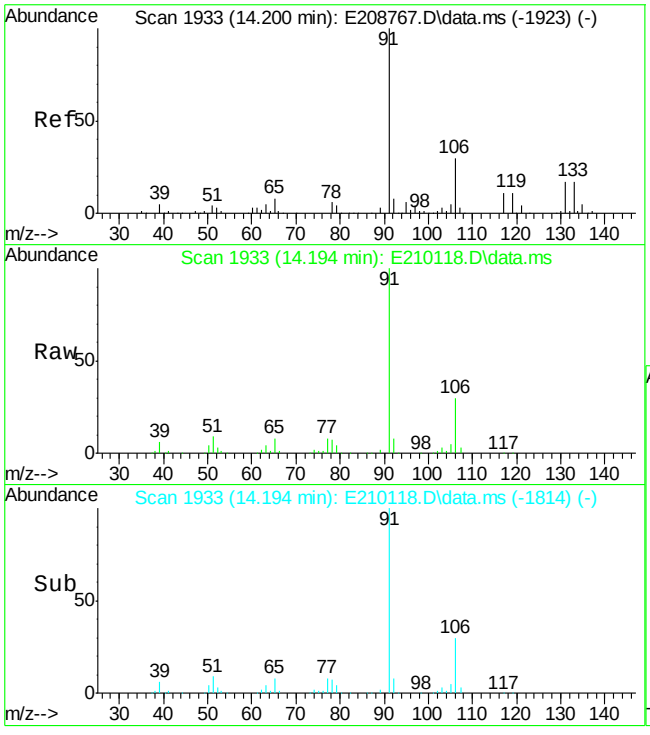
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210118.D
Acq On : 25 Nov 2013 4:15 pm
Operator : DivyaP
Sample : JB53758-1
Misc : MS59034,VE9218,6.0,,1,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 26 09:31:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration



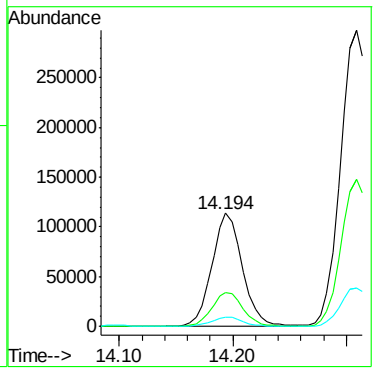
ME9161.M Tue Nov 26 09:47:25 2013 RPT1 Page: 2

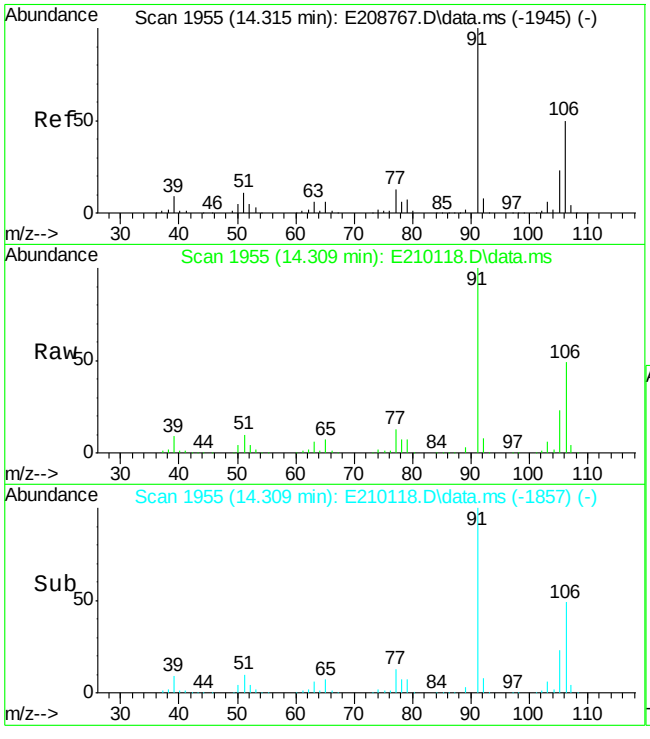


#108
ethylbenzene
Concen: 26.28 ug/L
RT: 14.194 min Scan# 1933
Delta R.T. -0.006 min
Lab File: E210118.D
Acq: 25 Nov 2013 4:15 pm

Tgt Ion: 91 Resp: 211166

Ion	Ratio	Lower	Upper
91	100		
106	30.0	0.4	60.4
77	8.0	0.0	38.1

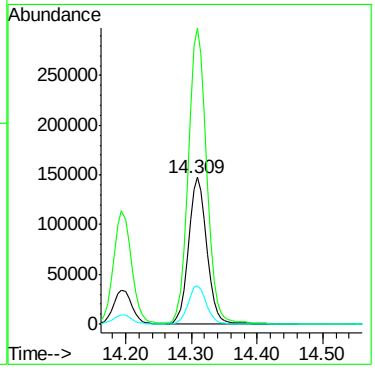


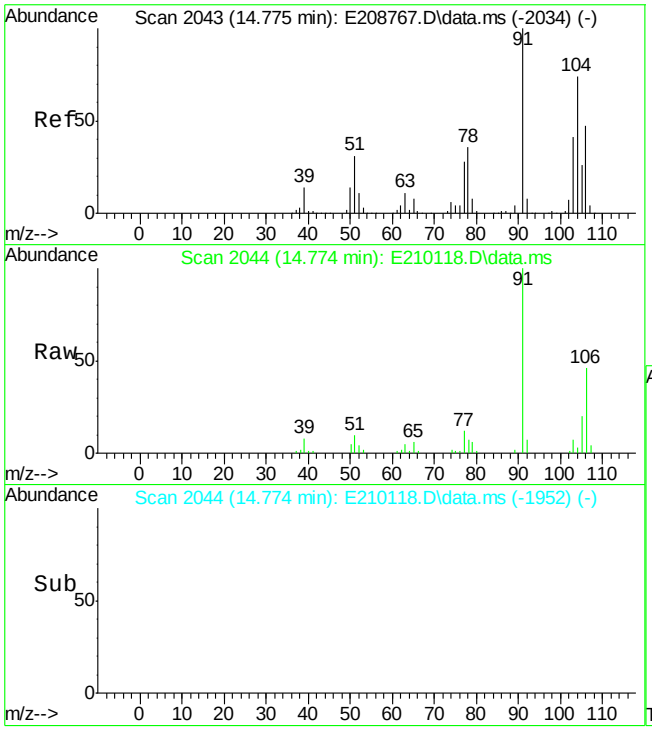


#109
m,p-xylene
Concen: 97.31 ug/L
RT: 14.309 min Scan# 1955
Delta R.T. -0.006 min
Lab File: E210118.D
Acq: 25 Nov 2013 4:15 pm

Tgt Ion:106 Resp: 288141

Ion	Ratio	Lower	Upper
106	100		
91	202.0	171.4	231.4
77	26.4	0.0	56.2

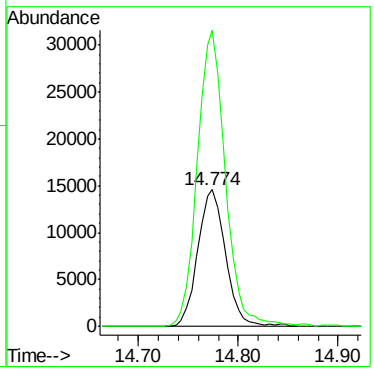




#110
o-xylene
Concen: 9.58 ug/L
RT: 14.774 min Scan# 2044
Delta R.T. -0.001 min
Lab File: E210118.D
Acq: 25 Nov 2013 4:15 pm

Tgt Ion:106 Resp: 28147

Ion	Ratio	Lower	Upper
106	100		
91	217.0	183.4	243.4



7.1.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210085.D
Acq On : 24 Nov 2013 1:34 am
Operator : DivyaP
Sample : JB53758-1
Misc : MS59034,VE9217,6.0,,100,5,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 25 09:32:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.622	65	33484	500.00	ug/L	-0.02
5) pentafluorobenzene	9.849	168	112766	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.769	114	168128	50.00	ug/L	0.00
97) chlorobenzene-d5	14.099	117	162159	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.671	152	96085	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.891	113	57731	53.74	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 107.48%			
61) 1,2-dichloroethane-d4 (s)	10.309	65	69613	51.91	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 103.82%			
89) toluene-d8 (s)	12.468	98	237292	52.47	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 104.94%			
116) 4-bromofluorobenzene (s)	15.370	95	100039	56.63	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 113.26%			

Target Compounds

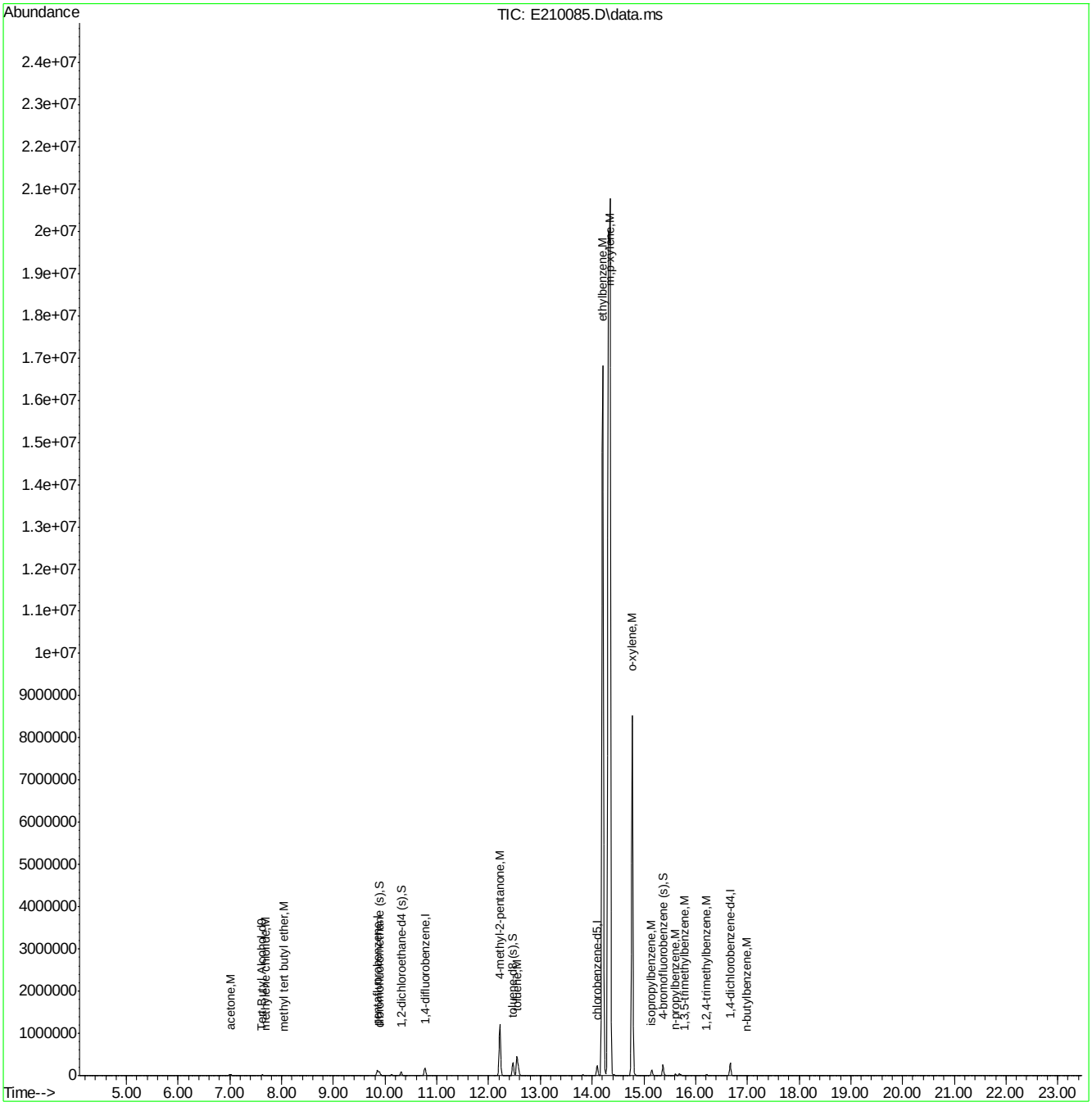
						Qvalue
32) acetone	7.000	58	19520	172.68	ug/L	86
38) methylene chloride	7.690	84	2310	1.80	ug/L	97
41) methyl tert butyl ether	8.050	73	1055	0.31	ug/L #	53
90) 4-methyl-2-pentanone	12.217	58	377778	731.48	ug/L #	47
91) toluene	12.547	92	223466	76.64	ug/L	98
108) ethylbenzene	14.204	91	16857647	2853.24	ug/L	98
109) m,p-xylene	14.345	106	12826203	5891.11	ug/L	97
110) o-xylene	14.774	106	2700453	1250.56	ug/L	97
115) isopropylbenzene	15.155	105	101667	17.43	ug/L	98
121) n-propylbenzene	15.610	91	34450	5.05	ug/L	99
125) 1,3,5-trimethylbenzene	15.772	105	6692	1.33	ug/L	97
128) 1,2,4-trimethylbenzene	16.211	105	15460	3.06	ug/L	96
136) n-butylbenzene	16.990	92	715	0.27	ug/L #	75

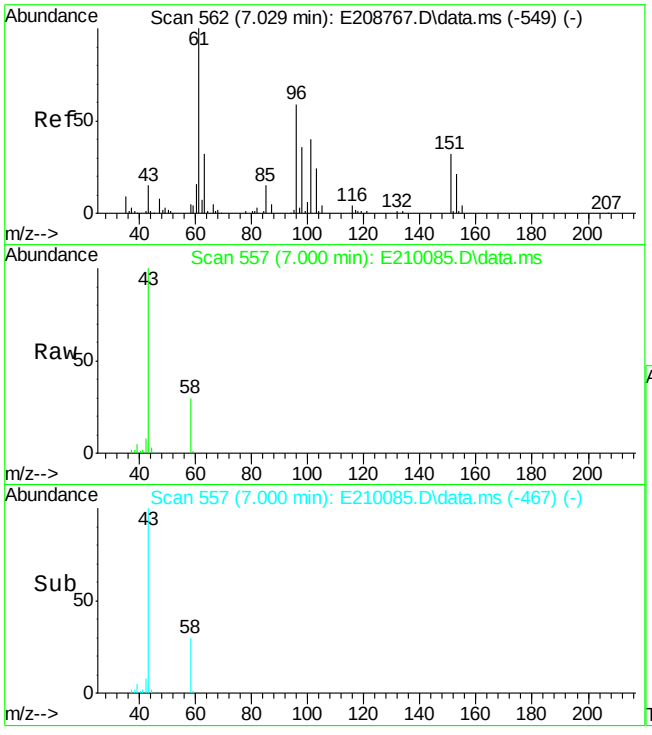
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210085.D
Acq On : 24 Nov 2013 1:34 am
Operator : DivyaP
Sample : JB53758-1
Misc : MS59034,VE9217,6.0,,100,5,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 25 09:32:35 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

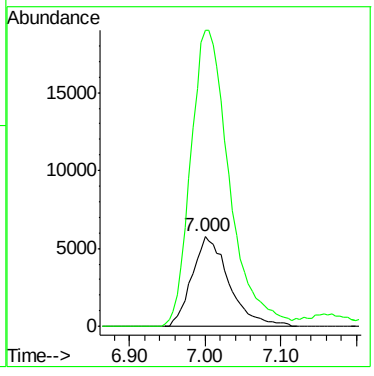


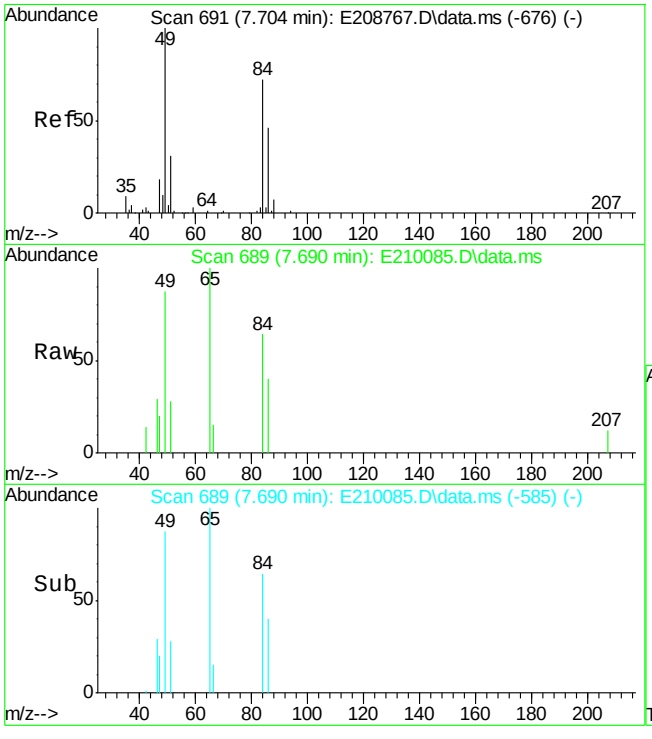


#32
acetone
Concen: 172.68 ug/L
RT: 7.000 min Scan# 557
Delta R.T. -0.030 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion: 58 Resp: 19520

Ion	Ratio	Lower	Upper
58	100		
43	343.8	285.3	345.3

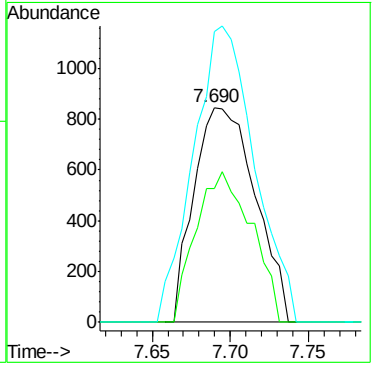


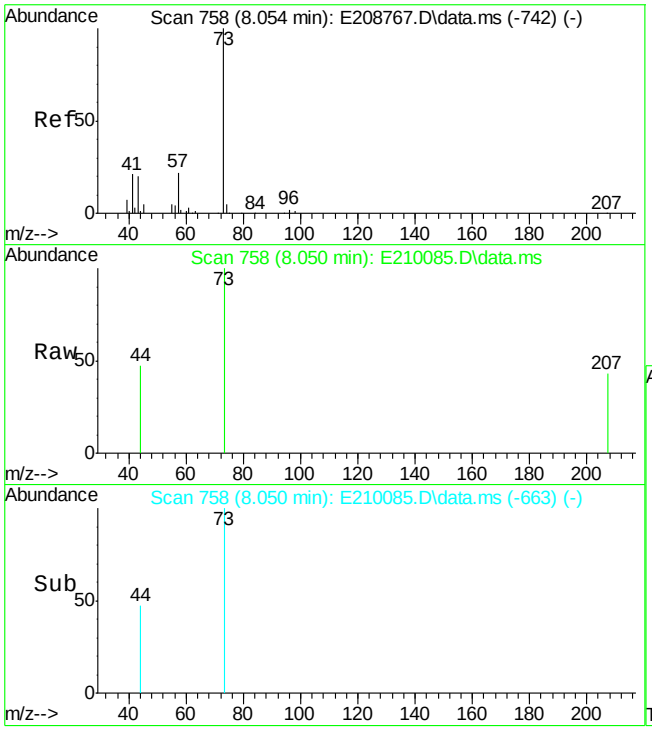


#38
methylene chloride
Concen: 1.80 ug/L
RT: 7.690 min Scan# 689
Delta R.T. -0.014 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion: 84 Resp: 2310

Ion	Ratio	Lower	Upper
84	100		
86	62.3	44.7	82.9
49	135.2	97.4	181.0

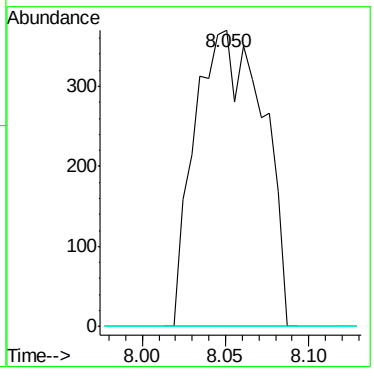


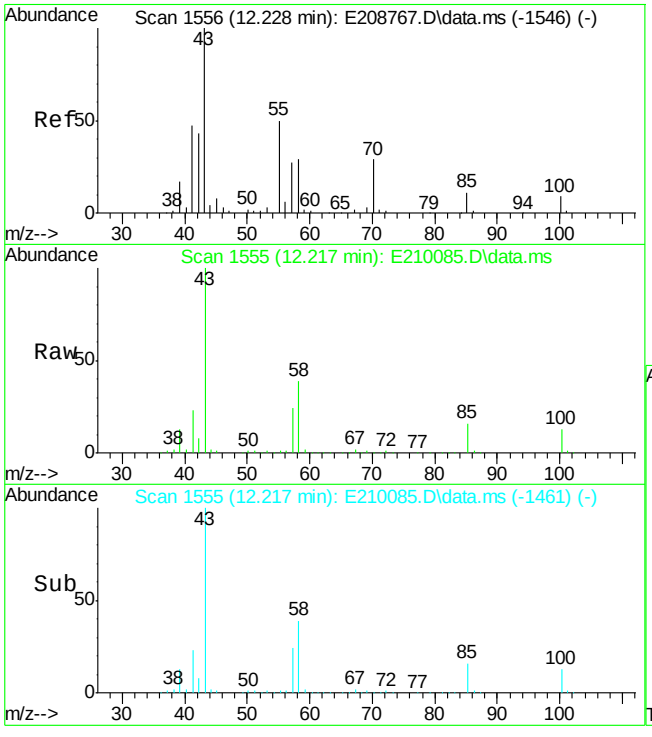


#41
methyl tert butyl ether
Concen: 0.31 ug/L
RT: 8.050 min Scan# 758
Delta R.T. -0.004 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion: 73 Resp: 1055

Ion	Ratio	Lower	Upper
73	100		
57	0.0	0.0	54.4
43	0.0	0.0	50.4

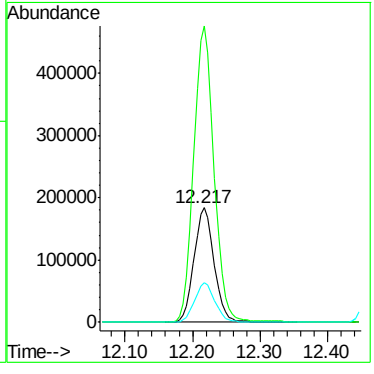


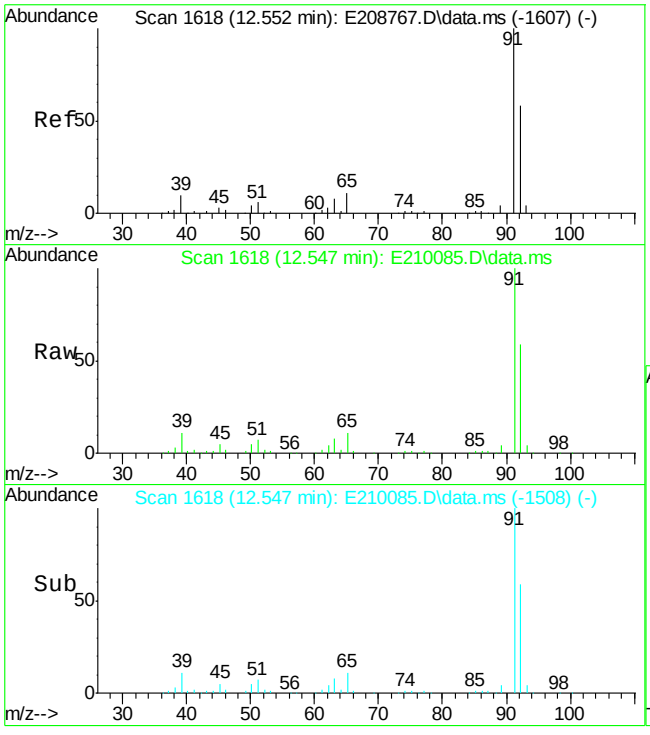


#90
4-methyl-2-pentanone
Concen: 731.48 ug/L
RT: 12.217 min Scan# 1555
Delta R.T. -0.011 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion: 58 Resp: 377778

Ion	Ratio	Lower	Upper
58	100		
43	262.5	365.8	425.8#
100	34.4	1.3	61.3

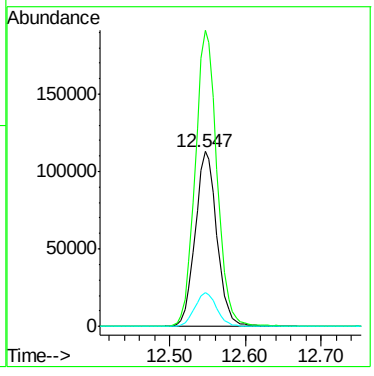


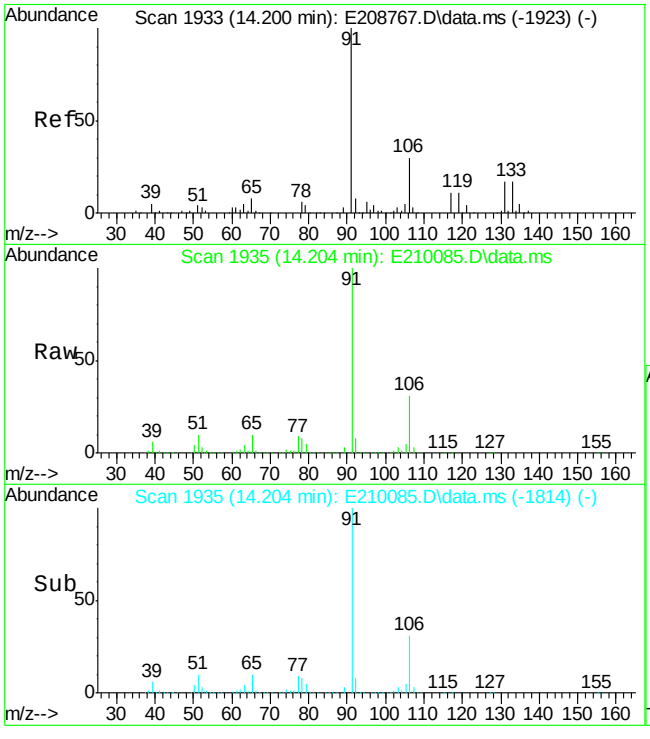


#91
toluene
Concen: 76.64 ug/L
RT: 12.547 min Scan# 1618
Delta R.T. -0.006 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion: 92 Resp: 223466

Ion	Ratio	Lower	Upper
92	100		
91	169.6	142.5	202.5
65	19.3	0.0	49.2

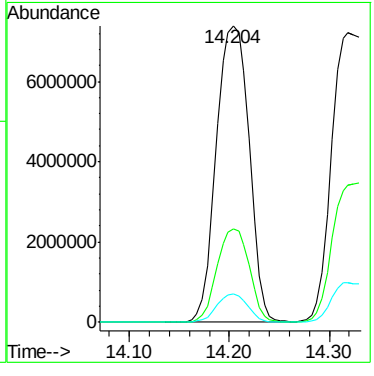


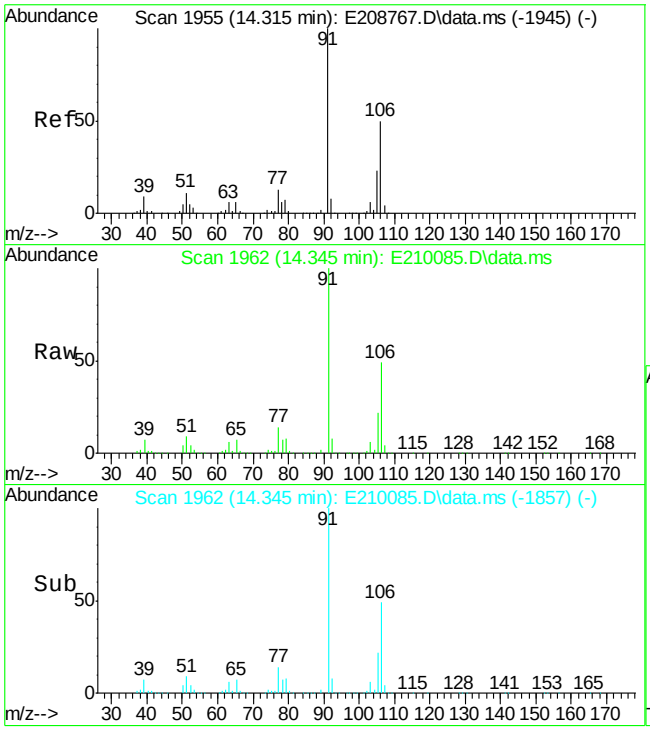


#108
ethylbenzene
Concen: 2853.24 ug/L
RT: 14.204 min Scan# 1935
Delta R.T. 0.004 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion: 91 Resp:16857647

Ion	Ratio	Lower	Upper
91	100		
106	31.3	0.4	60.4
77	9.4	0.0	38.1

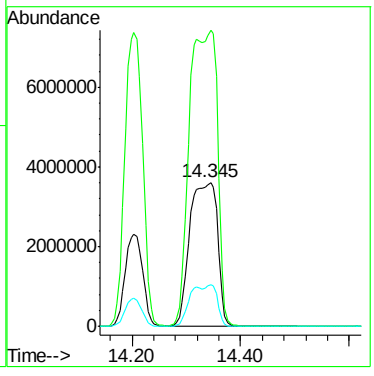


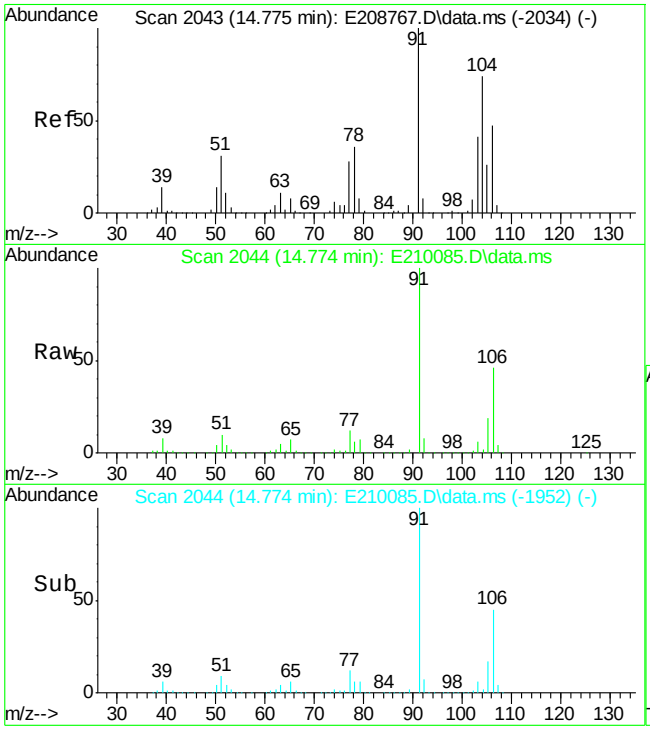


#109
m,p-xylene
Concen: 5891.11 ug/L
RT: 14.345 min Scan# 1962
Delta R.T. 0.030 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion:106 Resp:12826203

Ion	Ratio	Lower	Upper
106	100		
91	206.2	171.4	231.4
77	29.0	0.0	56.2

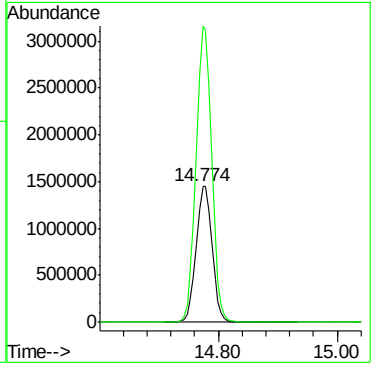




#110
o-xylene
Concen: 1250.56 ug/L
RT: 14.774 min Scan# 2044
Delta R.T. -0.001 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

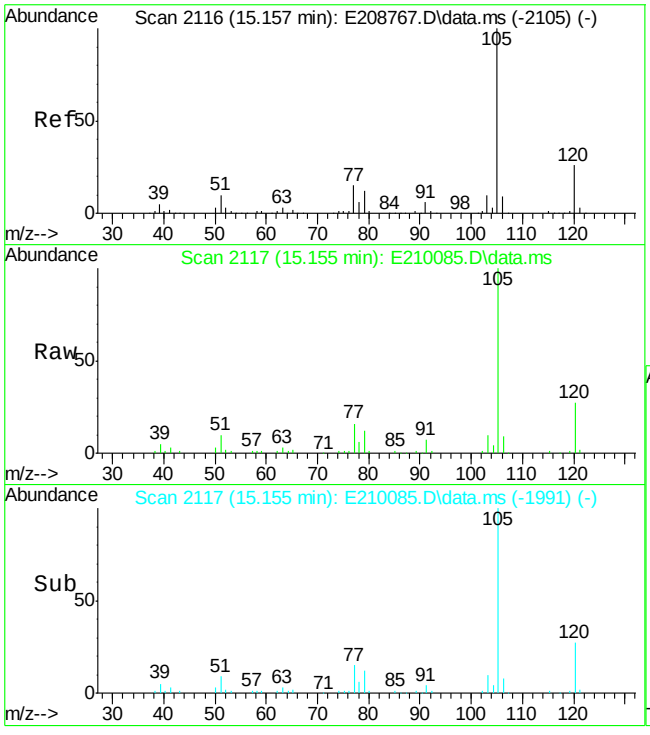
Tgt Ion:106 Resp: 2700453

Ion	Ratio	Lower	Upper
106	100		
91	217.7	183.4	243.4



7.1.2

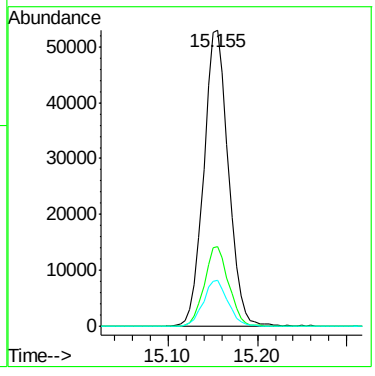
7

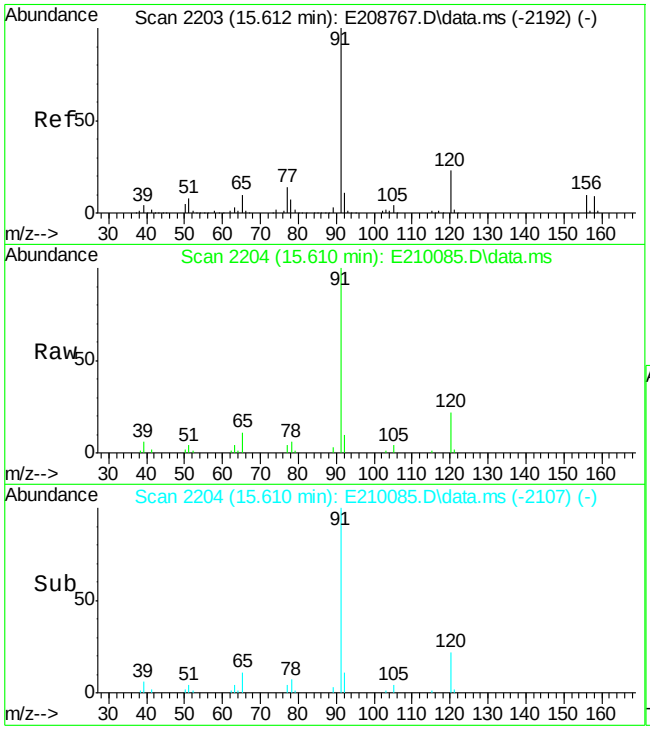


#115
isopropylbenzene
Concen: 17.43 ug/L
RT: 15.155 min Scan# 2117
Delta R.T. -0.002 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion:105 Resp: 101667

Ion	Ratio	Lower	Upper
105	100		
120	26.9	0.0	56.0
77	15.6	0.0	45.0

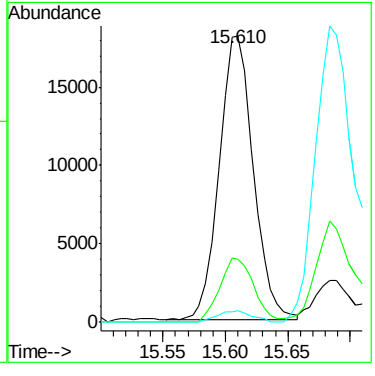


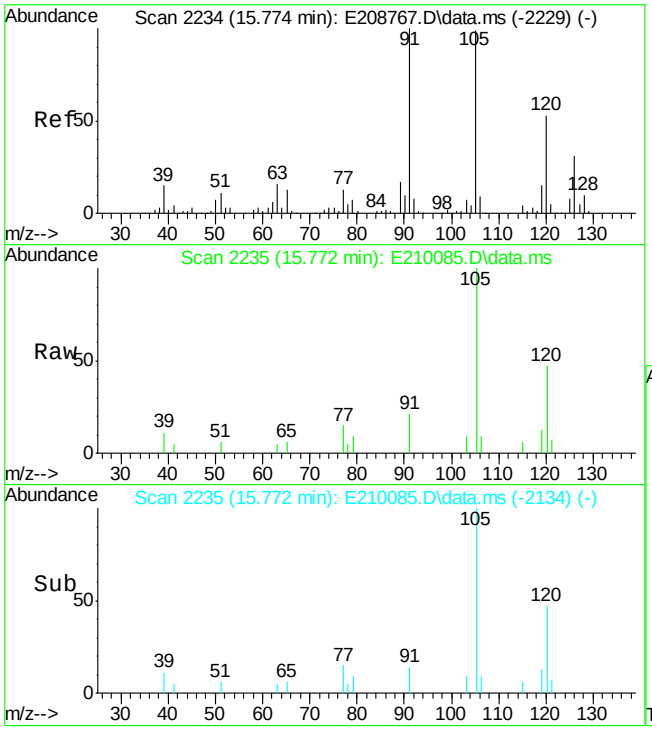


#121
n-propylbenzene
Concen: 5.05 ug/L
RT: 15.610 min Scan# 2204
Delta R.T. -0.002 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion: 91 Resp: 34450

Ion	Ratio	Lower	Upper
91	100		
120	22.3	0.0	52.9
105	4.0	0.0	33.9

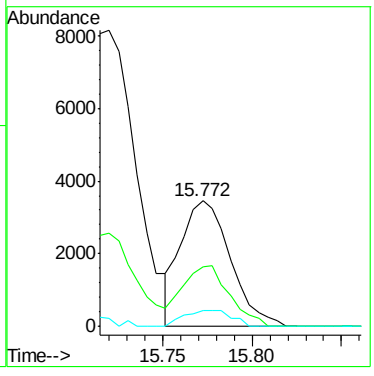


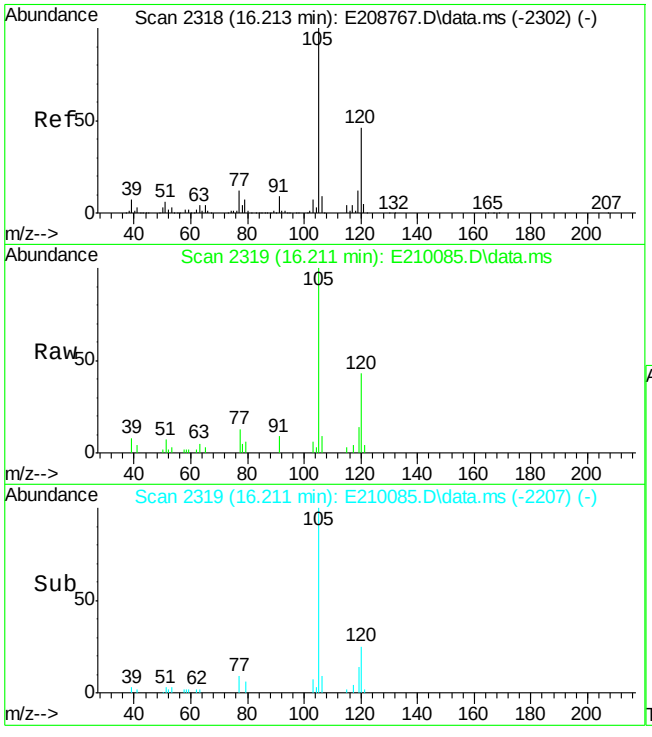


#125
1,3,5-trimethylbenzene
Concen: 1.33 ug/L
RT: 15.772 min Scan# 2235
Delta R.T. -0.002 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion:105 Resp: 6692

Ion	Ratio	Lower	Upper
105	100		
120	47.0	19.9	79.9
119	12.7	0.0	43.0

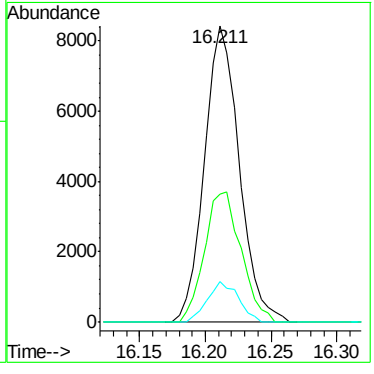




#128
1,2,4-trimethylbenzene
Concen: 3.06 ug/L
RT: 16.211 min Scan# 2319
Delta R.T. -0.002 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

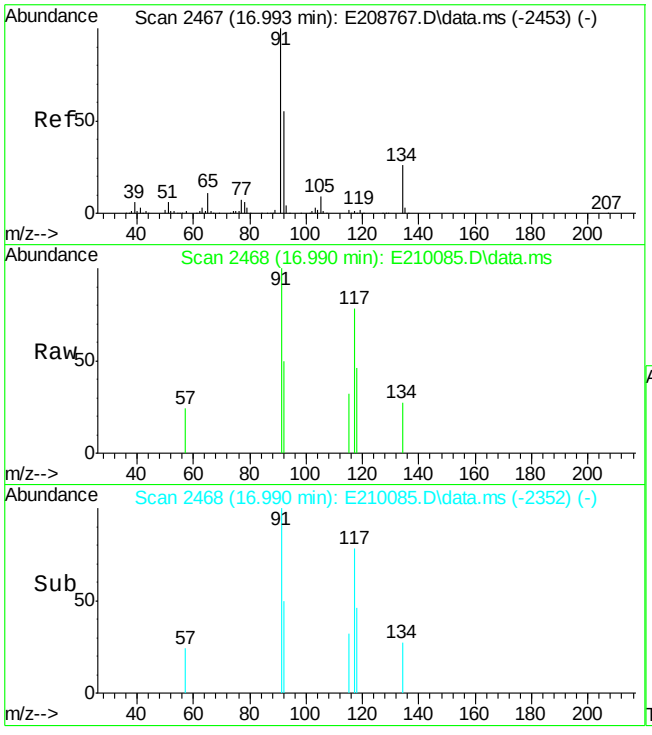
Tgt Ion:105 Resp: 15460

Ion	Ratio	Lower	Upper
105	100		
120	43.2	15.9	75.9
119	13.8	0.0	42.9



7.1.2

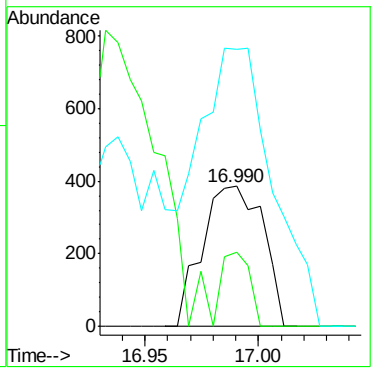
7



#136
n-butylbenzene
Concen: 0.27 ug/L
RT: 16.990 min Scan# 2468
Delta R.T. -0.002 min
Lab File: E210085.D
Acq: 24 Nov 2013 1:34 am

Tgt Ion: 92 Resp: 715

Ion	Ratio	Lower	Upper
92	100		
134	53.0	17.1	77.1
91	139.7	151.2	211.2#



7.1.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210119.D
Acq On : 25 Nov 2013 4:44 pm
Operator : DivyaP
Sample : JB53758-2
Misc : MS59034,VE9218,6.0,,2,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 26 09:33:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.628	65	75836	500.00	ug/L	-0.02
5) pentafluorobenzene	9.850	168	162054	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.765	114	242978	50.00	ug/L	0.00
97) chlorobenzene-d5	14.095	117	225058	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.667	152	116036	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.886	113	82347	53.34	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 106.68%			
61) 1,2-dichloroethane-d4 (s)	10.305	65	96256	49.95	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 99.90%			
89) toluene-d8 (s)	12.469	98	327600	50.12	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 100.24%			
116) 4-bromofluorobenzene (s)	15.371	95	126381	59.24	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 118.48%			

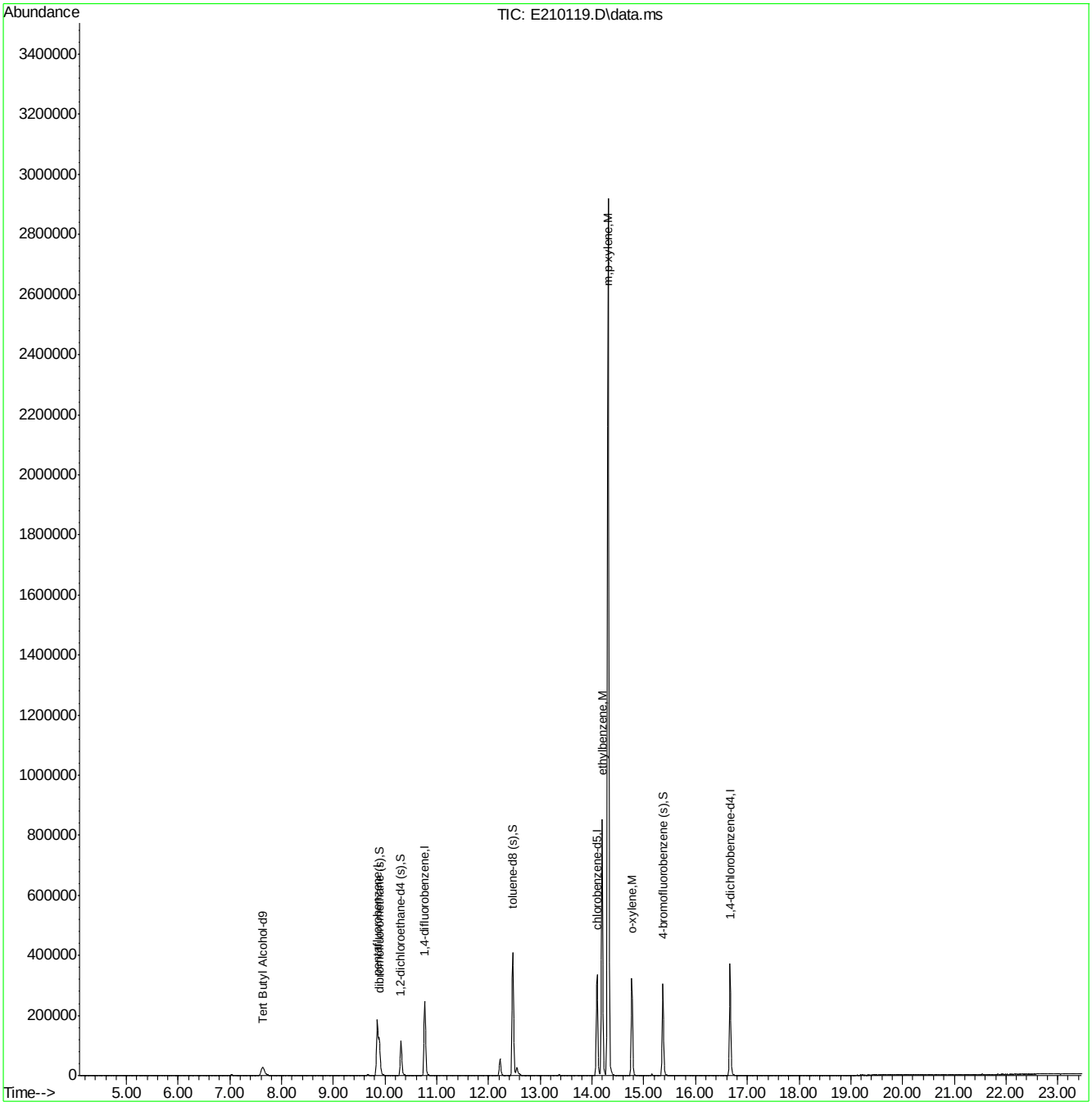
Target Compounds						Qvalue
108) ethylbenzene	14.194	91	715166	87.22	ug/L	99
109) m,p-xylene	14.309	106	991580	328.15	ug/L	98
110) o-xylene	14.769	106	106445	35.52	ug/L	97

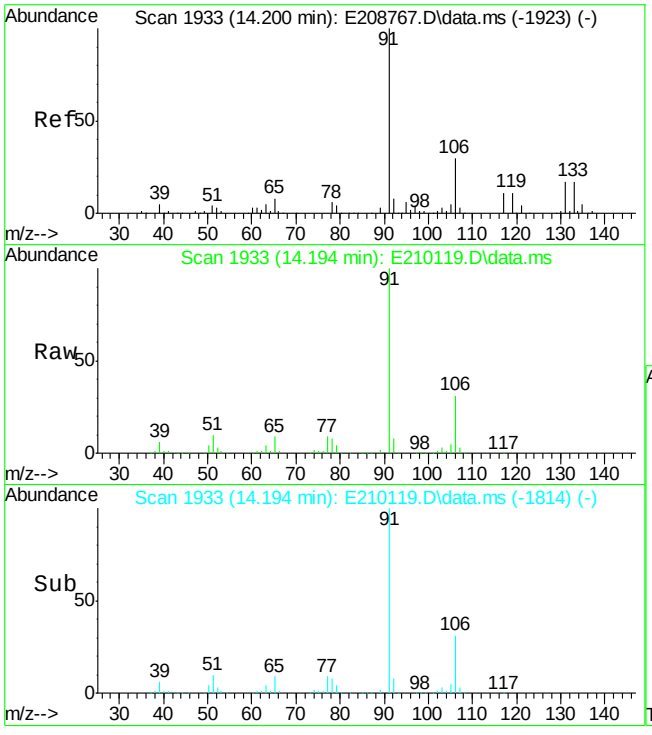
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210119.D
Acq On : 25 Nov 2013 4:44 pm
Operator : DivyaP
Sample : JB53758-2
Misc : MS59034,VE9218,6.0,,2,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 26 09:33:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

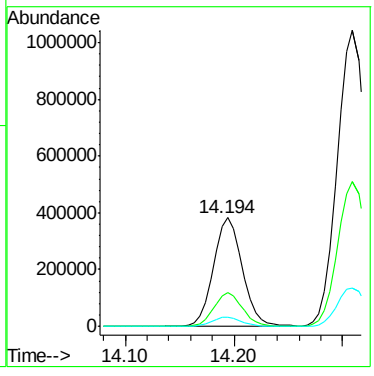


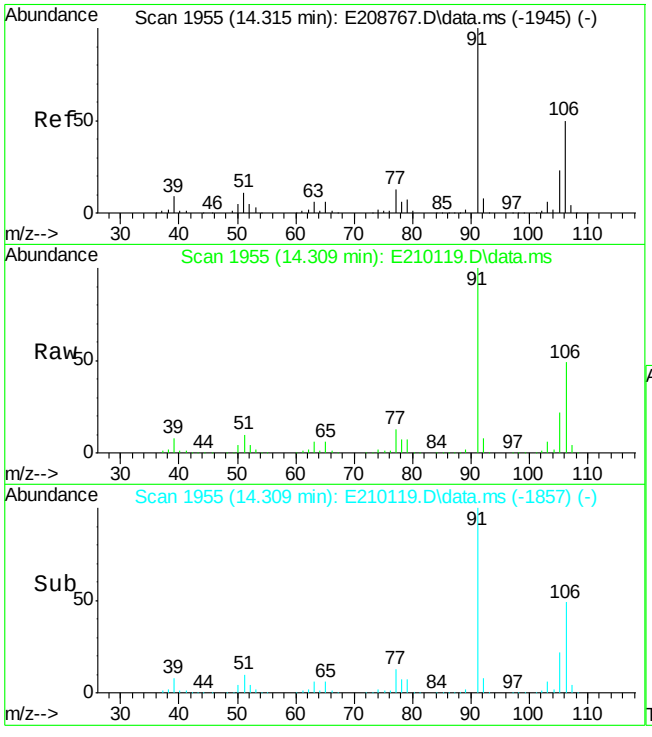


#108
ethylbenzene
Concen: 87.22 ug/L
RT: 14.194 min Scan# 1933
Delta R.T. -0.006 min
Lab File: E210119.D
Acq: 25 Nov 2013 4:44 pm

Tgt Ion: 91 Resp: 715166

Ion	Ratio	Lower	Upper
91	100		
106	30.7	0.4	60.4
77	8.5	0.0	38.1

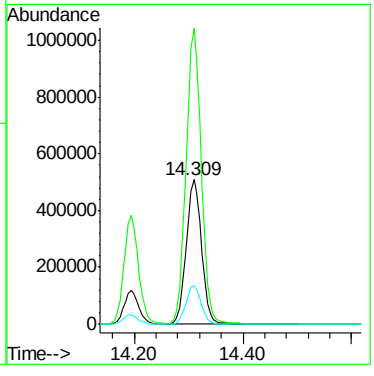


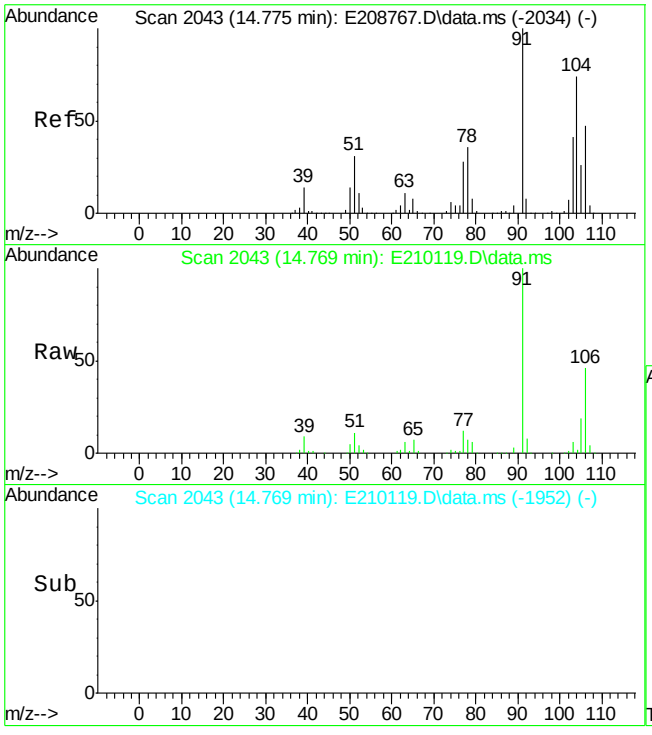


#109
m,p-xylene
Concen: 328.15 ug/L
RT: 14.309 min Scan# 1955
Delta R.T. -0.006 min
Lab File: E210119.D
Acq: 25 Nov 2013 4:44 pm

Tgt Ion:106 Resp: 991580

Ion	Ratio	Lower	Upper
106	100		
91	204.8	171.4	231.4
77	26.5	0.0	56.2

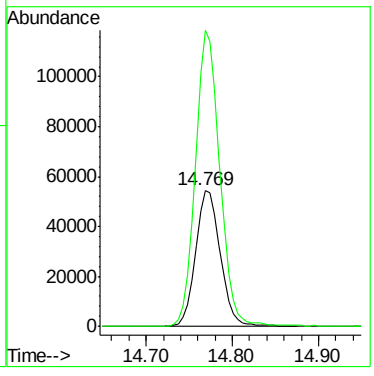




#110
o-xylene
Concen: 35.52 ug/L
RT: 14.769 min Scan# 2043
Delta R.T. -0.006 min
Lab File: E210119.D
Acq: 25 Nov 2013 4:44 pm

Tgt Ion:106 Resp: 106445

Ion	Ratio	Lower	Upper
106	100		
91	217.4	183.4	243.4



7.1.3

7

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 11/27/13 14:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210086.D
Acq On : 24 Nov 2013 2:03 am
Operator : DivyaP
Sample : JB53758-2
Misc : MS59034,VE9217,6.0,,100,5,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Nov 25 09:33:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.633	65	38356	500.00	ug/L	-0.01
5) pentafluorobenzene	9.850	168	117408	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.770	114	174249	50.00	ug/L	0.00
97) chlorobenzene-d5	14.100	117	169220	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.672	152	101785	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.892	113	59552	53.25	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 106.50%			
61) 1,2-dichloroethane-d4 (s)	10.310	65	71801	51.42	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 102.84%			
89) toluene-d8 (s)	12.469	98	247593	52.82	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 105.64%			
116) 4-bromofluorobenzene (s)	15.370	95	109810	58.68	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 117.36%			

Target Compounds						Qvalue
108) ethylbenzene	14.210	91	21744595	3526.81	ug/L	95
109) m,p-xylene	14.356	106	15582830m	6858.59	ug/L	
110) o-xylene	14.780	106	4508018	2000.52	ug/L	95

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

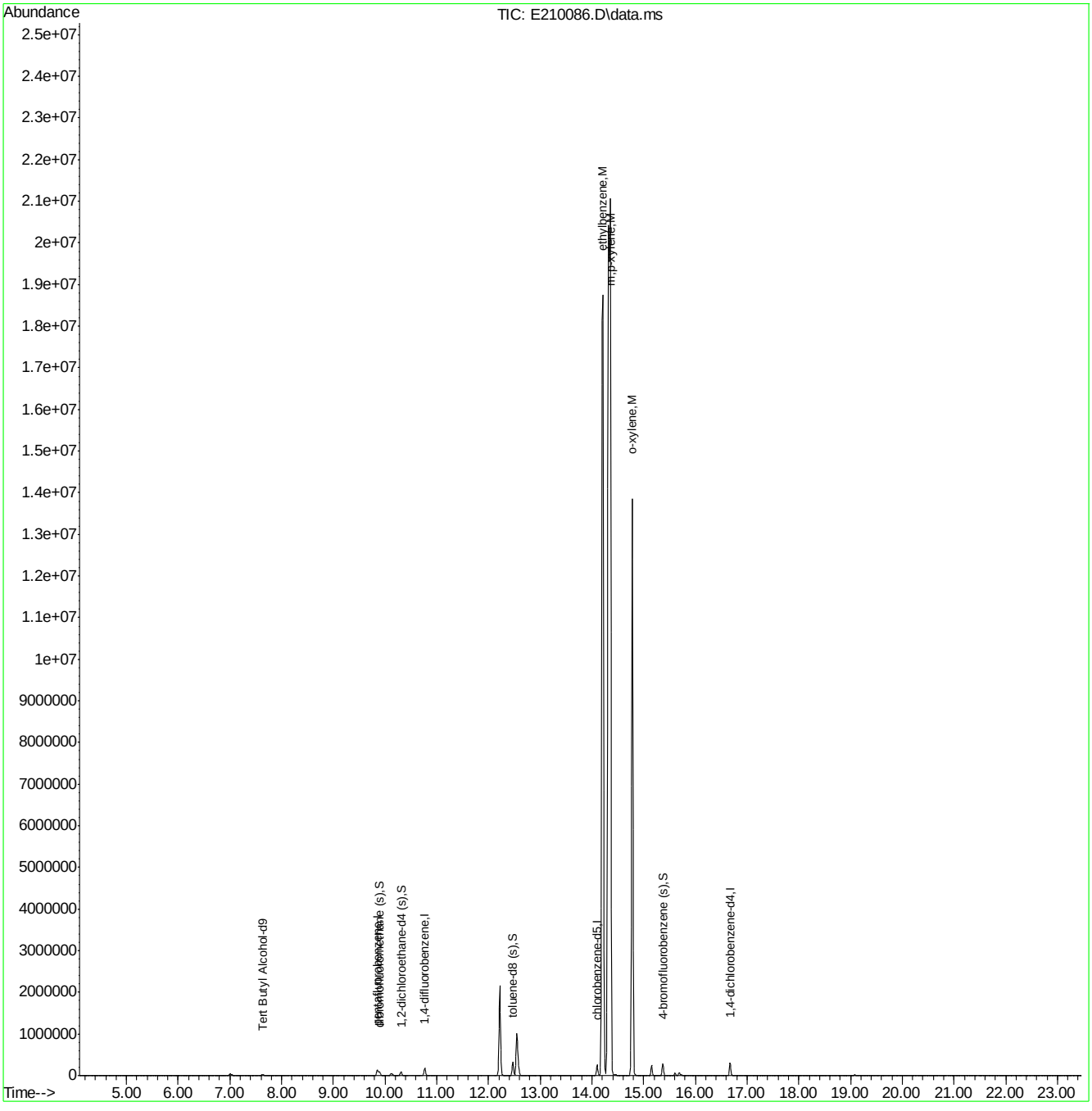
7.1.4

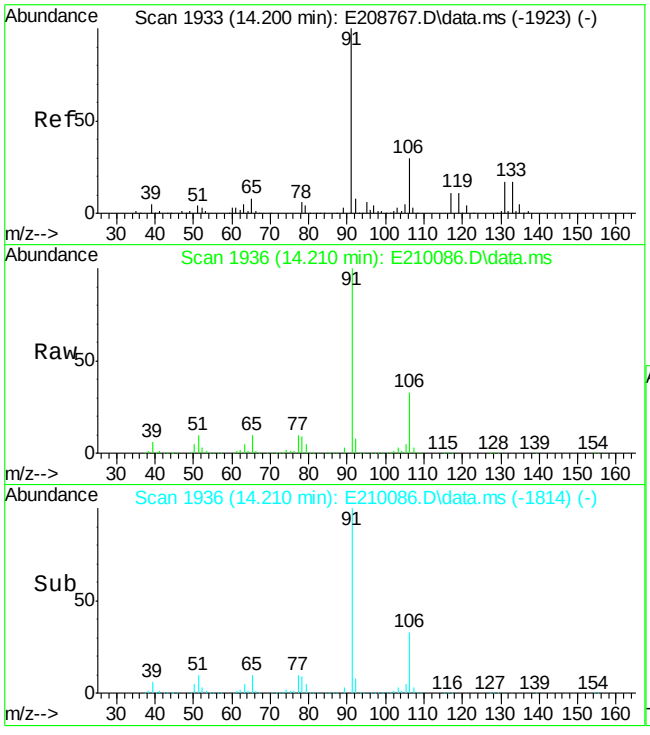
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210086.D
Acq On : 24 Nov 2013 2:03 am
Operator : DivyaP
Sample : JB53758-2
Misc : MS59034,VE9217,6.0,,100,5,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Nov 25 09:33:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

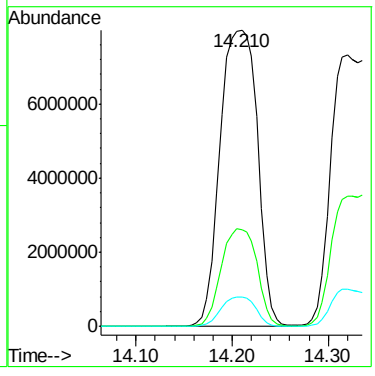


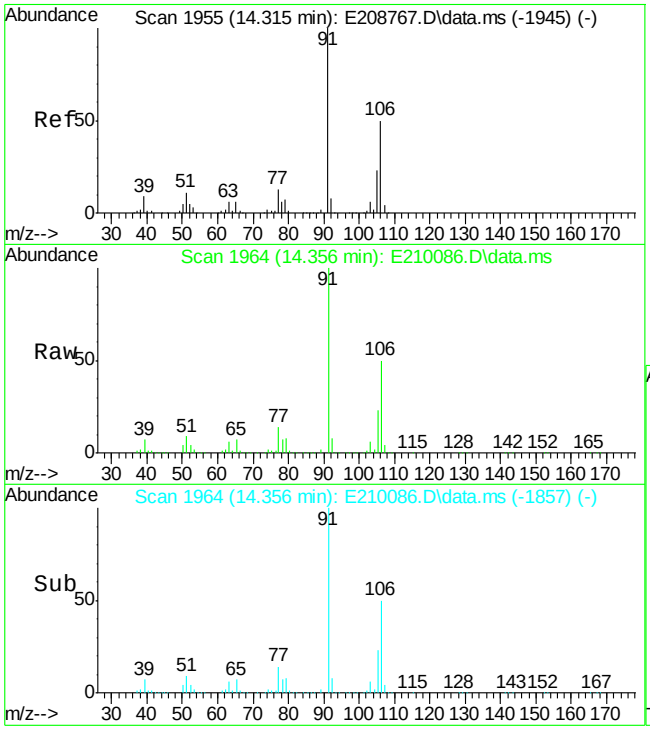


#108
ethylbenzene
Concen: 3526.81 ug/L
RT: 14.210 min Scan# 1936
Delta R.T. 0.010 min
Lab File: E210086.D
Acq: 24 Nov 2013 2:03 am

Tgt Ion: 91 Resp:21744595

Ion	Ratio	Lower	Upper
91	100		
106	32.8	0.4	60.4
77	10.0	0.0	38.1

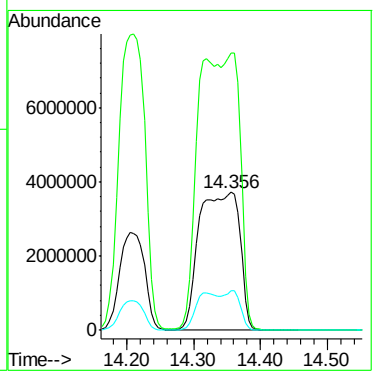




#109
m,p-xylene
Concen: 6858.59 ug/L m
RT: 14.356 min Scan# 1964
Delta R.T. 0.041 min
Lab File: E210086.D
Acq: 24 Nov 2013 2:03 am

Tgt Ion:106 Resp:15582830

Ion	Ratio	Lower	Upper
106	100		
91	201.4	171.4	231.4
77	28.3	0.0	56.2



7.1.4

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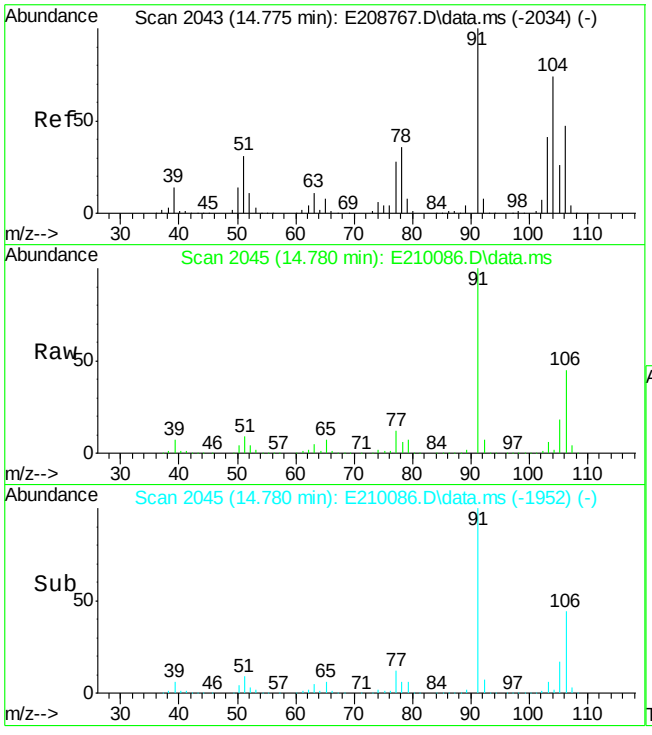
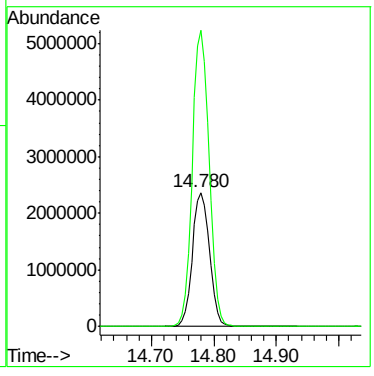


#110
o-xylene
Concen: 2000.52 ug/L
RT: 14.780 min Scan# 2045
Delta R.T. 0.005 min
Lab File: E210086.D
Acq: 24 Nov 2013 2:03 am

Tgt Ion:106 Resp: 4508018

Ion	Ratio	Lower	Upper
106	100		
91	221.3	183.4	243.4



7.1.4

7

Manual Integration Approval Summary

Sample Number:	JB53758-2	**Method:**	SW846 8260B
Lab FileID:	E210086.D	**Analyst approved:**	11/27/13 14:02 Kanya Veerawat
Injection Time:	11/24/13 02:03	**Supervisor approved:**	11/27/13 14:27 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
m,p-Xylene			14.36	Poor instrument integration

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142335.D
Acq On : 24 Nov 2013 12:47 pm
Operator : natet
Sample : jb53758-3
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 25 14:22:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.93	65	59504	500.00 ug/L	-0.02
5) pentafluorobenzene	9.59	168	194010	50.00 ug/L	-0.02
62) 1,4-difluorobenzene	10.75	114	278415	50.00 ug/L	-0.02
93) chlorobenzene-d5	15.00	117	257797	50.00 ug/L	-0.01
108) 1,4-dichlorobenzene-d4	17.86	152	122661	50.00 ug/L	0.00

System Monitoring Compounds

54) dibromofluoromethane (s)	9.62	113	83195	47.78 ug/L	-0.02
Spiked Amount 50.000	Range 59 - 130		Recovery = 95.56%		
55) 1,2-dichloroethane-d4 (s)	10.15	65	83686	47.42 ug/L	-0.01
Spiked Amount 50.000	Range 65 - 123		Recovery = 94.84%		
85) toluene-d8 (s)	12.96	98	329536	51.70 ug/L	-0.02
Spiked Amount 50.000	Range 80 - 124		Recovery = 103.40%		
111) 4-bromofluorobenzene (s)	16.53	95	120075	51.42 ug/L	-0.01
Spiked Amount 50.000	Range 71 - 132		Recovery = 102.84%		

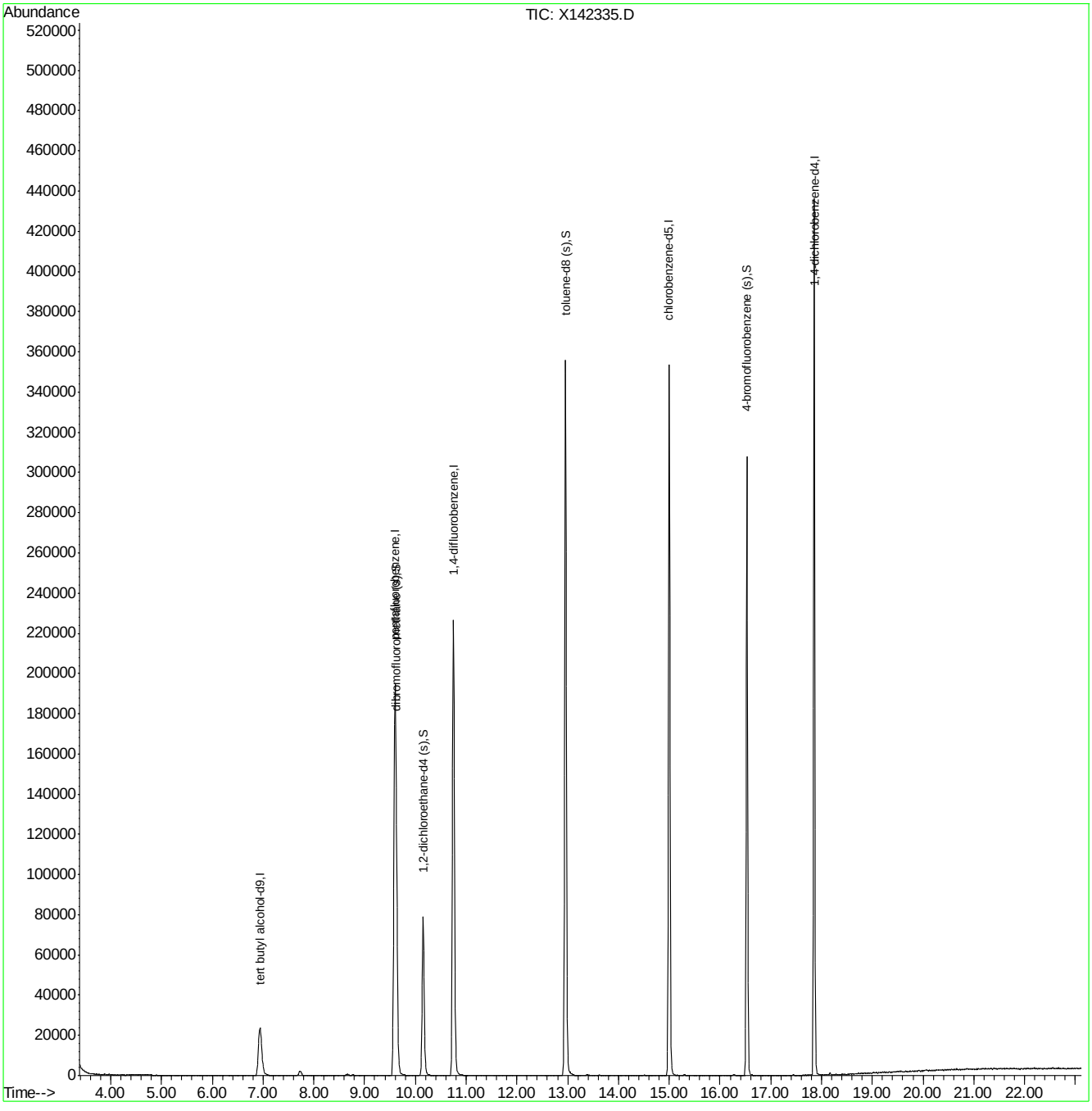
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142335.D
Acq On : 24 Nov 2013 12:47 pm
Operator : natet
Sample : jb53758-3
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 25 14:22:57 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142331C.D
Acq On : 24 Nov 2013 11:00 am
Operator : natet
Sample : MB
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 14:21:40 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.94	65	58480	500.00 ug/L	-0.01
5) pentafluorobenzene	9.59	168	197041	50.00 ug/L	-0.02
62) 1,4-difluorobenzene	10.75	114	279245	50.00 ug/L	-0.02
93) chlorobenzene-d5	15.00	117	254481	50.00 ug/L	-0.01
108) 1,4-dichlorobenzene-d4	17.86	152	121897	50.00 ug/L	0.00

System Monitoring Compounds

54) dibromofluoromethane (s)	9.62	113	83963	47.48 ug/L	-0.02
Spiked Amount 50.000	Range 59 - 130		Recovery = 94.96%		
55) 1,2-dichloroethane-d4 (s)	10.15	65	84717	47.26 ug/L	-0.01
Spiked Amount 50.000	Range 65 - 123		Recovery = 94.52%		
85) toluene-d8 (s)	12.96	98	329208	51.50 ug/L	-0.02
Spiked Amount 50.000	Range 80 - 124		Recovery = 103.00%		
111) 4-bromofluorobenzene (s)	16.53	95	119145	51.34 ug/L	-0.01
Spiked Amount 50.000	Range 71 - 132		Recovery = 102.68%		

Target Compounds Qvalue

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

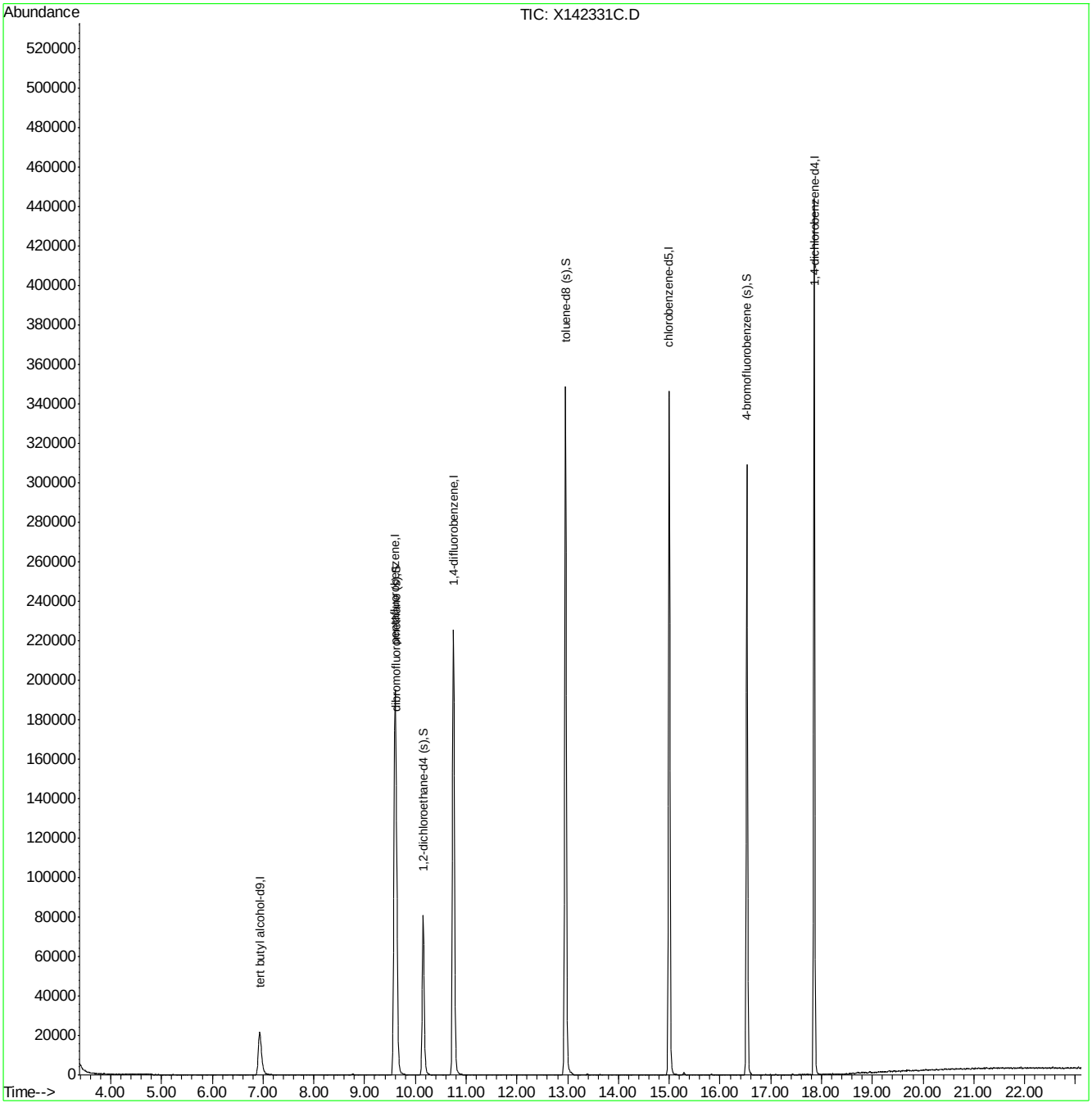
7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142331C.D
Acq On : 24 Nov 2013 11:00 am
Operator : natet
Sample : MB
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 14:21:40 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210116.D
Acq On : 25 Nov 2013 2:53 pm
Operator : DivyaP
Sample : jb25319k-25b
Misc : MS57363,VE9218,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 26 09:29:50 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.620	65	70352	500.00	ug/L	-0.03
5) pentafluorobenzene	9.847	168	162221	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.768	114	243767	50.00	ug/L	0.00
97) chlorobenzene-d5	14.098	117	221258	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.670	152	113727	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.889	113	80717	52.23	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 104.46%			
61) 1,2-dichloroethane-d4 (s)	10.307	65	96009	49.77	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 99.54%			
89) toluene-d8 (s)	12.467	98	322417	49.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 98.34%			
116) 4-bromofluorobenzene (s)	15.368	95	121515	58.11	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 116.22%			

Target Compounds					Qvalue
2) 1,4-dioxane	11.494	88	1100	Below Cal	# 70

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

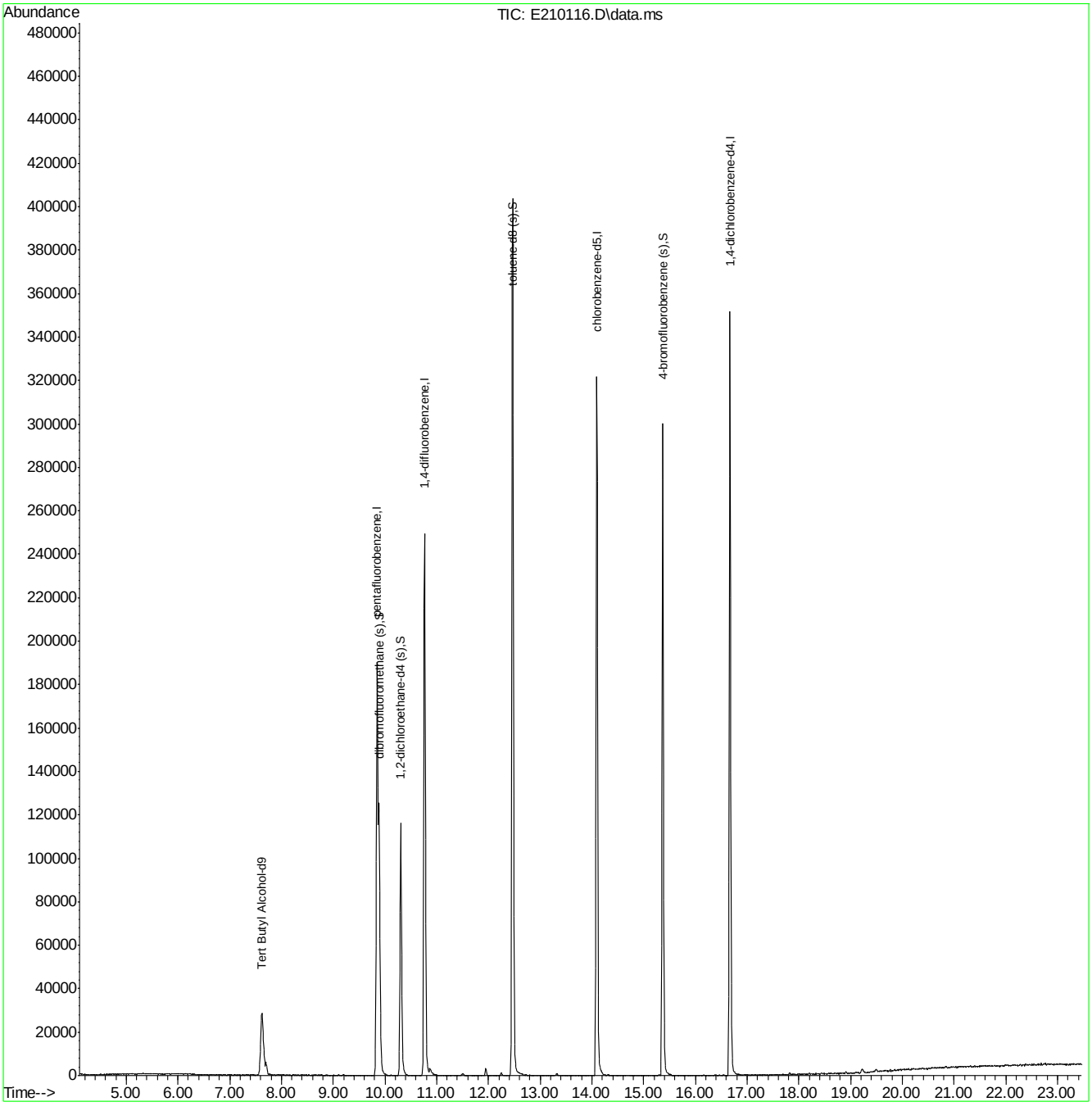
7.2.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210116.D
Acq On : 25 Nov 2013 2:53 pm
Operator : DivyaP
Sample : jb25319k-25b
Misc : MS57363,VE9218,5.0,,100,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 26 09:29:50 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142332C.D
Acq On : 24 Nov 2013 11:35 am
Operator : natet
Sample : bs
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 25 14:33:58 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 25 14:33:45 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.92	65	74169	500.00	ug/L	-0.03
5) pentafluorobenzene	9.59	168	199116	50.00	ug/L	-0.02
62) 1,4-difluorobenzene	10.74	114	285372	50.00	ug/L	-0.02
93) chlorobenzene-d5	15.00	117	265007	50.00	ug/L	-0.02
108) 1,4-dichlorobenzene-d4	17.85	152	142080	50.00	ug/L	-0.01

System Monitoring Compounds

54) dibromofluoromethane (s)	9.62	113	86763	48.55	ug/L	-0.03
Spiked Amount 50.000	Range 59 - 130		Recovery = 97.10%			
55) 1,2-dichloroethane-d4 (s)	10.15	65	88446	48.83	ug/L	-0.02
Spiked Amount 50.000	Range 65 - 123		Recovery = 97.66%			
85) toluene-d8 (s)	12.95	98	339992	52.04	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 124		Recovery = 104.08%			
111) 4-bromofluorobenzene (s)	16.53	95	131767	48.71	ug/L	-0.01
Spiked Amount 50.000	Range 71 - 132		Recovery = 97.42%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.05	59	44765	255.44	ug/L	100
4) 1,4-dioxane	11.69	88	19628	1283.32	ug/L #	91
11) chlorodifluoromethane	3.56	51	49467	38.21	ug/L	93
12) dichlorodifluoromethane	3.54	85	87848	60.55	ug/L	93
15) chloromethane	3.84	50	89159	39.68	ug/L	99
16) vinyl chloride	4.08	62	85236	44.97	ug/L	97
18) bromomethane	4.70	94	66311	52.35	ug/L	98
19) chloroethane	4.87	64	47664	45.81	ug/L	98
21) trichlorofluoromethane	5.34	101	125250	54.59	ug/L	98
23) ethyl ether	5.74	74	38621	47.56	ug/L	91
27) acrolein	6.00	56	120269	441.24	ug/L #	98
28) 1,1-dichloroethene	6.17	96	69464	51.48	ug/L	96
29) acetone	6.22	58	5035	44.88	ug/L	95
30) allyl chloride	6.73	76	41955	48.03	ug/L	93
31) acetonitrile	6.73	40	48453	431.45	ug/L #	1
32) iodomethane	6.46	142	138798	50.27	ug/L	94
33) iso-butyl alcohol	9.97	43	31937	445.15	ug/L	97
34) carbon disulfide	6.59	76	235525	48.61	ug/L	98
35) methylene chloride	6.95	84	78309	43.53	ug/L	94
36) methyl acetate	6.73	43	41588	41.13	ug/L	98
37) methyl tert butyl ether	7.32	73	418650	96.87	ug/L	96
38) trans-1,2-dichloroethene	7.37	96	77510	48.36	ug/L	95
39) di-isopropyl ether	8.01	45	222027	40.12	ug/L	92
40) 2-butanone	8.87	72	7713	49.01	ug/L	57
41) 1,1-dichloroethane	8.01	63	138014	47.21	ug/L	99
42) chloroprene	8.14	53	110823	51.10	ug/L	99
43) acrylonitrile	7.31	53	104418	225.02	ug/L	98
44) vinyl acetate	8.02	86	11830	54.53	ug/L	76
45) ethyl tert-butyl ether	8.57	59	232107	45.62	ug/L	97
46) ethyl acetate	8.92	70	8597	54.90	ug/L	93
47) 2,2-dichloropropane	8.90	77	117758	52.75	ug/L	96
48) cis-1,2-dichloroethene	8.91	96	86398	47.20	ug/L	97
49) propionitrile	8.99	54	87036	462.06	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142332C.D
Acq On : 24 Nov 2013 11:35 am
Operator : natet
Sample : bs
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 25 14:33:58 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 25 14:33:45 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) tert-Butyl Formate	9.42	59	61973	51.66 ug/L #	94
51) bromochloromethane	9.28	128	41272	49.55 ug/L	91
52) tetrahydrofuran	9.34	72	8826	49.79 ug/L #	87
53) chloroform	9.37	83	146420	47.93 ug/L	99
56) freon 113	6.17	151	56670	55.35 ug/L	98
57) methacrylonitrile	9.22	41	34095	43.60 ug/L	96
58) 1,1,1-trichloroethane	9.67	97	130857	56.06 ug/L	99
59) cyclohexane	9.77	84	101157	44.41 ug/L	94
60) tert amyl alcohol	10.12	59	36203	260.53 ug/L	97
61) iso-octane	10.26	57	227571	39.45 ug/L	95
64) epichlorohydrin	12.44	57	31925	236.93 ug/L	97
65) n-butyl alcohol	10.95	56	106845	2590.02 ug/L	96
66) carbon tetrachloride	9.93	117	121153	61.06 ug/L	97
67) 1,1-dichloropropene	9.91	75	103227	50.11 ug/L	97
68) hexane	7.71	57	72584	37.82 ug/L	96
69) benzene	10.23	78	312264	47.81 ug/L	100
70) tert-amyl methyl ether	10.30	73	230987	50.50 ug/L	98
71) heptane	10.50	57	51280	43.06 ug/L	97
72) isopropyl acetate	10.19	43	112868	43.73 ug/L	99
73) 1,2-dichloroethane	10.26	62	104502	53.04 ug/L	99
74) trichloroethene	11.18	130	87338	55.74 ug/L	98
78) 2-chloroethyl vinyl ether	12.29	63	185231	190.51 ug/L	98
79) methyl methacrylate	11.58	69	48451	52.50 ug/L	94
80) 1,2-dichloropropane	11.52	63	79196	45.53 ug/L	99
81) dibromomethane	11.73	93	49377	52.51 ug/L	98
82) methylcyclohexane	11.46	83	122487	50.16 ug/L	90
83) bromodichloromethane	11.93	83	115379	52.14 ug/L	99
84) cis-1,3-dichloropropene	12.56	75	125394	45.56 ug/L	98
86) 4-methyl-2-pentanone	12.72	58	26959	49.31 ug/L	96
87) toluene	13.05	92	205973	49.60 ug/L	97
88) 3-methyl-1-butanol	12.78	55	69008	1092.53 ug/L	95
89) trans-1,3-dichloropropene	13.34	75	123954	51.26 ug/L	98
90) ethyl methacrylate	13.37	69	94063	49.82 ug/L	97
91) 1,1,2-trichloroethane	13.63	83	59163	49.33 ug/L	95
92) 2-hexanone	13.90	58	26054	51.30 ug/L	96
94) 3,3-Dimethyl-1-butanol	14.15	57	67765	453.94 ug/L	95
95) tetrachloroethene	13.85	164	78938	53.45 ug/L	98
96) 1,3-dichloropropane	13.87	76	111349	46.53 ug/L	97
97) butyl acetate	14.02	56	46960	49.81 ug/L	97
98) dibromochloromethane	14.22	129	96495	54.26 ug/L	99
99) 1,2-dibromoethane	14.40	107	74082	49.65 ug/L	97
101) chlorobenzene	15.04	112	239949	48.77 ug/L	99
102) 1,1,1,2-tetrachloroethane	15.13	131	90361	50.80 ug/L	97
103) ethylbenzene	15.13	91	414717	50.55 ug/L	99
104) m,p-xylene	15.28	106	316426	99.89 ug/L	99
105) o-xylene	15.82	106	152929	48.89 ug/L	99
106) styrene	15.84	104	267024	49.76 ug/L	96
107) bromoform	16.16	173	68607	56.95 ug/L	99
109) isopropylbenzene	16.28	105	418724	48.80 ug/L	99
110) Cyclohexanone	16.47	55	64772	280.66 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142332C.D
Acq On : 24 Nov 2013 11:35 am
Operator : natet
Sample : bs
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 25 14:33:58 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 25 14:33:45 2013
Response via : Initial Calibration

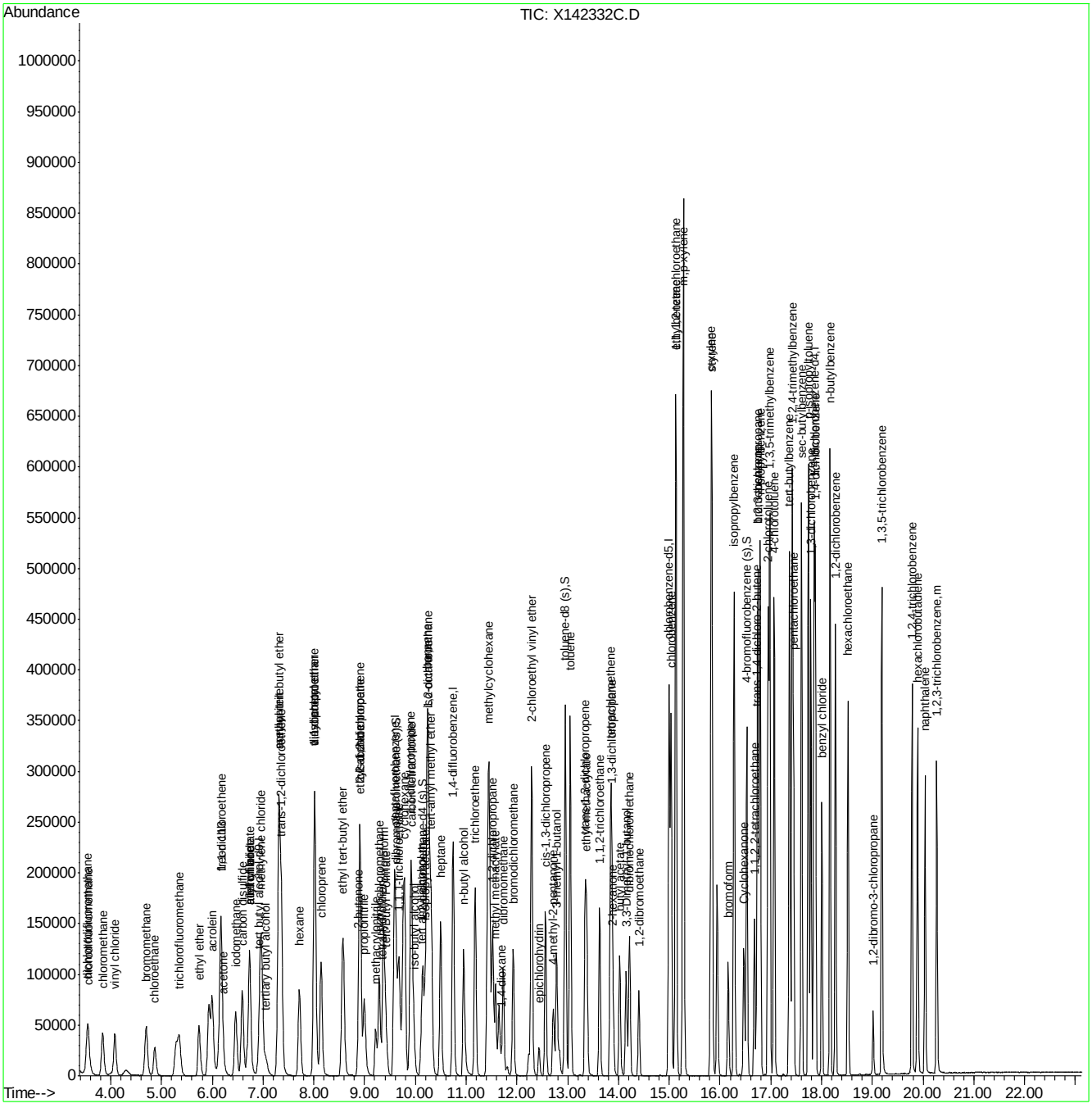
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
112) bromobenzene	16.75	156	112422	47.62 ug/L	92
113) 1,1,2,2-tetrachloroethane	16.68	83	92691	43.65 ug/L	100
114) trans-1,4-dichloro-2-buten	16.73	53	25091	51.54 ug/L #	78
115) 1,2,3-trichloropropane	16.75	110	24543	51.16 ug/L #	75
116) n-propylbenzene	16.79	91	493635	48.69 ug/L	99
118) 2-chlorotoluene	16.95	126	100952	46.67 ug/L	97
119) 4-chlorotoluene	17.07	91	300692	45.98 ug/L	100
120) 1,3,5-trimethylbenzene	16.98	105	356631	48.43 ug/L	97
121) tert-butylbenzene	17.37	119	300930	50.38 ug/L	97
122) pentachloroethane	17.45	167	73926	51.27 ug/L	98
123) 1,2,4-trimethylbenzene	17.42	105	357592	47.58 ug/L	99
125) sec-butylbenzene	17.61	105	452806	47.88 ug/L	99
126) 1,3-dichlorobenzene	17.79	146	209680	47.51 ug/L	98
127) p-isopropyltoluene	17.74	119	392131	50.89 ug/L	100
128) 1,4-dichlorobenzene	17.88	146	211088	46.15 ug/L	99
129) 1,2-dichlorobenzene	18.28	146	194685	46.92 ug/L	98
130) benzyl chloride	18.00	91	203238	50.61 ug/L	100
132) n-butylbenzene	18.17	92	191655	48.55 ug/L	99
134) 1,2-dibromo-3-chloropropan	19.01	75	16762	53.15 ug/L	93
135) 1,3,5-trichlorobenzene	19.19	180	163898	52.36 ug/L	99
136) hexachlorobutadiene	19.89	225	87304	53.74 ug/L	98
137) naphthalene	20.04	128	244744	51.96 ug/L	98
138) 1,2,4-trichlorobenzene	19.78	180	133212	55.75 ug/L	99
139) 1,2,3-trichlorobenzene	20.27	180	108462	56.68 ug/L	99
140) hexachloroethane	18.52	201	74619	53.90 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142332C.D
Acq On : 24 Nov 2013 11:35 am
Operator : natet
Sample : bs
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 25 14:33:58 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 25 14:33:45 2013
Response via : Initial Calibration



MX6084.M Mon Nov 25 14:34:06 2013 GCMSX Page: 4

ACCUTEST LABORATORIES JB53758

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142364.D
Acq On : 25 Nov 2013 2:24 pm
Operator : natet
Sample : bs
Misc : MS58857,VX6160,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 18:00:43 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.92	65	58523	500.00	ug/L	-0.03
5) pentafluorobenzene	9.58	168	183991	50.00	ug/L	-0.03
62) 1,4-difluorobenzene	10.73	114	265448	50.00	ug/L	-0.03
93) chlorobenzene-d5	14.99	117	248992	50.00	ug/L	-0.03
108) 1,4-dichlorobenzene-d4	17.85	152	133170	50.00	ug/L	-0.02

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.61	113	82112	49.72	ug/L	-0.04
Spiked Amount 50.000	Range 59 - 130		Recovery = 99.44%			
55) 1,2-dichloroethane-d4 (s)	10.13	65	82195	49.11	ug/L	-0.03
Spiked Amount 50.000	Range 65 - 123		Recovery = 98.22%			
85) toluene-d8 (s)	12.94	98	319686	52.61	ug/L	-0.03
Spiked Amount 50.000	Range 80 - 124		Recovery = 105.22%			
111) 4-bromofluorobenzene (s)	16.52	95	121948	48.10	ug/L	-0.02
Spiked Amount 50.000	Range 71 - 132		Recovery = 96.20%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.05	59	32955	238.33	ug/L	100
3) ethyl alcohol	5.59	45	43948	4999.37	ug/L	83
4) 1,4-dioxane	11.69	88	14712	1219.07	ug/L #	89
11) chlorodifluoromethane	3.55	51	39498	33.01	ug/L	96
12) dichlorodifluoromethane	3.54	85	54722	40.82	ug/L	93
15) chloromethane	3.83	50	72442	34.89	ug/L	99
16) vinyl chloride	4.07	62	69432	39.64	ug/L	98
18) bromomethane	4.69	94	60446	51.64	ug/L	99
19) chloroethane	4.86	64	37963	39.49	ug/L	99
21) trichlorofluoromethane	5.33	101	109496	51.65	ug/L	98
23) ethyl ether	5.73	74	38647	51.50	ug/L	94
27) acrolein	5.99	56	102188	405.72	ug/L #	99
28) 1,1-dichloroethene	6.16	96	66301	53.17	ug/L	98
29) acetone	6.22	58	5629	54.29	ug/L #	71
30) allyl chloride	6.73	76	44576	55.23	ug/L #	88
31) acetonitrile	6.71	40	41995	404.68	ug/L #	1
32) iodomethane	6.45	142	139229	54.57	ug/L	95
33) iso-butyl alcohol	9.96	43	23763	358.45	ug/L	93
34) carbon disulfide	6.58	76	233566	52.17	ug/L	99
35) methylene chloride	6.94	84	77402	46.57	ug/L	94
36) methyl acetate	6.72	43	37036	39.64	ug/L	96
37) methyl tert butyl ether	7.31	73	382144	95.69	ug/L	97
38) trans-1,2-dichloroethene	7.35	96	75334	50.86	ug/L	97
39) di-isopropyl ether	8.01	45	193752	37.89	ug/L	97
40) 2-butanone	8.87	72	7653	52.62	ug/L	66
41) 1,1-dichloroethane	8.00	63	132885	49.19	ug/L	98
42) chloroprene	8.13	53	90106	44.96	ug/L	99
43) acrylonitrile	7.30	53	95460	222.63	ug/L	98
44) vinyl acetate	8.00	86	9528	47.53	ug/L	81
45) ethyl tert-butyl ether	8.56	59	203736	43.33	ug/L	97
46) ethyl acetate	8.90	70	6763	46.74	ug/L #	14
47) 2,2-dichloropropane	8.89	77	111599	54.10	ug/L	95
48) cis-1,2-dichloroethene	8.89	96	84534	49.97	ug/L	94

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142364.D
Acq On : 25 Nov 2013 2:24 pm
Operator : natet
Sample : bs
Misc : MS58857,VX6160,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 18:00:43 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) propionitrile	8.98	54	77704	446.43 ug/L	93
50) tert-Butyl Formate	9.40	59	52221	47.11 ug/L #	93
51) bromochloromethane	9.28	128	41471	53.89 ug/L	91
52) tetrahydrofuran	9.33	72	7739	47.25 ug/L #	86
53) chloroform	9.36	83	143377	50.79 ug/L	99
56) freon 113	6.16	151	45818	48.43 ug/L	98
57) methacrylonitrile	9.21	41	31338	43.36 ug/L	95
58) 1,1,1-trichloroethane	9.66	97	122233	56.67 ug/L	99
59) cyclohexane	9.76	84	94707	45.00 ug/L	92
60) tert amyl alcohol	10.11	59	26176	203.86 ug/L	96
61) iso-octane	10.25	57	191889	36.00 ug/L	95
64) epichlorohydrin	12.43	57	24982	199.32 ug/L	97
65) n-butyl alcohol	10.94	56	78273	2039.82 ug/L	96
66) carbon tetrachloride	9.92	117	113019	61.23 ug/L	96
67) 1,1-dichloropropene	9.90	75	96990	50.62 ug/L	97
68) hexane	7.70	57	60352	33.81 ug/L	97
69) benzene	10.22	78	301279	49.59 ug/L	100
70) tert-amyl methyl ether	10.29	73	200071	47.03 ug/L	98
71) heptane	10.49	57	43056	38.86 ug/L	98
72) isopropyl acetate	10.18	43	90978	37.89 ug/L	98
73) 1,2-dichloroethane	10.25	62	103596	56.53 ug/L	98
74) trichloroethene	11.17	130	81587	55.98 ug/L	98
78) 2-chloroethyl vinyl ether	12.28	63	151905	167.96 ug/L	98
79) methyl methacrylate	11.57	69	43460	50.62 ug/L	96
80) 1,2-dichloropropane	11.51	63	76456	47.25 ug/L	97
81) dibromomethane	11.72	93	47662	54.49 ug/L	100
82) methylcyclohexane	11.44	83	101227	44.57 ug/L	87
83) bromodichloromethane	11.92	83	112525	54.67 ug/L	99
84) cis-1,3-dichloropropene	12.55	75	122592	47.88 ug/L	98
86) 4-methyl-2-pentanone	12.71	58	23879	46.95 ug/L	96
87) toluene	13.04	92	195492	50.61 ug/L	98
88) 3-methyl-1-butanol	12.77	55	49861	848.65 ug/L	96
89) trans-1,3-dichloropropene	13.34	75	119929	53.32 ug/L	99
90) ethyl methacrylate	13.36	69	85609	48.75 ug/L	97
91) 1,1,2-trichloroethane	13.62	83	56147	50.33 ug/L	95
92) 2-hexanone	13.89	58	23043	48.78 ug/L	93
94) 3,3-Dimethyl-1-butanol	14.14	57	49523	353.08 ug/L	96
95) tetrachloroethene	13.83	164	75748	54.59 ug/L	99
96) 1,3-dichloropropane	13.86	76	107159	47.66 ug/L	98
97) butyl acetate	14.01	56	35638	40.24 ug/L	98
98) dibromochloromethane	14.21	129	93408	55.90 ug/L	99
99) 1,2-dibromoethane	14.39	107	70832	50.52 ug/L	99
101) chlorobenzene	15.03	112	227752	49.27 ug/L	99
102) 1,1,1,2-tetrachloroethane	15.12	131	87849	52.57 ug/L	96
103) ethylbenzene	15.12	91	387261	50.24 ug/L	99
104) m,p-xylene	15.27	106	294488	98.94 ug/L	97
105) o-xylene	15.82	106	142728	48.57 ug/L	97
106) styrene	15.83	104	250642	49.72 ug/L	95
107) bromoform	16.15	173	62746	55.43 ug/L	98
109) isopropylbenzene	16.27	105	377265	46.91 ug/L	100

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142364.D
Acq On : 25 Nov 2013 2:24 pm
Operator : natet
Sample : bs
Misc : MS58857,VX6160,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 18:00:43 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) Cyclohexanone	16.46	55	99399	459.52 ug/L	96
112) bromobenzene	16.74	156	106877	48.30 ug/L	96
113) 1,1,2,2-tetrachloroethane	16.67	83	82011	41.20 ug/L	98
114) trans-1,4-dichloro-2-buten	16.72	53	21977	48.16 ug/L	91
115) 1,2,3-trichloropropane	16.74	110	21478	47.76 ug/L #	91
116) n-propylbenzene	16.78	91	448147	47.16 ug/L	99
118) 2-chlorotoluene	16.94	126	93358	46.05 ug/L	98
119) 4-chlorotoluene	17.06	91	278982	45.52 ug/L	98
120) 1,3,5-trimethylbenzene	16.97	105	323797	46.91 ug/L	99
121) tert-butylbenzene	17.36	119	275884	49.27 ug/L	96
122) pentachloroethane	17.44	167	68627	50.78 ug/L	97
123) 1,2,4-trimethylbenzene	17.42	105	328713	46.67 ug/L	99
125) sec-butylbenzene	17.60	105	406622	45.87 ug/L	99
126) 1,3-dichlorobenzene	17.78	146	196445	47.48 ug/L	98
127) p-isopropyltoluene	17.74	119	348587	48.27 ug/L	99
128) 1,4-dichlorobenzene	17.87	146	198185	46.23 ug/L	99
129) 1,2-dichlorobenzene	18.26	146	182225	46.86 ug/L	99
130) benzyl chloride	18.00	91	155936	41.43 ug/L	99
132) n-butylbenzene	18.16	92	169892	45.91 ug/L	99
134) 1,2-dibromo-3-chloropropan	19.01	75	13958	47.22 ug/L	95
135) 1,3,5-trichlorobenzene	19.18	180	148986	50.78 ug/L	99
136) hexachlorobutadiene	19.89	225	77740	51.05 ug/L	98
137) naphthalene	20.03	128	205404	46.53 ug/L	99
138) 1,2,4-trichlorobenzene	19.77	180	118395	52.86 ug/L	96
139) 1,2,3-trichlorobenzene	20.26	180	92402	51.51 ug/L	99
140) hexachloroethane	18.52	201	69168	53.31 ug/L	100

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

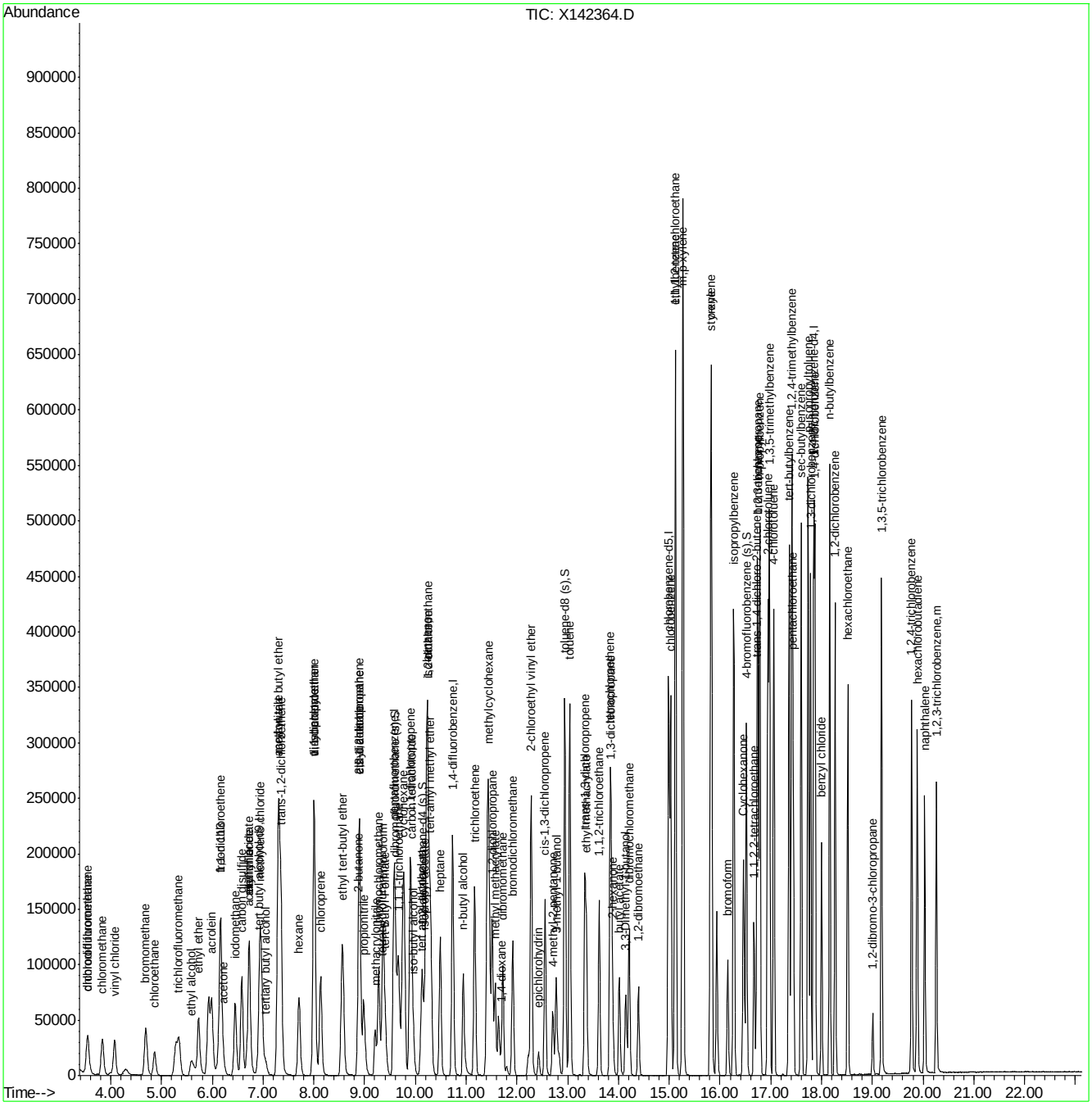
7.3.2

7

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142364.D
Acq On : 25 Nov 2013 2:24 pm
Operator : natet
Sample : bs
Misc : MS58857,VX6160,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 25 18:00:43 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210117.D
Acq On : 25 Nov 2013 3:34 pm
Operator : DivyaP
Sample : BS
Misc : MS58394,VE9218,5.0,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 26 09:30:44 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.617	65	76862	500.00	ug/L	-0.03
5) pentafluorobenzene	9.850	168	167752	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.764	114	253604	50.00	ug/L	0.00
97) chlorobenzene-d5	14.095	117	232639	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.667	152	131056	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.886	113	84787	53.06	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 106.12%			
61) 1,2-dichloroethane-d4 (s)	10.304	65	98844	49.55	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 99.10%			
89) toluene-d8 (s)	12.469	98	337213	49.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 98.86%			
116) 4-bromofluorobenzene (s)	15.365	95	131050	54.39	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 108.78%			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.481	88	16765	1154.27	ug/L	90
3) tertiary butyl alcohol	7.737	59	47941	272.40	ug/L #	58
11) chlorodifluoromethane	4.308	51	78369	40.75	ug/L	99
12) dichlorodifluoromethane	4.303	85	96412	44.46	ug/L	96
15) chloromethane	4.627	50	114743	40.49	ug/L	98
16) vinyl chloride	4.904	62	106722	44.98	ug/L	97
19) bromomethane	5.547	94	73479	48.02	ug/L	99
20) chloroethane	5.719	64	61504	51.80	ug/L	98
22) trichlorofluoromethane	6.232	101	129171	49.90	ug/L	97
24) ethyl ether	6.593	74	55188	62.41	ug/L	90
28) 2-chloropropane	6.786	43	162315	48.07	ug/L	97
29) acrolein	6.796	56	191349	440.89	ug/L	98
30) 1,1-dichloroethene	7.037	96	88332	55.68	ug/L	96
32) acetone	7.006	58	8146	48.44	ug/L #	76
33) allyl chloride	7.518	41	159814	45.38	ug/L	90
34) acetonitrile	7.398	40	59090	557.64	ug/L	96
35) iodomethane	7.298	142	163817	60.95	ug/L	97
36) iso-butyl alcohol	10.419	74	31512	1827.76	ug/L	87
37) carbon disulfide	7.471	76	329059	57.82	ug/L	97
38) methylene chloride	7.701	84	100956	53.00	ug/L	91
39) 1-chloropropane	7.748	42	162385	47.58	ug/L	96
40) methyl acetate	7.481	43	65775	46.14	ug/L	97
41) methyl tert butyl ether	8.046	73	561243	110.06	ug/L	97
42) trans-1,2-dichloroethene	8.088	96	95080	53.76	ug/L	94
43) di-isopropyl ether	8.631	45	303505	46.82	ug/L	98
44) ethyl tert-butyl ether	9.092	59	291684	49.89	ug/L	97
45) 2-butanone	9.280	72	9901	50.05	ug/L #	99
46) 1,1-dichloroethane	8.621	63	172819	56.36	ug/L	99
47) chloroprene	8.752	53	122402	44.01	ug/L	97
48) acrylonitrile	7.957	53	179576	229.59	ug/L	96
49) vinyl acetate	8.590	86	16453	53.65	ug/L	73
50) ethyl acetate	9.311	45	12462	43.84	ug/L #	68
51) 2,2-dichloropropane	9.369	77	136668	56.21	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210117.D
Acq On : 25 Nov 2013 3:34 pm
Operator : DivyaP
Sample : BS
Misc : MS58394,VE9218,5.0,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 26 09:30:44 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
52) cis-1,2-dichloroethene	9.342	96	102328	54.72 ug/L	96
53) methyl acrylate	9.395	55	82301	51.98 ug/L	99
54) propionitrile	9.327	54	136881	439.47 ug/L #	68
55) bromochloromethane	9.646	128	49760	58.25 ug/L	94
56) tetrahydrofuran	9.703	42	32592	47.73 ug/L	97
57) chloroform	9.698	83	163482	53.24 ug/L	99
58) t-butyl formate	9.745	59	89364	48.83 ug/L	95
59) Iso-octane	10.466	57	241224	34.97 ug/L	95
62) freon 113	7.021	151	60251	48.23 ug/L	96
63) methacrylonitrile	9.541	41	58160	48.35 ug/L	96
64) 1,1,1-trichloroethane	9.991	97	145268	57.59 ug/L	98
65) tert-amyl methyl ether	10.461	73	292726	53.74 ug/L	98
69) epichlorohydrin	12.004	57	43383	203.04 ug/L	97
70) n-butyl alcohol	10.843	56	111568	1809.87 ug/L	98
72) carbon tetrachloride	10.210	117	130342	59.20 ug/L	96
73) 1,1-dichloropropene	10.168	75	120681	51.43 ug/L	100
74) hexane	8.417	57	79225	31.84 ug/L	96
75) benzene	10.414	78	377393	51.55 ug/L	98
76) heptane	10.618	57	49801	35.05 ug/L	94
77) isopropyl acetate	10.304	43	173984	44.69 ug/L	95
78) 1,2-dichloroethane	10.393	62	125676	57.58 ug/L	97
80) trichloroethene	11.130	95	93647	50.05 ug/L	98
82) 2-chloroethyl vinyl ether	11.894	63	274720	223.68 ug/L	97
83) methylcyclohexane	11.397	83	137970	42.80 ug/L	95
84) methyl methacrylate	11.371	69	94549	45.96 ug/L	93
85) 1,2-dichloropropane	11.371	63	98785	50.87 ug/L	96
86) dibromomethane	11.528	93	59484	57.82 ug/L	91
87) bromodichloromethane	11.658	83	128169	48.43 ug/L	99
88) cis-1,3-dichloropropene	12.134	75	146511	50.22 ug/L	97
90) 4-methyl-2-pentanone	12.218	58	38588	49.53 ug/L #	87
91) toluene	12.547	92	232055	52.76 ug/L	97
92) 3-methyl-1-butanol	12.223	55	81909	827.38 ug/L	97
93) trans-1,3-dichloropropene	12.715	75	144234	54.06 ug/L	96
94) ethyl methacrylate	12.720	69	122175	48.03 ug/L	95
95) 1,1,2-trichloroethane	12.945	83	72893	48.64 ug/L	97
96) 2-hexanone	13.128	58	33343	48.77 ug/L	92
98) cyclohexanone	15.292	55	34623	383.85 ug/L	96
99) tetrachloroethene	13.195	166	101947	52.78 ug/L	96
100) 1,3-dichloropropane	13.143	76	143262	56.17 ug/L	97
101) butyl acetate	13.216	56	59789	45.07 ug/L	96
102) 3,3-dimethyl-1-butanol	13.305	57	98001	450.80 ug/L	99
103) dibromochloromethane	13.441	129	102325	56.14 ug/L	100
104) 1,2-dibromoethane	13.603	107	88560	56.77 ug/L	100
106) chlorobenzene	14.126	112	264302	56.13 ug/L	99
107) 1,1,1,2-tetrachloroethane	14.189	131	100095	57.29 ug/L	100
108) ethylbenzene	14.194	91	453939	53.55 ug/L	99
109) m,p-xylene	14.309	106	349781	111.98 ug/L	99
110) o-xylene	14.769	106	172426	55.66 ug/L	98
112) styrene	14.774	104	295429	55.55 ug/L	99
113) bromoform	15.051	173	72671	54.11 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210117.D
Acq On : 25 Nov 2013 3:34 pm
Operator : DivyaP
Sample : BS
Misc : MS58394,VE9218,5.0,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 26 09:30:44 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

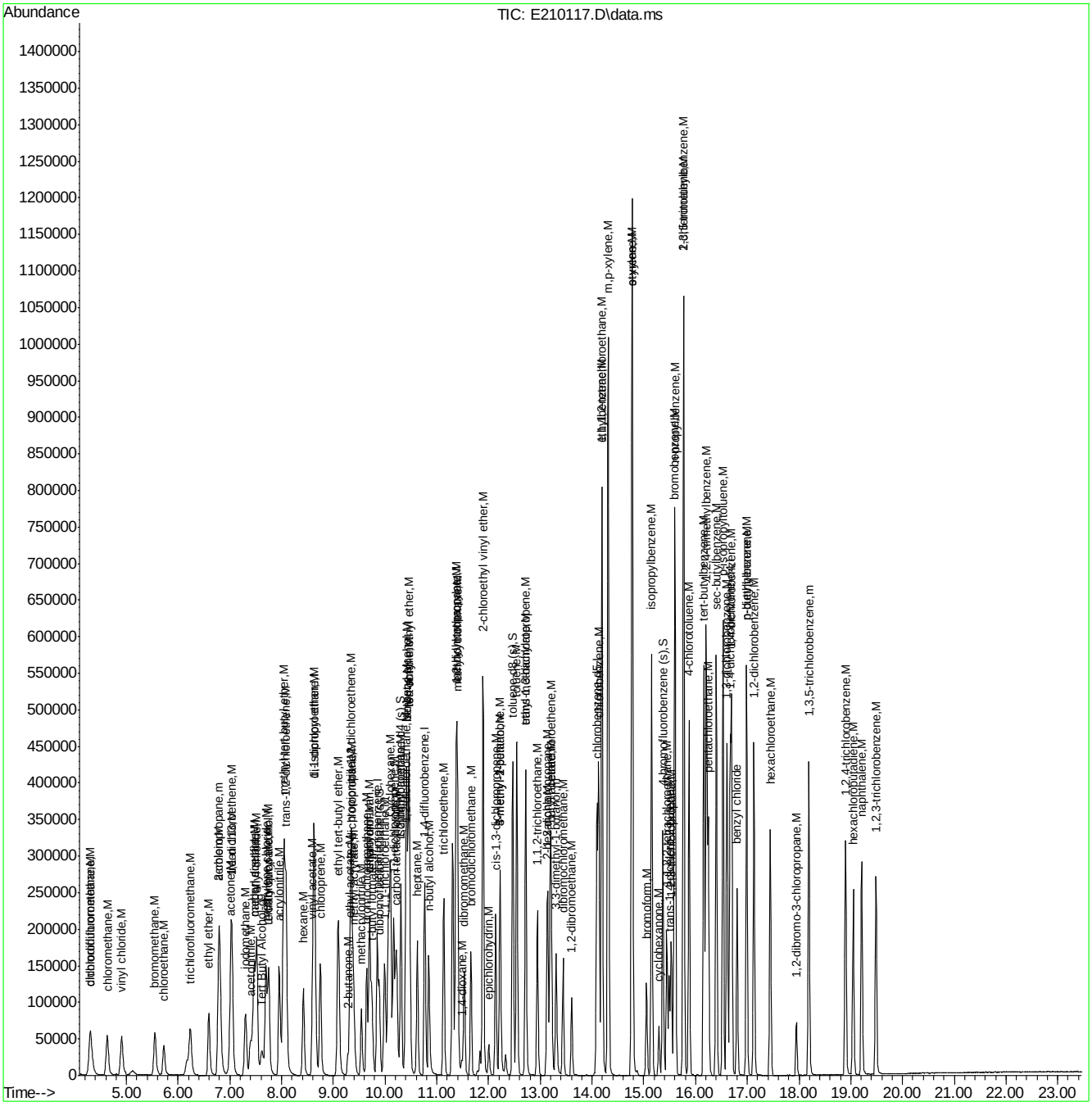
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
115) isopropylbenzene	15.151	105	457268	57.46	ug/L		99
117) bromobenzene	15.590	156	120895	59.46	ug/L		98
118) 1,1,2,2-tetrachloroethane	15.444	83	118415	52.49	ug/L		99
119) trans-1,4-dichloro-2-b...	15.491	53	30750	51.75	ug/L		97
120) 1,2,3-trichloropropane	15.527	110	31555	56.29	ug/L		95
121) n-propylbenzene	15.606	91	539394	58.00	ug/L		100
123) 2-chlorotoluene	15.768	126	112270	61.03	ug/L		98
124) 4-chlorotoluene	15.872	91	328811	55.07	ug/L		99
125) 1,3,5-trimethylbenzene	15.768	105	388365	56.63	ug/L		100
126) tert-butylbenzene	16.160	119	337810	57.88	ug/L		96
127) pentachloroethane	16.243	167	80487	58.41	ug/L		96
128) 1,2,4-trimethylbenzene	16.207	105	397916	57.66	ug/L		100
129) sec-butylbenzene	16.400	105	488926	56.73	ug/L		100
130) 1,3-dichlorobenzene	16.609	146	227588	58.75	ug/L		99
131) p-isopropyltoluene	16.531	119	427389	60.17	ug/L		99
132) 1,4-dichlorobenzene	16.698	146	232659	56.85	ug/L		98
133) benzyl chloride	16.803	91	219219	53.24	ug/L		100
134) p-diethylbenzene	16.991	119	4067	0.93	ug/L	#	1
135) 1,2-dichlorobenzene	17.127	146	222734	58.08	ug/L		97
136) n-butylbenzene	16.986	92	202213	55.82	ug/L		100
138) 1,2-dibromo-3-chloropr...	17.948	75	21092	55.29	ug/L		93
139) 1,3,5-trichlorobenzene	18.193	180	171156	59.54	ug/L		98
140) 1,2,4-trichlorobenzene	18.899	180	134201	55.55	ug/L		99
141) hexachlorobutadiene	19.051	225	71733	52.98	ug/L		98
142) naphthalene	19.213	128	294523	50.16	ug/L		99
144) 1,2,3-trichlorobenzene	19.485	180	111978	52.71	ug/L		99
145) hexachloroethane	17.446	119	79034	60.58	ug/L		96
146) Cyclohexane	10.101	84	139157	52.09	ug/L	#	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210117.D
Acq On : 25 Nov 2013 3:34 pm
Operator : DivyaP
Sample : BS
Misc : MS58394,VE9218,5.0,,100,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 26 09:30:44 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration



ACCUTEST LABORATORIES JB53758

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142338.D
Acq On : 24 Nov 2013 2:44 pm
Operator : natet
Sample : jb53799-1ms
Misc : MS59001,VX6159,5.7,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 25 14:23:49 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.93	65	39755	500.00	ug/L	-0.02
5) pentafluorobenzene	9.59	168	194855	50.00	ug/L	-0.02
62) 1,4-difluorobenzene	10.75	114	279430	50.00	ug/L	-0.02
93) chlorobenzene-d5	15.00	117	255762	50.00	ug/L	-0.02
108) 1,4-dichlorobenzene-d4	17.85	152	135218	50.00	ug/L	-0.01

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.62	113	83304	47.63	ug/L	-0.02
Spiked Amount 50.000	Range 59 - 130		Recovery = 95.26%			
55) 1,2-dichloroethane-d4 (s)	10.15	65	76621	43.23	ug/L	-0.02
Spiked Amount 50.000	Range 65 - 123		Recovery = 86.46%			
85) toluene-d8 (s)	12.95	98	333273	52.10	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 124		Recovery = 104.20%			
111) 4-bromofluorobenzene (s)	16.53	95	125187	48.63	ug/L	-0.01
Spiked Amount 50.000	Range 71 - 132		Recovery = 97.26%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.06	59	23595	251.19	ug/L	100
4) 1,4-dioxane	11.70	88	10671	1301.65	ug/L #	89
11) chlorodifluoromethane	3.57	51	45801	36.15	ug/L	96
12) dichlorodifluoromethane	3.55	85	83050	58.49	ug/L	96
15) chloromethane	3.85	50	92035	41.85	ug/L	100
16) vinyl chloride	4.09	62	90168	48.61	ug/L	97
18) bromomethane	4.71	94	71279	57.50	ug/L	98
19) chloroethane	4.88	64	45249	44.44	ug/L	96
21) trichlorofluoromethane	5.35	101	132846	59.17	ug/L	99
23) ethyl ether	5.74	74	30126	37.91	ug/L	89
27) acrolein	6.00	56	71819	269.25	ug/L #	98
28) 1,1-dichloroethene	6.18	96	67443	51.07	ug/L	99
29) acetone	6.25	58	4460	40.62	ug/L	86
30) allyl chloride	6.74	76	40946	47.90	ug/L	88
31) acetonitrile	6.73	40	33147	301.61	ug/L #	1
32) iodomethane	6.46	142	133130	49.27	ug/L	92
33) iso-butyl alcohol	9.98	43	17066	243.08	ug/L	94
34) carbon disulfide	6.60	76	224069	47.26	ug/L	98
35) methylene chloride	6.95	84	73032	41.49	ug/L	94
36) methyl acetate	6.74	43	26661	26.94	ug/L	95
37) methyl tert butyl ether	7.33	73	170955	40.42	ug/L	96
38) trans-1,2-dichloroethene	7.37	96	79473	50.67	ug/L	97
39) di-isopropyl ether	8.02	45	202101	37.32	ug/L	87
40) 2-butanone	8.88	72	5337	34.65	ug/L	61
41) 1,1-dichloroethane	8.02	63	137801	48.17	ug/L	97
42) chloroprene	8.14	53	105803	49.85	ug/L	99
43) acrylonitrile	7.31	53	69138	152.25	ug/L	98
44) vinyl acetate	8.02	86	7475	35.21	ug/L	64
45) ethyl tert-butyl ether	8.58	59	180109	36.17	ug/L	97
46) ethyl acetate	8.92	70	5604	36.57	ug/L #	1
47) 2,2-dichloropropane	8.91	77	116913	53.52	ug/L	96
48) cis-1,2-dichloroethene	8.91	96	86249	48.15	ug/L	93
49) propionitrile	8.99	54	54398	295.11	ug/L	89

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142338.D
Acq On : 24 Nov 2013 2:44 pm
Operator : natet
Sample : jb53799-1ms
Misc : MS59001,VX6159,5.7,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 25 14:23:49 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) tert-Butyl Formate	9.42	59	46007	39.19 ug/L #	93
51) bromochloromethane	9.29	128	37959	46.57 ug/L	90
52) tetrahydrofuran	9.35	72	5814	33.52 ug/L	87
53) chloroform	9.38	83	148045	49.52 ug/L	99
56) freon 113	6.17	151	51340	51.24 ug/L	100
57) methacrylonitrile	9.23	41	23990	31.35 ug/L	96
58) 1,1,1-trichloroethane	9.68	97	136589	59.79 ug/L	99
59) cyclohexane	9.76	84	105398	47.29 ug/L	82
61) iso-octane	10.26	57	223154	39.53 ug/L	93
64) epichlorohydrin	12.44	57	19679	149.15 ug/L	99
65) n-butyl alcohol	10.96	56	56119	1389.30 ug/L	97
66) carbon tetrachloride	9.93	117	125968	64.83 ug/L	99
67) 1,1-dichloropropene	9.91	75	111782	55.42 ug/L	98
68) hexane	7.73	57	61602	32.78 ug/L	99
69) benzene	10.24	78	315936	49.40 ug/L	99
70) tert-amyl methyl ether	10.31	73	187702	41.91 ug/L	99
71) heptane	10.50	57	43604	37.39 ug/L	98
72) isopropyl acetate	10.19	43	89931	35.58 ug/L	95
73) 1,2-dichloroethane	10.26	62	93272	48.35 ug/L	99
74) trichloroethene	11.18	130	89790	58.53 ug/L	100
78) 2-chloroethyl vinyl ether	12.29	63	133583	140.31 ug/L	97
79) methyl methacrylate	11.58	69	34448	38.12 ug/L	97
80) 1,2-dichloropropane	11.52	63	76550	44.95 ug/L	100
81) dibromomethane	11.73	93	41271	44.82 ug/L	97
82) methylcyclohexane	11.46	83	111734	46.73 ug/L	98
83) bromodichloromethane	11.93	83	113362	52.32 ug/L	99
84) cis-1,3-dichloropropene	12.56	75	127458	47.29 ug/L	98
86) 4-methyl-2-pentanone	12.72	58	18231	34.05 ug/L	98
87) toluene	13.05	92	215056	52.89 ug/L	96
88) 3-methyl-1-butanol	12.78	55	35717	577.49 ug/L	96
89) trans-1,3-dichloropropene	13.35	75	113136	47.78 ug/L	99
90) ethyl methacrylate	13.37	69	75543	40.86 ug/L	96
91) 1,1,2-trichloroethane	13.63	83	50050	42.62 ug/L	96
92) 2-hexanone	13.90	58	17004	34.19 ug/L	99
94) 3,3-Dimethyl-1-butanol	14.15	57	35821	248.63 ug/L	96
95) tetrachloroethene	13.85	164	83559	58.63 ug/L	99
96) 1,3-dichloropropane	13.87	76	95595	41.39 ug/L	98
97) butyl acetate	14.03	56	31300	34.40 ug/L	93
98) dibromochloromethane	14.22	129	85647	49.90 ug/L	100
99) 1,2-dibromoethane	14.40	107	60643	42.11 ug/L	97
101) chlorobenzene	15.04	112	240895	50.73 ug/L	99
102) 1,1,1,2-tetrachloroethane	15.13	131	91525	53.32 ug/L	96
103) ethylbenzene	15.13	91	432019	54.56 ug/L	99
104) m,p-xylene	15.28	106	325527	106.47 ug/L	95
105) o-xylene	15.82	106	158075	52.37 ug/L	98
106) styrene	15.84	104	265551	51.28 ug/L	95
107) bromoform	16.16	173	53616	46.11 ug/L	100
109) isopropylbenzene	16.28	105	432653	52.98 ug/L	99
110) Cyclohexanone	16.47	55	24721	112.55 ug/L	98
112) bromobenzene	16.75	156	107898	48.02 ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142338.D
Acq On : 24 Nov 2013 2:44 pm
Operator : natet
Sample : jb53799-1ms
Misc : MS59001,VX6159,5.7,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 25 14:23:49 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

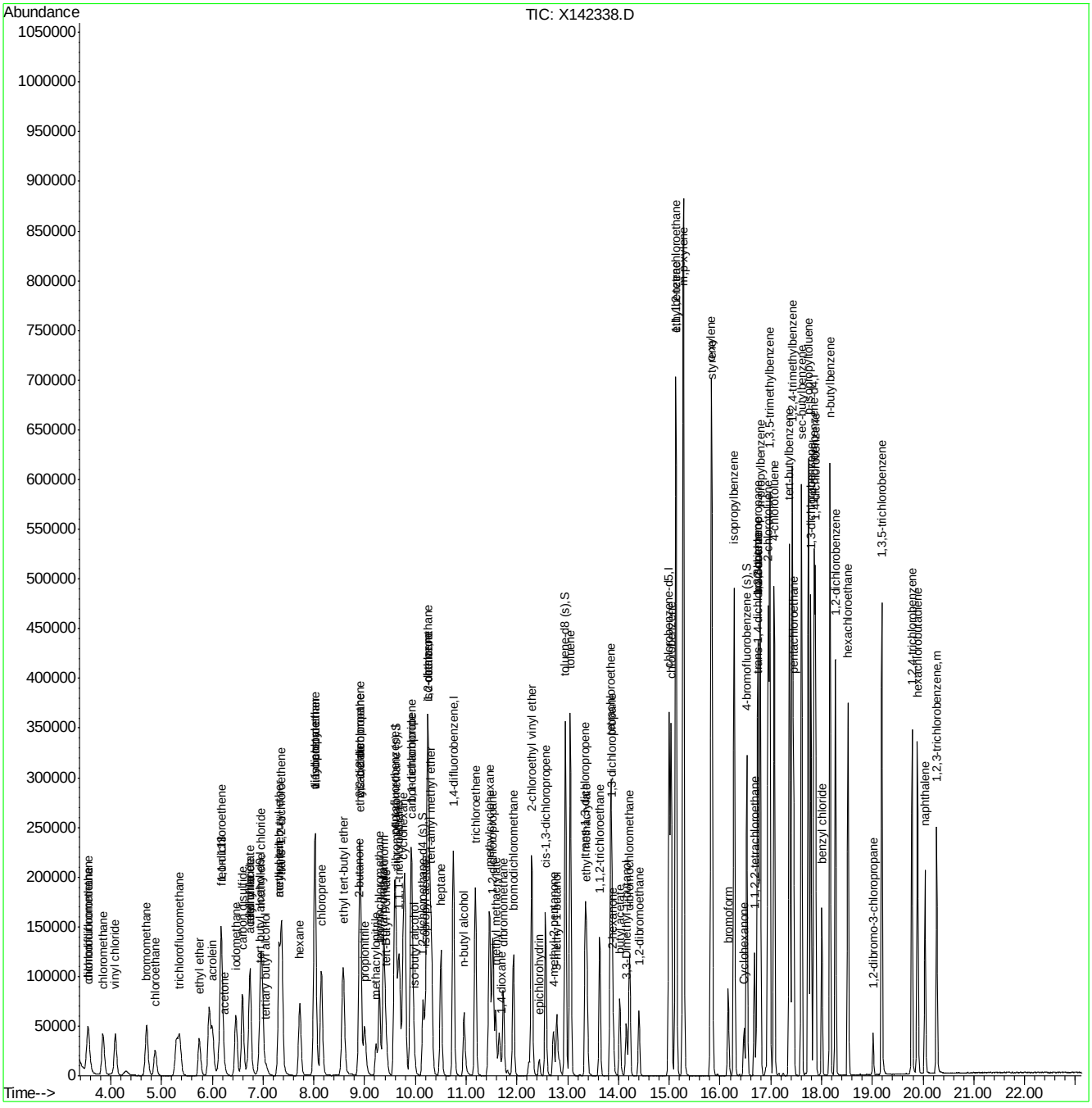
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
113) 1,1,2,2-tetrachloroethane	16.68	83	71818	35.53 ug/L	98
114) trans-1,4-dichloro-2-buten	16.73	53	17226	37.18 ug/L	87
115) 1,2,3-trichloropropane	16.75	110	17995	39.41 ug/L #	84
116) n-propylbenzene	16.79	91	486980	50.47 ug/L	99
118) 2-chlorotoluene	16.95	126	103809	50.42 ug/L	97
119) 4-chlorotoluene	17.07	91	314457	50.53 ug/L	99
120) 1,3,5-trimethylbenzene	16.98	105	368562	52.59 ug/L	98
121) tert-butylbenzene	17.37	119	315740	55.54 ug/L	96
122) pentachloroethane	17.45	167	69918	50.95 ug/L	97
123) 1,2,4-trimethylbenzene	17.42	105	361388	50.53 ug/L	99
125) sec-butylbenzene	17.61	105	475063	52.78 ug/L	100
126) 1,3-dichlorobenzene	17.79	146	211433	50.33 ug/L	98
127) p-isopropyltoluene	17.74	119	398312	54.32 ug/L	99
128) 1,4-dichlorobenzene	17.88	146	208423	47.88 ug/L	99
129) 1,2-dichlorobenzene	18.28	146	183783	46.54 ug/L	99
130) benzyl chloride	18.00	91	126121	33.00 ug/L	99
132) n-butylbenzene	18.17	92	190733	50.77 ug/L	99
134) 1,2-dibromo-3-chloropropan	19.01	75	11229	37.41 ug/L	89
135) 1,3,5-trichlorobenzene	19.19	180	158453	53.19 ug/L	98
136) hexachlorobutadiene	19.89	225	84835	54.87 ug/L	99
137) naphthalene	20.04	128	171117	38.18 ug/L	98
138) 1,2,4-trichlorobenzene	19.78	180	120020	52.78 ug/L	99
139) 1,2,3-trichlorobenzene	20.27	180	87676	48.14 ug/L	99
140) hexachloroethane	18.52	201	74787	56.77 ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142338.D
Acq On : 24 Nov 2013 2:44 pm
Operator : natet
Sample : jb53799-1ms
Misc : MS59001,VX6159,5.7,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 25 14:23:49 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210126.D
Acq On : 25 Nov 2013 8:12 pm
Operator : DivyaP
Sample : JB54013-1MS
Misc : MS59166,VE9218,6.7,,100,10,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 26 09:42:18 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.680	65	92519	500.00	ug/L	0.03
5) pentafluorobenzene	9.845	168	179897	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.765	114	263299	50.00	ug/L	0.00
97) chlorobenzene-d5	14.095	117	245815	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.667	152	144597	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.887	113	87534	51.08	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 102.16%			
61) 1,2-dichloroethane-d4 (s)	10.305	65	99688	46.60	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 93.20%			
89) toluene-d8 (s)	12.469	98	351785	49.67	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 99.34%			
116) 4-bromofluorobenzene (s)	15.365	95	139104	52.32	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 104.64%			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.512	88	23752	1376.11	ug/L #	86
3) tertiary butyl alcohol	7.780	59	55641	262.65	ug/L #	1
11) chlorodifluoromethane	4.298	51	46679	22.63	ug/L	97
12) dichlorodifluoromethane	4.293	85	61296	26.36	ug/L	99
15) chloromethane	4.617	50	99235	32.66	ug/L	99
16) vinyl chloride	4.889	62	93550	36.77	ug/L	98
19) bromomethane	5.532	94	51276	29.44	ug/L	97
20) chloroethane	5.699	64	34069	26.76	ug/L	99
22) trichlorofluoromethane	6.216	101	95749	34.49	ug/L	99
24) ethyl ether	6.588	74	41953	44.24	ug/L	88
28) 2-chloropropane	6.776	43	109865	30.34	ug/L	94
29) acrolein	6.797	56	198619	426.74	ug/L	96
30) 1,1-dichloroethene	7.027	96	62707	36.86	ug/L	93
32) acetone	7.032	58	8456	46.89	ug/L #	84
33) allyl chloride	7.513	41	138481	36.66	ug/L	98
34) acetonitrile	7.503	40	75143	661.26	ug/L #	1
35) iodomethane	7.293	142	124047	43.04	ug/L	98
36) iso-butyl alcohol	10.415	74	27781	1414.29	ug/L	91
37) carbon disulfide	7.466	76	232682	38.13	ug/L	99
38) methylene chloride	7.696	84	81646	39.97	ug/L	91
39) 1-chloropropane	7.743	42	144186	39.39	ug/L #	90
40) methyl acetate	7.487	43	71961	47.07	ug/L	97
41) methyl tert butyl ether	8.052	73	243019	44.44	ug/L	95
42) trans-1,2-dichloroethene	8.088	96	73495	38.75	ug/L	94
43) di-isopropyl ether	8.637	45	282257	40.61	ug/L	95
44) ethyl tert-butyl ether	9.097	59	246139	39.26	ug/L	87
45) 2-butanone	9.285	72	10927	51.51	ug/L #	89
46) 1,1-dichloroethane	8.621	63	133927	40.73	ug/L	99
47) chloroprene	8.747	53	102311	34.30	ug/L	95
48) acrylonitrile	7.963	53	171824	204.85	ug/L	98
49) vinyl acetate	8.590	86	14826	45.08	ug/L	73
50) ethyl acetate	9.317	45	12759	41.85	ug/L	89
51) 2,2-dichloropropane	9.369	77	110402	42.34	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210126.D
Acq On : 25 Nov 2013 8:12 pm
Operator : DivyaP
Sample : JB54013-1MS
Misc : MS59166,VE9218,6.7,,100,10,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 26 09:42:18 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
52) cis-1,2-dichloroethene	9.348	96	84142	41.96 ug/L	95
53) methyl acrylate	9.400	55	82697	48.70 ug/L	99
54) propionitrile	9.338	54	143215	428.76 ug/L	89
55) bromochloromethane	9.646	128	43789	47.80 ug/L	94
56) tetrahydrofuran	9.714	42	31912	43.58 ug/L	94
57) chloroform	9.698	83	133926	40.67 ug/L	98
58) t-butyl formate	9.745	59	87271	44.47 ug/L	98
59) Iso-octane	10.467	57	625292	84.53 ug/L	96
62) freon 113	7.006	151	49025	36.60 ug/L	99
63) methacrylonitrile	9.541	41	52706	40.85 ug/L	94
64) 1,1,1-trichloroethane	9.991	97	109879	40.62 ug/L	98
65) tert-amyl methyl ether	10.462	73	279364	47.83 ug/L	94
69) epichlorohydrin	12.009	57	57400	258.75 ug/L	96
70) n-butyl alcohol	10.864	56	172012	2687.66 ug/L	99
72) carbon tetrachloride	10.211	117	95885	41.94 ug/L	99
73) 1,1-dichloropropene	10.164	75	97415	39.99 ug/L	98
74) hexane	8.417	57	69000	26.71 ug/L	95
75) benzene	10.415	78	303859	39.98 ug/L	98
76) heptane	10.618	57	53812	36.48 ug/L	91
77) isopropyl acetate	10.305	43	179467	44.40 ug/L	95
78) 1,2-dichloroethane	10.394	62	106061	46.81 ug/L	100
80) trichloroethene	11.131	95	74789	38.50 ug/L	99
82) 2-chloroethyl vinyl ether	11.894	63	303705	238.18 ug/L	98
83) methylcyclohexane	11.392	83	129340	38.65 ug/L	98
84) methyl methacrylate	11.371	69	88774	41.56 ug/L	93
85) 1,2-dichloropropane	11.371	63	82756	41.04 ug/L	95
86) dibromomethane	11.528	93	51047	47.80 ug/L	93
87) bromodichloromethane	11.659	83	108741	39.58 ug/L	98
88) cis-1,3-dichloropropene	12.135	75	139286	45.99 ug/L	97
90) 4-methyl-2-pentanone	12.218	58	36754	45.44 ug/L #	83
91) toluene	12.542	92	193076	42.28 ug/L	100
92) 3-methyl-1-butanol	12.234	55	115948	1128.09 ug/L	95
93) trans-1,3-dichloropropene	12.715	75	129287	46.67 ug/L	95
94) ethyl methacrylate	12.720	69	119571	45.28 ug/L	93
95) 1,1,2-trichloroethane	12.945	83	64604	41.52 ug/L	93
96) 2-hexanone	13.128	58	34087	48.02 ug/L	89
98) cyclohexanone	15.298	55	107788	1233.64 ug/L	98
99) tetrachloroethene	13.196	166	84925	41.61 ug/L	98
100) 1,3-dichloropropane	13.144	76	128010	47.50 ug/L	98
101) butyl acetate	13.217	56	69793	49.79 ug/L	94
102) 3,3-dimethyl-1-butanol	13.311	57	137009	596.45 ug/L	96
103) dibromochloromethane	13.436	129	88584	46.00 ug/L	97
104) 1,2-dibromoethane	13.604	107	80601	48.90 ug/L	99
106) chlorobenzene	14.126	112	226596	45.54 ug/L	98
107) 1,1,1,2-tetrachloroethane	14.189	131	86088	46.63 ug/L	98
108) ethylbenzene	14.194	91	374739	41.84 ug/L	98
109) m,p-xylene	14.309	106	290944	88.15 ug/L	98
110) o-xylene	14.770	106	146554	44.77 ug/L	98
112) styrene	14.775	104	252465	44.93 ug/L	99
113) bromoform	15.052	173	65462	46.13 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210126.D
Acq On : 25 Nov 2013 8:12 pm
Operator : DivyaP
Sample : JB54013-1MS
Misc : MS59166,VE9218,6.7,,100,10,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 26 09:42:18 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
115) isopropylbenzene	15.151	105	385834	43.94 ug/L	100
117) bromobenzene	15.590	156	107470	47.91 ug/L	99
118) 1,1,2,2-tetrachloroethane	15.444	83	111285	44.71 ug/L	97
119) trans-1,4-dichloro-2-b...	15.486	53	31524	48.08 ug/L	94
120) 1,2,3-trichloropropane	15.528	110	32634	52.76 ug/L #	66
121) n-propylbenzene	15.606	91	475469	46.34 ug/L	99
123) 2-chlorotoluene	15.768	126	95225	46.92 ug/L	98
124) 4-chlorotoluene	15.873	91	285633	43.36 ug/L	100
125) 1,3,5-trimethylbenzene	15.768	105	329219	43.51 ug/L	100
126) tert-butylbenzene	16.160	119	283422	44.01 ug/L	97
127) pentachloroethane	16.244	167	70778	46.55 ug/L	96
128) 1,2,4-trimethylbenzene	16.207	105	338960	44.52 ug/L	100
129) sec-butylbenzene	16.401	105	449285	47.25 ug/L	99
130) 1,3-dichlorobenzene	16.610	146	198493	46.44 ug/L	98
131) p-isopropyltoluene	16.531	119	353367	45.09 ug/L	99
132) 1,4-dichlorobenzene	16.699	146	208674	46.22 ug/L	98
133) benzyl chloride	16.803	91	267212	58.82 ug/L	98
135) 1,2-dichlorobenzene	17.127	146	200397	47.36 ug/L	99
136) n-butylbenzene	16.986	92	194606	48.69 ug/L	98
138) 1,2-dibromo-3-chloropr...	17.948	75	20799	49.42 ug/L	97
139) 1,3,5-trichlorobenzene	18.189	180	157568	49.68 ug/L	99
140) 1,2,4-trichlorobenzene	18.900	180	129426	48.55 ug/L	97
141) hexachlorobutadiene	19.051	225	82666	55.33 ug/L #	42
142) naphthalene	19.208	128	339851	52.46 ug/L	100
144) 1,2,3-trichlorobenzene	19.485	180	109576	46.75 ug/L	99
145) hexachloroethane	17.446	119	57317	39.82 ug/L	88
146) Cyclohexane	10.101	84	105768	35.88 ug/L #	100

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

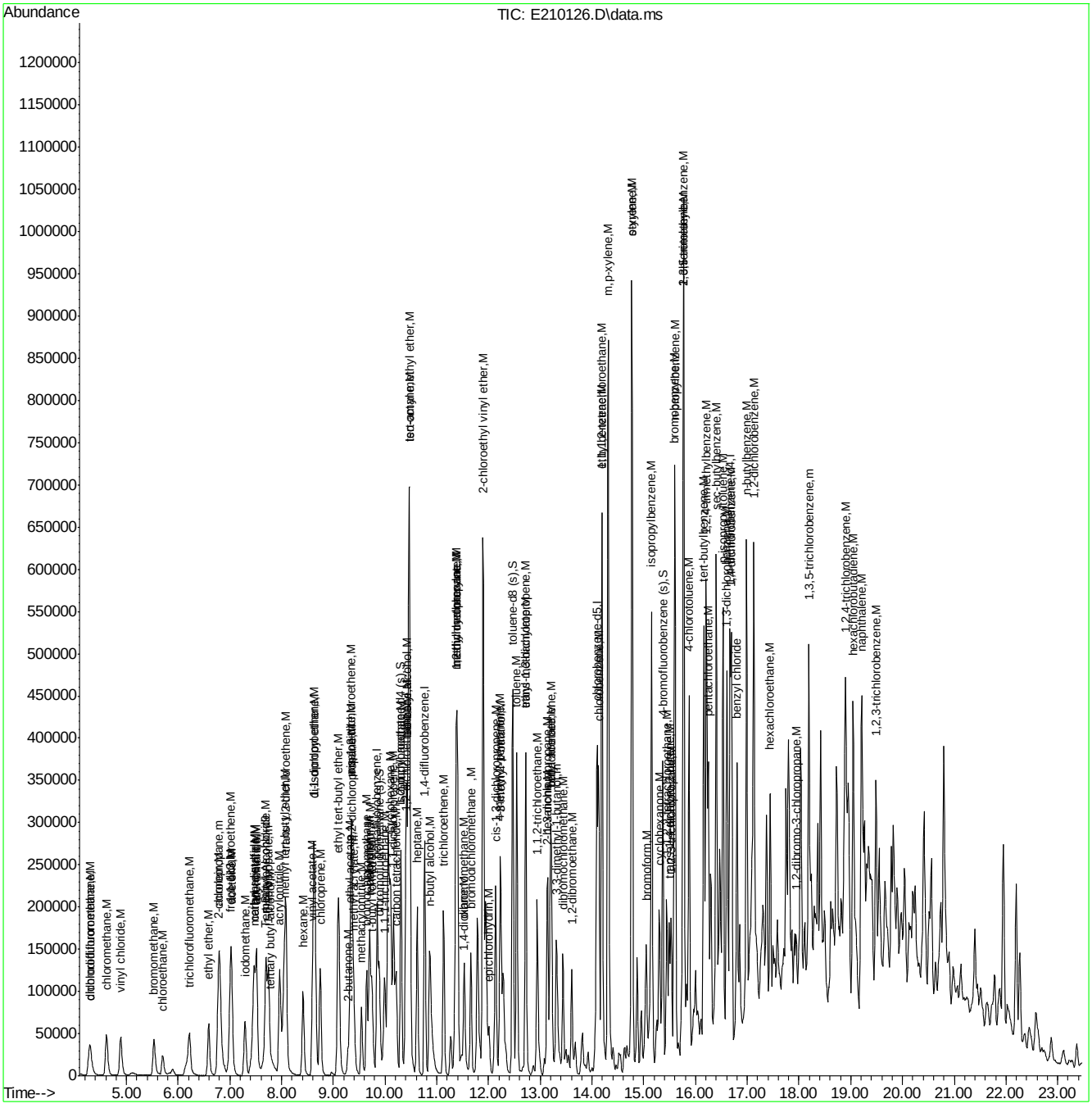
7.4.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210126.D
Acq On : 25 Nov 2013 8:12 pm
Operator : DivyaP
Sample : JB54013-1MS
Misc : MS59166,VE9218,6.7,,100,10,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 26 09:42:18 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration



ACCUTEST LABORATORIES JB53758

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210127.D
Acq On : 25 Nov 2013 8:41 pm
Operator : DivyaP
Sample : JB54013-1MSD
Misc : MS59166,VE9218,6.7,,100,10,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 26 09:42:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.633	65	80895	500.00	ug/L	-0.01
5) pentafluorobenzene	9.849	168	176508	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.764	114	258236	50.00	ug/L	0.00
97) chlorobenzene-d5	14.095	117	239962	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.667	152	144958	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.886	113	84652	50.35	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 100.70%			
61) 1,2-dichloroethane-d4 (s)	10.304	65	95491	45.49	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 90.98%			
89) toluene-d8 (s)	12.463	98	343381	49.43	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 124		Recovery = 98.86%			
116) 4-bromofluorobenzene (s)	15.365	95	136183	51.10	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 102.20%			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.486	88	19409	1279.59	ug/L #	70
3) tertiary butyl alcohol	7.743	59	48533	262.01	ug/L #	76
11) chlorodifluoromethane	4.297	51	43926	21.71	ug/L	98
12) dichlorodifluoromethane	4.292	85	56494	24.76	ug/L	98
15) chloromethane	4.616	50	94185	31.59	ug/L	99
16) vinyl chloride	4.888	62	86468	34.64	ug/L	97
19) bromomethane	5.510	94	62373	37.74	ug/L	99
20) chloroethane	5.693	64	42825	34.28	ug/L	96
22) trichlorofluoromethane	6.216	101	91363	33.54	ug/L	99
24) ethyl ether	6.592	74	41470	44.57	ug/L	85
28) 2-chloropropane	6.775	43	103880	29.24	ug/L	94
29) acrolein	6.796	56	192583	421.72	ug/L	98
30) 1,1-dichloroethene	7.026	96	58903	35.29	ug/L	94
32) acetone	7.005	58	7841	44.31	ug/L	86
33) allyl chloride	7.513	41	114977	31.03	ug/L	98
34) acetonitrile	7.408	40	53446	479.36	ug/L	96
35) iodomethane	7.288	142	121428	42.94	ug/L	98
36) iso-butyl alcohol	10.414	74	26302	1347.31	ug/L	89
37) carbon disulfide	7.465	76	222123	37.10	ug/L	99
38) methylene chloride	7.690	84	81203	40.52	ug/L	91
39) 1-chloropropane	7.743	42	135743	37.80	ug/L #	85
40) methyl acetate	7.476	43	67768	45.18	ug/L	97
41) methyl tert butyl ether	8.046	73	240290	44.78	ug/L	96
42) trans-1,2-dichloroethene	8.082	96	69824	37.52	ug/L	96
43) di-isopropyl ether	8.637	45	276112	40.48	ug/L	96
44) ethyl tert-butyl ether	9.097	59	242427	39.41	ug/L	89
45) 2-butanone	9.280	72	9744	46.81	ug/L #	95
46) 1,1-dichloroethane	8.621	63	128128	39.71	ug/L	98
47) chloroprene	8.746	53	93367	31.90	ug/L	95
48) acrylonitrile	7.957	53	160910	195.52	ug/L	99
49) vinyl acetate	8.590	86	13926	43.16	ug/L	79
50) ethyl acetate	9.316	45	11905	39.80	ug/L	82
51) 2,2-dichloropropane	9.363	77	102791	40.18	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210127.D
Acq On : 25 Nov 2013 8:41 pm
Operator : DivyaP
Sample : JB54013-1MSD
Misc : MS59166,VE9218,6.7,,100,10,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 26 09:42:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
52) cis-1,2-dichloroethene	9.342	96	81403	41.37 ug/L	95
53) methyl acrylate	9.400	55	73496	44.12 ug/L	99
54) propionitrile	9.332	54	125826	383.93 ug/L	88
55) bromochloromethane	9.646	128	42267	47.03 ug/L	93
56) tetrahydrofuran	9.708	42	28656	39.89 ug/L	95
57) chloroform	9.698	83	128569	39.80 ug/L	99
58) t-butyl formate	9.745	59	85445	44.37 ug/L	97
59) Iso-octane	10.466	57	600770	82.78 ug/L	96
62) freon 113	7.005	151	45428	34.56 ug/L	96
63) methacrylonitrile	9.541	41	49582	39.17 ug/L	93
64) 1,1,1-trichloroethane	9.991	97	101460	38.23 ug/L	97
65) tert-amyl methyl ether	10.461	73	270931	47.28 ug/L	93
69) epichlorohydrin	12.003	57	49333	226.75 ug/L	97
70) n-butyl alcohol	10.848	56	135101	2152.32 ug/L	97
72) carbon tetrachloride	10.210	117	87135	38.86 ug/L	98
73) 1,1-dichloropropene	10.163	75	87664	36.69 ug/L	97
74) hexane	8.412	57	62735	24.76 ug/L	96
75) benzene	10.414	78	286157	38.39 ug/L	98
76) heptane	10.623	57	51152	35.35 ug/L	95
77) isopropyl acetate	10.304	43	166874	42.09 ug/L	94
78) 1,2-dichloroethane	10.393	62	100069	45.03 ug/L	97
80) trichloroethene	11.130	95	70146	36.82 ug/L	98
82) 2-chloroethyl vinyl ether	11.894	63	286268	228.90 ug/L	98
83) methylcyclohexane	11.392	83	117957	35.94 ug/L	100
84) methyl methacrylate	11.371	69	82821	39.54 ug/L	96
85) 1,2-dichloropropane	11.371	63	79228	40.06 ug/L	94
86) dibromomethane	11.528	93	48880	46.66 ug/L	96
87) bromodichloromethane	11.658	83	102945	38.20 ug/L	98
88) cis-1,3-dichloropropene	12.134	75	132752	44.69 ug/L	97
90) 4-methyl-2-pentanone	12.218	58	32819	41.37 ug/L	89
91) toluene	12.542	92	181571	40.54 ug/L	98
92) 3-methyl-1-butanol	12.228	55	90202	894.81 ug/L	96
93) trans-1,3-dichloropropene	12.714	75	123301	45.38 ug/L	94
94) ethyl methacrylate	12.720	69	112774	43.54 ug/L	92
95) 1,1,2-trichloroethane	12.944	83	62053	40.66 ug/L	95
96) 2-hexanone	13.127	58	29941	43.01 ug/L	84
98) cyclohexanone	15.292	55	99285	1161.06 ug/L	98
99) tetrachloroethene	13.195	166	78541	39.42 ug/L	97
100) 1,3-dichloropropane	13.143	76	121832	46.31 ug/L	98
101) butyl acetate	13.216	56	63677	46.53 ug/L	90
102) 3,3-dimethyl-1-butanol	13.305	57	105275	469.48 ug/L	97
103) dibromochloromethane	13.436	129	85067	45.25 ug/L	100
104) 1,2-dibromoethane	13.603	107	77858	48.39 ug/L	97
106) chlorobenzene	14.131	112	216702	44.62 ug/L	98
107) 1,1,1,2-tetrachloroethane	14.183	131	83533	46.35 ug/L	99
108) ethylbenzene	14.194	91	355113	40.62 ug/L	99
109) m,p-xylene	14.309	106	277289	86.07 ug/L	99
110) o-xylene	14.769	106	139947	43.80 ug/L	99
112) styrene	14.774	104	245077	44.68 ug/L	99
113) bromoform	15.051	173	63134	45.58 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210127.D
Acq On : 25 Nov 2013 8:41 pm
Operator : DivyaP
Sample : JB54013-1MSD
Misc : MS59166,VE9218,6.7,,100,10,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 26 09:42:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

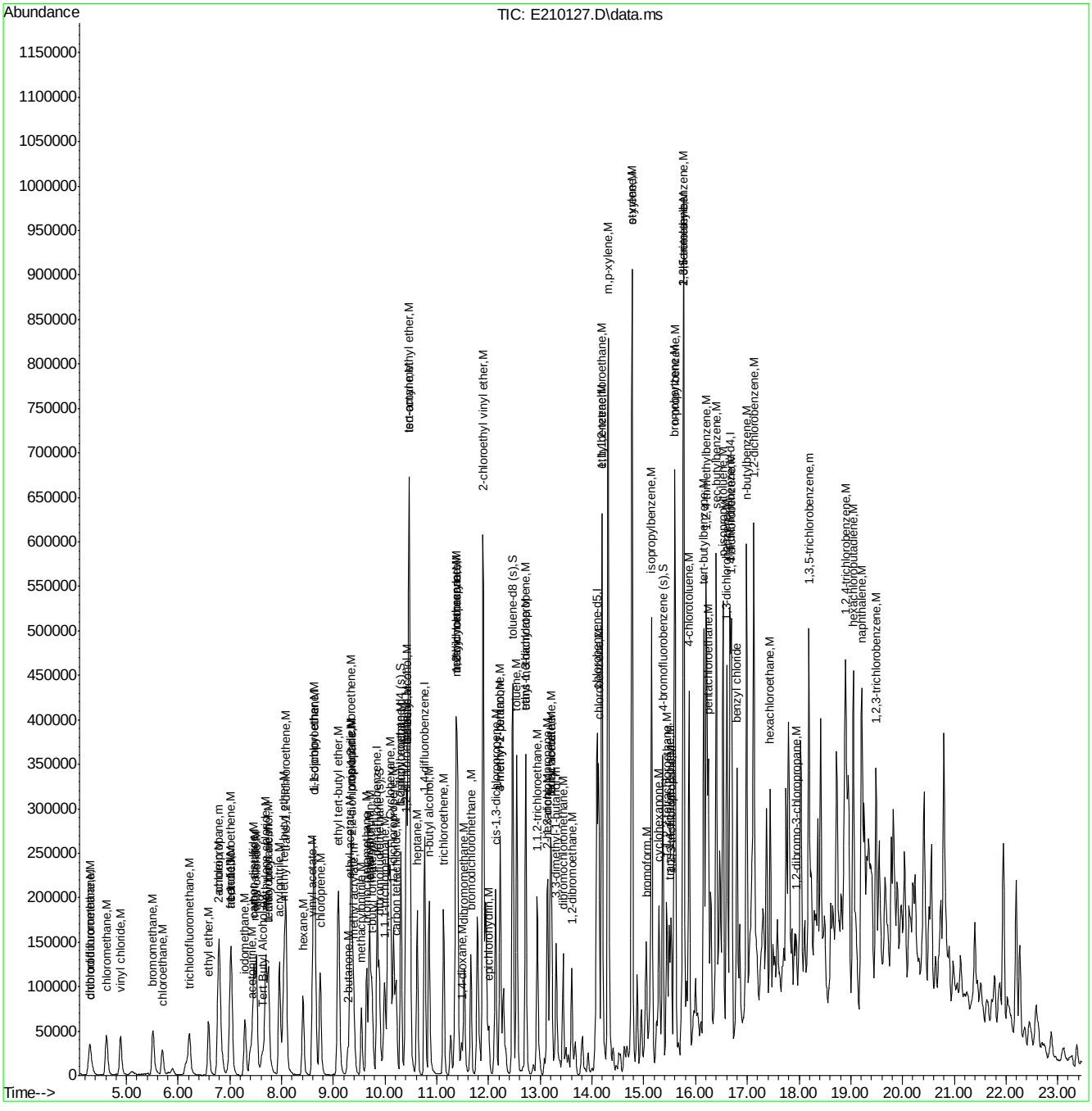
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
115) isopropylbenzene	15.151	105	365165	41.49 ug/L	100
117) bromobenzene	15.590	156	104919	46.65 ug/L	99
118) 1,1,2,2-tetrachloroethane	15.443	83	106990	42.87 ug/L	99
119) trans-1,4-dichloro-2-b...	15.490	53	29492	44.87 ug/L	97
120) 1,2,3-trichloropropane	15.527	110	29474	47.54 ug/L #	69
121) n-propylbenzene	15.605	91	449607	43.71 ug/L	100
123) 2-chlorotoluene	15.768	126	91591	45.02 ug/L	99
124) 4-chlorotoluene	15.872	91	273128	41.36 ug/L	99
125) 1,3,5-trimethylbenzene	15.768	105	315961	41.66 ug/L	99
126) tert-butylbenzene	16.160	119	269387	41.73 ug/L	99
127) pentachloroethane	16.243	167	69320	45.48 ug/L	98
128) 1,2,4-trimethylbenzene	16.207	105	326555	42.78 ug/L	99
129) sec-butylbenzene	16.400	105	428739	44.98 ug/L	100
130) 1,3-dichlorobenzene	16.609	146	195684	45.67 ug/L	98
131) p-isopropyltoluene	16.531	119	340063	43.28 ug/L	99
132) 1,4-dichlorobenzene	16.698	146	207151	45.76 ug/L	97
133) benzyl chloride	16.803	91	254613	55.90 ug/L	98
135) 1,2-dichlorobenzene	17.127	146	199627	47.06 ug/L	98
136) n-butylbenzene	16.986	92	187281	46.74 ug/L	98
138) 1,2-dibromo-3-chloropr...	17.948	75	20053	47.53 ug/L	94
139) 1,3,5-trichlorobenzene	18.193	180	158013	49.69 ug/L	99
140) 1,2,4-trichlorobenzene	18.899	180	131543	49.22 ug/L	96
141) hexachlorobutadiene	19.046	225	84092	56.15 ug/L #	42
142) naphthalene	19.208	128	339906	52.34 ug/L	99
144) 1,2,3-trichlorobenzene	19.490	180	110658	47.09 ug/L	98
145) hexachloroethane	17.446	119	55208	38.26 ug/L	87
146) Cyclohexane	10.100	84	96816	32.76 ug/L #	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210127.D
Acq On : 25 Nov 2013 8:41 pm
Operator : DivyaP
Sample : JB54013-1MSD
Misc : MS59166,VE9218,6.7,,100,10,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 26 09:42:55 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142340.D
Acq On : 24 Nov 2013 3:44 pm
Operator : natet
Sample : jb53799-3dup
Misc : MS59001,VX6159,5.1,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 25 14:24:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.93	65	60151	500.00	ug/L	-0.02
5) pentafluorobenzene	9.59	168	196478	50.00	ug/L	-0.02
62) 1,4-difluorobenzene	10.74	114	283439	50.00	ug/L	-0.02
93) chlorobenzene-d5	15.00	117	254413	50.00	ug/L	-0.02
108) 1,4-dichlorobenzene-d4	17.85	152	118770	50.00	ug/L	-0.01

System Monitoring Compounds

54) dibromofluoromethane (s)	9.62	113	86387	48.99	ug/L	-0.02
Spiked Amount 50.000	Range 59 - 130		Recovery = 97.98%			
55) 1,2-dichloroethane-d4 (s)	10.15	65	86999	48.68	ug/L	-0.02
Spiked Amount 50.000	Range 65 - 123		Recovery = 97.36%			
85) toluene-d8 (s)	12.95	98	331294	51.06	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 124		Recovery = 102.12%			
111) 4-bromofluorobenzene (s)	16.53	95	118872	52.57	ug/L	-0.01
Spiked Amount 50.000	Range 71 - 132		Recovery = 105.14%			

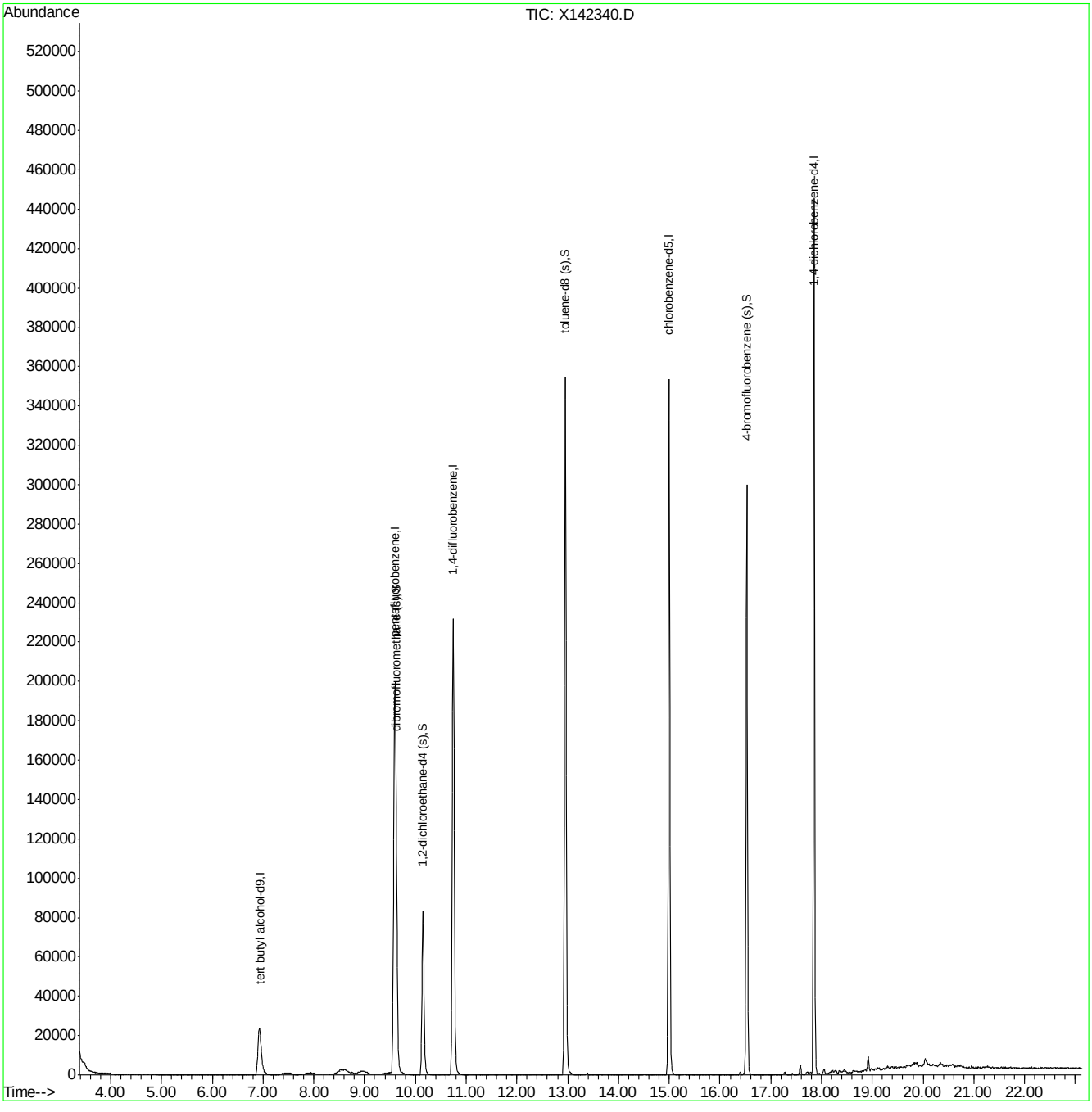
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142340.D
Acq On : 24 Nov 2013 3:44 pm
Operator : natet
Sample : jb53799-3dup
Misc : MS59001,VX6159,5.1,,,,1
ALS Vial : 13 Sample Multiplier: 1

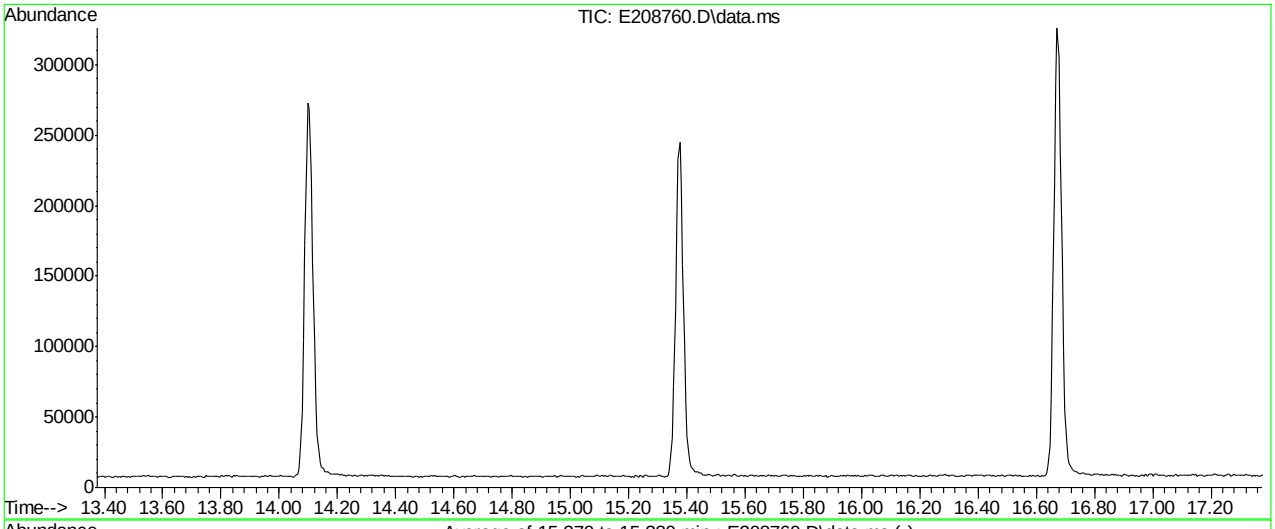
Quant Time: Nov 25 14:24:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

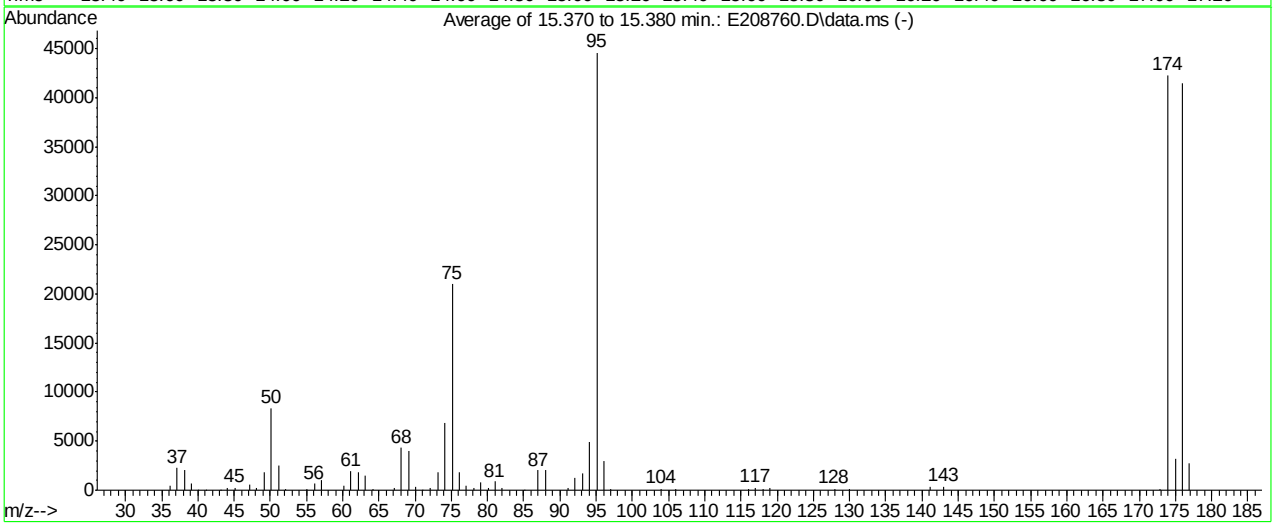


SW-846 Method 8260

Data File : C:\msdchem\1\DATA\E208760.D Vial: 11
Acq On : 22 Oct 2013 10:21 pm Operator: DivyaP
Sample : bfb Inst : MSE
Misc : MS57101,VE9161,5.0,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\ME9161.M (RTE Integrator)
Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2157, 2158, 2159; Background Corrected with Scan 2147

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	8397	PASS
75	95	30	60	47.0	20978	PASS
95	95	100	100	100.0	44605	PASS
96	95	5	9	6.8	3021	PASS
173	174	0.00	2	0.3	129	PASS
174	95	50	120	94.8	42274	PASS
175	174	5	9	7.6	3202	PASS
176	174	95	101	98.2	41496	PASS
177	176	5	9	6.5	2709	PASS

E208760.D ME9161.M Wed Oct 23 09:13:25 2013 RPT1

Average of 15.370 to 15.380 min.: E208760.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	512	49.10	1860	64.20	66	77.05	418
37.10	2254	50.10	8397	67.15	238	78.10	241
38.10	2044	51.10	2549	68.10	4304	79.00	817
39.10	686	52.10	98	69.10	4045	80.10	270
40.10	57	55.10	125	70.10	344	81.00	912
41.10	12	56.10	680	71.00	50	82.05	201
43.10	3	57.10	1023	72.10	264	85.10	50
44.10	204	60.10	472	73.10	1858	87.00	2023
45.10	262	61.10	1946	74.10	6857	88.00	2010
47.10	612	62.10	1873	75.10	20978	91.05	245
48.10	269	63.10	1446	76.10	1830	92.05	1231

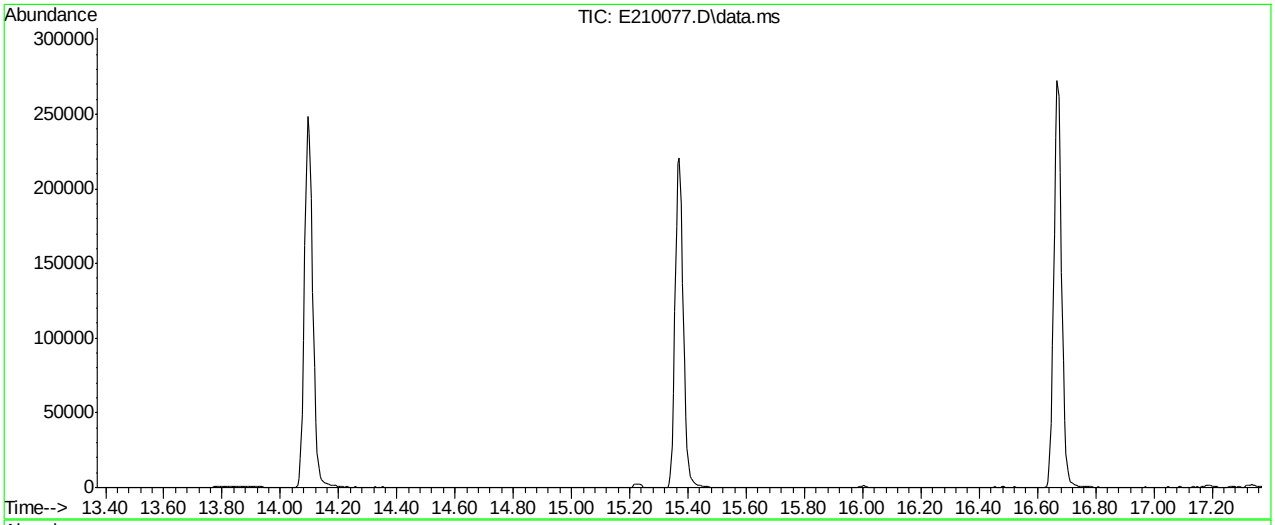
Average of 15.370 to 15.380 min.: E208760.D\data.ms
bfb
Modified:subtracted

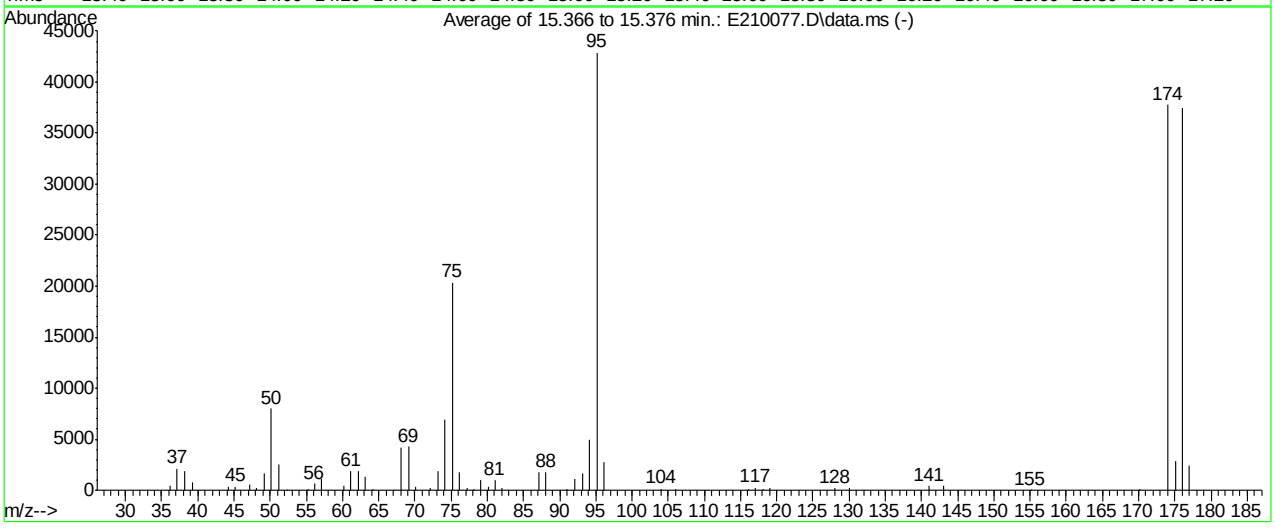
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.10	1717	127.95	117				
94.10	4944	130.00	101				
95.10	44605	141.05	368				
96.10	3021	143.00	383				
97.05	135	172.90	129				
104.00	130	174.00	42274				
106.00	63	175.00	3202				
116.00	174	176.00	41496				
117.00	277	176.95	2709				
118.10	63						
118.95	243						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\E210077.D Vial: 24
Acq On : 23 Nov 2013 9:36 pm Operator: DivyaP
Sample : BFB Inst : MSE
Misc : MS58538,VE9217,5.0,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\ME9161.M (RTE Integrator)
Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2157, 2158, 2159; Background Corrected with Scan 2147

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	8006	PASS
75	95	30	60	47.4	20349	PASS
95	95	100	100	100.0	42904	PASS
96	95	5	9	6.4	2736	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	88.0	37762	PASS
175	174	5	9	7.6	2874	PASS
176	174	95	101	99.2	37445	PASS
177	176	5	9	6.5	2421	PASS

E210077.D ME9161.M Mon Nov 25 09:24:15 2013 RPT1

Average of 15.366 to 15.376 min.: E210077.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.15	445	52.25	50	69.15	4234	81.05	1022
37.15	2119	55.20	120	70.15	318	82.05	254
38.20	1853	56.15	618	72.10	249	87.15	1770
39.20	734	57.15	1106	73.15	1887	88.10	1799
44.15	316	60.15	412	74.15	6967	91.05	62
45.20	355	61.15	1906	75.15	20349	92.15	1107
47.15	568	62.15	1830	76.15	1740	93.15	1650
48.15	246	63.15	1357	77.15	266	94.15	4949
49.15	1698	64.25	104	78.20	136	95.15	42904
50.15	8006	67.15	52	79.05	972	96.15	2736
51.15	2487	68.15	4137	80.10	294	104.05	122

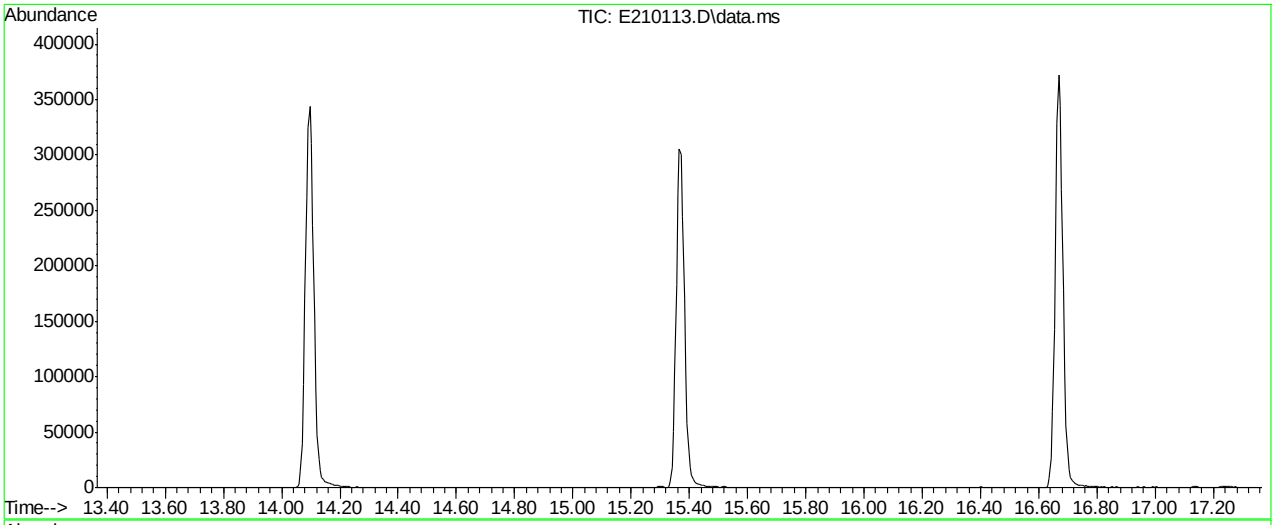
Average of 15.366 to 15.376 min.: E210077.D\data.ms
BFB
Modified:subtracted

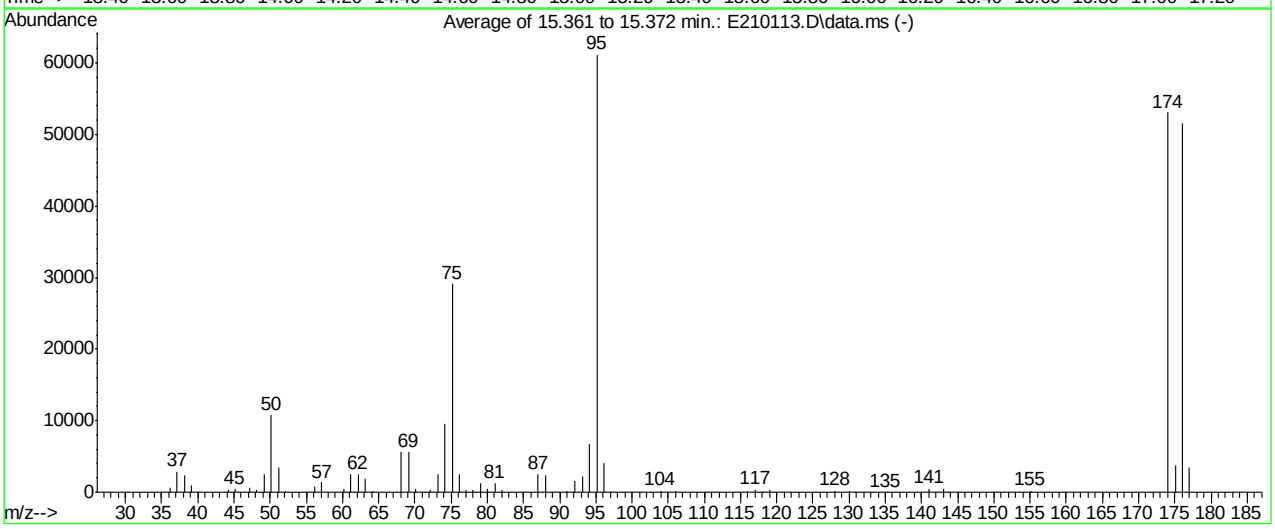
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
106.05	121	174.05	37762				
116.05	122	175.10	2874				
117.05	250	176.05	37445				
118.05	111	177.05	2421				
119.10	230						
128.10	183						
130.05	181						
141.05	433						
143.05	408						
155.10	50						
170.20	108						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\E210113.D Vial: 1
Acq On : 25 Nov 2013 12:59 pm Operator: DivyaP
Sample : BFB Inst : MSE
Misc : MS58394,VE9218,5.0,,100,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\ME9161.M (RTE Integrator)
Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2156, 2157, 2158; Background Corrected with Scan 2147

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	10751	PASS
75	95	30	60	47.5	29074	PASS
95	95	100	100	100.0	61170	PASS
96	95	5	9	6.6	4066	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.7	53045	PASS
175	174	5	9	7.2	3816	PASS
176	174	95	101	97.1	51498	PASS
177	176	5	9	6.6	3397	PASS

E210113.D ME9161.M Tue Nov 26 09:28:41 2013 RPT1

Average of 15.361 to 15.372 min.: E210113.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.15	563	52.10	111	72.10	330	87.05	2526
37.15	2892	56.15	786	73.15	2551	88.05	2416
38.15	2399	57.15	1407	74.15	9554	91.05	140
39.15	926	60.15	551	75.15	29074	92.10	1518
44.15	375	61.15	2472	76.15	2452	93.15	2243
45.15	458	62.15	2558	77.10	344	94.15	6738
47.15	680	63.15	1870	78.05	268	95.15	61170
48.15	337	64.20	172	79.05	1293	96.15	4066
49.15	2456	68.15	5593	80.00	401	97.05	54
50.15	10751	69.15	5622	81.05	1327	104.00	228
51.15	3403	70.10	409	82.00	290	106.00	217

Average of 15.361 to 15.372 min.: E210113.D\data.ms
BFB
Modified:subtracted

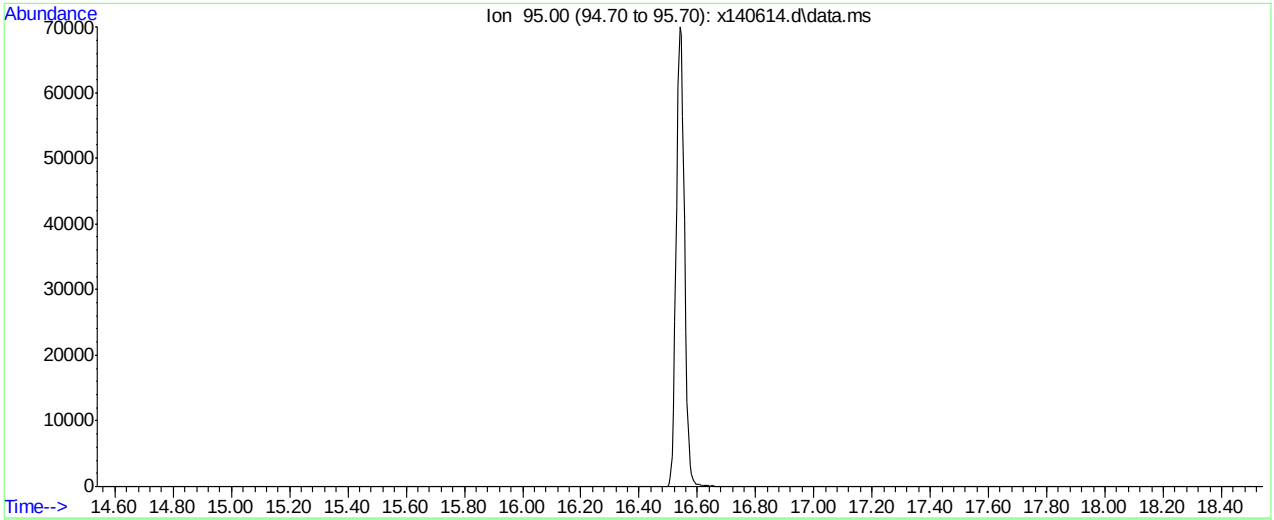
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.00	214	175.05	3816				
117.05	337	176.05	51498				
118.05	67	177.05	3397				
119.00	265						
128.05	201						
130.05	199						
135.05	53						
141.05	542						
143.05	542						
155.10	188						
174.05	53045						

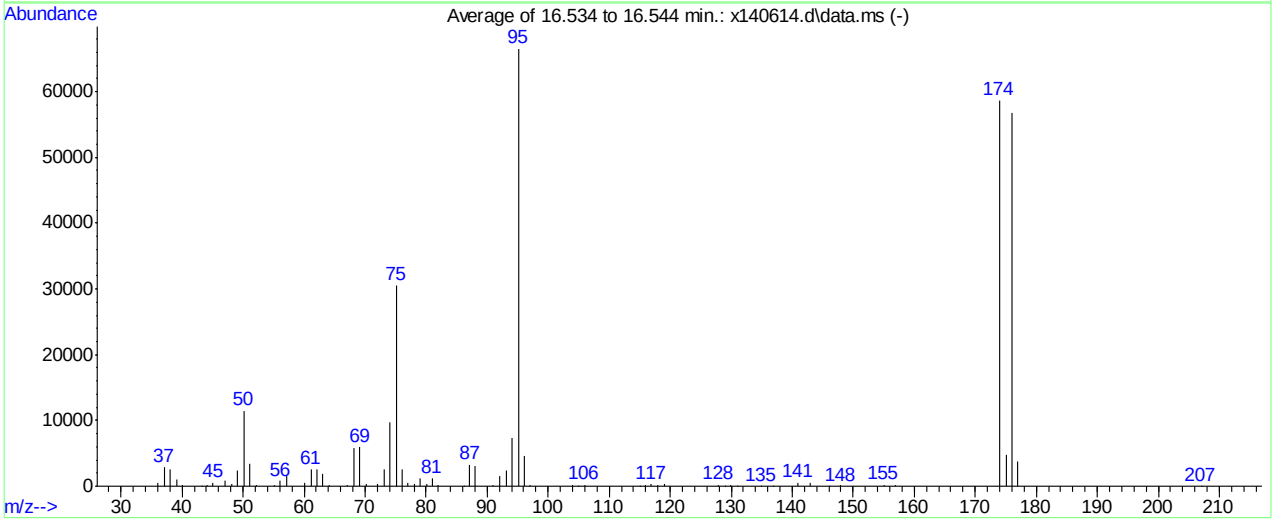
BFB

Data File : C:\msdchem\1\DATA\x140614.d
Acq On : 11 Oct 2013 9:48 am
Sample : bfb
Misc : MS55872,VX6084,5.0,,,,1
MS Integration Params: rteint.p

Vial: 1
Operator: natet
Inst : ACC-VOA-MSX
Multiplr: 1.00

Method : C:\msdchem\1\METHODS\M1B3854.M (RTE Integrator)
Title : method 524, zb624 60mx0.25mmx1.4um





AutoFind: Scans 2515, 2516, 2517; Background Corrected with Scan 2506

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.2	11475	PASS
75	95	30	80	45.9	30568	PASS
95	95	100	100	100.0	66568	PASS
96	95	5	9	6.8	4524	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	88.2	58725	PASS
175	174	5	9	8.2	4805	PASS
176	174	95	101	96.8	56819	PASS
177	176	5	9	6.6	3745	PASS

x140614.d M1B3854.M Mon Oct 14 09:51:31 2013 RPT1

Average of 16.534 to 16.544 min.: x140614.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	598	50.10	11475	67.10	205	79.00	1234
37.10	2931	51.10	3469	68.10	5778	80.05	340
38.10	2485	52.10	156	69.10	5933	81.00	1278
39.10	1014	55.10	179	70.10	412	81.95	258
40.05	108	56.10	849	72.05	351	86.10	35
43.10	34	57.10	1522	73.10	2647	87.10	3256
44.10	198	60.05	550	74.10	9739	88.05	3091
45.10	561	61.10	2598	75.10	30568	90.95	187
47.10	888	62.10	2513	76.10	2576	92.10	1563
48.10	341	63.10	1920	77.05	458	93.10	2431
49.10	2444	64.10	188	78.05	361	94.10	7286

Average of 16.534 to 16.544 min.: x140614.d\data.ms
bfb
Modified:subtracted

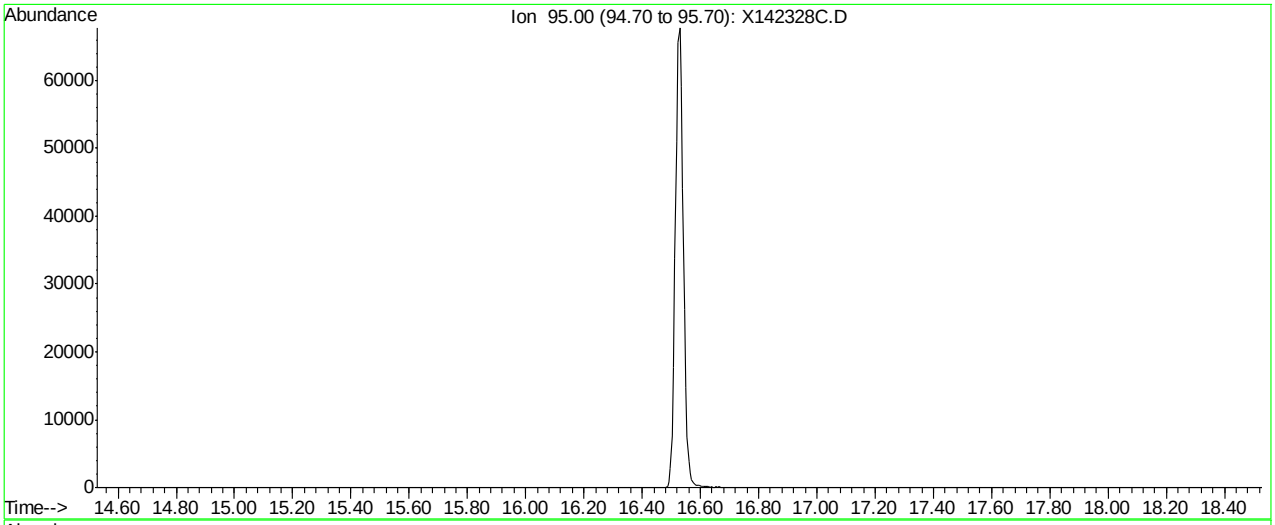
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.10	66568	127.95	248	156.95	119		
96.10	4524	129.00	77	174.00	58725		
97.10	143	129.95	233	175.05	4805		
104.00	203	131.00	72	176.00	56819		
105.00	35	134.90	41	177.00	3745		
106.00	244	136.95	78	207.00	39		
115.10	35	140.95	539				
115.90	174	142.95	515				
116.95	329	146.00	35				
117.95	215	147.95	171				
119.00	296	155.00	185				

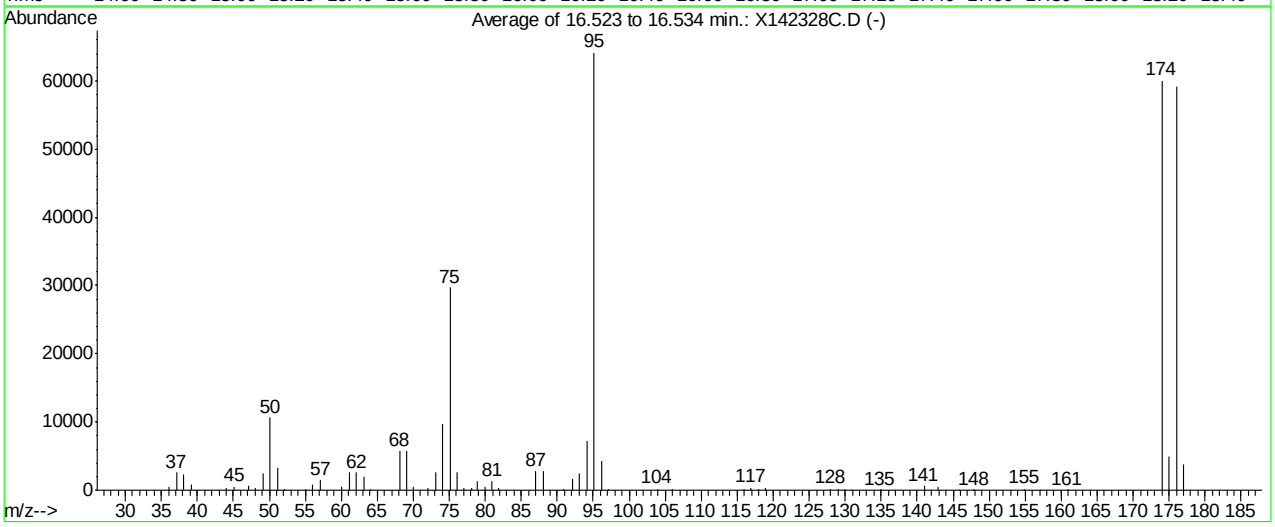
BFB

Data File : C:\MSDCHEM\1\DATA\X142328C.D
Acq On : 24 Nov 2013 8:45 am
Sample : BFB
Misc : MS59034,VX6159,5.0,,,,1
MS Integration Params: RTEINT.P

Vial: 1
Operator: natet
Inst : ACC-VOA-M
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MX6084.M (RTE Integrator)
Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2513, 2514, 2515; Background Corrected with Scan 2503

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.6	10678	PASS
75	95	30	60	46.3	29736	PASS
95	95	100	100	100.0	64178	PASS
96	95	5	9	6.6	4253	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	93.5	60026	PASS
175	174	5	9	8.2	4911	PASS
176	174	95	101	98.6	59170	PASS
177	176	5	9	6.5	3837	PASS

X142328C.D MX6084.M Mon Nov 25 14:20:02 2013 GCMSX

Average of 16.523 to 16.534 min.: X142328C.D
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	482	52.05	177	70.05	443	81.90	275
37.10	2620	55.05	140	72.10	328	87.05	2849
38.10	2345	56.05	781	73.10	2579	88.05	2735
39.15	880	57.10	1530	74.10	9785	90.95	232
44.05	340	60.05	536	75.10	29736	92.05	1703
45.10	499	61.10	2586	76.10	2629	93.10	2456
47.10	723	62.10	2594	77.05	343	94.10	7245
48.05	357	63.10	1954	78.10	281	95.10	64178
49.10	2496	64.10	159	78.95	1379	96.10	4253
50.10	10678	68.10	5732	80.00	446	97.10	123
51.10	3269	69.10	5723	80.95	1336	103.95	244

Average of 16.523 to 16.534 min.: X142328C.D
BFB
Modified:subtracted

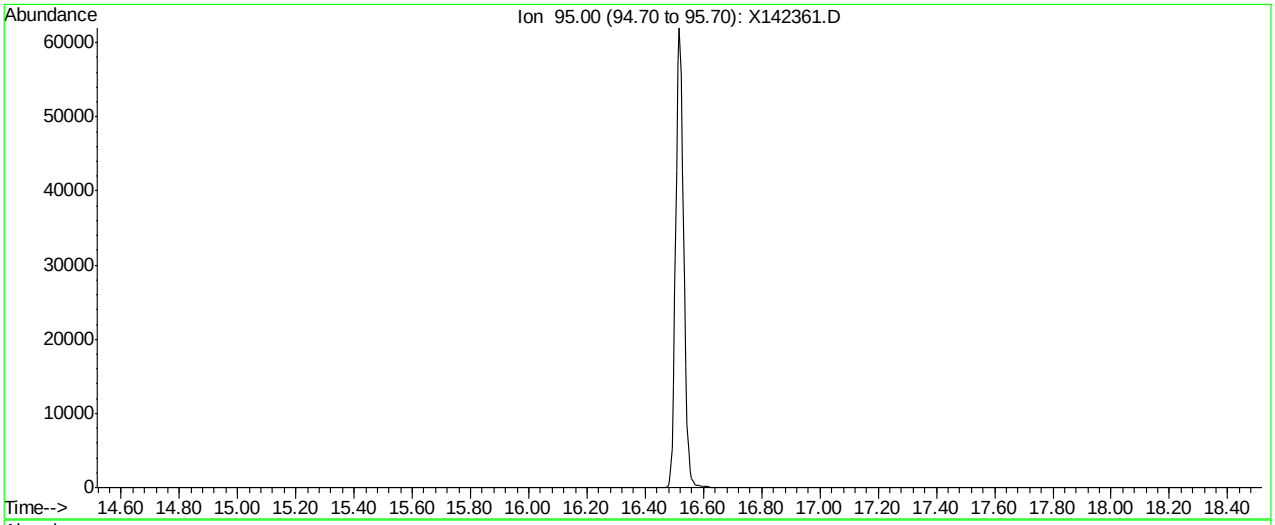
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.95	236	140.95	600	177.00	3837		
115.95	219	142.00	47	177.90	42		
116.95	368	142.95	545				
117.95	216	145.90	75				
118.95	278	147.95	147				
127.95	241	154.95	177				
129.00	94	157.00	86				
130.00	227	160.95	109				
130.90	35	174.00	60026				
134.95	117	175.00	4911				
136.85	81	176.00	59170				

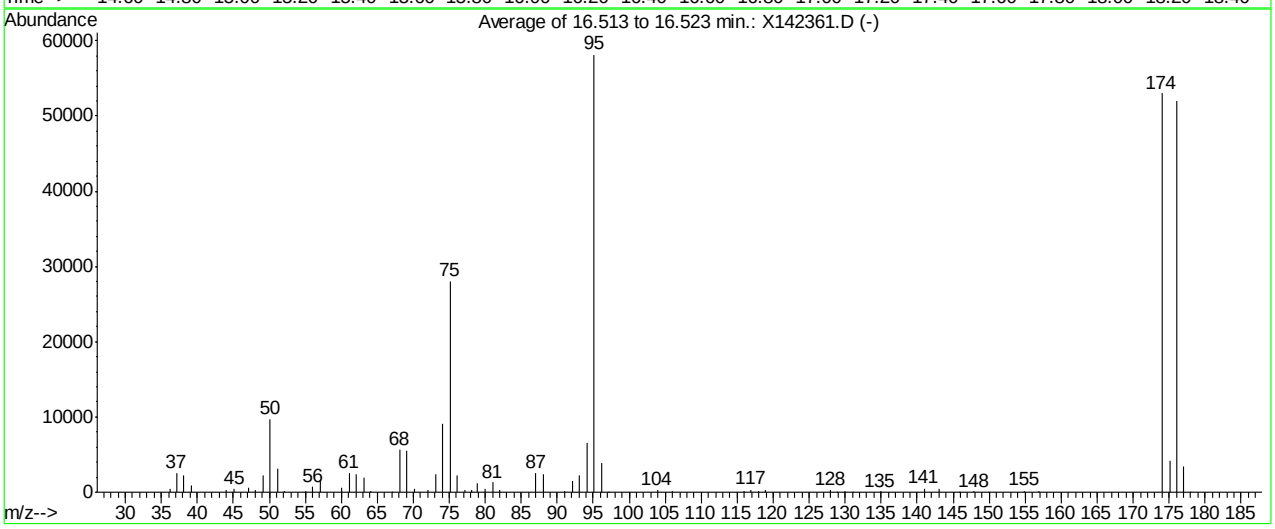
BFB

Data File : C:\MSDCHEM\1\DATA\X142361.D
Acq On : 25 Nov 2013 12:24 pm
Sample : bfb
Misc : MS58857,VX6160,5.0,,,,1
MS Integration Params: RTEINT.P

Vial: 1
Operator: natet
Inst : ACC-VOA-M
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MX6084.M (RTE Integrator)
Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um





AutoFind: Scans 2511, 2512, 2513; Background Corrected with Scan 2501

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	9754	PASS
75	95	30	60	48.2	28064	PASS
95	95	100	100	100.0	58168	PASS
96	95	5	9	6.7	3919	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.1	52973	PASS
175	174	5	9	8.0	4225	PASS
176	174	95	101	98.2	51994	PASS
177	176	5	9	6.5	3367	PASS

X142361.D MX6084.M Tue Nov 26 12:08:29 2013 GCMSX

Average of 16.513 to 16.523 min.: X142361.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.15	514	52.05	105	69.10	5574	81.00	1339
37.10	2570	55.05	176	70.10	413	81.95	269
38.10	2190	56.05	692	72.05	319	87.05	2554
39.10	825	57.10	1429	73.10	2340	88.00	2358
44.05	240	60.05	562	74.10	9059	91.00	183
45.10	433	61.10	2573	75.10	28064	92.05	1485
47.10	642	62.10	2436	76.10	2214	93.10	2222
48.10	350	63.10	1916	77.10	374	94.10	6494
49.10	2176	64.10	140	78.10	263	95.10	58168
50.10	9754	67.00	62	78.95	1271	96.10	3919
51.10	3089	68.10	5617	80.00	391	97.10	47

Average of 16.513 to 16.523 min.: X142361.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.95	257	141.00	522	177.90	34		
105.95	182	143.00	509				
115.95	203	145.90	37				
116.95	347	147.90	114				
117.95	158	149.90	33				
118.95	278	154.95	159				
127.95	230	156.95	110				
128.90	33	174.00	52973				
129.95	217	175.05	4225				
131.00	42	176.00	51994				
134.95	129	177.00	3367				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208761.D
Acq On : 22 Oct 2013 10:51 pm
Operator : DivyaP
Sample : jb25269d-11c
Misc : MS55943,VE9161,5.0,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 23 09:08:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.655	65	71817	500.00	ug/L	0.01
5) pentafluorobenzene	9.857	168	128954	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.772	114	181455	50.00	ug/L	0.00
97) chlorobenzene-d5	14.104	117	170828	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.672	152	97830	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.909	113	706	0.57	ug/L	0.01
Spiked Amount 50.000	Range 59 - 130		Recovery = 1.14%#			
61) 1,2-dichloroethane-d4 (s)	10.327	65	1013	0.66	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 1.32%#			
89) toluene-d8 (s)	12.477	98	2904	0.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 1.18%#			
116) 4-bromofluorobenzene (s)	15.375	95	1705	0.82	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 1.64%#			

Target Compounds						Qvalue
16) vinyl chloride	4.872	62	767	0.42	ug/L	83
28) 2-chloropropane	6.792	43	1292	0.50	ug/L #	50
30) 1,1-dichloroethene	7.043	96	561	0.46	ug/L #	55
33) allyl chloride	7.524	41	1324	0.49	ug/L	90
35) iodomethane	7.315	142	829	0.40	ug/L #	40
37) carbon disulfide	7.477	76	2150	0.49	ug/L	67
38) methylene chloride	7.707	84	775	0.53	ug/L	87
41) methyl tert butyl ether	8.063	73	2064	0.53	ug/L	83
42) trans-1,2-dichloroethene	8.110	96	792	0.58	ug/L	70
43) di-isopropyl ether	8.643	45	3005	0.60	ug/L	94
44) ethyl tert-butyl ether	9.104	59	2347	0.52	ug/L	94
46) 1,1-dichloroethane	8.638	63	1163	0.49	ug/L	70
47) chloroprene	8.758	53	1317	0.62	ug/L	72
48) acrylonitrile	8.016	53	1714	2.85	ug/L	87
52) cis-1,2-dichloroethene	9.365	96	852	0.59	ug/L	86
54) propionitrile	9.376	54	1507	6.29	ug/L	77
58) t-butyl formate	9.757	59	765	0.54	ug/L #	83
59) Iso-octane	10.474	57	2746	0.52	ug/L #	77
64) 1,1,1-trichloroethane	9.998	97	996	0.51	ug/L #	69
65) tert-amyl methyl ether	10.469	73	2382	0.57	ug/L	87
71) tert-amyl ethyl ether	11.316	87	836	0.43	ug/L #	60
72) carbon tetrachloride	10.228	117	689	0.44	ug/L #	79
73) 1,1-dichloropropene	10.176	75	675	0.40	ug/L #	39
75) benzene	10.427	78	2792	0.53	ug/L	73
78) 1,2-dichloroethane	10.411	62	644	0.41	ug/L #	49
80) trichloroethene	11.143	95	875	0.65	ug/L	79
82) 2-chloroethyl vinyl ether	11.912	63	1948	2.22	ug/L	92
85) 1,2-dichloropropane	11.389	63	734	0.53	ug/L #	37
86) dibromomethane	11.541	93	262	0.36	ug/L #	41
87) bromodichloromethane	11.672	83	1223	0.65	ug/L	91
88) cis-1,3-dichloropropene	12.148	75	922	0.44	ug/L	69
91) toluene	12.556	92	1379	0.44	ug/L	97
93) trans-1,3-dichloropropene	12.739	75	825	0.43	ug/L #	48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208761.D
Acq On : 22 Oct 2013 10:51 pm
Operator : DivyaP
Sample : jb25269d-11c
Misc : MS55943,VE9161,5.0,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 23 09:08:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

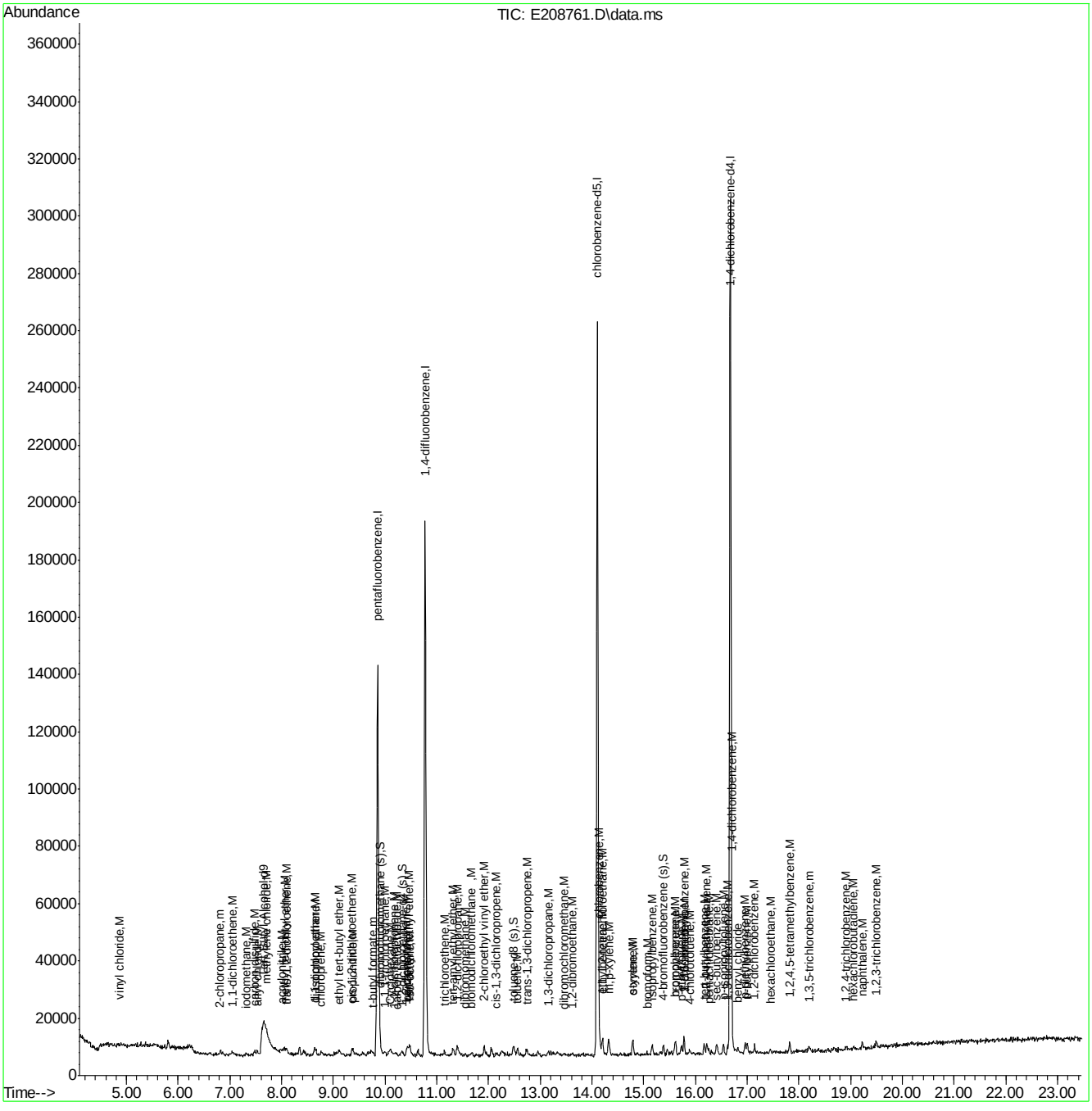
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
100) 1,3-dichloropropane	13.157	76	832	0.44 ug/L	73
103) dibromochloromethane	13.460	129	660	0.49 ug/L	80
104) 1,2-dibromoethane	13.617	107	450	0.39 ug/L #	61
106) chlorobenzene	14.135	112	1617	0.47 ug/L	91
107) 1,1,1,2-tetrachloroethane	14.198	131	553	0.43 ug/L #	67
108) ethylbenzene	14.203	91	3237	0.52 ug/L	87
109) m,p-xylene	14.323	106	1922	0.84 ug/L	93
110) o-xylene	14.778	106	1030	0.45 ug/L #	64
112) styrene	14.794	104	1559	0.40 ug/L	95
113) bromoform	15.071	173	388	0.39 ug/L #	36
115) isopropylbenzene	15.165	105	2941	0.50 ug/L	95
117) bromobenzene	15.610	156	629	0.41 ug/L #	67
121) n-propylbenzene	15.615	91	3558	0.51 ug/L	96
122) p-ethyltoluene	15.725	105	2943	0.51 ug/L	86
123) 2-chlorotoluene	15.783	126	586	0.43 ug/L #	77
124) 4-chlorotoluene	15.892	91	2401	0.54 ug/L	86
125) 1,3,5-trimethylbenzene	15.777	105	2797	0.55 ug/L	83
126) tert-butylbenzene	16.170	119	2242	0.51 ug/L	96
127) pentachloroethane	16.253	167	451	0.44 ug/L #	58
128) 1,2,4-trimethylbenzene	16.217	105	2805	0.54 ug/L	86
129) sec-butylbenzene	16.410	105	3215	0.50 ug/L	98
130) 1,3-dichlorobenzene	16.614	146	1336	0.46 ug/L	96
131) p-isopropyltoluene	16.536	119	2584	0.49 ug/L	90
132) 1,4-dichlorobenzene	16.703	146	1481	0.48 ug/L	80
133) benzyl chloride	16.818	91	1895	0.62 ug/L #	87
134) p-diethylbenzene	16.965	119	1502	0.46 ug/L	97
135) 1,2-dichlorobenzene	17.137	146	1392	0.49 ug/L	96
136) n-butylbenzene	16.991	92	1275	0.47 ug/L #	54
137) 1,2,4,5-tetramethylben...	17.822	119	2478	0.51 ug/L	90
139) 1,3,5-trichlorobenzene	18.194	180	951	0.44 ug/L #	56
140) 1,2,4-trichlorobenzene	18.915	180	771	0.43 ug/L #	66
141) hexachlorobutadiene	19.051	225	404	0.40 ug/L	48
142) naphthalene	19.224	128	2599	0.59 ug/L	77
144) 1,2,3-trichlorobenzene	19.496	180	737	0.46 ug/L	90
145) hexachloroethane	17.446	119	463	0.48 ug/L #	80
146) Cyclohexane	10.108	84	1074	0.54 ug/L #	1

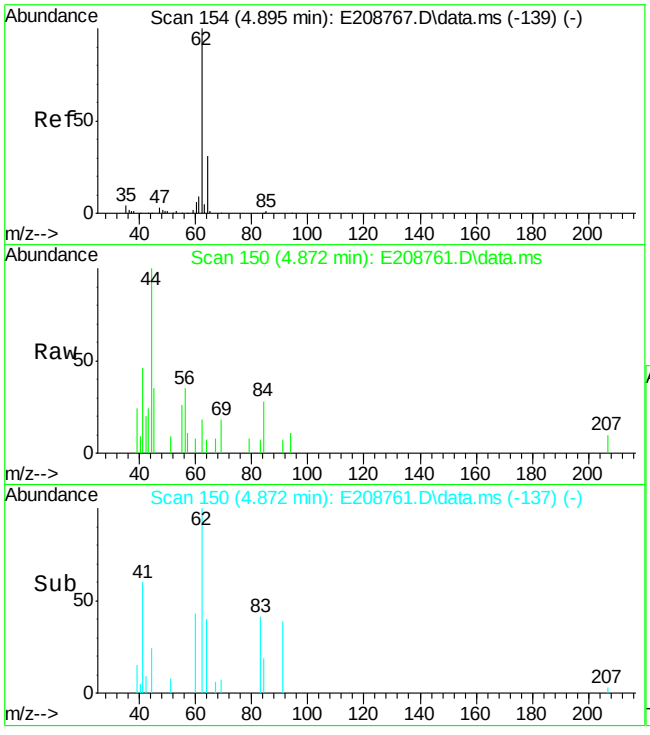
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208761.D
Acq On : 22 Oct 2013 10:51 pm
Operator : DivyaP
Sample : jb25269d-11c
Misc : MS55943,VE9161,5.0,,100,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 23 09:08:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

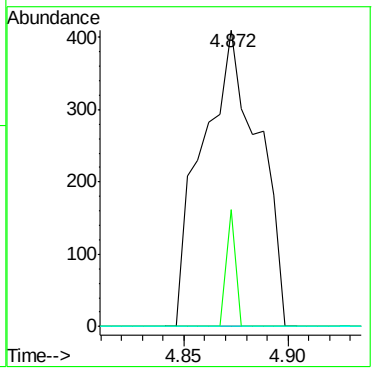


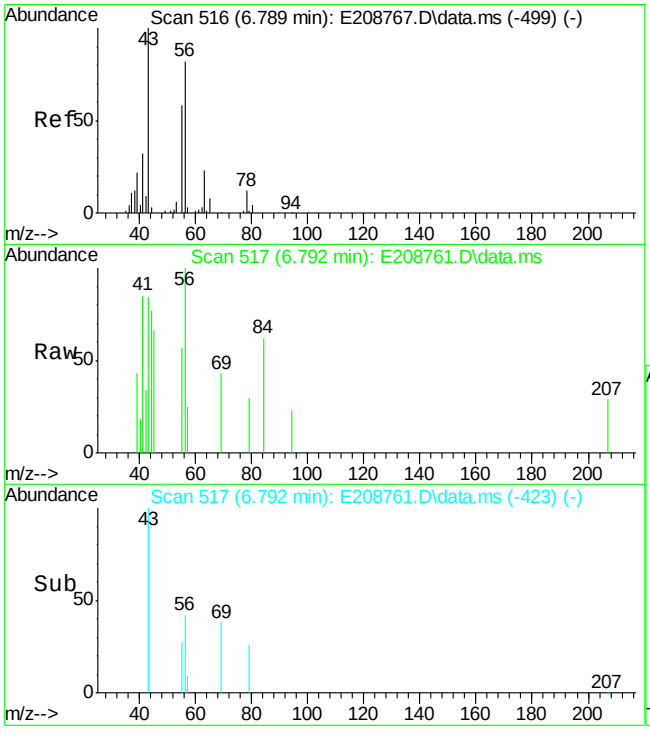


#16
vinyl chloride
Concen: 0.42 ug/L
RT: 4.872 min Scan# 150
Delta R.T. -0.032 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 62 Resp: 767

Ion	Ratio	Lower	Upper
62	100		
64	39.5	1.0	61.0
61	0.0	0.0	38.7

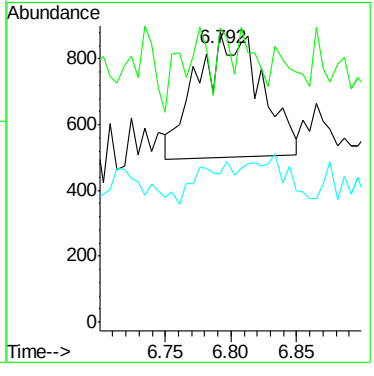


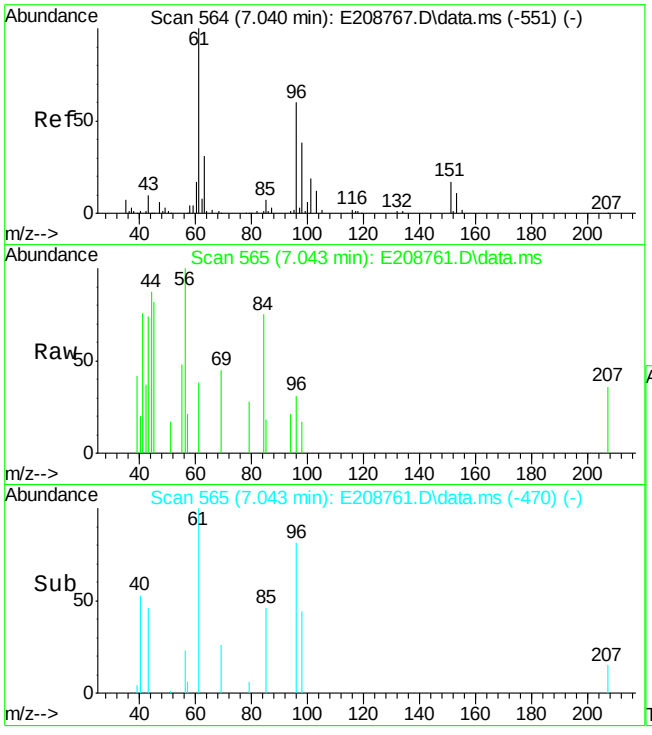


#28
2-chloropropane
Concen: 0.50 ug/L
RT: 6.792 min Scan# 517
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 43 Resp: 1292

Ion	Ratio	Lower	Upper
43	100		
41	10.8	30.4	45.6#
39	0.0	24.6	36.8#

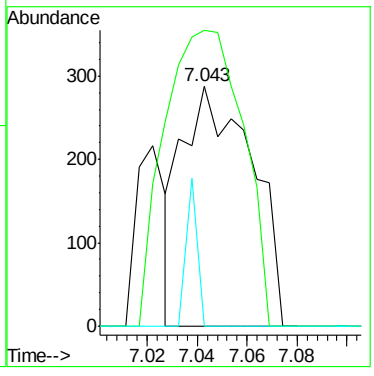


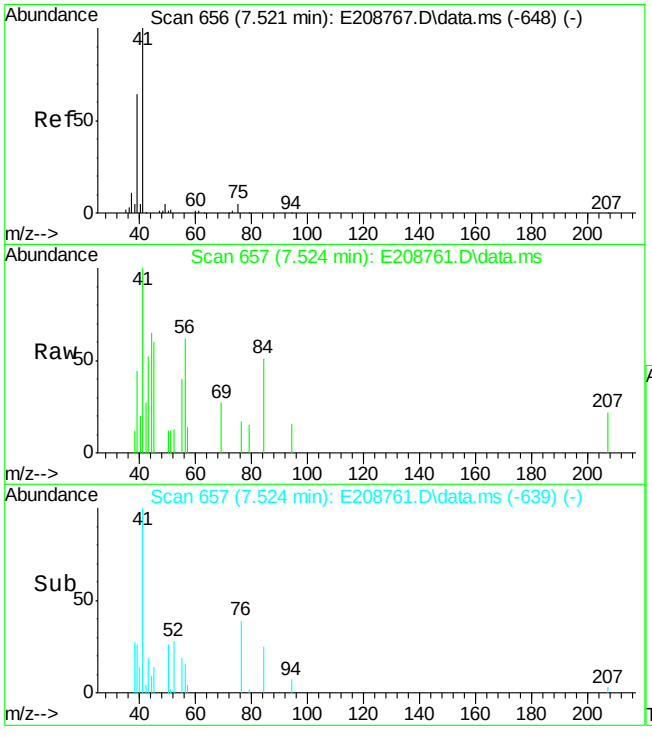


#30
1,1-dichloroethene
Concen: 0.46 ug/L
RT: 7.043 min Scan# 565
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 96 Resp: 561

Ion	Ratio	Lower	Upper
96	100		
61	123.3	141.5	201.5#
63	0.0	24.4	84.4#

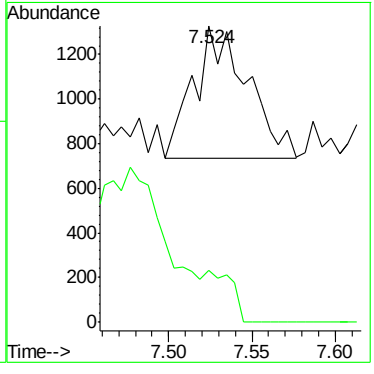


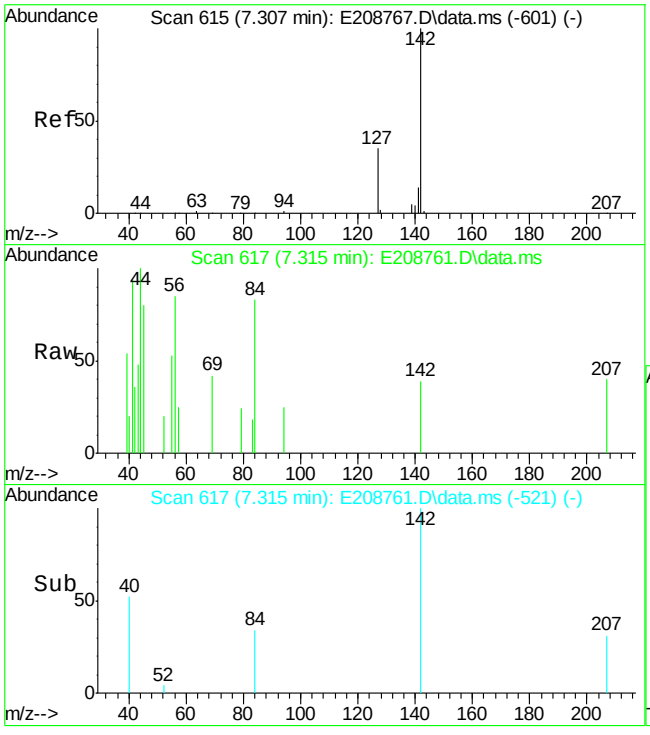


#33
allyl chloride
Concen: 0.49 ug/L
RT: 7.524 min Scan# 657
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 41 Resp: 1324

Ion	Ratio	Lower	Upper
41	100		
76	39.2	32.1	59.5

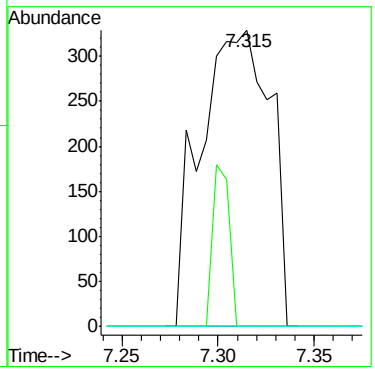


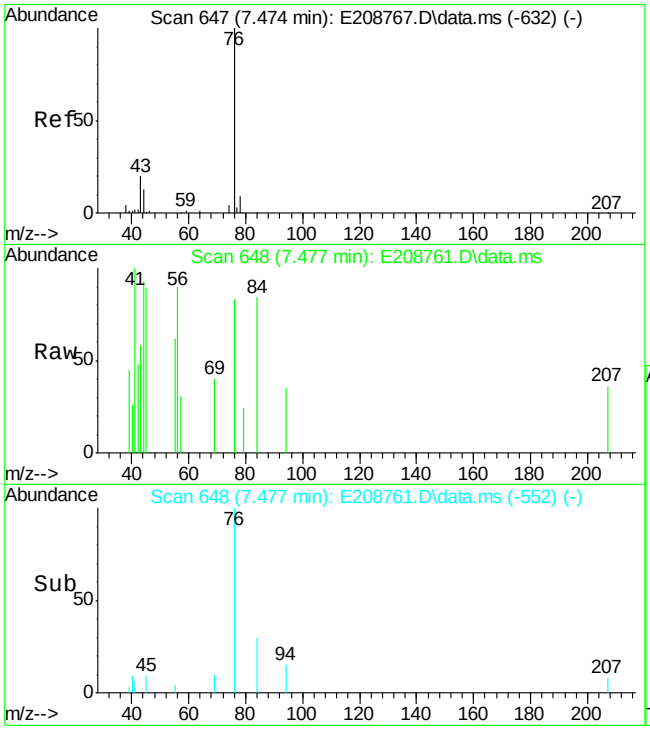


#35
iodomethane
Concen: 0.40 ug/L
RT: 7.315 min Scan# 617
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:142 Resp: 829

Ion	Ratio	Lower	Upper
142	100		
127	0.0	14.5	74.5#
141	0.0	0.0	45.7

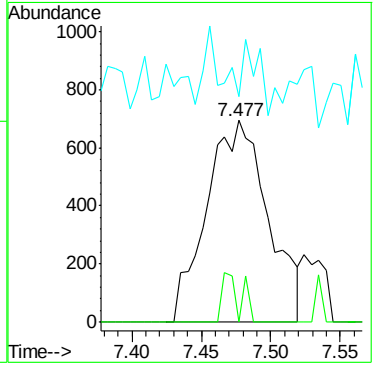




#37
carbon disulfide
Concen: 0.49 ug/L
RT: 7.477 min Scan# 648
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 76 Resp: 2150

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	36.9
44	0.0	0.0	46.3



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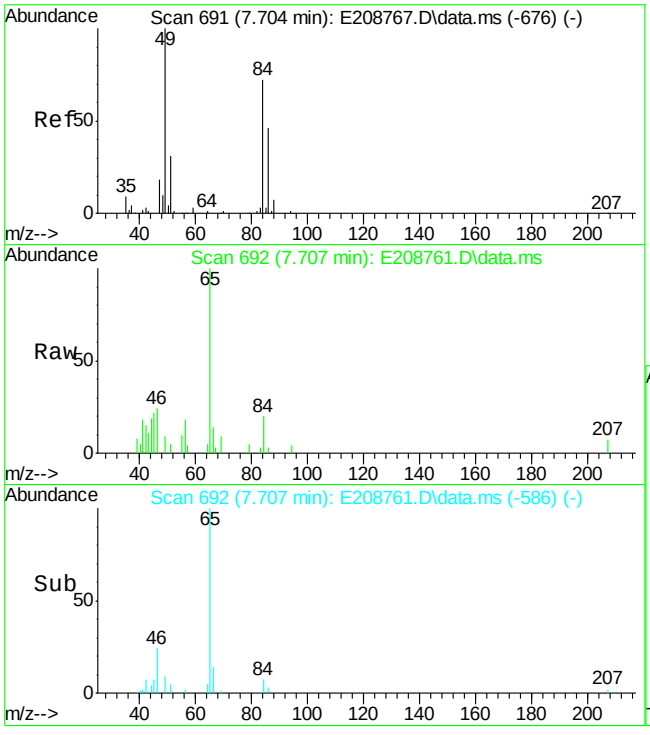
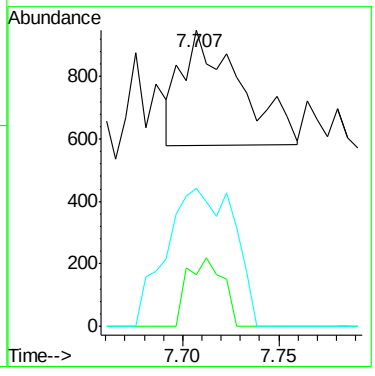
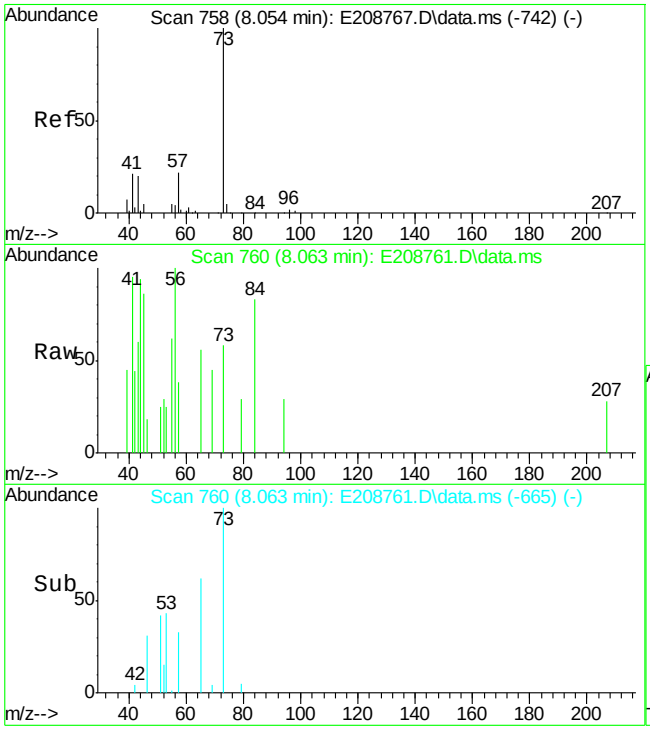


#38
methylene chloride
Concen: 0.53 ug/L
RT: 7.707 min Scan# 692
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 84 Resp: 775

Ion	Ratio	Lower	Upper
84	100		
86	46.8	45.8	85.2
49	124.2	93.3	173.3

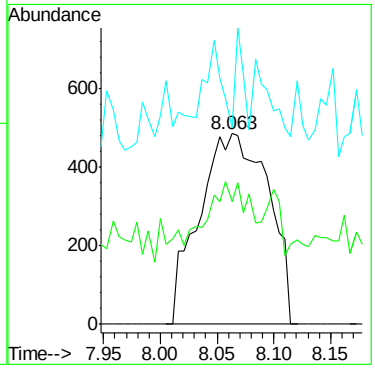




#41
methyl tert butyl ether
Concen: 0.53 ug/L
RT: 8.063 min Scan# 760
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 73 Resp: 2064

Ion	Ratio	Lower	Upper
73	100		
57	18.8	0.0	51.9
43	7.7	0.0	51.2



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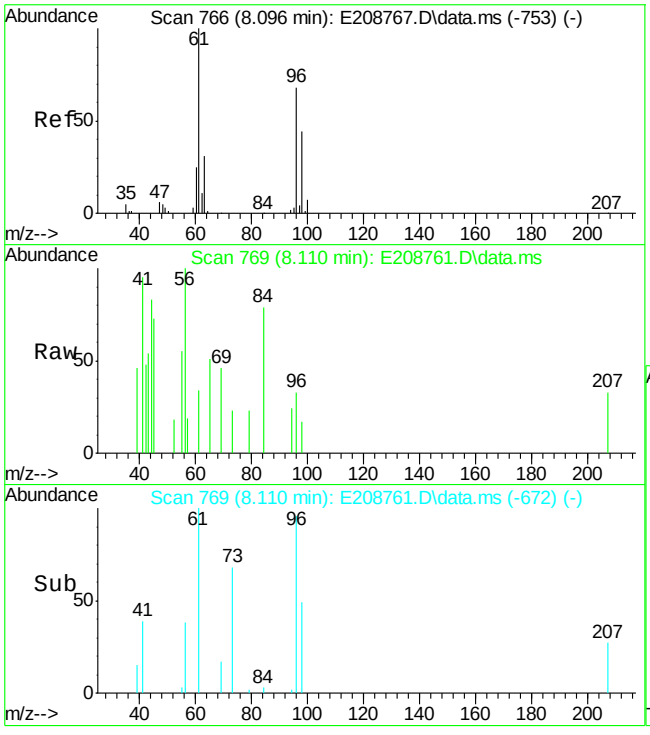
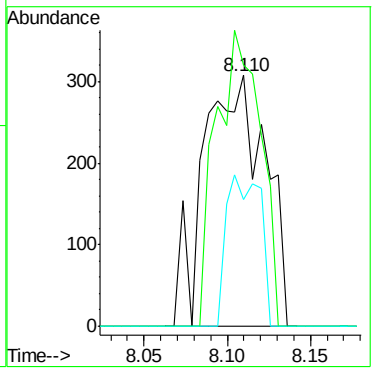
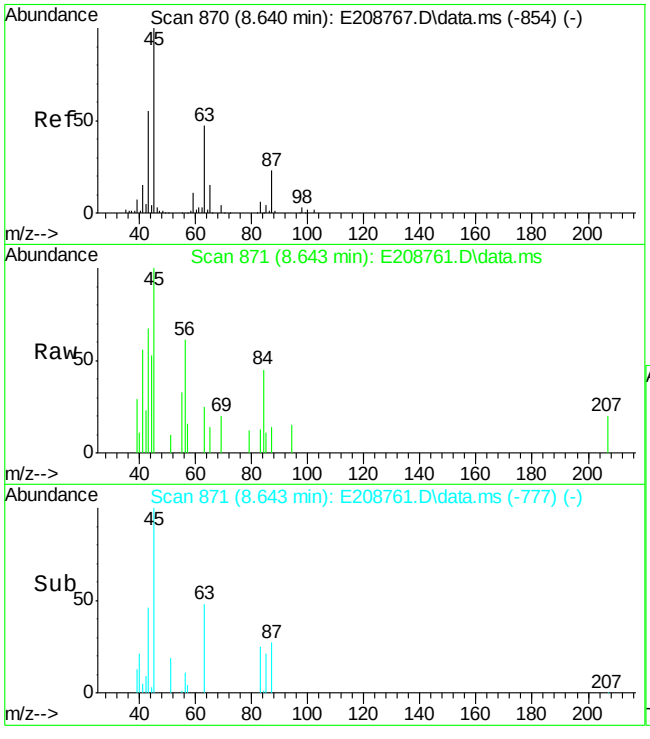


#42
trans-1,2-dichloroethene
Concen: 0.58 ug/L
RT: 8.110 min Scan# 769
Delta R.T. 0.010 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 96 Resp: 792

Ion	Ratio	Lower	Upper
96	100		
61	103.9	103.3	191.9
98	50.6	45.2	84.0

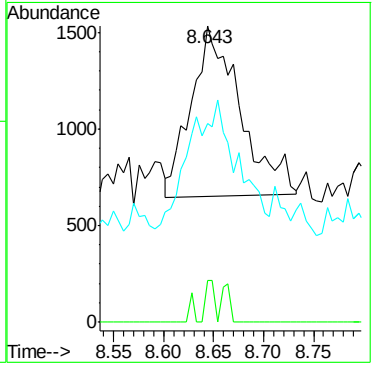




#43
di-isopropyl ether
Concen: 0.60 ug/L
RT: 8.643 min Scan# 871
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 45 Resp: 3005

Ion	Ratio	Lower	Upper
45	100		
87	25.5	0.0	57.6
43	53.6	28.6	88.6



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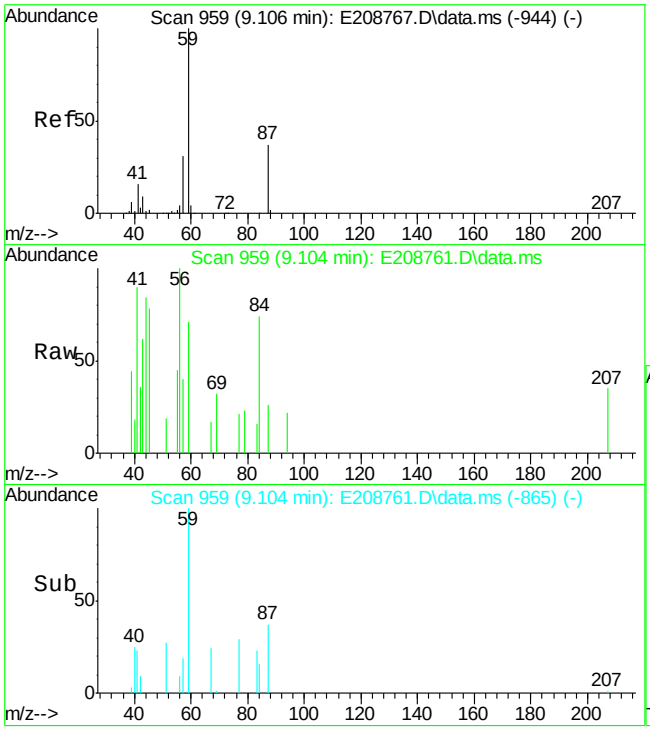
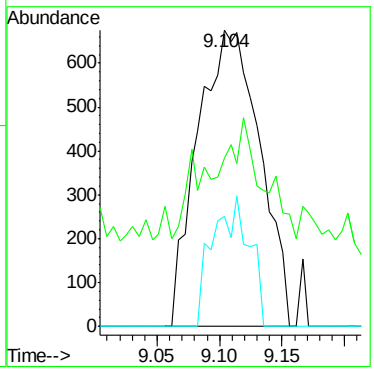
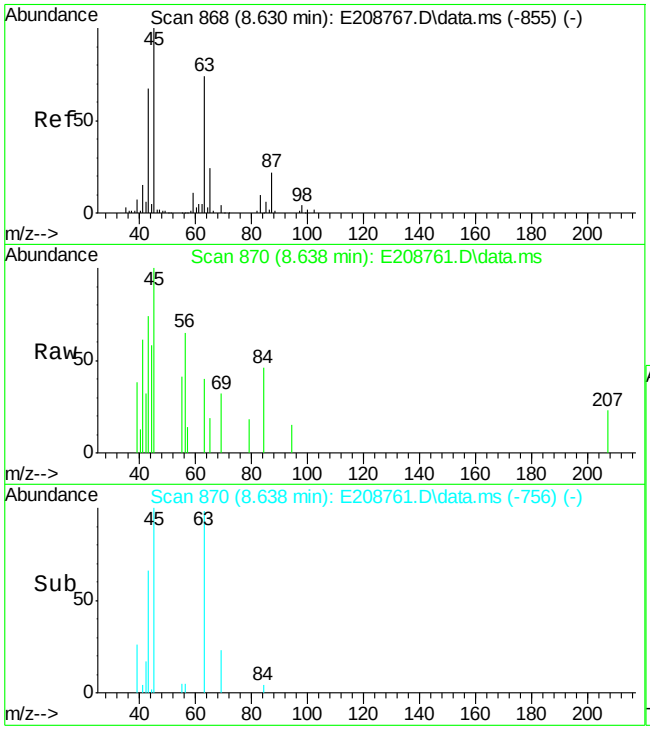


#44
ethyl tert-butyl ether
Concen: 0.52 ug/L
RT: 9.104 min Scan# 959
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 59 Resp: 2347

Ion	Ratio	Lower	Upper
59	100		
57	27.4	0.9	60.9
87	37.2	10.9	70.9

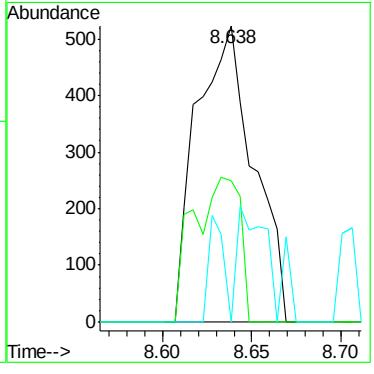




#46
1,1-dichloroethane
Concen: 0.49 ug/L
RT: 8.638 min Scan# 870
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 63 Resp: 1163

Ion	Ratio	Lower	Upper
63	100		
65	47.6	1.9	61.9
83	0.0	0.0	43.1



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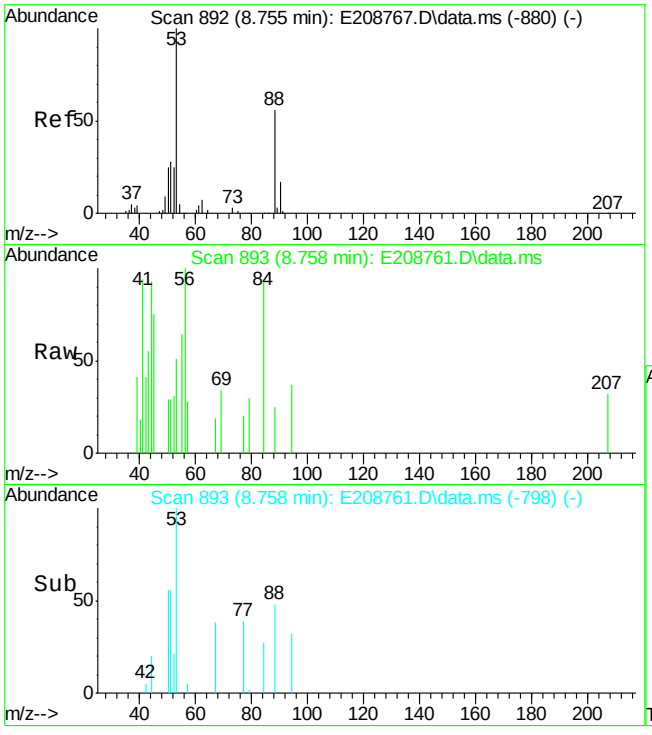
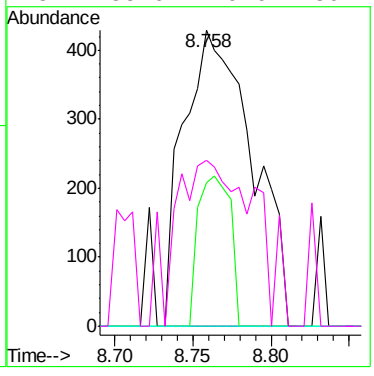
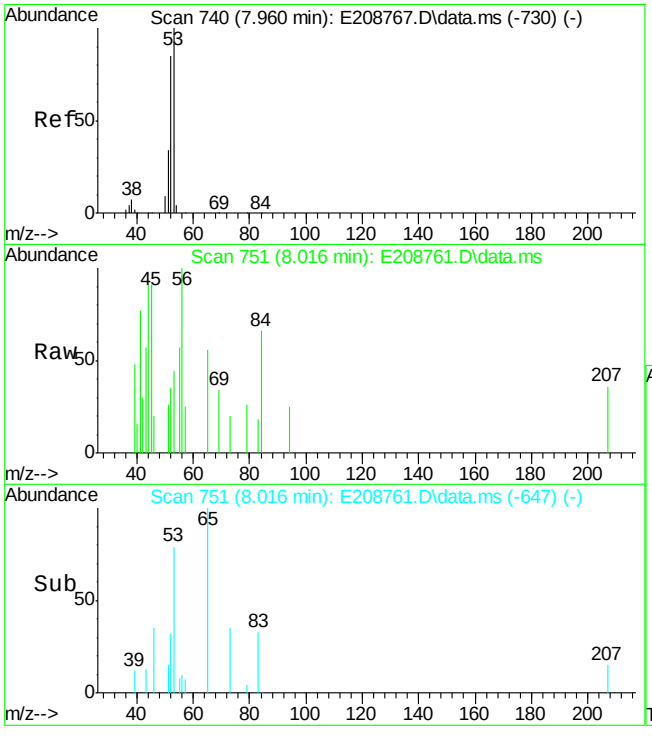


#47
chloroprene
Concen: 0.62 ug/L
RT: 8.758 min Scan# 893
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 53 Resp: 1317

Ion	Ratio	Lower	Upper
53	100		
88	48.5	27.8	87.8
90	0.0	0.0	48.1
51	55.9	0.0	59.4

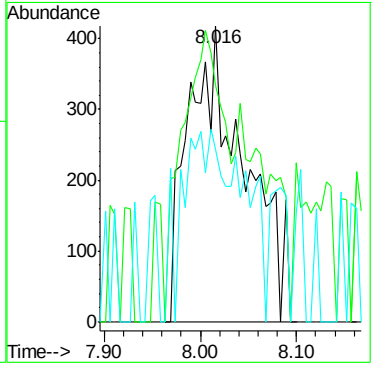




#48
acrylonitrile
Concen: 2.85 ug/L
RT: 8.016 min Scan# 751
Delta R.T. 0.046 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 53 Resp: 1714

Ion	Ratio	Lower	Upper
53	100		
52	79.9	52.0	112.0
51	58.4	5.6	65.6



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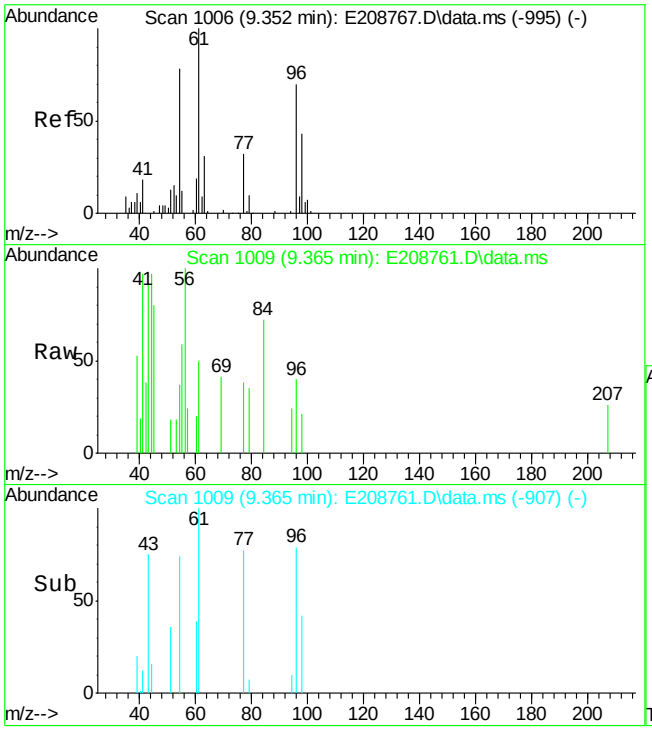
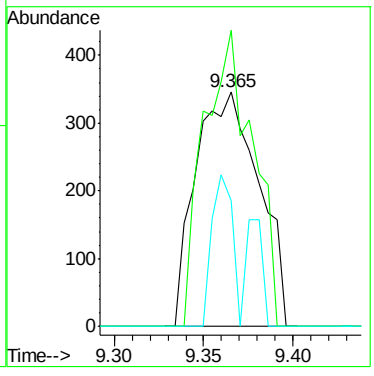
ACCUTEST LABORATORIES JB53758

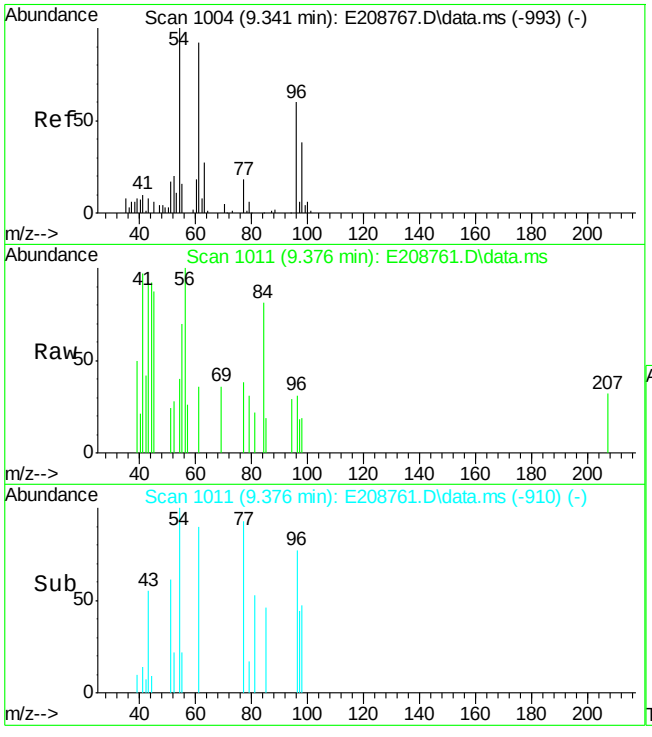


#52
cis-1,2-dichloroethene
Concen: 0.59 ug/L
RT: 9.365 min Scan# 1009
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 96 Resp: 852

Ion	Ratio	Lower	Upper
96	100		
61	126.3	113.9	173.9
98	53.5	34.7	94.7

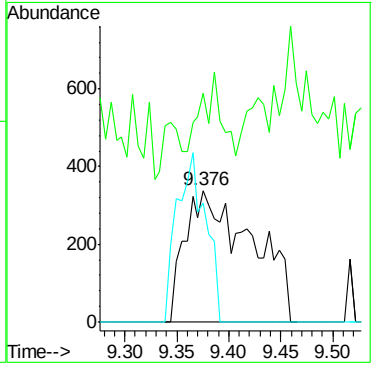




#54
propionitrile
Concen: 6.29 ug/L
RT: 9.376 min Scan# 1011
Delta R.T. 0.031 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 54 Resp: 1507

Ion	Ratio	Lower	Upper
54	100		
55	25.1	0.0	45.7
61	90.0	40.6	100.6



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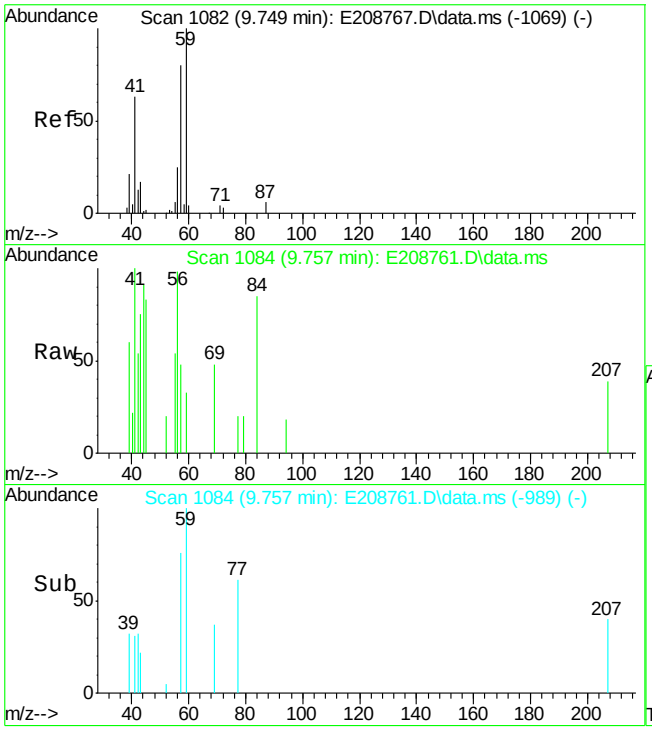
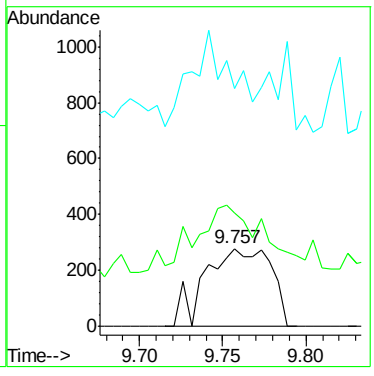
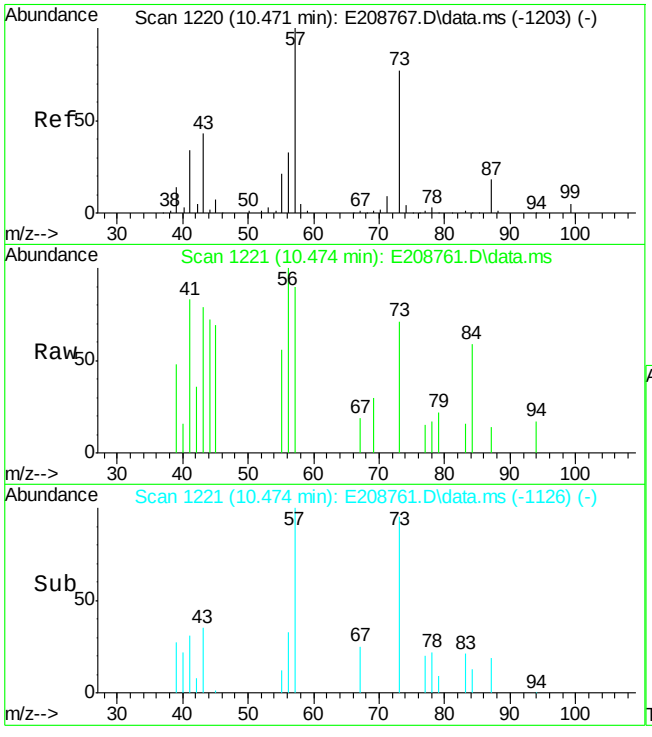


#58
t-butyl formate
Concen: 0.54 ug/L
RT: 9.757 min Scan# 1084
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 59 Resp: 765

Ion	Ratio	Lower	Upper
59	100		
57	102.9	55.0	102.2#
41	79.7	59.8	111.0

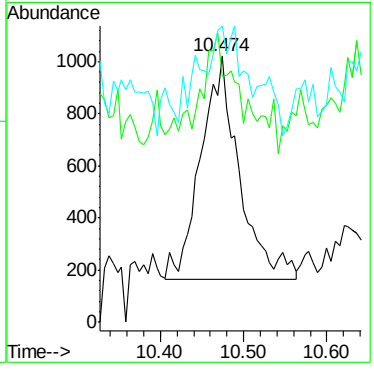




#59
Iso-octane
Concen: 0.52 ug/L
RT: 10.474 min Scan# 1221
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 57 Resp: 2746

Ion	Ratio	Lower	Upper
57	100		
41	52.4	26.8	49.8#
56	48.1	24.1	44.8#



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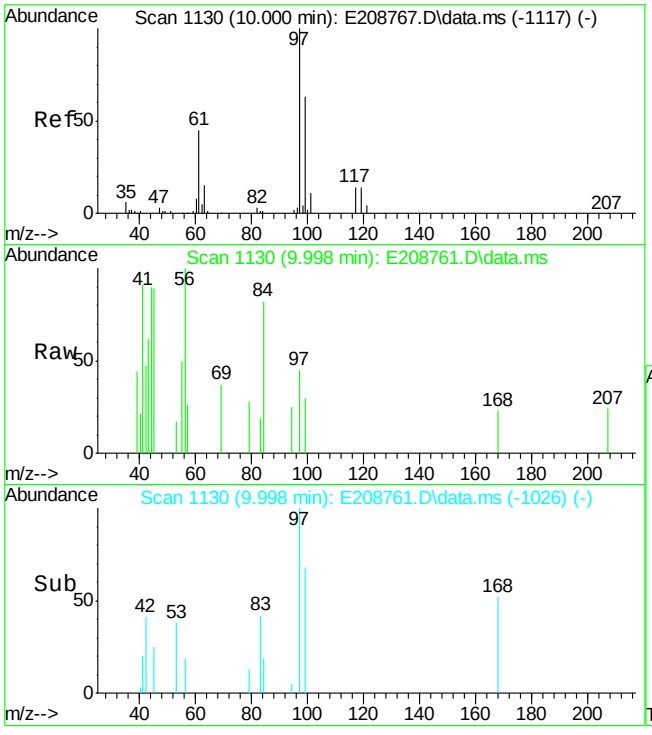
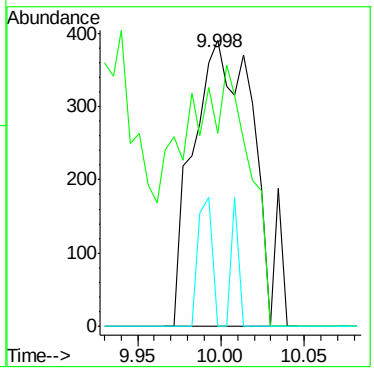
ACCUTEST LABORATORIES JB53758

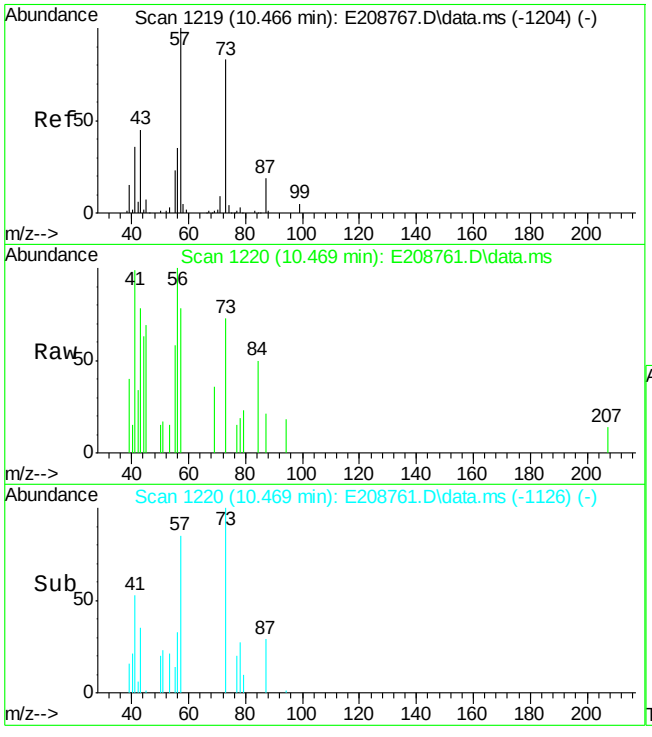


#64
1,1,1-trichloroethane
Concen: 0.51 ug/L
RT: 9.998 min Scan# 1130
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 97 Resp: 996

Ion	Ratio	Lower	Upper
97	100		
99	67.5	34.2	94.2
61	0.0	15.1	75.1#

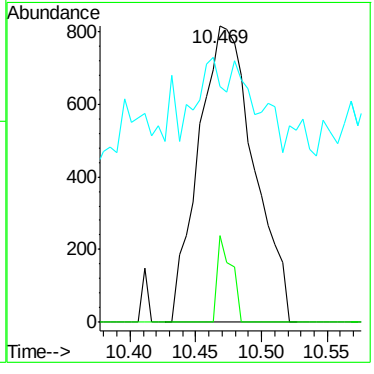




#65
tert-amyl methyl ether
Concen: 0.57 ug/L
RT: 10.469 min Scan# 1220
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 73 Resp: 2382

Ion	Ratio	Lower	Upper
73	100		
87	29.3	0.0	54.4
55	18.4	0.0	57.0



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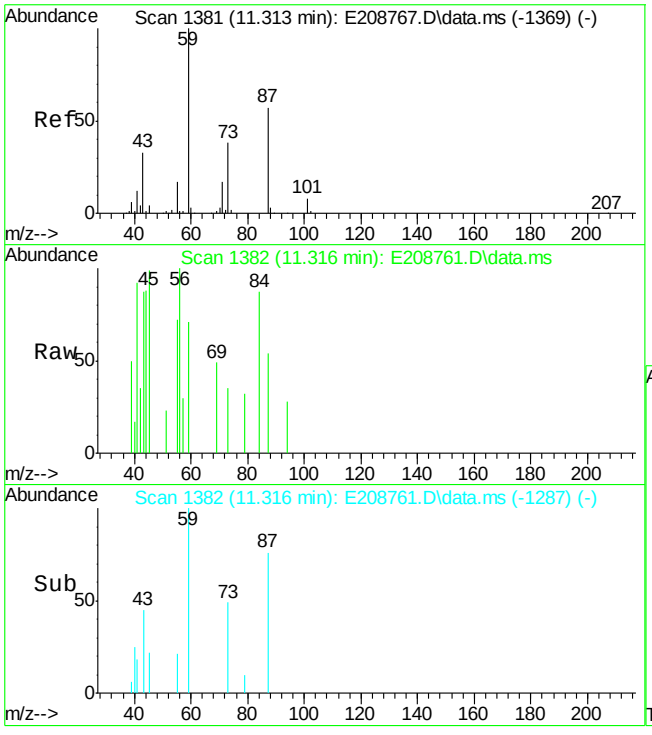
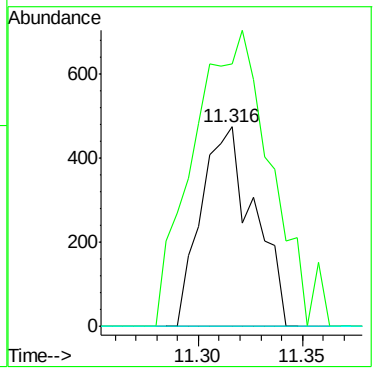
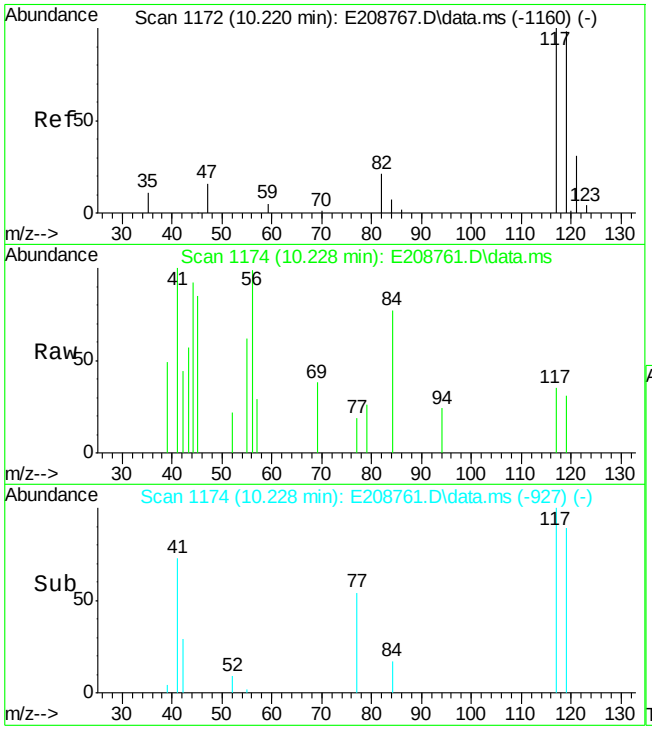


#71
tert-amyl ethyl ether
Concen: 0.43 ug/L
RT: 11.316 min Scan# 1382
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 87 Resp: 836

Ion	Ratio	Lower	Upper
87	100		
59	217.6	114.2	212.2#
101	0.0	10.2	19.0#

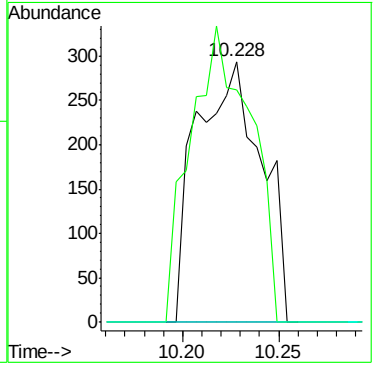




#72
carbon tetrachloride
Concen: 0.44 ug/L
RT: 10.228 min Scan# 1174
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:117 Resp: 689

Ion	Ratio	Lower	Upper
117	100		
119	89.1	68.6	128.6
121	0.0	0.7	60.7#



7.7.1

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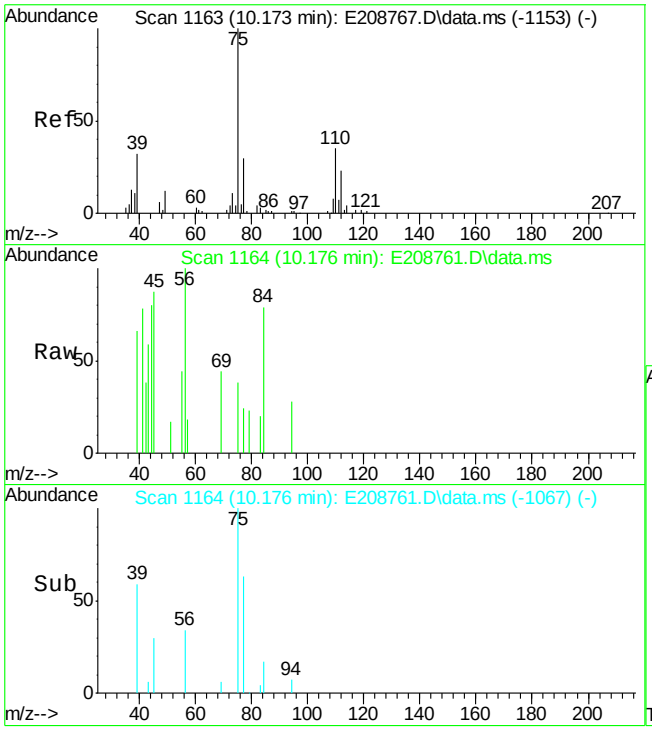
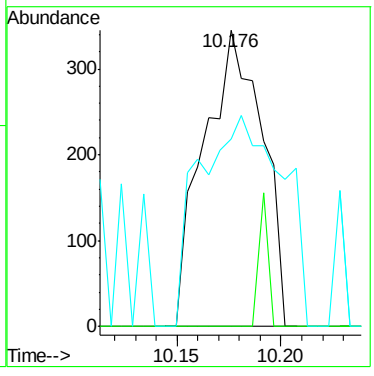
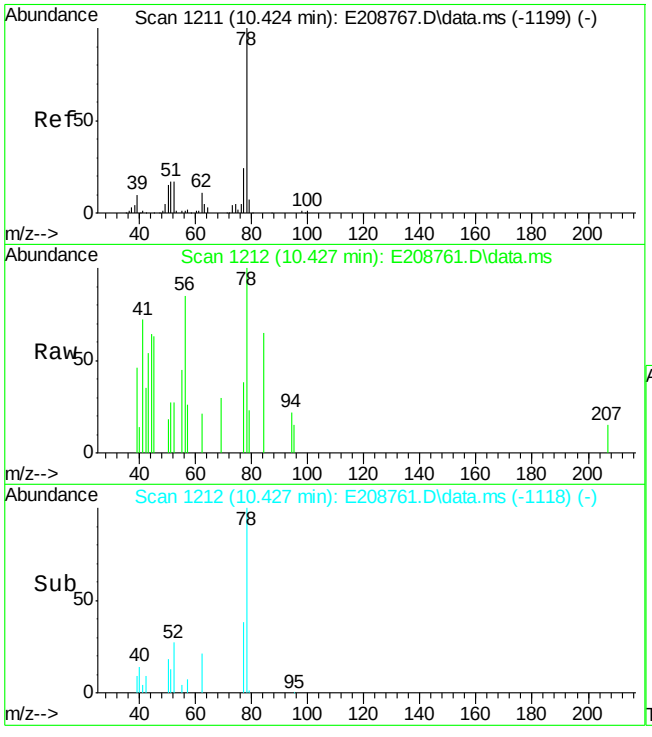


#73
1,1-dichloropropene
Concen: 0.40 ug/L
RT: 10.176 min Scan# 1164
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 75 Resp: 675

Ion	Ratio	Lower	Upper
75	100		
110	0.0	4.8	64.8#
77	63.5	0.0	59.9#

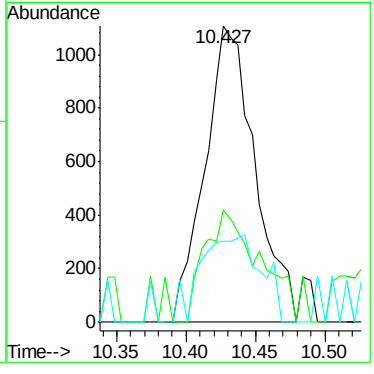




#75
benzene
Concen: 0.53 ug/L
RT: 10.427 min Scan# 1212
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 78 Resp: 2792

Ion	Ratio	Lower	Upper
78	100		
77	37.9	0.0	53.9
52	27.5	0.0	46.8



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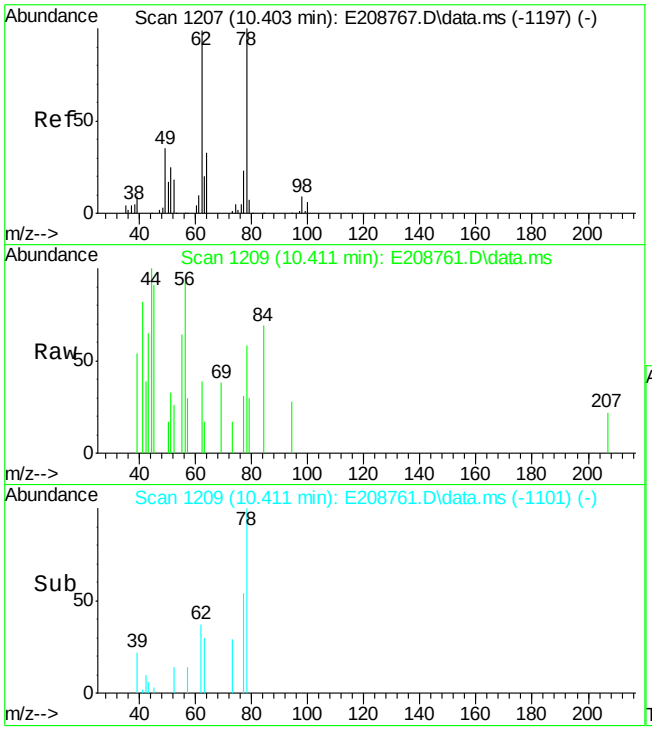
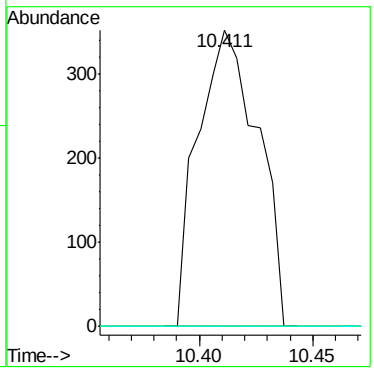
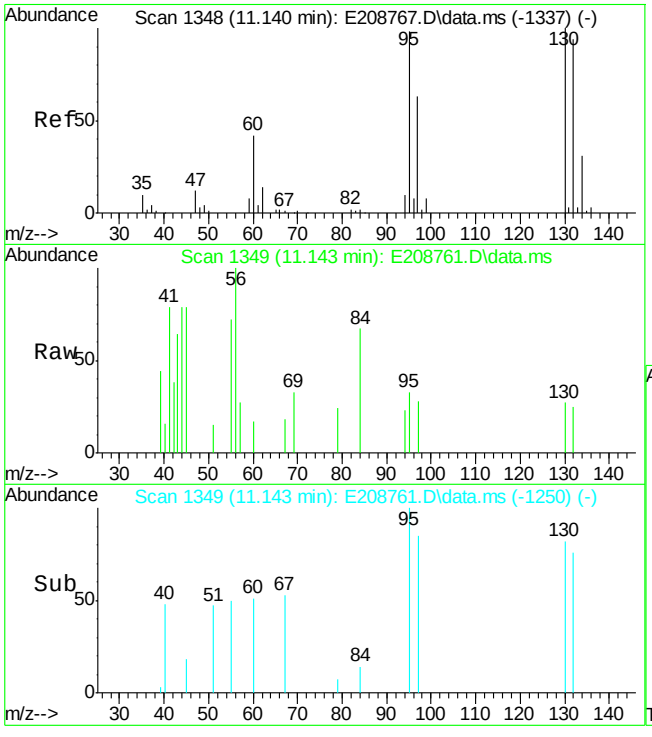


#78
1,2-dichloroethane
Concen: 0.41 ug/L
RT: 10.411 min Scan# 1209
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 62 Resp: 644

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	38.5
64	0.0	2.2	62.2#

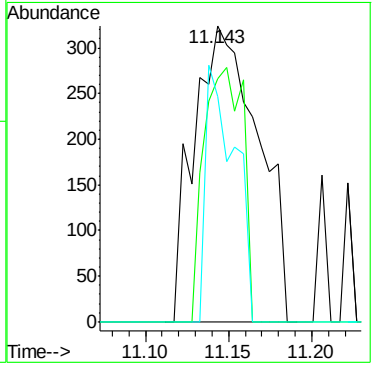




#80
trichloroethene
Concen: 0.65 ug/L
RT: 11.143 min Scan# 1349
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 95 Resp: 875

Ion	Ratio	Lower	Upper
95	100		
130	82.1	71.9	131.9
132	76.2	67.7	127.7



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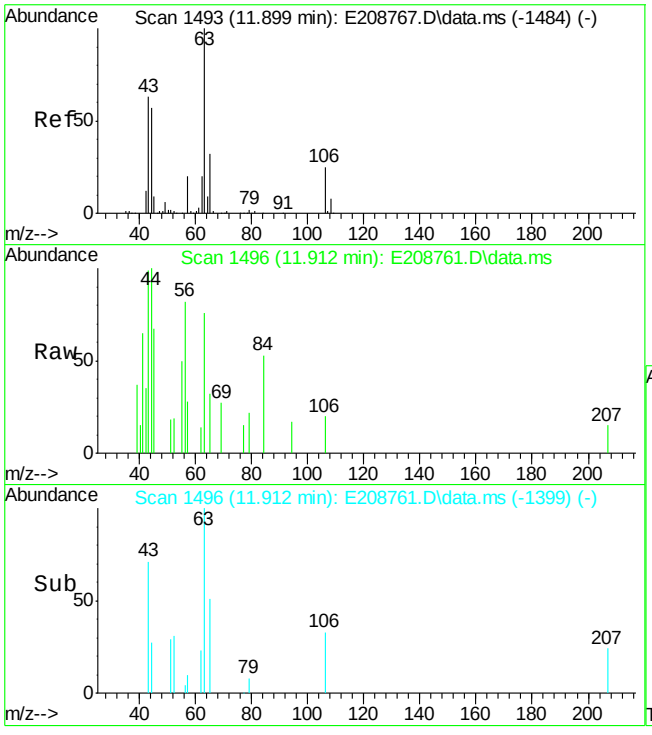
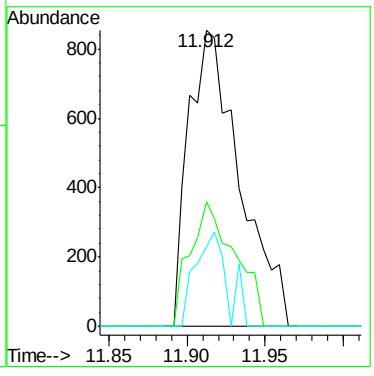
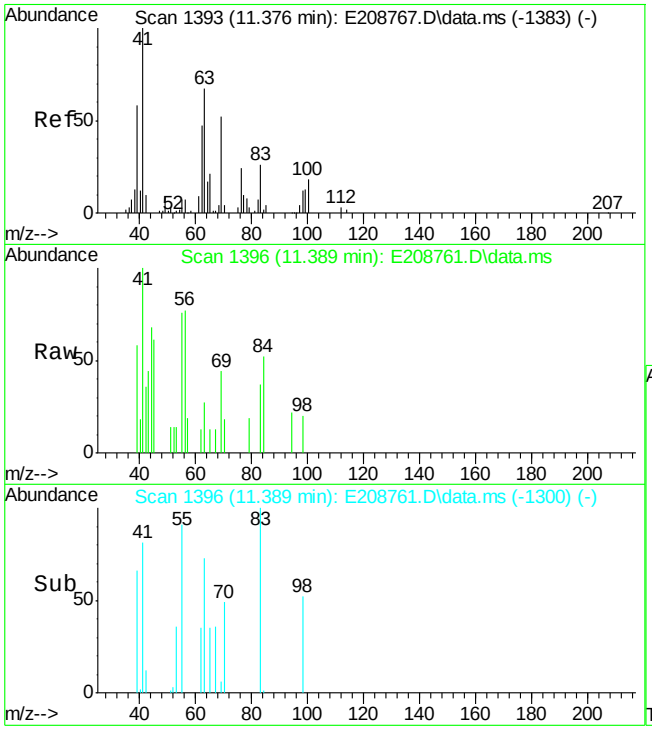


#82
2-chloroethyl vinyl ether
Concen: 2.22 ug/L
RT: 11.912 min Scan# 1496
Delta R.T. 0.010 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 63 Resp: 1948

Ion	Ratio	Lower	Upper
63	100		
65	41.9	3.5	63.5
106	26.8	0.0	57.1

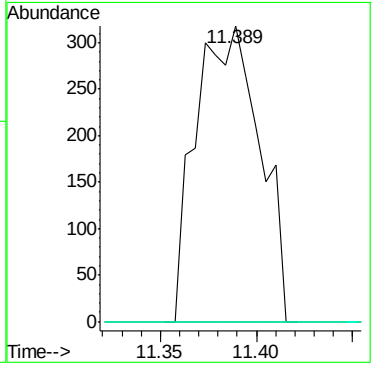




#85
1,2-dichloropropane
Concen: 0.53 ug/L
RT: 11.389 min Scan# 1396
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 63 Resp: 734

Ion	Ratio	Lower	Upper
63	100		
112	0.0	0.0	33.7
76	0.0	13.4	73.4#



7.7.1

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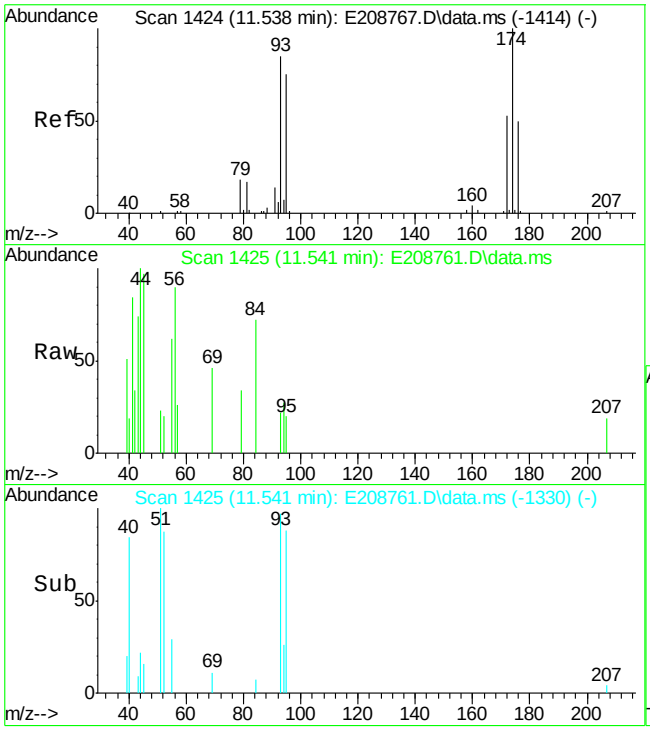
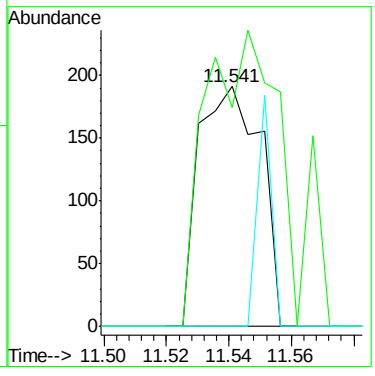
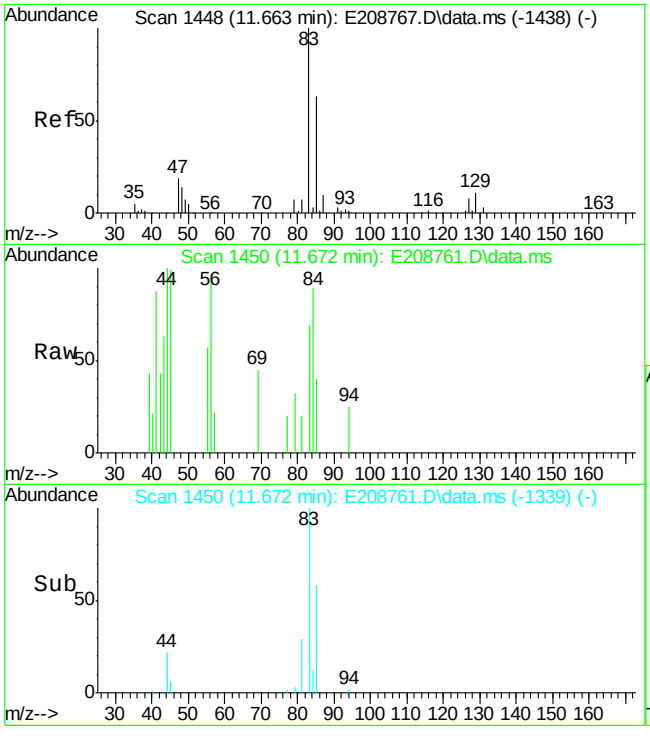


#86
dibromomethane
Concen: 0.36 ug/L
RT: 11.541 min Scan# 1425
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 93 Resp: 262

Ion	Ratio	Lower	Upper
93	100		
95	91.1	52.3	112.3
174	0.0	69.8	129.8#

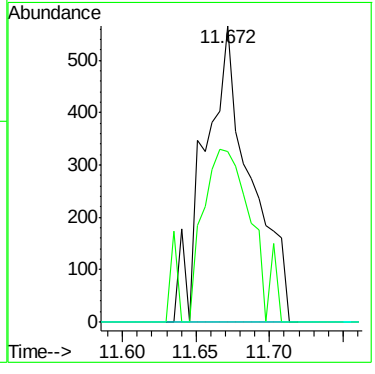


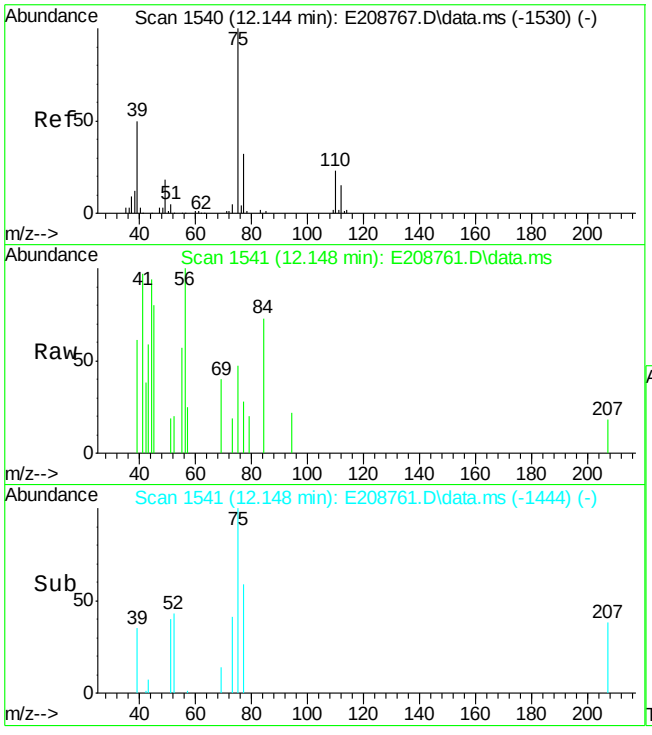


#87
bromodichloromethane
Concen: 0.65 ug/L
RT: 11.672 min Scan# 1450
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 83 Resp: 1223

Ion	Ratio	Lower	Upper
83	100		
85	57.8	33.2	93.2
127	0.0	0.0	38.7

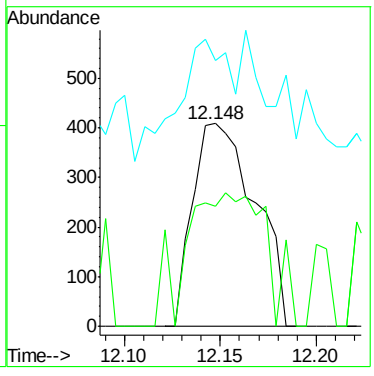


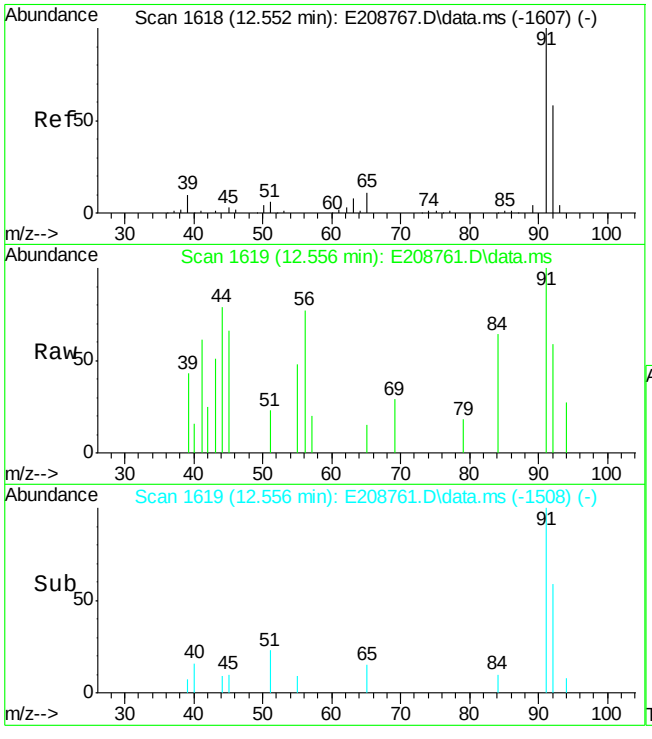


#88
cis-1,3-dichloropropene
Concen: 0.44 ug/L
RT: 12.148 min Scan# 1541
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 75 Resp: 922

Ion	Ratio	Lower	Upper
75	100		
77	59.2	2.0	62.0
39	38.4	22.7	82.7

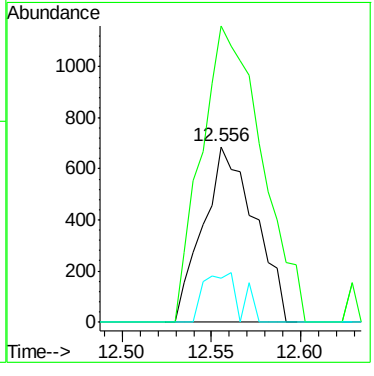




#91
toluene
Concen: 0.44 ug/L
RT: 12.556 min Scan# 1619
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 92 Resp: 1379

Ion	Ratio	Lower	Upper
92	100		
91	169.1	136.9	196.9
65	25.1	0.0	50.0



7.7.1

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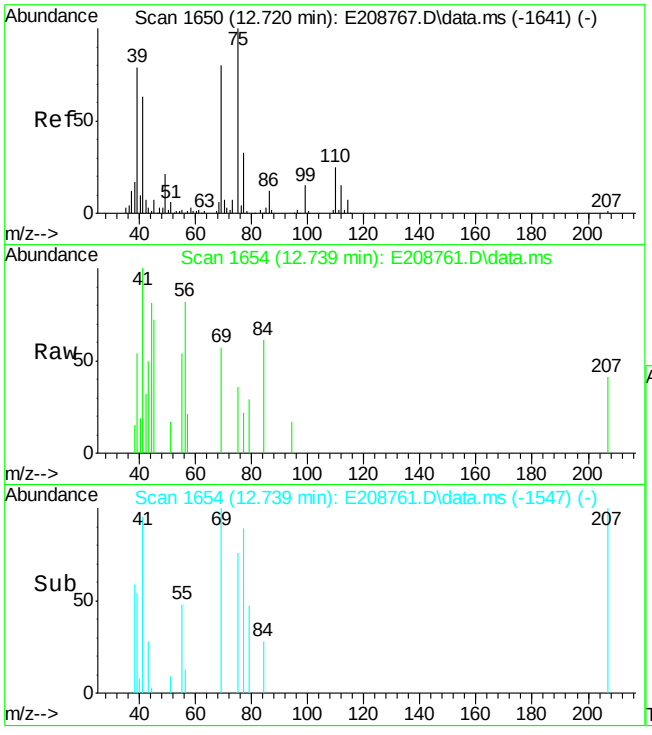
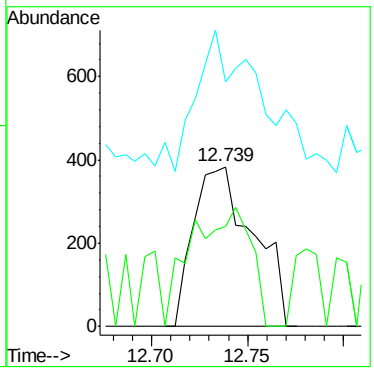
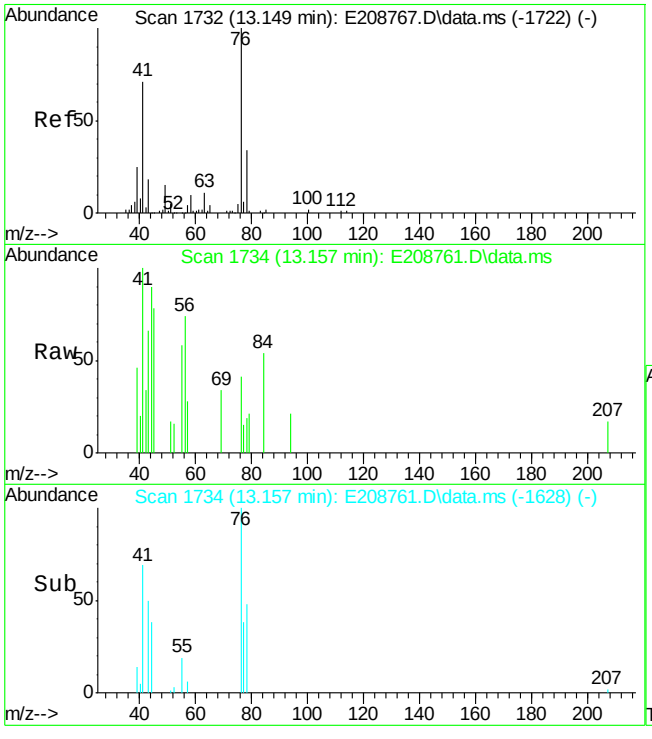


#93
trans-1,3-dichloropropene
Concen: 0.43 ug/L
RT: 12.739 min Scan# 1654
Delta R.T. 0.010 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 75 Resp: 825

Ion	Ratio	Lower	Upper
75	100		
77	62.2	2.3	62.3
39	37.8	54.8	114.8#

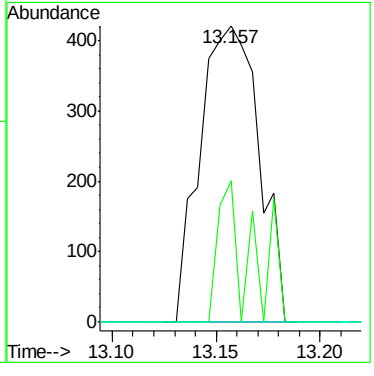




#100
1,3-dichloropropane
Concen: 0.44 ug/L
RT: 13.157 min Scan# 1734
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 76 Resp: 832

Ion	Ratio	Lower	Upper
76	100		
78	47.7	2.9	62.9
63	0.0	0.0	40.7



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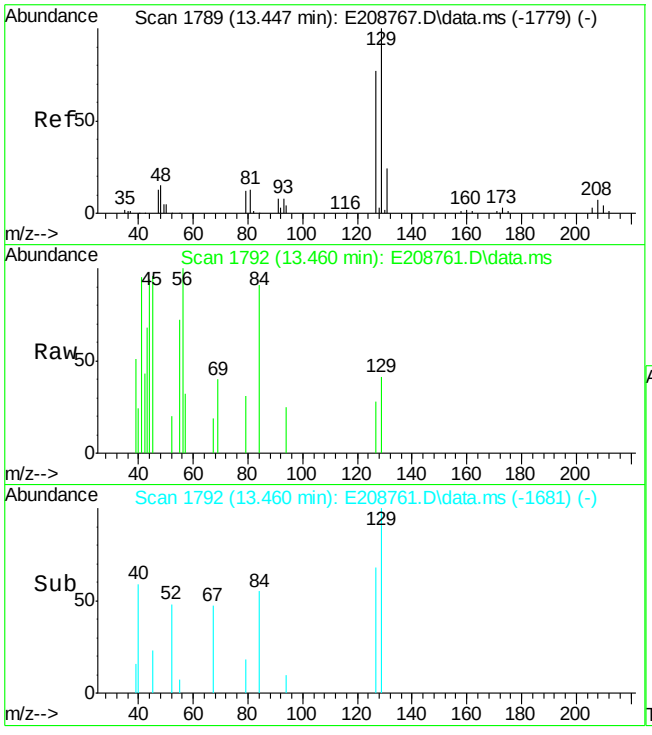
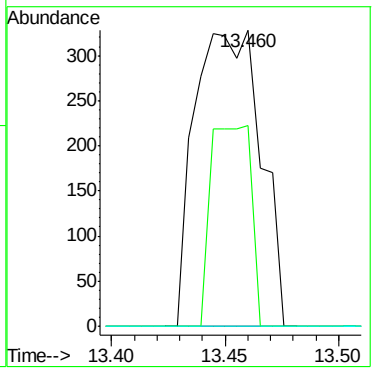
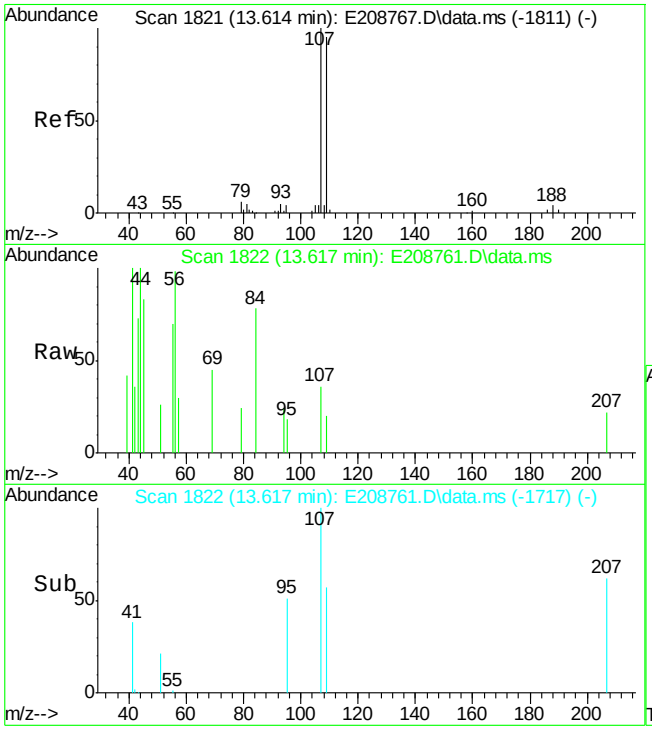


#103
dibromochloromethane
Concen: 0.49 ug/L
RT: 13.460 min Scan# 1792
Delta R.T. 0.010 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:129 Resp: 660

Ion	Ratio	Lower	Upper
129	100		
127	68.0	47.1	107.1
131	0.0	0.0	54.5

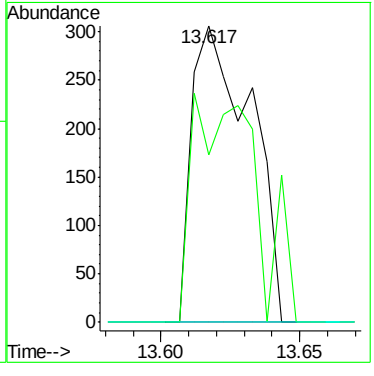




#104
1,2-dibromoethane
Concen: 0.39 ug/L
RT: 13.617 min Scan# 1822
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:107 Resp: 450

Ion	Ratio	Lower	Upper
107	100		
109	56.5	64.9	124.9#
188	0.0	0.0	33.2



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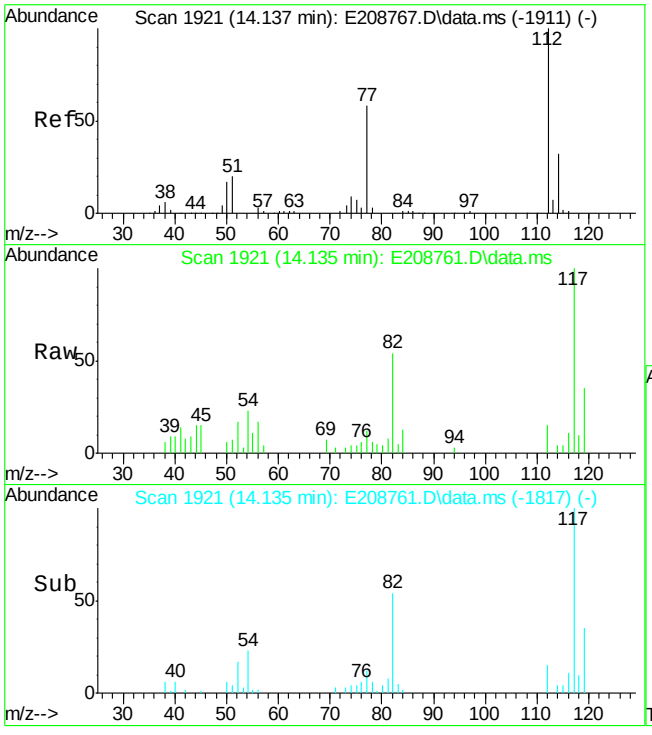
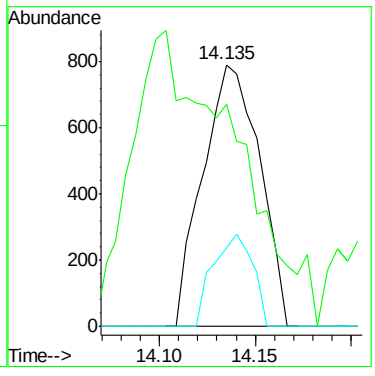
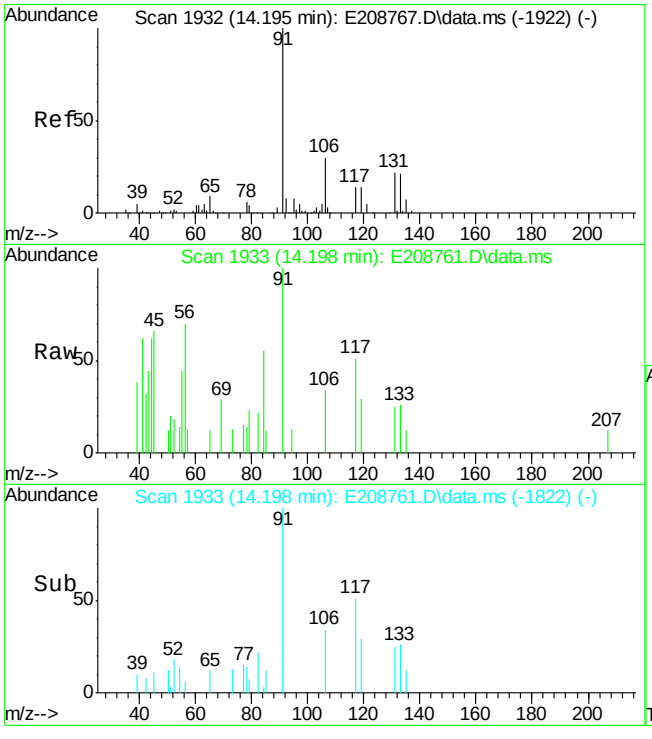


#106
chlorobenzene
Concen: 0.47 ug/L
RT: 14.135 min Scan# 1921
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:112 Resp: 1617

Ion	Ratio	Lower	Upper
112	100		
77	65.5	26.6	86.6
114	30.2	1.7	61.7

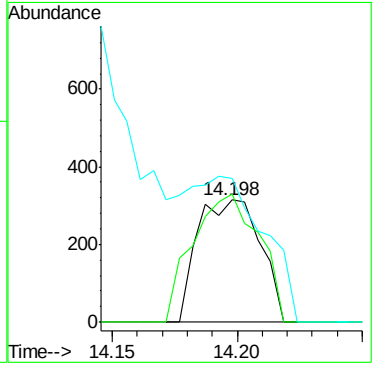


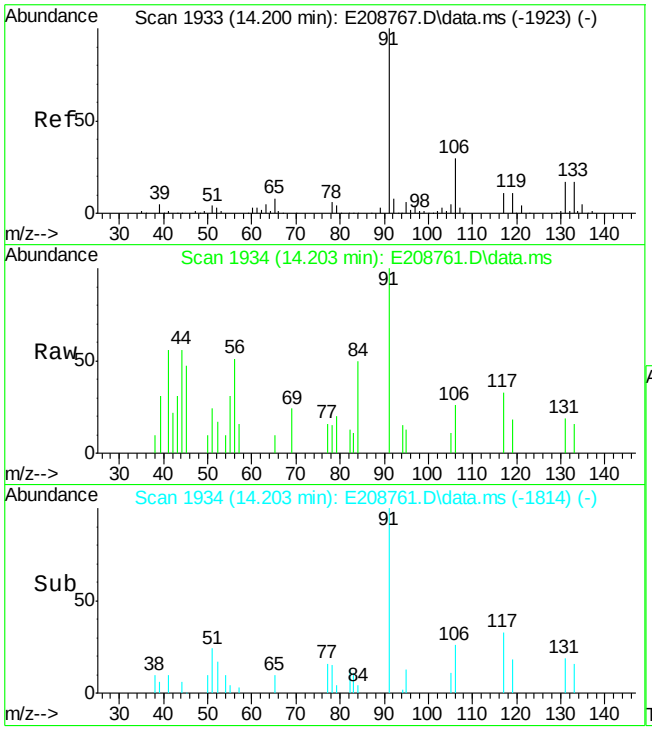


#107
1,1,1,2-tetrachloroethane
Concen: 0.43 ug/L
RT: 14.198 min Scan# 1933
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:131 Resp: 553

Ion	Ratio	Lower	Upper
131	100		
133	105.1	66.4	126.4
119	117.5	33.2	93.2#

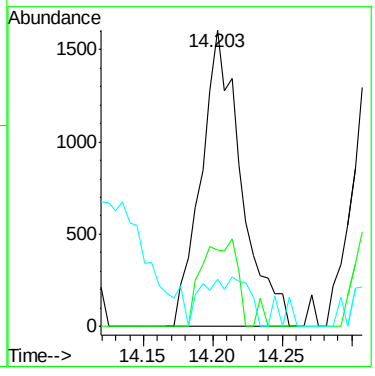


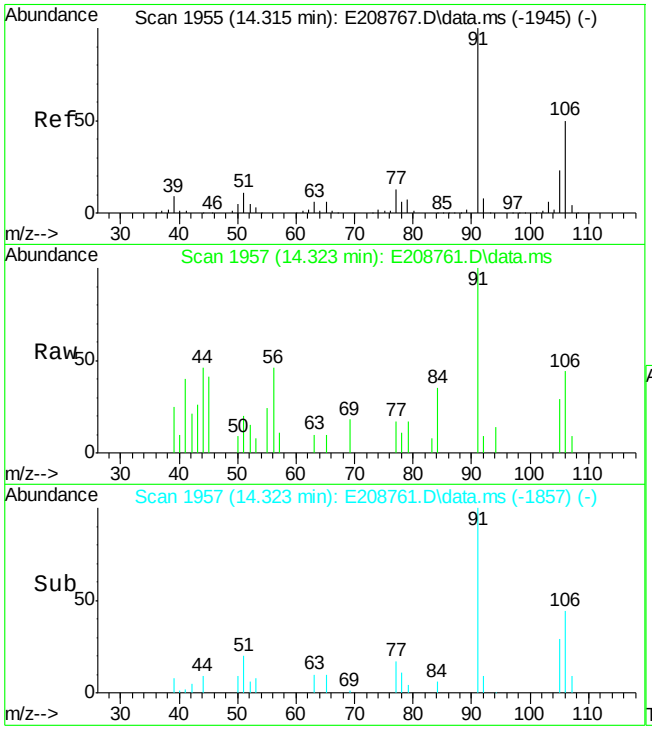


#108
ethylbenzene
Concen: 0.52 ug/L
RT: 14.203 min Scan# 1934
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 91 Resp: 3237

Ion	Ratio	Lower	Upper
91	100		
106	26.0	2.0	62.0
77	16.0	0.0	39.1

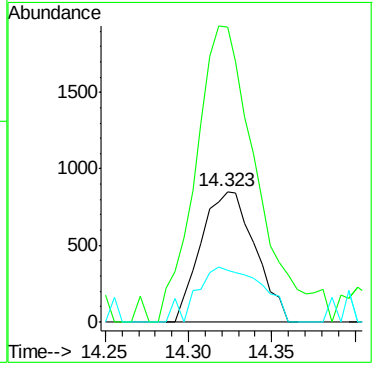




#109
m,p-xylene
Concen: 0.84 ug/L
RT: 14.323 min Scan# 1957
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:106 Resp: 1922

Ion	Ratio	Lower	Upper
106	100		
91	201.8	164.7	224.7
77	39.5	0.0	56.6



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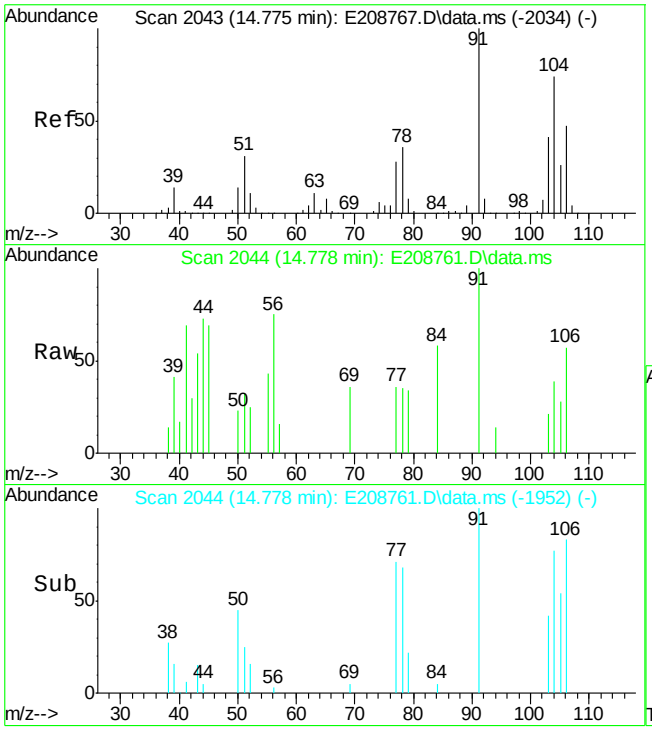
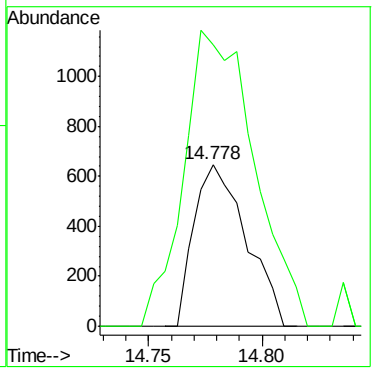
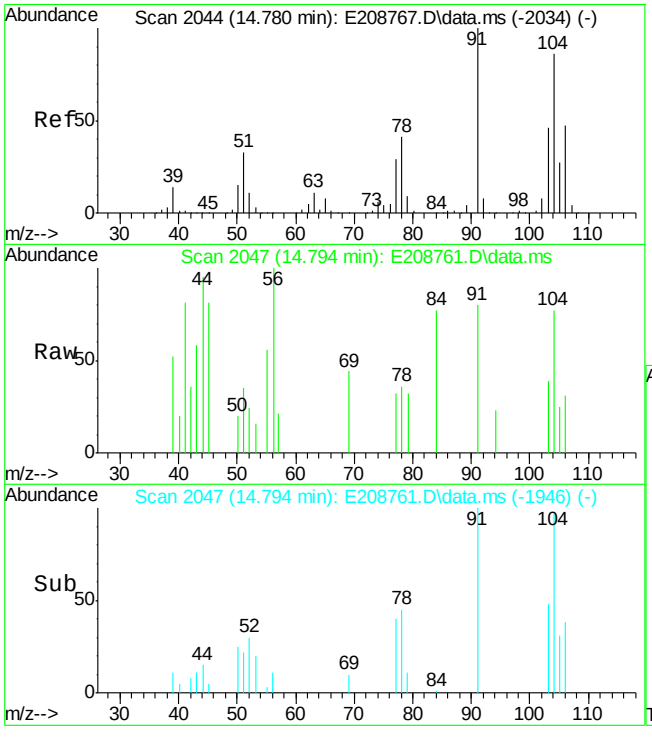


#110
o-xylene
Concen: 0.45 ug/L
RT: 14.778 min Scan# 2044
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:106 Resp: 1030

Ion	Ratio	Lower	Upper
106	100		
91	149.6	174.8	234.8#

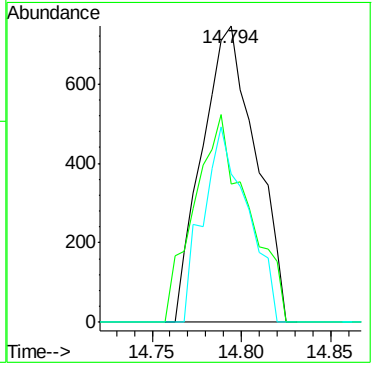




#112
styrene
Concen: 0.40 ug/L
RT: 14.794 min Scan# 2047
Delta R.T. 0.010 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:104 Resp: 1559

Ion	Ratio	Lower	Upper
104	100		
78	46.5	20.2	80.2
103	49.9	22.6	82.6



7.7.1

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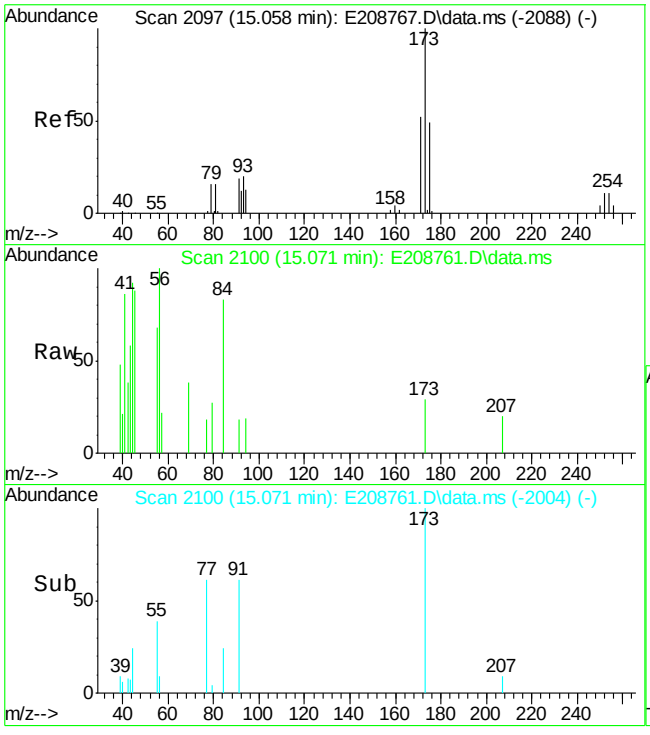
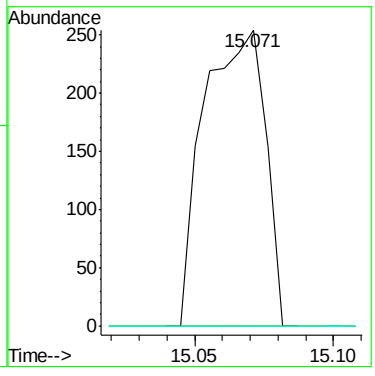
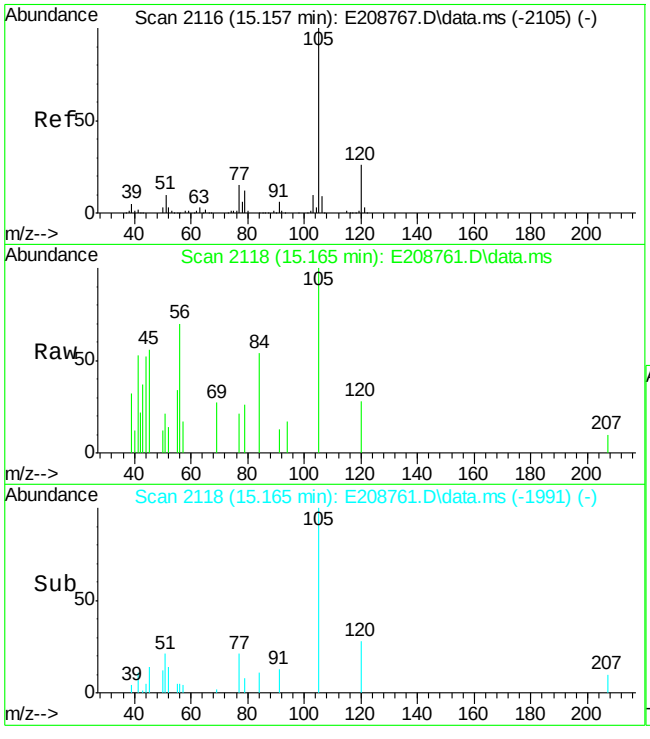


#113
bromoform
Concen: 0.39 ug/L
RT: 15.071 min Scan# 2100
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:173 Resp: 388

Ion	Ratio	Lower	Upper
173	100		
175	0.0	18.9	78.9#
254	0.0	0.0	39.3

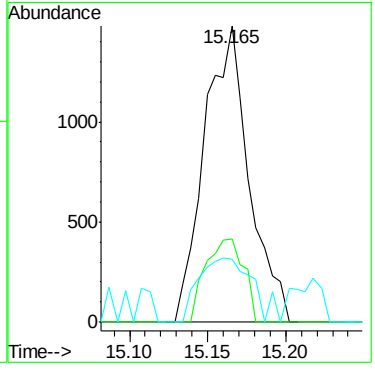




#115
isopropylbenzene
Concen: 0.50 ug/L
RT: 15.165 min Scan# 2118
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:105 Resp: 2941

Ion	Ratio	Lower	Upper
105	100		
120	28.1	0.0	57.7
77	21.4	0.0	45.6



7.7.1

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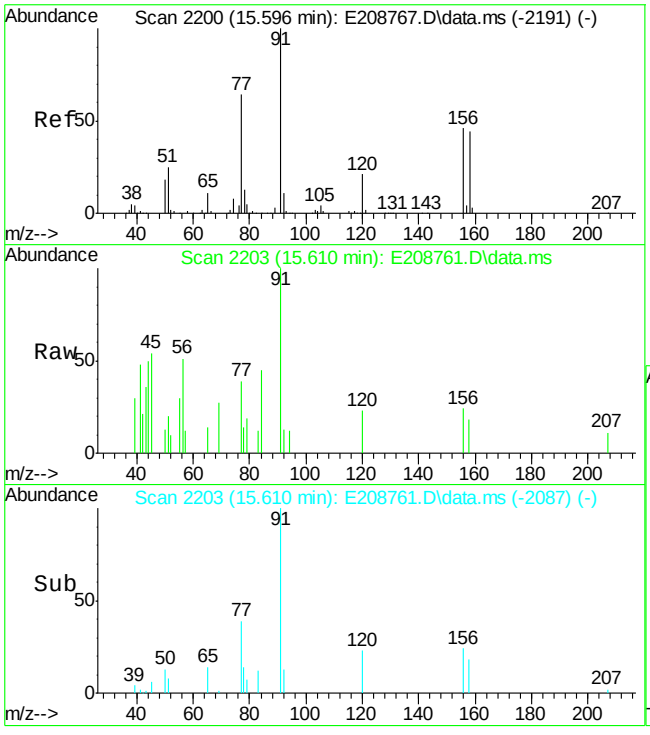
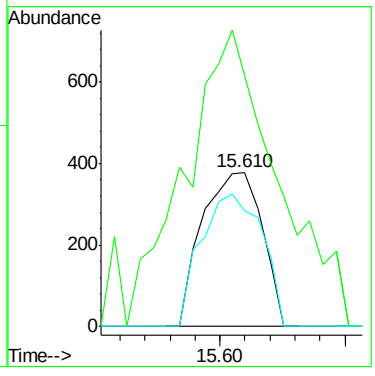
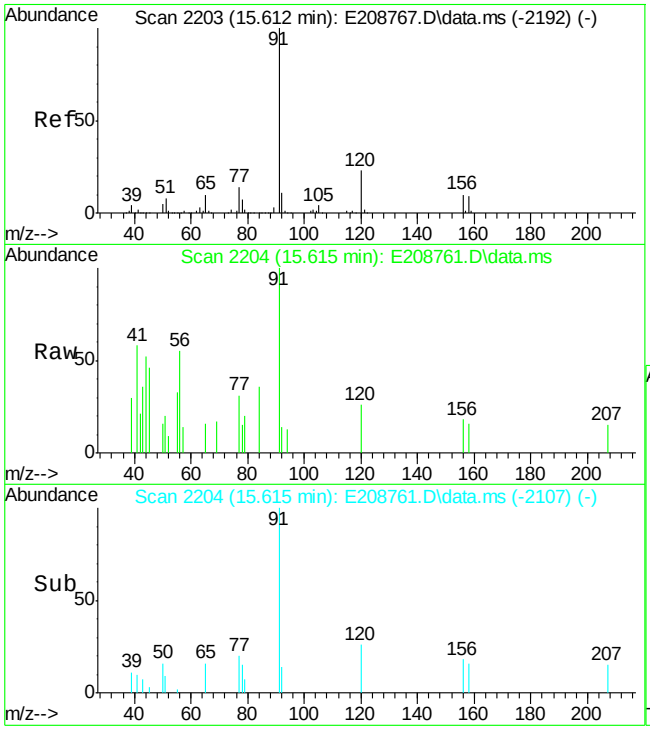


#117
bromobenzene
Concen: 0.41 ug/L
RT: 15.610 min Scan# 2203
Delta R.T. 0.010 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:156 Resp: 629

Ion	Ratio	Lower	Upper
156	100		
77	104.2	124.7	184.7#
158	74.9	69.1	129.1

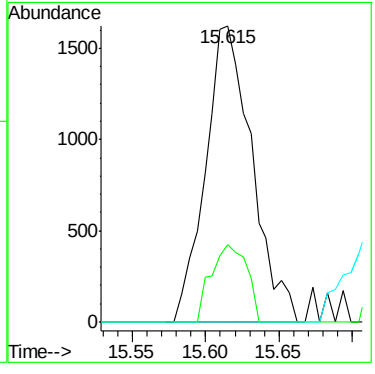




#121
n-propylbenzene
Concen: 0.51 ug/L
RT: 15.615 min Scan# 2204
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 91 Resp: 3558

Ion	Ratio	Lower	Upper
91	100		
120	26.1	0.0	54.4
105	0.0	0.0	33.8



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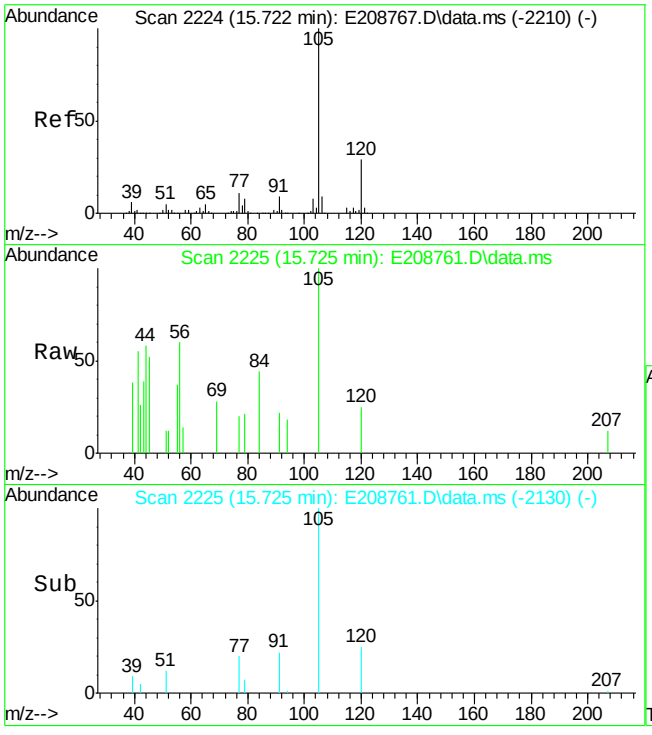
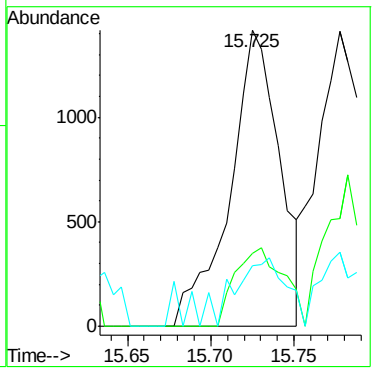
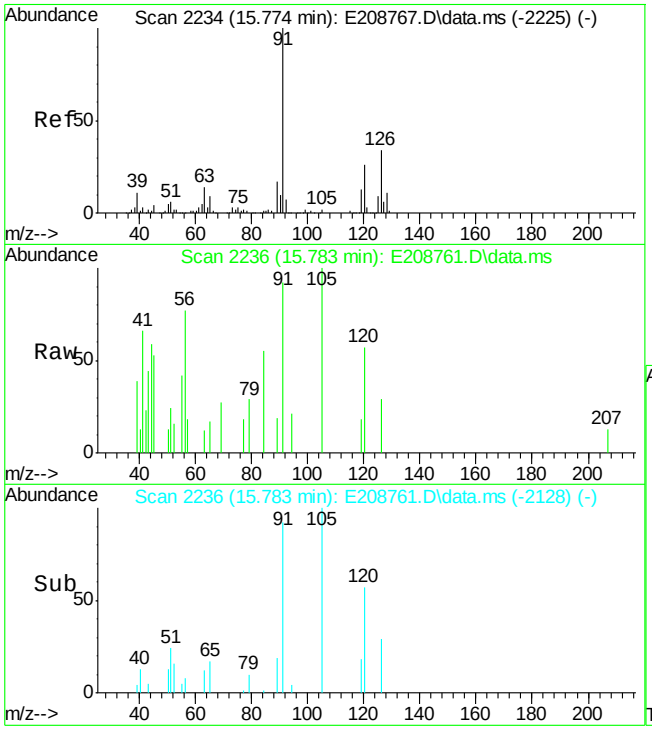


#122
p-ethyltoluene
Concen: 0.51 ug/L
RT: 15.725 min Scan# 2225
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:105 Resp: 2943

Ion	Ratio	Lower	Upper
105	100		
120	24.7	0.4	60.4
77	20.5	0.0	41.5

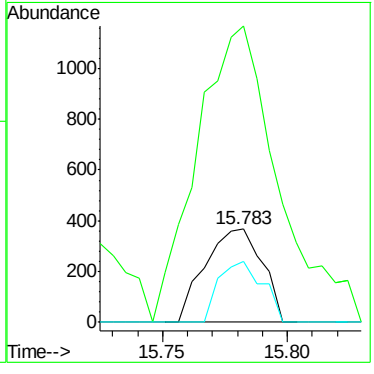




#123
2-chlorotoluene
Concen: 0.43 ug/L
RT: 15.783 min Scan# 2236
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:126 Resp: 586

Ion	Ratio	Lower	Upper
126	100		
91	265.6	287.2	347.2#
89	65.6	27.9	87.9



7.7.1

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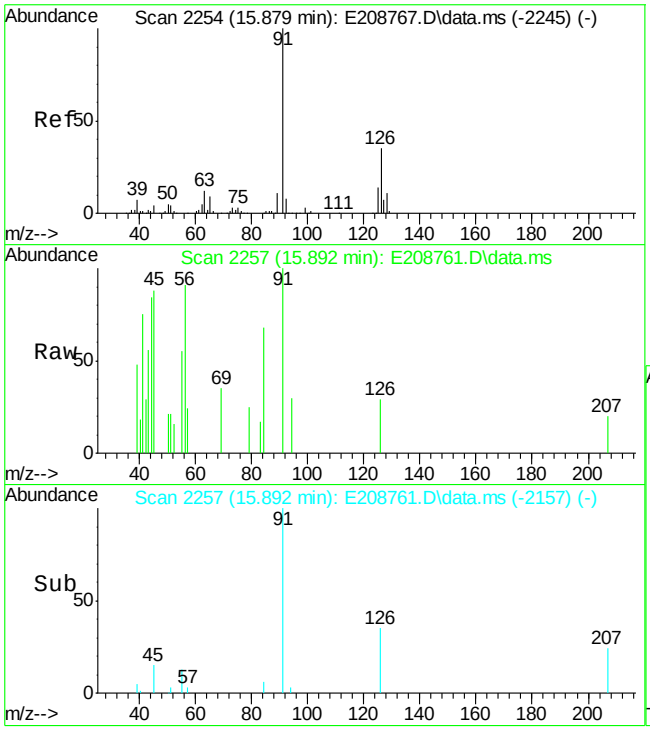
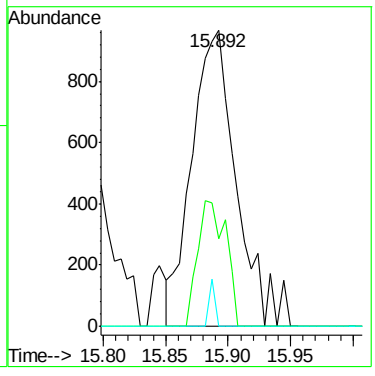
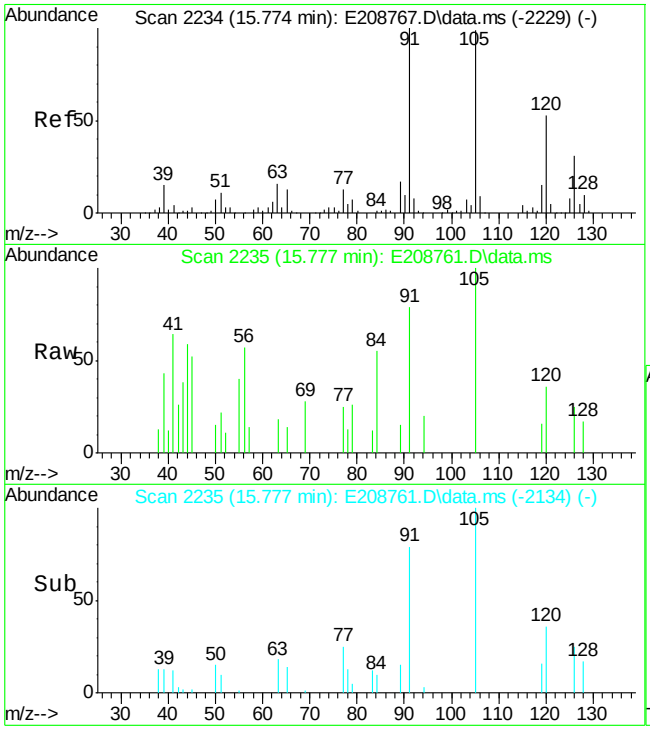


#124
4-chlorotoluene
Concen: 0.54 ug/L
RT: 15.892 min Scan# 2257
Delta R.T. 0.010 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 91 Resp: 2401

Ion	Ratio	Lower	Upper
91	100		
126	29.5	4.3	64.3
89	0.0	0.0	41.5

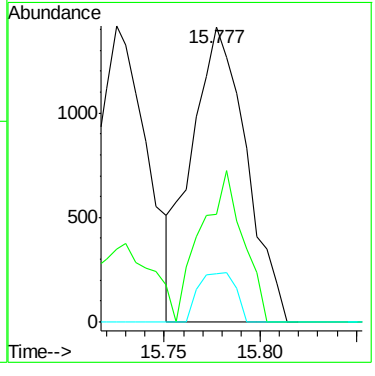




#125
1,3,5-trimethylbenzene
Concen: 0.55 ug/L
RT: 15.777 min Scan# 2235
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:105 Resp: 2797

Ion	Ratio	Lower	Upper
105	100		
120	36.4	19.8	79.8
119	16.3	0.0	42.6



7.7.1

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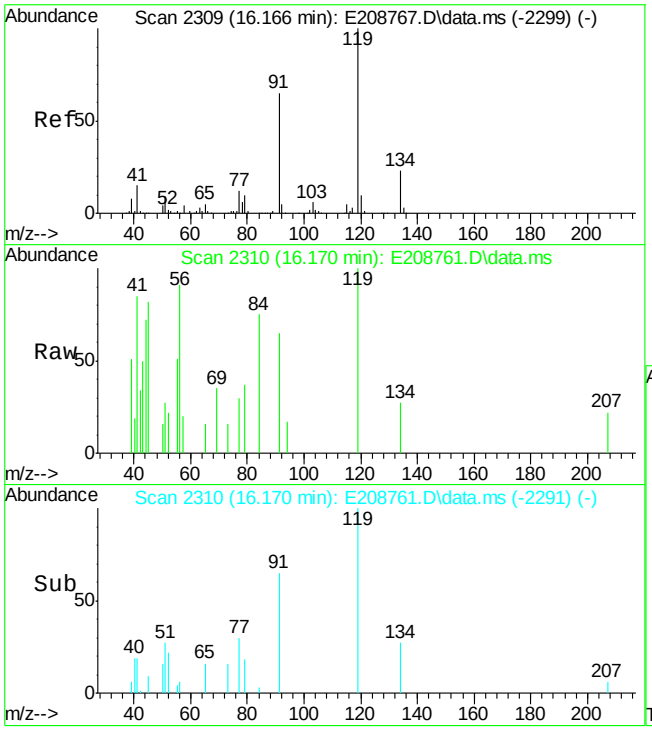
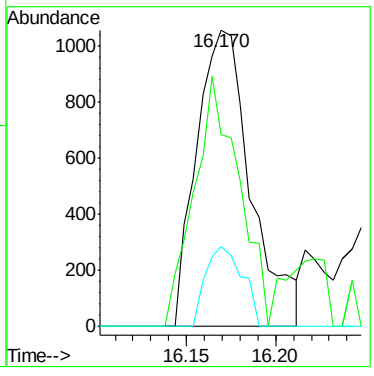
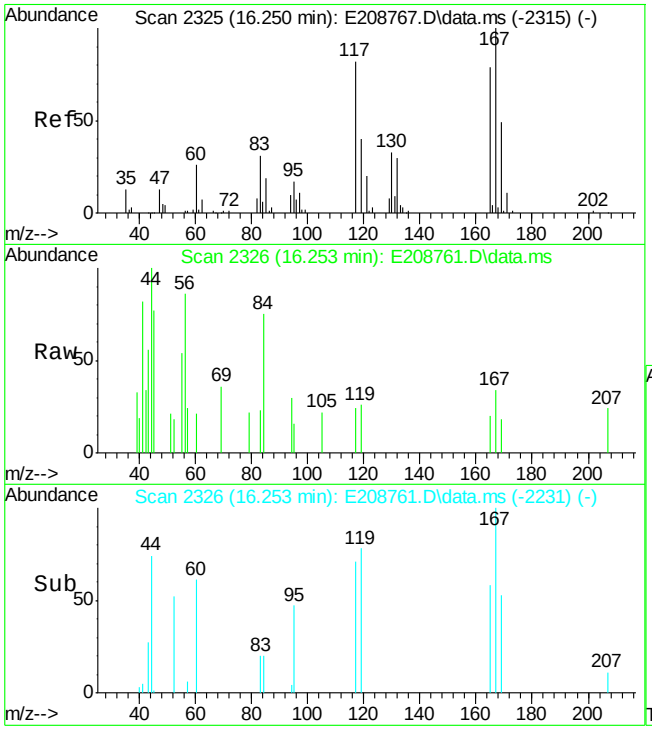


#126
tert-butylbenzene
Concen: 0.51 ug/L
RT: 16.170 min Scan# 2310
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:119 Resp: 2242

Ion	Ratio	Lower	Upper
119	100		
91	64.9	37.5	97.5
134	27.0	0.0	54.4

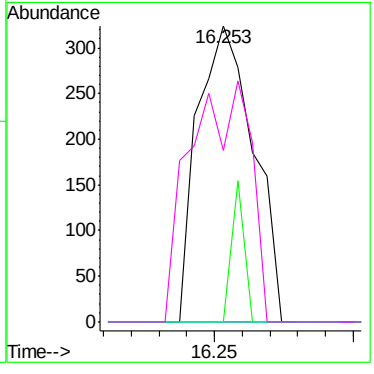


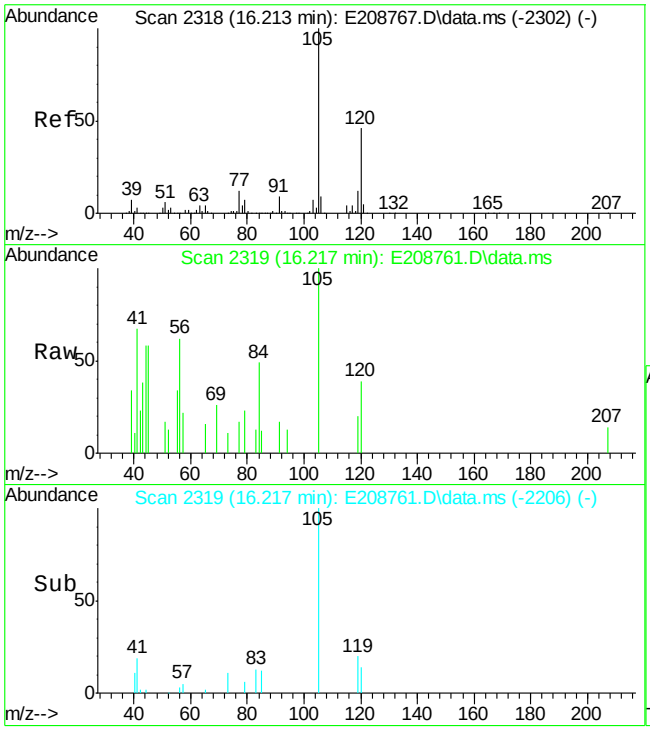


#127
pentachloroethane
Concen: 0.44 ug/L
RT: 16.253 min Scan# 2326
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:167 Resp: 451

Ion	Ratio	Lower	Upper
167	100		
130	0.0	8.2	68.2#
132	0.0	8.2	68.2#
165	58.0	46.2	106.2

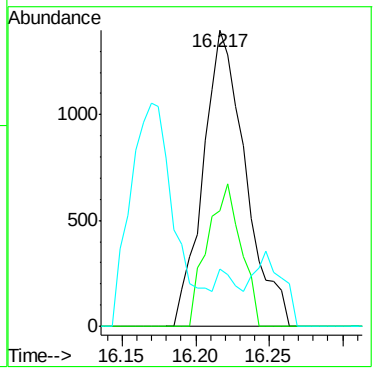


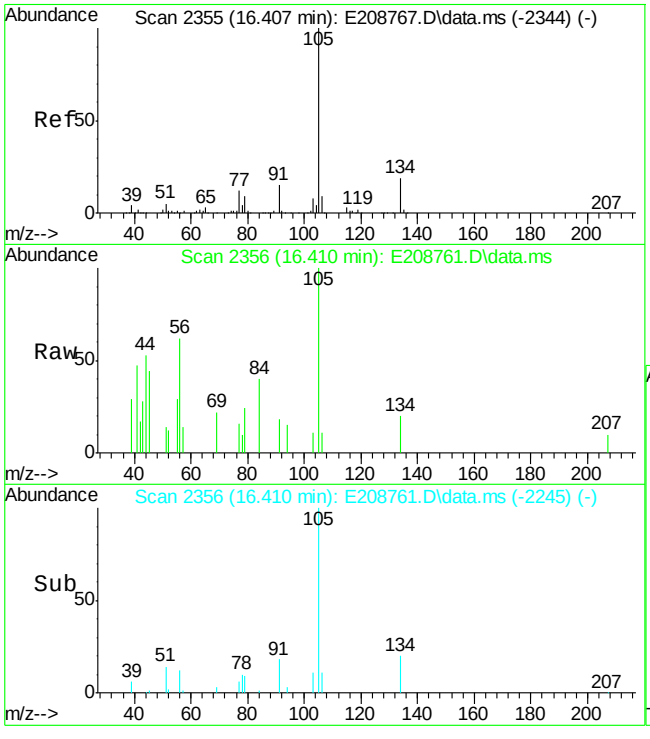


#128
1,2,4-trimethylbenzene
Concen: 0.54 ug/L
RT: 16.217 min Scan# 2319
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:105 Resp: 2805

Ion	Ratio	Lower	Upper
105	100		
120	39.0	17.8	77.8
119	19.5	0.0	43.2

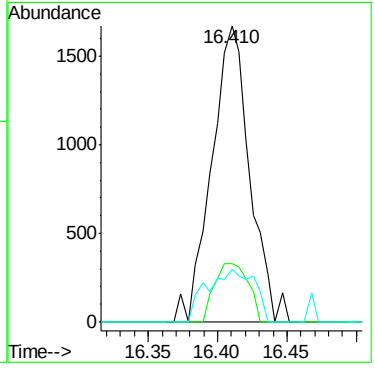


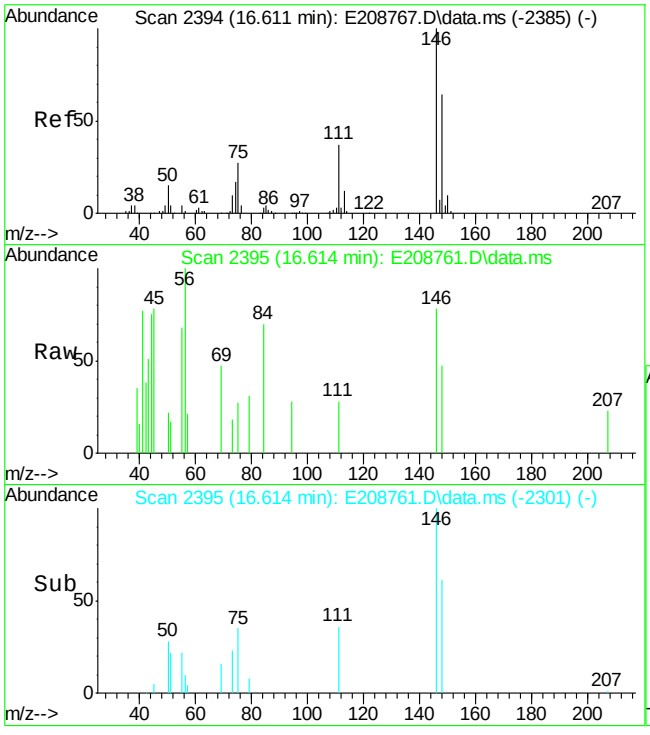


#129
sec-butylbenzene
Concen: 0.50 ug/L
RT: 16.410 min Scan# 2356
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:105 Resp: 3215

Ion	Ratio	Lower	Upper
105	100		
134	19.9	0.0	49.9
91	17.7	0.0	45.9

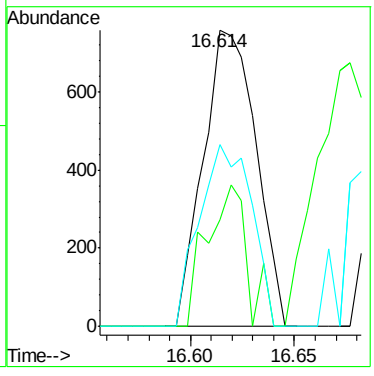


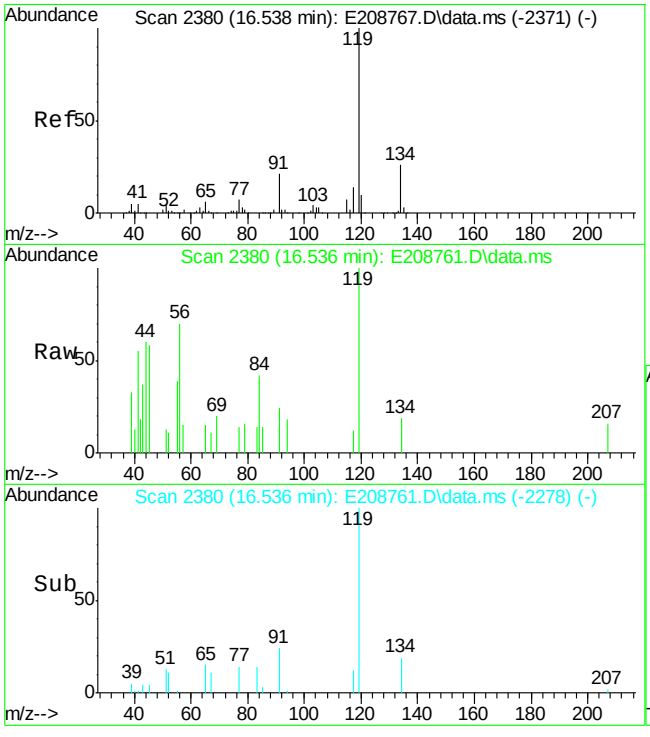


#130
1,3-dichlorobenzene
Concen: 0.46 ug/L
RT: 16.614 min Scan# 2395
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:146 Resp: 1336

Ion	Ratio	Lower	Upper
146	100		
111	36.0	8.1	68.1
148	61.2	34.6	94.6

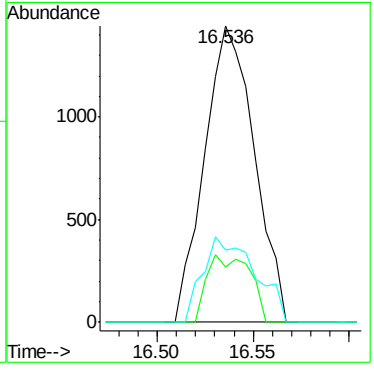




#131
p-isopropyltoluene
Concen: 0.49 ug/L
RT: 16.536 min Scan# 2380
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:119 Resp: 2584

Ion	Ratio	Lower	Upper
119	100		
134	18.5	0.0	57.6
91	24.3	0.0	54.0



7.7.1

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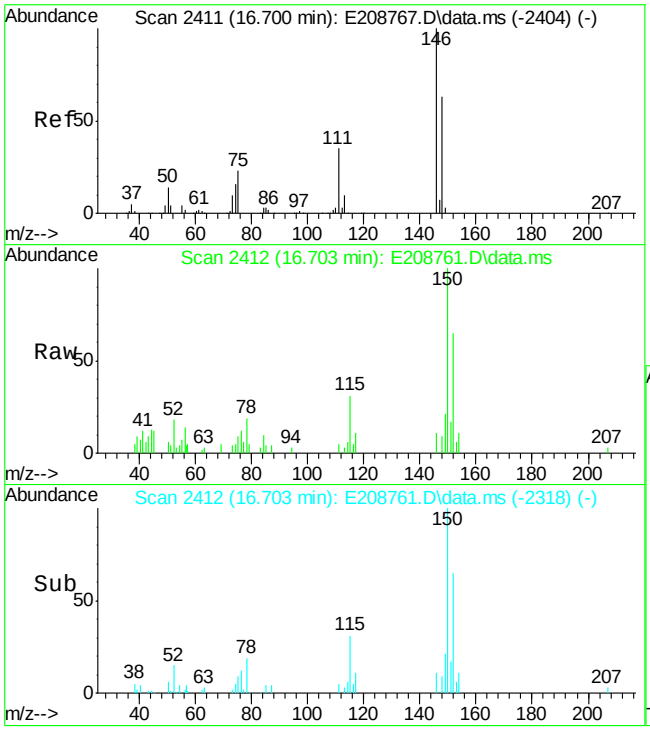
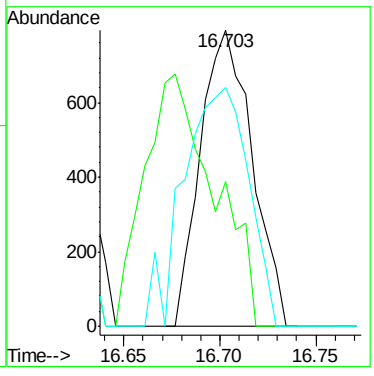
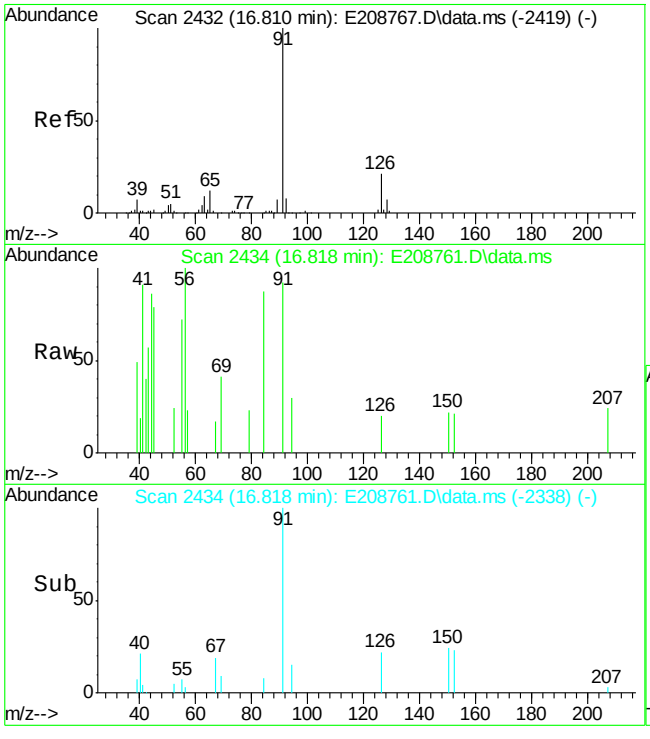


#132
1,4-dichlorobenzene
Concen: 0.48 ug/L
RT: 16.703 min Scan# 2412
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:146 Resp: 1481

Ion	Ratio	Lower	Upper
146	100		
111	48.7	8.0	68.0
148	80.9	34.5	94.5

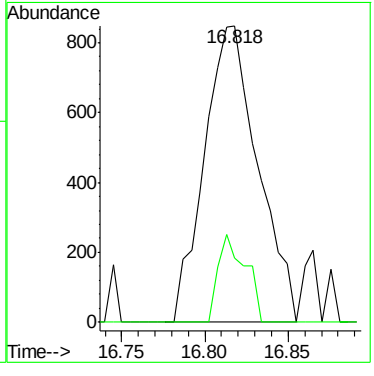


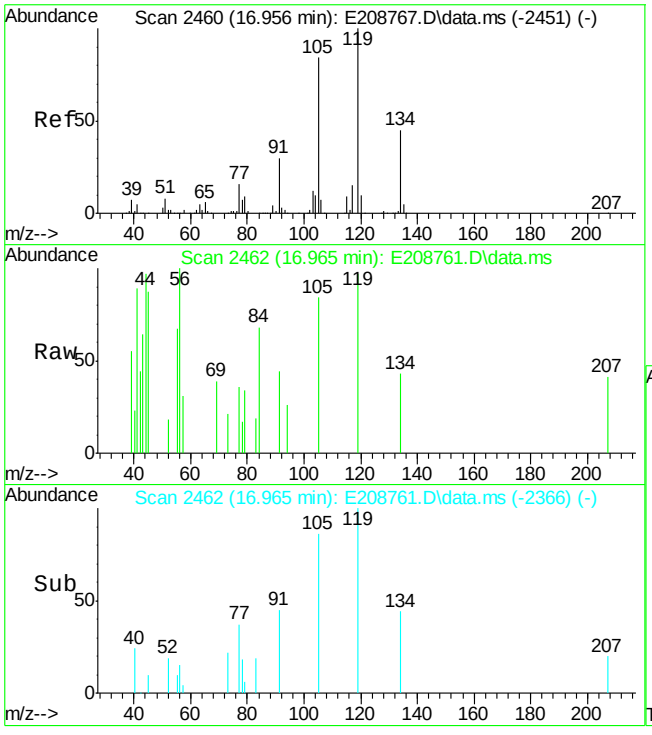


#133
benzyl chloride
Concen: 0.62 ug/L
RT: 16.818 min Scan# 2434
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 91 Resp: 1895

Ion	Ratio	Lower	Upper
91	100		
126	15.1	16.8	25.2#

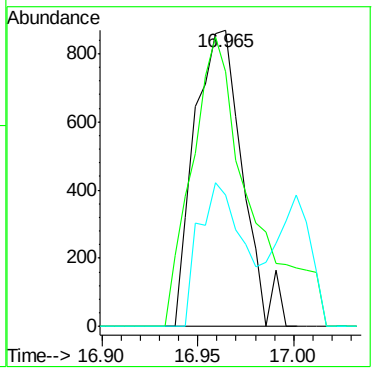


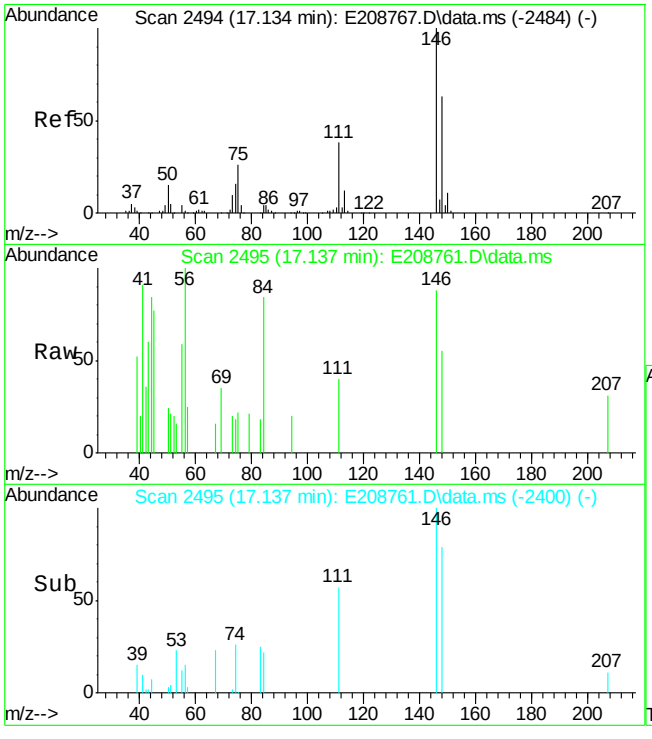


#134
p-diethylbenzene
Concen: 0.46 ug/L
RT: 16.965 min Scan# 2462
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:119 Resp: 1502

Ion	Ratio	Lower	Upper
119	100		
105	86.1	54.3	114.3
134	44.4	17.6	77.6

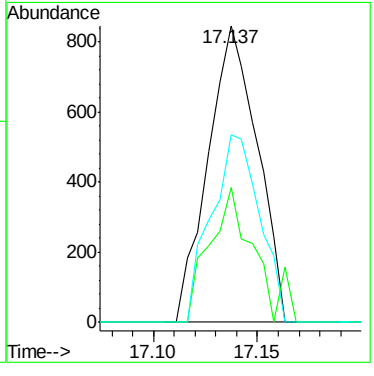




#135
1,2-dichlorobenzene
Concen: 0.49 ug/L
RT: 17.137 min Scan# 2495
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:146 Resp: 1392

Ion	Ratio	Lower	Upper
146	100		
111	45.6	11.7	71.7
148	63.2	35.1	95.1



7.7.1

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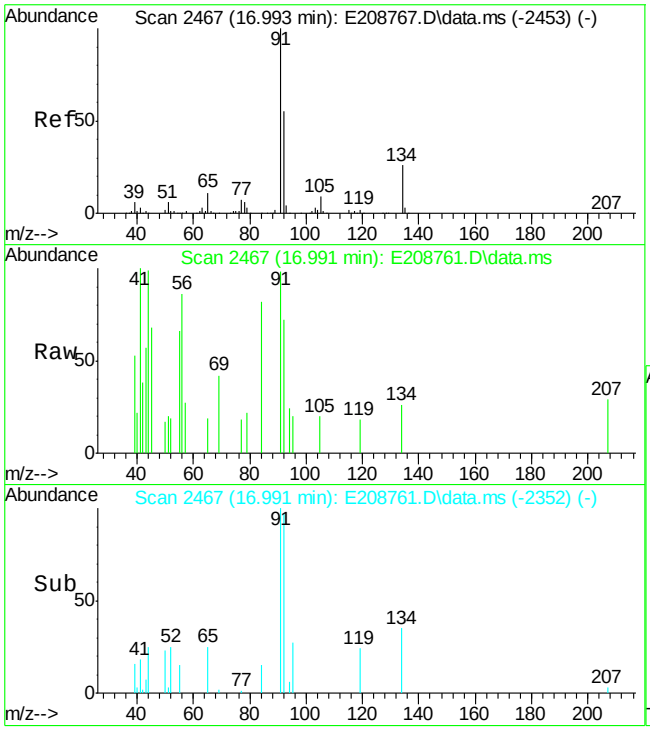
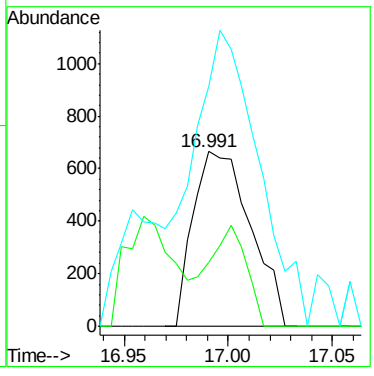
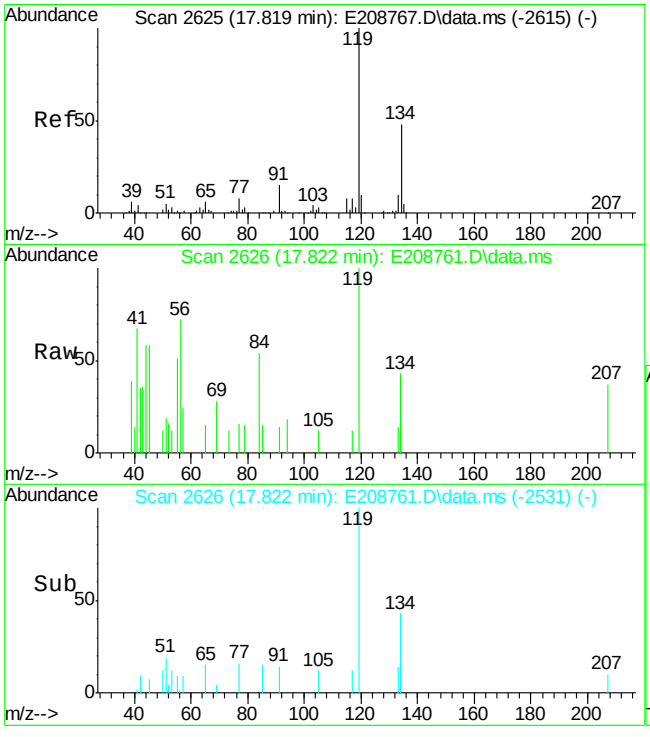


#136
n-butylbenzene
Concen: 0.47 ug/L
RT: 16.991 min Scan# 2467
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 92 Resp: 1275

Ion	Ratio	Lower	Upper
92	100		
134	36.7	17.6	77.6
91	99.8	146.1	206.1#

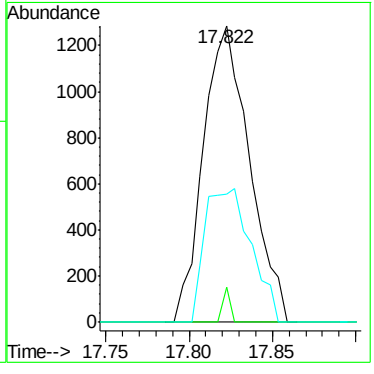


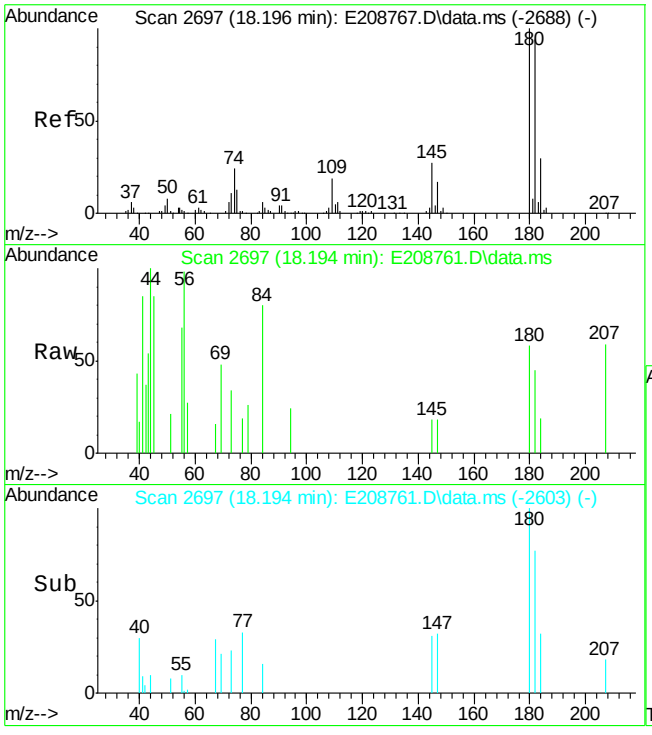


#137
1,2,4,5-tetramethylbenzene
Concen: 0.51 ug/L
RT: 17.822 min Scan# 2626
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:119 Resp: 2478

Ion	Ratio	Lower	Upper
119	100		
105	11.7	0.0	34.0
134	43.2	19.1	79.1

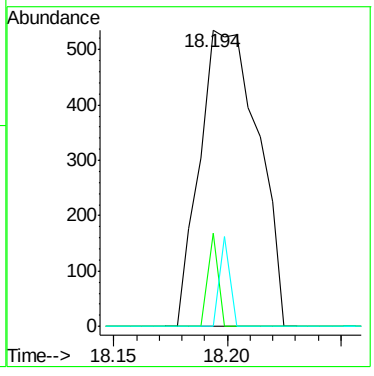


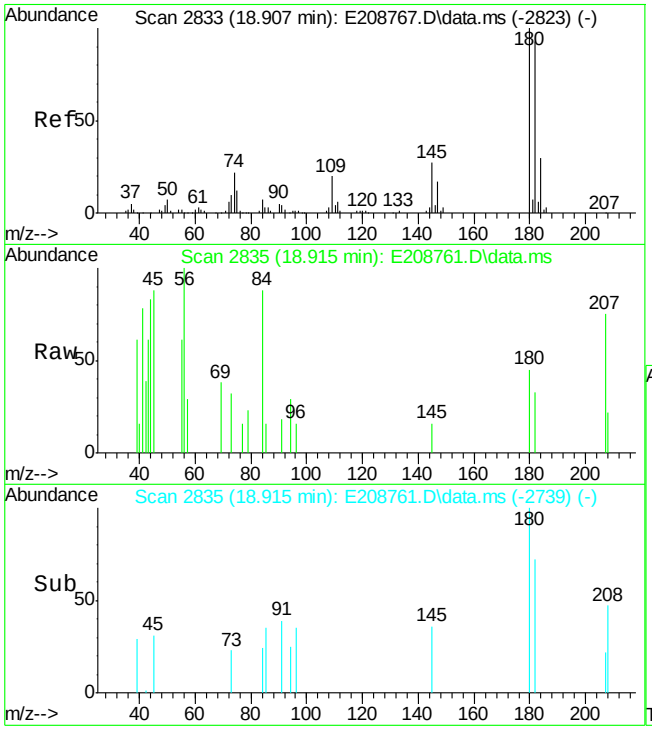


#139
1,3,5-trichlorobenzene
Concen: 0.44 ug/L
RT: 18.194 min Scan# 2697
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:180 Resp: 951

Ion	Ratio	Lower	Upper
180	100		
145	5.6	20.2	37.4#
74	5.4	20.0	37.2#

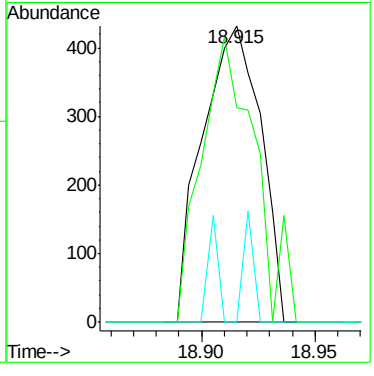




#140
1,2,4-trichlorobenzene
Concen: 0.43 ug/L
RT: 18.915 min Scan# 2835
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

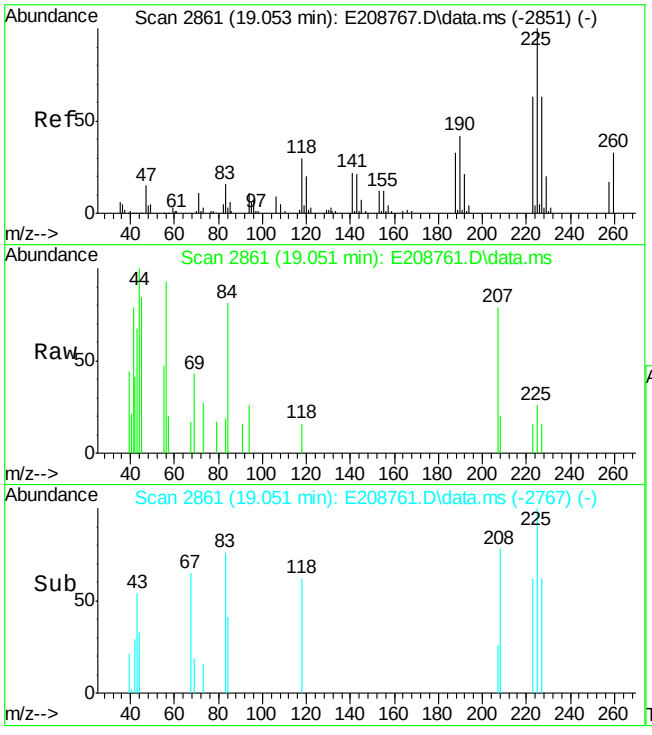
Tgt Ion:180 Resp: 771

Ion	Ratio	Lower	Upper
180	100		
182	72.5	68.7	128.7
184	0.0	1.9	61.9#



7.7.1

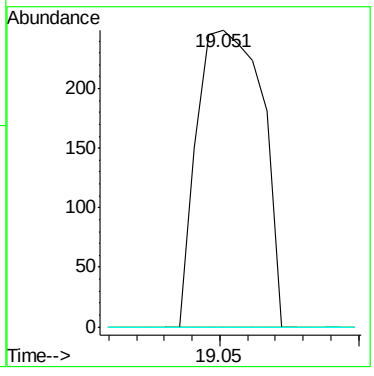
7

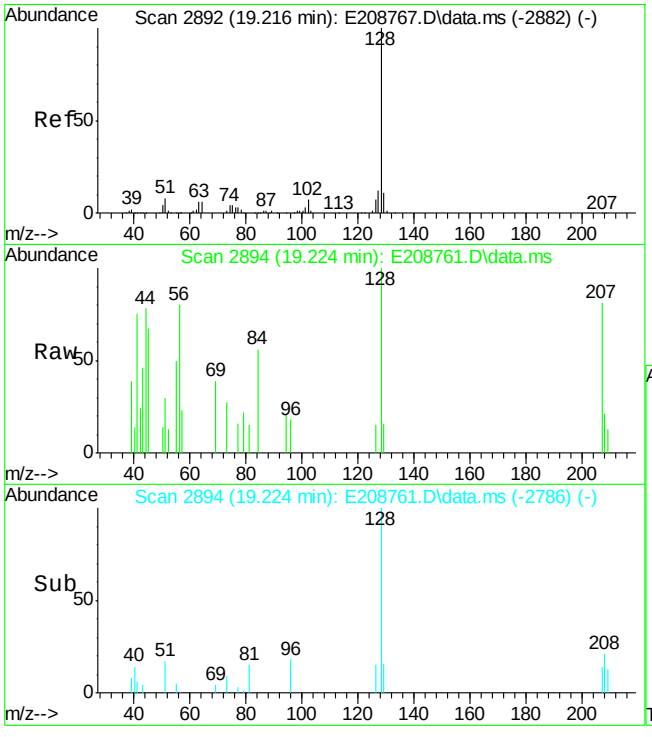


#141
hexachlorobutadiene
Concen: 0.40 ug/L
RT: 19.051 min Scan# 2861
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:225 Resp: 404

Ion	Ratio	Lower	Upper
225	100		
259	0.0	0.0	30.0
260	0.0	0.0	57.3

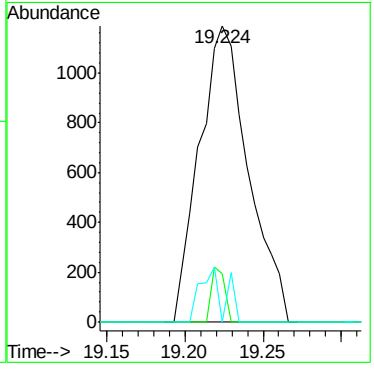




#142
naphthalene
Concen: 0.59 ug/L
RT: 19.224 min Scan# 2894
Delta R.T. 0.004 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:128 Resp: 2599

Ion	Ratio	Lower	Upper
128	100		
129	16.1	0.0	41.4
127	0.0	0.0	43.1



7.7.1

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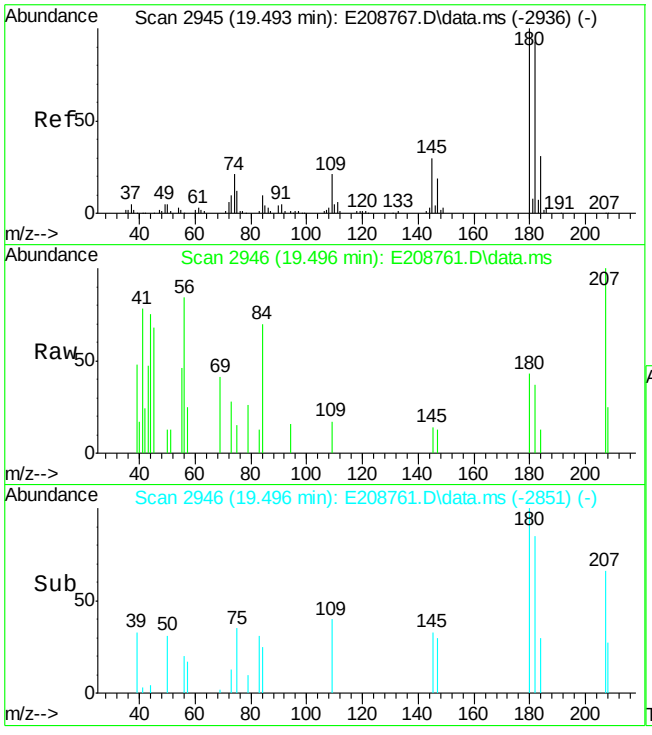
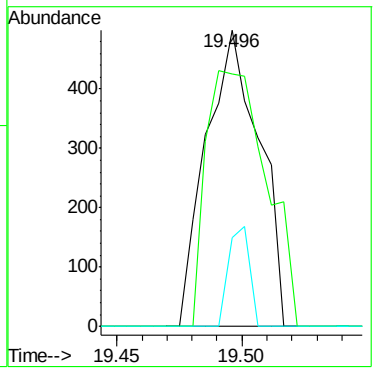
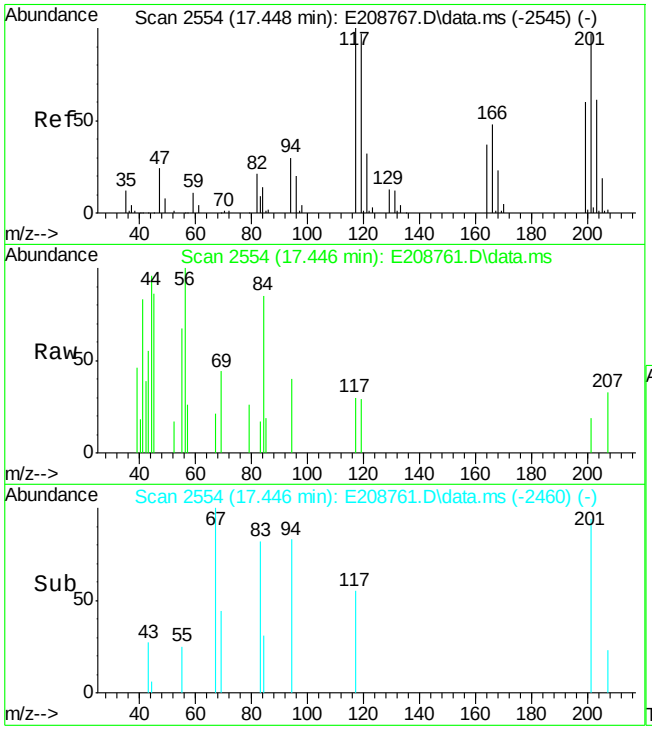


#144
1,2,3-trichlorobenzene
Concen: 0.46 ug/L
RT: 19.496 min Scan# 2946
Delta R.T. -0.001 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:180 Resp: 737

Ion	Ratio	Lower	Upper
180	100		
182	85.2	68.0	128.0
184	30.1	1.2	61.2

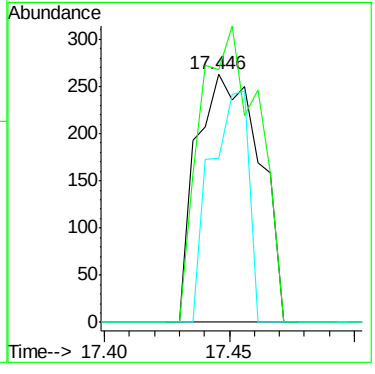




#145
hexachloroethane
Concen: 0.48 ug/L
RT: 17.446 min Scan# 2554
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion:119 Resp: 463

Ion	Ratio	Lower	Upper
119	100		
117	110.8	73.3	133.3
201	56.6	59.2	119.2#



7.7.1

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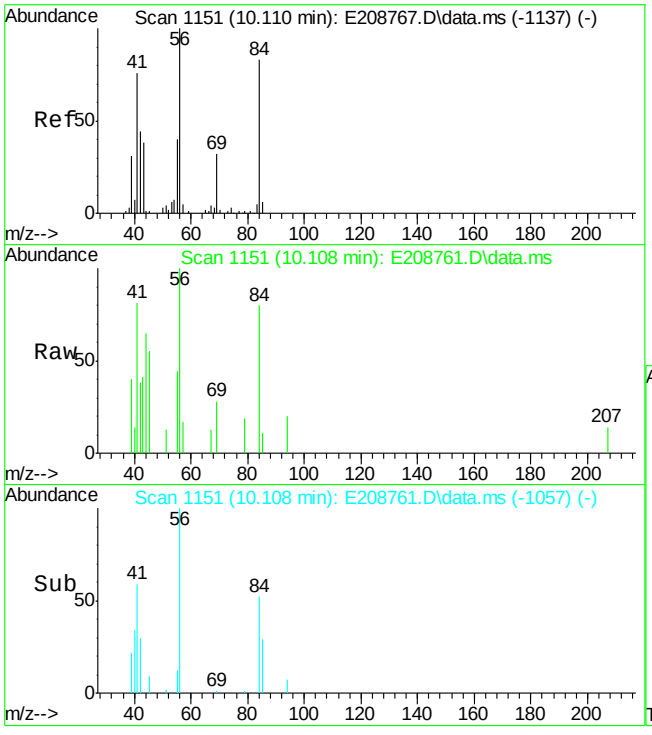
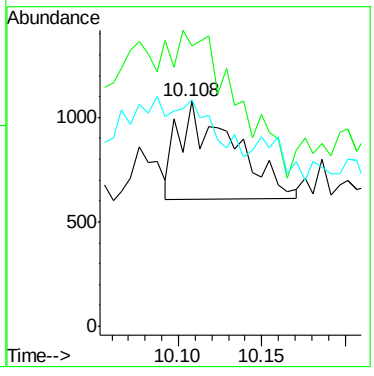


#146
Cyclohexane
Concen: 0.54 ug/L
RT: 10.108 min Scan# 1151
Delta R.T. -0.006 min
Lab File: E208761.D
Acq: 22 Oct 2013 10:51 pm

Tgt Ion: 84 Resp: 1074

Ion	Ratio	Lower	Upper
84	100		
56	317.5	0.0	30.0#
41	0.0	69.1	129.1#



7.7.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208762.D
Acq On : 22 Oct 2013 11:21 pm
Operator : DivyaP
Sample : jb25269d-11d
Misc : MS55943,VE9161,5.0,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 23 08:31:56 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.651	65	72976	500.00	ug/L	0.01
5) pentafluorobenzene	9.858	168	128946	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.774	114	183320	50.00	ug/L	0.00
97) chlorobenzene-d5	14.100	117	175110	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.673	152	100850	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.895	113	1234	1.00	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 2.00%#			
61) 1,2-dichloroethane-d4 (s)	10.318	65	1538	1.00	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 2.00%#			
89) toluene-d8 (s)	12.484	98	4908	1.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 2.00%#			
116) 4-bromofluorobenzene (s)	15.381	95	2697	1.26	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 2.52%#			

Target Compounds						Qvalue
12) dichlorodifluoromethane	4.288	85	1793	1.00	ug/L #	50
15) chloromethane	4.612	50	2544	1.09	ug/L	68
16) vinyl chloride	4.869	62	1539	0.84	ug/L	94
20) chloroethane	5.732	64	815	0.93	ug/L #	43
24) ethyl ether	6.605	74	462	0.75	ug/L #	17
28) 2-chloropropane	6.788	43	2737	1.05	ug/L #	1
29) acrolein	6.809	56	331838	1391.24	ug/L	99
30) 1,1-dichloroethene	7.044	96	1133	0.93	ug/L #	65
33) allyl chloride	7.536	41	2667	0.99	ug/L	79
35) iodomethane	7.301	142	1763	0.85	ug/L	74
37) carbon disulfide	7.473	76	3867	0.88	ug/L	79
38) methylene chloride	7.698	84	1668	1.14	ug/L	80
41) methyl tert butyl ether	8.064	73	3799	0.97	ug/L	72
42) trans-1,2-dichloroethene	8.101	96	1248	0.92	ug/L	94
43) di-isopropyl ether	8.645	45	4687	0.94	ug/L	85
44) ethyl tert-butyl ether	9.110	59	4216	0.94	ug/L	95
46) 1,1-dichloroethane	8.629	63	2131	0.90	ug/L	89
47) chloroprene	8.755	53	1987	0.93	ug/L	72
48) acrylonitrile	7.991	53	3329	5.54	ug/L	77
51) 2,2-dichloropropane	9.377	77	2372	1.19	ug/L	81
52) cis-1,2-dichloroethene	9.356	96	1306	0.91	ug/L #	80
54) propionitrile	9.372	54	2634	11.00	ug/L	87
57) chloroform	9.712	83	2832	1.13	ug/L	91
58) t-butyl formate	9.759	59	1369	0.97	ug/L	87
59) Iso-octane	10.475	57	4791	0.90	ug/L	99
63) methacrylonitrile	9.571	41	851	0.97	ug/L	81
64) 1,1,1-trichloroethane	10.010	97	1771	0.91	ug/L	87
65) tert-amyl methyl ether	10.475	73	3844	0.92	ug/L	95
71) tert-amyl ethyl ether	11.312	87	1885	0.96	ug/L #	78
72) carbon tetrachloride	10.219	117	1330	0.84	ug/L	84
73) 1,1-dichloropropene	10.177	75	1494	0.88	ug/L	90
74) hexane	8.425	57	1589	0.84	ug/L	84
75) benzene	10.434	78	4970	0.94	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208762.D
Acq On : 22 Oct 2013 11:21 pm
Operator : DivyaP
Sample : jb25269d-11d
Misc : MS55943,VE9161,5.0,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 23 08:31:56 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
77) isopropyl acetate	10.313	43	2343	0.80 ug/L #	74
78) 1,2-dichloroethane	10.418	62	1248	0.79 ug/L	91
79) ethyl acrylate	11.129	55	1487	0.93 ug/L #	83
80) trichloroethene	11.145	95	1320	0.98 ug/L	77
82) 2-chloroethyl vinyl ether	11.908	63	3746	4.22 ug/L	95
83) methylcyclohexane	11.401	83	2565	1.05 ug/L	91
84) methyl methacrylate	11.401	69	1789	1.12 ug/L #	40
85) 1,2-dichloropropane	11.380	63	1289	0.92 ug/L	85
86) dibromomethane	11.542	93	698	0.94 ug/L	94
87) bromodichloromethane	11.668	83	2124	1.11 ug/L	92
88) cis-1,3-dichloropropene	12.154	75	1823	0.86 ug/L	87
90) 4-methyl-2-pentanone	12.233	58	525	0.98 ug/L #	51
91) toluene	12.557	92	2884	0.91 ug/L	93
92) 3-methyl-1-butanol	12.264	55	1138	16.43 ug/L #	63
93) trans-1,3-dichloropropene	12.730	75	1668	0.86 ug/L #	65
94) ethyl methacrylate	12.740	69	2049	1.03 ug/L	79
95) 1,1,2-trichloroethane	12.949	83	1351	1.15 ug/L	96
96) 2-hexanone	13.153	58	404	0.82 ug/L #	20
99) tetrachloroethene	13.200	166	1059	0.76 ug/L	92
100) 1,3-dichloropropane	13.153	76	1727	0.90 ug/L	92
101) butyl acetate	13.253	56	1181	1.09 ug/L #	28
102) 3,3-dimethyl-1-butanol	13.321	57	1441	8.36 ug/L #	66
103) dibromochloromethane	13.446	129	1247	0.91 ug/L	80
104) 1,2-dibromoethane	13.624	107	1109	0.94 ug/L	95
106) chlorobenzene	14.142	112	3222	0.91 ug/L	87
107) 1,1,1,2-tetrachloroethane	14.189	131	1269	0.96 ug/L	71
108) ethylbenzene	14.204	91	5806	0.91 ug/L	97
109) m,p-xylene	14.320	106	4241	1.80 ug/L	90
110) o-xylene	14.780	106	1931	0.83 ug/L	91
112) styrene	14.795	104	3598	0.90 ug/L	98
113) bromoform	15.062	173	999	0.99 ug/L	90
115) isopropylbenzene	15.162	105	5638	0.92 ug/L	89
117) bromobenzene	15.601	156	1454	0.93 ug/L	82
120) 1,2,3-trichloropropane	15.543	110	464	1.14 ug/L #	64
121) n-propylbenzene	15.611	91	6701	0.94 ug/L	96
122) p-ethyltoluene	15.726	105	5729	0.96 ug/L	96
123) 2-chlorotoluene	15.774	126	1266	0.89 ug/L #	82
124) 4-chlorotoluene	15.883	91	4686	1.02 ug/L	92
125) 1,3,5-trimethylbenzene	15.774	105	5032	0.95 ug/L	96
126) tert-butylbenzene	16.166	119	4224	0.94 ug/L	94
127) pentachloroethane	16.255	167	1116	1.05 ug/L	88
128) 1,2,4-trimethylbenzene	16.218	105	4896	0.92 ug/L	90
129) sec-butylbenzene	16.412	105	5974	0.90 ug/L	95
130) 1,3-dichlorobenzene	16.616	146	2872	0.96 ug/L	91
131) p-isopropyltoluene	16.537	119	4814	0.88 ug/L	92
132) 1,4-dichlorobenzene	16.704	146	3051	0.97 ug/L	96
133) benzyl chloride	16.814	91	2931	0.92 ug/L #	89
134) p-diethylbenzene	16.961	119	3013	0.90 ug/L	93
135) 1,2-dichlorobenzene	17.133	146	3033	1.03 ug/L	85
136) n-butylbenzene	17.003	92	2275	0.82 ug/L #	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208762.D
Acq On : 22 Oct 2013 11:21 pm
Operator : DivyaP
Sample : jb25269d-11d
Misc : MS55943,VE9161,5.0,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 23 08:31:56 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
137) 1,2,4,5-tetramethylben...	17.819	119	4858	0.97	ug/L	92
138) 1,2-dibromo-3-chloropr...	17.965	75	241	0.85	ug/L	80
139) 1,3,5-trichlorobenzene	18.200	180	1896	0.86	ug/L	95
140) 1,2,4-trichlorobenzene	18.912	180	1754	0.94	ug/L	91
141) hexachlorobutadiene	19.063	225	899	0.86	ug/L	48
142) naphthalene	19.225	128	4827	1.07	ug/L	97
144) 1,2,3-trichlorobenzene	19.497	180	1608	0.98	ug/L	97
145) hexachloroethane	17.452	119	877	0.87	ug/L	92
146) Cyclohexane	10.104	84	1810	0.88	ug/L #	1

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

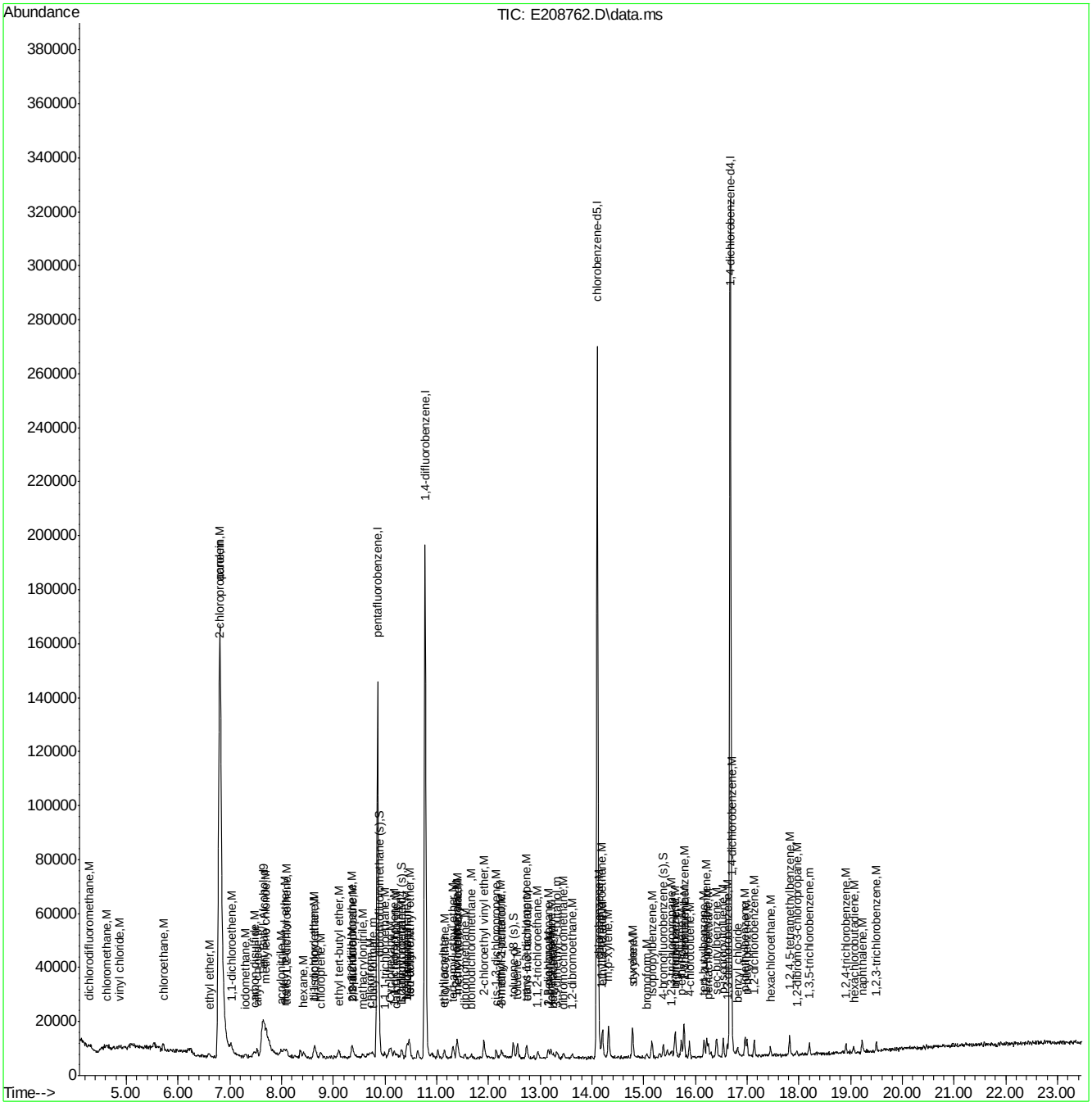
7.7.2

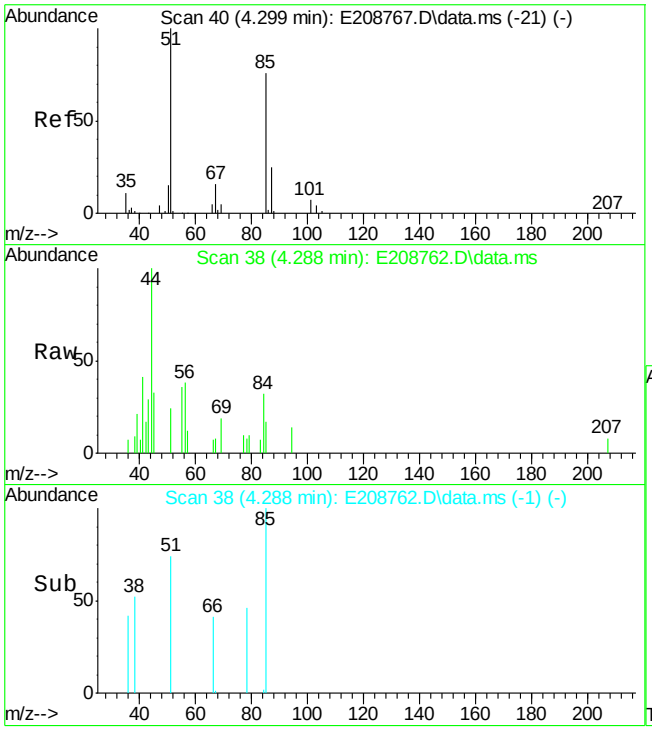
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208762.D
Acq On : 22 Oct 2013 11:21 pm
Operator : DivyaP
Sample : jb25269d-11d
Misc : MS55943,VE9161,5.0,,100,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 23 08:31:56 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

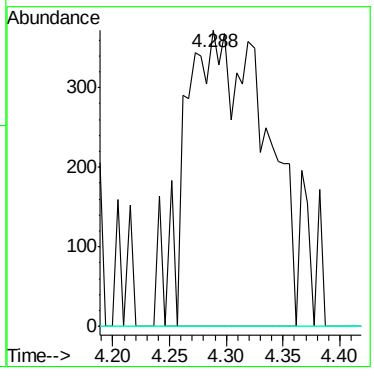


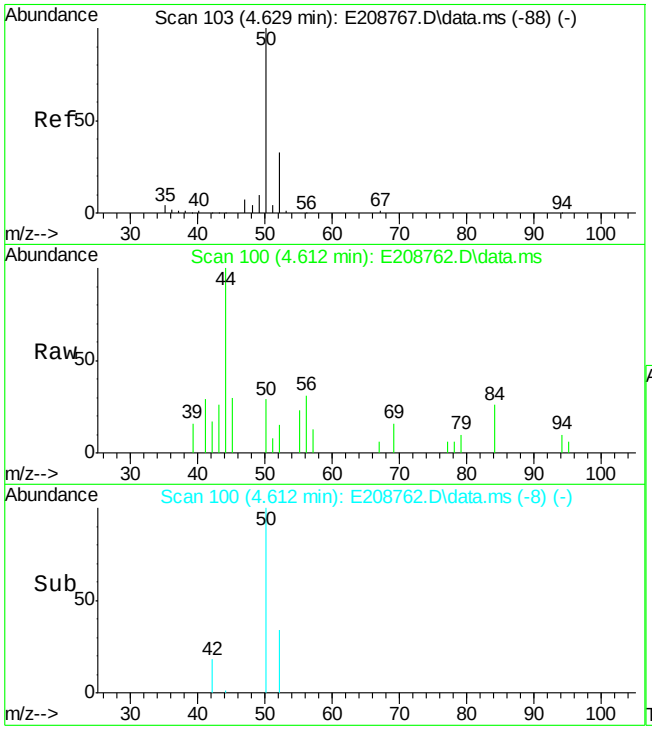


#12
dichlorodifluoromethane
Concen: 1.00 ug/L
RT: 4.288 min Scan# 38
Delta R.T. -0.004 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 85 Resp: 1793

Ion	Ratio	Lower	Upper
85	100		
87	0.0	2.2	62.2#
101	0.0	0.0	40.0

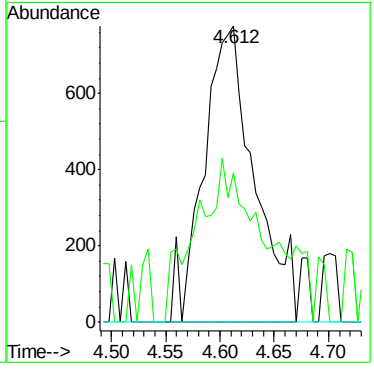




#15
chloromethane
Concen: 1.09 ug/L
RT: 4.612 min Scan# 100
Delta R.T. -0.020 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 50 Resp: 2544

Ion	Ratio	Lower	Upper
50	100		
52	50.6	2.3	62.3
49	0.0	0.0	40.7



7.7.2

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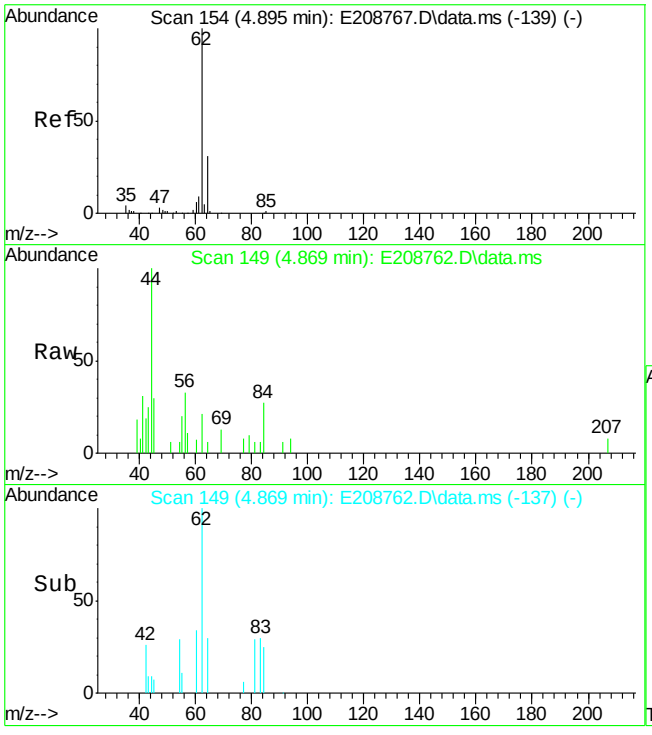
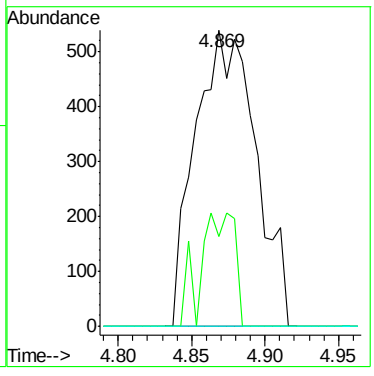
ACCUTEST LABORATORIES JB53758

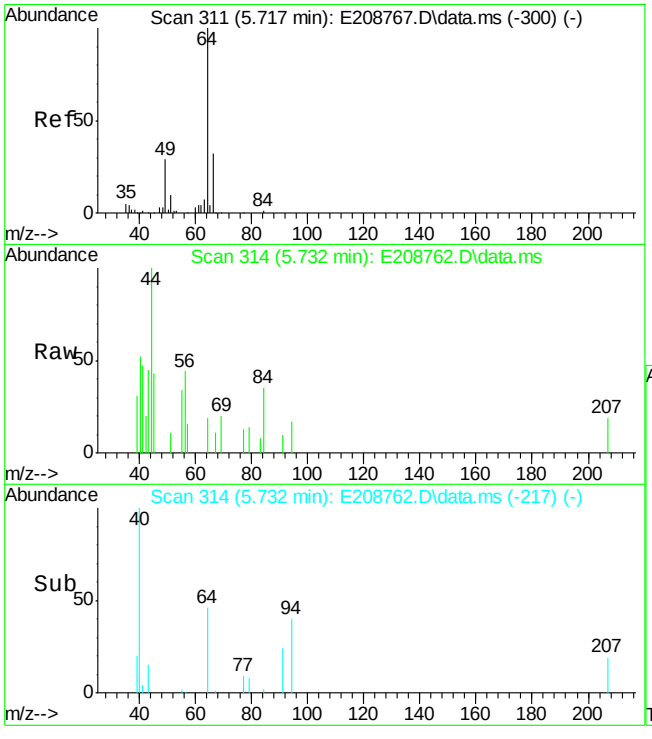


#16
vinyl chloride
Concen: 0.84 ug/L
RT: 4.869 min Scan# 149
Delta R.T. -0.035 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 62 Resp: 1539

Ion	Ratio	Lower	Upper
62	100		
64	30.4	1.0	61.0
61	0.0	0.0	38.7

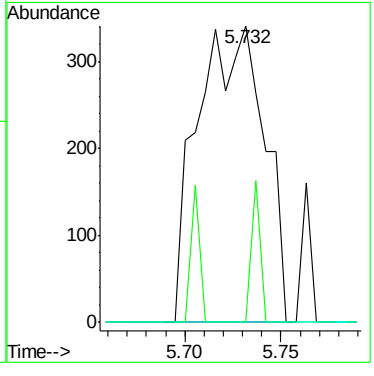




#20
chloroethane
Concen: 0.93 ug/L
RT: 5.732 min Scan# 314
Delta R.T. 0.007 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 64 Resp: 815

Ion	Ratio	Lower	Upper
64	100		
66	0.0	3.3	63.3#
49	0.0	0.0	59.2



7.7.2

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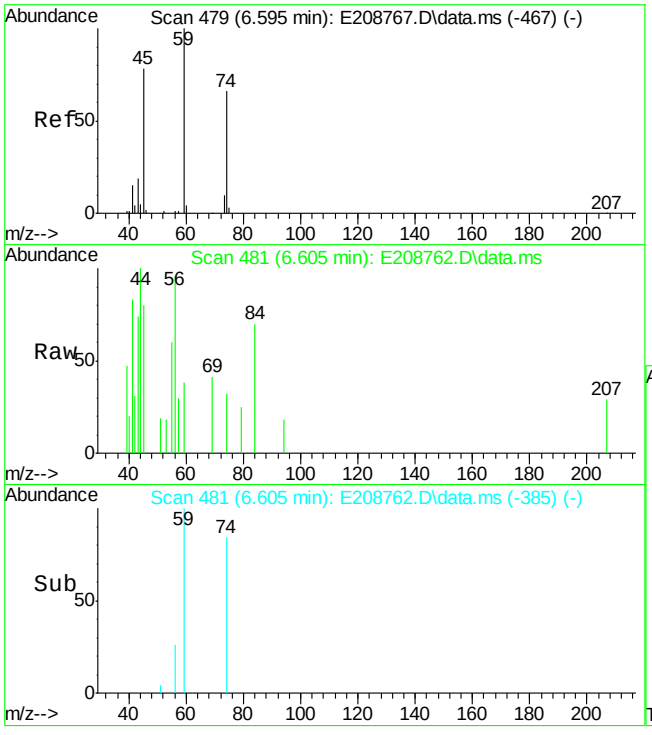
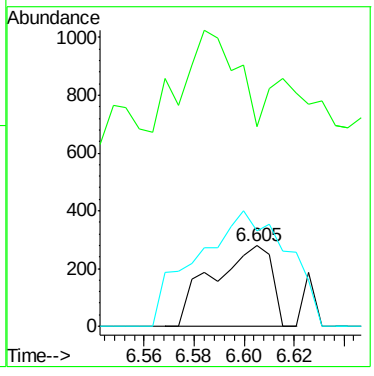
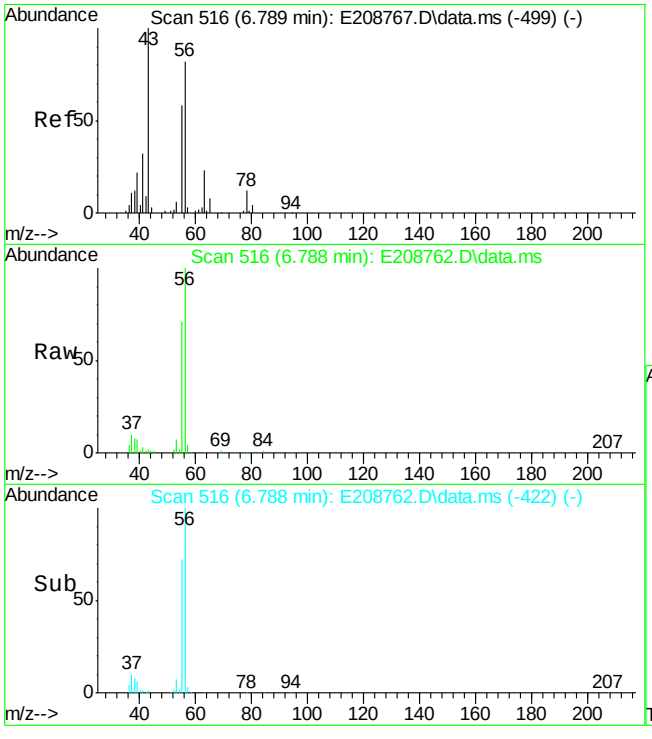


#24
ethyl ether
Concen: 0.75 ug/L
RT: 6.605 min Scan# 481
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 74 Resp: 462

Ion	Ratio	Lower	Upper
74	100		
45	0.0	69.3	129.3#
59	51.1	105.6	165.6#

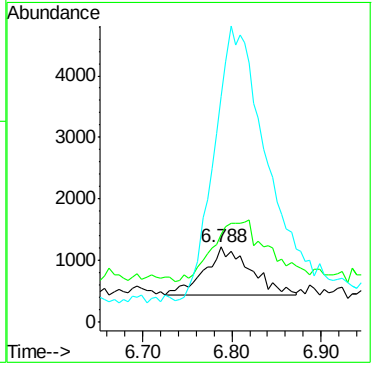


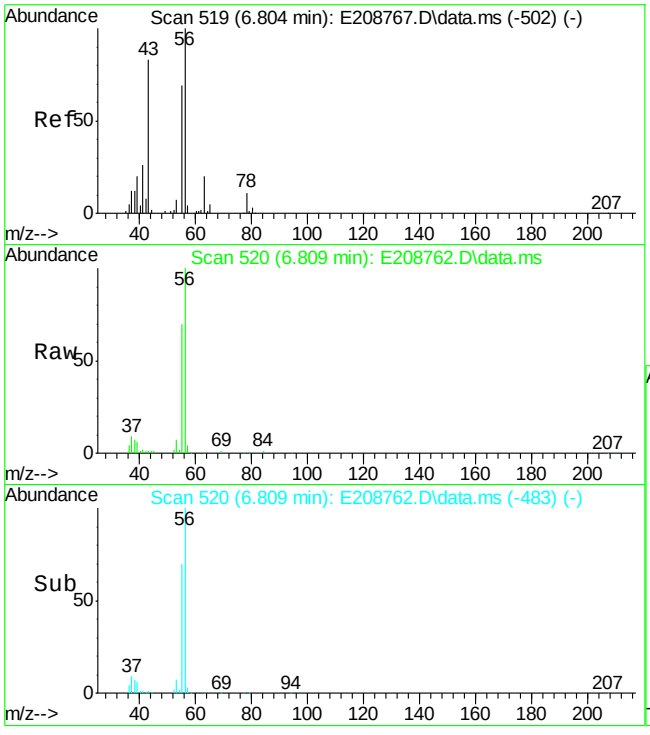


#28
2-chloropropane
Concen: 1.05 ug/L
RT: 6.788 min Scan# 516
Delta R.T. -0.010 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 43 Resp: 2737

Ion	Ratio	Lower	Upper
43	100		
41	0.0	30.4	45.6#
39	711.5	24.6	36.8#

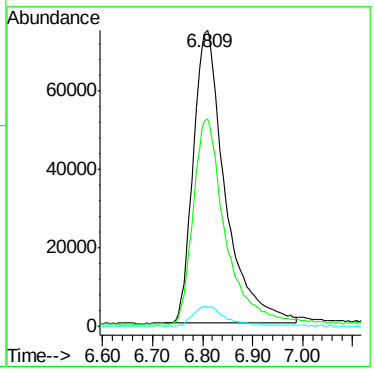


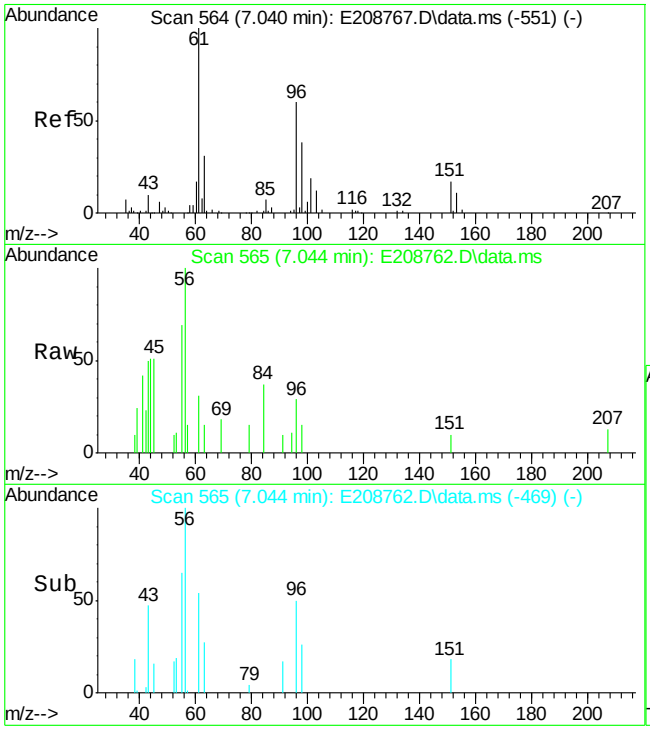


#29
acrolein
Concen: 1391.24 ug/L
RT: 6.809 min Scan# 520
Delta R.T. -0.004 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 56 Resp: 331838

Ion	Ratio	Lower	Upper
56	100		
55	70.1	39.1	99.1
53	6.7	0.0	37.3

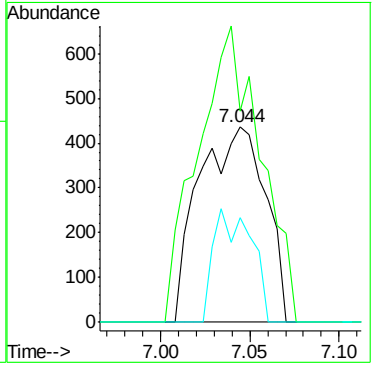




#30
1,1-dichloroethene
Concen: 0.93 ug/L
RT: 7.044 min Scan# 565
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 96 Resp: 1133

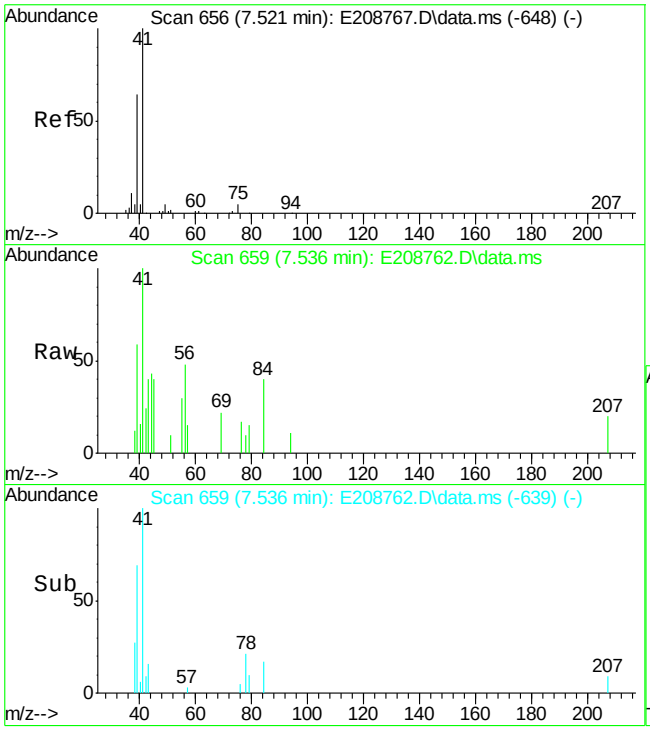
Ion	Ratio	Lower	Upper
96	100		
61	108.0	141.5	201.5#
63	53.7	24.4	84.4



7.7.2

7

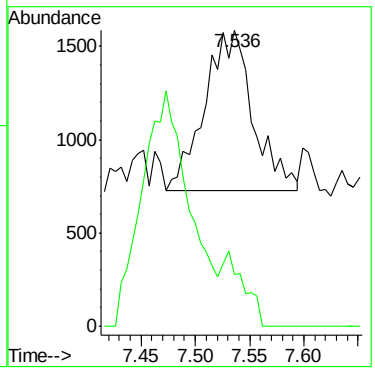
ACCUTEST LABORATORIES JB53758

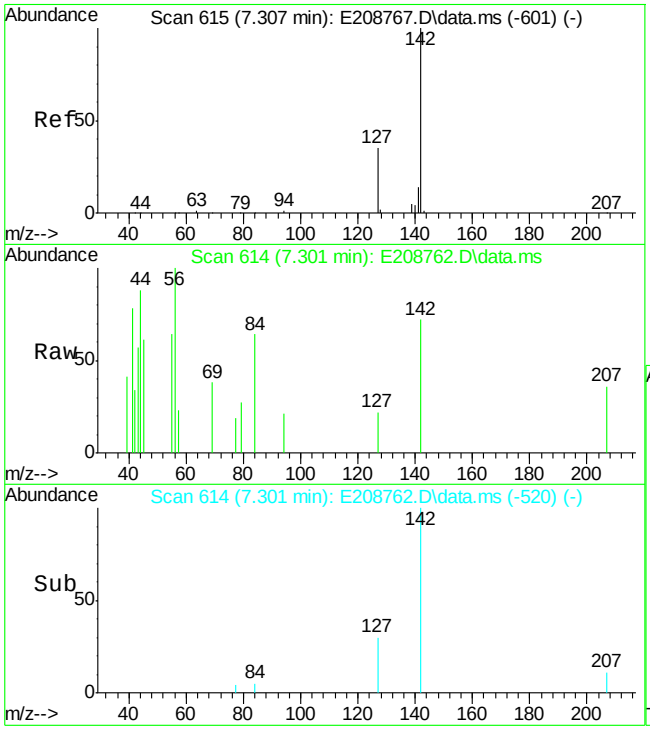


#33
allyl chloride
Concen: 0.99 ug/L
RT: 7.536 min Scan# 659
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 41 Resp: 2667

Ion	Ratio	Lower	Upper
41	100		
76	32.1	32.1	59.5

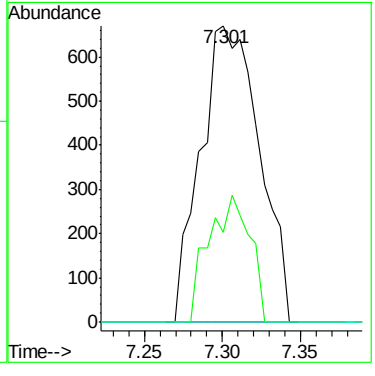




#35
iodomethane
Concen: 0.85 ug/L
RT: 7.301 min Scan# 614
Delta R.T. -0.010 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:142 Resp: 1763

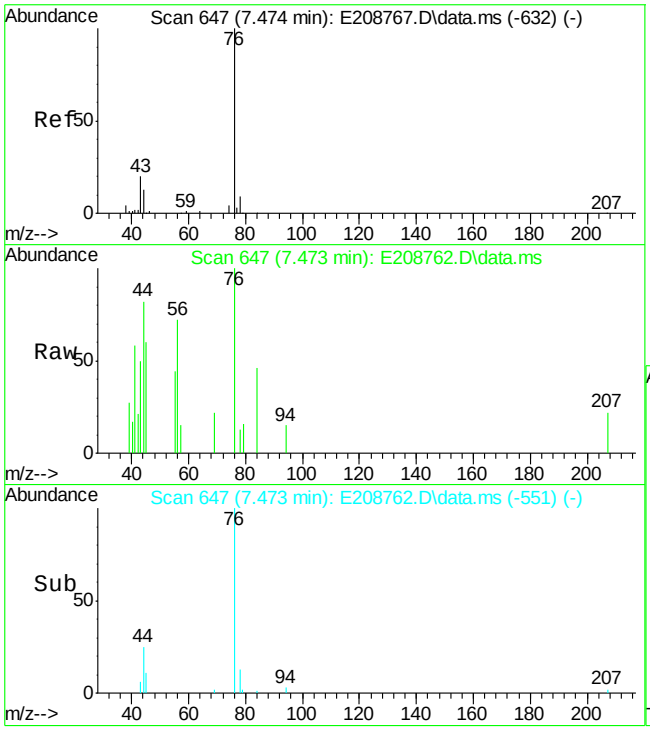
Ion	Ratio	Lower	Upper
142	100		
127	30.4	14.5	74.5
141	0.0	0.0	45.7



7.7.2

7

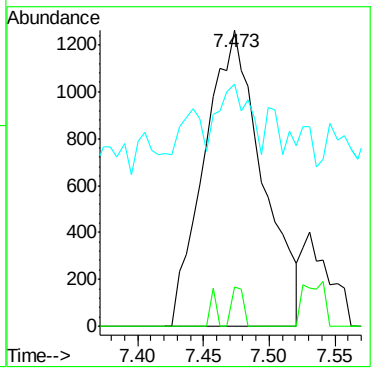
ACCUTEST LABORATORIES JB53758

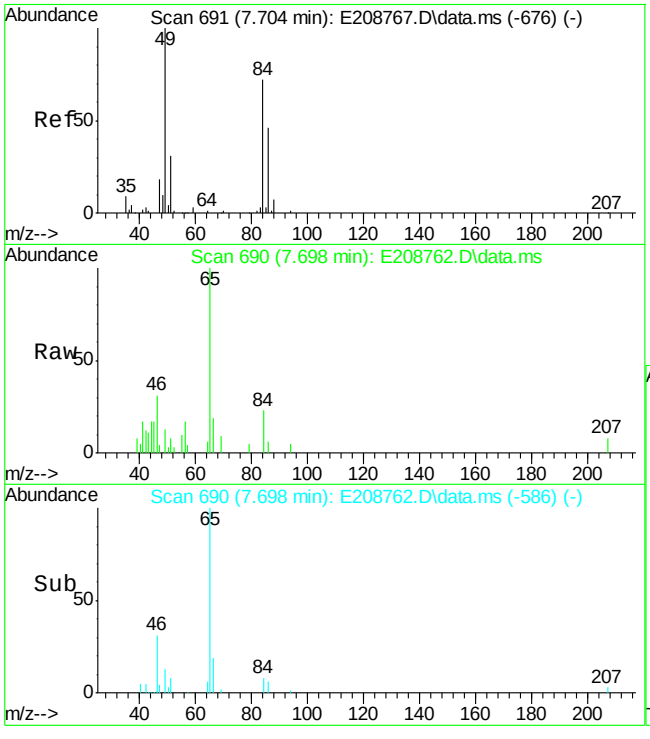


#37
carbon disulfide
Concen: 0.88 ug/L
RT: 7.473 min Scan# 647
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 76 Resp: 3867

Ion	Ratio	Lower	Upper
76	100		
78	15.0	0.0	36.9
44	24.8	0.0	46.3

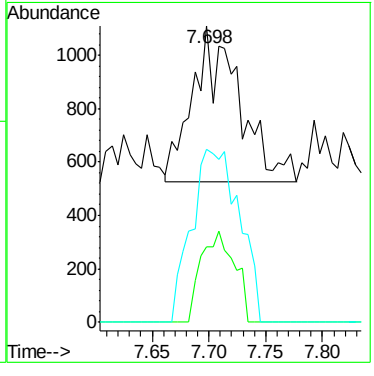




#38
methylene chloride
Concen: 1.14 ug/L
RT: 7.698 min Scan# 690
Delta R.T. -0.015 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 84 Resp: 1668

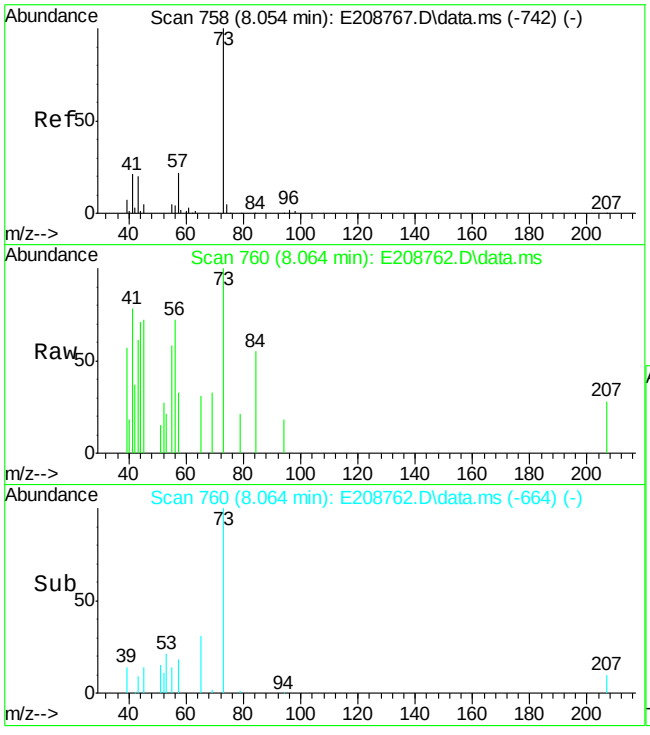
Ion	Ratio	Lower	Upper
84	100		
86	48.2	45.8	85.2
49	111.0	93.3	173.3



7.7.2

7

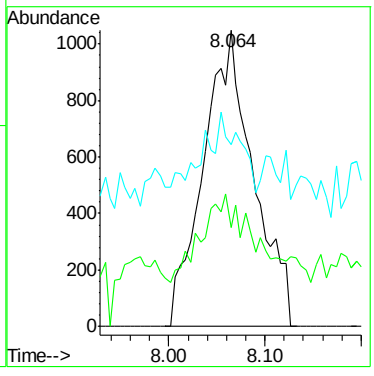
ACCUTEST LABORATORIES JB53758

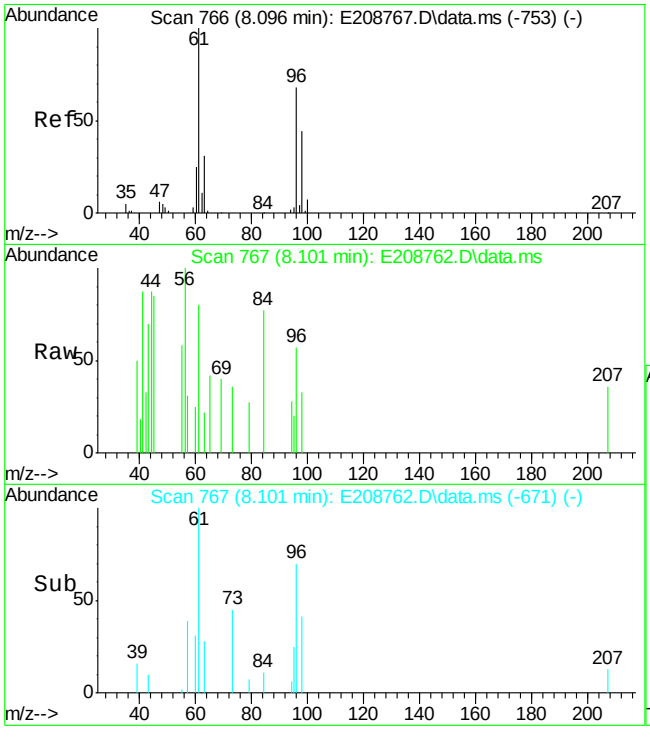


#41
methyl tert butyl ether
Concen: 0.97 ug/L
RT: 8.064 min Scan# 760
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 73 Resp: 3799

Ion	Ratio	Lower	Upper
73	100		
57	42.8	0.0	51.9
43	26.5	0.0	51.2

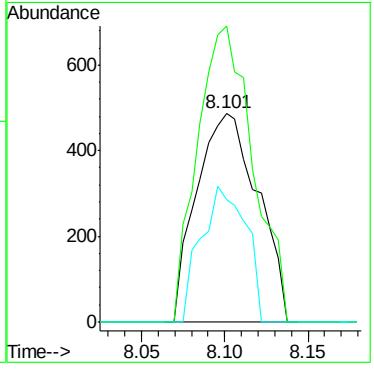




#42
trans-1,2-dichloroethene
Concen: 0.92 ug/L
RT: 8.101 min Scan# 767
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 96 Resp: 1248

Ion	Ratio	Lower	Upper
96	100		
61	141.9	103.3	191.9
98	58.5	45.2	84.0



7.7.2

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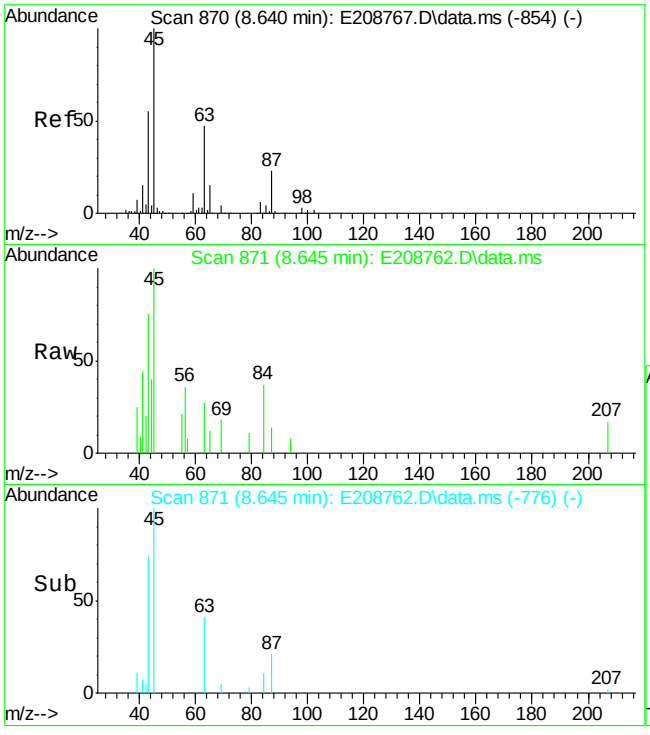
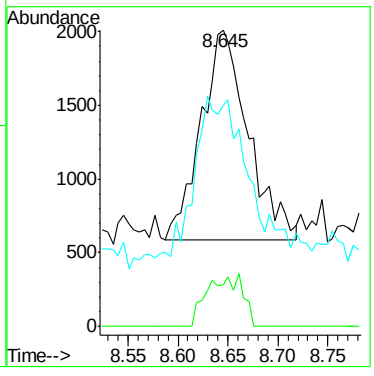
ACCUTEST LABORATORIES JB53758

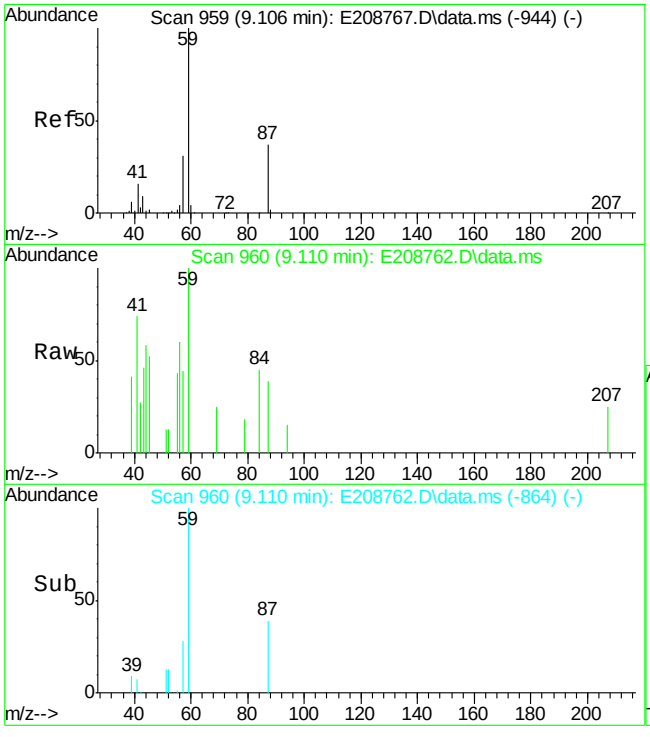


#43
di-isopropyl ether
Concen: 0.94 ug/L
RT: 8.645 min Scan# 871
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 45 Resp: 4687

Ion	Ratio	Lower	Upper
45	100		
87	20.0	0.0	57.6
43	70.2	28.6	88.6

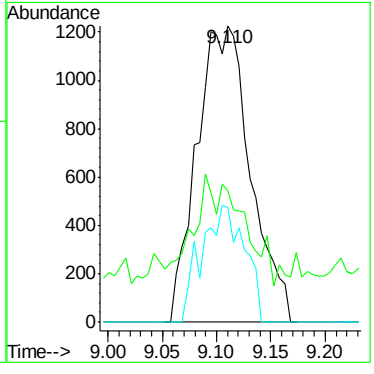


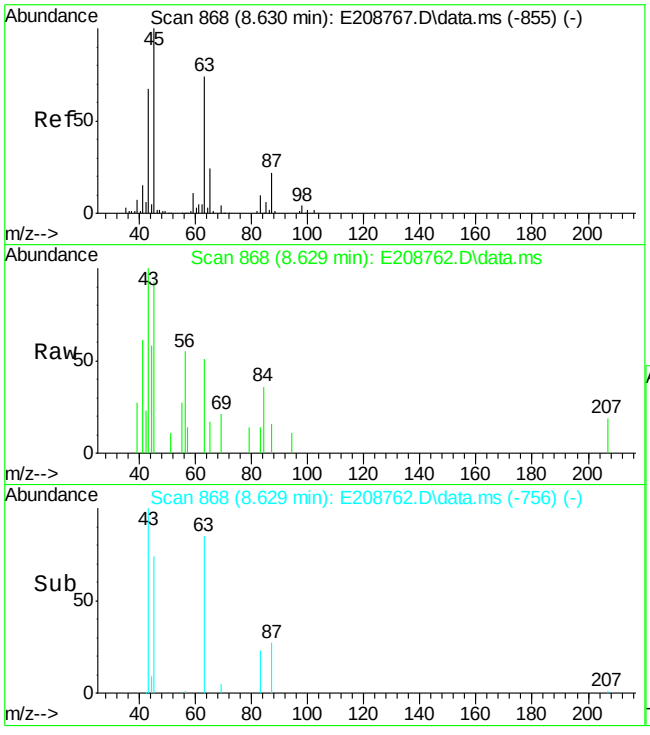


#44
ethyl tert-butyl ether
Concen: 0.94 ug/L
RT: 9.110 min Scan# 960
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 59 Resp: 4216

Ion	Ratio	Lower	Upper
59	100		
57	26.4	0.9	60.9
87	38.8	10.9	70.9

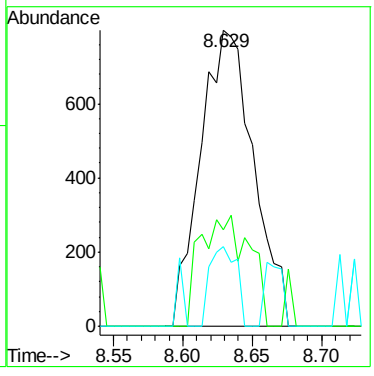


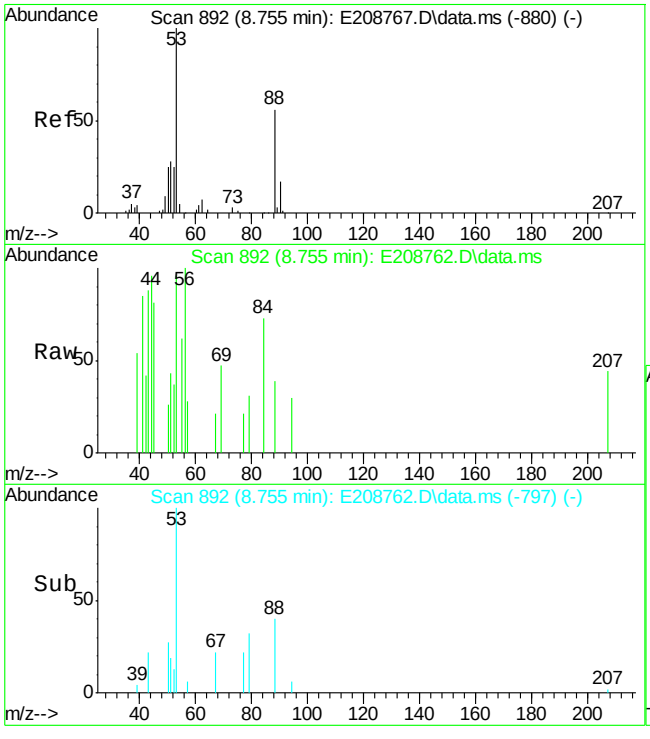


#46
1,1-dichloroethane
Concen: 0.90 ug/L
RT: 8.629 min Scan# 868
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 63 Resp: 2131

Ion	Ratio	Lower	Upper
63	100		
65	32.7	1.9	61.9
83	26.9	0.0	43.1

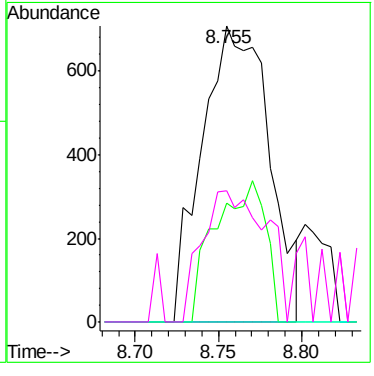


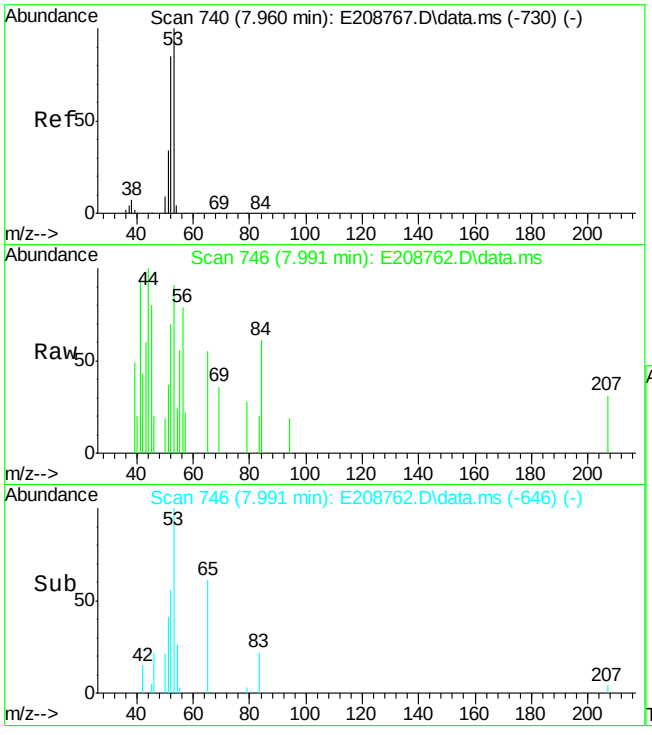


#47
chloroprene
Concen: 0.93 ug/L
RT: 8.755 min Scan# 892
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 53 Resp: 1987

Ion	Ratio	Lower	Upper
53	100		
88	40.1	27.8	87.8
90	0.0	0.0	48.1
51	44.5	0.0	59.4

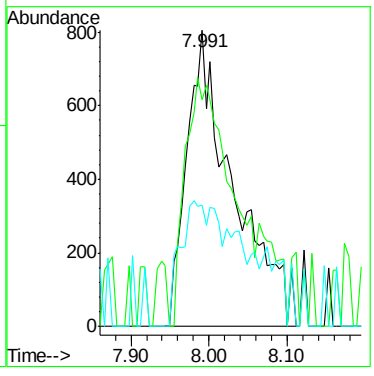


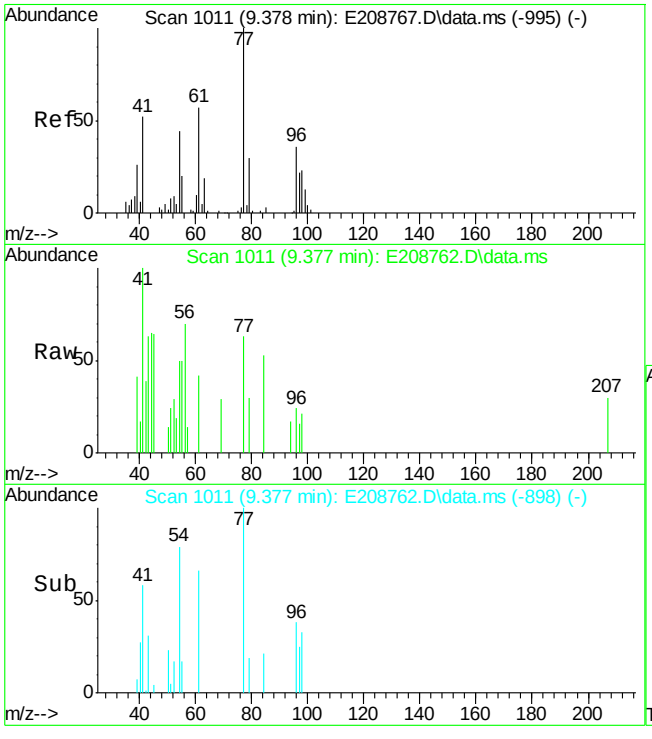


#48
acrylonitrile
Concen: 5.54 ug/L
RT: 7.991 min Scan# 746
Delta R.T. 0.022 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 53 Resp: 3329

Ion	Ratio	Lower	Upper
53	100		
52	56.3	52.0	112.0
51	41.1	5.6	65.6

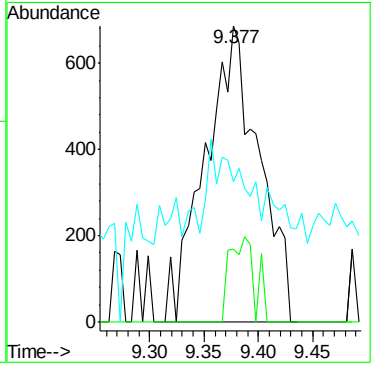


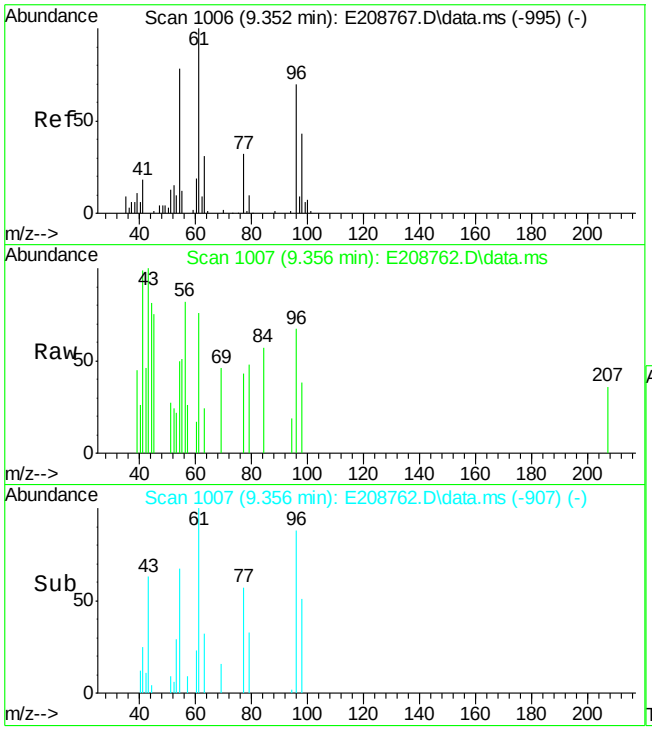


#51
2,2-dichloropropane
Concen: 1.19 ug/L
RT: 9.377 min Scan# 1011
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 77 Resp: 2372

Ion	Ratio	Lower	Upper
77	100		
97	24.8	0.0	51.5
79	15.9	1.0	61.0

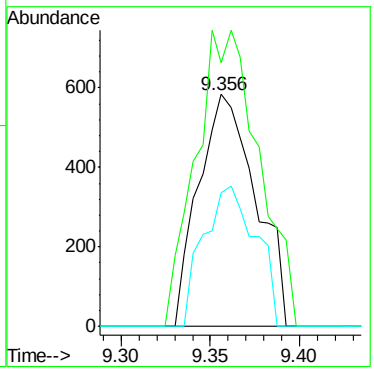


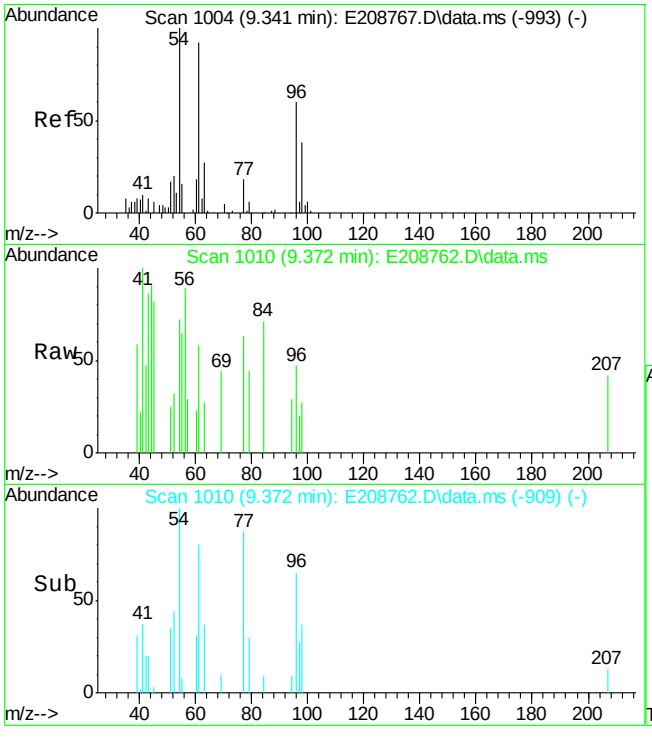


#52
cis-1,2-dichloroethene
Concen: 0.91 ug/L
RT: 9.356 min Scan# 1007
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 96 Resp: 1306

Ion	Ratio	Lower	Upper
96	100		
61	113.6	113.9	173.9#
98	57.6	34.7	94.7

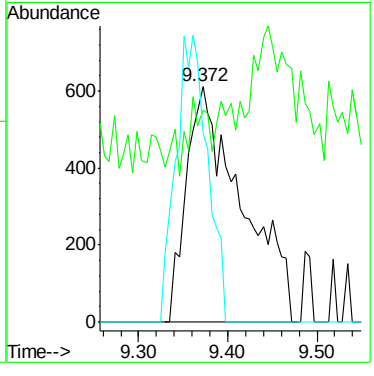




#54
propionitrile
Concen: 11.00 ug/L
RT: 9.372 min Scan# 1010
Delta R.T. 0.027 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 54 Resp: 2634

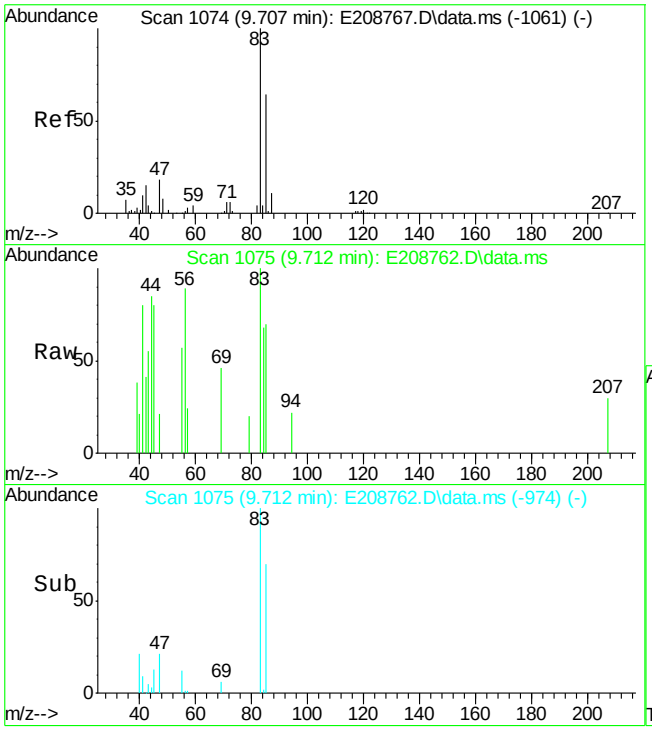
Ion	Ratio	Lower	Upper
54	100		
55	24.5	0.0	45.7
61	80.1	40.6	100.6



7.7.2

7

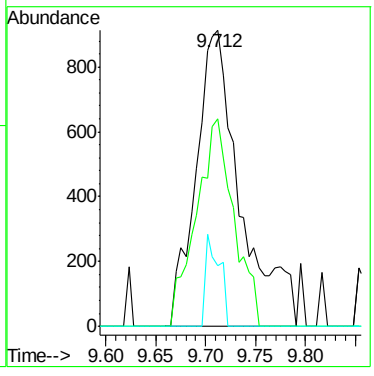
ACCUTEST LABORATORIES JB53758

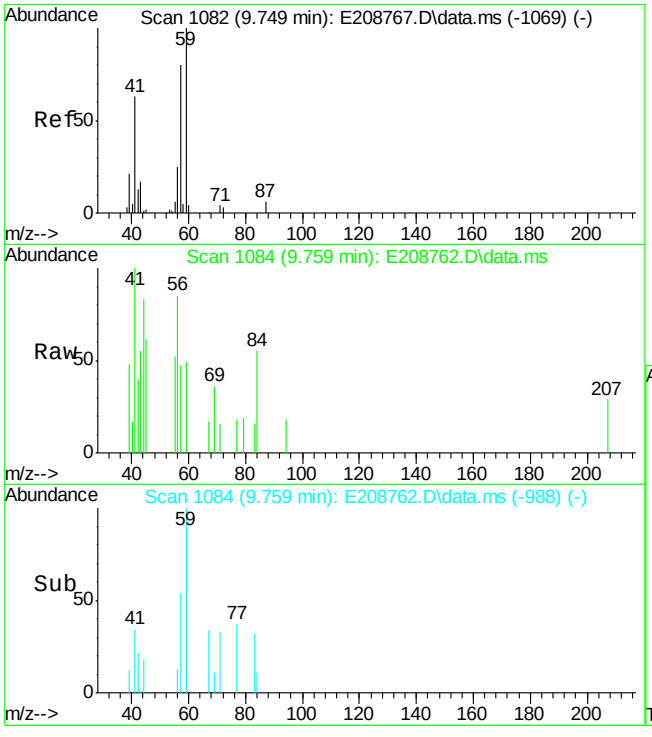


#57
chloroform
Concen: 1.13 ug/L
RT: 9.712 min Scan# 1075
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 83 Resp: 2832

Ion	Ratio	Lower	Upper
83	100		
85	70.2	33.2	93.2
47	20.7	0.0	56.1

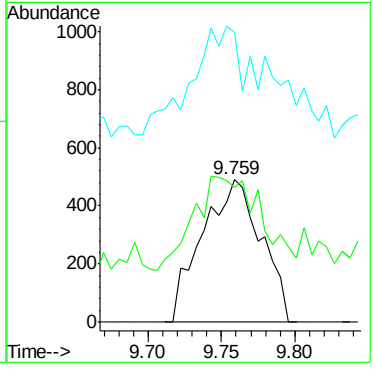




#58
t-butyl formate
Concen: 0.97 ug/L
RT: 9.759 min Scan# 1084
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 59 Resp: 1369

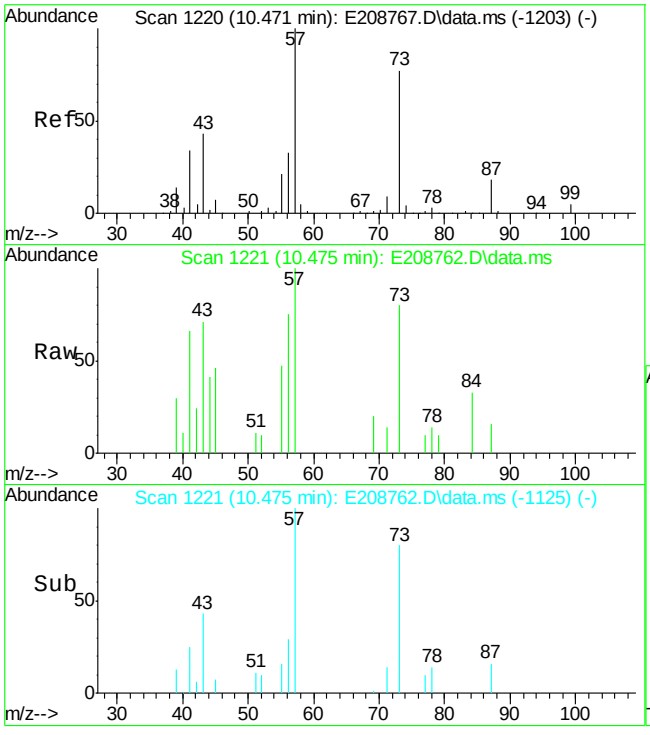
Ion	Ratio	Lower	Upper
59	100		
57	86.0	55.0	102.2
41	101.9	59.8	111.0



7.7.2

7

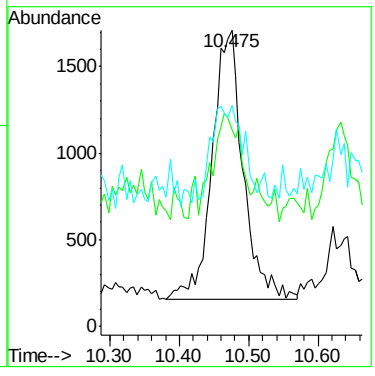
ACCUTEST LABORATORIES JB53758

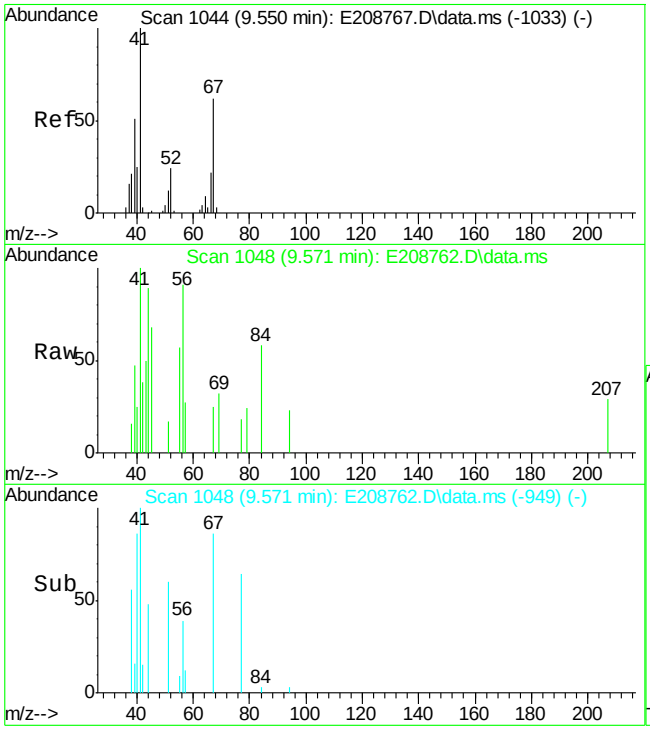


#59
Iso-octane
Concen: 0.90 ug/L
RT: 10.475 min Scan# 1221
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 57 Resp: 4791

Ion	Ratio	Lower	Upper
57	100		
41	39.2	26.8	49.8
56	34.8	24.1	44.8

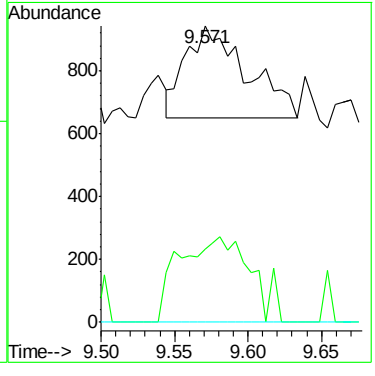




#63
methacrylonitrile
Concen: 0.97 ug/L
RT: 9.571 min Scan# 1048
Delta R.T. 0.016 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 41 Resp: 851

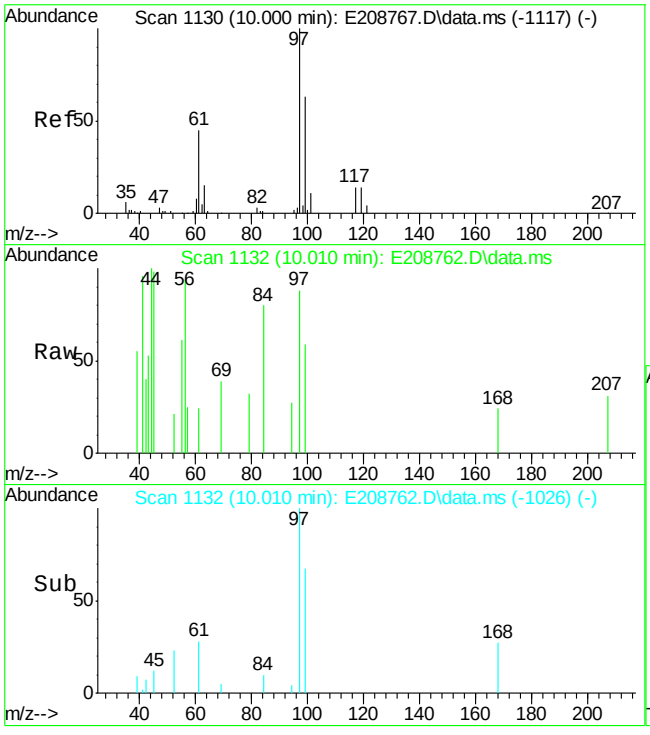
Ion	Ratio	Lower	Upper
41	100		
67	79.6	42.1	102.1
66	0.0	0.0	54.8



7.7.2

7

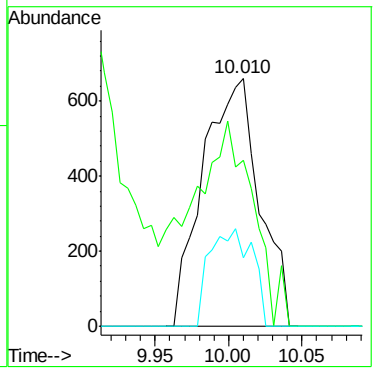
ACCUTEST LABORATORIES JB53758

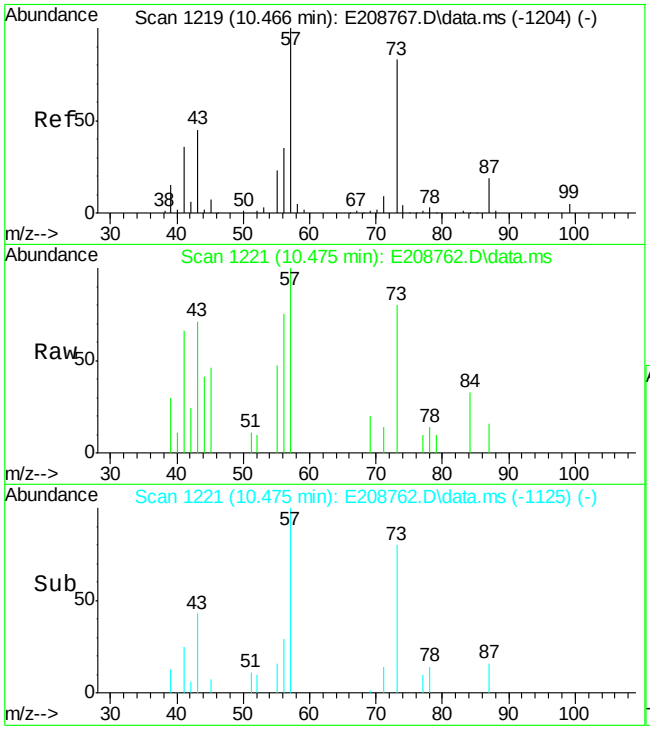


#64
1,1,1-trichloroethane
Concen: 0.91 ug/L
RT: 10.010 min Scan# 1132
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 97 Resp: 1771

Ion	Ratio	Lower	Upper
97	100		
99	66.9	34.2	94.2
61	27.5	15.1	75.1

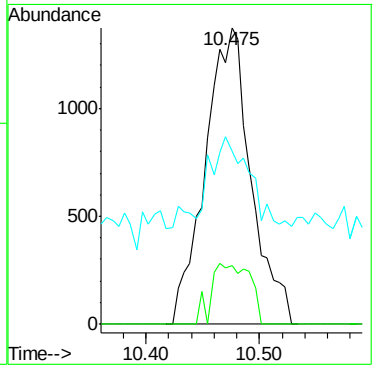


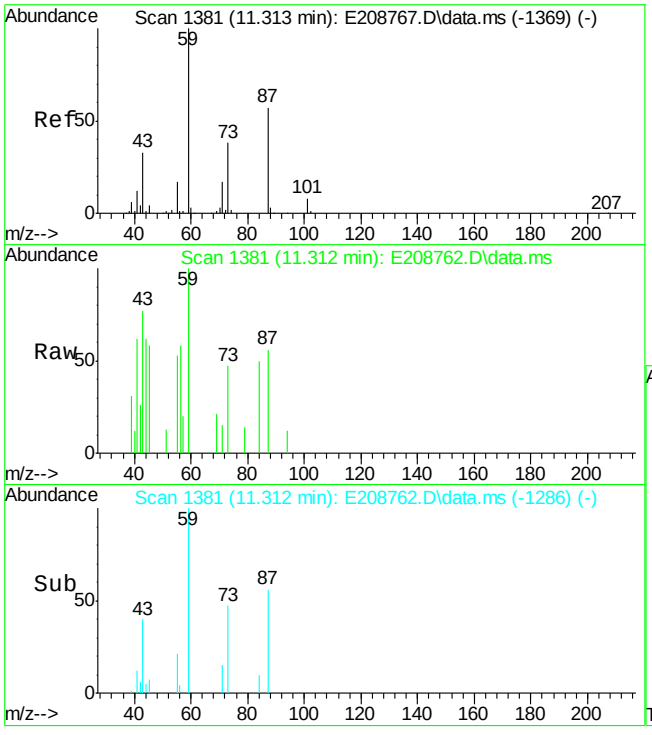


#65
tert-amyl methyl ether
Concen: 0.92 ug/L
RT: 10.475 min Scan# 1221
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 73 Resp: 3844

Ion	Ratio	Lower	Upper
73	100		
87	19.7	0.0	54.4
55	26.2	0.0	57.0

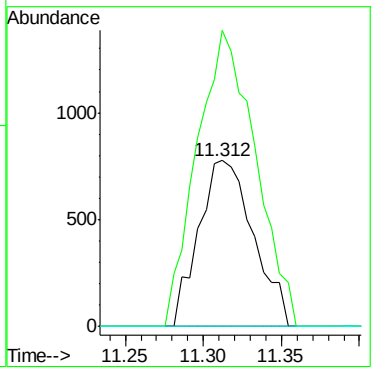


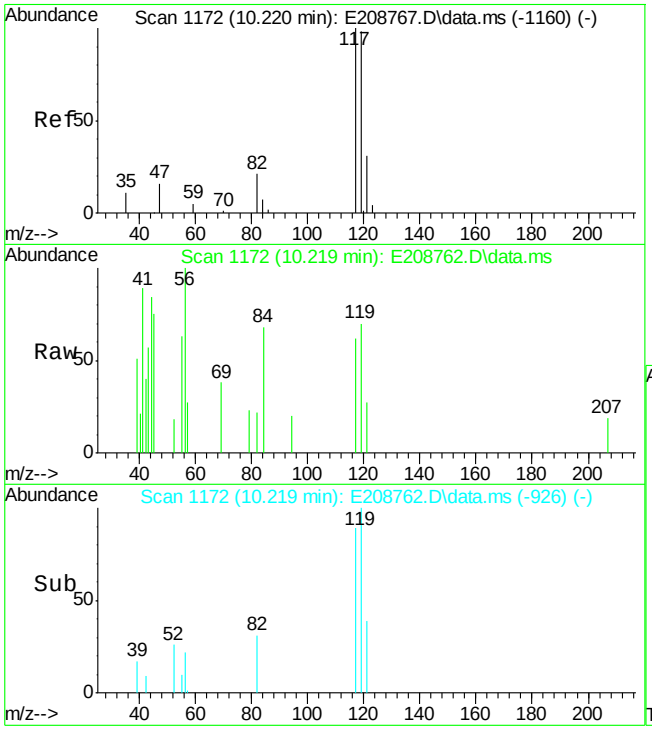


#71
tert-amyl ethyl ether
Concen: 0.96 ug/L
RT: 11.312 min Scan# 1381
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 87 Resp: 1885

Ion	Ratio	Lower	Upper
87	100		
59	191.2	114.2	212.2
101	0.0	10.2	19.0#

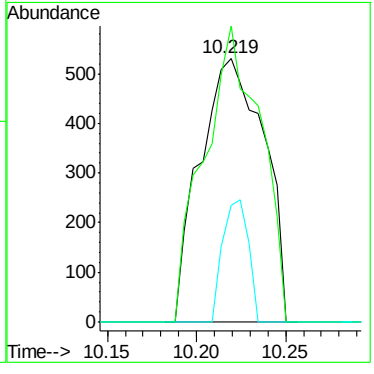




#72
carbon tetrachloride
Concen: 0.84 ug/L
RT: 10.219 min Scan# 1172
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:117 Resp: 1330

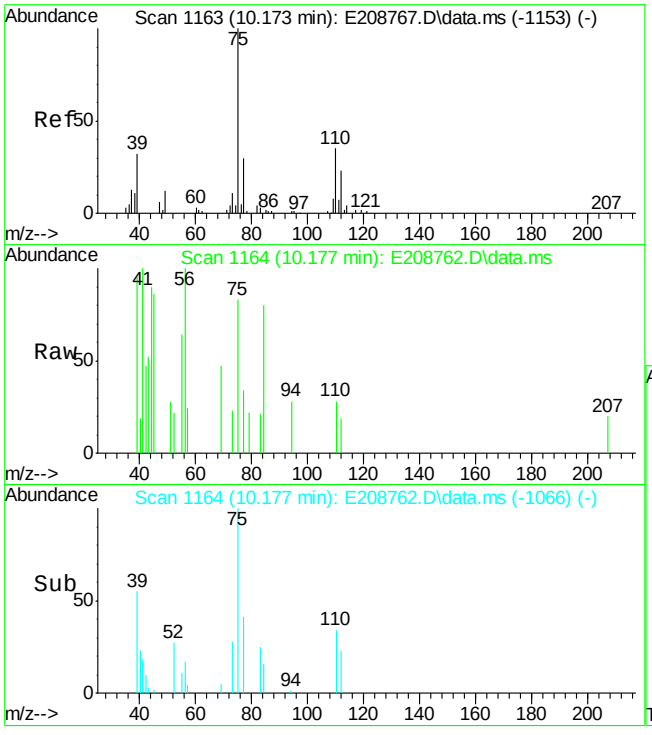
Ion	Ratio	Lower	Upper
117	100		
119	112.2	68.6	128.6
121	44.1	0.7	60.7



7.7.2

7

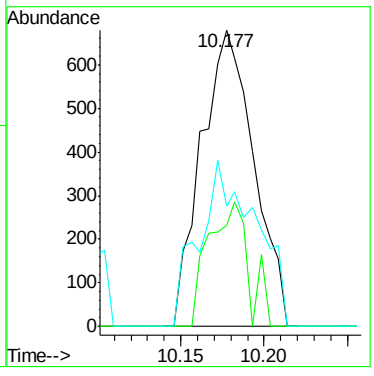
ACCUTEST LABORATORIES JB53758

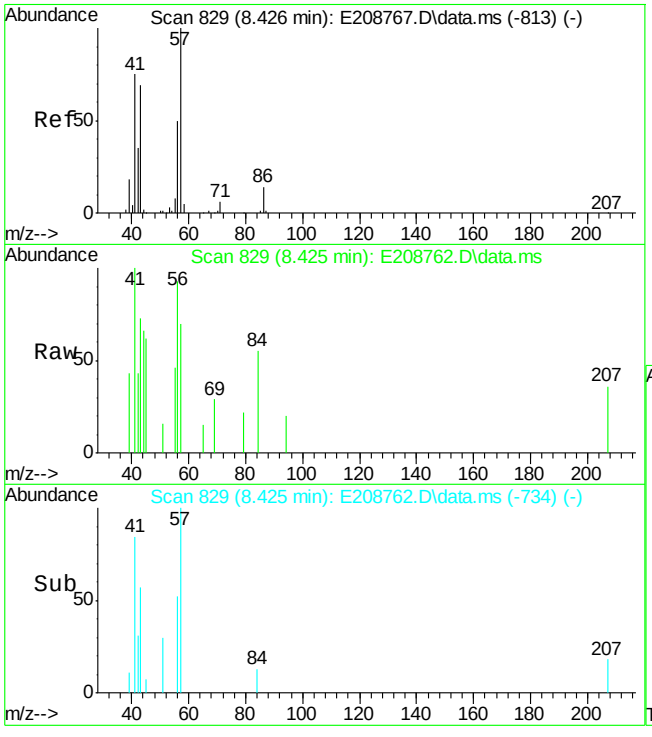


#73
1,1-dichloropropene
Concen: 0.88 ug/L
RT: 10.177 min Scan# 1164
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 75 Resp: 1494

Ion	Ratio	Lower	Upper
75	100		
110	34.0	4.8	64.8
77	40.6	0.0	59.9

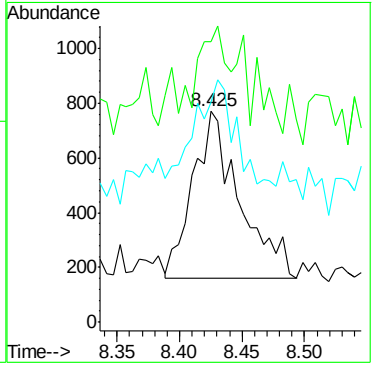




#74
hexane
Concen: 0.84 ug/L
RT: 8.425 min Scan# 829
Delta R.T. -0.004 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 57 Resp: 1589

Ion	Ratio	Lower	Upper
57	100		
56	46.5	23.4	83.4
43	46.2	32.7	92.7



7.7.2

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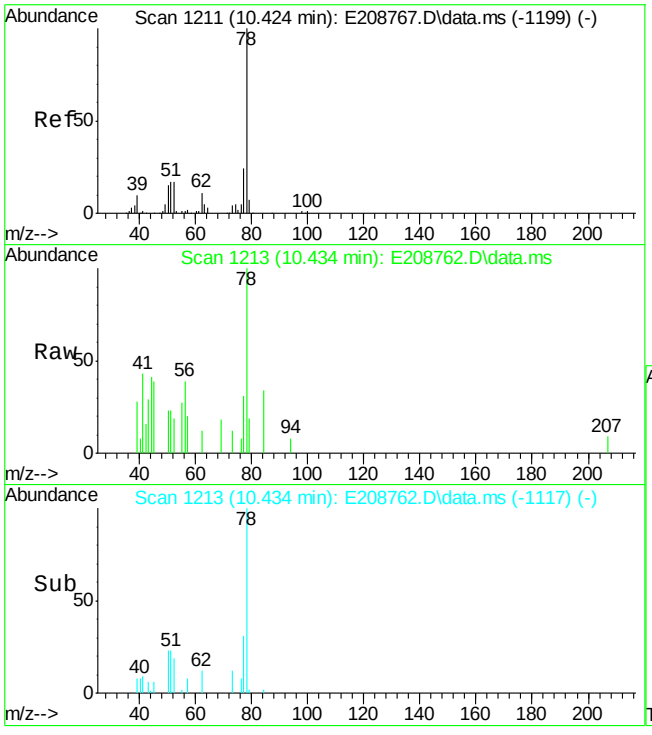
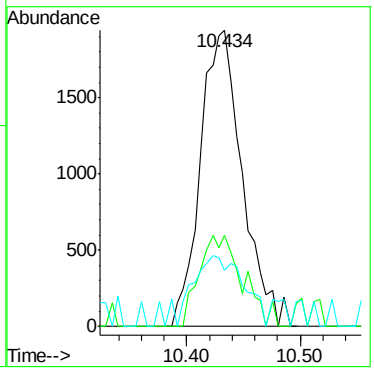
ACCUTEST LABORATORIES JB53758

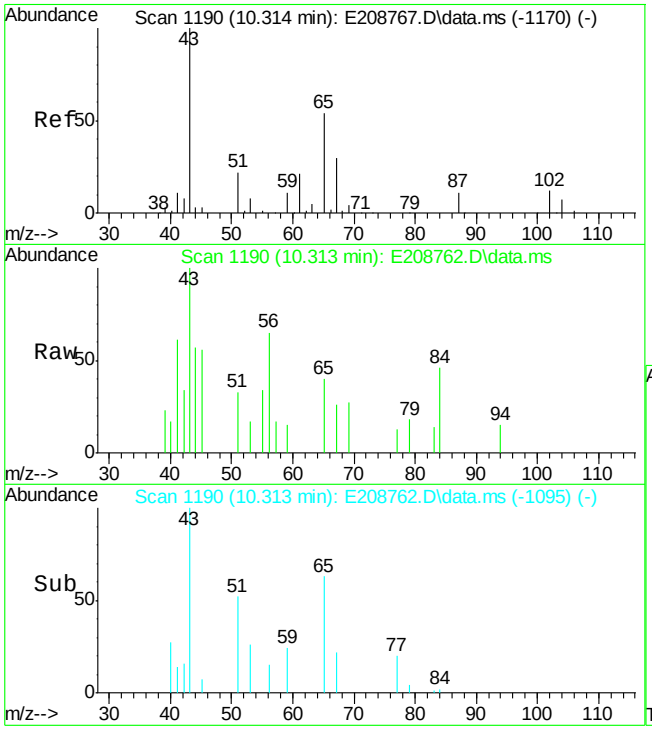


#75
benzene
Concen: 0.94 ug/L
RT: 10.434 min Scan# 1213
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 78 Resp: 4970

Ion	Ratio	Lower	Upper
78	100		
77	30.5	0.0	53.9
52	18.8	0.0	46.8

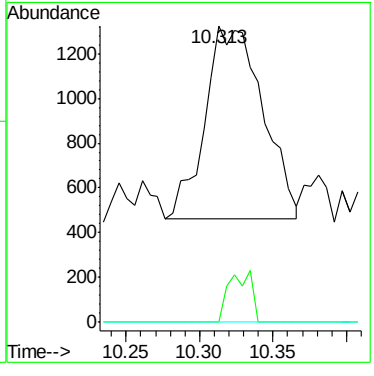


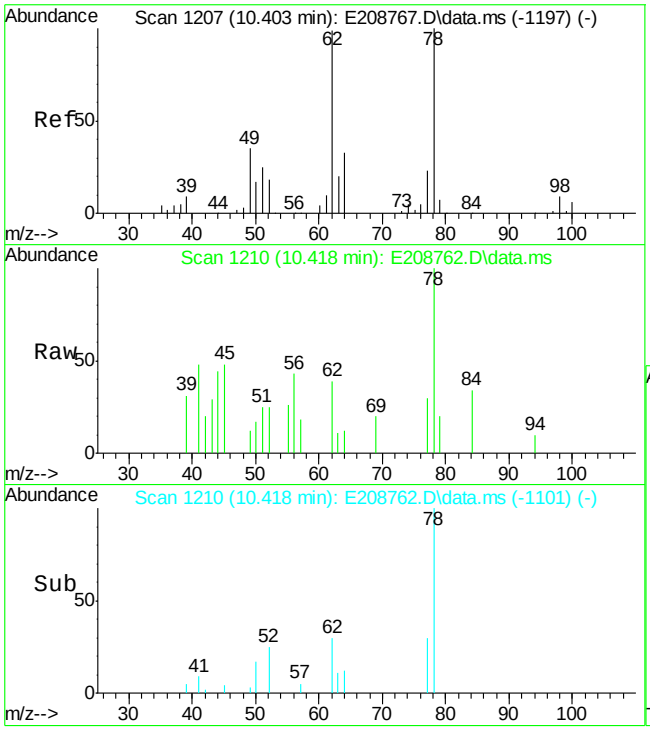


#77
isopropyl acetate
Concen: 0.80 ug/L
RT: 10.313 min Scan# 1190
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 43 Resp: 2343

Ion	Ratio	Lower	Upper
43	100		
61	10.3	0.0	51.5
87	0.0	0.0	41.5

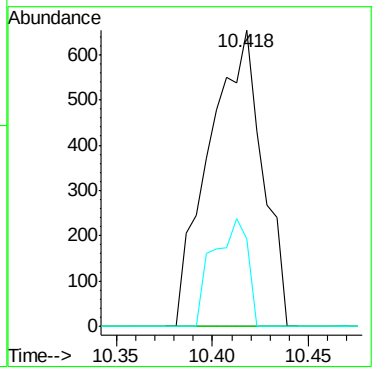


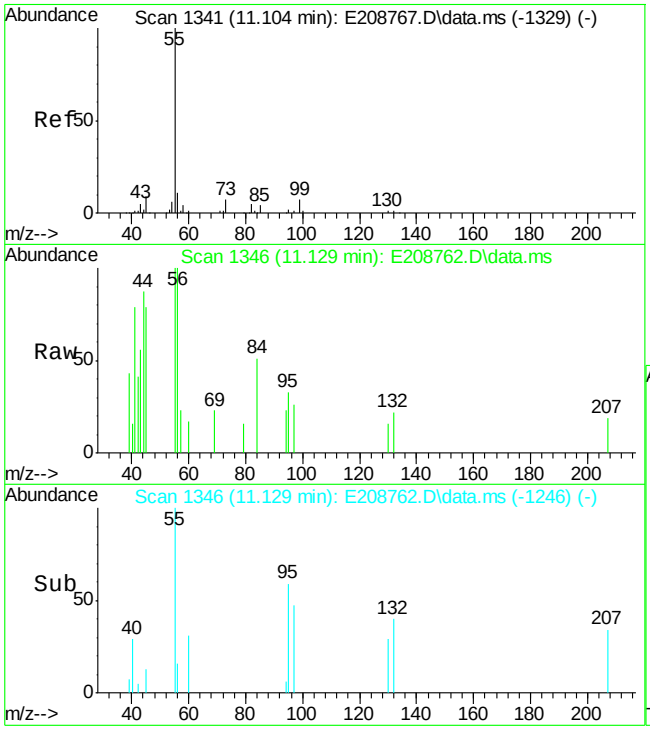


#78
1,2-dichloroethane
Concen: 0.79 ug/L
RT: 10.418 min Scan# 1210
Delta R.T. 0.011 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 62 Resp: 1248

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	38.5
64	29.4	2.2	62.2

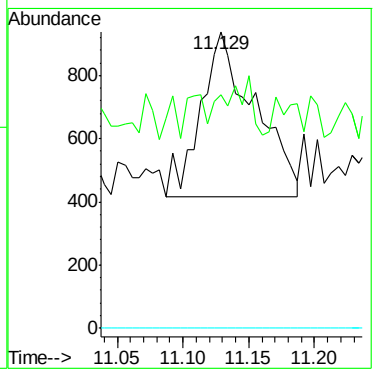




#79
ethyl acrylate
Concen: 0.93 ug/L
RT: 11.129 min Scan# 1346
Delta R.T. 0.022 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 55 Resp: 1487

Ion	Ratio	Lower	Upper
55	100		
45	4.7	6.7	12.5#
99	0.0	5.4	10.0#



7.7.2

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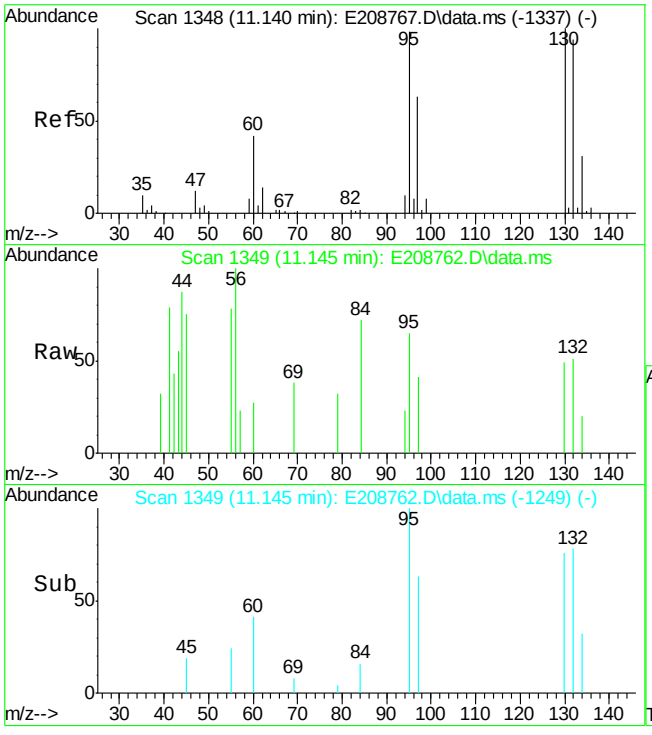
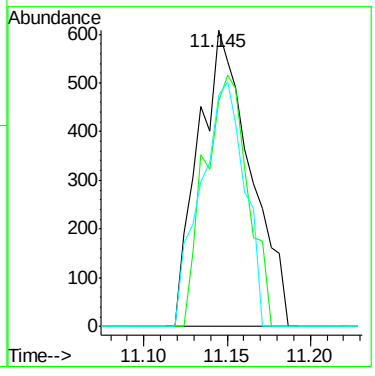
ACCUTEST LABORATORIES JB53758

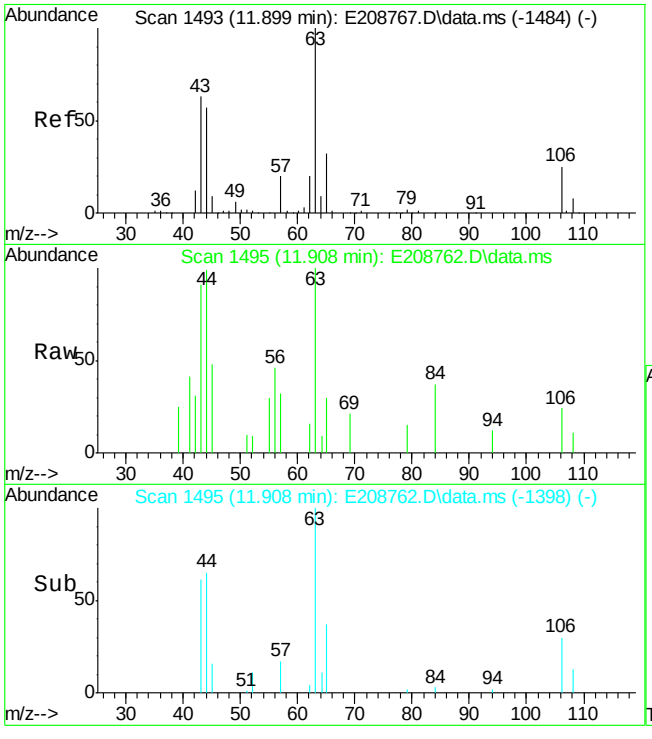


#80
trichloroethene
Concen: 0.98 ug/L
RT: 11.145 min Scan# 1349
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 95 Resp: 1320

Ion	Ratio	Lower	Upper
95	100		
130	76.2	71.9	131.9
132	78.1	67.7	127.7

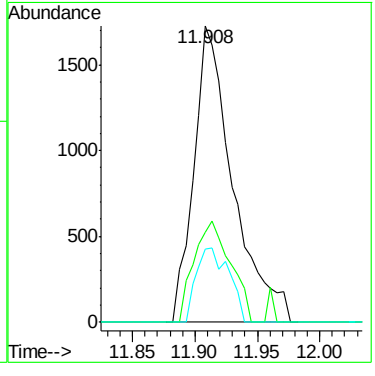




#82
2-chloroethyl vinyl ether
Concen: 4.22 ug/L
RT: 11.908 min Scan# 1495
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 63 Resp: 3746

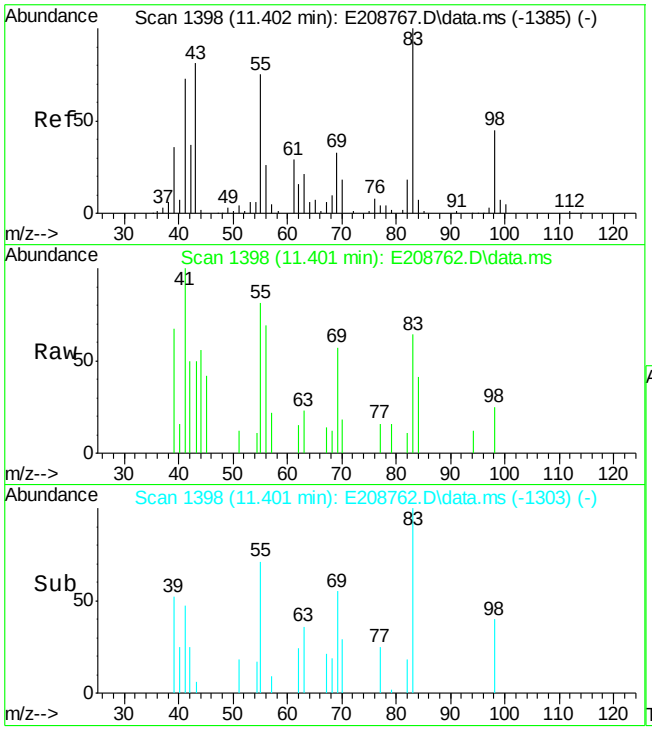
Ion	Ratio	Lower	Upper
63	100		
65	30.2	3.5	63.5
106	24.5	0.0	57.1



7.7.2

7

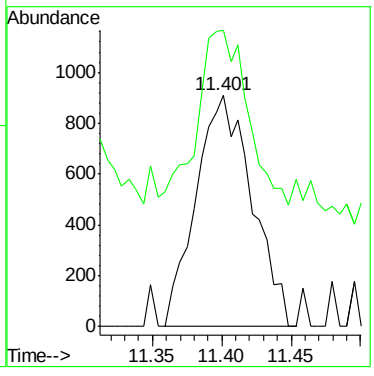
ACCUTEST LABORATORIES JB53758

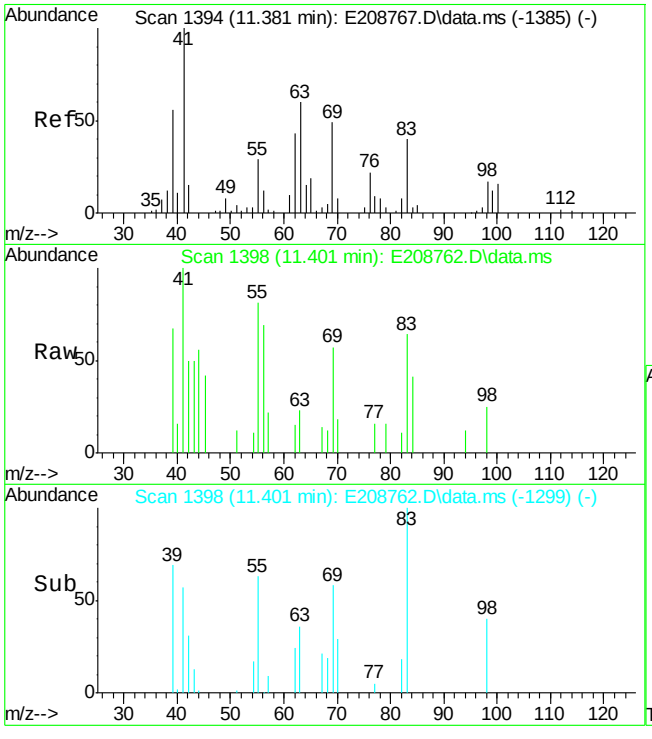


#83
methylcyclohexane
Concen: 1.05 ug/L
RT: 11.401 min Scan# 1398
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 83 Resp: 2565

Ion	Ratio	Lower	Upper
83	100		
55	75.7	58.7	108.9

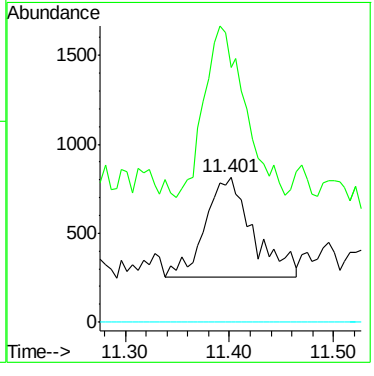


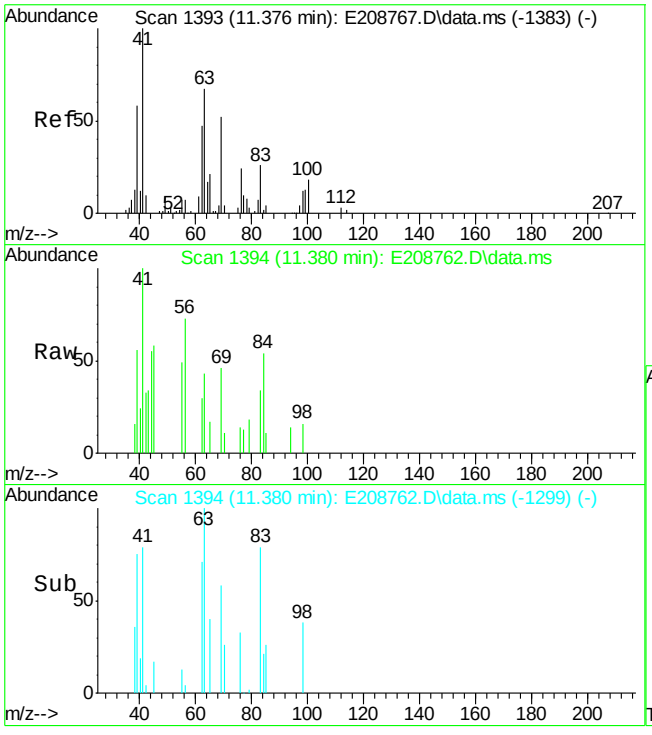


#84
methyl methacrylate
Concen: 1.12 ug/L
RT: 11.401 min Scan# 1398
Delta R.T. 0.016 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 69 Resp: 1789

Ion	Ratio	Lower	Upper
69	100		
41	112.6	174.3	234.3#
100	0.0	4.0	64.0#

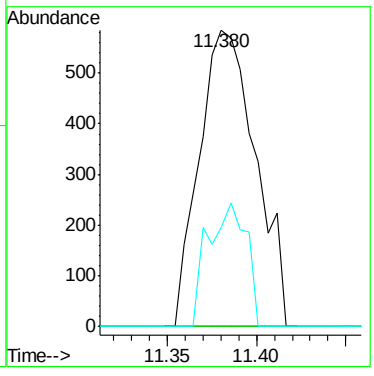


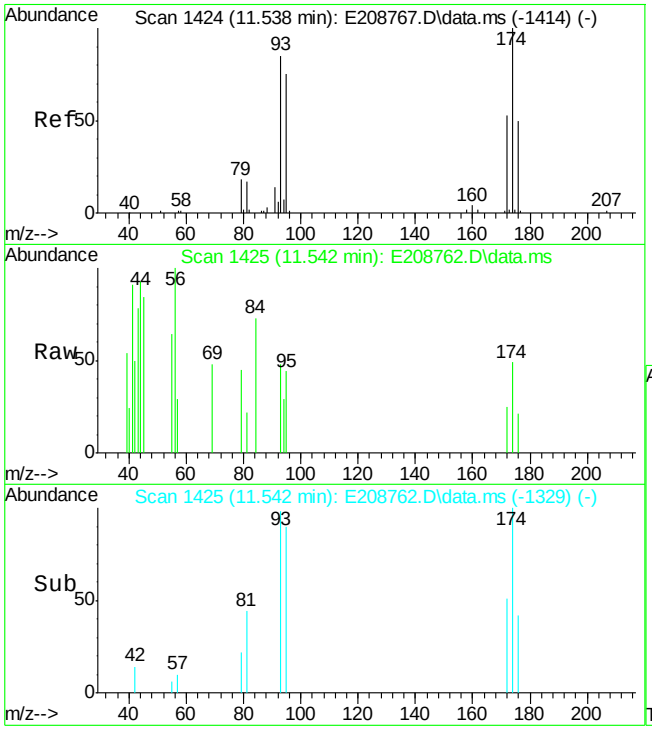


#85
1,2-dichloropropane
Concen: 0.92 ug/L
RT: 11.380 min Scan# 1394
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 63 Resp: 1289

Ion	Ratio	Lower	Upper
63	100		
112	0.0	0.0	33.7
76	33.3	13.4	73.4

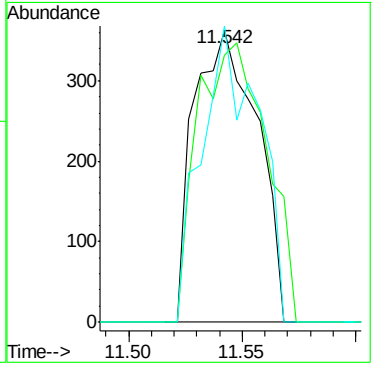




#86
dibromomethane
Concen: 0.94 ug/L
RT: 11.542 min Scan# 1425
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 93 Resp: 698

Ion	Ratio	Lower	Upper
93	100		
95	91.7	52.3	112.3
174	101.7	69.8	129.8



7.7.2

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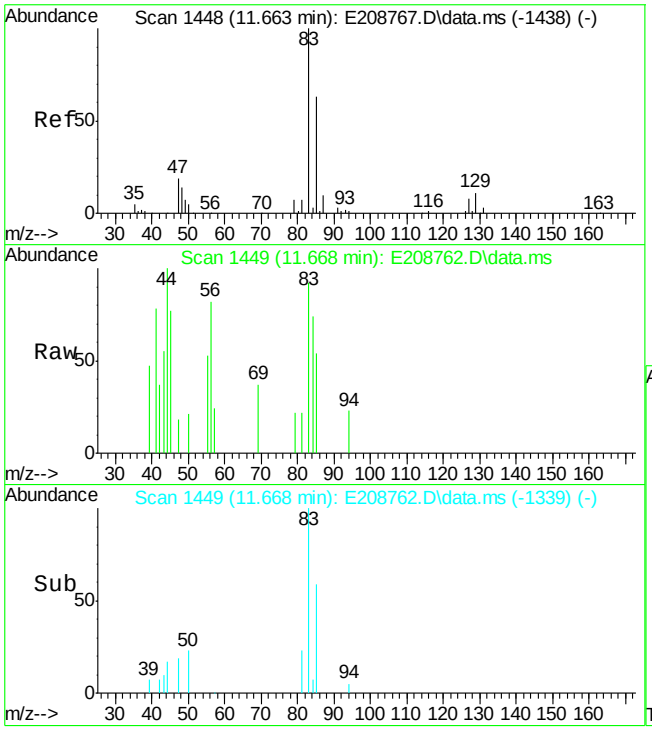
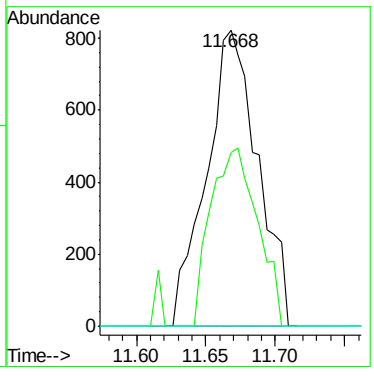
ACCUTEST LABORATORIES JB53758

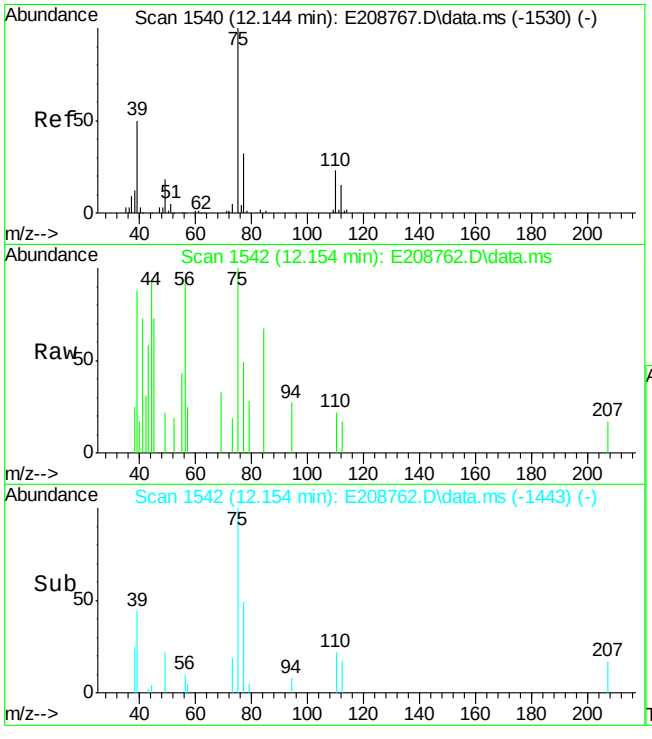


#87
bromodichloromethane
Concen: 1.11 ug/L
RT: 11.668 min Scan# 1449
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 83 Resp: 2124

Ion	Ratio	Lower	Upper
83	100		
85	58.9	33.2	93.2
127	0.0	0.0	38.7

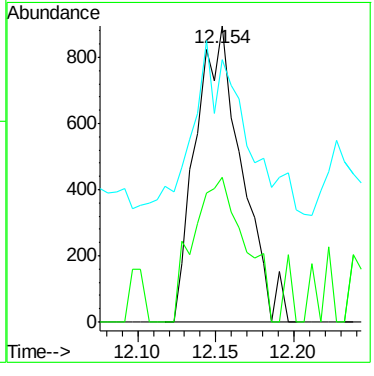


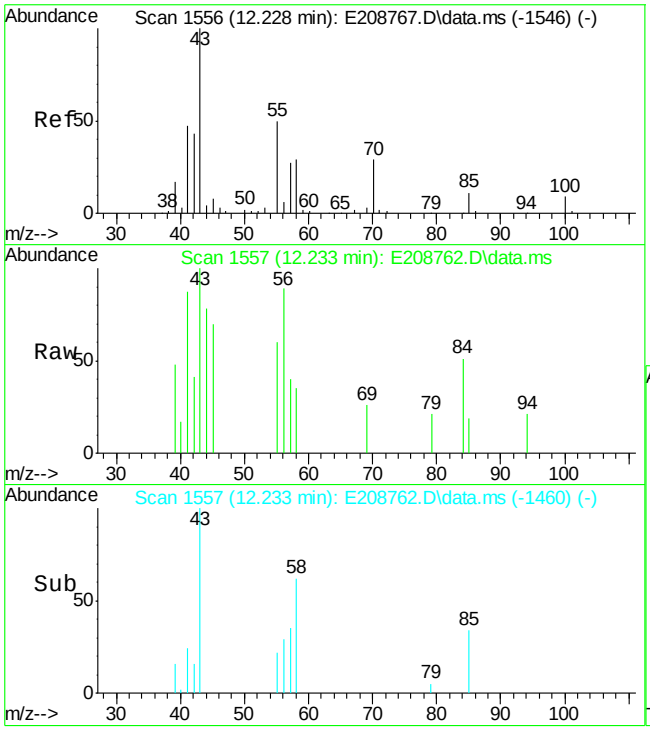


#88
cis-1,3-dichloropropene
Concen: 0.86 ug/L
RT: 12.154 min Scan# 1542
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 75 Resp: 1823

Ion	Ratio	Lower	Upper
75	100		
77	48.9	2.0	62.0
39	50.7	22.7	82.7

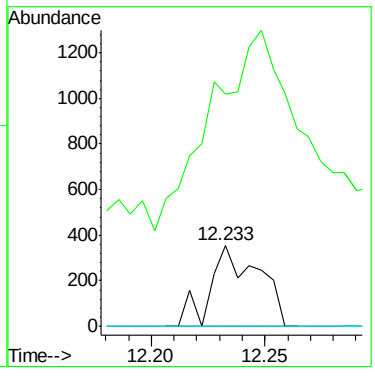


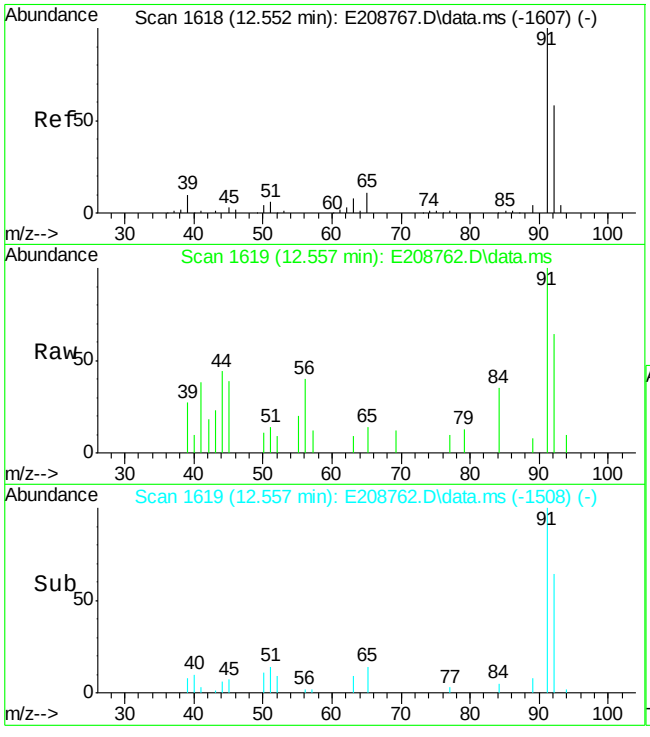


#90
4-methyl-2-pentanone
Concen: 0.98 ug/L
RT: 12.233 min Scan# 1557
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 58 Resp: 525

Ion	Ratio	Lower	Upper
58	100		
43	501.1	358.4	418.4#
100	0.0	3.7	63.7#

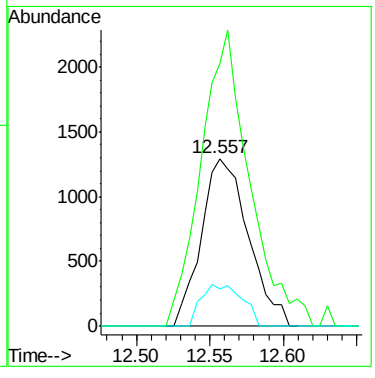




#91
toluene
Concen: 0.91 ug/L
RT: 12.557 min Scan# 1619
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 92 Resp: 2884

Ion	Ratio	Lower	Upper
92	100		
91	157.0	136.9	196.9
65	22.2	0.0	50.0



7.7.2

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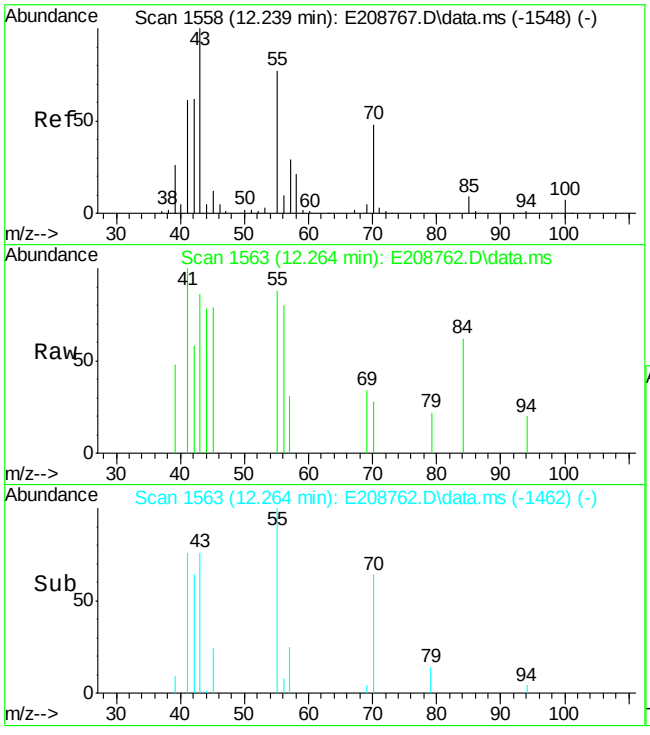
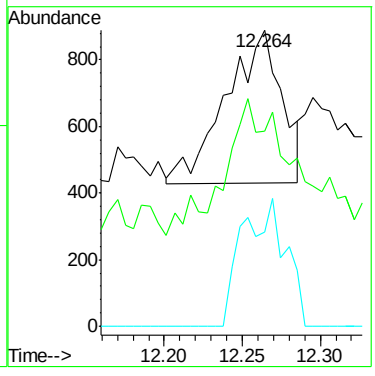
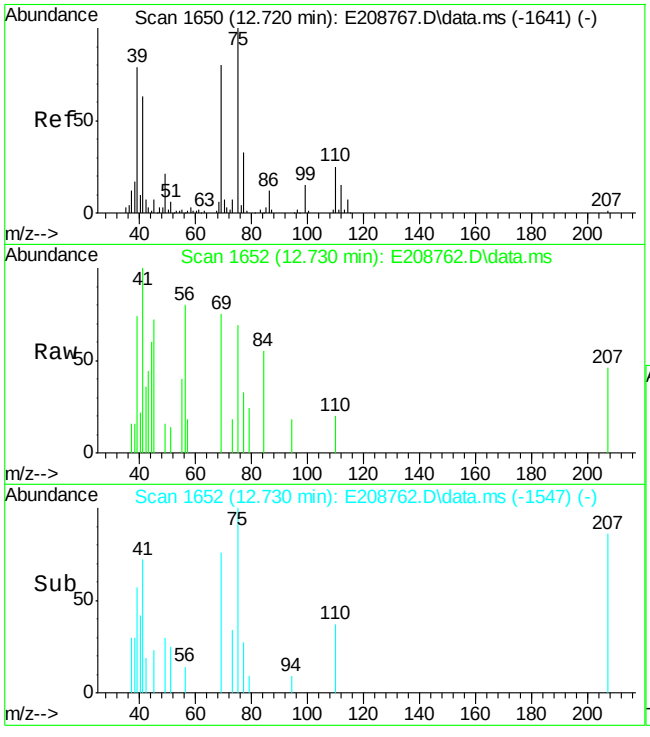


#92
3-methyl-1-butanol
Concen: 16.43 ug/L
RT: 12.264 min Scan# 1563
Delta R.T. 0.027 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 55 Resp: 1138

Ion	Ratio	Lower	Upper
55	100		
42	127.9	44.8	104.8#
70	64.9	31.1	91.1

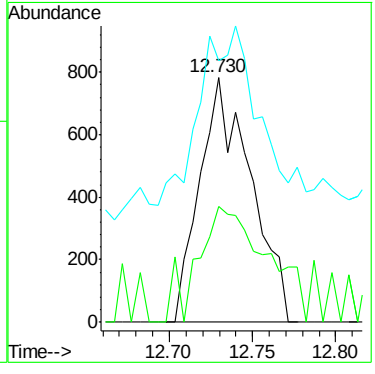




#93
trans-1,3-dichloropropene
Concen: 0.86 ug/L
RT: 12.730 min Scan# 1652
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 75 Resp: 1668

Ion	Ratio	Lower	Upper
75	100		
77	47.4	2.3	62.3
39	50.0	54.8	114.8#



7.7.2

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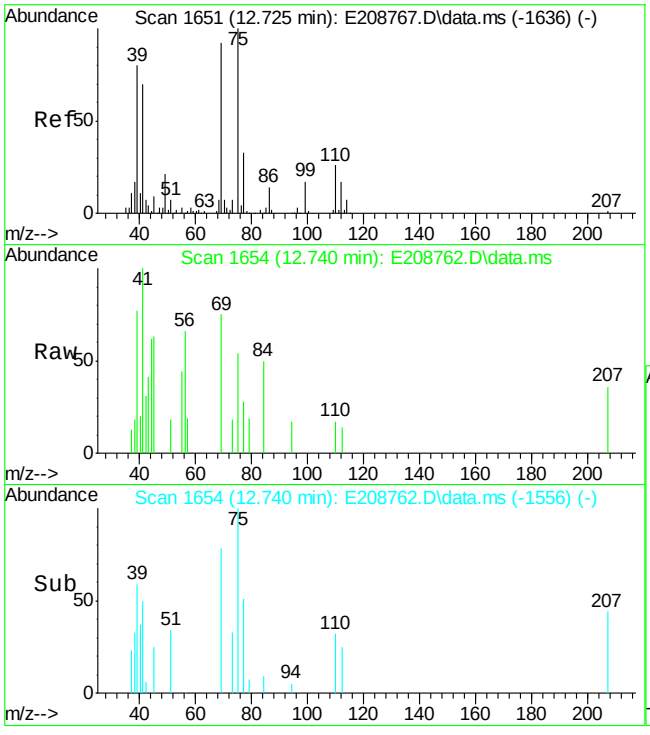
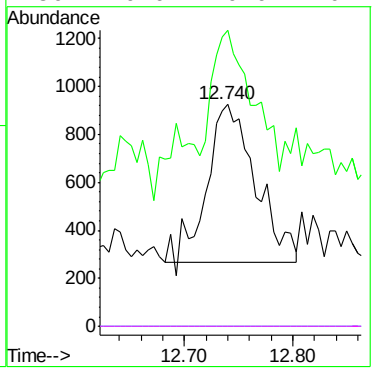
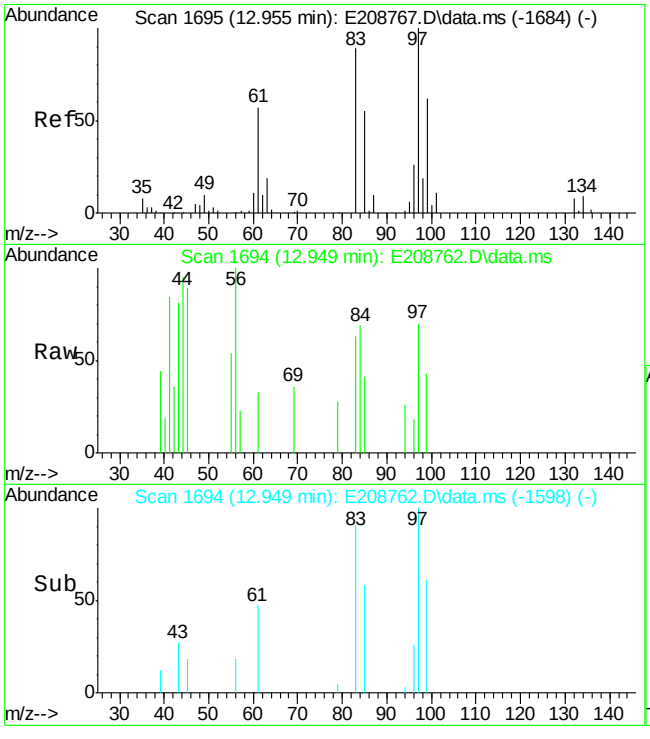


#94
ethyl methacrylate
Concen: 1.03 ug/L
RT: 12.740 min Scan# 1654
Delta R.T. 0.011 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 69 Resp: 2049

Ion	Ratio	Lower	Upper
69	100		
41	82.0	42.1	102.1
99	0.0	0.0	49.6
86	0.0	0.0	46.1

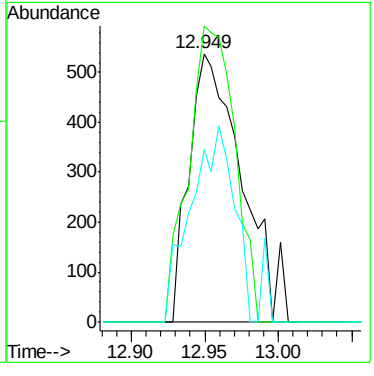




#95
1,1,2-trichloroethane
Concen: 1.15 ug/L
RT: 12.949 min Scan# 1694
Delta R.T. -0.010 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 83 Resp: 1351

Ion	Ratio	Lower	Upper
83	100		
97	110.4	86.6	146.6
85	64.4	34.1	94.1



7.7.2

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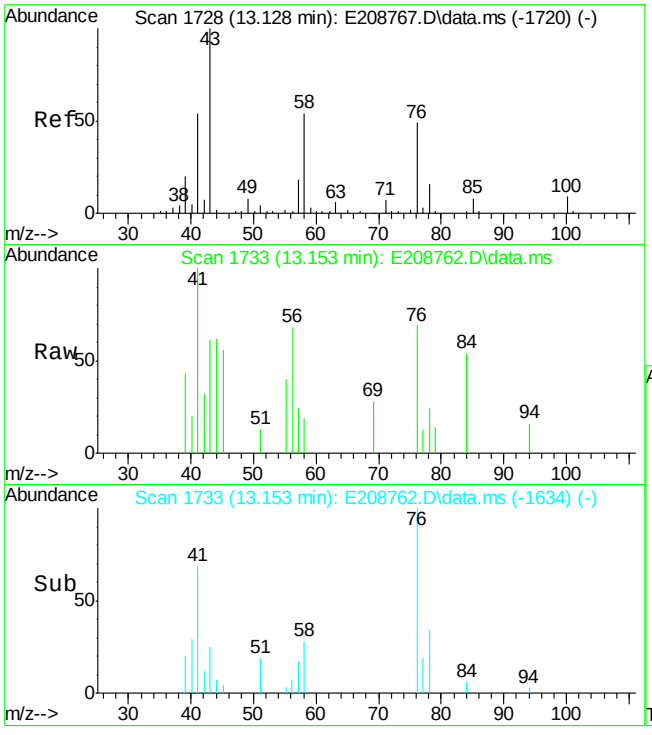
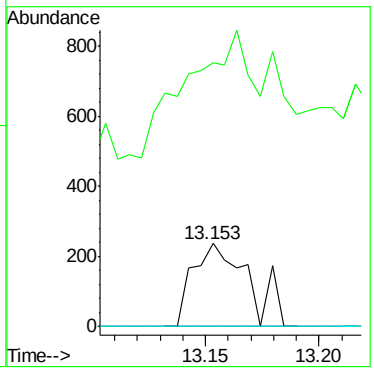
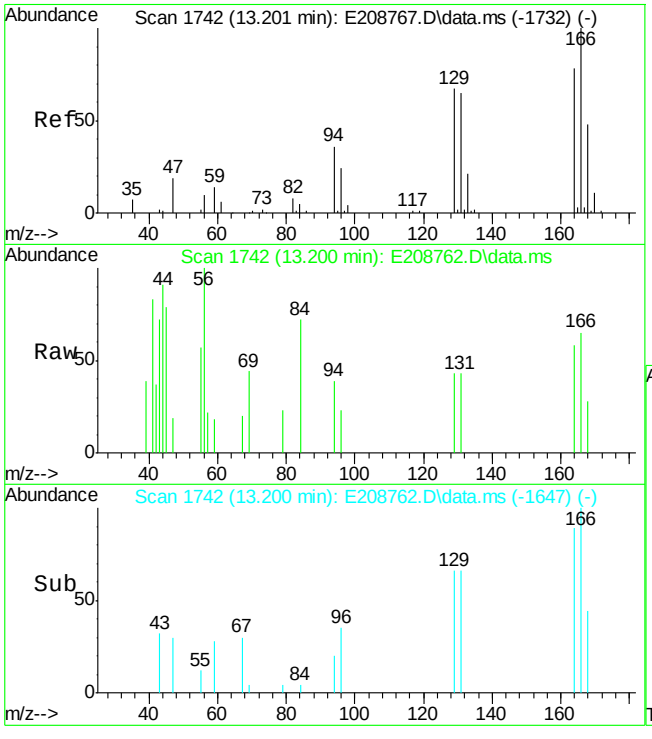


#96
2-hexanone
Concen: 0.82 ug/L
RT: 13.153 min Scan# 1733
Delta R.T. 0.016 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 58 Resp: 404

Ion	Ratio	Lower	Upper
58	100		
43	62.0	150.8	210.8#
100	0.0	0.0	49.8

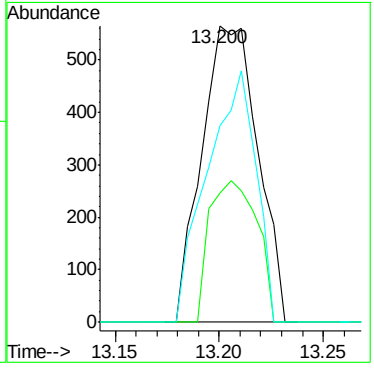




#99
tetrachloroethene
Concen: 0.76 ug/L
RT: 13.200 min Scan# 1742
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:166 Resp: 1059

Ion	Ratio	Lower	Upper
166	100		
168	43.5	17.1	77.1
129	66.2	44.1	104.1



7.7.2

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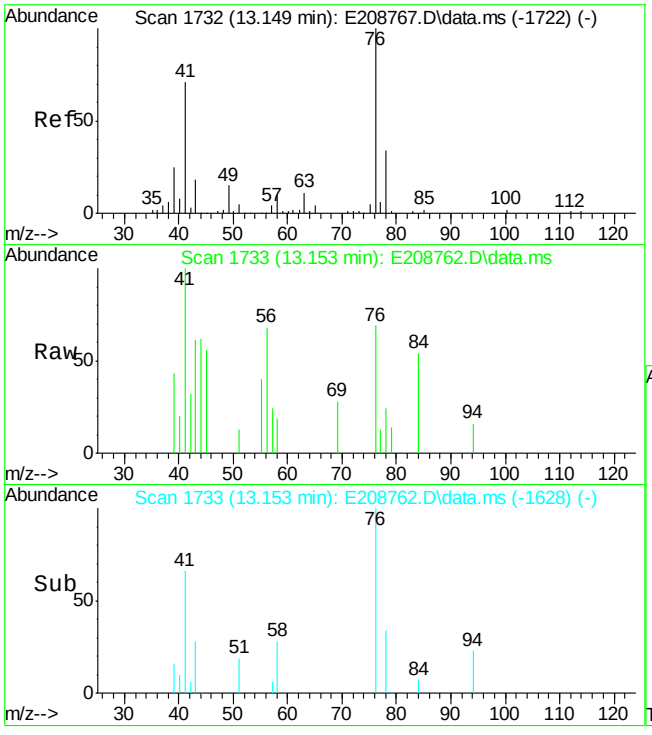
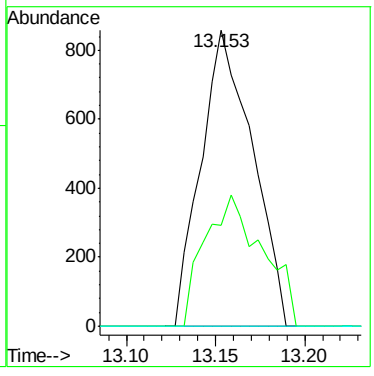
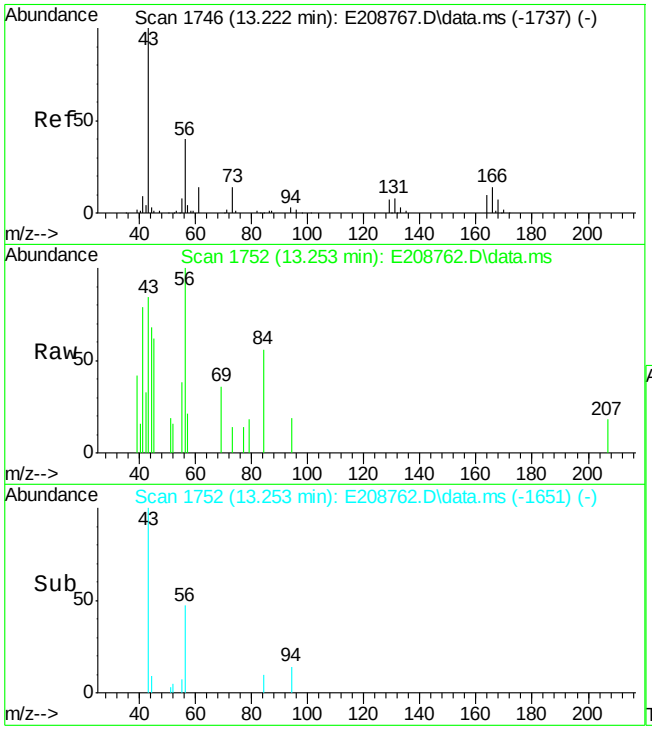


#100
1,3-dichloropropane
Concen: 0.90 ug/L
RT: 13.153 min Scan# 1733
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 76 Resp: 1727

Ion	Ratio	Lower	Upper
76	100		
78	33.9	2.9	62.9
63	0.0	0.0	40.7

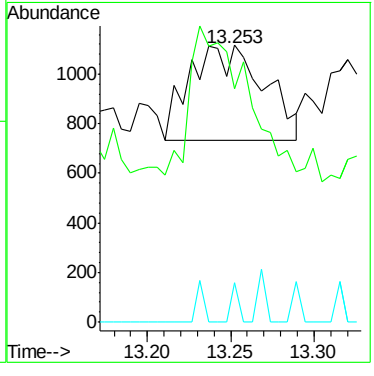


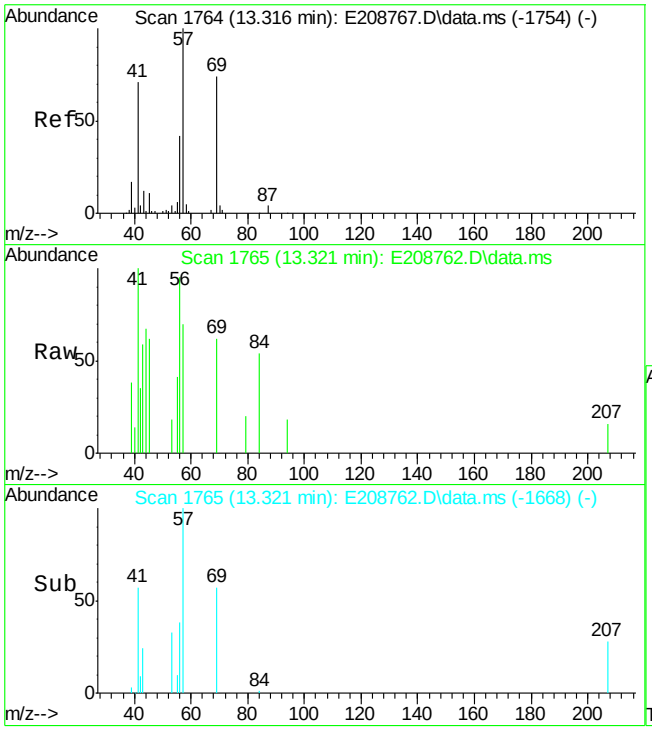


#101
butyl acetate
Concen: 1.09 ug/L
RT: 13.253 min Scan# 1752
Delta R.T. 0.027 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 56 Resp: 1181

Ion	Ratio	Lower	Upper
56	100		
43	90.4	193.8	253.8#
73	41.0	4.8	64.8

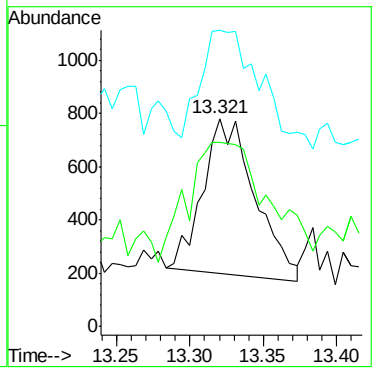


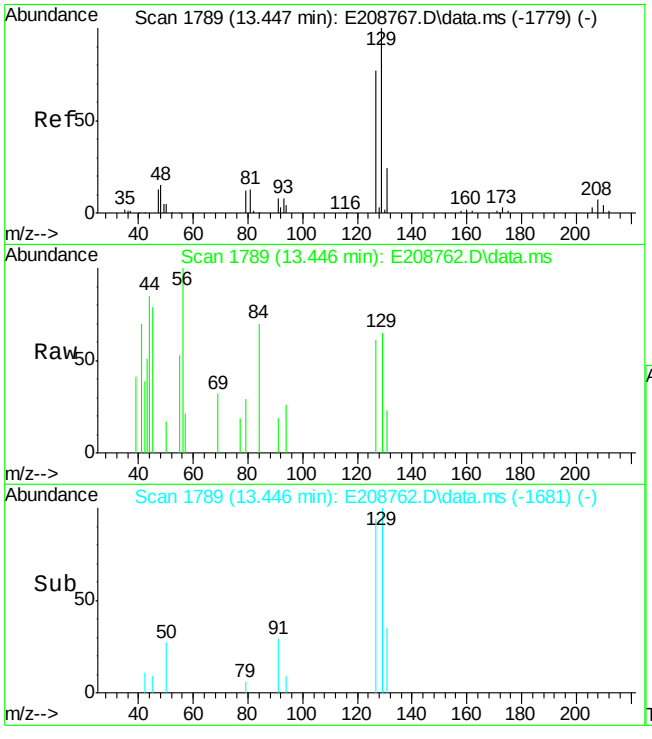


#102
3,3-dimethyl-1-butanol
Concen: 8.36 ug/L
RT: 13.321 min Scan# 1765
Delta R.T. 0.007 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 57 Resp: 1441

Ion	Ratio	Lower	Upper
57	100		
69	118.4	52.3	97.1#
41	88.3	52.2	97.0

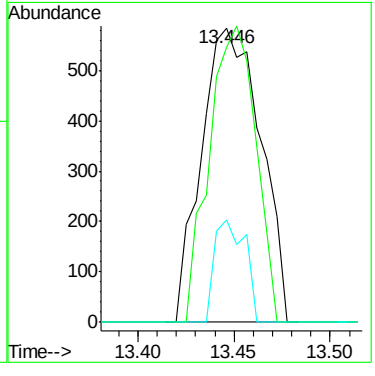




#103
dibromochloromethane
Concen: 0.91 ug/L
RT: 13.446 min Scan# 1789
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:129 Resp: 1247

Ion	Ratio	Lower	Upper
129	100		
127	93.7	47.1	107.1
131	34.9	0.0	54.5



7.7.2

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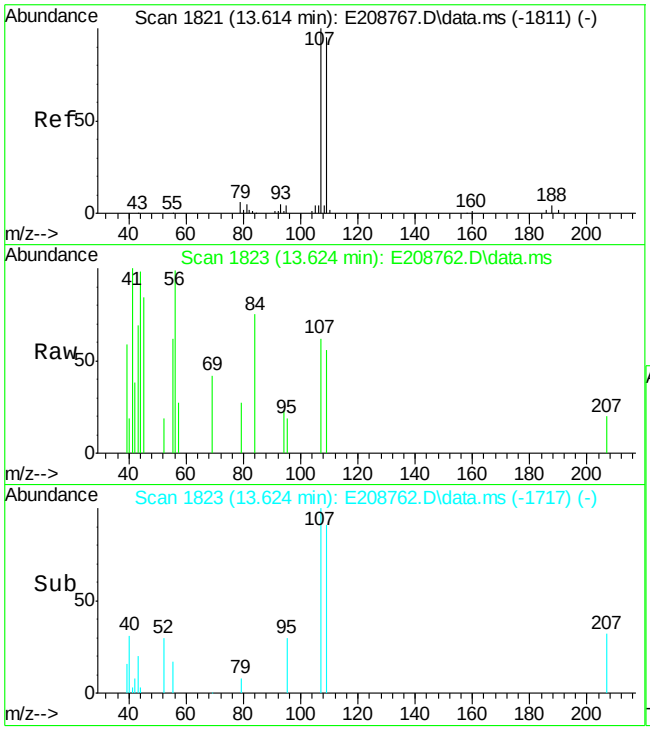
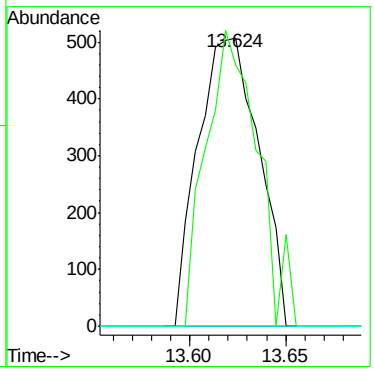
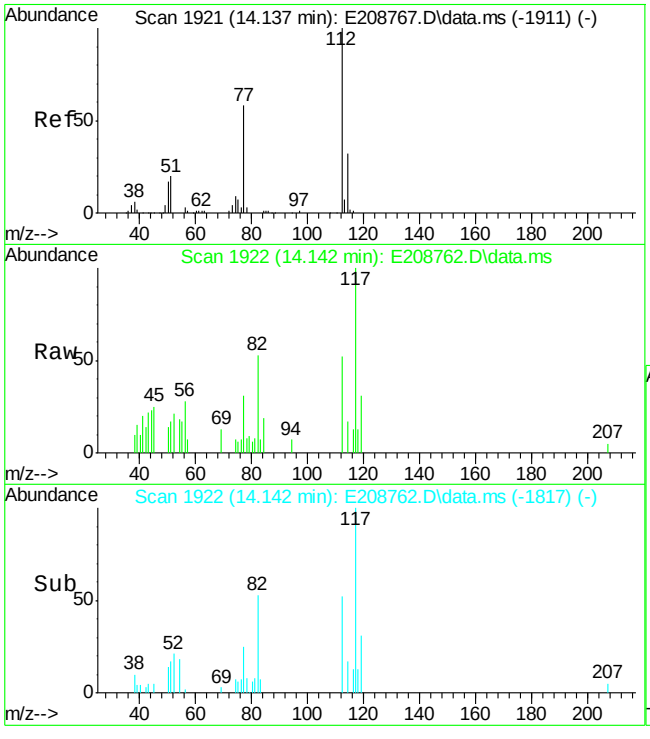


#104
1,2-dibromoethane
Concen: 0.94 ug/L
RT: 13.624 min Scan# 1823
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:107 Resp: 1109

Ion	Ratio	Lower	Upper
107	100		
109	90.5	64.9	124.9
188	0.0	0.0	33.2

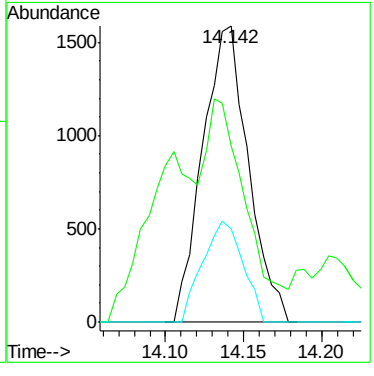




#106
chlorobenzene
Concen: 0.91 ug/L
RT: 14.142 min Scan# 1922
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:112 Resp: 3222

Ion	Ratio	Lower	Upper
112	100		
77	41.9	26.6	86.6
114	31.5	1.7	61.7



7.7.2

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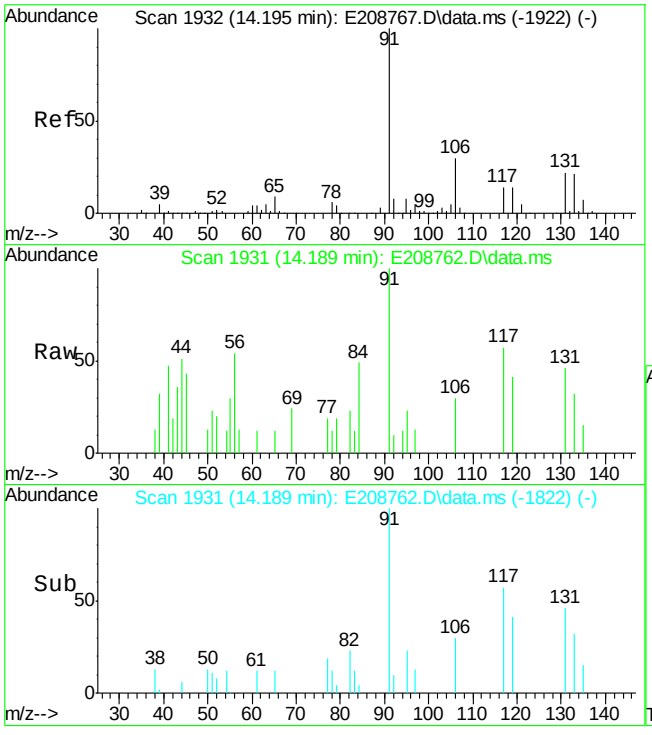
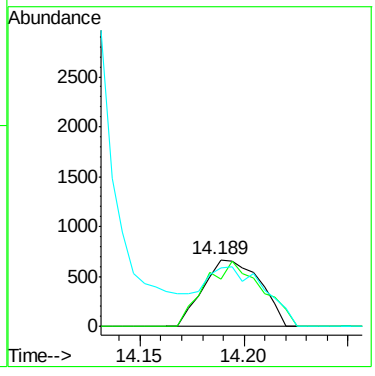
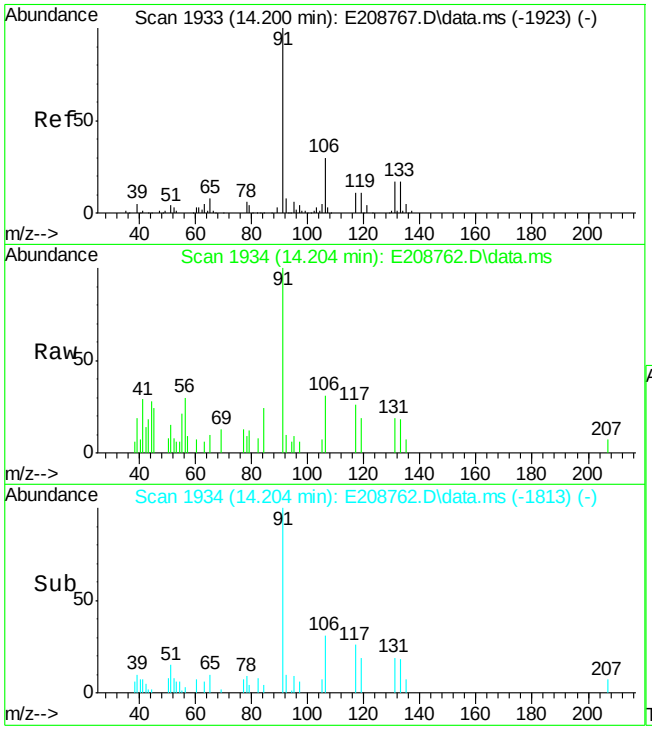


#107
1,1,1,2-tetrachloroethane
Concen: 0.96 ug/L
RT: 14.189 min Scan# 1931
Delta R.T. -0.010 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:131 Resp: 1269

Ion	Ratio	Lower	Upper
131	100		
133	70.9	66.4	126.4
119	88.5	33.2	93.2

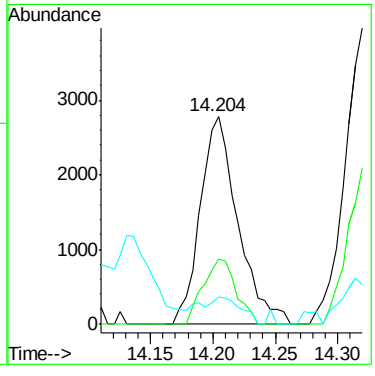




#108
ethylbenzene
Concen: 0.91 ug/L
RT: 14.204 min Scan# 1934
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 91 Resp: 5806

Ion	Ratio	Lower	Upper
91	100		
106	31.4	2.0	62.0
77	12.8	0.0	39.1



7.7.2

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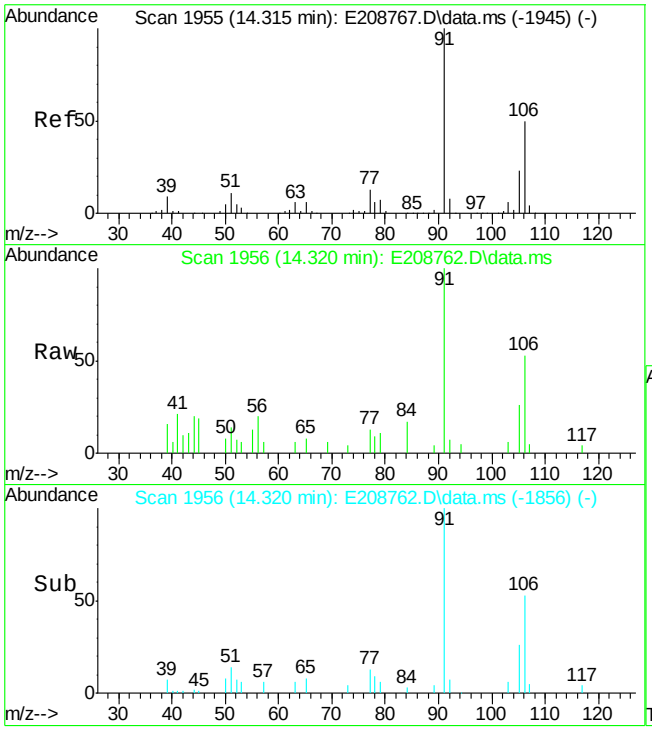
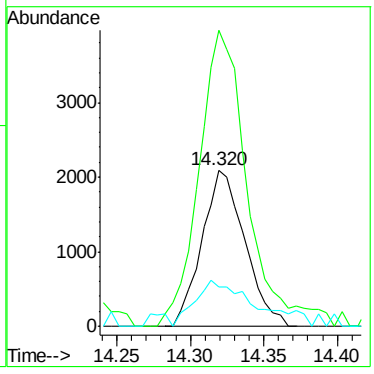
ACCUTEST LABORATORIES JB53758

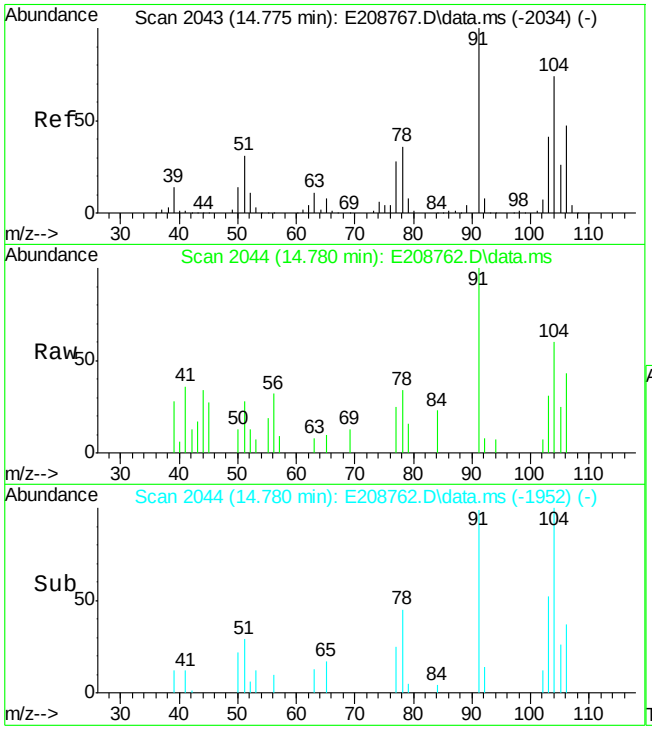


#109
m,p-xylene
Concen: 1.80 ug/L
RT: 14.320 min Scan# 1956
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:106 Resp: 4241

Ion	Ratio	Lower	Upper
106	100		
91	180.9	164.7	224.7
77	17.2	0.0	56.6

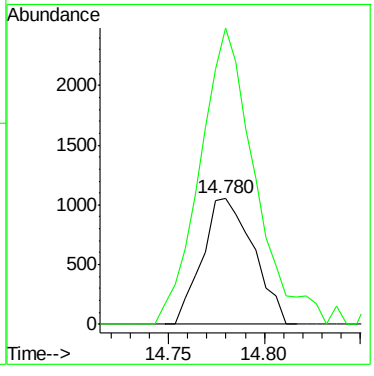




#110
o-xylene
Concen: 0.83 ug/L
RT: 14.780 min Scan# 2044
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:106 Resp: 1931

Ion	Ratio	Lower	Upper
106	100		
91	218.9	174.8	234.8



7.7.2

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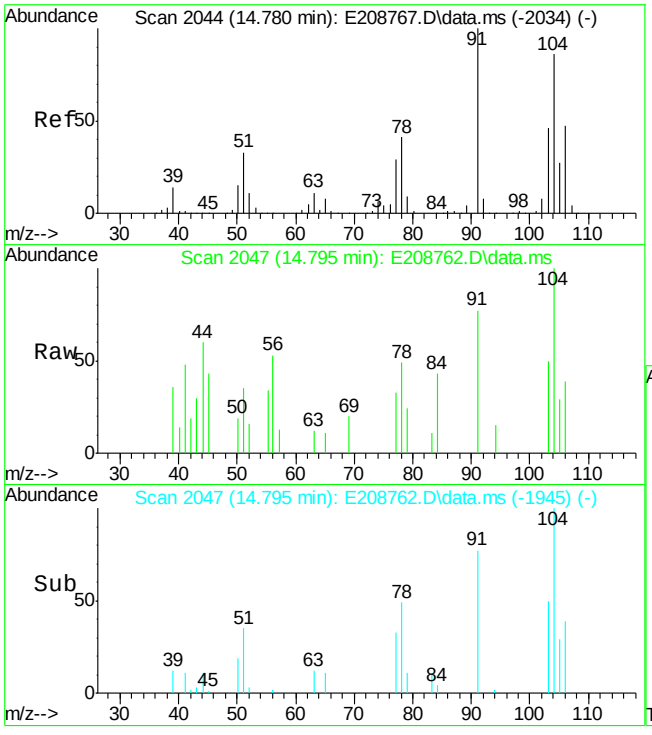
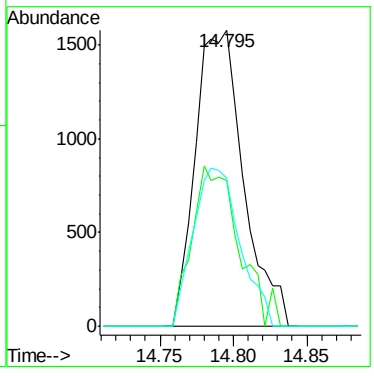
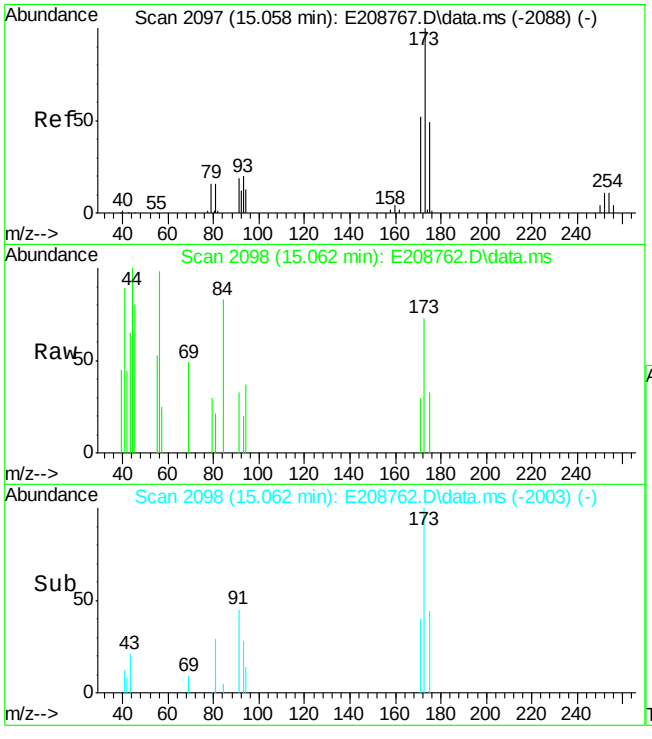


#112
styrene
Concen: 0.90 ug/L
RT: 14.795 min Scan# 2047
Delta R.T. 0.011 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:104 Resp: 3598

Ion	Ratio	Lower	Upper
104	100		
78	49.2	20.2	80.2
103	50.2	22.6	82.6

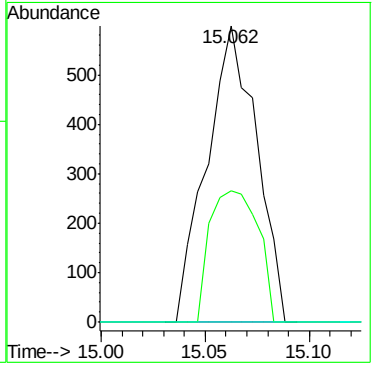




#113
bromoform
Concen: 0.99 ug/L
RT: 15.062 min Scan# 2098
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:173 Resp: 999

Ion	Ratio	Lower	Upper
173	100		
175	44.4	18.9	78.9
254	0.0	0.0	39.3



7.7.2

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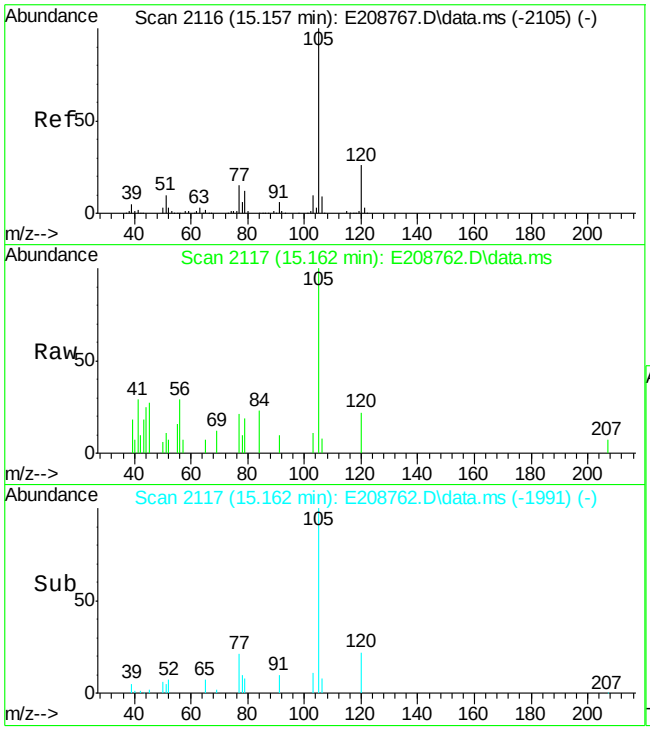
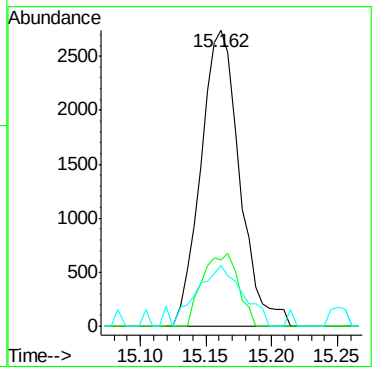
ACCUTEST LABORATORIES JB53758

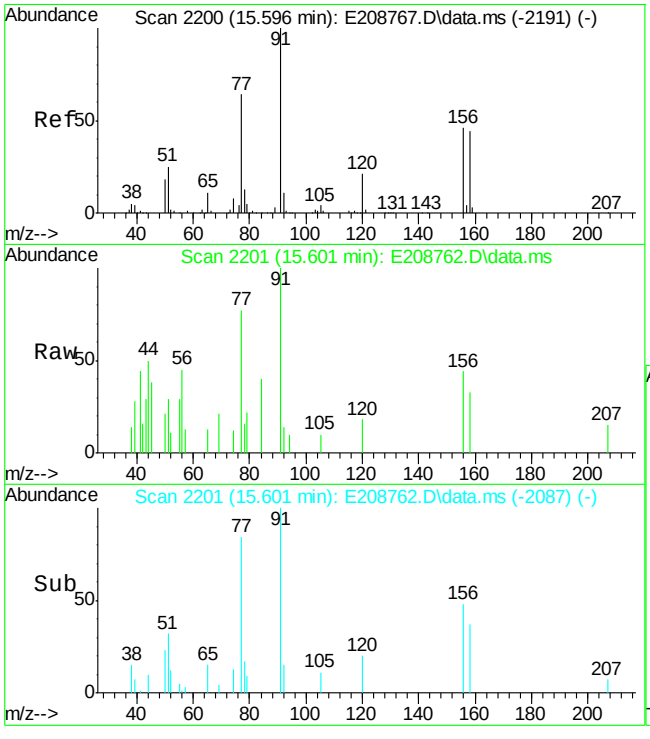


#115
isopropylbenzene
Concen: 0.92 ug/L
RT: 15.162 min Scan# 2117
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:105 Resp: 5638

Ion	Ratio	Lower	Upper
105	100		
120	22.5	0.0	57.7
77	20.5	0.0	45.6

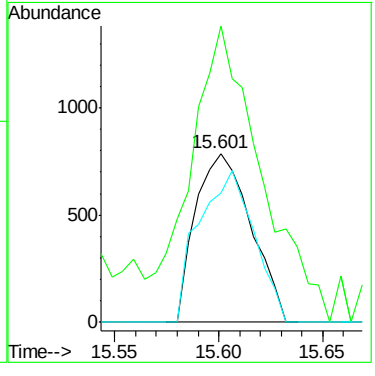




#117
bromobenzene
Concen: 0.93 ug/L
RT: 15.601 min Scan# 2201
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:156 Resp: 1454

Ion	Ratio	Lower	Upper
156	100		
77	135.2	124.7	184.7
158	76.7	69.1	129.1



7.7.2

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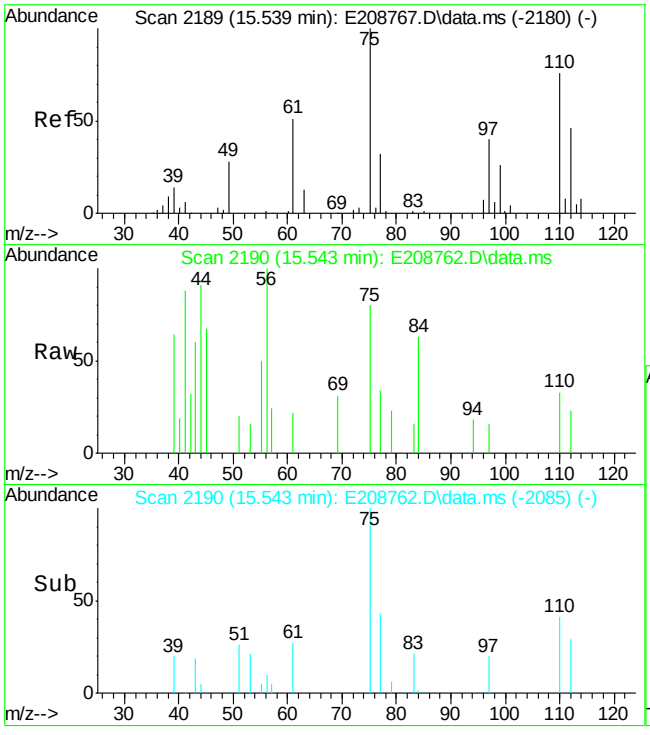
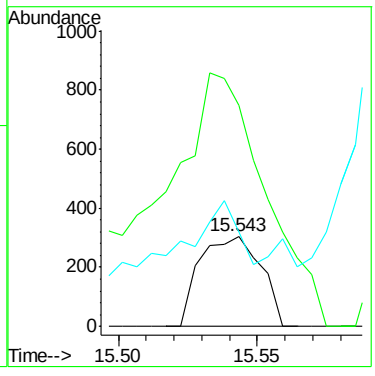
ACCUTEST LABORATORIES JB53758

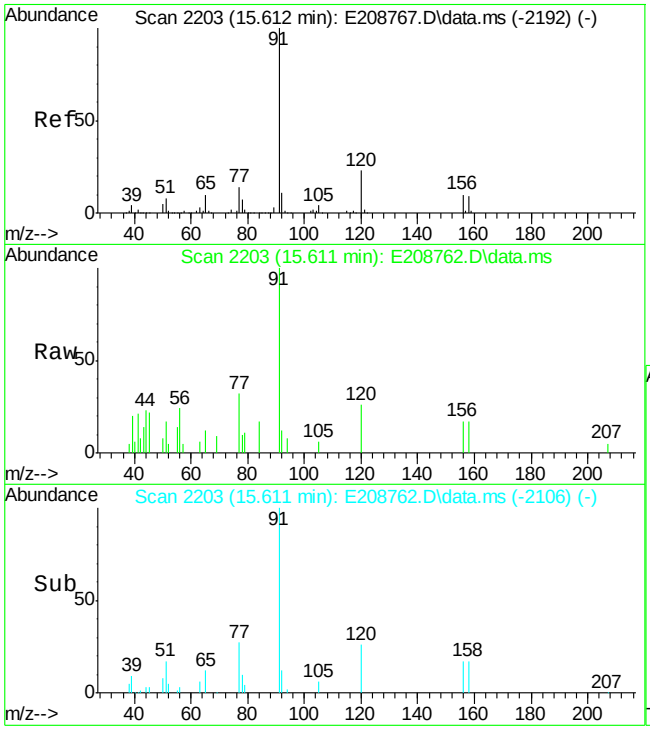


#120
1,2,3-trichloropropane
Concen: 1.14 ug/L
RT: 15.543 min Scan# 2190
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:110 Resp: 464

Ion	Ratio	Lower	Upper
110	100		
75	168.6	207.7	267.7#
77	38.9	12.5	72.5

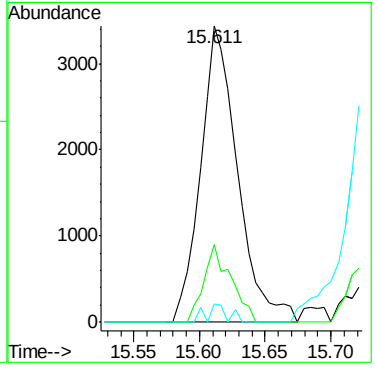


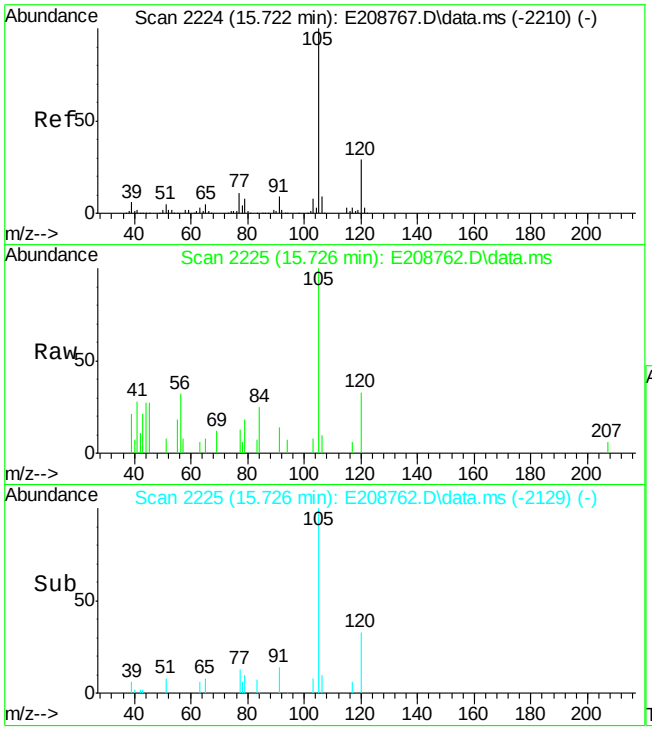


#121
n-propylbenzene
Concen: 0.94 ug/L
RT: 15.611 min Scan# 2203
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 91 Resp: 6701

Ion	Ratio	Lower	Upper
91	100		
120	26.3	0.0	54.4
105	6.1	0.0	33.8

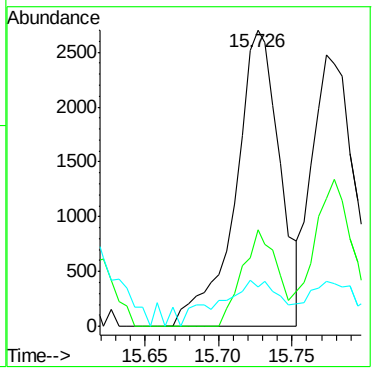


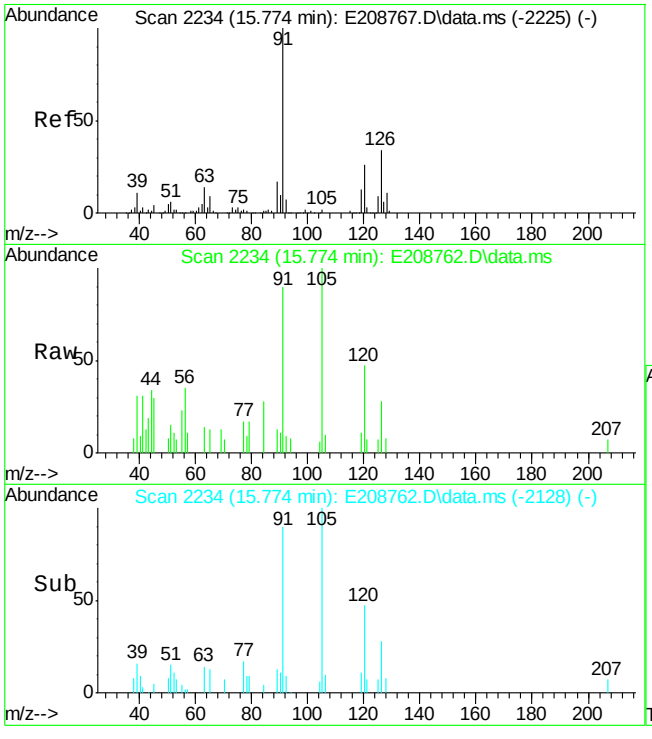


#122
p-ethyltoluene
Concen: 0.96 ug/L
RT: 15.726 min Scan# 2225
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:105 Resp: 5729

Ion	Ratio	Lower	Upper
105	100		
120	32.5	0.4	60.4
77	13.1	0.0	41.5

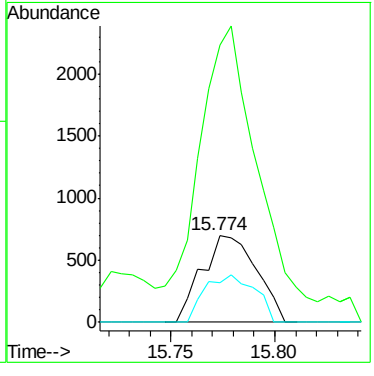


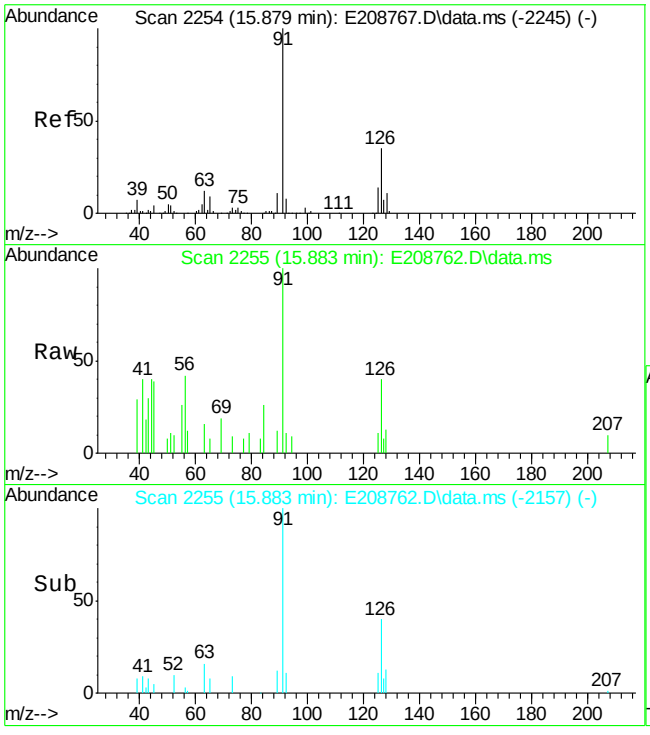


#123
2-chlorotoluene
Concen: 0.89 ug/L
RT: 15.774 min Scan# 2234
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:126 Resp: 1266

Ion	Ratio	Lower	Upper
126	100		
91	279.1	287.2	347.2#
89	45.7	27.9	87.9

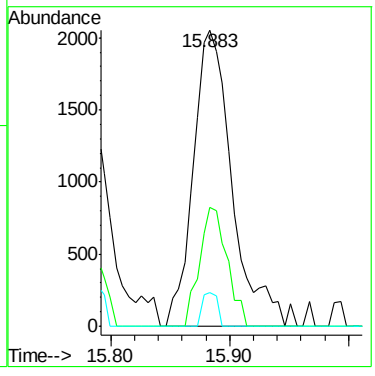


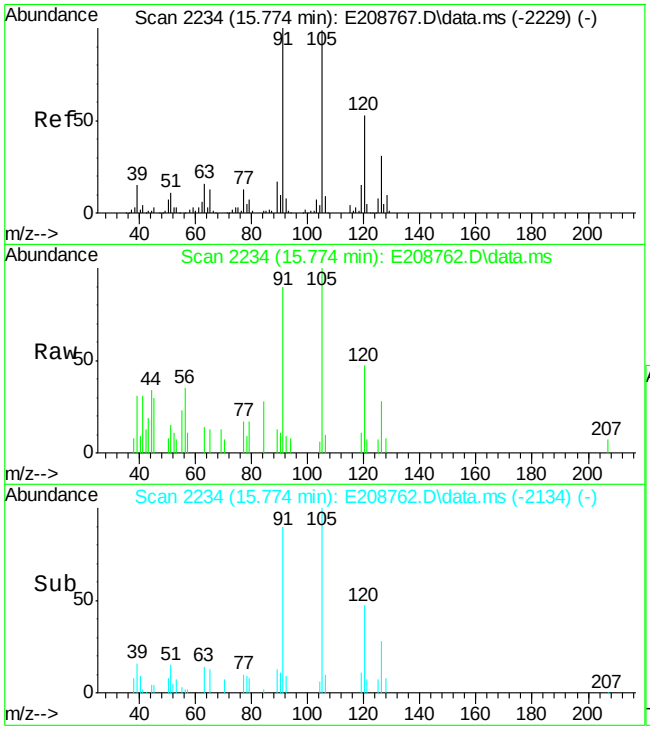


#124
4-chlorotoluene
Concen: 1.02 ug/L
RT: 15.883 min Scan# 2255
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 91 Resp: 4686

Ion	Ratio	Lower	Upper
91	100		
126	40.4	4.3	64.3
89	11.5	0.0	41.5

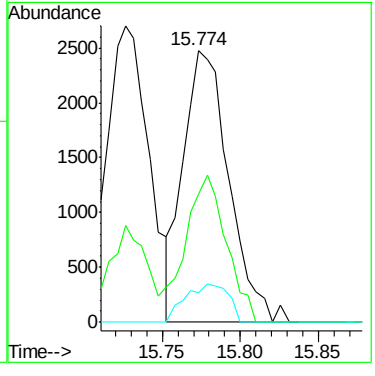


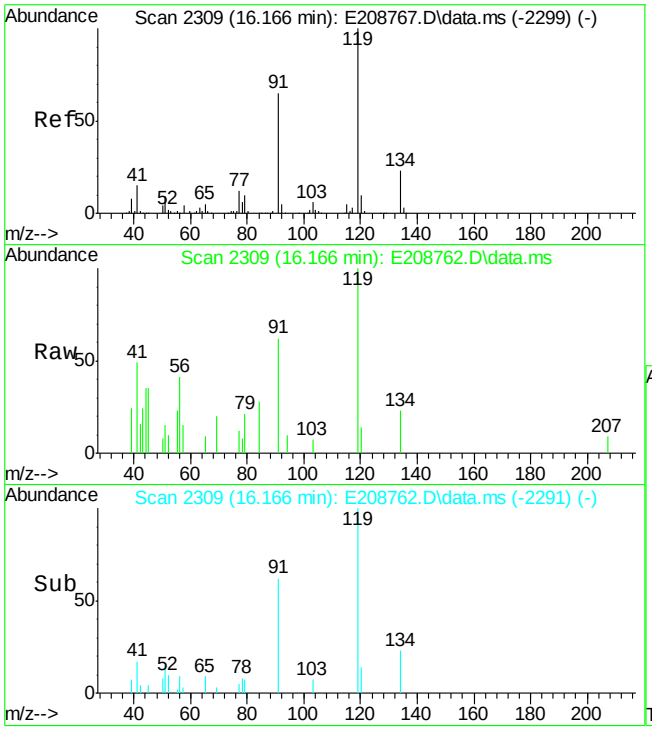


#125
1,3,5-trimethylbenzene
Concen: 0.95 ug/L
RT: 15.774 min Scan# 2234
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:105 Resp: 5032

Ion	Ratio	Lower	Upper
105	100		
120	47.1	19.8	79.8
119	10.9	0.0	42.6

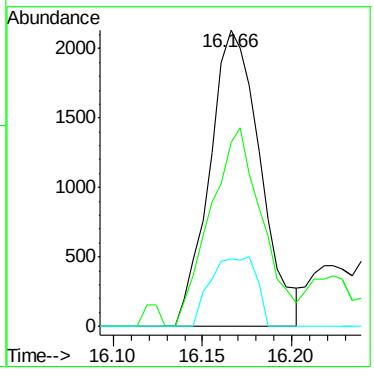


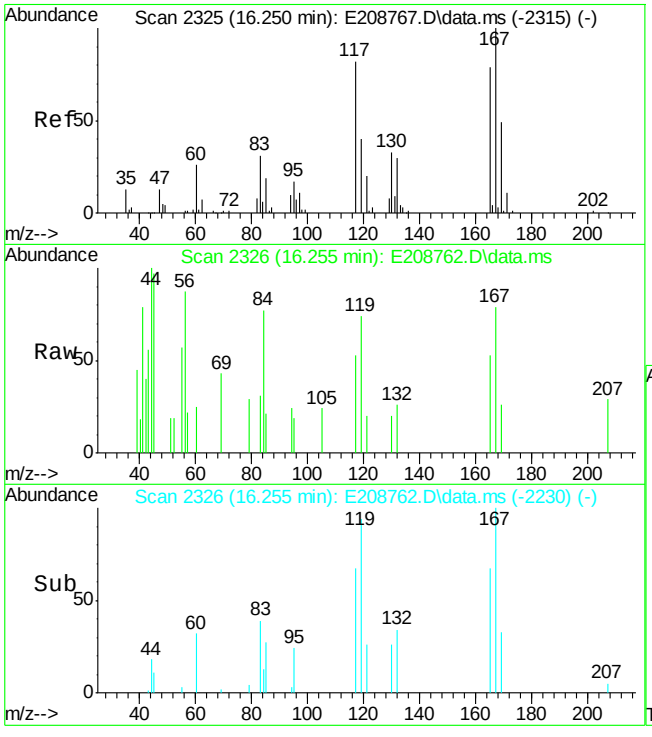


#126
tert-butylbenzene
Concen: 0.94 ug/L
RT: 16.166 min Scan# 2309
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:119 Resp: 4224

Ion	Ratio	Lower	Upper
119	100		
91	62.0	37.5	97.5
134	22.8	0.0	54.4

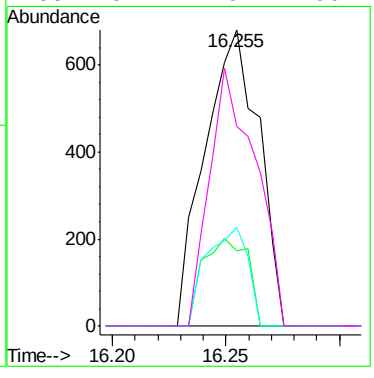




#127
pentachloroethane
Concen: 1.05 ug/L
RT: 16.255 min Scan# 2326
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:167 Resp: 1116

Ion	Ratio	Lower	Upper
167	100		
130	25.6	8.2	68.2
132	33.5	8.2	68.2
165	67.4	46.2	106.2



7.7.2

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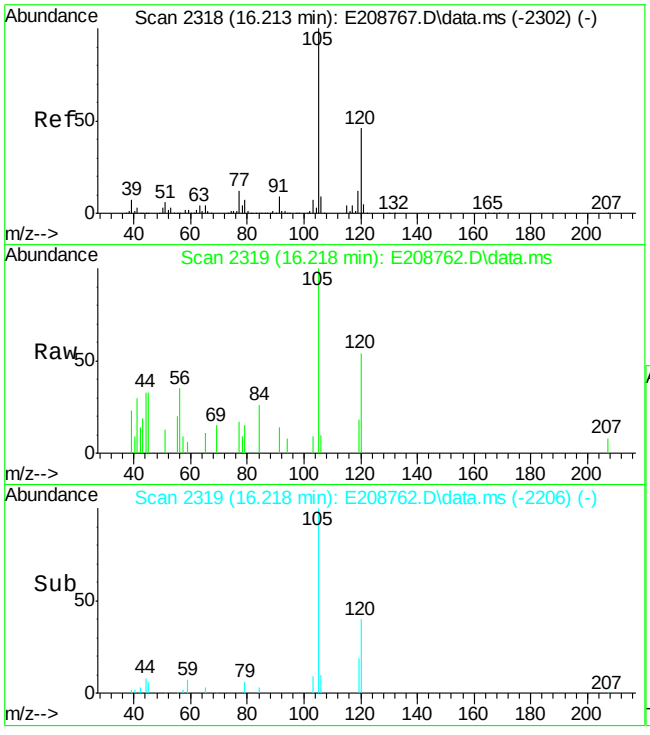
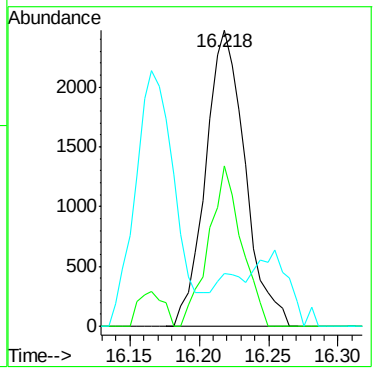
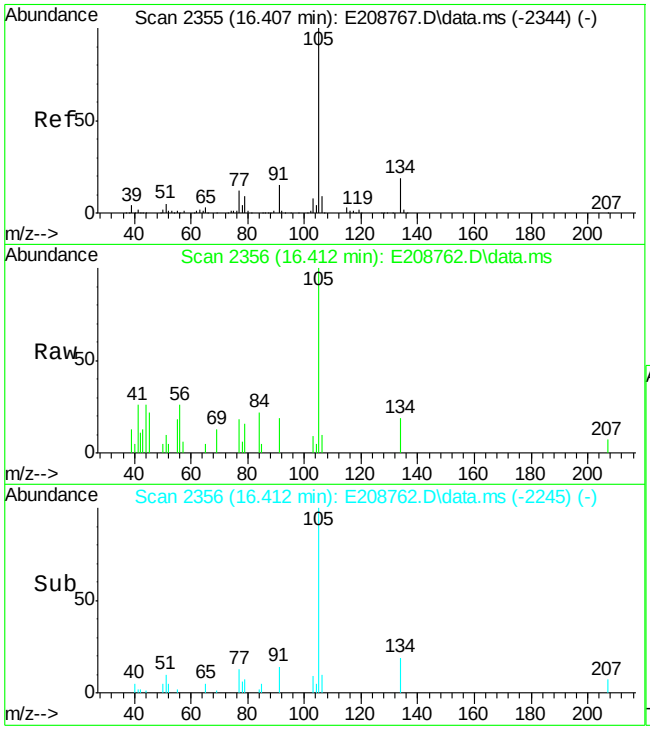


#128
1,2,4-trimethylbenzene
Concen: 0.92 ug/L
RT: 16.218 min Scan# 2319
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:105 Resp: 4896

Ion	Ratio	Lower	Upper
105	100		
120	54.1	17.8	77.8
119	9.3	0.0	43.2

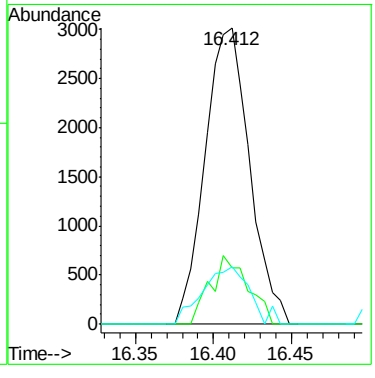




#129
sec-butylbenzene
Concen: 0.90 ug/L
RT: 16.412 min Scan# 2356
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:105 Resp: 5974

Ion	Ratio	Lower	Upper
105	100		
134	19.1	0.0	49.9
91	19.4	0.0	45.9



7.7.2

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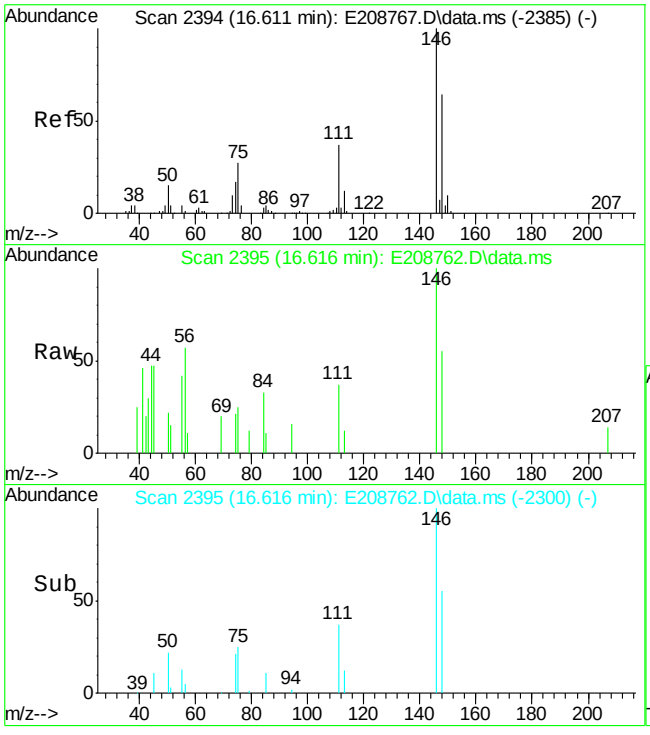
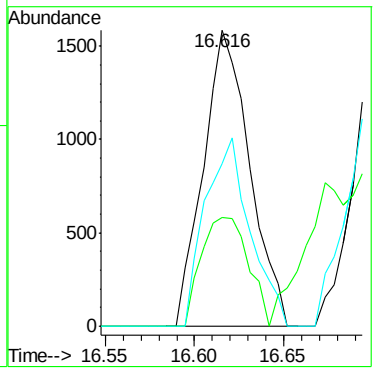
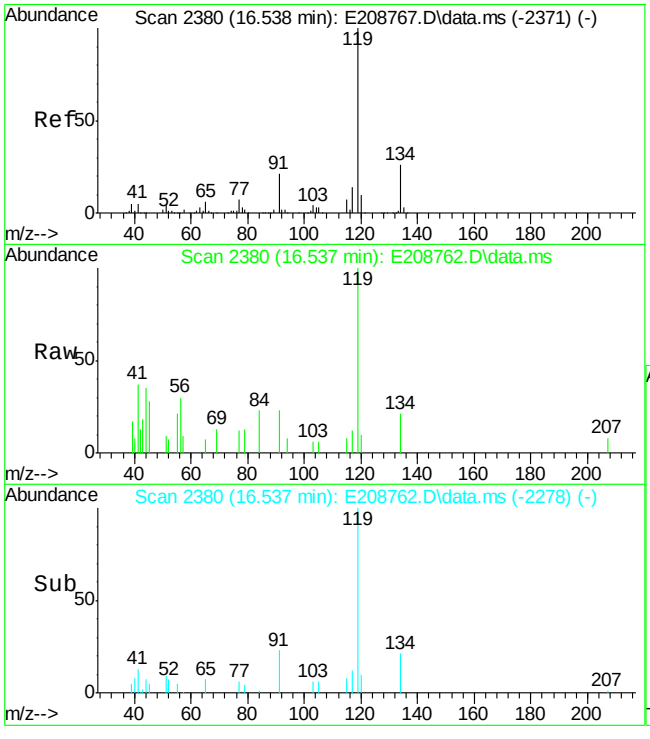


#130
1,3-dichlorobenzene
Concen: 0.96 ug/L
RT: 16.616 min Scan# 2395
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:146 Resp: 2872

Ion	Ratio	Lower	Upper
146	100		
111	36.8	8.1	68.1
148	54.8	34.6	94.6

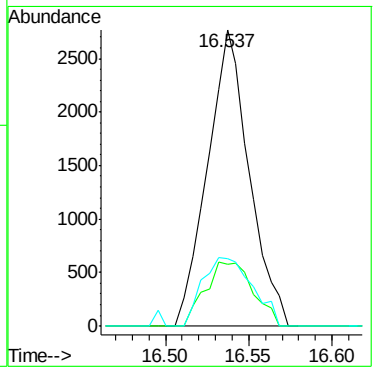




#131
p-isopropyltoluene
Concen: 0.88 ug/L
RT: 16.537 min Scan# 2380
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:119 Resp: 4814

Ion	Ratio	Lower	Upper
119	100		
134	20.9	0.0	57.6
91	22.6	0.0	54.0



7.7.2

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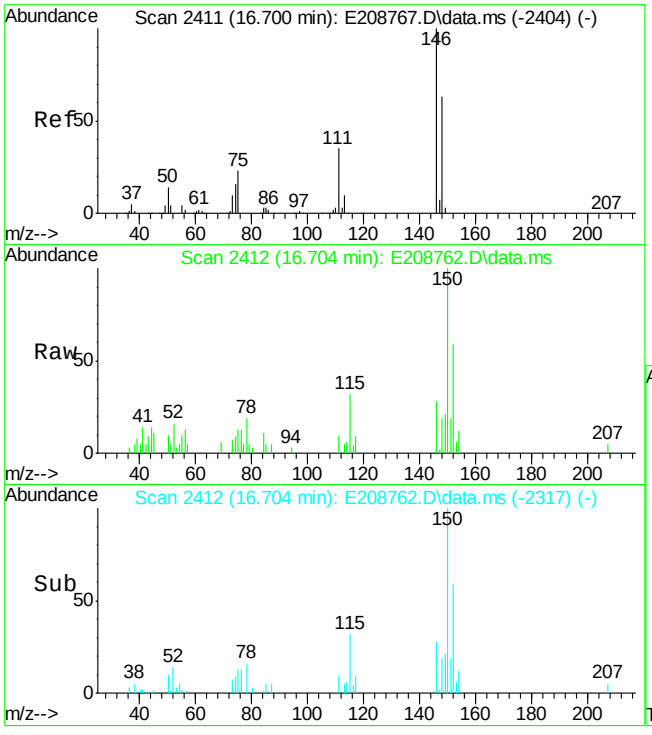
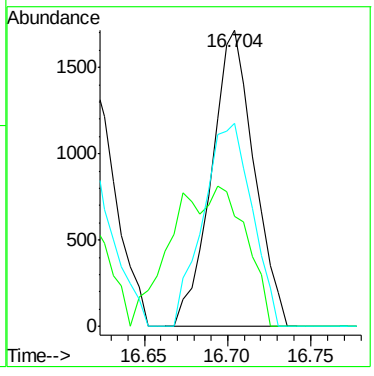
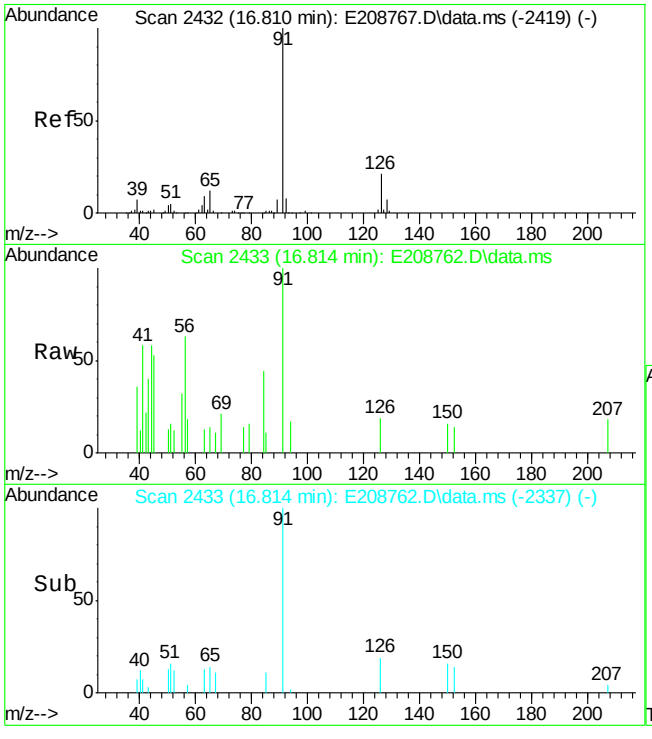


#132
1,4-dichlorobenzene
Concen: 0.97 ug/L
RT: 16.704 min Scan# 2412
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:146 Resp: 3051

Ion	Ratio	Lower	Upper
146	100		
111	37.1	8.0	68.0
148	68.6	34.5	94.5

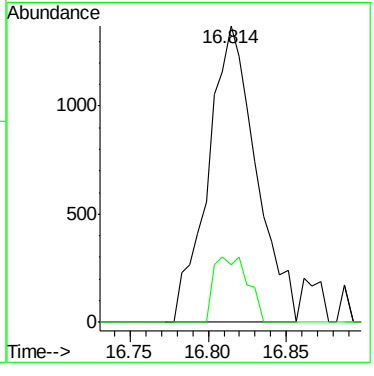


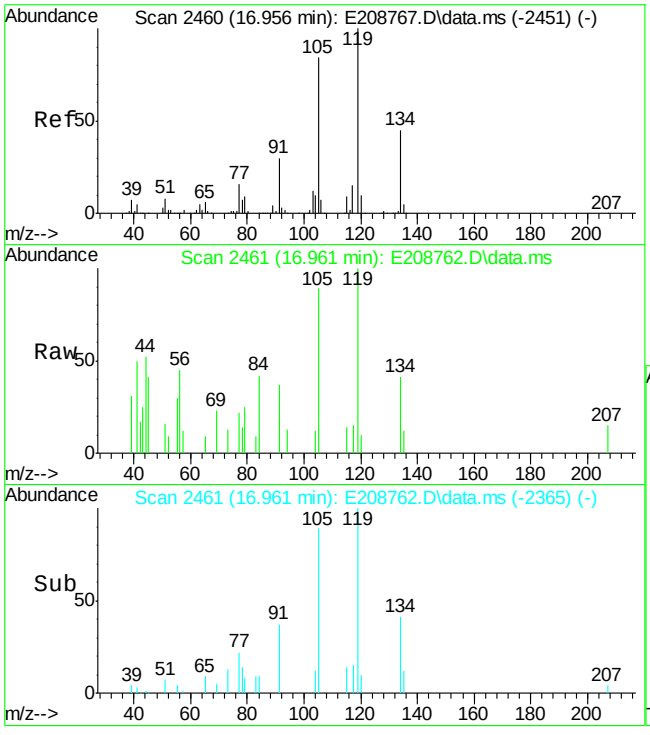


#133
benzyl chloride
Concen: 0.92 ug/L
RT: 16.814 min Scan# 2433
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 91 Resp: 2931

Ion	Ratio	Lower	Upper
91	100		
126	15.7	16.8	25.2#

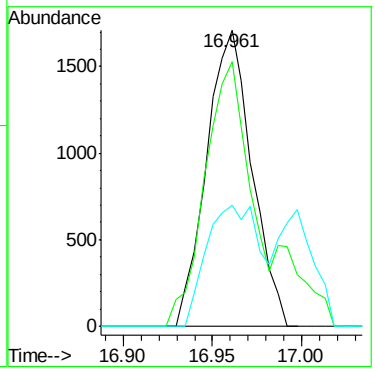


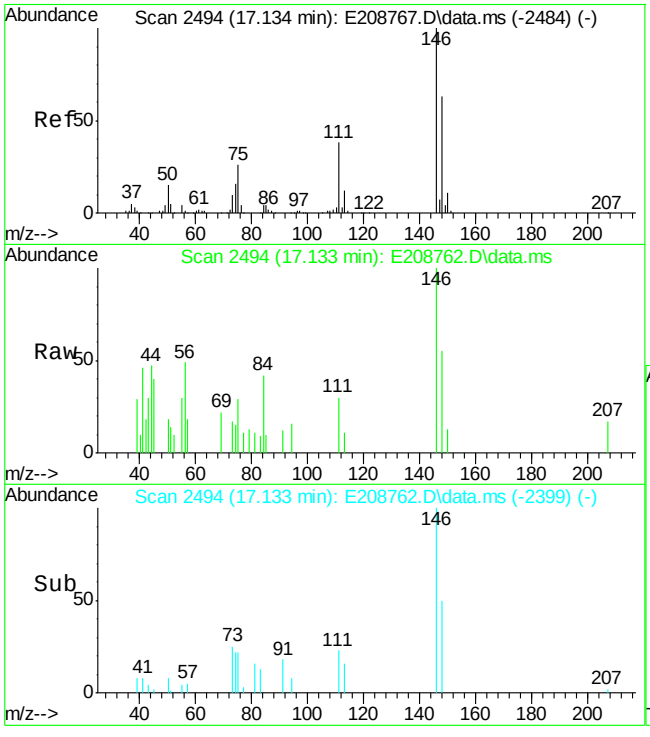


#134
p-diethylbenzene
Concen: 0.90 ug/L
RT: 16.961 min Scan# 2461
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:119 Resp: 3013

Ion	Ratio	Lower	Upper
119	100		
105	89.3	54.3	114.3
134	41.0	17.6	77.6

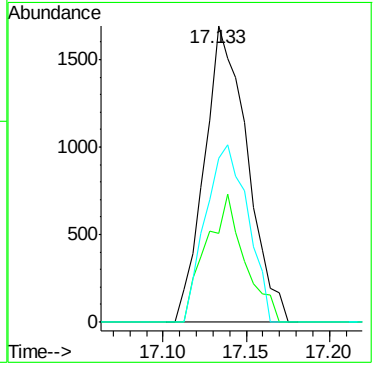




#135
1,2-dichlorobenzene
Concen: 1.03 ug/L
RT: 17.133 min Scan# 2494
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:146 Resp: 3033

Ion	Ratio	Lower	Upper
146	100		
111	29.9	11.7	71.7
148	55.3	35.1	95.1



7.7.2

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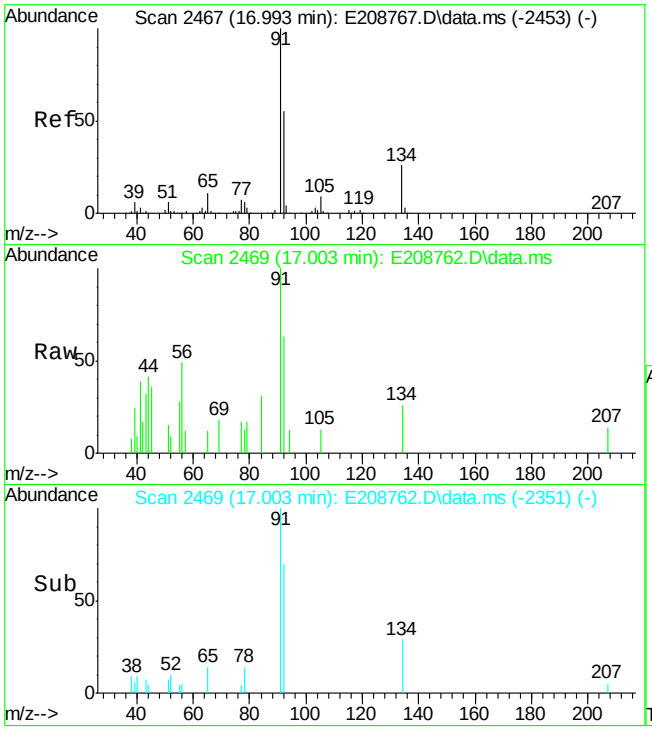
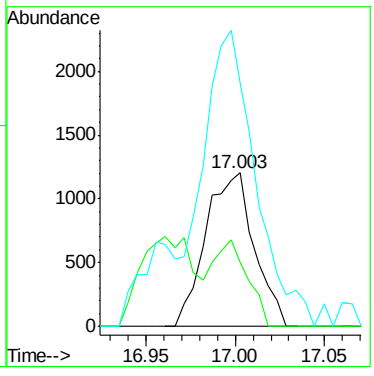
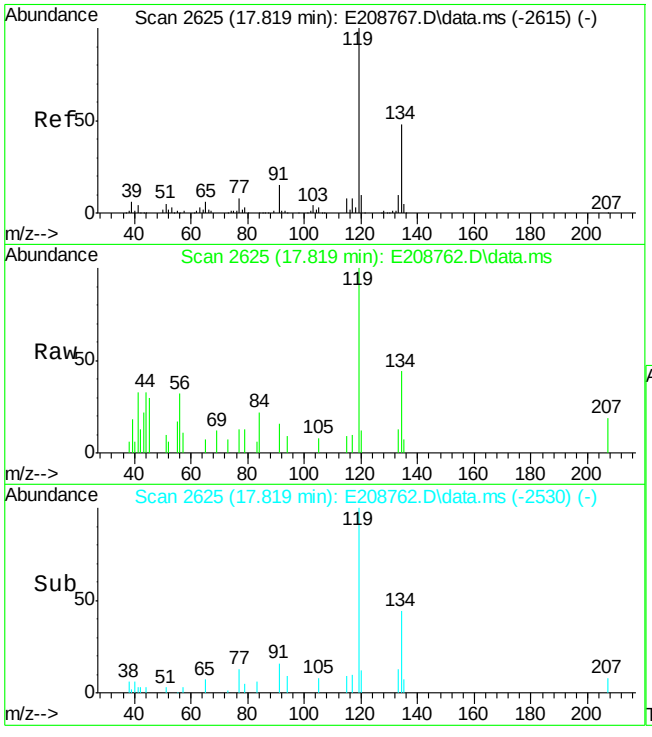


#136
n-butylbenzene
Concen: 0.82 ug/L
RT: 17.003 min Scan# 2469
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 92 Resp: 2275

Ion	Ratio	Lower	Upper
92	100		
134	41.5	17.6	77.6
91	134.8	146.1	206.1#

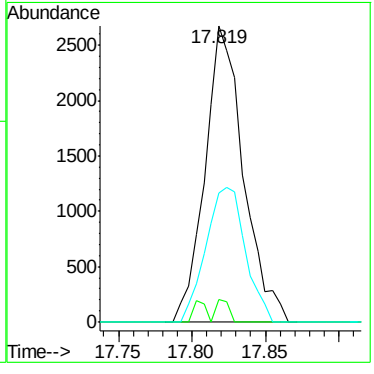


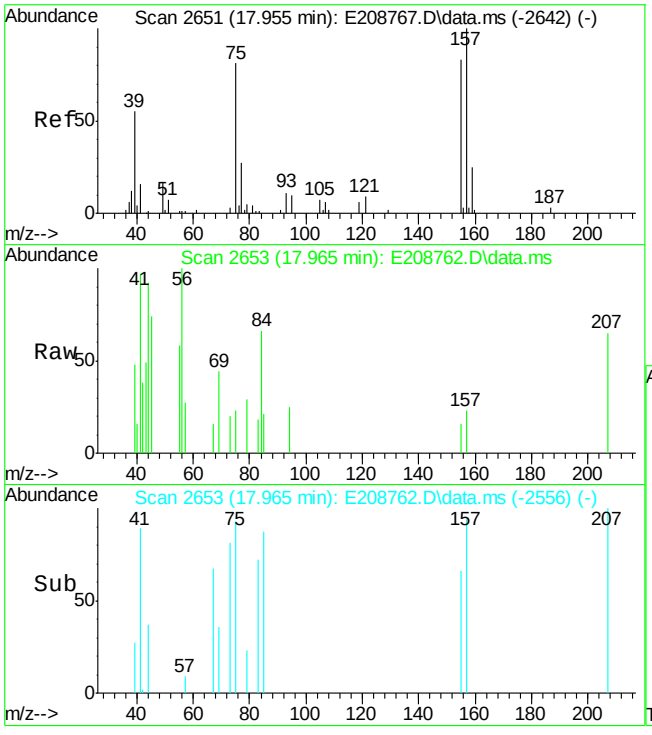


#137
1,2,4,5-tetramethylbenzene
Concen: 0.97 ug/L
RT: 17.819 min Scan# 2625
Delta R.T. -0.005 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:119 Resp: 4858

Ion	Ratio	Lower	Upper
119	100		
105	7.8	0.0	34.0
134	43.7	19.1	79.1

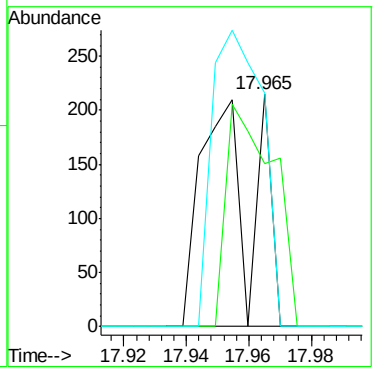


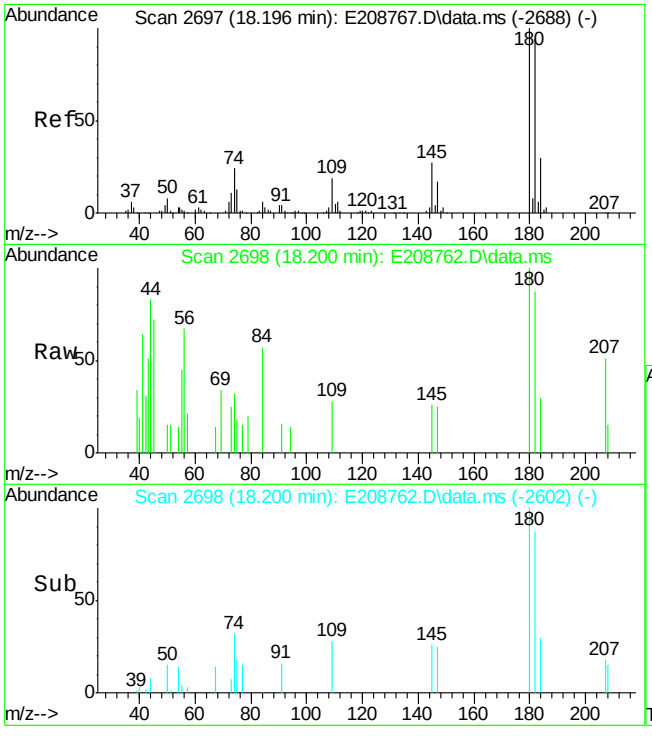


#138
1,2-dibromo-3-chloropropane
Concen: 0.85 ug/L
RT: 17.965 min Scan# 2653
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 75 Resp: 241

Ion	Ratio	Lower	Upper
75	100		
155	70.2	63.6	123.6
157	100.5	89.9	149.9

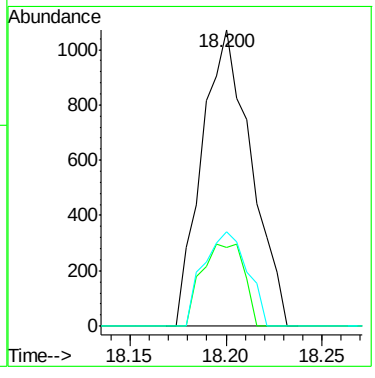




#139
1,3,5-trichlorobenzene
Concen: 0.86 ug/L
RT: 18.200 min Scan# 2698
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:180 Resp: 1896

Ion	Ratio	Lower	Upper
180	100		
145	23.8	20.2	37.4
74	28.6	20.0	37.2



7.7.2

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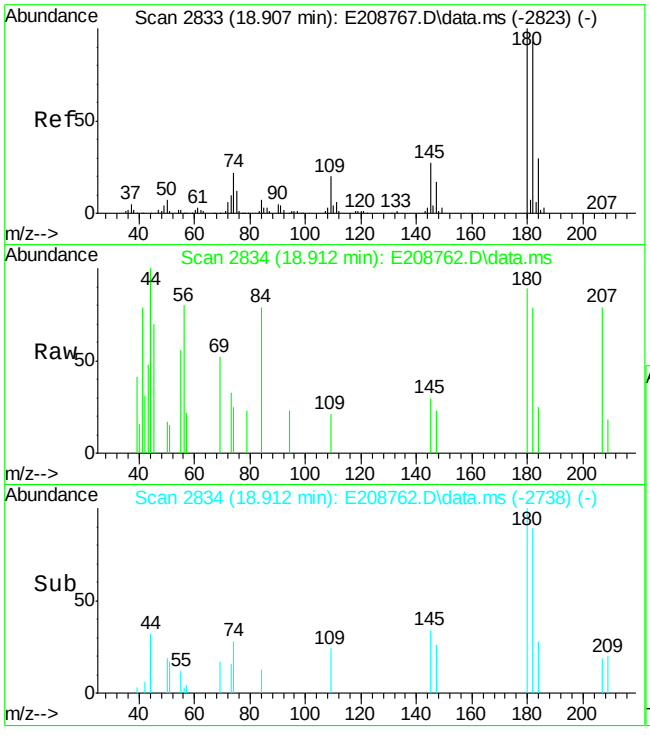
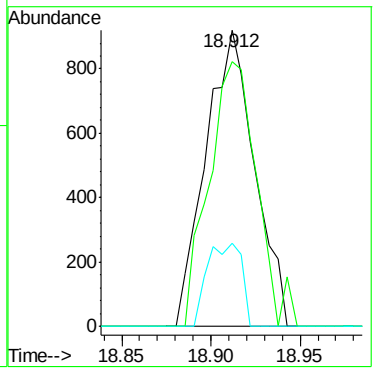
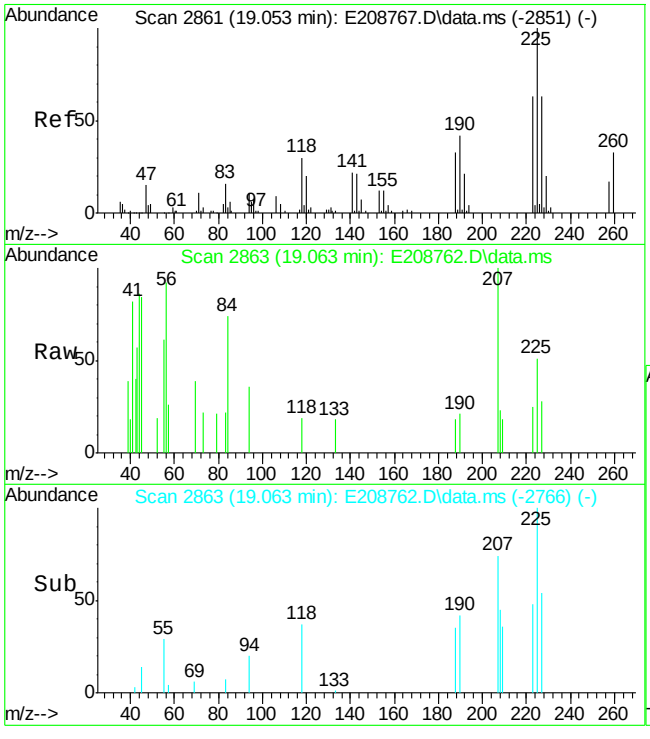


#140
1,2,4-trichlorobenzene
Concen: 0.94 ug/L
RT: 18.912 min Scan# 2834
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:180 Resp: 1754

Ion	Ratio	Lower	Upper
180	100		
182	89.2	68.7	128.7
184	27.9	1.9	61.9

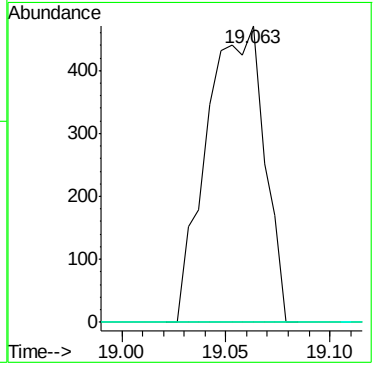




#141
hexachlorobutadiene
Concen: 0.86 ug/L
RT: 19.063 min Scan# 2863
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:225 Resp: 899

Ion	Ratio	Lower	Upper
225	100		
259	0.0	0.0	30.0
260	0.0	0.0	57.3



7.7.2

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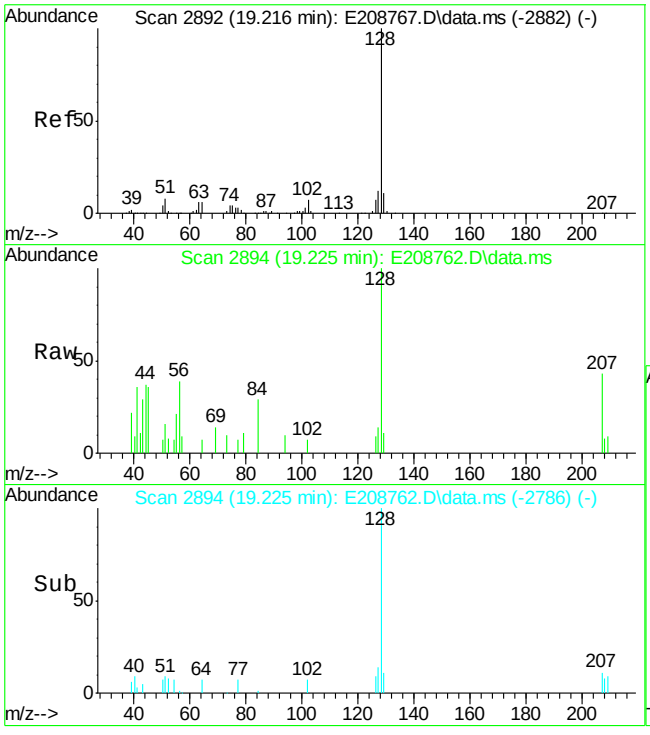
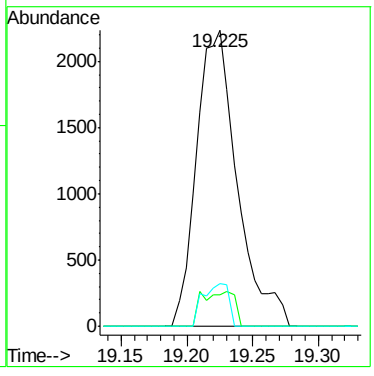
ACCUTEST LABORATORIES JB53758

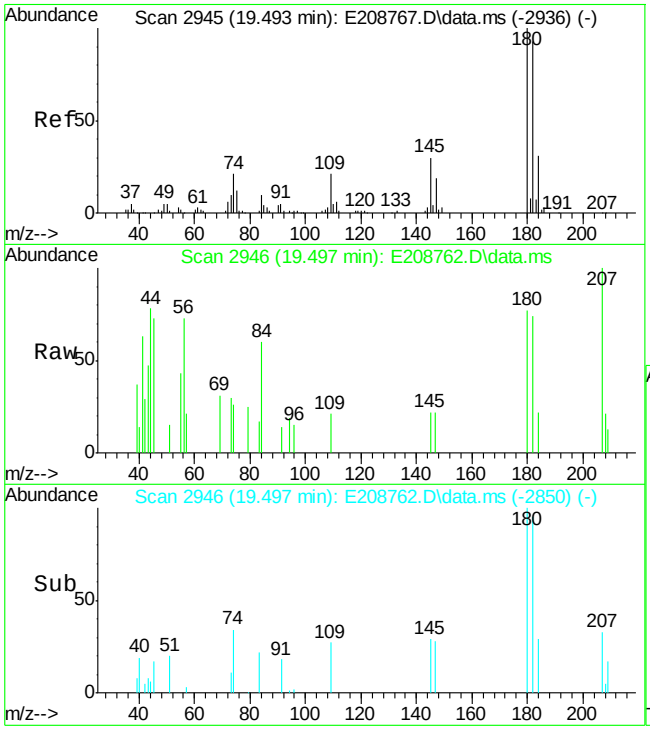


#142
naphthalene
Concen: 1.07 ug/L
RT: 19.225 min Scan# 2894
Delta R.T. 0.006 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:128 Resp: 4827

Ion	Ratio	Lower	Upper
128	100		
129	10.5	0.0	41.4
127	14.5	0.0	43.1

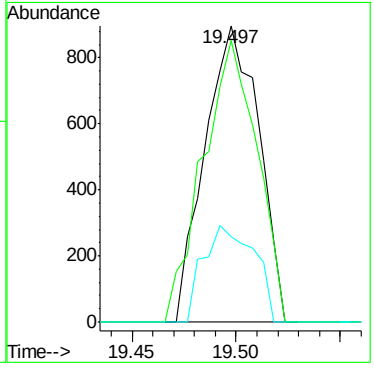




#144
1,2,3-trichlorobenzene
Concen: 0.98 ug/L
RT: 19.497 min Scan# 2946
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

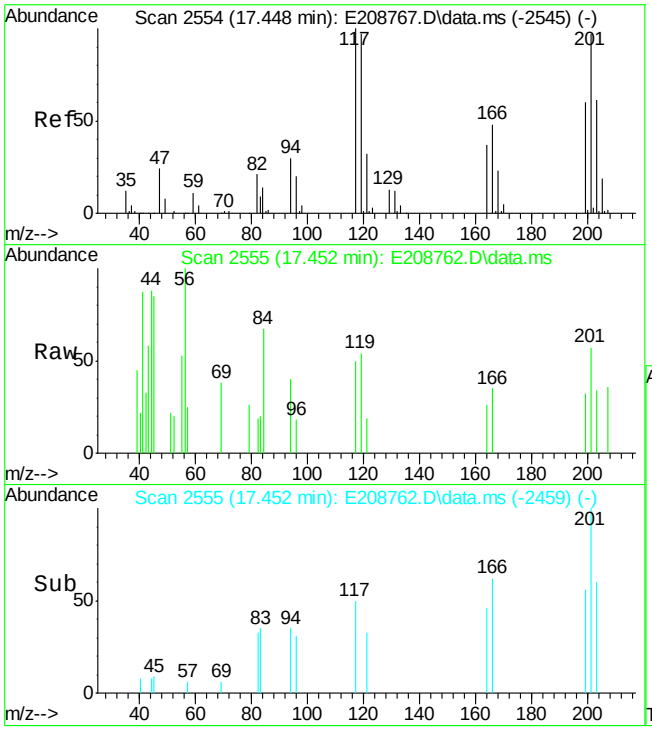
Tgt Ion:180 Resp: 1608

Ion	Ratio	Lower	Upper
180	100		
182	95.2	68.0	128.0
184	28.7	1.2	61.2



7.7.2

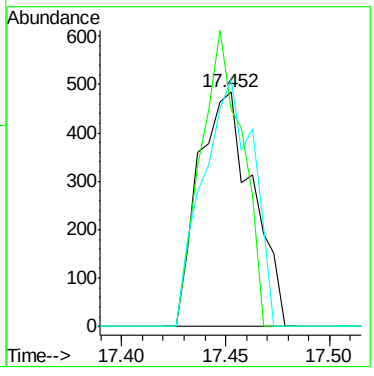
7

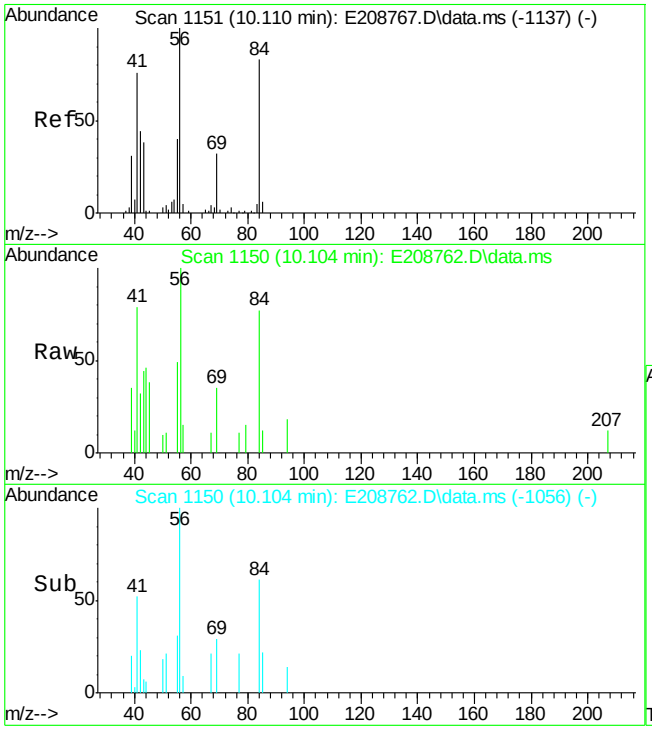


#145
hexachloroethane
Concen: 0.87 ug/L
RT: 17.452 min Scan# 2555
Delta R.T. 0.001 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion:119 Resp: 877

Ion	Ratio	Lower	Upper
119	100		
117	96.1	73.3	133.3
201	97.6	59.2	119.2

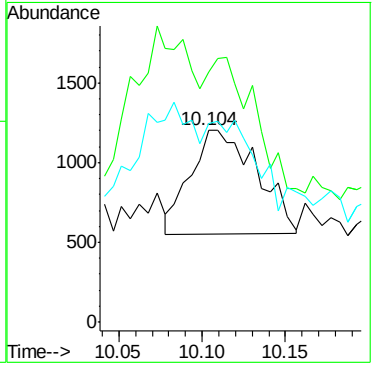




#146
Cyclohexane
Concen: 0.88 ug/L
RT: 10.104 min Scan# 1150
Delta R.T. -0.010 min
Lab File: E208762.D
Acq: 22 Oct 2013 11:21 pm

Tgt Ion: 84 Resp: 1810

Ion	Ratio	Lower	Upper
84	100		
56	0.0	0.0	30.0
41	0.0	69.1	129.1#



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 10/25/13 02:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208763.D
Acq On : 22 Oct 2013 11:50 pm
Operator : DivyaP
Sample : ic9161-2
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 23 09:31:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.640	65	72566	500.00	ug/L	0.00
5) pentafluorobenzene	9.857	168	128163	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.772	114	181063	50.00	ug/L	0.00
97) chlorobenzene-d5	14.099	117	170126	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.672	152	98810	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.894	113	2208	1.81	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 3.62%#			
61) 1,2-dichloroethane-d4 (s)	10.317	65	2832	1.86	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 3.72%#			
89) toluene-d8 (s)	12.477	98	9222	1.89	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 3.78%#			
116) 4-bromofluorobenzene (s)	15.375	95	4098	1.96	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 3.92%#			

Target Compounds						Qvalue
12) dichlorodifluoromethane	4.292	85	3473	1.95	ug/L	80
15) chloromethane	4.606	50	4661	2.02	ug/L	90
16) vinyl chloride	4.873	62	3510	1.94	ug/L	86
20) chloroethane	5.710	64	1694	1.94	ug/L	91
22) trichlorofluoromethane	6.227	101	3611m	2.07	ug/L	
24) ethyl ether	6.593	74	1275	2.08	ug/L #	52
28) 2-chloropropane	6.792	43	5404	2.09	ug/L #	1
29) acrolein	6.803	56	666439	2811.13	ug/L	99
30) 1,1-dichloroethene	7.043	96	2492	2.06	ug/L #	74
33) allyl chloride	7.524	41	5726	2.13	ug/L	86
35) iodomethane	7.305	142	3831	1.87	ug/L	92
37) carbon disulfide	7.472	76	8251	1.90	ug/L	79
38) methylene chloride	7.707	84	3019	2.07	ug/L	77
40) methyl acetate	7.493	43	1613	1.67	ug/L #	60
41) methyl tert butyl ether	8.053	73	7848	2.01	ug/L	92
42) trans-1,2-dichloroethene	8.100	96	2621	1.94	ug/L	93
43) di-isopropyl ether	8.638	45	9644	1.95	ug/L	84
44) ethyl tert-butyl ether	9.099	59	9184	2.06	ug/L	94
46) 1,1-dichloroethane	8.633	63	4418	1.89	ug/L	80
47) chloroprene	8.759	53	4414	2.08	ug/L	92
48) acrylonitrile	7.985	53	5953	9.96	ug/L	91
51) 2,2-dichloropropane	9.376	77	4094	2.07	ug/L	95
52) cis-1,2-dichloroethene	9.355	96	2666	1.87	ug/L #	83
53) methyl acrylate	9.433	55	1951	1.94	ug/L #	88
54) propionitrile	9.365	54	4607	19.36	ug/L #	51
55) bromochloromethane	9.653	128	1050	1.78	ug/L	99
57) chloroform	9.705	83	4621	1.85	ug/L	92
58) t-butyl formate	9.747	59	2957	2.11	ug/L #	74
59) Iso-octane	10.464	57	11300	2.14	ug/L	96
63) methacrylonitrile	9.564	41	1987	2.27	ug/L	86
64) 1,1,1-trichloroethane	9.993	97	3829	1.99	ug/L	95
65) tert-amyl methyl ether	10.469	73	8379	2.01	ug/L	94
70) n-butyl alcohol	10.887	56	4390	124.69	ug/L	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208763.D
Acq On : 22 Oct 2013 11:50 pm
Operator : DivyaP
Sample : ic9161-2
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 23 09:31:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
71) tert-amyl ethyl ether	11.316	87	3605	1.87 ug/L #	86
72) carbon tetrachloride	10.218	117	3037	1.93 ug/L	93
73) 1,1-dichloropropene	10.181	75	3237	1.93 ug/L	86
74) hexane	8.429	57	4013	2.16 ug/L	94
75) benzene	10.427	78	10025	1.92 ug/L	90
77) isopropyl acetate	10.323	43	5693	1.97 ug/L	87
78) 1,2-dichloroethane	10.411	62	2880	1.85 ug/L	90
79) ethyl acrylate	11.123	55	3391	2.15 ug/L #	83
80) trichloroethene	11.144	95	2567	1.92 ug/L	83
82) 2-chloroethyl vinyl ether	11.907	63	8538	9.74 ug/L	97
83) methylcyclohexane	11.405	83	4751	1.96 ug/L	95
84) methyl methacrylate	11.390	69	2777	1.76 ug/L	99
85) 1,2-dichloropropane	11.379	63	2640	1.90 ug/L	83
86) dibromomethane	11.541	93	1346	1.83 ug/L	80
87) bromodichloromethane	11.667	83	3768	1.99 ug/L	93
88) cis-1,3-dichloropropene	12.148	75	4017	1.93 ug/L	97
90) 4-methyl-2-pentanone	12.232	58	1089	2.06 ug/L	93
91) toluene	12.561	92	5992	1.91 ug/L	97
92) 3-methyl-1-butanol	12.247	55	3131	45.76 ug/L	87
93) trans-1,3-dichloropropene	12.734	75	3572	1.88 ug/L	91
94) ethyl methacrylate	12.739	69	3290	1.68 ug/L	87
95) 1,1,2-trichloroethane	12.953	83	2212	1.90 ug/L	96
96) 2-hexanone	13.157	58	863	1.77 ug/L #	63
99) tetrachloroethene	13.210	166	2664	1.95 ug/L	86
100) 1,3-dichloropropane	13.157	76	3606	1.93 ug/L	98
101) butyl acetate	13.241	56	1998	1.90 ug/L #	76
102) 3,3-dimethyl-1-butanol	13.319	57	3640	21.75 ug/L	97
103) dibromochloromethane	13.445	129	2539	1.91 ug/L	99
104) 1,2-dibromoethane	13.623	107	2162	1.90 ug/L	84
106) chlorobenzene	14.141	112	6692	1.94 ug/L	91
107) 1,1,1,2-tetrachloroethane	14.198	131	2469	1.93 ug/L	94
108) ethylbenzene	14.203	91	12064	1.95 ug/L	94
109) m,p-xylene	14.324	106	8763	3.84 ug/L	93
110) o-xylene	14.784	106	4362	1.93 ug/L	95
112) styrene	14.789	104	7268	1.87 ug/L	99
113) bromoform	15.061	173	1824	1.86 ug/L	95
115) isopropylbenzene	15.160	105	11880	1.98 ug/L	97
117) bromobenzene	15.595	156	2852	1.86 ug/L	90
118) 1,1,2,2-tetrachloroethane	15.453	83	3976	2.02 ug/L	91
120) 1,2,3-trichloropropane	15.537	110	806	2.02 ug/L	93
121) n-propylbenzene	15.615	91	13465	1.92 ug/L	93
122) p-ethyltoluene	15.725	105	10873	1.86 ug/L	96
123) 2-chlorotoluene	15.778	126	2670	1.93 ug/L	96
124) 4-chlorotoluene	15.882	91	8861	1.97 ug/L	95
125) 1,3,5-trimethylbenzene	15.778	105	10105	1.95 ug/L	96
126) tert-butylbenzene	16.165	119	8376	1.90 ug/L	93
127) pentachloroethane	16.248	167	1989	1.91 ug/L	94
128) 1,2,4-trimethylbenzene	16.217	105	10019	1.93 ug/L	96
129) sec-butylbenzene	16.410	105	12323	1.90 ug/L	95
130) 1,3-dichlorobenzene	16.620	146	5424	1.86 ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208763.D
Acq On : 22 Oct 2013 11:50 pm
Operator : DivyaP
Sample : ic9161-2
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 23 09:31:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
131) p-isopropyltoluene	16.541	119	10315	1.93 ug/L	95
132) 1,4-dichlorobenzene	16.698	146	5599	1.81 ug/L	99
133) benzyl chloride	16.813	91	6460	2.08 ug/L	96
134) p-diethylbenzene	16.954	119	6153	1.87 ug/L	97
135) 1,2-dichlorobenzene	17.137	146	5378	1.86 ug/L	98
136) n-butylbenzene	16.996	92	5014	1.84 ug/L	99
137) 1,2,4,5-tetramethylben...	17.823	119	9122	1.86 ug/L	99
138) 1,2-dibromo-3-chloropr...	17.959	75	629	2.26 ug/L	89
139) 1,3,5-trichlorobenzene	18.199	180	4113	1.90 ug/L	93
140) 1,2,4-trichlorobenzene	18.905	180	3376	1.85 ug/L	81
141) hexachlorobutadiene	19.057	225	2064	2.02 ug/L	89
142) naphthalene	19.219	128	7957	1.80 ug/L	98
144) 1,2,3-trichlorobenzene	19.501	180	3074	1.92 ug/L	87
145) hexachloroethane	17.446	119	1987	2.02 ug/L	99
146) Cyclohexane	10.113	84	4669	2.32 ug/L #	1

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

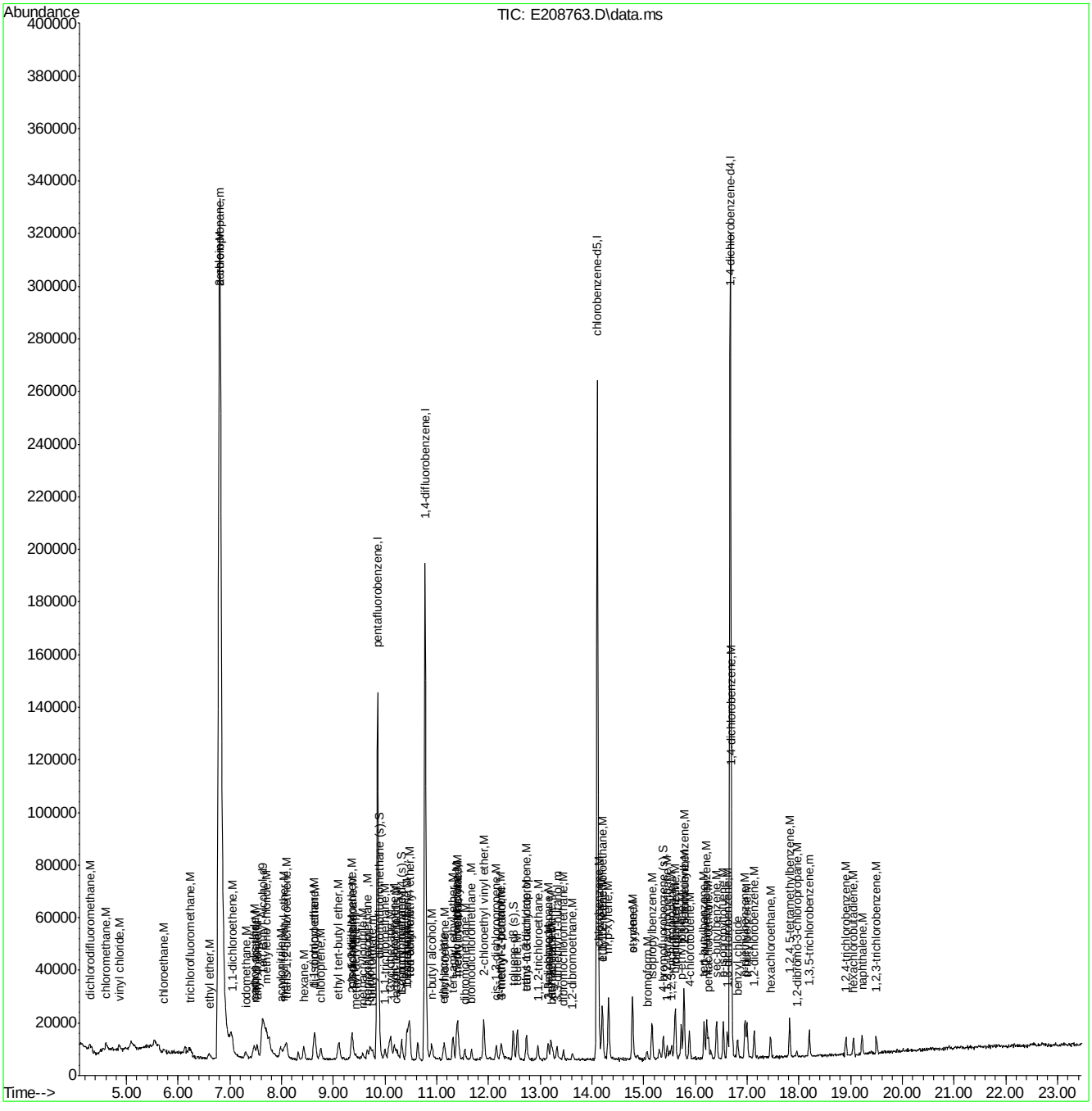
7.7.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208763.D
Acq On : 22 Oct 2013 11:50 pm
Operator : DivyaP
Sample : ic9161-2
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 23 09:31:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration



Manual Integration Approval Summary

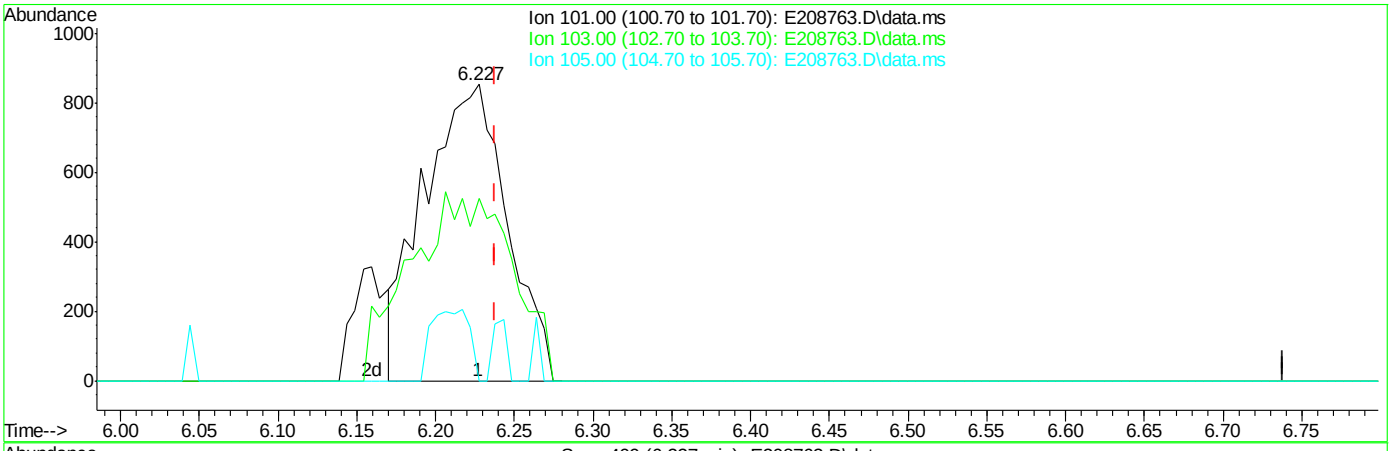
Sample Number:	VE9161-IC9161	**Method:**	SW846 8260B
Lab FileID:	E208763.D	**Analyst approved:**	10/23/13 10:15 Henny Salim
Injection Time:	10/22/13 23:50	**Supervisor approved:**	10/25/13 02:27 Kanya Veerawat

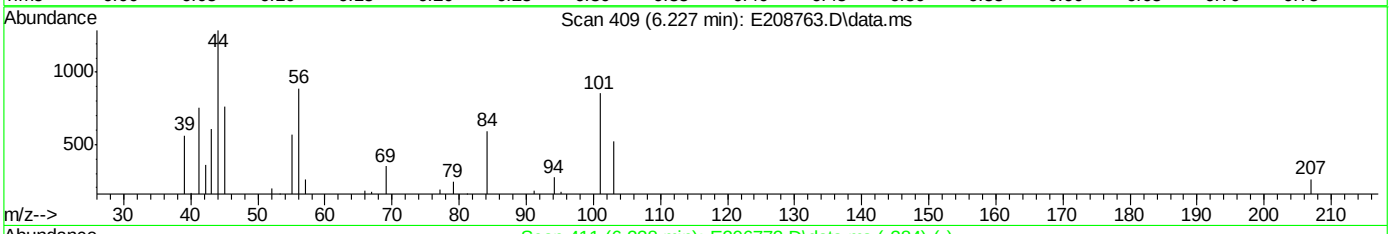
Parameter	CAS	Sig#	R.T. (min.)	Reason
Trichlorofluoromethane	75-69-4		6.23	Poor instrument integration

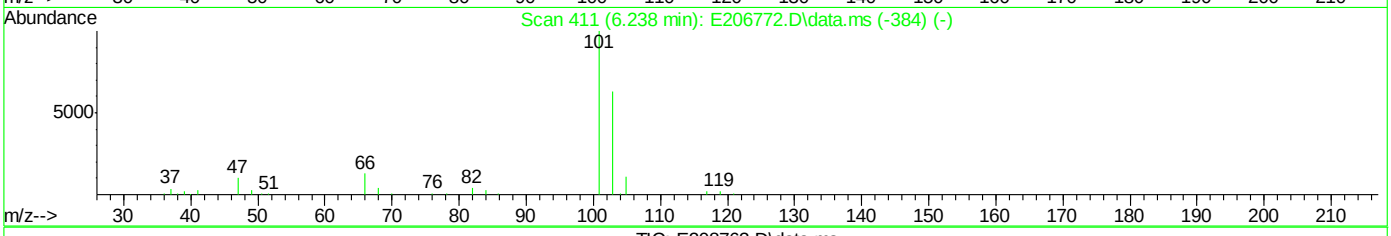
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208763.D
Acq On : 22 Oct 2013 11:50 pm
Operator : DivyaP
Sample : ic9161-2
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 23 08:26:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration







TIC: E208763.D\data.ms

(22) trichlorofluoromethane (M)

6.227min (-0.011) 1.80ug/L

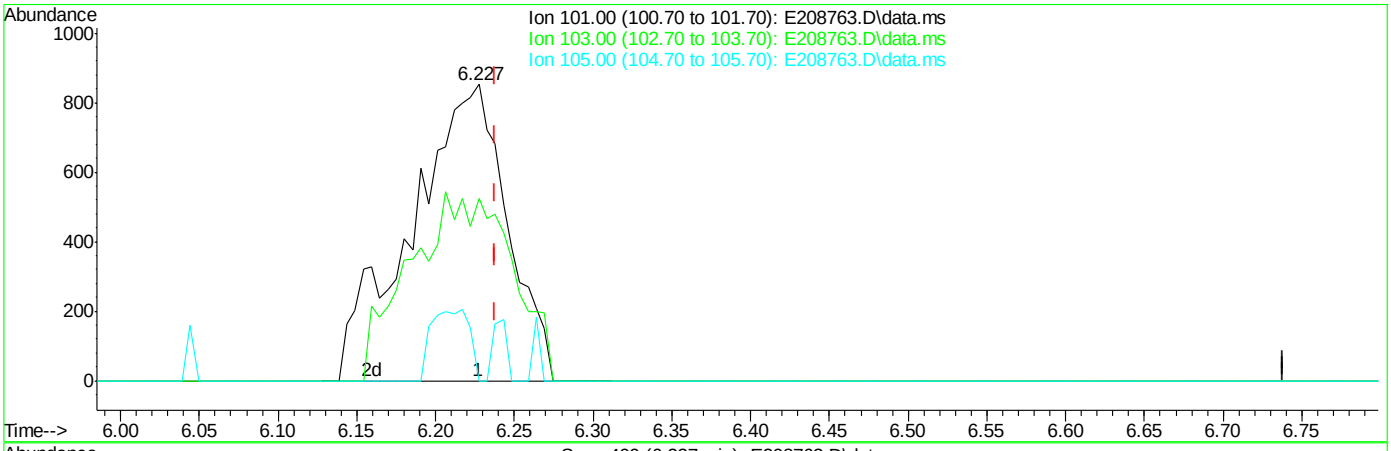
response 3135

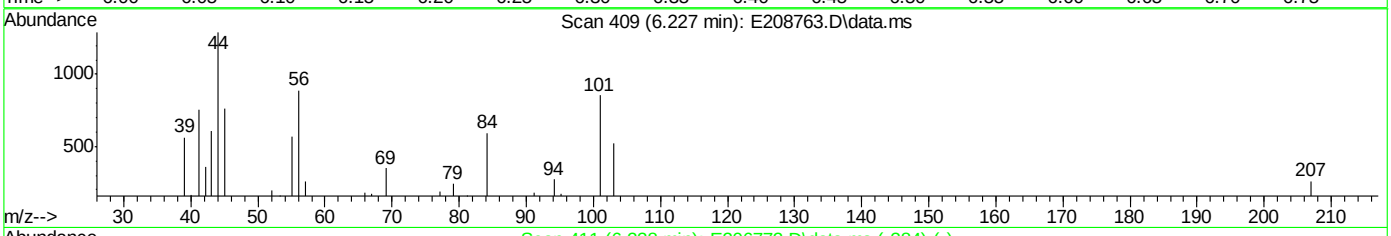
Ion	Exp%	Act%
101.00	100	100
103.00	63.00	61.43
105.00	10.70	0.00
0.00	0.00	0.00

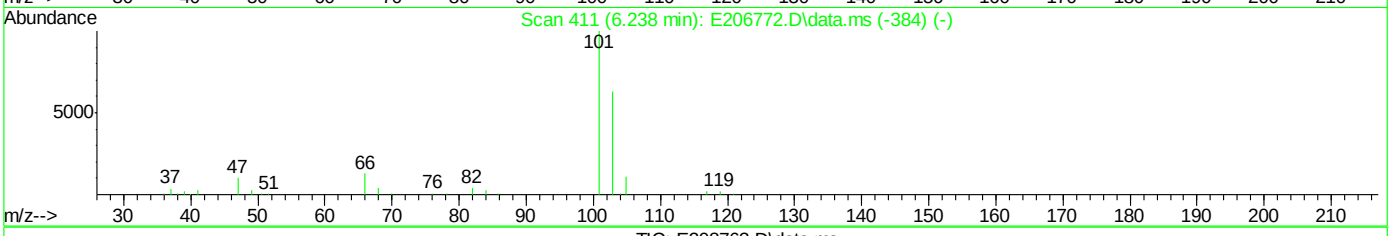
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208763.D
Acq On : 22 Oct 2013 11:50 pm
Operator : DivyaP
Sample : ic9161-2
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 23 08:26:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration







TIC: E208763.D\data.ms

(22) trichlorofluoromethane (M)

6.227min (-0.011) 2.07ug/L m

response 3611

Ion	Exp%	Act%
101.00	100	100
103.00	63.00	61.43
105.00	10.70	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 10/25/13 02:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 09:46:14 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.640	65	72923	500.00	ug/L	0.00
5) pentafluorobenzene	9.857	168	128977	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.773	114	182769	50.00	ug/L	0.00
97) chlorobenzene-d5	14.099	117	170430	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.672	152	98873	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.899	113	6049	4.92	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 9.84%#			
61) 1,2-dichloroethane-d4 (s)	10.318	65	7535	4.91	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 9.82%#			
89) toluene-d8 (s)	12.478	98	24610	5.01	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 10.02%#			
116) 4-bromofluorobenzene (s)	15.375	95	9887	4.73	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 9.46%#			

Target Compounds						Qvalue
2) 1,4-dioxane	11.505	88	1140m	107.44	ug/L	
3) tertiary butyl alcohol	7.750	59	4013m	28.70	ug/L	
11) chlorodifluoromethane	4.298	51	8631	4.72	ug/L	99
12) dichlorodifluoromethane	4.298	85	8873	4.94	ug/L	91
15) chloromethane	4.606	50	11033	4.75	ug/L	96
16) vinyl chloride	4.878	62	9632	5.28	ug/L	96
19) bromomethane	5.543	94	8510	5.66	ug/L	95
20) chloroethane	5.726	64	4928	5.62	ug/L	98
22) trichlorofluoromethane	6.228	101	10280	5.86	ug/L	93
24) ethyl ether	6.604	74	3383	5.50	ug/L	90
28) 2-chloropropane	6.803	43	12886	4.96	ug/L #	94
29) acrolein	6.814	56	16817	70.49	ug/L	93
30) 1,1-dichloroethene	7.044	96	6078	4.98	ug/L	82
33) allyl chloride	7.530	41	13422	4.96	ug/L	88
35) iodomethane	7.305	142	10517	5.09	ug/L	92
36) iso-butyl alcohol	10.171	74	527m	20.55	ug/L	
37) carbon disulfide	7.473	76	21234	4.85	ug/L	91
38) methylene chloride	7.703	84	6756	4.61	ug/L	94
39) 1-chloropropane	7.755	42	12784	4.79	ug/L	92
40) methyl acetate	7.504	43	5070	5.22	ug/L	85
41) methyl tert butyl ether	8.064	73	18751	4.78	ug/L	86
42) trans-1,2-dichloroethene	8.095	96	6697	4.93	ug/L	89
43) di-isopropyl ether	8.649	45	23085	4.63	ug/L	90
44) ethyl tert-butyl ether	9.104	59	21714	4.83	ug/L	94
46) 1,1-dichloroethane	8.634	63	11491	4.87	ug/L	97
47) chloroprene	8.764	53	10100	4.72	ug/L	90
48) acrylonitrile	7.980	53	14263	23.72	ug/L	95
50) ethyl acetate	9.340	45	1206	5.47	ug/L #	1
51) 2,2-dichloropropane	9.376	77	9171	4.60	ug/L	96
52) cis-1,2-dichloroethene	9.355	96	6997	4.87	ug/L	99
53) methyl acrylate	9.423	55	5432	5.37	ug/L #	89
54) propionitrile	9.350	54	10892	45.48	ug/L #	41
55) bromochloromethane	9.654	128	3144	5.29	ug/L	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 09:46:14 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
56) tetrahydrofuran	9.722	42	2712	5.05 ug/L	90
57) chloroform	9.706	83	11380	4.54 ug/L	98
58) t-butyl formate	9.748	59	6637	4.72 ug/L	87
59) Iso-octane	10.469	57	24247	4.57 ug/L	96
62) freon 113	7.018	151	4551	5.09 ug/L	88
63) methacrylonitrile	9.565	41	4436	5.04 ug/L	92
64) 1,1,1-trichloroethane	10.004	97	9340	4.82 ug/L	93
65) tert-amyl methyl ether	10.469	73	19667	4.70 ug/L	99
68) tert amyl alcohol	10.245	55	1500	25.10 ug/L #	56
70) n-butyl alcohol	10.872	56	11194	314.97 ug/L	97
71) tert-amyl ethyl ether	11.306	87	9740	4.99 ug/L	91
72) carbon tetrachloride	10.224	117	7951	5.01 ug/L	98
73) 1,1-dichloropropene	10.177	75	8741	5.17 ug/L	92
74) hexane	8.419	57	9735	5.19 ug/L	90
75) benzene	10.422	78	25531	4.84 ug/L	98
76) heptane	10.632	57	5781	4.58 ug/L	94
77) isopropyl acetate	10.318	43	13237	4.53 ug/L	95
78) 1,2-dichloroethane	10.401	62	7859	5.00 ug/L	99
79) ethyl acrylate	11.113	55	9411	5.92 ug/L #	87
80) trichloroethene	11.144	95	6264	4.65 ug/L	94
82) 2-chloroethyl vinyl ether	11.902	63	21016	23.74 ug/L	96
83) methylcyclohexane	11.400	83	11087	4.53 ug/L	99
84) methyl methacrylate	11.385	69	7125	4.48 ug/L	96
85) 1,2-dichloropropane	11.379	63	6764	4.83 ug/L	92
86) dibromomethane	11.542	93	3920	5.29 ug/L	90
87) bromodichloromethane	11.667	83	8732	4.58 ug/L	98
88) cis-1,3-dichloropropene	12.148	75	10288	4.89 ug/L	95
90) 4-methyl-2-pentanone	12.237	58	2869	5.37 ug/L	98
91) toluene	12.556	92	15336	4.84 ug/L	100
92) 3-methyl-1-butanol	12.242	55	7504	108.66 ug/L	99
93) trans-1,3-dichloropropene	12.729	75	9312	4.84 ug/L	92
94) ethyl methacrylate	12.734	69	8930	4.52 ug/L	95
95) 1,1,2-trichloroethane	12.949	83	5106	4.35 ug/L	96
96) 2-hexanone	13.142	58	2330	4.73 ug/L	95
99) tetrachloroethene	13.205	166	7360	5.39 ug/L	88
100) 1,3-dichloropropane	13.152	76	9439	5.05 ug/L	98
101) butyl acetate	13.226	56	4537	4.30 ug/L	95
102) 3,3-dimethyl-1-butanol	13.325	57	7993	47.67 ug/L	97
103) dibromochloromethane	13.451	129	6559	4.91 ug/L	97
104) 1,2-dibromoethane	13.618	107	5790	5.07 ug/L	92
106) chlorobenzene	14.136	112	17586	5.10 ug/L	99
107) 1,1,1,2-tetrachloroethane	14.193	131	6433	5.03 ug/L	95
108) ethylbenzene	14.199	91	30357	4.89 ug/L	99
109) m,p-xylene	14.319	106	22812	9.97 ug/L	97
110) o-xylene	14.779	106	11557	5.09 ug/L	94
112) styrene	14.784	104	19128	4.91 ug/L	96
113) bromoform	15.056	173	4838	4.92 ug/L	94
115) isopropylbenzene	15.161	105	30676	5.11 ug/L	97
117) bromobenzene	15.600	156	7764	5.06 ug/L	89
118) 1,1,2,2-tetrachloroethane	15.454	83	8784	4.46 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 09:46:14 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
119) trans-1,4-dichloro-2-b...	15.496	53	2359	5.06 ug/L	89
120) 1,2,3-trichloropropane	15.537	110	2144	5.38 ug/L #	75
121) n-propylbenzene	15.611	91	34882	4.97 ug/L	95
122) p-ethyltoluene	15.726	105	29195	4.99 ug/L	97
123) 2-chlorotoluene	15.773	126	7117	5.13 ug/L	94
124) 4-chlorotoluene	15.883	91	22057	4.90 ug/L	98
125) 1,3,5-trimethylbenzene	15.778	105	25564	4.94 ug/L	98
126) tert-butylbenzene	16.165	119	21882	4.97 ug/L	96
127) pentachloroethane	16.254	167	5219	5.02 ug/L	91
128) 1,2,4-trimethylbenzene	16.217	105	25523	4.90 ug/L	97
129) sec-butylbenzene	16.411	105	32550	5.01 ug/L	97
130) 1,3-dichlorobenzene	16.615	146	14540	4.97 ug/L	97
131) p-isopropyltoluene	16.536	119	26836	5.01 ug/L	97
132) 1,4-dichlorobenzene	16.704	146	15345	4.97 ug/L	98
133) benzyl chloride	16.808	91	15423	4.96 ug/L	98
134) p-diethylbenzene	16.955	119	16268	4.95 ug/L	99
135) 1,2-dichlorobenzene	17.138	146	14548	5.03 ug/L	95
136) n-butylbenzene	16.997	92	13752	5.03 ug/L	96
137) 1,2,4,5-tetramethylben...	17.823	119	24248	4.95 ug/L	98
138) 1,2-dibromo-3-chloropr...	17.954	75	1622	5.83 ug/L	89
139) 1,3,5-trichlorobenzene	18.200	180	11096	5.12 ug/L	94
140) 1,2,4-trichlorobenzene	18.906	180	9101	4.99 ug/L	90
141) hexachlorobutadiene	19.052	225	5320	5.21 ug/L	92
142) naphthalene	19.219	128	21764	4.91 ug/L	98
144) 1,2,3-trichlorobenzene	19.491	180	8069	5.03 ug/L	95
145) hexachloroethane	17.452	119	4954	5.03 ug/L	95
146) Cyclohexane	10.114	84	10435	5.18 ug/L #	22

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

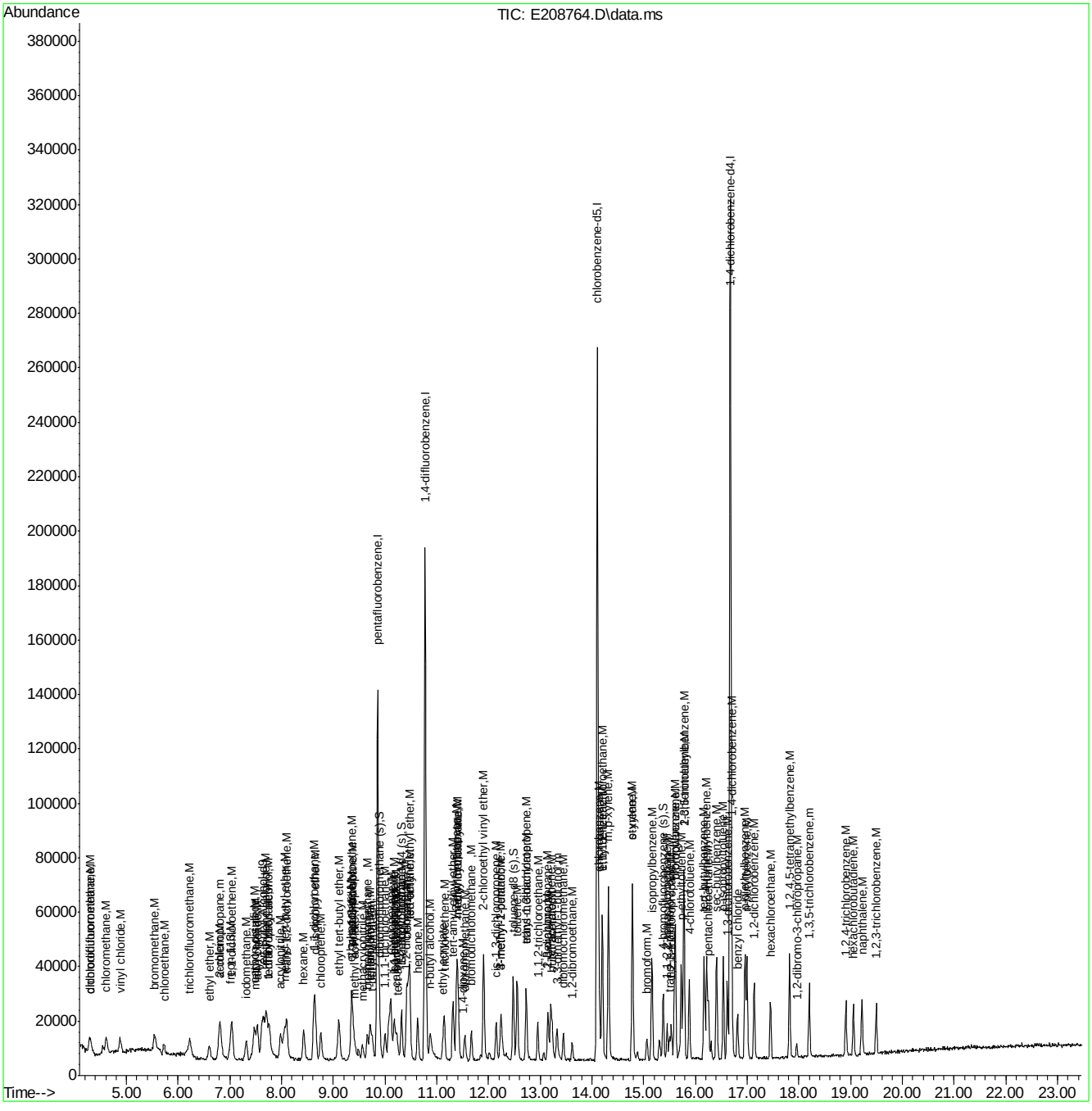
7.7.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 09:46:14 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration



Manual Integration Approval Summary

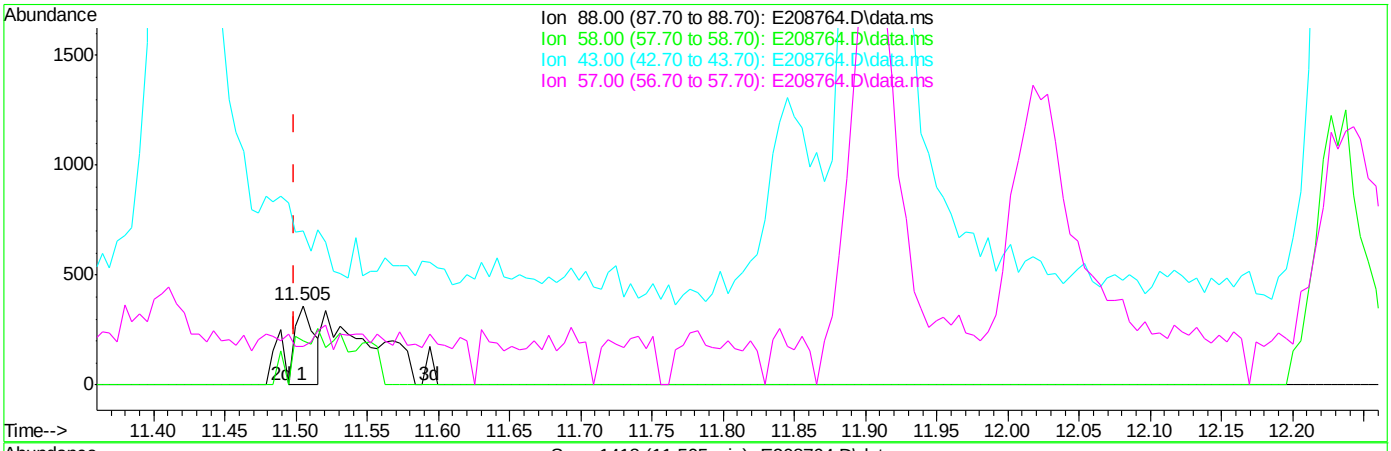
Sample Number:	VE9161-IC9161	**Method:**	SW846 8260B
Lab FileID:	E208764.D	**Analyst approved:**	10/23/13 10:15 Henny Salim
Injection Time:	10/23/13 00:20	**Supervisor approved:**	10/25/13 02:27 Kanya Veerawat

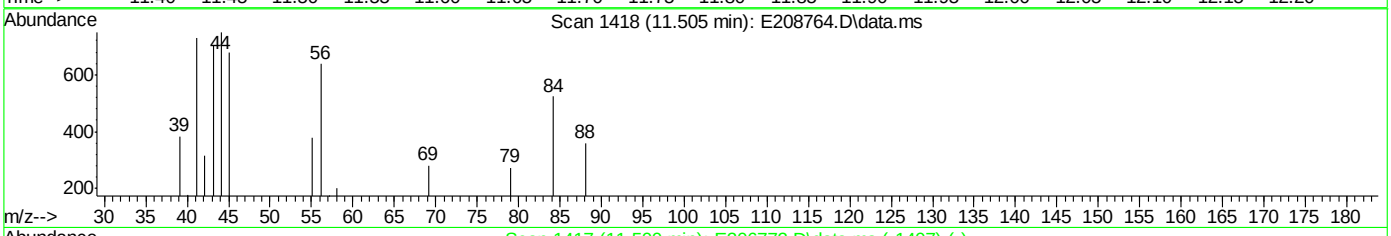
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tert Butyl Alcohol	75-65-0		7.75	Poor instrument integration
Isobutyl alcohol	78-83-1		10.17	Poor instrument integration
1,4-Dioxane	123-91-1		11.50	Poor instrument integration

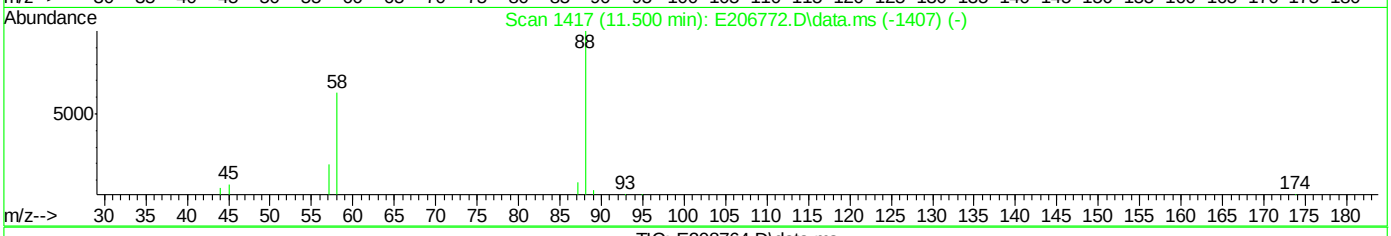
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 08:26:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration







TIC: E208764.D\data.ms

(2) 1,4-dioxane (M)

11.505min (+0.006) 32.14ug/L

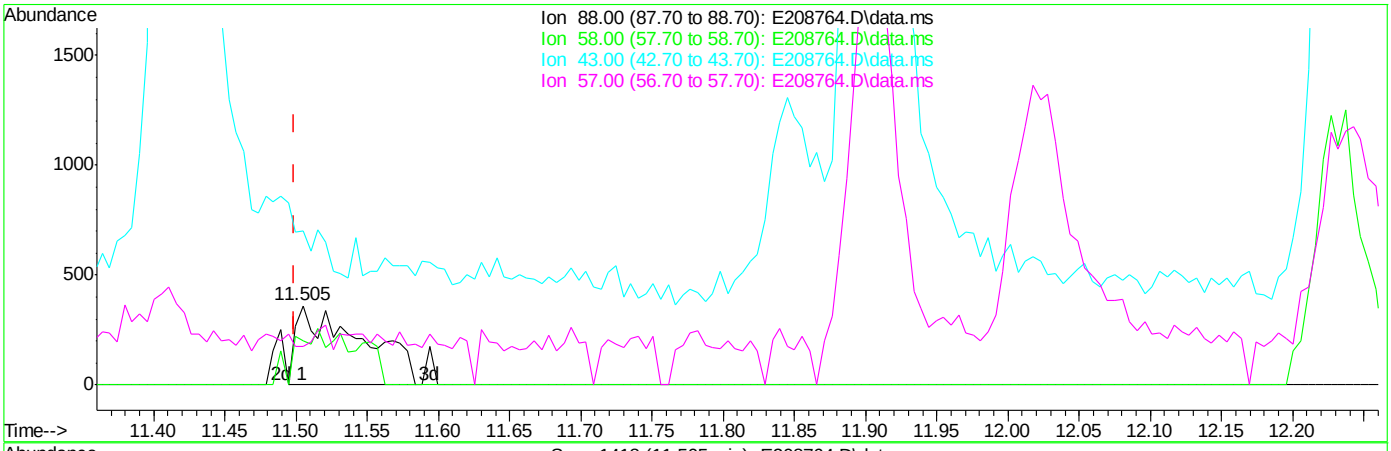
response 341

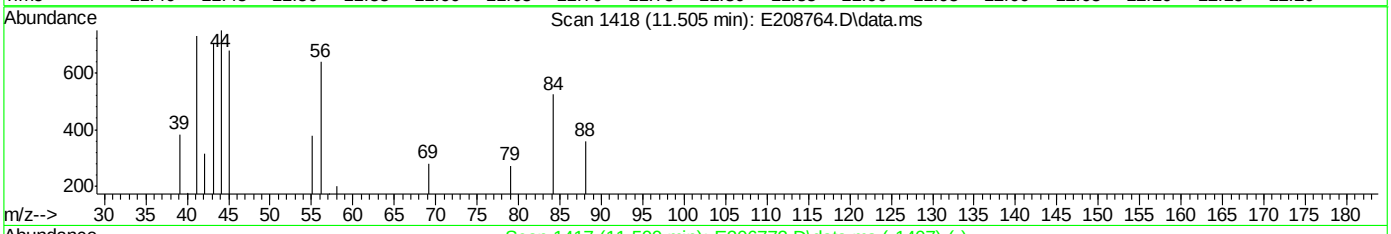
Ion	Exp%	Act%
88.00	100	100
58.00	62.70	55.40
43.00	32.50	0.00#
57.00	22.80	0.00#

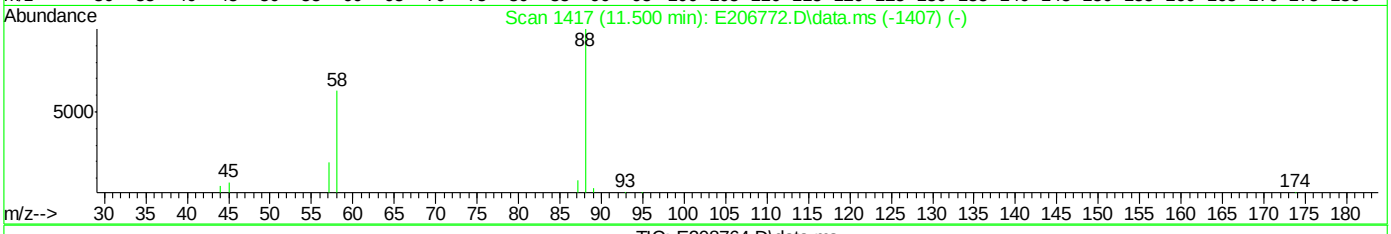
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 08:26:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration







TIC: E208764.D\data.ms

(2) 1,4-dioxane (M)

11.505min (+0.006) 107.44ug/L m

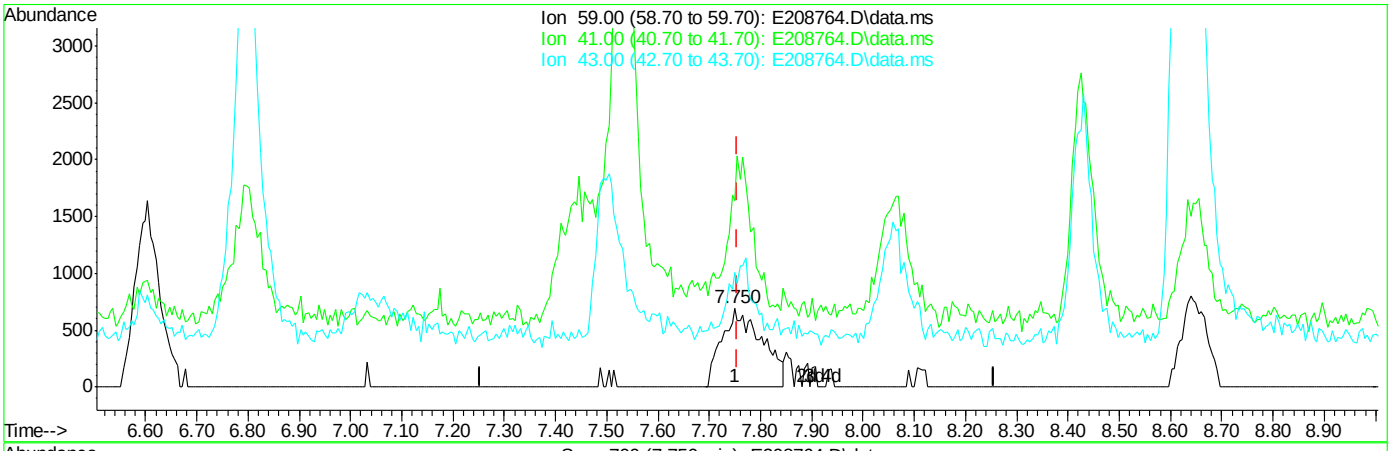
response 1140

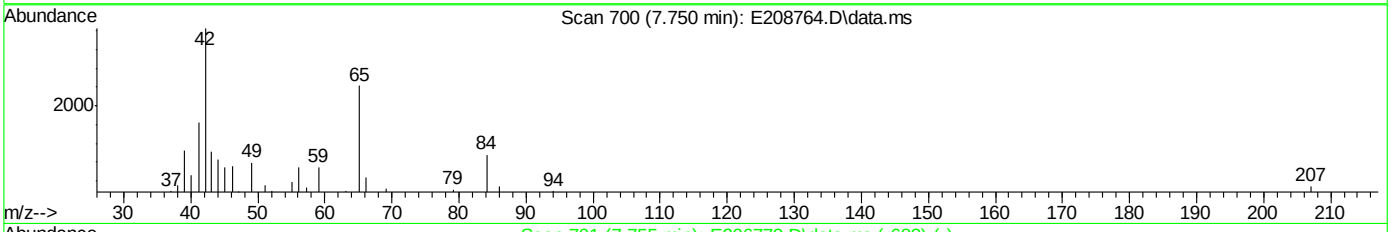
Ion	Exp%	Act%
88.00	100	100
58.00	62.70	55.40
43.00	32.50	194.18#
57.00	22.80	48.20#

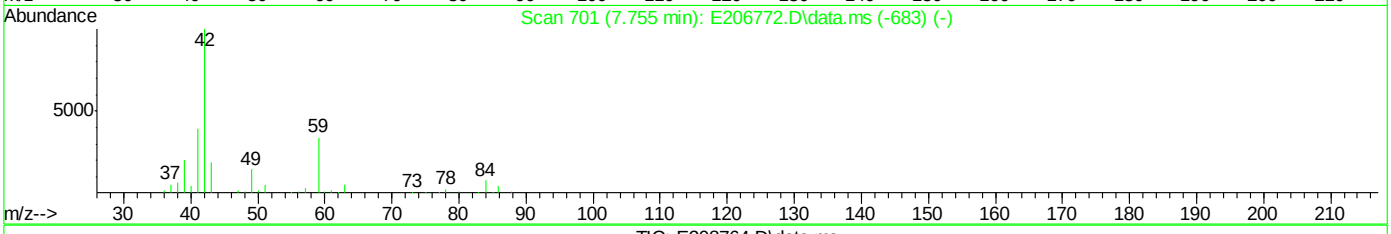
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 08:26:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration







TIC: E208764.D\data.ms

(3) tertiary butyl alcohol (M)

7.750min (-0.005) 26.87ug/L

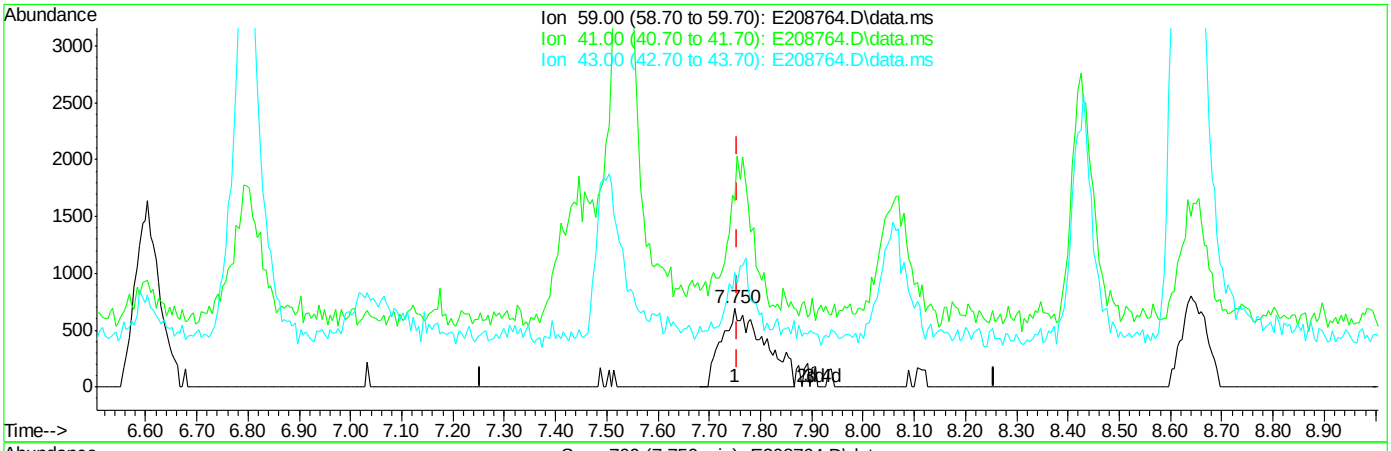
response 3756

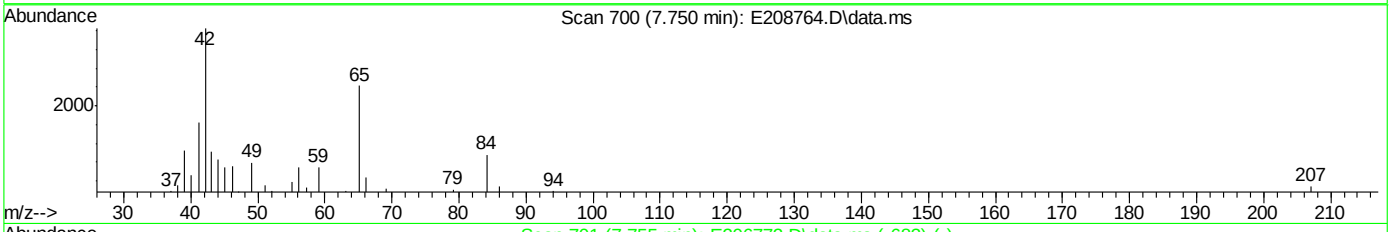
Ion	Exp%	Act%
59.00	100	100
41.00	117.00	127.26
43.00	56.80	87.01#
0.00	0.00	0.00

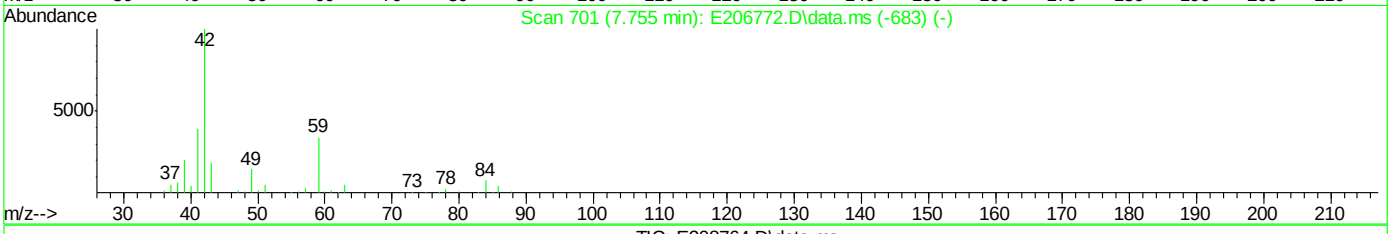
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 08:26:11 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration







TIC: E208764.D\data.ms

(3) tertiary butyl alcohol (M)

7.750min (-0.005) 28.70ug/L m

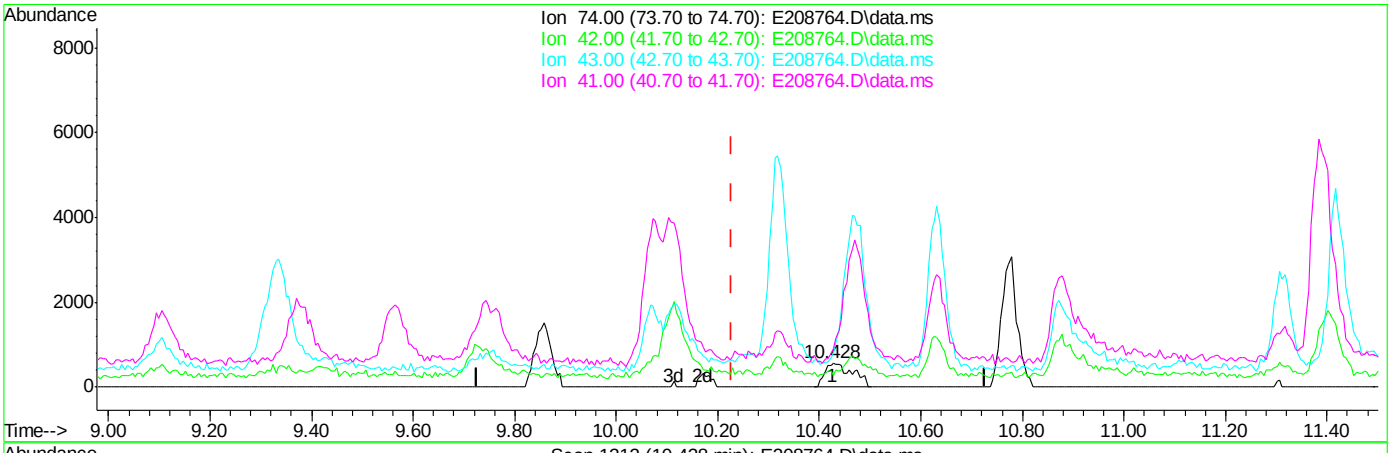
response 4013

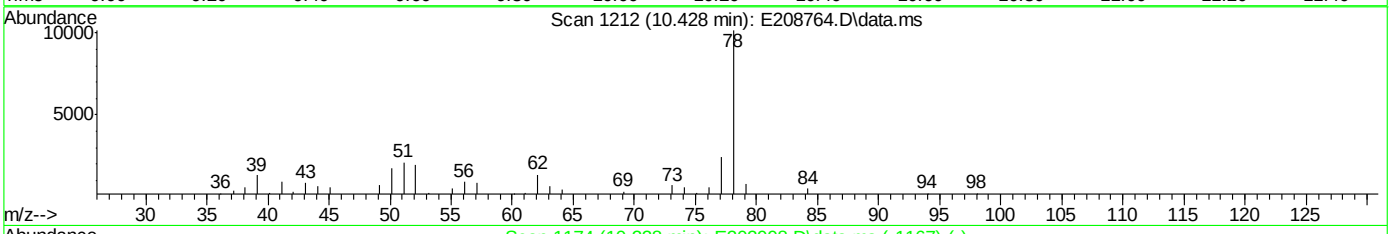
Ion	Exp%	Act%
59.00	100	100
41.00	117.00	235.92#
43.00	56.80	145.11#
0.00	0.00	0.00

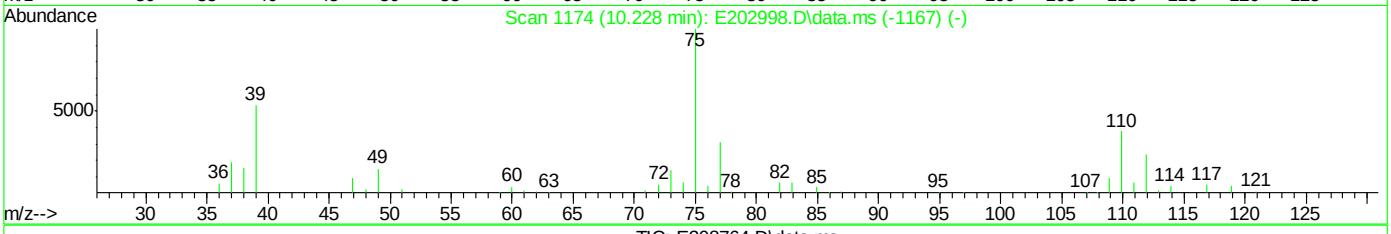
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 09:35:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration







TIC: E208764.D\data.ms

(36) iso-butyl alcohol (M)

10.428min (+0.201) 83.24ug/L

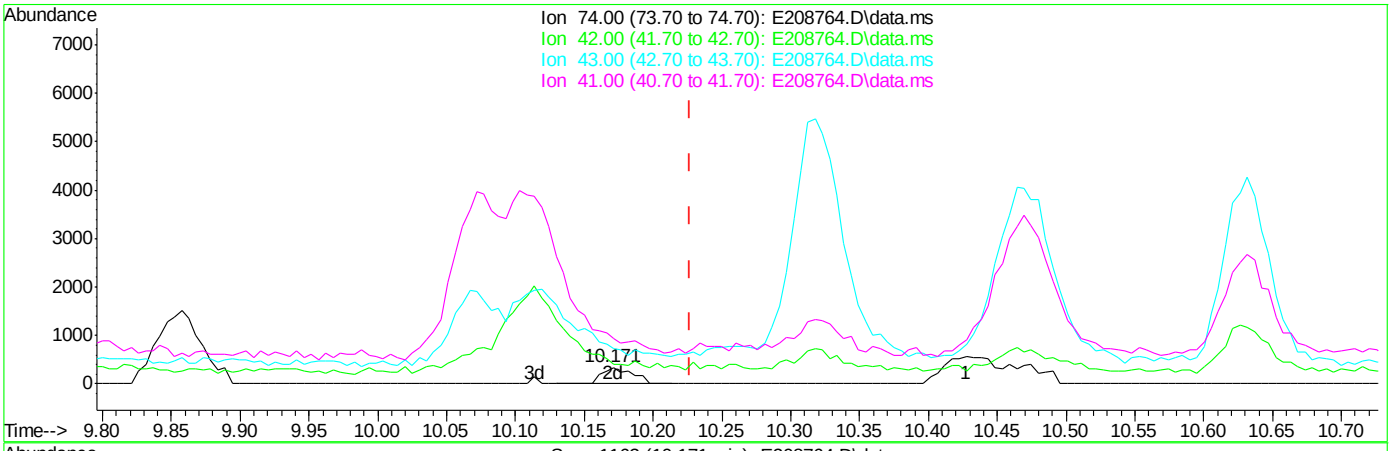
response 2135

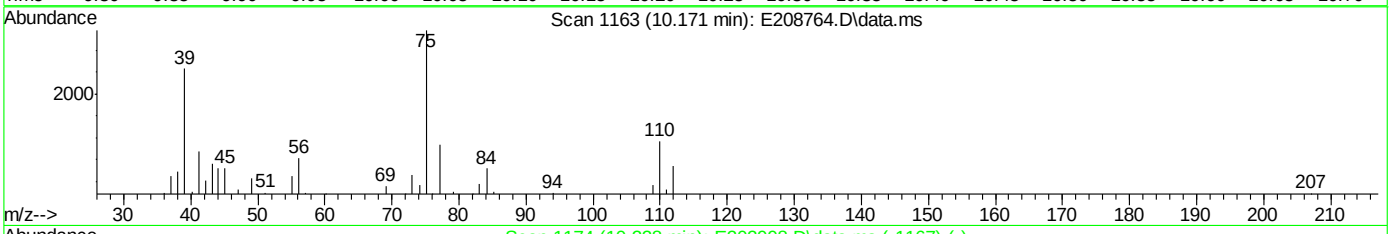
Ion	Exp%	Act%
74.00	100	100
42.00	5.30	0.00
43.00	0.00	30.00
41.00	0.00	26.32

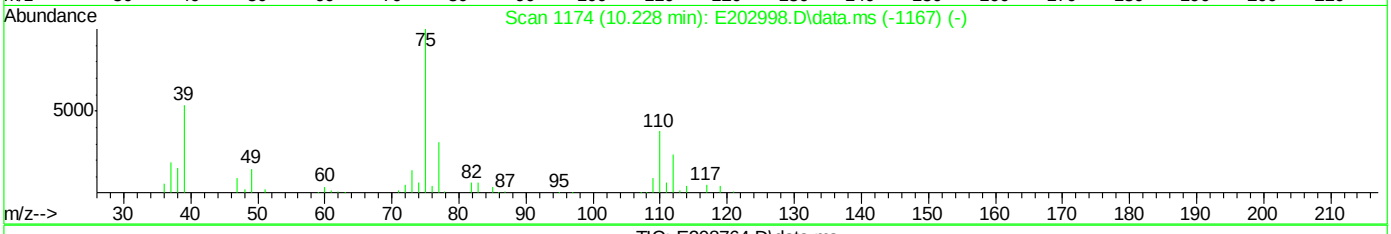
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208764.D
Acq On : 23 Oct 2013 12:20 am
Operator : DivyaP
Sample : ic9161-5
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 23 09:35:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration







TIC: E208764.D\data.ms

(36) iso-butyl alcohol (M)

10.171min (-0.056) 20.55ug/L m

response 527

Ion	Exp%	Act%
74.00	100	100
42.00	5.30	122.49#
43.00	0.00	215.98#
41.00	0.00	279.59#

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208765.D
Acq On : 23 Oct 2013 12:49 am
Operator : DivyaP
Sample : ic9161-10
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 23 09:42:45 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.640	65	71192	500.00	ug/L	0.00
5) pentafluorobenzene	9.857	168	130623	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.773	114	187538	50.00	ug/L	0.00
97) chlorobenzene-d5	14.104	117	175760	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.672	152	101448	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.894	113	12393	9.96	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 19.92%#			
61) 1,2-dichloroethane-d4 (s)	10.317	65	14803	9.53	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 19.06%#			
89) toluene-d8 (s)	12.478	98	48789	9.67	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 19.34%#			
116) 4-bromofluorobenzene (s)	15.375	95	18707	8.72	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 17.44%#			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.510	88	3021	291.63	ug/L #	79
3) tertiary butyl alcohol	7.770	59	8895	65.17	ug/L #	27
11) chlorodifluoromethane	4.303	51	15433	8.33	ug/L	95
12) dichlorodifluoromethane	4.303	85	17474	9.61	ug/L	97
15) chloromethane	4.611	50	22244	9.45	ug/L	96
16) vinyl chloride	4.883	62	20047	10.85	ug/L	99
19) bromomethane	5.542	94	13252	8.71	ug/L	96
20) chloroethane	5.725	64	10024	11.28	ug/L	97
22) trichlorofluoromethane	6.228	101	20891	11.75	ug/L	96
24) ethyl ether	6.599	74	7458	11.97	ug/L	91
28) 2-chloropropane	6.792	43	26133	9.94	ug/L #	92
29) acrolein	6.813	56	34467	142.65	ug/L	97
30) 1,1-dichloroethene	7.043	96	12729	10.31	ug/L	95
32) acetone	7.038	58	1166	6.50	ug/L #	69
33) allyl chloride	7.530	41	28207	10.29	ug/L	91
34) acetonitrile	7.436	40	7943	63.08	ug/L	73
35) iodomethane	7.305	142	22446	10.73	ug/L	93
36) iso-butyl alcohol	10.182	74	1449	55.78	ug/L #	38
37) carbon disulfide	7.472	76	46258	10.44	ug/L	94
38) methylene chloride	7.702	84	14561	9.82	ug/L	95
39) 1-chloropropane	7.755	42	27452	10.15	ug/L	87
40) methyl acetate	7.493	43	11040	11.22	ug/L	95
41) methyl tert butyl ether	8.063	73	39811	10.03	ug/L	92
42) trans-1,2-dichloroethene	8.100	96	13572	9.86	ug/L	92
43) di-isopropyl ether	8.644	45	49734	9.85	ug/L	94
44) ethyl tert-butyl ether	9.104	59	45635	10.02	ug/L	95
45) 2-butanone	9.308	72	1269	8.77	ug/L #	1
46) 1,1-dichloroethane	8.628	63	24752	10.37	ug/L	97
47) chloroprene	8.759	53	21288	9.83	ug/L	96
48) acrylonitrile	7.969	53	30191	49.57	ug/L	98
49) vinyl acetate	8.607	86	2405	12.25	ug/L #	70
50) ethyl acetate	9.329	45	2344	10.51	ug/L #	55
51) 2,2-dichloropropane	9.381	77	18309	9.06	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208765.D
Acq On : 23 Oct 2013 12:49 am
Operator : DivyaP
Sample : ic9161-10
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 23 09:42:45 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) cis-1,2-dichloroethene	9.355	96	14514	9.97	ug/L		95
53) methyl acrylate	9.413	55	12550	12.24	ug/L		98
54) propionitrile	9.355	54	23513	96.95	ug/L	#	27
55) bromochloromethane	9.653	128	6703	11.14	ug/L		89
56) tetrahydrofuran	9.726	42	5333	9.80	ug/L		93
57) chloroform	9.711	83	23154	9.12	ug/L		97
58) t-butyl formate	9.753	59	14062	9.87	ug/L		89
59) Iso-octane	10.469	57	52808	9.83	ug/L		97
62) freon 113	7.023	151	9771	10.79	ug/L		98
63) methacrylonitrile	9.554	41	9707	10.89	ug/L		84
64) 1,1,1-trichloroethane	9.998	97	19988	10.18	ug/L		95
65) tert-amyl methyl ether	10.469	73	42463	10.01	ug/L		99
68) tert amyl alcohol	10.260	55	2744	44.76	ug/L	#	84
69) epichlorohydrin	12.017	57	8157	38.54	ug/L		93
70) n-butyl alcohol	10.872	56	24158	662.46	ug/L		99
71) tert-amyl ethyl ether	11.316	87	21256	10.62	ug/L		87
72) carbon tetrachloride	10.223	117	17093	10.50	ug/L		97
73) 1,1-dichloropropene	10.176	75	18564	10.70	ug/L		100
74) hexane	8.424	57	19286	10.01	ug/L		94
75) benzene	10.427	78	54849	10.13	ug/L		98
76) heptane	10.626	57	10428	8.05	ug/L		96
77) isopropyl acetate	10.317	43	30810	10.28	ug/L		94
78) 1,2-dichloroethane	10.406	62	17385	10.77	ug/L		98
79) ethyl acrylate	11.107	55	17970	11.01	ug/L		95
80) trichloroethene	11.144	95	13302	9.61	ug/L		97
82) 2-chloroethyl vinyl ether	11.902	63	48826	53.76	ug/L		96
83) methylcyclohexane	11.405	83	23116	9.21	ug/L		95
84) methyl methacrylate	11.390	69	14772	9.06	ug/L		96
85) 1,2-dichloropropane	11.384	63	14730	10.26	ug/L		90
86) dibromomethane	11.541	93	7970	10.48	ug/L		88
87) bromodichloromethane	11.667	83	18589	9.50	ug/L		98
88) cis-1,3-dichloropropene	12.143	75	22896	10.61	ug/L		99
90) 4-methyl-2-pentanone	12.227	58	5990	10.93	ug/L		95
91) toluene	12.556	92	34091	10.48	ug/L		98
92) 3-methyl-1-butanol	12.247	55	15551	219.46	ug/L		92
93) trans-1,3-dichloropropene	12.723	75	20694	10.49	ug/L		93
94) ethyl methacrylate	12.729	69	18321	9.03	ug/L		97
95) 1,1,2-trichloroethane	12.953	83	10944	9.08	ug/L		96
96) 2-hexanone	13.137	58	5302	10.49	ug/L		99
98) cyclohexanone	15.307	55	8296	83.66	ug/L		99
99) tetrachloroethene	13.205	166	15668	11.13	ug/L		94
100) 1,3-dichloropropane	13.152	76	20496	10.64	ug/L		98
101) butyl acetate	13.225	56	10263	9.42	ug/L		93
102) 3,3-dimethyl-1-butanol	13.325	57	20380	117.85	ug/L		88
103) dibromochloromethane	13.450	129	14442	10.49	ug/L		98
104) 1,2-dibromoethane	13.612	107	12679	10.76	ug/L		94
106) chlorobenzene	14.136	112	37216	10.46	ug/L		99
107) 1,1,1,2-tetrachloroethane	14.193	131	14023	10.62	ug/L		96
108) ethylbenzene	14.198	91	65857	10.28	ug/L		99
109) m,p-xylene	14.319	106	50503	21.40	ug/L		92

ACCUTEST LABORATORIES JB53758

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208765.D
Acq On : 23 Oct 2013 12:49 am
Operator : DivyaP
Sample : ic9161-10
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 23 09:42:45 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

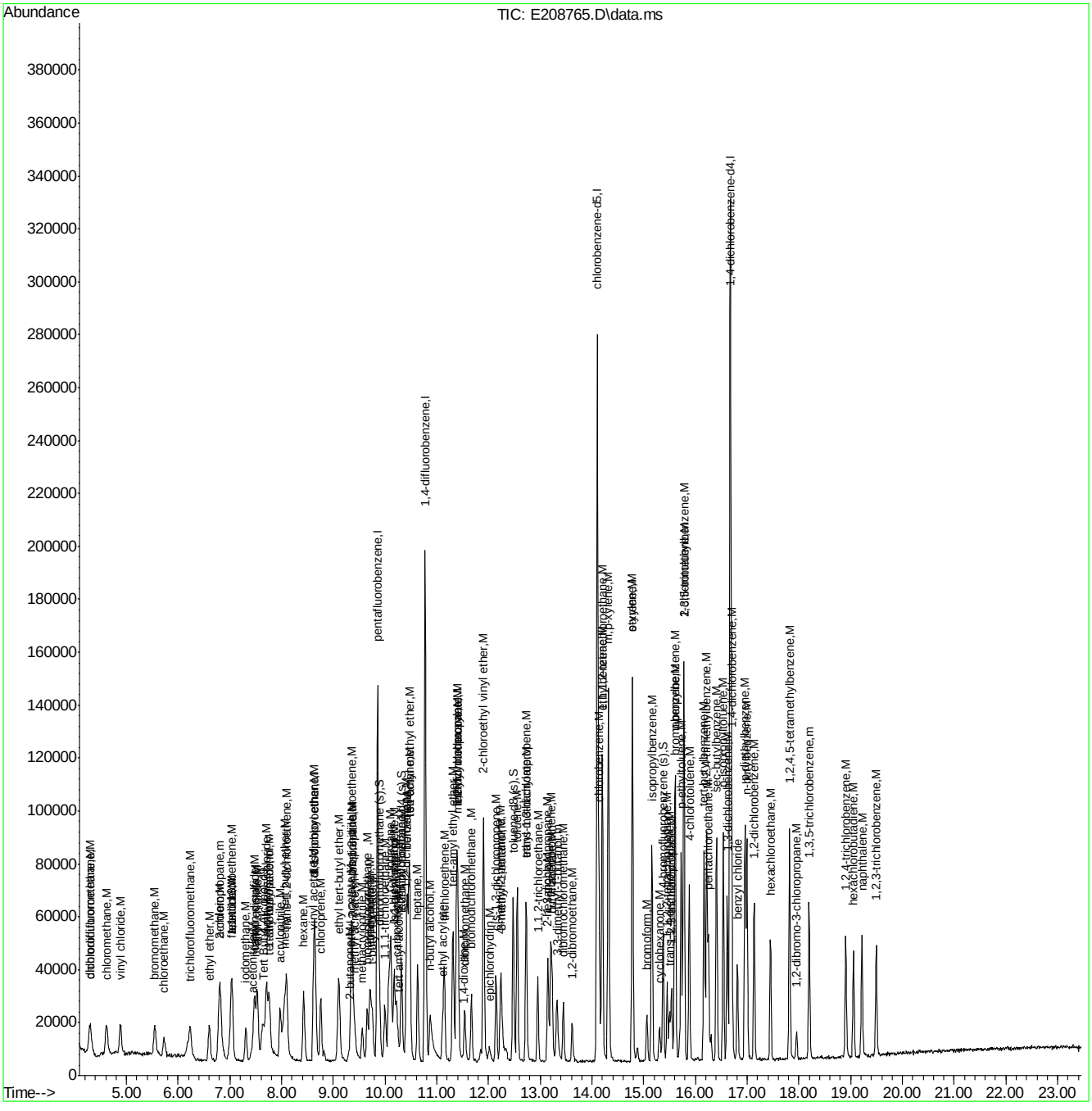
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) o-xylene	14.779	106	24766	10.58 ug/L	92
112) styrene	14.784	104	42836	10.66 ug/L	96
113) bromoform	15.061	173	10501	10.35 ug/L	97
115) isopropylbenzene	15.155	105	66292	10.76 ug/L	96
117) bromobenzene	15.595	156	17042	10.83 ug/L	97
118) 1,1,2,2-tetrachloroethane	15.453	83	18268	9.05 ug/L	97
119) trans-1,4-dichloro-2-b...	15.495	53	4850	10.14 ug/L	93
120) 1,2,3-trichloropropane	15.537	110	4635	11.34 ug/L	88
121) n-propylbenzene	15.610	91	75705	10.52 ug/L	98
122) p-ethyltoluene	15.725	105	65144	10.85 ug/L	98
123) 2-chlorotoluene	15.773	126	15300	10.75 ug/L	97
124) 4-chlorotoluene	15.882	91	47443	10.26 ug/L	98
125) 1,3,5-trimethylbenzene	15.778	105	54863	10.34 ug/L	99
126) tert-butylbenzene	16.165	119	47564	10.53 ug/L	97
127) pentachloroethane	16.248	167	11300	10.59 ug/L	95
128) 1,2,4-trimethylbenzene	16.217	105	55748	10.44 ug/L	96
129) sec-butylbenzene	16.405	105	70732	10.60 ug/L	99
130) 1,3-dichlorobenzene	16.615	146	31425	10.48 ug/L	99
131) p-isopropyltoluene	16.536	119	58745	10.68 ug/L	97
132) 1,4-dichlorobenzene	16.703	146	33542	10.59 ug/L	98
133) benzyl chloride	16.808	91	33207	10.42 ug/L	98
134) p-diethylbenzene	16.955	119	37130	11.01 ug/L	97
135) 1,2-dichlorobenzene	17.138	146	30020	10.11 ug/L	96
136) n-butylbenzene	16.991	92	30137	10.75 ug/L	99
137) 1,2,4,5-tetramethylben...	17.817	119	54892	10.92 ug/L	97
138) 1,2-dibromo-3-chloropr...	17.959	75	3213	11.25 ug/L	96
139) 1,3,5-trichlorobenzene	18.199	180	24061	10.81 ug/L	93
140) 1,2,4-trichlorobenzene	18.905	180	19979	10.68 ug/L	98
141) hexachlorobutadiene	19.052	225	11362	10.84 ug/L	91
142) naphthalene	19.219	128	45603	10.03 ug/L	99
144) 1,2,3-trichlorobenzene	19.496	180	17570	10.68 ug/L	95
145) hexachloroethane	17.446	119	10847	10.74 ug/L	95
146) Cyclohexane	10.108	84	21840	10.56 ug/L #	1

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208765.D
Acq On : 23 Oct 2013 12:49 am
Operator : DivyaP
Sample : ic9161-10
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 23 09:42:45 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208766.D
Acq On : 23 Oct 2013 1:19 am
Operator : DivyaP
Sample : ic9161-20
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 23 09:48:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.655	65	71871	500.00	ug/L	0.01
5) pentafluorobenzene	9.857	168	130104	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.772	114	190072	50.00	ug/L	0.00
97) chlorobenzene-d5	14.103	117	179502	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.671	152	104077	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.893	113	62711	50.60	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 101.20%			
61) 1,2-dichloroethane-d4 (s)	10.312	65	74713	48.29	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 96.58%			
89) toluene-d8 (s)	12.472	98	252642	49.41	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 98.82%			
116) 4-bromofluorobenzene (s)	15.374	95	98522	44.77	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 89.54%			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.520	88	8041	768.89	ug/L #	88
3) tertiary butyl alcohol	7.770	59	17654	128.12	ug/L #	27
11) chlorodifluoromethane	4.302	51	28668	15.54	ug/L	97
12) dichlorodifluoromethane	4.292	85	35142	19.40	ug/L	99
15) chloromethane	4.621	50	44575	19.01	ug/L	97
16) vinyl chloride	4.888	62	41740	22.68	ug/L	99
19) bromomethane	5.542	94	29599	19.53	ug/L	98
20) chloroethane	5.725	64	20073	22.68	ug/L	97
22) trichlorofluoromethane	6.232	101	42897	24.22	ug/L	99
24) ethyl ether	6.598	74	15394	24.80	ug/L	87
28) 2-chloropropane	6.792	43	54561	20.84	ug/L #	89
29) acrolein	6.813	56	67915	282.20	ug/L	98
30) 1,1-dichloroethene	7.043	96	26481	21.52	ug/L	93
32) acetone	7.027	58	2802	15.68	ug/L	94
33) allyl chloride	7.524	41	58725	21.50	ug/L	93
34) acetonitrile	7.440	40	17014	135.66	ug/L	93
35) iodomethane	7.304	142	46840	22.47	ug/L	91
36) iso-butyl alcohol	10.427	74	9495	367.00	ug/L	99
37) carbon disulfide	7.472	76	96208	21.80	ug/L	96
38) methylene chloride	7.702	84	29873	20.22	ug/L	97
39) 1-chloropropane	7.754	42	56731	21.07	ug/L	96
40) methyl acetate	7.493	43	25186	25.69	ug/L	95
41) methyl tert butyl ether	8.052	73	83677	21.16	ug/L	97
42) trans-1,2-dichloroethene	8.099	96	28638	20.88	ug/L	99
43) di-isopropyl ether	8.638	45	103065	20.50	ug/L	93
44) ethyl tert-butyl ether	9.103	59	94199	20.77	ug/L	96
45) 2-butanone	9.302	72	3196	22.16	ug/L #	95
46) 1,1-dichloroethane	8.627	63	51404	21.62	ug/L	99
47) chloroprene	8.753	53	43139	20.00	ug/L	97
48) acrylonitrile	7.963	53	61109	100.74	ug/L	99
49) vinyl acetate	8.601	86	4772	24.39	ug/L	76
50) ethyl acetate	9.323	45	4557	20.50	ug/L #	79
51) 2,2-dichloropropane	9.370	77	37439	18.61	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208766.D
Acq On : 23 Oct 2013 1:19 am
Operator : DivyaP
Sample : ic9161-20
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 23 09:48:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) cis-1,2-dichloroethene	9.354	96	30215	20.83	ug/L		98
53) methyl acrylate	9.407	55	27111	26.55	ug/L		99
54) propionitrile	9.349	54	49227	203.78	ug/L	#	50
55) bromochloromethane	9.647	128	14263	23.81	ug/L		98
56) tetrahydrofuran	9.726	42	11116	20.50	ug/L		97
57) chloroform	9.705	83	48192	19.05	ug/L		98
58) t-butyl formate	9.752	59	29099	20.50	ug/L		90
59) Iso-octane	10.469	57	111416	20.83	ug/L		96
62) freon 113	7.011	151	20327	22.55	ug/L		87
63) methacrylonitrile	9.553	41	19766	22.26	ug/L		95
64) 1,1,1-trichloroethane	9.993	97	41634	21.28	ug/L		99
65) tert-amyl methyl ether	10.469	73	87273	20.66	ug/L		98
68) tert amyl alcohol	10.249	55	5746	92.47	ug/L		91
69) epichlorohydrin	12.017	57	17391	81.08	ug/L		95
70) n-butyl alcohol	10.871	56	49113	1328.82	ug/L		96
71) tert-amyl ethyl ether	11.311	87	43118	21.26	ug/L		91
72) carbon tetrachloride	10.217	117	36697	22.24	ug/L		97
73) 1,1-dichloropropene	10.176	75	38791	22.06	ug/L		97
74) hexane	8.424	57	39158	20.06	ug/L		97
75) benzene	10.421	78	115408	21.03	ug/L		99
76) heptane	10.631	57	20992	15.99	ug/L		99
77) isopropyl acetate	10.312	43	62957	20.73	ug/L		98
78) 1,2-dichloroethane	10.400	62	37249	22.77	ug/L		95
79) ethyl acrylate	11.107	55	39486	23.88	ug/L	#	89
80) trichloroethene	11.143	95	28185	20.10	ug/L		96
82) 2-chloroethyl vinyl ether	11.902	63	101029	109.75	ug/L		96
83) methylcyclohexane	11.399	83	49198	19.34	ug/L		97
84) methyl methacrylate	11.384	69	31203	18.87	ug/L		89
85) 1,2-dichloropropane	11.379	63	30733	21.11	ug/L		93
86) dibromomethane	11.535	93	17163	22.26	ug/L		92
87) bromodichloromethane	11.666	83	37997	19.16	ug/L		99
88) cis-1,3-dichloropropene	12.142	75	47351	21.66	ug/L		98
90) 4-methyl-2-pentanone	12.226	58	12347	22.23	ug/L		96
91) toluene	12.550	92	72025	21.85	ug/L		96
92) 3-methyl-1-butanol	12.242	55	32925	458.44	ug/L		94
93) trans-1,3-dichloropropene	12.723	75	44518	22.26	ug/L		91
94) ethyl methacrylate	12.728	69	39345	19.14	ug/L		97
95) 1,1,2-trichloroethane	12.953	83	22209	18.18	ug/L		100
96) 2-hexanone	13.136	58	11836	23.10	ug/L		92
98) cyclohexanone	15.306	55	16806	165.94	ug/L		99
99) tetrachloroethene	13.204	166	33459	23.27	ug/L		93
100) 1,3-dichloropropane	13.152	76	43802	22.26	ug/L		99
101) butyl acetate	13.225	56	20809	18.71	ug/L		84
102) 3,3-dimethyl-1-butanol	13.319	57	35520	201.12	ug/L		100
103) dibromochloromethane	13.444	129	30462	21.66	ug/L		98
104) 1,2-dibromoethane	13.612	107	26857	22.31	ug/L		98
106) chlorobenzene	14.135	112	79048	21.76	ug/L		98
107) 1,1,1,2-tetrachloroethane	14.192	131	29170	21.64	ug/L		99
108) ethylbenzene	14.203	91	139026	21.26	ug/L		98
109) m,p-xylene	14.318	106	106889	44.35	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208766.D
Acq On : 23 Oct 2013 1:19 am
Operator : DivyaP
Sample : ic9161-20
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 23 09:48:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) o-xylene	14.778	106	52761	22.07 ug/L	99
112) styrene	14.783	104	92301	22.50 ug/L	96
113) bromoform	15.061	173	23083	22.28 ug/L	99
115) isopropylbenzene	15.155	105	140664	22.26 ug/L	97
117) bromobenzene	15.599	156	37337	23.12 ug/L	96
118) 1,1,2,2-tetrachloroethane	15.453	83	38672	18.67 ug/L	99
119) trans-1,4-dichloro-2-b...	15.495	53	10463	21.33 ug/L	92
120) 1,2,3-trichloropropane	15.537	110	9802	23.37 ug/L	87
121) n-propylbenzene	15.610	91	162766	22.04 ug/L	98
122) p-ethyltoluene	15.725	105	135835	22.04 ug/L	97
123) 2-chlorotoluene	15.777	126	33174	22.71 ug/L	95
124) 4-chlorotoluene	15.876	91	100273	21.15 ug/L	99
125) 1,3,5-trimethylbenzene	15.777	105	118196	21.70 ug/L	100
126) tert-butylbenzene	16.169	119	101773	21.96 ug/L	96
127) pentachloroethane	16.248	167	24417	22.31 ug/L	92
128) 1,2,4-trimethylbenzene	16.216	105	120558	22.00 ug/L	99
129) sec-butylbenzene	16.410	105	151652	22.16 ug/L	98
130) 1,3-dichlorobenzene	16.614	146	68652	22.32 ug/L	98
131) p-isopropyltoluene	16.535	119	125472	22.24 ug/L	96
132) 1,4-dichlorobenzene	16.703	146	72332	22.26 ug/L	97
133) benzyl chloride	16.807	91	69183	21.16 ug/L	99
134) p-diethylbenzene	16.954	119	78072	22.57 ug/L	95
135) 1,2-dichlorobenzene	17.132	146	66984	21.99 ug/L	97
136) n-butylbenzene	16.990	92	65579	22.79 ug/L	97
137) 1,2,4,5-tetramethylben...	17.822	119	114056	22.11 ug/L	96
138) 1,2-dibromo-3-chloropr...	17.953	75	6619	22.60 ug/L	94
139) 1,3,5-trichlorobenzene	18.199	180	52242	22.88 ug/L	93
140) 1,2,4-trichlorobenzene	18.905	180	43868	22.86 ug/L	94
141) hexachlorobutadiene	19.051	225	25079	23.32 ug/L	88
142) naphthalene	19.218	128	98921	21.22 ug/L	99
144) 1,2,3-trichlorobenzene	19.496	180	38280	22.69 ug/L	98
145) hexachloroethane	17.445	119	23010	22.21 ug/L	93
146) Cyclohexane	10.108	84	46684	22.00 ug/L #	33

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

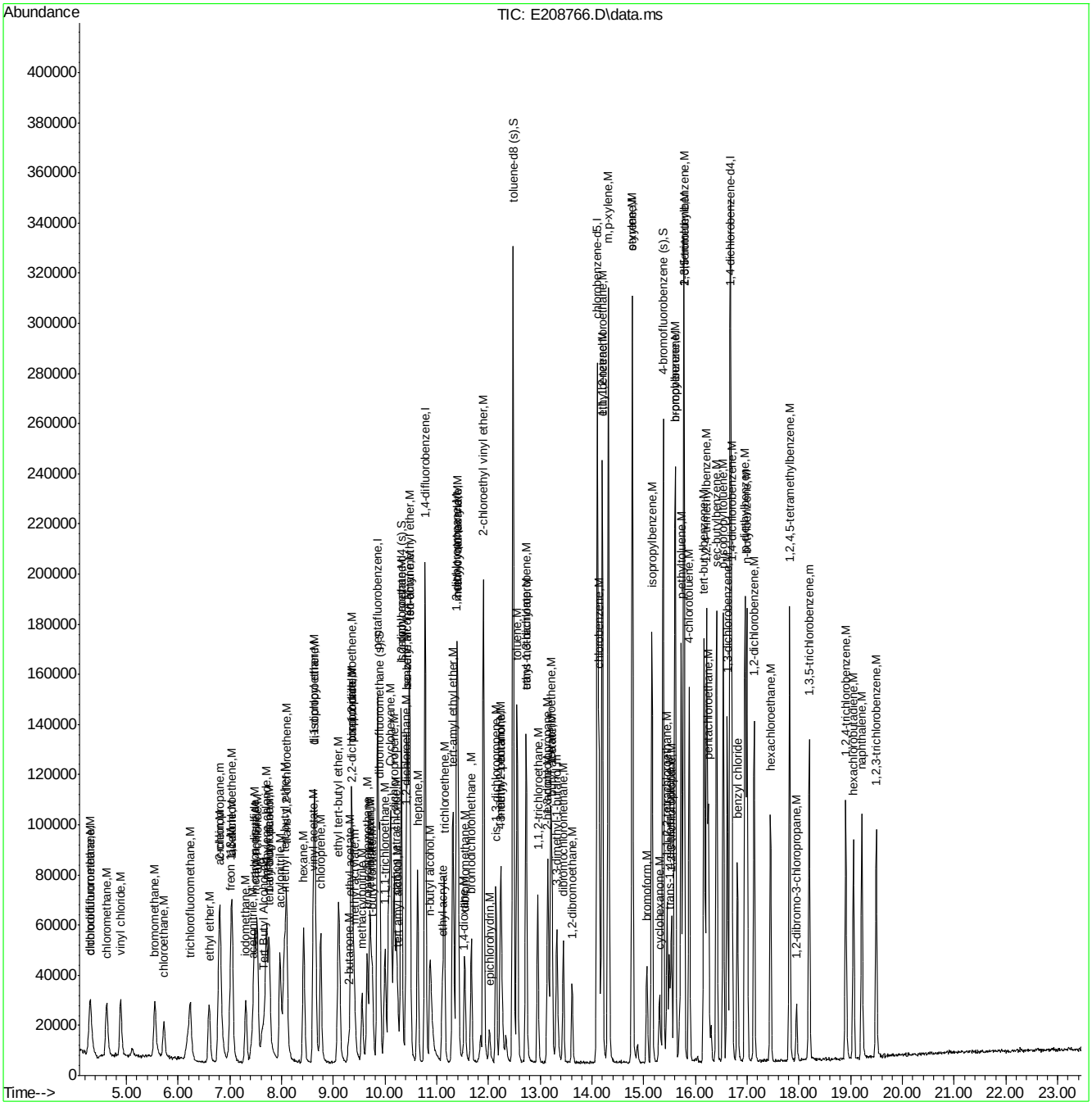
7.7.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208766.D
Acq On : 23 Oct 2013 1:19 am
Operator : DivyaP
Sample : ic9161-20
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 23 09:48:09 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208767.D
Acq On : 23 Oct 2013 1:49 am
Operator : DivyaP
Sample : icc9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 23 09:52:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.646	65	75875	500.00	ug/L	0.00
5) pentafluorobenzene	9.854	168	132612	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.774	114	192148	50.00	ug/L	0.00
97) chlorobenzene-d5	14.100	117	185462	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.674	152	113541	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.895	113	62782	49.70	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 99.40%			
61) 1,2-dichloroethane-d4 (s)	10.314	65	75982	48.18	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 96.36%			
89) toluene-d8 (s)	12.474	98	254151	49.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 98.34%			
116) 4-bromofluorobenzene (s)	15.371	95	100951	42.05	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 84.10%			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.517	88	19924	1804.62	ug/L	92
3) tertiary butyl alcohol	7.751	59	44592	306.55	ug/L #	27
11) chlorodifluoromethane	4.304	51	73076	38.86	ug/L	93
12) dichlorodifluoromethane	4.299	85	79870	43.27	ug/L	98
15) chloromethane	4.629	50	104882	43.88	ug/L	99
16) vinyl chloride	4.895	62	99871	53.25	ug/L	99
19) bromomethane	5.549	94	63064	40.82	ug/L	97
20) chloroethane	5.717	64	47777	52.96	ug/L	98
22) trichlorofluoromethane	6.229	101	103296	57.22	ug/L	97
24) ethyl ether	6.595	74	37701	59.58	ug/L	85
28) 2-chloropropane	6.789	43	132480	49.63	ug/L	91
29) acrolein	6.804	56	165327	673.97	ug/L	99
30) 1,1-dichloroethene	7.040	96	65624	52.33	ug/L	96
32) acetone	7.029	58	7214	39.61	ug/L	99
33) allyl chloride	7.521	41	140977	50.63	ug/L	100
34) acetonitrile	7.422	40	41181	322.15	ug/L	96
35) iodomethane	7.307	142	117049	55.09	ug/L	88
36) iso-butyl alcohol	10.424	74	23296	883.41	ug/L	93
37) carbon disulfide	7.474	76	236078	52.48	ug/L	96
38) methylene chloride	7.704	84	73666	48.92	ug/L	96
39) 1-chloropropane	7.756	42	134628	49.05	ug/L	98
40) methyl acetate	7.490	43	60270	60.31	ug/L	97
41) methyl tert butyl ether	8.054	73	204124	50.64	ug/L	96
42) trans-1,2-dichloroethene	8.096	96	69403	49.64	ug/L	99
43) di-isopropyl ether	8.640	45	253394	49.45	ug/L	94
44) ethyl tert-butyl ether	9.106	59	233583	50.54	ug/L	96
45) 2-butanone	9.289	72	8455	57.53	ug/L #	84
46) 1,1-dichloroethane	8.630	63	126966	52.38	ug/L	99
47) chloroprene	8.755	53	105309	47.90	ug/L	97
48) acrylonitrile	7.960	53	150868	244.00	ug/L	97
49) vinyl acetate	8.604	86	12161	60.99	ug/L	82
50) ethyl acetate	9.325	45	10735	47.39	ug/L #	78
51) 2,2-dichloropropane	9.378	77	89739	43.75	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208767.D
Acq On : 23 Oct 2013 1:49 am
Operator : DivyaP
Sample : icc9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 23 09:52:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) cis-1,2-dichloroethene	9.352	96	74622	50.48	ug/L	98
53) methyl acrylate	9.404	55	68139	65.47	ug/L	97
54) propionitrile	9.341	54	120867	490.88	ug/L	78
55) bromochloromethane	9.655	128	36002	58.95	ug/L	99
56) tetrahydrofuran	9.718	42	27254	49.32	ug/L	97
57) chloroform	9.707	83	118571	45.99	ug/L	98
58) t-butyl formate	9.749	59	71696	49.56	ug/L	93
59) Iso-octane	10.471	57	272480	49.97	ug/L	97
62) freon 113	7.014	151	49380	53.73	ug/L	97
63) methacrylonitrile	9.550	41	47857	52.87	ug/L	89
64) 1,1,1-trichloroethane	10.000	97	101941	51.12	ug/L	99
65) tert-amyl methyl ether	10.466	73	213827	49.66	ug/L	98
68) tert amyl alcohol	10.256	55	13828	220.13	ug/L #	32
69) epichlorohydrin	12.014	57	40247	185.61	ug/L	97
70) n-butyl alcohol	10.863	56	122776	3285.99	ug/L	98
71) tert-amyl ethyl ether	11.313	87	106361	51.88	ug/L	83
72) carbon tetrachloride	10.220	117	89313	53.54	ug/L	99
73) 1,1-dichloropropene	10.173	75	94931	53.40	ug/L	99
74) hexane	8.426	57	89082	45.15	ug/L	93
75) benzene	10.424	78	282219	50.88	ug/L	99
76) heptane	10.628	57	51519	38.81	ug/L	93
77) isopropyl acetate	10.314	43	161502	52.59	ug/L	94
78) 1,2-dichloroethane	10.403	62	91370	55.25	ug/L	97
79) ethyl acrylate	11.104	55	95673	57.23	ug/L	99
80) trichloroethene	11.140	95	68836	48.56	ug/L	99
82) 2-chloroethyl vinyl ether	11.899	63	245846	264.19	ug/L	96
83) methylcyclohexane	11.402	83	118696	46.17	ug/L	95
84) methyl methacrylate	11.381	69	76863	45.99	ug/L	95
85) 1,2-dichloropropane	11.376	63	75960	51.62	ug/L	89
86) dibromomethane	11.538	93	42554	54.60	ug/L	88
87) bromodichloromethane	11.663	83	94982	47.37	ug/L	100
88) cis-1,3-dichloropropene	12.144	75	119212	53.94	ug/L	98
90) 4-methyl-2-pentanone	12.228	58	30671	54.61	ug/L	97
91) toluene	12.552	92	176708	53.03	ug/L	96
92) 3-methyl-1-butanol	12.239	55	78443	1080.43	ug/L	94
93) trans-1,3-dichloropropene	12.720	75	109689	54.26	ug/L	95
94) ethyl methacrylate	12.725	69	97765	47.04	ug/L	96
95) 1,1,2-trichloroethane	12.955	83	54216	43.90	ug/L	97
96) 2-hexanone	13.128	58	28323	54.68	ug/L	96
98) cyclohexanone	15.303	55	36869	352.34	ug/L	98
99) tetrachloroethene	13.201	166	81460	54.83	ug/L	95
100) 1,3-dichloropropane	13.149	76	108452	53.34	ug/L	98
101) butyl acetate	13.222	56	51315	44.66	ug/L	87
102) 3,3-dimethyl-1-butanol	13.316	57	85533	468.74	ug/L	98
103) dibromochloromethane	13.447	129	76612	52.73	ug/L	100
104) 1,2-dibromoethane	13.614	107	67482	54.26	ug/L	100
106) chlorobenzene	14.137	112	195918	52.19	ug/L	98
107) 1,1,1,2-tetrachloroethane	14.195	131	73032	52.43	ug/L	99
108) ethylbenzene	14.200	91	345729	51.16	ug/L	97
109) m,p-xylene	14.315	106	265559	106.65	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208767.D
Acq On : 23 Oct 2013 1:49 am
Operator : DivyaP
Sample : icc9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 23 09:52:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) o-xylene	14.775	106	132344	53.59 ug/L	94
112) styrene	14.780	104	229946	54.24 ug/L	98
113) bromoform	15.058	173	57848	54.03 ug/L	98
115) isopropylbenzene	15.157	105	349286	50.66 ug/L	97
117) bromobenzene	15.596	156	93773	53.23 ug/L	97
118) 1,1,2,2-tetrachloroethane	15.450	83	93218	41.25 ug/L	99
119) trans-1,4-dichloro-2-b...	15.497	53	25583	47.81 ug/L	91
120) 1,2,3-trichloropropane	15.539	110	23857	52.15 ug/L	99
121) n-propylbenzene	15.612	91	409243	50.79 ug/L	97
122) p-ethyltoluene	15.722	105	326669	48.60 ug/L	97
123) 2-chlorotoluene	15.774	126	84497	53.02 ug/L	96
124) 4-chlorotoluene	15.879	91	257636	49.81 ug/L	99
125) 1,3,5-trimethylbenzene	15.774	105	303057	51.01 ug/L	100
126) tert-butylbenzene	16.166	119	261525	51.72 ug/L	97
127) pentachloroethane	16.250	167	61541	51.55 ug/L	93
128) 1,2,4-trimethylbenzene	16.213	105	303462	50.76 ug/L	98
129) sec-butylbenzene	16.407	105	387641	51.92 ug/L	99
130) 1,3-dichlorobenzene	16.611	146	176704	52.65 ug/L	98
131) p-isopropyltoluene	16.538	119	322446	52.40 ug/L	95
132) 1,4-dichlorobenzene	16.700	146	185492	52.32 ug/L	97
133) benzyl chloride	16.810	91	170428	47.77 ug/L	99
134) p-diethylbenzene	16.956	119	192572	51.04 ug/L	98
135) 1,2-dichlorobenzene	17.134	146	171060	51.48 ug/L	96
136) n-butylbenzene	16.993	92	168002	53.53 ug/L	97
137) 1,2,4,5-tetramethylben...	17.819	119	277954	49.40 ug/L	98
138) 1,2-dibromo-3-chloropr...	17.955	75	16606	51.96 ug/L	95
139) 1,3,5-trichlorobenzene	18.196	180	131062	52.62 ug/L	94
140) 1,2,4-trichlorobenzene	18.907	180	112543	53.77 ug/L	95
141) hexachlorobutadiene	19.053	225	62727	53.47 ug/L	89
142) naphthalene	19.216	128	252396	49.62 ug/L	99
144) 1,2,3-trichlorobenzene	19.493	180	96209	52.27 ug/L	96
145) hexachloroethane	17.448	119	59197	52.38 ug/L	94
146) Cyclohexane	10.110	84	110755	47.85 ug/L #	1

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

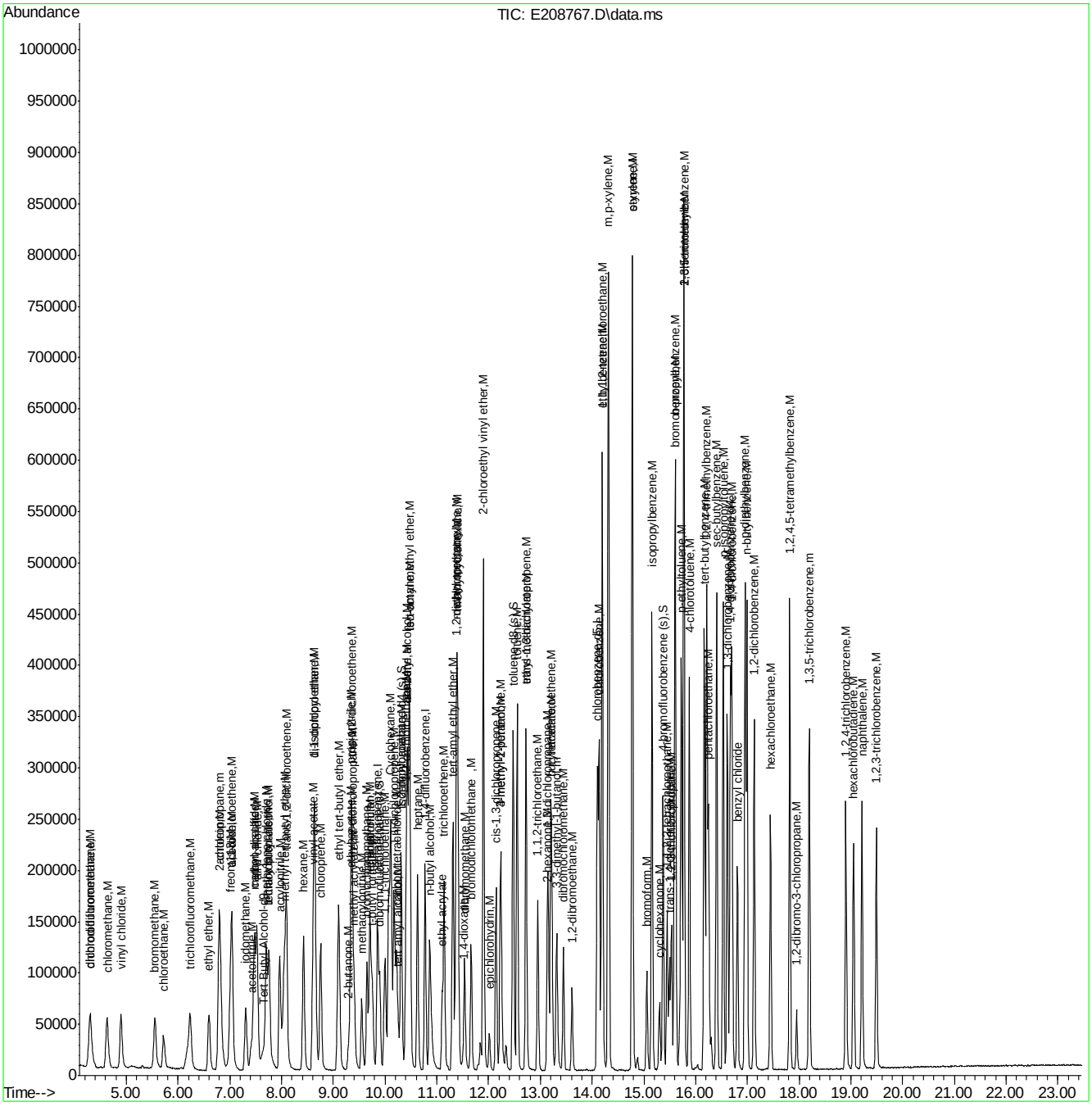
7.2.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208767.D
Acq On : 23 Oct 2013 1:49 am
Operator : DivyaP
Sample : icc9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 23 09:52:26 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208768.D
Acq On : 23 Oct 2013 2:18 am
Operator : DivyaP
Sample : ic9161-100
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 23 09:55:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.639	65	73441	500.00	ug/L	0.00
5) pentafluorobenzene	9.856	168	135565	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.772	114	196837	50.00	ug/L	0.00
97) chlorobenzene-d5	14.103	117	192846	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.671	152	118954	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.893	113	127559	98.78	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 197.56%#			
61) 1,2-dichloroethane-d4 (s)	10.311	65	152909	94.85	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 189.70%#			
89) toluene-d8 (s)	12.471	98	515658	97.39	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 194.78%#			
116) 4-bromofluorobenzene (s)	15.374	95	204232	81.20	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 162.40%#			

Target Compounds						Qvalue
2) 1,4-dioxane	11.493	88	35046	3279.50	ug/L	91
3) tertiary butyl alcohol	7.749	59	83397	592.31	ug/L #	64
11) chlorodifluoromethane	4.297	51	147654	76.81	ug/L	92
12) dichlorodifluoromethane	4.291	85	159741	84.65	ug/L	98
15) chloromethane	4.637	50	206562	84.53	ug/L	98
16) vinyl chloride	4.909	62	193823	101.09	ug/L	100
19) bromomethane	5.552	94	118915	75.30	ug/L	99
20) chloroethane	5.719	64	93208	101.07	ug/L	97
22) trichlorofluoromethane	6.232	101	205014	111.10	ug/L	98
24) ethyl ether	6.598	74	75302	116.41	ug/L	92
28) 2-chloropropane	6.792	43	254405	93.24	ug/L #	84
30) 1,1-dichloroethene	7.043	96	124512	97.13	ug/L	93
32) acetone	7.006	58	13263	71.24	ug/L	98
33) allyl chloride	7.524	41	266791	93.74	ug/L	96
34) acetonitrile	7.414	40	87440	669.12	ug/L	93
35) iodomethane	7.304	142	224304	103.27	ug/L	90
36) iso-butyl alcohol	10.175	74	13118	486.61	ug/L	88
37) carbon disulfide	7.471	76	464598	101.03	ug/L	96
38) methylene chloride	7.707	84	142881	92.82	ug/L	98
39) 1-chloropropane	7.754	42	265946	94.78	ug/L	95
40) methyl acetate	7.482	43	123787	121.17	ug/L	97
41) methyl tert butyl ether	8.057	73	396368	96.18	ug/L	97
42) trans-1,2-dichloroethene	8.094	96	138440	96.86	ug/L	99
43) di-isopropyl ether	8.643	45	514466	98.21	ug/L	90
44) ethyl tert-butyl ether	9.103	59	470811	99.65	ug/L	97
45) 2-butanone	9.281	72	16325	108.65	ug/L #	97
46) 1,1-dichloroethane	8.627	63	250679	101.16	ug/L	99
47) chloroprene	8.753	53	217519	96.78	ug/L	96
48) acrylonitrile	7.963	53	289571	458.13	ug/L	98
49) vinyl acetate	8.601	86	24663	121.00	ug/L	82
50) ethyl acetate	9.323	45	21337	92.14	ug/L #	86
51) 2,2-dichloropropane	9.375	77	171173	81.64	ug/L	98
52) cis-1,2-dichloroethene	9.349	96	147177	97.39	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208768.D
Acq On : 23 Oct 2013 2:18 am
Operator : DivyaP
Sample : ic9161-100
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 23 09:55:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) methyl acrylate	9.401	55	133231	125.22	ug/L	97
54) propionitrile	9.339	54	226834	901.18	ug/L	93
55) bromochloromethane	9.652	128	71979	115.30	ug/L	99
56) tetrahydrofuran	9.715	42	52471	92.88	ug/L	98
57) chloroform	9.705	83	234188	88.86	ug/L	97
58) t-butyl formate	9.752	59	144206	97.50	ug/L	93
59) Iso-octane	10.474	57	568699	102.03	ug/L	96
62) freon 113	7.022	151	100277	106.74	ug/L	96
63) methacrylonitrile	9.548	41	94884	102.54	ug/L	92
64) 1,1,1-trichloroethane	9.998	97	201603	98.90	ug/L	98
65) tert-amyl methyl ether	10.468	73	432447	98.25	ug/L	97
68) tert amyl alcohol	10.249	55	27689	430.29	ug/L	89
69) epichlorohydrin	12.011	57	80206	361.08	ug/L	96
70) n-butyl alcohol	10.855	56	227108	5933.55	ug/L	96
71) tert-amyl ethyl ether	11.310	87	217865	103.73	ug/L	84
72) carbon tetrachloride	10.217	117	177384	103.79	ug/L	99
73) 1,1-dichloropropene	10.170	75	189876	104.26	ug/L	98
74) hexane	8.423	57	184518	91.29	ug/L	94
75) benzene	10.426	78	566519	99.70	ug/L	100
76) heptane	10.630	57	109875	80.80	ug/L	98
77) isopropyl acetate	10.311	43	302288	96.09	ug/L	98
78) 1,2-dichloroethane	10.400	62	183050	108.06	ug/L	98
79) ethyl acrylate	11.101	55	198571	115.96	ug/L	99
80) trichloroethene	11.138	95	137518	94.70	ug/L	99
82) 2-chloroethyl vinyl ether	11.901	63	510380	535.41	ug/L	97
83) methylcyclohexane	11.399	83	245195	93.10	ug/L	96
84) methyl methacrylate	11.378	69	154507	90.24	ug/L	94
85) 1,2-dichloropropane	11.378	63	151039	100.20	ug/L	92
86) dibromomethane	11.535	93	84878	106.31	ug/L	90
87) bromodichloromethane	11.666	83	188361	91.71	ug/L	99
88) cis-1,3-dichloropropene	12.142	75	237528	104.91	ug/L	96
90) 4-methyl-2-pentanone	12.220	58	59058	102.65	ug/L	96
91) toluene	12.550	92	357175	104.64	ug/L	99
92) 3-methyl-1-butanol	12.231	55	147295	1980.43	ug/L	96
93) trans-1,3-dichloropropene	12.722	75	219415	105.95	ug/L	96
94) ethyl methacrylate	12.728	69	196462	92.27	ug/L	98
95) 1,1,2-trichloroethane	12.953	83	107270	84.79	ug/L	99
96) 2-hexanone	13.125	58	55178	103.99	ug/L	96
98) cyclohexanone	15.301	55	65395	601.01	ug/L	96
99) tetrachloroethene	13.204	166	164794	106.68	ug/L	93
100) 1,3-dichloropropane	13.146	76	215399	101.88	ug/L	98
101) butyl acetate	13.225	56	103717	86.80	ug/L	86
102) 3,3-dimethyl-1-butanol	13.313	57	162137	854.53	ug/L	96
103) dibromochloromethane	13.444	129	152729	101.09	ug/L	100
104) 1,2-dibromoethane	13.612	107	134382	103.92	ug/L	99
106) chlorobenzene	14.135	112	393581	100.83	ug/L	98
107) 1,1,1,2-tetrachloroethane	14.192	131	146740	101.32	ug/L	98
108) ethylbenzene	14.197	91	702562	99.99	ug/L	97
109) m,p-xylene	14.318	106	537650	207.65	ug/L	96
110) o-xylene	14.778	106	266050	103.60	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208768.D
Acq On : 23 Oct 2013 2:18 am
Operator : DivyaP
Sample : ic9161-100
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 23 09:55:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
112) styrene	14.778	104	467350	106.02 ug/L	98
113) bromoform	15.060	173	117537	105.59 ug/L	99
115) isopropylbenzene	15.160	105	702849	97.31 ug/L	97
117) bromobenzene	15.594	156	191319	103.67 ug/L	97
118) 1,1,2,2-tetrachloroethane	15.453	83	183962	77.70 ug/L	99
119) trans-1,4-dichloro-2-b...	15.494	53	50898	90.79 ug/L	95
120) 1,2,3-trichloropropane	15.536	110	48216	100.60 ug/L	96
121) n-propylbenzene	15.610	91	834436	98.85 ug/L	96
122) p-ethyltoluene	15.725	105	699933	99.38 ug/L	98
123) 2-chlorotoluene	15.777	126	171597	102.78 ug/L	95
124) 4-chlorotoluene	15.881	91	520993	96.13 ug/L	99
125) 1,3,5-trimethylbenzene	15.777	105	596633	95.85 ug/L	99
126) tert-butylbenzene	16.169	119	517763	97.73 ug/L	96
127) pentachloroethane	16.253	167	123596	98.81 ug/L	93
128) 1,2,4-trimethylbenzene	16.216	105	611027	97.55 ug/L	99
129) sec-butylbenzene	16.410	105	784784	100.32 ug/L	97
130) 1,3-dichlorobenzene	16.614	146	357574	101.69 ug/L	98
131) p-isopropyltoluene	16.535	119	647763	100.47 ug/L	96
132) 1,4-dichlorobenzene	16.703	146	373317	100.50 ug/L	98
133) benzyl chloride	16.807	91	345991	92.57 ug/L	100
134) p-diethylbenzene	16.959	119	410430	103.83 ug/L	98
135) 1,2-dichlorobenzene	17.131	146	347044	99.70 ug/L	96
136) n-butylbenzene	16.995	92	345521	105.08 ug/L	98
137) 1,2,4,5-tetramethylben...	17.822	119	584653	99.18 ug/L	99
138) 1,2-dibromo-3-chloropr...	17.953	75	32145	96.01 ug/L	97
139) 1,3,5-trichlorobenzene	18.198	180	273040	104.64 ug/L	93
140) 1,2,4-trichlorobenzene	18.904	180	228675	104.28 ug/L	98
141) hexachlorobutadiene	19.056	225	126886	103.24 ug/L	90
142) naphthalene	19.218	128	507922	95.31 ug/L	99
144) 1,2,3-trichlorobenzene	19.495	180	190688	98.89 ug/L	99
145) hexachloroethane	17.451	119	117978	99.64 ug/L	93
146) Cyclohexane	10.107	84	220146	90.79 ug/L #	28

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

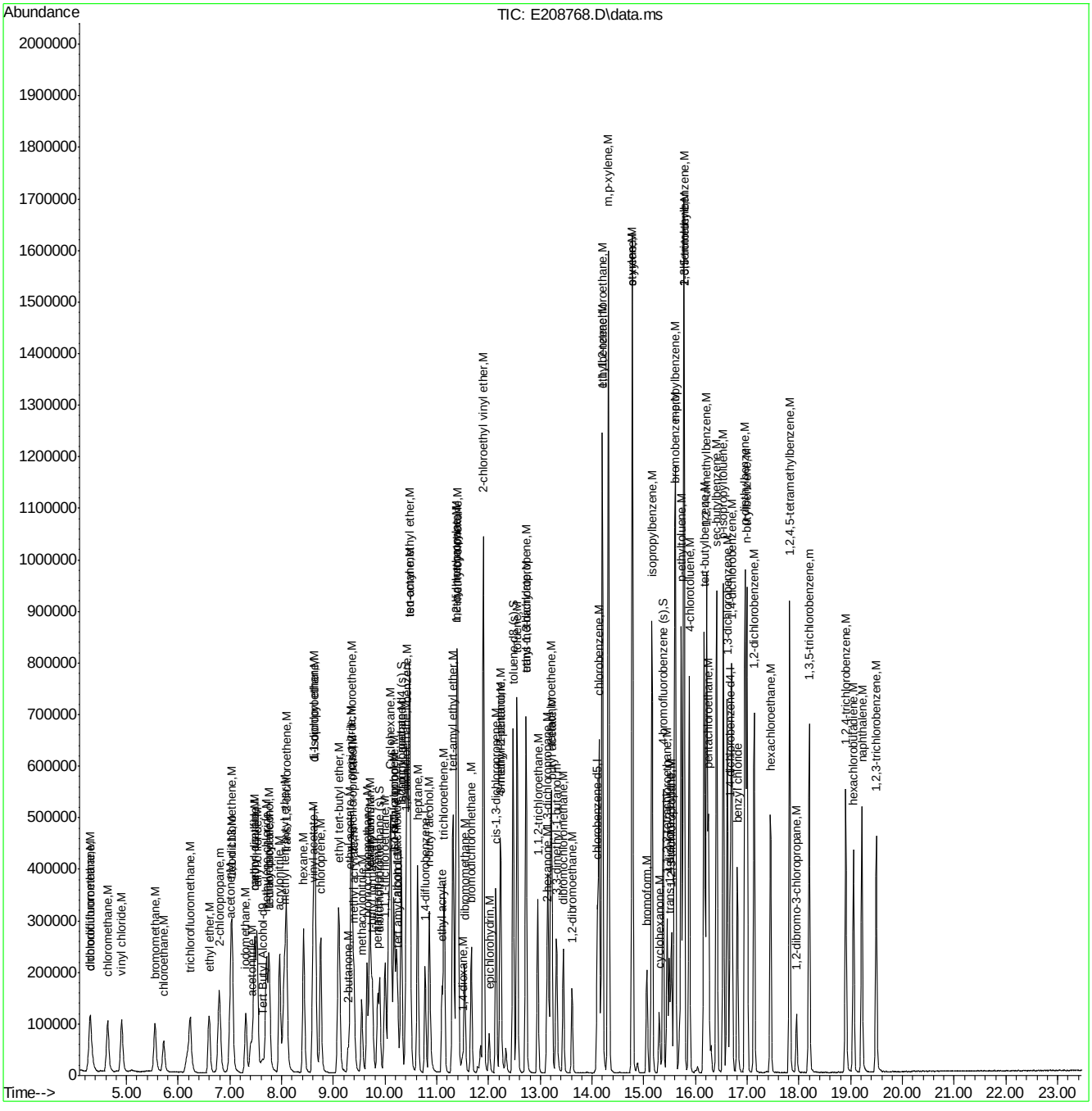
7.7.8

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208768.D
Acq On : 23 Oct 2013 2:18 am
Operator : DivyaP
Sample : ic9161-100
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 23 09:55:08 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208769.D
Acq On : 23 Oct 2013 2:48 am
Operator : DivyaP
Sample : ic9161-200
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 23 09:58:23 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.636	65	80320	500.00	ug/L	0.00
5) pentafluorobenzene	9.854	168	136115	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.774	114	201542	50.00	ug/L	0.00
97) chlorobenzene-d5	14.101	117	205232	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.674	152	135280	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.896	113	250823	193.44	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 386.88%#			
61) 1,2-dichloroethane-d4 (s)	10.309	65	302239	186.72	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 373.44%#			
89) toluene-d8 (s)	12.474	98	1034850	190.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 381.76%#			
116) 4-bromofluorobenzene (s)	15.372	95	423218	147.96	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 295.92%#			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.486	88	69779	5970.48	ug/L	92
3) tertiary butyl alcohol	7.746	59	157447	1022.47	ug/L #	72
11) chlorodifluoromethane	4.305	51	290278	150.38	ug/L	94
12) dichlorodifluoromethane	4.294	85	313045	165.22	ug/L	99
15) chloromethane	4.645	50	405648	165.33	ug/L	99
16) vinyl chloride	4.917	62	383428	199.17	ug/L	98
19) bromomethane	5.550	94	228465	144.08	ug/L	99
20) chloroethane	5.712	64	179124	193.44	ug/L	97
22) trichlorofluoromethane	6.224	101	403112	217.57	ug/L	97
24) ethyl ether	6.596	74	149741	230.55	ug/L	88
28) 2-chloropropane	6.789	43	519923	189.78	ug/L #	83
30) 1,1-dichloroethene	7.045	96	257727	200.24	ug/L	95
32) acetone	7.014	58	26580	142.19	ug/L	98
33) allyl chloride	7.527	41	530346	185.58	ug/L	94
34) acetonitrile	7.401	40	171596	1307.80	ug/L	93
35) iodomethane	7.307	142	463555	212.56	ug/L	89
36) iso-butyl alcohol	10.168	74	26033	961.79	ug/L	72
37) carbon disulfide	7.474	76	941696	203.95	ug/L	96
38) methylene chloride	7.704	84	291444	188.57	ug/L	97
39) 1-chloropropane	7.757	42	531199	188.54	ug/L	96
40) methyl acetate	7.485	43	244514	238.37	ug/L	97
41) methyl tert butyl ether	8.055	73	810105	195.79	ug/L	98
42) trans-1,2-dichloroethene	8.091	96	278702	194.21	ug/L	99
43) di-isopropyl ether	8.646	45	1021803	194.28	ug/L	88
44) ethyl tert-butyl ether	9.101	59	924850	194.96	ug/L	96
45) 2-butanone	9.279	72	33132	219.63	ug/L #	86
46) 1,1-dichloroethane	8.625	63	504905	202.93	ug/L	99
47) chloroprene	8.756	53	427381	189.38	ug/L	98
48) acrylonitrile	7.961	53	581524	916.30	ug/L	98
49) vinyl acetate	8.599	86	49326	241.02	ug/L	84
50) ethyl acetate	9.320	45	42425	182.47	ug/L #	83
51) 2,2-dichloropropane	9.373	77	348230	165.42	ug/L	99
52) cis-1,2-dichloroethene	9.352	96	296782	195.59	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208769.D
Acq On : 23 Oct 2013 2:48 am
Operator : DivyaP
Sample : ic9161-200
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 23 09:58:23 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
53) methyl acrylate	9.399	55	269571	252.34 ug/L	97
54) propionitrile	9.336	54	450892	1784.09 ug/L	99
55) bromochloromethane	9.650	128	144838	231.07 ug/L	95
56) tetrahydrofuran	9.713	42	105634	186.23 ug/L	99
57) chloroform	9.702	83	473357	178.88 ug/L	98
58) t-butyl formate	9.749	59	285314	192.13 ug/L	93
59) Iso-octane	10.471	57	1152575	205.94 ug/L	96
62) freon 113	7.019	151	203809	216.07 ug/L	93
63) methacrylonitrile	9.545	41	187720	202.04 ug/L	90
64) 1,1,1-trichloroethane	10.000	97	413409	201.98 ug/L	97
65) tert-amyl methyl ether	10.471	73	873325	197.61 ug/L	98
68) tert amyl alcohol	10.246	55	52474	796.41 ug/L	85
69) epichlorohydrin	12.009	57	156184	686.72 ug/L	99
70) n-butyl alcohol	10.853	56	426654	10886.78 ug/L	96
71) tert-amyl ethyl ether	11.313	87	447725	208.19 ug/L	85
72) carbon tetrachloride	10.220	117	367962	210.28 ug/L	99
73) 1,1-dichloropropene	10.173	75	384740	206.33 ug/L	99
74) hexane	8.421	57	356911	172.45 ug/L	94
75) benzene	10.424	78	1150387	197.73 ug/L	99
76) heptane	10.628	57	212250	152.44 ug/L	97
77) isopropyl acetate	10.309	43	591452	183.62 ug/L	98
78) 1,2-dichloroethane	10.398	62	367532	211.89 ug/L	99
79) ethyl acrylate	11.099	55	398655	227.37 ug/L	99
80) trichloroethene	11.141	95	280231	188.47 ug/L	99
82) 2-chloroethyl vinyl ether	11.899	63	1020604	1045.65 ug/L	97
83) methylcyclohexane	11.402	83	498326	184.79 ug/L	97
84) methyl methacrylate	11.376	69	311883	177.90 ug/L	96
85) 1,2-dichloropropane	11.381	63	305818	198.15 ug/L	91
86) dibromomethane	11.538	93	173285	211.96 ug/L	91
87) bromodichloromethane	11.664	83	383826	182.51 ug/L	100
88) cis-1,3-dichloropropene	12.145	75	480741	207.37 ug/L	96
90) 4-methyl-2-pentanone	12.223	58	118065	200.43 ug/L	99
91) toluene	12.553	92	731700	209.35 ug/L	98
92) 3-methyl-1-butanol	12.228	55	273757	3594.83 ug/L	95
93) trans-1,3-dichloropropene	12.720	75	448875	211.69 ug/L	93
94) ethyl methacrylate	12.725	69	400157	183.55 ug/L	97
95) 1,1,2-trichloroethane	12.950	83	219271	169.27 ug/L	99
96) 2-hexanone	13.128	58	110327	203.07 ug/L	95
98) cyclohexanone	15.299	55	144996	1252.17 ug/L	99
99) tetrachloroethene	13.201	166	342571	208.39 ug/L	95
100) 1,3-dichloropropane	13.149	76	437831	194.59 ug/L	98
101) butyl acetate	13.222	56	210775	165.76 ug/L	87
102) 3,3-dimethyl-1-butanol	13.311	57	300875	1490.04 ug/L	97
103) dibromochloromethane	13.447	129	312634	194.45 ug/L	99
104) 1,2-dibromoethane	13.614	107	273314	198.60 ug/L	100
106) chlorobenzene	14.137	112	812519	195.60 ug/L	98
107) 1,1,1,2-tetrachloroethane	14.195	131	306936	199.13 ug/L	98
108) ethylbenzene	14.200	91	1472355	196.90 ug/L	97
109) m,p-xylene	14.315	106	1124853	408.22 ug/L	94
110) o-xylene	14.775	106	555154	203.13 ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208769.D
Acq On : 23 Oct 2013 2:48 am
Operator : DivyaP
Sample : ic9161-200
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 23 09:58:23 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration

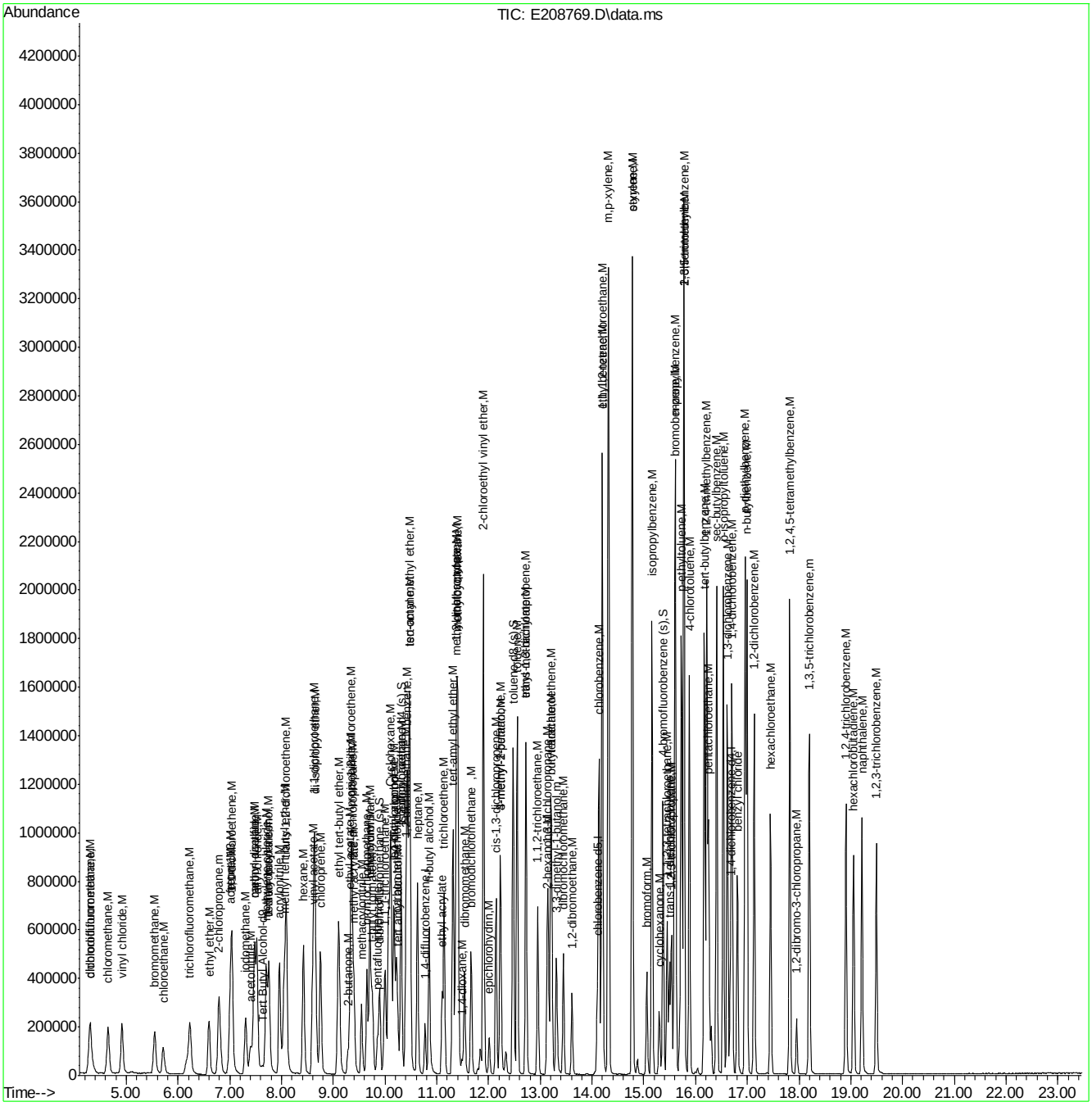
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
112) styrene	14.781	104	985366	210.04 ug/L	98
113) bromoform	15.058	173	243364	205.42 ug/L	99
115) isopropylbenzene	15.157	105	1481821	180.39 ug/L	97
117) bromobenzene	15.597	156	402596	191.82 ug/L	96
118) 1,1,2,2-tetrachloroethane	15.450	83	382795	142.18 ug/L	99
119) trans-1,4-dichloro-2-b...	15.497	53	103937	163.02 ug/L	90
120) 1,2,3-trichloropropane	15.539	110	99261	182.11 ug/L #	71
121) n-propylbenzene	15.612	91	1778129	185.23 ug/L	97
122) p-ethyltoluene	15.727	105	1513664	188.99 ug/L	97
123) 2-chlorotoluene	15.774	126	366673	193.11 ug/L	96
124) 4-chlorotoluene	15.879	91	1106745	179.57 ug/L	99
125) 1,3,5-trimethylbenzene	15.774	105	1261171	178.16 ug/L	99
126) tert-butylbenzene	16.167	119	1111643	184.51 ug/L	97
127) pentachloroethane	16.250	167	260520	183.14 ug/L	93
128) 1,2,4-trimethylbenzene	16.214	105	1298993	182.35 ug/L	97
129) sec-butylbenzene	16.407	105	1673912	188.16 ug/L	98
130) 1,3-dichlorobenzene	16.611	146	764182	191.10 ug/L	99
131) p-isopropyltoluene	16.538	119	1388376	189.36 ug/L	96
132) 1,4-dichlorobenzene	16.705	146	791724	187.42 ug/L	98
133) benzyl chloride	16.810	91	703695	165.56 ug/L	100
134) p-diethylbenzene	16.956	119	863339	192.05 ug/L	99
135) 1,2-dichlorobenzene	17.134	146	733650	185.33 ug/L	97
136) n-butylbenzene	16.993	92	733694	196.20 ug/L	96
137) 1,2,4,5-tetramethylben...	17.819	119	1216214	181.42 ug/L	99
138) 1,2-dibromo-3-chloropr...	17.955	75	66515	174.70 ug/L	92
139) 1,3,5-trichlorobenzene	18.196	180	569823	192.03 ug/L	93
140) 1,2,4-trichlorobenzene	18.907	180	472248	189.36 ug/L	97
141) hexachlorobutadiene	19.054	225	260899	186.67 ug/L	90
142) naphthalene	19.216	128	1035845	170.91 ug/L	99
144) 1,2,3-trichlorobenzene	19.493	180	387451	176.68 ug/L	97
145) hexachloroethane	17.448	119	250484	186.01 ug/L	93
146) Cyclohexane	10.110	84	455973	165.35 ug/L #	33

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208769.D
Acq On : 23 Oct 2013 2:48 am
Operator : DivyaP
Sample : ic9161-200
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 23 09:58:23 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 08:00:20 2013
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat
10/25/13 02:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208772.D
Acq On : 23 Oct 2013 4:19 am
Operator : DivyaP
Sample : icv9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 23 10:11:46 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.649	65	76066	500.00	ug/L	0.00
5) pentafluorobenzene	9.857	168	134132	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.772	114	195204	50.00	ug/L	0.00
97) chlorobenzene-d5	14.103	117	190156	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.671	152	116003	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.893	113	60366	47.24	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 94.48%			
61) 1,2-dichloroethane-d4 (s)	10.312	65	72611	45.52	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 91.04%			
89) toluene-d8 (s)	12.477	98	245484	46.75	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 93.50%			
116) 4-bromofluorobenzene (s)	15.374	95	97329	45.63	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 91.26%			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.499	88	18454	1294.97	ug/L	96
3) tertiary butyl alcohol	7.765	59	43647	250.59	ug/L	94
11) chlorodifluoromethane	4.302	51	69680	45.31	ug/L	99
12) dichlorodifluoromethane	4.302	85	79117	45.63	ug/L	99
15) chloromethane	4.626	50	107425	47.41	ug/L	98
16) vinyl chloride	4.898	62	101678	53.60	ug/L	98
19) bromomethane	5.552	94	64609	53.32	ug/L	98
20) chloroethane	5.720	64	48321	50.90	ug/L	97
22) trichlorofluoromethane	6.232	101	103588	50.05	ug/L	97
24) ethyl ether	6.598	74	36771	52.01	ug/L	94
28) 2-chloropropane	6.792	43	129050	47.80	ug/L	99
29) acrolein	6.813	56	162841	469.24	ug/L	98
30) 1,1-dichloroethene	7.038	96	63230	49.85	ug/L	99
32) acetone	7.011	58	6829	50.79	ug/L	90
33) allyl chloride	7.524	41	136252	48.38	ug/L	95
34) acetonitrile	7.425	40	42962	507.06	ug/L	98
35) iodomethane	7.310	142	113405	52.77	ug/L	97
36) iso-butyl alcohol	10.427	74	23392	1661.33	ug/L	84
37) carbon disulfide	7.477	76	240470	52.85	ug/L	99
38) methylene chloride	7.707	84	72690	47.73	ug/L	100
39) 1-chloropropane	7.759	42	135190	49.54	ug/L	96
40) methyl acetate	7.487	43	59597	52.28	ug/L	99
41) methyl tert butyl ether	8.057	73	404747	99.27	ug/L	99
42) trans-1,2-dichloroethene	8.099	96	67879	48.00	ug/L	97
43) di-isopropyl ether	8.643	45	257907	49.76	ug/L	100
44) ethyl tert-butyl ether	9.103	59	234598	50.18	ug/L	97
45) 2-butanone	9.287	72	8263	52.24	ug/L #	97
46) 1,1-dichloroethane	8.628	63	123915	50.54	ug/L	98
47) chloroprene	8.753	53	109580	49.27	ug/L	99
48) acrylonitrile	7.963	53	147019	235.08	ug/L	99
49) vinyl acetate	8.601	86	12265	50.02	ug/L	88
50) ethyl acetate	9.323	45	10919	48.04	ug/L	84
51) 2,2-dichloropropane	9.375	77	83138	42.77	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208772.D
Acq On : 23 Oct 2013 4:19 am
Operator : DivyaP
Sample : icv9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 23 10:11:46 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
52) cis-1,2-dichloroethene	9.355	96	72713	48.63 ug/L	98
53) methyl acrylate	9.407	55	67255	53.13 ug/L	98
54) propionitrile	9.344	54	116658	468.42 ug/L	97
55) bromochloromethane	9.653	128	34909	51.11 ug/L	97
56) tetrahydrofuran	9.715	42	27093	49.63 ug/L	98
57) chloroform	9.705	83	115315	46.97 ug/L	99
58) t-butyl formate	9.752	59	72880	49.80 ug/L	100
59) Iso-octane	10.474	57	273011	49.50 ug/L	100
62) freon 113	7.017	151	51604	51.66 ug/L	97
63) methacrylonitrile	9.548	41	46460	48.30 ug/L	98
64) 1,1,1-trichloroethane	9.998	97	100028	49.59 ug/L	100
65) tert-amyl methyl ether	10.469	73	228276	52.42 ug/L	100
68) tert amyl alcohol	10.254	55	29163	511.41 ug/L	75
69) epichlorohydrin	12.011	57	40756	247.81 ug/L	94
70) n-butyl alcohol	10.861	56	123588	2604.66 ug/L	99
71) tert-amyl ethyl ether	11.311	87	215270	103.35 ug/L	97
72) carbon tetrachloride	10.217	117	87634	51.71 ug/L	98
73) 1,1-dichloropropene	10.176	75	92311	51.11 ug/L	98
74) hexane	8.424	57	95546	49.89 ug/L	99
75) benzene	10.427	78	276118	49.00 ug/L	99
76) heptane	10.625	57	53681	49.08 ug/L	98
77) isopropyl acetate	10.312	43	155564	51.91 ug/L	98
78) 1,2-dichloroethane	10.401	62	88238	52.52 ug/L	98
79) ethyl acrylate	11.101	55	97334	51.35 ug/L	99
80) trichloroethene	11.138	95	67196	46.66 ug/L	99
82) 2-chloroethyl vinyl ether	11.902	63	238049	251.81 ug/L	100
83) methylcyclohexane	11.400	83	132219	53.29 ug/L	100
84) methyl methacrylate	11.379	69	76953	48.60 ug/L	98
85) 1,2-dichloropropane	11.379	63	73823	49.39 ug/L	96
86) dibromomethane	11.535	93	41267	52.12 ug/L	96
87) bromodichloromethane	11.666	83	91188	44.77 ug/L	98
88) cis-1,3-dichloropropene	12.142	75	114653	51.06 ug/L	100
90) 4-methyl-2-pentanone	12.226	58	29944	49.94 ug/L	96
91) toluene	12.550	92	174384	51.51 ug/L	98
92) 3-methyl-1-butanol	12.236	55	79662	1045.42 ug/L	98
93) trans-1,3-dichloropropene	12.723	75	105992	51.61 ug/L	99
94) ethyl methacrylate	12.723	69	99848	51.00 ug/L	97
95) 1,1,2-trichloroethane	12.948	83	53288	46.19 ug/L	98
96) 2-hexanone	13.131	58	27684	52.61 ug/L	99
98) cyclohexanone	15.301	55	38745	544.99 ug/L	98
99) tetrachloroethene	13.199	166	81457	51.59 ug/L	98
100) 1,3-dichloropropane	13.152	76	105788	50.74 ug/L	99
101) butyl acetate	13.225	56	53209	49.07 ug/L	98
102) 3,3-dimethyl-1-butanol	13.314	57	89114	501.50 ug/L	99
103) dibromochloromethane	13.444	129	73494	49.33 ug/L	99
104) 1,2-dibromoethane	13.612	107	64683	50.73 ug/L	98
106) chlorobenzene	14.135	112	192460	50.01 ug/L	99
107) 1,1,1,2-tetrachloroethane	14.192	131	71343	49.96 ug/L	98
108) ethylbenzene	14.203	91	339535	49.01 ug/L	99
109) m,p-xylene	14.318	106	259580	101.67 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208772.D
Acq On : 23 Oct 2013 4:19 am
Operator : DivyaP
Sample : icv9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 23 10:11:46 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

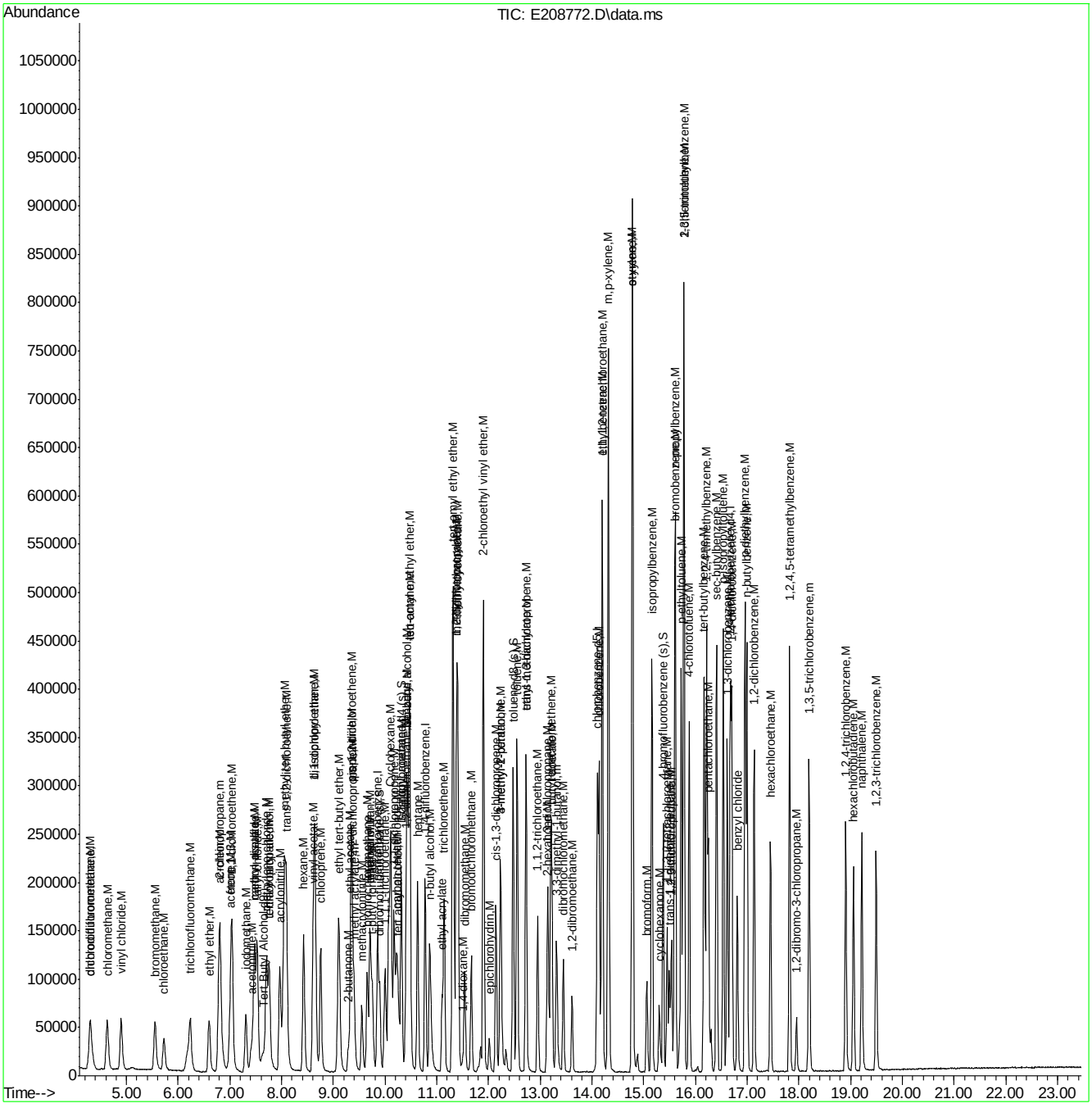
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) o-xylene	14.778	106	128124	50.60 ug/L	99
112) styrene	14.783	104	226341	52.07 ug/L	98
113) bromoform	15.061	173	55739	50.78 ug/L	99
115) isopropylbenzene	15.160	105	343752	48.80 ug/L	99
117) bromobenzene	15.594	156	90867	50.49 ug/L	97
118) 1,1,2,2-tetrachloroethane	15.453	83	90859	45.50 ug/L	100
119) trans-1,4-dichloro-2-b...	15.495	53	24129	45.87 ug/L	93
120) 1,2,3-trichloropropane	15.537	110	23024	46.40 ug/L	91
121) n-propylbenzene	15.610	91	401725	48.80 ug/L	100
122) p-ethyltoluene	15.725	105	337847	49.19 ug/L	99
123) 2-chlorotoluene	15.777	126	82307	50.55 ug/L	98
124) 4-chlorotoluene	15.877	91	250585	47.41 ug/L	98
125) 1,3,5-trimethylbenzene	15.777	105	287358	47.34 ug/L	99
126) tert-butylbenzene	16.169	119	251024	48.59 ug/L	99
127) pentachloroethane	16.248	167	58769	48.18 ug/L	98
128) 1,2,4-trimethylbenzene	16.216	105	295530	48.38 ug/L	100
129) sec-butylbenzene	16.410	105	378912	49.67 ug/L	99
130) 1,3-dichlorobenzene	16.614	146	171912	50.13 ug/L	99
131) p-isopropyltoluene	16.535	119	313474	49.86 ug/L	100
132) 1,4-dichlorobenzene	16.703	146	180771	49.90 ug/L	99
133) benzyl chloride	16.807	91	155889	42.77 ug/L	100
134) p-diethylbenzene	16.954	119	193985	50.32 ug/L	99
135) 1,2-dichlorobenzene	17.132	146	165055	48.62 ug/L	98
136) n-butylbenzene	16.991	92	163428	50.97 ug/L	100
137) 1,2,4,5-tetramethylben...	17.822	119	282741	49.18 ug/L	99
138) 1,2-dibromo-3-chloropr...	17.953	75	15989	47.35 ug/L	96
139) 1,3,5-trichlorobenzene	18.193	180	128393	50.46 ug/L	100
140) 1,2,4-trichlorobenzene	18.905	180	108885	50.92 ug/L	97
141) hexachlorobutadiene	19.056	225	61964	51.70 ug/L	99
142) naphthalene	19.213	128	243080	46.77 ug/L	99
144) 1,2,3-trichlorobenzene	19.491	180	93749	49.85 ug/L	98
145) hexachloroethane	17.451	119	56762	49.16 ug/L	99
146) Cyclohexane	10.108	84	109606m	46.35 ug/L	

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ve9161-9170\
Data File : E208772.D
Acq On : 23 Oct 2013 4:19 am
Operator : DivyaP
Sample : icv9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 23 10:11:46 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration



ACCUTEST LABORATORIES JB53758

Manual Integration Approval Summary

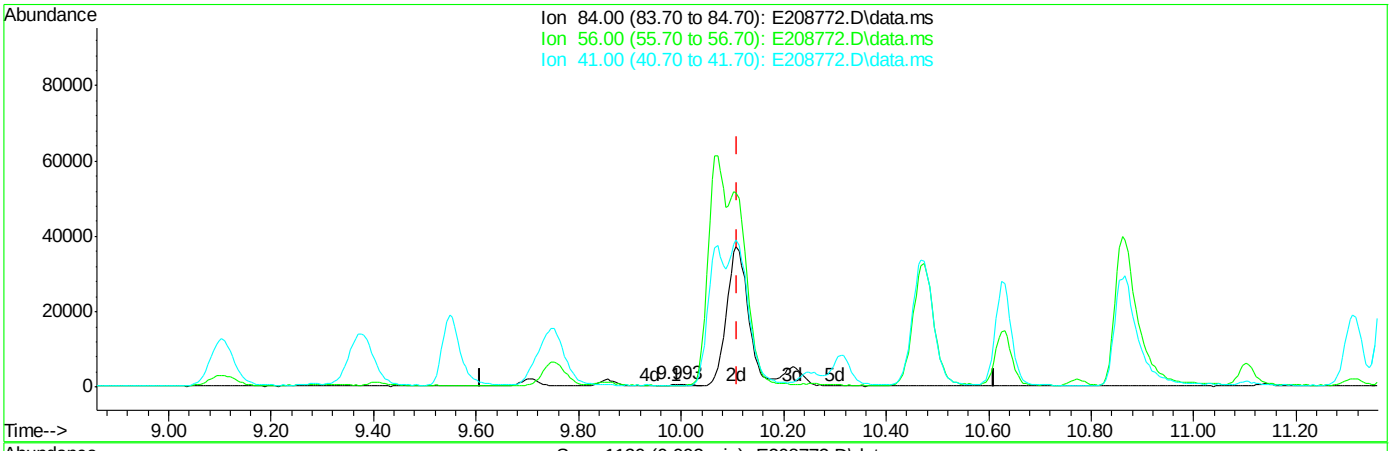
Sample Number:	VE9161-ICV9161	**Method:**	SW846 8260B
Lab FileID:	E208772.D	**Analyst approved:**	10/23/13 10:15 Henny Salim
Injection Time:	10/23/13 04:19	**Supervisor approved:**	10/25/13 02:27 Kanya Veerawat

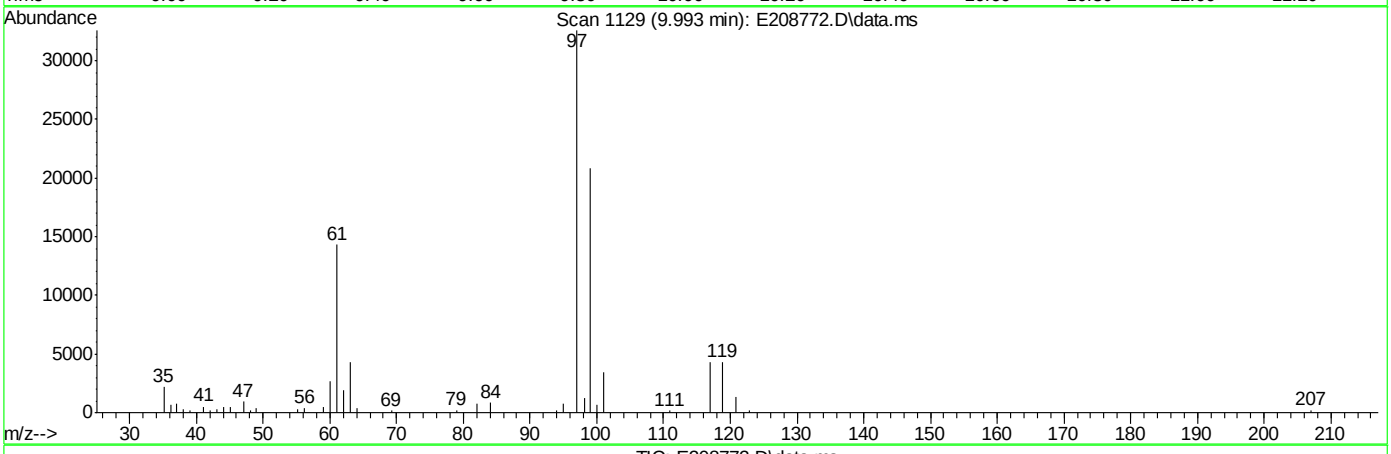
Parameter	CAS	Sig#	R.T. (min.)	Reason
Cyclohexane	110-82-7		10.11	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208772.D
Acq On : 23 Oct 2013 4:19 am
Operator : DivyaP
Sample : icv9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 23 10:09:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration





(146) Cyclohexane (M)

9.993min (-0.117) 0.63ug/L

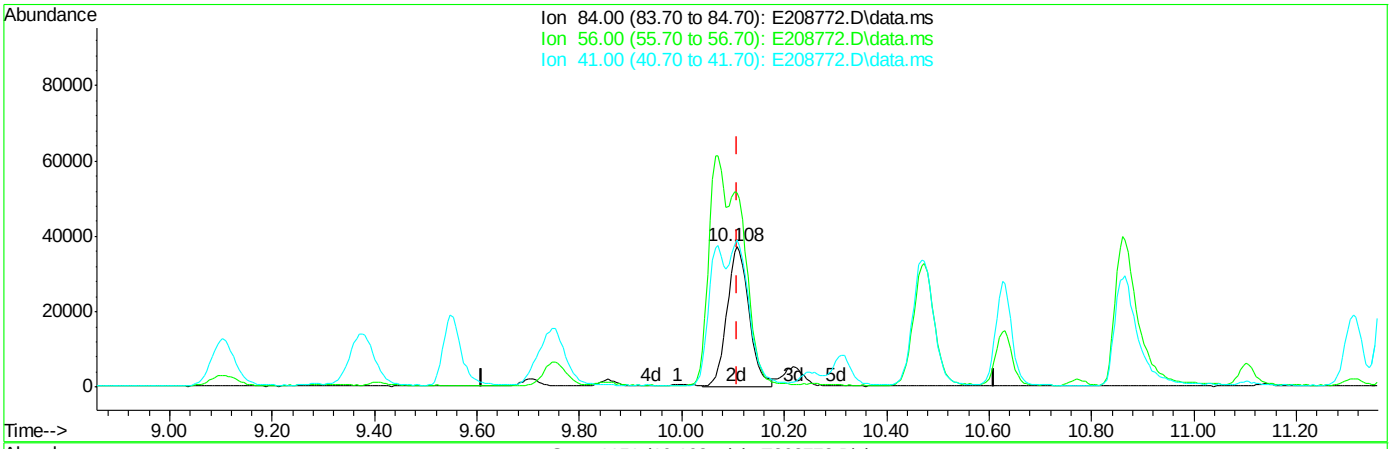
response 1499

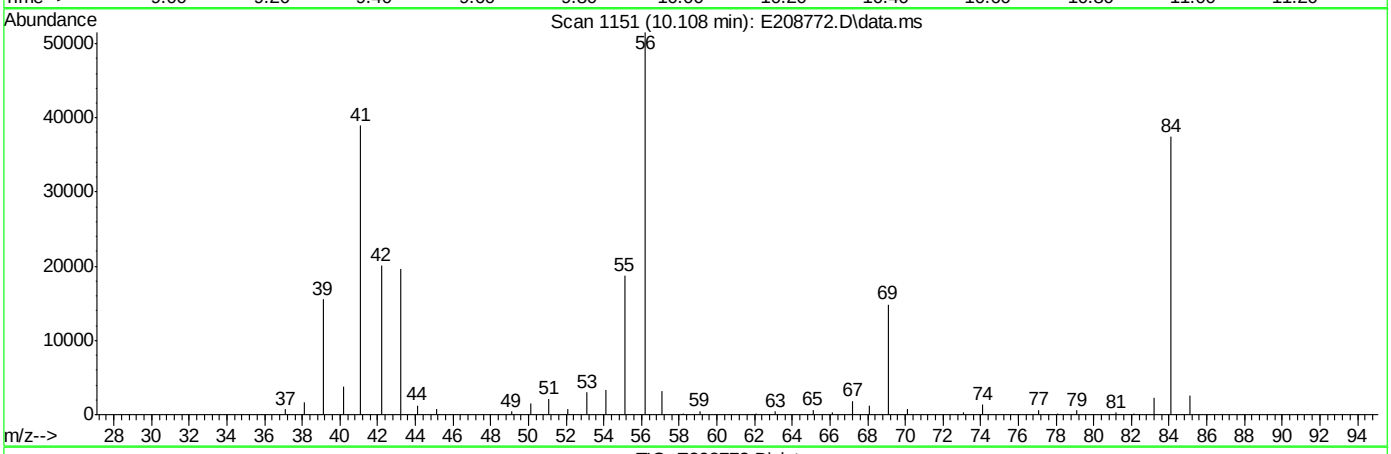
Ion	Exp%	Act%
84.00	100	100
56.00	0.00	6.47
41.00	0.00	3.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : E208772.D
Acq On : 23 Oct 2013 4:19 am
Operator : DivyaP
Sample : icv9161-50
Misc : MS57101,VE9161,5.0,,100,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 23 10:09:06 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration





TIC: E208772.D\data.ms

(146) Cyclohexane (M)

10.108min (-0.002) 46.35ug/L m

response 109606

Ion	Exp%	Act%
84.00	100	100
56.00	0.00	0.09
41.00	0.00	0.05
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210078.D
Acq On : 23 Nov 2013 10:06 pm
Operator : DivyaP
Sample : CC9161-50
Misc : MS58538,VE9217,5.0,,100,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 25 09:24:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.623	65	39208	500.00	ug/L	-0.02
5) pentafluorobenzene	9.851	168	122601	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.765	114	182840	50.00	ug/L	0.00
97) chlorobenzene-d5	14.096	117	170263	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.668	152	97792	50.00	ug/L	0.00

System Monitoring Compounds						
60) dibromofluoromethane (s)	9.887	113	63325	54.22	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 108.44%			
61) 1,2-dichloroethane-d4 (s)	10.305	65	74289	50.95	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 101.90%			
89) toluene-d8 (s)	12.470	98	249988	50.83	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 101.66%			
116) 4-bromofluorobenzene (s)	15.366	95	96370	53.60	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 107.20%			

Target Compounds						Qvalue
2) 1,4-dioxane	11.482	88	3974	483.37	ug/L #	81
3) tertiary butyl alcohol	7.733	59	20904	232.84	ug/L #	80
11) chlorodifluoromethane	4.304	51	67031	47.69	ug/L	99
12) dichlorodifluoromethane	4.298	85	61635	38.89	ug/L	98
15) chloromethane	4.623	50	99071	47.84	ug/L	98
16) vinyl chloride	4.894	62	92509	53.35	ug/L	99
19) bromomethane	5.543	94	62468	56.70	ug/L	98
20) chloroethane	5.720	64	46920	54.07	ug/L	98
22) trichlorofluoromethane	6.233	101	100622	53.19	ug/L	99
24) ethyl ether	6.588	74	38257	59.20	ug/L	94
28) 2-chloropropane	6.787	43	119608	48.47	ug/L #	91
29) acrolein	6.797	56	295004	930.04	ug/L	98
30) 1,1-dichloroethene	7.033	96	59780	51.56	ug/L	95
32) acetone	7.012	58	5257	42.77	ug/L #	76
33) allyl chloride	7.524	41	116462	45.25	ug/L	91
34) acetonitrile	7.409	40	36355	469.44	ug/L	97
35) iodomethane	7.299	142	114484	58.28	ug/L	93
36) iso-butyl alcohol	10.420	74	15462	1064.04	ug/L	90
37) carbon disulfide	7.461	76	223967	53.85	ug/L	98
38) methylene chloride	7.697	84	72945	52.40	ug/L	99
39) 1-chloropropane	7.749	42	124657	49.97	ug/L	91
40) methyl acetate	7.482	43	54760	52.56	ug/L	100
41) methyl tert butyl ether	8.047	73	200903	53.91	ug/L	98
42) trans-1,2-dichloroethene	8.089	96	64254	49.71	ug/L	98
43) di-isopropyl ether	8.638	45	247945	52.34	ug/L	99
44) ethyl tert-butyl ether	9.098	59	197462	46.21	ug/L	97
45) 2-butanone	9.281	72	5722	39.58	ug/L #	92
46) 1,1-dichloroethane	8.622	63	123497	55.11	ug/L	99
47) chloroprene	8.747	53	97553	47.99	ug/L	99
48) acrylonitrile	7.953	53	119571	209.17	ug/L	98
49) vinyl acetate	8.591	86	11767	52.50	ug/L	99
50) ethyl acetate	9.317	45	9378	45.14	ug/L	93
51) 2,2-dichloropropane	9.370	77	90248	50.79	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210078.D
Acq On : 23 Nov 2013 10:06 pm
Operator : DivyaP
Sample : CC9161-50
Misc : MS58538,VE9217,5.0,,100,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 25 09:24:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) cis-1,2-dichloroethene	9.349	96	71595	52.38	ug/L		97
53) methyl acrylate	9.401	55	55125	47.64	ug/L		99
54) propionitrile	9.328	54	82074	360.55	ug/L		77
55) bromochloromethane	9.647	128	36140	57.89	ug/L		98
56) tetrahydrofuran	9.709	42	22572	45.23	ug/L		96
57) chloroform	9.699	83	114253	50.91	ug/L		98
58) t-butyl formate	9.746	59	67164	50.21	ug/L		96
59) Iso-octane	10.467	57	198335	39.34	ug/L		95
62) freon 113	7.017	151	46587	51.03	ug/L		96
63) methacrylonitrile	9.542	41	41466	47.16	ug/L		99
64) 1,1,1-trichloroethane	9.992	97	98180	53.25	ug/L		100
65) tert-amyl methyl ether	10.462	73	214833	53.97	ug/L		98
69) epichlorohydrin	12.005	57	26794	173.93	ug/L		99
70) n-butyl alcohol	10.849	56	36592	823.34	ug/L		94
72) carbon tetrachloride	10.211	117	88028	55.45	ug/L		99
73) 1,1-dichloropropene	10.169	75	86531	51.15	ug/L		98
74) hexane	8.418	57	63637	35.48	ug/L		98
75) benzene	10.415	78	255291	48.37	ug/L		100
76) heptane	10.624	57	36817	35.94	ug/L		98
77) isopropyl acetate	10.305	43	133287	47.48	ug/L		96
78) 1,2-dichloroethane	10.394	62	90870	57.75	ug/L		98
80) trichloroethene	11.131	95	63089	46.77	ug/L		98
82) 2-chloroethyl vinyl ether	11.895	63	236071	266.60	ug/L		99
83) methylcyclohexane	11.398	83	99817	42.95	ug/L		96
84) methyl methacrylate	11.372	69	66588	44.89	ug/L		95
85) 1,2-dichloropropane	11.372	63	72588	51.84	ug/L		97
86) dibromomethane	11.534	93	41831	56.40	ug/L		92
87) bromodichloromethane	11.659	83	90658	47.52	ug/L		98
88) cis-1,3-dichloropropene	12.135	75	111755	53.14	ug/L		99
90) 4-methyl-2-pentanone	12.219	58	25459	45.33	ug/L	#	73
91) toluene	12.548	92	160224	50.53	ug/L		97
92) 3-methyl-1-butanol	12.229	55	32447	454.60	ug/L		97
93) trans-1,3-dichloropropene	12.716	75	106252	55.23	ug/L		99
94) ethyl methacrylate	12.721	69	91543	49.92	ug/L		99
95) 1,1,2-trichloroethane	12.946	83	51142	47.33	ug/L		98
96) 2-hexanone	13.129	58	21943	44.52	ug/L		95
98) cyclohexanone	15.293	55	18342	263.28	ug/L		94
99) tetrachloroethene	13.197	166	69727	49.32	ug/L		96
100) 1,3-dichloropropane	13.144	76	104212	55.83	ug/L		98
101) butyl acetate	13.217	56	46931	48.33	ug/L		94
102) 3,3-dimethyl-1-butanol	13.306	57	45183	283.98	ug/L		96
103) dibromochloromethane	13.442	129	74972	56.21	ug/L		99
104) 1,2-dibromoethane	13.610	107	62986	55.17	ug/L		99
106) chlorobenzene	14.132	112	184897	53.65	ug/L		96
107) 1,1,1,2-tetrachloroethane	14.190	131	71812	56.16	ug/L		99
108) ethylbenzene	14.195	91	316035	50.94	ug/L		98
109) m,p-xylene	14.310	106	247014	108.05	ug/L		98
110) o-xylene	14.770	106	125801	55.48	ug/L		95
112) styrene	14.775	104	209127	53.73	ug/L		100
113) bromoform	15.052	173	50667	51.55	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210078.D
Acq On : 23 Nov 2013 10:06 pm
Operator : DivyaP
Sample : CC9161-50
Misc : MS58538,VE9217,5.0,,100,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 25 09:24:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

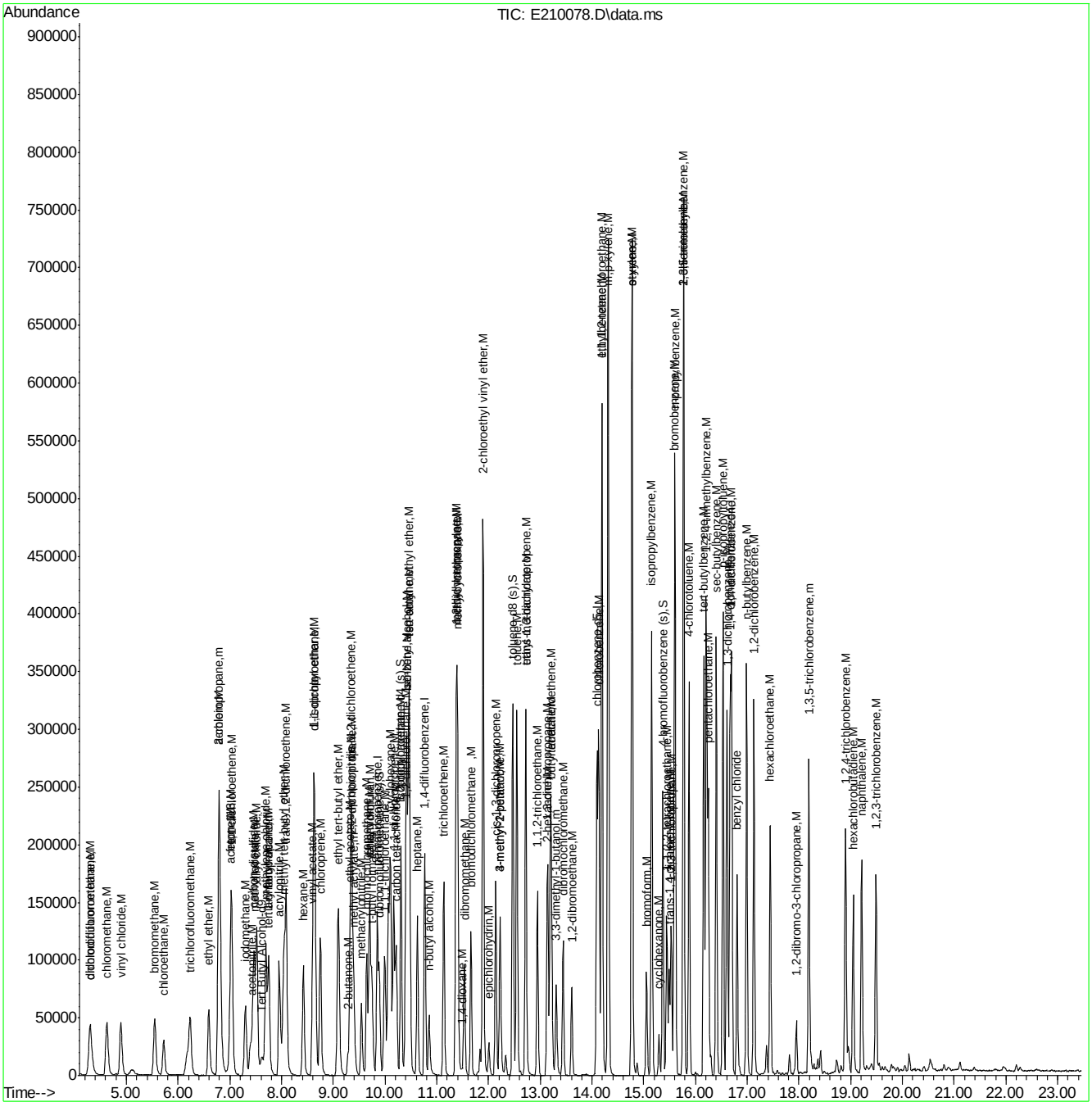
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
115) isopropylbenzene	15.152	105	304191	51.23 ug/L	99
117) bromobenzene	15.591	156	84284	55.55 ug/L	94
118) 1,1,2,2-tetrachloroethane	15.445	83	84312	50.08 ug/L	99
119) trans-1,4-dichloro-2-b...	15.492	53	21420	48.31 ug/L	97
120) 1,2,3-trichloropropane	15.533	110	21962	52.50 ug/L	99
121) n-propylbenzene	15.607	91	357481	51.51 ug/L	99
123) 2-chlorotoluene	15.769	126	79113	57.64 ug/L	95
124) 4-chlorotoluene	15.873	91	224221	50.33 ug/L	98
125) 1,3,5-trimethylbenzene	15.769	105	263946	51.58 ug/L	100
126) tert-butylbenzene	16.161	119	218977	50.28 ug/L	98
127) pentachloroethane	16.244	167	55671	54.14 ug/L	96
128) 1,2,4-trimethylbenzene	16.208	105	261420	50.77 ug/L	99
129) sec-butylbenzene	16.401	105	312179	48.54 ug/L	99
130) 1,3-dichlorobenzene	16.610	146	155300	53.72 ug/L	98
131) p-isopropyltoluene	16.532	119	266566	50.29 ug/L	99
132) 1,4-dichlorobenzene	16.699	146	162412	53.19 ug/L	98
133) benzyl chloride	16.804	91	144921	47.17 ug/L	99
135) 1,2-dichlorobenzene	17.128	146	152820	53.40 ug/L	97
136) n-butylbenzene	16.987	92	128244	47.44 ug/L	99
138) 1,2-dibromo-3-chloropr...	17.949	75	13652	47.96 ug/L	92
139) 1,3,5-trichlorobenzene	18.194	180	107093	49.93 ug/L	98
140) 1,2,4-trichlorobenzene	18.900	180	85472	47.41 ug/L	99
141) hexachlorobutadiene	19.047	225	42627	42.19 ug/L #	42
142) naphthalene	19.214	128	180005	41.09 ug/L	99
144) 1,2,3-trichlorobenzene	19.486	180	66454	41.92 ug/L	97
145) hexachloroethane	17.442	119	51218	52.62 ug/L	93
146) Cyclohexane	10.102	84	92002	46.15 ug/L #	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210078.D
Acq On : 23 Nov 2013 10:06 pm
Operator : DivyaP
Sample : CC9161-50
Misc : MS58538,VE9217,5.0,,100,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 25 09:24:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210115.D
Acq On : 25 Nov 2013 2:13 pm
Operator : DivyaP
Sample : CC9161-20
Misc : MS58394,VE9218,5.0,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 26 09:29:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.619	65	74451	500.00	ug/L	-0.03
5) pentafluorobenzene	9.846	168	165304	50.00	ug/L	0.00
66) 1,4-difluorobenzene	10.767	114	247481	50.00	ug/L	0.00
97) chlorobenzene-d5	14.097	117	227058	50.00	ug/L	0.00
114) 1,4-dichlorobenzene-d4	16.669	152	123968	50.00	ug/L	0.00

System Monitoring Compounds

60) dibromofluoromethane (s)	9.888	113	82557	52.43	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 104.86%			
61) 1,2-dichloroethane-d4 (s)	10.306	65	96429	49.05	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 98.10%			
89) toluene-d8 (s)	12.466	98	329517	49.50	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 99.00%			
116) 4-bromofluorobenzene (s)	15.367	95	127764	56.05	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 112.10%			

Target Compounds

						Qvalue
2) 1,4-dioxane	11.483	88	6552	406.65	ug/L	93
3) tertiary butyl alcohol	7.734	59	20078	117.78	ug/L #	37
11) chlorodifluoromethane	4.299	51	32716	17.26	ug/L	98
12) dichlorodifluoromethane	4.294	85	26551	12.42	ug/L	98
15) chloromethane	4.613	50	43013	15.40	ug/L	98
16) vinyl chloride	4.885	62	41011	17.54	ug/L	99
19) bromomethane	5.539	94	30732	17.41	ug/L	99
20) chloroethane	5.721	64	21844	18.67	ug/L	97
22) trichlorofluoromethane	6.234	101	44888	17.60	ug/L	98
24) ethyl ether	6.595	74	19591	22.48	ug/L	89
28) 2-chloropropane	6.788	43	52969	15.92	ug/L	93
29) acrolein	6.793	56	81022	189.45	ug/L	97
30) 1,1-dichloroethene	7.029	96	28681	18.35	ug/L	96
32) acetone	7.008	58	3880	23.41	ug/L #	80
33) allyl chloride	7.520	41	53497	15.41	ug/L	97
34) acetonitrile	7.410	40	24850	237.99	ug/L	96
35) iodomethane	7.295	142	56394	21.29	ug/L	98
36) iso-butyl alcohol	10.421	74	11167	339.54	ug/L	58
37) carbon disulfide	7.462	76	109890	19.60	ug/L	98
38) methylene chloride	7.698	84	36626	19.51	ug/L	91
39) 1-chloropropane	7.750	42	54740	16.28	ug/L	98
40) methyl acetate	7.489	43	29144	20.75	ug/L	100
41) methyl tert butyl ether	8.048	73	108784	21.65	ug/L	97
42) trans-1,2-dichloroethene	8.090	96	32162	18.45	ug/L	92
43) di-isopropyl ether	8.639	45	120755	18.91	ug/L	98
44) ethyl tert-butyl ether	9.094	59	104420	18.12	ug/L	97
45) 2-butanone	9.287	72	3936	20.19	ug/L #	97
46) 1,1-dichloroethane	8.623	63	57916	19.17	ug/L	98
47) chloroprene	8.749	53	45748	16.69	ug/L	98
48) acrylonitrile	7.954	53	67054	87.00	ug/L	98
49) vinyl acetate	8.602	86	5952	19.70	ug/L	90
50) ethyl acetate	9.318	45	4906	17.51	ug/L	89
51) 2,2-dichloropropane	9.365	77	49989	20.87	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210115.D
Acq On : 25 Nov 2013 2:13 pm
Operator : DivyaP
Sample : CC9161-20
Misc : MS58394,VE9218,5.0,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 26 09:29:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) cis-1,2-dichloroethene	9.345	96	35188	19.10	ug/L		97
53) methyl acrylate	9.397	55	30363	19.46	ug/L		99
54) propionitrile	9.334	54	49853	162.43	ug/L		95
55) bromochloromethane	9.648	128	17687	21.01	ug/L		93
56) tetrahydrofuran	9.710	42	11997	17.83	ug/L		97
57) chloroform	9.700	83	56858	18.79	ug/L		99
58) t-butyl formate	9.742	59	35187	19.51	ug/L		94
59) Iso-octane	10.463	57	102548	15.09	ug/L		96
62) freon 113	7.018	151	21811	17.72	ug/L		100
63) methacrylonitrile	9.543	41	21422	18.07	ug/L		94
64) 1,1,1-trichloroethane	9.993	97	47837	19.24	ug/L		98
65) tert-amyl methyl ether	10.458	73	114115	21.26	ug/L		98
69) epichlorohydrin	12.006	57	19075	91.48	ug/L		98
70) n-butyl alcohol	10.850	56	43884	729.51	ug/L		97
71) tert-amyl ethyl ether	11.483	87	536	0.20	ug/L	#	1
72) carbon tetrachloride	10.212	117	41400	19.27	ug/L		97
73) 1,1-dichloropropene	10.165	75	41017	17.91	ug/L		99
74) hexane	8.419	57	31280	12.88	ug/L		98
75) benzene	10.416	78	128706	18.02	ug/L		98
76) heptane	10.620	57	19336	13.94	ug/L		95
77) isopropyl acetate	10.306	43	70502	18.56	ug/L		93
78) 1,2-dichloroethane	10.395	62	45547	21.38	ug/L		98
80) trichloroethene	11.132	95	31085	17.03	ug/L		96
82) 2-chloroethyl vinyl ether	11.896	63	113221	94.47	ug/L		97
83) methylcyclohexane	11.394	83	48024	15.27	ug/L		95
84) methyl methacrylate	11.373	69	32976	16.43	ug/L		98
85) 1,2-dichloropropane	11.368	63	34299	18.10	ug/L		91
86) dibromomethane	11.530	93	21238	21.16	ug/L		95
87) bromodichloromethane	11.655	83	45181	17.50	ug/L		98
88) cis-1,3-dichloropropene	12.136	75	56951	20.01	ug/L		97
90) 4-methyl-2-pentanone	12.220	58	13778	18.12	ug/L		91
91) toluene	12.544	92	80059	18.65	ug/L		99
92) 3-methyl-1-butanol	12.225	55	31250	323.47	ug/L		97
93) trans-1,3-dichloropropene	12.717	75	52824	20.29	ug/L		97
94) ethyl methacrylate	12.722	69	45277	18.24	ug/L		94
95) 1,1,2-trichloroethane	12.941	83	26358	18.02	ug/L		97
96) 2-hexanone	13.130	58	12585	18.86	ug/L		93
98) cyclohexanone	15.289	55	65036	787.53	ug/L		100
99) tetrachloroethene	13.198	166	34223	18.15	ug/L		97
100) 1,3-dichloropropane	13.145	76	53327	21.42	ug/L		99
101) butyl acetate	13.218	56	22593	17.45	ug/L		99
102) 3,3-dimethyl-1-butanol	13.307	57	38012	179.15	ug/L		98
103) dibromochloromethane	13.438	129	35964	20.22	ug/L		99
104) 1,2-dibromoethane	13.611	107	33008	21.68	ug/L		96
106) chlorobenzene	14.128	112	93102	20.26	ug/L		99
107) 1,1,1,2-tetrachloroethane	14.186	131	35488	20.81	ug/L		99
108) ethylbenzene	14.196	91	155233	18.76	ug/L		99
109) m,p-xylene	14.311	106	119898	39.33	ug/L		99
110) o-xylene	14.771	106	60521	20.02	ug/L		95
112) styrene	14.776	104	100611	19.38	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210115.D
Acq On : 25 Nov 2013 2:13 pm
Operator : DivyaP
Sample : CC9161-20
Misc : MS58394,VE9218,5.0,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 26 09:29:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration

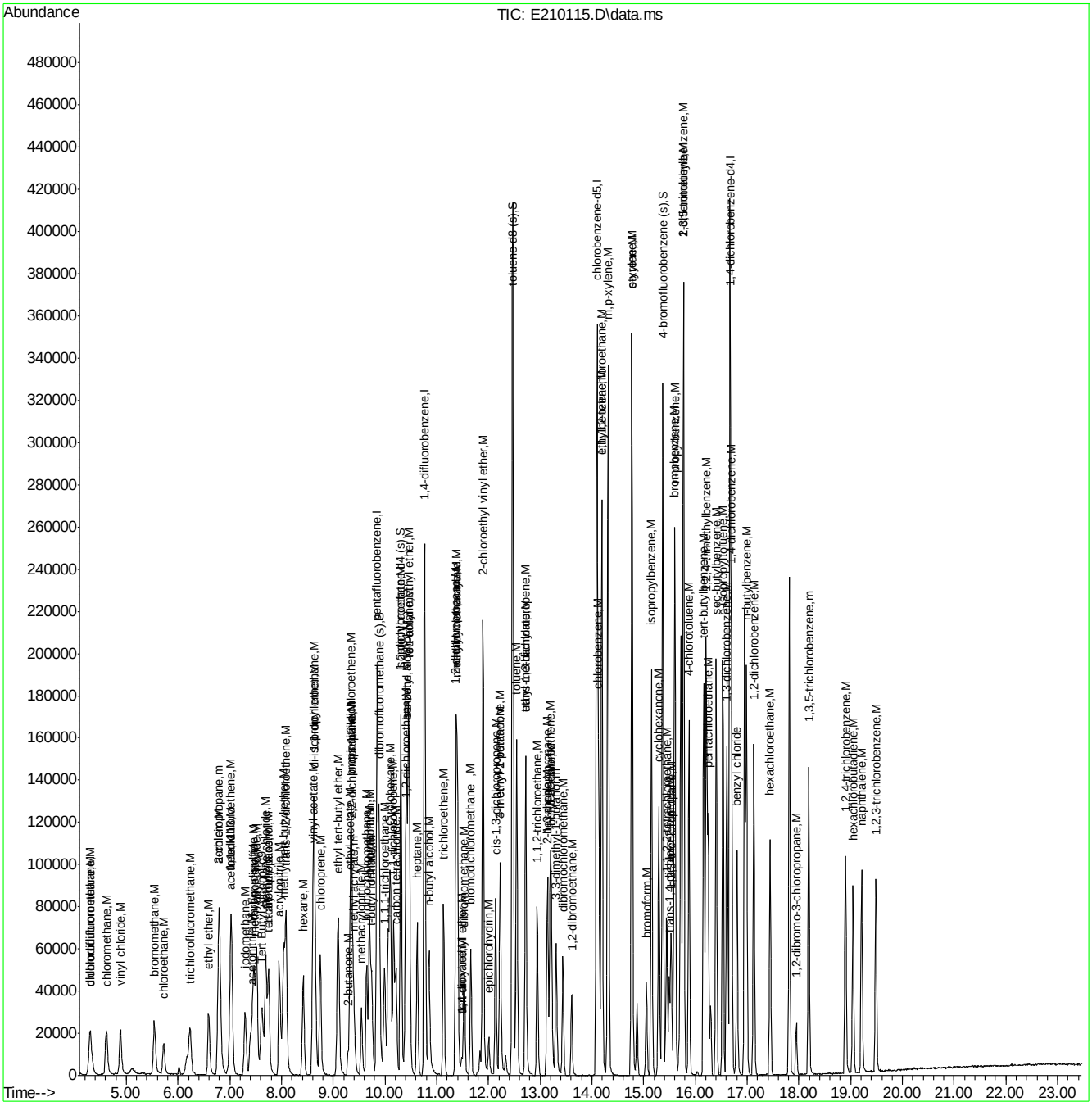
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
113) bromoform	15.053	173	25616	19.54 ug/L	99
115) isopropylbenzene	15.153	105	153950	20.45 ug/L	99
117) bromobenzene	15.592	156	42885	22.30 ug/L	98
118) 1,1,2,2-tetrachloroethane	15.446	83	44389	20.80 ug/L	99
119) trans-1,4-dichloro-2-b...	15.493	53	11011	19.59 ug/L	97
120) 1,2,3-trichloropropane	15.529	110	12159	22.93 ug/L	84
121) n-propylbenzene	15.602	91	177679	20.20 ug/L	100
123) 2-chlorotoluene	15.770	126	38946	22.38 ug/L	98
124) 4-chlorotoluene	15.874	91	116712	20.66 ug/L	99
125) 1,3,5-trimethylbenzene	15.770	105	135190	20.84 ug/L	99
126) tert-butylbenzene	16.162	119	114521	20.74 ug/L	97
127) pentachloroethane	16.245	167	28085	21.55 ug/L	97
128) 1,2,4-trimethylbenzene	16.209	105	136706	20.94 ug/L	99
129) sec-butylbenzene	16.402	105	167168	20.51 ug/L	99
130) 1,3-dichlorobenzene	16.611	146	78464	21.41 ug/L	99
131) p-isopropyltoluene	16.533	119	139450	20.75 ug/L	98
132) 1,4-dichlorobenzene	16.695	146	82021	21.19 ug/L	97
133) benzyl chloride	16.805	91	93281	23.95 ug/L	99
135) 1,2-dichlorobenzene	17.129	146	78227	21.56 ug/L	98
136) n-butylbenzene	16.988	92	71686	20.92 ug/L	98
138) 1,2-dibromo-3-chloropr...	17.950	75	7521	20.84 ug/L	97
139) 1,3,5-trichlorobenzene	18.190	180	59200	21.77 ug/L	98
140) 1,2,4-trichlorobenzene	18.901	180	44546	19.49 ug/L	99
141) hexachlorobutadiene	19.048	225	24872	19.42 ug/L	98
142) naphthalene	19.210	128	100707	18.13 ug/L	99
144) 1,2,3-trichlorobenzene	19.487	180	37460	18.64 ug/L	98
145) hexachloroethane	17.443	119	26253	21.27 ug/L	94
146) Cyclohexane	10.097	84	43505	17.22 ug/L #	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : E210115.D
Acq On : 25 Nov 2013 2:13 pm
Operator : DivyaP
Sample : CC9161-20
Misc : MS58394,VE9218,5.0,,100,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 26 09:29:10 2013
Quant Method : C:\MSDCHEM\1\METHODS\ME9161.M
Quant Title : SW846 8260B,ZB624 60m x 0.25mm x 1.4um
QLast Update : Wed Oct 23 10:07:58 2013
Response via : Initial Calibration



ACCUTEST LABORATORIES JB53758

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140615.D
Acq On : 11 Oct 2013 10:22 am
Operator : natet
Sample : ic6084-10
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 14 09:30:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:54:12 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.93	65	63593	500.00	ug/L	-0.02
5) pentafluorobenzene	9.61	168	194772	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.76	114	288608	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	257219	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.86	152	127025	50.00	ug/L	0.00

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.64	113	16342	9.98	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 19.96%#			
55) 1,2-dichloroethane-d4 (s)	10.16	65	16852	9.95	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 19.90%#			
85) toluene-d8 (s)	12.97	98	60286	9.76	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 19.52%#			
111) 4-bromofluorobenzene (s)	16.54	95	27991	12.05	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 24.10%#			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.07	59	7578	51.81	ug/L	100
3) ethyl alcohol	5.63	45	12084	1218.27	ug/L #	77
4) 1,4-dioxane	11.72	88	3394	262.21	ug/L #	93
11) chlorodifluoromethane	3.57	51	10885	9.32	ug/L	94
12) dichlorodifluoromethane	3.56	85	14769	10.47	ug/L	99
15) chloromethane	3.84	50	21257	10.90	ug/L	98
16) vinyl chloride	4.08	62	18547	10.54	ug/L	97
18) bromomethane	4.71	94	13405	12.49	ug/L	97
19) chloroethane	4.89	64	10648	11.69	ug/L	95
21) trichlorofluoromethane	5.34	101	22864	10.64	ug/L	99
23) ethyl ether	5.75	74	7247	9.27	ug/L	94
27) acrolein	6.02	56	24580	92.68	ug/L #	96
28) 1,1-dichloroethene	6.19	96	11098	8.87	ug/L	98
29) acetone	6.28	58	1108	9.52	ug/L	94
30) allyl chloride	6.76	76	7956	9.65	ug/L	98
31) acetonitrile	6.73	40	11743	110.85	ug/L #	35
32) iodomethane	6.48	142	23817	9.16	ug/L	100
33) iso-butyl alcohol	10.00	43	6911	101.59	ug/L	96
34) carbon disulfide	6.61	76	41378	9.13	ug/L	99
35) methylene chloride	6.96	84	16548	10.13	ug/L	95
36) methyl acetate	6.76	43	9812	10.02	ug/L #	92
37) methyl tert butyl ether	7.34	73	38685	9.54	ug/L	99
38) trans-1,2-dichloroethene	7.39	96	13332	9.03	ug/L	98
39) di-isopropyl ether	8.03	45	48808	9.55	ug/L	83
40) 2-butanone	8.92	72	1378	8.72	ug/L	93
41) 1,1-dichloroethane	8.03	63	25271	9.26	ug/L	99
42) chloroprene	8.17	53	18251	8.90	ug/L	97
43) acrylonitrile	7.33	53	22118	46.67	ug/L	95
44) vinyl acetate	8.05	86	1817	8.03	ug/L	86
45) ethyl tert-butyl ether	8.59	59	45915	9.45	ug/L	99
46) ethyl acetate	8.96	70	1330	8.06	ug/L #	3
47) 2,2-dichloropropane	8.92	77	19220	9.61	ug/L	97
48) cis-1,2-dichloroethene	8.93	96	15813	9.27	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140615.D
Acq On : 11 Oct 2013 10:22 am
Operator : natet
Sample : ic6084-10
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 14 09:30:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:54:12 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) propionitrile	9.01	54	17936	93.47 ug/L	81
50) tert-Butyl Formate	9.44	59	11625	9.48 ug/L #	99
51) bromochloromethane	9.31	128	7686	9.34 ug/L	96
52) tetrahydrofuran	9.36	72	1646	9.24 ug/L	98
53) chloroform	9.39	83	26011	9.48 ug/L	99
56) freon 113	6.18	151	8645	8.86 ug/L	96
57) methacrylonitrile	9.25	41	7332	9.48 ug/L	98
58) 1,1,1-trichloroethane	9.69	97	19701	9.13 ug/L	96
59) cyclohexane	9.78	84	18669	9.00 ug/L	89
60) tert amyl alcohol	10.15	59	6364	44.72 ug/L	95
61) iso-octane	10.27	57	50172	9.54 ug/L	94
64) epichlorohydrin	12.46	57	6643	47.71 ug/L	98
65) n-butyl alcohol	10.98	56	20468	468.64 ug/L	95
66) carbon tetrachloride	9.95	117	16819	8.80 ug/L	94
67) 1,1-dichloropropene	9.93	75	18009	9.06 ug/L	97
68) hexane	7.74	57	16562	9.09 ug/L	97
69) benzene	10.26	78	57711	9.31 ug/L	100
70) tert-amyl methyl ether	10.33	73	43238	9.65 ug/L	98
71) heptane	10.52	57	10749	9.38 ug/L	97
72) isopropyl acetate	10.22	43	23911	9.29 ug/L	96
73) 1,2-dichloroethane	10.28	62	18338	9.30 ug/L	100
74) trichloroethene	11.20	130	14169	9.03 ug/L	98
78) 2-chloroethyl vinyl ether	12.31	63	46899	47.46 ug/L	100
79) methyl methacrylate	11.60	69	9115	9.28 ug/L	94
80) 1,2-dichloropropane	11.54	63	15783	9.25 ug/L	97
81) dibromomethane	11.75	93	8919	9.14 ug/L	92
82) methylcyclohexane	11.47	83	21469	9.13 ug/L	97
83) bromodichloromethane	11.95	83	20182	9.24 ug/L	99
84) cis-1,3-dichloropropene	12.58	75	25887	9.41 ug/L	97
86) 4-methyl-2-pentanone	12.74	58	5154	9.04 ug/L	98
87) toluene	13.07	92	36826	9.28 ug/L	98
88) 3-methyl-1-butanol	12.80	55	12174	177.36 ug/L	97
89) trans-1,3-dichloropropene	13.36	75	22447	9.17 ug/L	99
90) ethyl methacrylate	13.40	69	18018	9.10 ug/L	97
91) 1,1,2-trichloroethane	13.65	83	11334	9.45 ug/L	96
92) 2-hexanone	13.92	58	4876	8.95 ug/L	96
94) 3,3-Dimethyl-1-butanol	14.16	57	13881	92.54 ug/L	98
95) tetrachloroethene	13.86	164	12524	9.02 ug/L	100
96) 1,3-dichloropropane	13.89	76	21334	9.50 ug/L	98
97) butyl acetate	14.04	56	9332	9.56 ug/L	100
98) dibromochloromethane	14.23	129	15919	9.24 ug/L	99
99) 1,2-dibromoethane	14.42	107	13491	9.37 ug/L	94
101) chlorobenzene	15.05	112	42820	9.53 ug/L	95
102) 1,1,1,2-tetrachloroethane	15.14	131	15519	9.29 ug/L	98
103) ethylbenzene	15.15	91	70113	9.33 ug/L	99
104) m,p-xylene	15.29	106	53901	18.91 ug/L	98
105) o-xylene	15.84	106	26952	9.45 ug/L	97
106) styrene	15.85	104	47029	9.32 ug/L	100
107) bromoform	16.18	173	10978	9.03 ug/L	99
109) isopropylbenzene	16.29	105	68034	9.85 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140615.D
Acq On : 11 Oct 2013 10:22 am
Operator : natet
Sample : ic6084-10
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 14 09:30:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:54:12 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) Cyclohexanone	16.48	55	23596	124.34 ug/L	98
112) bromobenzene	16.76	156	19034	9.62 ug/L	98
113) 1,1,2,2-tetrachloroethane	16.69	83	17725	9.94 ug/L	95
114) trans-1,4-dichloro-2-buten	16.75	53	4131	9.41 ug/L #	67
115) 1,2,3-trichloropropane	16.76	110	4131	9.64 ug/L	94
116) n-propylbenzene	16.81	91	79851	9.77 ug/L	99
118) 2-chlorotoluene	16.96	126	17119	9.77 ug/L	91
119) 4-chlorotoluene	17.08	91	52405	9.95 ug/L	99
120) 1,3,5-trimethylbenzene	16.99	105	58723	9.85 ug/L	99
121) tert-butylbenzene	17.38	119	48131	9.66 ug/L	97
122) pentachloroethane	17.46	167	12134	10.01 ug/L	98
123) 1,2,4-trimethylbenzene	17.43	105	60855	10.03 ug/L	97
125) sec-butylbenzene	17.62	105	73992	9.69 ug/L	99
126) 1,3-dichlorobenzene	17.80	146	35428	9.75 ug/L	99
127) p-isopropyltoluene	17.75	119	62119	9.87 ug/L	99
128) 1,4-dichlorobenzene	17.89	146	36306	9.69 ug/L	97
129) 1,2-dichlorobenzene	18.29	146	34103	9.72 ug/L	98
130) benzyl chloride	18.02	91	36602	10.34 ug/L	99
132) n-butylbenzene	18.18	92	32255	9.73 ug/L	99
134) 1,2-dibromo-3-chloropropan	19.02	75	2795	9.73 ug/L	80
135) 1,3,5-trichlorobenzene	19.20	180	26977	9.63 ug/L	99
136) hexachlorobutadiene	19.90	225	13815	9.77 ug/L	99
137) naphthalene	20.05	128	38227	8.54 ug/L	100
138) 1,2,4-trichlorobenzene	19.79	180	19538	8.78 ug/L	95
139) 1,2,3-trichlorobenzene	20.28	180	15346	8.51 ug/L	98
140) hexachloroethane	18.54	201	11159	9.38 ug/L	97

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

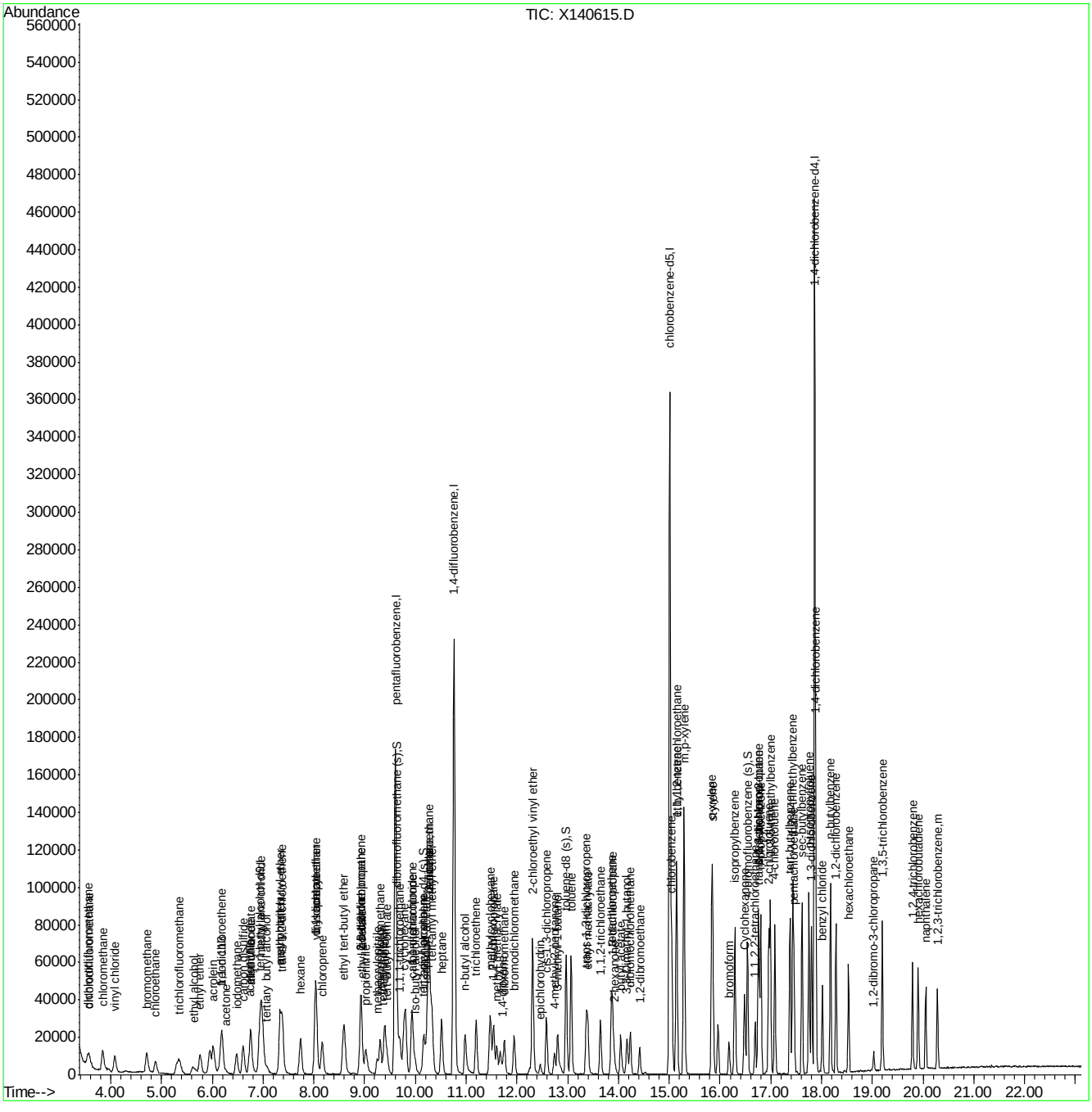
7.7.13

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140615.D
Acq On : 11 Oct 2013 10:22 am
Operator : natet
Sample : ic6084-10
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 14 09:30:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:54:12 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140616.D
Acq On : 11 Oct 2013 10:51 am
Operator : natet
Sample : ic6084-5
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 14 09:07:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:00:45 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.94	65	56514	500.00	ug/L	-0.01
5) pentafluorobenzene	9.61	168	195550	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.76	114	289223	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	255575	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.87	152	123307	50.00	ug/L	0.00

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.65	113	9935	6.04	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 12.08%#			
55) 1,2-dichloroethane-d4 (s)	10.17	65	9704	5.71	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 11.42%#			
85) toluene-d8 (s)	12.97	98	38855	6.31	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 12.62%#			
111) 4-bromofluorobenzene (s)	0.00	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 71 - 132		Recovery = 0.00%#			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.07	59	3504	26.18	ug/L	100
3) ethyl alcohol	5.64	45	6410	696.77	ug/L #	57
4) 1,4-dioxane	11.72	88	1481	127.51	ug/L #	96
11) chlorodifluoromethane	3.56	51	7549	6.53	ug/L	98
12) dichlorodifluoromethane	3.57	85	8090	5.66	ug/L	90
15) chloromethane	3.83	50	11305	5.67	ug/L	100
16) vinyl chloride	4.08	62	10128	5.67	ug/L	94
18) bromomethane	4.70	94	7060	6.24	ug/L	98
19) chloroethane	4.88	64	5677	6.00	ug/L	93
21) trichlorofluoromethane	5.36	101	12182	5.58	ug/L	91
23) ethyl ether	5.76	74	3988	5.16	ug/L	92
27) acrolein	6.03	56	12502	48.13	ug/L #	95
28) 1,1-dichloroethene	6.20	96	7624	6.21	ug/L	97
29) acetone	6.29	58	413	3.57	ug/L	85
30) allyl chloride	6.75	76	5009	6.09	ug/L	91
31) acetonitrile	6.76	40	5921	54.49	ug/L #	1
32) iodomethane	6.49	142	14886	5.80	ug/L	97
33) iso-butyl alcohol	10.00	43	3467	50.60	ug/L	87
34) carbon disulfide	6.61	76	27850	6.23	ug/L	98
35) methylene chloride	6.97	84	9722	5.91	ug/L	96
36) methyl acetate	6.77	43	4617	4.70	ug/L #	89
37) methyl tert butyl ether	7.34	73	21665	5.37	ug/L	100
38) trans-1,2-dichloroethene	7.39	96	8943	6.15	ug/L	98
39) di-isopropyl ether	8.03	45	28516	5.61	ug/L #	58
41) 1,1-dichloroethane	8.03	63	16025	5.94	ug/L	99
42) chloroprene	8.17	53	12119	6.02	ug/L	96
43) acrylonitrile	7.34	53	10999	23.43	ug/L	96
44) vinyl acetate	8.06	86	938	4.30	ug/L	43
45) ethyl tert-butyl ether	8.59	59	26357	5.46	ug/L	99
46) ethyl acetate	8.96	70	634	3.98	ug/L #	2
47) 2,2-dichloropropane	8.92	77	12882	6.47	ug/L	98
48) cis-1,2-dichloroethene	8.93	96	10121	6.00	ug/L	87
49) propionitrile	9.03	54	8326	43.79	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140616.D
Acq On : 11 Oct 2013 10:51 am
Operator : natet
Sample : ic6084-5
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 14 09:07:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:00:45 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) tert-Butyl Formate	9.44	59	5997	4.92 ug/L #	95
51) bromochloromethane	9.32	128	4372	5.36 ug/L	95
52) tetrahydrofuran	9.38	72	819	4.65 ug/L #	72
53) chloroform	9.39	83	16079	5.90 ug/L	97
56) freon 113	6.17	151	6227	6.50 ug/L	98
57) methacrylonitrile	9.26	41	3901	5.08 ug/L	95
58) 1,1,1-trichloroethane	9.69	97	13231	6.22 ug/L	95
59) cyclohexane	9.78	84	13115	6.43 ug/L	77
60) tert amyl alcohol	10.15	59	2989	21.37 ug/L	91
61) iso-octane	10.28	57	32635	6.24 ug/L	94
64) epichlorohydrin	12.47	57	3352	24.25 ug/L	99
65) n-butyl alcohol	10.99	56	8788	203.34 ug/L	98
66) carbon tetrachloride	9.95	117	11613	6.21 ug/L	93
67) 1,1-dichloropropene	9.93	75	12024	6.15 ug/L	99
68) hexane	7.74	57	11572	6.46 ug/L	98
69) benzene	10.26	78	36865	6.02 ug/L	99
70) tert-amyl methyl ether	10.33	73	24355	5.46 ug/L	98
71) heptane	10.52	57	7210	6.36 ug/L	95
72) isopropyl acetate	10.22	43	13970	5.75 ug/L	89
73) 1,2-dichloroethane	10.28	62	10463	5.37 ug/L	95
74) trichloroethene	11.20	130	9377	6.08 ug/L	96
78) 2-chloroethyl vinyl ether	12.31	63	24716	25.21 ug/L	98
79) methyl methacrylate	11.61	69	4863	5.01 ug/L	85
80) 1,2-dichloropropane	11.55	63	9538	5.66 ug/L	98
81) dibromomethane	11.76	93	5092	5.30 ug/L	92
82) methylcyclohexane	11.48	83	14191	6.13 ug/L	99
83) bromodichloromethane	11.95	83	11830	5.49 ug/L	100
84) cis-1,3-dichloropropene	12.58	75	14784	5.43 ug/L	97
86) 4-methyl-2-pentanone	12.74	58	2475	4.42 ug/L	97
87) toluene	13.07	92	23517	6.00 ug/L	96
88) 3-methyl-1-butanol	12.82	55	6012	89.42 ug/L	89
89) trans-1,3-dichloropropene	13.37	75	12762	5.29 ug/L	99
90) ethyl methacrylate	13.40	69	10064	5.17 ug/L	96
91) 1,1,2-trichloroethane	13.65	83	6317	5.31 ug/L	98
92) 2-hexanone	13.92	58	2380	4.45 ug/L	90
94) 3,3-Dimethyl-1-butanol	14.18	57	6470	44.07 ug/L #	98
95) tetrachloroethene	13.87	164	8340	6.17 ug/L	94
96) 1,3-dichloropropane	13.89	76	12126	5.49 ug/L	96
97) butyl acetate	14.05	56	4620	4.81 ug/L	89
98) dibromochloromethane	14.24	129	8843	5.25 ug/L	96
99) 1,2-dibromoethane	14.43	107	7401	5.24 ug/L	91
101) chlorobenzene	15.05	112	26482	5.99 ug/L	95
102) 1,1,1,2-tetrachloroethane	15.14	131	9343	5.71 ug/L	98
103) ethylbenzene	15.15	91	45331	6.15 ug/L	99
104) m,p-xylene	15.29	106	34384	12.27 ug/L	100
105) o-xylene	15.84	106	16754	5.98 ug/L	96
106) styrene	15.86	104	28150	5.69 ug/L	97
107) bromoform	16.18	173	5758	4.86 ug/L	97
109) isopropylbenzene	16.29	105	44438	6.65 ug/L	99
110) Cyclohexanone	16.49	55	9888	51.18 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140616.D
Acq On : 11 Oct 2013 10:51 am
Operator : natet
Sample : ic6084-5
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 14 09:07:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:00:45 2013
Response via : Initial Calibration

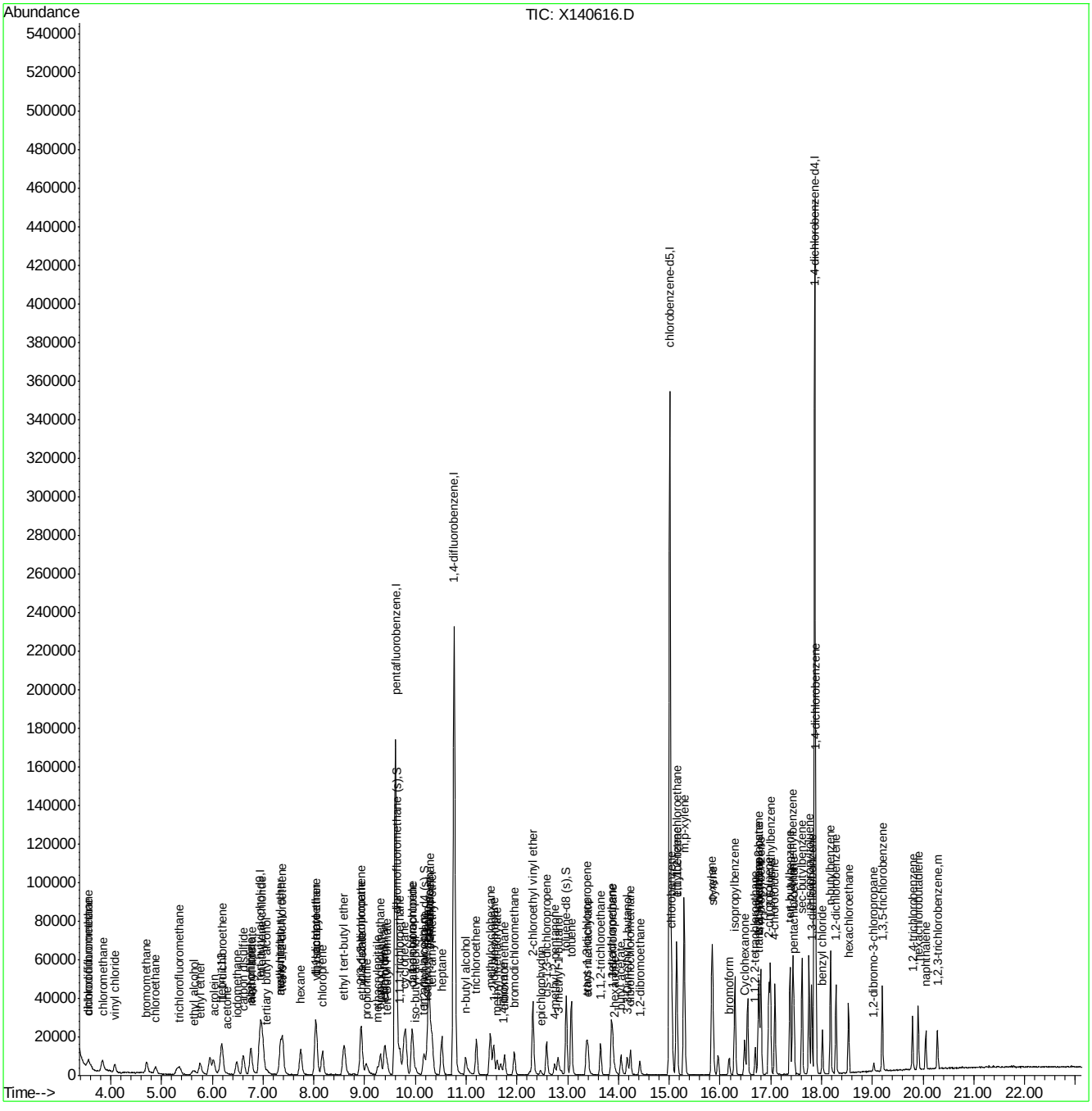
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
112) bromobenzene	16.76	156	11203	5.88 ug/L	97
113) 1,1,2,2-tetrachloroethane	16.69	83	9326	5.39 ug/L	99
114) trans-1,4-dichloro-2-buten	16.75	53	2151	5.11 ug/L #	63
115) 1,2,3-trichloropropane	16.77	110	2116	5.12 ug/L #	70
116) n-propylbenzene	16.81	91	51961	6.58 ug/L	99
118) 2-chlorotoluene	16.96	126	10811	6.38 ug/L	98
119) 4-chlorotoluene	17.08	91	32220	6.31 ug/L	99
120) 1,3,5-trimethylbenzene	16.99	105	36935	6.40 ug/L	97
121) tert-butylbenzene	17.38	119	31635	6.58 ug/L	99
122) pentachloroethane	17.46	167	6941	5.90 ug/L	97
123) 1,2,4-trimethylbenzene	17.43	105	36901	6.26 ug/L	97
125) sec-butylbenzene	17.62	105	48405	6.57 ug/L	99
126) 1,3-dichlorobenzene	17.80	146	21598	6.15 ug/L	99
127) p-isopropyltoluene	17.75	119	39741	6.52 ug/L	99
128) 1,4-dichlorobenzene	17.89	146	21784	6.03 ug/L	99
129) 1,2-dichlorobenzene	18.29	146	19645	5.80 ug/L	99
130) benzyl chloride	18.01	91	18314	5.29 ug/L	99
132) n-butylbenzene	18.18	92	20480	6.40 ug/L	96
134) 1,2-dibromo-3-chloropropan	19.03	75	1287	4.64 ug/L	100
135) 1,3,5-trichlorobenzene	19.20	180	15044	5.57 ug/L	92
136) hexachlorobutadiene	19.90	225	8494	6.22 ug/L	97
137) naphthalene	20.05	128	17124	4.06 ug/L	99
138) 1,2,4-trichlorobenzene	19.79	180	9509	4.51 ug/L	98
139) 1,2,3-trichlorobenzene	20.28	180	7355	4.33 ug/L	99
140) hexachloroethane	18.54	201	7006	6.14 ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140616.D
Acq On : 11 Oct 2013 10:51 am
Operator : natet
Sample : ic6084-5
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 14 09:07:31 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:00:45 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140617.D
Acq On : 11 Oct 2013 11:21 am
Operator : natet
Sample : ic6084-2
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 14 09:15:22 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:07:46 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.94	65	71929	500.00	ug/L	0.00
5) pentafluorobenzene	9.61	168	195204	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.76	114	292523	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	262439	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.87	152	128952	50.00	ug/L	0.00

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.65	113	4151	2.44	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 4.88%#			
55) 1,2-dichloroethane-d4 (s)	10.18	65	4035	2.33	ug/L	0.02
Spiked Amount 50.000	Range 65 - 123		Recovery = 4.66%#			
85) toluene-d8 (s)	12.97	98	15751	2.42	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 4.84%#			
111) 4-bromofluorobenzene (s)	0.00	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 71 - 132		Recovery = 0.00%#			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.09	59	1594	9.28	ug/L	100
3) ethyl alcohol	5.64	45	3580	286.93	ug/L #	67
11) chlorodifluoromethane	3.57	51	2886	2.38	ug/L	79
12) dichlorodifluoromethane	3.57	85	3030	2.08	ug/L	90
15) chloromethane	3.84	50	4989	2.45	ug/L	97
16) vinyl chloride	4.08	62	4129	2.27	ug/L	98
19) chloroethane	4.88	64	2421	2.48	ug/L	97
21) trichlorofluoromethane	5.33	101	5073	2.28	ug/L	90
23) ethyl ether	5.76	74	1678	2.16	ug/L	89
27) acrolein	6.02	56	615284	2395.22	ug/L #	98
28) 1,1-dichloroethene	6.20	96	3014	2.36	ug/L	86
30) allyl chloride	6.77	76	1893	2.23	ug/L	87
32) iodomethane	6.48	142	5852	2.22	ug/L	92
33) iso-butyl alcohol	10.03	43	1623	23.68	ug/L	86
34) carbon disulfide	6.62	76	10656	2.29	ug/L	94
35) methylene chloride	6.97	84	4390	2.60	ug/L	93
36) methyl acetate	6.78	43	2219	2.28	ug/L #	57
37) methyl tert butyl ether	7.35	73	9381	2.30	ug/L	90
38) trans-1,2-dichloroethene	7.40	96	3599	2.39	ug/L	95
39) di-isopropyl ether	8.05	45	11745	2.27	ug/L #	56
41) 1,1-dichloroethane	8.05	63	6276	2.26	ug/L	99
42) chloroprene	8.18	53	4667	2.25	ug/L	93
43) acrylonitrile	7.35	53	4839	10.43	ug/L	93
45) ethyl tert-butyl ether	8.60	59	10829	2.21	ug/L	99
47) 2,2-dichloropropane	8.92	77	4937	2.37	ug/L	92
48) cis-1,2-dichloroethene	8.94	96	3918	2.25	ug/L #	81
49) propionitrile	9.04	54	3972	21.37	ug/L	78
50) tert-Butyl Formate	9.44	59	2537	2.09	ug/L #	93
51) bromochloromethane	9.31	128	1793	2.18	ug/L	90
53) chloroform	9.40	83	6460	2.30	ug/L	99
57) methacrylonitrile	9.26	41	1815	2.36	ug/L	96
58) 1,1,1-trichloroethane	9.70	97	5130	2.32	ug/L	86
59) cyclohexane	9.78	84	5023	2.35	ug/L	76

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140617.D
Acq On : 11 Oct 2013 11:21 am
Operator : natet
Sample : ic6084-2
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 14 09:15:22 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:07:46 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
61) iso-octane	10.28	57	12884	2.37	ug/L		87
64) epichlorohydrin	12.46	57	1557	11.19	ug/L		85
65) n-butyl alcohol	11.01	56	4189	98.91	ug/L		92
66) carbon tetrachloride	9.96	117	4501	2.29	ug/L		93
67) 1,1-dichloropropene	9.93	75	4715	2.30	ug/L		88
68) hexane	7.75	57	4523	2.38	ug/L		96
69) benzene	10.26	78	14576	2.27	ug/L		100
70) tert-amyl methyl ether	10.34	73	10104	2.21	ug/L		96
71) heptane	10.52	57	2718	2.27	ug/L		89
72) isopropyl acetate	10.23	43	6410	2.54	ug/L		87
73) 1,2-dichloroethane	10.29	62	4383	2.20	ug/L		96
74) trichloroethene	11.20	130	3500	2.17	ug/L		92
78) 2-chloroethyl vinyl ether	12.32	63	10952	11.03	ug/L		99
79) methyl methacrylate	11.62	69	1988	2.03	ug/L	#	68
80) 1,2-dichloropropane	11.55	63	3831	2.20	ug/L		98
81) dibromomethane	11.76	93	2115	2.16	ug/L		90
82) methylcyclohexane	11.49	83	5681	2.34	ug/L		96
83) bromodichloromethane	11.96	83	4806	2.17	ug/L		99
84) cis-1,3-dichloropropene	12.59	75	5974	2.14	ug/L		92
86) 4-methyl-2-pentanone	12.75	58	1179	2.12	ug/L	#	78
87) toluene	13.08	92	9128	2.23	ug/L		97
88) 3-methyl-1-butanol	12.82	55	2898	43.38	ug/L		94
89) trans-1,3-dichloropropene	13.37	75	5159	2.09	ug/L		97
90) ethyl methacrylate	13.41	69	4052	2.05	ug/L		94
91) 1,1,2-trichloroethane	13.65	83	2729	2.25	ug/L		97
92) 2-hexanone	13.94	58	919	1.73	ug/L	#	74
94) 3,3-Dimethyl-1-butanol	14.17	57	3437	23.26	ug/L	#	98
95) tetrachloroethene	13.87	164	3160	2.19	ug/L		97
96) 1,3-dichloropropane	13.89	76	4908	2.13	ug/L		96
97) butyl acetate	14.05	56	2132	2.17	ug/L		89
98) dibromochloromethane	14.24	129	3830	2.19	ug/L		90
99) 1,2-dibromoethane	14.42	107	3158	2.16	ug/L		93
101) chlorobenzene	15.05	112	10354	2.21	ug/L		95
102) 1,1,1,2-tetrachloroethane	15.15	131	3683	2.14	ug/L		96
103) ethylbenzene	15.15	91	17392	2.21	ug/L		99
104) m,p-xylene	15.30	106	13568	4.54	ug/L		97
105) o-xylene	15.84	106	6736	2.27	ug/L		93
106) styrene	15.86	104	11106	2.14	ug/L		94
107) bromoform	16.18	173	2478	2.05	ug/L		98
109) isopropylbenzene	16.30	105	17259	2.34	ug/L		99
110) Cyclohexanone	16.49	55	4874	24.03	ug/L		99
112) bromobenzene	16.76	156	4607	2.25	ug/L		96
113) 1,1,2,2-tetrachloroethane	16.69	83	4266	2.33	ug/L		99
115) 1,2,3-trichloropropane	16.77	110	922	2.13	ug/L	#	32
116) n-propylbenzene	16.81	91	20122	2.31	ug/L		99
118) 2-chlorotoluene	16.96	126	4325	2.33	ug/L		92
119) 4-chlorotoluene	17.08	91	12969	2.33	ug/L		98
120) 1,3,5-trimethylbenzene	16.99	105	14631	2.32	ug/L		96
121) tert-butylbenzene	17.38	119	12426	2.35	ug/L		97
122) pentachloroethane	17.46	167	2665	2.10	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140617.D
Acq On : 11 Oct 2013 11:21 am
Operator : natet
Sample : ic6084-2
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 14 09:15:22 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:07:46 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
123) 1,2,4-trimethylbenzene	17.43	105	14638	2.28 ug/L	99
125) sec-butylbenzene	17.62	105	18920	2.33 ug/L	99
126) 1,3-dichlorobenzene	17.80	146	8609	2.26 ug/L	100
127) p-isopropyltoluene	17.75	119	15163	2.26 ug/L	97
128) 1,4-dichlorobenzene	17.89	146	8873	2.27 ug/L	94
129) 1,2-dichlorobenzene	18.29	146	7973	2.19 ug/L	93
130) benzyl chloride	18.02	91	7563	2.07 ug/L	99
132) n-butylbenzene	18.18	92	7659	2.19 ug/L	95
134) 1,2-dibromo-3-chloropropan	19.03	75	568	1.98 ug/L	94
135) 1,3,5-trichlorobenzene	19.20	180	5772	2.01 ug/L	96
136) hexachlorobutadiene	19.90	225	3044	2.05 ug/L	91
140) hexachloroethane	18.54	201	2801	2.26 ug/L	97

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

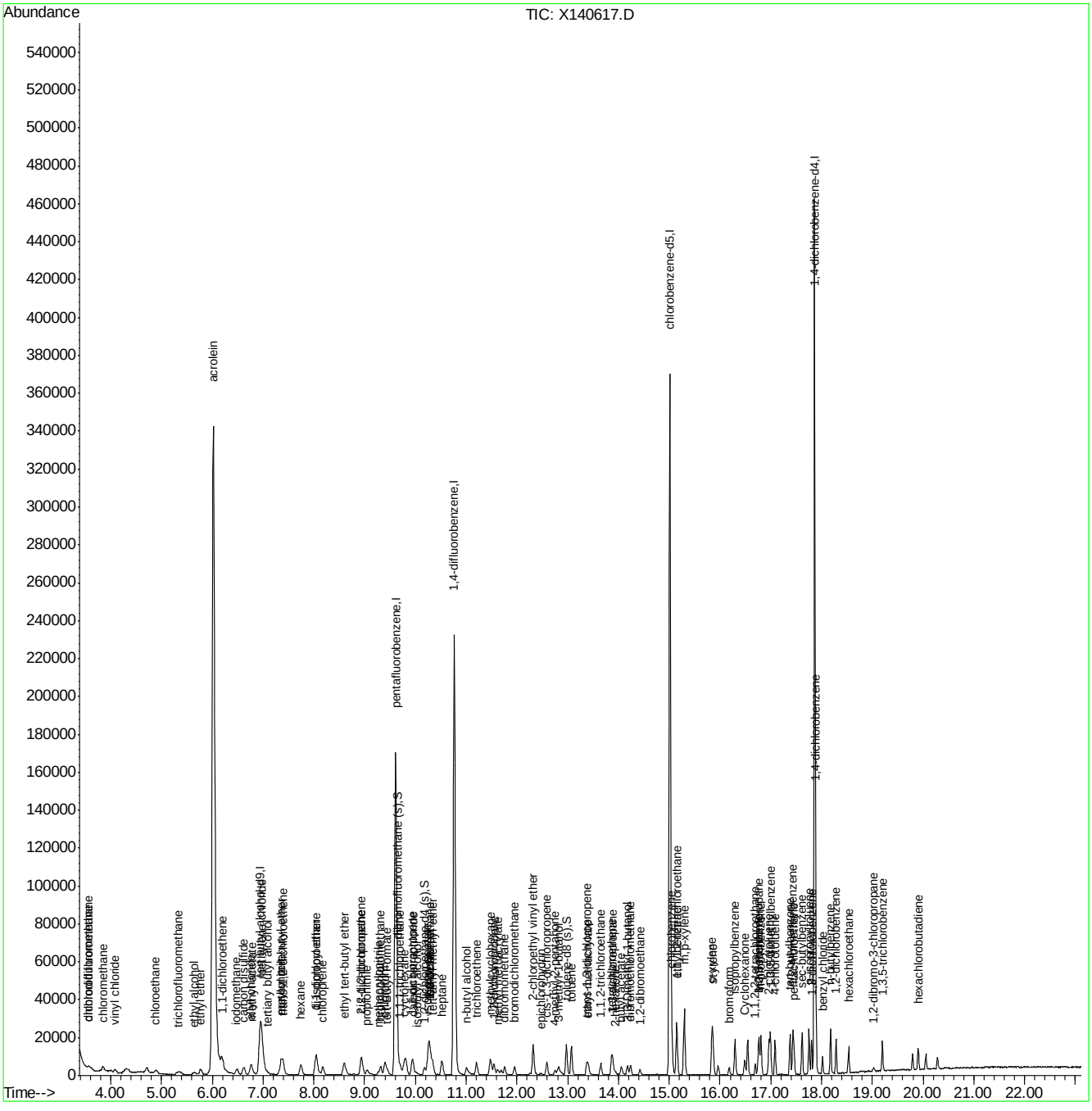
7.7.15

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140617.D
Acq On : 11 Oct 2013 11:21 am
Operator : natet
Sample : ic6084-2
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 14 09:15:22 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:07:46 2013
Response via : Initial Calibration



ACCUTEST LABORATORIES JB53758

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140618.D
Acq On : 11 Oct 2013 11:50 am
Operator : natet
Sample : ic6084-1
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 14 09:38:00 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:18:00 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.94	65	59190	500.00	ug/L	0.00
5) pentafluorobenzene	9.61	168	204226	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.76	114	303466	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	269727	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.87	152	127753	50.00	ug/L	0.00

System Monitoring Compounds

54) dibromofluoromethane (s)	0.00	113	0d	0.00	ug/L	
Spiked Amount 50.000	Range 59 - 130		Recovery	=	0.00%#	
55) 1,2-dichloroethane-d4 (s)	0.00	65	0d	0.00	ug/L	
Spiked Amount 50.000	Range 65 - 123		Recovery	=	0.00%#	
85) toluene-d8 (s)	0.00	98	0d	0.00	ug/L	
Spiked Amount 50.000	Range 80 - 124		Recovery	=	0.00%#	
111) 4-bromofluorobenzene (s)	0.00	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 71 - 132		Recovery	=	0.00%#	

Target Compounds

						Qvalue
11) chlorodifluoromethane	3.57	51	1309	1.00	ug/L	62
12) dichlorodifluoromethane	3.58	85	1457	0.95	ug/L #	47
15) chloromethane	3.83	50	2719	1.24	ug/L	89
16) vinyl chloride	4.09	62	2012	1.04	ug/L	90
19) chloroethane	4.88	64	1148	1.09	ug/L #	62
21) trichlorofluoromethane	5.35	101	2483	1.05	ug/L	94
23) ethyl ether	5.77	74	914	1.11	ug/L #	55
27) acrolein	6.02	56	280521	1004.11	ug/L #	99
28) 1,1-dichloroethene	6.20	96	1610	1.18	ug/L #	76
30) allyl chloride	6.76	76	839	0.93	ug/L #	60
32) iodomethane	6.48	142	3186	1.14	ug/L	88
34) carbon disulfide	6.63	76	5649	1.14	ug/L	96
37) methyl tert butyl ether	7.34	73	4555	1.05	ug/L	84
38) trans-1,2-dichloroethene	7.39	96	1965	1.21	ug/L	88
39) di-isopropyl ether	8.05	45	5616	1.02	ug/L #	55
41) 1,1-dichloroethane	8.05	63	3289	1.11	ug/L	90
42) chloroprene	8.18	53	2091	0.95	ug/L	82
43) acrylonitrile	7.37	53	1951	4.00	ug/L	91
45) ethyl tert-butyl ether	8.60	59	4943	0.95	ug/L	98
47) 2,2-dichloropropane	8.92	77	2644	1.18	ug/L	90
48) cis-1,2-dichloroethene	8.93	96	2099	1.13	ug/L	85
49) propionitrile	9.05	54	1710	8.71	ug/L	79
50) tert-Butyl Formate	9.45	59	1102	0.86	ug/L #	43
51) bromochloromethane	9.32	128	815	0.93	ug/L #	75
53) chloroform	9.41	83	3625	1.21	ug/L	88
57) methacrylonitrile	9.27	41	640	0.78	ug/L	85
58) 1,1,1-trichloroethane	9.70	97	2787	1.18	ug/L	81
59) cyclohexane	9.78	84	2667	1.17	ug/L	70
61) iso-octane	10.28	57	5653	0.97	ug/L	88
64) epichlorohydrin	12.48	57	594	4.05	ug/L	57
66) carbon tetrachloride	9.95	117	2522	1.21	ug/L	90
67) 1,1-dichloropropene	9.93	75	2510	1.15	ug/L	91
68) hexane	7.74	57	2151	1.06	ug/L	89

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140618.D
Acq On : 11 Oct 2013 11:50 am
Operator : natet
Sample : ic6084-1
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 14 09:38:00 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:18:00 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
69) benzene	10.26	78	8036	1.19 ug/L	98
70) tert-amyl methyl ether	10.33	73	4565	0.95 ug/L	97
71) heptane	10.52	57	1188	0.94 ug/L	96
72) isopropyl acetate	10.24	43	2955	1.09 ug/L #	56
73) 1,2-dichloroethane	10.29	62	2223	1.06 ug/L	87
74) trichloroethene	11.20	130	1776	1.05 ug/L	93
78) 2-chloroethyl vinyl ether	12.32	63	4648	4.45 ug/L	94
79) methyl methacrylate	11.63	69	710	0.70 ug/L #	74
80) 1,2-dichloropropane	11.55	63	2063	1.13 ug/L	93
81) dibromomethane	11.76	93	1063	1.03 ug/L	80
82) methylcyclohexane	11.47	83	2363	0.92 ug/L	96
83) bromodichloromethane	11.95	83	2484	1.07 ug/L	93
84) cis-1,3-dichloropropene	12.59	75	3135	1.07 ug/L	96
87) toluene	13.07	92	4908	1.14 ug/L	88
88) 3-methyl-1-butanol	12.82	55	1159	16.53 ug/L	87
89) trans-1,3-dichloropropene	13.37	75	2653	1.03 ug/L	97
90) ethyl methacrylate	13.41	69	1936	0.94 ug/L	88
91) 1,1,2-trichloroethane	13.65	83	1375	1.07 ug/L #	77
94) 3,3-Dimethyl-1-butanol	14.17	57	1248	8.03 ug/L #	98
95) tetrachloroethene	13.87	164	1642	1.09 ug/L	94
96) 1,3-dichloropropane	13.89	76	2650	1.11 ug/L	97
97) butyl acetate	14.06	56	832	0.82 ug/L #	74
98) dibromochloromethane	14.24	129	1783	0.98 ug/L	97
99) 1,2-dibromoethane	14.43	107	1577	1.04 ug/L	87
101) chlorobenzene	15.05	112	5659	1.16 ug/L	90
102) 1,1,1,2-tetrachloroethane	15.15	131	2004	1.12 ug/L	91
103) ethylbenzene	15.15	91	9528	1.16 ug/L	94
104) m,p-xylene	15.29	106	7459	2.38 ug/L	96
105) o-xylene	15.84	106	3653	1.17 ug/L	92
106) styrene	15.86	104	5974	1.11 ug/L	97
107) bromoform	16.18	173	1089	0.87 ug/L	87
109) isopropylbenzene	16.29	105	9027	1.21 ug/L	98
110) Cyclohexanone	16.49	55	2015	9.75 ug/L	92
112) bromobenzene	16.76	156	2421	1.17 ug/L	98
113) 1,1,2,2-tetrachloroethane	16.69	83	2081	1.12 ug/L	99
115) 1,2,3-trichloropropane	16.77	110	417	0.96 ug/L #	30
116) n-propylbenzene	16.81	91	10648	1.21 ug/L	99
118) 2-chlorotoluene	16.97	126	2310	1.23 ug/L	97
119) 4-chlorotoluene	17.08	91	6776	1.20 ug/L	95
120) 1,3,5-trimethylbenzene	16.99	105	7869	1.23 ug/L	98
122) pentachloroethane	17.46	167	1433	1.13 ug/L	88
123) 1,2,4-trimethylbenzene	17.44	105	7959	1.23 ug/L	92
125) sec-butylbenzene	17.62	105	10137	1.23 ug/L	99
126) 1,3-dichlorobenzene	17.80	146	4474	1.16 ug/L	97
127) p-isopropyltoluene	17.75	119	8002	1.18 ug/L	97
128) 1,4-dichlorobenzene	17.89	146	4906	1.24 ug/L	96
129) 1,2-dichlorobenzene	18.29	146	4137	1.13 ug/L	92
130) benzyl chloride	18.02	91	3193	0.88 ug/L	97
132) n-butylbenzene	18.18	92	3997	1.14 ug/L	90
135) 1,3,5-trichlorobenzene	19.20	180	2884	1.01 ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140618.D
Acq On : 11 Oct 2013 11:50 am
Operator : natet
Sample : ic6084-1
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 14 09:38:00 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:18:00 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
136) hexachlorobutadiene	19.90	225	1536	1.04 ug/L	99
140) hexachloroethane	18.53	201	1368	1.09 ug/L	95

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

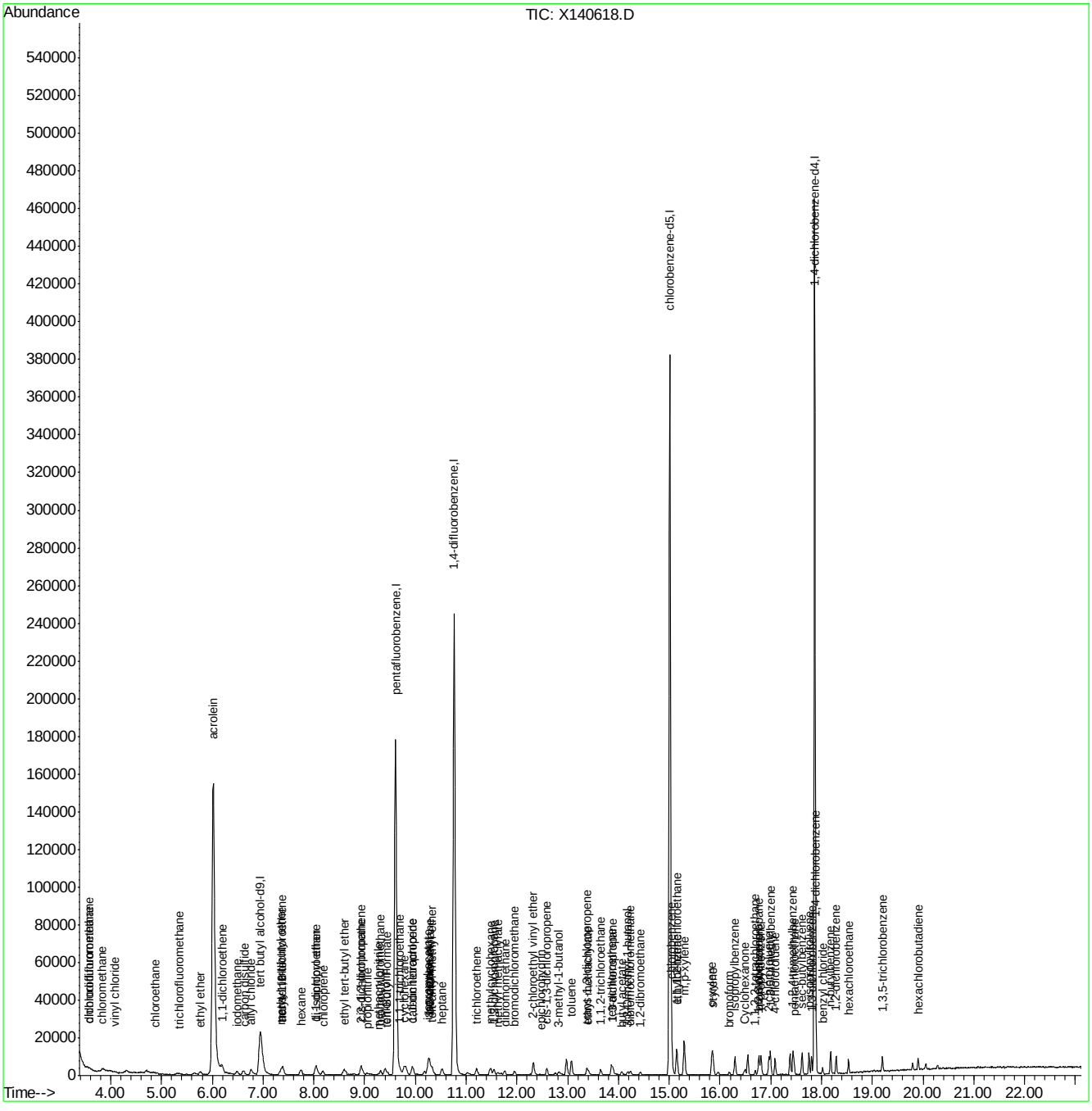
7.7.16

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140618.D
Acq On : 11 Oct 2013 11:50 am
Operator : natet
Sample : ic6084-1
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 14 09:38:00 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:18:00 2013
Response via : Initial Calibration



MX6084.M Tue Oct 15 14:33:25 2013 GCMSX Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140619.D
Acq On : 11 Oct 2013 12:20 pm
Operator : natet
Sample : ic6084-0.5
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 14 09:36:05 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:24:13 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.94	65	60290	500.00	ug/L	0.00
5) pentafluorobenzene	9.61	168	200709	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.76	114	297346	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	261410	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.87	152	120394	50.00	ug/L	0.00

System Monitoring Compounds

54) dibromofluoromethane (s)	0.00	113	0d	0.00	ug/L	
Spiked Amount 50.000	Range 59 - 130		Recovery	=	0.00%#	
55) 1,2-dichloroethane-d4 (s)	0.00	65	0d	0.00	ug/L	
Spiked Amount 50.000	Range 65 - 123		Recovery	=	0.00%#	
85) toluene-d8 (s)	0.00	98	0d	0.00	ug/L	
Spiked Amount 50.000	Range 80 - 124		Recovery	=	0.00%#	
111) 4-bromofluorobenzene (s)	0.00	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 71 - 132		Recovery	=	0.00%#	

Target Compounds

						Qvalue
11) chlorodifluoromethane	3.58	51	745	0.58	ug/L	62
12) dichlorodifluoromethane	3.58	85	588	0.39	ug/L #	47
15) chloromethane	3.83	50	1299	0.58	ug/L	92
16) vinyl chloride	4.06	62	927	0.48	ug/L #	49
21) trichlorofluoromethane	5.36	101	1027	0.44	ug/L	87
28) 1,1-dichloroethene	6.19	96	622	0.45	ug/L #	58
32) iodomethane	6.49	142	1340	0.48	ug/L	83
34) carbon disulfide	6.62	76	2129	0.43	ug/L	77
37) methyl tert butyl ether	7.34	73	2382	0.55	ug/L	83
38) trans-1,2-dichloroethene	7.40	96	732	0.45	ug/L #	74
39) di-isopropyl ether	8.04	45	3352	0.62	ug/L #	47
41) 1,1-dichloroethane	8.04	63	1460	0.49	ug/L	87
42) chloroprene	8.17	53	1199	0.56	ug/L	77
45) ethyl tert-butyl ether	8.60	59	2780	0.55	ug/L	92
48) cis-1,2-dichloroethene	8.94	96	897	0.48	ug/L	88
50) tert-Butyl Formate	9.45	59	506	0.41	ug/L #	71
51) bromochloromethane	9.33	128	376	0.44	ug/L #	73
53) chloroform	9.39	83	1767	0.58	ug/L	88
58) 1,1,1-trichloroethane	9.70	97	1082	0.46	ug/L #	44
61) iso-octane	10.27	57	3301	0.58	ug/L	73
66) carbon tetrachloride	9.94	117	928	0.44	ug/L	77
67) 1,1-dichloropropene	9.93	75	970	0.45	ug/L	93
69) benzene	10.26	78	3442	0.51	ug/L	96
70) tert-amyl methyl ether	10.33	73	2676	0.57	ug/L	97
71) heptane	10.52	57	655	0.53	ug/L	90
73) 1,2-dichloroethane	10.30	62	951	0.46	ug/L #	49
74) trichloroethene	11.20	130	659	0.39	ug/L	87
78) 2-chloroethyl vinyl ether	12.32	63	2595	2.57	ug/L	98
80) 1,2-dichloropropane	11.54	63	861	0.47	ug/L #	47
81) dibromomethane	11.76	93	358	0.35	ug/L	94
82) methylcyclohexane	11.48	83	1436	0.57	ug/L	90
83) bromodichloromethane	11.95	83	1181	0.51	ug/L	93
84) cis-1,3-dichloropropene	12.60	75	1331	0.46	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140619.D
Acq On : 11 Oct 2013 12:20 pm
Operator : natet
Sample : ic6084-0.5
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 14 09:36:05 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:24:13 2013
Response via : Initial Calibration

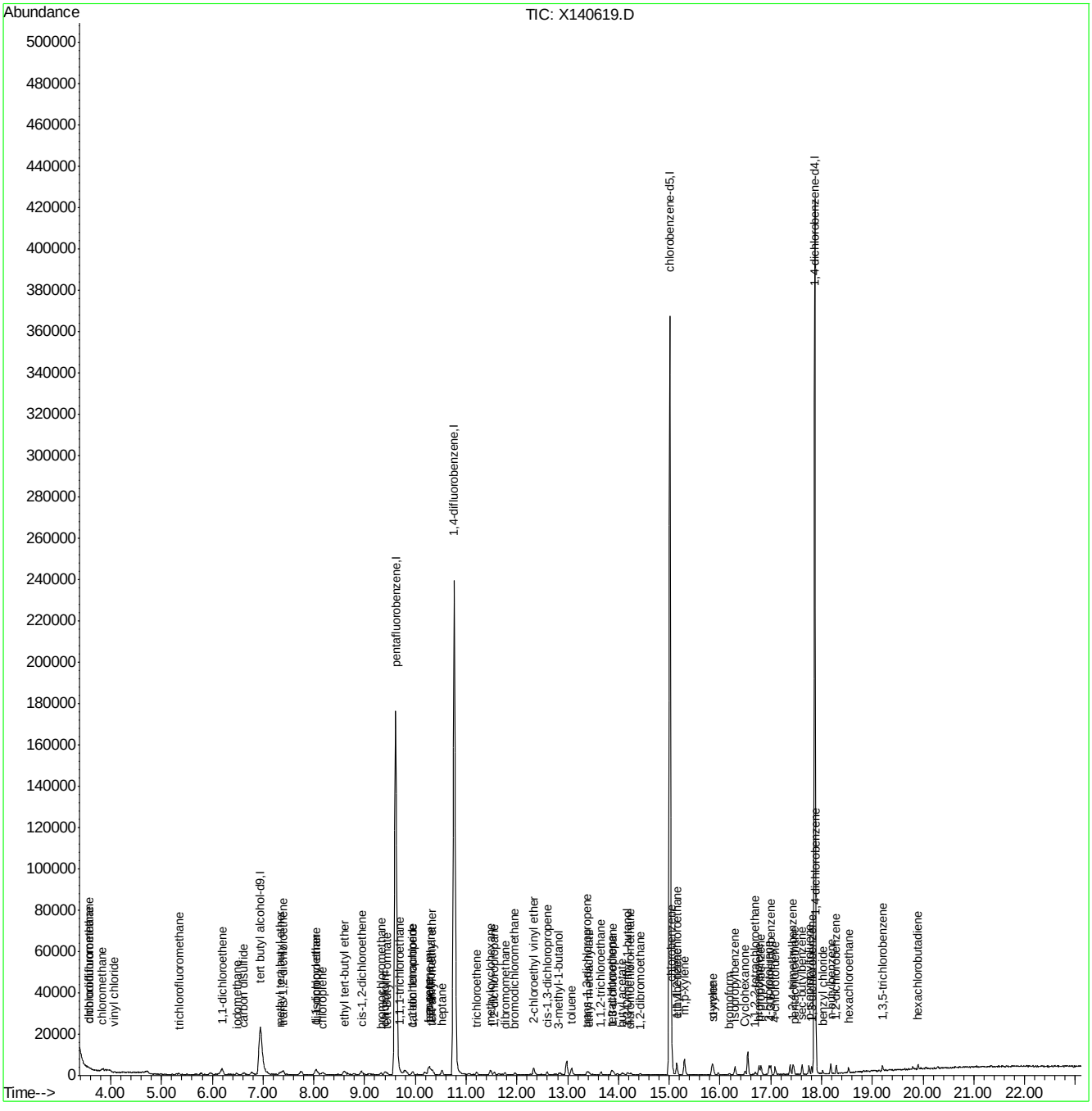
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
87) toluene	13.08	92	2257	0.52 ug/L	87
88) 3-methyl-1-butanol	12.83	55	545	8.11 ug/L #	16
89) trans-1,3-dichloropropene	13.38	75	1213	0.48 ug/L	96
90) ethyl methacrylate	13.42	69	833	0.42 ug/L	74
91) 1,1,2-trichloroethane	13.66	83	551	0.43 ug/L	82
94) 3,3-Dimethyl-1-butanol	14.18	57	750	5.11 ug/L #	66
95) tetrachloroethene	13.86	164	661	0.45 ug/L	80
96) 1,3-dichloropropane	13.90	76	1226	0.52 ug/L	86
97) butyl acetate	14.07	56	320	0.33 ug/L #	19
98) dibromochloromethane	14.23	129	862	0.49 ug/L	84
99) 1,2-dibromoethane	14.43	107	703	0.47 ug/L	78
101) chlorobenzene	15.05	112	2500	0.52 ug/L	89
102) 1,1,1,2-tetrachloroethane	15.15	131	868	0.49 ug/L	90
103) ethylbenzene	15.15	91	3991	0.49 ug/L	95
104) m,p-xylene	15.30	106	3288	1.06 ug/L	98
105) o-xylene	15.85	106	1554	0.50 ug/L	83
106) styrene	15.87	104	2634	0.50 ug/L	94
107) bromoform	16.19	173	584	0.49 ug/L	76
109) isopropylbenzene	16.30	105	3774	0.52 ug/L	91
110) Cyclohexanone	16.49	55	1032	5.31 ug/L	92
112) bromobenzene	16.77	156	1040	0.52 ug/L #	85
113) 1,1,2,2-tetrachloroethane	16.70	83	990	0.56 ug/L	95
116) n-propylbenzene	16.81	91	4597	0.54 ug/L	98
118) 2-chlorotoluene	16.96	126	961	0.53 ug/L #	78
119) 4-chlorotoluene	17.08	91	3103	0.57 ug/L	89
120) 1,3,5-trimethylbenzene	17.00	105	3271	0.53 ug/L	96
122) pentachloroethane	17.46	167	650	0.54 ug/L	87
123) 1,2,4-trimethylbenzene	17.43	105	3506	0.56 ug/L	98
125) sec-butylbenzene	17.62	105	4159	0.52 ug/L	94
126) 1,3-dichlorobenzene	17.81	146	2034	0.55 ug/L	89
127) p-isopropyltoluene	17.75	119	3315	0.51 ug/L	100
128) 1,4-dichlorobenzene	17.89	146	2110	0.55 ug/L	97
129) 1,2-dichlorobenzene	18.29	146	1829	0.52 ug/L	92
130) benzyl chloride	18.02	91	1811	0.54 ug/L #	61
132) n-butylbenzene	18.18	92	1568	0.47 ug/L	94
135) 1,3,5-trichlorobenzene	19.20	180	1172	0.44 ug/L	97
136) hexachlorobutadiene	19.90	225	597	0.43 ug/L	93
140) hexachloroethane	18.53	201	513	0.43 ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140619.D
Acq On : 11 Oct 2013 12:20 pm
Operator : natet
Sample : ic6084-0.5
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 14 09:36:05 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:24:13 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140620.D
Acq On : 11 Oct 2013 12:50 pm
Operator : natet
Sample : ic6084-20
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 14 09:31:13 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:47:42 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.94	65	69607	500.00	ug/L	-0.01
5) pentafluorobenzene	9.61	168	200035	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.77	114	297292	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	264659	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.86	152	132837	50.00	ug/L	0.00

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.64	113	34332	20.55	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 41.10%#			
55) 1,2-dichloroethane-d4 (s)	10.17	65	35174	20.31	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 40.62%#			
85) toluene-d8 (s)	12.97	98	130654	20.73	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 41.46%#			
111) 4-bromofluorobenzene (s)	16.54	95	52528	22.22	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 44.44%#			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.08	59	16258	102.09	ug/L	100
3) ethyl alcohol	5.62	45	25448	2486.46	ug/L	92
4) 1,4-dioxane	11.72	88	7079	499.54	ug/L #	93
11) chlorodifluoromethane	3.56	51	23439	19.39	ug/L	99
12) dichlorodifluoromethane	3.56	85	29262	20.27	ug/L	96
15) chloromethane	3.84	50	42052	21.35	ug/L	99
16) vinyl chloride	4.08	62	37308	20.88	ug/L	96
18) bromomethane	4.71	94	26212	25.38	ug/L	99
19) chloroethane	4.88	64	21729	24.55	ug/L	97
21) trichlorofluoromethane	5.35	101	46297	21.34	ug/L	96
23) ethyl ether	5.76	74	15995	19.90	ug/L	99
27) acrolein	6.02	56	54666	201.42	ug/L #	97
28) 1,1-dichloroethene	6.19	96	25414	19.71	ug/L	95
29) acetone	6.26	58	2243	18.39	ug/L #	79
30) allyl chloride	6.76	76	17198	20.42	ug/L	97
31) acetonitrile	6.72	40	22562	209.96	ug/L	98
32) iodomethane	6.48	142	52273	19.43	ug/L	100
33) iso-butyl alcohol	9.99	43	13882	198.27	ug/L	98
34) carbon disulfide	6.61	76	90350	19.22	ug/L	100
35) methylene chloride	6.97	84	33924	20.29	ug/L	97
36) methyl acetate	6.76	43	19489	19.19	ug/L #	99
37) methyl tert butyl ether	7.34	73	82146	19.64	ug/L	100
38) trans-1,2-dichloroethene	7.39	96	30195	19.88	ug/L	99
39) di-isopropyl ether	8.03	45	104172	19.81	ug/L	90
40) 2-butanone	8.91	72	3147	19.20	ug/L	86
41) 1,1-dichloroethane	8.03	63	56094	20.02	ug/L	98
42) chloroprene	8.17	53	41575	19.65	ug/L	98
43) acrylonitrile	7.33	53	47895	97.88	ug/L	98
44) vinyl acetate	8.05	86	4398	18.61	ug/L	78
45) ethyl tert-butyl ether	8.59	59	97488	19.38	ug/L	99
46) ethyl acetate	8.94	70	3369	19.85	ug/L	95
47) 2,2-dichloropropane	8.92	77	41556	20.32	ug/L	97
48) cis-1,2-dichloroethene	8.92	96	34734	19.78	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140620.D
Acq On : 11 Oct 2013 12:50 pm
Operator : natet
Sample : ic6084-20
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 14 09:31:13 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:47:42 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) propionitrile	9.01	54	38360	192.92	ug/L	96
50) tert-Butyl Formate	9.44	59	24573	19.35	ug/L #	100
51) bromochloromethane	9.31	128	16317	19.09	ug/L	96
52) tetrahydrofuran	9.38	72	3495	18.82	ug/L	91
53) chloroform	9.39	83	55770	19.71	ug/L	97
56) freon 113	6.17	151	19062	18.71	ug/L	98
57) methacrylonitrile	9.24	41	15560	19.45	ug/L	99
58) 1,1,1-trichloroethane	9.69	97	43471	19.50	ug/L	98
59) cyclohexane	9.78	84	40460	18.68	ug/L	96
60) tert amyl alcohol	10.15	59	14738	101.13	ug/L	99
61) iso-octane	10.28	57	106228	19.55	ug/L	99
64) epichlorohydrin	12.46	57	14356	100.13	ug/L	97
65) n-butyl alcohol	10.97	56	42682	932.77	ug/L	96
66) carbon tetrachloride	9.95	117	37783	18.95	ug/L	98
67) 1,1-dichloropropene	9.93	75	40080	19.43	ug/L	97
68) hexane	7.74	57	36728	19.44	ug/L	99
69) benzene	10.26	78	126819	19.81	ug/L	100
70) tert-amyl methyl ether	10.33	73	89347	19.15	ug/L	99
71) heptane	10.51	57	23150	19.48	ug/L	98
72) isopropyl acetate	10.21	43	52043	19.52	ug/L	97
73) 1,2-dichloroethane	10.28	62	39695	19.39	ug/L	99
74) trichloroethene	11.20	130	31569	19.38	ug/L	98
78) 2-chloroethyl vinyl ether	12.31	63	100206	97.92	ug/L	99
79) methyl methacrylate	11.60	69	19598	19.17	ug/L	97
80) 1,2-dichloropropane	11.54	63	34682	19.64	ug/L	99
81) dibromomethane	11.75	93	19391	19.08	ug/L	99
82) methylcyclohexane	11.48	83	46762	19.08	ug/L	99
83) bromodichloromethane	11.95	83	43067	18.87	ug/L	98
84) cis-1,3-dichloropropene	12.58	75	54937	19.20	ug/L	100
86) 4-methyl-2-pentanone	12.74	58	11456	19.36	ug/L	96
87) toluene	13.07	92	80843	19.71	ug/L	100
88) 3-methyl-1-butanol	12.80	55	27489	385.17	ug/L	98
89) trans-1,3-dichloropropene	13.36	75	48514	18.99	ug/L	98
90) ethyl methacrylate	13.39	69	39374	19.09	ug/L	99
91) 1,1,2-trichloroethane	13.65	83	24201	19.45	ug/L	99
92) 2-hexanone	13.91	58	10841	19.10	ug/L	95
94) 3,3-Dimethyl-1-butanol	14.16	57	30286	195.02	ug/L	100
95) tetrachloroethene	13.86	164	27598	19.10	ug/L	96
96) 1,3-dichloropropane	13.89	76	45600	19.64	ug/L	99
97) butyl acetate	14.04	56	19911	19.77	ug/L	98
98) dibromochloromethane	14.23	129	34638	19.39	ug/L	96
99) 1,2-dibromoethane	14.42	107	29124	19.54	ug/L	97
101) chlorobenzene	15.05	112	91687	19.77	ug/L	99
102) 1,1,1,2-tetrachloroethane	15.14	131	33666	19.46	ug/L	96
103) ethylbenzene	15.14	91	155333	20.11	ug/L	100
104) m,p-xylene	15.29	106	118375	40.49	ug/L	100
105) o-xylene	15.84	106	58830	20.05	ug/L	98
106) styrene	15.85	104	102185	19.58	ug/L	99
107) bromoform	16.18	173	23351	18.25	ug/L	99
109) isopropylbenzene	16.29	105	148748	20.79	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140620.D
Acq On : 11 Oct 2013 12:50 pm
Operator : natet
Sample : ic6084-20
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 14 09:31:13 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:47:42 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) Cyclohexanone	16.48	55	42013	215.91 ug/L	99
112) bromobenzene	16.76	156	41834	20.29 ug/L	98
113) 1,1,2,2-tetrachloroethane	16.69	83	37761	20.33 ug/L	97
114) trans-1,4-dichloro-2-buten	16.74	53	9026	19.56 ug/L	99
115) 1,2,3-trichloropropane	16.76	110	9132	20.52 ug/L #	79
116) n-propylbenzene	16.81	91	175500	20.72 ug/L	99
118) 2-chlorotoluene	16.96	126	37234	20.42 ug/L	97
119) 4-chlorotoluene	17.08	91	113124	20.73 ug/L	99
120) 1,3,5-trimethylbenzene	16.99	105	127910	20.70 ug/L	99
121) tert-butylbenzene	17.38	119	106599	20.61 ug/L	99
122) pentachloroethane	17.46	167	26063	20.75 ug/L	97
123) 1,2,4-trimethylbenzene	17.43	105	129430	20.55 ug/L	99
125) sec-butylbenzene	17.62	105	164325	20.78 ug/L	99
126) 1,3-dichlorobenzene	17.80	146	75822	19.93 ug/L	98
127) p-isopropyltoluene	17.75	119	134621	20.60 ug/L	99
128) 1,4-dichlorobenzene	17.89	146	79470	20.39 ug/L	99
129) 1,2-dichlorobenzene	18.29	146	73854	20.19 ug/L	98
130) benzyl chloride	18.01	91	76314	20.84 ug/L	100
132) n-butylbenzene	18.18	92	70778	20.55 ug/L	100
134) 1,2-dibromo-3-chloropropan	19.03	75	5964	19.80 ug/L	92
135) 1,3,5-trichlorobenzene	19.20	180	59141	20.25 ug/L	97
136) hexachlorobutadiene	19.90	225	29929	20.33 ug/L	98
137) naphthalene	20.05	128	88998	18.69 ug/L	100
138) 1,2,4-trichlorobenzene	19.79	180	44361	18.76 ug/L	99
139) 1,2,3-trichlorobenzene	20.28	180	36733	19.30 ug/L	99
140) hexachloroethane	18.53	201	24804	19.92 ug/L	99

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

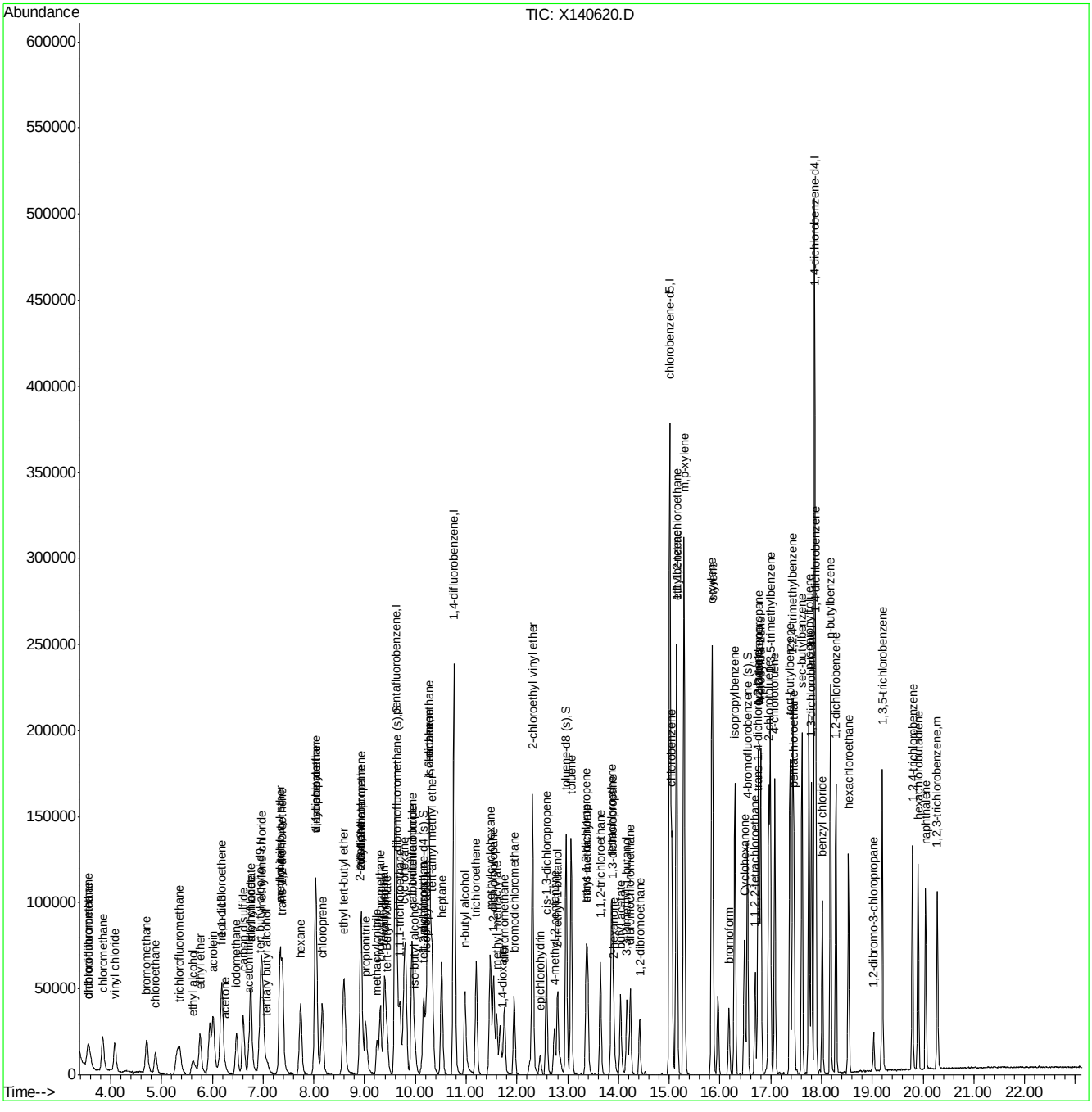
7.7.18

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140620.D
Acq On : 11 Oct 2013 12:50 pm
Operator : natet
Sample : ic6084-20
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 14 09:31:13 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:47:42 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140621.D
Acq On : 11 Oct 2013 1:19 pm
Operator : natet
Sample : icc6084-50
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 14 09:31:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:39:18 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.95	65	70056	500.00	ug/L	0.00
5) pentafluorobenzene	9.61	168	197753	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.77	114	293113	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	267378	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.86	152	140228	50.00	ug/L	0.00

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.65	113	84121	50.00	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 100.00%			
55) 1,2-dichloroethane-d4 (s)	10.16	65	87243	50.00	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 100.00%			
85) toluene-d8 (s)	12.97	98	315258	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 100.00%			
111) 4-bromofluorobenzene (s)	16.54	95	127532	50.00	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 100.00%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.08	59	40406	250.00	ug/L	100
3) ethyl alcohol	5.61	45	56640	5000.00	ug/L	100
4) 1,4-dioxane	11.71	88	17956	1250.00	ug/L #	100
11) chlorodifluoromethane	3.58	51	61332	50.00	ug/L	100
12) dichlorodifluoromethane	3.57	85	73907	50.00	ug/L	100
15) chloromethane	3.86	50	102245	50.00	ug/L	100
16) vinyl chloride	4.10	62	90851	50.00	ug/L	100
18) bromomethane	4.71	94	60720	50.00	ug/L	100
19) chloroethane	4.89	64	48875	50.00	ug/L	100
21) trichlorofluoromethane	5.35	101	111528	50.00	ug/L	100
23) ethyl ether	5.76	74	40080	50.00	ug/L	100
27) acrolein	6.02	56	134153	500.00	ug/L #	100
28) 1,1-dichloroethene	6.20	96	64930	50.00	ug/L	100
29) acetone	6.25	58	6247	50.00	ug/L	100
30) allyl chloride	6.76	76	41005	50.00	ug/L	100
31) acetonitrile	6.72	40	53743	500.00	ug/L	100
32) iodomethane	6.49	142	135446	50.00	ug/L	100
33) iso-butyl alcohol	10.00	43	33595	500.00	ug/L	100
34) carbon disulfide	6.61	76	237882	50.00	ug/L	100
35) methylene chloride	6.97	84	85299	50.00	ug/L	100
36) methyl acetate	6.75	43	49699	50.00	ug/L	100
37) methyl tert butyl ether	7.34	73	212601	50.00	ug/L	100
38) trans-1,2-dichloroethene	7.39	96	77149	50.00	ug/L	100
39) di-isopropyl ether	8.04	45	266144	50.00	ug/L	100
40) 2-butanone	8.90	72	8010	50.00	ug/L	100
41) 1,1-dichloroethane	8.04	63	142042	50.00	ug/L	100
42) chloroprene	8.17	53	106239	50.00	ug/L	100
43) acrylonitrile	7.33	53	121357	250.00	ug/L	100
44) vinyl acetate	8.05	86	11712	50.00	ug/L	100
45) ethyl tert-butyl ether	8.60	59	253047	50.00	ug/L	100
46) ethyl acetate	8.94	70	8227	50.00	ug/L	100
47) 2,2-dichloropropane	8.92	77	103485	50.00	ug/L	100
48) cis-1,2-dichloroethene	8.93	96	88110	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140621.D
Acq On : 11 Oct 2013 1:19 pm
Operator : natet
Sample : icc6084-50
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 14 09:31:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:39:18 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) propionitrile	9.01	54	98079	500.00 ug/L	100
50) tert-Butyl Formate	9.44	59	63162	50.00 ug/L #	100
51) bromochloromethane	9.31	128	42516	50.00 ug/L	100
52) tetrahydrofuran	9.37	72	9104	50.00 ug/L	100
53) chloroform	9.39	83	141155	50.00 ug/L	100
56) freon 113	6.17	151	51374	50.00 ug/L	100
57) methacrylonitrile	9.24	41	39077	50.00 ug/L	100
58) 1,1,1-trichloroethane	9.70	97	111694	50.00 ug/L	100
59) cyclohexane	9.79	84	109904	50.00 ug/L	100
60) tert amyl alcohol	10.14	59	35612	250.00 ug/L	100
61) iso-octane	10.28	57	276779	50.00 ug/L	100
64) epichlorohydrin	12.46	57	34830	250.00 ug/L	100
65) n-butyl alcohol	10.97	56	107928	2500.00 ug/L	100
66) carbon tetrachloride	9.95	117	99139	50.00 ug/L	100
67) 1,1-dichloropropene	9.93	75	102502	50.00 ug/L	100
68) hexane	7.74	57	94752	50.00 ug/L	100
69) benzene	10.26	78	322270	50.00 ug/L	100
70) tert-amyl methyl ether	10.33	73	231416	50.00 ug/L	100
71) heptane	10.52	57	58996	50.00 ug/L	100
72) isopropyl acetate	10.21	43	121094	50.00 ug/L	100
73) 1,2-dichloroethane	10.28	62	102287	50.00 ug/L	100
74) trichloroethene	11.20	130	80278	50.00 ug/L	100
78) 2-chloroethyl vinyl ether	12.31	63	251791	250.00 ug/L	100
79) methyl methacrylate	11.60	69	50707	50.00 ug/L	100
80) 1,2-dichloropropane	11.54	63	87410	50.00 ug/L	100
81) dibromomethane	11.75	93	50291	50.00 ug/L	100
82) methylcyclohexane	11.48	83	122355	50.00 ug/L	100
83) bromodichloromethane	11.95	83	112317	50.00 ug/L	100
84) cis-1,3-dichloropropene	12.58	75	141058	50.00 ug/L	100
86) 4-methyl-2-pentanone	12.74	58	28969	50.00 ug/L	100
87) toluene	13.07	92	205038	50.00 ug/L	100
88) 3-methyl-1-butanol	12.79	55	67837	1000.00 ug/L	100
89) trans-1,3-dichloropropene	13.36	75	126202	50.00 ug/L	100
90) ethyl methacrylate	13.39	69	101276	50.00 ug/L	100
91) 1,1,2-trichloroethane	13.65	83	61129	50.00 ug/L	100
92) 2-hexanone	13.91	58	27818	50.00 ug/L	100
94) 3,3-Dimethyl-1-butanol	14.17	57	76316	500.00 ug/L	100
95) tetrachloroethene	13.86	164	72476	50.00 ug/L	100
96) 1,3-dichloropropane	13.89	76	117486	50.00 ug/L	100
97) butyl acetate	14.04	56	50162	50.00 ug/L	100
98) dibromochloromethane	14.23	129	89248	50.00 ug/L	100
99) 1,2-dibromoethane	14.42	107	75167	50.00 ug/L	100
101) chlorobenzene	15.05	112	234784	50.00 ug/L	100
102) 1,1,1,2-tetrachloroethane	15.14	131	88746	50.00 ug/L	100
103) ethylbenzene	15.14	91	394256	50.00 ug/L	100
104) m,p-xylene	15.29	106	300963	100.00 ug/L	100
105) o-xylene	15.84	106	150843	50.00 ug/L	100
106) styrene	15.85	104	266561	50.00 ug/L	100
107) bromoform	16.18	173	63935	50.00 ug/L	100
109) isopropylbenzene	16.29	105	384273	50.00 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140621.D
Acq On : 11 Oct 2013 1:19 pm
Operator : natet
Sample : icc6084-50
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 14 09:31:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:39:18 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) Cyclohexanone	16.48	55	108422	500.00 ug/L	100
112) bromobenzene	16.76	156	109851	50.00 ug/L	100
113) 1,1,2,2-tetrachloroethane	16.69	83	99479	50.00 ug/L	100
114) trans-1,4-dichloro-2-buten	16.74	53	24069	50.00 ug/L	100
115) 1,2,3-trichloropropane	16.76	110	23748	50.00 ug/L	100
116) n-propylbenzene	16.81	91	455967	50.00 ug/L	100
118) 2-chlorotoluene	16.96	126	97877	50.00 ug/L	100
119) 4-chlorotoluene	17.08	91	292108	50.00 ug/L	100
120) 1,3,5-trimethylbenzene	16.99	105	332702	50.00 ug/L	100
121) tert-butylbenzene	17.38	119	276947	50.00 ug/L	100
122) pentachloroethane	17.46	167	67081	50.00 ug/L	100
123) 1,2,4-trimethylbenzene	17.43	105	336934	50.00 ug/L	100
125) sec-butylbenzene	17.62	105	425892	50.00 ug/L	100
126) 1,3-dichlorobenzene	17.80	146	203207	50.00 ug/L	100
127) p-isopropyltoluene	17.75	119	350570	50.00 ug/L	100
128) 1,4-dichlorobenzene	17.89	146	207075	50.00 ug/L	100
129) 1,2-dichlorobenzene	18.29	146	193613	50.00 ug/L	100
130) benzyl chloride	18.01	91	191900	50.00 ug/L	100
132) n-butylbenzene	18.18	92	184383	50.00 ug/L	100
134) 1,2-dibromo-3-chloropropan	19.03	75	15674	50.00 ug/L	100
135) 1,3,5-trichlorobenzene	19.20	180	153995	50.00 ug/L	100
136) hexachlorobutadiene	19.90	225	78941	50.00 ug/L	100
137) naphthalene	20.05	128	250888	50.00 ug/L	100
138) 1,2,4-trichlorobenzene	19.79	180	123085	50.00 ug/L	100
139) 1,2,3-trichlorobenzene	20.28	180	102929	50.00 ug/L	100
140) hexachloroethane	18.53	201	65699	50.00 ug/L	100

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

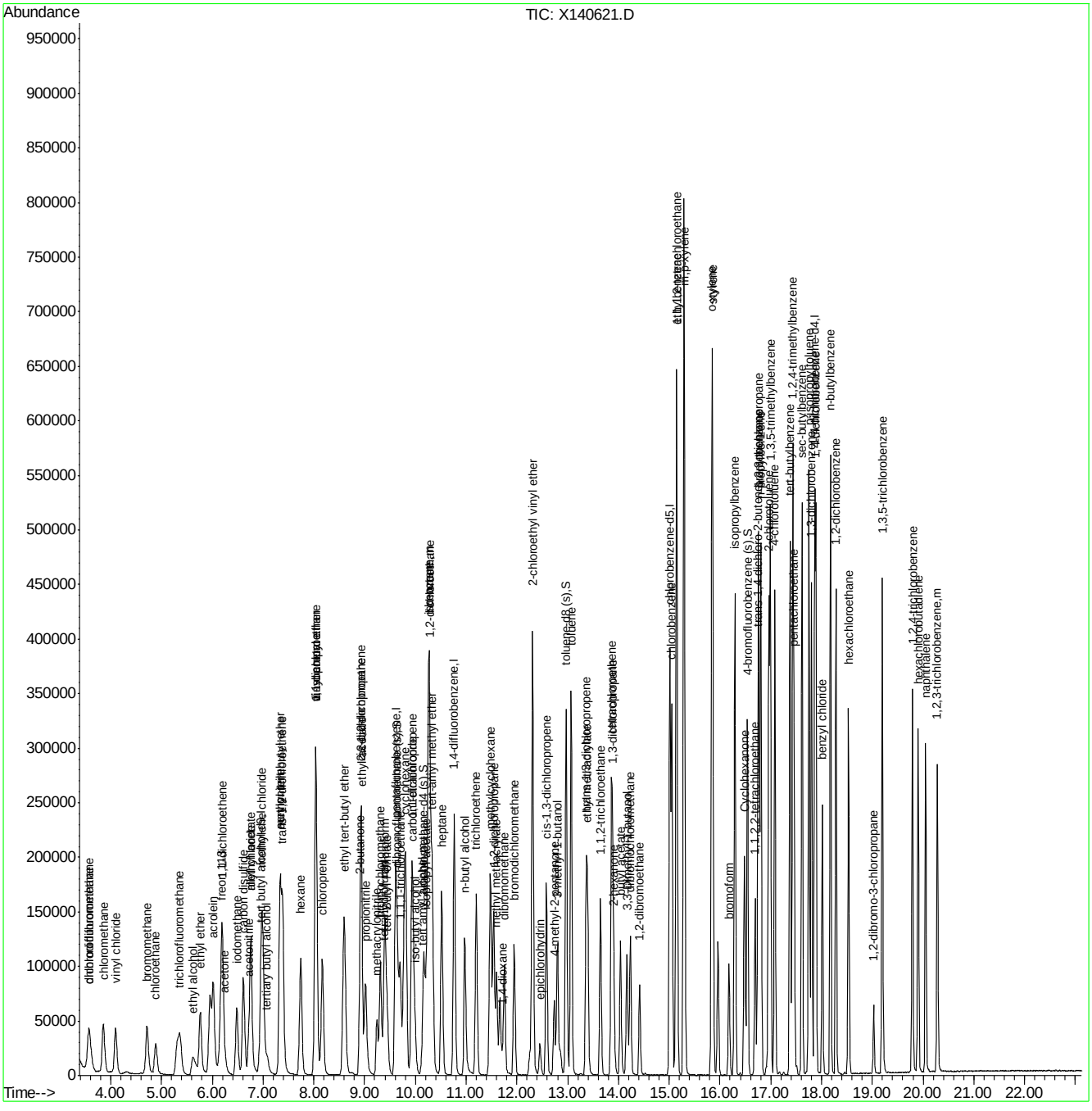
7.7.19

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140621.D
Acq On : 11 Oct 2013 1:19 pm
Operator : natet
Sample : icc6084-50
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 14 09:31:16 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:39:18 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140622.D
Acq On : 11 Oct 2013 1:48 pm
Operator : natet
Sample : ic6084-100
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 14 09:31:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:43:00 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.95	65	83472	500.00	ug/L	0.00
5) pentafluorobenzene	9.61	168	211373	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.77	114	314187	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	285916	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.87	152	152067	50.00	ug/L	0.00

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.65	113	161850	90.00	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 180.00%#			
55) 1,2-dichloroethane-d4 (s)	10.17	65	168901	90.56	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 181.12%#			
85) toluene-d8 (s)	12.97	98	606781	89.78	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 179.56%#			
111) 4-bromofluorobenzene (s)	16.54	95	246262	89.03	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 178.06%#			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.08	59	87023	451.89	ug/L	100
3) ethyl alcohol	5.63	45	111351	8249.84	ug/L	98
4) 1,4-dioxane	11.71	88	37057	2165.09	ug/L #	94
11) chlorodifluoromethane	3.58	51	117963	89.97	ug/L	98
12) dichlorodifluoromethane	3.57	85	139276	88.15	ug/L	98
15) chloromethane	3.86	50	188887	86.42	ug/L	99
16) vinyl chloride	4.10	62	173407	89.29	ug/L	99
18) bromomethane	4.71	94	105952	81.62	ug/L	99
19) chloroethane	4.89	64	86764	83.04	ug/L	98
21) trichlorofluoromethane	5.36	101	208367	87.40	ug/L	99
23) ethyl ether	5.76	74	78539	91.66	ug/L	95
28) 1,1-dichloroethene	6.19	96	126111	90.86	ug/L	99
29) acetone	6.26	58	12065	90.34	ug/L	99
30) allyl chloride	6.76	76	84750	96.68	ug/L	95
31) acetonitrile	6.72	40	107426	935.04	ug/L	85
32) iodomethane	6.48	142	261079	90.17	ug/L	98
33) iso-butyl alcohol	10.00	43	72175	1004.98	ug/L	98
34) carbon disulfide	6.61	76	457735	90.01	ug/L	100
35) methylene chloride	6.97	84	161411	88.52	ug/L	98
36) methyl acetate	6.75	43	102736	96.70	ug/L	99
37) methyl tert butyl ether	7.35	73	410601	90.34	ug/L	99
38) trans-1,2-dichloroethene	7.39	96	147386	89.37	ug/L	99
39) di-isopropyl ether	8.04	45	509282	89.51	ug/L	96
40) 2-butanone	8.90	72	16693	97.49	ug/L	100
41) 1,1-dichloroethane	8.04	63	272317	89.68	ug/L	98
42) chloroprene	8.17	53	205094	90.31	ug/L	99
43) acrylonitrile	7.33	53	246349	474.79	ug/L	100
44) vinyl acetate	8.05	86	23446	93.64	ug/L	93
45) ethyl tert-butyl ether	8.60	59	486853	90.00	ug/L	100
46) ethyl acetate	8.94	70	17282	98.26	ug/L	99
47) 2,2-dichloropropane	8.93	77	200460	90.61	ug/L	100
48) cis-1,2-dichloroethene	8.93	96	171449	91.02	ug/L	98
49) propionitrile	9.01	54	199725	952.58	ug/L	80

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140622.D
Acq On : 11 Oct 2013 1:48 pm
Operator : natet
Sample : ic6084-100
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 14 09:31:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:43:00 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) tert-Butyl Formate	9.44	59	125674	93.08 ug/L #	100
51) bromochloromethane	9.32	128	83461	91.83 ug/L	96
52) tetrahydrofuran	9.36	72	18548	95.30 ug/L	98
53) chloroform	9.40	83	275749	91.38 ug/L	98
56) freon 113	6.18	151	98650	89.83 ug/L	99
57) methacrylonitrile	9.24	41	79965	95.72 ug/L	97
58) 1,1,1-trichloroethane	9.70	97	218510	91.51 ug/L	98
59) cyclohexane	9.79	84	210927	89.78 ug/L	97
60) tert amyl alcohol	10.15	59	75861	498.24 ug/L	99
61) iso-octane	10.28	57	528040	89.24 ug/L	99
64) epichlorohydrin	12.45	57	71072	475.92 ug/L	98
65) n-butyl alcohol	10.97	56	234157	5060.11 ug/L	97
66) carbon tetrachloride	9.96	117	193464	91.03 ug/L	96
67) 1,1-dichloropropene	9.93	75	201006	91.47 ug/L	99
68) hexane	7.74	57	182236	89.71 ug/L	98
69) benzene	10.26	78	617672	89.40 ug/L	100
70) tert-amyl methyl ether	10.33	73	451767	91.06 ug/L	99
71) heptane	10.52	57	114713	90.70 ug/L	96
72) isopropyl acetate	10.21	43	248589	95.76 ug/L	100
73) 1,2-dichloroethane	10.28	62	197645	90.13 ug/L	98
74) trichloroethene	11.20	130	157666	91.61 ug/L	98
78) 2-chloroethyl vinyl ether	12.31	63	507734	470.31 ug/L	99
79) methyl methacrylate	11.60	69	101037	92.95 ug/L	97
80) 1,2-dichloropropane	11.54	63	170805	91.15 ug/L	96
81) dibromomethane	11.75	93	98772	91.61 ug/L	100
82) methylcyclohexane	11.48	83	235579	89.81 ug/L	98
83) bromodichloromethane	11.95	83	220575	91.61 ug/L	100
84) cis-1,3-dichloropropene	12.58	75	276176	91.33 ug/L	99
86) 4-methyl-2-pentanone	12.74	58	59322	95.52 ug/L	99
87) toluene	13.07	92	397070	90.33 ug/L	98
88) 3-methyl-1-butanol	12.80	55	145883	2006.25 ug/L	99
89) trans-1,3-dichloropropene	13.36	75	248913	92.00 ug/L	99
90) ethyl methacrylate	13.39	69	203663	93.80 ug/L	98
91) 1,1,2-trichloroethane	13.65	83	122284	93.31 ug/L	99
92) 2-hexanone	13.91	58	56982	95.55 ug/L	99
94) 3,3-Dimethyl-1-butanol	14.17	57	163716	1003.07 ug/L	99
95) tetrachloroethene	13.86	164	143716	92.72 ug/L	98
96) 1,3-dichloropropane	13.89	76	233340	92.87 ug/L	99
97) butyl acetate	14.04	56	103387	96.37 ug/L	99
98) dibromochloromethane	14.24	129	178888	93.72 ug/L	98
99) 1,2-dibromoethane	14.42	107	150152	93.40 ug/L	97
101) chlorobenzene	15.05	112	460709	91.75 ug/L	99
102) 1,1,1,2-tetrachloroethane	15.14	131	171119	90.16 ug/L	98
103) ethylbenzene	15.15	91	769554	91.27 ug/L	99
104) m,p-xylene	15.29	106	582796	181.09 ug/L	96
105) o-xylene	15.84	106	290110	89.93 ug/L	99
106) styrene	15.86	104	518764	91.00 ug/L	98
107) bromoform	16.18	173	128657	94.09 ug/L	99
109) isopropylbenzene	16.29	105	748967	89.87 ug/L	100
110) Cyclohexanone	16.48	55	203879	867.01 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140622.D
Acq On : 11 Oct 2013 1:48 pm
Operator : natet
Sample : ic6084-100
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 14 09:31:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:43:00 2013
Response via : Initial Calibration

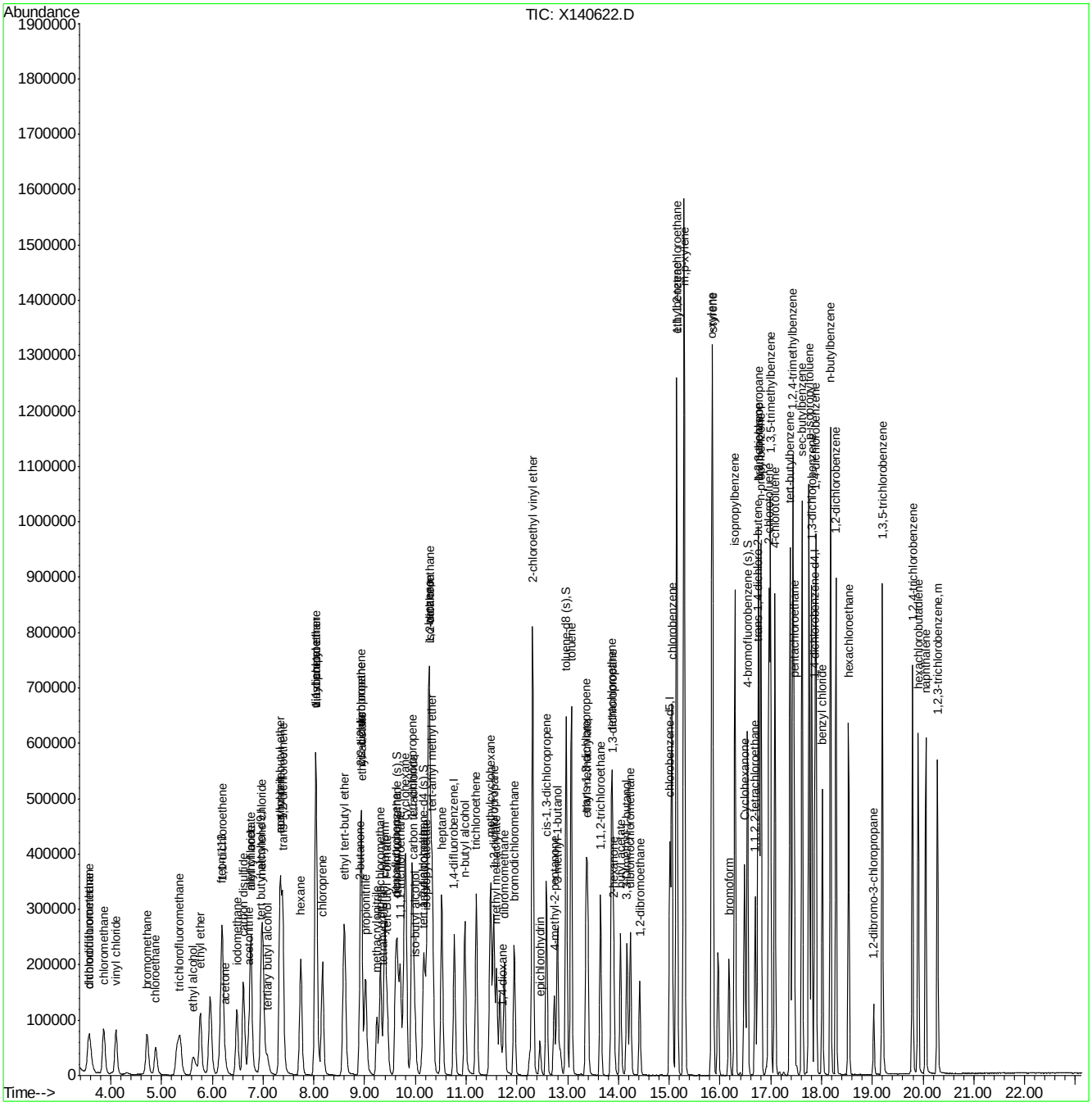
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
112) bromobenzene	16.76	156	215135	90.30 ug/L	97
113) 1,1,2,2-tetrachloroethane	16.69	83	197807	91.68 ug/L	100
114) trans-1,4-dichloro-2-buten	16.74	53	49573	94.96 ug/L	93
115) 1,2,3-trichloropropane	16.76	110	47586	92.39 ug/L	94
116) n-propylbenzene	16.81	91	888980	89.89 ug/L	100
118) 2-chlorotoluene	16.96	126	190121	89.56 ug/L	98
119) 4-chlorotoluene	17.08	91	570453	90.04 ug/L	99
120) 1,3,5-trimethylbenzene	16.99	105	645058	89.39 ug/L	99
121) tert-butylbenzene	17.38	119	542044	90.24 ug/L	98
122) pentachloroethane	17.47	167	131536	90.41 ug/L	98
123) 1,2,4-trimethylbenzene	17.43	105	660042	90.32 ug/L	100
125) sec-butylbenzene	17.62	105	827365	89.57 ug/L	100
126) 1,3-dichlorobenzene	17.80	146	397628	90.22 ug/L	98
127) p-isopropyltoluene	17.75	119	684727	90.06 ug/L	99
128) 1,4-dichlorobenzene	17.89	146	410630	91.43 ug/L	100
129) 1,2-dichlorobenzene	18.29	146	383834	91.41 ug/L	99
130) benzyl chloride	18.01	91	392139	94.22 ug/L	100
132) n-butylbenzene	18.18	92	363604	90.92 ug/L	98
134) 1,2-dibromo-3-chloropropan	19.02	75	32924	96.85 ug/L	94
135) 1,3,5-trichlorobenzene	19.20	180	309271	92.60 ug/L	99
136) hexachlorobutadiene	19.90	225	156105	91.18 ug/L	99
137) naphthalene	20.05	128	521302	95.80 ug/L	100
138) 1,2,4-trichlorobenzene	19.79	180	252036	94.41 ug/L	99
139) 1,2,3-trichlorobenzene	20.28	180	207234	92.83 ug/L	100
140) hexachloroethane	18.54	201	130341	91.47 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140622.D
Acq On : 11 Oct 2013 1:48 pm
Operator : natet
Sample : ic6084-100
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 14 09:31:19 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:43:00 2013
Response via : Initial Calibration



ACCUTEST LABORATORIES JB53758

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140623.D
Acq On : 11 Oct 2013 2:18 pm
Operator : natet
Sample : ic6084-200
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 15 14:31:22 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:58:56 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.96	65	68207	500.00	ug/L	0.02
5) pentafluorobenzene	9.61	168	193191	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.76	114	281347	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	257135	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.87	152	135541	50.00	ug/L	0.00

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.65	113	343745	211.65	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 423.30%#			
55) 1,2-dichloroethane-d4 (s)	10.17	65	353910	210.96	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 421.92%#			
85) toluene-d8 (s)	12.97	98	1281100	213.87	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 427.74%#			
111) 4-bromofluorobenzene (s)	16.54	95	515133	199.62	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 399.24%#			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.08	59	186348	1179.40	ug/L	100
3) ethyl alcohol	5.64	45	199172	17938.50	ug/L #	75
4) 1,4-dioxane	11.71	88	77800	5549.85	ug/L #	93
11) chlorodifluoromethane	3.57	51	245157	214.53	ug/L	95
12) dichlorodifluoromethane	3.56	85	293216	207.63	ug/L	97
15) chloromethane	3.87	50	396638	201.41	ug/L	98
16) vinyl chloride	4.10	62	363609	206.14	ug/L	99
18) bromomethane	4.70	94	167598	149.96	ug/L	100
19) chloroethane	4.88	64	163358	174.89	ug/L	98
21) trichlorofluoromethane	5.35	101	440721	204.21	ug/L	98
23) ethyl ether	5.76	74	165631	216.78	ug/L	98
28) 1,1-dichloroethene	6.19	96	263065	216.89	ug/L	99
29) acetone	6.26	58	24202	211.72	ug/L #	82
30) allyl chloride	6.76	76	172849	212.89	ug/L	97
31) acetonitrile	6.72	40	216312	2014.92	ug/L #	70
32) iodomethane	6.48	142	552517	217.84	ug/L	99
33) iso-butyl alcohol	10.00	43	142511	2105.37	ug/L	96
34) carbon disulfide	6.61	76	958016	216.86	ug/L	100
35) methylene chloride	6.97	84	340542	209.59	ug/L	98
36) methyl acetate	6.75	43	206646	212.70	ug/L	99
37) methyl tert butyl ether	7.34	73	842440	211.43	ug/L	100
38) trans-1,2-dichloroethene	7.39	96	309048	215.21	ug/L	99
39) di-isopropyl ether	8.04	45	1076330	214.34	ug/L	97
40) 2-butanone	8.89	72	33162	217.16	ug/L	87
41) 1,1-dichloroethane	8.03	63	571122	214.14	ug/L	98
42) chloroprene	8.17	53	435832	219.07	ug/L	98
43) acrylonitrile	7.33	53	493248	1063.43	ug/L	99
44) vinyl acetate	8.04	86	48351	224.37	ug/L	93
45) ethyl tert-butyl ether	8.60	59	1036555	217.41	ug/L	100
46) ethyl acetate	8.93	70	34600	220.02	ug/L	36
47) 2,2-dichloropropane	8.93	77	414053	210.45	ug/L	99
48) cis-1,2-dichloroethene	8.93	96	359989	215.97	ug/L	98
49) propionitrile	9.01	54	403871	2149.95	ug/L	71

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140623.D
Acq On : 11 Oct 2013 2:18 pm
Operator : natet
Sample : ic6084-200
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 15 14:31:22 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:58:56 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) tert-Butyl Formate	9.44	59	259168	215.32 ug/L #	99
51) bromochloromethane	9.31	128	176619	219.30 ug/L	96
52) tetrahydrofuran	9.37	72	38115	219.05 ug/L	93
53) chloroform	9.39	83	583935	216.74 ug/L	98
56) freon 113	6.18	151	209309	221.26 ug/L	99
57) methacrylonitrile	9.24	41	164607	216.81 ug/L	98
58) 1,1,1-trichloroethane	9.70	97	455919	216.85 ug/L	97
59) cyclohexane	9.78	84	439810	218.16 ug/L	93
60) tert amyl alcohol	10.15	59	144411	1045.20 ug/L	99
61) iso-octane	10.28	57	1102023	213.15 ug/L	99
64) epichlorohydrin	12.45	57	146056	1086.00 ug/L	97
65) n-butyl alcohol	10.97	56	465372	11069.18 ug/L	97
66) carbon tetrachloride	9.95	117	405123	222.87 ug/L	99
67) 1,1-dichloropropene	9.93	75	417829	219.70 ug/L	99
68) hexane	7.74	57	382593	219.47 ug/L	99
69) benzene	10.26	78	1291602	216.69 ug/L	100
70) tert-amyl methyl ether	10.33	73	951431	219.35 ug/L	99
71) heptane	10.52	57	242849	220.08 ug/L	98
72) isopropyl acetate	10.21	43	494623	200.05 ug/L	99
73) 1,2-dichloroethane	10.28	62	415444	219.19 ug/L	100
74) trichloroethene	11.20	130	334580	223.03 ug/L	98
78) 2-chloroethyl vinyl ether	12.31	63	1029189	1079.28 ug/L	100
79) methyl methacrylate	11.60	69	204922	217.14 ug/L	97
80) 1,2-dichloropropane	11.54	63	361332	220.49 ug/L	97
81) dibromomethane	11.75	93	207191	221.69 ug/L	99
82) methylcyclohexane	11.48	83	500271	222.04 ug/L	98
83) bromodichloromethane	11.95	83	469619	223.95 ug/L	100
84) cis-1,3-dichloropropene	12.58	75	588912	222.25 ug/L	100
86) 4-methyl-2-pentanone	12.74	58	118595	217.62 ug/L	99
87) toluene	13.07	92	830640	217.90 ug/L	98
88) 3-methyl-1-butanol	12.80	55	288757	4415.30 ug/L	99
89) trans-1,3-dichloropropene	13.36	75	520447	221.70 ug/L	99
90) ethyl methacrylate	13.39	69	417324	220.24 ug/L	99
91) 1,1,2-trichloroethane	13.65	83	252982	218.71 ug/L	98
92) 2-hexanone	13.91	58	113507	218.27 ug/L	98
94) 3,3-Dimethyl-1-butanol	14.17	57	317258	2147.87 ug/L	98
95) tetrachloroethene	13.86	164	304949	224.10 ug/L	98
96) 1,3-dichloropropane	13.89	76	482171	216.86 ug/L	99
97) butyl acetate	14.04	56	208173	215.25 ug/L	99
98) dibromochloromethane	14.24	129	376107	221.76 ug/L	98
99) 1,2-dibromoethane	14.42	107	309733	217.87 ug/L	99
101) chlorobenzene	15.05	112	971128	218.24 ug/L	99
102) 1,1,1,2-tetrachloroethane	15.14	131	359578	218.44 ug/L	98
103) ethylbenzene	15.15	91	1602412	216.13 ug/L	99
104) m,p-xylene	15.29	106	1202830	426.79 ug/L	98
105) o-xylene	15.84	106	608125	215.60 ug/L	100
106) styrene	15.86	104	1083463	217.78 ug/L	98
107) bromoform	16.18	173	268378	225.13 ug/L	100
109) isopropylbenzene	16.29	105	1559756	212.20 ug/L	100
110) Cyclohexanone	16.48	55	408639	1924.35 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140623.D
Acq On : 11 Oct 2013 2:18 pm
Operator : natet
Sample : ic6084-200
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 15 14:31:22 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:58:56 2013
Response via : Initial Calibration

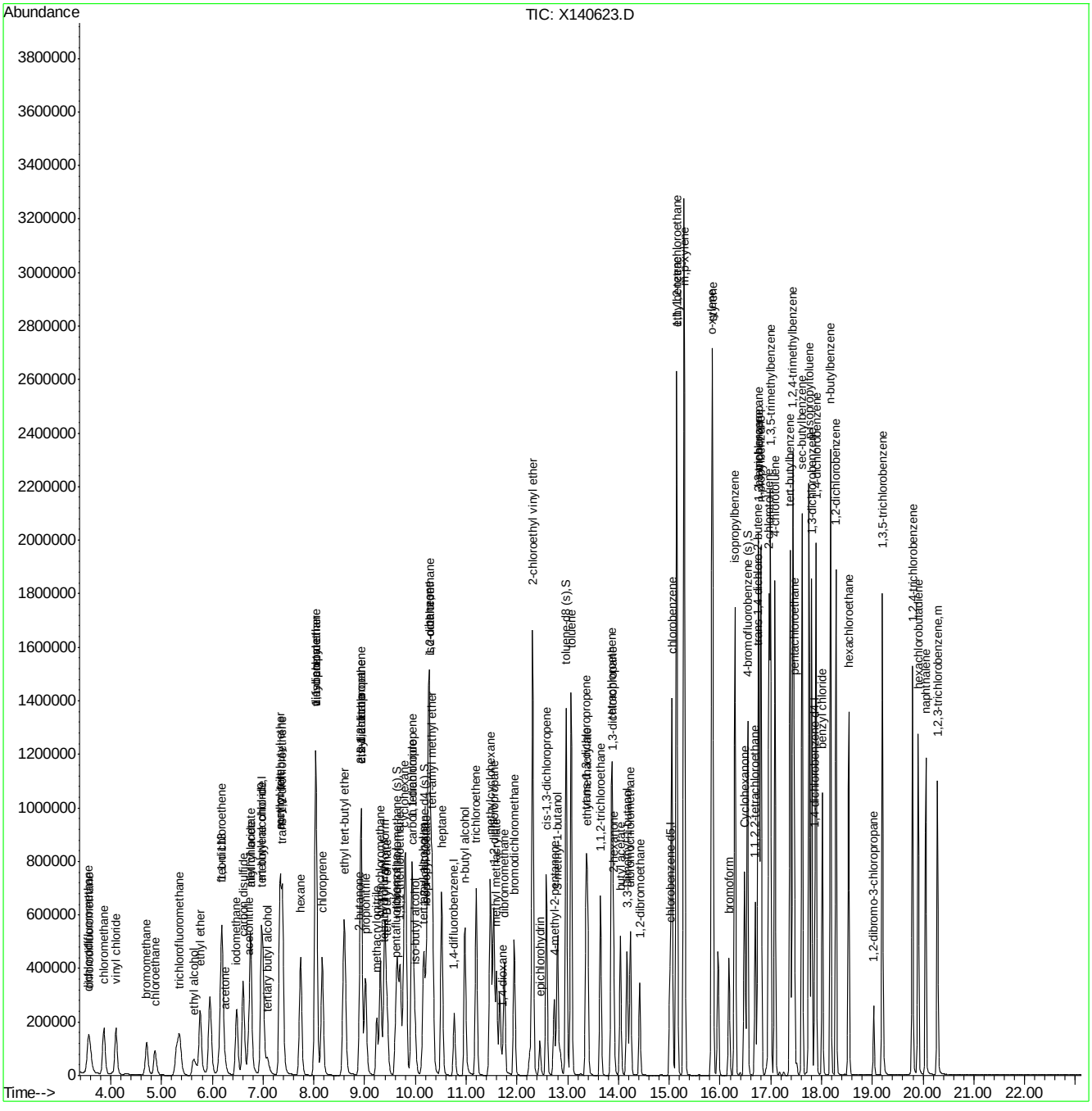
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
112) bromobenzene	16.76	156	454153	216.73 ug/L	96
113) 1,1,2,2-tetrachloroethane	16.70	83	399991	210.43 ug/L	99
114) trans-1,4-dichloro-2-buten	16.74	53	101045	218.37 ug/L	93
115) 1,2,3-trichloropropane	16.77	110	95860	211.22 ug/L #	67
116) n-propylbenzene	16.81	91	1837185	211.67 ug/L	99
118) 2-chlorotoluene	16.96	126	399082	214.37 ug/L	97
119) 4-chlorotoluene	17.08	91	1194923	212.85 ug/L	99
120) 1,3,5-trimethylbenzene	16.99	105	1346438	212.34 ug/L	99
121) tert-butylbenzene	17.38	119	1129186	213.82 ug/L	97
122) pentachloroethane	17.46	167	275117	212.64 ug/L	96
123) 1,2,4-trimethylbenzene	17.43	105	1377395	212.69 ug/L	100
125) sec-butylbenzene	17.62	105	1720691	212.48 ug/L	99
126) 1,3-dichlorobenzene	17.80	146	835125	216.39 ug/L	98
127) p-isopropyltoluene	17.75	119	1423984	212.56 ug/L	100
128) 1,4-dichlorobenzene	17.89	146	853868	214.96 ug/L	100
129) 1,2-dichlorobenzene	18.29	146	807172	216.90 ug/L	99
130) benzyl chloride	18.01	91	801357	210.76 ug/L	100
132) n-butylbenzene	18.18	92	747510	212.41 ug/L	99
134) 1,2-dibromo-3-chloropropan	19.03	75	65125	213.58 ug/L	98
135) 1,3,5-trichlorobenzene	19.20	180	641166	216.10 ug/L	100
136) hexachlorobutadiene	19.90	225	317984	211.75 ug/L	98
137) naphthalene	20.05	128	1015651	218.94 ug/L	99
138) 1,2,4-trichlorobenzene	19.79	180	522607	225.52 ug/L	98
139) 1,2,3-trichlorobenzene	20.28	180	397698	212.97 ug/L	99
140) hexachloroethane	18.54	201	275778	220.03 ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140623.D
Acq On : 11 Oct 2013 2:18 pm
Operator : natet
Sample : ic6084-200
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 15 14:31:22 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 08:58:56 2013
Response via : Initial Calibration



ACCUTEST LABORATORIES JB53758

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140625.D
Acq On : 11 Oct 2013 3:18 pm
Operator : natet
Sample : icv6084-50
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 14 09:42:38 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:42:03 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.94	65	76244	500.00	ug/L	0.00
5) pentafluorobenzene	9.61	168	207480	50.00	ug/L	0.00
62) 1,4-difluorobenzene	10.76	114	305368	50.00	ug/L	0.00
93) chlorobenzene-d5	15.01	117	278136	50.00	ug/L	0.00
108) 1,4-dichlorobenzene-d4	17.87	152	146626	50.00	ug/L	0.00

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.64	113	89556	48.09	ug/L	0.00
Spiked Amount 50.000	Range 59 - 130		Recovery = 96.18%			
55) 1,2-dichloroethane-d4 (s)	10.17	65	89756	47.55	ug/L	0.00
Spiked Amount 50.000	Range 65 - 123		Recovery = 95.10%			
85) toluene-d8 (s)	12.97	98	350356	50.12	ug/L	0.00
Spiked Amount 50.000	Range 80 - 124		Recovery = 100.24%			
111) 4-bromofluorobenzene (s)	16.54	95	137129	49.12	ug/L	0.00
Spiked Amount 50.000	Range 71 - 132		Recovery = 98.24%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.07	59	52270	290.15	ug/L	100
3) ethyl alcohol	5.61	45	64944	5711.24	ug/L	97
4) 1,4-dioxane	11.71	88	21194	1348.00	ug/L #	93
11) chlorodifluoromethane	3.57	51	79098	58.63	ug/L	96
12) dichlorodifluoromethane	3.57	85	71730	47.45	ug/L	93
15) chloromethane	3.85	50	106919	45.66	ug/L	99
16) vinyl chloride	4.09	62	94912	48.05	ug/L	97
18) bromomethane	4.71	94	63835	48.36	ug/L	99
19) chloroethane	4.88	64	51200	47.23	ug/L	96
21) trichlorofluoromethane	5.34	101	112055	46.87	ug/L	99
23) ethyl ether	5.75	74	46989	55.53	ug/L	98
27) acrolein	6.01	56	152931	538.45	ug/L #	100
28) 1,1-dichloroethene	6.19	96	76510	54.42	ug/L	99
29) acetone	6.25	58	6702	57.33	ug/L #	79
30) allyl chloride	6.75	76	53117	58.36	ug/L	96
31) acetonitrile	6.72	40	61269	523.58	ug/L #	59
32) iodomethane	6.48	142	156208	54.29	ug/L	98
33) iso-butyl alcohol	9.99	43	39889	533.58	ug/L	99
34) carbon disulfide	6.61	76	278869	55.24	ug/L	99
35) methylene chloride	6.97	84	94684	50.51	ug/L	96
36) methyl acetate	6.75	43	52535	49.86	ug/L	99
37) methyl tert butyl ether	7.34	73	459729	102.08	ug/L	99
38) trans-1,2-dichloroethene	7.39	96	90175	53.99	ug/L	99
39) di-isopropyl ether	8.03	45	293265	50.86	ug/L	96
40) 2-butanone	8.91	72	9519	58.04	ug/L	82
41) 1,1-dichloroethane	8.03	63	167478	54.98	ug/L	99
42) chloroprene	8.16	53	126856	56.14	ug/L	99
43) acrylonitrile	7.33	53	133931	276.99	ug/L	98
44) vinyl acetate	8.04	86	13963	61.77	ug/L	99
45) ethyl tert-butyl ether	8.59	59	273551	51.59	ug/L	100
46) ethyl acetate	8.94	70	9652	59.15	ug/L	88
47) 2,2-dichloropropane	8.92	77	126754	54.49	ug/L	97
48) cis-1,2-dichloroethene	8.93	96	101790	53.36	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140625.D
Acq On : 11 Oct 2013 3:18 pm
Operator : natet
Sample : icv6084-50
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 14 09:42:38 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:42:03 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) propionitrile	9.01	54	111023	565.64 ug/L	91
50) tert-Butyl Formate	9.43	59	71241	56.99 ug/L #	100
51) bromochloromethane	9.31	128	47380	54.59 ug/L	98
52) tetrahydrofuran	9.36	72	10513	56.92 ug/L	98
53) chloroform	9.39	83	164469	51.67 ug/L	98
56) freon 113	6.17	151	62033	58.15 ug/L	99
57) methacrylonitrile	9.24	41	44550	54.67 ug/L	97
58) 1,1,1-trichloroethane	9.69	97	133444	54.86 ug/L	97
59) cyclohexane	9.78	84	116275	48.99 ug/L	99
60) tert amyl alcohol	10.14	59	40922	282.62 ug/L	99
61) iso-octane	10.28	57	319702	53.18 ug/L	95
64) epichlorohydrin	12.45	57	37501	260.08 ug/L	95
65) n-butyl alcohol	10.97	56	129513	2933.93 ug/L	97
66) carbon tetrachloride	9.95	117	117017	55.11 ug/L	98
67) 1,1-dichloropropene	9.92	75	117309	53.22 ug/L	96
68) hexane	7.74	57	123094	59.94 ug/L	99
69) benzene	10.25	78	378179	54.12 ug/L	98
70) tert-amyl methyl ether	10.33	73	261651	53.46 ug/L	99
71) heptane	10.52	57	70421	55.25 ug/L	99
72) isopropyl acetate	10.21	43	135781	49.16 ug/L	98
73) 1,2-dichloroethane	10.28	62	113448	53.81 ug/L	99
74) trichloroethene	11.20	130	99375	59.27 ug/L	99
78) 2-chloroethyl vinyl ether	12.31	63	266757	256.40 ug/L	100
79) methyl methacrylate	11.60	69	57898	58.63 ug/L	100
80) 1,2-dichloropropane	11.54	63	101865	54.73 ug/L	97
81) dibromomethane	11.75	93	56286	55.94 ug/L	98
82) methylcyclohexane	11.48	83	152397	58.32 ug/L	89
83) bromodichloromethane	11.95	83	126979	53.62 ug/L	99
84) cis-1,3-dichloropropene	12.58	75	148644	50.47 ug/L	99
86) 4-methyl-2-pentanone	12.74	58	32808	56.08 ug/L	99
87) toluene	13.07	92	238628	53.70 ug/L	97
88) 3-methyl-1-butanol	12.79	55	80468	1190.54 ug/L	98
89) trans-1,3-dichloropropene	13.36	75	141968	54.86 ug/L	99
90) ethyl methacrylate	13.39	69	112007	55.44 ug/L	98
91) 1,1,2-trichloroethane	13.65	83	69743	54.34 ug/L	98
92) 2-hexanone	13.91	58	31610	58.16 ug/L	99
94) 3,3-Dimethyl-1-butanol	14.16	57	86061	549.29 ug/L	99
95) tetrachloroethene	13.86	164	83318	53.76 ug/L	99
96) 1,3-dichloropropane	13.89	76	131160	52.22 ug/L	100
97) butyl acetate	14.04	56	57187	57.80 ug/L	99
98) dibromochloromethane	14.23	129	100848	54.03 ug/L	99
99) 1,2-dibromoethane	14.42	107	82599	52.74 ug/L	96
101) chlorobenzene	15.05	112	273930	53.05 ug/L	99
102) 1,1,1,2-tetrachloroethane	15.14	131	98320	52.67 ug/L	97
103) ethylbenzene	15.15	91	465601	54.07 ug/L	99
104) m,p-xylene	15.29	106	354066	106.49 ug/L	99
105) o-xylene	15.84	106	174167	53.06 ug/L	98
106) styrene	15.85	104	306956	54.51 ug/L	99
107) bromoform	16.18	173	69740	55.16 ug/L	99
109) isopropylbenzene	16.29	105	451198	50.96 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140625.D
Acq On : 11 Oct 2013 3:18 pm
Operator : natet
Sample : icv6084-50
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 14 09:42:38 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:42:03 2013
Response via : Initial Calibration

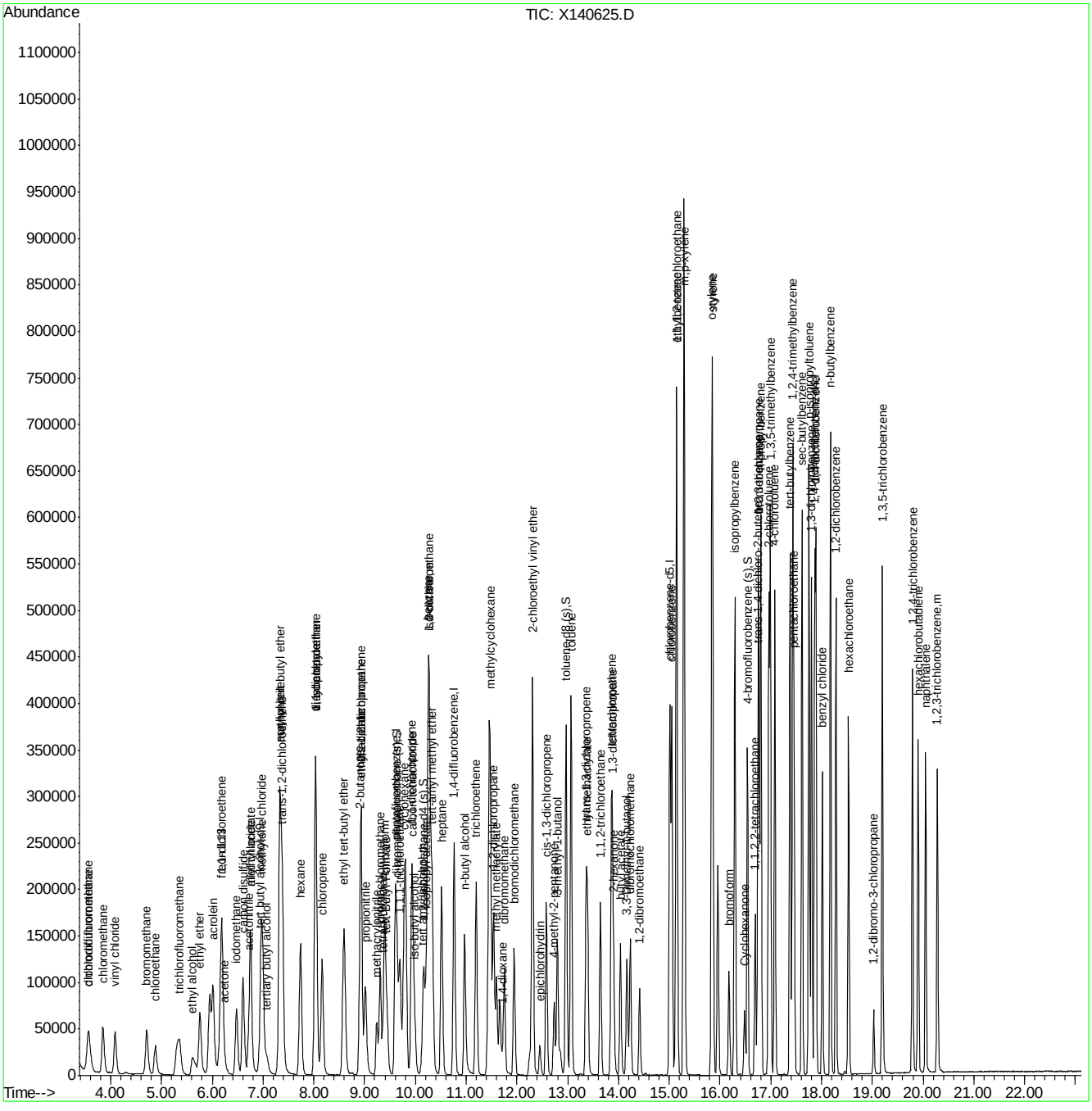
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) Cyclohexanone	16.48	55	37461	157.29 ug/L	100
112) bromobenzene	16.76	156	123574	50.72 ug/L	99
113) 1,1,2,2-tetrachloroethane	16.69	83	107307	48.96 ug/L	99
114) trans-1,4-dichloro-2-buten	16.74	53	28202	56.13 ug/L	95
115) 1,2,3-trichloropropane	16.76	110	25587	51.68 ug/L	98
116) n-propylbenzene	16.81	91	549084	52.48 ug/L	99
118) 2-chlorotoluene	16.96	126	112393	50.35 ug/L	98
119) 4-chlorotoluene	17.08	91	338964	50.23 ug/L	99
120) 1,3,5-trimethylbenzene	16.99	105	389025	51.19 ug/L	99
121) tert-butylbenzene	17.38	119	320344	51.96 ug/L	99
122) pentachloroethane	17.46	167	78520	52.77 ug/L	99
123) 1,2,4-trimethylbenzene	17.43	105	395282	50.97 ug/L	100
125) sec-butylbenzene	17.62	105	492784	50.49 ug/L	99
126) 1,3-dichlorobenzene	17.80	146	236933	52.02 ug/L	99
127) p-isopropyltoluene	17.75	119	426346	53.62 ug/L	100
128) 1,4-dichlorobenzene	17.89	146	238001	50.42 ug/L	99
129) 1,2-dichlorobenzene	18.29	146	219024	51.15 ug/L	99
130) benzyl chloride	18.01	91	241983	58.39 ug/L	100
132) n-butylbenzene	18.18	92	219060	53.77 ug/L	99
134) 1,2-dibromo-3-chloropropan	19.02	75	17494	53.75 ug/L	91
135) 1,3,5-trichlorobenzene	19.20	180	186754	57.81 ug/L	99
136) hexachlorobutadiene	19.90	225	89677	53.48 ug/L	98
137) naphthalene	20.05	128	287422	59.13 ug/L	100
138) 1,2,4-trichlorobenzene	19.79	180	147882	59.97 ug/L	98
139) 1,2,3-trichlorobenzene	20.28	180	120787	61.16 ug/L	100
140) hexachloroethane	18.53	201	77863	54.50 ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X140625.D
Acq On : 11 Oct 2013 3:18 pm
Operator : natet
Sample : icv6084-50
Misc : MS55872,VX6084,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 14 09:42:38 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : SW-846 Method 8260B, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Oct 14 09:42:03 2013
Response via : Initial Calibration



ACCUTEST LABORATORIES JB53758

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142329D.D
Acq On : 24 Nov 2013 9:50 am
Operator : natet
Sample : CC6084-20
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 25 14:22:15 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.92	65	64349	500.00	ug/L	-0.03
5) pentafluorobenzene	9.59	168	201609	50.00	ug/L	-0.02
62) 1,4-difluorobenzene	10.74	114	287699	50.00	ug/L	-0.02
93) chlorobenzene-d5	15.00	117	267696	50.00	ug/L	-0.02
108) 1,4-dichlorobenzene-d4	17.85	152	140238	50.00	ug/L	-0.01

System Monitoring Compounds

54) dibromofluoromethane (s)	9.62	113	88719	49.03	ug/L	-0.03
Spiked Amount 50.000	Range 59 - 130		Recovery = 98.06%			
55) 1,2-dichloroethane-d4 (s)	10.15	65	88254	48.12	ug/L	-0.02
Spiked Amount 50.000	Range 65 - 123		Recovery = 96.24%			
85) toluene-d8 (s)	12.95	98	339002	51.47	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 124		Recovery = 102.94%			
111) 4-bromofluorobenzene (s)	16.53	95	130519	48.88	ug/L	-0.01
Spiked Amount 50.000	Range 71 - 132		Recovery = 97.76%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.06	59	14873	97.82	ug/L	100
4) 1,4-dioxane	11.70	88	6756	509.13	ug/L #	89
11) chlorodifluoromethane	3.55	51	17520	13.36	ug/L	91
12) dichlorodifluoromethane	3.55	85	32056	21.82	ug/L	91
15) chloromethane	3.83	50	37597	16.52	ug/L	97
16) vinyl chloride	4.08	62	35656	18.58	ug/L	98
18) bromomethane	4.69	94	28979	22.59	ug/L	96
19) chloroethane	4.88	64	17962	17.05	ug/L	100
21) trichlorofluoromethane	5.35	101	50509	21.74	ug/L	94
23) ethyl ether	5.74	74	13949	16.96	ug/L	91
27) acrolein	6.00	56	42827	155.18	ug/L #	98
28) 1,1-dichloroethene	6.17	96	24974	18.28	ug/L	95
29) acetone	6.24	58	2284	20.11	ug/L	96
30) allyl chloride	6.74	76	15474	17.50	ug/L	91
31) acetonitrile	6.71	40	18186	159.93	ug/L #	72
32) iodomethane	6.47	142	51917	18.57	ug/L	94
33) iso-butyl alcohol	9.98	43	10547	145.19	ug/L	99
34) carbon disulfide	6.60	76	83274	16.98	ug/L	99
35) methylene chloride	6.95	84	31501	17.29	ug/L	93
36) methyl acetate	6.74	43	15013	14.66	ug/L	97
37) methyl tert butyl ether	7.32	73	80644	18.43	ug/L	96
38) trans-1,2-dichloroethene	7.37	96	30422	18.75	ug/L	94
39) di-isopropyl ether	8.01	45	83305	14.87	ug/L	88
40) 2-butanone	8.89	72	3224	20.23	ug/L	70
41) 1,1-dichloroethane	8.02	63	52245	17.65	ug/L	98
42) chloroprene	8.14	53	39593	18.03	ug/L	99
43) acrylonitrile	7.32	53	38639	82.24	ug/L	98
44) vinyl acetate	8.02	86	3623	16.50	ug/L	80
45) ethyl tert-butyl ether	8.57	59	77606	15.06	ug/L	97
46) ethyl acetate	8.92	70	2898	18.28	ug/L	47
47) 2,2-dichloropropane	8.91	77	45838	20.28	ug/L	98
48) cis-1,2-dichloroethene	8.91	96	33991	18.34	ug/L	93
49) propionitrile	8.99	54	31990	167.73	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142329D.D
Acq On : 24 Nov 2013 9:50 am
Operator : natet
Sample : CC6084-20
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 25 14:22:15 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) tert-Butyl Formate	9.42	59	22735	18.72 ug/L #	93
51) bromochloromethane	9.30	128	16920	20.06 ug/L #	87
52) tetrahydrofuran	9.34	72	3169	17.66 ug/L	89
53) chloroform	9.37	83	57807	18.69 ug/L	96
56) freon 113	6.17	151	20431	19.71 ug/L	97
57) methacrylonitrile	9.22	41	12789	16.15 ug/L	94
58) 1,1,1-trichloroethane	9.68	97	49777	21.06 ug/L	98
59) cyclohexane	9.77	84	38663	16.76 ug/L	89
61) iso-octane	10.26	57	97458	16.68 ug/L	97
64) epichlorohydrin	12.44	57	11464	84.39 ug/L	95
65) n-butyl alcohol	10.96	56	34556	830.89 ug/L	97
66) carbon tetrachloride	9.93	117	45676	22.83 ug/L	96
67) 1,1-dichloropropene	9.91	75	40884	19.69 ug/L	98
68) hexane	7.72	57	25682	13.27 ug/L	97
69) benzene	10.24	78	120415	18.29 ug/L	100
70) tert-amyl methyl ether	10.30	73	84304	18.28 ug/L	99
71) heptane	10.50	57	18638	15.52 ug/L	98
72) isopropyl acetate	10.19	43	55908	21.49 ug/L	92
73) 1,2-dichloroethane	10.26	62	41175	20.73 ug/L	99
74) trichloroethene	11.18	130	33837	21.42 ug/L	98
78) 2-chloroethyl vinyl ether	12.29	63	65946	67.28 ug/L	97
79) methyl methacrylate	11.59	69	17333	18.63 ug/L	94
80) 1,2-dichloropropane	11.52	63	30534	17.41 ug/L	96
81) dibromomethane	11.73	93	19451	20.52 ug/L	95
82) methylcyclohexane	11.46	83	43921	17.84 ug/L	96
83) bromodichloromethane	11.93	83	45538	20.41 ug/L	96
84) cis-1,3-dichloropropene	12.56	75	53773	19.38 ug/L	99
86) 4-methyl-2-pentanone	12.72	58	9839	17.85 ug/L	93
87) toluene	13.05	92	81477	19.46 ug/L	96
88) 3-methyl-1-butanol	12.79	55	21302	334.52 ug/L	96
89) trans-1,3-dichloropropene	13.35	75	49757	20.41 ug/L	99
90) ethyl methacrylate	13.38	69	35716	18.76 ug/L	95
91) 1,1,2-trichloroethane	13.63	83	23350	19.31 ug/L	96
92) 2-hexanone	13.90	58	9504	18.56 ug/L	95
94) 3,3-Dimethyl-1-butanol	14.16	57	21787	144.48 ug/L	96
95) tetrachloroethene	13.85	164	30696	20.58 ug/L	97
96) 1,3-dichloropropane	13.87	76	43987	18.19 ug/L	97
97) butyl acetate	14.03	56	16130	16.94 ug/L	98
98) dibromochloromethane	14.22	129	38240	21.29 ug/L	100
99) 1,2-dibromoethane	14.41	107	29514	19.58 ug/L	100
101) chlorobenzene	15.04	112	95138	19.14 ug/L	99
102) 1,1,1,2-tetrachloroethane	15.13	131	36776	20.47 ug/L	95
103) ethylbenzene	15.13	91	163234	19.70 ug/L	99
104) m,p-xylene	15.28	106	124023	38.76 ug/L	95
105) o-xylene	15.82	106	61156	19.36 ug/L	99
106) styrene	15.84	104	107125	19.76 ug/L	96
107) bromoform	16.16	173	26292	21.61 ug/L	99
109) isopropylbenzene	16.28	105	159765	18.87 ug/L	100
110) Cyclohexanone	16.47	55	46118	202.46 ug/L	97
112) bromobenzene	16.75	156	44111	18.93 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142329D.D
Acq On : 24 Nov 2013 9:50 am
Operator : natet
Sample : CC6084-20
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 25 14:22:15 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
113) 1,1,2,2-tetrachloroethane	16.68	83	37081	17.69 ug/L	99
114) trans-1,4-dichloro-2-buten	16.73	53	9134	19.01 ug/L	94
115) 1,2,3-trichloropropane	16.75	110	9436	19.93 ug/L #	71
116) n-propylbenzene	16.80	91	182286	18.22 ug/L	100
118) 2-chlorotoluene	16.95	126	39575	18.54 ug/L	99
119) 4-chlorotoluene	17.07	91	118111	18.30 ug/L	100
120) 1,3,5-trimethylbenzene	16.98	105	139344	19.17 ug/L	99
121) tert-butylbenzene	17.37	119	116733	19.80 ug/L	98
122) pentachloroethane	17.45	167	28953	20.34 ug/L	100
123) 1,2,4-trimethylbenzene	17.42	105	137092	18.48 ug/L	98
125) sec-butylbenzene	17.61	105	177135	18.98 ug/L	100
126) 1,3-dichlorobenzene	17.79	146	83615	19.19 ug/L	99
127) p-isopropyltoluene	17.74	119	148466	19.52 ug/L	99
128) 1,4-dichlorobenzene	17.88	146	82360	18.24 ug/L	99
129) 1,2-dichlorobenzene	18.28	146	76684	18.72 ug/L	98
130) benzyl chloride	18.01	91	70352	17.75 ug/L	100
132) n-butylbenzene	18.17	92	71384	18.32 ug/L	100
134) 1,2-dibromo-3-chloropropan	19.02	75	5849	18.79 ug/L	95
135) 1,3,5-trichlorobenzene	19.19	180	59901	19.39 ug/L	97
136) hexachlorobutadiene	19.89	225	32759	20.43 ug/L	97
137) naphthalene	20.04	128	81100	17.45 ug/L	98
138) 1,2,4-trichlorobenzene	19.78	180	45889	19.46 ug/L	98
139) 1,2,3-trichlorobenzene	20.27	180	35509	18.80 ug/L	99
140) hexachloroethane	18.53	201	28397	20.78 ug/L	99

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

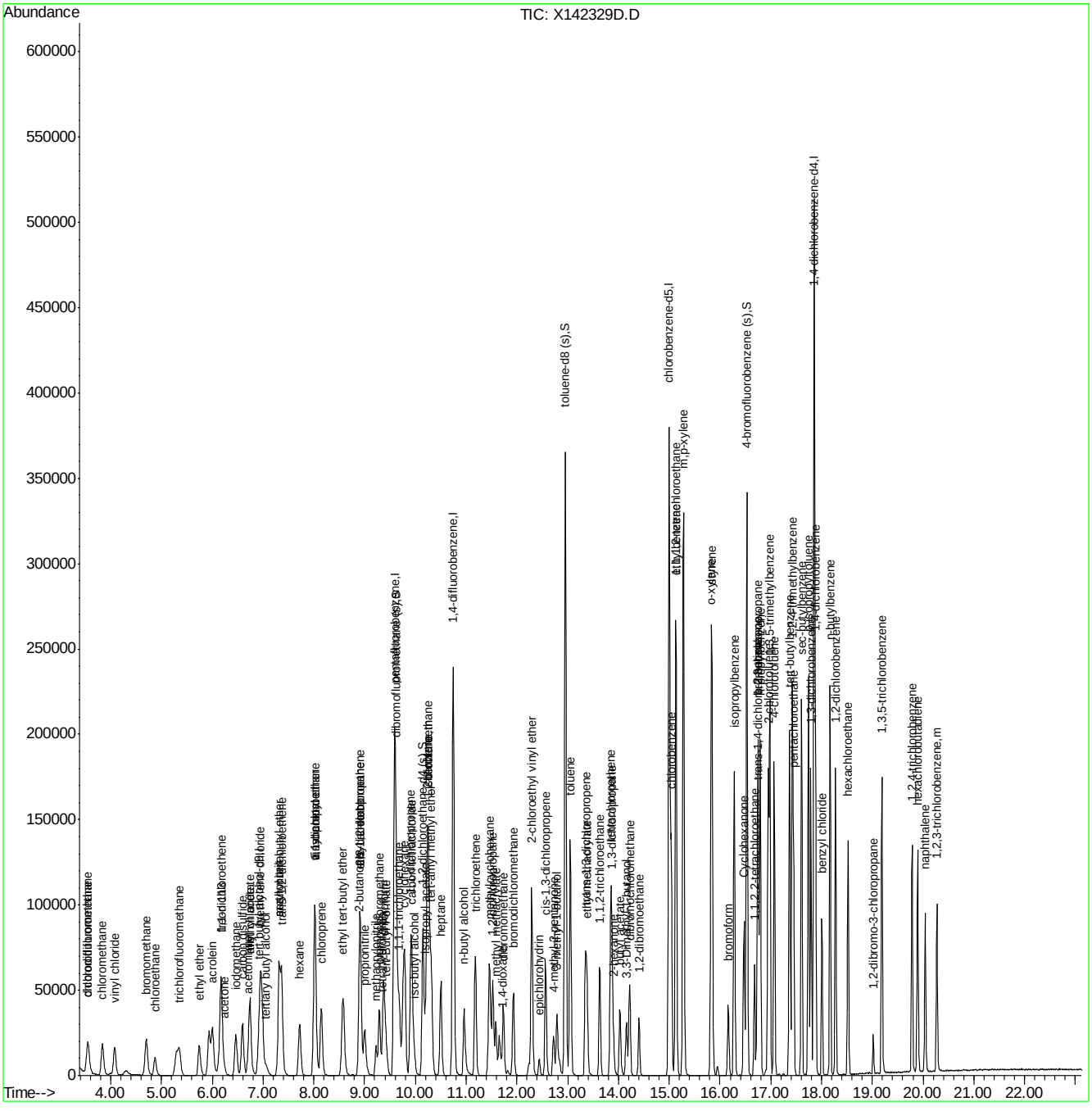
7.7.23

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142329D.D
Acq On : 24 Nov 2013 9:50 am
Operator : natet
Sample : CC6084-20
Misc : MS59034,VX6159,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 25 14:22:15 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142362.D
Acq On : 25 Nov 2013 12:54 pm
Operator : natet
Sample : cc6084-20
Misc : MS58857,VX6160,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 26 12:08:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.92	65	54309	500.00	ug/L	-0.03
5) pentafluorobenzene	9.58	168	183964	50.00	ug/L	-0.03
62) 1,4-difluorobenzene	10.73	114	270998	50.00	ug/L	-0.03
93) chlorobenzene-d5	14.99	117	258105	50.00	ug/L	-0.03
108) 1,4-dichlorobenzene-d4	17.85	152	131470	50.00	ug/L	-0.02

System Monitoring Compounds						
54) dibromofluoromethane (s)	9.61	113	82393	49.90	ug/L	-0.03
Spiked Amount 50.000	Range 59 - 130		Recovery = 99.80%			
55) 1,2-dichloroethane-d4 (s)	10.14	65	83204	49.72	ug/L	-0.03
Spiked Amount 50.000	Range 65 - 123		Recovery = 99.44%			
85) toluene-d8 (s)	12.94	98	325582	52.48	ug/L	-0.03
Spiked Amount 50.000	Range 80 - 124		Recovery = 104.96%			
111) 4-bromofluorobenzene (s)	16.52	95	124657	49.80	ug/L	-0.02
Spiked Amount 50.000	Range 71 - 132		Recovery = 99.60%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.06	59	12967	101.05	ug/L	100
4) 1,4-dioxane	11.69	88	6078	542.71	ug/L #	90
11) chlorodifluoromethane	3.56	51	16913	14.14	ug/L	98
12) dichlorodifluoromethane	3.54	85	25352	18.91	ug/L	95
15) chloromethane	3.82	50	32486	15.65	ug/L	98
16) vinyl chloride	4.06	62	29852	17.05	ug/L	98
18) bromomethane	4.69	94	25953	22.18	ug/L	97
19) chloroethane	4.86	64	15713	16.35	ug/L	94
21) trichlorofluoromethane	5.33	101	42164	19.89	ug/L	95
23) ethyl ether	5.74	74	13292	17.72	ug/L	93
27) acrolein	5.99	56	43046	170.93	ug/L #	99
28) 1,1-dichloroethene	6.17	96	22241	17.84	ug/L	97
29) acetone	6.23	58	1959	18.90	ug/L	96
30) allyl chloride	6.74	76	14736	18.26	ug/L #	88
31) acetonitrile	6.70	40	16745	161.39	ug/L	90
32) iodomethane	6.45	142	47845	18.75	ug/L	93
33) iso-butyl alcohol	9.97	43	9087	137.09	ug/L	97
34) carbon disulfide	6.59	76	74931	16.74	ug/L	99
35) methylene chloride	6.95	84	29421	17.70	ug/L	92
36) methyl acetate	6.73	43	14140	15.13	ug/L	98
37) methyl tert butyl ether	7.31	73	75466	18.90	ug/L	96
38) trans-1,2-dichloroethene	7.35	96	27818	18.79	ug/L	90
39) di-isopropyl ether	8.01	45	81377	15.92	ug/L	92
40) 2-butanone	8.88	72	2769	19.04	ug/L	83
41) 1,1-dichloroethane	8.01	63	49135	18.19	ug/L	98
42) chloroprene	8.14	53	36962	18.45	ug/L	97
43) acrylonitrile	7.30	53	36905	86.08	ug/L	98
44) vinyl acetate	8.02	86	3538	17.65	ug/L	66
45) ethyl tert-butyl ether	8.56	59	75646	16.09	ug/L	97
46) ethyl acetate	8.91	70	2739	18.93	ug/L	46
47) 2,2-dichloropropane	8.90	77	40498	19.64	ug/L	93
48) cis-1,2-dichloroethene	8.90	96	31696	18.74	ug/L	96
49) propionitrile	8.99	54	29246	168.05	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142362.D
Acq On : 25 Nov 2013 12:54 pm
Operator : natet
Sample : cc6084-20
Misc : MS58857,VX6160,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 26 12:08:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) tert-Butyl Formate	9.41	59	21178	19.11 ug/L #	94
51) bromochloromethane	9.28	128	15667	20.36 ug/L	93
52) tetrahydrofuran	9.34	72	2876	17.56 ug/L	88
53) chloroform	9.37	83	55680	19.73 ug/L	99
56) freon 113	6.16	151	17817	18.84 ug/L	93
57) methacrylonitrile	9.22	41	12185	16.86 ug/L	95
58) 1,1,1-trichloroethane	9.67	97	45838	21.25 ug/L	98
59) cyclohexane	9.76	84	33819	16.07 ug/L	96
61) iso-octane	10.25	57	91894	17.24 ug/L	91
64) epichlorohydrin	12.43	57	10610	82.92 ug/L	98
65) n-butyl alcohol	10.95	56	30483	778.13 ug/L	99
66) carbon tetrachloride	9.92	117	40889	21.70 ug/L	99
67) 1,1-dichloropropene	9.90	75	37340	19.09 ug/L	98
68) hexane	7.72	57	26047	14.29 ug/L	98
69) benzene	10.23	78	114521	18.47 ug/L	97
70) tert-amyl methyl ether	10.30	73	81229	18.70 ug/L	99
71) heptane	10.49	57	17884	15.81 ug/L	97
72) isopropyl acetate	10.19	43	55061	22.46 ug/L	90
73) 1,2-dichloroethane	10.26	62	40836	21.83 ug/L	97
74) trichloroethene	11.17	130	30537	20.52 ug/L	99
78) 2-chloroethyl vinyl ether	12.28	63	64282	69.62 ug/L	97
79) methyl methacrylate	11.58	69	16724	19.08 ug/L	91
80) 1,2-dichloropropane	11.51	63	30108	18.23 ug/L	95
81) dibromomethane	11.73	93	18895	21.16 ug/L	99
82) methylcyclohexane	11.45	83	40370	17.41 ug/L	97
83) bromodichloromethane	11.92	83	45196	21.51 ug/L	99
84) cis-1,3-dichloropropene	12.55	75	51814	19.82 ug/L	97
86) 4-methyl-2-pentanone	12.72	58	9460	18.22 ug/L	94
87) toluene	13.05	92	77307	19.60 ug/L	97
88) 3-methyl-1-butanol	12.78	55	18331	305.61 ug/L	96
89) trans-1,3-dichloropropene	13.34	75	47992	20.90 ug/L	98
90) ethyl methacrylate	13.37	69	35023	19.53 ug/L	97
91) 1,1,2-trichloroethane	13.62	83	22794	20.01 ug/L	96
92) 2-hexanone	13.89	58	8709	18.06 ug/L	95
94) 3,3-Dimethyl-1-butanol	14.15	57	18533	127.47 ug/L	98
95) tetrachloroethene	13.83	164	28226	19.62 ug/L	97
96) 1,3-dichloropropane	13.86	76	43296	18.57 ug/L	98
97) butyl acetate	14.02	56	15371	16.74 ug/L	98
98) dibromochloromethane	14.21	129	37050	21.39 ug/L	95
99) 1,2-dibromoethane	14.39	107	28304	19.48 ug/L	96
101) chlorobenzene	15.03	112	91740	19.15 ug/L	99
102) 1,1,1,2-tetrachloroethane	15.12	131	35760	20.64 ug/L	95
103) ethylbenzene	15.12	91	154348	19.32 ug/L	99
104) m,p-xylene	15.27	106	118486	38.40 ug/L	98
105) o-xylene	15.82	106	58533	19.21 ug/L	99
106) styrene	15.83	104	99942	19.12 ug/L	95
107) bromoform	16.16	173	24477	20.86 ug/L	99
109) isopropylbenzene	16.27	105	148387	18.69 ug/L	99
110) Cyclohexanone	16.46	55	40117	187.86 ug/L	97
112) bromobenzene	16.74	156	42340	19.38 ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142362.D
Acq On : 25 Nov 2013 12:54 pm
Operator : natet
Sample : cc6084-20
Misc : MS58857,VX6160,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 26 12:08:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration

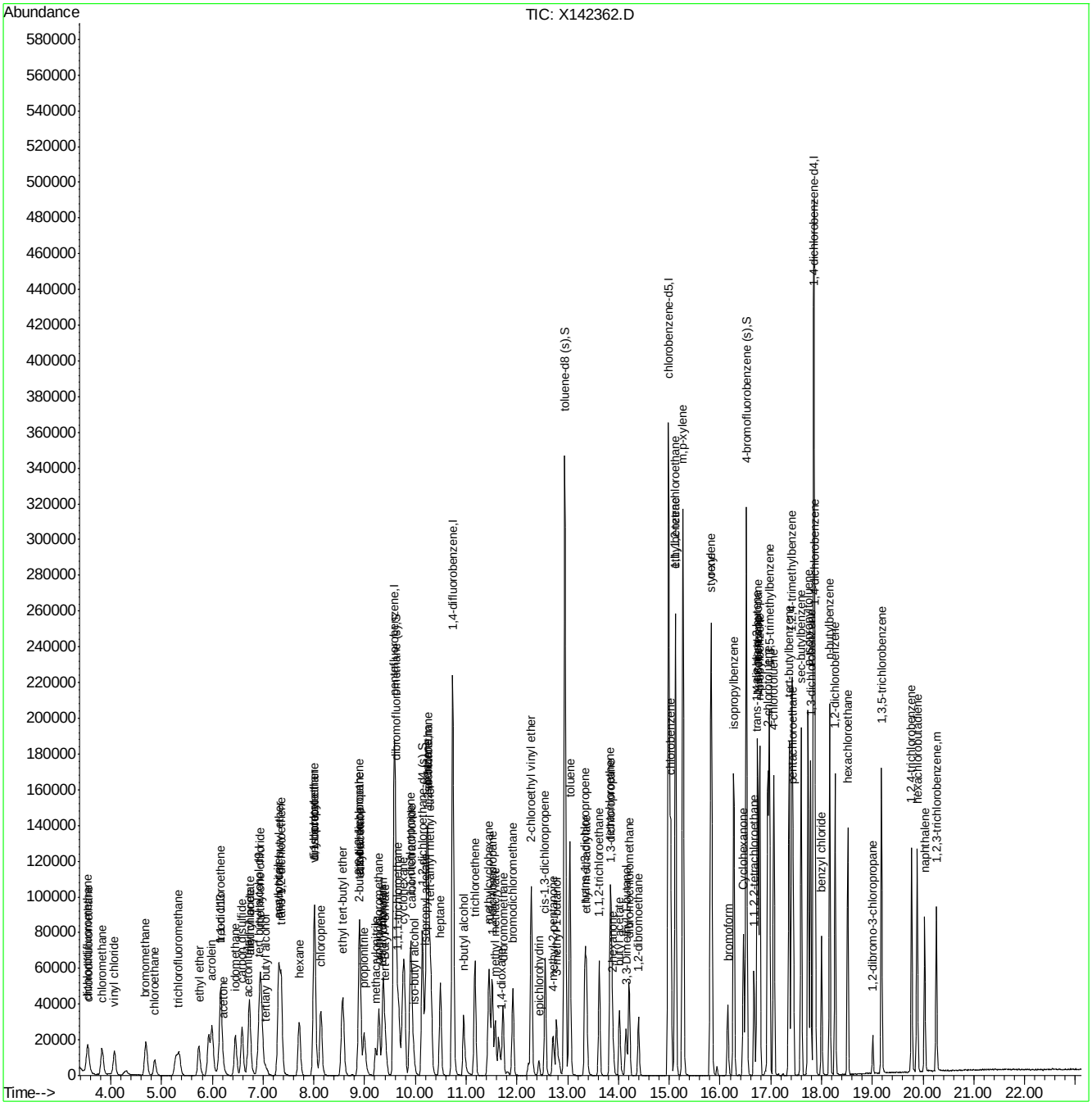
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
113) 1,1,2,2-tetrachloroethane	16.67	83	34278	17.44 ug/L	99
114) trans-1,4-dichloro-2-buten	16.73	53	8439	18.73 ug/L #	69
115) 1,2,3-trichloropropane	16.74	110	8689	19.57 ug/L #	89
116) n-propylbenzene	16.78	91	171590	18.29 ug/L	99
118) 2-chlorotoluene	16.94	126	37178	18.57 ug/L	99
119) 4-chlorotoluene	17.06	91	112696	18.62 ug/L	98
120) 1,3,5-trimethylbenzene	16.97	105	129199	18.96 ug/L	99
121) tert-butylbenzene	17.36	119	109270	19.77 ug/L	97
122) pentachloroethane	17.44	167	27399	20.54 ug/L	99
123) 1,2,4-trimethylbenzene	17.41	105	130570	18.78 ug/L	98
125) sec-butylbenzene	17.60	105	159411	18.22 ug/L	99
126) 1,3-dichlorobenzene	17.78	146	76822	18.81 ug/L	98
127) p-isopropyltoluene	17.74	119	132057	18.52 ug/L	99
128) 1,4-dichlorobenzene	17.87	146	78957	18.66 ug/L	99
129) 1,2-dichlorobenzene	18.26	146	72313	18.84 ug/L	98
130) benzyl chloride	18.00	91	58806	15.83 ug/L	99
132) n-butylbenzene	18.16	92	65785	18.01 ug/L	97
134) 1,2-dibromo-3-chloropropan	19.01	75	5552	19.02 ug/L	95
135) 1,3,5-trichlorobenzene	19.18	180	57736	19.93 ug/L	100
136) hexachlorobutadiene	19.88	225	30803	20.49 ug/L	100
137) naphthalene	20.03	128	73383	16.84 ug/L	98
138) 1,2,4-trichlorobenzene	19.77	180	43798	19.81 ug/L	98
139) 1,2,3-trichlorobenzene	20.26	180	32179	18.17 ug/L	99
140) hexachloroethane	18.52	201	26581	20.75 ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : X142362.D
Acq On : 25 Nov 2013 12:54 pm
Operator : natet
Sample : cc6084-20
Misc : MS58857,VX6160,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 26 12:08:59 2013
Quant Method : C:\MSDCHEM\1\METHODS\MX6084.M
Quant Title : Method 8260B/8260C, ZB624 60m x 0.25mm x 1.4um
QLast Update : Mon Nov 11 13:17:14 2013
Response via : Initial Calibration



ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VE9161

Date: 10/22/2013

Print Analyst Name: Henry Salim

Analyst Signature: HS

V013-1686- **Standard Data**

Lot #	Description	Conc.
013-1686-74	Int Only	250/2500 ppm
99	Std A	100 PPM
129	B	
139	C	
129	Acrolein	1000 PPM
130	NTSUF	

V013-1686- **Standard Data**

Lot #	Description	Conc.
104	EXT A	100 PPM
116	B	
137	C	
109	Acrolein	1000 PPM
127	Int. Surr	250/2500 PPM

Columns: 7862 4160 mx 0.25 mm x 1.4 u

Method V8260B

Initial Cal. Method ME9161

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: HS **Date:** 10/24/13

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
	E208760	BFB											ok	10:21 pm	
	208761	IC9161-0.5	8260 Method				5		LX		V		ok	200mL-DI (1µL-Std A,B,C, Acro, Surr, 2µL-Acro)	
	208762	IC9161-1									V		ok	100mL-DI (1µL-Std A,B,C, Surr, 100µL-Acro)	
	208763	IC9161-2									V		ok	100mL-DI (2µL-Std A,B,C, Surr, 200µL-Acro)	
	208764	IC9161-5									V		ok	100mL-DI (5µL-Std A,B,C, Acro, Surr)	
	208765	IC9161-10									V		ok	50mL-DI (5µL-Std A,B,C, Acro, Surr)	
	208766	IC9161-20									V	V	ok	50mL-DI (10µL-Std A,B,C, Acro, 25µL-Surr)	
	208767	IC9161-50									V	V	ok	50mL-DI (25µL-Std A,B,C, Acro, Surr)	
	208768	IC9161-100									V		ok	50mL-DI (50µL-Std A,B,C, Surr, Acro)	
	208769	IC9161-200									V		ok	50mL-DI (100µL-Std A,B,C, Acro, Surr)	
	208770	IB													
	208771	IB													
	208772	IC9161-50									V	V	ok	50mL-DI (25µL-EXT A,B,C, Acro, Surr)	
	208773	IB													
														HS 10/22/13	

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

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VE 9217

Print Analyst Name: Divya Patel

Analyst Signature:

Date: 11/23/13 (PM) (SAT)

Columns: 2B-624 (60m x 0.25mm x 1.4um)

Method V8260B

Initial Cal. Method ME9161

V013 1727 Standard Data

Lot #	Description	Conc.
31	Std A	100 PPM
38	B	
55	C	
1680-145	Acrolein	1000 PPM
149	Int-Sym	250/2500ppm

V012 1727 Standard Data

Lot #	Description	Conc.
42	EXT A	100 PPM
49	B	
52	C	
25	Acrolein	1000 PPM
DI 421	MeOH	

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: MJ **Date:** 4/27/13

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
	E210077	BFB				24							ok		
	210078	CC-9161-50				25						W	ok	(25ul C-Std A,B,C,Acro/50ml	
	210079	IB				26									
	210080	MB/JB25319K-22B	59036			27						W	ok	JB25319K-22B (14.01ox ↓)	
	210081	BS				28						W	ok	(25ul EXT A,B,C Acro/50ml	
	210082	MS JB53758-1	59034 XYL	S L	5	29	6.0/5	100				W	ok	25ul Std A,B,C,Acro (50ml/1ml)	
	210083	MSD JB53758-1			5	30	6.0/5	100				W	ok		
	210084	IB				31									
	210085	JB53758-1			5	32	6.0/5	100				W	ok/DL	FID	
	210086	JB53758-2	↓	↓	3	33	6.0/5	100				W	ok/DL	FID	
	210087	JB53484-15	58848 BTX	S O L	1	34	10/10	100				W	NG	CIO, RR LL To the folder	
	210088	JB53484-16	↓	↓	2	35	10/10	100				W	NG	CIO, ~~RR LL~~ RR-1X DP 11/25 @	
	210089	JB53197-4	58752 BTX	S L	2	36	3.0/5	100				W	NG	CIO, RR LL-A	
	210090	JB53360-6	58766 BENZ		3	37	5.7/5	100				W	NG	CIO	
	210091	~~MSD CFS~~ JB53661-10	58959 BENZ		3	38	6.7/5	100				W	ok		
	210092	CFS JB53661-11	↓		3	39	6.1/5	100				W	ok		
	210093	JB53330-2	58861 BTX	↓	2	40	5.3/5	100				W	ok/DL	FID	

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

285

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VE 9217

Print Analyst Name: Divya Patel

Analyst Signature:

Date: 11/23/13 (PM) SAT

Columns: 2B-624 (60m x 0.25mm x 1.4um)

Method V8260B

Initial Cal. Method ME 9161

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see pg-285	

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: HM Date: 11/25/13

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
	E 210094	JB53330-4	58861 BTX	SOIL		41	3.6/5	10			✓	✓	OK/DL	HD	
	210095	JB53197-2	58752 BTX	↓		42	5.2/5	10			✓	✓	OK/DL	HD	
	210096	JB53484-17	58848 BTX	SOIL	1	43	1.5/10	100			✓	✓	NG	RR, CIO, ~~To the folder~~ ~~RR LL~~	
	210097	JB53484-11	↓	↓	2	44	1.3/10	100 DP 11/23/13			✓	✓	NG	RR, CIO	
	210098	IB				45									
	210099	JB52768-7	58394 TCL20+	SOIL	3	46	5.0/5	100			✓	✓	NG	CIO, RR LL-A	
	210100	JB52768-6	↓	↓	3	47	5.5/5	10			✓	✓	OK		
	210101	IB				48									
	210102	IB				49									
	210103	IB				50									
	210104	IB				51									
														DP 11/23/13	

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

287

7.8.2

7

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VE9218

Print Analyst Name: Divya Patel

Analyst Signature:

Date: 11/25/13 (AM)

Columns: 2B-624 (60m x 0.25mm x 1.4um)

Method V8260B

Initial Cal. Method ME9161

Standard Data

Lot #	Description	Conc.
31	Std A	100 PPM
38	B	
55	C	
~~1ESC 145~~ 54	Acrolein	1000 PPM
149	Int. Std	250/200 PPM

Standard Data

Lot #	Description	Conc.
61	~~Std~~ EXT A	100 PPM
49	B	
65	C	
25	Acrolein	1000 PPM
DI 421	MeOH	

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: HW **Date:** 11/26/13

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
	E210113	BFB				1							OK	12:59pm	
	210114	CC-9161-20				2							NG	MC ↓ ≠ Std B	
	210115	CC-9161-20				3							OK	(10 µL-Std A,B,C, Acro)/50mL D	
	210116	MB/JB25319K-25B	57363			4							OK		
	210117	BS				5							OK	(25 µL-EXT A,B,C, Acro)/50mL D	
FD	210118	JB53758-1	59034 XYL	SOL	5	6	6.0/5	1					OK	≠ED16085	
FD	210119	JB53758-2	↓		3	7	6.0/5	2					OK		
FD	210120	JB53197-2	58752 BTX		2	8	5.2/5	10					OK/DL	FID 100X	
FD	210121	JB52945-5	58503 BTX		3	9	6.3/5	10					NG	nap co. RR FID 10X	
	210122	JB52964-1	58538 BTX		3	10	5.8/5	5					OK	≠3C105140	
	210123	JB52964-2B	↓		3	11	5.6/5	2					OK	≠3C105141	
	210124	JB53484-1J	58848 BTX	SOL	2	12	1.5/10	100					OK		
	210125	JB53484-16	↓		2	13	10/10	100					NG	matrix CIC!	
	210126	MS JB54013-1	59166 NAP	SOL	2	14	6.7/10	100					OK	(25 µL std A,B,C, Acro) (50mL/1mL)	
	210127	MSD JB54013-1			2	15	6.7/10	100					OK		
	210128	IB				16									
	210129	JB54013-1			2	17	6.7/10	100					OK		

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

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VE9218

Print Analyst Name: Divya Patel

Analyst Signature:

Date: 11/25/13 (AM)

Columns: 2B-624 (60m x 0.25mm x 1.40m)

Method V8260B

Initial Cal. Method ME9161

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See pg - 289	

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: [illegible] Date: 11/26/13

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
	E210130	JB54013-2	59166 NAP	S L	2	18	7.1/10	100			✓		OK		
R	210131	JB53360-6	58766 BENZ		3	19	5.7/5	100			✓		OK	CO	
	210132	53330-~~4~~ JB~~52882-14~~	58861 BTX		2	20	~~3.6~~ 5.2/5	1 ~~5~~			✓		OK	RE SX + ED1C093	
	210133	JB53330-~~2~~ -4			2	21	~~5.3~~ 5.1/5	1 ~~100~~			✓		OK	+ ED1C094	
	210134	~~JB53354-9~~ ~~JB53330-2~~			~~2~~ 3	22	5.3/5	100 ~~10~~					Not run		
	210135	53685-1 JB~~52882-14~~ DP 11/25	~~58474~~ 59025 BENZ XYL		~~5~~ 3 DP 11/26	23	~~3.3~~ 5.5/5	100			✓	✓	NG	RE 2X IS failed	
	210136	IB				24									
	210137	IB				25									
	210138	BFB				26								1:36 am	
	210139	CC-9161-50				27							NG	+ STD	
	210140	IB				28							RE		
	210141	MB2				29									
	210142	JB53685-2	59025 BENZ XYL	S L	3	30	5.8/5	100						RE 1X	
	210143	JB53685-4			3	31	5.4/5 DP 11/26	100							
	210144	JB53685-7			3	32	5.6/5	100							
	210145	JB53685-~~6~~ -5			3	33	6.5/5	100							
	210146	JB53685-3			3	34	5.6/5	100					RE NG	5:34 am	

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. 11/26

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

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VX6084

Print Analyst Name: Nuta, Tuve

Analyst Signature: Nuta

Date: 10/11/13

Columns: ZB624 (60m x 0.25mm x 1µm)

Method V8260B

Initial Cal. Method MX6084

Standard Data

Lot #	Description	Conc.
V031686-57	Ext Ethanol	10000ppm
-104	A	100ppm
-116	B	
-120	C	
-109	Benzene	1000ppm

Standard Data

Lot #	Description	Conc.
V031686-45	Int Only	200/2000ppm
-59	Surrogate	100ppm
-88	Ethanol	10000ppm
-99	A STD	100ppm
-81	B	

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:** 10/11/13

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
	X140614	BFB				1							OK		
	140615	IC6084-10	V8260 Soil			2						✓	OK	5µl ADC Acro EtOH, TAA, Surr / 10mlDW	
	140616	IC6084-5				3						✓	OK	5µl ADC Acro EtOH, TAA, Surr / 10mlDW	
	140617	IC6084-2				4						✓	OK	20µl Acro 5µl ADC EtOH TAA, Surr / 10mlDW	
	140618	IC6084-1				5						✓	OK	10µl Acro 1µl ADC EtOH TAA Surr / 10mlDW	
	140619	IC6084-0.5				6						✓	OK	1µl Acro 0.5µl MeOH TAA Surr / 10mlDW	
	140620	IC6084-20				7						✓	OK	10µl ADC Acro EtOH TAA Surr, 50mlDW	
	140621	IC6084-50				8						✓	OK	25µl ADC Acro EtOH TAA Surr / 50mlDW	
	140622	IC6084-100				9						✓	OK	50µl ADC EtOH TAA Surr / 50mlDW	
	140623	IC6084-200				10						✓	OK	100µl ADC EtOH TAA Surr / 50mlDW	
	140624	IB				11							—		
	140625	ICV6084-50				12						✓	OK	25µl EtOH ADC Acro Surr / 50mlDW	
	140626	B				13							—		

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

277

7.8.4

7

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VX6159

Print Analyst Name: Nate Tum

Analyst Signature: [signature]

Date: 11/24/13

Columns: ZB624 (60m x 0.2mm x 1.4µm)

Method V8260B

Initial Cal. Method MX6034

Standard Data

Lot #	Description	Conc.
VX143277-58	EX76 Mend	1000ppm
-02	A	100ppm
-49	B	↓
-52	C	↓
-23	Acrolein	1000ppm
-54	Acrylo	

Standard Data

Lot #	Description	Conc.
VX143277-46	Mix Cur	2000ppm
-41	A 576	100ppm
-45	B ↓	↓
-60	C ↓	↓
-43	Ethanol	10000ppm

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:** 11/25/13

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
	X1423288	BPB6											OK	8:45 AM	
	1423290	CC 6084-70											NG	Acetone ↓	
	1423290 D	CC 6084-80									✓		OK		
	1423300	IB											OK		
	1423310	MB1									✓		OK		
	1423320	BS									✓		OK		
	1423330	IB											OK		
	1423334	JB53758-3	59034 X4L	C	1		5.0				✓		OK		
	1423335A	JB53799-1	59001 TCL/GC/MS	C	5		5.8				✓		OK		
	1423336	JB53799-2	↓		5		6.2				✓		OK		
	1423337	JB53799-3			5		4.8				✓		OK		
	1423338	JB53799-1MS			4		5.7				✓		OK		
	1423339	IB											OK		
	1423340	JB53799-3DUP			4		5.1				✓		OK		
	1423341	JB53799-5	↓		5		5.1				✓		OK		
	1423342	JB53846-24	59074 TCL/GC	S	5		5.1				✓		OK		
	1423343	JB53859-1	58857 TCL/GC	S	7		4.0				✓		OK		
	1423344	JB53859-2	↓		7		4.2				✓		OK		

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

271

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VX6159

Date: 11/23/19

Print Analyst Name: Nate Tang

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.

Columns: 7890A/60m x 0.25mm x 1µm

Method V8260B

Initial Cal. Method MX6034

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:** 11/25/19

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
	X 142345	JB53459-9	S8857 TCL112	S	7		4.9				✓		OK		
	142346	JB53648-1	S9039 TCL202	S	7		5.9				✓		OK		
	142347	JB53648-2			7		5.0				✓		OK		
	142348	JB53648-3			8		6.1				✓		OK		
	142349	JB53648-4			8		5.6				✓		OK		
	142350	IB											—		
	142351	IB											—		
	142352	IB											—		

11/22/19

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.

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Form: OR001-9
Rev. Date: 2/14/2007

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VX6160

Date: 11/25/13

Print Analyst Name: Nate Tum

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc.
VX3-777-58	Extl Ethanol	1000ppm
-61	A	100ppm
-49	B	
-52	C	
-55	Aerosol	100ppm

Standard Data

Lot #	Description	Conc.
VX3-777-46	int/surr	2500/2000ppm
-31	A 5.70	100ppm
-38	B	
-65	C	
-55	Ethanol	1000ppm

Columns: 20m (1mm x 0.18mm x 1.0µm)

Method VX6160B

Initial Cal. Method MX6089

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: 11/26/13

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
	XM2361	BFB				1							OK	1221 ppm	
	M2362	CC6054-28				2							OK	10ml 70% methanol (5ml/DW)	
	M2363	MB1				3				P			OK		
	M2364	BS				4							OK	25ml 70% methanol (5ml/DW)	
	M2365	TB				5							—		
	M2366	JB53089-2R	5916U TCL267	SLC	5	6	5.4						OK		
	M2367	JB53089-4R			5	7	4.4						OK		
	M2368	JB53089-2RDP			4	8	4.3						OK	75ml 70% methanol	
	M2369	JB53089-4RMS			4	9	4.6						OK		
	M2370	TB				10							—		
	M2371	JB53963-1	5916T TCL267+738	SLC	5	11	6.4						OK		
	M2372	JB53963-2			5	12	5.9						OK		
	M2373	JB53963-3			5	13	6.6						OK		
	M2374	JB53991-1	5916T TCL267+738	SLC	5	14	6.5						OK		
	M2375	JB53991-2			5	15	5.9						OK		
	M2376	JB53991-3			5	16	5.6						OK		
	M2377	JB53991-4			5	17	5.7						OK	(1:10) RPN	

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Form: OR001-9
Rev. Date: 2/14/2007

277

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VX6160

Print Analyst Name: Nate Turner

Analyst Signature: Nate Turner

Date: 11/25/13

Columns: ZB-624 (60m x 0.25mm x 1.4µm)

Method V8260B

Initial Cal. Method MX6084

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.

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:** 11/26/13

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
	X142378	JB51991-5	5x169 TCL20+TBA	S/L	5	18	6.4						on		
R	142379	JB55599-10	5x169 TCL20+TBA	S/L	5	19	5.4						on		
R	142380	JB55599-8			5	20	6.3						on		
R	142381	JB55599-3			4	21	5.4				✓	↓	on / DL	Dilution medium (ul) ~~FIO 10X~~	
R	142382	JB55599-7			5	22	6.0						on		
R	142383	JB55599-9			6	23	5.4						on	1143am	
	142384	IB				24							—		
	142385	IB				25							—		
	142386	IB				26							—	1104am	

11/25/13

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Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result .

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Form: OR001-9
Rev. Date: 2/14/2007

279

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: JB53758
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMS-ICM, Humacao, PR

Sample: JB53758-1 **Analyzed:** 26-NOV-13 by AR **Method:** SM2540 G-97
ClientID: A-2-9 (5.7-6.2)

Wet Weight (Total)	32.68	g
Tare Weight	26.6	g
Dry Weight (Total)	31.71	g
Solids, Percent	84	%

Sample: JB53758-2 **Analyzed:** 26-NOV-13 by AR **Method:** SM2540 G-97
ClientID: A-2-9 (5.7-6.2)D

Wet Weight (Total)	35.08	g
Tare Weight	27.29	g
Dry Weight (Total)	33.82	g
Solids, Percent	83.8	%

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
11/21/2013-6967	JB53758-1.10	34.4300	40.2800	5.8500	11/22/2013 9:04:48 AM	di	nt	DI water	
11/21/2013-6968	JB53758-1.11	34.4600	40.4500	5.9900	11/22/2013 9:04:59 AM	di	nt	DI water	
11/21/2013-6969	JB53758-1.12	34.1400	40.1900	6.0500	11/22/2013 9:05:17 AM	di	nt	DI water	
11/21/2013-6970	JB53758-1.13	33.7900	39.6200	5.8300	11/22/2013 9:05:25 AM	di	nt	DI water	
11/22/2013-7109	JB53758-1.5	32.9500	38.9900	6.0400	11/22/2013 9:04:06 AM	di421	jp	5ml MeOH	
11/22/2013-7110	JB53758-1.6	33.1800	39.0400	5.8600	11/22/2013 9:04:37 AM	di421	jp	5ml MeOH	
11/22/2013-7111	JB53758-1.7	32.7900	38.6700	5.8800	11/22/2013 9:05:07 AM	di421	jp	5ml MeOH	
11/21/2013-6965	JB53758-1.8	34.1200	39.9600	5.8400	11/22/2013 9:04:15 AM	di	nt	DI water	
11/21/2013-6966	JB53758-1.9	34.4900	40.2700	5.7800	11/22/2013 9:04:26 AM	di	nt	DI water	
11/22/2013-7112	JB53758-2.3	33.1400	39.1700	6.0300	11/22/2013 9:05:34 AM	di421	jp	5ml MeOH	
11/21/2013-6971	JB53758-2.4	33.9000	39.7300	5.8300	11/22/2013 9:05:43 AM	di	nt	DI water	
11/21/2013-6972	JB53758-2.5	34.0400	39.7400	5.7000	11/22/2013 9:05:52 AM	di	nt	DI water	
11/4/2013-835	JB53758-3.5	34.2700	34.2700	0.0000	11/21/2013 12:23:17 PM	di	fz	DI water	`